

AD-A127 617

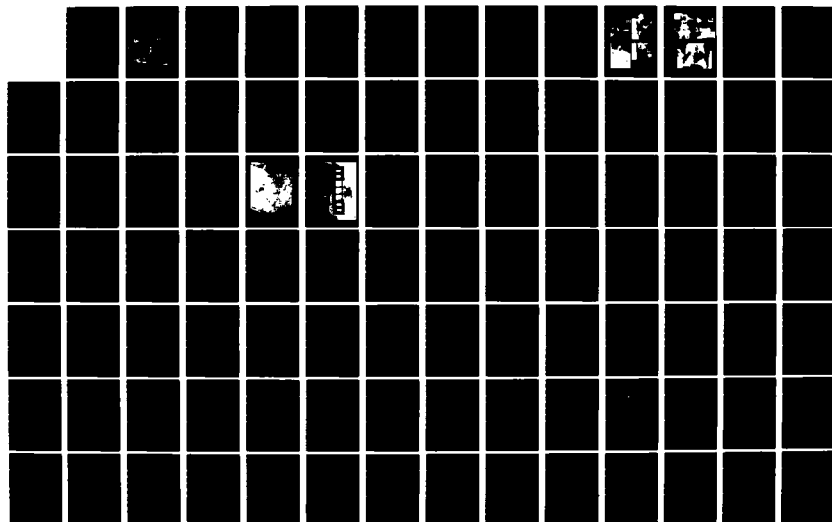
HAVERLY PLANTATION: ETHNOARCHAEOLOGY OF A TENANT
FARMING COMMUNITY(U) RESOURCE ANALYSTS INC BLOOMINGTON
IN W H ADAMS 16 DEC 80

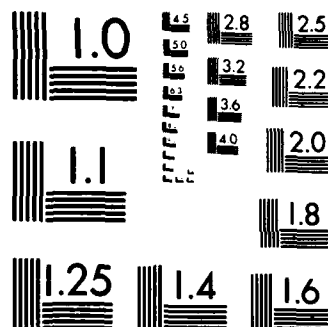
1/6

UNCLASSIFIED

F/G 8/7

NL



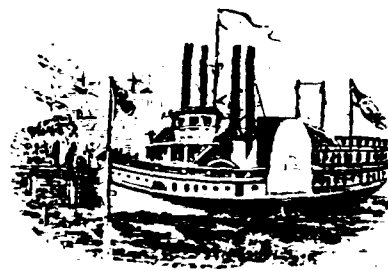


MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

WAVERLY PLANTATION



DTIC
S 26 1993
D



WAVERLY PLANTATION: ETHNOARCHAEOLOGY
OF A TENANT FARMING COMMUNITY

edited by
William Hampton Adams

Submitted to:

Heritage Conservation and Recreation Service
Richard B. Russell Federal Building
75 Spring Street, S.W.
Atlanta, Georgia 30303

Funding provided by:

U. S. Army Corps of Engineers, Mobile District

Contract No. C-55026 (79)

Submitted by:

Resource Analysts, Inc.
223 Pete Ellis Drive, Suite 14
Bloomington, Indiana 47401

Accession For		
NTIS GRA&I	<input checked="checked" type="checkbox"/>	
DTIC TAB	<input type="checkbox"/>	
Unannounced	<input type="checkbox"/>	
Justification		
By Per DTIC Form 50		
Distribution/on file		
Availability codes		
Dist	Availability codes	
A	Special	

December 16, 1980


Principal Investigator



Approved
Distribution

PREFACE

The Waverly Project, as we called it, began officially in February 1979, but the idea for such a community study began germinating years earlier at another farming community, Silcott, in southeastern Washington. That pioneer effort convinced us that historical communities should be studied and that ethnoarchaeology was the best approach. The impetus for the Silcott study was the construction of another waterway by the Corps of Engineers, designed to make Lewiston, Idaho, a seaport on the Snake River. Silcott now lies underwater and the high ground near the nucleus of that settlement is also in the process of becoming a recreation area so that boats can churn through the ghostly second story of Bill Wilson's General Store.

Waverly and Silcott were remarkably similar. Both were rural communities centered upon a cash crop but where the individuals were usually subsistence farmers. Both communities were poor, barely making ends meet. Silcott farmers were white and owned the land. Waverly farmers were black and rented the land. Both used mules and depended upon their gardens for most of their food. Both relied upon a general store providing credit until harvest. Both were located where major wagon roads (based upon Indian trails) converged in order to cross the river. Warehouses were built on the riverbank for access to the steamboats. A railroad passed through both places, apparently having little direct impact. Like Waverly, Silcott was a famous place before white settlement. Explorers on the Lewis and Clark Expedition in 1805 and 1806 stopped at Silcott to cross the river; the Hernando de Soto expedition in 1540 crossed at or just above Waverly. At Waverly, part-Indian Alexander Pitchlyn sold the land after his family had signed the treaties; at Silcott, the Nez Perce chief, Timothy, signed away his people's land, but stayed on himself to homestead the area next to the river crossing, eventually selling it to his son-in-law, John Silcott. The farmers who settled Silcott came in the 1880s from Arkansas and Illinois, continuing the search for good land which 50 years before had brought Col. Young from Georgia to Mississippi. These parallels could probably be derived for many areas of the country, but the point is that the two communities are similar in ways affecting our study.

This study could have been presented in many different ways and certainly many aspects deserve more attention. With more analysis we feel the data could be even more productive. We want to ask many more questions of the data and refine our ideas. Hopefully, those can be accomplished in later studies. We were able to expand and to refine many of the ideas begun at Silcott, like the study of trade networks. We have learned much in the eight years since Silcott, yet because so much new ground needed clearing and breaking we have been able only to plant seeds and watch a few grow into fruition. A project of this nature requires much more germination time than was available. In walking through the woods we saw the budding daffodils amid the bricks and leaves, but we never saw them bloom. In the summer we saw their yellowed leaves and found their bulbs in the soil. The replanted bulbs may yet bloom under a northern sun, but never as they did amid the bricks.

ABSTRACT

This report presents results of an ethnoarchaeological study of Waverly Plantation in Clay County, Mississippi. The investigations were conducted under the General Research Design for Historic Settlement in the Tombigbee Multi-Resource District. In order to implement this framework, we chose a community focus for the study. The community focus makes the archaeological data more compatible with the oral history and history collected at the same time. The study of tenant farmers at Waverly Plantation used a multidisciplinary approach to obtain and synthesize data on an extinct community. Archaeology, history, and oral history present both overlapping and divergent viewpoints to cross-check and supplement each other.

The Waverly study makes several important contributions. This is the first systematic study of tenant farmers in the late 19th and early 20th centuries making use of material culture, oral testimony, and written documents. Much research has been done on antebellum plantations but little on their postbellum counterparts. The Waverly study continues that research past the Civil War and into the mid-20th century demonstrating the survival of the plantation as an economic system up to the present. The Upper Tombigbee River plantations are among the least studied in the South, for Waverly Plantation was the first. The Waverly study also contributes to black history by presenting a unique local history about black tenant farmers, a group conspicuously missing from many histories.

We used five basic strategies in the study of the black tenant community and the white planter community. Material culture study provided an observable and quantifiable data base free from many inherent biases to be expected in a study of black tenants and their poverty. A systems approach was used because it recognizes the inter-relatedness of all sub-systems. Economic systems were investigated to understand the nature of farming and trading within the community and to explore the role Waverly played in the trade networks linking it with the national economy. Social systems were studied to define and to delineate the community and to understand the social factors affecting the economy and settlement. Settlement systems were explored to define the reasons for the relationships between sites and the physical environment. Settlement patterns were studied to delineate those relationships. Each strategy provided a research paradigm under which to collect and organize the data.

The historical study of Waverly presents the development of Waverly Plantation and the surrounding area, from an Indian owned plantation to a large residential plantation. This recounts the history of the white planters primarily but it provides an important view on the background in which the black tenant community developed. After Reconstruction the whites died or moved away. The black tenant and black landowner developed by the 1880s. Plantations around Waverly soon had absentee landlords, but Waverly itself was still occupied until 1913.

The oral history continues the historical story up to the 1950s, when the community ceased. From the 1890s to the 1910s it overlaps with the history but afterwards it is the only source for much data. Eighty-nine informants who had lived at Waverly were interviewed, including the black

tenants, the planters' families, and the white sharecroppers who replaced the blacks there in the 1930s. The oral history provides specific histories for the archaeological sites, as well as perspectives on local history, material culture, and economic, settlement, and social systems.

The archaeological research investigated nine areas which would be adversely impacted by construction of the proposed Waverly Ferry Access Area. Four of these (22CL567, 22CL569, 22CL571A, 22CL571B) represent domestic structures. All of these domestic sites date to the late 19th and early 20th century. Two dumps (22CL571D and 22CL576) were excavated and provided a sample of trash associated with two of the domestic structures. Two industrial sites (22CL575 and 22CL521) were investigated. Site 22CL575 represents the power source for the milling operation at Waverly and dates to the mid-19th century. Site 22CL521, a brick kiln probably dating from the turn of the century, was excavated but yielded little cultural information.

The historical, oral historical, and archaeological data were combined to investigate the five research strategies mentioned above. The result is a series of essays on each topic, as well as lengthy appendices of use to the archaeologist dealing with various aspects of material culture. From this study one should begin to understand the development of a plantation in the Tombigbee area and how it changed through time to meet the local, regional, and national forces affecting economy and society. Further, the lives of black tenants and later white sharecroppers are presented in terms of the material possessions they had, where and how they lived, and why their particular adaptation worked.

ACKNOWLEDGMENTS

Many people contributed time and effort to this study, too many to acknowledge here. The project required a team approach combining individuals from government, private industry, and university. Quite early in the Waverly Project we realized that an adversary role of government archaeologists was a positive contribution towards the project, rather than an obstacle to overcome; they were very much an integral part of the research team. We would like to thank Charles Moorehead and Jerry Nielsen (U. S. Army Corps of Engineers-Mobile) and Stephanie H. Rodeffer and Lloyd Chapman (Heritage Conservation and Recreation Service) for their assistance and criticisms at all stages of the project. They were the ones to formulate the project in the first place and to direct its growth conceptually and pragmatically. We would like to thank the U. S. Army Corps of Engineers-Mobile for funding the project and for the many assistances rendered, and we would like to thank the individuals at (Heritage Conservation and Recreation Service) for helping in the administration of the contract: Bennie C. Keel, Harry Scheele, Victor Carbone, and Suzie Fulgham.

William H. Adams directed the testing crew, consisting of Dale L. Martin, Kevin Crouch, James E. Adams, Gary Napper, and Jack D. Elliott, Jr. Ralph R. B. von Frese and Bruce Losee of Purdue University conducted the magnetometer survey.

Betty J. Belanus and David F. Barton collected the oral histories. The historical research was conducted by Howard G. Adkins, assisted by Jack D. Elliott, Jr.

The excavation phase was directed by Timothy B. Riordan, who patiently endured the interference of the Principal Investigator, Adams. Riordan did an excellent job of coordinating the simultaneous excavation of four sites by four crews. Steven D. Smith served as the Assistant Field Director and as the crew chief for the excavations at 22CL571A. He is now finishing his Master's Thesis on that site for the University of Kentucky. Smith was assisted by Karen J. Walker and Rebecca Halpern. The excavation of site 22CL569 was supervised initially by Robert N. Wilkinson. Jed Levin and Roselle E. Henn of the City College of New York supervised the excavation of sites 22CL567, 22CL576, 22CL575, and 22CL521. They are to be especially commended for a fine job of supervising, excavating, and recording. We wish that they could have participated in the analysis and writing but they were committed to return to finish their graduate degrees. Dale L. Martin served as Surveyor for the project and drew many of the stratigraphic profiles. The field members alternated between crews. We would like to thank the following individuals for surviving the heat, humidity, hurricanes, ticks, chiggers, and poison ivy: Joseph Bosco, James Dryer, Mary Fitzherbert, Ray Frye, Jane Hinson, Aileen M. Howe, Marcia Montgomery, George Myers, Gretchen Niendorff, Richard Pace, Jeanne A. Ward, and Paul F. Yamauchi. The field laboratory was run by Sandi Faikus who was assisted by Diane Riordan.

The analysis phase was conducted in our Bloomington laboratory. Jane Bouchard, Lab Director, supervised the artifact washing, cataloging, and preliminary analysis. She was assisted by Karen Jo Walker and Margaret Rothman. Lab technicians included Lee Dorwin, Connie Nagel, and Ellen

Salach. Soil analysis was done by Jim Driver, Carol Oberholtzer, and Linda Nichols. Dr. Donald Whitehead, Indiana University, did the dendrochronology of tree samples from the sites. William Richard Adams analyzed the faunal remains.

Mr. and Mrs. Robert Snow of Waverly graciously entertained us and provided us with unpublished material. They helped us in many ways and we wish to thank them for their hospitality.

John M. Sheftall of Macon, Georgia, a descendant of Col. Young, has been researching the Young family. He provided us with several family letters, and led us to the McDowell Collection at the Duke University. We thank Robert L. Byrd, Assistant Curator for Reader Services at Duke University, for his help in obtaining the 32 letters Col. Young sent to Gov. McDowell, and for providing us permission to publish those letters. Ron Thomlin, Mississippi Department of Archives and History, provided us with additional materials on Waverly.

Throughout the project, a management team kept track of the necessary paperwork. Patricia Q. Nagel kept the accounts and did the monthly invoicing. That was no easy task for her. The Principal Investigator was William H. Adams. Assisted by David F. Barton and George P. Bartnik, John T Dorwin served as Project Manager. Dorwin also served as devil's advocate.

The report production took over a year and involved numerous people. The report was typed using a word processor. Sally Bush Allen was especially diligent in encoding and processing the authors' scribbles into legible verbiage. Others encoding various portions of the report were Margaret Rothman, Karen McDonald, and Susan Andrews. Tedious table typing took tremendous tolerance by each.

Graphics were done by James Parker, assisted by Sandra Greenman. James E. Adams helped on developing and printing photographs. William H. Adams did the artifact illustration. We would like to thank the informants for providing us with the few photographs of Waverly existing. We would also like to thank the Library of Congress for the use of their photographs of tenants and sharecroppers.

We would like to thank Albert F. Bartovics for his permission to adapt into this report the ceramic portion from his dissertation on Daniels Village. Bartovics had the opportunity to examine briefly the Waverly ceramics and assist in their identification.

The authors were responsible for not only reading their own section but also those of the others, thus, the oral historian commented on the history and archaeology, and so forth. In addition, proofreading and commenting was done by John T Dorwin, George P. Bartnik, W. Richard Adams, Connie Adams, Sally Bush Allen, and Jeffrey Myers.

Dr. Stephanie H. Rodeffer deserves special recognition. In addition to her official responsibilities she devoted many weekend hours of her own time to this project, thoroughly reading and commenting on every aspect of this report in its several drafts. She guided the project from beginning to end; her interest and dedication to the project vastly improved its quality. We greatly appreciate her contributions, her patience, and her persistence.

Jerry Nielsen and Charles Moorehead from the Mobile Corps of Engineers made many comments and editorial suggestions, as did Lloyd Chapman and Margaret K. Brown. Lee Minnerly, Stanley South, and Sue Mullins Moore read the entire draft report and made lengthy comments on it. Roderick Sprague and Lester A. Ross read sections dealing with the archaeology and material culture. Richard Dorson read the oral history section. We would thank those individuals and two anonymous reviewers for reading an earlier draft. Their suggestions for reorganizing the report into its present form have helped improve it substantially. We have tried to address all their comments, but that has proved to be impossible. The above individuals are not, of course, responsible for the content of this report.

Without several key individuals, there would have been no oral history; without many more it would have been only half as rich and interesting. Special thanks goes to James W. "Honeybee" Hendrix, who in the midst of a political campaign and a busy honey operation found time to steer us on the right track. Walter Ivy contributed so much to the oral history. We greatly appreciate his telling of the old days at Waverly and hope that our memory stirring brought comfort to the dull life in a nursing home. Other folks who contributed much and were so gracious about sharing their knowledge were: Douglas and Hallie Ivy, Dezzie Adair, Marie and Albert Blankenship, Vivien and Robert Adair, Homer and Abilee Wallace, Willard and Willadean Collins, Luther and Jean Barham, Emily Shaw, Georgia Hopkins, and many others.

Special moments shared with informants during the oral history fieldwork should also be mentioned, including catching home grown catfish at Honeybee's, attending church services at Mt. Pisgah Missionary Baptist Church where Douglas Ivy lines out hymns, sharing meals with the Adairs and Wallaces, and listening with fascination to the tales told by Billie Mae Baberson, the former maid at Waverly Mansion. One extra special occasion, escorting Laura Young Lenoir on a tour of Waverly Mansion, where her grandmother had been a house slave, was especially rewarding. All in all the people who once were part of Waverly Plantation can be very proud of providing such fine raw material with which to tell their story.

One day in the Spring of 1980, Bill Adams got a haircut in Bloomington. In small talk with the barber, he mentioned being an archaeologist working in Mississippi. As it turned out, the barber had grown up just a couple of miles from Waverly, and in the 1950s as a child had frequently played in the yard at Honeybee Hendrix's house, site 22CL569. Honeybee himself frequently delivers honeybees to the winery in Bloomington, and he may someday be famous for developing the tame bee bred with the killer bees in South America, ending that problem.



Laura Young Lenoir



Honeybee Hendrix



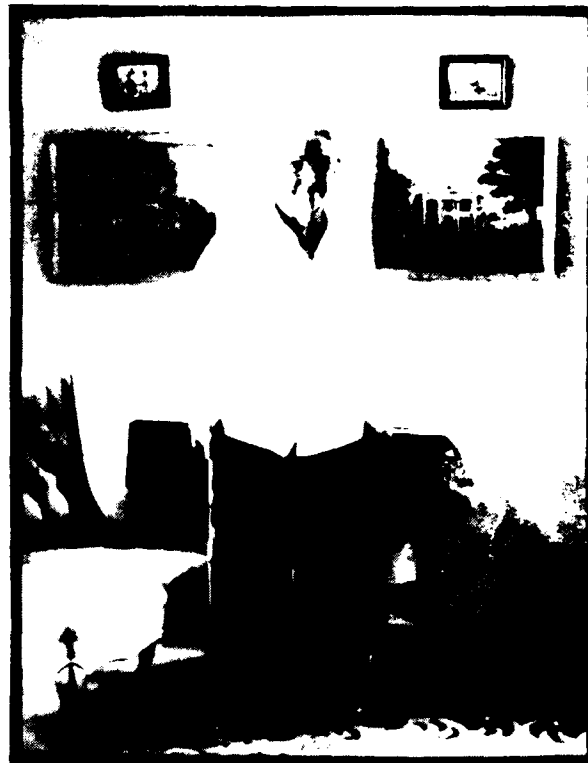
Luther Barham



Easter Mathis Smith



Morris McDill



Emily Evans Shaw



Walter Ivy

TABLE OF CONTENTS

Preface.....	ii
Abstract.....	iii
Acknowledgments.....	v
Frontispiece.....	vii
List of Figures.....	xvii
List of Tables.....	xx

PART ONE: INTRODUCTION TO THE WAVERLY PROJECT

1. The Waverly Project	
by William H. Adams	
The Tenants	1
Waverly: A Brief History	2
Project History.....	5
2. Archaeology, History, and Oral History	
by William H. Adams, Betty J. Belanus, and Steven D. Smith	
Realities	11
Ethnoarchaeology	12
Archaeological Ethnography	13
Oral History	14
History	18
Historical Archaeology of Plantations	20
Conclusions	22
3. Research Design	
by William H. Adams and David F. Barton	
The General Research Design.....	23
The Project.....	24
Strategy 1: Material Culture	24
Strategy 2: Economic Systems.....	27
Strategy 3: Social Systems.....	28
Strategy 4: Settlement Systems	29
Strategy 5: Settlement Patterns.....	33
Settlement Patterns: A Model for Plantation Settlement...	34
Summary.....	38
4. Methods	
by Timothy B. Riordan, William H. Adams, and Betty J. Belanus	
Introduction.....	39
Excavation Methods.....	39
Field Lab.....	41
Bloomington Lab.....	42
Analytical Sources.....	43
Typology.....	43
Oral History.....	46

PART TWO: THE HISTORY OF WAVERLY

5. The Geographic Base for Settlement by Howard G. Adkins and Jack D. Elliott, Jr.	
Introduction.....	51
Terrain.....	54
Climate.....	54
Soils and Settlement.....	55
Vegetation.....	57
6. The Early Settlement of the Waverly Locality by Howard G. Adkins and Jack D. Elliott, Jr.	
Indian Occupancy.....	59
The Pitchlyns of Waverly.....	63
White Settlements in the Tombigbee Valley.....	67
Trails and Pioneer Roads.....	69
Early Navigation on the Tombigbee River.....	71
The Formation of Lowndes County.....	72
7. The Antebellum Waverly Community by Howard G. Adkins	
Introduction.....	75
Land Acquisition.....	75
The Prominence of George H. Young.....	79
Waverly Plantations.....	85
Commercial Functions.....	90
River and Land Transportation.....	95
Politics and George H. Young.....	98
Social Amenities at Waverly.....	99
8. The Postbellum Waverly Community by Howard G. Adkins	
The War Years.....	101
Reconstruction and Waverly.....	103
A New Economic System.....	104
Commercial Enterprises at Waverly.....	110
Waverly Schools and Churches.....	115
Fox Hunting and Waverly.....	116
Summary.....	117
9. The Demise of the Waverly Plantation Community by Howard G. Adkins	
Expiring Leadership.....	119
Changes in Land Tenure.....	120
A New Commercial Pattern.....	121
A Declining Agricultural Economic Base.....	123

PART THREE: ORAL HISTORY OF WAVERLY

10. Memories of the Plantation (1865-1913)

by Betty J. Belanus

Introduction.....	127
Waverly Mansion.....	130
Other Places.....	133
Waverly Tenants at the Turn of the Century.....	136
Summary.....	141

11. Independent Renting (1913-1930)

by Betty J. Belanus

Renting	143
Planting.....	144
Cultivating	145
Harvesting.....	146
Gardening.....	147
Winter Jobs.....	148
Housing.....	149
Shopping.....	151
Social Life.....	151
Summary.....	154

12. Sharecropping and Sawmilling (1930-1950s)

by Betty J. Belanus

Introduction.....	155
Shopping.....	158
Farming.....	158
Gardening.....	160
Summary.....	165

PART FOUR: THE ARCHAEOLOGY OF WAVERLY

13. The Belle Scott Site

by Timothy B. Riordan and Betty J. Belanus

Oral History.....	167
History.....	169
Excavation.....	170
Stratigraphy.....	171
The Structure.....	172
Artifacts.....	175
Artifact Distribution.....	176
Summary.....	177

14. Aaron Mathews' House

by Timothy B. Riordan and Betty J. Belanus

Description.....	181
Oral History.....	181
History.....	189

Excavations.....	189
Stratigraphy.....	190
Features.....	190
Artifacts.....	194
Artifact Distribution.....	195
Summary.....	196
Luther Barham's Blacksmith Shop.....	200
15. Ellen Mathews' and Henry Goodall's Houses	
by Steven D. Smith and Betty J. Belanus	
Oral History.....	205
Description.....	209
The Ellen Mathews House, 22CL571A.....	209
Excavations.....	209
Stratigraphy.....	209
Features.....	212
Artifacts.....	216
Artifact Distribution.....	216
Summary.....	223
Henry Goodall's House, 22CL571B.....	224
Excavations.....	225
Stratigraphy.....	227
Features.....	227
Artifact Distribution.....	230
Summary.....	233
22CL571 Areas C and D.....	234
Excavation.....	234
16. Industrial Sites	
by Timothy B. Riordan, William H. Adams, and Betty J. Belanus	
Introduction.....	237
The Mill (22CL575)	237
Oral History.....	237
History.....	241
Description.....	242
Excavations.....	242
Stratigraphy.....	242
Structural Features.....	247
The Brick Kiln (22CL521)	255
Oral History.....	255
History.....	257
Description.....	259
Summary.....	262
17. The Humanly Touched Thing	
by Steven D. Smith, William H. Adams, and Timothy B. Riordan	
Introduction.....	263
Clothing.....	263
Footwear.....	266
Personal Adornment.....	266
Grooming and Hygiene.....	267
Indulgences.....	269

Personal Accouterments.....	270
Infant Care.....	271
Furnishings.....	271
Housewares & Appliances.....	272
Construction.....	280
Hardware.....	280
Tools.....	281
Agriculture.....	281
Hunting.....	282
Fishing.....	283
Manufacturing.....	283
Transportation.....	283
Commercial Services.....	284
Group Services.....	284
Miscellaneous.....	284

18. An Historical Perspective on Tenant Farmer Material Culture
by William H. Adams, Steven D. Smith, and Timothy B. Riordan

Introduction.....	285
Methods.....	285
Pricing.....	287
Reconstructed Store Inventory.....	289
Purchaser Profiles.....	289
Comparison of Purchases.....	293
Archaeological Visibility.....	295
Conclusions.....	297

PART FIVE: PERSPECTIVES ON THE WAVERLY COMMUNITY AND ITS STUDY

19. Settlement Patterns
by William H. Adams

Introduction.....	299
Soils and Topography.....	300
Transportation Networks.....	300
Evolution of the Waverly Settlement System	303
Summary.....	314

20. Economic Interaction
by Timothy B. Riordan and William H. Adams

The Data.....	315
The Networks.....	315
The Local Network.....	316
Local Commercial Network.....	319
Area Commercial Network.....	321
Regional Networks.....	322
National Networks.....	327
International Networks.....	334
Conclusions.....	335

21. Social Systems	
by David F. Barton	
Introduction.....	337
Human Groups.....	337
Groups Represented at Waverly.....	337
Comparison of Groups at Waverly.....	342
Group Interaction at Waverly.....	344
Institutions at Waverly.....	345
Disintegration of Waverly.....	346
22. The Waverly Community	
by William H. Adams, Betty J. Belanus, and Howard G. Adkins	
The Historical Perspective.....	347
Local History.....	352
Tenant Farmers.....	354
Material View.....	358
The Demise of Waverly.....	360
23. Perspectives on the Community Study of Waverly	
by William H. Adams, Timothy B. Riordan, Steven D. Smith, and David F. Barton	
The Study	363
History.....	364
Oral History.....	366
Archaeology.....	368
Ethnoarchaeology.....	372
Conclusions.....	375
References Cited.....	376
*****NOTE: Appendices 1-6, 9, and 10 are on microfiche*****	
Appendix 1: Comparative notes on the oral history	[fiche].. 405
Appendix 2: The Oral History Questionnaire	[fiche].. 408
Appendix 3: The General Research Design for the Tombigbee Multi-Resource District.....	[fiche].. 414
Appendix 4. Remote Sensing by William H. Adams	
Vegetation.....	[fiche].. 422
Soil Chemistry.....	423
Magnetometer.....	425
Site 22CL567.....	425
Site 22CL568.....	426
Site 22CL569, Aaron Matthew's House	426
Site 22CL571.....	432
Summary.....	436

Appendix 5.	Faunal Remains from Tenant Farmer Sites, Waverly Plantation, Mississippi by William Richard Adams	
	Introduction.....[fiche]...	437
	Mammals.....	438
	Birds.....	449
	Fish.....	450
	Summary.....	450
Appendix 6.	Comparison of Tenant, Black Landowner, Storekeeper, and Planter from the Henry C. Long Store Ledgers...[fiche]	452
Appendix 7:	Material Culture Studies	
	Introduction.....	473
	Glass Typology by Timothy B. Riordan	
	Glass.....	475
	Technology.....	475
	Glass Typology.....	479
	Bottles from Waverly.....	479
	Flat Glass by Margaret Langhorne Rothman.....	491
	Changing Glass Technology in the United States.....	501
	Conclusions.....	504
	Ceramic Typology by Albert F. Bartovics and William H. Adams	
	Introduction.....	505
	Wares and Classes.....	507
	Decorative Categories.....	511
	The Waverly Ceramics.....	516
	Discussion of Wares.....	516
	Decoration.....	523
	Vessel Form.....	526
	Ceramic Dating.....	533
	Metal Artifacts by Steven D. Smith	
	Class F01: Fasteners by Karen Jo Walker	543
	Class F02: Door Hardware.....	553
	Class F03: Lighting, Electrical.....	553
	Class F04: Plumbing.....	556
	Class F05: Other Construction.....	556
	Class F06: Ammunition.....	556
	Class F07: Metal Tools.....	558
	Class F08: Coins and Tokens.....	560
	Class F09: Industrial	563
	Class F10: Wire.....	563
	Class F11: Wagon & Automotive Parts.....	563
	Class F12: Agricultural	564
	Class F13: Horse Equipment.....	564
	Class F14: Adornment and Personal.....	565
	Class F15: Clothing Hardware.....	566
	Class F16: Recreation and Sports Equipment.....	567
	Class F17: Grooming and Clothing Care.....	568
	Class F18: Toys.....	568

Class F19: Writing and Painting.....	568
Class F20: Closures.....	568
Class F21: Kitchen Equipment and Cleaning.....	569
Class F22: Tableware and Utensils.....	570
Class F23: Tin Cans	571
Class F24: Stove Parts.....	575
Class F25: Miscellaneous Hardware.....	575
Class F26: Furniture & Household Furnishings.....	575
Class F27: Unidentified Metal.....	576
Miscellaneous Artifacts by Steven D. Smith	
Material G: Plastics.....	577
Material H: Wood Artifacts.....	581
Material I: Bone Artifacts.....	581
Material J: Shell Artifacts.....	581
Material K: Leather.....	581
Materials L and M: Paper and Cloth.....	584
Material N: Stone.....	584
Material O: Rubber.....	584
Material P: Miscellaneous Materials.....	586
Dating the Archaeological Sites	
by Timothy B. Riordan and William H. Adams	
Introduction.....	587
Manufacturers' Marks.....	588
Technology.....	589
Production and Popularity.....	590
Analysis.....	591
Summary.....	592
Appendix 8: Artifact Illustrations	594
Appendix 9: Artifact Descriptions.....[fiche]..	610
Glossary.....	610
Glass.....	611
Ceramic.....	641
Metal.....	657
Plastic.....	685
Other.....	692
Appendix 10: Artifact Distribution by Site.....[fiche]..	699

LIST OF FIGURES

1.1. Location of Waverly and Major Historic Sites Nearby.....	4
1.2. Contour Map of Waverly Ferry.....	6
1.3. The Proposed Impact of Waverly Ferry Access Area.....	6
1.4. Aerial Photograph of Waverly in 1960s.....	8
1.5. Waverly Mansion.....	9
3.1. Spatial Patterning on the Average Cotton Plantation, 1934	37
5.1 The Waverly Plantation.....	52
5.2 Planters' House Locations on Main Roads	52

5.3	Topography of the Waverly Area.....	53
5.4	Soil Types in the Waverly Community.....	56
6.1	Indian Land Cessions, Northeast Mississippi.....	60
6.2	Pre-Statehood Roads in the Upper Tombigbee Valley.....	69
7.1	Waverly Landownership, ca. 1850.....	76
7.2	Waverly Landownership, ca. 1860.....	76
7.3	Waverly Landownership, ca. 1872.....	77
7.4	Waverly Landownership, ca. 1883.....	77
7.5	Waverly Landownership, ca. 1902.....	78
7.6	The Latourette Map of 1839.....	81
8.1	Origin of Waverly Merchandise.....	113
8.2	Attendance at the Waverly Black School, 1890-1955.....	116
9.1	Number of Landowners in Waverly, 1840-1911.....	120
10.1	Composite location map, all sites.....	128
10.2	Location of log houses.....	136
11.1	Houses about 1918.....	150
11.2	General Store in Mississippi in 1930s.....	152
12.1	Houses about 1930.....	157
13.1	Location of archaeological sites.....	168
13.2	Honeybee Hendrix's Sketch Map of Waverly	168
13.3	The 1888 Railroad Survey Map	170
13.4	Excavation Plan, 22CL567.....	171
13.5	Stratigraphic Section, 22CL567.....	172
13.6	Plan of Structural Remains, 22CL567.....	173
13.7	Structural Remains, 22CL567.....	174
13.8	Northwest Corner Pillar, 22CL567.....	174
13.9	Machine Cut and Wire Cut Nail Distribution, 22CL567.....	178
13.10	Window Glass and Architectural Hardware Distribution.....	178
13.11	Shell and Food Bone.....	179
13.12	Canning Jars and Stoneware.....	179
13.13	Tools and Toys.....	180
14.1	The House at 22CL569.....	182
14.2	House and Yard, 22CL569.....	182
14.3	Sketch Map of Aaron Mathews House.....	183
14.4	Excavation Plan for 22CL569.....	191
14.5	Stratigraphic Section, 22CL569.....	191
14.6	Feature Map, 22CL569.....	192
14.7	View of Excavations, 22CL569.....	193
14.8	Dark Stains in Kitchen Area, 22CL569.....	193
14.9	Machine Cut and Wire Cut Nail Distribution, 22CL569.....	197
14.10	Window Glass and Architectural Hardware Distribution.....	197
14.11	Shell and Food Bone.....	198
14.12	Canning Jars and Stoneware.....	198
14.13	Tools and Toys.....	199
14.14	Plan of Excavation, Luther Barham's Forge, 22CL576.....	201
14.15	Stratigraphy, 22CL576.....	203
15.1	Sketch map of floor plan for Ellen Mathews' House.....	208
15.2	Plan of Excavation, 22CL571.....	210
15.3	Stratigraphic Section, 22CL571 A & B.....	210
15.4	Feature Map, 22CL571A.....	211
15.5	Eastern Floor Supports and Chimney.....	213
15.6	View Across Excavations.....	213
15.7	Machine Cut and Wire Cut Nail Distribution, 22CL571A House.....	217
15.8	Window Glass and Architectural Hardware Distribution.....	217
15.9	Shell and Food Bone.....	218

15.10	Canning Jars and Stoneware.....	218
15.11	Tools and Toys.....	219
15.12	Coins and Buttons.....	219
15.13	Machine Cut and Wire Cut Nail Distribution, 22CL571 Yard.....	220
15.14	Window Glass and Architectural Hardware Distribution.....	220
15.15	Shell and Food Bone.....	221
15.16	Canning Jars and Stoneware.....	221
15.17	Tools and Toys.....	222
15.18	Double Pen House.....	224
15.19	Feature Map, 22CL571B.....	226
15.20	Excavations, 22CL571B.....	229
15.21	Brick Pillar and Post Mold, 22CL571B.....	229
15.22	Machine Cut and Wire Cut Nail Distribution, 22CL571B House.....	231
15.23	Window Glass and Architectural Hardware Distribution.....	231
15.24	Shell and Food Bone.....	232
15.25	Canning Jars and Stoneware.....	232
15.26	Tools and Toys.....	233
15.27	Stratigraphic Section, 22CL571D.....	235
16.1	Historical Photographs	238
16.2	Plan of Excavation, 22CL575.....	243
16.3	Building Phases, 22CL575.....	244
16.4	Structural Features, 22CL575.....	244
16.5	Stratigraphy, 22CL575.....	245
16.6	Stratigraphy, 22CL575.....	246
16.7	View of Feature E, 22CL575.....	248
16.8	View of Features, C, D, G. and I, 22CL575.....	248
16.9	View of Features F, G, and H, 22CL575.....	249
16.10	View of Features A and E, 22CL575.....	249
16.11	Plan of Excavation, 22CL521.....	260
16.12	Stratigraphy.....	260
16.13	View of Kiln Floor and Firing Chambers.....	261
16.14	Kiln Floor and Base of Arches.....	261
17.1	Buttons.....	264
18.1	Sample Page from Henry C. Long's Store Ledger.....	286
18.2	Monthly Price Averages for Meat, Meal, and Molasses.....	288
19.1	The Waverly Community, 1909.....	301
20.1	Percentage of Annual Consumption.....	320
20.2	Waverly Artifacts by Manufacturer's Location.....	326
20.3	Pre-1920 and Post-1920 Artifact Manufacturers.....	328
20.4	Food/Condiment and Alcohol Manufacturers.....	328
20.5	Glass and Medicine Manufacturers.....	329
20.6	Ceramics and Other Artifacts Manufacturers.....	329
20.7	Market Accessibility Areas.....	333
20.8	Market Oriented and Labor Related Profiles.....	333
22.1	Open Land and Wooded Land in Waverly, 1960.....	352
22.2	Mantle of Mississippi Tenant House, 1939.....	361
22.3	Fixing Meal	361
22.4	Kitchen Area	362
22.5	Waiting in Kitchen.....	362

Appendix 4: Remote Sensing

1.	Magnetometer Survey, 22CL567.....	426
2.	Soil Tests for pH, Phosphorus, 22CL567.....	427
3.	Magnetometer and Soil Survey, 22CL568.....	428
4.	Soil Chemistry, pH, 22CL569.....	430

5.	Soil Chemistry, Phosphorus, 22CL569.....	430
6.	Soil Chemistry, Copper and Iron, 22CL569.....	431
7.	Magnetometer Survey, 22CL571A.....	433
8.	Soil Chemistry Phosphorus, pH, 22CL571.....	434
9.	Soil Chemistry, Copper and Iron, 22CL571A.....	435

Appendix 5: Faunal Remains

1.	Hog Carcass in Hung Position.....	445
2.	Beef Carcass in Hanging Position.....	445
3.	The Carcasses of Deer and Sheep.....	448

Appendix 7: Waverly Artifacts

1.	Post Bottom Mold and Cup Bottom Mold.....	477
2.	Bottle Base Shapes.....	483
3.	Bottle Necks.....	485
4.	Generalized Bottle Neck.....	486
5.	Waverly Neck Percentages.....	486
6.	Jar Rims.....	490
7.	Window Glass Seriation	495
8.	Glass Color Seriation.....	502
9.	Machine vs. Non-Machine Made Glass Containers at Waverly.....	504
10.	Seriation of Stoneware by Vessel MNI.....	523
11.	Cumulative Graph of Decorative Categories.....	530
12.	Percentage of Vessel Decoration.....	531
13.	Frequency by Vessel Form for Waverly and Other Sites.....	532
14.	Nail Types.....	548
15.	Nail Seriation.....	555
16.	Penny Production Compared with Waverly Sample.....	561
17.	Shoe Features.....	583
18.	Nail Production Curve.....	591

LIST OF TABLES

Table		Page
5.1	Soils and Settlement in the Waverly Community, 1909.....	57
6.1	Land Transfer in the Waverly Community.....	62
6.2	John Pitchlyn Credit Purchases, 1835.....	67
6.3	Items Purchased on Credit by John Pitchlyn, 1835.....	67
7.1	Landownership in the Waverly Community, 1836-1860.....	79
7.2	Slave Holders in the Waverly Community.....	86
7.3	G. H. Young Plantations, 1850 and 1860.....	87
7.4	Slaves and Slave Houses in the Waverly Community.....	89
7.5	Comparative Cost of Marketing Cotton.....	92
7.6	Schedule of Rates at Ferries Across Tombigbee River.....	95
7.7	Road Work Assignment for Select Years.....	97
8.1	Elements of Waverly Agriculture, 1860-1870.....	106
8.2	Plantation Tenancy at Waverly, 1880.....	108
8.3	Tenant Credit Purchases (\$), G.H. Young Plantation, 1878	109
8.4	Waverly Cotton Sales, 1879-1884.....	110
8.5	Furnishings and Supplies Authorized by A. Hamilton.....	112
8.6	Purchases and Sales, Waverly Commissary, 1878.....	114
9.1	Black Landowners, Waverly, 1900.....	121

9.2	Commerical Establishments, 1906-1918.....	122
14.1	Archaeological Features, 22CL569.....	192
15.1	Archaeological Features, 22CL571A.....	211
15.2	Archaeological Features, 22CL571B.....	226
15.3	Dogtrot House Measurements.....	227
16.1	Building Sequence, 22CL575.....	247
16.2	Comparison of Tombigbee Scove Kilns.....	258
17.1	Functional Typology.....	264
17.2	Brick Sizes.....	280
17.3	Ammunition Distribution.....	282
18.1	Comparison of per unit cost for Meat, Meal, and Molasses.....	288
18.2	The Reconstructed Store Inventory 1887-1888.....	290
18.3	Comparison of Henry Goodall's Purchases.....	292
18.4	Hiram Finney, Credits and Annual Debts.....	293
18.5	Comparison of Tenant, Landowner, Storekeeper, and Planter.....	296
18.6	Comparison of Archaeological and Store Ledger Data.....	296
19.1	Acreage Owned by the Young Family.....	305
20.1	Monthly Consumption of Selected Items.....	320
20.2	Location of Manufacturers.....	323
20.3	Market Oriented Industries.....	332
20.4	Labor Oriented Industries.....	332

Appendix 4: Remote Sensing

1.	Iron, Copper, and Phosphorus Nomenclature.....	424
2.	Phosphorus Calibration Chart.....	424
3.	Copper Calibration Chart.....	424
4.	Iron Calibration Chart.....	424
5.	pH Averages and Range, 22CL569.....	429

Appendix 5: Faunal Remains

1.	Total Number of Identified Bones.....	474
2.	Minimum Number of Individuals	479
3.	Hog/Beef Ratios from Store Ledger.....	440
4.	Hog/Beef Ratios from Archaeological Data Using Average Weights..	440
5.	Hog/Beef Ratios from Archaeological Data Using White's Method...	440
6.	Mammals.....	441
7.	Turtles, Fish, and Birds.....	443

Appendix 7: Artifacts

1.	Waverly Typology: Materials.....	474
2.	Glass Classes.....	479
3.	Class A01: Bottle Categories.....	480
4.	Companies and Products for Waverly Bottles.....	481
5.	Bottle Manufacturers for Waverly Bottles.....	481
6.	Class A02: Bottle Base Categories.....	483
7.	Information Derived from Brewer's Permit Numbers.....	484
8.	Class A03: Bottleneck Categories.....	486
9.	Class A04: Jar Categories.....	488
10.	Manufacturers of Waverly Jars.....	489
11.	Companies and Products for Jars.....	489
12.	Class A07: Fragments.....	491

13.	Window Glass Varieties by Site.....	493
14.	Percentages of Window Glass for Waverly Sites.....	493
15.	Window Thickness Data from Roenke.....	494
16.	Window Dates from Waverly.....	494
17.	Dated Canning Jar Fragments.....	496
18.	Pressed Glass Fragments by Site.....	497
19.	Identified Pressed Glass Fragments, 22CL571A.....	497
20.	Tableware Categories.....	498
21.	Clear Pressed Glass Tableware Patterns.....	499
22.	Depression Glass Patterns.....	499
23.	Glass Fragment Sorted by Site and Color.....	502
24.	Glass Color Percentages.....	502
25.	Glass Containers from Waverly.....	503
26.	Ceramic Typology.....	506
27.	Distribution by Vessel Form (MNI).....	517
28.	Distribution by Vessel Form (Fragments).....	517
29.	Miscellaneous Non-Vessel Ceramic Artifacts.....	518
30.	Distribution of Doll Parts by Site.....	519
31.	Stoneware and Common Earthenware Vessel Count (MNI).....	520
32.	Stoneware Vessels (MNI) by Category.....	520
33.	Stoneware Fragments by Site.....	521
34.	Ceramic Ware Frequency by Fragment for Vessels and Non-Vessels..	521
35.	Ceramic Ware Frequency by MNI for Vessels and Non-Vessels.....	521
36.	Stoneware Glazes.....	522
37.	Matrix of Decorative Styles Using Presence/Absence.....	524
38.	Matrix for Index of Diversity.....	525
39.	Sample Size by Decoration and Vessel (MNI).....	525
40.	Sample Frequency by Decoration and Vessel (% of MNI).....	527
41.	Comparison by Decorative Categories.....	528
42.	Comparison by Vessel Form.....	529
43.	Vessel Form Using MNI vs. Fragment Count.....	530
44.	Comparison of Waverly Domestic Sites with Other Data.....	532
45.	Range and Mean Dates from Ceramic Marks.....	535
46.	Ceramic Marks and Manufactures.....	535
47.	Ceramic Dates.....	536
48.	Formula Dating.....	537
49.	Comparison of Mark Dates with Fragment and MNI Weighted Dates...	541
50.	Class Distinctions for Metal Artifacts.....	544
51.	Fastener Categories and Types.....	544
52.	Nail Varieties by Length.....	545
53.	Varieties F01-05-08.....	546
54.	Type 10 Varieties.....	546
55.	Rail Spike Varieties.....	549
56.	Miscellaneous Spikes.....	550
57.	Ratio of Wire Cut to Machine Cut Nails.....	553
58.	Distribution of Wire Cut Nails by Site.....	554
59.	Distribution of Machine Cut Nails by Site.....	554
60.	Coin Distribution.....	562
61.	Tin Can Chronology.....	573
62.	Miscellaneous Artifacts.....	578
63.	Manufacturers' Mark Dates.....	589
64.	Age of Waverly Sites Based on Seriation by Technology.....	590
65.	Probable Occupation Dates.....	592
66.	Relative Ranking of Selected Sites.....	593

CHAPTER 1. THE WAVERLY PROJECT

by William H. Adams

"History is lived forward but is written in retrospect. We know the end before we consider the beginning and we can never wholly recapture what it was to know the beginning only."

--C. V. Wedgwood (1944:35) William the Silent.

The Tenants

Crossing the South, we used to see their houses set back from the road, bare dirt and a single big tree beside them, cotton fields around them. Driving by, light showed through the wall boards and someone was always sitting on the porch in the evening. Years later, the burned remains lay monumented by a chimney. We wondered what life was for those tenant farmers, having no electricity, no television, no indoor plumbing.

The subjects of our study are the tenant farmers living on a Mississippi plantation between 1880 and 1930. These tenants lived beside a main road and back in the woods. Their houses were torn down nearly half a century ago and can be seen only through the memories of the neighborhood children, now grown old. Bricks scattered beneath the cedar trees mark former house locations. To study these people and to place them within their social and economic context required two years of work. To study the development of the plantation meant months of archival research, looking in the courthouses for old records. To understand the individuals and their homesteads, we undertook three months of archaeological research, digging through their house sites and yards. To understand the people, we talked with former tenants and their children. To reconstruct their lives, we merged each viewpoint into a single one, comparing and contrasting each. We are not sure how best to label this kind of research, for it is folklore, ethnohistory and oral history, ethnoarchaeology and historical archaeology: it is all of these. It is also a story of tenant farmers in Mississippi, a local story of interest to anyone curious about our country's past.

Our history of Waverly is a history of a changing cultural, physical, and natural landscape. Where cotton fields blossomed, forests now grow. Gravel quarries and kudzu vines have engulfed house sites. Enough time has passed for one site to have had four structures, each one built over its predecessor. Yet despite the massive succession of people, plants, and animals and the changes each wrought, Waverly patiently persisted. The mansion lay abandoned for 50 years, yet decayed little and resisted the torch. On a spring day, one can walk in the nearby woods and find the daffodils planted by the freed slaves at their new homes, visit the slave cemetery with its single concrete gravestone scratched with a nail "J. W. Witherspoon" or visit the Young Cemetery with its carved stone monuments. The white mansion sat on a hill overlooking the nucleus of Col. Young's holdings: the industrial center, the steamboat landing, and the shacks of his tenants. The contrasts of rich and poor, white and black, still are visible today if one looks with an archaeological eye while traveling through the countryside.

Walking in the woods, we sometimes let our child imagination conquer our adult practicality and we actually see the world around us as it might have been. Bears and wolves return in our minds. A few bricks scattered among the leaves become ruins of a frontier cabin. Henry David Thoreau (1958:196), walking in the woods near Walden, encountered such a cabin:

"Now only a dent in the earth marks the site of these dwellings, with buried cellar stones, and strawberries, raspberries, thimble-berries, hazel-bushes, and sumacks growing in the sunny sward there; some pitch pine or gnarled oak occupies what was the chimney nook, and a sweet scented black birch, perhaps, waves where the door stone was. . . . Still grows the vivacious lilac a generation after the door and lintel and the sill are gone, unfolding its sweet-scented flowers each spring, to be plucked by the musing traveller; planted and tended once by children's hands, in front yard plots,--now standing by wall-sides in retired pastures, and giving place to new-rising forests:--the last of that stirp sole survivor of that family. Little did the dusky children think that the puny slip with its two eyes only, which they stuck in the ground in the shadow of the house and daily watered, would root itself in the rear that shaded it, and grown man's garden and orchard, and tell their story faintly to the lone wanderer a half-century after they had grown up and died,--blossoming as fair, and smelling as sweet as in that first spring."

A walk through most woods can produce what Thoreau saw at Walden, if one troubles to look--to see as few of us ever do. Mankind has left an imprint over most of the Earth: time only hides but does not destroy most of that imprint.

Waverly: A Brief History

The Waverly portrayed by our study attempts to sketch what it was to know the beginning of Waverly, as Wedgwood referred to understanding the past as those people knew it. The reality of a place and a people is impossible to write, for we can never know all the pertinent facts and ideas. All that can be written is a history, one assembling the known data and presenting those as accurately as possible. We studied the fragments of Waverly--the deeds and documents, the oldtimers' stories, the shattered artifacts--and assembled a story of Waverly, a story of the development of a cotton plantation, a story of a fine white pillared house, a story of slaves and their descendants working the plantation as tenant farmers. This is the story about a bend in the river, and how people lived there. We are not sure what they called the cluster of houses and work places near the ferry landing: we have called it Waverly Ferry to distinguish that neighborhood from the rest of Waverly Plantation owned by Col. Young. Waverly Plantation and neighboring ones west of the Tombigbee River are defined as the Waverly Locality; within that the planters and their tenants formed the Waverly Community.

Because so many of the specific records for Waverly were missing, we traced its history by studying a larger area than just Col. Young's plantation. This larger community of plantations identified strongly with Waverly and it can be called the Waverly community. It was formed originally by several men from Georgia, who brought their families and

slaves west to establish a new cotton kingdom along the Tombigbee. Through marriage, friendship, and business, these planters formed a community led by Col. Young. His homeplace was a strategic location placed on high ground with good soil, but more importantly at a location on the river ideally suited as a transshipment point. The Tombigbee has meandered, forming a substantial bluff on the west bank. Here warehouses were built on the shore, safe above any flood, yet their contents were easy to load onto steamboats. With such a location Young could control the development of the hinterland by controlling the goods flowing in and out of the area.

In 1841, Col. Young moved to Waverly from his prairie plantation a few miles to the west. At Waverly, he lived with his family in a two storied, log dogtrot cabin until the mansion was completed in 1857. By 1841, he had built a brick, steampowered cotton gin and grist mill and a fine warehouse. By 1845, he had expanded this to include a sawmill. Col. Young's industry made him a wealthy and influential gentleman, and made Waverly a thriving plantation. The Civil War was kinder to Waverly than to many nearby plantations. The mansion and steadings, situated at such a strategic location, should have been destroyed by General Smith, but he refused to draw his forces into the cul-de-sac there and thus thwarted General Nathan Bedford Forrest. The destructive effects of the Civil War were largely economic for Waverly. Reconstruction necessitated the shift from slavery to a tenant farming economy. Apparently some slaves stayed on to become tenants. Many others left.

The tenants were provided with about 15 ha (hectares) and credit at the commissary store owned by Henry C. Long from the mid 1870s to 1897. Such arrangements varied through time, but in essence these tenants were renting land for a specific payment (in cotton). These individuals provided their own animals and tools. With the death of Col. Young's last son in 1913, the plantation passed into absentee landlord management. The first white tenants appeared in the late 1910s. By the 1930s, a substantial change in the economic system and in the demography had begun. Black tenants had died or moved away, and whites increasingly became residents. Renting was replaced by sharecropping and lumbering increased. Sharecroppers did not furnish their own animals or equipment for farming. By the 1950s, most homes at Waverly lay abandoned and were torn down.

What once was a thriving plantation and tenant farming community by the 1960s lay in ruin. The forest had returned. By the 1970s, the mansion, bought in 1963 by the Robert Snow family, had begun to appear in its former glory and was a National Historic Landmark. The Tennessee-Tombigbee Waterway coming past Waverly would bring new prosperity to the area. The federal government bought the land between the mansion and the river and made plans for a recreation area.

This volume describes the results of an archaeological investigation of Waverly Plantation, that part within the proposed Waverly Ferry Access Area. The proposed recreation area is located in Sec. 30, T17S, R8E in Clay County, Mississippi (Figure 1.1). This area consists of 16 ha (40 ac) of land bordered on the south by the Columbus and Greenville Railroad, the Tennessee-Tombigbee Waterway to the east, and Waverly Mansion and adjoining grounds to the west (Figures 1.2-1.4). A road leading east from the slave cemetery marks the north boundary.

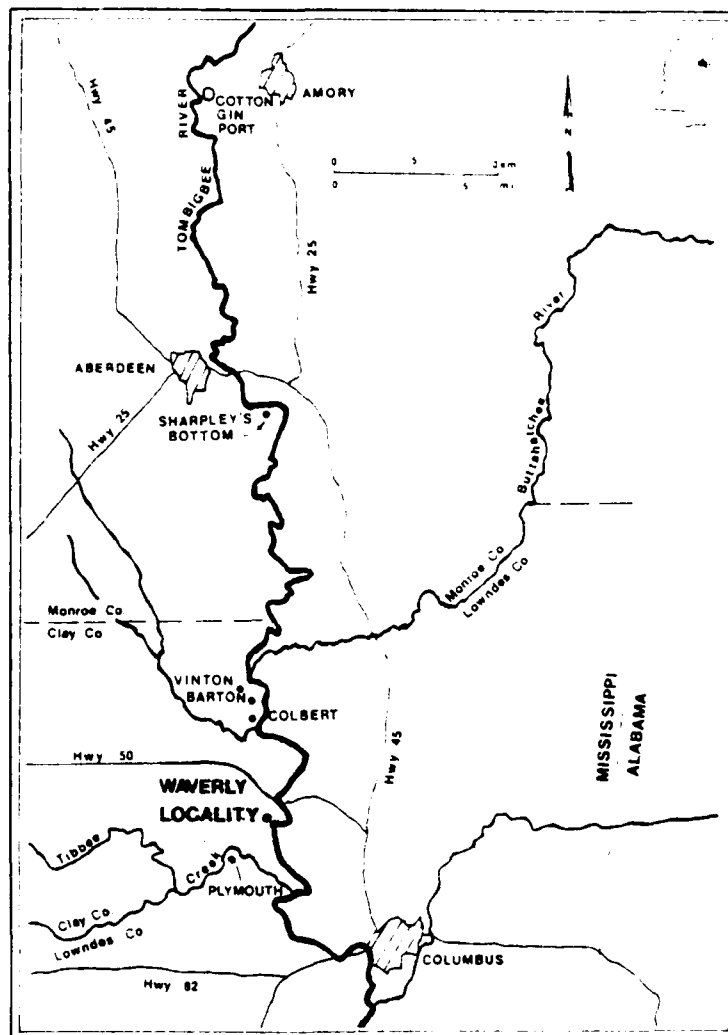


Figure 1.1.--Location of Waverly and Major Historical Sites Nearby.

Topographically, the project area is divided into three zones with differing soil characteristics. The active floodplain starts at the west bank of the Tombigbee River 44 m (145 ft) MSL and extends 200 m (656 ft) into the study area to an elevation of approximately 52 m (170 ft) MSL. Soil samples from this area consisted of a coarse sand with little or no topsoil. On the terraced, inactive floodplain, soils were typically clay below a medium brown sandy loam topsoil. Elevations range from 52-58 m (170-190 ft). Rising above this terraced area are gently sloping ridges that reach a maximum elevation of 69 m (226 ft). Soils are a dark sandy loam. This area, known as the Tombigbee Terraces, is an aspect of the Black Prairie Physiographic Province. Drainage of the area is to the south and east into the Tombigbee River. The overstory typically contains various species of oak and elm (Miller et al. 1973:15) although parts of the study area have been continually altered via selective cutting throughout the 20th century. Most of the area has a dense understory of honeysuckle, kudzu, and cat briar.

Project History

Although talk of linking the Tennessee and Tombigbee Rivers began during the late 18th century, Congress did not authorize construction until signing the River and Harbor Act of 1946. The resulting Tennessee-Tombigbee Waterway is one of the largest construction projects in the world, with 315 million cubic yards being excavated. By comparison, the Panama Canal was only 220 million cubic yards. Archaeological research in the area had been minimal until 1970, when the National Park Service contracted with Mississippi State University and the University of Alabama for survey, testing, and excavation of various prehistoric sites. With the signing of Public Law 93-291, additional federal funding became available, and in 1975, the U. S. Corps of Engineers assumed management of the archaeological resources on the planned Waterway, in compliance with 36 CFR Part 800. In order to manage those resources, a National Register District was declared eligible on September 27, 1977: the Tombigbee River Multi-Resource District encompasses a corridor five miles wide and 130 miles wide, reaching from Paden, Mississippi downstream to Gainesville, Alabama (IAS-A and MDCOE 1977). In 1977, the Corps of Engineers entered into partnership with Interagency Archeological Services-Atlanta to administer the cultural resource investigations. That fall a mitigation plan for historical resources was formulated. The Waverly Project was conducted by Soil Systems, Inc. (later, Resource Analysts, Inc.) of Bloomington, Indiana under contracts with Heritage Conservation and Recreation Service using funding provided by the U. S. Army Corps of Engineers.

The announcement for competitive proposals to perform the Phase II testing of Waverly was published in Commerce and Business Daily in November, 1978. We submitted our proposal December 28, 1978, and a revised proposal on January 16, 1979. The contract was awarded February 5, with authorization to proceed issued on February 12, 1979. From February 13 to March 8, 1979, we conducted a testing program along with preliminary archival and oral history research, using a crew of five persons. Eleven sites were recorded, nine were recommended for preservation or excavation. We submitted a draft report on April 18, 1979, revised it, and submitted it in final form on November 20, 1979 (Adams et al. 1979).

The mitigation program was initiated June 11, 1979, and completed August 11. The crew consisted of 18 field archaeologists, two laboratory staff, two historians, and two oral historians. The purpose of the project was to mitigate impact of construction activities on archaeological resources within the recreation area. This entailed archival and oral historical research in conjunction with excavation of six recorded sites. The analysis of the archaeological material began in the field lab in Columbus and was finished in the Bloomington lab of Resource Analysts. Because of the quantity and complexity of materials recovered, the detailed analyses were delayed for several months. This meant the final report, due June 1, 1980 was not finished in draft form until July, 1980, much longer than we expected, but still less than a year after completion of fieldwork.

The recreation area was supposed to be constructed in August of 1979, a few days after completion of the archaeological work there. The proposed recreation area, Waverly Ferry Access Area, would contain a loop road leading to parking lots and picnic areas, and a road leading down to a boat launching ramp (Figure 1.3). Plans called for hiking paths and benches.

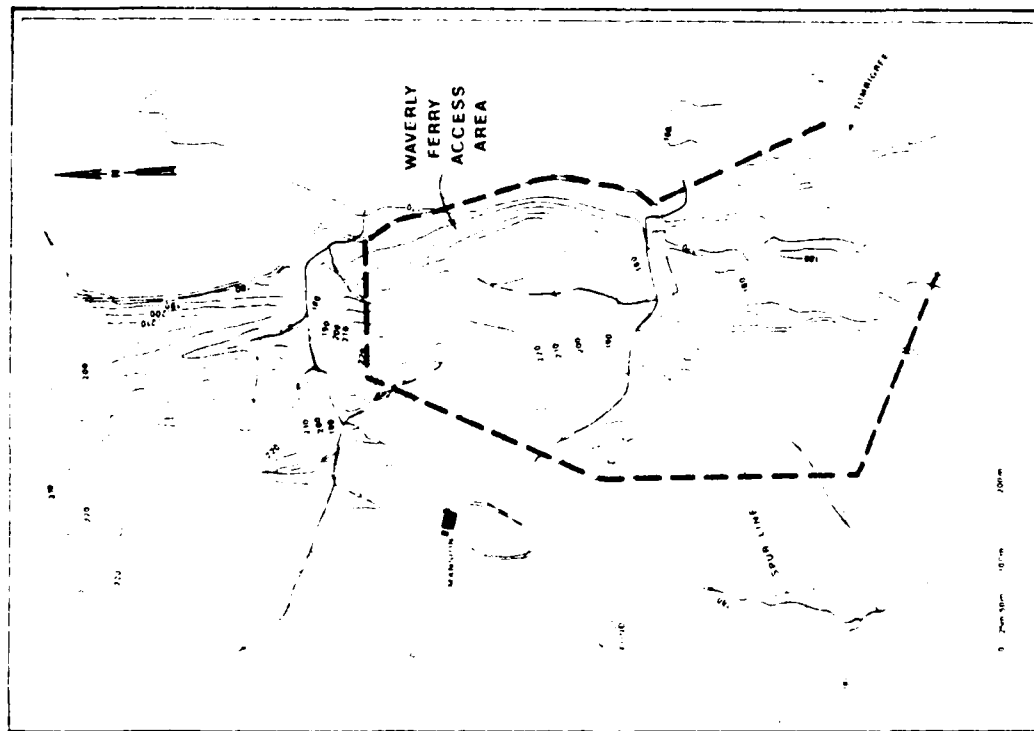


Figure 1.2.--Contour Map of Waverly Ferry.

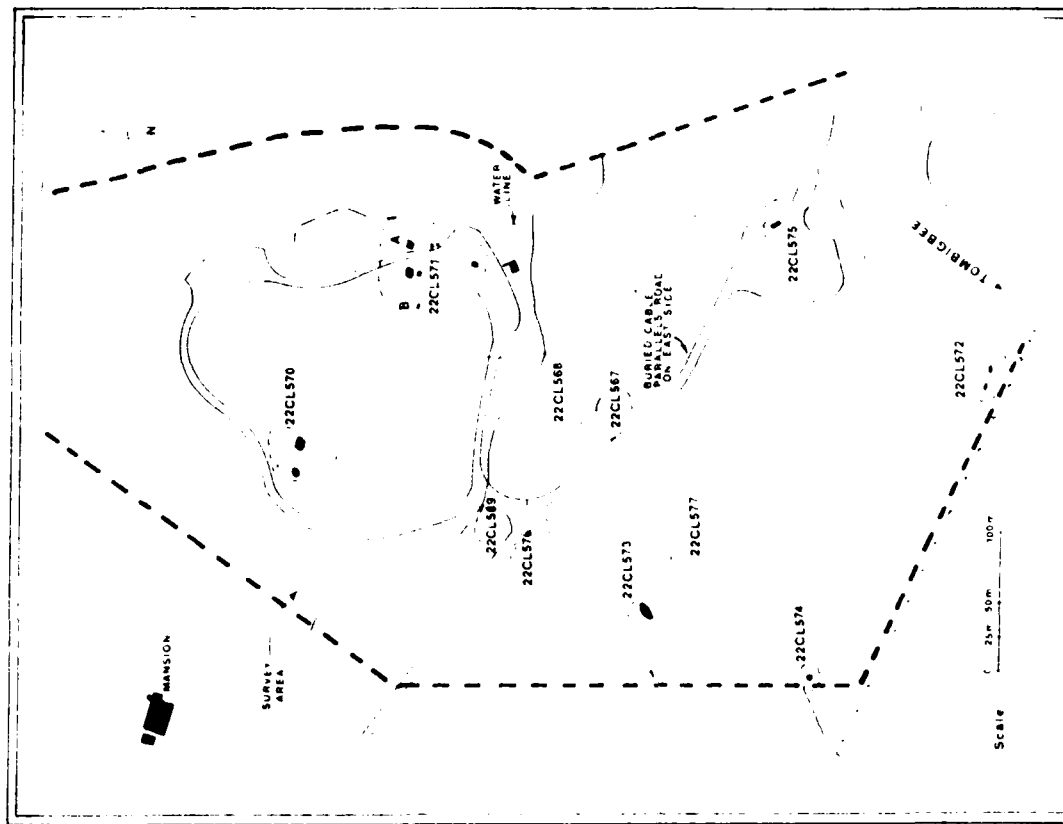


Figure 1.3.--The Proposed Construction of Waverly Ferry Access Area.

The proposed construction's impact on the archaeological sites would be substantial. The loop road will start by exactly bisecting the Aaron Mathews House site (the engineer's stakes were driven near each of the end chimneys) and the road will pass through the eastern room and the kitchen area. Crossing a creek and winding up the hill, the road misses the Squire Stepp House site by only a few feet, then reaches the hill crest and follows the bluff edge down through the Ellen Mathews House site (just missing the house site by a few feet), and passing just to the east of Henry Goodall's House site. The boat launching facility includes a parking lot and pit toilet which will be dug into the brick foundation of Col. Young's 1841 steampowered cotton gin. By December of 1980, construction had not yet begun, and the possibility remained that the industrial site might be preserved from its ignominious fate.

The mansion and its occupants were the focal point for Waverly and the surrounding plantations. Architecturally, the mansion is one of the most elegant and significant houses in the South (Smith 1941:93) with its free-standing stairs leading up four stories to its domed cupola, where one can survey the surrounding terrain (Figure 1.5). The mansion has been refurbished and filled with period furniture. One can almost expect to encounter hoop-skirted women in the drawing room, or hear faint notes coming from the wedding alcove Col. Young built for his daughters. From his study or his law library next door, Col. Young carried out the affairs of running the plantation, planned his unsuccessful campaign for the U. S. House of Representatives, helped found the University of Mississippi, entertained the figures of his day, and read of his son's death at Gettysburg.

The voluminous plantation records were stored upstairs, souveniered by curious visitors after the house lay abandoned, and finally burned by a housekeeper, fearing a fire hazard. Few of those records exist and some, like the Henry C. Long Account Book for 1887-1889, have only recently been returned to the mansion. Despite the absence of personal and plantation records, a man of Col. Young's stature leaves a trail in history which can be followed. Family papers and public documents provide us with a history of the literate and prominent people of Waverly.

The documents do not reveal nearly as much about the other people at Waverly. Had the plantation records survived intact many of our questions might have been answered. Certainly the public documents reveal little about the settlement of Waverly. One problem is that tenant farmers are largely invisible in the public records, since the bulk of the business and legal transactions were between the tenant and landowner. For the 20th century of Waverly, we must turn to the oral history and the archaeology for the continuation of the story. Written history would have ended the story in about 1913. By listening to the old timers and by studying the sites and artifacts, the story of Waverly continues to the present.

The early years of the community were best studied via the written documents, while the more recent years were best approached by the oral history and archaeology. This combined use of history, oral history, and archaeology has been termed ethnoarchaeology. Ethnoarchaeology is a means of not only supplementing missing data from one discipline with that derived from another, but it also is a means whereby the same data can be viewed from several different vantage points, in order to see more clearly the



Figure 1.4.--Aerial Photograph of Waverly, December 18, 1977.

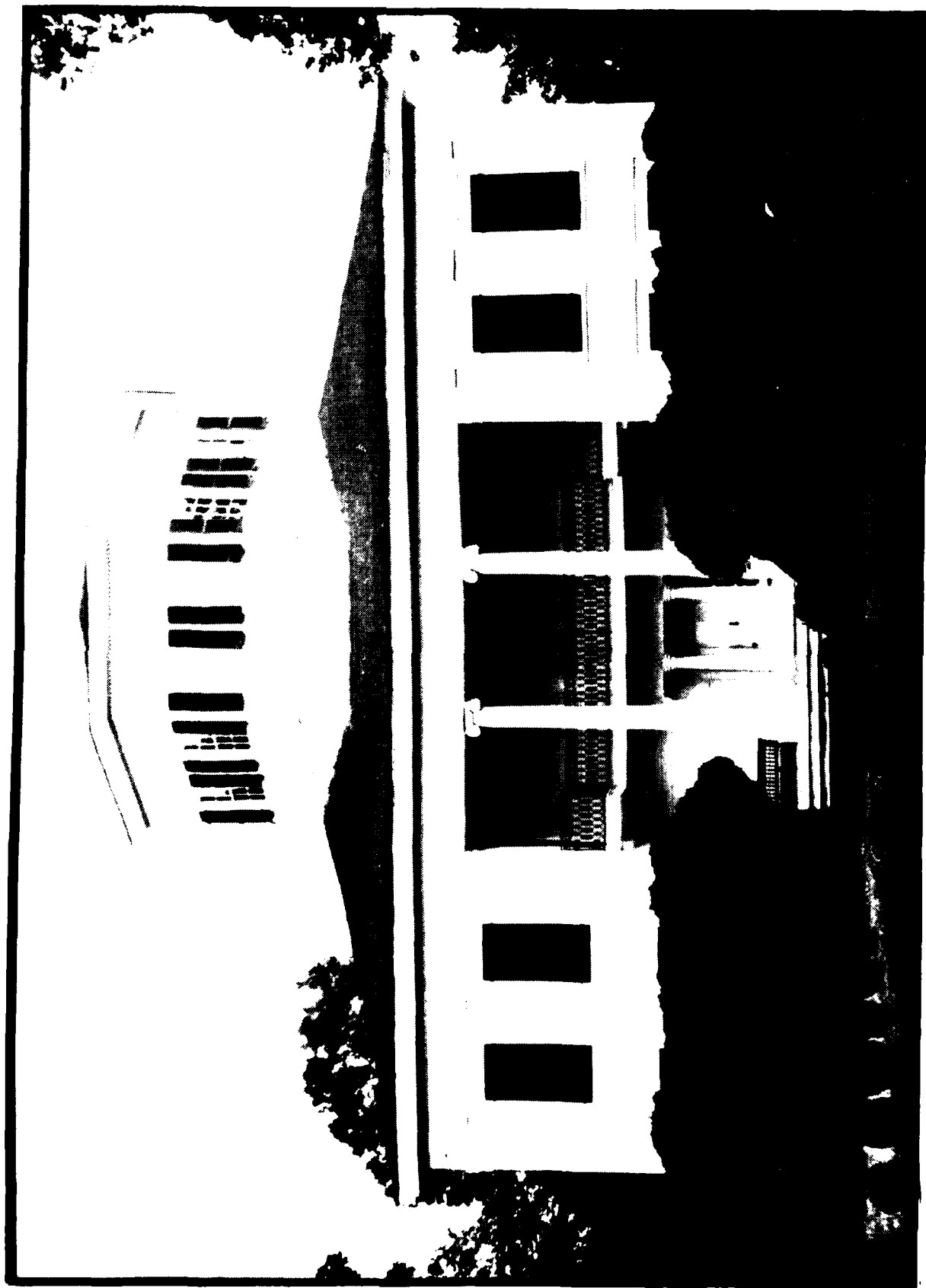


Figure 1.5.--Waverly National Historic Landmark in 1979.

whole of Waverly. We obtained the best data base by applying the different approaches simultaneously, this requiring a team approach. Regarding division of labor, Francis Bacon (quoted in Eiseley 1973:80-81) stated:

"The path of science is not such that one man can tread it at a time. Especially in the collecting of data the work can first be distributed and then combined. Men will begin to understand their own strength only when instead of many of them doing the same things, one shall take charge of one thing and one of another."

Our team consisted of anthropologists, cultural geographers, and folklorists. We met regularly to discuss our progress in obtaining the data, and flesh out our ideas about Waverly. Information derived from one source would be checked in another. This allowed us to present the data with better internal consistency and historical accuracy. Because the subject of the tenant community is a complex and diverse topic, its study required a team with broad training in the humanities, individuals with interests crossing disciplinary boundaries. By using a team with similar yet diverse backgrounds and with converging interests in understanding the totality of Waverly, the study benefited immensely.

CHAPTER 2. ARCHAEOLOGY, HISTORY, AND ORAL HISTORY

by William H. Adams, Betty J. Belanus, and Steven D. Smith

"You see, two fellars get in a fight out there and three or four of 'em see it, and hear every bit of it. And everyone will tell it just a little different and be plum honest about it."

--Luther Barham, Waverly, Mississippi, July, 1979

Realities

Luther Barham, a sage farmer from Waverly, Mississippi, has succinctly stated the idea of variable perceptions among people when viewing a specific event. The same is true when academically trained "fellars" view the past. Archaeologists, oral historians, and historians each see something different when viewing the same thing. They view and analyze what they see from perspectives heavily influenced by academic background, observational abilities, experience, and imagination. They merge the separate views on past reality into a unified vision of that past, by taking the best each discipline has to offer, and using each to corroborate the others.

Different realities, or ideas about reality, exist concerning the past. Archaeology provides one reality; oral history provides a separate reality; history provides yet another. Each perspective is as valid as the next. But still another reality existed: what actually occurred in the past. Historians made this distinction years ago, when they differentiated historiography (written history) and history (real events and processes). "What we call history is in reality only an image or hypothetical conception of the actual past. Historical facts are really only propositions about the past based upon the remaining evidence" (Berkhofer 1969:12).

As R. G. Collingwood (1946:293) has emphasized, we do not reconstruct the past, we construct it. "What the historian is doing, when he fancies he is merely cognizing past events as they actually happened, is in reality organizing his present consciousness" (Collingwood 1946:153). "While the past as actuality is frozen in time, human knowledge and understanding of that past constantly increase, and thus, as our conception of the past is altered by new discoveries and interpretations, so the relationship of the past to present is changed" (Donovan 1973:41). History, archaeology, and oral history each provide a perspective on past reality by furnishing a statement about the past. By combining these perspectives we increase the probability of those statements.

This chapter examines relationships between history, oral history, and archaeology and how those approaches may be combined into an effective study of human lifeways. The only label yet applied to the approach advocated here has been "ethnoarchaeology" (Adams 1973, 1977a), although that term has also been used in other ways. The ethnoarchaeological approach means that the researcher uses oral, archival, and archaeological methods to derive a statement about events, people, processes, and things of the past. Some people may argue with our choice of the term ethnoarchaeology as a research paradigm, for that term has many meanings; our usage is based on both its original use and its etymological derivation. But, as Percy W. Bridgman

(1946:7) pointed out, "The true meaning of a term is to be found by observing what a man does with it, not what he says about it." Let us delve a bit into philosophy and into the theoretical development of ethnoarchaeology and the related fields of ethnohistory, oral history, historical archaeology, and archaeological ethnography. These paradigms provide frameworks for the interpretation of past realities.

Ethnoarchaeology

Ethnoarchaeology is not just a fancy name for historical archaeology, ethnohistory, or archaeological ethnography. However, only a few statements in the literature may be regarded as approaching a definition for ethnoarchaeology, while a slightly larger number of statements contain definitional aspects. "Ethnoarchaeology is the combined historical, archaeological, and ethnographic study of a community using the direct historical approach" (Adams 1977a:138). This was in agreement with Wendell H. Oswalt (1974:3) who offered the following: "Ethnoarchaeology is the study, from an archaeological perspective, of material culture based upon verbal information about artifacts obtained from persons, or their direct descendants, who were involved with the production." In both cases, ethnography was seen as an aid to the interpretation of archaeological data originating from the people being studied ethnographically. In contrast are those definitions by archaeologists studying a living society for the purpose of providing analogical data, rather than specific data to be related to a given archaeological site. Michael B. Stanislawski offered a definition (1974:18) which he has since modified to read that ethnoarchaeology is "the participant or direct observation field study of the form, use, meaning, and function of artifacts within their institutional settings in a living society" (1978:204). Ruth Tringham (1978:170) has provided similar definition: "We can define ethnoarchaeology as the structure for a series of observations on behavioral patterns of living societies which are designed to answer archaeologically oriented questions." Daniel Stiles lumps Oswalt's and Stanislawski's definitions into what Richard Gould has called living archaeology and what Stiles (1977:88) refers to as archaeological ethnography. "An etymologist might say that the term, ethnoarchaeology implied that the field data dealt with the use of archaeology in the study of living peoples, but this would be diametrically opposite to its primary concern: the use of ethnographic methods and information to aid in interpretation and explanation of archaeological data" (Stiles 1977:88).

Two schools of thought are currently active in ethnoarchaeology. The first uses the original meaning of ethnoarchaeology. Fewkes (1900:579) mentions the word in the context of doing archaeology and ethnography of a group. This historical school developed with the work of anthropologists in the Arctic--where cultural continuity was easily observable (Ackerman 1970: de Laguna 1960: Oswalt and VanStone 1967)--and it emphasized the combined archaeological and ethnographic approach within a historical context. The second, behavioral school of ethnoarchaeology, largely ignores the dynamic historical aspect of the study group preferring to study it only in the present.

The historical school of thought in ethnoarchaeology uses the direct historical approach as a key to generating analogies with high probabilities. This approach emphasizes the use of continuous models,

whereby the ethnographic data base and the archaeological data base have continuity: that is, the people studied ethnographically (and historically) are the same as those studied archaeologically. Whereas this approach may study behavior as a major focus, it does so using the dynamics of an historical approach. The study of Waverly applies this historical approach.

The behavioral school is much more linked with the ethnographic observation of a culture and particularly its present behavior. Carol Kramer (1979:1) commented "Ethnoarchaeological research investigates aspects of contemporary sociocultural behavior from an archaeological perspective; ethnoarchaeologists attempt to systematically define relationships between behavior and material culture not often explored by ethnologists, and to ascertain how certain features of observable behavior may be reflected in remains which archaeologists find". Comments by several authors indicate that behavior is the overriding concern of such studies (Gould 1978a:4, 6, 7, 10; 1978b:256-257; Tringham 1978:185-186), along with a materialist bias. "Ethnoarchaeology does not study things so much as it looks for processes of behavior that will explain the way material remains come to occur where they finally do" (Gould 1978a). The purpose of the behavioral approach is to study modern behavior in order to have data for analogical comparison with an earlier one by means of correlates in the material culture, that is, to provide an analogy. The probability of an analogy is directly proportional to the number of demonstrable interrelationships between the analogs.

Archaeological Ethnography

Archaeological ethnography means conducting ethnographic research oriented towards archaeological goals. The major difference between archaeological ethnography and ethnoarchaeology is that the first is an ethnographic study which incorporates archaeological goals, while the second is an historical and ethnographic study which incorporates archaeology as an integral method. Archaeological ethnography and ethnoarchaeology are, in fact, quite similar in goals and methods. Yet they can be distinguished on the basis of the extent to which those goals and methods are used. For now, let us view the two as distinct approaches.

Until the 1930s most ethnographies included a section on material culture. Archaeologists could compare those data with archaeological data. For various reasons the ethnographers generally de-emphasized material culture study and a vacuum of research resulted. During the 1950s such archaeologists as Frederica de Laguna (1960), Wendell H. Oswalt and James VanStone (1967), Patty Jo Watson (1979), and others began to rectify the situation by collecting data on material culture with the specific purpose of relating those data to archaeological situations. Unfortunately, publication of their research was delayed a decade or more, and those studies had much less impact on the discipline of archaeology than they deserved. Ethnographers still mostly ignore material culture, and the result is that archaeologists and folklorists are the ones studying material culture today. "Archaeologists are doing ethnoarchaeology because most ethnographers, in their analyses of behavior, do not pay sufficient attention to material culture to be useful in reconstructing the past or in analyzing ongoing processes" (Rathje 1978:60). Archaeologists have begun to study living communities as archaeological sites.

Archaeological ethnography (or living archaeology) can be described as the observation of a culture in terms of how it could be represented in the archaeological record. Usually it is considered as a means of providing ethnographic correlates (analogues) to archaeological data, and as a means of testing those analogies. Archaeological ethnography is best considered a branch of ethnography dealing with material culture and the behavioral correlates of material culture.

Oral History

Oral history emerged from a traditional history framework. The original concept of oral history research was to provide source materials for contemporary history of significant historical figures. Interviews of prominent individuals would thus be on file for future historians as a supplement and complement to written sources. Oral history soon was expanded to investigate less prominent individuals. Since then oral history has grown tremendously in popularity.

Within the discipline of history, oral history originated in the 1930s, but within anthropology it had a much longer use under the name, memory ethnography. Anthropologists of the late 19th century were concerned with recording information about various cultures' pristine pasts, at a time when the natives were uncluttered with Western ideas and materials. The purpose of such studies was to "reconstruct" the original way of life for those peoples and while observation of the then present natives' cultures was important, probably just as important were the individual narratives collected from the oldtimers about the olden days. This we would call oral history today. So the goal of "reconstruction" has changed little. Nor for that matter has the basic technique, interviewing, which folklorists have been using since the early 19th century, and anthropologists almost as long. Hopefully, however, our goals and methods have become a bit more sophisticated.

Oral history as a method of historical investigation has been espoused by a handful of prominent historians since at least 1938 (Nevins 1966). Chief among these scholars is Allan Nevins, who helped organize the Oral History Archives at Columbia University in 1948. Since that date, oral history "centers," serving as project home bases and repositories for materials gathered, have begun popping up all over the country. In 1972, the estimate was 700 such centers located in 47 different states (Waserman 1975). In addition, a National Oral History Association, organized in 1967, had over 1,000 members in 1975, and has spawned a large number of regional oral history associations (Waserman 1975).

As the oral history snowball began rolling, it took in not only history scholars, but also local history buffs, public school teachers, librarians, popular writers, and journalists. Recently, oral history has gained popularity among the general public through such best sellers as Hard Times: An Oral History of the Great Depression (Terkel 1970), and Roots (Haley 1976), which eventually brought the subject into the world of mass media. Most academic folklorists and anthropologists have remained outside the mainstream oral history movement and use the term sparingly and with reservation.

The definition of the term "oral history" has been disputed by an array of scholars. Essentially, a general consensus has emerged that oral history is history collected from persons orally, usually by means of interview aided by a tape recorder (Brooks 1966). This definition is deceptively simple and straight forward. Few agree on the fine points of the definition of "oral history" and many reject it altogether in favor of terms better fitting their personal jargon. For the sake of simplicity, and for lack of another term easily understood by nonspecialists and the general public, oral history has been used to describe the fieldwork done on the Waverly Project. The term, however, needs a definition usable in the context of projects like Waverly. The relationship between oral history and sometimes related concepts of folk history, ethnohistory, folklife research, memory ethnography, and oral tradition also needs examining.

The only written records concerning common people to be found in the future might be official demographic records, deeds, censuses, and perhaps a will or two. These records will not tell future generations much about these people after they have died, but oral history collections will help. Recognizing the need for such records, a number of oral history enthusiasts took this direction instead of the great man route, and commenced collecting histories of common people. The slave narratives collected by the WPA were some of the pioneer efforts toward these goals. Of 26 ex-slaves interviewed in Mississippi by the WPA workers, two slaves, Jim Allen and Clara Young, had worked at Waverly (W.P.A. 1941:3-10, 173-174). While these narratives are not particularly informative for our project, they do provide a link between history and oral history. They also remind us that our oral history of Waverly will produce an historical document. The people of Waverly were for the most part common, non-literary oriented people whose hitherto unwritten history depended greatly on oral sources. "As we look back into the nineteenth century, visibility becomes increasingly poor. We see only the shadows of countless people who lived and died without their names surviving so much as a hundred years" (Noel Hume 1969:9).

While oral historians have been using an interview collection technique since at least the early 1940s, folklorists have used a similar technique since before the Grimm Brothers in 1810. The difference in the method, folklorists contend, is that "the oral historian interviews, while the folklorist collects" (Dorson 1972). The folklorist seeks a number of informants in a particular area who share common traditions, while the oral historian traditionally has concentrated on one individual. The folklorist goes into the field with an idea of what he wishes to collect but allows informants to direct the course of the interview to a certain extent; the oral historian usually has a more rigid idea of how he wishes to direct an interview.

Folklorist Richard Dorson has chastized some oral historians for imposing their own conception of history on the people they interview. When interviewing common people, Dorson says, the researcher should "seek out the topics and themes that the folk wish to talk about, the personal and immediate history with which they are concerned" (Dorson 1972). Other folklorists have advocated the same practice in the collection of oral history (Glassie 1972; Montell 1972). Thus far, only folklorists have followed this advice to any extent. Dorson proposes such a collection be called "oral folk history."

Charles Hudson, an anthropologist, suggests the term "folk history" mean "the historical beliefs of other societies and cultures" (Hudson 1966). In some respects, Hudson's folk history is like Dorson's oral history, in that both take into account the insider's attitude toward his own history. Hudson, however, uses as examples the historical concepts of cultures significantly different from our own, like the Lugbara of Uganda, whereas Dorson talks about the American folk, meaning the common man. Hudson (1966:53-54) contrasts folk history to ethnohistory (a synthetic discipline combining historic and ethnographic research) which aims "to reconstruct what 'really happened' in terms that agree with our sense of relevance." The ethnohistorian, unlike the "folk historian" imposes order on historic data after it has been collected from the people of a culture. Dorson's objection to the historical-minded oral historian is, on the other hand, that he brings to his work of collecting oral materials a biased assumption of the natural course of history. The American folk have their own order for their historical data based on events in their personal lives, which nevertheless is relevant to most other Americans.

For our purposes, folk history means emic history--what the informants believed was the real history; "oral history" means etic history, that is, our view based upon the oral data. While both folk history and oral history may be viewed as valid, oral history is presumed to reflect the truth; that is, our reconstruction of a past reality based upon the composite view generated from informants, archaeological, and historical sources. What the informant believed happened is important perceptually in understanding their culture, but we are also seeking the truth, unbiased by their opinion. For example, informants remembered being told that Col. Young had upwards of 500 slaves, yet census data reveal only a third that number. We assume the census data to be more accurate than the oral data, but there may be a grain of truth in that oral data. As it turns out, during the 1840s, Col. Young managed the slaves belonging to his mother and to Gov. James McDowell of Virginia. The figure of 500 slaves may well originate from this and similar practices.

What distinguishes folklorists and anthropologists from oral historians? For one thing, relatively few folklorists or anthropologists collect detailed oral history. The folklorist usually collects various "oral traditions" given genre designations such as tales, anecdotes, legends, ballads, beliefs, customs, and the like. These traditions are collected from a number of individuals belonging to distinct groups--regional, ethnic, family, or other--sharing them. The folklorist seeks the shared traditional repertoire of the group.

An important part of the folklorist's work is recognizing that certain oral traditions are not unique to the group from which they have been collected. In other words, a story collected from an informant in Mississippi may on the surface seem like a true occurrence that happened there on a certain date, even though essentially the same story has been told in variation in Alabama, Missouri, Kansas, and any number of other places. Comparative tools like Stith Thompson's (1955-1958) Motif-Index have been devised to help folklorists categorize these stories, and a well-trained folklorist can easily spot a potential repeated motif. This is especially helpful in the collection of oral history, since a story one might take at face value, a folklorist should recognize as a repeated motif and provide comparative information (Appendix 1).

The material manifestations of tradition--tools, clothing, food, architecture, and the like--have been studied by folklorists also, although in America, only extensively within the past decade. Material folklore study has followed the lead of Western European scholars who advocated the holistic study of the material and oral traditions of distinct regions or communities. An entire "personality profile" of the region and its people is undertaken (Jenkins 1966). The term "folklife research" has been adopted for this type of study. Since "folklife researcher" is such a ponderous term, scholars practicing this are usually called folklorists.

The folklife researcher essentially uses the same method as the folklorist; although, he necessarily shares his time between studying artifact and maker or owner/user, taking careful note of the artifact (measuring, sketching, photographing) and interviewing persons associated with the artifact to place it within the context of their lives and the life of the community. In practice, folklife research is very close to ethnography and, in fact, has been called by some scholars "regional ethnography" (Yoder 1963).

Anthropology, the study of mankind, is divided into a number of branches. One branch, ethnography, involves the description of cultures as they exist today. Many ethnographers, like many folklorists, have a synchronic orientation: they deal with the present-day life of the culture without regarding its diachronic, or historical time depth. In the past three decades, a synthesis of ethnography and history, ethnohistory, has taken form. Ethnohistorians have largely limited themselves to researching the written records pertaining to a culture to supplement the ethnographic research on the culture. Ethnohistorians who have done their fieldwork among illiterate and remote peoples have relied upon historic records written by literate outsiders, such as missionaries, travelers, or government officials, who noted their impressions of and facts about the native population.

A number of ethnohistorians have recently turned to the people themselves, rather than to outsiders as historical sources. The use of oral history has been adopted by a number of ethnohistorians as a viable form of supplementing written historical records, if not as a substitution for the lack of such written records. The ethnohistorian may himself become a practitioner of a method similar to oral history as need arises, or use oral historical materials already collected.

To date, relatively few folklorists or anthropologists have tackled straight oral history studies. One of the best studies of this kind is that of folklorist William Lynwood Montell (1970), who compiled the oral history of former residents of Coe Ridge, an extinct settlement in Kentucky, mostly through the use of folk legends. Despite the hesitation by folklorists to use the term oral history, it has nevertheless been included in a recent textbook on folklore by Barre Toelken. Toelken's (1979:344) definition is reminiscent of Dorson's: "Oral history represents the feelings of the people accurately: What events are worth remembering and retelling? History has more farmers than generals"

The oral research at Waverly comes closest to Dorson's "oral folk history" concept combined with folklife research. It is the history of an extinct community through oral sources with an emphasis on the holistic

study of that community's former "personality" with attention paid to the former inhabitants' own view of their history. Transcriptions of oral traditions and descriptions of material culture combine in a diachronic study of the once-vital community of Waverly. When combined with the archival and archaeological studies of Waverly, we have an ethnoarchaeological study, a dynamic, multiperspective, diachronic view of the Waverly Community.

History

The historical research concerning plantation life and slavery is rather extensive, and has recently concentrated on slave culture. Previous literature can be arranged roughly into three phases and examined by their major contributions.

The first phase included contemporary accounts of slave and plantation life from the planters, abolitionists, agricultural journals, and travellers' accounts. Most useful to our research would be the planters records and agricultural journals such as American Farmer, Southern Agriculturalist, and Debow's Review. The journals often included articles written by the planter's themselves, concerning the "proper" housing and feeding of slaves. Contemporary accounts, of course, in the antebellum and postbellum literature often did little more than reinforce prejudices and prevailing sentiments.

The second phase of plantation literature began in 1918 with the publication of Ulrich B. Phillips American Negro Slavery, which had an enormous impact on the scholarly community until the mid-1950s. His conclusions centered on the slaves as being contented and that plantation life was "a school constantly training and controlling pupils who were in a backward state of civilization" (Phillips 1918:342).

Slave life, however, was not the subject foremost in the minds of historians of this period; the majority concentrated on economic aspects. Fogel and Engerman (1974) summarize the prevailing theories of plantation economies expressed by the leading historians of this time including such men as Fredrick Olmstead, James Ford Rhodes, Ulrich B. Phillips, and Richard Hofstadter. Generally, those historians felt that slavery was an unprofitable investment kept in existence by the failure or indifference of slave owners to their own economic well-being (Fogel and Engerman 1974:4). Also, there was the belief that slavery was inefficient and that the system was about to die its own death on the eve of the Civil War (Fogel and Engerman 1974:Prologue).

The above interpretation of the plantation system and slavery was thoroughly challenged by Kenneth Stampp whose Peculiar Institution, still the definitive work on slavery, opened a new phase of plantation studies. His interpretation of the plantation as a viable economic system has not been seriously disputed since. Stampp (1956:414) sums up his viewpoint with "In short, on both large and small estates, none but the most hopelessly inept masters failed to profit from the ownership of slaves." Though slavery was profitable, to the slave it was a harsh system with a high mortality rate (Stampp 1956:276-320).

Stampp's reinterpretation opened the way for a wave of works, which, combined with a new ethnic awareness, concentrated mainly on slave life and culture. Examples of this new awareness are The Slave Community (Blassingame 1972), Roll Jordan, Roll (Genovese 1974), and The Black Family in Slavery and Freedom (Gutman 1976). In addition were books concerning black narratives, for example, Puttin On Ole Massa (Osofsky 1969) and Life under the Peculiar Institution (Yetman 1970). Generally, these works try to infer the cultural systems existing on plantations from a reexamination of the contemporary historical record and black informants interviewed in the 1930s Federal Writer's Project. The plantation system has been investigated using new techniques like econometrics (Fogel and Engerman 1974) and old philosophical interpretations like Marxism (Genovese 1974).

Throughout all the phases presented here far less attention has been paid to the plantation after the Civil War. Slavery was abolished, but the plantation did not die with the war. Recently, the interest in ethnic identity has carried plantation study beyond the slave system and into the tenant and sharecropper period after the Civil War (McDaniels 1979; Nathans 1979).

Our historical background research has revealed the lack of scholarly attention to the adaptation of the plantation economy to the Upper Tombigbee, especially when compared with the available literature on plantations near Natchez, Jackson, or in other coastal areas of the South. Furthermore, what does not seem to be realized by many researchers is that plantations survived the Civil War, albeit changed. Merle Prunty (1955:460) stated that:

"the plantation landholdings remained intact through the Civil War and Reconstruction, and indeed, on down to the present. It has been the large landholding that has provided the areal potential and spatial framework for the agricultural factory we have called the 'plantation.' A change in labor system did not mean that the agricultural factory was destroyed any more than an industrial factory would disappear if its labor pattern were altered."

What seems to be ignored in plantation studies is that plantations evolved along with the society as a whole. A historical and cultural continuum must be recognized. Of the various plantations studied archaeologically, virtually all have emphasized the antebellum or colonial periods. The notable exceptions to this are Waverly and the Bennehan-Cameron Plantation (McDaniel 1979). Both studies emphasized the continuity from plantation to tenant farming and renting.

But important social, economic, and technological differences existed as well. A plantation model derived from a rice and indigo plantation on St. Simon's Island, Georgia (Otto 1977; Mullins 1980), may differ considerably from a similar one in South Carolina, while a tobacco plantation in Kentucky should differ greatly from a cotton plantation in Mississippi. There was a remarkable communication between planters, however. For example, Gov. James McDowell of Virginia had a tobacco plantation in Kentucky in the 1830s, and from the 1830s through the 1840s, had a cotton plantation 15 miles west of Waverly. This communication is not limited to the planters, for slaves were shipped from plantation to plantation. Col. Young got his slaves from Georgia and Virginia.

So we cannot speak of a single plantation model, but must distinguish them on the basis of time period, geography, culture, crop, and size. A plantation differs from a farm or series of farms in that a cooperative arrangement is imposed upon the community members as slaves, tenant farmers, or sharecroppers. They do not generally form their own co-operatives (except in informal task-specific functions; e.g., neighboring, barn building). Hence, a plantation may be defined as consisting of a landowner and his closed corporate community, generally engaged in the production of a cash crops, and often characterized as self sufficient.

Historical Archaeology of Plantations

Beginning in the late 1960s, historical archaeologists, led by Charles Fairbanks of the University of Florida, began to focus their attention to black history by excavation and historical research on plantations (Fairbanks 1974). For the first time, serious attention was paid to slave life, using sources which were not inherently biased by the issues for and against slavery, but were instead the mute testimony of the slaves themselves. Contemporary histories of slavery were biased by the issues and motivations of the writers. Present day histories are biased by the source data. Accounts by the slaves themselves (cf. Yetman 1970; Osofsky 1969) were oral testimony and influenced by the times. Accounts by other protagonists were no better. Only in sources recording mundane topics, like commissary records could relatively unbiased data be found. For this reason the archaeologists turned to the sites and the artifacts. Those things were not intended by their users to be studied. The artifacts were lost or discarded with little thought to the future. Those excavations have led to some re-evaluations of slave culture, offered new ideas, and supported some of the historians' conclusions. Our study of Waverly is simply a continuation of that research past the Civil War and into this century.

The historical archaeology of plantations has centered upon coastal plantations. This focus is changing to obtain a broader geographical and temporal perspective. In plantation archaeology, two topics have received the greatest attention: subsistence activities of slaves; and relative economic/social status of slaves, overseers, and planters.

Robert Ascher and Charles Fairbanks, at the Rayfield site on Cumberland Islands, Georgia, demonstrated that considerable amounts of protein were added to the slave diet by hunting, trapping, and fishing (Ascher and Fairbanks 1971). Their concept has been substantiated by John S. Otto (1975, 1977). On the basis of the Waverly faunal remains and oral history, wild plants and animals provided substantial amounts of food for the tenant farmers, suggesting that part of the subsistence system used in slavery elsewhere continued (at least at Waverly) well into the 20th century.

Status of the individual families has been of considerable concern to historical archaeologists, yet in many cases the historical status of the individuals being studied was unknown, hence, little could be accomplished in resolving their status archaeologically (Otto 1977:92). On a plantation, however, the status of each individual is largely proscribed and rigid: planter, overseer, and slave. John S. Otto working at Cannon's Point Plantation on St. Simon's Island, Georgia, reasoned that if those individuals could be identified in the archaeological context, then substantial differences in material culture should be evident. Otto found

housing strongly indicated status, with the amount of available living space, quality of construction, and expected durability closely indicating the status of its occupants. Other material culture items are also suggestive of status differences. Otto found that a much higher percentage of transferprinted ceramics was found in the planter's kitchen area than at the slave and overseer's sites; while in contrast, banded vessels were more frequent at the latter sites (Otto 1975:219). Otto also found that the planter's ceramic assemblage exhibited greater functional variation than did the overseer's or the slaves' ceramics. He found that four and five hole bone buttons and five hole iron buttons, as well as clay pipe fragments were indicative of the lower status, suggesting differences in clothing style (fashion vs. work) and preference by planters for cigars or snuff.

Fairbanks' work on St. Simon's Island shifted to the Hampton Plantation in 1978. There the emphasis has been to obtain a larger data base than available to Otto, by examining not only the slave quarters, but also the "big house" or mansion (Mullins 1980). Much of the earlier research on plantations centered upon the big house (Caywood 1955; Noel Hume 1966). But by the late 1960s, the interest had shifted to black history and to the slave quarters. Soon came the realization that to understand the slave, we must understand the planter as well. That is why the community approach advocated here is so useful--it seeks to understand the broader cultural context of the community rather than its integral parts. Other research on plantations includes excavations in Barbados (Handler and Lange 1978), Jamaica (Higman 1974), The Hermitage in Tennessee (Smith 1977), Limerick Plantation in South Carolina (Lees 1979), and the Bennehan-Cameron Plantation in North Carolina (McDaniel 1979).

Conclusion

The preceding sections have presented a basic overview of the development of various approaches which combined are ethnoarchaeology. Although each of the approaches has been used for a century or more, only in the past 30 years have these begun to merge into a unified study, and only in the past decade has the ethnoarchaeological approach become popular.

The most obvious reason for this combined approach rests in pragmatism: in both objectives and methods. If we wish to study most of America's past, that is our past beyond the traditional histories, we must turn to non-traditional sources for our data. We are not likely to read about ourselves or most of our kin in the history books, for the written histories are overwhelmingly biased against the common American who made the history. While the growth of the local history movement, coupled with social histories will alleviate this bias, there is too much of American history that remains buried in the minds, the archives, and the sites for any valid history to have yet been written. If we seek a history of minorities or poor folk or just the everyday citizen in one of thousands of small communities scattered across America we must turn to oral history combined with archival history for their story. In many cases we can successfully combine those with archaeology.

As used here, ethnoarchaeology means the study of a community or settlement through ethnography, archaeology, and history. This generally limits its scope to the recent past since living informants are essential (unless superb ethnographic data have been collected previously). These informants need not have participated in the social milieu at the site, but they must have direct knowledge concerning it.

Oral history and ethnoarchaeology are both fairly new approaches to the study of the past; hence, we feel obligated to present the reader with information about their development and scope, in order that the Waverly Project may be better understood. The historical research is better understood and does not need such detail. Instead, let us narrow our focus to those studies having most relevance to the understanding of black tenant farmers and their historical antecedents.

CHAPTER 3. RESEARCH DESIGN

By William H. Adams and David F. Barton

The preceding chapter provided the research paradigm of ethnoarchaeology and its component disciplines. In this chapter, we examine how that paradigm was applied to the study of Waverly. This discussion examines the research strategies first, then the specific research objectives. The next chapter discusses the tactics used to meet those objectives.

The General Research Design for Historic Sites

A General Research Design for historical settlements along the Tennessee-Tombigbee Waterway was formulated by Interagency Archeological Services-Atlanta and the Corps of Engineers (Appendix 3). It provides an integrative framework for dealing with historical sites within a larger socio-cultural universe instead of as single sites or group of sites. Its potential success is hinged upon theory acquired from cultural geographers (locational analysis, central place theory) as it can be applied to both the historical and archaeological data. Hence, sites are not viewed as unique entities or important because of some historic personage or rare archaeological find, but rather as part of a system, be it town, community, or plantation. The focus is on the culture as a whole, not upon its integral parts. "Culture is a system of functionally interdependent parts in which change in one aspect is related in specifiable ways to changes in others" (Struever 1968:133). The system is the culture of 19th and 20th century rural Mississippi. That culture was composed of smaller systems like economic, social, and settlement, which interrelate with one another. Each merges with and affects the others; so we cannot really study one without recourse to the other. The settlement system developed alongside and as a result of the economic and social systems and vice versa.

The General Research Design is presented in Appendix 3 in order to place our research design in perspective. The major difference lies in the focus. The General Research Design was formulated for the entire waterway to address an extremely diverse array of sites, on both the general synthetic level and the site specific level. We have adapted that research design and much more narrowly focused it to include one plantation and relate that to the surrounding area. In forming our research design, we were concerned with not only answering the specific questions but also in collecting other data, which could be combined with data from other projects to answer the broader, regional questions set forth in the General Research Design. Where reasonable, we have attempted to answer those questions from the Waverly perspective, but since Waverly was the first major historical project on the Tennessee-Tombigbee Waterway, we lack the forthcoming comparable data. The historical overview (Doster and Weaver n.d.) for the Waterway was not available until our report writing was completed; it would have made our task much easier in evaluating the data and placing those in regional perspective. Waverly itself was barely mentioned in the overview, however.

The Project

The purpose of the project was to find and evaluate any cultural resources located in the Waverly Ferry Access Area. The survey and testing phase revealed 11 sites in that area, and another site just outside of the area, but within the Waterway construction. We recommended that 10 of those 12 sites could have the potential to contribute to our knowledge of mankind and archaeology. Upon reviewing our recommendations and assessing the impact of proposed construction, a mitigation plan was agreed upon, whereby five sites in the recreation area and the other site outside the area would be excavated and studied via oral history and history. This required the development of a research design to provide a framework for the data collection and interpretation. The remaining sites were preserved.

The preliminary archival, oral, and archaeological data indicated that within the recreation area supposedly were located nine residences, a blacksmith shop, a general store and post office, a possible brick kiln, a saw and grist mill, and a brick warehouse. We had reason to believe several of these sites were antebellum, including possible slave quarters and an overseer's cabin. Antebellum material was recovered on the sites during testing. We had to develop a strategy to study adequately the sites to be excavated and to place them within some kind of meaningful framework.

Since several houses were standing as late as the 1950s, and one had been occupied until 1969, we had the potential for these sites to date from the 1840s until the 1940s or later. Such a long time frame requires broad and specific questions. Obviously, if such a time depth existed, a major concern should be changes occurring at each site over that time period. At various times, the social framework potentially included an overseer and slaves, black tenants, and white sharecroppers. Given the above, how could such sites best be studied and how could the data be organized into a report? Data collection and data presentation have different objectives. The research paradigm of ethnoarchaeology provided the conceptual organization for the study to begin data collection and to complete the data presentation. But, except for maintaining feedback between its component approaches, ethnoarchaeology does not exist in the field, because people are doing archaeology, oral history, or history. Ethnoarchaeology is simply their touchstone. Ethnoarchaeology can be nourished in the field by seeking redundant data sets, that is, by excavating sites and interviewing people who lived in those sites, by finding historical data relating specifically to those people and those sites.

We formulated five strategies or paradigms to integrate the data collected via archaeology, oral history, and history: settlement systems, settlement patterns, economic systems, social systems, and material culture study.

Strategy 1: Material Culture Study

The first research strategy was to study the material remains of the community from the perspective of the informants' views of what they once possessed and the artifacts recovered from the sites. Archaeologists study other people's trash, the refuse of our human millenia. The purpose of such study lies not in the artifact, but in what that artifact reveals about the people who used it. An artifact may be defined as anything used or modified

by mankind; hence, artifacts can include anything from a sliver of a bottle to the glass factory which made the bottle. Generally, such a factory would be called a site, but in reality it and even the roads leading to it are simply the constructs of human imagination applied to physical things.

Culture consists of a system of shared knowledge and understandings, enabling a society or group of people to cope with daily problems and survive through the generations. Artifacts are the physical manifestations of culture. By means of artifacts, people are studied by the archaeologist in the hope that general statements can be made about those people and about their culture. Although rarely accomplished, the ultimate aim of most archaeologists is to learn the rules others have followed in their culture, so that we may ourselves benefit from their experience, and perhaps not repeat their mistakes. Collingwood (1946:10) stated: "The value of history, then, is that it teaches us what man had done and thus what man is." By studying the artifacts lost or discarded, we study what mankind is.

"The archaeologist is the last grubber among things mortal. He puts not men, but civilizations, to bed, and passes upon them final judgements. He finds, if imprinted upon clay, both our grocery bills and the hymns to our gods" (Eiseley 1969:29).

As the last grubbers of several mortals' things, we have gained insight into the manner of their lives, and can learn from their passing what life in a rural Mississippi community was like generations ago.

"No one, I suppose, would believe that an archaeologist is a man who knows where last year's lace valentines have gone, or that from the surface of rubbish heaps the thin and ghostly essence of things human keeps rising through the centuries until the plaintive murmur of dead men and women may take precedence at times over the living voice. A man who has once looked with the archaeological eye will never see quite normally. He will be wounded by what other men call trifles. It is possible to refine the sense of time until an old shoe in the bunch grass or a pile of nineteenth century beer bottles in an abandoned mining town tolls in one's head like a hall clock. This is a price one pays for learning to read time from surfaces other than an illuminated dial. It is the melancholy secret of the artifact, the humanly touched thing" (Eiseley 1971:81).

This study focuses upon the humanly touched thing. But why study the recent past with trash so recognizably modern? In reference to much earlier material from Colonial America, Ivor Noel Hume (1969:9) stated that "it would be fine if the remains of early America could be allowed to mature in the ground until they acquire the venerable patina of great antiquity." Unfortunately, the bulldozers deny sites their maturity--their time capsulated story shredded and scattered. The unique remains of our past are increasingly made rare by our present construction. The present use of the settlement area at Waverly is one more step in the archaeogenesis of the sites (i.e., the continual natural and cultural changes in a site). Fortunately, here we were able to acquire part of the site inhabitants' stories through the artifacts lost or discarded by them.

William Rathje (1978:51-52) has listed five advantages of studying physical data from ethnographic contexts: (1) nonreactive with researcher; (2) quantifiable; (3) independent check on interview methods and data; (4) alternative data source; and (5) independent variable.

The ethnographic data he used were based upon interviews concerning material culture usage and disposal in Tucson, Arizona. He then compared those data with samples taken from the informants' garbage cans. The material from Waverly was often little different from Rathje's artifacts, except the Waverly material had been cleaned in the soil and most organic materials were rotted away. We did not have the preservation Rathje had, but at least our trash did not smell. Rathje's points are well taken, however. Artifacts can usually be studied with a kind of detachment not possible when interviewing a person; hence, the artifacts are largely nonreactive with the researcher.

Physical data are quantifiable, for we can count the nails and bits of glass. This is hard to do with interview data. But just because it is quantifiable does not mean it is of value. Arthur Schlesinger (1969:193) commented upon the emphasis on quantification in the social sciences when he stated:

"As a humanist, I am bound to reply that almost all important questions are important precisely because they are not susceptible to quantitative answers. The humanist, let me repeat, does not deny the value of the quantitative method. What he denies is that it can handle everything which the humanist must take into account: what he condemns is the assumption that things which quantitative methods can't handle don't matter"

Artifacts serve as excellent checks on the reliability of both the interview data and the historical data. The problem of site location provides one example of this. Informants stated the location of various sites, later confirmed by the survey and excavation. Historical sources also gave locational data. In both cases, the observable reality in the field was similar to, but different from, the historical and ethnographic realities, that is, they were synergistic and complementary. The artifacts serve as an important data source, an alternative to the ethnographic and historical sources. Taken alone, no single data source truly reflects the past reality of Waverly.

Rathje's fifth point, artifacts as independent variables, is also important. How did the artifacts affect the people who used them? This is especially important in an industrial society where most of our material culture was made by someone other than the user. This differs strongly from more "primitive" cultures where the user and maker were often one and the same.

The rationale for the study of the material culture holds that such a study provides a quantifiable and comparable data base representing the material manifestations of the behavior and actions of the individuals we wish to study. Such data are independently and methodically derived in such a manner as to serve as a cross-check or verification of the ethnographic and historical sources. In essence, it provides one of many kinds of

spectacles with which to view what once was a thriving community, but now exists only in memories, yellowed papers, and bits of glass scattered beneath the leaves.

The purpose of the material culture study is two-fold: (1) to present the story of the inhabitants by means of their artifacts; and (2) to present to other archaeologists the methods and data whereby we derived our interpretations. The first objective requires data be phrased in emic terms wherever possible, that is, to present the people's stories as they themselves might have told them. We have presented such data in Chapters 17-18. The second objective required that the data be organized in etic terms, that is, described in a manner so that archaeologists working on other sites can compare their data with ours, and know the differences and similarities. This requires constructing a typology and systematically classifying the artifacts. We have presented the specific data in the appendices.

Strategy 2: Economic System

We wanted to learn about the Waverly economic system. The economic system consists of the extraction or production of raw materials, and the redistribution and consumption of both raw materials and finished goods. The paradigm for organizing the economic data consisted of six levels of interaction: local, local commercial, area commercial, regional, national, and international. Historical and archaeological sources provided data on all levels, but oral history provided mostly local information. Although separately considered here, we recognize that the economic, social, and settlement systems are really sub-systems within the community, and the community was part of larger systems. The result is an understanding of the relationship between the sites and the general store/commissary, the tenant and sharecropping system as used at Waverly, and the factors relating the various economic activities at Waverly to the outside world. To obtain those data, we posed several objectives and research questions.

Objective 1: To define the various light industries. Where and how did they develop? How extensive were the industrial activities? How did industrial techniques change through time? What effects did industry have on settlement patterning? What tales or stories were associated with local industries? What were the industries at Waverly and what functions did they serve? Who used their products? How did these operations integrate with the operation of the plantation? What were the determinants for the locations of these industries?

Objective 2: To define the use of home-made versus consumer goods. How were commercial products acquired by local residents? What products were made at home; what was bought?

Objective 3: To differentiate tenant farmers from sharecroppers on the basis of economy. How was the transition from slave to sharecropper to renter systems of labor and productivity accomplished at Waverly and nearby plantations? How did each group settle their debts and acquire land, tools, and credit for goods?

Objective 4: To compare the purchasing pattern at the Long General Store with the archaeological remains. What items were purchased at the store? What portion of a tenant's material possessions could be expected to be preserved archaeologically? What biases enter into such an analysis?

Strategy 3: Social System

We wanted to learn about the social system at Waverly, that is, the set of interactions binding individuals into groups within the community. This was found to be nearly unapproachable via the archaeology, because such attributes are intangibles.

Objective 1: To determine via the oral history and documents the relationship between the black and white residents of the Waverly community. What were the differences between sharecroppers and tenant farmers at Waverly? What material culture was used at and near Waverly by different socio-economic classes? What do the historical documents reveal about the racial relations within the Waverly community? Are economic or social factors more important than race in determining one's status within the community? What interaction occurred between the Young family and its overseers and workers? In what form did this interaction occur?

The archaeological question of importance is how this could be documented by the artifacts. What artifacts or patterns of artifact use and disposal would be a true reflection of ethnicity rather than socio-economic factors? How could we know this from only artifacts if the oral and written information is missing? The problem of ethnicity has been addressed before in historical archaeology (Otto 1977; Riordan 1978); however, few such studies had good oral history to correlate with the archaeology. While the oral history provided many insights into the relationship between the black and white sharecroppers, the archaeology was not so successful. With one exception, the sites were occupied entirely by blacks, denying us the comparable data needed to make the kind of statements on ethnicity originally considered.

Objective 2: To determine the social interaction between the plantations. Would the plantations surrounding Waverly compose what has been regarded best as a closed corporate community? What was the relationship between Col. Young's plantation and those of his kindred? To what extent was the relationship kin based and social, and how did this affect economic and settlement systems?

Objective 3: To obtain a view of the non-tangibles of Waverly life. Where did people worship in the area? What kinds of religious beliefs were common? Where did people worship? What kinds of values were important to residents? How were values prioritized? Was education considered important? How was it obtained?

Strategy 4: Settlement System

The fourth strategy consists of the settlement system of the Waverly Locality. Here we distinguish settlement system from settlement pattern. The settlement pattern is the geography of the community, both internally and in relation to areal networks: residence patterns are the spatial relations within a site. The settlement pattern is the "what" and the

"where" and the settlement system is the "why" of a settlement (Flannery 1976:162; Schoenwetter and Dittert 1968:41; Winters 1969:110-111). As Kent V. Flannery (1976:162) distinguished these:

"A settlement pattern, as its name implies, is the pattern of sites on the regional landscape: it is empirically derived by counting sites, measuring their sizes and the distances between them, and so on. A settlement system, on the other hand is the set of 'rules' that generated the pattern in the first place."

Bruce Trigger suggested we should think of settlements on three levels of organization. "The first of these is the individual building or structure; the second, the manner in which these structures are arranged within single communities; and the third, the manner in which communities are distributed over the landscape" (Trigger 1978:169). James Deetz (1968:42) suggested that four levels of behavior have archaeological correlates (individual, minimal group, community, society) and these abstracts come close to what we see at Waverly. We have added a fourth level between Trigger's individual level and the community level: the neighborhood. The neighborhood is the operational level for studying most communities. By neighborhood we mean a cluster of homes and other buildings near enough to one another that we may assume frequent interaction by the inhabitants. A community may often be too large in number or scattered over too great an area for it to exhibit a single settlement pattern. A neighborhood is much more definable. It represents the interface between the community and the individual actions which culminate in a settlement pattern. The community in turn is the interface between the needs of a culture in a given area, and the individuals living there. The study of Waverly concentrates on the first three levels, and provides data whereby the fourth level will be attainable once comparable data become available for the Tombigbee Valley.

On the community level, the determinants of settlement are seasonality, resource processing, transportation, storage, defense, specialized functions, as well as the environment (Trigger 1978:176-184). "Within any region, people tend to establish their settlements in places that are close to drinking water, sources of food, and as far as possible, in places that are safe and pleasant" (Trigger 1978:177). Trigger (1978:178) argues that the layout of communities tends to be heavily influenced by kinship, while "community size and location are influenced to a large extent by ecological factors." At Waverly we focused on the community rather than specific sites to understand the functional relationship between sites.

Ethnographers generally study living people, communities, and societies; whereas, historians and archaeologists usually study dead people, communities, and societies. In certain circumstances, however, the fields of interest and data overlap, and it then becomes possible to study a community from the different perspectives each method can provide. But one can also study a past community through ethnography, by interviewing older persons whose memory extends back into the past one wishes to study. For most purposes, this kind of study is limited to the recent past by the human lifetime. Archaeology and history are less limited in time--they are confined to the past. Imagine then the resources available if one uses these methods in the study of the recent past. Communities and neighborhoods can be studied in a meaningful way by applying the approaches

together. This is particularly true for those communities which left a disproportionately poor showing in the historical record--those communities which shared in creation of the present but left little mark in the present's record of the past. It may in fact be the only way we can study the small farming communities or any other small community differentiated from the rest of society by economic, social, ethnic, or any other cultural reasons. The historical record is biased against the poor, the illiterate, the powerless, and even the average American citizen. These lack historicity, the ability to become immortalized in the historical record (Adams 1977b; Ascher 1974). Indeed, because of this very real bias, and the fact that it would apply to most people, one can wonder if the real history of America could ever be known. Obviously, we will never know all the past, but what this means is that the portion we do know is seriously questioned. In other words, we are not just missing important facts of history, we are missing most important facts. We may have a program listing the leading actors, but the supporting cast is being ignored. Without knowing the supporting lines, the rest of the play makes little sense.

The people living at Waverly belonged to many social groups, but the most important (besides kinship) would be the neighborhood--the area and the people with whom daily or frequent social interaction occurred. Archaeologists often speak of dealing with a community, or at least assume that they are studying only one community within any given area. Only rarely, such as the case with Waverly, can the archaeologist actually know the true extent and character of that settlement.

A community has been defined as "the maximal group of persons who normally reside in face-to-face association" (Murdock et al. 1945:29), however, that definition is applicable only to a very small village. It makes a better definition for a neighborhood. However, Murdock's (1965:80) definition of a neighborhood was "families scattered in semi-isolated homesteads." As used by Willey and Phillips (1958:18), the archaeological locality means "generally not larger than the space that might be occupied by a single community or local group." Conceptually, their locality and K. C. Chang's (1967:41-42) settlement are the archaeologists' equivalent of the ethnographer's community. The concept of the community is a social concept, implied but not determined in the archaeological record, that is, we infer a community archaeologically but do not know if it has any past reality or not. The concept has utility, just so long as we realize it is a construct of our mind. Bruce Trigger's essay, "The Concept of the Community," examines many of the problems inherent in correlating artifacts and patterns seen archaeologically with the social community (Trigger 1978:115-121). From the above, we draw two distinctions regarding community, locality, and neighborhood. The community is a group of persons who share an identity derived from interaction economically and socially within a definable settlement area. Within the community may be several neighborhoods, either dispersed or clustered, but sharing closer interaction with one another than with the rest of the community.

The study of Waverly followed the model established in the study of Silcott, Washington. That study incorporated oral and written history, and archaeology in a community study. The rationale from that study (Adams 1977a:27-28) follows:

"How did we go about studying the community through archaeology? First of all, we had to excavate a number of sites, not just one site. The excavation of a single site may reveal much knowledge about that site and about the people who occupied it, but the site must be put into a broader perspective, just as the people themselves were part of a broader social framework. The broader the archaeological data base is, the broader the inferences that can be made from it. We sought information from which inferences could be made on the basis of the community as a whole, rather than on individual sites within it. With only an individual site, inferences based upon it are limited to similar sites, similar kinds of sites, and to other sites within the same cultural framework. . . . Instead we sought a community data base in order to make our inferences and generalizations on a higher order of social complexity as well as on the more specific level"

As stated previously, the Waverly project tries to focus its attention on the community level, where possible. But how can the community of Waverly be defined in any useful way, other than the vague notion of its existence? Via archaeology, this would require tremendous effort, for in order to define what was part of Waverly would require the demonstration that peripheral areas were not part of the community. This alone would take years of research. Since we have oral and written data, such effort would be unnecessary. The oral data has produced one concept of the Waverly community which appears to be accurate for the 20th century tenant and sharecropping community, but not for that of the 19th century. This later community would cover about 12 sq mi, including among others the plantations of George H. Young, William Burt, G. H. Lee, and J. V. Cook. For pragmatic reasons, we assume the social boundaries tended to follow the plantation boundaries for both the 19th and 20th century communities. But such rural communities do not have definite boundaries and cannot be specifically delineated on a map. Individual families on the periphery may have interacted nearly equally with other families in two or more communities. Nevertheless, there will be a tendency to identify with one community, because of economic, legal, and other factors.

We must also be aware that on the plantations (antebellum and postbellum) severe differences existed between the planter, his overseers, and the slaves, tenants, and sharecroppers. Indeed, such social and economic differences may well justify rethinking the entire community concept, for certainly face-to-face association is unlikely. Perhaps Redfield's dichotomy for peasant societies has bearing here when he speaks of the great tradition and the little tradition (Redfield 1973:42). We suggest Waverly was a community of plantations, linked by common economic factors and kinship. While mostly subjective, there is one very good indicator of this in the Henry C. Long Account Book for the general store at Waverly. In it are found the purchases of various tenants for 1878-1879 and 1887-1889. These provide the "catchment area" or market area for the general store, and hence, define the boundaries of an area whose inhabitants shared economic interaction and presumably social interaction. The local economy was controlled by the planters, who arranged credit at Long's Store for their tenants. Thus, Waverly is defined on economic terms, using a system imposed upon its inhabitants by the elite substratum there. While certainly not perfect, this is far better than trying to rely on census, tax, or school districts, which are imposed upon the inhabitants by a distant authority.

Thus, we may speak of a community of planters and a community of tenants or sharecroppers. The community of planters and the community of tenants appear to share the same area during the 19th century, but with the 20th century, the community changes. Within this 19th century community, we should expect a series of neighborhoods hierarchically arranged within each plantation, an administrative center for each plantation, and at least one symbolic center (the mansion). Furthermore, each of these is oriented toward the central place of Waverly, the entrepot consisting of the steamboat landing and ferry landing. For the 20th century, this larger community organization has disintegrated into the individual neighborhoods. To obtain the data on settlement systems, we posed several research objectives and questions.

Objective 1: To define the Waverly community. Why did people live in this area? Where were the boundaries of the community? Does the Waverly community have any legal definition or legitimizing aspect in the form of school records, voting precincts, tax districts or does Waverly appear only as a place name? What defined place for area residents? How flexible was the idea of community for local informants? How does this differ through time? Where did one go to get mail? Where did one go to buy: food, clothing, tools, furniture, kitchen goods, hardware, farming implements, seed?

Objective 2: To obtain data on nearby communities. How was the settlement at Waverly similar to and different from other nearby communities? How did Waverly differ from a small town or village? What was the difference between a plantation and a large farm? Which towns did people go to most frequently?

Objective 3: To determine the transportation network and its nodes. What was the nature of the riverport function at Waverly? What were the port facilities like? What was the status of Waverly during its history as a node in the transportation network? How did the presence of Waverly as a transshipment point on the river and railroad affect its importance as a commercial center?

Objective 4: To study the various entry ports (ferry/ford, steamboat landing, train station) as they relate to the distributional facilities (post office, stores, warehouses), the industries (tannery, cotton gin, sawmill, grist mill, quarry, lumbering, blacksmithing) and the residences. While most of this objective is empirically unattainable, it was nevertheless addressed through both the oral history and the archaeology. Locational analysis of site placement and functional analysis of intrasite variability and artifacts was a first step in this process of understanding. One quantitative means was used, a network analysis of products reaching Waverly compared diachronically. A similar study has already been accomplished synchronically for the Silcott data (Adams 1976). Based upon that study and some suggestions by Klein (1973), Suzanne Elliott (1977) attempted diachronic comparisons. However, her sample size was extremely small and lacked the controls which the Waverly sites possess. A new analysis based on geographic concepts of market accessibility presented in a later chapter promises to be very useful in analyzing national market economies. The economy of Waverly was tied to the outside world through the various transportation networks, and these are approachable through the archaeological data.

Objective 5: To define the location of houses, commercial, and industrial sites within Waverly Plantation specifically and in the other plantations nearby. What geographical factors affected the location and structure of a plantation and its integral parts? How was settlement influenced by physiography and attempts to exploit different land forms? What was the relative importance of Waverly as a retail commercial center? What land use patterns were commonly exploited? How did settlement patterns change through time? What distribution networks operated to spread industrial products?

The spatial and temporal nature of settlement in the Waverly area was investigated. Structures, roads, trails, and work areas were located, identified, and mapped. These features are analyzed to show spatial and temporal variation in size and placement, relationship to cultural and natural features, and internal differences and similarities. Also, comparisons are made between sites on the basis of trash patterns and architectural patterns. The result is a statement defining what constitutes each site, how sites relate to each other, and how they form a community.

Strategy 5: Settlement Patterns

The settlement pattern may be defined as the spatial relationships between a house, yard, and associated structures and features, including fences, roads, and fields, as well as their relation to natural features, such as streams, slopes, and soils. The following determinants of individual buildings need to be considered: climate (materials, heating, cooling, orientation to sun, wind, and view), and culture (construction technique, specialization of production and distribution, household size, family organization, ritual specialization, symbolism, security, and fashion)(Trigger 1978:170-176). Hence, settlement patterns will be addressed by examining individual sites and their location on the physical landscape.

Recently, historical archaeologists have begun seeking to determine intra-site patterning of activities, such as refuse disposal (South 1977:47). To achieve our strategy of determining the settlement pattern for Waverly sites required positing several research objectives examined below.

Objective 1: To define the relationship (from a cultural-historical view) between structures, showing this relationship in time and space, and the reasons for these relationships. This has been done on the basis of artifactual data, using such techniques as seriation to show differences in time. There appears to be little difference between the sites on the basis of social status. During the plantation period, the land remained in the hands of the Young family. We may assume the occupants were always enmeshed in the economy of the plantation from its heyday to its later days of simple land speculation. Because of the lack of landownership, one would expect the tenant occupants to show little difference in terms of relative economic status.

Objective 2: To determine functional, formal, and temporal similarities and differences which may exist between structures. Where did people usually build houses and outbuildings? What factors affected construction of buildings (terrain, streams, roads, materials, etc.)? How was a home usually laid out in relation to roads, outbuildings, fences?

Where was trash discarded? Was there any difference in kinds of trash and the way they were discarded? Research on this question proceeded in many directions. Artifacts, disposal patterns, and architecture were among the many areas investigated. The artifact data were arranged so that the sites may be compared. In addition, comparisons were made between sites on the basis of artifacts reflecting such areas as: clothing, hygiene and health, tobacco, alcohol, food preparation and use, household items, personal items, tools, and so forth. The end result is an overview of the people at each site and how they differed from others in the neighborhood.

Objective 3: To delineate changes in the placement of structures which may reflect a differing view of land use. Why were structures placed where they were? How were they oriented in relation to the road system? Questions such as these are answered partially through historical data and partially through archaeological data. An attempt was made to locate porches and doors at each site and these were related to roads, fences, and work areas. The orientation of each structure was revealed and mapped. The oral, historical, and archaeological evidence for each site was synthesized.

Objective 4: To examine the location, spatial organization, and architecture within a site, as it reveals the function of the site and the way people perceived and used it. Basically, we wished to achieve a view of what constituted the various elements, which together formed the "site." This search for the mind set of long dead people requires a careful and sufficiently large sample of the site area, analysis, and cautious application of correlative data from oral history sources and historical analogies.

Settlement Patterns: A Model for Plantation Settlement

Based upon the historical literature and the more recent research by historical archaeologists, we would propose the following settlement model for plantations. Merle Prunty's (1955) study of plantation settlement patterns divided the plantation system into three forms: The Antebellum Plantation Occupance Form, The Postbellum Fragmented Occupance Form, and The Neoplantation Occupance Form. The latter emerges after World War II, emphasizing machinery instead of labor; it will not be considered here. We will call these the Antebellum Plantation Settlement System, the Postbellum Plantation Settlement Systems, and the Neoplantation Plantation Settlement Systems.

"The 'plantation,' as the term is used in the South today, comprises six elements: a landholding large enough to be distinguishable from the larger 'family' farm; a distinct division of labor and management functions, with management customarily in the hands of the owner; specialized agricultural production, usually two or three specialties per proprietorship; location in some area of the South with a plantation tradition; distinctive settlement forms and spatial organization reflecting, to a high degree, centralized control or cultivating power; and a relatively large input of cultivating power per unit of area" (Prunty 1955:460).

Plantations were usually larger than 260 ac but infrequently larger than 1000 ac; during the 1930s, 10% of the plantations were larger (Woofter 1936; Prunty 1955:461). Antebellum planters considered 900 to 1000 ac to be optimal, while 1950s planters "state the efficiency of management is so clear on units containing 800 to 900 acres that they intend to subdivide their larger tracts" (Prunty 1955:461).

The Antebellum Plantation Settlement System

"The ante bellum plantation settlement pattern was distinctive. The owner's, or manager's, house customarily was situated near a cluster of service buildings and slave quarters. Slave houses were grouped compactly in rows along short roads, forming a square or, more frequently, a rectangle of buildings. Service buildings included sheds for tools and simple implements, storage sheds for the plantation food supplies, an office, barns for the work stock, a cotton gin or rice mill or sugar-cane mill (or occasionally two such 'processing' centers), and a blacksmith shop. On some of the larger plantations a separate central kitchen was used for a nucleated plantation village, a settlement type noteworthy because of the huge area within which it was distributed" (Prunty 1955:465-466).

Evidence from coastal Georgia indicates a less centralized plantation, with slave quarters located nearer work places (Otto 1977). The settlement pattern used for slave plantations varied tremendously, depending upon size, crops, soils, terrain, and other factors. Yet, certain features were held in common. First, the "big house" was occupied by the planter's family. Near it were dependent structures, such as kitchen, smokehouse, and stables. While obviously functional, the planter's house and grounds were also symbolic as a success indicator to other planters, emphasizing the difference between the planter and his servants. Even the planter's log cabin would have some symbolic attributes. Second, an administrative center is required, containing an office and commissary. These were usually located near the big house, for the planter's convenience and for security. Also near the big house would be house servants' quarters and guest houses. The third feature, the slave quarters, was located as near the big house as practical. Slave quarters consisted of rows of small, generally one room, cabins, set fairly close together. Usually, these would be accompanied by an overseer's house, slightly better in quality. The slave quarters appear to have two prime determinants of location, security and access to work areas, and several determinants of structural arrangement (population size, family numbers), as well as a symbolic aspect. The symbolism lies in the redundancy and lack of individuality of the structures. Cabins were constructed alike and of the same size. This pattern tended to magnify the differences between slave, overseer, and planter. The slave quarters may be characterized as concentrated.

Postbellum Plantation Settlement System

The period of Reconstruction in the South saw many changes. For plantations, the loss of slave labor and the burden of the land necessitated a shift to labor paid in wages or by usufruct. Many planters did not have the capital to pay many hands, so the planters were forced to provide the labor with land use rights. Such an arrangement might be renting the land for cash or for cash equivalent in cotton. This shift would eventually

cause a change in settlement pattern for the tenants, but this was a gradual process, taking decades to complete, for neither tenant nor owner had the capital to build immediately new houses on each rented parcel of land. The freed slaves may have stayed on in the cabins and walked to their parcels. Many would not have far to go and would stay in the cabins until they were not repairable any longer. This transitional period would be defined so long as the slave quarters still served as residences for the tenants.

The development of the postbellum system and its various patterns was a gradual one, dependent upon balancing the need to be close to one's work and the need to be close to one's kin and friends. While we may characterize tenancy as a dispersed settlement, this is only in relation to the previous concentration of the slave quarters. In many cases, this balance is totally idiosyncratic, but since humans are inherently lazy, we suspect that walking an extra mile a day to one's fields would tend to be avoided if possible.

Attitudes also enter in here. Planters may have feared keeping their freed slaves in close quarters and close communication and may have hastened the dispersal of the settlement. With this system, we should expect to see housing dispersed across the plantation, but concentrated along roads, probably in kin groups.

Prunty divided the postbellum period (for his purposes, 1865-1945) into two settlement types, Cropper and Tenant-Renter, but from the evidence provided by him we suggest three types: Work Gang Pattern, Initial Sharecropper Pattern, and Tenant Pattern.

The Work Gang Pattern emerged immediately after the Civil War as a means of organizing labor into essentially the same system of agriculture used under slavery, but with paid workers. Regarding the work gang system, Prunty (1955:470) stated:

"The freedman found the system irksome, because he worked, was supervised, and was housed much the same as before emancipation and thus did not have the complete personal freedom to work where, when, and as he pleased, and he wanted use and control of the mules. When all these had been granted, the spatial pattern of the plantation was altered. . . . Dispersal of houses followed, and the nucleated plantation village disappeared."

Housing would have continued in the slave quarters. Archaeologically, this change would perhaps be reflected in the material culture, but not in any change in site location or internal spatial arrangements. Generally, this pattern lasted until the mid 1870s, but on sugar cane plantations, it lasted until at least the 1950s (Prunty 1955:472).

The Initial Sharecropper Pattern is defined as the beginning of the dispersed settlement, consisting of homesteads having few if any outbuildings. With the sharecropping system "the owner supplies everything used in production (including housing) except labor and furnishes half the cost of seed and fertilizer" (Prunty 1955:468). The land was divided into 30 to 40 ac units per housesite, and contained two to three plots. This requires two or more miles of farm road per square mile than in the antebellum plantation (Prunty 1955:469). Prunty notes the following similarities to the antebellum plantation: (1) amount of cropland same:

(2) community pasture same; (3) much of land in woods; (4) located near owner's house; (5) mules located in central barn. Thus, the initial sharecropper pattern can be characterized as units dispersed across the plantation, but with the antebellum centralized power still evident; each unit consists of 30 to 40 ac, a house, and few, if any, dependencies, such as a small shed or cotton shed (Figure 3.1).

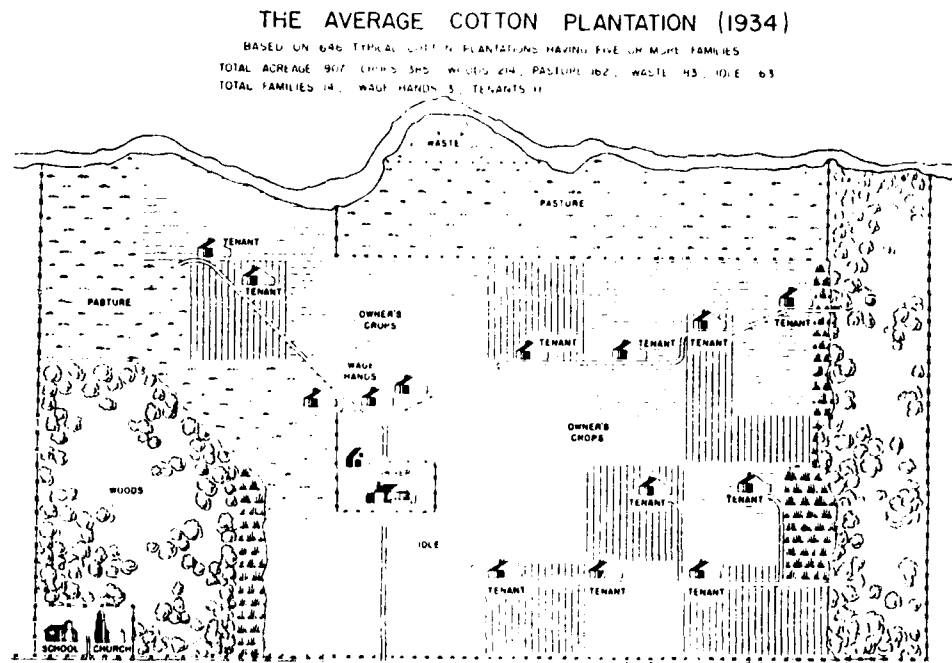


Figure 3.1--Spatial Patterning on the "Average Cotton Plantation, 1934" (from Woofter 1936:xxxii).

The Tenant Pattern developed from the sharecropper systems and exhibits little change in location of the homestead but major changes in the spatial patterning within each unit. The tenant unit is very similar to a small farm, except for ownership.

"Settlement dispersal on the tenant-renter type is as great as on the cropper type. There are fewer housesites, because the area in each subunit customarily is larger than in a cropper subunit. Fragmentation of fields and length of roads and lanes are about the same. Some important differences exist, however. Central barns and sheds have disappeared, because work stock and implements belong to the tenant or renter, not to the owner. Pasturage is fragmented and dispersed, because each tenant needs a pasture for his work stock and the family cow. Fencing is also fragmented, each fence enclosing five to ten acres of pasture. The total amount of pasture required is about the same under both cropper and tenant-renter occupance, but the length of fence necessary to enclose many small pastures obviously is greater than that required to enclose the same acreage in one pasture. A small barn and a storage shed or two are necessary on each tenant subunit" (Prunty 1955:474).

"On 15 plantations in northwestern Mississippi as much as 8 per cent of potential cropland was found to be in nonproductive residential area . . . , occupied by the laborer's garden, house, hog lot, chicken yard, garage, mule barn, sheds, other outbuildings, drives, paths, and recreational space" (Prunty 1955:479). While this may have been nonproductive for the landowner, it was certainly productive for the tenant. Thus, the tenant place is much more complex in its spatial structure than that of the sharecropper. The tenants have more control over their own lives and appear to be more stable, since they have a greater investment in tools and livestock. "Numerous analyses of southern tenants and croppers indicate that the tenants have achieved the higher economic status" (Prunty 1955:480). The benefit to the plantation owner is largely that of having a contented labor force available.

Summary

While the emphasis here has been on the synthetic, integrative paradigms, the actual order of the research and the data presentation moves from the specific to the general. We do not study communities as such, but instead, we study artifacts and sites; from these and analogous bits of information derived from archival and oral sources, we construct a past community which can no longer be observed.

We set up a research design to include domestic, commercial, and industrial sites from the 1840-1940 period; however, our excavations did not produce occupations at the domestic sites before about 1880. So the antebellum and immediately postbellum periods were not attainable via the archaeology. Our research design was sufficiently broad and flexible that we were able to discard many questions and not have to write too many new ones. Of course, as the research progressed new questions became necessary for detailed areas of the investigation. For example, at site 22CL569, the oral data had indicated that the structure was once the overseer's house, yet all evidence from the ground indicates it dates after the 1890s. This meant we needed new sets of questions regarding why informants felt it was an early site. We did not use a set of formal hypotheses to be tested. Instead, we asked a series of questions which would guide the research but not restrict the data collection unnecessarily. Our concern was to collect the maximum amount of data possible within as rigorous a framework as possible. We have sought the structured inquiry without sacrificing objectivity by posing broad research questions.

CHAPTER 4. METHODS

by Timothy B. Riordan, William H. Adams, and Betty J. Belanus

Introduction

In any framework of investigation, we need to state the methods whereby we achieved our results, so others can achieve similar results. The paths of investigation we took were not clearly marked, for there has been little activity there. Few archaeologists have studied the later decades of the 19th century or the early decades of the 20th century. Recent work on this period is flourishing, but publication remains in the future. Detailed material culture studies of this period are virtually non-existent. Some studies have been made of antiques and collectibles, but since those are aimed more at prestigious items, the chances of their covering aspects of tenant farmer materials are not good. We improvised and made errors. Hopefully, we presented data in a usable way, whereby others may recognize our errors and correct them.

This chapter introduces the reader to the field and laboratory methods used in the archaeology and oral history. The methods employed in the historical research were much more basic and, we assume, common to any historical research done. Perusal of the historical text and of the bibliography should suffice.

Excavation Methods

The specific strategy for each site will be addressed later. What follows is a description of the general excavation methods used and comments on their effectiveness.

Stage 1: Site Preparation

All herbaceous plants were cleared from the site, using power and hand equipment, with appropriate safety procedures. Some small trees were removed, but environmental damage was kept to a minimum, since this would be a recreation area someday. The metric cartesian grid established during test excavations in February 1979, was rechecked for accuracy and additional points established.

A backhoe and bulldozer were used to clear overburden at the industrial site (22CL575) and to excavate stratigraphic trenches at the "post office" (22CL567), the dump (22CL576), a domestic site (22CL571), and the brick kiln (22CL521). The backhoe and bulldozer proved to be of great usefulness without doing unnecessary harm to the sites. The removal of a concrete platform at the industrial site by the bulldozer saved many hours of arduous handwork and freed a vital area for excavation. Carefully controlled and supervised power equipment can be used on archaeological sites to good advantage. It allows more of the budget to be used on hand excavation of sensitive areas.

Stage II: Slot Trenches

In order to understand the spatial distribution of trash disposal, artifact loss, and cultural features, we sampled different areas of a site. Although the ideal is total excavation, it can rarely be achieved due to limitations of time and money. As a result, we must use a sampling strategy. The sampling strategy should consider the universe, sample bias, technique, and cost effectiveness.

The universe for each site was the site area, defined on the basis of observable variables. To ascertain this, a control sample must be taken from outside the area thought to define the site. We chose a non-random, systematic sampling transect as being the least biased and most cost effective. This entailed the excavation of .5 m wide trenches every 5 m across each site. Thus, our sample size would be 10% if we ran only N-S or E-W trenches. The 5 m interval should be effective in intersecting cultural features like fencelines, roads, and structures. There is a randomizing aspect in this strategy, since we did not place these trenches according to observable features, and hence, bias our sample against unexpected features. A totally random sample would be better for that, but it is not as cost effective to set up. Long trenches are easier to lay out, excavate, and record than random test pits scattered across the site. We used test trenches to define the spatial variations of artifacts and features existing at each site. Horizontal control was in .5x2 m units and vertical control was by cultural stratigraphy. In cases where the cultural stratum was thick, we used 10 cm arbitrary levels within the stratum. The excavated soil was screened through a 1.25 cm wire mesh screen. We excavated features with trowel and brush. The excavation techniques were chosen for two purposes: to define the structure and surrounding activity areas and to obtain a sample of yard material to relate to questions about trash disposal.

At Waverly, artifacts were dispersed in concentrations around the houses; fewer artifacts were recovered away from the houses except in a few dumps. Thus, we can demonstrate where they were not dumping their trash much more certainly than we can state where the disposal areas were. Slot trenches were fairly effective for determining the spatial distribution of artifacts, once we got past the structures (excavated in large blocks). However, as a method of locating features like fences, roads, and gardens, slot trenching does not appear to be as useful. The "window" provided by these trenches does not give enough data to determine the full nature and extent of a feature; the trenches must be accompanied by larger area excavations. Often, a possible feature in a .5 m wide trench turns out not to be one when revealed in a larger excavation. The narrow trenches were proportionately more difficult to excavate than 1x2 m or 2x2 m excavation units because of the lack of maneuvering room. Furthermore, small excavation units such as slot trenches were less efficient because of the recording necessary. For example, the ratio of wall profiles per area of the excavation unit decreases with size, with a .5x2 m unit having a ratio of 5:1, but a 2x2 m unit having only an 8:4 ratio; this is simply economy of scale operating. Because of these problems, the use of slot trenches should be carefully considered. Slot trenches seem more useful in testing sites than in large scale excavation.

Stage III: Excavation

On the basis of surface features, test excavations, slot trenches, magnetometer, and soil testing, certain areas were selected for excavation. The selection process varied, depending upon the kinds of questions being asked. Structures previously located were excavated. Additional samples from the yards and from trash disposal areas were obtained. We used 2x2 m and 1x1 m units. Large areal exposure was favored because this was the most efficient method of identifying architectural and cultural features.

Soil chemical and magnetometer anomalies noted in the testing phase were excavated to determine their meaning, to evaluate the utility of these techniques, and to delineate the kinds of signatures the various artifacts and activities have. The excavations were specifically set up to explore anomalies that had appeared in magnetometer, soil chemistry, and surface material surveys. In some cases, these methods proved to be useful, while in others they did not (Appendix 4).

Shovels were used to skim thin slices of soil wherever possible, but in complex stratigraphic situations and in dense artifact accumulations, trowels and brushes were used. As a general rule, all dirt was screened through 1.25 cm wire mesh. When time constraints became a factor, 25% of the soil was screened, but this was only done in areas of low artifact concentrations. Each level form records the screening sample used. Smaller samples (N=312) were collected for water screening through fine (.5mm) wire mesh to recover floral and faunal microfossils.

Large area excavation proved to be the most productive method for dealing with architectural and cultural features, trash deposits, and work areas. Only after large areas had been opened at 22CL569 and 22CL571 did the architectural features make sense. By exposing such large areas, the features could be confidently mapped and recorded.

Features were removed by hand excavation with trowel and brush. They were excavated separately and before the surrounding matrix was removed. Features were mapped and photographed in plan and profile views. All features were screened and all artifactual materials bagged by feature.

Recording was set up so the maximum data were recorded. Artifacts were put in labeled bags, and a bag list was kept. Each unit had a level record sheet and notebooks were kept by the site supervisors to insure adequate data recording. Features were recorded on a special form. Stratigraphy was, as a general rule, recorded for the north and west walls of the excavation units.

The Field Lab

We rented a small two-bedroom house in Columbus, Mississippi (as it turned out, from a great-grandson of Col. Young) to serve as our laboratory during the field phase of the project. Two people worked full-time, assisted by others on rainy days. Washing was done in plastic tubs and the water dumped outside. Artifacts were placed on styrofoam meat trays to dry. When dry, each major item was labeled with India ink, either on the item directly or on designer's white gouache. Clear nail polish was brushed over each label. Items without clean, smooth surfaces like rusted metal,

were string-tagged or a paper tag was placed with them in a small plastic bag. Artifacts were kept together on the trays by field bag to examine the association between items, and to keep the field crew posted on variations in kind or in date of material being excavated. This worked well for about two weeks, when so much material began coming from the field, that a backlog was created. Because of the finite amount of per diem funding available, we could not just shift field persons into the lab to help catch-up.

The Bloomington Lab

Two very loaded pick-up trucks brought the Waverly material to our laboratory in Bloomington, Indiana. Upon arrival, the material was organized by field bag number and placed in standard sized boxes on shelves to await further processing.

A washing log was kept for each bag to provide a record and control. Each bag's contents were emptied into a plastic colander held over a wastebasket, in order to eliminate as much dirt as possible at this stage. Next, the materials were scrubbed with brushes and the clean artifacts placed in another colander resting in a rinse bucket. A window screen drying rack provided a place for initial sorting into gross material categories. After drying, these were taken to the labeling table. Here, the catalog numbers were assigned and each artifact labeled individually or collectively (e.g. nails were given a lot number and placed in plastic bags). The number assigned might read 22CL571B-31-1567, meaning site 22CL571B, bag/lot 31, catalog 1567. The site number represents Mississippi (22nd alphabetically of the first 48 states), Clay County, site number 571, area B. The bag number was assigned sequentially in the field and was unique for each site. The catalog number was unique within the project. The use of the bag number alone would have been sufficient; however, this redundancy served to insure that artifact provenience would not be lost because of a cataloging error.

The catalogers performed the initial sorting for analysis, separating various kinds of material by site, and preparing them for different kinds of analysis. The first separation was designed to eliminate as much "noise" as possible, that is, those artifacts providing easily recorded information which would not yield much further value past that point: metal scraps, plain glass, and nails. Nails and window glass were measured and bagged for storage. The remaining artifacts were separated into material categories (glass, ceramic, metal, plastic, wood, bone, shell, botanical) at this time.

A total of 72,253 artifact bits (all items requiring processing) were washed and cataloged. This took 2335 hours of time to accomplish, or an average of 30.9 artifact "bits" per hour. The original budget contained 1176 hours for artifact processing for the anticipated 53,000 bits, but since we recovered 36% more artifacts, additional funding was negotiated. Even that was insufficient. Efficiency of artifact processing was a goal throughout the project, but there are still considerable variations from project to project which hinder the prediction of "sufficient" time. Perhaps if other archaeologists would state in print their time/task data, some kind of realistic consensus for budgets could be derived.

Analytical Sources

The number of data sources for late 19th/early 20th century material culture is remarkably large, compared to earlier time periods, yet because of the increased quantity and variety of the industrial age materials, the data sources are still insufficient. Most kinds of data still await study by material culture specialists. However, a body of literature is developing on this period from a number of sources.

The largest number of references from this period consists of various books and articles written by and for the collector, ranging from books on collecting glass and ceramic antiques, to tin cans and soda pop bottles. Somewhere, someone is collecting Americana and contemplating writing the definitive work on his/her speciality. Many succeed and a hundred copies are printed locally, but few of these find their way to the archaeologist. (Perhaps this is repayment for the lack of information which filters to the general public from the archaeologist.) Occasionally, one of these books is printed by a publishing company and becomes available to a larger audience. The quality of these references ranges from useless to excellent, but one usually has little choice and is glad to find anything on the subject at hand. Very few scholarly synthetic works focus on specific details of interest to the archaeologist; although, several very useful books identify marks on glass, ceramic, and other artifacts (Barber 1904; Godden 1964; Toulouse 1971).

Although until recently few archaeologists have paid attention to this period, a number of current projects hold promise for comparative data. The data availability is a problem for many important sources are in theses and dissertations, difficult or impossible to obtain from libraries or other sources.

Reprints and originals of various trade and mail order catalogs are important data sources, providing many illustrations and descriptions to aid identification of items, as well as the original terminology.

The company producing the artifact is an often overlooked source of information. Their addresses can be found by consulting Moody's Industrials or the Thomas Register of Manufactures, both to be found in most major reference libraries. We have written to many companies and most responded. Often a company does not keep the kind of information we wish or they simply cannot afford the time to track it down. However, a surprising number have archivists in charge of company history who can provide detailed information, sometimes to the exact day of manufacture.

Many other sources such as Patent Office records, photographs from local sources, newspaper advertisements, and so forth, provide additional useful data for the archaeologist to identify and classify material culture.

Typology

The purpose of a typology is simply to order different kinds of data in a systematic manner, so relationships between things can be studied, or at the least, so each thing can be placed in its own niche in the scheme. The Periodic Table of Elements and the Linnaean Taxonomy are notable examples of typologies for physical and natural objects. Typologies for cultural

objects are not as easy to construct. While elements and species change as do artifacts, the similarity stops there. The humanly touched thing is characterized as much by random factors as by laws. Natural and physical objects are governed by natural and physical laws, but cultural objects must in addition be governed by cultural laws. Unlike natural and physical laws, cultural laws change with time, often rapidly so. Human free will negates the validity of most cultural laws, for as soon as the rule begins to apply, exceptions begin to emerge. The point is that a typology of cultural materials is not innate in the materials due to elemental structure or evolutionary development. Thus, any number of equally valid typologies could be constructed for any given data set. The "correctness" of a typology lies in its usability. The most empirically valid typology may be useless for comparison. The one based upon all possible attributes is split so fine that one may be totally lost within it. We have tried to develop a usable typology for other archaeologists. Like most typologies, it has inconsistencies, despite considerable effort to avoid them. The problem lies in the fact that a typology of modern material culture is so broad that it encompass many smaller typologies within it, such as glass, ceramics, and so forth.

Three basic kinds of typologies are useful to archaeologists: functional, descriptive, and mixed.

Functional Typologies

Functional typologies are arrayed along distinctions of function. For example, storage containers would be placed together in the typology, even if they were made of different materials. One could create a functional typology for items in an old Sears & Roebuck mail order catalog, which would be useful and have empirical and emic validity. A functional typology is the easiest to understand but the most difficult to use for archaeological materials.

Functional typologies present data in an understandable human way. An axe is called axe, not a Type #A cutting implement; further, the mention of an axe implies various uses and functions. The axe's primary use is to cut, but it may have many functions, such as cutting firewood, clearing a forest for planting crops, butchering animals, and building a cabin (Linton 1936:404). Except by historical and ethnographic analogy, we cannot guess the many functions an axe or other item had, but we can guess some functions--an axe cut and a canning jar stored. A functional typology is employed to a degree by all archaeologists when they classify material culture. Whether the function assigned is a correct one must be determined through analysis and replicative experiments. When a stone artifact is called an axe, certain functions are implied if not explicitly stated. In prehistoric sites, that "axe" function is a guess, and often a good one, but on a historic site, because of records from the historic period, very often we know what the manufacturer intended for the function to be. (Of course, the user often employs other uses.) Functional typologies have two main deficiencies. First, fragments are not easily classifiable by function, but they may nevertheless contain important attributes for the archaeologist to note. Second, even on recent historical sites, some objects defy functional classification. The specific function assigned to an item must be considered as an hypothesis. For example, a canning jar function is

storage, usually wet foods. But dry goods, moonshine, and even nails could be stored in one. Just to complicate the situation are human pack rats who collect canning jars as a hobby.

The advantage of the functional typology is its integrative nature. Hence, artifacts which might be presented in a dozen locations in a descriptive typology are instead placed in the same passage. For example, the people of Waverly may have noted differences in buttons, particularly Ellen Mathews, the seamstress. However, probably most people cannot describe the buttons on the shirt they are wearing today without looking at them.

The functional typology used here was modified only slightly from one used by Roderick Sprague of the University of Idaho, and presented in Saastamo (1971:29-31). As a vehicle for organizing an incredibly diverse array of cultural materials, this system is excellent. It furnishes the organizing framework for discussing things and their relation to people. Similar frameworks have been developed; one in particular by Stanley South (1977) has been used by many archaeologists.

Descriptive Typologies

A descriptive typology, on the other hand, is much easier to construct by much harder to understand by any but its creator. These simply describe the artifacts and array the descriptions in some order. It begs the question of function entirely. A typology of this sort uses selected attributes of artifacts as dividing lines. It often provides more clear cut divisions than either functional or mixed typologies. Unfortunately, the detail necessary to establish a descriptive typology makes it difficult to pick one group of artifacts for study because they are spread over several levels of the typology. The major advantage of a purely descriptive typology is that it presents the data with no interpretation. If you know the system, you can find any artifact. With functional or mixed typologies there is a greater degree of subjectivity. The major subjectivity in a descriptive typology lies in choosing some attributes as being more significant than others. There is no way to establish a hierarchical typology without this bias.

Descriptive typologies, however, suffer from being cumbersome. In order to be consistent and to cover the significant attributes, level upon level of complexity needs to be outlined. Finding functionally related artifacts in this morass is almost impossible. This kind of typology is of little value in understanding cultural processes or cultural histories. A well-conceived and workable descriptive typology for industrial American material culture would take many years to create and implement using a computer; thus far no one has done this.

Mixed Typology

In order to analyze adequately the technological attributes of the Waverly artifact assemblage, and thereby, to assess its potential for understanding the general culture history of Waverly and the specific culture history of the various sites, the following typology is presented.

The Waverly typology is actually a mixing of both descriptive and functional criteria, but its main direction is descriptive. Our objectives in presenting this typology are threefold. First, the typology serves to record permanent descriptions of what we found at Waverly. Second, it organizes the artifact collection into a manner hopefully useful to other historical archaeologists. Finally, the typology will demonstrate a sample of our national culture which produced the artifacts used at Waverly. Regarding the third objective, the descriptive typology allows us to study the development of the national culture through its technological achievements. Technological processes leave marks on the objects produced. Changes in these marks can be studied to provide data on changing patterns of technology. In order to present the data so that technological patterns are comprehensible, detailed descriptions are necessary.

Emic reality does not necessarily exist in a descriptive typology. In other words, the folk at Waverly may not necessarily agree with all of our typological divisions. The typology detailed below probably does, simply because the culture we are describing is our own.

Oral History

Although the primary concern was to gather information pertaining directly to the proposed Waverly Ferry Access, without a thorough study of the Waverly community in its entirety, such information would have been of limited use. The Waverly Ferry Access Area did not function as an organic subsection of the community, but rather related by necessity to the other areas of the community. Most fields worked by inhabitants were located in another area of the plantation. The plantation mansion, an important focal point for the community, was just outside the study area. A later saw mill and cotton gin were also outside the area. It was vital to study Waverly as a community to understand the lives of the inhabitants and why they chose to live in that area, and to relate non-dwelling structures in the area to the lives of the inhabitants and the workings of the plantation.

During the field period, oral history information was collected from 89 persons. Of these, 43 were interviewed extensively. These interviews were taped with a Realistic Model CTR-47 Auto-Repeat portable tape recorder on Scotch 3M Tenzar Posi-Trak Backing 60-minute cassette tapes. If time and the amount of potential information to record permitted, informants were contacted and interviewed informally for a short period, usually approximately half an hour, before a formal taping session was scheduled. However, due to tight scheduling and the number of persons necessary to contact, a number of informants were initially contacted and recorded in one session.

The tape recorder was used as inconspicuously as possible, although always with the full knowledge and permission of the informants. A data release form was signed by each informant. Interview session ranged in length from one half hour to three hours. Some informants were interviewed once, either because of time considerations or limited information possessed by them. Handwritten notes were taken at all times, and often diagrams and maps were drawn by the informant and/or the interviewer during the session. Notes, tapes, and diagrams were reviewed and analyzed by the fieldworker during the field period to determine the direction the research was taking

and to help fill in gaps in the existing research. Copies of all tapes and the completed transcripts (edited only for typographical and transcription errors) are on file at the Library of Congress, Mississippi Department of Archives and History, and the Indiana University Folklore Archives.

In preliminary oral history research, Jack D. Elliott, Jr., a Clay County, Mississippi native, had located several informants. Chief among them was James W. ("Honeybee") Hendrix, who had lived in and around Waverly for most of his life, since he was a boy in the 1910s, and was one of the last to leave Waverly. As well as serving as an excellent informant himself, Mr. Hendrix proved invaluable in helping contact other informants.

Most informants contacted during the field period presently live within a 15 mi radius of Waverly, some in Clay County and some in Lowndes County, Mississippi. The traditional settlement pattern of the region dictates that persons do not usually move significantly far away from the area in which they were reared; although, in recent years economic considerations have forced a number of younger former residents of the Waverly vicinity to move to larger Northern cities. In general, however, the larger portion of persons who had once lived in Waverly, or those who had significant amounts of information, still resided in the area. Within the past 15 years death has unfortunately taken several people who would have been invaluable informants.

The informants ranged in age from their thirties to into their nineties. They included former black tenant farmers, white sharecroppers and sawyers, descendants of the family that owned the plantation, people who were children when they lived in Waverly, people who visited Waverly often, and people who had tangential connections to Waverly (such as digging mussels in the section of the Tombigbee near Waverly). For each informant, a profile was made consisting of name, birthdate or age, present address, family association, and extent of contact with the Waverly area.

A prepared questionnaire was used as a guideline in interviewing those people who had an extensive amount of contact with the Waverly area. The questionnaire was divided into sections directed toward involvement with the area, specific houses and house sites lived in by informants within the area, conceptions of neighborhood and community, the daily concerns of the family, the yearly cycle of farm life, transportation to and from the area, existing industries in the area, and traditional stories and beliefs (Appendix 2). The answers to these questions provided data on the settlement patterns, economic system, and belief system of the Waverly area. The same questions were asked as many people as possible in order to triangulate (cross-check) information. Unfortunately, in some cases triangulation was impossible, since only one or at most two people could remember back far enough to provide information on certain events and structures. For instance, Walter Ivy, the informant who had lived in Waverly the longest, is sure that one of the stores operating in the Waverly community had been moved by oxen on log rollers from a different location. No one else remembers this event. Does this mean we must disregard this information entirely? Such information can be accepted, with reservations, if the informant has proven reliable--that is, if his information triangulates with other informants' information in other areas of the questioning.

In general, the 1900-1930 period was less well covered by informants than the 1930-1960 period, and any pre-1900 information was spotty and more anecdotal than typical. The pre-1900 information was handed down by the "old people" who are now long deceased. Most informants themselves will punctuate the relating of this older information with, "Well, that's what they told me, although I didn't see it myself." Since most black families moved from Waverly by the 1940s, it was somewhat harder to find blacks still living who remembered the pre-1940 period of tenant farming on the plantation.

A primary goal of the oral history research was to contribute to the archaeological research as much as possible. Thus, a significant amount of time was taken with each informant gathering information on the sites being excavated. Did they remember structures at these sites? If so, what were the structures like? If they were dwellings, who lived there during what years? When were the structures torn down? This type of questioning provided much pertinent site specific information, but also led to some dead ends.

Traditional beliefs and stories were often latent in informants' minds and emerged as a by-product of the questions concerning life and times in Waverly. If an informant was presented with the straight question, "Do you know any stories or legends about Waverly?" he or she often professed not to remember any. However, upon examination, a number of localized legends and area-specific stories are found to have been told within the context of the general interviews. Many of these stories are related to traditional folk motifs, paralleling stories told throughout the southern United States and sometimes around the world. Others were interesting local occurrences that have become legendary, such as the murder of the saw mill operator, Bridges, around 1910.

Whenever possible, photographs of the informants were taken. Any related extant material culture items, such as old pieces of farm machinery, quilts, typical examples of architecture, and ceramic containers were also photographed. An effort was made to locate and copy historic photographs taken during the period Waverly was inhabited. This effort was largely fruitless; however, since few families living in the area had enough money to buy a camera and photo supplies, or the inclination to spend what little they did have on such frivolous items. One large collection of photographs, the Adair/Decker family's, had burned in the fire that destroyed their home in the 1950s.

Informants were, in general, more than willing to tell all they knew or could remember. Perhaps the proverbial "Southern hospitality" was at work in the ready acceptance of the fieldworker by most informants. In any case, it is a fact that the people of Northeastern Mississippi are, on the whole, generous, kind, and eager to please. Everyone, regardless of age, race, or sex, told his/her stories with the minimum of embarrassment and no apparent resentment. Once the goals of the fieldworker were understood by the informant--that is, the collection of the unwritten history of the Waverly community--information flowed freely. (The fieldworker was only once or twice mistaken for a welfare agent or Medicare worker!) Most people viewed the collection of the oral historical record as a very worthwhile project and took pride in the fact that they could be contributors.

Two factors that unwittingly helped the data collection from the former Waverly residents were that the researcher was young and from the North. The older people, and those who were not very old but still remember the old ways of doing things on a farm, found it amusing and ego-building to tell a young person how people survived without modern conveniences. Honeybee Hendrix, for instance, felt it was his duty to demonstrate the process of riving shingles from a cedar log for the "younger" folks. A Notherner is considered to be, and in many ways actually is, ignorant of Southern folkways. For instance, one of the inevitable points of comparison between the Northern researcher and the Southern informants became food. The Northern conception of "peas" as round, green vegetables (to the Southerners, "English peas") soon had to be broadened to include Southern varieties, like black-eyed peas, field peas, and crowder peas, which are not often found in the Northern diet. Several informants found it necessary to illustrate their point by taking the researcher out to their gardens and, in some cases, providing a taste of the item in question. The research in Waverly, it will be noted, was a multi-sensory experience.

The oral history plan included transporting selected informants to the archaeological sites and field laboratory. Due to a number of factors, including ill health of some informants, adverse weather conditions, and scheduling problems, only a small number of informants actually visited the sites and the lab. These visits were not as fruitful as might be expected. The cleared archaeological sites did not particularly inspire any insightful memories. Nor did visits by informants provide many pertinent clues to what was once located on the various sites. Similar results were obtained in the study of other communities (Adams 1977a:18-19; Brown 1973). (Preliminary site visits by Honeybee Hendrix and other informants had, however, provided information on possible sites during the testing.) Questioning informants in their own homes proved to be just as helpful, in the long run, to elicit site specific information. The reason for this lack of stimulation by visits to actual sites may be explained partly by the following. What Waverly was is entrenched deeply into the memories of the informants. The Waverly that once was is no more--it exists only in memory and has little to do with the present physical area which, at the time of the study had no more resemblance to its former self than a few daffodils, a rose bush or two, some piles of bricks, and scattered rusty pieces of iron.

Trips to the lab by a small number of informants were interesting, but again, not very informative. Most "garbage" (as the artifacts were so ungenerously referred to by some visitors, including the garbage collector, who almost walked off with a tableful) was of such general nature that informants could not say for sure whether it had ever been theirs. Who can tell whether this bottom of a glass Clorox bottle, piece of whiteware ceramic, or overall button was used by his/her family or one of the preceding or subsequent families that lived on the site? Except for general identification of artifacts, informant visits to the lab were of limited success. Yet, the lack of identification of articles as one's own is also an interesting indication of the homogeneous nature of everyday life in Waverly. A follow-up study using the artifacts as a systematic stimulus for recall would be informative, but we did not do this.

The oral historical information collected reflects the number of people interviewed, the personalities of those people, and the varying occupations and social standing of these people. The personality of the fieldworker and

the questions asked were also determining factors in the end-product of the project. Although it was impossible to cover all bases and answer all questions, we felt enough were covered and answered by those who lived there. The story has been composed using, as often as possible, the actual words of those people in hopes of conveying to the reader a feeling for the people of Waverly and their attitudes toward their former home.

The Waverly Project represents an intensive attempt to co-ordinate archaeology, history, and oral history. The nature of oral history is more intangible and ephemeral than written historical or archaeological data, but in many cases presents the only data available on certain topics, and, in most cases adds a human quality less apparent in written history and archaeology.

The three types of information (archaeological, historical, and oral historical) ideally complement each other by shedding light on different aspects of the same problem: What was Waverly like in this inhabited period? Who lived there, what did they do, how, where, and when did they live there, and how did they relate to the larger area of the Waverly community? While historical and archaeological research on Waverly uncovered materials dating reliably from the antebellum period, oral history data pre-1900 are not as reliable. Unlike the tangible written historic documents and archaeological artifacts, oral historical materials consist mostly of intangible memories and stories, punctuated now and then by a family photograph or vintage item of material culture. However, upon synthesis and examination, these sometimes hazy and seemingly garbled reminiscences capture the feeling and flavors of the area as neither the written records nor material artifacts can: from the mouths of people who actually lived, worked, and played in the area. As folklorist Richard M. Dorson (1971) has said: "Oral traditions may well exasperate the historian . . . with their quick-silver quality and chronological slipperiness. But they can be trapped, and they offer the chief available records for the beliefs and concerns and memories of large groups of obscure Americans." The majority of people who lived in Waverly is essentially one type of "obscure American"--members of common rural families living everyday lives.

CHAPTER 5. THE GEOGRAPHIC BASE FOR SETTLEMENT

by Howard G. Adkins and Jack D. Elliott, Jr.

Introduction

Historically, the socio-economic development of Mississippi was almost wholly supported by cotton production. Cotton was well adapted to any scale of production; however, the prime requisite was little skill and much labor. During the antebellum period its production in several areas within the state was dominated by the plantation slavery system; after 1865 production was continued under the tenant and sharecropping systems. It is generally agreed that the plantation and all it embraced, reached its zenith in the Natchez area, but after the Indian treaties in the early 1830s a second plantation strong-hold developed on the dark fertile soils of the northeast prairies (Black Belt) in the Tombigbee River Valley.

Most people acquiring extensive landholdings in the Tombigbee Valley and at Waverly were from the southeastern Atlantic seaboard states. Among the early settlers who apparently sought land for its cotton production potential were the Youngs, Lees, Browns, and Burts. Such a location as the west bank of the Tombigbee River was reminiscent of the area back-home. But more importantly, for these pioneer planters it served a dual role: easy transportation to markets and relatively easy access to fertile soils.

Few, if any, plantations in northeast Mississippi and especially in the Tombigbee Valley acquired a reputation for grandeur exceeding that of Waverly, established by Colonel George Hampton Young from Oglethorpe County, Georgia. Almost any cursory examination of historical data reveals that "to be of consequence a planter had to be master of 50 or more slaves" (Simpkins 1959:133). Colonel Young was, therefore, an antebellum planter of consequence for by 1860 he was the owner of 137 slaves and real estate valued at \$268,000 (U. S. Census of Agriculture 1860). But, like many others, the splendor of Young's plantation had disappeared by the 20th century (Banks and Brown 1905), and evidence of its once proud and influential existence only remains in the recently restored mansion.

This study of the Waverly community is unique in that rather than concentrating specifically upon a single plantation, the study will examine the evolution of several plantations within a perspective of regional history.

Waverly is the name, used as early as 1836 (Tanner 1836), identifying the site overlooking the Tombigbee River where Colonel Young constructed his mansion and plantation steadings (Figure 1.5). The site was occasionally referred to as Mullen's Bluff or Pine Bluff (Lowndes County Board of Police Minutes 1835-1838). At its zenith Waverly possessed all the characteristics of an embryonic village: social center, post office, river port, sawmill, cotton gin, brick kiln, tanyard, and store. Waverly also identified a group of plantations owned by Young's kinfolk and friends who migrated with him from the southern margin of the Piedmont in Eastern Georgia and settled nearby (Figure 5.1). Burnside and Tarawa, owned by Alexander Hamilton and Thomas Young, are examples of other plantations in the Waverly community (Figure 5.2). This larger area of related plantations we call the Waverly

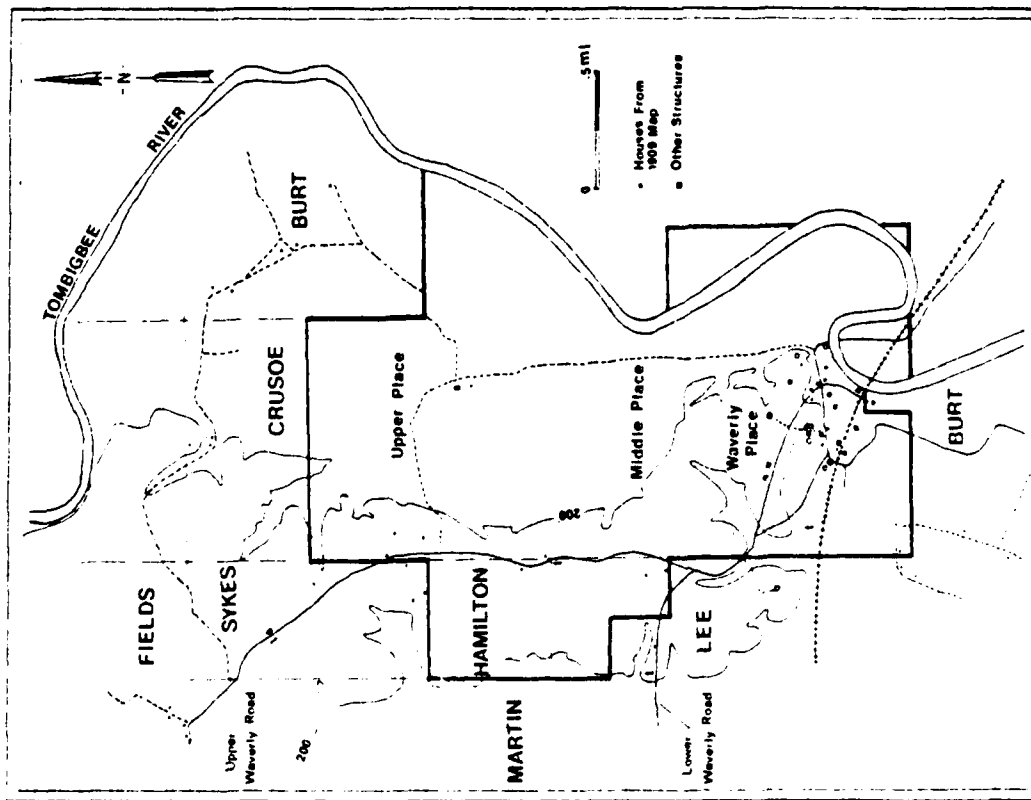


Figure 5.1.--Waverly Plantation.

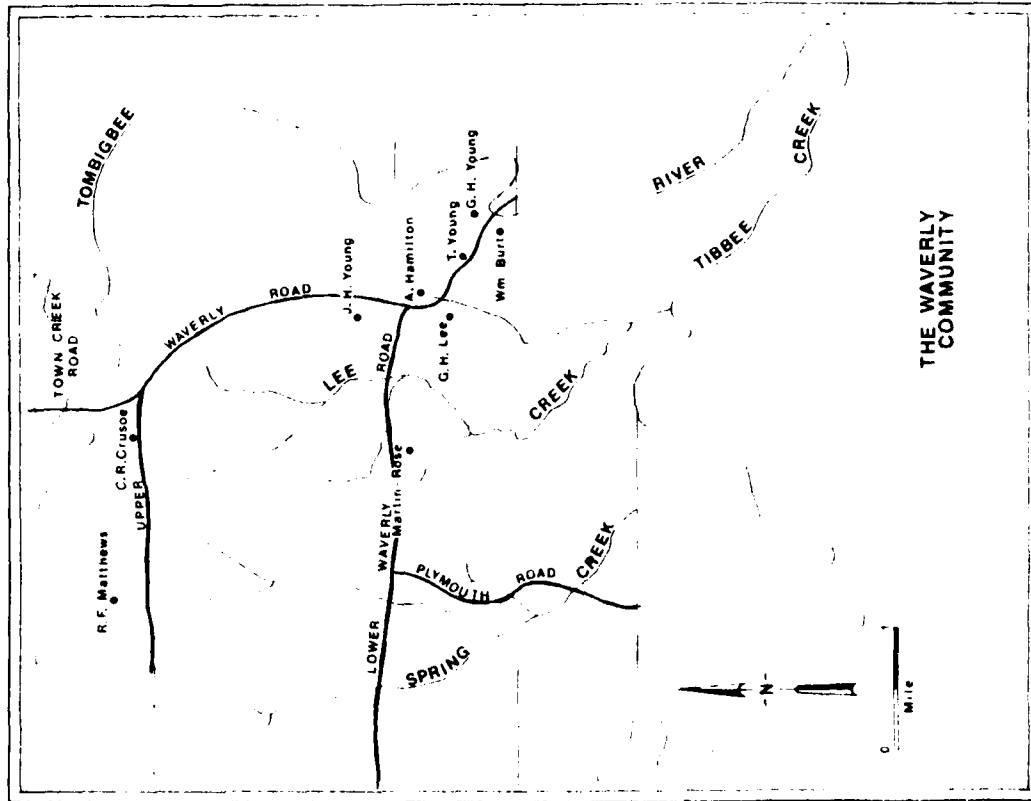


Figure 5.2.--Planters' House Locations on Main Roads.

Locality and the people living there, the Waverly Community. Col. Young's plantation was called Waverly Place or Waverly Plantation, after his mansion there. The study area of 16 ha destined to become a recreation area will be called Waverly Ferry or just the study area. The name, Waverly, may originate from the Waverley novels by Sir Walter Scott, some of the most widely read books of the Romantic Period. The spelling of Waverly varies. Since Col. Young used "Waverly" instead of "Waverley" in his 1840s correspondence, that is our usage.

The idea of planters living in mansions surrounded by broad acres is a myth in the Tombigbee Valley for had this been true each planter would have lived nearly in isolation. The plantations at Waverly formed a close-knit community with planters residing in a near face-to-face association. The area as delineated on the frequency of interpersonal relationships and kinship ties included 19 full and 15 fractional sections of land bordered on the east by the Tombigbee River, on the north by Town Creek, on the south by Tibbee Creek, and on the west by Spring Creek (Figures 5.2, 5.3). By 1850 the typical Waverly plantation was large, containing more than 50 slaves and 200 ha (500 ac) (Weaver 1945:38), and organized as an economic unit under central authority with the occupants (slaves) regimented for labor. Moreover, slaves accounted for more than 75% of the population.

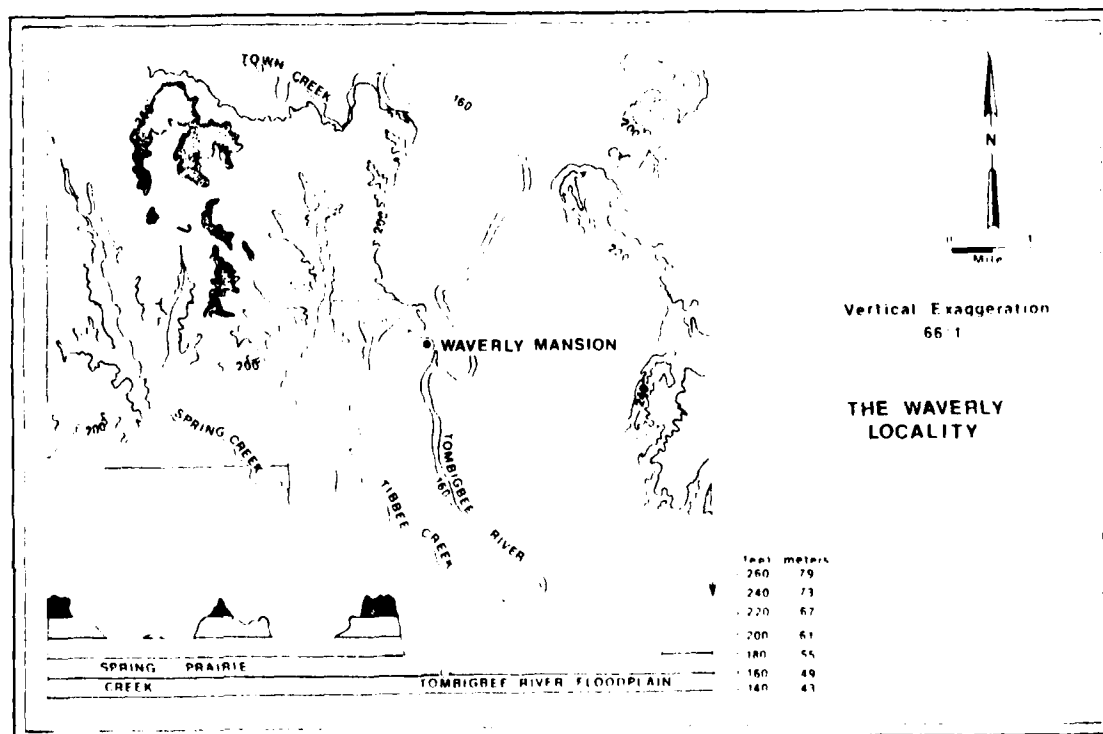


Figure 5.3.--Topography in the Waverly Locality.

Terrain

The location of Mississippi within the East Gulf Coastal Plain precludes an extreme variation in surface configuration. However, because the erodibility of rocks varies (Kelley 1973:5) the older portions of the coastal plain are belted, with lowlands between ridges or cuestas of more resistant rock. Waverly is located between the Pontotoc Ridge and the Tennessee Hills on the eastern margin of the Black Prairie (Kelley 1974:4-5). To the north, east, and west of Waverly, elevations range upward from 61 m (200 ft) above sea level, whereas to the south the Tombigbee River floodplain lying below 55 m (180 ft) is dominant.

At Waverly, the Tombigbee River impinges upon its western bluff after meandering over a floodplain about 3 mi wide between bluffs 61 m (200 ft) above sea level (Figure 5.3). The Waverly mansion is located on the southward edge of an impressive promontory with a commanding view of the surrounding countryside. This location allowed Colonel Young a high degree of accessibility to his landholdings of river lowlands, well-drained sandy formations adjacent to the floodplain, and Black Prairie lands to the west. Several other plantations in the community enjoyed a similar situation. In such lowland areas, subject to periodic flooding, the sites of plantation steadings in the community were ideal, being located on a well-drained and protected plateau-like divide between the easterly flowing Town, Spring, and Tibbee Creeks, and the Tombigbee River.

The local surface configuration within the community is gently undulating, so slightly that topography would have interfered with crop cultivation only in the northeast. In the early years, draining the lowlying land in preparation for cultivation was perhaps more critical to plantation development than the threat of slope erosion.

Climate

Climate is important because of its permissive and restrictive influence upon mankind. The climatic conditions affecting Waverly were determined more by the extensive land mass to the north and west and by the waters of the Gulf of Mexico than by topography. No climatic data are available for Waverly, but at nearby Columbus and West Point the January average mean temperature is 8 C (46 F) and the July average mean temperature is 27 C (81 F) degrees. The growing season extends from mid-March until the first week in November for an average of 225 days. Cold periods do occur in the winter and extreme July temperatures occasionally exceed 44 C (100 F) degrees, but these occurrences are of short duration and have only limited adverse affect. Rainfall is adequate for all cropping practices permitted by the temperature. Seasonal precipitation averages 38.1 cm (15") in winter, 35.6 cm (14 in) in spring, 32.2 cm (12.7 in) in summer, and 19.3 cm (7.6 in) in autumn.

Probably the most disagreeable climatic conditions affecting the early settlers (as they affect the people today) include: the high humidity, the thunderstorm type precipitation that causes flooding in lowlying areas and erosion in the uplands, the frequency of summer rains (virtually prohibiting hay curing and thereby restricting early livestock operations), and the constant possibility of tornadoes. Perhaps the most agreeable aspects of the climate were those favoring cotton production: the mild winters, high

percentage (65%-70%) of possible sunlight, and low rainfall in the autumn. Hence, the humid subtropical climate was the premier cotton climate until human labor was replaced by machines (U. S. Department of Agriculture 1941:935-944).

Soils and Settlement

Plantation owners with sufficient capital to purchase slaves and riverine land also had the wherewithal to select the best cotton soils. Cotton cultivation was the primary motive for exchanging the exhausted land in the seaboard states for new land in Mississippi (Sydnor 1933:144). For example, in 1880 the ratio between cotton and corn averages (the two leading crops) on owner-operated farms in Waverly was 1.56 to 1, respectively (U.S. Census of Agriculture 1880). This ratio is consistent with antebellum plantation practices for which acreage data are available (Weaver 1945:102-105).

Information on the Waverly community soils in the field notes of the first surveyors was generally limited to topographic position, and only occasionally were such essentials as texture, structure, depth, and fertility mentioned. Descriptive terms like friable, loose, stiff, thin, rich, and deep were used (Myers 1948:99-100). These descriptive terms and apparently reconnaissance by Young as early as 1834 (Lowndes County Personal Property Roll 1834) served as guides for intelligent purchases at the land office at Pontotoc (Lipscomb 1909:65).

The first systematic study of Waverly soils was included in the statewide study conducted by Eugene Hilgard in the 1850s. His terminology and description of soils at Waverly contained, among others, black prairies of heavy calcareous soils, shallow soils, light upland soils, loamy soils, and dark orange soils on the higher ridges (Hilgard 1860:258-262). Hilgard also discussed soils in conjunction with the 1880 Census, but he primarily emphasized productive depletion, erosion, and damage caused by "imperfect tillage" due to "plowing up and down hills" (Hilgard 1883:74). Such an intensive practice extending over several decades may have been the cause for the relatively early near-abandonment of cultivation in the Waverly Locality.

At the turn of the century, interest in the prairie soils was so keen that Clay County soils were mapped in 1909 (Worthen 1909). In Waverly it is possible to differentiate upland, terrace, and bottom soils (Figure 5.4). Upland soils vary considerably in structure and properties, ranging from heavy clays to fine sandy loams. The Orangeburg series forms a rugged though well-drained divide between the Tombigbee River and Lee's Creek, a tributary of Tibbee Creek. According to an observation by Hilgard (1883:74), much of the ruggedness must be attributed to poor farming practices after the Civil War.

The heavy clay and clay loams of the Houston series developed on gently undulating topography from weathered Selma chalk of the Cretaceous period (Worthen 1909:15-17). These heavy clay surface soils, owned in extensive tracts, were among the first to be cultivated for cotton in Northeast Mississippi. When moisture content was near optimum these were among the most productive cotton soils in the state. The Oktibbeha upland series, however, has been described as "a source of grief to many farm loan companies, as well as to farmers and local banks" (Myers 1948:113).

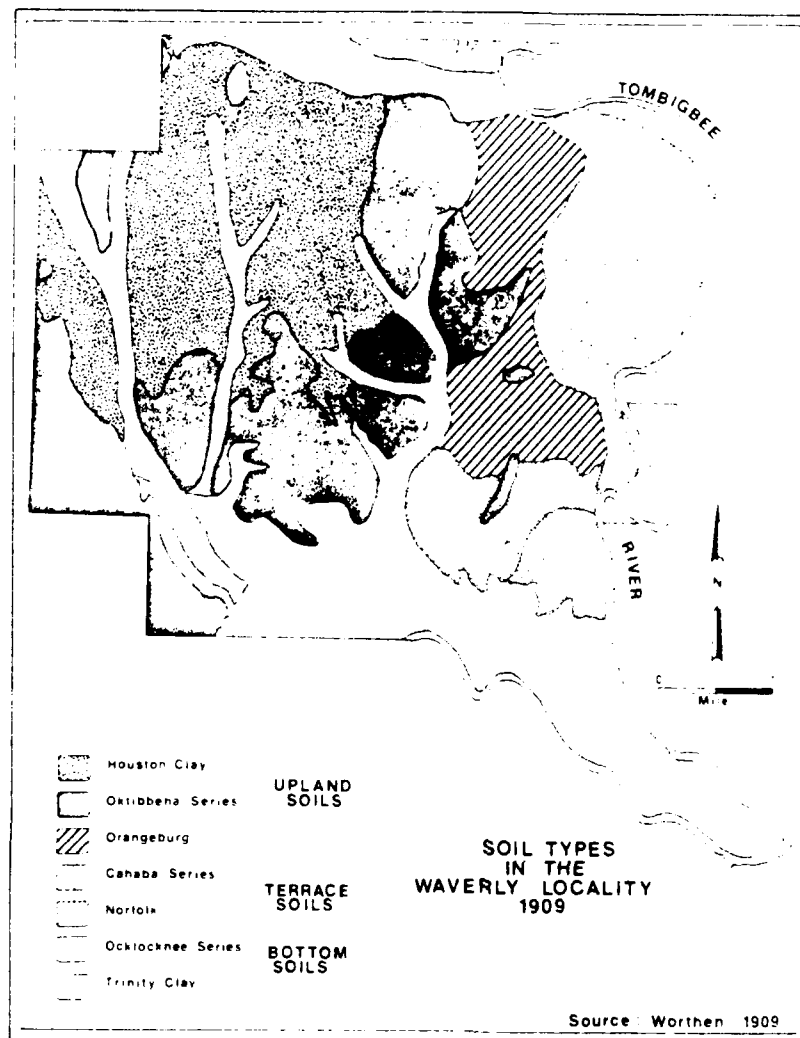


Figure 5.4.--Soil Types in the Waverly Locality.

Terraced (second bottom) soils along the Tombigbee River in the northeastern section of the community were mapped in 1909 as Cahaba and Norfolk soils (Worthen 1909:28-29). Even though these soils were not especially fertile, Colonel Young's antebellum Upper Place, devoted to cotton, was nearly coextensive with the Cahaba series. The basic problems Young and other early settlers encountered were to dry out the soils sufficiently early in the year for planting to allow the cotton crop to reach maturity and to avoid the near annual threat of flooding.

The largest body of bottom land soils is the Ocklocknee series, coextensive with the Tibbee Creek floodplain. Because of the tenacious nature of the material and inadequate drainage, difficulties were encountered in their cultivation. Along the streams extending into the calcareous prairies the uncommonly heavy granular bottom soils were referred to as "buckshot land." Nevertheless, in years with normal amounts of precipitation the bottom lands were extremely productive, often yielding more than one bale of cotton per acre (Worthen 1909:29-37).

An inverse relationship existed in the Waverly community between soil productivity and their desirability as homesites. We analyzed the data presented in Worthen (1909) and, excluding the marked churches and schools, determined the association of structures with specific soil types. Outbuildings such as barns do not appear to be presented on that 1909 map. A chi-square (values 45.55) of the data in Table 5.1 rejected the hypothesis that soil types and the house sites in the Waverly Locality were independent and suggest house sites were related to soil type. For example, the Houston clay (which more than any others attracted settlers) accounted for 21% of the soils but only 11% of the houses were so located. Obviously the soil's tenacious quality when wet, rapid runoff leading to stream overflow, flooding in time of excessive rainfall, and problems of obtaining potable water precluded their attractiveness for home sites. By contrast the well-drained, rough surface, and low productive Oktibbeha and Orangeburg series accounted for 29% of the soils and 66% of the homesites.

Table 5.1. Soils and Settlement in the Waverly Community, 1909.

Location	Soil Type	Hectares	Acres	Percent	Houses	Percent
Upland:	Houston	1,291	3,191	21	12	11
	Oktibbeha	1,247	3,082	20	54	50
	Orangeburg	564	1,393	9	17	16
Terrace:	Cahaba	933	2,306	15	7	7
	Norfolk	273	675	4	15	14
Bottom:	Ocklocknee	1,375	3,397	22	2	1
	Trinity	546	1,349	9	0	0
	Total	6,229	15,393	100	107	99

$$\chi^2 = 45.55 \text{ } P(H_0) 0.001 \text{ } df = 5$$

Source: Calculated from Worthen (1909).

Vegetation

Three distinct types of vegetation were discernible in the Waverly community. The lowlands were covered with hardwood forest (oak, ash, gum, elm, hickory, and cypress) and canebrakes. A much smaller variety of hardwoods (post oak, blackjack, and hickory) was dominant on the uplands. Post oak and blackjack, followed in order by pine and cedar, were the most abundant forest types on the prairie (Myers 1948:129-146), but there were scattered areas containing each from 40 ha (100 ac) to 400 ha (1000 ac) of prairie grasses surrounded by rich hammocks of hardwood (Southern Argus 1839). Apparently, vegetation in its natural state favored settlement rather than presenting land clearing problems for the incoming settlers. Thus, Waverly was favored to become an ideal plantation community. Perhaps few have more accurately described the Mississippi situation than J. H. Ingraham who traveled through the state in the 1830s. Ingraham (1835:84-86) observed that:

"A plantation . . . is the ne plus ultra of every man's ambition . . . not till every acre is purchased and cultivated-not till Mississippi becomes one vast cotton field, will this mania, which has entered into the very marrow, bone, and sinew of a Mississippian's system, pass away. And not then until the lands become exhausted and wholly unfit for farther cultivation."

An inverse relationship existed in the Waverly community between soil productivity and their desirability as homesites. We analyzed the data presented in Worthen (1909) and, excluding the marked churches and schools, determined the association of structures with specific soil types. Outbuildings such as barns do not appear to be presented on that 1909 map. A chi-square (values 45.55) of the data in Table 5.1 rejected the hypothesis that soil types and the house sites in the Waverly Locality were independent and suggest house sites were related to soil type. For example, the Houston clay (which more than any others attracted settlers) accounted for 21% of the soils but only 11% of the houses were so located. Obviously the soil's tenacious quality when wet, rapid runoff leading to stream overflow, flooding in time of excessive rainfall, and problems of obtaining potable water precluded their attractiveness for home sites. By contrast the well-drained, rough surface, and low productive Oktibbeha and Orangeburg series accounted for 29% of the soils and 66% of the homesites.

Table 5.1. Soils and Settlement in the Waverly Community, 1909.

Location	Soil Type	Hectares	Acres	Percent	Houses	Percent
Upland:	Houston	1,291	3,191	21	12	11
	Oktibbeha	1,247	3,082	20	54	50
	Orangeburg	564	1,393	9	17	16
Terrace:	Cahaba	933	2,306	15	7	7
	Norfolk	273	675	4	15	14
Bottom:	Ocklocknee	1,375	3,397	22	2	1
	Trinity	546	1,349	9	0	0
	Total	6,229	15,393	100	107	99

$X^2 = 45.55$ $P(H_0) 0.001$ $df = 5$

Source: Calculated from Worthen (1909).

Vegetation

Three distinct types of vegetation were discernible in the Waverly community. The lowlands were covered with hardwood forest (oak, ash, gum, elm, hickory, and cypress) and canebrakes. A much smaller variety of hardwoods (post oak, blackjack, and hickory) was dominant on the uplands. Post oak and blackjack, followed in order by pine and cedar, were the most abundant forest types on the prairie (Myers 1948:129-146), but there were scattered areas containing each from 40 ha (100 ac) to 400 ha (1000 ac) of prairie grasses surrounded by rich hammocks of hardwood (Southern Argus 1839). Apparently, vegetation in its natural state favored settlement rather than presenting land clearing problems for the incoming settlers. Thus, Waverly was favored to become an ideal plantation community. Perhaps few have more accurately described the Mississippi situation than L. H. Ingraham who traveled through the state in the 1830s. Ingraham (1835:84-86) observed that:

"A plantation . . . is the ne plus ultra of every man's ambition . . . not till every acre is purchased and cultivated-not till Mississippi becomes one vast cotton field, will this mania, which has entered into the very marrow, bone, and sinew of a Mississippian's system, pass away. And not then until the lands become exhausted and wholly unfit for farther cultivation."

CHAPTER 6. THE EARLY SETTLEMENT OF THE WAVERLY LOCALITY

by Howard G. Adkins and Jack D. Elliott, Jr.

Indian Occupancy

Prior to the 1820s, when effective white settlement began in the upper Tombigbee River Valley, a majority of the inhabitants were Choctaw and Chickasaw Indians. The geographic origin of the Choctaw and Chickasaw tribes is highly speculative. However, both tribes were members of the Muskogean linguistic stock and their basic cultural patterns were similar (Jennings 1941:159). They were primarily an agricultural people, cultivating corn, beans, and other crops typical of Indians in the South on land cleared by girdling the larger trees and burning the underbush.

During long periods of intertribal warfare, they continually cultivated large tracts of land near their compound-like villages. Indian farms were public, with women performing most of the labor. A Choctaw warrior was more disposed to work on the public farms than a Chickasaw warrior. So indolent was the latter that he has been characterized as arousing himself only at his opportunity or "when the devil is at his arse" (Adair 1930:448). However, the Chickasaws were "the readiest, and quickest of all people in going to shed blood" (Gibson 1971:29). It was this element of lifestyle that most singularly distinguished between the Chickasaws and Choctaws, and perhaps accounted for the successful defense of their territory against white encroachment until 1832. Hunting and fishing were secondary to agriculture (Debo 1961:1-11). The Choctaws and Chickasaws never became famous for trade in furs comparable to Indians in the upper Mississippi Valley. To a lesser extent the Chickasaw and Choctaw did engage in intertribal trade of "deerskins, Indian slaves, and bear's oil" (Gibson 1971:28) for goods essential to their basic needs.

The territory in Mississippi occupied by the Choctaws included the headwaters of the streams flowing to the Mississippi River, and to the Gulf of Mexico via the Pearl and lower Tombigbee Rivers. The Chickasaw were concentrated largely within the upper Tombigbee Valley north of Tibbee Creek (Anon. 1832; Rowland and Sanders 1927:301). More likely the area between Tibbee and Wolkey Creeks was a sort of neutral ground between the two tribes for the stronghold of the northeastern Choctaw District was concentrated in the Noxubee River Valley a few miles to the south, and that of the Chickasaw Nation was a few miles to the north near Cotton Gin Port and Pontotoc, Mississippi (Jennings 1941:160). Perhaps the most prominent individuals residing in this sort of no-man's land were the Pitchlyns. Several members of this mixed-blood family resided in the Waverly community prior to 1836. Nevertheless, Waverly lay within the Chickasaw Territory and legal settlement began only after the land was surveyed and sold under provisions of the Treaty of Pontotoc in 1832 (Figure 6.1).

The European intrusion into northeast Mississippi in the mid-16th century provoked changes significantly altering the Native American cultures. Hernando de Soto's expedition across the southeastern United States reached the upper Tombigbee River Valley in late 1540 and crossed the river at some point between the extinct towns of Plymouth and Cotton Gin Port (Swanton 1939). But after this and subsequent expeditions in the Southeast failed to reveal a source of quick wealth, the Spanish directed their attention elsewhere (Adkins 1972:25).

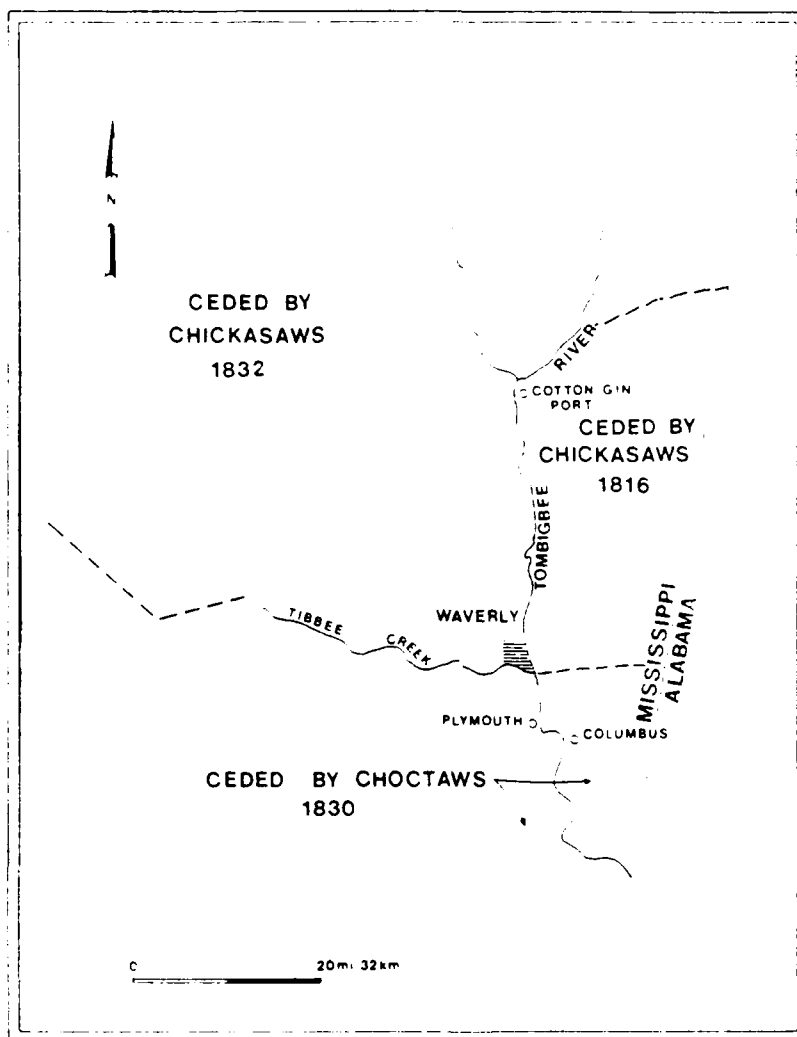


Figure 6.1.--Indian Land Cessions, Northeast Mississippi.

For about 150 years Indians in the Tombigbee Valley were unaffected by Europeans, then in the late 17th century France began to assume suzerainty over the Choctaw and Chickasaw Indians. Hostilities between the French and Chickasaws developed as early as 1702, and continued until 1763 when the British acquired control of the area. Apparently the difficulties between the French and Chickasaw Indians were connected to a series of events and situations that included: (1) opposition to the French practice of including missionaries in dealings with the Indians, (2) resentment toward the French for using the Indians, especially the Chickasaws, as a buffer between the French in Louisiana and the British in the Carolinas, (3) French failure to provide promised safe passage along the Big Trading Path through the Choctaw Nation to Mobile, and, (4) French failure to neutralize British influence among the Chickasaws. Therefore, the Chickasaws, who believed they were being exploited and neglected, readily accepted British traders

with their superior quality and lower priced goods (Gibson 1971:31-57). Winning the friendship of the Chickasaws was part of the British strategy to establish commercial relations with all tribes in the Southeast.

During the period of open hostilities from 1720 to 1763, the Chickasaws lived in well-organized and easily defended villages and were successful in holding their territory against the French. After the British acquired the territory they were able to maintain peace with the Chickasaws by regulating trade and preventing settlers from encroaching upon Indian lands (Gibson 1973:78). The fortified settlements were abandoned with the end of hostilities and Chickasaw tribesmen scattered over northeast Mississippi (Jennings 1941:170-171). This pattern of settlement prevailed at the time of the Treaty of Pontotoc which accounts for the large number of sections of land acquired from the Indians in the Waverly community in 1836 (Table 6.1). A contemporary writer (Gibson 1973:84) has proclaimed that: "Most of the history of the Indian tribes of Mississippi between 1795 and 1837 is a chronicle of retreat, land loss, and concentration on diminished domains, until the Choctaw and Chickasaw nations were annihilated as ethnic communities in Mississippi and relocated west of the Mississippi in the Indian Territory."

By the late 18th century the most far-reaching change among the Indian population was the large and growing number of mixed-blood families and the ownership of Negro slaves. Intermarriage with whites was permitted and often encouraged. So significant were the number of mixed marriages and their progeny that "by the time of the removal, both tribes were dominated by the mixed-bloods" (Gibson 1973:80). Mixed-blood carried with it clear tribal citizenship and a considerably greater breadth of cultural experience due to the continued influence of the father. The most influential mixed-blood families in the upper Tombigbee Valley were the Pitchlyns and Folsoms among the Choctaws and the Colberts among the Chickasaws.

Reduction of the Indian lands began in 1801 when the Chickasaws gave a right-of-way for the Natchez Trace through the Nation and pledged to keep the road open at all times to the people and mails of the United States (Kappler 1904:55-56). By 1818 the Chickasaws had lost their territory in the southeastern United States through cession treaties except for northeast Mississippi and northwest Alabama. All tribal land in northeast Mississippi was ceded outright to the United States Government in 1832.

According to the terms of the Treaty of Pontotoc, each male adult received a homestead of one section on which he was to reside until he emigrated. A family of five persons and under received two sections, while families of ten and over received four sections. Additional lands up to one and one-half sections were received according to the number of slaves owned. The Chickasaws were not to be disturbed in their homes while tribal leaders searched for suitable lands west of the Mississippi River. After suitable lands in the west were found, individual holdings in Mississippi were to be sold both at public and private sales for a required minimum payment of \$3.00 per hectare (\$1.25 per acre), though early sales of \$5.00 per hectare (\$2.00 per acre) were common and some Chickasaw land sold in the mid-to-late 1850s brought as little as twenty-five cents per hectare (ten cents per acre). Also, each Chickasaw was to be compensated for improvements made on his homestead (Kappler 1904:357-362). As seen in Table 6.1 warranty deeds to land at Waverly were held by whites within one and

Table 6.1. Land Transfer in the Waverly Locality.

Sec.	T.	R.	Title	Indian Homesteader*	White Warranty Deed	Date	Purchase Price
10	17	7	U.S.A.	to Ish tim a mi ha	to D. Hubbard	4/11/36	\$1,500
11	17	7	U.S.A.	to Ish tim oni ha	to A. Barton	4/ 7/36	1,500
12	17	7	U.S.A.	to Shah low a la	to J.D. Bradford	5/11/36	1,600#
13	17	7	U.S.A.	to Moo nah tubby	to J.D. Bradford	10/ 3/36	
24	17	7	U.S.A.	to Moo nah tubby	to J.D. Bradford	10/ 3/36	
25	17	7	U.S.A.	to Moo nah tubby	to J.D. Bradford	10/ 3/36	3,700
26	17	7	U.S.A.	to Moo nah tubby	to J.D. Bradford	10/ 3/36	
13	17	7	U.S.A.	(eastern half)	to W.W. Cherry	10/ 1/36	
14	17	7	U.S.A.	to Tinoh hak chak	to W.W. Cherry	4/ 8/36	2,300#
15	17	7	U.S.A.	to Kin hi cha	to A. Barton	4/ 7/36	
16	17	7	U.S.A.	to Kin hi cha	to A. Barton	4/ 7/36	2,000
21	17	7	U.S.A.	to Push hun cha	to A. Barton	4/ 6/36	1,100
22	17	7	U.S.A.	to Mash ho tubby	to A. Barton	4/ 9/36	2,200
23	17	7	U.S.A.	to Soon ha cha	to D. Greene	4/11/36	1,600
27	17	7	U.S.A.	to Shum ah lo ka	to D. Starke	5/30/36	
34	17	7	U.S.A.	to Shum ah lo ka	to D. Starke	5/30/36	2,400
35	17	7	U.S.A.	to Shum ah lo ka	to D. Starke	5/30/36	
28	17	7	U.S.A.	to Ah took			
				loosh tubby	to A. Barton	4/ 5/36	2,000#
36	17	7	U.S.A.	to Shu mus tubby	to A. Barton	5/ 1/37	1,000
1	18	7	U.S.A.		to J. Fortson	5/30/37	
7	17	8	U.S.A.	to Mak ho la tubby	to C.W. Martin		
					D.W. Ragsdale	4/14/36	1,600
18	17	8	U.S.A.	to Mak ho la tubby	to C.W. Martin	4/14/36	
					D.W. Ragsdale		
8	17	8	U.S.A.		to F. Lewis	6/21/37	
17	17	8	U.S.A.	to Mah la to ka	to J. Allen	9/27/38	NA
19	17	8	U.S.A.	to Ho leet aa ha	to E. Orne	10/22/36	1,600#
20	17	8	U.S.A.		to G.H. Young	11/23/37	
29	17	8	U.S.A.		to G.H. Young	6/ 1/37	
30	17	8	U.S.A.	to Alex. Pitchlyn	to G.H. Young	3/31/36	3,000
31	17	8	U.S.A.	to Tyah ho tubby	to J. Fortson	5/11/36	
6	18	8	U.S.A.	to Tyah ho tubby	to J. Fortson	5/11/36	2,000
5	18	8	U.S.A.		to J. Fortson	6/ 1/37	
7	18	8	U.S.A.		J. Fortson		
					J.W. Prowell	6/ 1/37	
8	18	8	U.S.A.		J. Fortson	6/ 1/37	
9	18	8	U.S.A.		J. Fortson	6/ 1/37	

* The United States Government held title to the land from October, 1832 to February, 1836, during which time the Chickasaws were "homesteaders" while lands were being selected and purchased from the Choctaws in the Indian Territory.

Price also includes payment for an additional section of land outside the Waverly Community.

Source: Clay County Land Rolls.

one-half years after sales became legal. Apparently the estimated 40 to 50 Indians in the Waverly Locality were among the first to migrate to the Indian territory in Oklahoma as all sections except one assigned to Indians were alienated by incoming settlers by mid-1836 (Clay County Land Rolls).

The Pitchlyns of Waverly

The first prominent family associated with the Waverly community was the Pitchlyns. At the time of the Treaty of Pontotoc, the patriarch of this large and influential family was John Pitchlyn. Most of Pitchlyn's life was lived in the Choctaw Nation south of the Tibbee Creek where he was important in the early history of Plymouth, an extinct town on the Tombigbee River a few miles south of Waverly (Adkins 1972:21). At the time of his death he was living at Waverly and "was the wealthiest man in the tribe" (Baird 1971:45). Pitchlyn's wealth had been amassed through several activities that included operating a trading post on the Gaines Trace at Plymouth (Baird 1971:7; Gaines 1964:149), raising large herds of cattle on the prairies, commercial cotton production, a partnership in a stage line operating between Columbus and Jackson (Elliott 1978:20; Lipscomb 1909:62; Love 1903:364), loaning money, and payments in land and currency for services rendered to the United States in their dealings with the Choctaws.

John Pitchlyn was born on a ship in the Caribbean Sea during the late 1750s. He entered the Choctaw Nation with his father, Issac Pitchlyn, sometime during the interlude between the French and Indian War and the American Revolution. Issac Pitchlyn was probably a naval officer turned Tory merchant anxious to try his skill at trading with the Indians and improve his fortune. After Issac Pitchlyn's death, John "was raised in the nation from his fourth year" (Linccum 1906:434). In the 1780s John Pitchlyn married Rhoda Folsom, the mixed-blood daughter of Ebenezer Folsom. Born of this marriage were three sons--James, John, Jr. (Jack), and Joseph C. After Rhoda's death John Pitchlyn married her cousin Sophia, the daughter of Nathaniel Folsom. "The second Mrs. John Pitchlyn gave birth to eight children who later reached maturity--Peter Perkins, Silas, Mary, Rhoda, Thomas, Eliza, Elizabeth, and Kiziah" (Baird 1971:6).

John Pitchlyn was an enterprising, persuasive, and trusting individual. He first came to prominence as the interpreter for the Choctaw delegation at the Treaty of Hopewell in 1786, after which at the request of the Choctaws he was made the official interpreter and signed all treaty documents between the United States and the Choctaws except the Treaty at Fort Adams in 1801. Pitchlyn has infrequently been accused of being overly zealous in the interest of the United States, claiming that his loyalties lay with the whites rather than with the Choctaws, but he never lost the trust and esteem of the Indians. Support for this allegation is attributed to his role and that of his son, James, in the Doak's Stand Treaty and the fact that he, John Pitchlyn, did not migrate with the Choctaws to the Indian Territory in the 1830s. But perhaps Pitchlyn's knowledge of Anglo-American culture enabled him to foresee an inevitable process and he was desirous to gain as much as possible for his Indian friends. Both Pitchlyns were instrumental in the negotiations at Doak's Stand whereby the Choctaws obtained permanent title to 5,261,028 ha (13,000,000 ac) located between the Canadian and Red Rivers in Indian Territory for 2,023,472 ha (5,000,000 ac)

surrendered in Mississippi (Baird 1971:16). Moreover, John Pitchlyn was generously compensated "for certain losses sustained in the Choctaw country, and as a grateful testimonial of the nation's esteem" (Baird 1971:10).

The Pitchlyn family received 2,072 ha (5,220 ac) of the finest land in what is now Lowndes County (Love 1903:367) under terms incorporated in the Treaty of Dancing Rabbit Creek. In truth, John Pitchlyn was a great benefactor to the Indians. He contributed significantly to their educational opportunities, supported missionary activities, and expended much time and effort in maintaining peace between the Choctaw and whites that otherwise would have been more disastrous to the Indians.

James, the eldest son of John and Rhoda Pitchlyn, was less fortunate in his relations with the Choctaws. In early 1819 he informed Andrew Jackson that with a suitable treaty of land concessions an estimated one-third to one-half of the Choctaw would move west (Bassett 1926:405). For this misguided effort in laying the preliminary ground work to the Doak's Stand Treaty, James Pitchlyn lost all influence with the Indians and his mixed-blood relatives. Following the Doak's Stand incident he apparently moved to Waverly in the Chickasaw Nation to escape the indignation of those who believed he had betrayed their trust.

The life of James Pitchlyn is obscure from 1820 until 1834, when on June 2, 1834: "Alexander Pitchlyn, son of James Pitchlyn, deceased, begs leave to represent unto your honor that he, Alexander Pitchlyn, is over the age of fourteen years and is entitled by the laws of his country to the choosing of a guardian and that he does make choice of his Grandfather, John Pitchlyn" (Pitchlyn 1835).

Evidently, James Pitchlyn had married into the Chickasaw Nation, for his son Alexander was described as a "native born citizen of the Chickasaw Nation" (Clay County Deed Book F:133-134). Inheritance of property and tribal honors among the Chickasaws followed the female line, and children were not regarded as being related to their father.

We do not know why John Pitchlyn decided against emigrating to the Indian Territory west of the Mississippi River. He may have been influenced by the fact that at least three sons--James, John, Jr., and Silas (Love 1903:365), and several daughters--were living north of Tibbee Creek in the Chickasaw Nation. Peter Pitchlyn, later a Choctaw chieftan in the Indian Territory, was the only son to migrate in the early 1830s (Baird 1971:51). Pitchlyn was perhaps influenced by the fact that much of his personal wealth was tied to commercial enterprises in the Plymouth-Columbus area, and that it would be difficult for an individual in his early seventies to withstand the rigors of relocating and rebuilding his fortunes.

Instead, Pitchlyn settled on two sections of land acquired under the provisions of the Dancing Rabbit Creek Treaty in 1830, and continued to operate, in partnership with Robert Jemison, the stage line between Columbus and Jackson (Elliott 1978:20). With cotton culture profitable in the early 1830s, he must have invested in its cultivation; moreover, he was the owner of 50 slaves in 1831 (Baird 1971:45). In 1833 he sold the Robinson Road land with intentions of moving west to be near his son Peter, but he changed his mind and relocated north of Tibbee Creek in the Waverly community. John

Pitchlyn's Waverly home was located on the south edge of Section 30 on or near the Pontotoc to Columbus road which crossed the Tombigbee River at Waverly (Elliott 1978:30).

At the time of his death at Waverly in May, 1835, John Pitchlyn's estate was valued at \$49,890 (Pitchlyn 1835). To our knowledge no records attest to his ownership of land at Waverly; however, it is logical to assume that as the owner of 62 slaves valued at \$29,820, five oxen valued at \$195, and 13 horses valued at \$760, Pitchlyn must have used them to cultivate crops. If indeed he did operate a plantation at Waverly, its basic designs must have been for self-sufficiency rather than a commercial enterprise. For example, Pitchlyn's cotton crop for the year of 1835 was valued at \$1,238 (24 bales at 13 cents per pound)--certainly not striking production for 62 slaves when the expected average per slave was five to seven bales (Sydnor 1933:13). An analysis of the credit accounts from January 1 to May 30, 1835, revealed only one purchase of 210 pounds of bacon, further suggesting self-sufficiency at the expense of commercial cropping.

Although a successful and enterprising individual, Pitchlyn's life style was probably only one step removed from the rough existence of frontier life. Records do not reveal the architecture of the homestead, but it was presumably a log cabin with a detached "widow pitchlon kitchen" nearby (Field Notes: Clay County). Log cabins typical of the region in the 1830s:

"were roughly built of logs, with stick and mud chimneys and clapboard roofs. The cracks . . . were lined with boards and daubed with mud, or merely chinked and daubed Sawed lumber was costly and could be used only in building the family room A few people at a cost of much labor hewed out "puncheons" for floors; others built their cabins flat on the ground A few . . . had two cabins with what we called a passage between them; others had a shed or room" (Welsh 1901:345-346).

The size and simplicity of Pitchlyn's home are suggested by the personal property probated in 1835. The property included six bedsteads and bedroom furniture valued at \$185; kitchen furnishings, including cupboard and table, valued at \$38; and furnishings for other rooms that included bureaus, bookcase, and writing table valued at \$50. And on March 28, 1835, charged to John Pitchlyn's account at J. L. Taft's store were two dozen silver spoons for \$96.00.

Outstanding accounts against the Pitchlyn estate totaled \$3,513, of which the largest account for \$1,169 was carried with A. Weir and Company of Mullen's Bluff, an early name for Waverly. Credit purchases were entered at the nine establishments listed in Table 6.2 on 93 of 151 possible days between January 1 and May 30, 1835. Entries to Pitchlyn's account at the Weir store averaged every third day, though entries were made on consecutive days on 11 different occasions. An equal number of entries occurred on Tuesday, Wednesday, and Saturday; however, the value of trade on Saturday totaled \$200.06, compared with \$184.44 on Thursdays. Furthermore, the frequency of purchases implies a close proximity between Pitchlyn's home and the Weir store.

Cloth and ready-to-wear clothes acquired from merchants Weir and Irby and Jordan accounted for 30% of all expenditures, and almost one-half of the purchases at these two firms included cloth and ready-to-wear clothes (Table 6.3). During the five month period, 685 yards of calico, gingham, muslin, domestic and other types of cloth including silk, were charged to Pitchlyn's account. The account with Irby and Jordan at Plymouth, Pitchlyn's former home, is interesting in that evidently he continued to have strong social or sentimental attachments to the old home place because on almost each date at which entries were recorded a considerable amount of whiskey and brandy was purchased. The purchase of whiskey and brandy does not occur elsewhere in Pitchlyn's accounts.

John Pitchlyn was not insensitive to the desires of others, especially members of his family and Indian friends (Table 6.3). Whenever the occasion arose, such as the untimely deaths of Silas (killed by John, Jr.) and John Jr. (killed by friends of Silas), he served as guardian for members of his family (Love 1903:365). During 1834 he supported his grandsons at a boarding school in Columbus, paying \$296 for each, plus \$40 for their ferriage. He apparently was sensitive to the desires of his daughters, allowing them to charge among other things \$38.25 for 11 rings, \$55.50 for 12 items of jewelry, and \$56.87 for 10 items of cosmetics between January 1 and May 30, 1835.

Pitchlyn must have been a great supporter of incoming settlers who were beginning to flood the region in the 1830s. The administrator of the estate collected more than \$2,500 in notes and interest from individuals of which no account exceeded one hundred dollars. Included in a long list of small loan beneficiaries were William Barton and Thomas Mullens. Among the list of large beneficiaries were James Colbert, L. N. Fields, Thomas and Jack Pitchlyn (sons), Samuel Garland (son-in-law), and Gideon Lincecum.

Apparently John Pitchlyn died suddenly, without an extended illness, at Waverly in May, 1835. No doctor bills were submitted to the estate administrators at his death, but funeral expenses totaled \$36. His funeral was "conducted after the manner of the Choctaws and all his war equipments were deposited with the coffin" (Lipscomb 1909:64). Almost immediately after his death the family migrated west and joined Peter Pitchlyn (Baird 1971:51). So complete was the family move that the widow Pitchlyn is believed to have "disinterred her husband's remains and carried them west with her. The likelihood of this having happened was increased by the fact that she never returned to the grave again" (Lipscomb 1909:64).

Alexander Pitchlyn, a citizen of the Chickasaw Nation, was granted Sec. 30 under the temporary homestead rights included in the Treaty of Pontotoc. He sold the land for \$3,000 to George H. Young in March, 1836 (Clay County Deed Book F:133-134). The price of \$3,000 for 242 ha (600 ac) at a time when sales were ranging from \$3.00 to \$5.00 per hectare (\$1.25 to \$2.00 per acre) in accordance with the terms of the treaty must have included payment for improvements made during the temporary occupancy of the Pitchlyns. No record of improvements exists, but John Pitchlyn was one of the more enterprising individuals in the upper Tombigbee Valley, owning slaves and cultivating cotton--both of which would have required cleared fields, slave quarters, and other plantation steadings.

Table 6.2. John Pitchlyn Credit Purchases, 1835

Merchant	January	February	March	April	May	Total
A. Weir	\$46.86	\$27.50	\$161.55	\$94.27	\$176.43	\$506.61
Irby & Jordan	75.14	64.23	2.82	6.70	116.82	265.71
J.L. Taft	---	---	127.00	72.48	---	199.48
Barry & Co.	30.25	49.91	13.18	15.25	---	108.59
D. Stanton	5.71	28.00	39.81	13.47	---	86.99
C. Abert	47.32	5.10	15.42	1.00	---	68.84
Walsh & Harris	---	---	1.50	40.40	4.13	46.03
J.D. Bibbs & Co.*	5.62	2.37	10.62	7.00	---	25.61
Toome & Brooks	9.00	---	.50	---	---	9.50
Total	\$219.90	\$177.11	\$372.40	\$250.57	\$297.38	\$1,317.36

*Blacksmith

Source: Pitchlyn (1835)

Table 6.3. Items Purchased on Credit by John Pitchlyn, 1835

	A. Weir & Co.					Irby & Jordan				
	Jan	Feb	Mar	Apr	May	Jan	Feb	Mar	Apr	May
Cloth	15.80	13.49	40.03	29.50	73.33	18.39	7.78	---	1.32	---
Clothing & Shoes	24.25	6.51	23.25	28.38	59.63	18.24	7.00	1.50	1.13	8.44
Personal	2.12	7.50	.50	---	4.12	3.76	2.50	.25	3.25	2.13
Household & Sundries	.88	---	2.50	---	36.75*	2.75	--	--	---	---
On Accts#	---	---	90.50	---	---	32.00	45.95	--	---	105.00
Books, etc.	3.81	---	.13	33.89	.60	---	---	.13	---	---
Others	---	---	.20	2.50	2.00	---	2.50	.94	1.00	1.25
Month Total	46.86	27.50	157.11	94.27	176.43	75.14	65.73	2.82	6.70	116.82
	Total \$502.17					Total \$267.21				

Pitchlyn paid accounts for Thomas Bailey (\$45.00), Ussagetubee (\$69.00), J. Johnston (410.50), Indian (?) (\$48.95), and Captain Redpepper (\$100.00).

* 210 lbs. of Bacon.

White Settlements in the Tombigbee Valley

The vanguard of white settlers in the upper Tombigbee Valley was a highly diverse group, with varied origins and backgrounds. Among these earliest settlers were French descendants, Georgia and Carolina loyalists, fugitives from justice, and poor people eluding creditors (Briceland 1971:96-97). They were few in number and were highly scattered throughout the region. Apparently they lived in harmony with the Indians, raised cattle, and crops marketed in Mobile, and engaged in trade with the Indians and transient whites (Mobile Register July 1872).

In 1815 the first real surge of white settlers entered the upper Tombigbee Valley (Howell 1971:24-26). These settlers possessed an Anglo-American culture supported by the commercial production of cotton and several other crops, primarily corn for home consumption. At first the

family provided the labor but slaves eventually provided the labor. A few settlers were squatting in Chickasaw Territory along the Gaines' Trace west of the Tombigbee River (Evans 1979:49); however, within a 50 mi radius of Columbus there were not "five hundred men . . . able to bear arms" (Lincecum 1906:429). The first area in northeast Mississippi officially opened to settlement by the Chickasaw and Choctaw Cession of 1816, was a 1025 sq km (637 sq mi) area (Rowland 1925:471) enclosed by the Tombigbee River and Bull Run Creek and the Alabama state line (Figure 6.1). By 1820, "371 households of pioneers had scattered their log cabins up and down the Tombigbee, Buttahatchie, and Luxapalila rivers" (Howell 1971:48). The official population count in Monroe County was 2,721 people (U.S. Census Population 1820).

Settlers living east of the Tombigbee River strongly advocated extinguishing the Chickasaw claim to the lands west of the Tombigbee River, and constructing roads to overcome their isolation. Incoming settlers were also demanding more land. Many settlers were encouraged prematurely to move west of the Tombigbee River into Indian lands when in 1827 President Monroe suggested to Congress the "propriety of removing the Indian tribes to a reservation west of the Mississippi River" (Love 1910:394). In a message to the Mississippi Legislature on January 6, 1829, Governor Brandon indicated the time had come for the United States Government to extinguish titles of the Chickasaws and Choctaws to the lands they claimed and occupied within the state, or steps had to be taken to extend state jurisdiction over the Indians (House of Representatives 1829:12).

As a result of Brandon's speech an act extending the state's civil jurisdiction over the Indians was passed by the Mississippi legislature in October, 1829 (Rowland 1925:555). The passage of this act was a direct incentive for settlers then living east of the Tombigbee River to invade and roam at will in the Indian country. Moreover, the Federal Government made no effective attempt to prevent the unlawful intrusion. Finally, the Circuit Court of Monroe County in late 1832, in an act that was popular at the time "ruled that the laws of the United States regulating intercourse and trade with the Indians had been nullified in the State" (Foreman 1932:201). This act plus the failure of the Federal Government to protect the rights of the Indians and to forcibly remove the earlier squatters was taken as a legal invitation to settlement west of the Tombigbee, even though the land was as yet unsurveyed and not offered for sale. Hence, by 1830 there were pioneer squatters, speculators, interpreters, whiskey peddlers, and operators of tent and log stores almost everywhere in the territory (Gibson 1971:180).

Apparently a group of landless whites, mixed-bloods, and Indians lived in the Waverly Locality in the mid-to-late 1830s, as inferred in the Lowndes County Board of Police Minutes, census and probate records, and land deed indexes. Among these appear the names of Thomas B. Mullens, Mrs. Pitchlyn, T. Pitchlyn, Captain Redpepper, Samuel Garland, Jesse Weaver, Andrew Weir, and John M. Hughes. Some, like the Pitchlyns and Garland, were waiting to migrate to the Indian Territory; others, like Weir, Hughes, and Weaver were engaged in various commercial enterprises; and still others had no permanent attachment and were perhaps squatters raising subsistence crops. After Col. Young purchased Mullens' Bluff (Waverly) Sec. 30 in 1836, it is not known if he collected rent from these individuals, or under what conditions they were allowed to remain. Thomas B. Mullens apparently operated the ferry across

the Tombigbee River, while Jesse Weaver was licensed to retail spirits in 1836 in "the house were [sic] he does business at Mullins Ferry on the Tombigby River" (Lowndes County Board of Police Minutes: April 1836). John M. Hughes operated a store at Waverly from the mid 1830s to 1840 or 1841, and when the Waverly Post Office was established in 1840 he was the first postmaster, a position he retained through 1845 (Postal Record n.d.).

Trails and Pioneer Roads in the Waverly Community

Proximity and means of transportation to markets were important considerations determining early settlement patterns and had a great influence on the pattern of agriculture. The early settlers with money most often arrived by river and settled along the river while settlers of lesser means traveled overland and stopped inland. In addition to being accessible to the Tombigbee River, historically Waverly was strategically located in the midst of an area where the major connecting roads from the Tennessee and Mississippi rivers merged with the Tombigbee River and roads to the Gulf (Figure 6.2).

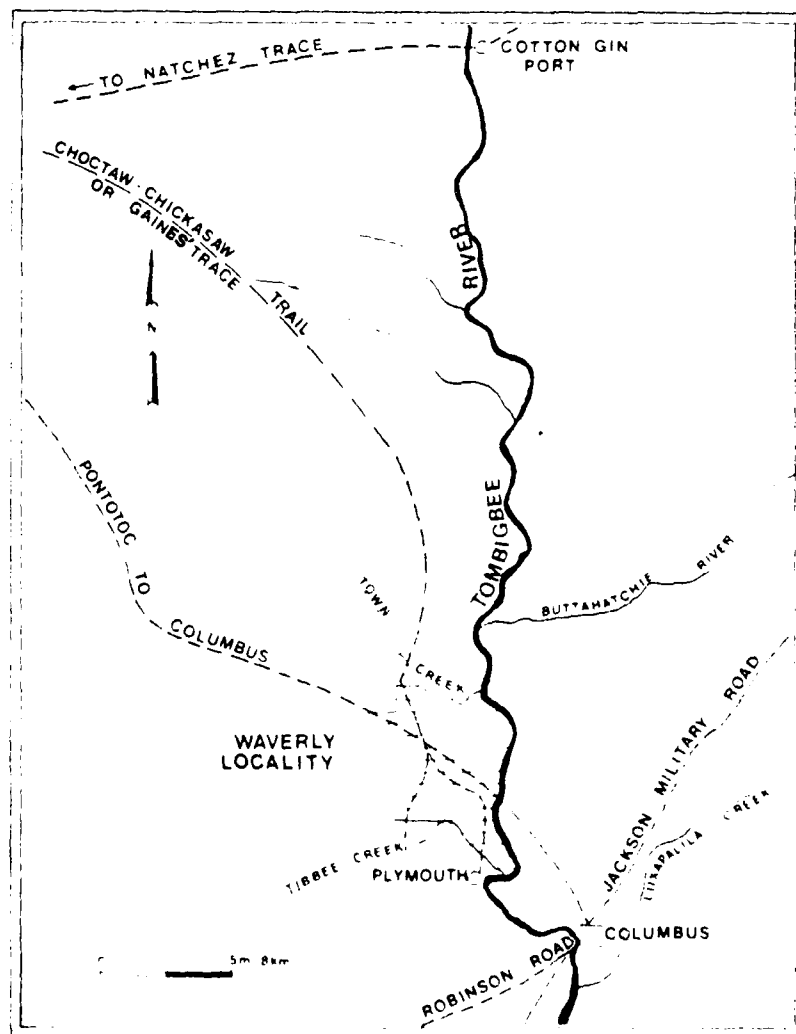


Figure 6.2.--Pre-Statehood Roads in the Upper Tombigbee Valley.

As early as 1736, a heavily traveled Indian trail passed through the Waverly area. This road, known as the Choctaw-Chickasaw Trail or as the Big Trading Path, was used by the Chickasaws in trading with the Gulf Coastal areas. It was also used by the Choctaws assisting the French in the Chickasaw wars (Rowland and Sanders 1927:301-302). The trail apparently paralleled the Tombigbee River near Waverly, for in 1771 Romans (1961:212) referred to the road between the Chickasaws and Choctaws which crossed Tibbee Creek about two miles above its confluence with the Tombigbee. North of Waverly the Big Trading Path turned northwest to join the Natchez Trace, after crossing Tibbee Creek near its mouth at Pitchlyn's (Gaines 1964:149-150). Beginning in the early 19th century the Indian trail was altered, abandoned, or retained to accommodate the white settlers. For example, a section of this road, later known as Gaines' Trace, was used by the early settlers entering the upper and lower Tombigbee Valley (Evans 1939:109).

Gaines' Trace was the first official road through the Waverly Locality laid out to service the settlers' needs. In 1807-1808, United States troops under General Edmund P. Gaines surveyed a route for a road west of the Tombigbee River to by-pass the broad expanses of the low-lying and swampy lower reaches of the Buttahatchie River and Luxapalila Creek from Colbert's Ferry on the Tennessee River at Muscle Shoals to Cotton Gin Port on the Tombigbee River. After crossing the river at Cotton Gin Port, the trace road evidently followed an old Indian trail, most likely the Big Trading Path, averaging three to four miles west of the river, but most significantly far enough away to miss backwater (Evans 1939:104-105). This would have brought the trail into the Waverly community without a circuitous route (Figure 6.2).

The purpose of Gaines' Trace was to provide a portage route whereby pack horses could move trade goods from the St. Stephens settlement on the lower Tombigbee River to the northeastern United States. With France and Spain alternately in possession of Mobile and other Gulf Coast ports Tombigbee settlers found it difficult to market their goods without paying exorbitant duties (Leftwich 1916:445-446). But after Spanish control over the Gulf was terminated, the main direction of traffic shifted from south to north. By 1810 George S. Gaines and others were using the trace for portage from Colbert's Ferry on the Tennessee River to John Pitchlyn's at Plymouth (Evans 1939:100-109; Gaines 1964:150-155). The trace provided a major route for incoming settlers, and furnished the only route of consequence for boatmen returning from Mobile to the Tennessee and Ohio country.

Jack Elliott has worked out in intricate detail the route of Gaines' Trace in the Waverly area (Elliott 1978:13-15). In Sec. 23, T17S R7E, the road forked with the western branch disappearing at the southern boundary of Sec. 34 and the eastern branch disappearing in Sec. 25 (Field Survey Map 1836). The east fork of Gaines' Trace is the same as the "Pitchlon Road" or road to "Maj. Pitchlons" homesite in Sec. 30. From the "widow Pitchlon Kitchen" the road continued south via the "wagon road from Maj. Peachland to Plymouth." This road crossed Tibbee Creek at Red Bluff and was to be incorporated in 1835 with a road to be laid out from Plymouth to Pontotoc via John Pitchlyn's and Red Bluff (Lowndes County Board of Police Minutes, April, 1835). Hence the Chicksaw Trail and Gaines' Trace followed the same road at Waverly. Nevertheless, by early 1836 the importance of the Plymouth-Waverly road passing through Sec. 30 and 31 was largely negated

when R. Barry, owner of the adjoining land east of the river, was allowed to operate a ferry on the Pontotoc to Columbus Road at or near Waverly (Lowndes County Deed Book 12:94).

In the absence of data, we assume the western fork of Gaines' Trace had continued to Rocky Ford on the Tibbee Creek. For a short period of time this section of the road was apparently heavily traveled, for in October, 1836, a jury was appointed by the Lowndes County Board of Police to lay out a road to the Rocky Ford Mill owned by L.S. Wilkins (Lowndes County Board of Police Minutes, April, 1835), and build a bridge across Tibbee "high enough so as to not obstruct navigation" (Lowndes County Board of Police Minutes, October, 1836). The bridge was never completed. And if references in the Lowndes County Board of Police Minutes are an indication the road soon fell into abeyance, only to be revived in the mid-to-late 1840s.

Two other roads of historical importance passing through the Indian country near the Waverly Community were the Jackson Military Road and the Robinson Road (Figure 6.2). After bypassing most of the settlements in central and southeastern Mississippi, the Jackson Military Road crossed the Tombigbee River at Columbus and continued into northeast Alabama. During the 1810s the road undoubtedly carried its share of traffic, especially flatboat men returning to the Ohio and Tennessee country after disposing of their goods on the New Orleans market (Lincecum 1906:419), and contributed to the early growth of Columbus. However, because of the poor accommodations along the road, direction away from the fertile soil regions of the state, and the location of the capital at Jackson, the road fell into disuse (Love 1910:411-417).

The completion of the Robinson Road in 1821 also diverted traffic from the southern section of the Jackson Military Road and provided a key link between Columbus and the state capital at Jackson (Phelps 1950:153). These early American roads must have been significant to the Waverly settlers by prematurely bringing about the demise of the Chickasaw Nation and allowing glowing reports of fertile land to reach Young and others, living in the Georgia Piedmont, interested in new cotton lands.

Early Navigation on the Tombigbee River

Mississippi is virtually surrounded by navigable waterways: The Mississippi, Tombigbee, and Tennessee rivers, and the Gulf of Mexico. Moreover, much of the state's interior was seasonally accessible, though navigation was hazardous in all seasons. Until about 1840, when railroads began to appear, the easiest routes to the interior were along rivers, and all large and important communities were located where the settlers could make the greatest use of rivers in transporting goods to and from markets (Adkins 1972:102).

The Tombigbee River was used by the Chickasaws, de Soto, Bienville, and English traders, but the real value of the river as a commercial artery was perhaps first realized when the Chickasaw cotton gin settlements north of Waverly began using the river as a route to the Mobile market for grain, livestock, and cotton (Adkins 1972:107). These early settlers depended on rafts, flatboats, and keelboats to get their farm produce to market. Flatboats and cargos were sold in Mobile, and the boatmen returned overland by the Big Trading Path to the upper Tombigbee settlements (Hopkins 1955).

Steamboats first appeared on the Tombigbee River in 1818. Four years later the steamboat, Cotton Plant, under the command of Captain Chandler, reached Columbus (Evans 1942:217). From 1822 to 1831, the extent of steamboat traffic on the upper Tombigbee is not known, but it seems unlikely after the successful 1822 season that steamboats would disappear from the upper Tombigbee until 1831. In that year four steamboats averaging 200 to 400 bales of cotton per trip were engaged in the Columbus trade (Evans 1942:217). By 1835 the merchants at Columbus were anxiously awaiting the beginning of the shipping season as illustrated by the following:

"Our River is now full and in good boating conditions and in a day or two we may expect to see our shore lined with steam-boats. Our town will then be all bustle and life; and what with merchants receiving new goods and shipping cotton, and strangers arriving and departing, our town will present a pleasant aspect" (Southern Argus December 1836).

Interest in extending shipping beyond Columbus is reflected in the report of the Select Committee on Internal Improvements on January 20, 1830, which recommended "that the legislature appropriate \$5,208 for the purpose of improving 107 miles of the Tombigbee River . . . so as to make it safe for steam-boat navigation for from four to six months in the year from Columbus to Cotton Gin Port" (House of Representatives 1830:162-163). By 1835 steamboats were appearing regularly during the shipping season at Cotton Gin Port (Evans 1942:218). Hence, steamboats were extending beyond Waverly by this date.

Although supportive evidence is not available, during the 1830s a shipping port developed at Waverly for steamboats active in the Columbus, Hamilton, Colbert, and Cotton Gin Port trade (Evans 1942:216-218). Moreover, as a general rule steamboats would stop to deposit or take aboard freight, passengers, and wood for fuel at any landing servicing three or more families (Adkins 1972:48). It would have been strange indeed if Waverly with its favorable site and situation had not been used from the very earliest as a port. On the other hand nothing is unusual about the absence of data on Waverly shipments at that time, because such data on even much larger ports are relatively scarce. The earliest record of a steamboat calling at Waverly is an advertisement stating that Waverly was the highest point on the river at which the steampacket Norma would stop on its weekly trips during the 1843-1844 boating season (Columbus Whig December, 1843).

An examination of one cargo carried down river by the steamboat, Marietta, to the Mobile market in 1832, revealed much about the early economy of the region. The cargo included passengers, 465 bales of cotton, 37 bales of deer hides, 1,300 bales of cow hides, a box of furs, and five barrels of beeswax (Evans 1942:218). The Chickasaws and Pitch'yns may have contributed to the cargo at a landing at Waverly, but the real potential of Waverly as a river port would be realized only after the hinterland to the west was converted to plantation agriculture.

The Formation of Lowndes County

Mississippi was admitted to the Union in 1817. But when the eastern boundary line of the state was run in 1820 it was found that 1025 sq km (637 sq mi) east of the Tombigbee, believed to have been part of Alabama, was in

reality a part of Mississippi. The territory was organized as Monroe County in 1821 and added to the state as the eighteenth county. According to the U. S. Census the population of Monroe County was 2,721 (U. S. Census of Population 1820).

Lowndes County was organized in 1830 from that part of Monroe located south of the Buttahatchie River. In 1833, a parcel 100 sq km (62 sq mi), which included the Waverly Locality, was added to Lowndes County from the Chickasaw Nation north of Tibbee Creek and west of the Tombigbee River (Laws of Mississippi 1830:18). During the intercensal decade the population in the two-county upper Tombigbee Valley area increased to 7,034 (U. S. Census of Population 1830), for a 2.6% rate of change for the state. However, in their semi-isolated location the people were only loosely tied to the state and did not begin to play a major role in politics until the late 1830s.

County enabling acts authorized a commission to select the site for a courthouse near the geographic center of the county. Whenever the selected site was on a navigable waterway, as in Columbus--the county seat for Lowndes County, county towns had a decided growth advantage with a potential to function as a regional trade and social center (Adkins 1973:42). By 1821, four years after the first house was built in Columbus, the town had become so significant that a bill was introduced "into the legislature to have it connected with Jackson by means of the Robinson Road" (Riley 1900:171). Columbus was made a land office in 1833, and in 1834 and 1835 it was the busiest land office in the state (Gonzales 1973:289). This added function contributed significantly to its early growth over other area centers. For example, a local census counted 481 persons in 1832 and 1,623 persons in 1835 (Columbus Democrat 1856). Thus, because of the early start, central location, and legal function Columbus ranked significantly above Waverly in the social and economic hierarchy within the Tombigbee River Valley.

AD-A127 617

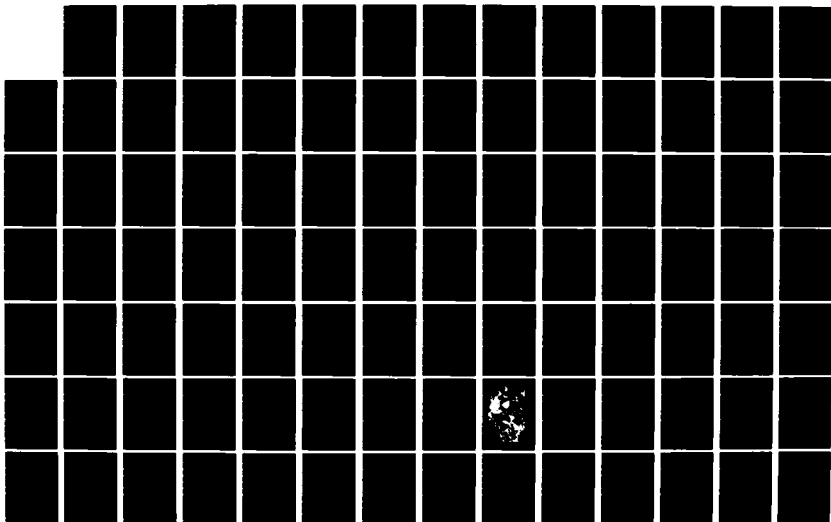
MAVERLY PLANTATION: ETHNOARCHAEOLOGY OF A TENANT
FARMING COMMUNITY(U) RESOURCE ANALYSTS INC BLOOMINGTON
IN W H ADAMS 16 DEC 88

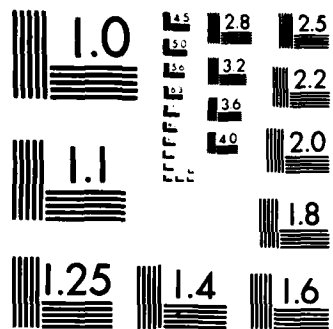
2/6

UNCLASSIFIED

F/G 8/7

NL





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

CHAPTER 7. THE ANTEBELLUM WAVERLY COMMUNITY

by Howard G. Adkins

Introduction

"Economic development in antebellum Mississippi was solidly dependent upon cotton, slavery, and the plantation system . . . [which] reached a climax in the decade of the 1850s, when cotton production quadrupled and the slave population increased by 197 percent" (Scarborough 1973:310). With a favorable cotton environment and 6.7 million hectares (16.5 million acres) of former Indian lands offered for sale in north Mississippi in the 1830s, the intercensal population increase rate averaged 1.87 between 1820 and 1860. By 1860, slaves were 55% of Mississippi's population and the state led the nation in cotton production. In no comparable period thereafter has Mississippi enjoyed such eminence in the economic life of the nation. The Waverly Community was caught up in this frenzied production of cotton and was an integral part of the state's dominance in antebellum plantation agriculture.

Land Acquisition

Ownership of quality land was essential to the well-being of a planter. The methods and relaxed regulations governing sales and acquisition favored a concentration of land among those controlling capital, possessing influence and organizational skills, thereby allowing the plantation system to develop naturally (Chapell 1949). Between April 5, 1836 and November 23, 1837 all of Waverly had been acquired by 15 individuals (Table 5.1). That the land was acquired so early and so quickly is an indication of the settlers' opinions of its potential.

The role of land sales in the rapid development of the frontier South is clearly evident in the writings of historians. But often neglected is the extent of speculation at the local or community level. The practice of speculators was to ally themselves with Indian traders, to contract halfbreeds to negotiate in their behalf with the fullbloods for lands allotted them under terms of the treaty, and to hire dummy entrymen to acquire title to large tracts of choice land to resell to settlers (East 1971:300-311; Young 1961:116-117). Accordingly, a considerable amount of land in the community was caught up in the speculative mania that characterized much of the early Chickasaw land sales. Among the well known speculators were Barton, Bradford, Cherry, Greene, Hubbard, Lewis, and Orne (Silvers 1944:84-92; Young 1961:165-166). Barton, Bradford, Starke, and Fortson (Table 7.1) acquired titles to more land than they could hope to till; moreover, they were not among the major owners in 1860 (Figures 7.1, 7.2). Ownership for 1872, 1883, and 1902 are presented in Figures 7.3-7.5).

Of the original purchasers in 1836, only George H. Young was living in the Waverly Locality in 1860 (Table 7.1). Thomas Martin, the largest owner of land in 1860, had initially acquired title to several parcels from speculators in 1836. But, as a resident of southwest Tennessee, the Martin plantation was operated entirely under the supervision of overseers throughout the antebellum period. Hence, of the original purchasers, evidently only Young had acquired the land with the affirmed intent of

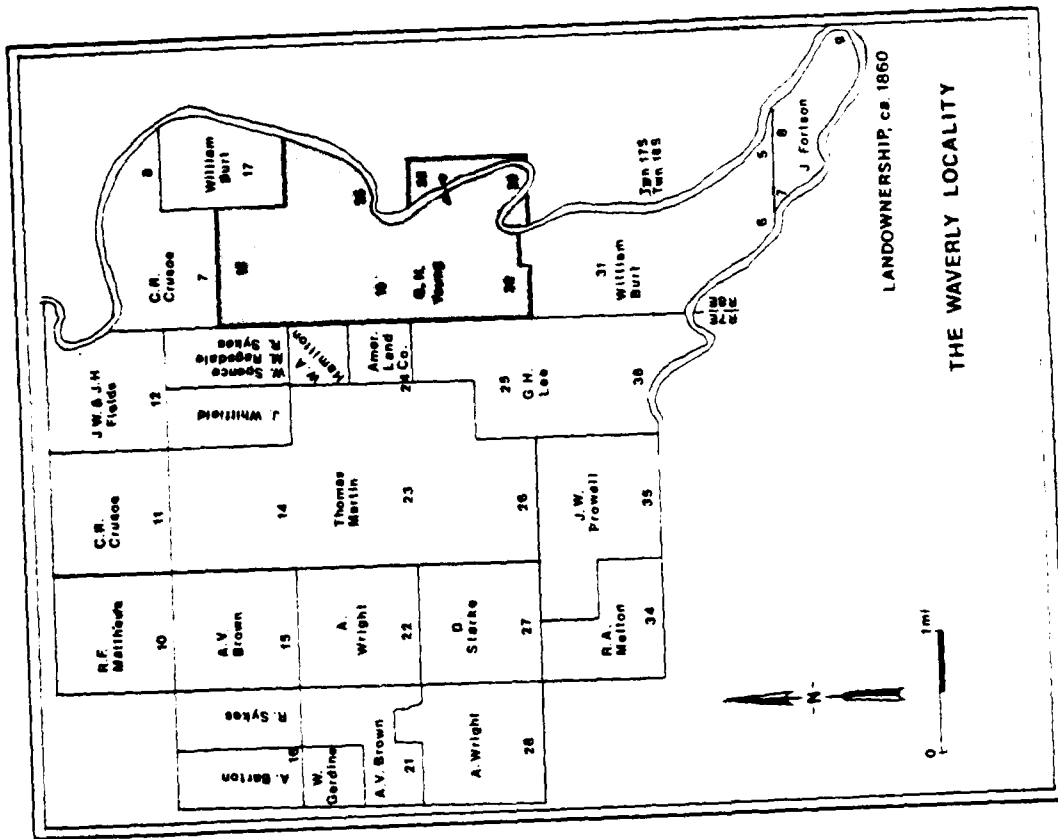


Figure 7.1.--Waverly Landownership, ca. 1850.

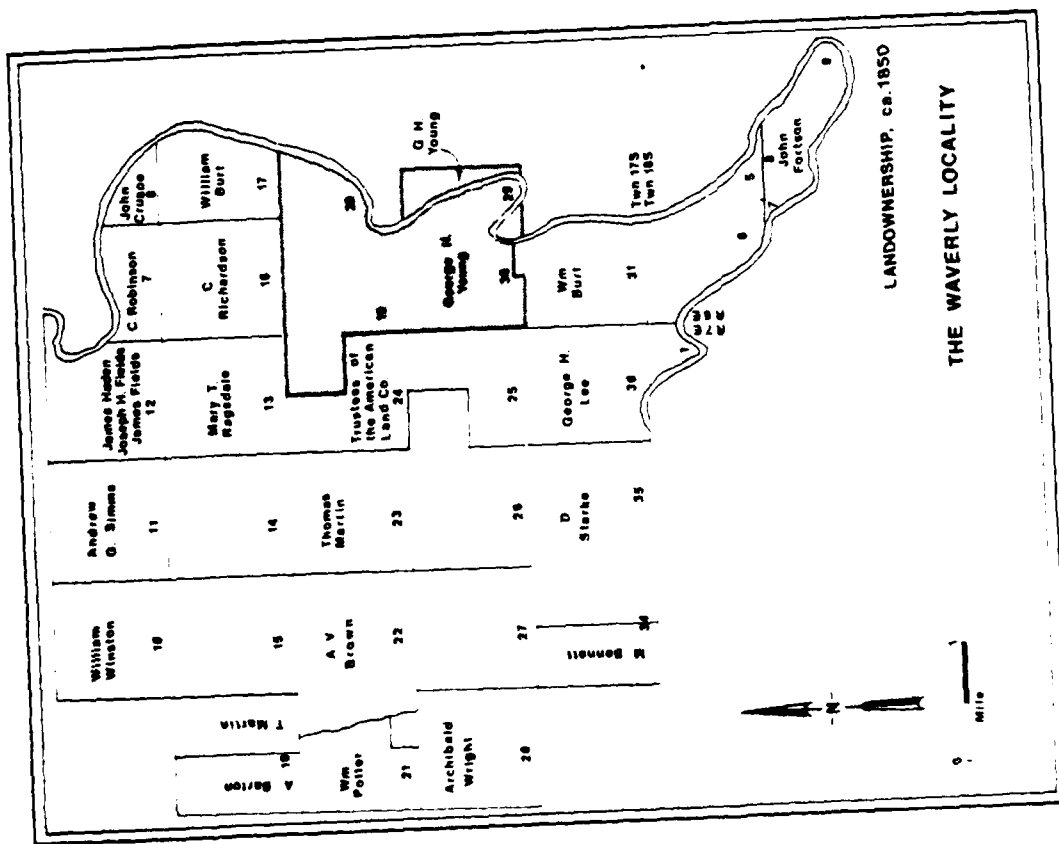


Figure 7.2.--Waverly Landownership, ca. 1860.

becoming a permanent resident. Possibly for this reason and proximity to the Tombigbee River, as well as improvements made by the Pitchlyns and bidding by others, Col. Young willingly paid more than \$12.00 per hectare (\$5.00 per acre) for Sec. 30 (Table 5.1). Speculations in community lands continued into the late 1840s, and because of the unsettled conditions associated with speculation may have delayed their full development for more than a decade.

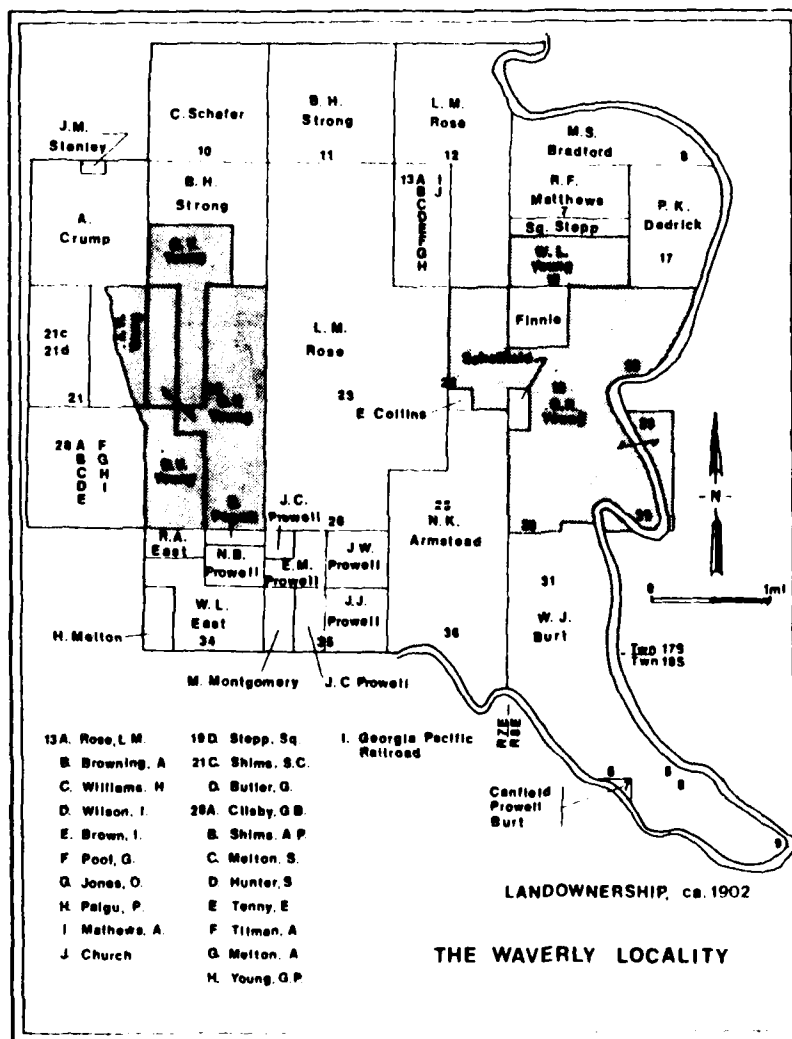


Figure 7.5.--Waverly Landownership, ca. 1902.

Table 7.1. Landownership in the Waverly Community, 1836-1860*

1836		1840		1850		1860	
Owner	Hectares	Owner	Hectares	Owner	Hectares	Owner	Hectares
Barton	1,581	Barton	1,037	Martin	972	Martin	972
Bradford	1,298	Fortson	893	Brown	955	Young	802
Starke	777	Young	632	Young	737	Crusoe	532
Fortson	647	Martin	583	Burt	662	Wright	469
Young	385	Starke	518	Lee	465	Lee	465
Allen	361	Weir	458	Wright	275	Burt	444
		Freemen	324			Brown	437
Total	5,049		4,445		4,066		4,445
Percent	76%		67%		61%		67%

*Landownership exceeding one section of land.

Source: Clay County Land Rolls.

The Prominence of George H. Young

The influence of Col. George H. Young as a catalyst in developing Waverly into a center of significance in antebellum Lowndes County should not be underestimated. Probably more than any other, he recognized the prospects of the site as a multifaceted rural economic center and exploited its resources and its situation. And it was undoubtedly Young who through skillful plantation management, business acumen, speeches and political campaigns, and the hospitality available at his home, who made the plantations at Waverly prominent in the upper Tombigbee River Valley.

The son of George and Nancy Hampton Young, George Hampton Young was born in Oglethorpe County, Georgia on December 28, 1799. On May 19, 1825, he married Lucy Woodson Watkins. After graduating with honors and a reputation as an orator from the University of Georgia, he entered the legal profession in Lexington, Georgia, and at one time served in the Georgia State Legislature representing Oglethorpe County (Lipscomb 1909:65; Saunders 1969:252).

By birth and training Young was a member of the Georgia landed gentry, and was spared the arduous struggle to the top of the social and economic stratum of southern society. Nevertheless, Young used the early success of his law practice to enter the more remunerative plantation life, and by 1830 he owned 10 slaves in Oglethorpe County, Georgia (U. S. Census of Population 1830). His father and older brother owned 30 and 14 slaves, respectively. Hence, as slave holders, the Youngs were above average in Georgia (Phillips 1968:109).

Shortly after the cession of Chickasaw lands Young arrived at Waverly, probably traveling up river by steamboat, to view and select favorable cotton lands for himself and friends in Georgia. The fact that Young is listed on the Lowndes County personal property rolls in 1834, but with no taxable property, indicates he was in the area perhaps as early as 1833. His taxable property in 1835 consisted of one slave. It is likely Young had returned to Georgia to report his findings, after which he returned to Mississippi with a slave as his personal body servant. It was fashionable at that time for persons of esteem to be accompanied by a personal servant.

One of Young's contemporaries once stated that "with Mr. Young there was a conflict between fame or fortune, but the decision was in favor of fortune" (Saunders 1969:252). We were unable to verify the reason for Young's emigration. He may have been among those who moved away from the soil-exhausted Georgia Piedmont to the new cotton land "where capital might be employed more advantageously" (Phillips 1968:97), and where slave labor would pay greater dividends (Weaver 1945:26), or he may have been typical of those who desired to simply "go out" (Farmers' Register 1835:508). The latter does not appear likely since Young never expressed a serious interest in living elsewhere.

Having acquainted himself with the location and merit of several sections, Young attended the land sales at Pontotoc in 1835. There he purchased 2,456 ha (6,070 ac) of land and served as the secretary to General Humphries, who represented the United States Government. Since these were among the last well-located cotton lands in the public domain the price was of little concern to Young. For 1,796 ha (4,438 ac) of Indian allotment land he paid \$8,000, or the equivalent of \$4.50 per hectare (\$1.82 per acre). The amount paid for the remaining land is unknown, but since it was acquired from the United States Government, he likely paid the going rate of \$3.00 per hectare (\$1.25 per acre) (Monroe County Land Rolls; Clay County Land Rolls). The lands purchased were Sec. 14, 23, and 24 in T14 R6E, in the upper headwaters of Chuquatonchee Creek; Sec. 4, 5, 6, 31, and 36 in T16 R6E, in the upper headwaters of McGee Creek; and three fractional sections at Waverly. The Chuquatonchee Creek land in Monroe County was acquired from Fo-li-cha; that on McGee Creek in Lowndes County was acquired from Neely, a native born citizen of the Chickasaw Nation (Monroe County Deed Book 3:507-510).

The extent of Young's speculation in land remains unknown. He did, however, acquire title to 194 ha (480 ac) in Phillips County, Arkansas, for which he paid \$2,147 (Snow Collection). Perhaps other lands were acquired purely for speculative purposes for one who knew him said, "he dealt largely in lands, and became very wealthy" (Saunders 1969:252). The total amount acquired was certainly more than he could possibly cultivate in the late 1830s, but the separate parcels suggest he may have been interested in determining their productive potential. In later years he sold the Arkansas and Chuquatonchee Creek lands while retaining control of the Waverly and McGee Creek properties throughout his life (Clay County Chancery Court, June 20, 1887:523-525).

Young may have moved first to the prairie with the intent of engaging in town speculation with the Waverly land (Figure 7.6). The Latourette Map was copyrighted in 1839, three years after Young acquired the site. It shows the streets and lots for the paper town of Waverly. However, the site apparently attracted little or no interest, and with the demise of the nearby river towns like Plymouth, Colbert, and Barton, and the the rapid growth of nearby Columbus, this visionary dream of Col. Young may have been stifled.

Col. Young brought his wife and seven children to Mississippi in 1835 (Lipscomb 1909:65) and settled on the McGee Creek property. Judging by references to the "road leading from Mullins Bluff [Waverly] to intersect the White road at George H. Young's" (Lowndes County Board of Police

Minutes, October 1838) and the "White Road . . . from G. H. Young's to County Line" (Lowndes County Board of Police Minutes, June 1841), the prairie home was located in the NW 1/4 of Sec. 36 on or near the White road.

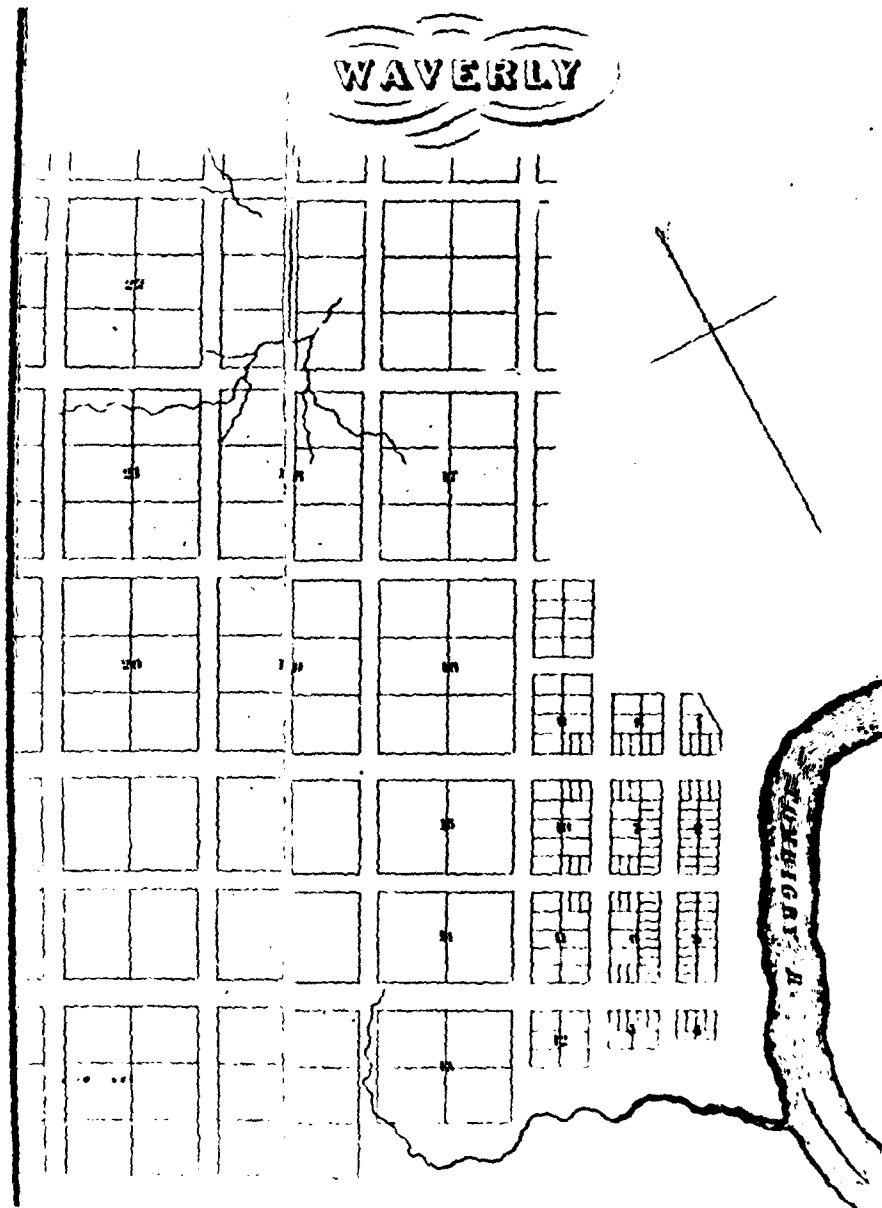


Figure 7.6.--Detail from the Latourette Map of Mississippi (1839) Showing the Plan for a Town of Waverly.

Dissatisfaction with the life-style on the prairie Plantation is gleaned from an apologetic reference in a letter to James McDowell of Lexington, Virginia.

"Watt [James Watkins Young] is rough, almost without any polish in anything. This could not be helped. We came 6 years ago to Miss., crowded into cabbins [sic], & up to his leaving such was our crowd of company, our children never had an opportunity of even eating at table, until their appetites were whetted enough by delay to devour their manners" (G. H. Young to James McDowell, September 25, 1842).

Apparently, James Watkins Young, sixteen years of age, was attending school, perhaps in Lexington, Virginia, and was under the guardianship of James McDowell.

Little is known of Young's early years in developing the prairie plantation. But the fact that the number of slaves increased from 25 in 1836 (Lowndes County Personal Property Rolls) to 60 in 1840 (U. S. Census of Population 1840) and that personal property taxes doubled in the high years of the Panic of 1837 suggest that he operated the plantation with intelligence and that success as a planter was imminent (Lowndes County Personal Property Rolls). What prompted the move from the prairie Plantation to Waverly in late 1841 or early 1842 (G. H. Young to James McDowell, January 7, 1842) is not known, but the soil, terrain, and vegetation at the prairie homestead stands in stark contrast to the Georgia Piedmont and probably was not appealing to the Youngs who could afford a more aesthetic environment. Moreover, in the early years, Waverly land may have been more productive than the prairie land: Col. Young noted in November, 1841, that "My home [prairie] crop is almost an entire failure. At my upper place [at Waverly] crop [is] superior and abundant. This place is no longer for sale" (George H. Young to James McDowell, November 18, 1841). Perhaps the Youngs were also typical of those Owsley had in mind when he stated:

"Men seldom change their climate, because to do so they must change their habits. Of great importance was the need to continue to employ the methods and tools with which he was familiar. Those accustomed to the use of certain farm implements adapted to one kind of soil had great difficulty in changing to another type soil, even though such change did not entail any change in their farm economy. This was particularly true of those who, having cultivated sandy or loamy soils, moved into gummy clay and lime soils" (Owlsey 1949:55).

Col. Young was described by his contemporaries as "noble-minded and generous-hearted" (Barnard 1912:108), and his name was frequently used as a recommendation in advertisements of medical practioners (Southern Argus 1838 and 1839). Because of these and other qualities, Young was primarily responsible for the plantation residential pattern that developed in the Waverly Locality during the antebellum years. One daughter, Anna, married Alexander Hamilton of North Carolina and they lived in the Burnside house. Other members of the immediate family residing at Waverly included sons

James H., Thomas E., and the bachelor brothers Val and Billy. A granddaughter married H. C. Long who operated a postbellum store at Waverly, and George H. Lee, a nephew, also resided at Waverly.

In essence Waverly was a transplanted Georgia community. John T. Fortson, one of the first to purchase land in 1836 and the second largest land owner by 1840 (Table 7.1), was born in Elbert County, Georgia, adjoining Oglethorpe County. "About the year 1834 he settled in Lowndes County, near Waverly . . . [and was] an excellent specimen of the pioneer planter" (Sunny South April 1859). Fortson lived at Waverly until the mid 1840s when he moved to Monroe County, where he died in 1859. Another planter, G. H. Lee of Oglethorpe County, Georgia, purchased 195 ha (480 ac) from the speculator, W. W. Topp, and added to his land holdings in 1854 by purchasing fractional Sec. 1 and 36 from John T. Fortson (Clay County Land Rolls). William Burt of Georgia purchased 662 ha (1,636 ac) from the speculators J. Allen and J. T. Fortson between 1836 and 1841. George H. Young deeded to Burt 4 ha (10 ac) in the southeast corner of Sec. 30 (Figure 7.1) on which he "built and . . . resided" (Clay County Deed Book 7:288-289). We do not know when the land passed to Burt nor when he first resided thereon, for the transaction apparently was not recorded. However, it is presumed that Burt moved during the early 1840s, at about the time he purchased the land to the south from Fortson. The speculator, Armstead Barton, living at Waverly in the early 1840s was from Franklin, Georgia--the same general area as was Young. Other Georgians in the Waverly Locality were W. L. C. Gerdine and R. A. Melton (U. S. Census of Population 1860).

After moving to Waverly, Young and his family first lived in a two-story log house of undetermined origin (Sykes 1941:3). At this time "Mississippi farmers or planters seldom built houses in the expectation that they and their heirs would occupy them for generations" (Moore 1958:39). But this was not so with George H. Young since shortly thereafter construction was begun on a mansion. Dates given for the completion of the mansion range from 1852 to 1858, though the most common date is 1852. However, in a letter dated September 4, 1857, to Susan Young, a daughter attending school in the Northeast, Col. Young noted that "The house did not progress in my absentee as I anticipated Things shall be better when you and my little Maggy D. come home. There shall be (a) new house, new carriage, new everything" (George H. Young to Susan Young, September 4, 1857). In all likelihood the family was living in the mansion prior to its completion. The mansion:

" . . . was designed by an Italian architect by the name of Pone. . . . The rough wood framing and hand-made bricks were fashioned by Young's slaves. Richard Miller, a Scottish craftsman from Mobile, installed the marble mantels and other marble work. . . . Two Irishmen executed the ornamental plaster for the mansion, a task which required two years of labor.

"Greek Revival motifs are incorporated into both north and south facades. . . . Doric and Ionic orders are pleasantly combined in this unusual wing pavilion type. Cast iron balconies are an extra refinement with the south facade balcony containing both cast and wrought iron. . . . Main entrance doors on the south portico have side lights and transom framed with harp-shaped muntins over red venetian glass. Dentils surround the cornice. Ionic columns rise two stories.

"The crowning feature of the house is an octagonal dome with sixteen windows rising high above the hip roof. Magnificent plaster work embellishes the ceiling of the oval rotunda fifty-two feet above the floor. The vast stairwell contains twin circular stairways curving gracefully to the second floor cantilevered octagonal balcony which opens into four bedrooms each measuring twenty-two by twenty-five feet. A third staircase curves upward connecting with another octagonal balcony which opens into trunk rooms. A fourth staircase rises to the fourth level balcony from which the acreage, the gardens and the Tombigbee River to the east and south-east may be viewed.

"The stairwell is . . . functional in several respects. Besides providing observation from the dome, the windows allow natural light to penetrate the stairwell, and when opened pull hot air up and through the windows at the same time that they bring cool air into the lower floors. . . .

"From the main floor four large rooms of equal size open into the rotunda The parlor to the left of the front entrance is . . decorated with Greek Revival motifs of fine moldings, dentril trim and acanthus leaves. Plaster moldings and clusters of grapes and leaves adorn the cornice of the room. An ormolu chandelier from France is suspended from an ornamental plaster medallion There were gilt cornices, imported furniture, a floral wool carpet and large gilt mirrors, one over a white marble fireplace In this parlor the hangings were peacock blue brocaded silk velvet, each panel being woven for the particular window. There were seven linings to protect the fabric from the sun, the outer lining being gold silk.

"Fine millwork adorns the windows and doors of the library as in all other rooms of the house. A walnut secretary of Gothic detail is built into the wall All doors are hand grained to simulate various woods. Porcelain key hole covers adorn the locks.

"The dining room contains a built-in china cabinet to the left of the marble fireplace. A plaster medallion adorns the ceiling. There are also hand grained doors with key hole covers, fine millwork and transoms over the doors as in the other major rooms in the building. The kitchen was detached

"The master bedroom is the fourth major room on the lower floor. A center medallion of plaster adorns the ceiling from which suspends an ormolu chandelier. The cornice is decorated with fine plaster molding and dentil work Greek Revival millwork frames the doors and windows. Window hangings in this room were red velvet with window shades of hand painted linen in scroll designs of blue and green with pink and red roses The window fenestration for this room and all others is carefully placed for cross ventilation. There are four windows to each room except the dining room which has only three. An exterior door opens from each room to a porch or a balcony.

"These allowed cool breezes to be drawn into the house and through the rotunda and out again through the sixteen windows of the rotunda dome.

"All bedrooms of the upper level have marble fireplaces and fine millwork with French and Egyptian influences" (Robert Snow 1974, in Prout 1975:25-31).

On every side of the mansion "stretched expansive grounds, devoted to small lawns, elaborately fashioned flower gardens, worked and planned by a German landscape gardener, and planted with imported shrubs" (McVey n.d.). Near the mansion were orchards, vegetable gardens, an ice house, kennels of hunting dogs, and an artesian well that supplied water to bath houses, a swimming pool, and fish pond (Lipscomb 1909:66; Waverly n.d.).

Tarawa and Burnside were lesser mansions of opulence in the Waverly community. Tarawa (probably the home of Thomas E. Young), burned in 1918, was two-story with a cupola on top containing stained glass windows. Outbuildings included a carriage house and smokehouse. Burnside was built on a high hill west of Waverly mansion as a wedding present for Alexander and Anna Young Hamilton. It was a two-story house with four rooms and an open hall on the ground floor and two rooms and a large sleeping porch upstairs. Because of the ever-present danger of fire the kitchen was unattached and located about twenty feet west of the main house. Burnside burned in 1930 (Snow Collection).

Waverly Plantations

The role of plantation agriculture at Waverly and in Lowndes County can hardly be overrated. In the decade preceding the Civil War the county increased its rank in the state in number of slaves from sixth to fourth, and in cotton ginned from thirteenth to fourth, and in value of farms it ranked sixth in 1860 (U. S. Census of Agriculture 1850, 1860). With a heritage that was plantation-oriented, Young engaged in this practice with intelligence, vigor, and most of all with success. Others at Waverly also were planters of no small means. Data in Table 7.2 reveal that, based on number of slaves and land holdings, all planters associated with Waverly were "Big Planters" (Gray 1958:483; Weaver 1945:38). Waverly planters accounted for 17% of the slave owners with more than 100 slaves, and 9% of those with more than 50 slaves in Lowndes County.

An index reflecting the plantation trend is the correlation ($R=.865$) between slaves and improved land (i.e., tilled hectares):

Year	State Average	Lowndes County	Waverly
	Tilled/Slave	Tilled/Slave	Tilled/Slave
1850	4.5 (11 ac)	4.0 (10 ac)	4.1 (10 ac)
1860	4.7 (11.6 ac)	3.8 (9 ac)	4.7 (11.6 ac)

The rate of increase in improved land and slaves at Waverly exceeded both the county and state rates. Lowndes County had actually declined. In another respect, whereas the general custom of planters in the upland cotton South was to provide one draft animal (horse, mule, or oxen) to every three to four hands (Gray 1958:708), the Waverly draft animal-slave ratio in 1850 and 1860 was 1:1.82 and 1:2.32, respectively (U. S. Census Agriculture 1850, 1860) (Table 7.3).

Table 7.2. Slave Holders in the Waverly Community

Waverly Planters	Slaves		Hectares				Value of Farm	
	1850	1860	Improved		Unimproved		1850	1860
			1850	1860	1850	1860		
G. H. Young	117	137	324	567	594	801	5,000	102,000
Wm. Burt	73	84	202	261	445	121	1,200	25,000
G. H. Lee	37	47	150	202	142	283	9,000	20,000
T. Martin	44	117	445	445	648	698	34,000	100,000
A. Wright	26	63	202	283	69	197	8,000	44,000
A. V. Brown	39	-	405	-	502	-	33,600	-
Wm. Winston	70	-	170	-	89	-	8,000	-
R. Sykes	-	95	-	378	-	161	-	60,000
G. H. Young*	-	80	-	486	-	324	-	102,000
A. Hamilton	-	88	-	324	-	178	-	48,000

*Sons of G. H. Young: T. E. Young, G. V. Young, J. H. Young, W. L. Young, and B. Young. Source: U.S. Census of Agriculture 1850 and 1860.

Young and other Waverly planters were typical of those who moved to Mississippi to acquire wealth, for under the geographic conditions in the state, plantations yielded a larger return in proportion to investments than small farms and most other legitimate activities. With an investment value in 1860 of \$102,000 in land and \$109,600 in slaves (estimated at \$800 per individual, Sydnor 1933:200), the estimated return on Col. Young's 1860 cotton crop of 631 bales (182 kg bales at 25 cents per kg; Gray 1958:1027) was 13%. The average for all Waverly planters at this time was 15%, as compared with 11% for the county and 10% for the state. Burt, Wright, and Sykes registered higher rates of return than others at Waverly.

In 1850 and 1860, Col. Young owned and operated a prairie plantation on upper McGee Creek and Waverly plantation on the Tombigbee River (Table 7.3) (U. S. Census 1850, 1860). A combination of terrain, soils, early start, and absentee management probably accounted for the more purely agricultural practices at the prairie place as compared with the more village-type characteristics of the Waverly place. However, the trend favored increasing production on the Waverly place, perhaps in part because in the 1850s cotton grown in the prairie tended to suffer from rust (Ruffin 1860:20-22).

The plantation at Waverly was organized into an Upper, Lower (Middle), and Home Place (Waverly) (Lowndes County Board of Police Minutes 1848-1861). The specific location of each is not generally known, though reference to road work assignments and land owned suggest that the Upper and Middle Places were north of the home place--Waverly, and that the designation probably differentiated between the higher and older terraced soils, the Norfolk, and the lower terraced soils, the Cahaba of the floodplain (Figures 5.1, 5.4).

Successful cotton production on an antebellum plantation required the expenditure of an immense amount of labor. With the seemingly limitless tracts of fertile land available at low prices investments in labor often exceeded that in land. Slaves therefore were central to the plantation system, possessing the power of labor and the mobility of capital. At an average of \$800 per slave, slaves were the principal source of wealth in the Waverly Community in 1860.

Table 7.3. G. H. Young Plantations, 1850 and 1860

Characteristic	1850		1860	
	Waverly	Prairie	Waverly	Prairie
Improved Land (ha)	81	243	162	405
Unimproved Land (ha)	319	275	688	113
Cash Value of Farm (\$)	3,000	2,000	42,000	60,000
Value of Implements (\$)	700	1,200	500	700
Horses	18	9	25	1
Mules	-	23	4	27
Milk Cows	15	16	14	13
Oxen (working)	14	4	7	4
Other Cattle	15	30	15	10
Sheep	5	-	130	-
Swine	20	275	200	250
Value of Livestock (\$)	2,200	3,415	500	5,600
Bushels of Corn	2,000	6,000	2,500	8,000
Cotton Bales (182 kg)	23	98	156	475
Wool (kg)	-	-	91	-
Peas (bushels)	50	-	10	-
Sweet Potatoes (bushels)	500	500	500	1,000
Butter (kg)	273	273	114	182
Value of Home Mfg. (\$)	-	100	150	-
Value of Animals (\$)	600	370	2,160	1,280
Slaughtered				

Note: In the 1850 population schedule the value of George H. Young's real estate was \$86,500 (U.S. Census of Population 1850). Source: U.S. Census of Agriculture (1850, 1860).

It is not known when or who brought the first slave to Waverly, but John Pitchlyn owned 62 slaves in the early 1830s. In 1836 Young owned 25 slaves and at that time may have been the only Waverly landowner to own slaves (Lowndes County Personal Property Rolls). However, Young was residing at his prairie home, and it is not known how many, if any, of his personal slaves were retained at the Waverly Place prior to the family's move in the 1840s. Following his father's death in Georgia in 1836, Col. Young worked his mother's slaves (number unknown but in 1830 George Young owned 30 slaves (U.S. Census 1830)), during her life on his Upper Place (G. H. Young to James McDowell, September 25, 1842). His mother, Nancy Hampton Young, died in 1844 and was buried at Waverly. In the absence of documentation, the assumption is that her slaves became the property of George H. Young. The number of slaves in Table 7.4 are owned by those planters having interests in the Waverly community during the census years and is not necessarily an accurate count of the number at Waverly.

The quality of slave houses is not known, but the recency of settlement and expense of sawn lumber logically precluded any but rough one-room log cabins with dirt floors ranging in size from 15-27 sq m (160-300 sq ft) (Sydnor 1933:39-41). As shown in Table 7.4 the average number of occupants per cabin ranged from a low of 3.3 in those maintained by the Youngs to a high of 6.9 in those on the Martin plantation. As the number of occupants increased the cabins must have become increasingly uncomfortable and lacking in adequate furnishings. Absentee owners generally had less interest in the

welfare of their slaves beyond safeguarding their ability to produce cotton. Even so, plain business sense must have compelled all Waverly planters to demand of their overseers and slaves a modicum of cleanliness about the cabins, and similar to other planters they must have had rules and regulations to this effect. It also was a common practice to concentrate cabins, called quarters, with an overseer's house near the places of work (Gray 1958:562).

Field hands were the largest group of plantation laborers. They were divided into hoe and plow gangs directed by Negro drivers during the planting, weeding, and cultivating periods, but were combined during the picking season. The cotton picking season normally began in late August and continued well into December, with the day beginning at five in the morning and continuing until six in the evening (The Primitive Republican 1852). As plantations approached economic independence, specialty needs necessitated a further division of labor. On Young's plantation mill employment was consistent enough to warrant road work assignments for the "mill hands" (Lowndes County Board of Police Minutes). A variety of needed occupations would have bound slaves to a particular task or group of tasks would have been, among others, the ferry, brick kiln, mechanics, carpentering, livestock tenders, operators of the steam engine, and house servants.

Good business prudence would have obligated Col. Young to remain in favor with his slaves and ensure their proper treatment to obtain favorable work habits. Young also supervised the annual hiring out of slaves owned by Gov. James McDowell of Virginia during the 1840s. But Young was constantly plagued with problems related to their improper treatment. For example, on one occasion two slaves, George and Henry, hired by Westbrook, were not provided blankets during the winter and were sick for ten weeks--requiring their mother's constant attention and care in Young's house (G. H. Young to James McDowell, April 8, 1842). After seven years of hiring out McDowell's slaves, Young wrote to him in 1847:

"I do sincerely hope you will not let another year pass away without making some new provision for your negros. Pardon my frankness, when I aver before heaven, it is not that I am weary of serving you--but the present plan is to our mutual injury. There is great difficulty in hiring here into suitable hands. And to avoid injury to your negros, I have kept most of them, & this year all of them, when it is both my interest & wish to buy and work none but my own. The injury to you is two fold--I do not pay you perhaps as high as previous hiring give--and I cannot manage or have managed all other negros as well as my own ... California especially has an idea that she is free--goes & comes as she pleases, infuses a good deal of these feelings and notions in her childrens heads, has Amalgamation prints stuck up in her cabins--which I constantly fear will be observed by the Patrol & unpleasant difficulties ensue & the example of all this is anguish (to) my slaves. Tim will say, why don't you remedy all this? My reply is never punish my own if I can avoid it--& others not at all. She demanded to be sent to Virginia this spring when hearing I suppose that I had not bought from you. Moses under the idea of being mine, & of feeling grateful for the purchase of his wife had improved" (G. H. Young to James McDowell, July 24, 1847).

The following year Young noted "I was gratified with the sensible view of John & Henry, running away & did not punish them . . . The simpletons ran away from Mr. H's plantation . . . hoping to reach Waverly, where they might not be sent back" (G. H. Young to James McDowell, May 13, 1848)

At one time or another overseers were employed to manage the details on each Waverly plantation (Lowndes County Board of Police Minutes 1848-1861). The overseer's position on the plantation was central: he stood between the slave and the master, bringing together the resources of one and the muscle of the other. "Among the major responsibilities of the overseer were the welfare and discipline of the slaves, the care of livestock and agricultural implements, and the production of staple and subsistence crops. He assigned gangs to work, apportioned tasks, and supervised the labor of slaves in the field" (Scarborough 1966:67). The ratio of overseers to slaves varied considerably, though at Waverly it likely approximated the state average of 1:30-50 (Sydnor 1933:67-69). It was common practice for overseers to be assisted by Negro drivers, but this fact is not known for the Waverly plantations.

If data gleaned from the Lowndes County Board of Police Minutes and United States Census are appropriate indicators then Young may have had no more than three overseers at any one time and most often only two. Much of the supervisory work was probably performed by his sons, John Watkins, George Valerius, Thomas Erskine, and James Hamilton Young. Managing the daily affairs of a plantation under the watchful guidance of the Colonel must have been an excellent education, as revealed by the fact that the sons' 1860 cotton crop was exceeded only by that of G. H. Young and the Martin plantation (Tables 7.2, 7.4) (U. S. Census of Agriculture 1860).

Table 7.4. Slaves and Slave Houses in the Waverly Locality, 1840-1860.

Owners	Slaves			Slave Houses	
	1840	1850	1860	1860	Average per house
G. H. Young	60	117	137	41	3.3
Wm. Burt	4	73	69	15	4.6
T. Martin	25	44	117	17	6.9
A. Wright	-	26	63	12	5.2
G. H. Lee	-	37	47	10	4.7
Sons of Young	-	-	80	24	3.3
A. Hamilton	-	-	88	24	3.7
R. Sykes	-	-	95	20	4.8
Wm. Winston	16	70	-	-	-
J. Field	30	41	-	-	-
A. Sims	25	17	-	-	-
J. Speight	31	-	-	-	-
J. Fortson	27	-	-	-	-
A. Weir	13	-	-	-	-

Source: U.S. Census of Population (1840-1860).

The overseer probably had the most demanding job on the plantation. He was expected to produce a large crop and to provide constant surveillance, guard the welfare, and merit out disciplinary punishment without incapacitating slaves. As the symbol of authority the overseer, no doubt, was the most frequent target of rebellious slaves. In the only reference

specifically identifying one of Young's overseers, "a negro belonging to Col. George Young, Waverly, on his plantation, near this place was killed by his overseer, Mr. Norwood, in self defense, as the Magistrate Court tried and acquitted him" (Southern Broad-Axe 1859).

Because their names reappear so infrequently one can surmise that in general Waverly overseers were a highly transitory lot with short tenures. The only known professional overseers were Mahlon Stacy and David Cottrell who managed the Thomas Martin Waverly plantation for most of its 30 year existence (Martin 1970b:275). In some instances the short tenures undoubtedly were attributed to salaries. George H. Young noted in 1842 that he could hire "the right sort of man for 300\$, or one with a wife & one child [to] . . . manage everything for 2 shares of all made" (G. H. Young to James McDowell, September 25, 1842). Ten years later, Moses Westbrook, who used the commercial facilities at Waverly and whose plantation had a common western border with the Waverly community, paid his overseer, Elias C. Westbrook (relation unknown), \$360 for the year 1852 and the salary for 1853 was to be \$350 (Westbrook 1854).

Commercial Functions

By clustering their plantation steadings Waverly took on the appearance of a commercial village (Figure 7.2). Moreover, clustering enabled the plantations to achieve greater self-sufficiency than was possible for free standing units on the prairie. Thus the economic crisis of 1837 to 1849, followed by the continued low prices for cotton until the mid-1850s, probably was not as severe on planters at Waverly. At least no Waverly planter was forced into bankruptcy during this time when "lawyers had their declarations in assumpsit printed by the Quire, leaving blanks only for the name of the debtor, creditor, and amounts" (Orr 1906:175).

On the Young property in Sec. 30 were a large brick warehouse, flour and grist mill, steam-powered sawmill, cotton gin, brick kiln, gas lighting plant, and facilities for making felt and straw hats and saddle blankets. A tanyard operated by Thomas D. Watkins supplied leather for shoes, saddles, and harnesses (U. S. Census of Manufactures 1850).

A post office and ferry operated by Young, and a commissioned merchant business operated in partnership with William L. C. Gerdine (Westbrook 1854), were also an integral part of Waverly. Nearby on a hill to the north was Young's office from which he transacted business and conferred with his overseers (Banks and Brown 1905).

Cotton gins were essential plantation features during the antebellum era. By separating the seed and lint, gins represented the final stage of cotton production and the initial stage of cotton manufacturing. For about \$500 (Gray 1958:542; Moore 1958:48) planters established their own gin plants by purchasing "the gin stand, the running gear, and the baling press, and by building a structure to house the machinery" (Aiken 1973:200). "On larger plantations gin houses usually were wooden structures two stories high with outside dimensions of approximately forty by sixty feet" (Moore 1958:48). Gin stands were approximately 2 by 5.5 m (7 by 18 ft) in dimension and mounted on heavy wooden beams on the second floor.

The average production of gins ranged between three and five bales daily (Wailes 1854:170-173), and required the attention of at least three hands (Gray 1958:704). To be economical, plantation gins needed about 200 bales annually drawn from within a radius of 6 km (5 mi) or less. After ginning, bales varied in weight and were pressed into manageable size and shape in preparation for shipment. It was to the planter's advantage to stuff as much lint cotton into each bale as appearance would allow because transportation and marketing costs were based on the number of bales rather than weight. One planter's cotton bales shipped through Waverly ranged in weight from 145 kg to 263 kg (320 to 580 lb) with two-thirds of the bales exceeding 227 kg (500 lb) (Westbrook 1854).

Most early antebellum cotton gins were horse powered. However, Young owned and operated a steam mill, possibly as early as 1841, for in January, 1842, he offered to hire from James McDowell two slaves, if they would concur, to cut wood for the year for his steam mill (G. H. Young to James McDowell, January 7, 1842). With this technology on the plantation, it seems logical to assume that he would have used this more efficient source to power the gin. In fact Young may have used steam to power several gin stands and ginned for a fee the cotton of his neighbors until their own gins were established. Others operating gins in the Waverly Locality were J. Fields (Fields 1845), Wm. Burt (Neville 1962:83), G. H. Lee, and Alexander Hamilton (Elliott 1978:44). G. H. Lee purchased a gin in 1853 from N. F. McGraw of Columbus, Mississippi (Southern Standard 1853).

By 1845 Young was operating a steam-powered saw, grist, and flour mill, in conjunction with his cotton gin, at Waverly (Clay County Deed Book C: 543-544). Three years later the mills were apparently operating full-time for Young's mill hands were distinguished from his field hands (Lowndes County Board of Police Minutes 1848). At this time the sawmill was supplying Young's lumber needs and others' because in 1853 the Westbrook estate owed Young \$22.54 for 425 m (1,395 ft) of planking sawn in 1847 and 1848. In 1850 the mill operation employed seven men and had an annual production of \$4,000 (U. S. Census 1850).

A report in late 1853 noted that in Lowndes County there were three successful tanners employing 15 in the yard, 12 in harness making, and 20 in shoe making (Southern Standard 1853). Names and locations of the tanners were not mentioned, but one of the tanners was probably Thomas Watkins at Waverly, for in the Census of 1850 he was enumerated as a 40 year old tanner from Virginia with real estate valued at \$550. There is no record of real estate owned by Watkins in Waverly; hence, the property was either located elsewhere or the value was an incorrect entry. However, there is oral reference to the tanyard field located some distance north of the Young house. Evidently the leather work of Watkins was in demand because in 1853 a list of accounts due his estate included 43 individuals owing \$868. Ten Waverly planters accounted for 46% of the amount due the Watkins estate, but two-thirds of his customers did not reside at Waverly, implying that his trade was extensive. Watkins was due payment for 13 pair of shoes made for the slaves of George H. Young. Shortly after the death of Thomas Watkins in 1853, the tanyard fixtures and hides inventory were purchased by Beverly Young and Alexander Hamilton for \$1,320 (Watkins 1853). Whether Young and Hamilton purchased the tanyard as a legal business venture or for speculation could not be determined.

Col. Young owned "a large brick warehouse by the river which held his own and his neighbors cotton until the boats came up from Mobile" (Banks and Brown 1905). Some form of protective storage was probably available at Waverly prior to Young's acquisition of the land in 1836, but in November, 1841, Young was "as busy as a bee, superintending the building of a fine Warehouse" (G. H. Young to James McDowell, November 18, 1841). The warehouse played an essential role by providing storage protection during inclement weather and until a sufficient number of bales accumulated for river shipment. Cotton bales were hauled overland to Waverly by slow-moving oxen and mule drawn wagons. In late autumn, dry weather favored overland hauling of cotton to the river port, but the river was low and shipping hazardous. With the wet weather in winter, heavy-laden cotton wagons cut deep ruts and turned roads into nearly impassible quagmires. Cotton was hauled by planters rather than by private wagoners from as far west as West Point (Southern Standard 1852). Cotton was stored at the warehouse for 25 cents per bale for the first month and at half-price for each succeeding month (Westbrook 1854), and insured through the Columbus Life and Insurance Company (Columbus Life 1852).

From the warehouse cotton was shipped by steamboat to agents, sometimes referred to as factors, in Mobile for final sale (Southern Argus 1839). Among the many charges the planter paid to market his cotton were the standard commission of 2.5%, freight storage at the upriver warehouse, wharfage, weighing, drayage, storage at the downriver destination, insurance, and mending. Charges levelled against marketing 158 bales of cotton at Mobile from Waverly in 1849 and Vinton in 1854 are typical of those during the late antebellum period (Table 7.5). Such indulgences deprived the planter of 8-12% of the gross sales.

Table 7.5. Comparative Cost of Marketing Cotton
from Waverly and Vinton, Mississippi to Mobile, Alabama

	1849		1854	
	Waverly (58 bales)	Cost per bale	Vinton (60 bales)	Cost per bale
Freight	\$58.00	\$1.00	\$105.00	\$1.75
Warehouse	14.50	.25	12.00	.20
Wharfage	4.64	.08	4.80	.08
Weighing	5.80	.10	6.00	.10
Drayage	5.80	.10	6.00	.10
Storage	14.50	.25	15.00	.25
Insurance	-	-	18.62	.31
Mending	.50	-	16.63	.28
Commission	45.84	.79	55.51	.93
Total	\$149.58	\$2.57	\$239.56	\$4.00
Gross Sales	\$1,834.05	-	\$2,220.40	-

Source: Westbrook (1854).

G. H. Young and W. L. C. Gerdine were local representatives for the merchant firms George G. Moore of Mobile (Southern Standard 1851), Hamilton and Baskervill of Columbus, and Hamilton and Young of Mobile (Southern Standard 1852). Also Young represented George H. Henry, factor and commission merchant of Mobile (The Primitive Republican 1852). Young and

Gerdine were authorized to make liberal advances on cotton received at Waverly to be shipped to Mobile, and to participate in auctions as representatives of the Hamilton and Baskervill Company. No relation is apparent between the Hamiltons and Youngs in the companies and those at Waverly.

The fact that the Westbrook estate was in debt to Young and Gerdine for a variety of items that included 58 kg (128 lb) of rope, 114 kg (250 lb) of sugar, 74 kg (163 lb) of coffee, 26 kg (57 lb) of flour, and 38 liters (10 gal) of vinegar suggests a commission business rather than a store operation at Waverly. Furthermore, had Young and Gerdine engaged in the mercantile business, it seems logical to expect that since credit purchases of even the smallest amounts were widespread and common that in the settlement of area estates, Fields, Leftwich, L. Westbrook, M. Westbrook, and Watkins--all having outstanding accounts against them--would have included some Waverly trade. Thomas Watkins, the Waverly tanner, would be a prime suspect, but the estate administrators were obligated to pay Young for groceries purchased in Mobile, and Gerdine for hides for the tannery (Watkins 1853).

Andrew Weir, owner of the first known store at Waverly, had likely sold out to J.M. Hughes in the late 1830s, and was living in Columbus at the turn of the decade (Lowndes County Personal Property Rolls 1839). John M. Hughes operated the store in the early 1840s, after which it was discontinued (Lowndes County Personal Property Rolls 1838-1841). Data do not reveal when John M. Hughes ceased to operate the store, but in 1843 Col. Young had \$2,000 in sales of merchandise, indicating he was a retailer. Since Young was then living at Waverly Place and Hughes was not listed that year as a merchant Young had probably taken over operating the store. However, Hughes remained as postmaster until 1845, so he likely was connected with the store, perhaps as a clerk or manager. We do not know how long after 1843 Young operated the store. In 1851, the tax rolls reveal W. L. C. Gerdine had \$1500 in merchandise sales, and since he was a business partner of Young's perhaps he was the store entrepreneur. Whoever the owner, the declining sales are evident from the personal property rolls:

1838	J. M. Hughes & Co.	\$5,940
1839	"	\$8,000
1840	"	\$8,000
1841	"	\$6,000
1843	George H. Young	\$2,000
1851	W. L. C. Gerdine	\$1,500

The store may have been a casualty of the Panic of 1837, or since Young owned the land and desired to foster a plantation society, he may have been responsible for its discontinuance. Whatever the reason, Young was purchasing clothing for the plantation from W. H. Wicks and Company of Mobile on the eve of the Civil War (Snow Collection).

A post office was clearly an important adjunct to an antebellum community for it provided an important communication link with the outside world. During 1838, the Southern Argus newspaper published periodically a list of those failing to pick up their mail at the Columbus Post Office. Appearing on almost every published list was George H. Young, implying the frequency of mail he received and the infrequency of visits to Columbus from his prairie home.

In 1839 Waverly was on postal route #3835 from Columbus to Houston. The mail left Columbus every Wednesday and arrived at Houston on Thursday, left Houston on Thursday and arrived at Columbus on Friday (U.S. Post Office Department 1830-1862). The following year a post office was established at Waverly with John M. Hughes serving as postmaster. George H. Young replaced Hughes as postmaster in 1845 and served until the post office was discontinued in 1860 (Oakley 1969:274). Young was offered the contract for postal route #5750, extending from Columbus via Waverly to West Point and Palo Alto in 1846 for \$140 per year, but he refused and the contract was signed with Moses Westbrook (U.S. Post Office Department 1830-1862). Perhaps the 53 mile trip weekly would have been too time consuming for Young, coming at a time when he was fully involved in establishing the Waverly Plantation.

By the time G. H. Young had acquired title to Sec. 30, Waverly had long been an important site for crossing the Tombigbee River. Several major Indian, European, and early pioneer trails and roads had converged at the Waverly crossing (Figures 5.1, 5.2, 6.2), perhaps encouraged by the fact that the floodplain is narrowed by hills protruding into it from the east and west. Also, with major tributaries entering the Tombigbee south of Waverly from the west and north of Waverly from the east, the broad expanses of the black prairie were more easily accessible from Columbus through Waverly. The site was further recognized in 1839 when postal route #3835 between Columbus and Houston shifted from the crossing further upriver at the now-extinct town of Colbert. Thomas B. Mullens was licensed by the Lowndes County Board of Police to operate a ferry in 1834 and 1835 "at the crossing known and called Pitchlynn's Ford." In 1836 Richard Barry was authorized to operate a ferry "at his landing on the road from Columbus to Pontotoc" (Lowndes County Board of Police Minutes 1836; Lowndes County Deed Book 12:94). Both sites were at Waverly. It is not known when Young first gained control of the ferry, but evidently it occurred at about the time he moved to Waverly--at least prior to 1848 for in that year Moses Westbrook owed Young six dollars for ferriage (Westbrook 1854). Young was paying taxes on the ferry in the early 1850s, and after the Lowndes County Board of Police announced in 1857 that all ferry keepers who had not renewed their bond in the past two years must execute new bonds, Young presented his and was authorized to operate the Waverly ferry for another five years. The ferry at Waverly was the only one operating along a 23 mi stretch of the river between West Port and Barton in 1863 (Table 7.6).

Just how profitable the ferry was is not known. Thomas Watkins owed Young \$32.80 for ferriage between 1850 and 1853. Apparently all ferry rates were set uniformly by the Police Court (Table 7.6). Rates for Waverly are not available prior to 1863, but comparing the Nashville and West Port rates with those listed in the early 1850s indicates rates had increased substantially during the decade, as much as 50-60% for certain categories. Most wagon traffic went north from Columbus to Aberdeen and then crossed the river, while that from Columbus to the southwest went by Starkville, crossing the river well south of Waverly. The ferry also was denied traffic when the railroad reached West Point in the 1850s.

Table 7.6. Schedule of Rates at Ferries Across Tombigbee River, 1863

Item	Barton	Waverly	West Port	Columbus
6 Horse Wagon	\$ 1.25	\$ 1.25	\$ 1.25	\$ 1.25
4 Horse Wagon	1.00	1.00	1.00	1.00
2 Horse Wagon	.60	.60	.60	.60
2 Horse Carriage	.75	.75	.75	.75
1 Horse Buggy	.40	.40	.40	.40
1 Horse Cart	.30	.30	.30	.30
Man & Horse	.20	.20	.20	.20
Man on Foot	.10	.10	.10	.10
Loose Mules & Horses (each)	.10	.10	.10	.10
Cows Per Head	.10	.10	.10	.10
Goats, Hogs, Sheep (each)	.05	.05	.05	.05

Source: Lowndes County Board of Police Minutes (1863).

River and Land Transportation

It would be almost impossible to overestimate the influence of water transportation upon the economic developments at Waverly and in the Community during the antebellum period. A desire for access to the Tombigbee was revealed when John T. Fortson deeded a 3 m (10 ft) strip off the north side of Sec. 31 to J. Fortson so that latter, owning Sec. 36 to the west, would have unimpaired access to the river. When J. Fortson sold Sec. 36 to G. H. Lee in 1854 that narrow strip of land also was sold (Clay County Abstract Books). Commission merchants and factors would "make liberal advances on cotton in store at any point on the Tombigbee River, whenever receipts for the same" were received (Southern Argus 1837, 1839). In another instance reflecting the river's importance, the editor of the Southern Standard (1852), observed that whenever the river was too low for navigation:

"there is no branch of business that is not dependent upon the river trade for its success. If the cotton cannot be got off, legitimate business is at an end. The mercantile and mechanized interests are wholly dependent upon the planter, and he upon the river for the market."

Most landings along the Tombigbee River were unimpressive in appearance. In 1858 an observer noted:

"the Leona ran her nose into the mud and landed a keg of nails and a box of sardines at Waverly, a place noted for its wealth and refinements. The principal attractions are its beautiful women. The men, however, are said to be powerful homely" (Sunny South 1858).

In all likelihood Burt's landing, standing isolated to the south, was even less impressive. Waverly and Burt's landings were the only significant ones between the Plymouth and Colbert at miles 426 and 443, respectively, from Mobile (Figure 1.1). Tibbee Creek and Chuquantonchee Creek, were declared navigable to keelboats in 1839 and 1840 (Laws of Mississippi 1839, 1840). This would have diverted cotton shipments from west of Chuquantonchee Creek to Plymouth, West Port, and Columbus (Carroll 1931:55; Elliott 1978:22).

Steamboats likely made occasional calls at Waverly while proceeding upriver from Columbus to Cotton Gin Port in the mid to late 1830s. However, Waverly was not regularly served by steamers until the 1843-1844 shipping season. Between January 7 and May 7, 1845, the steamboat Waverly made seven trips from Waverly carrying 4,656 bales of cotton to Mobile (Mobile Register and Journal 1845). The large volume of cotton shipped through Waverly in that year suggests the importance of the landing to prairie planters. Even after the railroad had reached West Point, it was reported in 1859 that the "wealthiest and most sagacious planters are hauling their cotton from this neighborhood [West Point] to the landing at Waverly on the Bigbee" (Southern Broad-Axe 1859). Speed, proper storage, and protection afforded at the warehouse were given as the cause for the continued shipments by steamboats. For example, the steamer, Norma, required five days to make the trip between Waverly and Mobile in 1843, whereas the S.S. Prentiss made the trip from Aberdeen to Mobile in four days in 1856 (Columbus Whig 1843; Columbus Democrat 1856).

The prime shipping season extended from mid-December through March with an occasional extension into May because of unusually high water (Mobile Register and Journal 1845; Columbus Whig 1843). One hundred thirteen steamboats were registered in the Columbus trade between December 9 and May 13, 1851 (The Primitive Republican 1851). How many of these continued upriver to Waverly is not known. Whenever the water level was low navigation was hazardous and Waverly planters were required to pay 25% insurance rates for shipping to Mobile (Mobile Merchants 1859).

In 1824 the Mississippi State Legislature declared "all roads now laid out and opened . . . shall be deemed public roads, and shall be at least 10 and not more than 30 feet wide. When repairs are deemed necessary they shall be at least 16 feet wide and dirt necessary to raise and cover said causeway shall be taken from each side so as to form a ditch" (Hutchinson's Code of Mississippi 1798-1848:254). The act was significant in that it made roads public, but it failed to lay out routes to be followed or to provide financial support. Consequently the road network was significantly local, and construction and maintenance were the responsibility of local residents assigned to work on the roads annually by the Police Court.

The earliest known map of local roads in Waverly is dated 1909 (Worthen 1909). Comparing this map with antebellum road work assignments by the Lowndes County Police court reveals the road network had changed little if any. A public road was maintained from Columbus to Waverly, and after crossing the Tombigbee River by ferry the road divided into upper and lower Waverly roads. Both roads continued westward to West Point. Travel north and south was possible by Town Creek and Plymouth Roads (Figure 5.2).

Road work assignments were issued annually in March by the Police Court. Each road or section thereof was placed under an overseer, with others obligated to work or to provide hands to that effect (Table 7.2). Because work time and quality of repairs were not specified, it is possible that road work consisted of little more than filling in the ruts. However, the Police court did specify that new roads be 30 ft (9 m) wide, and occasionally make attempts to bridge streams. For example, in 1848 Young was appointed to a commission to let a contract for a bridge across Town Creek for \$300, but after it was revealed the bridge would cost more, G. H. Young and Wm. Burt were authorized to accept the lowest bid. Apparently the

bridge was never completed, as had been the case with the Tibbee Creek bridge in the 1830s and the road north of Town Creek to Barton was discontinued in 1859 (Lowndes County Board of Police Minutes 1859). Therefore, the only bridge across streams in the Waverly community during the antebellum period crossed Spring Creek on the Lower Waverly Road.

The persistent condition of roads and awareness that railroads were more dependable and flexible than steamboats may have caused Young to support and promote railroads. A strong inducement must have been price differentials, as much as 68% in bacon and 56% in flour, between Mobile and the upper Tombigbee River (Southern Standard 1851). Moreover, the concentration of cotton receipts in November to March (the navigable season) caused prices to average slightly lower, often by as much as 2¢ kg (5¢ lb) than during the low cotton receipt period--a fact planters would have enjoyed overcoming.

In late 1852, Lowndes County residents voted 762 to 351 to subscribe to \$165,000 in Mobile and Ohio Railroad stock. Of this amount \$90,000 was to be expended on a main trunk line through the county and \$75,000 on a branch line to some point in the county to be designated by the company. The subscription was paid in five annual installments by levying a special tax upon persons and property (Lowndes County Board of Police Minutes 1853). On one occasion in Aberdeen, Col. Young was noted to be a "distinguished visitor and one of the very efficient directors of the Ohio and Mobile Railroad" (Sunny South 1857). Nevertheless, a railroad did not pass through Waverly until 1888, after Col. Young's death.

Table 7.7. Road Work Assignment for Select Years

	<u>1848</u>	<u>1854</u>	<u>1860</u>
<u>Upper Waverly Road:</u>	Fortson G. H. YOUNG Simms Dukiminer Shinn Leony Medorgen(?)	Winston Cottrell G. H. YOUNG Burt Hawkins Hamilton Lee	Stacy G. H. YOUNG T. E. Young Hamilton Crusoe Matthews Sykes
<u>Lower Waverly Road:</u>	Lee Chandler Gerdine Martin Brown Wright	Lee Gerdine Martin Wright Stacy G. H. YOUNG Brown	Lee Martin Brown Wright Garner
<u>Town Creek Road:</u>	- - -	Strong G. H. YOUNG -	Strong G. H. YOUNG Burt
<u>Plymouth Road:</u>	Powell Sanderson Morgan Cox Garner Swearingen Mirestone	Burt Powell Melton	Jones Melton

Source: Lowndes County Board of Police Minutes 1848, 1854, and 1860.

Politics and George H. Young

At about the time Young moved to Waverly he became active in Mississippi politics. His party affiliation in Georgia is not known, but typical of the planter aristocracy in Mississippi, Col. Young was an active Whig. Unfortunately, with a great majority of the people being Jacksonian and Democratic in politics, it was the wrong party affiliation for an aspiring politician. As early as 1839 this political trend was revealed in Lowndes County when the Democratic Party with its doctrine of reducing "all classes to the same level" (Rowland 1925:644), polled 538 votes for their governor-elect candidate to 530 votes for the Whig candidate (Southern Argus 1839). This new political trend in candidate selection was mirrored in a description of Judge Stephen Adams of Monroe County, who successfully defeated Young for a seat in the U. S. House of Representatives in 1845. Adams was described as a self-made man "of humble origin and of moderate literary attainments. He was a man of integrity, full of energy, had won his way to a circuit judgeship, and was emphatically one of the boys" (Orr 1906:177). On the other hand, Young was described as:

"a man of courtly and princely manners, refined, cultivated, high toned, and aristocrat by birth. He was a type--of whom we had hundreds throughout the South--misunderstood and not appreciated by the Northern people either before or since the great war of secession. A grander, nobler type of citizenship never lived in any government or country. They knew they belonged to the master race. Their selfishness [sic] and their keen sense of honor united to make them brave, discreet and conscientious, and they were never surpassed in their qualities by the bravest Roman or the noblest Briton. The value of the negro appealed to the selfishness of the owner for his protection. Healthful food, good clothing, prompt medical attention, moderate work were essential factors in maintaining his money value to the owner. A knowledge of superiority, the right to dominate the will of the slave, power to enforce absolute obedience carried in the mines [sic] of such men as George H. Young a high sense of moral responsibility" (Orr 1906:177).

Young was more successful in his bid for state offices. In the 1840s he was a member of the Mississippi Legislature, and had supported a bill to create the University of Mississippi. Probably because of this support in the legislature, "he was one of the . . . members of the Board of Trustees of the University of Mississippi" (White 1902:264), and was instrumental in the selection of August B. Longstreet as chancellor in 1849.

George H. Young left the Whig Party after Henry Clay, the party leader, opposed the annexation of Texas and championed the Compromise of 1850. Most southerners and especially Mississippians strongly favored annexation of Texas without reference to any mention of restriction to slavery. Most Mississippi Whigs, including Young, joined the State Rights Party. At West Point, Mississippi, George H. Young addressed the State Rights Association in May, 1851, after which it was reported that:

"All present agree that they never heard a subject more masterly handled, more logically treated, or eloquently discussed than was the wrongs of the South inflicted on them by the aggression of the North. He was repeatedly cheered. We anticipate much from this

eloquent son and able advocate of Southern Rights--he is firm in his opinions, sound in his arguments, and is a perfect master of the history of Northern aggression upon the indubitable rights of the South. He is a gentleman of great personal influence, and is everywhere respected and loved by those who know him" (Southern Standard 1851).

The political battles in 1851 between the State Rights and the Union Party set Mississippi "a blaze from east to west, and from north to south" (Davis 1890:317). George H. Lee, Moses Westbrook, William Burt, and George H. Young were delegates from Waverly to the State Rights Convention at Jackson in June, 1851, to nominate a candidate for governor (Southern Standard 1851). G. H. Lee was a member of the executive committee of the State Rights Party (Southern Standard 1851). At the convention and in the election that followed James Whitfield, a fellow planter and merchant from Lowndes County, was elected governor, but what role the Waverly contingent played in Whitfield's selection and election could not be determined.

Between July 30 and August 11, 1851, Young made speeches at 11 locations throughout the county as a State Rights candidate to represent Lowndes County at a convention at Jackson to define the state's position on the Compromise of 1850 (Southern Standard 1851). Young was elected, but ran sixth in the balloting. Most of his support came from the plantation prairie region, but he was unable to garner the support of the farmers, small planters and residents of Columbus (The Primitive Republican 1851).

The convention passed a series of resolutions supporting the Compromise of 1850 "so long as it was faithfully adhered to and enforced" (Rowland 1925:741), but the doctrine of state sovereignty was reasserted by a minority resolution which maintained that the state had an unquestioned right to resume delegated powers and withdraw from the Union. However, the measure was not submitted to the people at this time by a convention vote of 72 to 14. Young's position in the debate and balloting is not known, but as a delegate he was present at the state's first serious debate over secession from the Union. Whether George H. Young became disillusioned with politics over the demise of the elitist Whig Party, over the slavery issue which tended to create a one party system and thereby reduce all classes to the same level, or his apparent inability to win support from farmers and small planters is not known, but after the convention Young did not venture again into the political arena beyond the local level. Colonel Young was appointed manager of the West Point voting precinct in 1857 and to the grand jury of the Circuit Court of Lowndes County in 1858 (Lowndes County Board of Police Minutes 1857 and 1858).

Social Amenities at Waverly

No church or school was located at Waverly during the antebellum period. Waverly families, especially the Burt family, were affiliated with the Episcopal Church in Columbus (St. Paul's Register 1852-1910). Young had supported higher education at Oxford and Columbus, and was appointed in 1846 by the Lowndes County Board of Police to the County Board of School Commissioners to represent District Five, but he took little interest, if any, in providing public schools for the community. The only known school in District Five in the 1850s was located on the Tibbee Creek Road (Lowndes County Board of Police Minutes 1850). In 1860 there were 80 children of

educable age in the townships west of the Tombigbee River, but the common school fund contained only \$441 for their education (Lowndes County Board of Police Minutes 1860). Among the school items Thomas Watkins purchased for his children in the winter of 1852-1853 were McGuffey's Readers, history, arithmetic, and spelling books, a dictionary, and slates (Watkins 1853). Hence, three possibilities for the education of Waverly existed during the antebellum period: a tutor in the home, attendance at a school on Tibbee Creek Road, or boarding schools in Columbus or elsewhere.

Two of G. H. Young's children, Val and Susan, acquired a postgraduate education outside the state of Mississippi. In July, 1849, Col. Young wrote Val:

"I enclose you a draft in a New York Bank for 200. Get Mr. Hull to sell or cash it for you . . . Whilst I don't want you to live niggardly or betray a mean self . . . I would still have you to observe the most prudent economy. We have been deluged with daily rains for more than two weeks past, the River having been most of that time over my wharf & the consequence is an exceedingly gloomy prospect for a crop . . . let me in conclusion remind you that you are now on the ground where my collegiate life commenced (Columbia College) & where I never obtained or left the stigma of my name. You are likewise surrounded by my old and dear friends . . . Conducting yourself nobly my son. Connect yourself with the debating societies & never forget that your college years have only furnished you the tools to work with and that now, study has even just begun" (George H. Young to Valerius Young, July 22, 1849).

A decade later Susan Young was attending school somewhere in the northeast, because Col. Young wrote to her that he had a "delightful trip home . . . We spent a pleasant day or two in Washington, Richmond . . . and visited and saw many old and dear friends in Georgia." Young prevailed upon his daughter to "study hard, practice, read, write . . . until you qualify yourselves" (George H. Young to Susan Young, September 4, 1857).

In the 1850s the physical infirmities at Waverly were cared for by a Dr. Hawkins, apparently an in-house resident with the Lee family (Lowndes County Board of Police Minutes, 1854). Dr. Hawkins attended Thomas Watkins during his extended final illness in 1853 and was paid \$49.50 for 38 visits and medicine (Watkins 1853). Also, William Burt may have been a physician, for he often was listed as Dr. Burt.

By the close of the antebellum period Waverly had emerged as a mature and prosperous plantation community, with slavery and cotton firmly entrenched. Waverly had its mansions and its commercial enterprises. Its leading figures had even ventured out into the political arena. Moreover, the lifestyle they had established was the ultimate of their ambition. They advocated few social and economic changes, but a cataclysmic change was imminent.

CHAPTER 8. THE POSTBELLUM WAVERLY COMMUNITY

by Howard G. Adkins

The War Years

Waverly planters had become remarkably prosperous during the 1850s. Holdings of slaves and land had increased, cotton prices had rebounded from the disastrous lows of the 1840s and early 1850s, and the value of their plantations had increased nearly three-fold. The Youngs, Burts, and Lees no doubt believed the real danger to their agricultural system came not from such things as declining soil fertility and insects, but from Northern abolitionists opposed to their system of slave labor. Col. George H. Young had opposed attempts to restrict the expansion of slavery, had spoken against the abolitionists, and had been elected a delegate to the first state convention at which secession was an active issue.

Secession, which came on January 9, 1861, must have been favorably received at Waverly. At least their past behavior certainly suggests such a response. Like most Southerners, they probably had given little thought to the consequences of disunion or that war would ensue. The prospects of losing perhaps never entered their minds. To such patriotic Mississippians well-indoctrinated in cavalier traditions, any threat to their interests were matters involving honor. Since they conceived of honor not in metaphysical terms but in a more practical spirit of action, such threats had to be avenged. During the early spring volunteering went on at such a frenzied pace that many believed the war, if it did come, would be over before they had a chance to enter the fight. So many from Lowndes County volunteered in 1861 that the Board of Police authorized a committee to investigate and ascertain the conditions and wants of the wives and children of men of small means to alleviate their indigent circumstances. All six of Col. Young's sons volunteered, and two daughters were married to soldiers. Beverly Young died in August, 1863, at David's Island Hospital in New York of wounds received at the Battle of Gettysburg, Pennsylvania. The character of the Young family is revealed somewhat by Dr. B. F. Ward, who attended the wounded after Gettysburg. He told how Beverly Young, though seriously wounded and on a makeshift crutch, helped to move the wounded away from a flooding stream and how he purchased with his last five dollar gold piece straw for beds for the wounded (Anon. 1958:11). The five remaining sons returned to Waverly following the war and were instrumental in the recovery of the community.

Support for the war effort required an adjustment in the state's cotton economy. Governor Pettus issued a proclamation in May, 1862, asking farmers to plant not more than one bale of cotton for each laborer and to turn their attention to grain. In this effort the northern counties seemed to have been more successful than central and south Mississippi counties, which may have been partly responsible for the concentration of battles in north Mississippi. In 1863, Col. Young provided the Confederate Army with the following (Confederate Army Vouchers n.d.):

Fodder.....	92,516 Pounds.....	\$1,308.23
Corn.....	1,213 Bushels.....	1,913.51
Wheat.....	107 Bushels.....	321.00
Bacon.....	728 Pounds.....	509.60
Milling: Corn....	4,034 Bushels.....	1,020.87
Wheat...	1,018 Bushels.....	407.20
Ferriage: 23 wagons and teams.....		10.00
Six horse team for 5 days.....		50.00

On one occasion cotton and corn were taken from Col. Young's warehouses by federal officers as war contraband (Waverly n.d.).

Waverly plantation steadings were spared the destruction that characterized much of the rich, corn growing, prairie to the west. However, had the strategy of General Nathan Bedford Forrest succeeded in early 1864, Waverly would have become the scene of the battle later fought at Okolona, Mississippi. The Union commander, General Smith, under orders to devastate the prairie around West Point and do as much damage as possible to the railroad, realized shortly after leaving West Point to the east that further advance would draw his forces into a cul-de-sac formed by the Tombigbee River and Tibbee Creek. His retreat obviously spared Waverly the destruction that was inflicted on the prairie plantations to the west (U. S. War Department 1889b:784). During the campaign much of the destruction to plantation mansions, houses, cotton gins and slave quarters was caused by the slaves. So many left that General Smith's retreat was encumbered by "3,000 of them, with the mules, horses and wagons on and in which they had left the plantations to join the blue-clad column of liberation" (U. S. War Department 1889a:257). When General Forrest established courier lines connecting his headquarters at West Point with various points in Alabama, "a bridge was put across the Bigbee at Waverly . . . and dumps were established on the roads to the east" (Henry 1944:425). During this campaign General Lyon's brigade was camped a mile and one-half from Waverly, and General Lyon and staff were headquartered at the home of George H. Lee (Anon. 1958:14). It may have been during this campaign that General Forrest was reputed to have visited in Col. Young's home.

In a letter written by Lucy Young in February, 1864, some of the privations of those on the homefront at Waverly were revealed. She wrote:

"Major Crump . . . gave me several quires of the paper and two packages of envelopes--so you needn't be modest about your big paper anymore--as I can retaliate, but wasn't it clever of the Major to give it to me, and not only that but he gave me the longest nicest cake of soap and ever so much white sugar. I don't know when I have been so fortunate about getting presents as I have been lately" (Anon. 1958:14).

The discipline and maintenance of slaves must have been a constant problem for Young, Burt, Hamilton, and others at Waverly. Without good overseers and adequate patrols, the best measure seems to have been to isolate the slaves and community from outside influences that otherwise would have caused unrest. Col. Young apparently restricted the movement of his family members away from home for his daughter wrote a friend stating: "You know I am tied down to home till after the war so why don't you come out and see me" (Anon. 1958:14).

One writer has maintained that "before the end of the war, approximately half of the Negroes of Mississippi had found their way into freedom" (Wharton 1947:46). On the other hand, "thousands of their race plodded on in the old way, and . . . continued to work for their old masters" (Wharton 1947:46). Whatever the situation, the discipline was so relaxed that "to almost none of them did the end of the war in April come as a very great shock" (Wharton 1947:46).

Reconstruction and Waverly

Both races suffered some cruel aftershocks of the war. The blacks no doubt found life in the first year of freedom very harsh and uncertain. Their discipline, however, was commendable. The only act of violence at Waverly during the early post war years occurred in early 1868 when the body of McDaniel, a white, was discovered about one-half mile from the Waverly ferry. The Young brothers, Major "Val" and Captain "Billy" led a party of investigators which apprehended Charlie Humphries, a Negro, for the murder. After admitting to the crime and incriminating an old Negro, Tom Barry, Humphries was tried, convicted, and hanged at Columbus on April 10, 1868. According to Humphries, the motive was not conspiracy but robbery and the intended victim was George Henderson Lee. Tom Barry was tried and acquitted (Hopkins 1935:32-33).

Some blacks were occasionally intimidated because of their political activities. For example, Shelly Sissing [probably, Marshall Sisny], the Waverly ferryman, was listed on a widely posted circular of "Colored Men who voted the Democratic Ticket" (Circular n.d.). Otherwise, Young, Lee, Burt, and Hamilton recognized the significance of the Negro labor and showed little hostility toward their former slaves and other blacks moving into the community.

The involvements of Waverly residents in such reconstruction issues as the Freedmen's Bureau and the Black Codes is unknown, but their intimidations against blacks supporting Radical Republicans is better known. In 1872, Waverly came under the jurisdiction of Clay County, organized out of portions of Lowndes, Monroe, Oktibbeha, and Chickasaw Counties. The county seat was located at West Point--about 10 to 12 miles northwest of Waverly (Laws of Mississippi 1872). Whites formed anti-radical vigilante groups and joined the Red Shirt Brigade of the Ku Klux Klan to gain political control of the county from "scalawags and Negroes" (Calvert 1965:41). William L. Young and William J. Burt were members of the Executive Committee of Ten for Beat One, which issued seven resolutions: (1) refusing to rent land or employ any who were officers of any Negro Club or who had voted the Republican ticket; (2) binding plantations to discharge one Radical Negro if there was no Negro Club officer to discharge; (3) not to rent land to any person who will not first agree to refuse lodging or employment to officers of Negro Clubs, and if they do the contract rent will double and will be forfeited; (4) collecting names of obnoxious characters and making them known by publishing in the papers of the county; (5) reporting the names of those discharged to the Executive Committee of Ten; (6) using all honorable efforts to induce the Negro to cooperate with "us" in the future; and (7) deeming those who fail to cooperate with the actions of the committee as unworthy of public confidence and trust (Resolutions 1875). Handbills listing resolutions were distributed throughout the beat.

Such efforts were apparently successful for the election of 1875 "resulted in a large Democratic majority" (Carlisle 1925:7) that for all effective purposes ended Reconstruction in Clay County. In the election of 1875, G. V. Young was elected supervisor of District Two for 1876-1878.

A New Economic System

Waverly plantations were not destroyed during the war. However, money was virtually nonexistent in the early post war years so planters were forced to plant cotton to secure advances on operating expenses. Hence, the plantation and cotton remained the primary basis of livelihood. The primary changes were confined to methods of finance, labor, and spatial attributes. Planters allotted parcels of their land to freedmen for which payment was guaranteed through a form of credit known as the crop lien. Crop lien laws were "devised in 1867 to help the Negro adjust to a new system of cotton production . . . and pledge their anticipated crops as security for loans or for goods" (Adkins 1972:58-59). Under the tenant system, the spatial arrangements on plantations were significantly altered as the compact village-like plantation steadings were replaced by uniformly dispersed homesites located near fields cultivated by families of black tenants. The change was evident as early as 1869 on the Thomas Martin plantation, charged with constructing four houses on freedmen's rented land. The houses cost \$475.07, or about \$120 each, and contained the following: 920 ft of framing and weather boarding, 360 ft of framing joist and flooring, 360 ft of upper joist, 506 framing rafters and covering, one door, and two windows (Martin 1870a). The dispersed arrangement of black homesteads probably was preferred to the nucleated slave quarters, once Young and the others had lost control over their former employees because it would possibly reduce misconduct among the freedmen crowded together in the slave quarters.

Landowners and tenants obtained supplies and cash on credit from merchants in Columbus, West Point, and Waverly. After the harvest merchants took charge of the cotton for payment for items acquired on credit. In a real sense the cotton crop was consumed before it was harvested, and after harvest the farmer placed a lien on the next year's crop. Lien notes were worthless if crops did not yield the money. In 1878, the typical interest rate charged tenants by Henry Long, the Waverly merchant, was 10%, and 8-10% for goods he acquired on credit from suppliers (Long n.d.a).

G. K. Holmes wrote in 1893 that "the tenant system is economically inferior to the previous slave system, and while he did not get a due share of the product of his labor as a slave, he gets even less now, because he receives a share of the incidence of the comparative economic loss" (Holmes 1893:265). A tenant was any person who paid for the use of the land either by a share of the crop or by cash rentals. At Waverly in the late 1870s a tenant rented the land for \$7.00 per per hectare, 45 kg of cotton per hectare, or a share of the crop. Those working for wages received cash payment equal to one dollar per day paid daily, weekly, or monthly (Long n.d.a, n.d.b). By renting tenants had greater freedom, the possibility of a larger profit, and could simply move away after a bad crop. Owners did not prefer to work their land through the wage plan for if the crop was short they were left with wages. Hence, tenants and owners preferred the rent-share crop arrangements enforced by the crop lien system (Laws of Mississippi 1866-1867:569-572).

The infrastructure of tenancy went through three stages at Waverly. Immediately following the Civil War, formal contracts were signed between landowners and freedmen. The landowner agreed to furnish workers with a specified amount of land, tools, houses, mules, and food. Each sharecropper agreed to pay for these items from the proceeds of his crop and to maintain animals, tools, and fences in good repair (Ward 1869; Martin 1870a). Such formal agreements were largely replaced at the end of Reconstruction with less formal arrangements whereby the landowner authorized H. C. Long and merchants in West Point and Columbus to provide tenants with \$12 to \$15 worth of merchandise monthly during the year. Generally, the accounts ran for seven months (Long n.d.a). In the third stage the tenant made rent or share arrangements with the landowner for use of the land, then operating independently of the landowner but with his approval arranged credit with Long at Waverly or with merchants in West Point and Columbus for furnishings and supplies necessary to carry him through the crop year or until the cotton crop was sold. In many instances credit sales were secured by a signed and recorded deed-of-trust on a cow, mule, tools, or cotton (Long n.d.a), but most arrangements seem to have been verbal agreements. Under these systems the tenant saw little cash throughout the year, and practically none during the cultivating and pre-harvest seasons. After the death of Captain "Billy" in 1913 tenants apparently were independent renters for the farms thereafter were managed by absentee owners.

Although the plantation steadings were spared physical destruction during the war, the economic viability of the plantations suffered. The 1870 production levels are compared with pre-war production levels in Table 8.1. Cotton produced by the core of Waverly planters was reduced to 25% of 1860 quantities, livestock to 38%, and corn to 40%. Economic recovery in 1870 was still in its infancy.

The nature of the census schedules precludes an accurate portrayal of population change in the Waverly area due to the Civil War. However, by cross indexing the population schedules for 1870 with landowners and tenants as revealed in probate records and rental contracts an estimate of the population is possible. Thus, an estimated population of 55 white males, 39 white females, 130 black males and 161 black females living in 87 dwellings comprised the Waverly community in 1870. During the intercensal decade the white population had changed little, whereas, the black population had exhibited a much greater change. There is no evidence to indicate that the landowner showed hostility toward his former servants, but it was common for Negroes, after hearing they were free, to migrate "like sheep without a shepherd in great numbers to Columbus" (Hopkins 1935:23).

The Young family more thoroughly dominated the Waverly community during the 1870s and 1880s than they had during the antebellum years. Their landholdings in 1860 of 802 ha (Table 7.1) increased to 1,647 ha in the 1880s (Clay County Abstract Books). Family members owning land in the community were Col. George H. Young, Mrs. G. P. Young (widow of T. E. Young), G. V. Young, and James H. Young. Landholdings at this time extended to and included lands in Sec. 15, 21, 22, 24, 27, and 28 in T17S R7E, and Sec. 18, 19, 20, 29, and 30 in T17S R8E (Figure 7.4). James H. and William L. Young rented lands from Mrs. S. E. F. Rose (the Martin plantation) and Mrs. R. A. Armstead, respectively, and subleased it to tenants (Long n.d.a). Henry C. Long, the merchant and postmaster, married Lucy Young Hamilton, the daughter of Alexander and Anna Young Hamilton

(Baskervill 1916:112). The ferry, sawmill, and cotton gin were owned and operated by Col. G. H. Young until 1880, after which "all the rights, title, and interest . . . and other privileges" were vested in William L. Young (Clay County, Minutes of the Chancery Court 1887).

Table 8.1. Elements of Waverly Agriculture, 1860-1870

Planter	Hectares		Livestock		Cotton (Bales)		Corn (Bushels)	
	Improved							
	1860	1870	1860	1870	1860	1870	1860	1870
G. H. Young	567	364	770	275	631	120	10,500	3,000
Sons of Young	486	363	270	259	570	99	8,000	2,400
Wm. Burt	261	243	260	73	291	110	6,000	4,000
G. H. Lee	202	202	236	72	162	30	3,500	800
T. Martin	445	445	640	182	576	125	8,000	5,000
A. Hamilton	336	283	257	59	297	147	9,000	3,000
Total	2,297	1,901	2,433	940	2,527	631	45,000	18,200

Source: U. S. Census of Agriculture (1860, 1870).

During the early years of reconstruction the freedmen on the plantations were organized into squads of laborers under the supervision of a peer. For example, on Thomas Martin's plantation in 1869 there were six squads organized as follows:

Andrew's Squad & Supplies

Andrew & Wife	\$136.08
Frank & Wife	73.17
Rufus	27.93
Jane	40.03
Tom	35.27

Daniel's Squad & Supplies

Daniel	20.75
Bob (Long)	26.15
David	72.00
Pilot	
Malachi	71.25
Uriah, John, Fayette, Abe	
Sophia	71.25
Alex	66.68

Robert's Squad & Supplies

Robert	66.10
Peter	
Harrison	26.10
Jane	103.75
Trim, Keziah	
Alexis	46.15
Sarah	103.77

Others not in a Squad

Rhea	172.93
Boston	113.15
Billy	106.98
Armstead	
& Davenport	231.50

Charles' Squad & Supplies

Charles	\$ 17.63
Crocket	106.00
Little Henry	56.55
Edmond (in debt)	
Peyton	88.45
Tempe	69.50
Susan	69.50
Henderson	82.45
Chapman	40.25
Jonas, Phillips, Francis	

Eli's Squad & Supplies

Eli	57.85
Jim Lester	40.28

Hal's Squad & Supplies

Hal	97.91
Authur & Wife	167.59
Big Henry	27.55
Coon	62.63
Nelson & Sons	206.96
(Alonzo & Issac)	
Alfred	24.70
Warren	54.81
Joseph, Eloza	

The plantation was managed by J. E. Mayer at a salary of \$994.17. In that year the cotton crop of 125 bales was sold in Columbus to George and Leigh, Commission Merchants, for \$11,785.60--equivalent to 19¢ a pound at 500 pound weight bales. After expenses of \$2,928.25 were deducted, the tenants received \$2,832.30 for their share of the cotton crop. After taxes of \$120.45 and other expenses totaling \$965.56 were paid, the Martin estate received \$3,944.87. Squads were not equal in number nor were the supplies received equal in value, but had the proceeds been divided equally among the tenants each would have received \$55.00 for the year's effort (Martin 1870a).

The practice of organizing tenants into squads had disappeared by 1878. Family units with freedmen identified by given and family names were fully established. However, rent contracts were in force on Alexander Hamilton's plantation. When the Hamilton estate was probated in 1879, the following had rent contracts (Hamilton 1879):

	<u>Hectares</u>	<u>Lint Cotton (kg)</u>
Charley Coleman	8	360
Wm. Hamilton & Henry Jonthal	12	540
Charley Coleman & Lainder Coleman	20	927
Allen Coleman	12	540
Burwell Coleman	20	900
Charles Lancaster	10	394
James Coleman	8	360
Litvin Strong	225 kg of cotton regardless of hectares	
John Black	6 ha at 80¢ per hectare	

By this time, the once large fields of the plantations had more or less exploded into fragments of one mule farms with 12-20 ha per housesite. The size of the farm unit rented must have varied in proportion to the family size, experience, and ability of the tenant. Tenants of the same family name clustered on the farm.

Gus Halbert was the most successful tenant at Waverly. In 1879 he rented 13 ha for \$99 from Col. Young. On this land Halbert made 18 bales of cotton, paid Young \$36 for ginning, and sold the cotton to Billups and Banks of Columbus, through H. C. Long, for \$909.00 or about 10¢ a pound. Halbert settled his account at the commissary in February, 1880, with four bales of cotton valued at \$245.90. From the remaining proceeds he purchased two mules for \$225 and one horse for \$100 from H. C. Long. The following year he paid Young \$178.21 for rent, but produced apparently 12 bales of cotton which sold for \$432.78 (Long n.d.b).

Most tenants were not as enterprising or as successful as Halbert. The effort of Issac Wilson, a tenant of the R. A. Armstead plantation, is a case in point. Furnishings and supplies acquired at the commissary for the year totaled \$64.33. Wilson made three bales of cotton, of which he paid Armstead one bale and \$6.90 for rent of the land. The remaining two bales were sold for \$72.73, leaving a cash receipt or profit of \$1.50 after settling up at the store (Long n.d.a). Ten years later little change had been made in the progress of most tenants. Mort Dudley was charged with the following and managed \$5.77 in profits on a year's work:

Merchandise through December.....	\$ 41.23
Interest.....	1.50
Rent of two hectares.....	15.00
Rent of house.....	5.00
Bags, Ties, and Ginning.....	6.50
Total	\$ 69.23

Sale of one bale of cotton.....	\$ 45.65
Share of one bale of cotton.....	29.35
Total	\$ 75.00

The most thorough illustration of tenancy on a Waverly plantation is from the R. A. Armstead plantation. Armstead had acquired from W. J. Burt and G. H. Lee 470 ha in Sec. 1, 25, 31, and 36. At his death it was possible to cross reference each tenant listed in his probate record in 1880 with the agricultural schedules (Table 8.2). The yields of tenant produced cotton and corn were depressingly low, compared with that for Armstead who produced 1.5 bales of cotton and 50 bushels of corn per hectare. Supplies and furnishings were provided to Marion Bush, Jack Goodall, and Mack Dougherty by Armstead. Each had charged to R. A. Armstead's accounts at West Point and Waverly \$87.66, \$55.10, and \$29.30, respectively (Armstead 1881).

Table 8.2. Plantation Tenancy at Waverly, 1880

Farmer	Lint Cotton (Rent)	Rent Payment (\$)	Hectares Tilled	\$ Value of Implements	\$ Value of Livestock	Value of Produce	Draft Animals	Cattle	Swine	Poultry	Corn (ha)	Corn (bu)	Cotton (ha)	Cotton bales
R.A. Armstead (Owner)				50	500	800	7	23	15	100	8	400	8	13
I. Wilson	600	60	10	12	150	200	2	5	10	30	2	25	6	3
M. Chiles	-	100	26	10	125	741	3	7	7	33	8	160	18	12
M. Daugherty	1,200	120	20	5	105	500	2	-	5	10	2	30	19	9
M. Halbert	1,000	100	12	6	40	-	1	-	1	15	-	-	-	-
A. Rone	750	75	10	5	50	242	2	2	7	10	3	75	7	4
J. Goodall	750	75	8	5	35	-	1	2	7	-	-	-	-	-
S. Woodridge	750	75	12	5	60	340	1	2	-	-	3	60	9	6
J. Brown,														
A. White	1,500	150	18	15	125	328	4	6	25	20	-	-	12	6
M. Bush	-	50	24	10	110	-	1	2	-	10	-	-	-	-
G. Pool	1,200	120	14	3	80	525	2	-	5	-	2	125	12	9
J. Hodges	-	62	6	2	30	300	2	-	10	40	2	120	9	4
C. Pool	-	150	16	25	110	315	2	4	-	6	4	120	8	5

Source: Armstead (1881); U. S. Census of Agriculture 1880.

The division of Col. Young's Waverly lands into Waverly, Middle, and Upper Places continued in the postbellum period. Monthly credit purchases authorized by Young at the Waverly commissary for tenants on each plantation for 1878 are shown in Table 8.3. Both the monthly purchases and number authorized to make purchases varied extensively during the year. G. V. and J. H. Young authorized similar charges at the Waverly commissary for tenants residing on the land owned and rented from Armstead and Rose. At this time Young's prairie plantation may have been managed by William L. Young, for he was not active in the Waverly area until after 1880 (Long n.d.a, n.d.b).

Table 8.3. Tenant Credit Purchases (\$), G.H. Young Plantation, 1878

	Month											Total
	F	M	A	M	J	J	A	S	O	N	D	
<u>Waverly Place:</u>												
C. Matthews	10	9	6	3	4	3	8	5	11	10	7	76
H. Finney	3	7	3	3	6	1	10	9	3	15	4	64
J. Goodall	10	1	-	9	10	3	7	10	5	10	2	67
M. Dudley	-	2	19	1	1	2	-	8	2	11	16	62
R. Goodall	-	3	20	16	5	-	5	3	9	8	3	72
W. Taylor	2	14	-	-	2	5	7	2	4	2	25	63
G. Washington	2	-	7	3	1	-	9	5	-	22	40	89
J. Hodge	-	-	12	3	11	-	8	9	12	3	-	58
C. Matthews	-	7	17	-	-	-	3	-	-	1	3	31
A. Dickenson	-	-	13	1	-	-	11	19	-	4	7	55
C. Hamilton	-	-	-	11	-	-	6	11	1	11	10	50
10 others	1	-	-	3	5	-	5	4	14	7	4	43
<u>Middle Place:</u>												
W. Strong	2	-	14	11	17	3	-	15	3	-	1	66
D. Holmes	43	-	13	7	9	-	-	-	12	-	1	85
J. Young	29	-	-	24	3	17	-	-	5	-	-	78
D. Young	-	-	19	3	-	22	-	-	-	2	2	48
J. Figgers	-	-	5	-	27	9	7	-	-	4	-	52
17 others	117	-	43	27	98	47	25	8	-	2	4	371
<u>Upper Place:</u>												
B. Young	7	5	27	-	5	3	5	-	16	-	4	72
B. Young	9	2	-	7	8	4	-	0	-	5	-	34
S. Memphis	15	2	1	14	16	-	0	0	-	5	-	53
J. Gullett	9	2	13	3	2	-	8	-	-	-	-	37
W. Young	8	15	14	-	15	5	-	-	-	10	-	67
17 others	143	11	19	-	49	6	22	-	16	26	11	303

Note: No sales in January. Source: Long n.d.a

In 1878 expenses incurred at Long's store for the Waverly Place were \$1,210.09, for the Middle Place were \$714.39, and for the Upper Place were \$678.10 (Long n.d.a). The sale of cotton for that year is not known: however, cotton sales to Billups and Banks of Columbus for 1879 through 1884 are shown in Table 8.4. Peak cotton sales occurred in 1880, and thereafter showed a general downward trend. The downward trend in cotton sales may have resulted in part from a decline in cotton production due to slumping

prices. Average cotton prices per pound declined from 11¢ in 1875, to 8¢ in 1885, to 5¢ in 1893, and remained below the 10¢ level for the remainder of the century (Historical Statistics 1957:517-518). Separate sales were not noted for the Upper Place in 1884 suggesting it was merged with either the Middle or Waverly Places, or was farmed entirely by tenants without supervision by the Youngs.

Col. Young may have had a monopoly on cotton ginning until 1884 when S. E. F. Rose began to gin cotton on the Martin Plantation (Long n.d.b). The Young estate was paid \$443.39 for ginning 232 cotton bales in 1881. Packing and bagging cotton into bales was a function separate from ginning. Long was the apparent owner of this operation, having purchased the steam-powered screw from the Alexander Hamilton estate and paid \$125 for its removal, transportation, and erection at Waverly, most likely to replace the gin burned in 1878 at site 22CL575. Postbellum reference to the warehouse was not found; however, the volume of cotton ginned plus the fact that annually several bales of cotton were hauled from West Point at 50¢ per bale certainly suggest some form of protective storage was available. Moreover, cotton was shipped from Waverly via steamboat well into the 1880s (Rodabough 1975). River commerce was active enough in 1888 to cause the railroad bridge at Waverly to be constructed to pivot, thereby allowing steamboats to pass upriver.

There is no reference to a sawmill and grist mill operating at Waverly in the commissary records of H. C. Long. But "a sawmill and gristmill valued between \$3,000 and \$4,000 were destroyed by fire" on May 1, 1878 (The Macon Beacon May 1878). The mill was rebuilt, for George H. Young had a sawmill again in operation in 1880 (U. S. Census of Manufactures 1880). Another source of income for Young included charges for crossing the Waverly ferry (Lowndes County Board of Police Minutes 1869). H. C. Long paid the estate \$76.90 for ferriage in 1882. Other sources of income included rent received from land, houses, and mules, and interest from credit sales of mules (Long n.d.a, n.d.b).

Table 8.4. Waverly Cotton Sales, 1879-1884.

	<u>1879</u>	<u>1880</u>	<u>1881</u>	<u>1882</u>	<u>1883</u>	<u>1884</u>
G. H. Young						
Waverly	\$1,259	\$2,188	\$1,080	\$ 748	\$1,322	\$1,412
Middle	525	261	407	451	316	553
Upper	582	641	501	524	98	-
J. H Young	1,503	1,597	1,543	1,853	1,481	948
G. V. Young	1,111	1,948	1,008	804	-	542

Source: Long (n.d.b)

Commercial Enterprises at Waverly

With the breakup of antebellum plantations, communities of farmers became commercially more important, and the demand for merchandise in smaller quantities increased (Adkins 1972:61). The old lines of credit between Col. Young and Mobile factors were replaced by a commissary, dealing

in "general merchandise and plantation supplies" owned and operated by H. C. Long. The commissary at Waverly was opened for business sometime during the 1870s, definitely by 1877 (Clay County Board of Supervisors 1877), and evidently was discontinued during the late 1890s. The commissary may have been preceded by a store because J. H. Young was listed as a merchant in the 1860s when he was living at the mansion (U. S. Census of Population 1870).

H. C. Long, a native of Memphis, Tennessee, married Lucy Young Hamilton, granddaughter of George H. Young, in December, 1874 (Baskervill 1916:113). During the first years of marriage they resided in Columbus for in the late 1870s Long paid city taxes (\$36), insurance (\$59), and received rent from a house in Columbus (Long n.d.a). But after the commissary was opened at Waverly, they may have lived in the Alexander Hamilton house. At Hamilton's death in 1879, Long was the administrator of the estate and acted as the agent when the plantation was advertised for sale in the late 1880s (Clay County Leader November 1885).

In 1878 and 1879, Long owned two-thirds and T. B. Franklin one-third interest in the store. Franklin was a silent partner not directly involved in its management. Franklin married Lilla Young, daughter of Thomas E. Young. In December, 1878, Long's two-thirds interest paid \$1,969.28, and Franklin's one-third interest paid \$984.65. Shares at the end of the following year were \$984.65 and \$654.23, respectively. Then on January 5, 1880, with the business estimated at \$7,500, H. C. Long paid T. B. Franklin \$2,500 for his one-third interest (Long n.d.a).

The plantation commissary controlled the expenditures for subsistence and kept these amounts within the limits of the tenant's ability to produce cotton. The landowners and Long worked in harmony to apportion subsistence advances of food, clothing, and other essentials to the tenants to be repaid from the crop when marketed. Waverly planters authorized tenant purchases equal to \$8 to \$10 per month per family through the 1870s (Table 8.3), then by 1887 and 1888 tenants were carried for varying amounts by the commissary without reference to the planter. Interestingly, several tenant accounts in the latter period were noted by Long with the warning, "look out." Furthermore, although Long was licensed to sell whiskey in 1877-1879, no sales were recorded, so these may have been in cash to avoid sales to blacks or a record of such sales.

The advances authorized by Long and the planters determined living standards of the tenants. Items acquired and the expenditures of 13 tenants working the Alexander Hamilton plantation in 1878 are noted in Table 8.5 (Hamilton 1879). On the R. A. Armstead plantation in 1880, 306 bushels of corn were purchased for \$236 and meat for \$290 for 14 tenants (Armstead 1881). Hence the staple diet for tenants, consisting of corn meal, salt pork, poultry, molasses, vegetables, and potatoes, had changed little, if any, from pre-Civil War days. The Waverly commissary was a nearly complete commercial center for tenants. Long paid their taxes and fees for recording deed-of-trusts, cotton picking, and odd work like plowing peas, splitting fence rails, hauling cotton, shoeing mules and horses, making coffins, and day laborers doing domestic chores. Money was charged to individual accounts to purchase livestock, pay fines, court costs, divorce settlements, doctor fees, and to purchase marriage licenses. Occasionally, circus clowns provided entertainment at Waverly and were paid by Long (Long n.d.a, n.d.b).

Table 8.5. Furnishings and Supplies Authorized by Alexander Hamilton for Tenants at Waverly, 1878

<u>Item</u>	<u>Amount</u>
Food	\$355.40
Finished Clothing and Shoes	90.20
Clothes Making Materials	94.14
Merchandise and Sundries	72.90
Household and domestics	46.03
Farm supplies	33.94
Fire Arms & Knives	11.57
Tobacco	18.32
Cash Handed Tenants	45.96
Undecipherable	31.21
Total	<u>\$799.67</u>

Source: Hamilton (1879).

Interest rates varied according to the services provided and according to the individual. For tenants, the rates ranged between 10% and 22%. Money loaned to purchase mules commanded a high interest because they were expendable and afforded tenants a greater degree of freedom and income generation. As an example, on February 25, 1880, Long paid \$1,200 for 10 mules for tenants and charged \$176 interest, a 15% rate. The interest rates charged Waverly planters were less, normally about 10%. Long paid interest of 7% to 10% on merchandise acquired on credit (Long n.d.b).

During 1878, operating expenses of \$528.92 were noted in the Payment and Receipt Book for freight, work on the commissary, taxes, and licenses for whiskey and tobacco sales, salaries, and insurance. In that year Long was assisted at the store by W. B. Hamilton--a brother-in-law, John Hollamin, and John W. Young--the eldest son of Col. George H. Young.

Fifty-two percent of the merchandise sold through the store at Waverly came from the Banks and Billups firm in Columbus. Perhaps it was this fact which in part caused the editor of the Clay County Leader to write in April, 1882, "Is Waverly in Clay County? If so is there anybody living about there? We are not able to tell from our subscription list, as we have not a name from that post office. Maybe it is in Lowndes, or would like to be" (Clay County Leader April, 1882). Twenty-three percent of the merchandise was acquired from firms located outside the state at places as distant as Boston, Massachusetts (Figure 8.1) (Long n.d.b).

Trade and commerce at Waverly revolved around the production and sale of cotton. After ginning, the cotton crop was purchased by Banks and Billups of Columbus. The warehouse at Waverly had cotton receipts from 1880 to 1883 as follows (Long n.d.b):

<u>Year</u>	<u>Bales</u>	<u>Receipts</u>
1880	212	\$9,080.53
1881	138	6,534.06
1882	122	5,187.37
1883	134	5,585.95

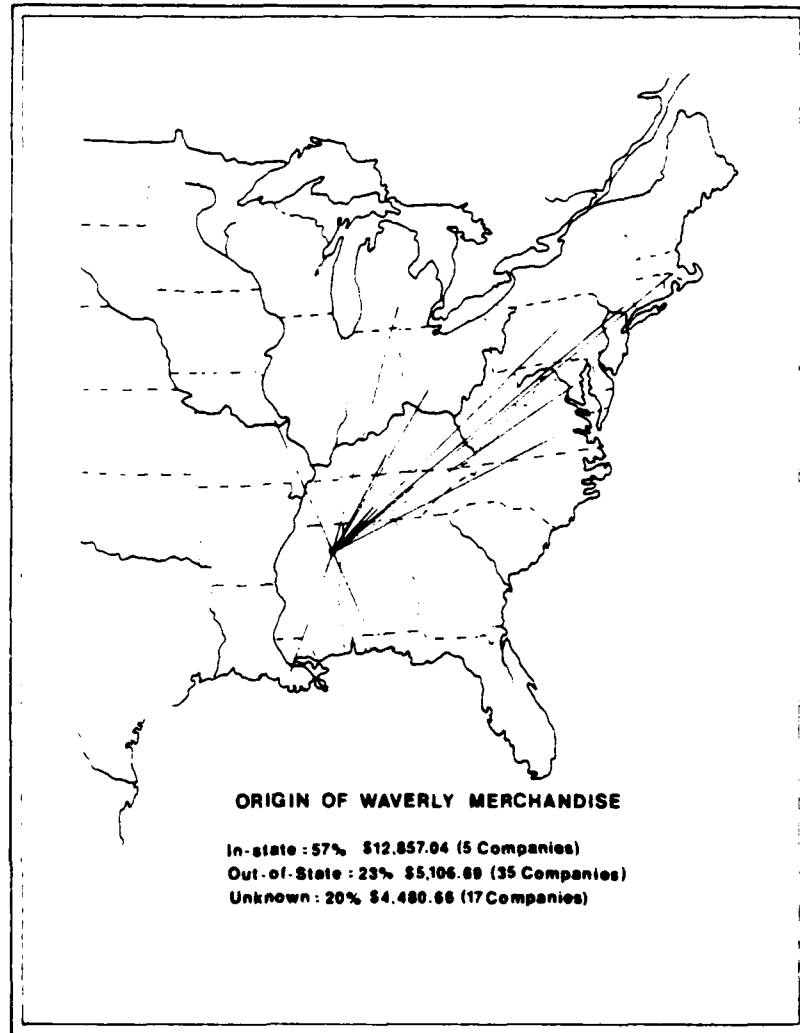


Figure 8.1.--Origin of Waverly Merchandise at Long's Store.

Monthly purchases, credit sales, and cash sales are listed in Table 8.6. Fifty-seven percent of the merchandise purchased by Long occurred during the cotton harvest period, from October through February. On the other hand, sales were more evenly distributed, with differences noted between cash and credit sales. The co-efficient of variation reveals that cash sales were more than 2.5 times as variable as credit sales. Long was able to subsidize his income through rebates, commissions, and interest. Cash sales at the commissary began to decline in the early 1880s as tenants increased their independence from planters and traveled to West Point and Columbus to trade with such firms as Franks and Brothers, Donohue, Dee and Company, and Chandler-Walker Mercantile Company (Armstead 1881; Young 1913). Cash sales from January through July, 1880, totaled \$1,674.05; from August through December, 1880, totaled \$1,199.20; and from January through July, 1881, totaled \$1,590.33 (Long n.d.a, n.d.b).

Table 8.6. Purchases and Sales, Waverly Commissary, 1878

Month	Purchases	Sales			Total Other
		Cash	Credit	Total	
January	\$1,224.88	\$ 637.58	\$ 568.52	\$ 1,206.10	\$ 5.60
February	1,554.60	758.70	1,208.27	1,966.97	4.28
March	897.60	296.55	1,068.74	1,365.29	3.61
April	561.25	180.55	1,224.38	1,404.93	-
May	1,685.66	231.80	1,246.37	1,478.17	2.19
June	757.69	258.80	1,160.68	1,419.48	47.24
July	443.63	224.45	1,091.86	1,316.31	6.85
August	747.76	305.90	786.90	1,092.80	1.50
September	757.49	164.45	709.52	873.97	-
October	2,004.30	211.85	776.00	988.84	8.34
November	1,459.29	395.45	996.95	1,392.40	1.02
December	1,385.98	333.21	1,176.35	1,513.56	123.90
Total	\$13,480.13	\$4,003.29	\$12,015.53	\$16,018.52	\$200.25
Mean	1,123.34	333.61	1,001.29	1,334.90	-
Standard Deviation	475.04	176.50	221.77	270.19	
Variation	$V = \frac{(100 \times SD)}{M}$		52.91	22.15	

Source: Long (n.d.b).

The Waverly Post Office

Post offices were almost universally operated with plantation stores, and Waverly was no exception. The Waverly post office discontinued in 1860 was re-established on August 4, 1879, with H. C. Long postmaster (U. S. Post Office Department n.d.). As a fourth class post office, incoming mail arrived from West Point on Monday, Wednesday, and Friday, and outgoing mail left for West Point on Tuesday, Thursday, and Saturday (Clay County Leader January, 1883). However, delays were frequent and service less than dependable. Numerous notations in the postal records for the Waverly office include comments such as carrier drunk, mail train refused to take mail, no mail due to heavy rains, messenger thrown from horse, train failed to catch pouch (Snow Collection).

George V. Young served as postmaster from 1900 to 1906, and according to oral sources, the post office was in the mansion. Stamp cancellations, an indication of the volume of business, steadily declined in the late 1890s. Months for which cancellation data are available follow (Snow Collection):

January, 1897	\$18.56	September, 1897	\$25.90	September, 1898	\$12.52
February, 1897	24.54	March, 1898	19.84	January, 1899	14.22
June, 1897	23.30	June, 1898	15.52	May, 1899	9.85

The post office was discontinued on April 30, 1906, and the community was served thereafter by rural free delivery routes (Postal Record).

The Georgia Pacific Railroad

The Georgia Pacific Railroad, extending from Columbus to West Point thence westward across the state, crossed the Tombigbee River at Waverly. A railroad right-of-way was acquired from Waverly landowners in 1888 (Clay County Abstract Books), after the railroad was enticed with a bonus of \$90,000 to take this route (Carlisle 1925:10). For most of its existence, or perhaps all of its existence, Waverly was a non-agent passenger station with no heat, no lights, no plumbing, and wooden seats (Columbus and Greenville Railway Company 1928). A small siding must have been available, for the Young brothers operated gravel pits at Waverly "where all the gravel you see going by here is obtained" (Clay County Leader March, 1888). However, if cotton was shipped from Waverly by railroad, then there was a definite oversight in an official report listing cotton shipments by Mississippi railroads from 484 stops in 1902-1903 and 525 stops in 1903-1904 (Watkins 1904:43-44; Watkins 1905:46-47).

Waverly Schools and Churches

In 1879 a school was established "south of Town Creek in the Waverly neighborhood for white pupils" (Clay County, Minutes of Board of Supervisors 1879). During the 1890s, the school term averaged five months, and enrollment declined from 13 to 8 students. The school in 1899 was ranked 43rd of 44 in Clay County. The following year in July, the Waverly school district was "discontinued for lack of proper number of children and the territory ordered placed with Stanley School District" (Clay County Superintendent's Record).

A school for blacks, alternately named Waverly and Young, was established in 1889 in Sec. 24, T17S R7E. At first the four-to-five month school period was scattered throughout the year, then in 1898 the school board ordered it taught as a winter school. In the early 1900s, the school's rank in the county was 10 of 38. However, the average daily attendance was highly erratic and showed a general decline from a high of 103 students in 1898 to a low of 33 in 1948 (Figure 8.2). All black schools were consolidated into the Clay County School District's Attendance Center at West Point in 1957 (Clay County Superintendent's Record).

All churches in the Waverly community were organized by blacks. The first was Mt. Pisgah, a Baptist church, followed by another Baptist church organized in 1876 and located in Sec. 16. It was followed by a Baptist church organized in 1900 and located in Sec. 24. Young's Chapel, a Methodist church established by blacks, was organized in 1902 and located in Sec. 30 (Guide to Vital Statistics 1942). Unfortunately, records of attendance, pastors, and community services are unavailable. H. C. Long, Mrs. James Young, and Mrs. Margaret Burt were active members of St. Paul's Episcopal Church in Columbus in 1873 and 1881 (St. Paul's Register 1852-1910).

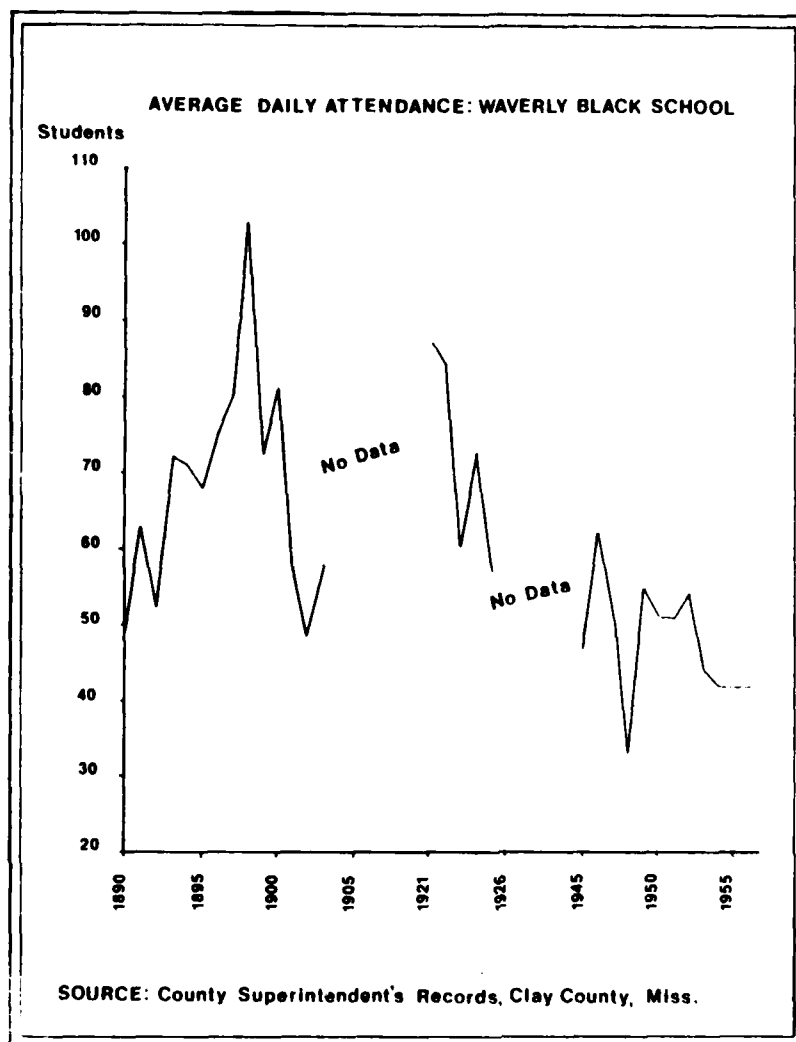


Figure 8.2.--Attendance at the Waverly Black School, 1890-1955.

Fox Hunting and Waverly

During the twilight years of the 19th century, Waverly was probably more renowned for fox hunting and other sporting activities than for its economic attributes. Unlike the Colonel, G. V. and W. L. Young were avid hunters. As bachelors they may have sought society in hunting and other sporting activities to avoid the loneliness of plantation life. The most active hunter of the bachelor brothers was G. V. Young. After he surrendered in 1865, he traveled throughout Virginia, the Carolinas, and Georgia to rebuild his pack of fox hounds (Evans 1938). G. V. Young was deeply interested in breeding and improving fox hounds, and was reputed to be "one of the best judges of fox hounds of his day, and up to a comparative short time before his death he kept a magnificent pack of fox dogs" (Anon. n.d.).

G. V. Young was a principal in organizing the Interstate Fox Club of America. Through his invitation fox hunters came from Alabama, Mississippi, Missouri, New York and Tennessee to Waverly for a week of fox hunting in December, 1888 (Anon. n.d.: Evans 1938). At the organizational meeting he was elected second vice president of the Interstate Fox Club. In 1893 the National Fox Hunters Association was organized at Waverly with James S. Jouett president (Evans 1938).

To assure a plentiful supply of foxes for the hunt, the brothers "imported from New Hampshire and other places more than thirty red fox" in 1890 (Clay County Leader March, 1890). Many of the fox hounds were trained from puppies acquired in West Virginia.

Summary

By the early 20th century Waverly had gone through several development phases. Slaves had become tenant farming freedmen, paying for the use of land in cotton or in cash. At first landowners provided tenants with basic essentials, but near the end of reconstruction this practice changed to one in which the landowners authorized limited amounts of purchases to be placed on their accounts at the Waverly commissary. Finally, in the late 1880s, tenants were independently responsible for securing credit for furnishings and supplies at commissaries in Waverly, West Point, and Columbus. Credit was secured by a lien on future crops at high interest rates. While these events were transpiring the spatial characteristics were transformed, as nucleated slave quarters were replaced by freestanding independent homesteads on 12 to 20 ha of land.

In the postbellum years the Young family was more clearly dominant than in the antebellum years. Their landholdings increased, they rented land from other planters and subleased it to tenants, and through the cotton gin and commissary they controlled the commercial functions. However, as cotton yields declined and death claimed several family members, the vitality of the community was undermined, and in the early 1900s Waverly began to experience another change in population with landowners leaving and white sharecroppers replacing the black tenants.

CHAPTER 9. THE DEMISE OF THE WAVERLY PLANTATION COMMUNITY

by Howard G. Adkins

Expiring Leadership

Col. George H. Young died in 1880 after living at Waverly for nearly a half century. His death and that of Alexander Hamilton the previous year were the among the first to deprive the community of vital leadership. Others included the following:

T. E. Young 1869	R. A. Armstead 1880	G. V. Young 1906
G. H. Lee 1870	J. W. Young 1885	W. J. Burt 1908
W. Burt 1873	J. H. Young 1899	W. L. Young 1913

Accompanying the demise in leadership were changes in landownership and a diminishing economic base.

In 1880 William L. Young inherited the cotton gin, sawmill, machinery, ferry, and the Waverly place lands in Sec. 18, 19, 20, 26, 29, and 30 (Chancery Court, Clay County 1887:523-525). William L. Young resided on the estate until his death in 1913, when the 607 ha (1500 ac) "plantation in Clay and Lowndes County known as the Waverly place, in consideration of money advanced" in earlier years was bequeathed to his sister, Mrs. L. Y. Banks of Columbus (Young 1913). The Banks family continued to live in Columbus and to rent the land to tenants.

Laura Martin Rose (granddaughter of Thomas Martin) and husband, S. E. F. Rose, owners of Roseland (formerly Martin plantation), had moved from Tennessee to Columbus, Mississippi, in 1884 to be near the plantation. After several years of managing the plantation from Columbus, the Rose family was living at Roseland in 1892 (Sorrels 1955:1). Two years later, however, they had purchased the Crowell place in West Point, and the plantation operations were supervised by a manager (West Point Leader August 1894). William L. Young was the last Waverly plantation landlord to actually reside in the community.

The decay of the Waverly place had been observed as early as 1905 when it was noted that "the hand of time, the devastator, is evident here, for within the box-bordered beds weeds too often run riot and usurp the soil once productive of wonderfully fragrant flowers" (Banks and Brown 1905). Sixteen years later, in 1921, another writer noted that the Waverly place:

"A symbol of the old South and its vanquished glory . . . [was] now standing alone in the midst of its untilled acres waiting for the slow fingers of time to reduce it to decay Beyond the grounds is an immense gin, with all the machinery still there, rusting in disuse and quiet where once was such a babel of sound as they drove the wagons loaded with cotton up to its yawning doors . . . Waverly! Standing alone and silent . . . waiting the touch which will bring it all to life again, waiting and listening in vain, for . . . busy life . . . of the golden days" (Hazard 1921:247-248).

Changes in Land Tenure

During the antebellum, Civil War, and Reconstruction years the number of landowners was fairly constant, but in the early 1880s the number of landowners began to increase. Trends in landowning in the community are shown in Figures 7.1-7.5 and 9.1. At first the addition was due to inheritance, but by mid-decade ownership increased through property sales. Since denying the right to acquire land was not included among the restrictions imposed upon blacks, the ready market for land was among successful black farmers (average age of black landowners was 43 years) who could make a first payment on a farm and give a mortgage for the balance.

The first known black landowner was Squire Stepp, who purchased 32 ha (80 ac) in the SW 1/4 of Sec. 18 from R. C. Irvin in 1885 (Clay County Abstract Books; U. S. Census of Agriculture 1880). The following year Seth Pool sold 0.8 ha (2 ac) from Sec. 18 to Issac Wilson. At the turn of the century, 19 of 49 landowners were black. With 38% black ownership, Waverly exceeded the state average of 16% black owner-operated farms. However, hectares owned, ranging from 1.6 to 38 ha (4 to 95 ac) for an average of 17.8 ha (4.4 ac) (Table 9.1), were considerably less than the state average of 36 ha (90 ac). With this revolutionary trend in land ownership, the categories of farms included small, black owner-operated family farms, sharecropper-tenant farms, and plantations.

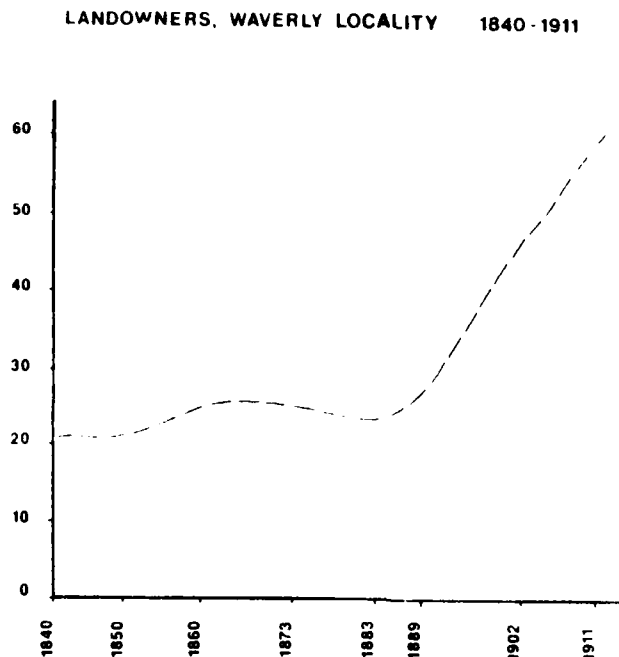


Figure 9.1.--Number of Landowners in the Waverly Locality, 1840-1911.

Table 9.1. Black Landowners, Waverly, 1900

<u>Name</u>	<u>Hectares</u>	<u>Location</u>
Oscar Jones	12.14	Sec. 13, T17S R7E
Issac Wilson	14.16	Sec. 13, T17S R7E
Charlie Pool	12.54	Sec. 13, T17S R7E
H. Williams	14.16	Sec. 13, T17S R7E
Issac Brown	4.45	Sec. 13, T17S R7E
A. Browning	14.56	Sec. 13, T17S R7E
A. Matthews	13.35	Sec. 13, T17S R7E
S. Collins	12.54	Sec. 13, T17S R7E
R. Harrison	13.35	Sec. 13, T17S R7E
Squire Stepp	32.37	Sec. 18, T17S R7E
H. Finnie	21.04	Sec. 19, T17S R8E
G. & Ed Butler	38.44	Sec. 21, T17S R7E
E. Tenny	18.61	Sec. 28, T17S R7E
A. Melton	10.52	Sec. 28, T17S R7E
S. Melton	16.99	Sec. 28, T17S R7E
A. Tillman	1.61	Sec. 28, T17S R7E
Squire Melton	16.99	Sec. 28, T17S R7E
S. Hunter	32.37	Sec. 28, T17S R7E
K. Montgomery	32.37	Sec. 35, T17S R7E
Total	332.56	
Average	17.50	

Land sales weakened the dominance of the plantation system; however, the tenant-sharecropper system was too entrenched and too adjusted to such ownership characteristics for plantations to disappear completely. Plantation land was parceled out to tenants and sharecroppers who worked their rented lands separately. The distinction between a farm and plantation seems to have been that the latter term applied to a place on which a body of Negro farmers was managed, while a farm contained only one farm family. A decade later any continuous tract of land controlled by an individual and subdivided for cultivation among at least five tenants was designated a plantation (U. S. Census of Agriculture 1910). Whatever the category, Waverly was predominately a black community at the turn of the century. White landowners residing there were A. Crump, R. A. East, S. C. Shims, G. V. Young, and W. L. Young (U. S. Census of Population 1900). Rosedale (Martin Plantation) was managed by J. T. Watkins (West Point Leader February, 1901).

A New Commercial Pattern

Farms operated on credit with merchandise secured through a lien on the cotton crop. Waverly farmers suffered from the maladies of the one-crop system, over-production, and declining prices. Cotton enjoyed a ready market, albeit at prices often below the cost of production. Assuming that Waverly farmers paralleled the state in terms of cropping percentages then cotton accounted for 52% and 55% of the crop land use and 64% and 65% of the value of all crops in 1900 and 1910, respectively (U. S. Census of Agriculture 1910).

Landlords and tenants depended upon merchants for food, clothing, articles of personal consumption, tools, farming implements, and work animals. As noted in the preceding chapter, credit arrangements were made

usually in January or February for amounts extending upward to \$200, but the tenant could draw upon this credit only gradually throughout the year. Without restrictions the amount allotted more likely would have been expended in a short time and tenants would have been even more destitute. This advance replaced currency.

All credit accounts carried by W. L. Young in 1913 for tenants farming his land were with merchants in West Point and Columbus. Although the distance to each trade center was greater than farmers preferred to travel (Adkins 1979:136,149), the volume of farm business was evidently unable to support a plantation commissary at Waverly. Young was therefore dependent upon the following credit merchants (Young 1913):

Banks Hardware Company, Columbus	\$694.04
Donoghue, Dee, and Company, Columbus	477.79
J.M. Morgan	560.12
Chandler-Walker Merchantile, West Point	207.72
L. Rosenzweig, Company, Columbus	47.00
S.B. Street, Medicine, Columbus	15.35
F.M. Jacob, Machine Shop, Columbus	4.25
Robertson and Company, Columbus	4.04
Johnston & Craine, Medicine, Columbus	2.05

The plantation commissary operated by H. C. Long until the late 1890s, probably to 1897, was the only known commissary to operate at Waverly. Thereafter, a much lower order of goods and services was dispensed through small store outlets. This is suggested from a list of stores compiled from Clay County Personal Property Rolls for the district including Waverly. The number of stores, capital investment in merchandise on hand, and race of the operator are shown in Table 9.2. Unfortunately, the location of each store is unknown. A store (capitalized at \$700) and cotton gin owned by W. L. Ussery in 1906 and 1907 were possibly located somewhere on land he owned in Sec. 1, 19, 25, or 36 (Clay County Personal Property Rolls; Clay County Land Rolls). These lands were formerly a part of the G. H. Lee and R. A. Armstead plantations.

Table 9.2. Commercial Establishments, 1906-1918,
Prairie View District, Clay County, Mississippi.

Year	Number of Stores	Capital in Merchandise			Operators	
		High	Mean	Low	White	Black
1906	4	700	545	50	-	-
1907	6	700	260	50	-	-
1908	4	-	125	-	2	2
1909	4	275	171	60	2	3
1910	4	300	183	50	1	3
1911	4	300	275	250	1	3
1912	-	-	-	-	-	-
1913	3	200	135	50	1	2
1914	7	300	118	25	1	6
1915	9	300	93	15	3	6
1916	12	385	140	25	2	10
1917	8	300	176	40	2	6
1918	7	300	141	30	1	6

Source: Clay County Personal Property Rolls.

A Declining Agricultural Economic Base

A declining agricultural economic base characterized the G. V. and W. L. Young years. This condition stemmed from a combination of general soil depletion, frailties of the tenancy system, and lethargic attitude stemming from the unprofitability of cotton farming as the price continued downward. In 1900 Clay County produced 15,903 bales of cotton on 18,407 ha (45,485 ac) for an average yield of 432 lb of lint per hectare (175 lb per acre). The average for the R. A. Armstead plantation in 1880 was 329 lb of lint cotton per hectare (133 lb per acre). If the yield for the Armstead plantation is assumed to be typical then Waverly production was below the county average. This is the only comparative data available. Moreover, the 23 year time difference would have favored Waverly because cultivation practices had not altered to improve yields.

The cost-price squeeze in cotton was so tight that farmers were unable to invest in the essentials to increase yields. For example, a Senate Committee on Agriculture and Forestry reported in 1893 that cotton could not be raised profitably at less than 8¢ per pound. That year cotton sold for an average of 7¢ a pound. Three years later, 1896, the cost of producing a pound of lint in Mississippi was \$0.536 (Watkins 1908:184) and cotton sold for \$0.666 (Historical Statistics 1957:517-518). As the only reliable cash crop available to the farmer, cotton was a way of subsistence survival rather than profitable commercial farming.

G. V. and W. L. Young perhaps were caught up in the agrarian discontent sweeping the state and responsible for many families moving in search of better opportunities. The Young brothers probably supplemented their income with non-farm activities. G. V. Young had served as the superintendent of construction of the post office at Aberdeen (West Point Leader May 1893), and had received an initial appointment to supervise the construction of the post office at Meridian, Mississippi in 1893. However, after "it was charged that Mr. Young was not a builder, or architect, or engineer, and was not so well qualified, his appointment as superintendent of construction was revoked in favor of Mr. Brandon of Meridian, Mississippi" (Carline 1896).

The bachelor brothers' knowledge of forestry was respected and widely recognized. G. V. Young was: "Probably the best informed man on forestry in the South, and it was due to information supplied by him that Major Jonas, as State and U.S. Commissioner for Mississippi, at the New Orleans Exposition, was enabled to assemble the finest and most complete timber exhibit ever seen in America" (West Point Leader January, 1907).

W. L. Young sold the timber rights in Sec. 30 to G. M. Flynn in 1911. This was the first timber deed recorded for Waverly. By 1921, 20 timber deeds had been recorded to such companies as Motor Wheel Corporation, Lucas E. Moore Stave Company, Hardy Handle Company, McFarland-Young Lumber Company, and W. H. Coleman Company. A majority of the deeds specified that pine, mulberry, and 30 cypress trees were to remain. Other deeds were less conservative, allowing all timber to be cut (Clay County Land Rolls). The sale of timber suggests that by 1911 the Young sawmill was inoperative, and that valuable stands of hardwood timber remained.

Intensive and continuous cotton cultivation over three-quarters of a century had impoverished much of the land. Uncleared areas remained in the community, but at best they were marginal soil areas and their productive levels would not justify the expense of putting them into cultivation. The value of uncleared land was \$7-\$50 per hectare (\$3-\$20 per acre) whereas the value of cleared land of the same soil type was \$50-\$86 per hectare (\$20-\$35 per acre) (Worthen 1909:18-39). In all likelihood cultivation remained confined to the old fields where a minimal amount of care in later years had caused much destruction to the soil, especially in fertility, and significant levels of abandonment. For example, in 1860, 58% of the total land area was improved, but in 1913 the Young estate of 607 ha (1500 ac) had 130 ha (320 ac) in cultivation for 21%. In Clay County 64% of the land was improved in 1910 (U. S. Census of Agriculture 1910).

With all levels of farmers obligated to raise cotton year after year to secure furnishings and supplies necessary for their very existence, soil which was the very basis of this existence would eventually be depleted of its productive capabilities without inputs of fertilizer and rotation practices. Perhaps the most serious defect of tenancy was the lack of suitable provisions for maintaining soil fertility. In the Census of 1880 Waverly farms reported no use of fertilizer.

Soil depletion seems not to have been an acute problem affecting the area until after about 1890, and by 1911 notable damage had occurred (Worthen 1909:18-39). Some soil groups were more susceptible to depletion and erosion damage than others. Continuous cropping had robbed the Oktibbeha soil of its organic matter, and cotton yields were reduced by one-half. Damage to the Orangeburg group had resulted primarily from washing and gullyng, so that it was yielding one-third bale per acre and was mostly unfit for farming. The light textured subsoil of the Norfolk series was unable to hold fertility, and was producing no more than one-fourth bale per acre (Worthen 1909:24, 27, 29). On the other hand, the Houston soils were capable of one bale per acre, but "most of the landowners live in towns, and the greater part of the land is rented to Negroes, the result being that many farms have deteriorated" (Worthen 1909:7). Yields were less than 454 kg per hectare (400 lb per acre).

Farmers in the community paralleled state farmers in doing little, if anything, to correct soil deficiencies. Between 1891 and 1907, when the annual tons of commercial fertilizer was 70,017 in Mississippi, 181,291 in Alabama, and 470,585 in Georgia, and cotton hectares in each state averaged 1,214,000 (3,000,000 ac), 1,254,600 (3,100,117 ac), and 1,497,400 (3,700,075 ac), respectively, the expenditure for commercial fertilizer in Mississippi averaged \$3.00 per farm in 1900 (U. S. Census of Agriculture 1900). Commercial fertilizer was used on 106 Clay County farms in 1910, and the reported amount expended per farm was \$45. Charged to W.L. Young's account in 1913 was 300 lb of "Sandy Loam Special" fertilizer purchased from the Refuge Cotton Oil Company of Columbus in April for \$2.85 (Young 1913). That year there were 130 ha (320 ac) cultivated.

The black tenant farmer has been charged with causing the declining cotton yields through inefficient and unreliable farming practices (Clark 1973:75-82). However, this may not have been an accurate appraisal of the efforts in Mississippi in 1900 when lint cotton yields in pounds by race and type of farm operator were as follows (U. S. Census of Agriculture 1900):

	<u>Owner</u>	<u>Cash Tenant</u>	<u>Share Tenant</u>
white	215	224	224
black	196	227	231

With black tenants more productive than white tenants at the state level, then the same conditions likely prevailed in the Waverly Community. Cotton yields for black landowners were not as high as those of white landowners probably because of differences in land quality. Worthen noted in 1909 that the land owned by blacks in Clay County was valued at about \$12 per hectare (\$5 per acre) and gave poor yields (Worthen 1909:30). By comparison, in areas where white landowners prevailed the value ranged upward from \$40 per hectare (\$16 per acre).

Whether rented or owner operated, farms ranged from 8-16 ha (20-40 ac), with 4-6 ha (10-15 ac) in cotton. Thoroughly cultivating 4-6 ha of cotton would have required an estimated 52% of the normal family's labor time. Therefore, little time was available for other crops. If the tenant owned the tools of production, he paid one-third of the crop to the landowner, but if the landowner provided tools as well as land the tenant received one-third of the cotton. Rented land varied with land quality, but averaged about \$7 per hectare (\$3.00 per acre). The wage plan in cotton production had likely disappeared when the commissary closed, because there was no credit merchant present with cash for wages or goods for work rendered. Furthermore, the loss of a local source of cash payment for picking cotton may have forced a reduction in cotton plantings to adjust to the farm family's ability to harvest the cotton crop.

William L. Young's Waverly place was rented to 15 black tenants in 1913: "in accordance with the custom prevailing in the cultivation of land with negro tenants, in said County, the said W. L. Young had supplied and was under the necessity of further supplying said tenants with rations, clothing, and farming implements usual and necessary in the making of a crop on said lands" (Young 1913). The tenants, rent, and account were as follows:

Abe Turner, rent and account.....	\$328.61
Frank Beard, rent and account.....	237.32
Walter Ivy, rent and account.....	203.05
Will Shack, rent and account.....	170.85
Luke Richardson, rent and account.....	155.77
Bill Beard, rent and account.....	139.10
Robert Warren, rent.....	125.43
Felix Vaughan, rent and account.....	118.69
John Richardson, rent and account.....	107.52
Lavinia Stepp, rent and account.....	106.81
William Collins, rent and account.....	72.37
Clem Matthews, rent and account.....	38.67
Jim Witherspoon, account.....	35.97
Marshall Sisson, rent and account.....	9.85
Will Smith, account.....	1.10

The fact that only 15 tenants were farming 130 of 607 ha (320 of 1500 ac) of the Young estate in 1913 suggests a demise in the community. Assuming the 3.47 persons per household for the enumeration district inclusive of Waverly (U. S. Census of Population 1900), then the population of the Young estate would have approximated 52, a significant demise from the numbers on Young's Waverly land in 1878 (Table 8.3). This downward trend in population at Waverly is further supported by estimates of 92 in 1890, 85 in 1920, and 50 in 1940 (Rand McNally Commercial Atlas 1890, 1920, 1940).

What transpired at Waverly during the 1910s is speculative, but in our opinion they were transitional years of whites gradually moving into places vacated by emigrating blacks. In this regard the Waverly Community was less representative of Clay County where the racial proportions of tenants remained fairly constant, and more representative of the trend throughout the cotton South where white tenants increased and black tenants decreased in such proportions that by 1920 whites outnumbered blacks more than five to three. We feel that the status of the new, white tenants did not immediately change: the system continued to command complete dependency on the (absentee) landlord, crop lien, and credit merchants in West Point and Columbus.

Thus, the demise of the Waverly community was tied to several interrelated conditions. Among these were: (1) the loss of vital leadership through death, leaving no live-in heirs; (2) the breakup of the plantation landlord dominance as black owner-operated small farms were established; (3) the general unprofitability of cotton farming (strongly related to declining productivity which was significantly tied to soil conditions, and declining prices which placed farmers at the tight end of the price-cost squeeze;) and (4) the frailties of the tenant system which caused many to approach farming with a despondent attitude.

CHAPTER 10. MEMORIES OF THE PLANTATION (1865-1913)

by Betty J. Belanus

Introduction

In the previous chapters we have seen the historical perspective on the development and demise of Waverly Plantation based upon the archival sources. Now let us turn to oral data for a slightly different perspective on the community in the late 19th and early 20th centuries. The places mentioned are keyed by numbers in the text and in Figure 10.1.

Waverly, Mississippi, meant many things to the people who lived there during the 19th and 20th centuries: a home base for land speculation, a home of slaves, a location of a unique antebellum mansion, a place to "break your back" picking cotton, a gathering place for well-to-do sportsmen, a place where there was enough land to rent a shack, stable and paling garden, a place to worship, and a place to bury the dead. Waverly provided woods for hunting, gathering food, timbering, and a river for fishing and swimming. Trains and steamboats stopped there. One crossed from one county to another on a rickety ferry.

"There was three places with Waverly on it there," one long-time resident, Honeybee Hendrix, related, "the old mansion, the old post office and the old depot." Today, however, Waverly lends its name to the entire community that included the former Henderson Lee plantation to the west and part of the former Cook plantation to the north. The name is also used for roads stretching miles beyond the community. Waverly, then, is not one definite location, but a complex.

Waverly was nestled in a large crook of the Tombigbee River. In its heyday, Waverly was divided into two distinct sections. To the south lay the mansion and a complex of houses, a large "community pasture" and some small fields--the Waverly Place and the Middle Place (Figures 5.1, 10.1). A great deal of this land was irregular and wooded. To the north lay the flatter and more fertile river bottom lands, and another group of houses at the Upper Place.

The larger fields were planted in the main cash crop, cotton, and had distinguishing names: Pitchlynn Field, Red Field, Tanyard Field, Sandy Field, Eagle Field. The next largest crop was corn, used for animal feed and personal consumption. Smaller "truck patches" were planted in watermelons, field peas, peanuts, sweet potatoes, sorghum, and sugar cane. The large wooded sections contained pine, sweet gum, hickory, red oak, poplar and cedar; the bottom land swamps produced some fine cypress. Housesites usually included a house, outbuildings, yard, and house gardens. Waverly, then, consisted largely of farmland, homes, and woods.

After the Civil War (or "War Between the States" as many Southerners prefer to call it), plantations in the former slave states were reorganized under varying labor systems. Former slaves, as well as other black farmers and white farmers who could not afford to buy their own land, made arrangements to work part of a landowner's acreage, usually using a portion of the crop as payment. Few details about the transition between the

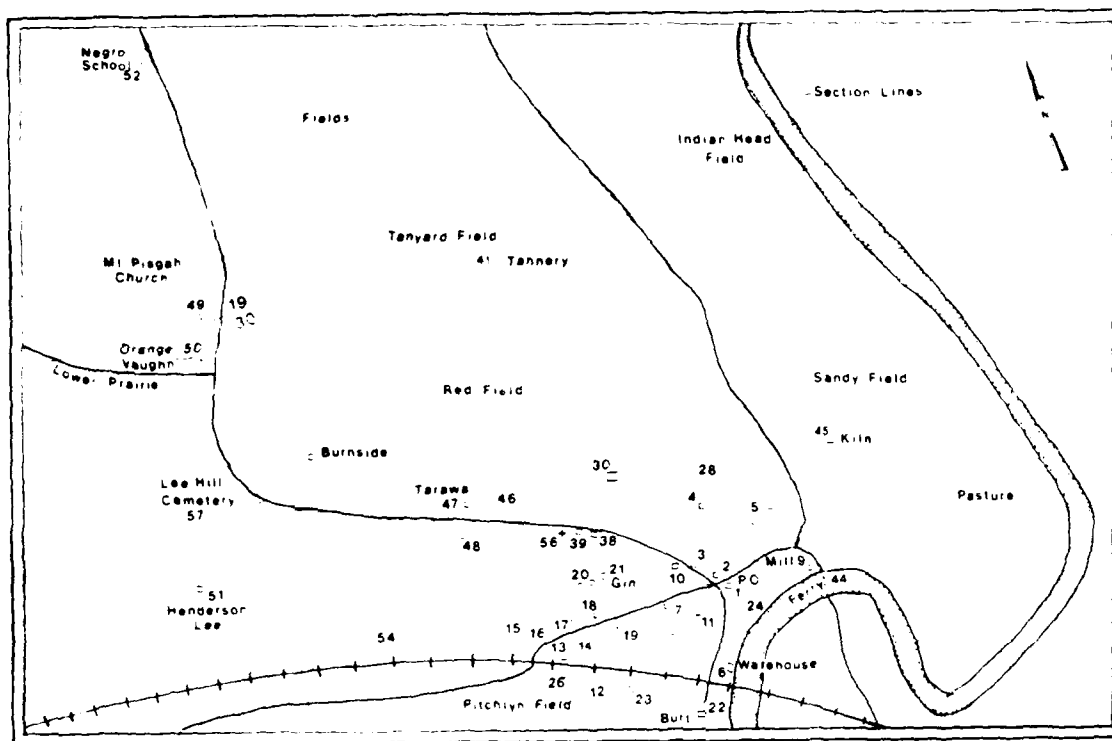


Figure 10.1.--Location of Places Mentioned by Informants.

1 Post Office?, later tenant house	22CL567	29 Young Family Cemetery
2 Long Score?, later tenant house	22CL568	30 Waverly Mansion
3 Aaron Mathews House	22CL569	31 Office
4 Lavinia Stepp House	22CL570	32 Young's Log House
5A Ellen Mathews House	22CL571A	33 Stables
5B Henry Goodall House	22CL571B	34 Icehouse
6 Young's Warehouse	22CL572	35 Gas Plant and Reservoir
7 Early brick kiln	22CL573	36 Privy
8 Albert Blankenship House	22CL574	37 Water Tank
9 Gin, Grist, and Saw Mill	22CL575	38 WPA Library
10 Dump, supposed blacksmith shop	22CL576	39 Doc Adair House
11 Homer Wallace House	22CL577	40 Lilly Pond
12 Stone Stone's House		41 Tanning Yard
13 Stone Cass Wilson House		42 Chicken Coops
14 Waiting Shed		43 Slave Quarters Upper Place
15 Bridges Saw Mill		44 Sunken Steamboat
16 Robert L. Adair House		45 Scoop Kiln
17 John Onus Adair House		46 House
18 Brook's Store Commissary		47 Tarawa Mansion
19 Clem and Laura Mathews House		48 Tenant House
20 Bathhouse		49 Mt. Pisgah Church
21 Gin and Grist Mill		50 Orange Vaughn House
22 William Burr House		51 George Henderson Lee House
23 Store		52 Negro School
24 Abe and Lou Turner House		53 Young Chapel
25 Same as Site 8		54 Burnside
26 Waverly Railroad Depot		55 Lee Hill Cemetery
27 Ferry Landing		56 House
28 Slave Cemetery		

slave-worked plantation and the tenant-worked plantation are known by former Waverly residents. One of the "old ex-slaves" gave Honeybee Hendrix the following explanation of arrangements at Waverly Plantation:

"After the Civil War they, Colonel Young told them, Captain Billy and all of them told them, that they were all there and they didn't anybody have anything left. And that they--liked it was they had a home. And if they wanted to get out there with a team, why, they could go on like it was before the Civil War and they could work, so much crop for the Young Estate and for so much land of their own to have a crop off of."

Exactly how many ex-slaves stayed on the Young place after freedom came is unknown. According to two informants, three half-brothers--Clem Mathews, Sr. and Marshall and Shirley Sesny--had been slaves on the place (W. Ivy, J. Hendrix). The majority of other former black tenants had ancestors who had been slaves, although relatively few seem to have been slaves on the Young place. Most of the informants, who remember their grandparents telling them they had been slaves (W. Ivy, A. Dunlap), did not know which plantations they had worked on. The one informant, Laura Young Lenoir, who remembered her grandmother telling her of being a house slave at Waverly, recalls that her grandmother and grandfather left Waverly when they married. In fact, very few memories of what "slavery days" were like in the area are retained at all, although several informants were told stories by their grandparents. As Walter Ivy puts it, "It was so different, they tell me, I just couldn't begin to say." Mrs. Lenoir relied on the movie "Gone with the Wind" for an impression of what those days were like. The history of Waverly Plantation begins, for most informants, in the days after slavery was abolished.

Some oral data for Waverly was collected in the 1930s by WPA researchers. Jim Allen, born about 1850, remembered "De fust work I did after the War was for Mr. Bob McDaniel who lived near Waverly on de Tombigbee River. Yes Ma'am, I knowed de Lees, an' de Joiners, but de river den an' long afte', an worked for 'em lots in Clay County" (WPA 1941:10). He also remembered "We was fitted out an' out each season, an' had two pair shoes, an' all de snuff an' 'bacco we wanted every month" (WPA 1941:7). Clara Young was born about 1842 near Huntsville, Alabama, but was later sold to Mr. Ewing near Aberdeen; she remembers:

"I stayed on wid Old Marster afte' de surrender, wid de res', 'til I met Joshua. Joshua Young was his name an' he b'longed to de Youngs what lived at Waverly. I moved out dar wid him afte' we married. We didn' have no big weddin' 'cause dere wa'nt much money den. We had a preacher tho', an' den went along jes lak we had allus been married. . . . Josh, he's been daid fer a long time now but we had a good life at Waverly an' many a night stood outside de parlor do' an' watch de white folks at des big dances an' parties. De folks was pow'ful nice to us an' we raised a passel er chillun out dar" (WPA 1941:173-174).

Waverly Mansion

After Col. Young's death his vast landholdings, according to one of his great-granddaughters, were divided among his nine children (G. Hopkins). The mansion (Figure 10.1:#30) and approximately 2,000 ac surrounding it fell into the hands of two Young sons, William Lowndes ("Billy") and George Valerius ("Val"). These two bachelors lived in the mansion and loosely ran the farm business until the last of the two died in 1913. Tenants respectfully called them "Captain Billy" and "Major Val" supposedly reflecting their ranks in the Confederate Army (W. Ivy).² Personal memories of the plantation under the auspices of Captain Billy and Major Val begin about 1900. Members of the family came out from time to time in the summer to visit Billy and Val at the mansion. They remember little about the farming operations and tenants because, as children and genteel guests, they stayed around the mansion grounds. They do provide vivid details of life at Waverly mansion in the early 1900s.

One of Captain Billy and Major Val's great-nieces recalls "both of them had beards and mustaches, that was the style in those days" (G. Hopkins). Another remembers Captain Billy as having "a rather large frame, . . . 5'10" or something like that, a rather rounded face . . . with a white beard" (E. Shaw). In their prime, the two brothers were great hunters, fishermen, and gamesmen, and were notorious for having a houseful of guests (usually other sportsmen) much of the time. "Everyone loved them because they loved to hunt" said their great-niece Georgia Hopkins. "It was open house up there and you could come and stay and bring your dog and hunt and come back loaded with what you had killed or come back empty-handed, either one. But they had a good time."

Among the overnight and sometimes week-long guests spending time at the mansion was one very eccentric gentleman. Emily Evans Shaw, another of Billy and Val's great-nieces, tells this story about the gentleman:

"One day he climbed up to the top (of the mansion porch) and Uncle Billy was sittin' down and he said, 'Oh, Billy--Captain Billy! You better move, 'cause I'm fixin' to jump.' And Uncle Billy looked up and said, 'Well, I'll tell you what, any fool can jump down, but why don't you come down and jump up? And he came down. I think that's the cutest story about Uncle Billy that I know.'"³

One of the prime attractions of the mansion grounds was the "bath house" (#20) located across the road and "under the hill" (as the local saying goes), near the brick cotton gin (#21) and lilly pond (#40). Lucy Banks, a third great-niece, recalls the bath house:

"It wasn't big enough to be called a swimming pool. It was a wooden building with dressing rooms on both sides, and in the center, there was a cement pool . . . it wasn't big enough to swim in. The water came from an artesian well, and was icy cold. And it was fun to push off from one side to the other. One push would take you from one side to the other."

Other memories of the mansion grounds include the privy, the mulberry orchard, and boxwood gardens. The privy was located to the north and west of the back of the mansion. Emily Shaw remembers it being "double" (i.e., two holes). Georgia Hopkins describes it:

"They had an old-timey privy. . . . Well, you came out the back door and go about half a block . . . And it was a double--nice, convenient place. It had little holes around and, had stars I think on the door. And there was room for triple use, three holes, a little one, a medium-sized, and the big one."

The substantial mulberry orchard was located to the back of the mansion. One or two of these trees still stand. Emily Shaw remembers that "the sickest she ever was" was on a visit to the mansion when she ate too many mulberries. Boxwoods grew in formal garden arrangements around the grounds. Lucy Banks recalls, "the boxwood hedges and the paths between the formal flower beds made a wonderful place for playing house." The hedges were said to have been in bad repair by the time of Captain Billy's death. One opinion is that the herd of goats and sheep that Captain Billy was fond of keeping snacked on the boxwood.

Emily Shaw, the only one of the grand-nieces quoted above who lived on a plantation herself, noted that her uncles did not rule Waverly with a strong hand. Her own father, Jim Evans (one of Col. G. H. Young's sons-in-law), managed his plantation closely. The Evans plantation had its own commissary and overseers to watch over the tenant farmers. Bells were rung for hands to get up in the morning, break for dinner, resume work in the afternoon (called "evening" in the area), and break for the day. In contrast, Captain Billy and Major Val would not allow an overseer. Walter Ivy, a former tenant farmer from Waverly, tells this story about the time Captain Billy hired a white man who wanted to act as boss:

"Captain Billy hired him, . . . and he wanted to be boss, boss those two mudhands [black hired hands who watched livestock] . . . He got high enough to hit one of those colored people . . . Captain Billy told him to get his papers and get away from there. He didn't hit his Negroes and didn't allow nobody else to hit 'em. He [the white man] hit the road."

Walter also tells, with some glee, about how a white man asked Captain Billy why he did not ring bells for his hands. "If I put up a bell," Captain Billy replied, "every damn nigger I have on the place would dress up and go to church."⁴

Captain Billy and Major Val's tenants were all independent renters; the tenants owned their own farm animals and machinery, and worked land for the rent of one 500-pound lint bale of cotton (i.e., cotton with the seeds removed) per 15 ac plot. The tenant's house, outbuildings, yard, and were included in the rent. Although technically, paying part of one's crop instead of cash for rent could be considered as sharecropping, it is not. The cotton was simply a cash substitute in a cashless society. If the crop failed, the rent was still due, unlike the sharecropping system. In the Waverly area this particular arrangement was always known as "renting." For instance, John Onus Adair, who moved onto the place in the 1930s was asked about the sharecropping arrangements then existing in Waverly. He replied, "Wasn't no sharecropping then. They was renters. They'd give so much cotton for a house, the rent of a house. Get so many acres."

Since few former tenants are still alive who were old enough to remember Captain Billy and Major Val, only scant memories of the plantation under their management are available. The farm hands remembered select aspects of Captain Billy and Major Val's personalities and pastimes. Honeybee Hendrix and others remember a number of stories that the old tenants had told them, and Walter and Douglas Ivy recall first-hand experiences from their boyhoods at Waverly.

Captain Billy and Major Val were fond of gambling. A race track ran from the large oak tree still standing near the office (#1), following the road north past the mansion, turning left and coming out behind the cotton gin and from there back to the oak tree. Honeybee Hendrix remembers "old man" Shirley Sesny telling a story about the money that old Captain Billy would make with Sesny, betting the visiting horse racer that Sesny could outrun any race horse:

"The old fellow said that after they'd placed the bet, when the man started off he'd grab the horse's tail and follow it. And let the horse pull him. Says, 'All I've got to do is move my feet and the horse was doing the pulling.' Says, 'Well, that put another load on the horse and helped slow him down.' And says, 'When we'd get within 50 foot of the finishing line, I was able to turn loose of the horse's tail and outrun him. And beat the horse to the finishing line.'"⁵

In addition to horse racing, cock fighting was a pastime of the Young brothers. Walter Ivy recalls:

"Cap't Billy used to have rooster fights. The white people did . . . Had a big circle. Kind of a lawn, like, where they would sit around, you know, all the way around, turn the roosters in there, and let 'em go together, and one killed, and one win, you know. They'd bet on the roosters, you know . . . They used to give all them chickens to the colored people when they kill 'em. Sure would."

One informant, Roy Barham, recalls hearing about Captain Billy and Major Val's possum hunts from some of the older black people around Waverly. The brothers had "a long row of coops" out behind the mansion, and put possums they had caught, live, into the coops. "Feed 'em taters and things, you know, fatten them up, then eat 'em. They'd sometimes have a grove of possums . . . feed 'em baked potatoes, really fatten 'em."⁶ Honeybee Hendrix tells a story about Major Val's long grace before a meal of possum and potatoes. One guest, supposedly a relative, began to slip some of the tempting food off on the sly. Without changing his ministerial tone, Major Val reprimanded the young man and suggested strongly that he leave the table without eating after grace was through.

One operation around the mansion that interested informants was ice-making. When the lilly pond located near the bath house froze over every winter, additional water would be sprayed on gradually until, over the course of several days the ice was about a foot thick. Honeybee Hendrix recalls, "They had an ice saw, I've seen it, it looked just about like a one man saw you would use to saw wood with, . . . one handle similar to a hand saw handle and the other handle similar to a regular cross-cut handle." He continues: "They'd go out there, and they would take time about cutting the

ice and they would fasten tongs to it and a mule and pull it up on a sled and slide it up to the ice pit behind the old mansion. And the rule was, whoever helped store up ice could come to the pit in the summer time and get ice. If you didn't help store ice, you couldn't get ice." The ice house had a large brick-lined pit with a frame hip-roofed structure over it (J. Hendrix, J.O. Adair, R. Adair). The pit is still visible, directly out from the back entrance to the mansion.

In the early days of the plantation, a business office, post office, and commissary had been run. Captain Billy and Major Val, however, ran most of their business from the mansion. The post office was located in Captain Billy's secretary which had a series of cubby holes. The Waverly correspondence was not, it seems, that frequent, since the whole post office is reputed to have fit in a cigar box (E. Shaw). Douglas Ivy's job as a boy was to pick up the mail at the railroad station and bring it to the mansion. A small brick building near the north side of the mansion was, supposedly, the office for the plantation at some point, although it seems more likely that Captain Billy and Major Val ran business from the mansion itself.

Other Places

Beside the mansion, two other large family homes dominated the Waverly area. One was Burnside (#54), home of the Hamiltons, located about one-half mile west of the mansion. Anna Young Hamilton was one of Billy and Val Young's sisters. The Hamiltons left Burnside before 1900. A white man named Will Ursery later lived there. The house and outbuildings burned in the 1920s. According to Honeybee Hendrix, the house was a large two-story frame structure with an upstairs sleeping porch. At one time, a cotton gin, sawmill, and store were reputed to have been located near the house (J. Hendrix). (The gin was probably the one moved across from the bath house in 1880 by Henry C. Long.) Also to the west of the mansion was the Tarawa Mansion or Hopkins homesite (#47). Mrs. Hopkins was a daughter of Thomas Erskine Young, one of Billy and Val's brothers. The Hopkins moved into Columbus before 1900. The Hopkins house burned around 1918. According to Honeybee Hendrix, "two old maids" whose identities are somewhat of a mystery, lived in this house. Ida Turner, the wife of renter and ferry tender Abram Turner, cooked for these women at one time. "Aunt" Ida told many ghost stories, called "ha'nt tales" locally, concerning this house. Honeybee recalls one of these tales:

"There were two old maids left here, were the last two people who lived in the house. And they had, back then, every house had a shelf at the end of the porch, to set their waterbuckets on. And this lady had her own pitcher, glass pitcher, that she kept her drinking water in, and her glass. And, uh, they said she was dying of TB--they called it consumption back then . . . They said she poured her a glass of water from her pitcher and set it on the shelf, and told 'em, says, 'I don't want anybody to move my pitcher.' Said that she went back into the bedroom and laid down and, a couple of days, she died. And, Aunt Ida said, she knew the water was gettin' stale in the pitcher, and should be thrown out, and said she went to lift it up, and said she couldn't. And, she went out and got somebody else to see if they could take it off the shelf, and they couldn't. And, she said that pitcher was sittin' on that shelf when the house burned. That nobody could move it."7

Waverly Plantation included several commercial buildings. Until 1907 or 1908, the cotton gin (#21) near the mansion was in operation. Walter Ivy remembers some details about this gin:

"They had rooms to the gin you know, each fellow would put his cotton in this room, another fellow would put it in that and they had, oh, a man by the name of old man Clem Mathews. He was a slavery man himself . . . He used to run the gin, my father used to fire the gin. It had a boiler and they run it by steam. Pack the cotton with your feet (laughs) . . . That's quite a mystery to you. But I helped pack a many bale, and helped tie it, too . . . After you'd gin the seed, you'd catch 'em and put 'em on your wagon, load 'em and bring them over here [to Columbus] to the [cotton seed] oil mill and sell 'em. That's what you had to do."

The gin also included a grist mill, where tenants could bring their corn to be ground into meal for a certain percentage, usually one peck out of each bushel.

An independently run store (#18) was part of the community in the 1900-1910 period. This store was owned and operated by a white man named Paul Brooks, a bachelor for whom Walter and Douglas Ivy's step-mother cooked meals. Walter vividly remembers the store building being moved by oxen from its first location on the Henderson Lee plantation down to Waverly, a distance of about a half mile:

"Well, Mr. Brooks built that store . . . And they picked it up and moved it down . . . They had oxens, and they cut out a right-o'-way down to the bottom back of that store, toward the railroad . . . Skid some way or 'nother. Didn't tear it down . . . Oh, it was a big building. Whew! . . . I was a little boy."

The store had groceries like flour, sugar, meal, and coffee. Walter Ivy recalls that "it was just a big ol' plank buildin', it kinda favored a church (laughs). That's right. It had two doors to it, one at the front and one at the back. Glass windows, just one floor." It was the last store of any size in Waverly proper. Around 1910 it was abandoned by Mr. Brooks, and the building was later used as a tenant house until into the 1930s.

During this period, the regular railroad depot building also remained standing, although a regular agent had ceased working there, and the train had to be flagged down to stop for passengers. Walter remembers what the building was like:

"Had . . . two rooms: a ticket office and a settin' room. The settin' room was a large one. You'd go to that window and get your ticket, they'd tell me . . . That was before I was born, I reckon. Up through the years, after I got [to be] a man, that station [building] was there."

Near the railroad, a white man named Bridges ran a steam-powered sawmill (#15) before his death around 1910. The death of Bridges caused quite a bit of excitement in Waverly. Honeybee Hendrix remembers being told that:

"He was killed, . . . and thrown in the river down here, off the railroad bridge. At the time he was thrown in the river, the river was up and the people never realized that they wasn't far enough out when they threw him in the river and so he hung in some bushes and when the river went down why there he was with some iron tied to his feet and he was hanging up in the bushes."

Walter Ivy remembers the death of Bridges caused a big commotion. "The place was stirred up then from the bottom to the top, 'cause they didn't know who did it. . . . I was a little boy at the time." There is some indication that Bridges was "fooling around" with someone else's girl friend, a mulatto woman. In any case, as Walter Ivy says, someone "sure did kill him and put him in the river."

Tenant houses on the plantation in the days of Captain Billy and Major Val were scattered. A number of log houses still stood, and after 1900, several frame houses were erected. In the Bottoms to the north of the mansion, there were three housesites. Closer to the mansion on the south side of Waverly, there were at least eight housesites.

The houses in the Bottoms prior to 1900 were all log: two one-room and one two-room. Walter Ivy, the present Walter and Douglas Ivy's father, moved his family from another log house near Waverly (formerly the Orange Vaughn house, #50) to the larger log house in the Bottoms in 1900 (Figure 10.2). Douglas Ivy comments that in the pre-1900 days around Waverly

"they didn't build nothin' but log cabins. . . . Go in the woods and cut down those trees, and hew 'em flat inside, and stand 'em on top of another and build that house. Was nothing but log cabins way back. You'd go in the woods and get your house then, didn't go to no sawmill."8

Other log houses on the place according to Walter and Douglas Ivy, were lived in by tenant families. Squire and Lavinia Stepp's House (#4) was close to the mansion, to the east. Further east, up on a hill from the ferry landing, was the Henry Goodall family's log house (#5B). Clem Mathews, Sr. and his wife Laura lived in one (#19) nearer the railroad tracks. One room of Abe and Ida Turner's house (#24) was also log. Most of the original log house Col. Young built for his family before the mansion was completed still stood at this time.

Most of these log houses were one story or story and a half structures, with two main rooms separated by an open hall in between. Douglas Ivy explains the open halls as "just these open halls so the air can blow through, no doors or nothin! That's what they call an open hall. Just go there between the rooms, and a floor between them, but no door." The roof covered the open hall also. (This feature is sometimes called a "dogtrot" in other areas, but the term is not used often in the Waverly area.) Additions, if they were needed, were built to the back in a shed fashion and referred to as "shed rooms." Kitchens were often added on in this manner.

Some of the log houses in the pre-1910 period, like the Orange Vaughn house and Goodall house still had part stick and mud chimneys. Walter Ivy described those chimneys and their hazardous nature:

Walter Ivy remembers the death of Bridges caused a big commotion. "The place was stirred up then from the bottom to the top, 'cause they didn't know who did it. . . . I was a little boy at the time." There is some indication that Bridges was "fooling around" with someone else's girl friend, a mulatto woman. In any case, as Walter Ivy says, someone "sure did kill him and put him in the river."

Tenant houses on the plantation in the days of Captain Billy and Major Val were scattered. A number of log houses still stood, and after 1900, several frame houses were erected. In the Bottoms to the north of the mansion, there were three housesites. Closer to the mansion on the south side of Waverly, there were at least eight housesites.

The houses in the Bottoms prior to 1900 were all log: two one-room and one two-room. Walter Ivy, the present Walter and Douglas Ivy's father, moved his family from another log house near Waverly (formerly the Orange Vaughn house, #50) to the larger log house in the Bottoms in 1900 (Figure 10.2). Douglas Ivy comments that in the pre-1900 days around Waverly "they didn't build nothin' but log cabins. . . . Go in the woods and cut down those trees, and hew 'em flat inside, and stand 'em on top of another and build that house. Was nothing but log cabins way back. You'd go in the woods and get your house then, didn't go to no sawmill."⁸

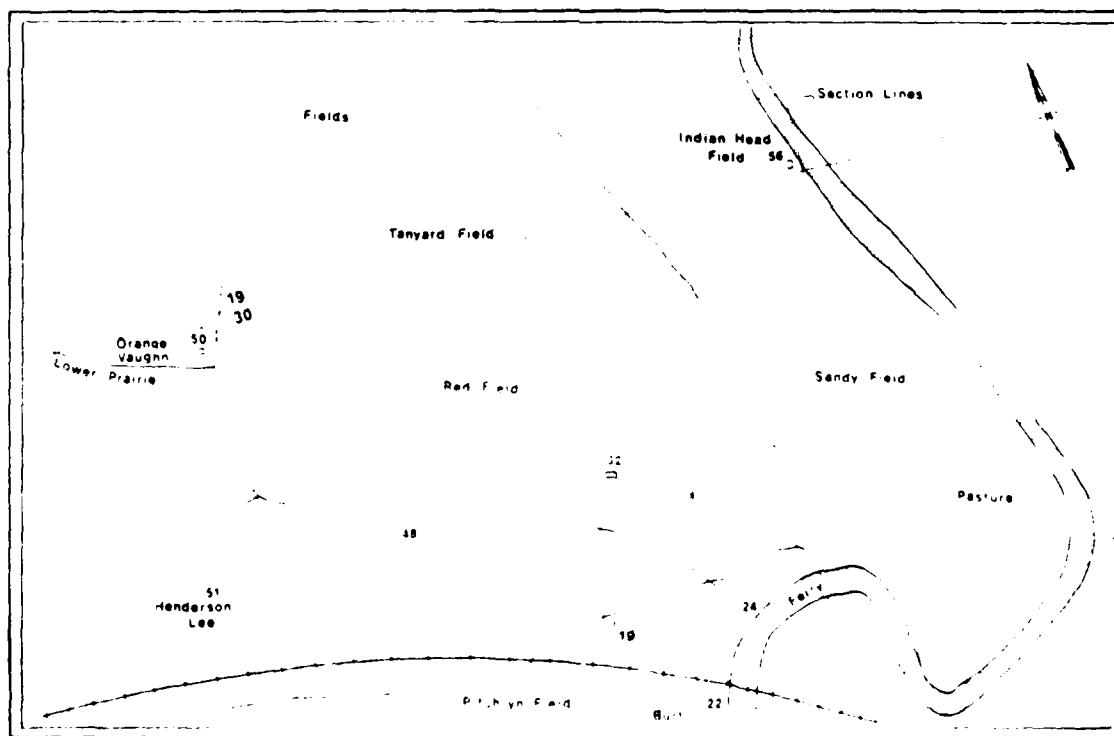


Figure 10.2.--Locations of Log Houses, 1918 or Before.

Young passed by, heard his daddy frailing him. So, two or three days later Captain Billy asked him how come his daddy frailing him and he told him. He says, 'Well, come up to the big house.' Says, 'I believe I can fix you something or other that'll make your daddy believe that you've got plenty of wood cut up.' So, he said he went up there and Captain Billy gave him a pound of black powder. And told him, says, 'You get down there this evening.' Says, 'You cut your wood up and cut you a big back stick and leave it laying there in the yard.' And says, 'When there ain't nobody looking take that big auger and bore you a hole in that stick of wood and pour this powder in there and peg it up. Rub some mud over it.' And says, 'Won't nobody notice it.' Says, 'You'll find out where your wood's going, I'll bet.' He said, 'Well, I done that.' He said, 'It was a cold night.' He says, (This fellow) come over and visited with us and set up and talked.' And said, 'Well, I went in the back room and went to bed.' Says, 'I kept peeping out the windows.' Says, 'Finally (this fellow) says, "Well, it's time to go home, go to bed." Says, "Going through the yard, he shouldered that backstick." He said, "Well, about three o'clock the next morning you ain't never heard such a whoom." He said, "Pa jumped up and went over there." Said, "We all got up and went over and the old woman (the fellow's wife) had had a pot of fat back and black-eyed peas setting in front of the fireplace." He says, "There's fat back and black-eyed peas plastered all over the walls." He says, "Poppa asked him, says, "(Hey), what in the world happened?" He says, "I don't know," says, "it must have been one of them Yankee shells that didn't go off" Says, "It was in that tree I guess I cut." Says, "I cut a big back stick, put it on the fire last night." And says, "It must have had one of them Yankee shells in there and it exploded!"¹⁰

This story may have archaeological significance as well. It provides the names of two families and where they lived (the Sesny's lived at Site 22CL568, the other family at Site 22CL567, the "post office"). Since Capt. Billy is involved this dates the story before his death in 1913. Since the post office was operated there until 1900 probably (when Henry C. Long stopped being postmaster), we can deduce that during the 1900-1913 period a tenant family had moved into the old post office building. Further, we know that they were cooking old style, on a fireplace, not on a stove. On the other hand, the folklore motifs in this story tend to negate somewhat its local utility.

Prior to 1905, few tenants had cooking stoves and many still cooked on the fireplace with "skillets and lids" as Walter Ivy says. Walter remembered the process for cooking ash cakes--cornbread cooked in the ashes:

"Make that bread up, cornbread. My grandmother learned me how to cook it, clean that fireplace, rake that fire back, rake them hot ashes back, put that bread, put it in there, and pat it out kinda, and put them ashes back on top of it. Some folks would put a collard leaf or somethin' on top of it, but my grandmother never put nothin' on it but them clean, hot ashes, and cook it. And get some water and wash it, and we'd eat it. And it tasted good to me. [laughter] That's what you call ash cakes."

When Walter was 12 or 13 years old (ca. 1905) the family bought an iron cook-stove from a store in Columbus. "At that time," Walter relates, "they would give you all things that pertained to a stove, it would go with the stove . . . pans, pots, kettles, some spoons, I don't know . . . Just everything, in the cost . . . These later years you'd have to buy the stove and then buy the rest of it."

The diet of Waverly tenant farmers in the early days was based mainly on what was raised on the farm--the large corn patch, truck patches for staples such as field peas and sweet potatoes, and house gardens for vegetables in season. Collards and turnips could be grown throughout the winter, and potatoes could be kept in a "kilyn" (see the next chapter for details of these processes), but black tenant women did not yet know how to can vegetables (H. Ivy). They did, however, preserve wild and domestic fruits such as wild berries and plums, and peaches from yard trees.

The predominant meat was pork. Hogs were killed every year in the cold weather, butchered, salted down and then smoked. Honeybee Hendrix recalls some of the older black tenants telling him about the hogs they let loose in the woods to graze on acorns:

"They would mark it [the hog] by puttin' a crop in one or the other ears and in such 'n such a place. And they turned those hogs loose, let 'em run wild. And, when some of them wanted meat, they went down to the Bottoms, got up in the stand [built in a tree] and waiting 'till a good sized shoat in good shape came by and so they would kill it. And they also told me that, you had to be careful that sometimes those old sows would stay around there to put up a heck of a fight. Old man Shirley Sesny told me of a big ol' boar keeping him up a tree all night one time. And the only reason he didn't shoot him, he only had one bullet and he had used it to kill about a 100-pound shoat. He said he wasn't about to go down on the ground with an empty gun."11

Chickens were kept for eggs and meat. Families usually kept a cow for milk and cream, feeding what the family did not use to the hogs, since Waverly farmers did not sell milk commercially in those days. Butter was churned from the cream in oak churns (W. Ivy). In general, Walter Ivy believes "food now is not like it was in those days, no way. At that time people didn't use as much chemicals on the food, now you know. . . . They use so much different fertilizer on the food now. It destroy the real taste that the earth would give it."

Every year, the tenants' sorghum would be made into molasses for sweetening. Honeybee Hendrix describes the process of boiling down the cane juice to make molasses:

"They would start makin' sorghum early in the mornin' and sometimes keep it cookin' all night They used mules, horses And the way that operated, you would make arrangements with the owner of the mill in advance, you would haul your sorghum or sugar cane to the mill, furnish the team to grind the stalks and you pay the mill and you'd furnish somebody to carry the sap to the barrel that you cooked 'em in. You generally used a 50-pound, a 50-gallon wooden barrel with a spigot in it settin' there and they could turn that

sap into this pan . . . The pan sat on a furnace about a foot and half to two foot tall, and about three foot wide. You fired with dry wood so you could have a quick blast. And it was--making molasses is similar to cookin' jelly. . . . In other words, you had to cook it 'till, well [it was thick]. . . . It evaporates down to a certain thickness that, well, all you got then, a molasses cooker looks at it and tells the way those bubbles are burstin' . . . whether its ready to run into the containers . . . They prefer pine for cookin' molasses. . . . I have seen cottonwood . . . But they claim oak and nickory hardwood makes too hot a flame. Well, if you cook sorghum too thick, it'll sugar on ya. If you don't cook it thick enough, it'll sour on ya."12

Clothing worn in the older days was simple and functional. Men and boys wore overalls and shirts, socks (often homemade) and work shoes--or else went barefoot in good weather. Women and girls wore dresses, stockings and functional shoes or also went barefoot. Women in those days did not wear pants, Walter Ivy emphasizes. "The Bible speaks agin it," he believes. Straw hats were worn in the fields. Everyone had their Sunday clothes for church and special occasions.

Much social life of the tenants centered around their church, the Mt. Pisgah Missionary Baptist Church, located at that time about three-quarters of a mile northwest of the mansion, a few hundred yards from its present location. Walter Ivy remembers the old days of his home church:

"I remember it didn't have nary a glass window to it. It just had shutter ones. [The church would] be sealed from the front to the back. . . . Well, it was much different back in those days, than it is now. They're still preachin' the same gospel, and the services was good, but it looked like people were more honest and interested . . . back then than it is now."

In 1913, before his death, Captain Billy made arrangements with a group of Methodist tenants to start their own church. They were given an acre of land on the western edge of the plantation where they erected a church they called, in honor of their benefactor, "Young's Chapel." The building was still standing in 1979. Among the members of this congregation were a family named the Curry's, and the Horace Horton family. Andrew Lenoir, a black farmer who lived west of Waverly, usually attending a service there when "melodius music" was sung.

Two organizations, the Masons and the Pennyworks Society, met regularly at Waverly as well. The Masons met in the two-story building that may have been the Waverly post office (#1). Walter Ivy, Sr. and one son were Masons. The Pennyworks Society, according to Walter Ivy, who was a member, did good works among the members of the community.

"They would, you know, bury the dead, and help the sick, [and the sick person would] give them a sick benefit when they got healed, you know . . . And they'd give you a bill . . . very cheap, but then, that was the reward you'd get for membership. That was the operation of it."

Tenant families, in general, got together often to help each other and socialize. Quilting bees and building bees were common, and if a member of the community needed help with difficult and important chores such as butchering hogs, neighbors would gather to help (W. Ivy). Socializing included music and dancing. Dances were held in the abandoned depot building. Walter Ivy remembers such affairs:

"My brother Douglas used to be a pretty good guitar picker, I used to play pretty good myself . . . I don't know who all, but they used to be guitar pickers. Make them things talk like a man. [laughter] We'd have big dances at night . . . had big times."

Christmas was celebrated with large dinners and group socializing. Walter Ivy describes one event that black tenants were involved in every Christmas season, called "drum beatin'":

"[We'd] have drum beatin; goin' from place to place, and I would beat time, drinkin' whiskey, some gettin' drunk [laughs]. From house to house . . . they would have whiskey, you know, and the visitors that come, they'd give 'em whiskey. If they got drunk, it wouldn't make no difference."13

Young people had fun "courtin'" and playing baseball. Walter explains what courting involved in the old days: "Oh, it was fun to us, pleasure. Go to dances, go to church. And all that there. Go call on the girls at their homes."

There were several baseball diamonds on the place, and the game was very popular among tenants. Hunting, fishing, and searching for wild foods also qualified as "fun," although they served the function of putting extra food on the table as well. Walter Ivy remembers the fun he personally had hunting for wild nuts in the slack period after harvest season, when all there was for a boy to do was "go to school, hunt hickory nuts, keep fires and roast 'taters. I sure had quite a job, huntin' hickory nuts, walnuts, scaley-barks [a kind of hickory nut] and goin' to school." Most tenants kept dogs and enjoyed hunting "varmints" as they are locally called--raccoon, squirrel, opossum and rabbit. Walter Ivy used to hunt with "old man Henry Goodall" who was, "an awful hunter," meaning he was a good hunter.

Fishing from the bank of the river or in skiffs on the river was also popular, although it depended on the individual tastes of the community members. "I never had much patience for fishin'. Especially when you have to wait on 'em" Walter Ivy says. Catfish, buffalo, and brim were caught and also an occasional eel or turtle. Along with the usual fishing pole method of catching fish, Abe Turner made net seines, and Walter and Douglas Ivy's father, Walter Ivy, Sr. made some split oak fish traps. Walter explains the operation of these traps:

"Well, when they [the fish] go in that basket, they can't get back out of it . . . The water keeps it shut up and when they go in there, it close up behind 'em. They can go in, but when they get ready to turn 'round and come back, that muzzle be shut up . . . But more can come in, but they all in there, got to stay."14

The Young brothers treated their tenants each year to a big 8th of May celebration. According to tradition, the 8th of May was the day the area slaves learned they were free. It is called "Colored People's Day" in the West Point and Columbus area. A number of plantations, including Waverly, gave barbeques. Walter Ivy describes the Waverly celebration:

"Now he would kill . . . a cow, a hog. I told you he growed sheeps and goats. He used to have them there to a real barbeque, he would barbeque that meat and he would give it away. He give a free dinner every year. [It was held] right down there in the quarter we would call it, out there from where the old gin was. Out south of there in that old space out there. We had tables, had board lumber . . . and we'd have a table long as--oh, I don't know how long. And benches you know for the people to eat on. He'd buy barrels of light bread. All that stuff. And have this cook that he had, Aunt Nancy we called her, he had a big ol' kettle there, he'd have it made for stew they called Brunswick stew or somethin'. He'd give all that stuff away free. Folks would come from far and near. You know, and he wouldn't have nothin' sold. . . . It wouldn't cost nobody nothin'. He'd do that every year. I know it was fun to me 'cause I could eat all I want. [Cap't Billy] gave that dinner and he was down there to it. He would be down there to it himself lookin', you know, he and some of his white friends. Walkin' around there among the colored people smokin' his pipe. . . . We had big ball games and so, that's the way he did it."15

The last 8th of May celebration at Waverly took place May 8, 1913, about a month before Captain Billy Young's death. During the last few years of his life, Captain Billy suffered from severe skin diseases which curtailed his activities. His nieces, Mrs. Emily Evans and Miss Lucy Young, daughters of James Young, came to stay with Billy in his last years. They brought with them their cook, Sally Mosby. The nieces, according to Emily Shaw, who is Emily Evans' daughter, loved Waverly dearly and enjoyed staying there immensely. Lucy, nicknamed "Honey," was a legendary huntswoman. According to Mrs. Shaw, Captain Billy would give Honey one shell a day to bring home meat for the table.

Young Walter Ivy fell in love with the cook, Sally. When Captain Billy died, Walter had to take drastic measures to keep her from returning to Muldon. "She didn't know anywhere else to go and she was goin' back . . . and I married her. I sure did . . . I and her married the 10th of June [1913]." Walter and Sally remained happily married until her death in 1972.

Captain Billy Young died May 30, 1913. In a number of ways, his death formally marked the end of a system that had been in decline since before the death of Major Val in 1906.

Summary

The plantation system in the postbellum South did not die, it was merely transformed. Tenant labor took the place of slave labor. At Waverly Plantation under the auspices of "Cap't" Billy and "Major" Val Young, ca. 1880-1913, an easy-going landlord/tenant system was established. Billy and

Val hunted foxes, staged cockfights, raced horses, and entertained family and friends at the Young Mansion, Waverly. The black renters worked 15 ac or more, owned their mules and tools, and lived sufficiently in a quiet manner.

The earliest memories from living informants of the Plantation in this period begin around 1900. Relatives remember visits to their Uncles Billy and Val, and the fun of the mansion's attractions which included a bath house, a mulberry orchard, and boxwood gardens. Former tenants remember Capt. Billy Young as a kind, if not attentive, landlord, and a just man. They remember the plantation had no work bells and no overseer. The Young brothers gave their tenants a free barbeque every year on May 8, Emancipation Day.

Major Val died in 1906. By this time the services offered at the Plantation--post office, cotton gin, saw mill and grocery store--were gone, or in decline. By the time of Captain Billy's death in 1913, the renters were already used to looking elsewhere for the commercial goods and services they needed.

CHAPTER 11. INDEPENDENT RENTING (1913-1930)

by Betty J. Belanus

Renting

After the death of Captain Billy Young, the Waverly land became the possession of Lucy Young Banks, Billy's and Val's sister, and the farming operations were managed by her husband, George Banks, and son, George Y. Banks. The Banks lived in Columbus, and Mr. Banks had enough business in town to keep him away from Waverly most of the time. For the first time since 1841, when Col. Young moved to Waverly, the owner did not live there. The mansion stood as an occasional summer home for the family, but it was empty, and whatever authority Captain Billy and Major Val radiated while they lived had ended. Absentee landlordism had begun. Yet, it seems tenants did not feel much difference. Captain Billy and Major Val had allowed their tenants to go about their farming business without interference. They were present, but usually preoccupied with the lives of sporting gentlemen and did not function as strict business managers. The tenants, therefore, had grown used to keeping their portions of the farm up, producing their one bale of cotton rent and living adequately off whatever else they could raise on their plots. The changes brought on by the death of the last brother and the take-over by the Banks were more subtle: No huge 8th of May celebrations, no Captain Billy to settle small squabbles. It was now necessary to go all the way to Columbus to ask a favor or borrow a bit of money from the landowners. The mansion had ceased to be a center of activity--no gentlemen with their game cocks and race horses came to visit, and the sound of hounds baying after foxes had ended.

The change had been happening gradually, though, since about 1907. When the cotton gin at Waverly ceased running and Brooks closed down his grocery store, the tenants were forced to look outside the community for these important services. For cotton ginning, they turned to an enterprising black man, Wash Davis, who had opened his own gin about eight miles west of Waverly, near West Point. Later they would turn to another successful black family, the Mathews, who started a gin and grocery store a few miles from Waverly about 1916.

Tenant farmers, who only had substantial cash flow once a year when their cotton was sold, usually needed to buy goods on credit. On many plantations, and probably during the earlier days in Waverly, a plantation store or commissary rendered this service, helping outfit the farmer with everything needed to "make a crop" and keep his family going until the cotton was sold and the farmer could settle with the plantation owner and storekeeper. Beginning early in the 20th century, around 1905, tenants at Waverly began to deal with a store complex in West Point called Chandler-Walker Mercantile. Honeybee Hendrix explains the arrangement between the farmers and store owners:

"I tell ya. Those people, Chandler-Walker Mercantile Company used to, ah, they called it a "furnish." Furnish the families that farmed with their staples and groceries and probably they, well they furnished them groceries, clothing, and anything you wanted, beds, anything--Chandler Walker Mercantile had it. And they would furnish

the farmers groceries and so forth to make a crop on and then when the farmer ginned a bale of cotton they would carry it to Chandler-Walker Mercantile and they would check it for, pull the lint for the staple, that is to see how long the fiber was. And they would take the cotton on what they (the farmers) owed. And so the farmer got fed and clothed, worked and wore out, and probably he'd have five or ten dollars extra maybe that he could use for Christmas, and then they was ready to get another furnish and start all over the next year."

Chandler-Walker would be the ones to furnish "nothin' but mules, wagons, buggies, plows, hoes to chop with, somethin' to eat, cotton seeds and every kind of seeds to plant, . . . fertilizer, snuff, 'bacca" as the store's former porter, Albinus Dunlap says. "Some years they'd make somethin' and some years they didn't, but then some years when they did make great, they mopped up."

Planting

Once the farmer was furnished with everything he needed to make a crop, he was ready to prepare the land and plant the seed. Most of the renters in Waverly were doing well enough to afford and keep up two mules or one horse and one mule. Mules were the preferred work animals for Waverly's black tenants. Douglas Ivy, who farmed from about 1920 till the 1940s on Waverly Plantation, speaks of farming with mules:

"They would obey you, gee and haw. When you want 'em to go to your right you would say, 'Gee',--the mules would know that. When you say, 'Haw', that's to your left. . . . You'd have to train 'em, if you bought one, he wouldn't know nothin', you'd have to train 'em to know 'gee' and 'haw'. When you want him to back up, you'd say, 'Back up!' They would work just according to what you tell 'em, after you train 'em. Just like you tell them. And, I'm tellin' you, they really weren't any trouble once you get 'em trained. 'Gee, mule!' they'd go right. 'Haw, mule!' they'd go left. 'Back up!'"

The basic items of farm machinery included middle busters, turning plows, fertilizer distributors, harrows, seed planters, cultivators, poisoners, and stalk cutters. Waverly consisted largely of "sandy land," and, to avoid erosion, the fields would not be broken until the spring, unlike the black, loamy "prairie land" just west of Waverly which could be plowed after fall harvest. Prairie land had a "warm nature" and the cotton could be planted earlier in the spring, early to mid-March, while Waverly's "cold natured" sandy land did not lose the freeze as early and could not be safely planted until at least late March or, usually, well into April. Cotton is a delicate plant. As Walter Ivy says, "Cotton can't stand no cold weather. Frost come 'n bite corn off after it's come up, it'll come out again. Cotton won't."16

The first thing the farmer did was to "break" the land with his turning plow. A turning plow is so named because it turned all the broken sod to the right. It was necessary to come up one row with the turning plow and then down the same row to plow the row completely. The land would then be "rowed up" with a middle buster, a kind of plow that went through the middle of the furrow and threw dirt to either side. Fertilizer would then be

placed in the drill left by the middle buster, with a mule-drawn fertilizer distributor. The turning plow was used to turn the fertilizer under. Then the middle buster was used again to "bed up" the land. Finally, a section harrow with rigid teeth would even the land off and break the clods of earth. "Level it off," says Douglas Ivy, "just as level." The land was then ready to plant. In the early days, seed was "dropped"--planted by hand. Hendrix related how old men told him they used a forked stick as a corn planter:

"They'd get one prong down and they would drop the corn in the hill there and then they'd push it around and where this prong here was settin' they'd drop the other hill and keep pushin' at the stick and that gave them uniform spacin' of the hills of corn. Also I believe he said they had to drop two grains of corn for the jay bird, three for the crow, I believe they had to drop, I think he said four for the crawfish. And one grain of corn for the stands, and one grain of corn in case that [one] they dropped to the stand didn't come up."17

Most progressive farmers from around 1900-on, though, had mule-drawn planters with adjustable plates they could use to plant corn, cotton, beans and a number of other crops.

Cultivating

When the cotton came up, the process of cultivating it--keeping the weeds and grass out--began, as Walter Ivy said,

"We had a weed we called hogweed, one we called dogweed, crab grass. Johnson grass, moody grass, different kinds of grasses. Vines, bramble briars, and so on. All of that would be on the farm. You'd have to get them hoes and ploughs and keep them things down. Until your plants get ahead of it, you know."

The first cultivation was usually by mule-drawn machine. Earlier cultivators were the "sweeps" that literally swept pesty weeds from between the cotton rows. These sweeps, often called "sweep stocks" or "Georgia stocks" were actually a small plow with adjustable metal points ranging from 6-18 in. With such a sweep, the farmer would go up one side of the row and down the other side, thus making two trips per row. Later, new types became popular which only required one trip down the row to clean both sides.

After the first cultivation the "chopping" or manual cultivation thinned the cotton plants and removed weeds and grass from between the plants where mule-drawn machinery could not reach. Either the tenant's family, if a large one, or temporary help hired especially for this purpose, would chop the cotton. Each person would begin at one end of a cotton row with a hoe and work down to the other end. It was very hard work and few enjoyed it. Douglas Ivy tells of an old couple who chopped cotton "because they didn't have no choice--they had to make a livin'." Jeff, an amateur preacher, wanted to buy a book to help him with his preaching endeavors:

"He was choppin' cotton for me one day, and his wife Ellen. . . . He told her that, 'If you could help me to pay for a book that I've got in mind, why, I could beat what I'm doing, it could lead me out

in what I'm trying to do, preachin'. He said, 'If you could let me have your paycheck this week to buy this book--' 'Oh, no, no!' she told him. 'You're not taking my money for no book! I'm gonna put my money in my belly!' Lord, that tickled me! . . . I don't blame her. . . . He weren't making nothin' preachin', and he was making something choppin' cotton. . . . I think I was paying them a dollar a day, for choppin'. They were choppin' all day for that dollar."

After the cotton plants were large enough to fight off the weeds on their own, around July, the crop was "put by" or "laid by"--left alone. Tenants were free, then, to work odd jobs or tend to other business. After the cotton bolls began to form, boll weevils and other insects began to be troublesome. "At one time, there wasn't no such thing as a boll weevil, you just make cotton, cotton, cotton. But through the years, these insects come in," explained Douglas Ivy.

Some farmers, like Walter Ivy, did not believe in using pesticides: "It was poison, I was afraid of it. They just eat what they want and leave what they want, was my idea. I never did use none of that poison." Douglas Ivy, however, did own and use first a shoulder-hung then a mule-drawn cotton poisoner, to "kill them boll weevils, keep 'em from eating the cotton up." The mule-drawn machine could poison up to eight rows of cotton at once. The poison came in dust form, and the farmer had to protect his nose with a handkerchief to keep from inhaling it.

Harvesting

Finally, in late August or early September, the cotton was ready to pick. Once again, day labor would be hired if a tenant's family could not pick the whole crop. Women were acknowledged to be better pickers, since they were generally quicker with their hands and had a lighter touch, and could stand the constant bending up and down. Walter Ivy says his wife was better than he was at picking. "My back'd go to hurtin' before the time I'm puttin' my sack on, look like it." Pickers were hired "so much a hundred," that is, a flat rate for each hundred pounds of cotton picked.

In earlier days, a split-oak basket was used to put the cotton in, but in later days, long burlap bags were used. When enough was picked to make a bale, the cotton was hauled to the gin in a wagon by the tenant. (Later, after about 1920, the Mathews brothers would haul the farmer's cotton to the Mathew's gin on their own wagon. The farmer need only leave a bale's worth of unginned cotton by the side of the road, and the ginned bale would be returned.) It took about 1,200 to 1,500 lb of cotton with seeds in to make one 500 lb bale of lint cotton. The valuable cotton seed was used as payment for ginning the cotton. Farmers in the Waverly area vied to make the first bale of the season, the Ivys tell, called the "prima bale."

After the cotton was picked, the hogs and cattle were let loose among the stalks to graze. When they had eaten all they could, a mule-drawn stalk cutter was brought in to cut the stalks as close to the ground as possible. These stalks were left on the fields until they were ploughed under in the spring. This was the last process of the yearly cotton crop. The cotton had been baled, sold, and the debts at Chandler-Walker paid. A little cotton might be saved for quilt battings or cotton mattresses, but otherwise it was the end of cotton until the next spring at Waverly.

Cotton was, of course, only the cash crop. Economically it was the most valuable crop on the farm, but to the family the food crops were important for daily subsistence. If the cotton crop failed, at least a family would have something to eat through the year. The next largest crop to cotton was corn which was used as cattle feed and for the family. The ears of corn were harvested and stored in the family's corn crib (sometimes a separate building but often an area in the barn or stable).

A quantity of shelled corn was taken to the grist mill to be ground for meal. A share of meal was given to the owner of the mill, usually a fourth. When the Waverly gin played out, so did the Waverly grist mill run by the same power source. The Davis' and Mathews' had grist mills along with their gins. White corn is preferred for feed and meal in the Waverly area. The same corn was used for animal feed as for food for the family, as Douglas Ivy's wife Hallie says, "Corn the mules ate, we ate it too." Other important crops were planted in large patches, and a house garden was maintained.

Gardening

If a farmer did not have a large family, he could successfully farm on one 15 ac plot. Walter Ivy and his wife Sally, who did not have any children, made good use of one plot. Eight to ten acres were planted in cotton, yielding four or five bales in a good year. Three or four acres were put into corn. In one of their "truck patches" they would grow watermelons, which Walter admits he loved to eat "more than a hog" does, and which were often sold for extra money in town. Sorghum grew in another patch. Field peas and peanuts were grown in other patches. Sweet potatoes took up yet another.

The house garden was near their dwelling. One area resident, Lewis Randle, has described a house garden as "a place that they kinda petted, took all the grass out, used their best fertilizer, . . . that was their prize patch." It was usually tended most of the season by the women, although Walter says "My wife cleared out a garden, and I did, too, 'cause I love vegetables." Their garden was enclosed by a paling fence to keep out the animals (both domestic and wild). The paling fence was a wooden fence built similar to a picket fence without points on each slat.

In their garden, Walter remembers growing "cabbages, collards, mustards, turnips, oh, English peas, string beans, just everything I knowed would grow in the garden. . . . Beets, lettuce. . . . Okra was something she (Sally) was crazy about." Sally Ivy, according to Walter, was also "crazy about" flowers. She grew "jonquils, four o'clocks, October pinks, . . . and roses, seven sisters, sweet scrubs." The yard around their house she adorned with these flowers. In addition, they had a few peach trees. The rest of the area around the house was taken up by outbuildings: smokehouse, corn crib, chicken house, hog pen and barn. The barn was actually, Walter says, "What we call the stable. It wasn't a big barn. A stable for the mules you know, two mules."

The house garden would yield vegetables in season from early spring into the fall. Sally Ivy did not know how to can vegetables then, but she did can fruit. Collards and turnips could also be kept over the winter. Walter Ivy explains how he and Sally did this:

"Get some those ol' pine tops and build us kind of a shed for them like. Put some poles and lay pine tops over that and them collards would live all the winter. It may snow but them collards wouldn't die. . . . And those collards would be good and sweet. Yes, Lord! Those collards, you could let 'em out there till they go to seed."

Field peas and peanuts could be dried and kept all winter. The sweet potatoes in this period were stored in a potato "kill" (kiln) built near the house. Honeybee Hendrix explains the construction and use of such a kiln:

"What we would do, we would dig potatoes, and uh, let 'em lay out and dry for a while. And it didn't hurt if a light frost fell on sweet potatoes after they were dug. But you couldn't let frost kill sweet potato vines and, uh, leave them on there for even a day more you couldn't eat the potatoes, they taste so [bad]. When we got ready to put 'em up for the winter, we would go up to the corn field and cut us a bunch of corn stalks. And, uh, we would come back and build us up a mound of dirt, as big around as we thought the stack of potatoes would take. We would build that up about 6" to 10" above the ground, so the water wouldn't seep in and--then, we'd start piling those potatoes up, and, the, we would take those corn stalks, come wig-wam fashion with them corn stalks, put them up there, then go get some hay or pine straw and put around there, then uh, take the shovel and put dirt on it around there. Well, the top was left open. So, if they went through a heat, that heat could escape, and not cause the potatoes to rot. And that's how we stored the potatoes. And, put an old tub on the top of them. As the weather got colder, you would put more dirt on them. . . . Then about the last of February we would tear the kill down, and sort our seed potatoes out from the rest of them, and March we would bed the seed potatoes down, to grow the new plants. And, uh, eat what potatoes was left, and they'd bake so-o-o nice and soft, and they'd be really sweet."

Hogs were butchered, and meat put up and lard made for winter use. The tenants were then ready for the winter months.

Winter Jobs

Most farmers got winter jobs at local sawmills or other places. Walter Ivy discusses his job at the Columbus Brick Company in 1916:

"[I would do] just different jobs. Cleanin' up bricks, and just whatever type of job they'd tell you to do. But I know just how that's done [i.e., brickmaking]. I've seen 'em mold 'em you know, and feed 'em, put 'em in the kiln and burn 'em, and all like that. . . . I stayed there overnight, you see I was eight miles from Columbus. . . . I worked, I sure did. . . . I would go on Monday mornin' and come back on the weekend, to home. . . . One dollar and twenty-five cents a day. That's what I made. . . . for ten hours work. Yes I did. I worked sawmill work for 75¢ a day. Ten hours work. That's about as cheap a public work as I did."

Douglas Ivy worked at a sawmill on the Lowndes County side of the river, crossing the Tombigbee in his skiff to get there. Mrs. Ivy brought him

lunch every day. Douglas says,

"I worked across the river . . . at the Ephram's mill. Me and lots of people. We'd cross the river every morning, and work the mill, come back every evening . . . I got two dollars and a half a day . . . Hallie would bring me my dinner. Boy, did that taste good. It was worth more than I was making for her to walk up there and bring my dinner! . . . Sorghum and fat back meat and cornbread . . . It'd taste good, 'cause I'd be hungry."

These off-season jobs helped make ends meet between crops, or in the event of a crop failure. The tenants considered themselves, first and foremost, farmers. Farmers often made extra money by making charcoal to sell to housewives. This charcoal was used in small braziers to heat flat irons. The process is described by Honeybee Hendrix:

"You just imagine cuttin' wood about three foot long, and stackin' it 'till you have a circle there that's about anywhere from probably eight to twelve foot in diameter. Right in the center those ol' fellows would have their dry wood kindlin', just started. Well, they would leave 'em a walk-way in there to wherever they got the wood stacked like they wanted it stacked on end. They could walk in there and light that. Then as they walked, come out, why they had other woods they fill that up. And after it got started to burnin' they would break up pine needles, put all around that, put over it, then shovel dirt put on top of that and, uh, they would have several low holes at the ground to let air go into the center where and they would have a little openin' in the center. And they couldn't let it blaze--it smoked. Well then, a little bit for every evenin' late and early ever' mornin' there would be a layer of smoke through the woods from those coal kilns and I believe they would take that to the town and sell it, a nickel a peck, fifteen cents a bushel. People used it to heat those sad irons, in other words flat irons. . . . Oh, that charcoal didn't give off any smoke, didn't mess your irons up when you was ironin' those white shirts an' sheets an' pillowcases."18

Housing

The group of houses in the Bottoms was increased to six or seven by the 1920s. Walter and Sally Ivy's house represented a transition in housing. When they moved into the house in 1913, the one existing room was log, and Walter himself built frame additions around this original room to make a three-room house, two rooms with an open hall between them and a shed room kitchen to the back. Since they had no children, Walter and Sally had their own bedroom and a "company room" where "preachers and different company" would stay.

By the late 1920s, the other log houses in the Bottoms had been torn down. Several frame houses were built by the Banks for tenants. Most of these were double pen houses, called "double houses" locally, with two main front rooms, with their own doors. Shed room additions were built to the back. The houses had two fireplaces apiece, positioned at the gable end of each main room. Shed room kitchens had flues for the cooking stoves. The houses were of board and batten construction, wide vertical boards sealed with thin vertical battens nailed over the cracks.

Douglas and Hallie Ivy lived in one of the new houses in the Bottoms. Douglas was pleased with their well-built home:

"It was a four-room frame house . . . William Stepp built it . . . At one time, they would build the floors (for houses) out of one-by-twelves. And sometimes, if the lumber wasn't cured good, after it cured there'd be cracks in it, in between the planks. But the house that I lived in, the Banks' put in a tongue-and-groove floor, and when you put in a tongue-and-groove floor, it don't--the floor don't crack . . . I thought I was in Heaven when I got that."

Other families who lived in the Bottoms included the Harkins, Stepps, and Dupreys.

Several other tenant families lived on the south end of the place. Lavinia Stepp (#4) and the Mathews (#19) still lived in their log houses (Figure 10.1). Hallie Ivy's parents, the Hayes, lived in the old Brooks store building (#18). A new family of Mathews (no relation to Clem's family or the family who owned the gin) had moved onto the place. Ellen Mathews and her husband Jeff moved to a small house (#5) near Henry Goodall's old log house (Figure 11.1). The Goodalls had moved out of Waverly, down to a large plantation on the Mississippi delta. Ellen and Jeff's grown son, Aaron, and his family had moved into the Tom Stepp home (#3) sometime before the older people moved there. Abe and Ida Turner lived in their comfortable home (#24) near the ferry.

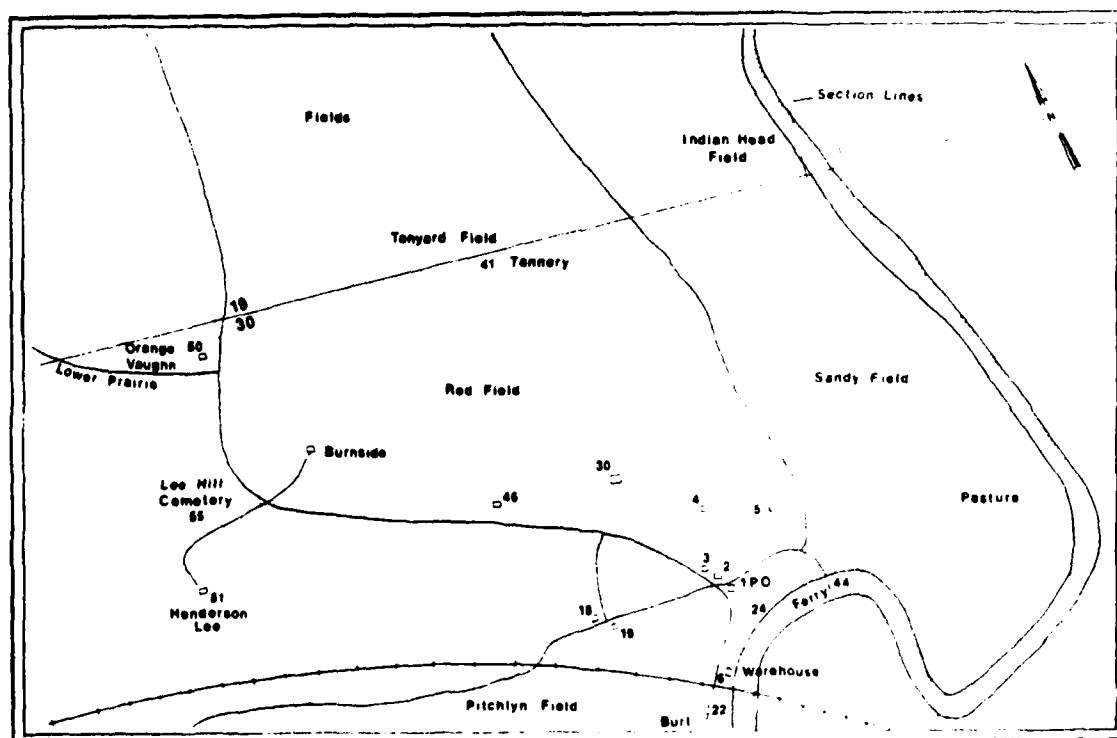


Figure 11.1.--Location of Houses in about 1918.

The timber operation around Waverly increased in the 1920s, and a few small shotgun style houses (one room behind another in a straight line) were built near the railroad (Figure 10.1:#13, 14), two on the Banks land and one on the adjoining Burt land to the south. These were occupied by transient white timbermen. Two of these men decided to open small stores in the front room of their dwellings. When asked if the community really needed two stores, Douglas Ivy comments, "It was just two men, and both wanted to run a store. Didn't need two stores." Both stores carried a very small stock of dry goods.

Shopping

Farmers would go into West Point, usually on Saturdays, to buy necessary items at Chandler-Walker Mercantile. Sterling Chandler, Junior remembers working at his father's and uncle's store during his college vacations. The store was in a two-story brick building. The first floor was the store and the second floor a warehouse for larger items and farm supplies. The front entrance had doors to the right and left with a large "show window" between them. Along the right hand wall were arranged, Mr. Chandler recalls, the piece goods, which "came in bolts and sell by the yard--calico and gingham. Well, they had heavy goods like denims, in fact, all types of piece goods." This section of the store also held sewing patterns. Along the middle of the store were tables with men's trousers and overalls. "Overalls sold for a dollar in those days, was a big item, sold overalls to farmers." At the left side of the store was a long wall of shoes reaching to the ceiling. The back of the store contained the grocery department. "Staple groceries" were carried--flour, corn meal, sugar, salt, coffee, molasses, and side meat. A big wheel of cheese was on one counter. A few canned goods could be purchased, like salmon and sardines. Sardines and crackers were especially enjoyed as a treat inside the store, for it was a gathering as well as a shopping place (Figure 11.2). Sterling Chandler, Junior, explains the social aspect of the store:

"Headed way back in the store, before you came to the grocery department, one of the main things in the store, and a big item on Saturdays when the farmers came to town, was an old-fashioned stove, we called it a pot-bellied stove, great big stove and on Saturday's there'd be customers so thick around it, you could hardly get by. When it'd be cold, well, some of them would practically spend the day there in the store."

Walter Ivy remembers driving to town in the winter to purchase items at Chandler-Walker Mercantile. "Sometimes you be wanting to get there before you get there, it'd be so cold riding ten miles, you know, in a wagon or buggy or horse . . . You open the door, why the heat would meet ya."19

Social Life

Social activities in Waverly still centered around the churches. Families got together for small parties and celebrations as well. Large organized celebrations like the annual 8th of May barbeque, however, were discontinued after the death of Captain Billy.



Figure 11.2.--A General Store in Mississippi in the 1930s (Library of Congress 58444 F34-52200).

The mansion gradually became more of a curiosity than a vital part of the community. The family came out regularly only during the summer. Lucy Young Banks and her daughters and grandchildren would stay most of the summer, recalls her grand-daughter Lucy Banks. The men did not have time to stay away from town that long. Young town-bred Lucy recalls that, while spending time at Waverly, "every night I'd get so scared that I'd want to leave--next day, next day I'd have so much fun I'd want to stay through another night."

Abe and Ida Turner served as caretakers for the mansion and grounds. When the family was coming for a visit, Abe would spruce up the lawns. Ida would clean up the house, and then serve as cook for the duration of the family's visit. Lucy Banks recalls that "Aunt" Ida was a marvelous cook and made especially good goose hash. "Ida could make anything good," she comments. In general, those family visits left Lucy with "beautiful memories."

Overnight family visits became less frequent as time went on. Picnics were still held out at the mansion by family members and their friends. Lucy Banks recalls the fare as "sandwiches, fried chicken, stuffed eggs, pickles, cakes." After the meal, bridge was invariably played. These day-long gatherings became popular especially after automobiles became prevalent, and the trip to Waverly was not as difficult as it had been with a horse and buggy.

Most of the time, and especially in the winter, the mansion stood empty. On dark evenings it loomed massive and white, and there is little wonder why ghost stories were sometimes told about it. Honeybee Hendrix, who was at this time a boy at Waverly, tells this story about the spookiness of the mansion:

"That night, a bunch of us was out cooning possum, I guess--oh, I was a thirteen-year-old kid. But back then, a bunch of little colored kids 'd always be around with the white kids. So, we'd been out, and the dogs hadn't treed anything. We come in behind the old mansion. Dogs treed up an old bois d'arc tree. Well, those country kids, before then, we didn't own a flashlight. I had an old carbide light, a miner's light. Well, I was shining that up there, around, trying to shine some eyes, to see what was up there, whether it was a coon or a possum, or a old stray house cat, or just what it was. One of them little black fellows lookin' around, and it was a moonlight night. Directly, he spied the white dome on that old mansion. He eased over there, . . . says, 'Us back here, behind the old big house. I bet that's old Captain Billy up there.' By God! Those little boys, they took off!"²⁰

The period of absentee landlordism and independent renting (1913-1940) spanned the revolution in transportation. Some Waverly tenants purchased automobiles, including Walter Ivy and his brother, who bought a "T Model Ford" in 1924. The car was purchased on time from a dealer in Columbus. "But we didn't keep it very long, we wasn't able to keep it up," Walter says. The Ivys went back to their horses and mules for transportation. "We didn't have to pay off one of them," Walter jokes.

Waverly was in transition between the modern and the traditional. When young Honeybee Hendrix broke his arm cranking a Model-T Ford, it was healed by old Laura Mathews, a folk medicine practitioner or "granny woman." Laura mixed up a batch of herbs and earth into a sort of cast and prescribed Honeybee to keep it on a certain number of weeks. The first time she did this, it began to itch so badly that he took it off. The second time, he kept it on, and his arm was healed.

The Depression came towards the end of this period and, while it hit the area pretty hard, the Waverly farmers were not in as bad a position as many people. Beatrus Mathews, grandson of Clem Mathews, Sr. and Laura Mathews, explained the situation in these words: "You could make a lot of corn and raise your own meat in them days, and just sort of live, but you just didn't have any money to buy any clothes or nothing with, that's the thing."

Sharecropping eventually superceded renting as a farm arrangement at Waverly in the years following 1930. The renters, for the most part, moved from Waverly, although most did not move very far. Douglas Ivy acquired his own land just up the road from the mansion on what was once the Henderson Lee place and continued raising cotton and cattle. Walter and Sally moved close-by. In general, those who lived through the independent renting period do not regret the experience.

Summary

From 1913 until 1931, the Plantation was run by the Banks family, absentee landlords. The Banks' did not come often to the Plantation, preferring to stay at their home in Columbus. The independent renters went about their business, paying their 500 lb bale of cotton per 15 ac plot.

The renters received a "furnish" from a local West Point store complex, Chandler-Walker Mercantile. Chandler-Walker extended credit for the farmers to make their crop, furnishing seeds, fertilizer, pesticide, household goods, animal feed, and staple groceries. The farmer later "settled" when the cotton crop was harvested. Mules were the preferred farm animals. Many items of machinery were needed to produce cotton, but manual cultivation ("chopping") and picking were also necessary.

During this period, a few new houses were put up for tenants in Waverly, and others improved. Some new families moved in, and farming was going well. Former tenants describe some of their ways of life: what they did for winter work when the crops were in, such as working at brick factories or sawmills, and burning charcoal; how they kept their vegetables over the winter.

The area was in a state of transition in this period. Automobiles were becoming prevalent. Some new types of farm machinery were being adopted. But still many of the old, difficult ways of life persisted, involving hard work. Nevertheless, few tenants regret having lived through this period.

CHAPTER 12. SHARECROPPING AND SAWMILLING (1930-1950s)

by Betty L. Bolanus

Introduction

Beginning in the early 1930s, the southern Waverly area near the mansion and including the recreation area began to change in inhabitants and industry. Gradually, a number of white families moved there, first and foremost the Adair family who helped look after the mansion, manage the farm, and direct timbering operations on the Banks land. Farm arrangements changed from renting to sharecropping by 1945, and most of the farmers worked at the sawmill part-time as well. A small but congenial white community grew up, living peacefully with the black families remaining in Waverly.

"Doc" Adair and his wife moved to Waverly in 1931 from nearby northwestern Alabama. Doc took on the job of running the ferry and Mrs. Adair was the caretaker of the mansion, taking over Ida Turner's former job. Their daughter, Milly, and her husband Albert Eugene ("Shorty") Decker, a carpenter, also moved to Waverly. Within the next few years, three other grown Adair children, John Onus, Robert, and Hershel moved to Waverly. Soon, Mrs. Adair's sister and her husband, Tom Collins, also moved to Waverly. Figuring children in, by 1940 the number of Adairs and close relations in the Waverly area reached about 20, well over half of the community's population.

John Onus and Robert Adair began timbering in the area and, around 1940, began operating a "ground hog" sawmill, a small sawmill run with a tractor engine, able to be moved from one place to another as timber cutting dictated. There were six "seats" or places to set up the mill, in Waverly. John Onus also managed the farm, making sharecropping arrangements with the various farmers. "Sharecropping" meant that Adair owned the equipment necessary for farming--machinery, horses, mules, and later, tractors. The sharecroppers used Adair's equipment and were also usually provided with half the fertilizer they needed. Half the crop was paid to Adair, out of which came the Banks' cut. The farmer got the other half. This arrangement was referred to as "working halves" or "farming on halves."

Most men who farmed and sawmilled for the Adairs in Waverly considered themselves primarily farmers. Sawmilling was done in one's spare time between farming chores and full time when the crop was laid by or in the winter months. "We was all just poor farmers, each had to help the other one," one former resident of Waverly, Luther Barham says. He describes how he managed both jobs: "I get up and get on my tractor, go plow, couple of hours every morning. . . . come time to start the mill, . . . I got up there. And, when the mill stopped, I get on my tractor and plowed all night . . . It's a long day, wasn't too hard, but it was a long day."

Like the black families in the area, the white families in Waverly were poor but managed to live on what they had. Willard and Willadean Collins, who lived in Waverly in 1940-1941, tell about one bad year when they only had 90¢ left after "settling up" their crop with their creditors. By raising large gardens and canning the produce, and raising their own hogs

and cattle for meat, the Waverly families ate well in the country manner. Most have good memories of living there. As Marie Blankenship, whose husband Albert (nicknamed "Buster" or "Pop") farmed and sawmilled in Waverly, says, "I liked to live there. It was a pretty place."

Since the Waverly area did not receive electrical service until almost 1950, the old ways of life remained, for the most part, static. Moreover, many aspects of the lives of the white families in Waverly differed little from those of the black families. A number of traditional practices, such as butchering hogs, making soap, and cooking hominy, were carried on from the earliest days at Waverly. We provide these in the context of this chapter on the later days of Waverly only because the most complete descriptions of these processes were collected from the people living there then.

The Waverly population in this period shifted rapidly. Sharecroppers tend to be less stable residents than renters, since they do not own their own equipment and find it easy to pack up and leave if the grass begins to look greener elsewhere. As Willadean Collins puts it, "A rolling stone never gathered no moss, and they didn't gather any."²¹ They commonly moved from one house to another on the same farm as others vacated. Most of the older houses in Waverly were beginning to fall into bad repair by the late 1940s and were, in the estimation of their occupants, little more than shacks. Albert Blankenship says of one of these houses: "It didn't leak, that's about all I could say about it. It wasn't much of a house." Some effort was made to improve the houses, but as Morris McDill, a former Waverly sharecropper, says, "You could throw a dog through the cracks." Most families managed to make their homes liveable and cheerful for the duration they stayed in them.

Several new houses were built for sharecroppers in the 1930s (Figure 12.1). One was located south of the old post office building. This was a "double house" (#11) with a stack (central) chimney between the two rooms, and two shed room additions to the back (J.O. Adair). A small shotgun-type house (built one room behind another) was built in a pine thicket near the old Laura and Clem Mathews log housesite (#19), which had been torn down.

The Banks built a small cottage (#39) for Doc Adair and his wife, across from the mansion. The lumber for this house was supposedly shipped in by railroad boxcar. Robert Adair thinks this lumber cost 90¢ a thousand feet. Doc rove shingles for the roof of the house (J.R. Decker).²² When John Onus and his wife Dezzie first moved to Waverly, they lived in the old Brooks store, which had been vacated by the Hays. Dezzie Adair says, "I could've cried my eyes out. That house was nasty and cold." Within a few years, the Adairs had a new house built on the site. (The old store building was torn down for scrap lumber.) Their new house had four rooms. Between the south front and back rooms was a stack chimney, and between the front and back north rooms was a stove flue. The back north room was used as the kitchen. The house was well-sealed and covered with siding. In other words, the house was several cuts above the normal sharecropper's "shack." It was referred to by the family and neighbors as "the new farmhouse."

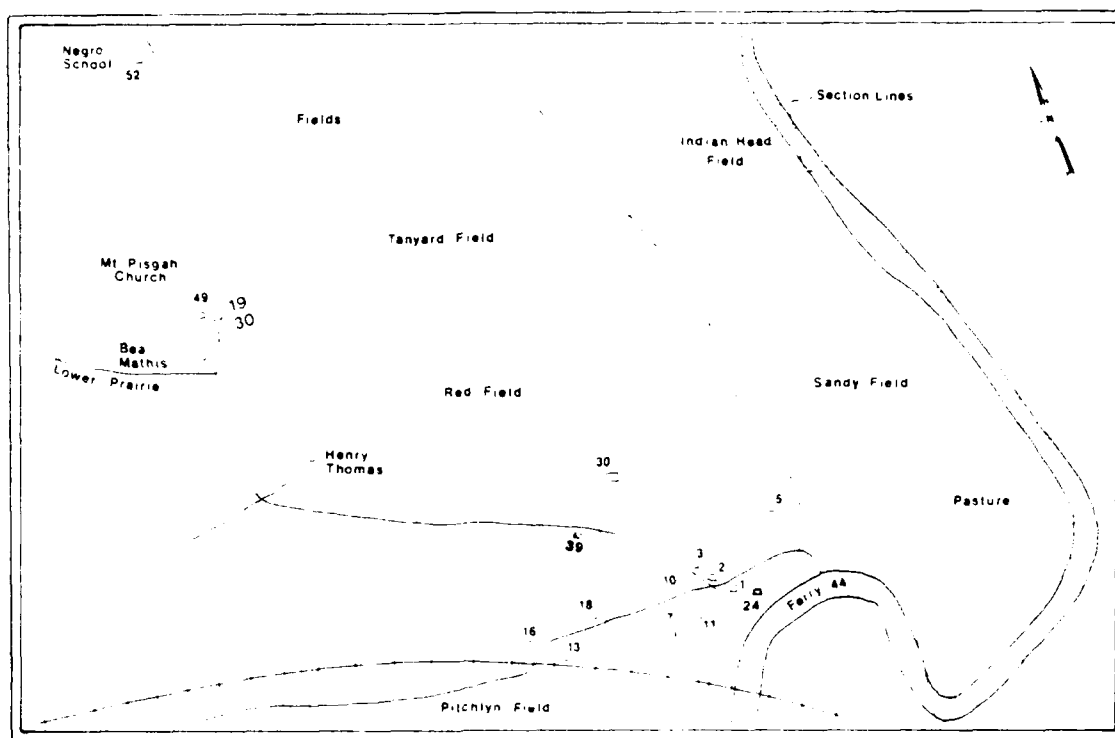


Figure 12.1.--Location of Houses in the 1930s.

A number of black families continued to live in the area for several years. Aaron Mathews and his family moved out of their house (#3) in 1941. Ellen Mathews, by that time a widow, lived in her house (#5A) until approximately this date. Abe and Ida Turner lived in their home (#24) until nearly 1950. Another black couple, the Porters, lived in one of the newer homes. One of Aaron Mathew's daughters, Easter, married Houston Smith who sharecropped and tended the ferry a while. They lived in the new shotgun house for a few years. The Ivy families and other tenants lived in the Bottoms until the early 1940s. Roosevelt and Gertrude Thomas lived for a short while in the small house (#2) across from the "post office" building, and later moved nearby to the Burt place, eventually settling on land they had purchased from the Hopkins' estate (the site of the old Hopkins house plus 10 or 12 ac around it).

Most of the white families moved onto the place in the 1940s. Willadean Collins, who moved into the Aaron Mathews house (#3) with her husband Willard the day after Aaron and his family moved out, remembers living in the house when World War II broke out. "I was sittin' there that Sunday mornin' listenin' to it [the radio] and he [Mr. Collins] was down at his Mom and Dad's fiddlin' around. [pause] And they just bombed Pearl Harbor." She remembers rationing sugar after the war had begun: "We had about 10 or 20 lb, I forget how much. And we got scared that they was gonna come and get it and we took it down to that old house [22CL568] and hid it under the house. There was a hole in it."28

Shopping

In the sharecropping period, the families bought most of their goods in West Point or Columbus, since all the stores in the immediate Waverly area had ceased to run. Up the road from the railroad tracks there was one small store which carried small household items like coal oil, vinegar, tobacco, snuff, and sewing thread. The store was run by Percy and Melvinia Halbert, a black farmer and his wife. If the Halberts were out in the field when a customer arrived, the customer beat on a sweep (plow point) to attract their attention. Luther Barham says the Halbert's store was "no bigger than a pocket handkerchief." One of the Mathews brothers who owned the gin several miles from Waverly ran a grocery store. "You could get just about anything there," Dezzie Adair remembers.

In addition, a "rolling" store came through the area once a week. The rolling store truck carried a complete line of groceries.²³ Jean Barham remembers them having "the things you need to cook in the kitchen with . . . Meal, flour, sugar, coffee, a real handy thing, right at your door." Luther Barham remembers one drawback to this particular rolling store:

"The man chewed tobacco and the roads was dusty. And he'd spit right down by the side of his clutch in his truck, and he'd have a cake of mud that thick [indicates several inches], of mud and tobacco juice. I remember hearin' Jean say she couldn't hardly eat what come out of the truck because under the seat look so filthy. But he loved that tobacco."

For many sharecroppers, the rolling store was particularly convenient since they did not own cars. Rides to town were often hitched on logging wagons or trucks. Hershel Adair, who drove the white children to school in West Point during the week, made an expedition to town every Saturday morning. For ten cents apiece, he would carry as many people as the bus would hold to town and back, allowing them time to do their business there.

Farming

The Waverly sharecroppers did not get a "furnish" like the earlier independent renters, although sharecroppers sometimes did find it necessary to borrow money to buy what they needed to make a crop. The wages that the farmers at Waverly earned sawmilling part-time helped make ends meet until the crop was harvested. Work at Waverly's ground-hog saw mill was more regular than the earlier renter's winter work. In addition, technological advances, especially tractors, helped make farming easier and provide more time for work at the saw mill.

Sharecroppers farmed anywhere from 8-75 ac in Waverly, depending on their circumstances. Although he only planted eight acres in cotton, Luther Barham's cotton crop yielded a bale or better per acre. Barham's secret was heavy fertilization. "Fertilizer's the cheapest cotton you can grow," he says. Mr. and Mrs. Barham had only two children. Albert ("Pop") Blankenship, and his wife, on the other hand had eight children at home when they lived in Waverly, many old enough to help in the fields. Blankenship, then, could handle a much larger crop.

The sharecroppers often co-operated with each other to get their farming work done. Blankenship, for instance, would poison Barham's crop for him while he was doing his own. They hired the same group of day labor to chop and pick cotton, when they needed them. This group of choppers and pickers lived north of Waverly proper and consisted mostly of the Mitchells and Smiths, two black families. Luther Barham tells an amusing story about the time "Aunt" Essie Mitchell lost her glasses while picking cotton for him:

"I remember one time Ol' Peter Mitchell's wife, oh, was pickin' cotton for me up at the Bottoms and, she picked on 'til time to weigh up. When she come to weigh up she wanted to look at the scales, you know, and she'd lost her glasses in the field, and never missed 'em until we went to weigh up the cotton [laughs] . . . Well, you see, we used an extra long pick sack, used eight and nine foot sacks. When they [her glasses] dropped off, she just dropped that sack over them, full of cotton, or partly full, and ground it up in that dirt there."

The Mathews' gin ran until the late 1950s. The Mathews would still come pick up the cotton for the farmer's convenience. Mr. and Mrs. Blankenship describe laying out the cotton for the pick up:

- (Mrs.): "You could leave things in the field then, and it wouldn't be bothered, . . . it'd be picked up for you . . ."
- (Mr.): "I've had from one to two bales of cotton right there, just as you turn off the road over at the big house [mansion], in a pile . . . Pile it out there on the ground on a big ol' tent thing I had, and then cover it up with it."
- (Mrs.): "I've taken quilts out lots of times . . . Put [the cotton] down on them quilts."

Sawmilling had its own protocol. The only full-time skilled laborer on the mill was Homer Wallace, the sawyer. Wallace had worked for a number of years on sawmills all around northern Mississippi and Alabama, and as far north as Tennessee and Kentucky. (He was, however, no stranger to farming, either, and helped his wife and children make a small crop every year at Waverly.) About sawmilling, Wallace says, "You have to have five [men working] if you want to do anything." The Adair's mill had, besides Wallace, five other workers: one log turner, one log setter, one edger, and two men to "tote" or carry away the cut slabs. Albert Blankenship explains:

"Just . . . me and another [man] handled all that heavy lumber back at that age, you see. Barham, he run the edger, Mr. Wallace he did the sawin'. And me and this nigger were back here tailing that mill, you know. The nigger would carry the strips and slabs, and I handled the lumber."24

In addition to sharecropping and sawmilling, Luther Barham found time to do some blacksmithing. Across from his house, Barham operated a very small portable forge, making rubber-tire wagons and smaller items to sell to fellow farmers. Most of the other farmers were handy with carpentry tasks, as well. Albert Blankenship, for instance, took apart some of the houses in the Bottoms for scrap lumber and built three rooms on the side of the small shot-gun house in the pine thicket, where his family was living at the time.

Wives helped their husbands with the farming chores, tended the children, and kept the garden. Mrs. Blankenship discusses a typical day for herself as a Waverly farm wife:

"Yeah, I'd get up at daylight, and get them [ready], they was leavin' before daylight. Bus and them would leave on wagons, tractors, or whatever they was going to use that day. I'd get my work all done, my cleanin' up, my dinner cooked, and I'd go to the fields, oh, long before dinner time. I'd work a while before dinner . . . I'd put dinner in boilers and buckets--just anything I could put it in . . . I'd take a jug of milk, water, dinner . . . I did my own housework, washin', and ironin', cookin' and my house--when I went to sleep, my house was clean. I'd just do it by snatches."

After dinner, Mrs. Blankenship would stay out in the fields helping the men until supper time. The older black women helped the young white women sometimes with the children and offered advice. Abilee Wallace recalls Ida Turner helping her with her five children. When Willadean Collins told "Aunt" Ida she was pregnant, she was advised by the wise older woman not eat any more black pepper. Mrs. Collins says, "I never heard that since."²⁵

Gardening

In their house gardens, the Waverly families grew just about every kind of vegetable favored in the area: okra, peas, beans, tomatoes, cabbage, a variety of greens, peppers (both hot and sweet), potatoes, turnips, beets, cucumbers. Some, like the Wallaces and Blankenships, believed in planting by sign. They used a "birthday almanac" (a yearly commercial almanac which uses zodiac signs as symbols for phases of the moon) to judge when to plant certain vegetables. Stick (or pole) beans, for instance, must not be planted "when the woman is holding the blossom up" (i.e. in Virgo). Belief in planting by sign is strengthened by stories telling what happened when the signs were ignored. Homer Wallace tells of the time he did not plant potatoes "on the full moon" (that is, at the time when the moon will be full):

"I lived right over there by Luther Barham in Waverly, and me and him planted a patch of Irish potatoes on Saturday--that was the only time we had--planted 'em in a good rich place--oh, we were gonna make some 'taters. Got 'em planted, he went down and looked in his almanack and he says, 'We won't make no 'taters out of that.' [I asked] 'Why?'. He said, 'It's on the new of the moon.' There wasn't the first 'tater. When those vines died down, I pulled 'em up, and there wasn't anything."²⁶

The women would get together and can their produce. Mrs. Blankenship remembers the neighbor women "putting up" their vegetables:

[We] would shell peas--I mean beans, butter beans by the three tubs full. And can them the next day. We had three cookers going at once . . . We did most of the work at my house . . . Ooh, we'd shell peas and beans at night . . . We'd set up there 'till 9 and 10 o'clock at night shellin' peas and butter beans out there in the front yard . . . Now we canned them . . . in this ol' open kettle style . . . If Bus [Mr. Blankenship] and Robert [Adair] went to town and found, at the hardware, some old zinc--we called them canners.

They was . . . just shaped to go over two eyes [of the wood-burning stove]. And we could get . . . seven or eight half-gallon jars in there, or we could get so many quarts or so many pounds . . . Boy, we canned--Oo-oo!"

The sharecroppers did not have as many truck patches in these days as the independent renters did earlier. Few grew sorghum for their own molasses, although the practice was common for white farmers in the area at an earlier time. (Albert Blankenship tells about the time he got a bit tipsy as a child on sorghum beer made from fermented molasses and ended up dumping a jug of fresh molasses over his head, to his mother's dismay.) Watermelons were still grown extensively for the family's use and for selling. Willadean Collins once kept a watermelon stand in her yard to sell to people coming over from Columbus on the ferry for Sunday picnics. Willard Collins remembers growing watermelons so thick "you could walk all over the patch on a good-size watermelon, from 40 to 75 pounds." John Onus Adair's watermelons are still legendary in the area. "Now if you could get your watermelons from Onus, you'd get a watermelon that's worth it," Albert Blankenship said.

The sharecroppers would, of course, butcher their own hogs every fall. Mrs. Blankenship describes the process in these words:

"You feed and fatten your hog. When cold enough to kill [i.e., in late fall]--kill it. . . . You have to scald it with real hot water to take off the hair. Then hang it to cut the stomach to get the guts out. . . . Let it cool--cut it up. Place in a place overnight--then salt it down in a box--a layer of salt and a layer of meat. Cut in pieces--hams, shoulders, and middlings (this is the sides that has the ribs attached)--and back bones. Take the head and feet and make souse meat. You have to boil that so as to come off bone and season up like sausage. It's delicious. Of course, you trim your fat off these cuts and also trim off some for sausage."

Mrs. Dezzie Adair further explains what to do with certain cuts and how to preserve them. Her recipe for "souse meat", which she calls "pressed meat" and is also called, by some "head cheese" follows: "Just clean the head real good, boil it real tender, just mash it up real fine, and put pepper, egg and salt and a tiny bit of vinegar in it, and press it in a pan, and it stays as hard as cheese." Dezzie pickled the feet: "Clean 'em real good, and boil 'em tender, and pickle 'em, you know, put them in vinegar." The process for making and preserving sausage was:

"You just trim off what you want, off the middling, and a little bit off the hind, and a little bit of all of it, you know, a little bit of strays, grind it up, and put salt and sage and pepper--Yes, you make enough to do you a year. There's a lot about the hog you call scraps, and you can grind it up for sausage. . . . "You could can it. Fry it like you were going to eat it, put lard in it, turn the jar on its head, you know how a jar seals, let it seal . . . Way back when I was a girl, it stayed cold enough . . . you could shuck corn, big ears of corn, and wash the shuck real good, and tie the shuck up at the top and roll that little sausage round, and pack 'em in that shuck, and tie the other end, and hung 'em up. And, now, that's good."

Another favorite by-product of hog-butchering was deep fried pigskin or "cracklin's." Dezzie Adair explains:

"You cook the lard out of it [the small fatty scraps used to make lard], leave that all in the washpot, strain it, and those crispy little pieces of meat, you know, . . . strain the grease out, and then you make the cracklin's. That makes the best bread, you know, . . . make cracklin' bread from that. That's real good. You can buy cracklin's [today in the grocery store], but they're not as good as we used to make."

Honeybee Hendrix says that if you have never tasted cracklin' bread, corn bread with cracklin's baked into it, "you've missed something good."²⁷

The black families butchered their hogs and did the same sorts of things with the various cuts that the whites did. One cut that the blacks enjoyed more than the whites, however, were the chitterlings ("chittlin's"), the hog's small intestines. If a white family needed help with their butchering, they could often get some black farmers over to help them in return for the hog chittlin's. "White folks couldn't wait to fry them a mess of ribs, and sausage, and stuff," says Mrs. Adair. "Well, the first thing they [blacks] cook is some chittlin's, they boil them up."

Lard was rendered out of the fatty scraps of the hog. A large amount of lard was used to fry foods. Lard was also used to make soap for cleaning clothes and housecleaning. Most of the Waverly housewives made their own soap, especially in the earlier days (pre-1945). They often got together to make a large batch. Mrs. Blankenship describes this process:

"Lye soap. We'd cut it, and cut it out in bars. Save our meat scraps . . . We'd make it in that old wash pot. You'd first, you see, you'd put these winter ashes out of your fireplace, and stuff them in a barrel. And leave it there 'till you got ready to make soap and then you'd pour water in there and that lye would run through. Then they'd put that in the pot, . . . and meat scraps that was cooked up. And it would make soap . . . You talk about white clothes!"²⁸

Washing was done in the large all-purpose iron wash pot. One informant explains,

"You had that washin' pot, you put that washin' pot on them bricks, on that fire, out doors . . . wash those clothes, and if they ain't clean, they go back in there. They gotta be white and clean before they go on that line."

Another use for the wash-pot and the home-made lye was to make hominy. Dezzie Adair tells how to make it:

"You want to start from the ears of corn. Take about two quarts of shelled corn, put it in a large pot--about three gallons, you know, corn swells, and take about two quarts of ashes, put it in a sack, and drop it in the hominy--the corn that is--and boil it till it turns yellow, and the husks are smooth. Pour it off and drain it out, that water. And take your hands and just wash it, wash it and

pick those husks out, and then you wash it in about two or three waters. Then put it in a clean pot, and if you want to cook it down, alright . . . What I really like to do is season it with a ham, . . . and it is really good."

Hominy was a favorite food among both the white and black families. It would be made all year round, whenever desired, as long as the corn held out.

Many women in Waverly made clothing for their families. A common practice was to make slips and other undergarments out of old flour sacks. The sacks would be washed and washed until the writing came off and they were perfectly white and soft. If flour sacks were lacking (flour often came in barrels), sacks and cheap "yellow domestic" cloth could be purchased at a very low price from the store. The well-to-do scoffed at children whose mothers made them flour sack undergarments. Mrs. Blankenship tells the story of one girl from her school days who always thought herself better than other children.

"Now, I went to school with a girl. And she thought she was an awful high above me. So after me and Bus (Mr. Blankenship) married, his sister come home one day and said, "Marie, I seen Miss so-and-so today with a thin dress on. And she said, "I seen 'Self-risin' Flour' under it!"

Commercial fertilizer sacks were purchased and used for sheets, pillowcases, and quilt linings.

Men generally wore overalls and shirts to work and women always wore dresses. Mr. Blankenship jokes about the times his wife had to wear overalls to help in the fields to avoid the sharp cockleburrs:

(Mr.): "I'd be gathering corn, you know, and the cockleburrs was so bad, and I'd make her put on overalls, she'd have to haul around in the corn."

(Mrs.): "Boy, I didn't keep 'em on long! I didn't want (the neighbors) to see me with overalls on, I'd never hear the end of it!"

For poorer families with many children, Sunday clothes were hard to come by. Mrs. Blankenship tells of a time she had to lend one of her sons her Sunday shoes to go to church in, since his had worn out and the family could not at the time afford another pair for him.

There was no white church closer than Columbus for the families of Waverly. Most went to church, when they could afford the time, in West Point. The Adair family was a member of the Church of Christ in West Point. Most of the other families were Baptists or Methodist-Evangelists. When they could not get to church, sometimes families would meet at Luther Barham's house for prayer meetings and Sunday School. For a short time during the 1940s, a travelling Baptist preacher settled in Waverly and got permission from the Banks to preach and lead prayers from the steps of the mansion. His name was either Bullton or Bullard (Barham, R. Adair). "Brother" Bullard's plan was to start up a church in Waverly, but the plans fell through. The Blankenship family eventually made arrangements for themselves to walk the railroad trestle and meet friends at the other side in order to attend a church in Columbus.

Families associated with each other informally. A favorite evening entertainment was playing the card game of "Rook." The Wallaces remember that they used to get together with their neighbors "to sit and play Rook by lamplight, . . . ain't no harm playing Rook." They also remember with amusement that Doc Adair "was the world's worse" Rook player. During holidays, families would visit informally, also. One year, Luther Barham put up a Christmas tree for the whole community.

Children generally found Waverly a good place to live, especially the boys who were more likely to roam all over the woods and fields, exploring. At home, they played marbles and mumblely-peg, and sometimes built homemade wagons out of scraps of wood to ride down hills.²⁹ The backyard of the mansion was a favorite play place, although concerned mothers would not allow their children to play there because as Jean Barham says, "It was too snakey." Many children loved the river. Homer Wallace says his boys and the Decker boys, John Robert and Gene, would stay in the river "from morning till night" swimming and playing on logs. Luther Barham tells the story of the idle play of two Waverly boys:

"Them little boys of Wallace's, . . . --the oldest one was sort of a plowboy, Kelly [Wallace] wasn't big enough to plow. They came through there [the Barham's yard] one day and they had them a broad iron a piece, and you talkin' about bustin' bottles, they had the ground covered. And I got out there and I says, 'Boys,' I says, 'you all ever figurin' on comin' back across there anymore?' They say yes. I says, 'What you gonna do with them bare feet when you walk through all that glass you busted up there?' [laughs] I says, 'What kind of feet you gonna have?' They realized what they was doin' you know, and they quit bustin', . . . but there was a bunch of ol' Garrett snuff bottles over there and they was a-havin' them a time in them bottles."³⁰

Barham uses the term "plow boy" to indicate the age of the Wallace boys. Indeed, as soon as a boy was old enough, he was taught to help out with the farming chores. Armand McDill remembers picking cotton at five or six years of age with his family, who lived in Waverly in the early 1950s.

Most of the men at Waverly in this period were avid hunters and fishermen. One year, Mrs. Wallace remembers, Homer caught so many catfish that they used the money they got selling the fish to hire hands for chopping their cotton. The most avid hunter of them all was John Onus Adair. Albert Blankenship remarks that Onus Adair could work all day and hunt coon all night for days on end. Many families enjoyed eating game. Abilee Wallace tells of making delicious squirrel dumplings. The native game birds, partridges and quails, were also popular. Some people liked raccoon and opossum, also. Deer hunting is a relatively new sport in the area.

In this period, it became a favorite pastime of townspeople to come down to Waverly on Sundays to picnic near the ferry or on the mansion grounds. Milly Decker sometimes showed these tourists around the mansion. By now, the mansion had fallen into rather bad repair, although the Banks had tried to maintain it to some extent, and had it reroofed. Vandalism was inevitable: the abandoned mansion's windows made an irresistible target for

young boys wishing to show their throwing prowess with small rocks. Stories of the fine furniture the mansion held (several informants mentioned especially the pearl-keyed piano that was supposedly there) were spread around, although most of the furniture had been removed by the family long before this time.

The people who lived in Waverly felt to some extent that the mansion belonged to the community. Most of them had been through it many times and could describe it vividly and with pride. After the Snows bought the mansion in the early 1960s, restored it, and opened it to the public, many former residents of Waverly took the tour.

The Waverly community began deteriorating in the late 1950s. Most of the houses were falling into very serious disrepair. Several other houses, including the shotgun in the pine thicket and the Adair's new farmhouse, had burned down. All of the older black people had died or moved away: Abe and Ida Turner, for instance, moved to Chicago and died there on the same day, according to Dezzie Adair and Willadean Collins. The Porters were killed in a car accident in Alabama.

Cotton production in the Waverly area was declining by the late 1950s. Luther Barham attributes this fact to tight government restrictions and the practice of paying land owners not to grow a certain crop.³¹ Most families had moved out of Waverly by the late 1950s. The Waverly ground hog sawmill ceased production in the late 1950s, although timbering continued. The last sharecroppers on the place left in 1959. John Onus Adair and his family, who had built a small but comfortable new house near the location of the burned farmhouse, have continued to live there up to the present day. Honeybee Hendrix moved into Luther Barham's old house and continued living there until 1969, when he tore it down for scrap lumber.

The Waverly ferry was moved to Nashville landing in 1961. A few years earlier, Highway 50 had been finished, with a bridge over the river near Waverly. The Snows were in the process of restoring the mansion and grounds to approximate their former splendor. Meanwhile, the few abandoned sharecropper and renter houses remaining were tumbling down, and the weeds and woods were reclaiming the grounds where those houses that were torn down or burned had stood. The former community of Waverly, for all intents and purposes, had ceased to exist.

Summary

Beginning in the early 1930s and continuing into the 1940s, several white families moved into the Waverly area. Gradually over a period of 13 years (1931-1944), the farming operations at Waverly changed from predominantly black renters to white sharecroppers. The sharecroppers did not own their own work animals and equipment, and farmed "on halves" (for half the crop they raised) with John Onus Adair the plantation manager, who lent his farm machinery. Onus Adair and his brother Robert also timbered and, in the 1940s, began running a small, moveable "groundhog" saw mill, at which most of the farmers worked part-time during slack farming times. Among the farmers and saw mill workers who lived in Waverly with their families over the years 1940-1959 were Luther Barham, Albert Blankenship, Homer Wallace, Willard Collins, and Morris McDill.

The small white community lived side-by-side with the existing black families in the area. Since they were on a similar economic scale, most white families lived in the same basic manner as the black families. They raised most of their own food, put it up themselves for winter, and had no modern conveniences such as washing machines and electric lights. Many of the old ways of life are described by the people: making lye soap, preparing cuts of pork into various regional specialties, planting by sign, and making underclothing out of sacks.

By the 1950s, many of the Waverly homes had been either destroyed or were tumbling down. Cotton farming was becoming less feasible in the area, and most farmers had left Waverly. The mansion was bought by the Snow family just as most of the tenants moved from the community. The restoration of Waverly mansion began; the death of the old Waverly community was almost complete.

CHAPTER 13. THE BELLE SCOTT SITE

by Timothy B. Riordan and Betty J. Belanus

Oral History

Very little specific information on the archaeological sites was collected in the archival research because most of the sites were tenant farmer houses. The essential historical data presented earlier will be repeated in each site description. Most of the historical data on the sites was collected by the oral historian. Unless otherwise indicated, the historical data will be from the oral history.

The building once standing at the crossroads near the large oak tree informants called the office, the post office, the little two-store building, or the Mason's meeting place (Figure 13.1-13.3). One informant called it "that tall thing in the corner." Apparently, the building was used at different times for a commercial building of some sort (post office, business office, and perhaps store); a dwelling house; a Black Masonic Lodge; and, in later years, a corn crib. While the site's original function was commercial, the exact function remains uncertain. Hence, we have designated this site (22CL567) as the Belle Scott Site, after one of the tenants who lived there.

Informants all agree the structure was used as a dwelling, but was not originally built as one. Descriptions of the building are fairly consistent: it was a small, two-story structure with one room stacked above the other. The second story room was reached by an exterior stairway located on the south side of the building. The main entrance on the south side had porches on both the first and second stories. Fireplaces on both floors served as the heat sources. The building was sided over, had glass windows, and gingerbread trim. It sat on brick pillars.

Walter Ivy remembers the older people saying that this building had been "an office or something." In his memory (i.e., from 1900 on), it was not used for an office, a post office, or a store. Emily Evans Shaw, who visited the mansion around 1911, remembers her great Uncle Billy Young talking about a store that used to operate in Waverly: "Now, the old store was there then . . . it was on, you know the road to the ferry, well you go on down that road, maybe half mile, the store was on your left, and it was a two-story building, and it had a stairway on the outside." She thinks this must have been the plantation commissary at one time.

When the building ceased to be used commercially, Captain Billy and Major Val allowed tenants to use it for a dwelling. No one remembers the first occupants of the house, but Honeybee Hendrix says the chimney of this house was blown out by Dave Haney's loaded backstick. The house was occupied, off and on, into the 1930s, Hendrix recalls.

During a short period of time (perhaps five years), sometime between 1905 and 1915, the building was used as a Masonic Lodge by a chapter of local black Masons. The Masons met in the upper story and no one lived in the building at that time. Neither Douglas nor Walter Ivy remember being inside the building when it was the Masonic Lodge. Walter Ivy recalls being

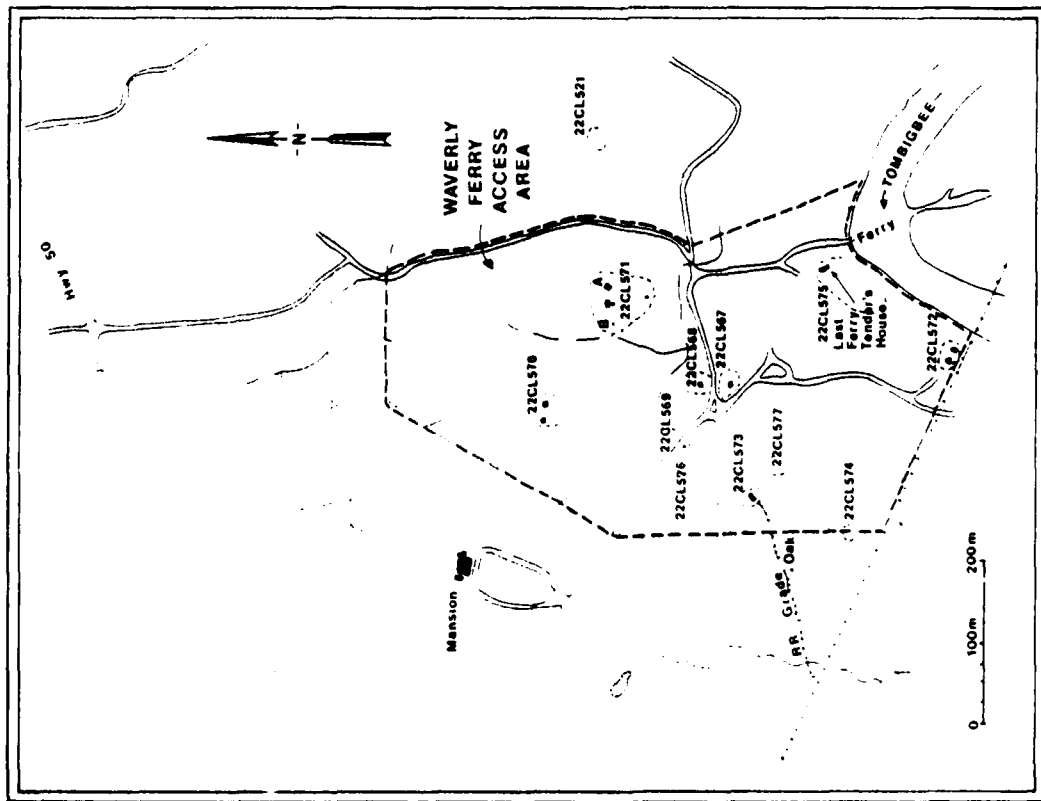


Figure 13.1.--Location of Archaeological Sites.

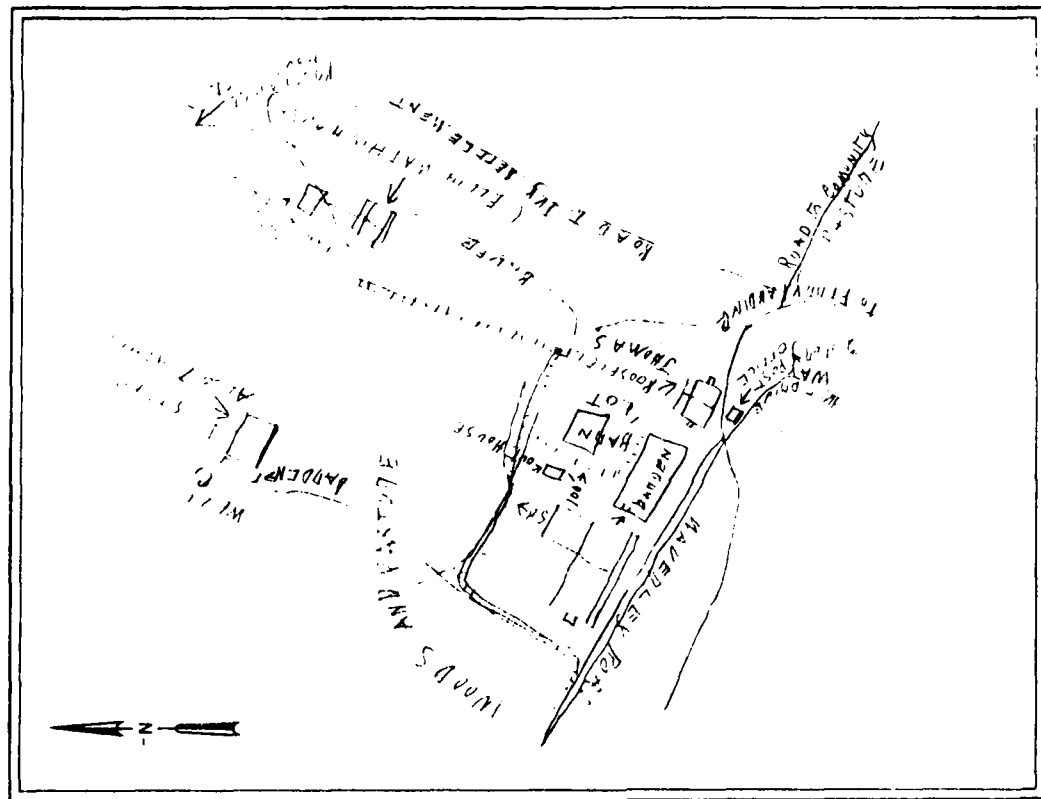


Figure 13.2.--Honeybee Hendrix's Sketch Map

inside the house when it was occupied by one of Clem Mathews' sons and his family. The upstairs room of the house was used as the children's bedroom and the downstairs room as the parents' room, living room and kitchen. No one else remembers specifically who lived in the house and in what years, but an older widow named Belle Scott (D. Ivy, J. Hendrix) and one of Abe and Ida Turner's daughters (D. Ivy) once lived there. No white tenants ever lived in the house.

Walter Ivy recalls that from the upstairs porch he could watch the trains on the railroad, back when the land between the building and the railroad was cleared. Walter and others used this vantage point quite often during times of relaxation.

By the 1930s, the house had fallen into bad repair and was suitable for use only as a corn crib and hay barn. The Adair family tore down the building after it had rotted so badly it was of no further use. Honeybee Hendrix preserved a few of the clapboards of the building for use in patching the ceiling of his house's kitchen at site 22CL569.

In evaluating this building, Walter Ivy called it a "nice-built" house. "Most of the other houses was built out of some log cabins, you know, [or] as rough lumber cabins . . . [The post office] was built out of nice materials." The nice materials included dressed lumber and glass windows, both uncommon in the pre-1900 period. The building was "sealed up" (i.e., had a good interior ceiling and walls) and had "good stairs" (probably closed instead of left open and roughly built). Walter compares the building with the Abe Turner house, which was also built nicely: "both of those was ole' time buildin's but they was built out of nice materials . . . [Abe's house] and that old office and the mansion I imagine were built at the same time, far as I could say." Walter believes that when the office or post office was "in session" that "white people" lived in the Abe Turner house.

The history of this two-story structure is still somewhat of a mystery. Most informants agree it was an uncommon type of building for the area. If Walter Ivy is accurate in his speculations, the office or post office building could have been one of the oldest buildings in the study area.

History

The structure may have been shown on the 1888 railroad map (Figure 13.3), but the road system was different from present roads. Furthermore, while a structure there was labeled as a post office (likely the post office and general store run by H. C. Long about 1877-1897), it appears on the map as a rectangular building north of the ferry road. Archaeologically, we know of two buildings at the crossroads, a probably rectangular one (22CL568) and a square one (22CL567). Informants spoke of the structure at that site (22CL568) as being a long and narrow house (probably a shotgun house) but that description could fit a country general store as well. In order for the 1888 square structure to be the structure at Site 22CL567 the road to the east of the structure would have to shift to the west of it.



Figure 13.3.--The 1888 Railroad Survey Map (Library of Congress).

Evidence of the shifting roads exists. In 1888, four roads were located in this vicinity (Figure 13.3). By 1909, one of these roads, the Burt Driveway, was gone and a new road came in from the west (Figure 5.1). The other two roads appear to be the same. Today the only difference would appear to be the road in question. A linear depression occurs on the east side of Site 22CL567 and appears to be an old road bed linking with the ferry road.

Excavation

The site is located on flat ground in the V-shaped area between two dirt roads (Figure 13.4). Beneath the site lies a poorly drained clay. The slightest rain turned the site into a quagmire and seriously hampered excavation. Visible site impacts include a ditch along the ferry road and earth mounds along the southern edge of the site, probably due to road work. These disturbances do not appear to have damaged the site. On the east side of the site is the low, flat area which at first appears to be a gully; however, the slope angles and its breadth suggest its origin as a road, probably the terminus of the Burt driveway.

The original excavation plan required a network of trenches to be followed by area excavations. Excavations were begun on the trenching, only to be stopped by rains from Hurricane Bob. Pools of water covered the site for weeks. The highest portions of the site were directly around the fireplace. As this was the first part to dry out, we began to excavate the structure. We excavated 12 2x2 m units and one 1x1 m unit, and removed a large quantity of brick rubble from these units. All the units were

excavated to the surface of the yellowish red clay. After the rain stopped and the site dried out, we resumed trenching. A total of 161 m of .5 m wide trench were excavated. The average depth of the trenches was 20 cm. Two units were taken down to a depth of one meter for stratigraphic purposes. Later, two stratigraphic trenches were excavated by backhoe on the east and west edges of the site to help drain it and explore the periphery.

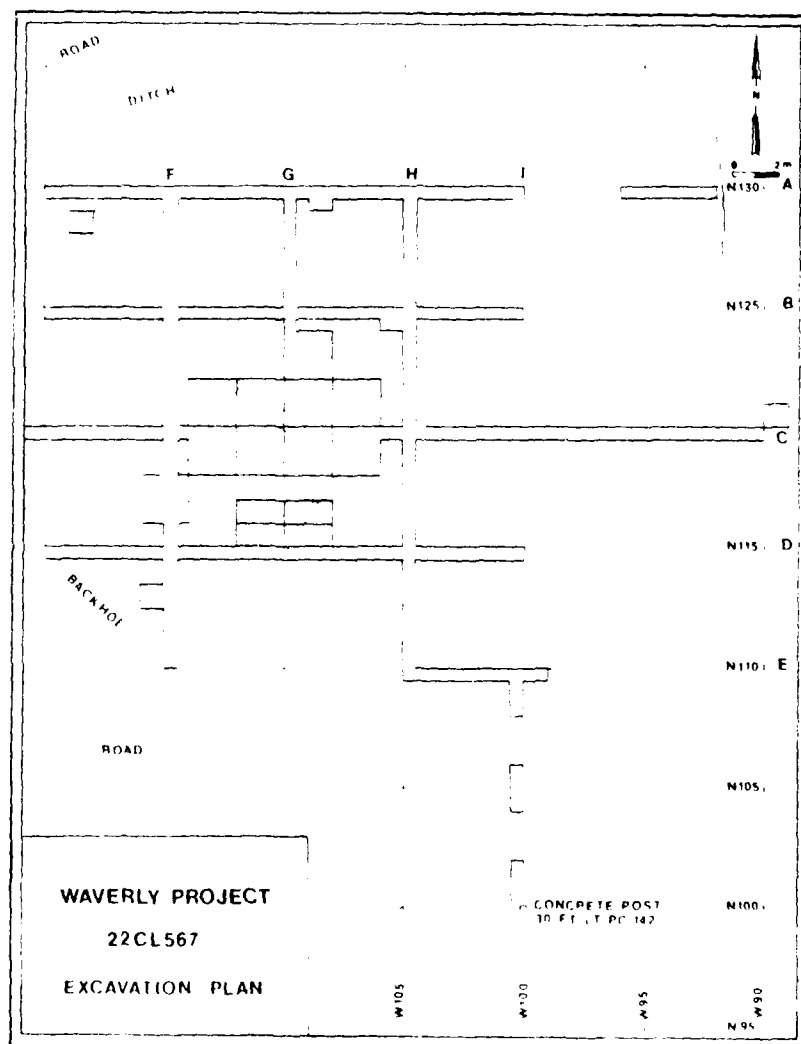


Figure 13.4.--Excavation Plan, 22CL567.

Stratigraphy

Stratigraphy at the site was not complex, but because of the extensive rains, it was often difficult to observe in the field. A thin (1 cm) and spotty humus layer covers the surface; it is concentrated along the edges of the site and only occurs in patches around the structure itself. Below this humus was Stratum 1, a weak red clay loam (2.5YR5/2 dry) (Figure 13.5), averaging 12 cm in thickness. This stratum extended over the entire site and partially covered several of the brick support pillars. Stratum 2, a

AD-A127 617

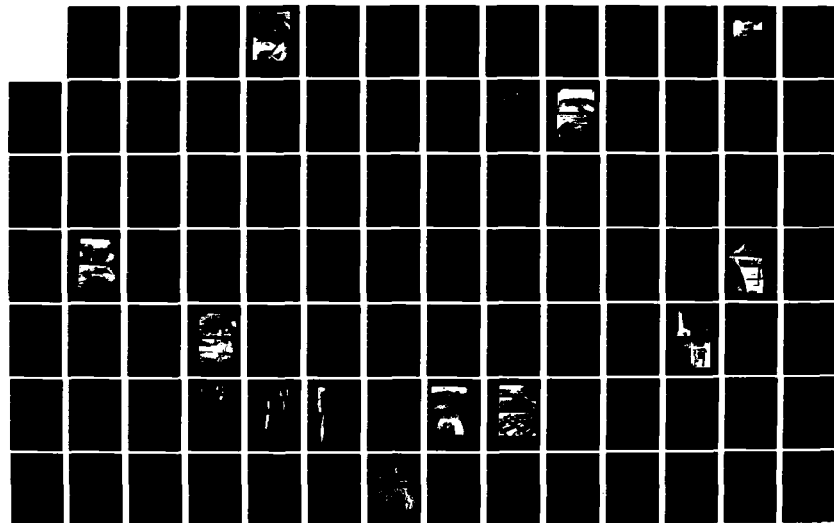
HAVERLY PLANTATION: ETHNOARCHAEOLOGY OF A TENANT
FARMING COMMUNITY(U) RESOURCE ANALYSTS INC BLOOMINGTON
IN W H ADAMS 16 DEC 80

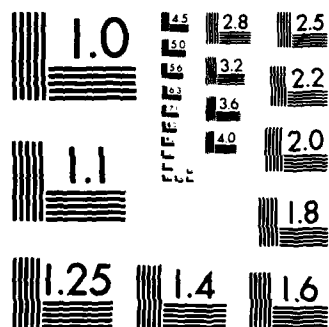
3/6

UNCLASSIFIED

F/G 8/7

NL





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

weak red clay loam (2.5YR4/2 dry), underlay Stratum 1. This stratum appeared to be a mixture of the strata above and below it, with some ash mixed in. It occurs in concentrations (i.e., more than 2 cm) only around the structure. Stratum 3, a yellowish red clay (5YR5/8 dry), occurs below the clay loam. While this stratum varies considerably in thickness, it averages only 8 cm. This stratum was cut into when the support pillars were erected. Directly below this was an impermeable gray clay (2.5YR7/0 dry), Stratum 4, at least 30 cm thick; supports for the structure were cut into this clay.

Stratum 3 was the original surface of the site. The building supports cut through this stratum and rested on gray clay. The red clay was used as fill around the supports. Through time, a living surface accumulated, as represented by Stratum 2. Most of the artifacts found at the site came from this stratum; dating from the first two decades of the 20th century. Few artifacts accumulated before the structure became a domestic site sometime in the 1905-1913 period based on the oral data. Stratum 1 represents the accumulation after abandonment. Artifacts from this stratum date from the 1930 to the present.

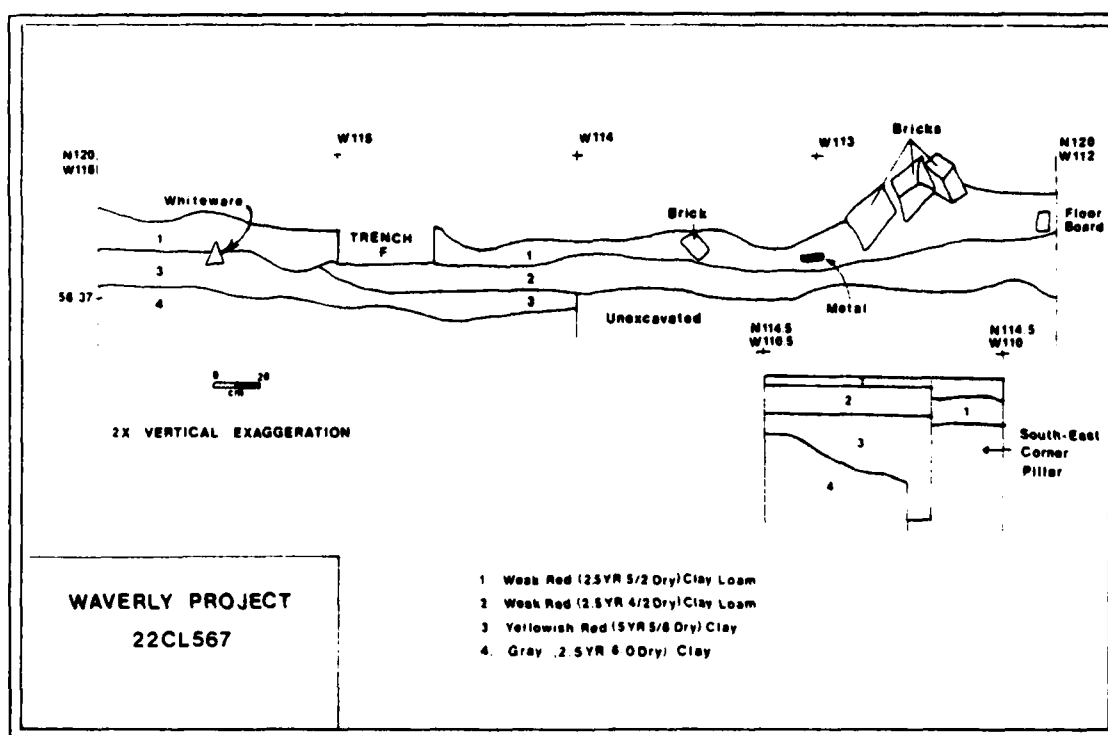


Figure 13.5.--Stratigraphic Section, 22CL567.

The Structure

The building was represented archaeologically by a brick chimney base, six brick support piers, and several wooden structural members (Figures 13.6-13.8). The structure was 5.5 m (18 ft) square with L-shaped piers at

173

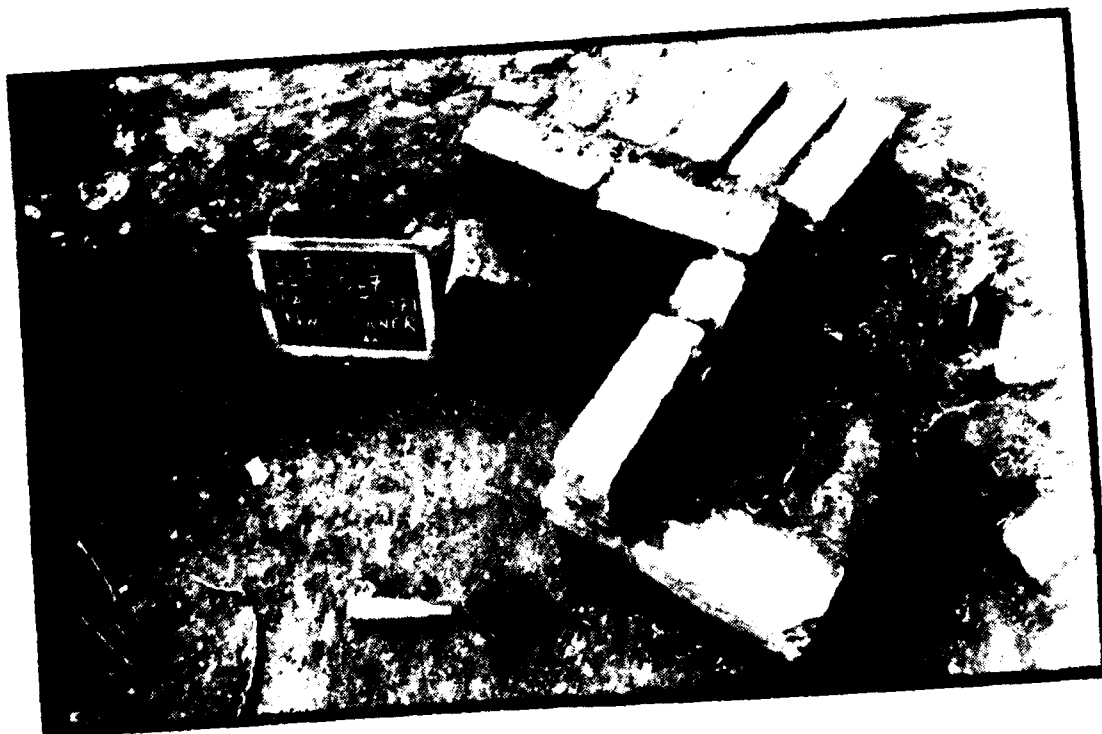


Figure 13.7.--Northwest Corner Pillar, 22CL567.

Figure 13.8.--Northwest Corner Pillar, 22CL567.

The base of the fireplace rests on the gray clay, Stratum 4. Stratum 2 and Stratum 3 appear to have accumulated after the chimney was built. However, the brick skirt that extends into the building rests on top of these two strata. This indicates that the brick skirt was a later addition to the structure or that these strata were removed during chimney construction.

The four L-shaped brick piers at the corners averaged .75 m (2 ft 6 in) along each axis. The southwestern pier was the tallest of these and had eight courses of brick in no apparent bonding pattern. Headers and stretchers were mixed indiscriminately in each course. The lowest course of bricks extended out 4-6 cm to form a skirt around the base of the pier. Here again, the base was resting on the gray clay. The stratigraphy above this is confused with a mixing of Strata 2 and 3. The pier was 84 cm (33 in) high. The remaining three corner piers were the same as the southwestern one, except the bricks in the upper course on the northwestern pier were laid on their side.

The support piers in the west and east walls were rectangular. The one in the east wall had been destroyed; only traces of it remained. A support pier should have been located in the center of the south wall but none was found. The pier in the west wall was 70 cm (28 in) long by 35 cm (14 in) wide with the long axis parallel to the wall. Eight courses of bricks were in this pier and the lower course was set out 4-6 cm to form a skirt around the base of the pier. The bricks were stretchers laid in common bond. The upper course bricks in this pier were laid on edge, like those on the northwestern corner pier. The pier was 82 cm high. Like the other piers, it was set into the gray clay. All of the piers are at roughly the same elevation (+2 cm) except the southeastern corner pier, about 10 cm lower than the others. Each was mortared.

We found nine boards within the structure; seven run northeast-southwest, parallel to the walls. The other two boards ran perpendicular to these. The upper boards were spaced 85 cm (34 in) apart and the lower boards were 1.25 m (50 in) apart.

Builders' trenches were either disturbed or highly irregular at this site. Most of the features showed little evidence of a builders' trench, other than slight indentations in the gray clay substratum.

A dark stain ran along the northwest wall of the structure, about 3-4 cm outside the brick piers. This dripline was 4 cm wide but was not continuous along the wall.

Part of the problem in detecting features at this site was the mixing effect caused by the intermittent accumulation of water. This process, over a 70 year period, has eliminated most traces of non-brick features.

Artifacts

While the brick features clearly defined how the structure was built, the artifacts were not as clear about the dates or function of the structure. The number of artifacts at this site was phenomenally low. It was certainly less than any other domestic site in the locality. The artifacts provided little assistance in dating since most appear to be from the 1920s or 1930s and considering probable time lag of a few years, these would post-date abandonment. Only a few older dateable artifacts and a large number of

non-datable ones are in the sample. The lack of artifacts at the site probably reflects its early commercial function, coupled with the poverty of its occupants. Of course, if the yard were kept especially unlittered and trash carried away from the site we would get the same impression. Further discussion of artifacts from the site is in Appendices 7-10.

Artifact Distribution

In order to determine activity areas and other spatial relationships of artifacts several kinds of artifacts were selected for comparison at each site. In order to examine architectural items, machine cut nails, wire cut nails, window glass, and hardware were plotted. In order to study kitchen refuse we plotted shell, bone, canning jars, and stoneware. In order to see the activities of work and play, tools and toys were plotted. Those items are more often lost than discarded. What we wished to study is variation between items lost, items discarded, and items left in place. Of course in each category individual item locations also reflect other activities, such as children kicking something around the yard, throwing rocks at a bottle, and dogs moving bones, to name a few. We know these exist but cannot deal with them further.

Initially the location of each kind of artifact examined here was placed on a map using color codes for different excavation levels at each site. We have combined these levels into a single one, because no temporal separation of strata were distinguishable. The artifacts from earlier periods appeared near the surface, while later artifacts lay below. Part of the reason for this apparent lack of stratigraphic integrity is the lack of depth; most of the occupation was concentrated within 30 cm of the surface. This vertical movement might also be reflected horizontally.

Intrasite distribution patterns are a useful object of study, so long as we recognize innumerable assumptions regarding how an object initially leaves the cultural system, enters the natural one, and is perhaps later affected once again by the cultural system (Schiffer 1976:11-41). As much as we would like to believe to the contrary, an artifact is almost never in exactly the same position as at the moment it entered the natural system. Gravity, worms, and roots move artifacts. Nevertheless, unless we start plotting distributions within our sites we will never refine our methods or understand the complexities of a site.

Nail distribution at 22CL567 is not significant beyond the observation that nails occur in and immediately around the structure and less frequently away from it (Figure 13.9). There appears to be no important difference for wire cut nails and machine cut nails. This is true in both horizontal and vertical dimensions. The large concentration of nails in the northern part of Trench F is unusual. No explanation of this anomaly has been developed. The possibility of a secondary structure cannot be evaluated.

Window glass fragments occurred in large numbers in and around the structure (Figure 13.10). The number of fragments decreases with distance from the structure but a concentration of window glass fragments was found at the north end of Trench F. This, like the nail distribution, suggests a secondary structure.

Food bone remains at this site were clustered within or around the structure (Figure 13.11). The only other area showing any food bones is at the intersection of Trenches B and F. The evidence is not strong enough to define this as a trash disposal area. Much of the food bone is concentrated around the fireplace. This appears to be a Waverly pattern. At all of the sites, the largest concentration of food bone clusters around the fireplace. The mollusk shells follow the same distribution as food bones but the small sample size makes this speculative.

Stoneware vessel and canning jar distributions were not very informative (Figure 13.12). Sample size was certainly a factor. The limited data suggest a different pattern than for food bone. Few stoneware or canning jar fragments occurred within the structure but rather, showed a wider distribution across the site. The intersection of Trenches B and F contains a relatively higher proportion of these artifacts. This area could be a trash disposal area or be associated with a secondary structure at the site.

Tool distribution, although the sample size is small, indicates a pattern common to all of the Waverly sites (Figure 13.13): files and chains represented a major proportion of the tools recovered. Files were most often found within or around structures, while chains were most often found in areas away from the structures.

Toys occur mostly around the house (Figure 13.13). Two of the seven toys occur in the northern part of Trench F, adding support to the hypothesis of a secondary structure. Small sample size presents a definite problem. However, the toy distributions are similar to many of the other distributions.

Summary

The excavations at the Belle Scott Site raised more questions than they answered. The original function of the building remains unknown, although all evidence supports its construction for a special purpose. It was built before the memory of our oldest informant yet few, if any, of the artifacts are older than 1900. The frequency of wire cut nails (46.2%) would date the construction to the early 1890s (Appendix 7:Figure 18), but this could also result from an earlier structure being repaired at a later date. Window glass seriation places construction after the two houses at 22CL571 but before the house at 22CL569.

The artifacts recovered represent the use of the structure as a domestic building ca. 1910-1930. Ceramic maker's marks (N=3) had a mean range of 1883 to 1927 and glass maker's marks (N=12) had a mean range of 1931-1952 (Appendix 7:Table 64). Artifact seriation for machine-made glass containers, clear glass, amethyst glass, alkaline glazed stoneware, and salt glazed stoneware all place the domestic trash from this site as fitting between that from the Ellen Mathews House (ca. 1880-1940) and the Aaron Mathews House (ca. 1900-1969). Given the above, we suggest that Henry C. Long constructed the building as an office or as a post office ca. 1889 (hence it does not appear on the 1888 railroad map, Figure 13.3) and that it served as the post office until 1897, when it was abandoned for a few years. After a couple of years as a black Masonic Lodge, it had by 1913 become a tenant dwelling, serving as such until about 1930. From 1930 to 1950 it served as a storage shed, accumulated some roadside trash, and was finally torn down for scrap.

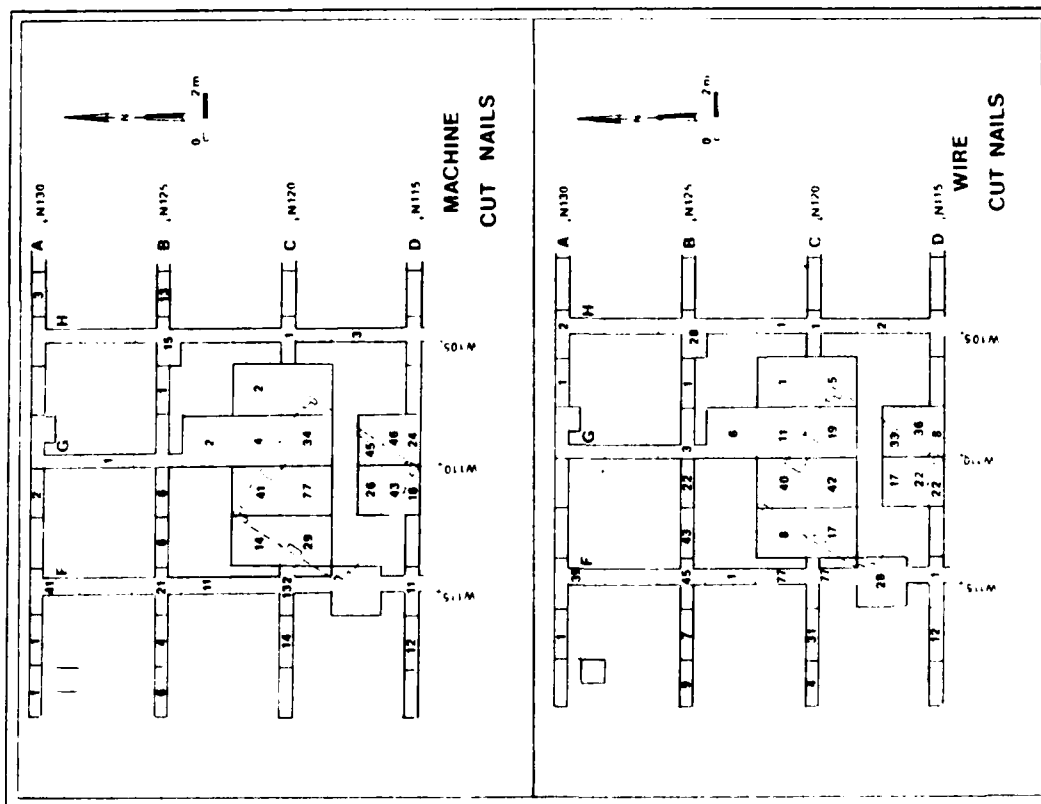


Figure 13.9.--Nail Distribution, 22CL567.

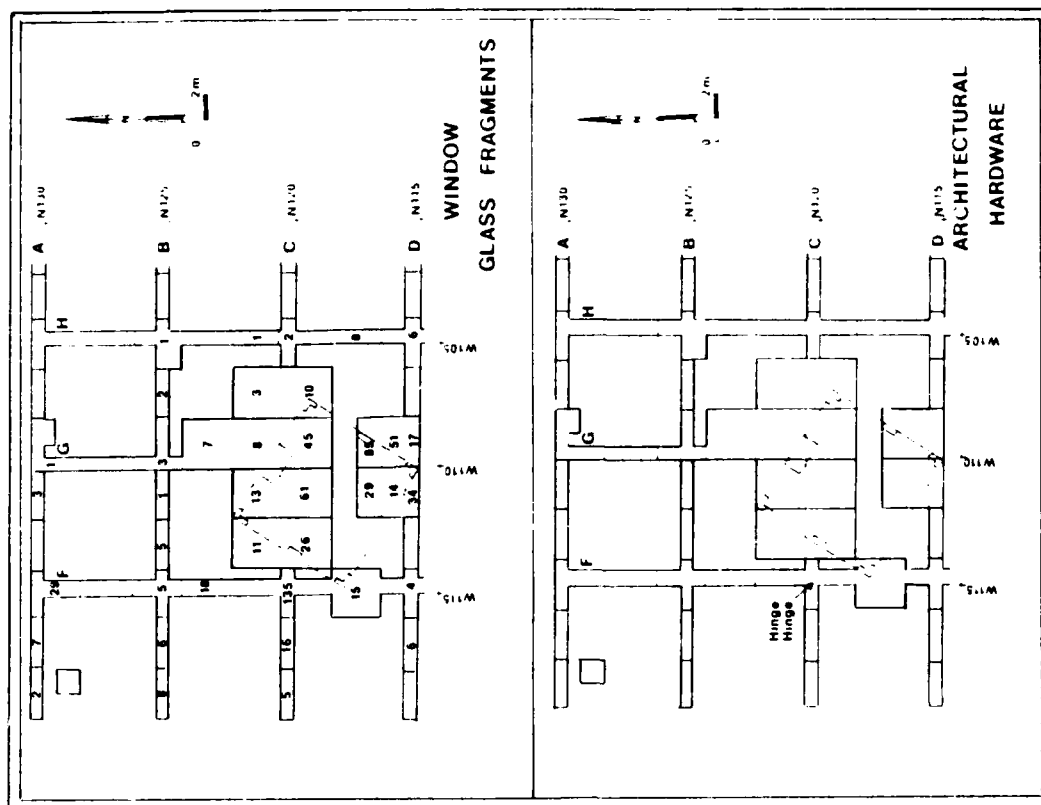


Figure 13.10.--Window Glass and Architectural Hardware Distribution, 22CL567

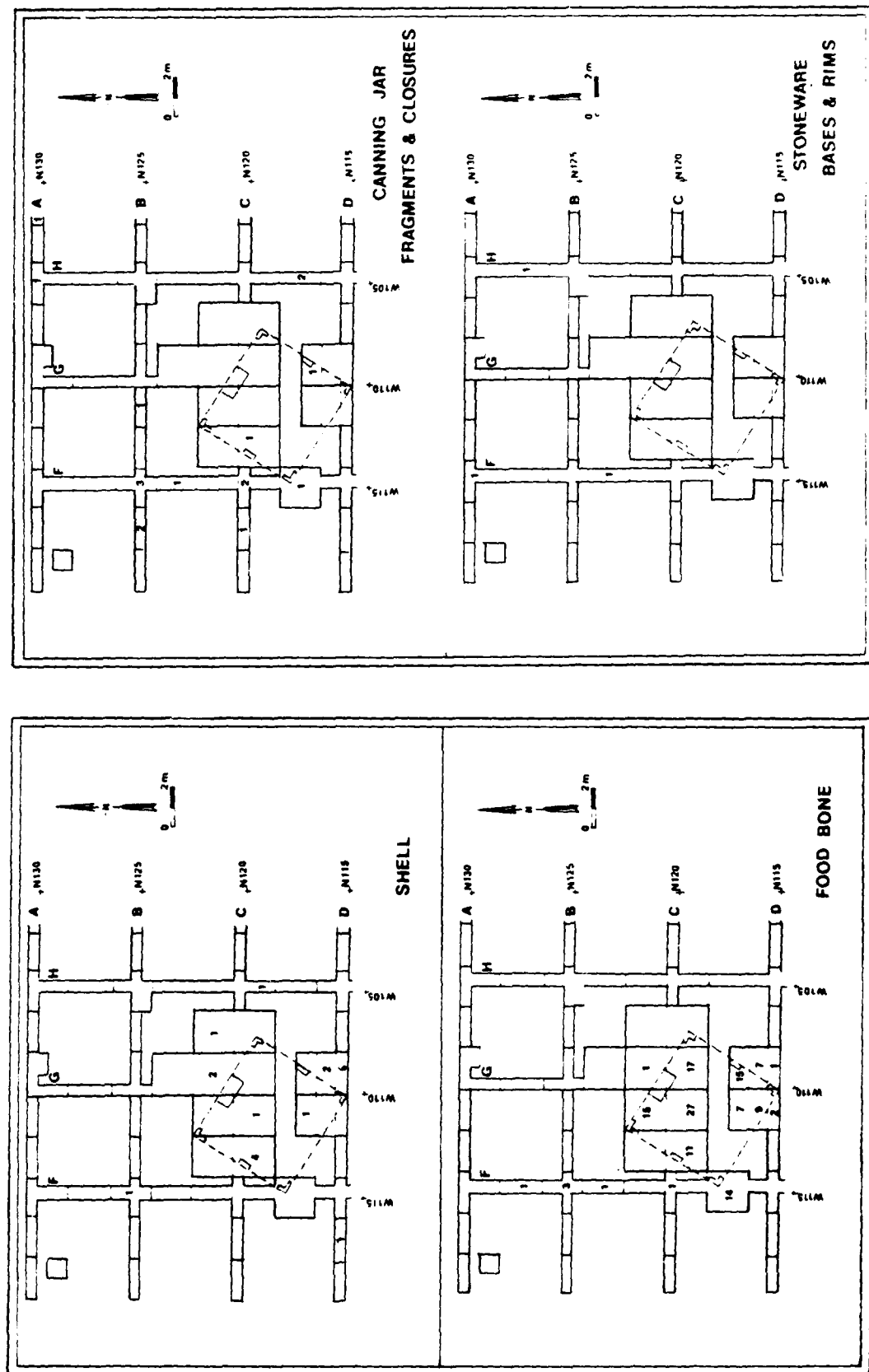


Figure 13.11.--Shell and Food Bone Distribution. Figure 13.12.--Canning Jars and Stoneware Distribution

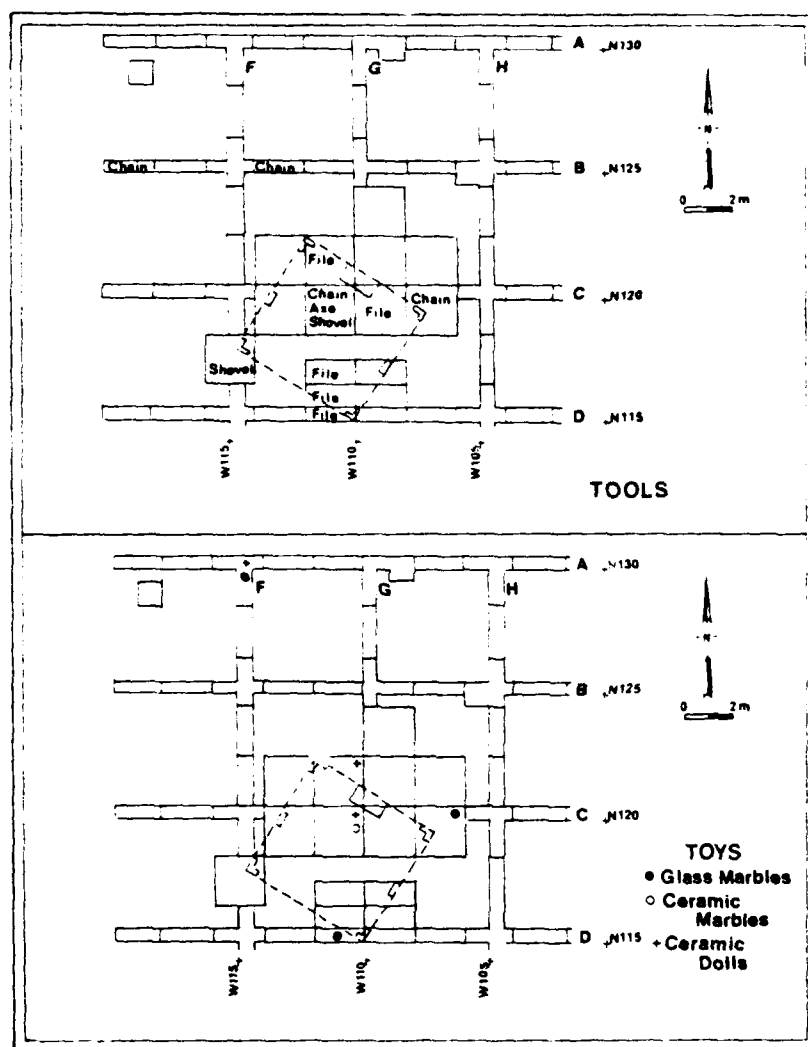


Figure 13.13.--Tools and Toys Distribution, 22CL567.

CHAPTER 14. AARON MATHEWS' HOUSE

by Timothy B. Riordan and Betty J. Belanus

Description

The house site commonly known as the Aaron Mathews' house was located approximately 100 m (328 ft) west of the Belle Scott Site on the level ground of a terraced inactive floodplain (Figures 13.1-13.3, 14.1-14.3). It was bordered on the south by the county road and on the north by a creek. Surface indications of a site included a large amount of scattered debris, several bricks, pieces of tin roofing, fencing, and a shallow depression. We noted several fruit trees there (Figure 14.2). The only visible site disturbances were a ditch along the county road and an overgrown, rutted road to the east of the house. That road crosses the creek behind the site and continues up the hill past the Lavinia Stepp House (22CL570).

Oral History

Three families and two other individuals who once occupied the house were still living in 1979. Consequently, oral historical information on this site is extensive, and memories are rich and various.

Luther Barham remembers Ida Turner saying the house's east room was over one hundred years old. Walter Ivy, however, is sure the entire house was built within his memory (i.e., since 1900). Walter recalls that the first occupants of the house were a black renter, Tom Stepp, and family.

The east room and the shed room to the back, according to Walter, were the first to be built (Figure 14.3). Then, Walter recalls, "Mr. Stepp's family increased, in fact he married--his first wife passed--and he married another lady, she had some children and they had Captain Billy build them another room to the house. . . . [Then] it was two big rooms, bed rooms, and a shed kitchen." Walter could not say precisely when the addition was built, but the original two rooms were there "quite a while" before the west room was built (probably a matter of 5-10 years). In addition to the Stepps, Walter thought Luke Richardson, a butler at the Waverly mansion, lived in the house. After the Stepp family vacated the house (sometime after the death of Captain Billy Young in 1913), the Aaron Mathews family moved in.

Aaron Mathews had three children from his first marriage--Easter, Ora Lee, and Manuel. Easter Mathews Smith, remembers living in the house with her father, brother, sister, and step-mother. Aaron was a renter on the place. This family did not claim relation to Clem Mathews and his family, or to the group of Mathews' who owned the gin and store near Waverly. Aaron Mathews and his family lived in the house from the early 1920s until 1941, when a young married couple, Willard and Willadeen Collins, moved in. No one is quite sure where Aaron Mathews went after he left Waverly. By that time his children were all grown. Easter had married Houston Smith, another resident of Waverly. They also lived for a time with her father in the house.

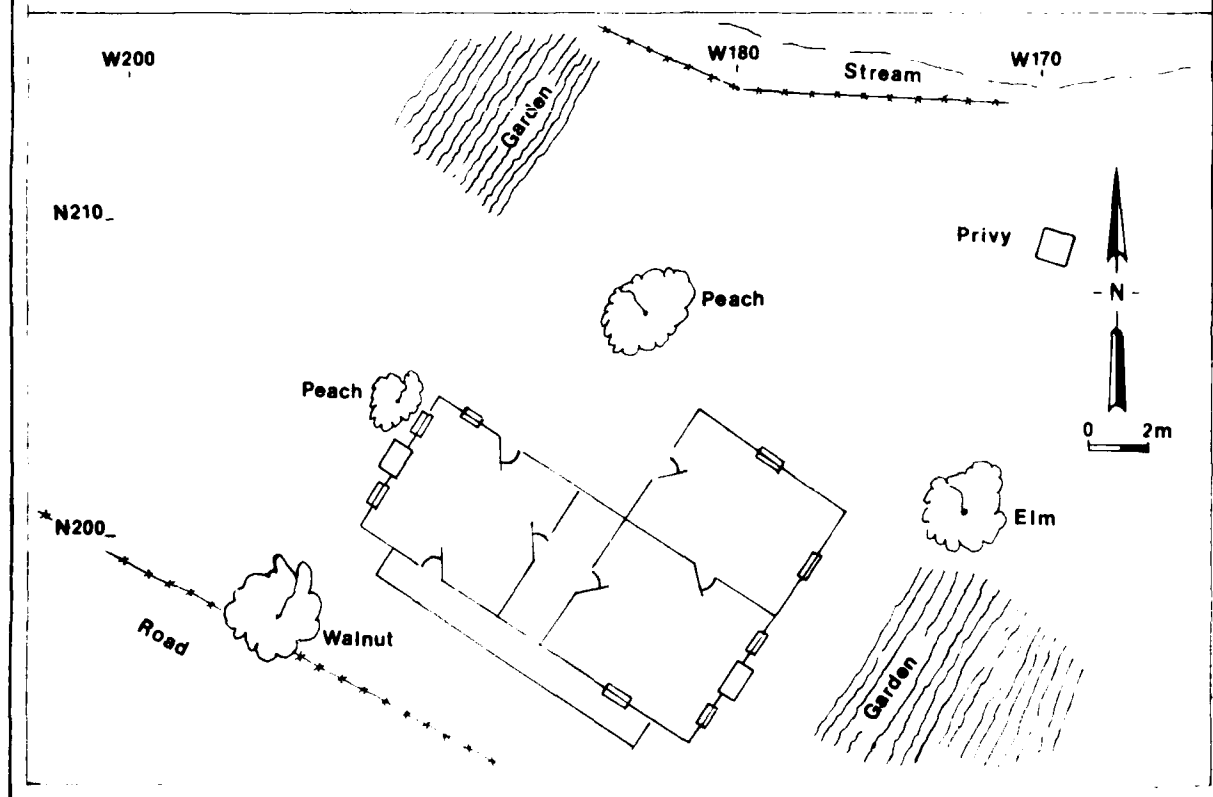


Figure 14.1.--The Aaron Mathews House at 22CL569 in the 1950s, View to North from Site 22CL576 Across the County Road

Figure 14.2.--The Aaron Mathews House and Yard Based Upon Honeybee Hendrix's Description.

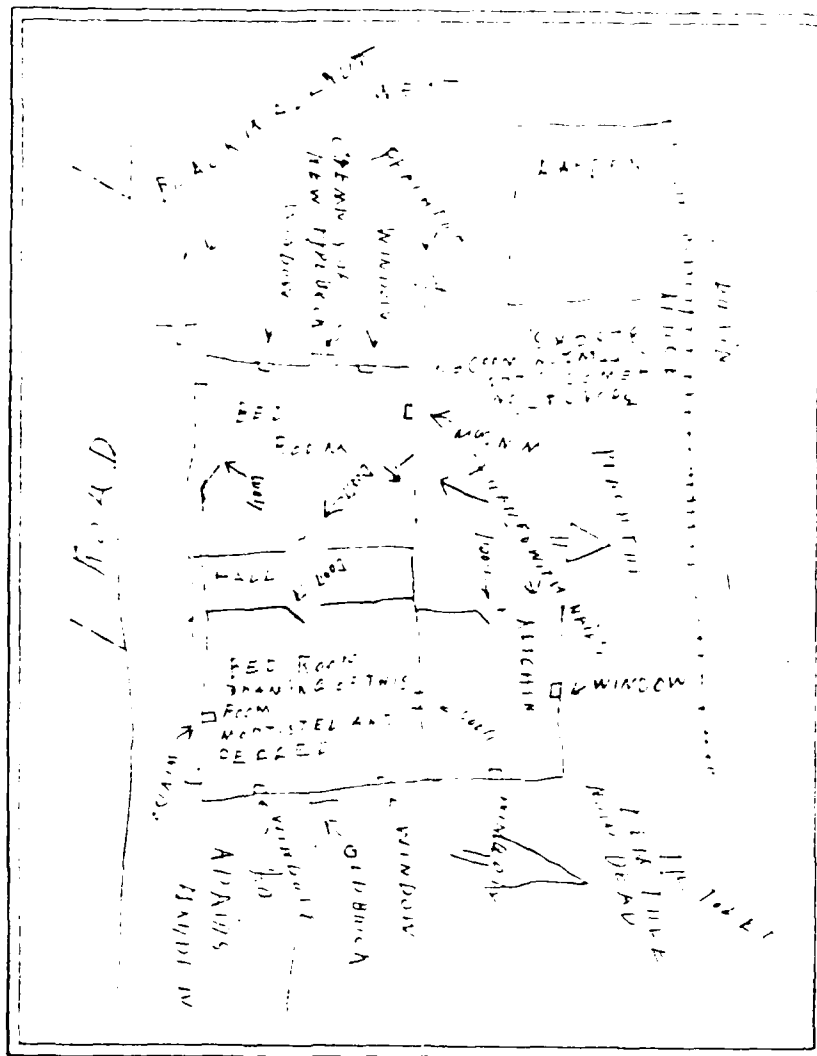


Figure 14.3.--Sketch Map of Aaron Mathews House by Honeybee Hendrix.

In 1942, the Barham family moved in to the house and stayed there, except for one year, until 1959. Luther Barham worked at the Adair's sawmill and sharecropped. The Barhams had two daughters. During the year the family did not live in the house, 1955-1956, a family by the name of McDill occupied the house. Morris and Lorine McDill had eight or nine children at home at this time.

After the Barhams left the house in 1959, Honeybee Hendrix came to live there. By this time, the house had fallen into very bad repair and only the east front room could be comfortably lived in. In 1970, Honeybee tore down the house, hauled off the salvagable lumber and brick, and burned the scrap lumber, leaving a clean site.

The house, as it stood after the Stepps added to it, was basically a frame dogtrot with one shed room. The two main rooms faced the road, and had a front porch spanning the dogtrot, running nearly the length of the house. The house was about 20 ft from the road. It was board and

batten on the exterior. The house sat on wooden blocks, and had a conglomeration of handmade and factory built doors, glass and plain wooden shutter-type windows. In short, it was a house which reflected a long history and changes along the course of that history.

The house, according to Walter Ivy, began as a single pen with a shed room kitchen. The second main room was added sometime later. When it was added, for some reason the roof was built about 4 ft higher. Luther Barham laughingly suggests this irregularity was included "to make it pretty." The west and east rooms had fireplaces, and the kitchen had a stove flue. The chimneys for the fireplaces remained intact until the 1950s, when the west chimney fell in and became useless. The house maintained its basic exterior appearance from approximately 1910 on.

The use of the house, however, varied greatly depending on the occupants, their personal tastes, number of children, and the condition of the house. Little is known about the use of the house during the early years, but a number of informants who lived there in the more recent period remembered quite a bit about their lives there.

Easter Smith did not recall too many details about her family's occupation of the house in the 1920 period. She described the house as "just a little old house" with two bedrooms and a shed room kitchen. The house had a "hall" (i.e., dogtrot) between the two main rooms. She remembers that they had gardens near the house: "My step-momma was smart about gardens. She had two gardens." Her father was a farmer, "that's all he did." Aaron Mathews farmed land north in the Bottoms, like the majority of Waverly tenants. Easter remembers her father telling her that he had helped build the railroad bridge as a young man.

Easter lived with her grandparents until she was twelve when she came to Waverly to live with her father and step-mother (ca. 1920). Her grandparents, Ellen and Jeff Mathews, did not immediately move to Waverly at that time, but came after Easter "got grown" (ca. 1927). Easter helped her step-mother care for Ora Lee and Manuel, since she was slightly older than her sister and brother. The Mathews were members of the Mt. Pisgah Church.

Willard and Willadean Collins were the first white occupants of the house. They moved there from Alabama as newlyweds in 1941. Mr. Collins' parents already lived in Waverly, and his mother's sister's family (the Adairs) were there also. Collins farmed for the year in Waverly: "We were sharecroppers, we called it. It was, in other words, they furnished the seeds, mules and tools, and we did the work for halves." The Collins saw their duration at Waverly as temporary: "The rest of them was settled there," says Mrs. Collins, "and we wasn't." As newlyweds, the Collins' had little furniture. They lived in the east side of the house, using the front main room as their bedroom and the shed (or "side") room as the kitchen. The west room was used for storage, as Mrs. Collins says, "Just to put my canned stuff in." They bought their first bedroom suite while living in Waverly. It consisted of a bed and a bureau, and cost \$48.00 at the Columbus hardware store. All their other furniture included only a few straight-back chairs and a kitchen table.

Mrs. Collins did not like Waverly because she was too lonely there. Mr. Collins was gone all day working in the fields, and she was left alone most of the time. She was 16 then. She did get together with her mother-in-law often, however. She remembers being engaged in a pocket money endeavor with her mother-in-law, making paper flowers to sell at the black settlement just up the railroad from Waverly.

The Collins' did not keep many animals while at Waverly, although Mr. Collins remembers fencing off a small area at the back of the house for their cow. The only outbuilding they remembered being near the house was the outhouse to the northeast. They kept a small garden "between the house and the mansion" (i.e., to the west of the house). The yard was kept hoed and swept clean, as was the habit in those days. They burned most of their trash. "Really then we didn't buy any groceries or anything. We didn't have much cash. . . . We raised almost all we ate," Mr. Collins explained.

The Collins moved out of the house in 1941, and Luther Barham and his family moved in. The Barhams settled in the house, staying there for 17 years. Their two daughters were reared in Waverly. For a time, they used the two main rooms for bedrooms and the shed room for the kitchen. However, Mrs. Barham explains how she decided to move the kitchen:

"You could make a kitchen out of either room you wanted. . . . I had my stove in three different places when we lived there. It wasn't no danger of messing up either room. So, we just used all the rooms for cookin'. Or, you could move the cookin' out, and clean it up an' put your bedroom back there if you wanted to."

If the stove was moved into one of the rooms with a fireplace, the stove flue would be run up the chimney. Mrs. Barham remembers having a safe (i.e., a pie safe for food storage) and a kitchen cabinet. Since none of the kitchen counters or shelves was built in, the whole kitchen was mobile. Dishes were washed in one dish pan and rinsed in another, and the water dumped outside. They "toted" their water from the artesian well at the ferry landing once a day, a distance of a few hundred yards.

The bedrooms had no closets: clothes were stored in wardrobes and bureaus. Mrs. Barham remembers having a chifforobe, considered a fancy piece of furniture when they bought it in Columbus. She does not recall much about their other furniture, but does remember some rocking chairs on the porch.

The Barhams made a few improvements on the house when they lived there, like papering the walls with a commercial wallpaper called Wall-Rite. "It was a kind of wallpaper but you put it up with tacks, . . . the tacks matched the paper," Luther Barham says, "Now I think there was some little flowers on it." Honeybee Hendrix recalls helping with this project. He thinks a solid color, perhaps yellow, was put up in one room and blue roses in another. This wallpaper "didn't cost nothin' hardly" according to Luther Barham, but helped seal cracks in the wall.

The Barhams had a smokehouse, barn, and outhouse near the house. The barn was "more of a shed, chicken house and a shed than a--couldn't hardly call it a barn," Luther says, "Part of it was there when I went there, and I added a little to it. To make it big enough for two cows and a bunch of

chickens." This barn was located behind the east side of the house, across a small ditch (or "drain" as the Barhams call it). The smokehouse was located to the east of the kitchen within the shade of a large elm tree at the side of the shed room. This tree still stood in 1979 although dead. The outhouse was just behind the smokehouse. The particular outhouse that the Barhams remember was one built in the 1940s by Mr. Barham's brother, Roy, who lived nearby and had married one of the Adair daughters, Ruby. Barham was contracted by the government to build several outhouses in the area as part of an improvement program for farm families. The building, Roy Barham remembers, measured 3x4 ft and sat on a 4x5 ft concrete slab. The Barhams kept gardens in different areas over the years. One spot was located just east of the house and consisted of about a half acre of land. Another favorite garden spot was located up the hill, north of the Lavinia Stepp House, near the dug well. The peach trees on the west side of the house produced few edible peaches.

In 1949 or 1950, the Barhams got electricity in their home. Before that time they--like all their neighbors--had lighted their home with "coal oil" (i.e., kerosene) lamps. The coal oil could be purchased at the little store down the railroad tracks owned by Percy and "Aunt Viney" (Melvinia) Halpert.

Mrs. Barham does not specifically remember what sort of dishes, except for plain whiteware, that she had when she lived at Waverly. For glasses, the Barhams and other families often used empty snuff glasses or jelly glasses. Mrs. Barham remembers an ingenious use for empty lard pails: "We'd paint 'em green, and 'd set out flowers in 'em, for flowers. That don't sound good now, but it looked good then."

The Barhams moved out of their house and across the river to the Lowndes County side for one year, 1956. The Morris McDill family moved into the house. Morris McDill jokes that cracks in the house by then were so large that "you could throw a dog through them." At this time, the east room was unlivable. "We didn't have anything in [it], because it rained all in it," Mrs. McDill says. Luther Barham explains how they disposed of any trash that accumulated: "Had no special place for it, just pile it up and haul it up off there in the Bottoms, and dump it somewhere."

The McDills used the back shed room for a kitchen. Since they had so many children, it was also necessary to keep a bed in the kitchen. Despite the size of the family, everyone always ate together at their large kitchen table. "We'd all eat together, [it's] always what we done. All eat the same thing." The McDill's had lived in the small shot-gun house (Figure 12.1:#8); that house burned destroying their furniture.

The McDill children, now grown, commented on their childhood in Waverly. "When we got big enough to work, we worked . . . , whether it was plowin' or choppin' cotton, or whatever, we would work, that's the way we were all brought up," John McDill says. But young boys also had time for fun. Arlan McDill remembers he and his brothers used to play marbles and make wagons out of scraps of lumber. "Just the normal kid games, that's all we played . . . we was all poor folks, and mostly what we made was what we had," Arlan says. He remembers that some people from West Point brought toys and gifts to the children at Waverly for Christmas. Mostly, children made their own fun around the place. Arlan recalls:

"One of our neighbors . . . told us, when we was kids, not to go in his pasture up there 'cause he had a real mean bull. And, you know how boys are. We had to see just how mean he was. He warn't too mean, anyway. We took sticks and run him all over the country one day, all day, one time. That'd be something on the mean side we done one day . . . I guess it's just normal."

The McDills had a large garden, tended by the whole family. "We had a good garden," Arlan McDill recalls, "In fact, we always raised most of what we eat. Raised our own meat, garden, we had to buy very little of what we eat. 'Course back then everybody raised what they'd eat." Mrs. McDill recalls that what trash they accumulated would be "carried off down in the pasture."

The last person to live in the house was Honeybee Hendrix. He was then a bachelor and had very simple needs. He lived mainly in the large east room, the only room that still had a fireplace and was fairly sound. (Obviously, the roof had been repaired after the McDills left the house.) Honeybee had little furniture: an iron bedstead, bureau, some wooden chairs, a table, and a cookstove sufficed. He tore down the house in 1970.

The details of the destruction of this house are remembered quite vividly by Honeybee and provide valuable information on the construction:

"Well, the first thing that I tore down was the chimney and fireplace on the west end of the house. I climbed up on the roof and carried a mattock up with me. The mortar was loose, so I could take the digging blade of the mattock and get in between the brick, the joints, and I dropped those brick back down inside the chimney, the fireplace, so they wouldn't bounce and break. I doubt whether I broke a dozen brick removing them. And then, when I got the chimney torn down to within two foot of the comb of the house, why, I got on, climbed a ladder, from the outside, and then, leaning the ladder against the back of the chimney, I would drop forty or fifty brick on the inside of it, I'd go down inside and remove them, and stack them outside, and, it took me about a half a day to demolish the chimney.

"Then, after I'd torn the chimney and fireplace out, the overhead ceiling in the west room was rough plank, and the roof was in such bad repair it had leaked in there, and they had rotted, and I tore those down, dropped them down, and carried them out. And, I fixed me some braces, that I could stand on, and I carried my trussel benches in, with my plank on them, and I used a long piece of two-by-four, and starting punching straight up, and knocking those old wooden shingles off, and letting them fall. Then, after I got the shingles knocked off the lathe on the roof, I removed the lathe, and also the two-by-four rafter. And, after removing the rafter, I'd taken down the porch on that end of the house, back past the hall. [The porch was all in one piece, straight across the hall]. I'd taken half of that off at a time. Then, standing on one trussel bench, I used my crow bar, and prised the outer wall off those planks, that were put on the vertical, with one-by-fours to break the cracks. The room, the walls, were sealed inside with rough lumber, and most of that was cypress, and it was put on horizontal.

So, I used my hammer and tapped that a-loose. The framework for that room was out of one-by-fours, with the corner posts and studs resting on hand-hewed sills. After removing the walls, I'd taken the plate off of the studs, the top of the plate, and then, I removed all corner braces, and removed the corner posts and all the studs. I believe I moved that, yeah, I set that lumber to one side. Then, the next room I removed was the old kitchen.

"It was, it had shingle on the roof, and the ceiling overhead, part of it, was from the old post office building. I may have two or three pieces of that laying around here, I don't know, I know I've seen some of it up here. After removing the ceiling of that room, I used a two-by-four, to knock the boards a-loose from the lathe and let them roll back down, I removed the lathe and the two-by-four rafters. That room was not sealed inside, the walls of that room were not sealed inside whatever. So, I'd taken my crow bar, and pried the walls loose, plank at a time, first I had to take the outside battens off, those are the one-by-fours that nail over the cracks, of the planks. Then I went back inside and used the crow-bar, and pried the plank loose from the upper plate, and from the booting that ran up around about four foot from the floor, and stacked that to itself, and the floor of that room was cypress planking from eight inches wide to fourteen inches wide. After removing the walls, I removed the corner posts and studs and left the floor to that room standing like I left the floor of the west room, for later removal. And then, when I finally vacated the house, I went up on the east room, which was covered with a metal--well, aluminum, is what it was, really, aluminum roofing. ... It had been shingles at one time, when I first went to Waverly, the aluminum roofing was put on sometime in the late 40s, I believe, or early 50s, 'Pop' Blankenship put the roof on that end of the house, I remember that. After removing the roof, I removed the lathe the roof was nailed to, and the three-by-five rafters. Then I went inside, the room was sealed inside overhead with rough lumber, and I removed that lumber, and stacked it outside separate. Then I removed the inner wall, which was plank nailed horizontally, and in different width, and different patterns, different types of lumber. Then I removed the outer wall, then, after removing the outer wall, I removed all of the lumber here to this place (his present home), then went back, and took up the floor, and floor joists to the west room and the kitchen. I burned what was no good and had rotted, and brought the rest of that up here. Then I went to work taking the framework to the east room apart. That was mortised and pegged framing. I had quite a job on some of the pegs, getting them out, due to the fact that it was blind-pegged. There were few of the pegs that were bored and pegged all the way through from one side of the timber to the other, and I could take a small pin, and a hammer, and drive those out. And, I have some of that old framing laying around here somewhere that is still solid. Some of it was heart redgum, and some of it was heart poplar. That room was put up on hand-hewed cyprus sills which rested on wooden blocks they were rotted. And the sills had been laying on the ground so long, till they had rotted. The floor joists were rotted. They were just no good.

[I burned the scraps and lumber] right there, right next to the fence, behind the house. You'll find plenty of nails over there, and if they're not through digging, they can go over there and dig up hands-full of nails. All sizes and lengths. I pretty much burned all of that in one pile. It took two or three burnings to dispose of it. But, that was in the agreement that anything I didn't want to move, I would burn and leave a clean house site. That about gets the removal of the old house and what there was to it."

Honeybee Hendrix used what scrap lumber he did salvage from the old house in building his present home near West Point, and to build some workshops near his house. Thus, a little bit of the Aaron Mathews house has been preserved.

History

Aside from the map data, no historical information was obtained on this site. Its occupants rented the house, and most of its occupation occurred after 1910. The house appears on the 1909 soils map (Worthen 1909) and possibly the 1888 railroad survey map (Figure 13.3). The scale on the former is insufficient to note any more than its presence. The railroad map is more detailed, but apparently is inaccurate. It shows two buildings south of the post office. We interpret these to be a barn (mentioned by some informants as midway between the house at Site 22CL568 and the house at 22CL569) and the Aaron Mathews House. This would date the structure as prior to 1888. Informants remember stories about this structure being the overseer's cabin. Possibly the structure's east room was antebellum since it was built using mortise and tenon construction. If true, then that single pen structure must have been moved onto its known location. The railroad map indicates a structure within about 100 ft of this spot; but why move a building 50 or 100 ft? Could the structure have been built as an office or for some other non-domestic function and thus not accumulate many artifacts? In any case, no archaeological material dates prior to about 1880. Hence, two possibilities exist. If the structure is older than about 1888 then it was either moved to the site from a nearby location, or its function was such that no artifactual evidence accumulated around it.

Excavations

No structural evidence remained on the surface of the site, however, our test excavations encountered the northern wall line and the eastern chimney area. That, coupled with Honeybee Hendrix walking around the site with us identifying the location of everything meant we had a good idea of what to expect and where to expect it. We knew within a few feet where all the walls would be, even though the site was covered with weeds when we arrived. The problem lay in precisely locating the structure. Since the structure had been built on wooden blocks and had chimneys at either end we could expect the physical evidence to be minimal, with perhaps a dripline in addition to the blocks and chimney base. But since the structure had not just been dismantled, but also been cleanly done we wondered if anything remained from the structure.

To approach this, we excavated four exploratory trenches down to sterile soil (Figure 14.4). These trenches provided some data on trash disposal but were less useful in defining structural features even though they were excavated right through the rooms of the house. We then expanded

those trenches using 2x2 m units to expose nearly all of the house area. While the house excavations were in progress we continued excavation of yard trenches to define refuse disposal patterns and hopefully encounter trash pits, privy pits, and other structures. Eventually, a total of 128 m of .5 m wide trench were excavated to sterile soil.

Areal excavations were placed in the location of the house, a smokehouse, and an outhouse, shown by informants visiting the site. These excavations provided us with data on the structural features at the site and added much information to our knowledge of trash disposal patterns. While the excavations revealed the house in great detail, we found no evidence for the outhouse and only a little data on the smokehouse. A total of 176 sq m was excavated to sterile soil.

Stratigraphy

The stratigraphy here was relatively simple (Figure 14.5). On the surface a thin stratum of humus and grass roots varied from 1-5 cm thick. Below the humus was Stratum 1, a 1-14 cm thick grayish brown silty sand (10YR5/2 dry), containing the artifacts and associated features. The grayish brown sandy silt represents the occupation and dates ca. 1900-1970. Over most of the site that stratum lay on a light reddish brown sandy clay (2.5YR6/4 dry), Stratum 2. That sterile stratum contained only natural hematite accretions and was at least 35 cm thick. All of the wood blocks on which the house sat were placed in this stratum. On the site's western edge the sandy clay was replaced by a red silty sand (2.5YR4/8 dry), Stratum 3. This fragipan was sterile and formed a slight rise; it was the major stratigraphic unit at Site 22CL576 across the road.

Features

Table 14.1 lists all of the features encountered at Site 22CL569. They are listed in order of their discovery with explanatory details appended. Most of the features relate to the house.

Some postholes and several stains (most likely driplines) (Figures 14.6-14.8) were the only evidence of this house left after its destruction. One such large stain (Features 12 and 18) begins in the northwest corner of the structure and runs southeast, outlining the rear wall. This stain is 7 m long. It joins the dripline (Features 9 and 23) for the kitchen addition at a right angle. The kitchen was 4.5 m (14 ft 9 in) by 3.5 m (11 ft 6 in). Directly parallel to the rear wall of the kitchen, in the interior of the room, there is another dark stain (Feature 31). This could be an original wall which was later removed and replaced. This stain is 1 m (3 ft 3 in) from the rear wall.

Feature 31 was a large (1.5 x 1.5 m), shallow (10 cm) dark stain, associated with burned glass, nails, whiteware, a crock lid, and the top to a butter churn. None of the artifacts was datable except to a late 19th-early 20th century context. The second unknown feature (Feature 10) appears to be an internal wall or perhaps an old dripline formed before the kitchen was added. This stain begins at the kitchen wall and runs 1.25 m (4 ft 2 in) southwest. Here, it turns right and runs .75 m (2 ft 5 in)

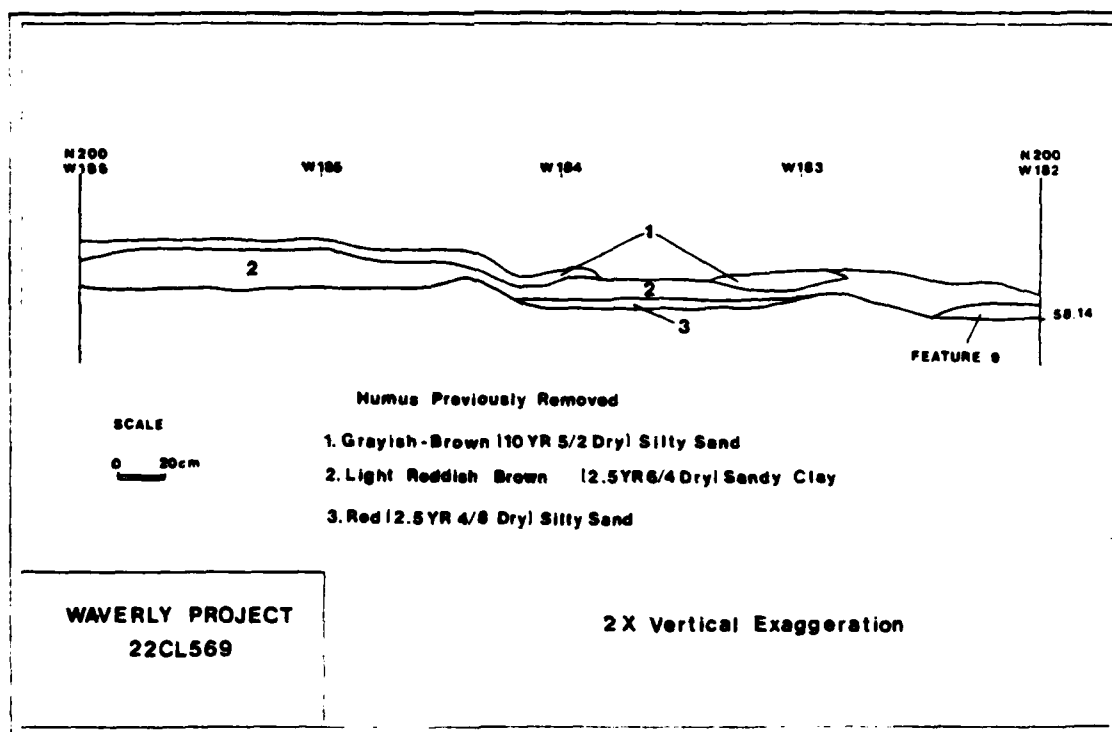
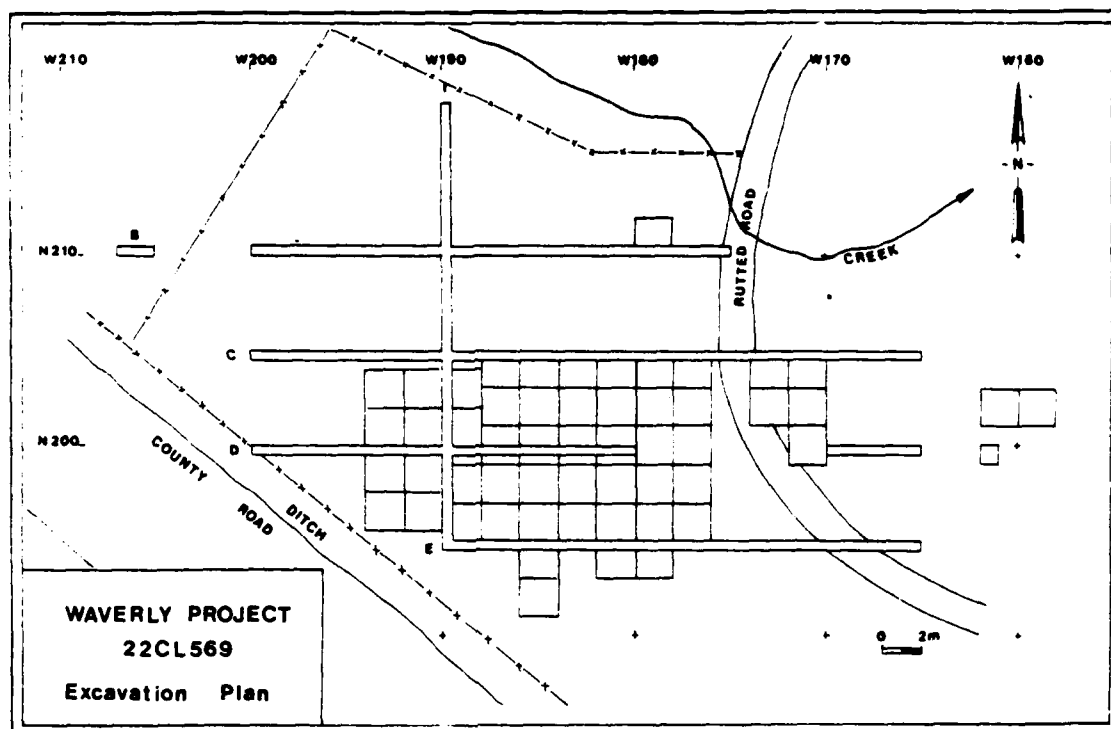


Figure 14.4.--Excavation Plan for 22CL569.

Figure 14.5.--Stratigraphic Section, 22CL569.

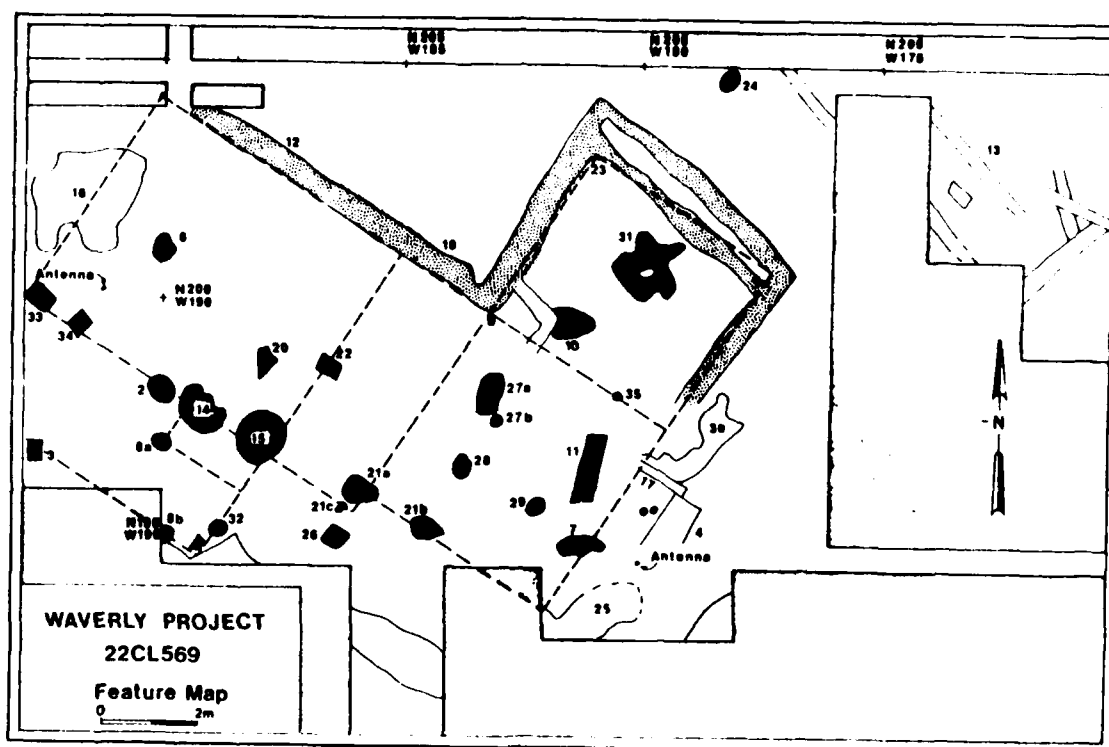


Figure 14.6.--Location of Archaeological Features, 22CL569.

Table 14.1. Archaeological Features, 22CL569.

Fea. #	Description	Location		Remarks
1	Trash Pit	N210-210.5	W198-200	shallow, oval pit
2	Post Mold	N198	W190	round stain, support block for porch
3	Post Mold	N196.60	W196.6	square stain, support block for porch
4	Brick Scatter	N193-197	W178-180	related to destruction of chimney, 1970
5	Post Mold	N194.75	W171.30	possibly related to old road
6	Post Mold	N200.90	W190.10	round stain, internal support under west room
7	Post Mold	N194.90	W181.10	oval stain, internal support for east room
8a,b	Post Molds	N195-197	W190-190.5	2 round stains related to porch structure
9	Dripline	N199.5-200	W182	corner of dripline connecting kitchen & house
10	Post Mold	N199.70	W181.30	related to kitchen
11	Unknown Stain	N196.5	W181	--
12	Dripline	N201-203	W181	dripline behind west room
13	Unknown Stains	N201-205	W170-172	possibly smokehouse debris
14	Post Mold	N197.80	W189.25	round stain, support block for front of house
15	Post Mold/Trash Pit	N197	W188	round hole, support block house front, post 1918
16	West Chimney	N202	W192	rectangular stain with brick, ash & charcoal
17	East Chimney Base	N195.50	W179.50	rectangular brick and mortar feature
18	Dripline	N200-201	W182-186	located between Features 9 & 12
19	Brick and Charcoal	N195-197	W180-184	scatter related to house destruction, 1970
20	Post Mold	N198.75	W186.50	rectangular stain west room block support
21a-c	Post Molds	N195-197	W184-186	supports of SW corner of east room
22	Post Mold	N199	W188	rectangular stain, west room internal support
23	Kitchen Dripline	N201-205	W180-184	outline of kitchen area
24	Post Mold	N204.50	W178.20	circular stain smokehouse ?
25	Dripline	N203-205	W178-184	SE corner of east room
26	Post Mold	N195.20	W186.60	rectangular stain support for porch
27a,b	Post Molds	N198	W183	block supports for east room
28	Post Mold	N196.50	W183.80	block support for east room
29	Post Mold	N195.70	W182.10	round stain support for east room, RR spike found in feature, post 1888
30	Dripline	N196-199	W177-180	related to east room
31	Unknown Stain	N198-200	W177-179	amorphous stain, much trash included, post 1897
32	Post Mold	N195.30	W188.80	round stain, possibly a porch support
33	Post Mold	N200	W193	rectangular block support for west room
34	Post Mold	N199.25	W192.10	rectangular block support for west room
35	Post Mold	N199	W181	round stain, possibly support for kitchen

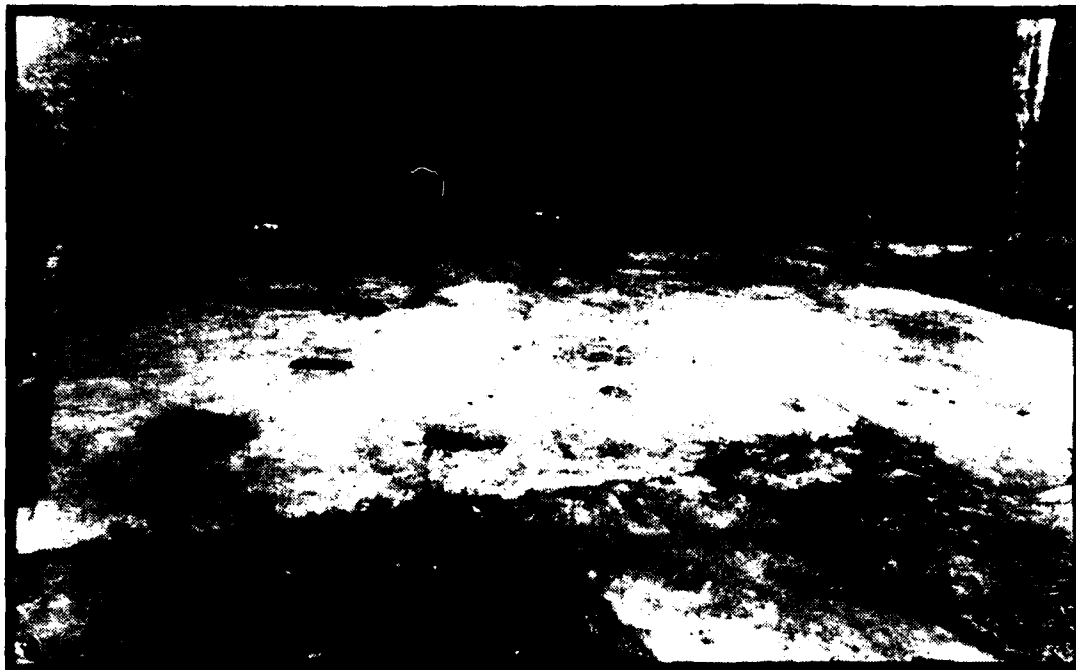


Figure 14.7.--View of Excavations, 22CL569.

Figure 14.8.--Dark Stains in Kitchen Area, 22CL569.

before it disappears. At the point where this stain makes a right angle, there is a disturbance that might have been a post hole. This part of the feature is 1 m x .7 m with the long axis running due east-west.

The eastern wall of the east room was defined by two dark stains and a rectangular brick and mortar feature which is the base of the former fireplace (Features 4, 17, 25, and 30). The fireplace had been totally destroyed, leaving only scattered bricks and a mixture of rubble and mortar. The dark stain to the north of the fireplace (Feature 30) does not match up with those of the kitchen, but is about 1 m further to the southeast. The dark stain to the south of the fireplace (Feature 25) was not fully exposed but clearly shows a right angle. This dark stain is in line with a series of four postholes (Features 2, 21, 33, 34) defining the front of the structure. The postholes are both round and rectangular although the posts appear to have been rectangular. On the west side of the structure there is a large, burned area associated with brick rubble (Feature 16). This is all that remains of the chimney on this side.

Rooms in this structure show considerable difference in size. We have already mentioned the dimensions of the kitchen. The east room measured 3.75 m (12 ft 3 in) by 5.5 m (18 ft). The west room was larger, measuring 5.5 m (18 ft) by 5.5 m (18 ft); the hallway between the two was 3 m (9 ft 10 in) wide by 5.5 m (18 ft) deep.

Few internal divisions are evident from the archaeology. Four postholes (Features 21b, 28, 27a, 27b) in line with the dark stain in the kitchen suggest a possible sill parallel to the west wall of the east room. The presence of porches in front of the structure is shown by postholes (Features 3, 8a, 8b, 32), driplines, and soil color changes. In front of the west room, there is an abrupt soil color change from red to yellow. The color change occurs in a right angle formation and is associated with three post holes aligned along the color change. There is a suggestion of a porch in front of the east room in the form of a partial dripline (Feature 25). This feature was only exposed in a small section of our excavations.

Several other features, not directly associated with the house were located. A shallow trash pit containing metal scrap, a glove, and a shoe was found near the northwest boundary of the site (N210/W199). This was the only trash pit encountered on the site. Another concentration of trash was found in a stream gully to the north of the structure. This appears to have been a favorite dumping spot as evidenced by the extensive trash deposit covering an extended time span. Two isolated postholes were encountered during excavation, one (Feature 24) about 2 m behind the structure and the other (Feature 5) located near the rutted road on the eastern edge of the site. Finally, in the smokehouse area we located a confusing scatter of dark stains (Feature 13). These form no particular pattern but look very much like a torn down or decayed structure.

Artifacts

The artifacts from 22CL569 are overwhelmingly 20th century in nature. On the basis of the artifacts, it is hard to see any pre-1900 occupation at this site. There is very little handmade glass and the ceramics do not look older than 1900. The large amount of plastic is suggestive of the post 1927 plastic boom. The use of the structure as a domicile is reflected in the

domestic character of the trash. Some artifact categories seem to be over-represented in the sample. Many car parts were found scattered in the yard. This could be related to the blacksmith shop/garage that was located across the road from 22CL569 or it could reflect a specialized activity of the site's inhabitants. The same could be said for the abundance of files at this site.

Artifact Distribution

The spatial distribution of the same kinds of items analyzed at the Belle Scott Site and the other sites were studied here.

Nail distribution at this site does not support the hypothesis that the rooms of this house were built at different times (Figure 14.9). Wire cut nails occur all over the site in large quantities. Machine cut nails, while fewer in number, share the same distribution. Where wire cut nails cluster in larger numbers, machine cut nails also show clustering. No distinction by level was apparent. As would be expected, more nails occur in and around the structure than away from it. One exception was the trash disposal area in Unit N210-210.5/W177-179, where 155 nails occurred.

Window glass distribution demonstrates a number of important points. While some window glass occurs within the structure, the majority was around its periphery (Figure 14.10). As with nails, frequency of window glass decreases with distance from the structure. Comparison of the distribution with the house plan in Figure 14.2 reveals fairly good correlation for the east room and kitchen, but not for the west room. Significant numbers of window glass sherds occurred in the east end of Trench B, a trash disposal area. Very little window glass occurred elsewhere on the site. The area of the hypothesized smokehouse on the east end of the site had a few window glass sherds but this may be the result of smearing.

Architectural hardware had a small sample size, however, these artifacts cluster within the area of the house (Figure 14.10). Since the structure did not burn or rot in place, but was dismantled instead, the distribution of door hardware has limited value. If we did not have any informant data we might infer that no doors were on the north or east sides of the kitchen and the east and south sides of the east room, but the placement of doors in the other walls would be uncertain.

Food bone distribution shows three important points. First, significant numbers of food bone occur around the fireplace on the east end of the structure (N195-197/W178-182), while few food bones occur in the area of the kitchen (Figure 14.11). Second, large numbers of food bone were deposited in the trash area at the east end of Trench B. While food bone occurs widely over the site, the concentration of food bone in the trash disposal area reflects a preference for removing such trash from the immediate area of the structure. Last, a number of food bones occurs in the area of the smokehouse.

Shell distribution shows a much different picture than food bone (Figure 14.11). There is a large concentration of mussel shell in the backyard area near the kitchen back door (N182-184/W201-203). This concentration could reflect many practices. It could represent the area

where the mussel were eaten or it could represent trash thrown out of the kitchen. Another possibility must be mentioned. Oyster and mussel shells were often sold commercially for use with chickens. The presence of mussel shell in the backyard may represent a secondary use for this food resource.

Canning jar fragment distribution shows an important clustering around the kitchen area and along the east side of the house (Figure 14.12). Few canning jar fragments occur away from the structure. The absence of large numbers of jar fragments in the trash disposal area is interesting. There are fewer jar fragments there than are scattered across the site.

Stoneware fragments show the same distribution as the canning jar fragments (Figure 14.12), with a concentration around the kitchen area and very little elsewhere. It should be noted that six fragments do occur in the trash disposal area, perhaps reflecting a functional factor not operating on canning jars.

Tool distribution shows the great number of tools recovered from this site which definitely cluster around the house area (Figure 14.13). Chain fragments usually occur outside the house area while files usually were found within. Several chain fragments were found in the trash disposal area. At least in the 1960s, a work shed was located a few feet directly west of the west room, but very few tools were found there.

Toy distribution shows an interesting but unexplained distribution (Figure 14.13). Glass marbles occur most frequently in the area under the west room and the breezeway, while clay marbles and doll parts tend to cluster under the eastern room and east of the house. Few toys occur away from the house. Clay marbles date until the mid-1930s so these were the black children's. Did they play under the house or inside it with the marbles falling through the floorboards?

Summary

Our excavations have shown site 22CL569 to be a domestic structure dating primarily to the 20th century. The house consisted of two main rooms with a hallway between and a kitchen added to the back of the east room. A large number of artifacts was recovered from the site. These were useful in understanding the later phases of the Waverly community. We excavated over 90% of the house area and sampled the backyard.

One informant remembered a time before the house was built (ca. 1900) and that it was built by Captain Billy Young for a renter named Tom Stepp. Originally, we thought this site could be as old as the antebellum plantation because some informants had told us the eastern half of the building served as the overseer's house. We have no way of knowing the truth, but can state that the site does not date that early in terms of the artifacts recovered. The construction date on that room is another matter. Because of the construction techniques used on the eastern room, it is possible that it was constructed earlier and moved to the site. Extensive excavations have revealed the structural details of the site but did not expose any artifacts dating earlier than ca. 1880.

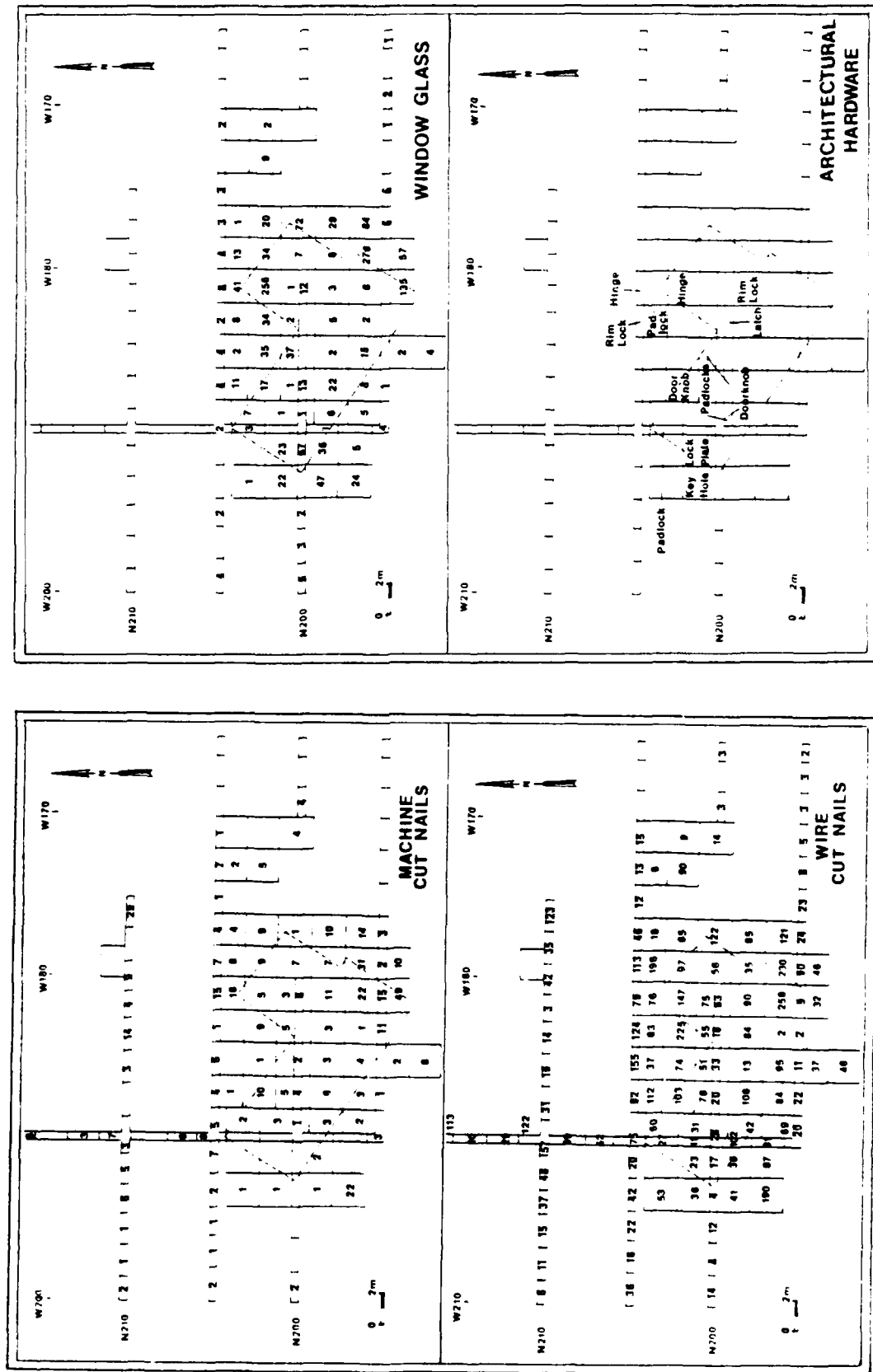


Figure 14.9.--Machine Cut Nail Distribution

Figure 14.10.--Window Glass and Architectural Hardware Distribution.

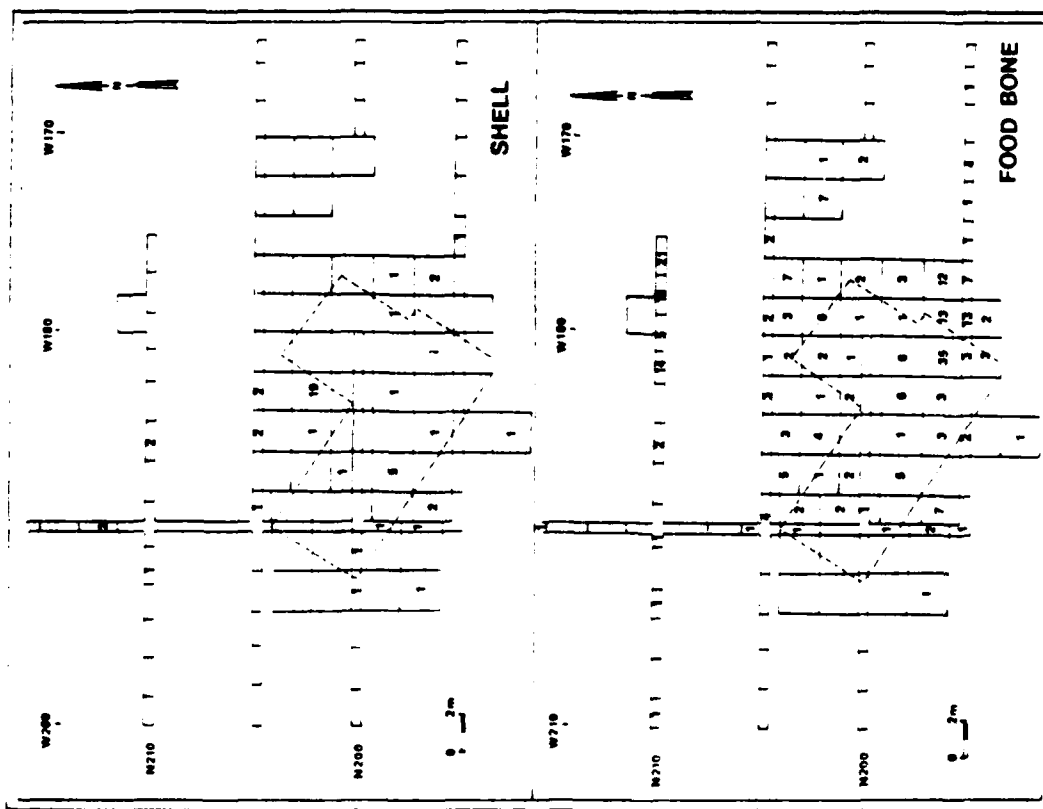


Figure 14.11.--Shell and Food Bone Distribution

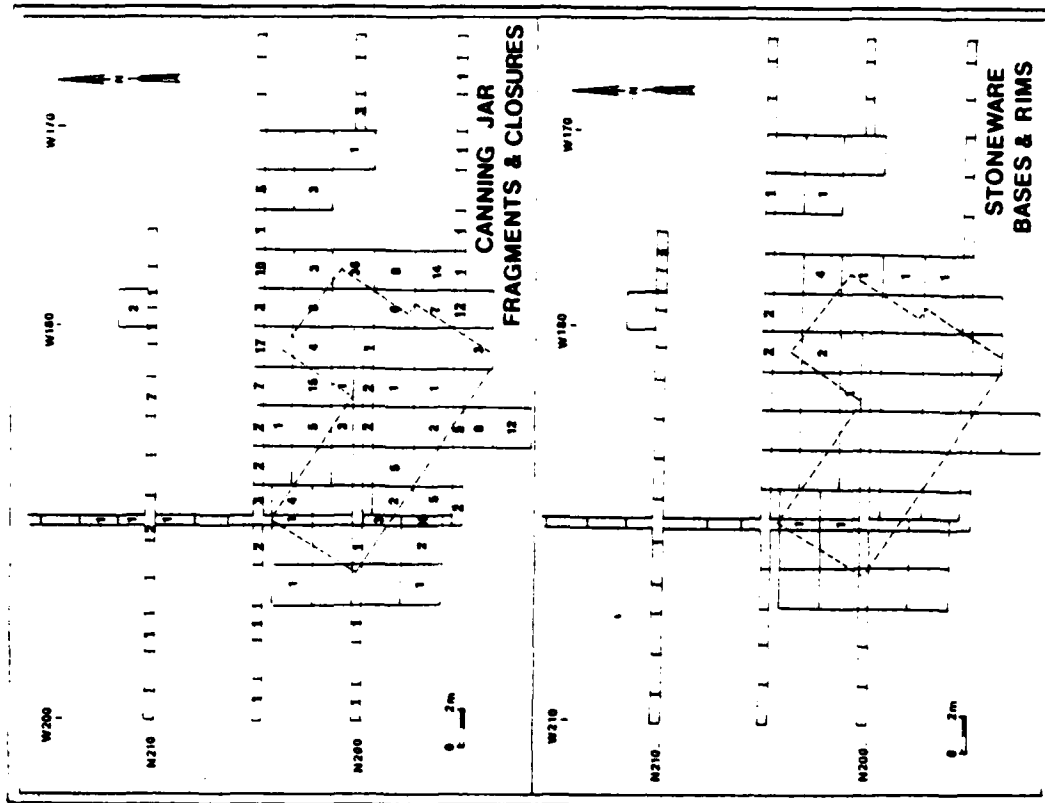


Figure 14.12.--Canning Jars and Stoneware Distribution

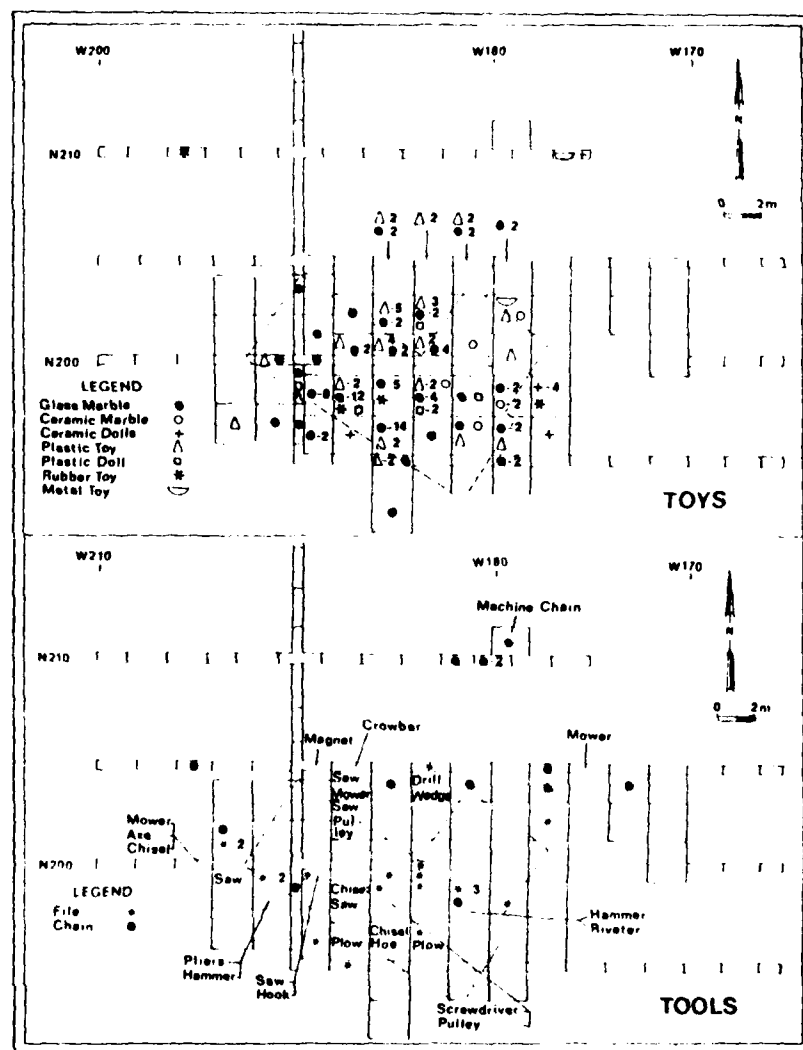


Figure 14.13.--Tools and Toys Distribution, 22CL569.

The 1888 railroad survey map showed two structures in this area, but neither is definitely this site. Two artifacts located in features below the house are suggestive of the construction date. A railroad spike was found in a feature below the east room. Since the railroad did not reach Waverly until late in 1888, it is possible that this provides a terminus post quem for the construction of the east room. However, railroad spikes are ubiquitous on historic sites and this dating is tenuous at best. Beneath the kitchen, we found a feature containing much trash. A crown cap was discovered in this concentration, dating the kitchen after 1892 but how much after, is unknown. Thus, we are left with a possibility of a pre-1888 structure, but artifacts did not begin to accumulate until after 1900. How many years must a site be occupied before material begins to become incorporated into the ground? Considering a time lag of about 5 years for bottles and 21 years for ceramics (Riordan n.d.; Adams and Gaw 1977), together with material poverty, and a conscientious housekeeping it is conceivable, perhaps, that the site was occupied from 1888 to 1900 and it simply lacks the archaeological visibility we need to recognize that occupation.

The ceramic maker's marks (N=17) had a mean range of 1908-1937, while the glass maker's marks (N=76) had a mean range of 1930-1954, a difference of 17-22 years. This is quite similar to the time lag at Silcott (Adams and Gaw 1977). Ceramic formula dating produces a median date of 1913. The nail production curve method discussed in Appendix 7, Figure 18, suggests a construction date of about 1905. Seriation of window glass, glass color, glass production, and nails indicate that this was the most recent site of the ones excavated at Waverly.

The house had many occupants during its history. Fortunately we were able to interview many of these people about what the house looked like and how it was used. The house consisted of three rooms. The eastern room was made of hand-hewn logs using mortise and peg construction. Built behind this section was an ell with a hipped roof and extra high ceilings. A balloon frame room was added to the western side at a later date. This room was constructed with wire cut nails. Between the main rooms was an open hallway. A porch ran along the front of the building where it faced the road. There were two chimneys attached to the structure: one on the east side and one on the west. The addition on the back had a stove but not a chimney. At different times each of the rooms was used as a kitchen, bedroom, and storage area.

The house was torn down for scrap lumber and we were lucky enough to interview the person who demolished it. He was obliged by the agreement he made to leave a clean house site. From his description of the work, it is easy to understand why little of the structure showed up archaeologically.

In addition to the main house, a barn, smokehouse, outhouse, and gardens were on the site at one time. Reports of several gardens east of the structure also were recorded.

Luther Barham's Blacksmith Shop

Description

This site was located directly across the road from Aaron Mathews' House (22CL569) and was associated with it. The site occupies a flat triangular space on a bend in the county road (Figure 14.14). The road forms the northern boundary. A sharp rise in topography to the west of the site marks the western limits. A depression on the northern edge of the site (N179/W203) was identified by informants as the well. This spot was 10 m southwest of the western corner of Mathews' front porch.

Our oral historical information had indicated this was the location of a Luther Barham's (ca. 1942-1959) blacksmith shop and/or car garage (Figure 14.14). A much vandalized truck at this location supported the identification. Also, we were informed that this area was the site of a well filled in with "junk" after it had gone dry. Unfortunately, the archaeological investigation of this site failed to reveal any indication of a blacksmith shop or well. The site is presently interpreted as a dump, and it is most likely associated with the early and mid-20th century occupation of site 22CL569. Although we did not encounter any structures, the oral evidence for one and possibly two structures there is not unlikely.

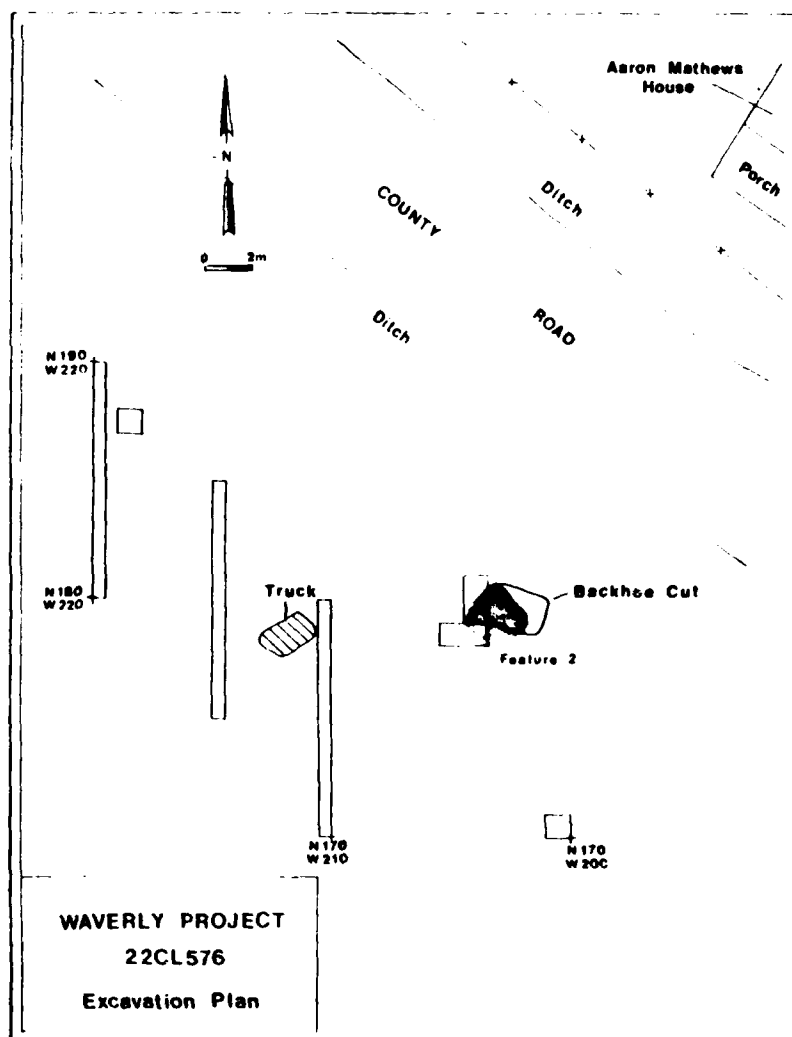


Figure 14.14.--Plan of Excavation, Luther Barham's Forge, 22CL576.

Oral History

The area across from the house at 22CL569 was used for a small blacksmith shop by Luther Barham, ca. 1942-1959. Honeybee Hendrix remembers that, earlier, there had been an "old shed" there with "bolts and pieces of iron lying about like you would expect to find around a blacksmith shop." The earlier shop, he suggests, might have been run by Clem Mathews, Sr. at one time. Honeybee recalls the shed was about 18x18 ft with one open end. "It was just about torn down when I first moved to Waverly" in about 1919. The building had a dirt floor, and was frame construction with a wooden shingle roof. Honeybee attributes the absence of coal slag (from our excavation) to the fact that "back then they used charcoal to heat [their forge] with." However, Barham used coal in his forge.

Douglas Ivy recalls that Clem Mathews did operate a blacksmith shop, but the shop was located near Mathews' house (Figure 11.1:#19). Mathews sharpened plow shares and sweeps, Douglas remembers. Honeybee thinks Mathews was at one time the blacksmith for the plantation.

Only Honeybee clearly remembers a dug well at this site. He thinks it might have been wood-lined. He speculates the well probably "played out" (i.e., went dry) and was backfilled by whoever used it. Perhaps, he thinks, the people even tossed old junk into the well hole to fill it up.

Luther Barham blacksmithed, more or less, for a hobby. "I just practically picked it up myself," he says, "One of my uncles run a little blacksmith shop." He explains that he never carried on one duty of blacksmithing as a profession:

"I would hardly trim a horse's foot. I was afraid they'd kick me, I never would shoe horses. . . . That's the biggest thing that kept me out of a big blacksmith's shop. That horse shoein' had to go on, and I was too cowardly to mess with the horses' feet."

He mostly sharpened plow points and hoes, and "just piddled" around the small shop. His forte, however, was building rubber-tired wagons. These wagons had oak beds, and used rubber tires from old automobiles. "I worked at the sawmill and when I'd find a white oak log that I liked and wanted, I get Adair to saw me some wagon timbers out of it, pile it off there, and then wait till days, days the mill didn't run I'd put up a wagon. I built four or five while I was there [living at Waverly]."

Barham acquired scrap metal from Eb McCool, who once lived in Waverly. Barham says:

"Fact of the business, he was a junk-iron dealer. He picked up ol' junk iron and carried it, then sold it. That's the way I got quite a bit of ol' strips of iron, and rods that I built wagons out of. If he found, . . . a piece of metal that I could use, he didn't ever carry it to the junk-yard until he let me pick through the load. If there was anything I needed, well I, uh, I'd buy it from him and do my patchin' with it."

Barham's forge was very small and portable, and did not even have a shelter over it. Every time the Barhams moved, the blacksmith operation moved with them: "When I went to Alabama, I took it. And when I came back . . . over across the river here, . . . I brought it with me. And when I went back [to Alabama] I carried it back." The shop consisted of a small anvil and homemade blowers, and a set of basic tools. "Just an anvil settin' on a stump and my blower out here in the open where the air could get to it," is the way Barham describes the shop.

The forge sat up on legs and was "more like a hamburger grill, portable hamburger grill, than anything else," Barham says. The part you put the coal in was called a "duck's nest," and was shaped like "the bottom of a wash pan." Barham would set a layer of bricks in the duck's nest and build the coal fire there to heat the metal. There was a hole in the center of the duck's nest to allow air to blow up through it. All the tools Barham had were

"an old hand plane, old fashioned brace, some bits," and a hammer. When Barham became "too feeble to stand over that fire," he gave his son the blower, anvil, and tongs. "I wore my brace and bits out," he recalls.

Neighbors were welcome to use the small shop for their own needs. Barham remembers one neighbor who wanted to build himself a rubber tired wagon at the shop. "[The neighbor] asked me if he could come over there and use my, what few tools I had, to build him a wagon. And he was makin' such a mess of it that I went out there and took it over . . . Markin' it off, . . . show him where to bore the holes, and what size."

Stratigraphy

The stratigraphy at this site reflects the flat topography of the area (Figure 14.15) and a lack of cultural activity there. On the surface was a thin layer of humus, averaging only 4 cm. Below this was Stratum 1, a dark brown sandy loam (7.5YR3/2 dry), containing most of the cultural material. This stratum averaged 8 cm in thickness but had a range of 1-12 cm. Underlying this cultural zone was a sterile fragipan, Stratum 2, consisting of red and orange banded silty sand (2.5YR4/8) 30 cm thick. Interlensing with the red silty sand was a grayish brown silty sand (10YR5/2), Stratum 3. Stratum 4 was a light reddish brown clayey sand (2.5YR6/4 dry) at least 80 cm thick. This stratum was also sterile.

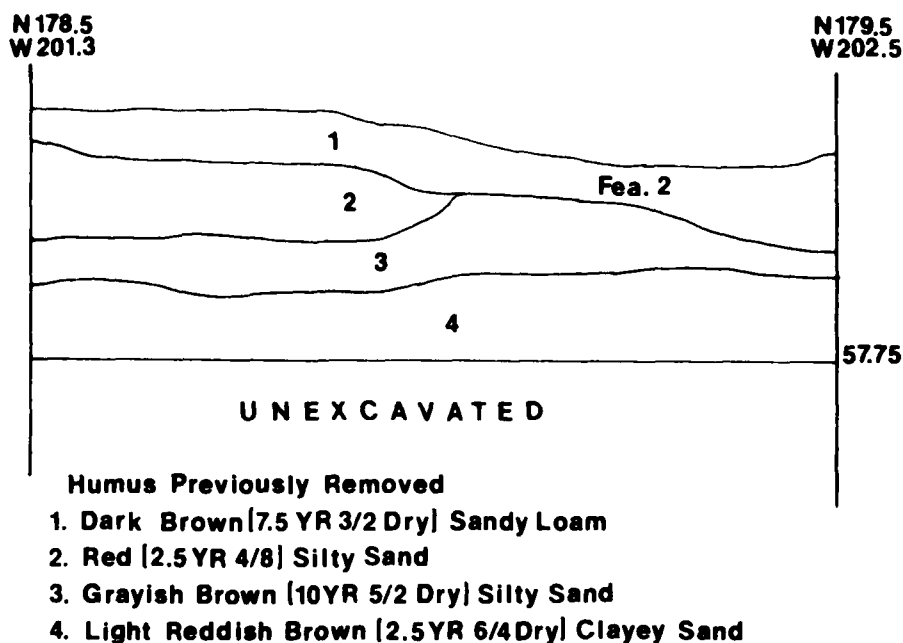


Figure 14.15.--Stratigraphic Section of Backhoe Cut, 22CL576.

Excavations

Before excavations could begin the site was cleared of natural foliage. This became quite a chore, especially in the trenching area as it was covered with a thick layer of kudzu, poison ivy, and thorny trees. A bushhog was hired to clear the site while the backhoe work began on Feature 2.

Excavations at 22CL576 began with an effort to locate the reported well. With careful monitoring we used a backhoe to excavate a 2x3 m pit next to the "well". This was done in order to profile the well and to insure safe conditions during the proposed well excavation. At a depth of 1.5 m it was evident that no well had ever disturbed the stratigraphy in the area. The depression that we thought to be a well was, in fact, a trash pit (Feature 2). Two 1x2 m units were excavated immediately west of the backhoe cut to insure that no well was in the area. Only the feature fill in these units was excavated after the entire depression had been defined. The second stage of investigations was to excavate three .5x10 m trenches across the site to a depth of 15 cm to explore the possibility of locating a structure.

Features

Only one cultural feature, the trash pit (Feature 2), was uncovered at this site. This pit was roughly circular, approximately 2 m in diameter, and 30 cm deep, cutting into the light reddish brown clayey sand. An extensive collection of early 20th century artifacts was recovered from this pit. Many of the artifacts were automobile parts, including a steering wheel, license plates, and transmission housing. A large number of artifacts reflected early- to mid-20th century domestic activities.

Feature 1, located at N187/W226, was a soil disturbance at first thought to be a post mold; however, excavation revealed this to be a tree mold.

A few small artifacts were recovered from the trenching. Investigations failed to reveal any indication of a garage, blacksmith shop, or well.

Summary

More than one informant indicated this was an outbuilding, either a shed, garage, or blacksmith shop. Archaeological investigations neither support nor refute their memories. The automobile parts imply the possibility of a garage nearby. The car parts could be left over from Luther Barham building rubber-tired wagons too. However, besides these automotive parts, no other "garage related" artifacts like tools were recovered. No blacksmithing tools were found, nor were coal or slag concentrations evident which would support such an activity area. We are left with the possibility that the informants had the general area correct, but not the specific location. Perhaps their memories were thrown off by the presence of the depression (trash pit) and the truck. The depression was easily mistaken for an old well. If a well was located near the structure, they might have assumed this spot to be the location of the structure. Perhaps the structure and well were located further to the west or east. No evidence was found in those areas, however. Since artifacts from the trash pit are contemporaneous with and only 10 m from the house at 22CL569 the pit was probably created and filled by the occupants of the Aaron Mathews house, probably Aaron Mathews himself given the 1920s dates on the material.

CHAPTER 15. ELLEN MATHEWS' AND HENRY GOODALL'S HOUSES

by Steven D. Smith and Betty J. Belanus

Oral History

The site of Ellen and Jeff Mathews' house is located on a bluff north of the ferry road (Figure 13.1). Several people remember this house and its occupants, especially "Aunt" Ellen. On the same bluff, according to Walter Ivy and his brother Douglas, stood a log house occupied by the Goodall family before 1910. Various outbuildings probably stood near the two houses; however, these buildings are not clearly remembered by informants.

The road to the houses branched off from the ferry road and up to the left of the Mathews house and right of the Goodall house, according to Walter Ivy. A few informants (W. Ivy, H. W. Hendrix, J. R. Decker) thought that a road, or at least a path, also once came up to these sites from the Roosevelt Thomas House, 22CL568. Some remnants of this road are still visible. The roads were described as "rough wagon roads" by Walter Ivy.

Informants tended to disagree or be vague about this site, and consequently many unanswered questions remain. The site was located off the main road in fairly dense woods, out of the vision of the passer-by. Few informants had the need or inclination to visit this site. Therefore, the oral historical record of the site is spotty, consisting of several disjointed, although often vivid, memories.

Walter Ivy was the only person who clearly remembered the log house of the Henry Goodall family, although Douglas Ivy had vague memories of such a house and family. The Goodall family, Walter recalls, consisted of Henry, his wife Lou, and their children Sarah, Ellen, and Jack. Henry's father (who Walter remembers was named Jack) had been a slave, "Young at that time, but [he] could remember slavery. Like my grandmother." Walter remembers Henry Goodall well, since they used to hunt together when Walter was a boy in his "teenage years" (ca. 1905). "I used to hunt with that old man, he was a awful [i.e., great] hunter, that Henry Goodall, nice to hunt with," Walter recalls.

"Night hunt and day-hunt, too. Henry'd go to hunting, stay all night sometimes. Good coon dogs. And we'd have lots of fun. Sometimes a dog would tree a coon, and we'd have to stay there 'till day to get it. Be up a tree, and he [Henry Goodall] couldn't shine his [the coon's] eyes to get 'em out. Sometimes [the coon] would be in his den, too. 'Twould be kinda cold, or somethin', and we'd build a fire and stay there the night. [The coon] wasn't comin' out as long as he seed that fire down there, no how. . . . Henry'd take him a nap and sleep sometime, but I was afraid to go to sleep. (laughs) He was so used to that."

Little else is known about Henry Goodall or his family via the oral history. He was, presumably, a renter on the Young place. Walter remembers the Goodall family moved up north of Waverly onto the Cook plantation before Captain Billy's death (1913). From there, the family moved to the Mississippi Delta and that is where Henry Goodall "passed" as Walter puts it

(i.e., passed away). Goodall was listed in the H. C. Long account book for 1878 and 1887-1889 and is studied in greater detail later. He was born in Mississippi in 1861, married Lou (b. 1862) in 1884. They had four children, Ella (b. 1883), Sarah (b. 1884), Sidney (b. 1885), and Nona (b. 1898) (U. S. Census of Population 1900). We assume the Goodalls built the house at the time of their marriage in 1884.

The Goodall house was a log dogtrot, according to Walter and Douglas Ivy. Walter remembers it being oriented north/south. The south chimney was of stick and mud construction with a brick fire box. "Old time (bricks)--those were larger than these they make now a'days," Walter says. The north chimney was all brick. The family cooked on their fireplace with "skillet and lid, they call it," Walter said. Heavy iron cooking vessels were used for cooking and baking.

The house sat up on wooden blocks. The "open hall" or dogtrot was roofed over but left open, "just an open hall, about seven-eight feet, somethin' like that," Walter recalls. The logs were not sided over. The windows were, as Walter says, "nothing but old wood windows, . . . hung on hangers to the outside . . . That's the way all those old log cabins was, no glass windows." Both rooms were entered from the dogtrot, one door for each room. In general, the Goodall log cabin seems to have been typical of the log houses in the area built before 1900. Walter Ivy thinks this house and several others might have been built "in slavery days," although he does not clearly recall anyone ever having told him so.

The location of the Goodall house in relation to the Ellen Mathews House is rather vague. Walter and Douglas agreed the house was "down" the hill from the Ellen's house, on the opposite side of the road leading up the bluff. This would place the house to the west and south of the Mathews house. Walter remembered one house was "nowhere from" the other, but just how close "nowhere from" indicates is open for interpretation. Honeybee Hendrix recalled what he thinks was at least one old house site in this general area, near an old cedar tree with nails driven into it. He does not recall hearing of Henry Goodall, however. The Goodalls were, apparently, the last occupants of the log house, or at least the last that Walter Ivy remembers living there. He thinks the house mostly rotted down. The common practice in the area seems to have been to disassemble old log houses and use the logs for firewood (W. Ivy).

The Ellen Mathews House was a frame house located, supposedly, up the bluff to the east of the Goodall House. Walter Ivy's early memory of the house was as a simple one room (single pen) house with one chimney. He is "satisfied" that another room was added to the house eventually, and another chimney as well. The first occupant of this house in anyone's memory seems to have been a renter named Jimmy Witherspoon. Most informants remember the house as "Aunt" Ellen Mathews home, and a few, especially Walter and Douglas Ivy, recall Ellen's husband Jeff Mathews, who aspired to be a preacher. Ellen and Jeff came to live in Waverly sometime after their son Aaron and his family moved there, according to their granddaughter, Easter Mathews Smith. The Aaron Mathews family came to Waverly sometime in the late 1910s or early 1920s. Ellen and Jeff were already an old couple by this time, and probably moved to Waverly to be near their son and grandchildren. They seem to have sustained themselves by hiring on as day labor to chop and pick cotton, although they may have farmed a little on their own (D. Ivy).

Jeff Mathews died sometime in the early 1930s. Dezzie Adair can barely remember "Uncle" Jeff. Ellen, however, continued to live in her Waverly home until the 1940s--Honeybee Hendrix thinks until almost 1949--when she went to spend her last years with her grown granddaughter Easter who had moved to West Point.

Several people remember Ellen Mathews well. One of her favorite occupations seemed to be fishing. Hallie Ivy remembers Ellen was very bent over in her older years to the point of being almost hump-backed. She attributes this affliction to the fact that Ellen sat on the bank of the river near the ferry landing all day, fishing. Douglas Ivy, while doubting this theory, agrees that Ellen loved to fish. "She would break ice to fish sometimes," Hallie remembers. John Robert Decker, one of Milly's sons, remembers fishing with Ellen about 1940. "She and I used to fish, . . . that's why I remember her so well. She was a good old person."

Honeybee Hendrix remembered Ellen Mathews, at one time, took in laundry. The method women used to clean clothes in those days involved boiling them out-of-doors in a large iron pot and scrubbing them with homemade lye soap or other strong preparation against a tin or glass rub board. Honeybee recalled his shirts would sometimes be worn "to a frazzle" from this treatment, but certainly were clean.

Dezzie Adair remembered Ellen Mathews as "a good person." She recalled Ellen loved coffee, and, when she ran out of it would walk down to the Adair's to borrow some. Douglas Ivy remembered both Jeff and Ellen smoked pipes and probably dipped snuff as well.

Ellen kept a garden up the hill from her house (J. Hendrix). Walter Ivy thinks this was a garden with a paling fence around it to keep out animals. Flowers, especially jonquils, grew in the clearing around the house. The yard was kept clean of grass and weeds by hoeing it down, in the common manner of the day. Since the land around the house was irregular, the hoeing helped level out a yard area and kept out snakes and other critters (J. Hendrix).

Several informants vaguely remembered one or two sheds in the general area. John Robert Decker recalled one "little old shed up there, just as you go up, to the left [of the house]." Honeybee Hendrix indicated on a map he drew that there were some "sheds for animals" near the house. Judging from the other house sites on the place, the typical site included some small sheds or shelters for chickens, hogs, and, sometimes, cattle and mules. Large barns were not common in the area. Smokehouses and corn cribs were common outbuildings.

The Ellen Mathews house (Figure 15.1) was most likely a single pen with one shed room to the back. Several people agreed it had a front porch (J. Hendrix, J. Decker, W. Ivy, V. Adair); Honeybee Hendrix remembered the porch being at about knee level. The front of the house faced the road to the ferry (i.e., south). The chimney in the main room faced east. Walter Ivy and Honeybee Hendrix both think the house had two chimneys, although Honeybee suggests one might have been for a stove flue. The one main room would, most likely, have been the bedroom/living room and the shed room a kitchen. As Honeybee Hendrix said, generally, in the area most people "did the cooking and eating in the side room, and, then, did the living in the

main room. In other words, the main room was the bedroom, living room, parlor, and so forth." From this basic unit, additions could be built as necessity dictated.

No one remembered the house site of Ellen Mathews or her habits well enough to recall where she got her water or threw her trash. Honeybee Hendrix speculated a dug or a cistern well might have been near the house, but several people thought it was more likely Ellen went down a path to the ferry landing to get her water there (D. Adair, D. & H. Ivy).

In general, relatively little is remembered by informants about the site of Henry Goodall's log house and Ellen Mathews' frame house, since few people had occasion to visit these sites and the span of time has caused other people's memories to blur. The few memories assembled here, however, give some idea of what life on the bluff was like for the Goodalls and Mathews.

No one is quite sure what happened to the Ellen Mathews site. Honeybee Hendrix thought that the Adairs had torn it down. John Onus Adair and John Robert Decker think most of it rotted down. After the practice of the area, it probably was torn down for whatever salvagable material remained. By the late 1940s, this house was in rather bad repair (J. O. Adair, R. Adair).

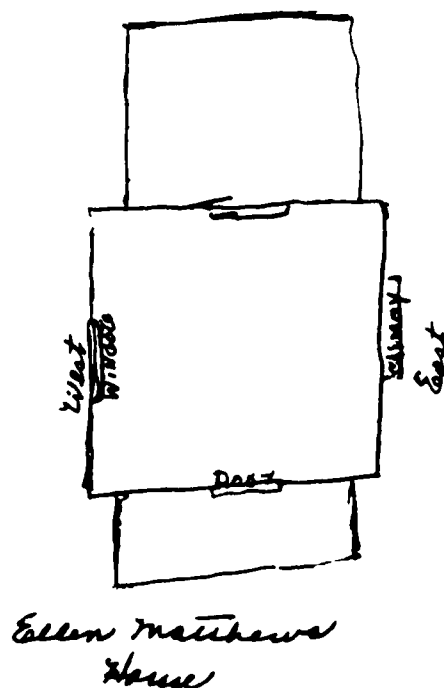


Figure 15.1.--Sketch Map of Floor Plan for Ellen Mathews House
by Vivian Adair.

Description

This site complex proved to be the largest in the study area. Because of its size, the site was divided into four areas: A, B, C, and D (Figure 15.2). Areas A and B were explored for structural remains and C and D for trash deposits. Because of time restrictions and the site's size, two crews were assigned to excavate the area. The site was located on the side of a hill gradually (10-15%) sloping from north to south through Areas A, B, and C. To the east in Area D, however, the slope sharply dropped (30%+ slope) to the floodplain of the Tombigbee River.

We discovered the site in February 1979 by noting surface brickbats, cedar trees, osage orange trees, and daffodils. In June it was covered with brush and trees needing clearing. The slope and overgrowth caused excavation problems. Roots hampered our digging and examining features. The slope and clay soils meant much runoff from rains washed downslope across the site. Hurricane Bob did serious damage to the areas we had already excavated, such as filling the trenches with more than 4 cm of slope wash.

The Ellen Mathews House, 22CL571A

Excavations

Investigations in Area A began by excavating 150 m of .5 m wide exploratory Trenches B, C, D, and E (Figure 15.2). Because the depth of deposits was greater than we had anticipated, based on testing, the length and of trenches had to be reduced from the original plan. During trenching, area excavation began near the chimney base located during testing. Individual unit sizes ranged from 2x2 m to 1x1 m. A total of 146.75 sq m was opened in this manner. Although we knew the location of the structure, we hope the trenches would delineate it better as well as encounter other structures and trash deposits.

Stratigraphy

Stratigraphy in Area A was shallow and not complex (Figure 15.3). Stratum 1, a black humus (5YR2.5/1 dry), varied from 2 to 16 cm thick. Below this was a reddish brown silt loam (5YR4/4 dry), Stratum 2, sometimes as thick as 20 cm. Beneath this was Stratum 3, a dark reddish brown silt loam (5YR3/4 dry). Except for the upper 5 cm, this lower stratum was culturally sterile. Approximately 40 cm below the surface, soils became a yellowish red clayey silt (5YR5/6 dry). The stratigraphy followed the natural topography of the site, gently sloping from north to south. The supports for the house were set into Stratum 3, but the base of Stratum 2 probably was the original surface of the site. That stratum dates from the late 19th century to ca. 1950. The humus has accumulated since that time.

East of the chimney lay a dark brown to black silt loam with mortar and brick inclusions, Feature A6 (Figure 15.4). It extends in a narrow band around the eastern end of the house, resting upon Stratum 3 and capped by the humus layer. This may represent an outdoor activity area and probably dates to the same time period as the dark brown midden (Feature A9).

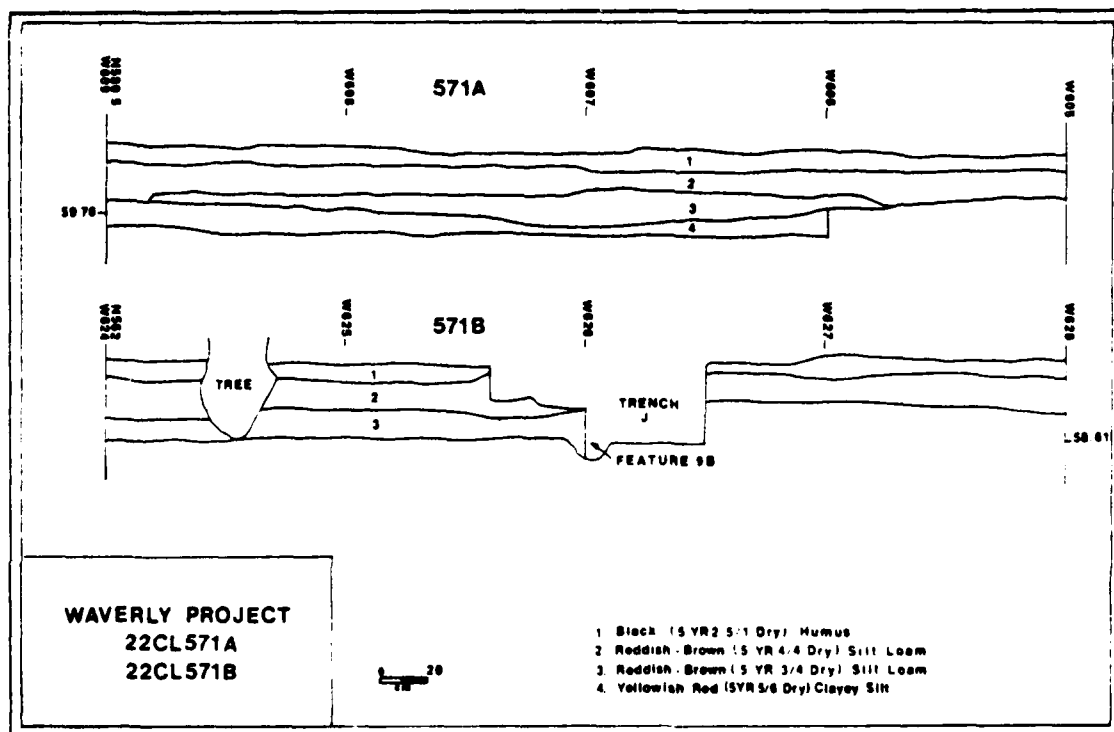
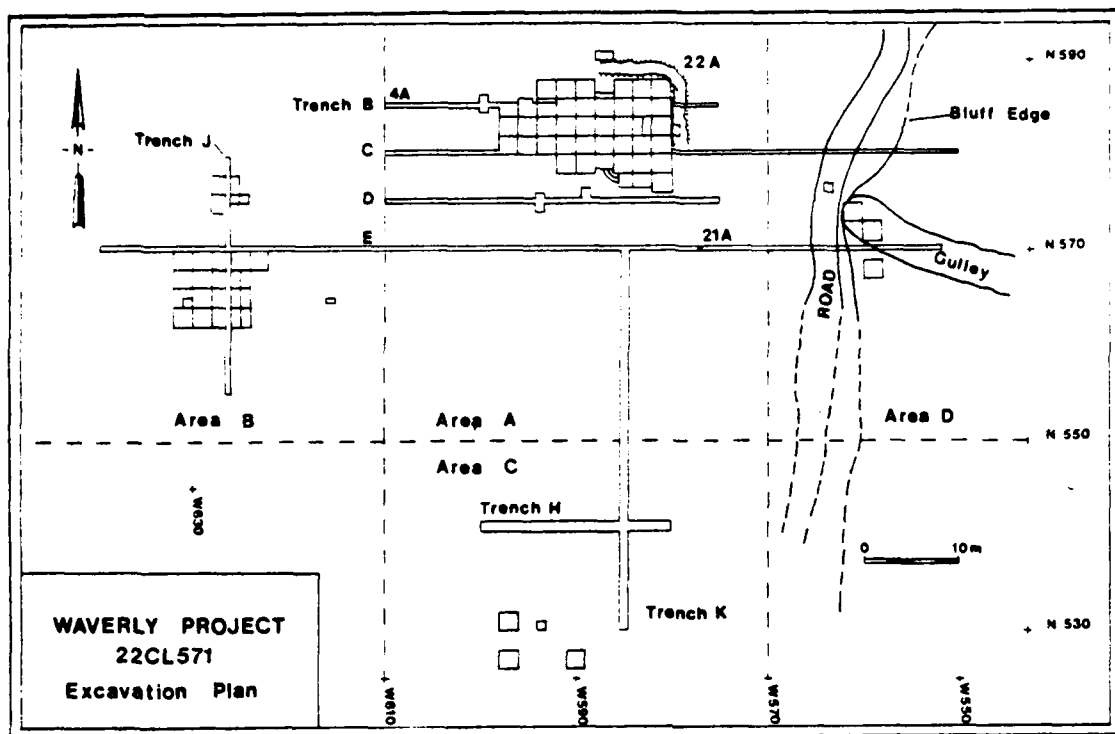


Figure 15.2.--Plan of Excavation, 22CL571.

Figure 15.3.--Stratigraphic Sections, 22CL571A&B

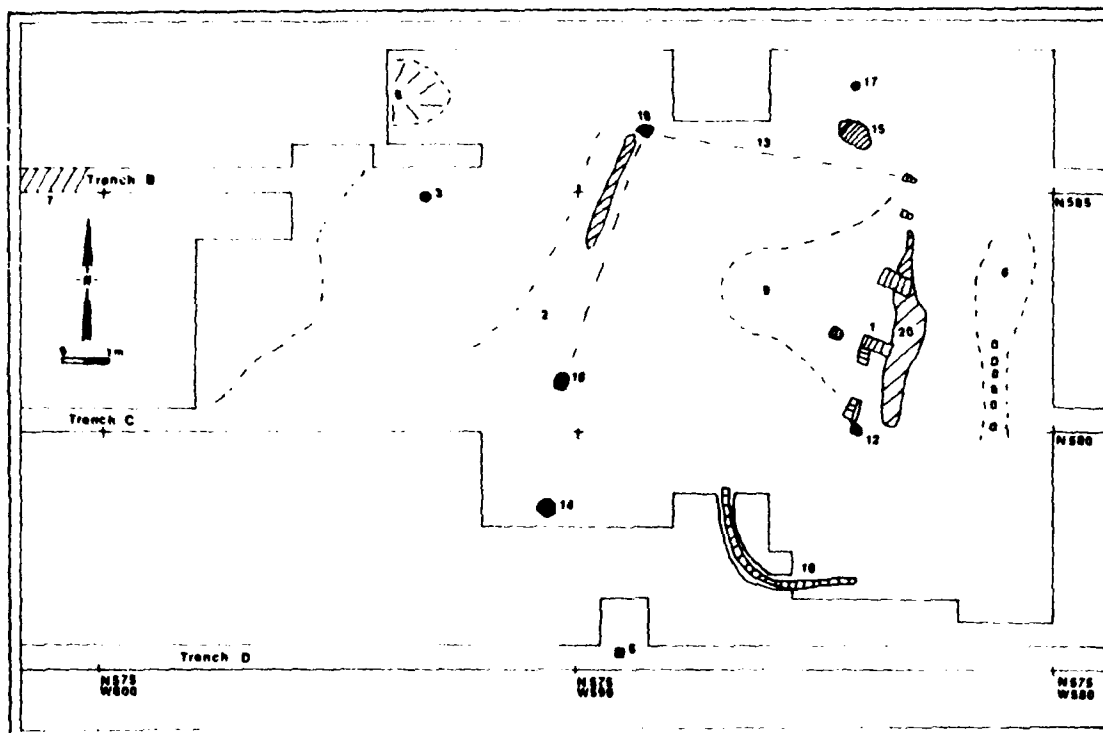


Figure 15.4.--Feature Map, 22CL571A.

Table 15.1. Archaeological Features, 22CL571A

Feature	Provenience	Comments
1A Fireplace	North-South W584 line	Filled Post-1884 (Coin) feature defines east wall of structure
2A West wall - soil color	N584.98/W593.19	Post-1904 (bottle base) feature stain W90 line defines west wall of structure
4A Soil color stain	Trench B: N585/W608	Machine cut nails
5A Post hole, square	Trench D: N588.0/W588.3	Feature very shallow
6A Soil stain	N586-581/W581	High artifact concentration activity area
7A Soil stain - road	Trench B & C: N585/W600-604	Filled Post-1907 (Coin); fence line probably fence line
8A Depression	N587/W593	Recent; (orange juice bottle) bottle collector's hole
9A Soil color change	N580/W584	See Feature 1A, associated with N579.0/W583
10A Rodent disturbance	N582/W584	Feature 1A
11A Rodent disturbance	N582/W584	
12A Post hole	N580/W580.48	SE corner of structure; Filled Post-1915 - (bottle base)
13A Soil stain	N585 line	North wall of structure
14A Post hole; porch corner	N578.68/W590.67	Machine cut nails & wire nails; feature defines porch
15A Dark soil stain	N586/ W584	Function unknown
16A Bricks in line in front of house	N577/W587	Feature defines walkway
17A Post hole	N586/W584	Wire nails part of rear lean-to (?)
18A Post hole - SW corner	N580/W590	SW corner of structure
19A Post hole - NW corner	N586/W588	NW corner of structure
20A Trench under chimney	W583	Post-1900 (snuff jar lip, machine cut nails), fine white sand fill
21A Soil stain	N570/NW578	Probably 1890-1920, (fruit jar) Trench E dumping area
22A Mound around house	W579 line	Sweeping activity

Features

Several features were uncovered in trenching and area excavation (Figure 15.4). The most obvious were those features defining the structure: a chimney and "wall base" to the east, soil color changes to the north and west, and three post holes in the southeast, southwest, and northwest corners. Since the house features are related, they will be examined first. Table 15.1 provides the summary of features excavated.

The chimney, Feature A1, consisted of two rectangular brick units with an open space between (Figure 15.5, 15.6). This space was filled with brick rubble, artifacts, and surprisingly little charcoal. The bricks were mortared between courses but not between bricks of the same course. The two brick units formed the north and south walls, with no rear wall to the east. These brick units were 1.24 m (4 ft) apart. Each was 70 cm (28 in) long and 26 cm (10 in) wide (one brick length). The chimney may have been constructed of sticks and mud with brick used only as a foundation. Though there was brick rubble in the immediate area of the chimney, there was obviously not enough for a full brick chimney. There is a possibility the chimney was robbed but this would have been a rather thorough job. The area immediately to the east was speckled with bits of mortar and brick; this was identical in appearance to the chimney area at 22CL569 we know was robbed.

On either side of this brick chimney, running north and south, were two lines of bricks and brick bats defining the eastern edge of the structure. Most of this brick was jumbled; however, a few solitary bricks indicate they were probably laid side by side to form a line one brick length wide. No mortar lay between this brick. The brick line, including the chimney, formed a wall approximately 5.3 m (17.3 ft) long.

Extending 3 m west from the chimney inside the structure, was a dark brown midden containing many artifacts, including a large number of buttons. Feature A9 was shallow (2 cm) to the west but gradually deepened to 48 cm at the chimney. No internal stratigraphy was visible. Feature A9 cut into the grayish brown silt loam, lending support to the hypothesis that the original surface was in Stratum 2. Two coins, dating 1884 and 1892, were found in the lower part of this feature, suggesting a terminus post quem for the construction of the building. Directly east beyond the brick line and running north/south underneath the chimney was a small ditch (Feature A20) containing a fine white sand fill and many machine cut and wire cut nails. The ditch varied from 16-86 cm (6-34 in) wide, 15 cm (6 in) deep, and 4.2 m (13 ft 9 in) long. The exact function of this ditch is unknown. A similar one was noted on the opposite side of the structure (Feature A2). If these were drip lines, then the chimneys were not built in the gable end as expected. Certainly they relate to the structure, if not as drip lines. The presence of a large number of nails in Feature A20 might also imply the filling of the ditch occurred as a single event rather than gradually. Another interpretation might be that the ditches were constructed during the building of the house and filled during the chimney construction. Because of the presence of a posthole (Feature A12) and the sand-filled trench (Feature A20) running under the bricks and chimney (Figure 15.4), we feel the structure was originally built on posts or blocks and had brick pillars added on the east to help support the structure.



Figure 15.5.--Eastern Floor Supports and Chimney, View to North.

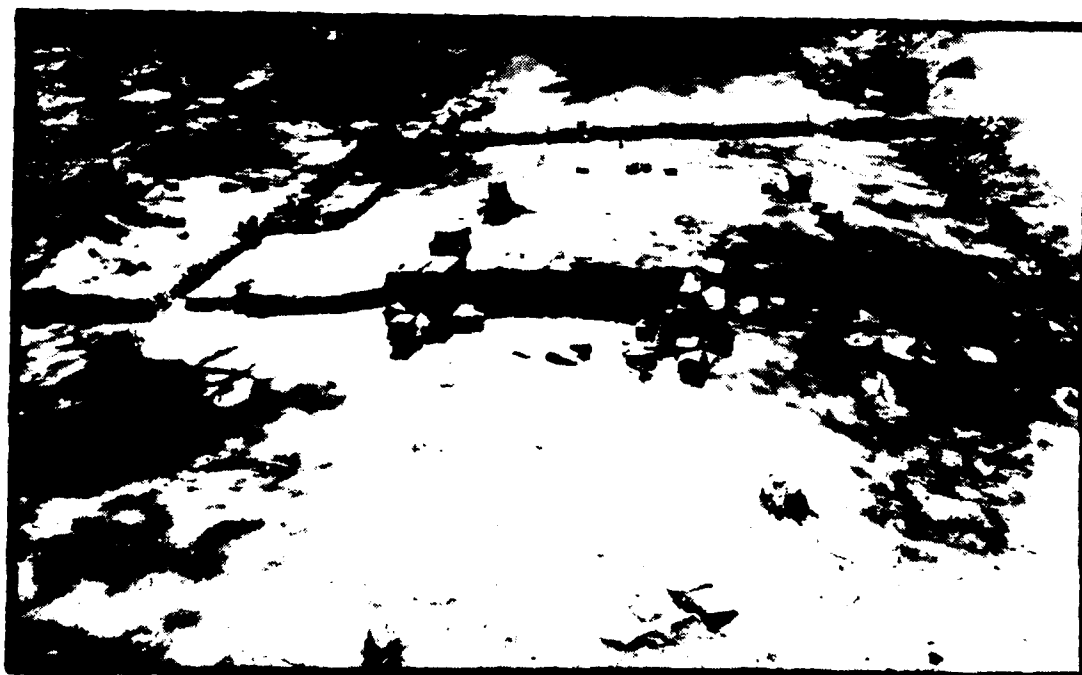


Figure 15.6.--View Across Excavation, View to West.

The north wall of this structure was defined by a soil color change (Feature A13), the north end of Feature A1, and a post hole (Feature A19). Inside the structure, soils were the reddish brown Stratum 2 (except for Feature A9). A very definite line (Feature A13) ran from Feature A1 to Feature A19. To the north of this line, soils were a dark brown silt loam. There was no difference in soil matrix between Feature A13 and the inside of the structure. Feature A13 was approximately 5.5 m (18 ft) in length measured from Features A1 to A19 inclusive.

The structure's west wall was not as sharply defined in the soil as the north wall. Post holes (Features A18 and A19) indicated where the line should have been, and a slight soil color change existed. However, this change was ill-defined because of a shallow lens of fine white sand analogous to Feature A20. Differences in artifact accumulations were another indicator of the west wall.

Features A18 and A19 were similar in size (45 and 40 cm in diameter, respectively). Feature A18 was much deeper at 32 cm than Feature A19 at 4 cm. Brick may also have been used to form the corners since brick was evident at the same levels as the points of origin of the post holes. However, no definite brick patterns confirmed this. The distance from Feature A18 to A19 was approximately 5.5 m (18 ft).

Many brickbats and bricks extended east/west from W591 to W597 and north/south from Trench B to Trench D. We hoped to find a foundation here but the excavation was unproductive since very few whole bricks were found. Still, three lines of evidence, admittedly circumstantial, lead us to suspect this brick as being from another chimney. The bricks here were not likely from the fall of the east chimney since no brick was found within the structure area; the east chimney may have been stick and mud with brick used only as a base. Second, informants indicated the structure may have had two chimneys, with the west chimney only a stove flue added by Jeff and Ellen Mathews. If it had a wood base, with the brick used only to support the flue, only scattered brick would have been found in the ground. Third, we are reminded of the poor archaeological evidence for a chimney at site 22CL569. Only a small amount of mortar was found in an area where a chimney was known to have existed. If a second chimney did exist on this west side, then an identical situation regarding the presence of a sand trench beneath the chimney can be noted. At Structure B, a similar situation occurred concerning the presence of a large amount of brick rubble with no evidence for a chimney.

The south wall of the structure is defined only by two post holes, Features A18 and A12, and the south end of Feature A1. No definite line could be discerned along the south wall. Along a 1 m wide strip from N580 to N581 soils gradually change from reddish brown to yellowish red silt loam. It is possible that the line was there, but this area, being a low point on a gradual slope, took the brunt of the damage done by heavy rains. Also the existence of a porch might affect accretion or erosion of a definite line between the inside and outside of the structure. Feature A12 was 44 cm in diameter and approximately 20 cm deep. Oddly, the feature was 6 m (19.5 ft) from Feature A18, making the structure an imperfect square. Feature A12 was located below the brick wall and may predate the construction of this wall.

Another post hole, Feature A14, located 2.75 m (9 ft) south of Feature A18 may provide evidence for a porch. It was 36 cm in diameter and 4 cm deep. If this is the southwest corner of a porch, the southeast corner was not found. A rather curious feature, A16, may pinpoint the porch's front steps. Feature A16 was a single curved line of bricks and brickbats running from N568/W586.90 to N576.90/W584.20. The bricks are positioned so each rests on the preceding one, like fallen dominoes. This formation is likely to define a walkway or flower garden border. Extensive probing failed to expose another brick line to the west or east to help confirm this. Also, there was no soil color or matrix change on either side of the brick to indicate different functions. If this feature did lead to the front steps it would seem to continue under the porch, unless the porch was only halfway across the front of the house. Feature A16 may continue to curve around to the east of the house and run north/south to approximately the N584 line. There is evidence of this in Feature A6. Informants remembered the front porch and nearby flower garden.

Feature A6 was a shallow amorphous ditch oriented north/south through units N580/W580, W582/W580, and N584/W580. It was defined by a blacker color change in already dark brown soils. The ditch contained artifacts, mortar, and many brickbats. The brickbats were not found in a single contiguous line as noted in Feature A16; however, some brick was found to resemble Feature A16's formation. They may be the same feature.

Feature A17 was located at N587.2/W584.2. This post hole was circular (17 cm in diameter and 28 cm in depth). To the south of Feature A17 was a dark brown soil anomaly Feature A15. It was located in the southeast quadrant of Unit N586/W584 and was approximately 1.53 m at its greatest northwest/southeast extent, 1.38 m from northeast to southwest, and 17 cm deep. During excavation burned dirt was noticed which might indicate the feature functioned as a firepit. These two features may be associated with a rear room addition, though this cannot be confirmed.

Besides the features discussed above, several others were uncovered which do not appear to be directly associated with the structure. Three other post holes were exposed during excavations. Feature A3 was located at N584.88/W593.19. The post hole was roughly circular (22x23 cm) and 14 cm deep. No artifacts were found with the feature. Feature A5 was located in Trench D at N575.5/W588. It was a square dark brown silt stain surrounded by fine white sand. This sand was identical to sand found in Feature A20 and along the west wall of the structure. Its dimensions were 30x32 cm and only 2 cm in depth.

Feature A4 (Figure 15.2) in Trench B N585/W609, and Feature A21 at N570/W579-W580.90, were similar soil anomalies with no readily apparent function. Feature A4 was a dark brown stain containing brick and metal. The feature was 30 cm wide and ran through the north and south walls of the trench. Feature A21 was wider, up to 1.25 m, though it was only 18 cm deep. Both features were very deep below the surface at 30 and 35 cm respectively. Feature A21 contained a great deal of artifacts including a whole bottle, brickbats, ceramics, and glass.

Feature A7, a large soil anomaly located at N585/W601.72-W605 in Trench B and at N580/W601-604 in Trench C, may be the road mentioned by informants. Unfortunately, it was not observed in Trenches D and E which

would be expected if it was indeed the road. In Trench B the feature consisted of a shallow trench 3.28 m (10.8 ft) wide and 7 cm (2.3 in) deep. In Trench C the feature was 3 m (10 ft) wide and at approximately the same depth. The feature in this trench contained large amounts of artifacts. Another road was excavated to the east along the bluff edge in Area D.

Feature A8 was a depression located at N587/W594 during testing and thought to be a cistern or well. Directly south of this feature was a mound of hard clayey silt analogous to those soils found 40 cm below the surface. The soils here were obviously disturbed and excavation of the mound uncovered a modern orange juice bottle. This information led us to suspect the feature to be of quite recent origin. A rapid excavation and intense probing failed to reveal any subsurface features.

The area within the structure was a low mound, Feature A22 (Figure 15.2). Surrounding the structure was a flat area cut back into the hillside and just beyond that a low ridge running around the structural area, which when excavated by trenching, contained dark organic matter and artifacts. This mound is interpreted to be the result of sweeping the yard to keep it clean, an activity mentioned by informants as common. The sweeper often used a hoe to clean and level the area around the house, piling the "backdirt" on the perimeter of the cleaned area.

Artifact Distribution

At Site 22CL571A the distribution of artifacts horizontally across the site was significant while vertical distribution was not. Except in features, the vertical provenience of artifacts was irrelevant. Distribution maps by excavation level showed little difference between levels. Distribution maps present the data for the house area (Figures 15.7-15.12) and the yard area (Figures 15.13-15.17).

Generally those distributions reveal two major activity areas. One of these was the hearth. Many domestic activities should have taken place around the hearth resulting in an accumulation of midden in this area of the structure. One may envision small artifacts dropping through a loose wooden floor, set above ground level. Also, food and refuse could have been thrown into the firebox. The distribution of toys, mollusk shells, food bone, and buttons are especially clear in revealing this activity area. Such items could also accumulate by children and dogs playing under the house.

The second activity area is located outside the structure immediately to the east and southeast. Exactly why this area would be more abundant in artifacts than, for example, the west side of the structure, is not known. However, it was evident during the excavation that the soil in this area was rich in organic material, whereas the north, west, and southwestern areas outside the structure were much less so. This applies to the artifact concentrations as well. This same area was suggested on the basis of the alkalinity and high phosphates (Appendix 4).

Artifacts, especially nails and buttons, were concentrated in Feature A7, the road or fence line.

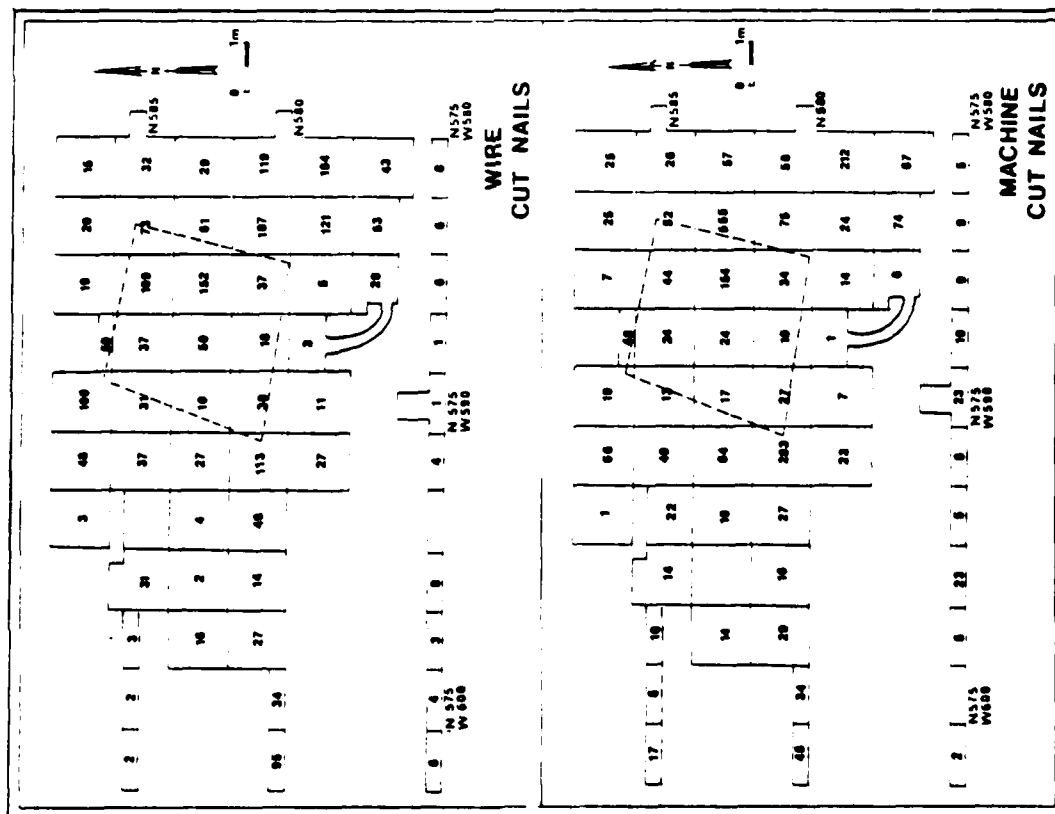


Figure 15.7.—Machine Cut and Wire Cut Nail Distribution, 22CL571A House.

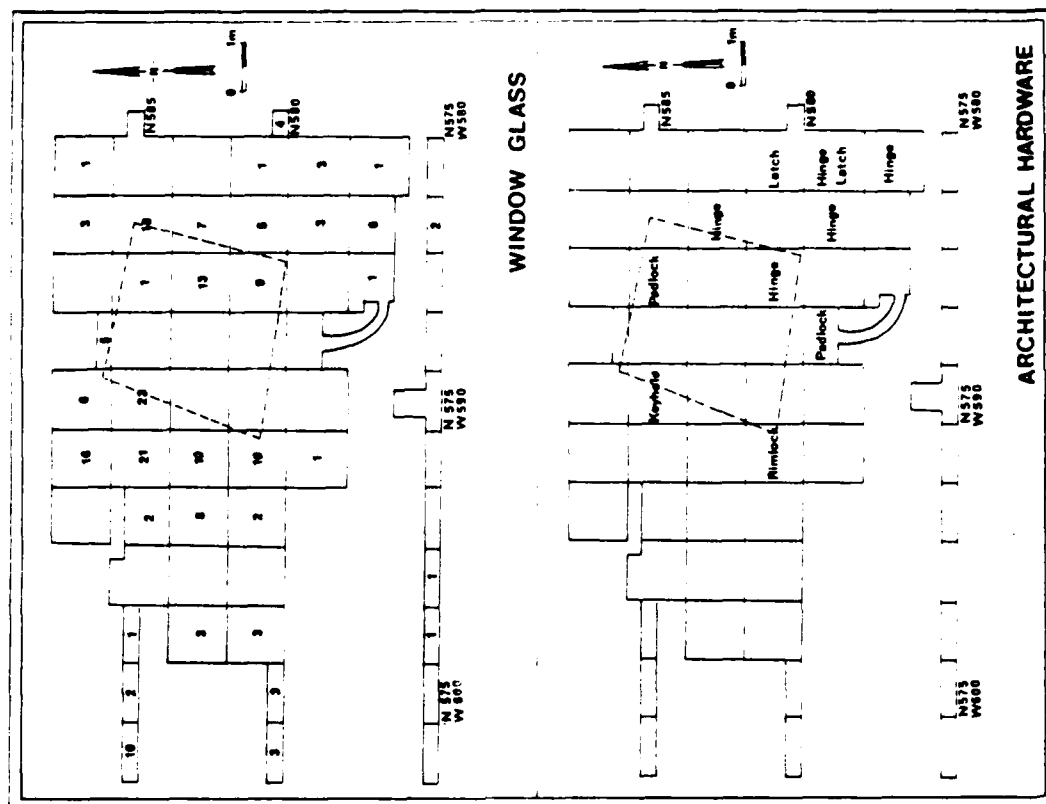


Figure 15.8.—Window Glass and Architectural Hardware Distribution.

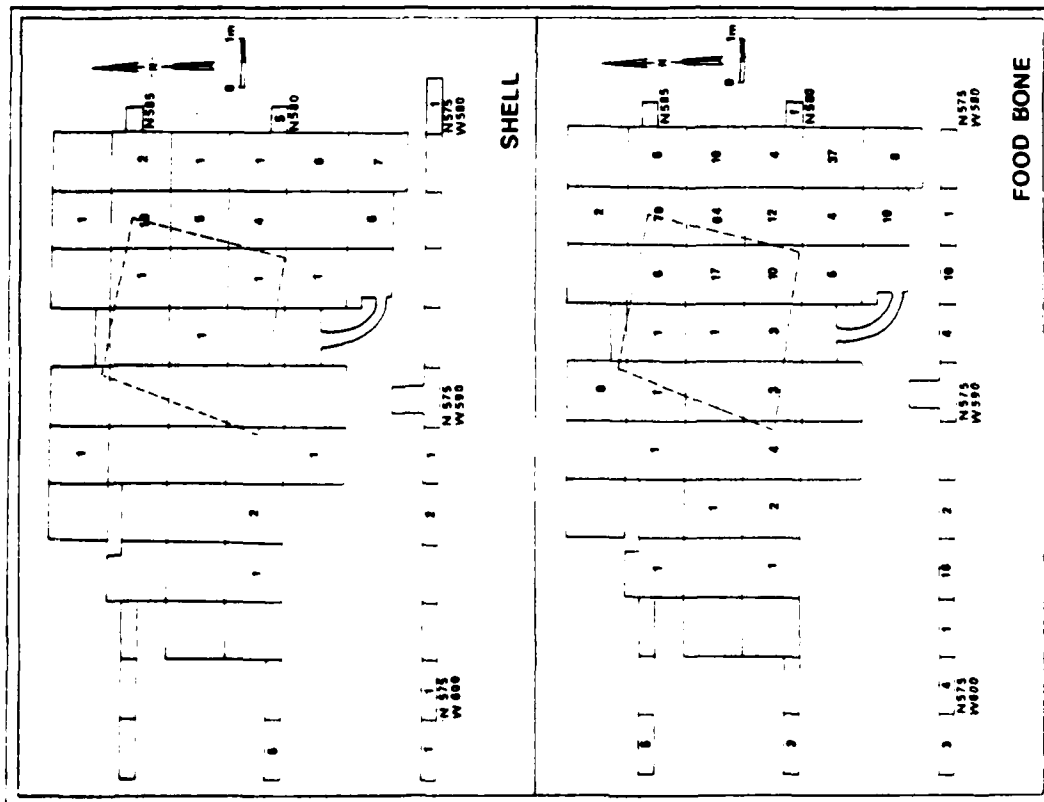


Figure 15.9.--Shell and Food Bone Distribution.

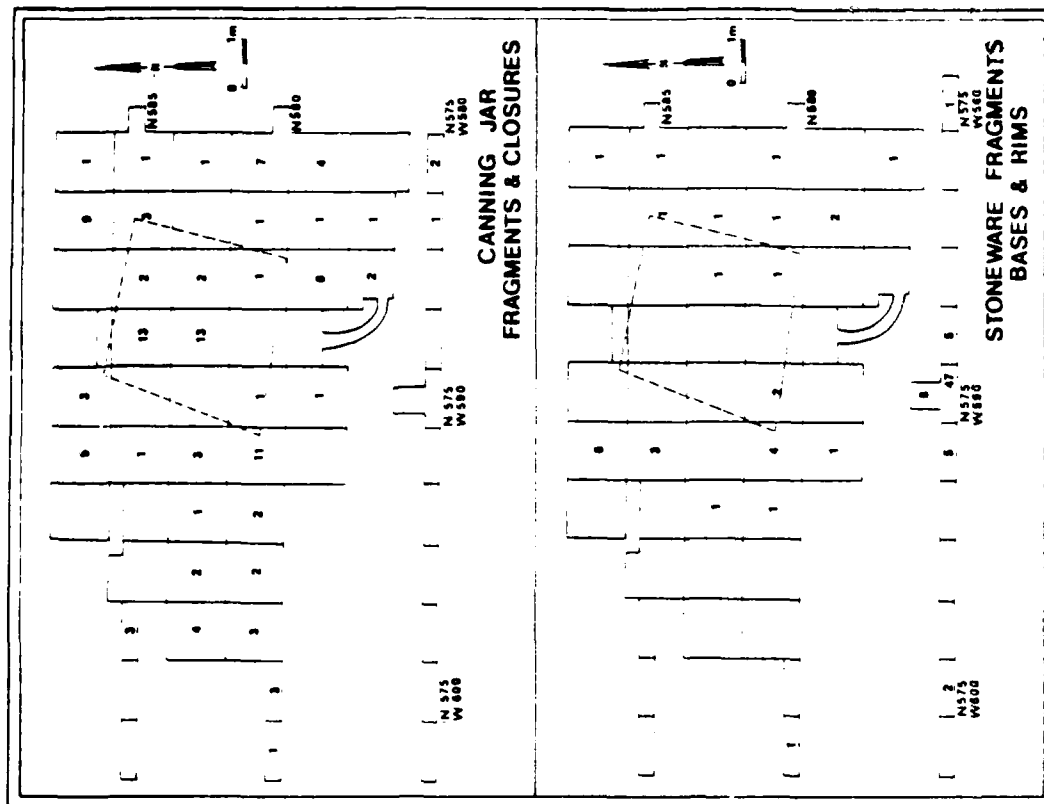


Figure 15.10.--Canning Jars and Stoneware Distribution.

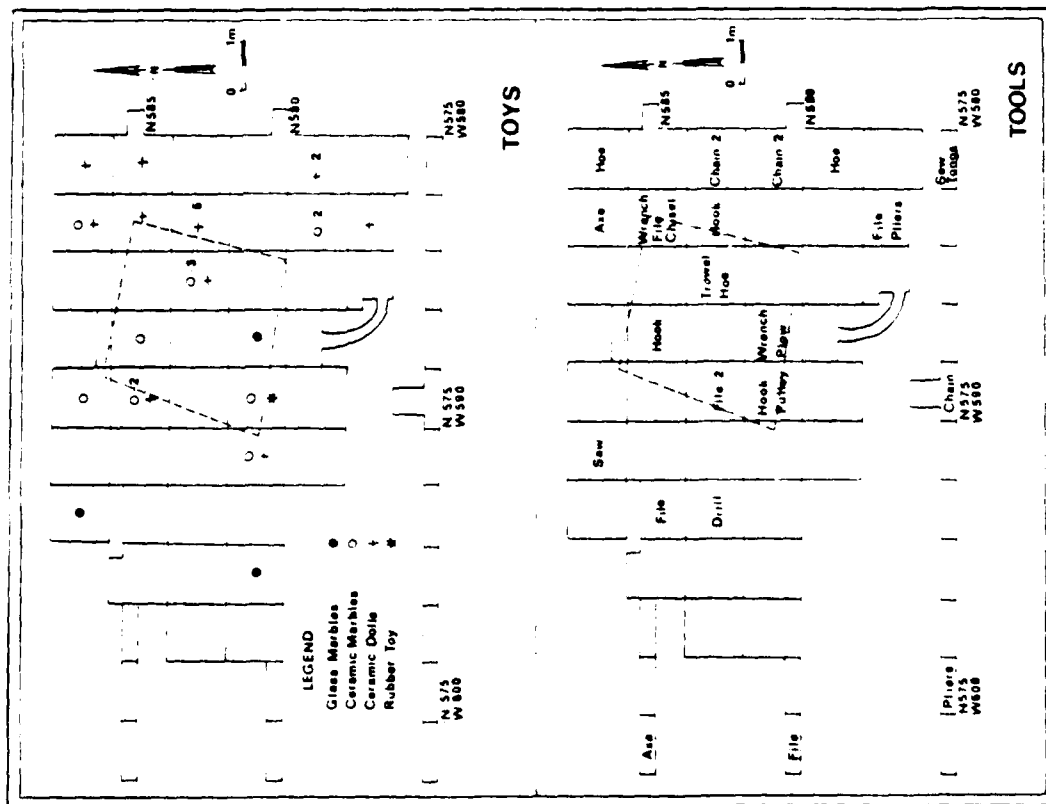


Figure 15.11.--Tools and Toys Distribution.

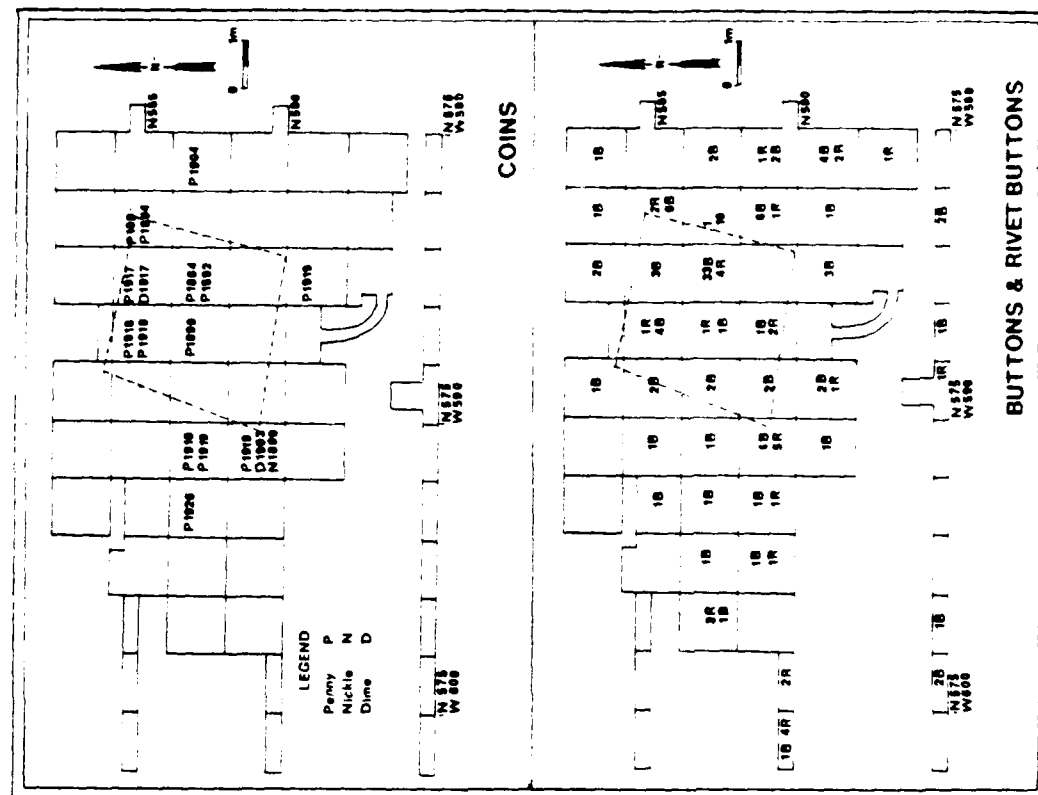


Figure 15.12.--Coins and Buttons Distribution.

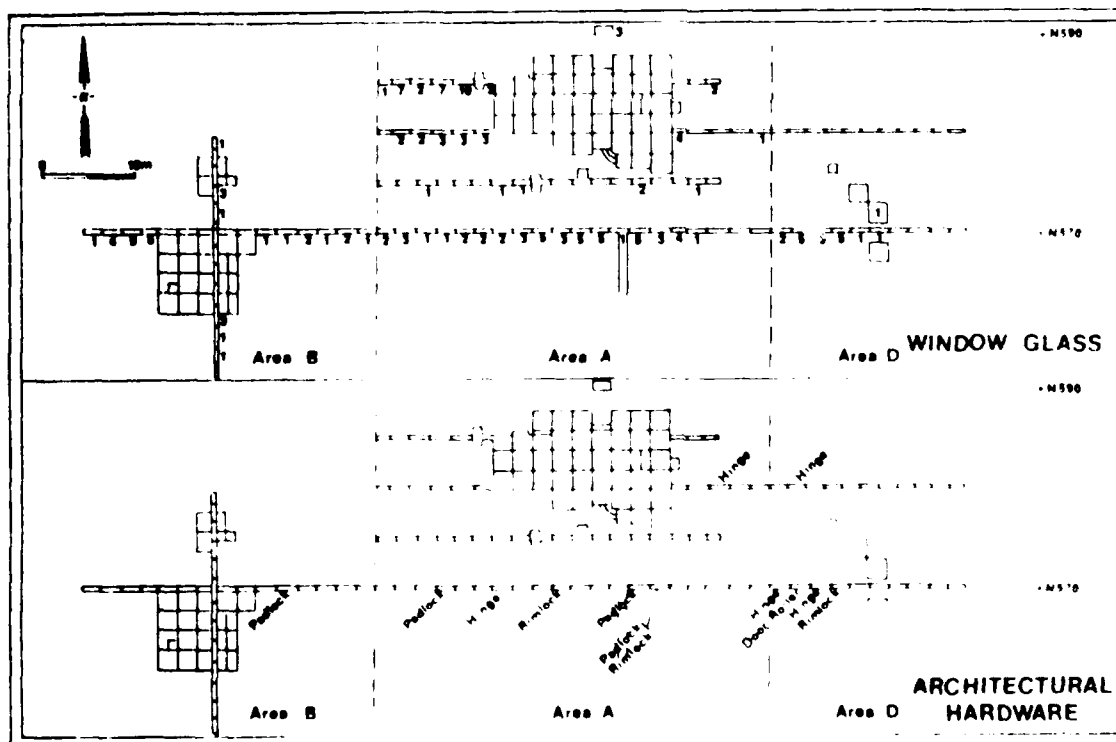
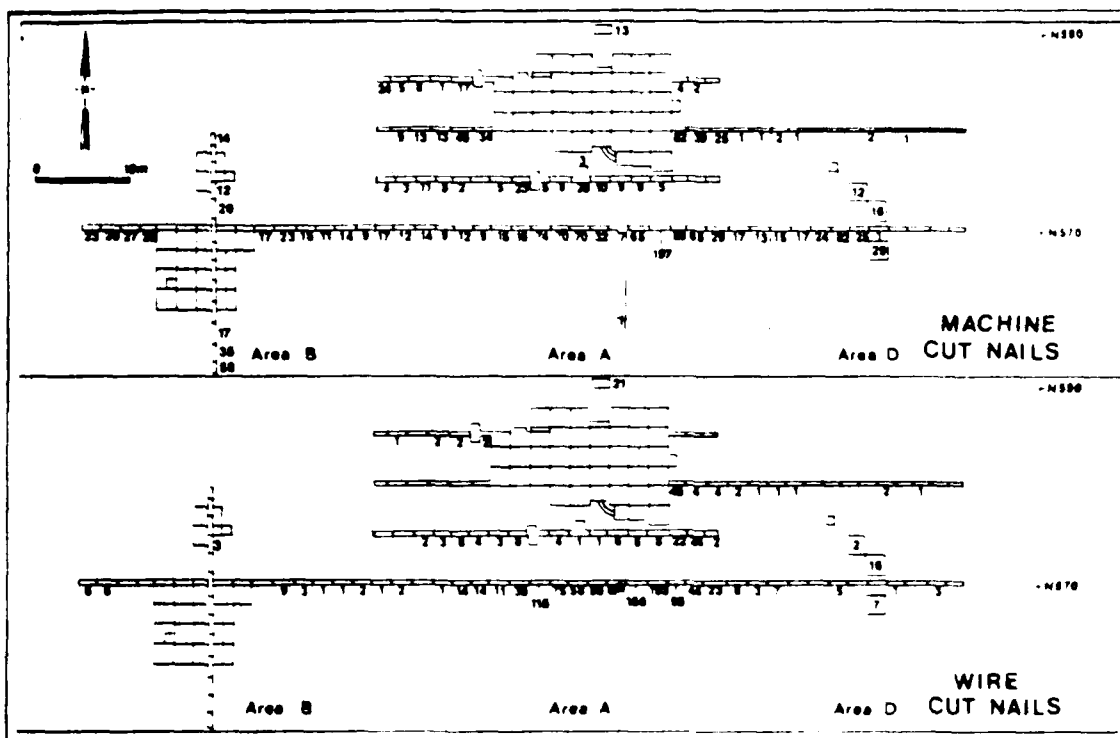


Figure 15.13. Nail Distribution, 22CL571 Yard.

Figure 15.14.--Window Glass and Architectural Hardware Distribution

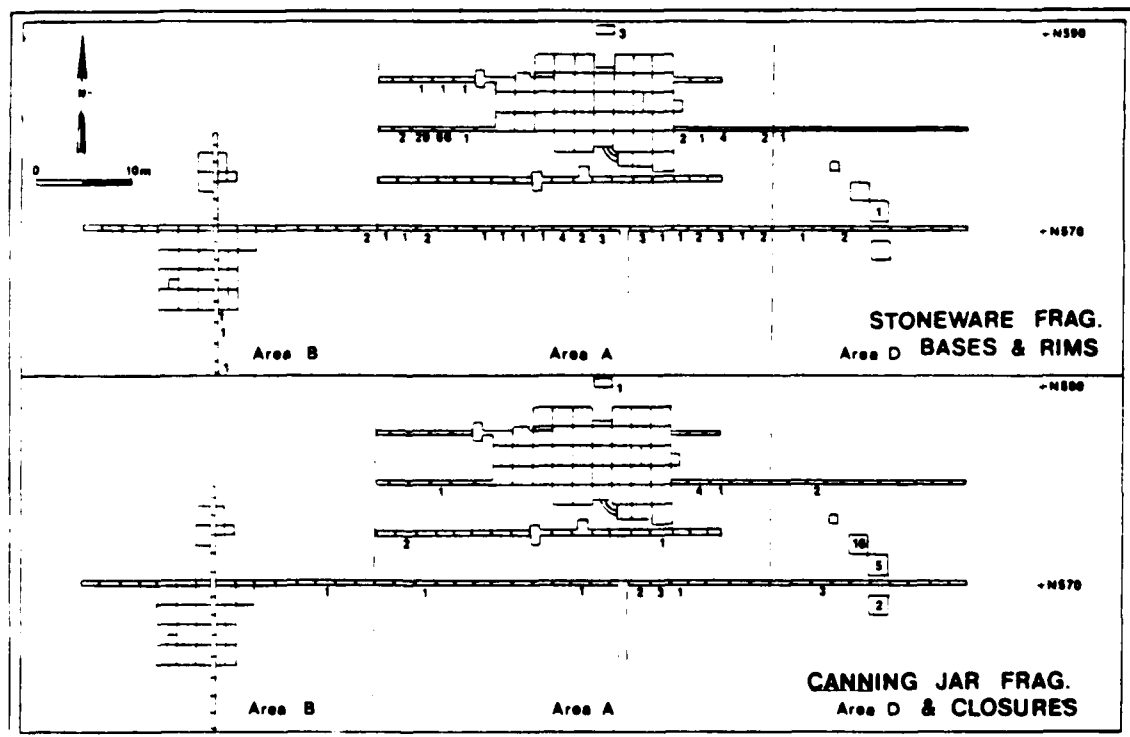
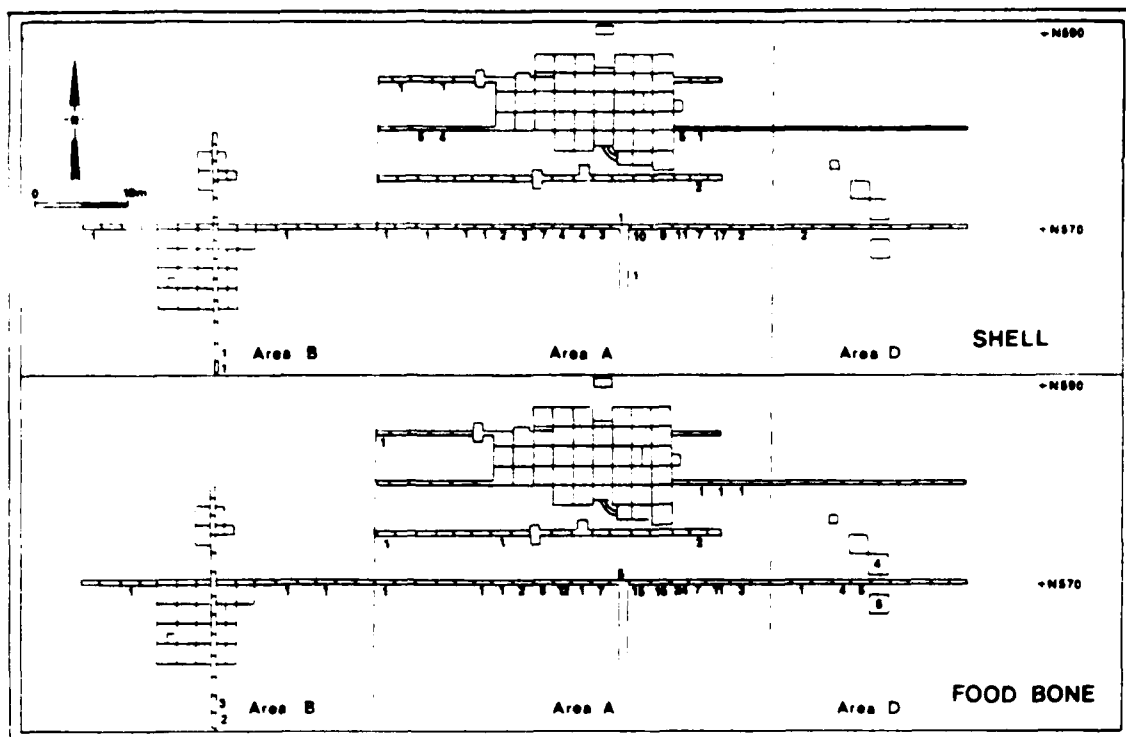


Figure 15.15.--Shell and Food Bone Distribution.

Figure 15.16.--Canning Jars and Stoneware Distribution.

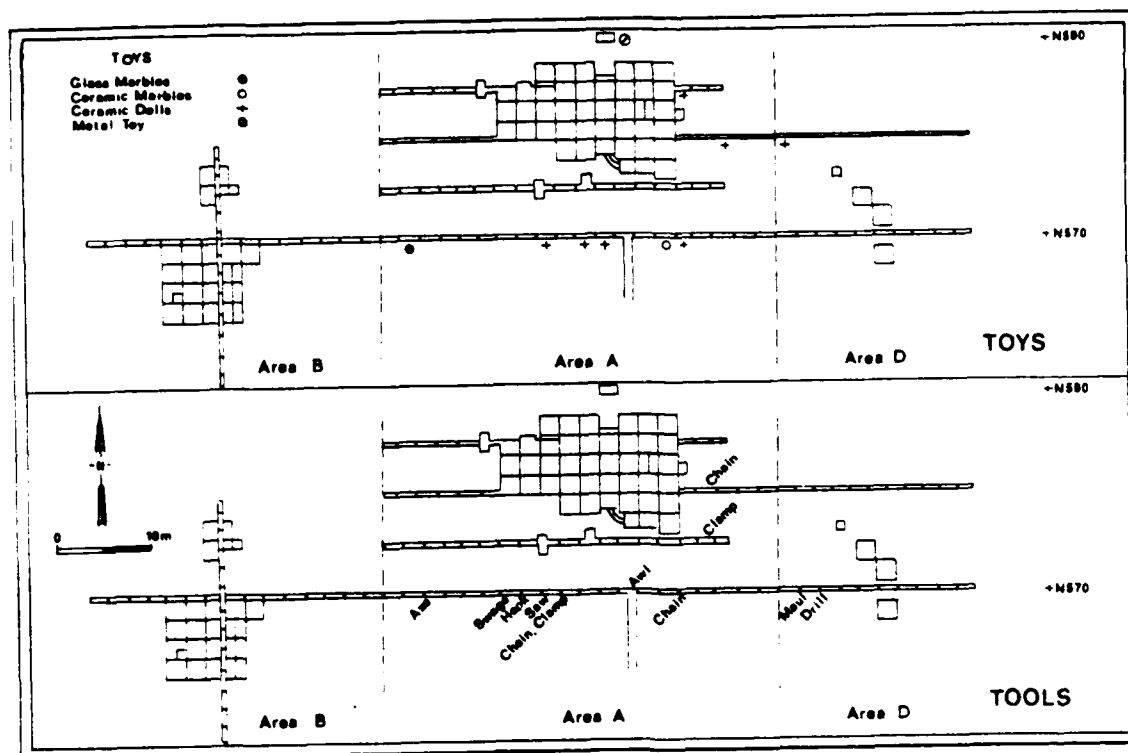


Figure 15.17.--Tools and Toys Distribution.

Finally, it is interesting to note the relative lack of artifacts in two areas within the structure, the central portion (N582/W586), and front (N578/W584-588). Perhaps the majority of activities in the structure were near the fireplace, this accounting for the lack of artifacts in the central portion of the house. In front of the structure, the porch may have prevented artifacts swept out of the door from accumulating too near the living room. They would have been pushed off the porch. The porch was probably a half porch added at a later date. This area was kept especially clean. This is different from South's Colonial Brunswick Pattern where artifacts tended to cluster around the door (South 1977:47-80).

Machine cut and wire cut nails (Figures 15.7, 15.13) clustered in four areas: around the sides of structure, the fireplace area, outside the structure to the southeast, and along the fenceline to the west. No real distinction was evident between clusters of wire versus machine cut nails.

Window glass (Figures 15.8, 15.14) repeats the pattern at site 22CL569: some window glass appeared within the structure but most lay on the periphery. Numerous sherds occurred on the western and eastern ends of the structure indicating the probable locations of windows. Few fragments occur elsewhere at the site like in the trash disposal areas.

Architectural hardware (Figures 15.8, 15.14) clustered on the eastern half of the site. Other than this and perhaps the interesting position of a padlock at a likely spot for a front door, nothing of interest was revealed by this distribution.

Food Bone distribution (Figures 15.9, 15.15) was similar at each Waverly site. The majority of the bones were found around the fireplace with few bone fragments in the other areas of the house. In addition, much bone has been disposed of away from the house in a trash disposal area. Mussel shell shows the same distribution as food bone at this site. Concentrations of shell were found around the fireplace and in trash disposal areas but not randomly scattered across the site.

Canning jars and closures seemed to cluster slightly in the north central part of the structure (Figures 15.10, 15.16). Informants spoke of a kitchen on the north side. Otherwise these items were spread evenly across the site. No explanation was readily apparent.

Tool distribution (Figures 15.11, 15.17) was curious. While chains were distributed around and outside the house (as also noted at site 22CL569), other unlikely tools were found within the structure: files, a plow, a trowel, and a hoe. One might expect such tools in a shed rather than in a house, assuming they had a tool shed. Perhaps the house served as a tool shed for someone else, after the Mathews moved out.

Toys were frequent in the yard (Figures 15.11, 15.17). After about 1920, Ellen and Jeff Mathews' grandchildren likely played here. We know nothing about Jimmy Witherspoon's family. As with other artifacts, toys tended to cluster to the east of the site, probably where daily outside activities usually took place.

Buttons and rivets (Figure 15.12) clustered around the hearth area and fireplace. The concentration of buttons was interesting in light of the oral historical evidence that Ellen may have helped support herself by taking in laundry and sewing. One may immediately conjure up an image of Ellen sewing in front of the hearth.

Summary

From the oral history, history, and archaeology we may piece together a fragmentary history of this site and the structure's appearance. We do not know the date of construction. The oral history regards a Jimmy Witherspoon as its first occupant. He was in the Waverly area around 1888 (Long n.d.a) and was a tenant at Waverly in 1913 (Young 1913).

We may speculate--and the artifacts recovered generally support this hypothesis--that the site was constructed in the late 1880s or early 1890s. It was a single pen, frame structure built on four wooden posts. The fireplace was stick and mud with a brick base. The structure may have been somewhat similar to a double pen house photographed elsewhere in Mississippi in the 1930s (Figure 15.18): note the wooden support blocks, catted chimney, and the board which would allow the chimney to fall away in case of fire.

Around the late 1920s, perhaps after Witherspoon died and was buried on that same ridge where the house stood, Ellen and Jeff Mathews moved into the house. Perhaps they moved there to be near their son Aaron who lived at 22CL569. Ellen and Jeff probably made extensive repairs on the house.

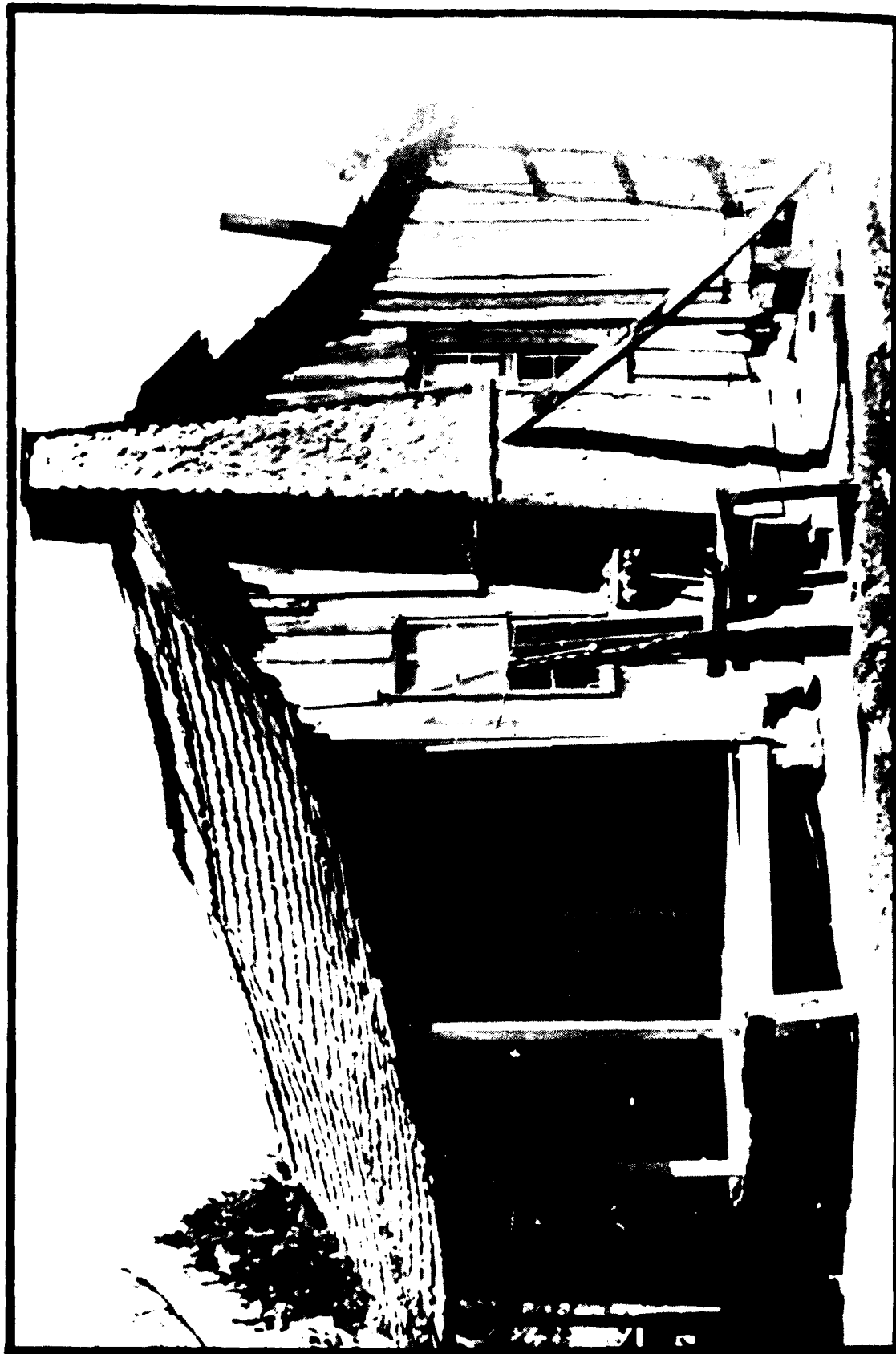


Figure 15.18.--Double Pen House in Mississippi During 1930s
(Library of Congress 5844-F34-31907).

The porch may have been added by them or by Jimmy Witherspoon, but from the oral history we believe the Mathews added a rear room. Also they may have added, at a later date, another chimney to the west side of the house. Possibly the structure was settling and Jeff added brick to the post supports and underneath the east side of the house. Jeff may have noticed that Jimmy had not built a square structure. Ellen built a walkway from the porch around to the east side of the house to protect her flowers from careless feet. Since the area was the scene of many outdoor activities, she kept it clean by hoeing. Ellen and Jeff had no young children; however, either Jimmy Witherspoon's children or Ellen and Jeff's grandchildren are evident by the number of toys lost in and around the house.

Inside, the single room was sparsely furnished. Most everything was done around the fireplace--cooking, keeping warm in the wet winter months, and of course sewing. Ellen took in laundry for extra money and, while Jeff was alive, both worked the fields. Jeff died in the 1930s, and Ellen moved to West Point in the 1940s. Sometime afterwards, the structure was probably torn down, perhaps by the Adairs.

Henry Goodall's House, 22CL571B

The structure in Area B was tentatively identified as a one-room frame house similar in construction to that in Area A (Figure 15.19). Oral historical data concerning this site was inconsistent and contradicts archaeological information. Informants indicated this was the possible location of the Henry Goodall family structure. They stated that the Goodall house was "down" from the Mathews' structure and on the opposite side of the road. If Feature A7 in Area A is interpreted as part of the old road then the structure in Area B is likely the Goodall home. The Goodall structure was oriented north and south and set up on wooden blocks, according to informants. This information may also fit the archaeological evidence presented below. Furthermore, the Goodall structure was remembered as a log dogtrot. If so we excavated only one pen of the dogtrot. Other informants remember "sheds" to the west of the Mathews house. This also fits the location of the structure at Area B, possibly indicating a later use of the structure as an outbuilding for the Mathews' house.

Excavation

Test excavations had revealed the presence of a brick corner pier and probing located additional subsurface material. We began by excavating Trench E through the entire site along the N570 line (Figures 15.2, 15.19). Next a similar trench (Trench J) was completed running north-south, bisecting Area B and crossing Trench E at the W626 line. In total, 55 m of .5 m wide trench was excavated. Following the completion of Trenches E and J, area excavation was initiated where the trenches had revealed the probability of uncovering architectural features. These area units ranged from 1x1 m to 2x2 m in size. A total of 72 sq m were opened in Area B.

Stratigraphy

Stratigraphy of Area B was consistent with Area A (Figure 15.3). Below black humus (5YR2.5/1) 2-5 cm thick (Stratum 1), was a reddish brown silt loam (5YR4/4), Stratum 2, 10-15 cm thick. The upper 5-10 cm of this silt loam often contained artifacts, and when not disturbed by roots, provided an excellent contrast for features. Below a depth of 30-40 cm below the surface soils are interpreted as culturally sterile though occasional small artifacts were found, probably the result of animal and root disturbance.

The brick pillars for this structure were built on Stratum 3. This, and the presence of artifacts in the upper 10 cm of Stratum 3 indicates the structure was built prior to the accumulation of the grayish brown silt loam. This date is sometime before ca. 1892.

Features

Features uncovered by trenches and area units seem to define a one room structure, and to the north of this structure a concentration of brick rubble and artifacts (Figure 15.19; Table 15.2). Though we have identified this structure as a one room building we must consider the possibility that this was indeed a log dogtrot as the oral history indicates. If a straight line is drawn from Feature B7 through Feature B10 to Feature B6, the segments each measure about 6.1 m (20 ft), and the "wall" 12.2 m or 40 ft. Comparing this to a known dogtrot, site 22CL569, with a long axis of 12.8 m (41 ft) there appears an interesting size similiarity. Perhaps Feature B6 defined the northwestern corner of the structure. Intensive probing east of this feature failed to produce further brick concentrations which could define a northeastern corner. If this is a dogtrot, we are still left with the problem of the large quantity of brick in what would be the breezeway. Eugene Wilson (1974:67-68; 1975) provided measurements of first- and second-generation dogtrot houses in the South (Table 15.3). The structure at Area B compares quite well with a second generation dogtrot in terms of overall length and room length, and within the side range at 15 ft 1 in (4.9 m). Because the brick rubble lay down the middle of the structure we feel a more likely identification would be a saddle-bag house. This would fit somewhat with the archaeological data though we have no oral historical data to support this hypothesis. Distribution of nails and window glass confirm the presence of northern room to this structure. The problems in identifying this folk structure are put into perspective when considering similiar problems of identifying the structure at Site 22CL569, where there were former residents to interview and photographs, and which had only been torn down in 1970. Artifacts from 22CL571B indicate this structure was down before 1920.

Table 15.3. Dogtrot House Measurements from Wilson (1974).

	First-generation		Second-generation	
	Mean	Range	Mean	Range
Side	16'9.7"	16'0"-18'4"	17'3.6"	15'0"-20'1"
Left Front	19'0.7"	16'2"-22'6"	17'2.8"	15'0"-20'1.5"
Dogtrot	9'2.1"	7'0"-12'1"	9'2"	7'0"-10'10"
Right Front	18'6.7"	16'6"-20'2"	17'3"	15'0"-20'1"
Total Front	46'9.5"	41'9"-52'0"	43'7.9"	38'0"-50'4"

Table 15.2 presents a summary of the features uncovered in Area B. Features B4 and B5 (Figures 15.19-15.21) are brick and mortar piers which are mirror images of each other and probably define the southwest and southeast corners of the structure. Intense probing south of these features failed to disclose any brick features which would define a structure leading south from these piers. Features in this area begin with Feature B4. (Features B1 through B3 were renumbered during analysis because of their location in Areas A and D.)

Feature B4, located at N564-564.9/W629.5-630.30, consisted of two tiers of bricks and mortar laid to form an "L" with the two "arms" pointing north and east. The north arm was 85 cm and the east arm was 90 cm long; both were 36 cm wide. Directly 3.95 m (13 ft) east of this feature was Feature B5, also a brick and mortar pier, arranged to form a reverse "L" with arms pointing north and west. The north arm was 80 cm and the west arm 66 cm long. Both were slightly thinner (34 cm) than the arms of Feature B4. From the west wall of Feature B4 to the east wall of B5 the distance is 4.9 m or 15.09 ft. If these platforms served as southern corners of a structure, as is strongly believed, the northern corners were not so easily determined. The location for these corners may be on or immediately south of a line of concentrated brick rubble (Feature B12) 6 m north of Features B4 and B5, within Trench E.

That brick concentration extended approximately 7 m along Trench E from the northwest corner of unit N568-570/W622-624 to the east half of unit N510-570/W630-632. Two large trees are located at N569.5/W623.75 and N570/W627, and their root systems made investigation in this area extremely difficult. No definite architectural features were located. The bricks and brickbats in this area could be a fallen chimney, though no conclusive evidence was seen. Also, it is interesting to note two vaguely defined artifact concentrations and color changes (Features B10 and B11) immediately south of the brick line at N568.25/W624.25 and N569.50/W628.25. Soils in those areas were disturbed, and though the anomalies were noted, they were not given feature numbers in the field. They are, however, directly north of Features B4 and B5, at a distance of 5.5 m (18 ft) from center point to center point. They are also 4.5 m (14.7 ft) apart from each other. The two color changes could possibly be the missing northern corners of Structure B.

Other features in this area consist of post holes and a concentration of metal fragments. Feature B7 is a rectangular post hole with its centerpoint at N564.60/W630.35. It was 36 cm north-south by 22 cm east-west and 32 cm deep from its point of origin approximately 29 cm below the surface. The point of origin was 13 cm below the top of Feature B4 and Feature B7 may pre-date Feature B4.

Feature B8 is a circular post hole located at N567.55/W629.35. It measures 10 cm in diameter and was located 29 cm below the surface. This post hole was shallow; however, the feature was not discovered until very near its base.

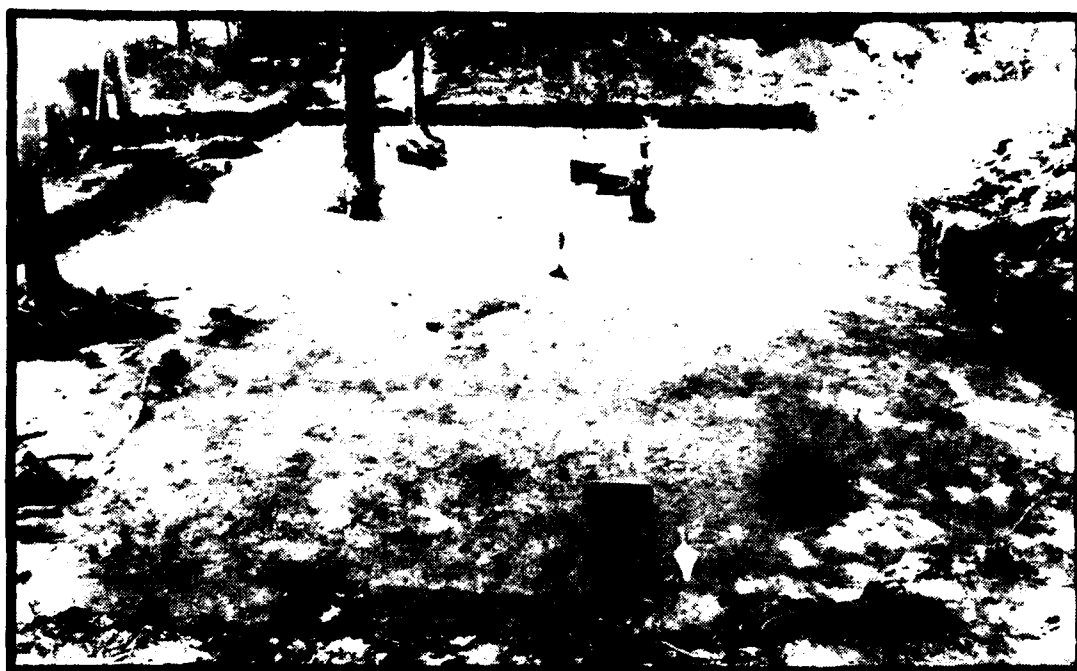


Figure 15.20.--Excavations, 22CL571B, View to South.

Figure 15.21.--Brick Pillar and Post Mold, 22CL571B, View to East

Feature B9, another post hole and located at N561.90/W626.0, was similar to Feature B9. It was 7.2 cm in diameter and located 23 cm below the surface in the Trench J wall. The feature quite possibly continued to the present surface since its outline becomes blurred in the dark-brown subsoil at 23 cm below the surface. Its point of completion was 20 cm below its point of origin. Two other dark soil stains were noted. One was a possible post hole located at N562.25/W629.75 and the other was a stain containing bits of mortar located at N562.25/W628.50.

North of the structure at N576/W626 was an amorphous concentration of brick, charcoal, and mortar, Feature B6. During excavation, a strong rotting odor was noticed. At first we thought a privy had been located; however, subsequent excavation of this feature did not disclose a pit normally associated with a privy. The positive identity of this feature remains unknown. The feature is 1.5 m wide and 2.5 m long with a cigar-shaped heavy concentration of brick rubble running through its length. Some of the brick had been burned. No artifact concentrations were noted during excavation.

Returning to the tentative identification of this structure as a single pen, interesting similarities between the structures at Areas A and B exist. If the structures are placed side by side with their long axes aligned north and south, both structures would be similar in archaeological appearance, Structure A being 2 ft larger on either side. Structure B does not have a brick chimney although one end is defined by brick. As at Structure A, if it were made of stick and mud we would have found little evidence of it. On the opposite ends of both structures, (north for Structure B, west for Structure A), brick scatters were observed--neither of which can definitely be defined as chimneys. Furthermore, the ends of both structures here are defined by post molds. These observations may be no more than coincidence or they may imply a relationship. A similar relationship may also be implied by construction features at 22CL567.

Artifact Distribution

Nail distribution at this site was similar to the other sites (Figure 15.22), with no apparent distinction between machine cut and wire nails. Generally more wire nails appeared in the upper excavation levels and more machine cut nails in the lower levels, but both kinds occurred in each level. Significant numbers of nails occurred in the northern area. This perhaps indicates a second room or pen, or possibly a separate kitchen.

Window glass appeared to be concentrated around the structure but not within it (Figure 15.23). The quantities of sherds indicated windows probably were placed on the east and west sides. At least this was the only area of the house site with significant numbers of window glass fragments. Numerous sherds also occurred in the northern area, supporting the idea of a second structure or room.

Food bone at the house area appeared to be evenly scattered with a slight concentration on the southern end of the house (Figure 15.24). Large numbers of food bone occurred in the northern area of the site. This would tend to support the use of this area as a kitchen and perhaps explain why there was no clustering within the house area.

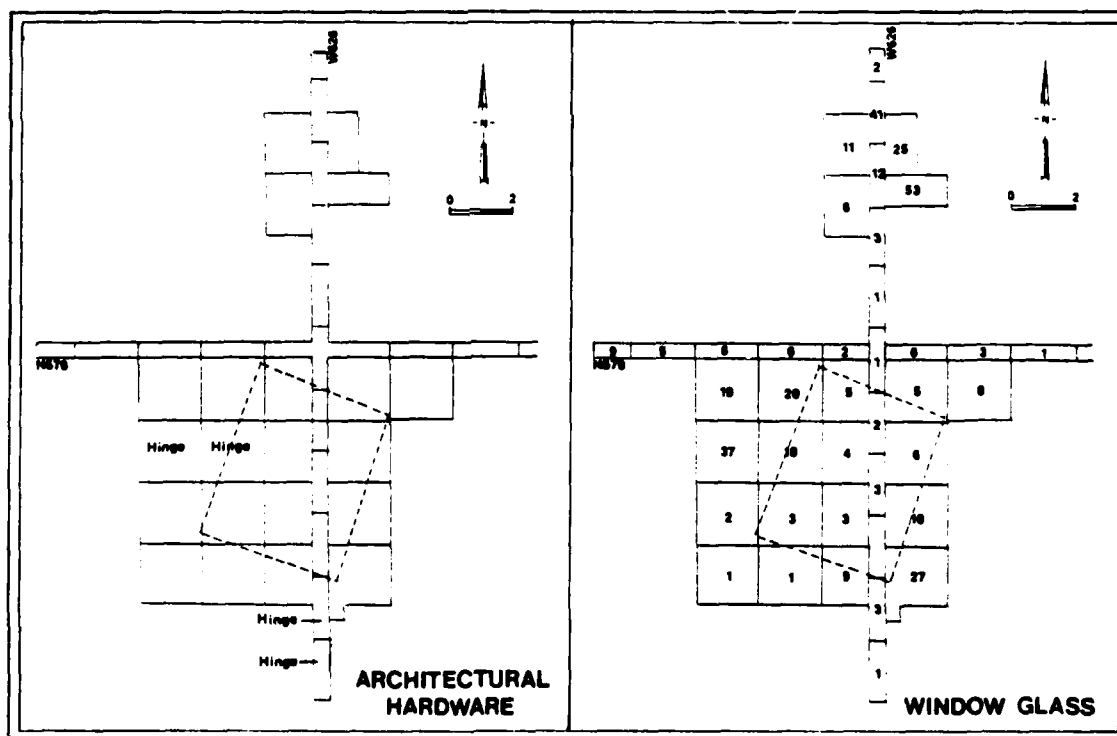
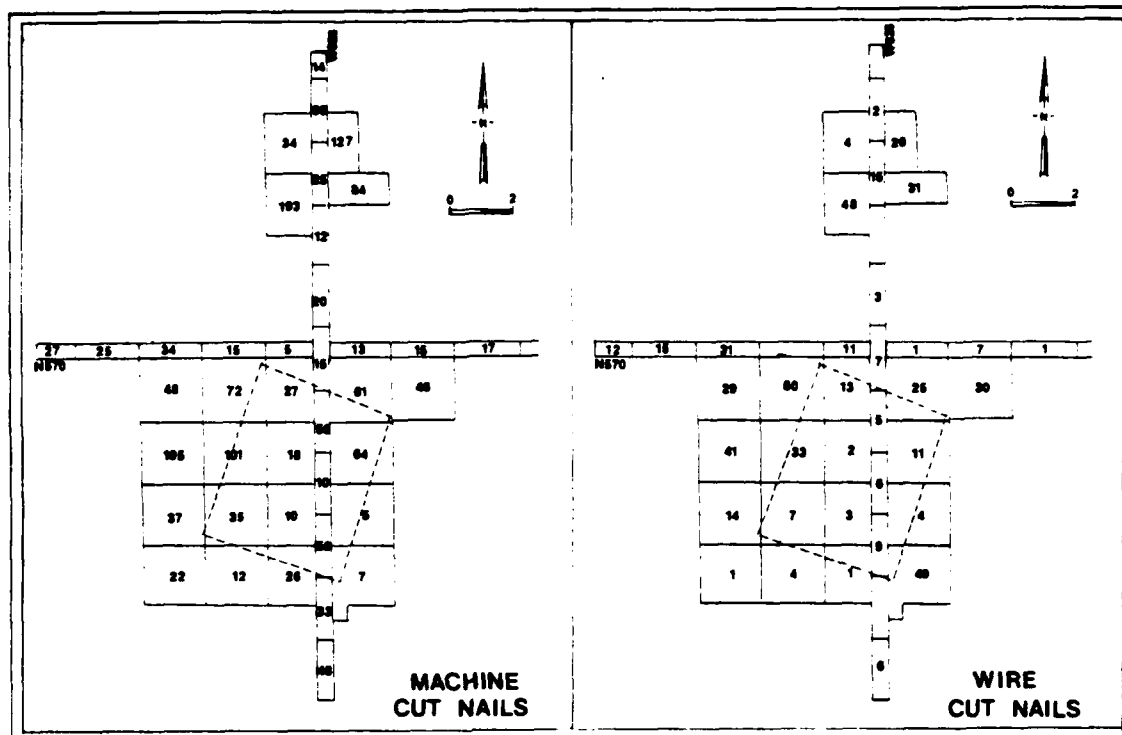


Figure 15.22.--Machine Cut and Wire Cut Nail Distribution, 22CL571B

Figure 15.23.--Window Glass and Architectural Hardware Distribution

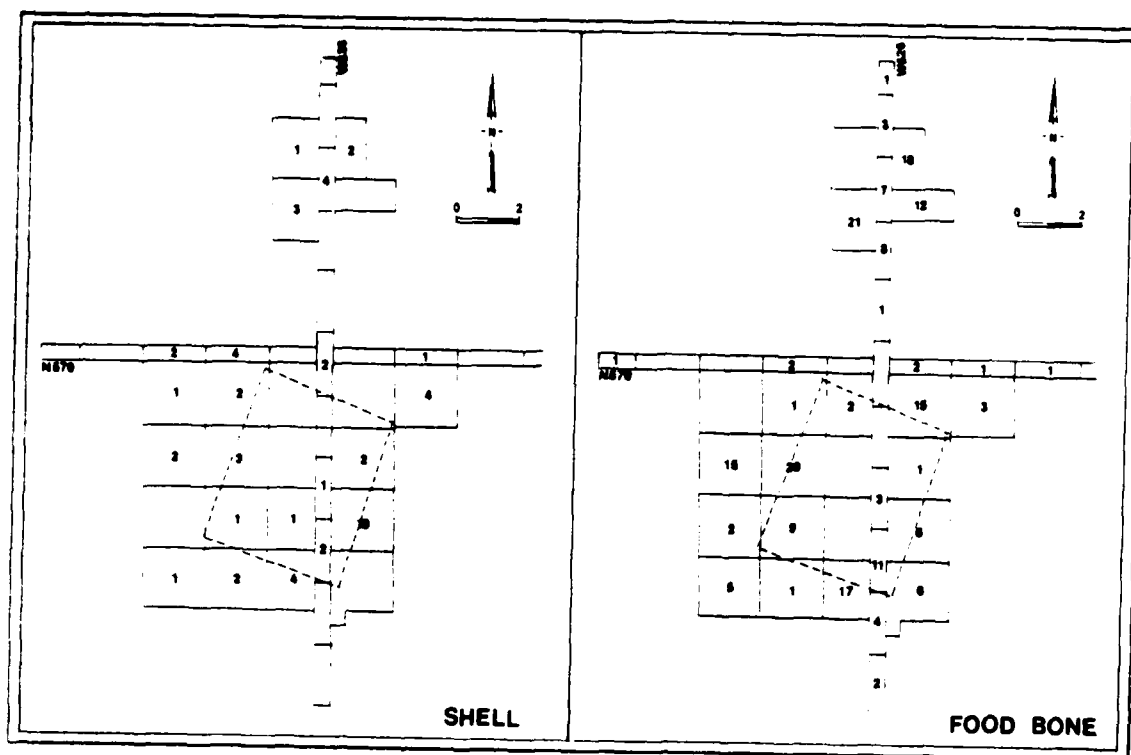


Figure 15.24.--Shell and Food Bone Distribution

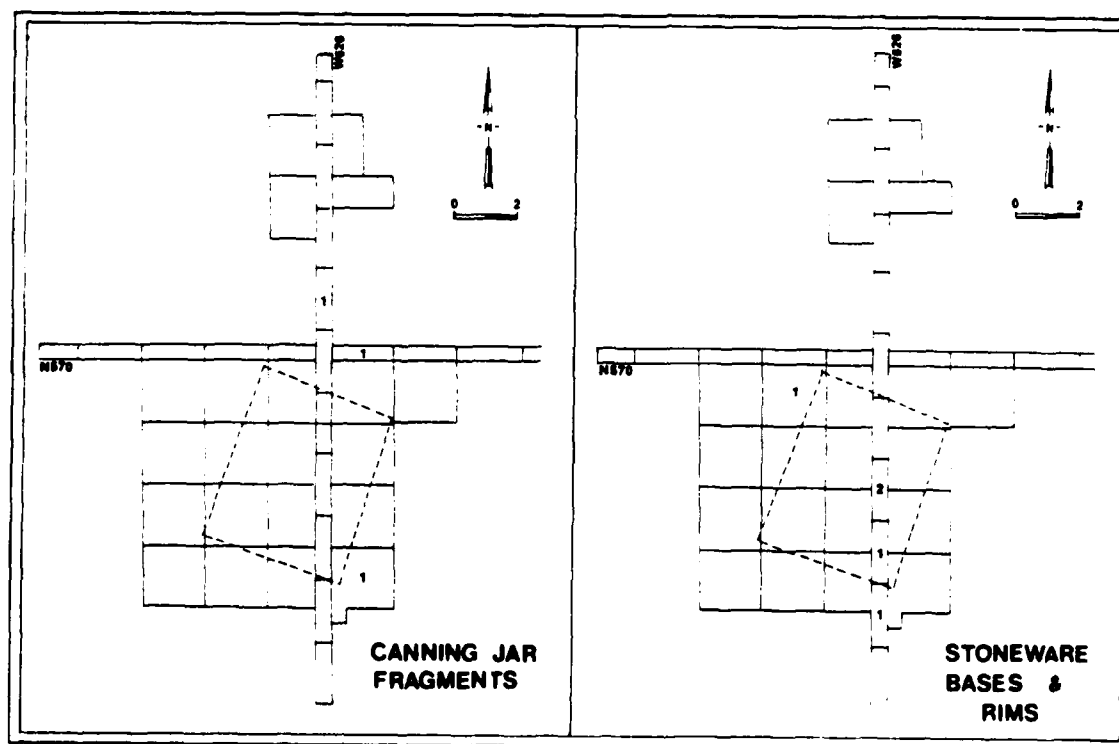


Figure 15.25.--Canning Jars and Stoneware Distribution.

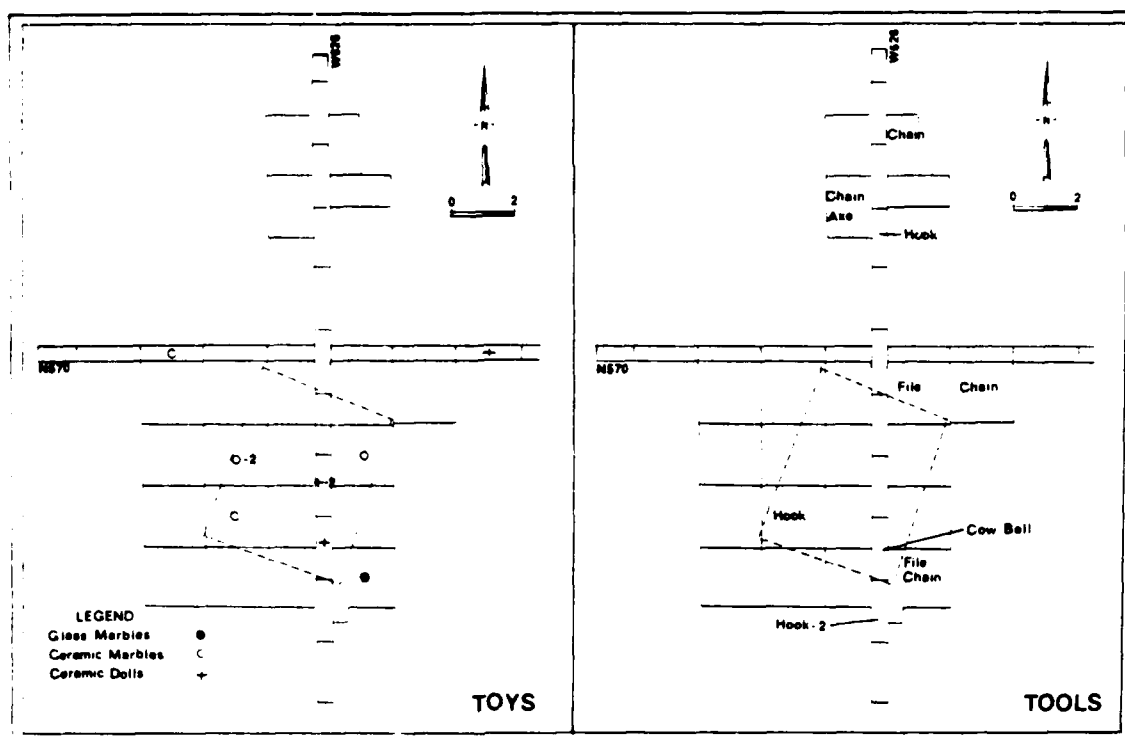


Figure 15.26.--Tools and Toy Distribution.

The shell distribution is identical to that for food bone: a general scattering of artifacts across the house area and a concentration in the northern area.

Too few fragments were recovered to discuss any meaningful distribution for canning jars, stoneware, tools, and toys (Figures 15.25, 15.26).

Summary

The Goodall site is interpreted to be a double-pen domestic structure with attached porch. Oral historical data indicated the house was a log dogtrot house. The measurements of dogtrots compare well with this structure; however the probable central chimney suggests the greater likelihood of it being a single pen house converted to a saddlebag house instead of a dogtrot.

Even less is known about this area than Area A. Gathering all the information we have from oral history, history, and archaeology, we have asked more questions than we have answered. A Henry Goodall has been linked to this site as a former occupant by the oral history. A Henry Goodall is known historically to have been at the Hamilton Plantation from at least 1878. We assume he built or moved to this house upon his marriage in 1884; artifacts from the 1880s would support this initial occupation date at 22CL571B.

We have several indications this structure dates from the latter half of the 19th century and was probably down before 1920. First, we have artifactual evidence from nails, window glass, and bottle seriations (Appendix 7). Second, our oldest informants remember seeing the structures from 1905 onward. However, one informant who is now in his 70s, and who lived at Waverly, does not remember the structure. If we place his earliest memories around 1920 (age 10) we may assume the structure was torn down or collapsed around that time. Third, if the oral history is correct in placing Goodall at that site, we know that Goodall had moved away sometime after 1913.

22CL571 Areas C and D

Excavation

We investigated two areas thought to contain artifact concentrations or trash pits, based on the testing in February. Area C was located 30 m south of Area A at N525-535/W585-W600. Within this area, 12 sq m were opened in three 2x2 m units. They were located at N526/W589, N526/W596, and N530/W596 (Figure 15.2).

Stratigraphy in this area was consistent with Areas A and B. Humus 2-5 cm thick merged with Stratum 2. This gradually became dark reddish brown silt loam and was harder packed than soils in Areas A and B. Although artifacts were recovered from all of these units no features were discovered.

In the interest of time, two trenches were excavated by a backhoe in this area and in Area A. Trench K was located at W585.5, and ran north-south from N570 (Trench E) to N530 (40 m). Trench H was located at N540.5 and ran east-west from W580 to W600.5 (20.5 m). The trenches averaged 60 cm deep. Stratigraphy was similar to Areas A, B, and C in the upper 40 cm. Few artifacts were recovered and neither trench uncovered any features.

Area D was located on the edge of a cliff east of Area A (Figure 15.2). Here, a dirt road runs north-south from W561 to W564. About 1 m east of the road the bluff drops sharply at W560. This road is not thought to be the road described in the oral history as that road can be traced from the Roosevelt Thomas House (22CL568) up the hill toward 22CL571B where it disappears. From W560 to W553, the cliff falls 1.44 m. The bluff location made it a probable site for trash accumulations and probing during testing had revealed subsurface artifacts. Excavations began with the extensions of Trench E into Area D for a distance of 20 m. Trench C was also extended into Area D for 18.5 m. Besides 38.5 m of .5 m wide trenches, 12 sq m of 2x2 m units were opened.

Stratigraphy in this area was somewhat different than in Areas A, B, and C (Figure 15.26). Along the N570/W560 to W570 line the black humus (5YR2.5/1), Stratum 1 averaged 5 cm thick. Below this, Stratum 2, a reddish brown silt (5YR4/4), was found to average 35 cm thick. From this depth soils became a yellowish red silty sand (5YR5/6). Along the road the silty sand was very hard-packed. From W563 to W570 subsoils became gradually darker until they were almost a rich black loam at W570 where heavy cultural disturbance was present around Structure A.

Features in this area included the road and several gulleys. Before discussing the features, some interesting observations should be made concerning a possible feature in Trench E. From N570/W579 where Feature A21 was located to N570/W563.5, where the west edge of the road began, was an area of dark brown silt 40 cm deep containing many artifacts. This area was never clearly defined in the wall profiles. However, artifacts, especially bricks and nails, were found 40-50 cm below the surface. The bricks were random, often incomplete, and were obviously not part of any structure where they were recovered. This was probably a former gully.

The road (Feature D2) also turned out to be much deeper than first thought. Below the dark brown subsoil, the soils were yellowish red silty sand in this feature. To a depth of 45 cm, more hard compact reddish clayey silts and coarse reddish sand were found. The sand's reddish color is partly explained by the concentration of iron objects found at this depth. The sand continued to a depth of 60 cm when the hard packed silty clay soils were found again.

Feature D1 was a small gully located from N571-575/W558-562 running through two 2x2 m units. This gully was originally 70 cm deep and filled with a dark brown silt loam and tin cans. Artifacts were not recovered here in the numbers we anticipated, based upon a test unit and probing.

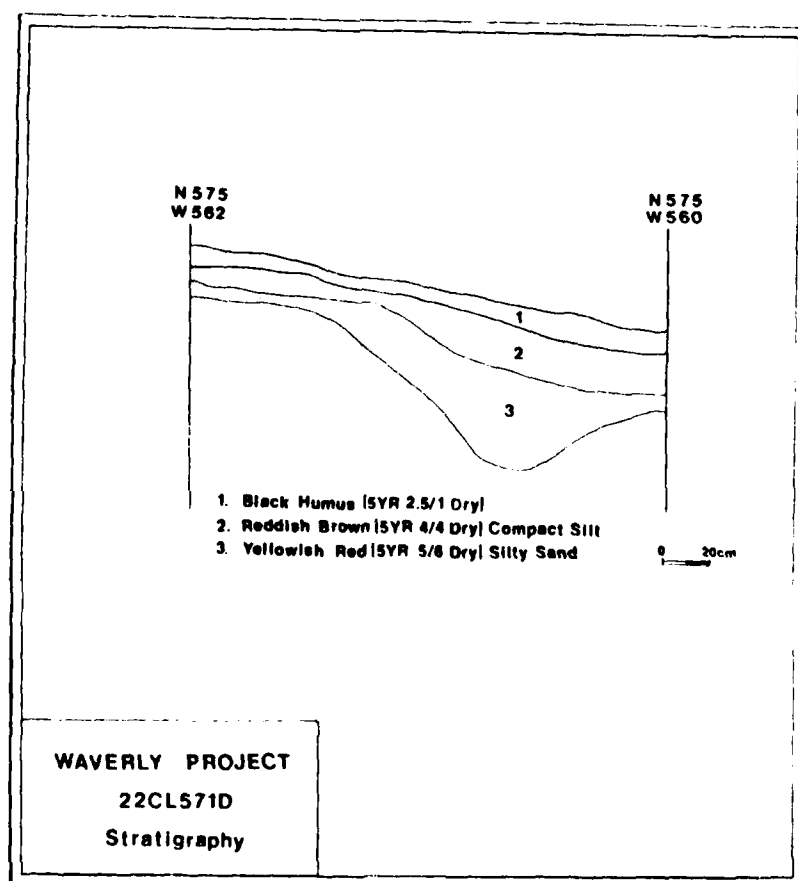


Figure 15.27.--Stratigraphic Section, 22CL571D.

CHAPTER 16. INDUSTRIAL SITES

by Timothy B. Riordan, William H. Adams, and Betty J. Belanus

Introduction

Three industrial sites were investigated. The brick cotton warehouse (22CL572) was located on the riverbank where the railroad later crossed the Tombigbee (Figure 13.3). It was only tested, and will not be examined here. The two industrial sites excavated were a steam-powered gin, grist mill, and sawmill, and a brick kiln.

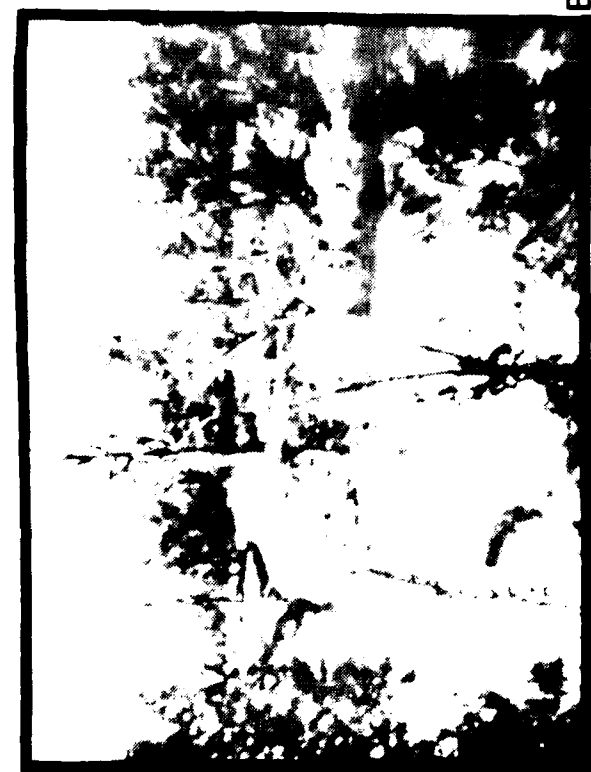
The Mill (22CL575)

Oral History

A large brick structure once stood near the ferry landing. Walter Ivy and Honeybee Hendrix remember older people telling them that this building was a cotton warehouse. Honeybee says, "They loaded--so the old hands tell me--that they loaded right off over this bank down there to the boats and barges." He continues: "This was a good big warehouse. That well [artesian well at ferry landing] was put down there for it. You see, . . . when the railroad come through, it killed these warehouses out here on the river." Besides a few scanty memories, nothing was known by informants about the warehouse. Apparently the memories refer to the brick warehouse to the south rather than the mill site; however, there seems to be the possibility of more than one warehouse here. The 1888 railroad map (Figure 13.3) indicates the structure at the ferry landing, 22CL575, was a cotton gin and sawmill; however, no one remembers ever hearing about the structure as anything but a warehouse. The Waverly cotton gin (Figure 10.1:#21) some informants remember was located south of the mansion. Figure 16.1A&D shows 1920s views of that gin building with the steam boiler and engine outside; these were bolted down to brick pads still visible today there. No photographs were found of the site we excavated, but Figures 16.1B&C show the area; in B the structure would be just to the left (south) of the landing; in C, taken from the center of the railroad bridge looking upstream, that ferry landing appears in the far right and the warehouse bluff on the far left.

While visiting the partially excavated site, Honeybee Hendrix speculated on the various portions of the building, assuming it had once been a gin and sawmill. He based his speculations on his knowledge of similar operations. The part of the structure to the south, Honeybee decided,

"looks like it could be part of a steam engine bed. . . . This could be where a steam cylinder set. Over there was built up for one end of the crank shaft bearings to rest on-- . . . you have a sheet that pulled your machinery, and this could very well be built up to hold that shaft, this end of the shaft. . . . That looks like part of an old steam engine bed. They had to use brick years and years ago, before they had concrete for those beds." [If a sawmill was there, Honeybee thinks it] "would be down, ah, probably waist high for your skid weight, for your logs to rest on. And also,



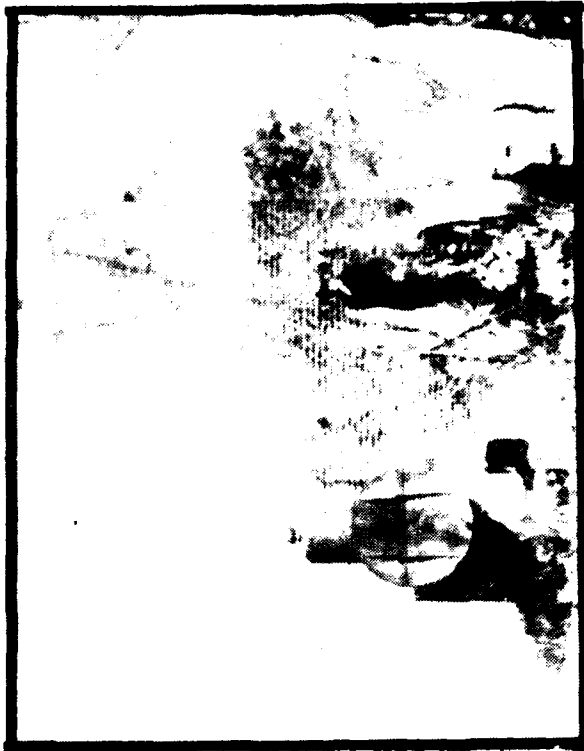
B



A



C



D

Figure 16.1.--Historical Photographs. A&D Cotton Gin at Bath House; B, Waverly Ferry in 1922; C, Mill Area, 1922.

you'd have to have the room between the ground, and the bottom edge of your saw. And, you've got to have a place where you can dig out a pit in the ground and, have it on a level that you can take a wheelbarrow back in, either run a chain conveyor in there [to get the sawdust out]. You should find, at the bottom of this structure, a layer of mortar maybe an inch, two inches thick, and you may find where this has brick built way out, and gradually brought. . . . Well, they would build a wide foundation, put down a big layer of mortar, on the ground. Put the first layer of brick down. And then, they would build probably three layers that way, they go to bringing it in, for the steam engine bed to rest on. Simply to give it a firmer foundation, that one cylinder engine would have a tendency to shake and jar, quite a bit."

The steam engine, Honeybee judged, would have been "a thirty or a forty horse." The boiler might have been partially, or even fully, bricked over. Water for the boiler was probably piped over from the near-by artesian well. "As the fireman needed it [the water], he opened his injector or inspirator, and let the boiler take up water," Honeybee explains.

Honeybee speculated on the arrangement of the operations. There would not necessarily have been a structure over the boiler, furnace, engine and other machinery

"if it was a sawmill straight out [i.e., only a sawmill]. And, if it was a gin, it could've had a sawmill below. If it was a gin, it probably didn't have but two heads, and, that would've been about eight or ten feet high, with a shed over it. And, uh, they would've picked the cotton up with baskets, and carried it on their shoulders up, and emptied it into the gin heads."

Walter Ivy remembers bringing cotton to the other Waverly gin near the mansion. He described his experiences there, in hopes that it might provide background on the earlier gin:

"I did it, handled cotton, we carried it in a wagon, every bale at a time. They had two rooms inside the gin, at different corners. They had a man tending to the gin--old man Clem Mathews, he was the one that handled the cotton. And put it up on the hopper to gin, you know, we had two men that packed cotton, you know, with the feet. After you get so much in the press, they'd have to get in there, then, and, you know, keep it packed down, in there. But, we would unload the cotton in baskets, on a scaffold, and tote it in there in those cotton baskets, and put it into a room upstairs, a separate room there was, you know, for different ones to put their cotton. That's the way it was handled. That ginner, that generally worked the gin, why, he'd take into those baskets and put so much on the hopper at a time, you know, to keep it running. The machinery was upstairs, . . . get your seeds on the first floor, behind the boiler. . . . There was big iron boiler . . . downstairs in a separate room, for the boiler, you see, they'd need to have fire. My father used to fire the gin. Fired it with wood. . . . Pine [was the best wood to use], they used any kind but Captain Billy would have them cut pine wood through the summer and get it dry, to

gin with, that's right. Pay them so much a cord, to get men to cut cord wood, and to dry it, and to have it to fire with. The grist mill was downstairs, too. Was nothin' upstairs in the way of movement, but the gin. They grind meal down, at the north end of the building, that's your movement."

The typical gin of the area, then, would have been a fairly large two-story building. The upstairs housed the gin machinery and would also have had small rooms for different farmers to place their cotton. The downstairs section housed the steam boiler, furnace, and engine. Either grist mill, sawmill, or both could have also been run by the steam engine. Cotton, with seeds, was brought upstairs and unloaded into the gins, and the seeds fell downstairs and were gathered there. In the days of the Site #21 Waverly gin (pre-1907), seeds were gathered by the farmer for sale in Columbus at the cottonseed oil mill there. In later days, seeds were used as pay for ginning at outside gins like those of the Mathews and Davis.

After the gin and sawmill at the ferry landing site had been reduced to a pile of brick, it served as a foundation for a succession of small ferrytenders' houses. When Abe Turner ran the ferry, there was no need for a ferryman's shelter or house, since traffic was light, and Abe lived close enough to the ferry landing to hear the shouts of those who wished to cross. When Doc Adair took over the ferry tending business, he needed a small shelter to protect him from the rain. The shelter was only a small lumber shack. Robert Adair remembers his father used to stay at the ferry "from sun-up to sun-down."

Later ferrymen lived in slightly larger houses. Joe Harris, who tended the ferry after Doc Adair, lived in a small one or two-room frame house built by the county for the ferryman, according to his son, Robert. Mr. Harris was a widower who lived very simply. The tiny ferryman's house served his needs adequately. One informant described this frame structure as "just a boxed-in building" (12x12 ft square, with a wooden shingle roof, sitting on brick pillars). In the late 1940s, Hood Simpson and his wife, a retired farming couple, moved to Waverly. Mr. Simpson tended the ferry for several years. By this time, a small concrete block house had been built for the ferry tender.

The concrete block house was built on a concrete slab foundation. The dimensions were approximately 12x24 ft, consisting of two 12x12 ft rooms with a partition between them. There was no door between the two rooms; it was necessary to enter either room by the outside front doors. The house was heated by a wood stove. One room was used as a kitchen and the other as a bedroom/living room. The house ran north and south, the south room being the kitchen and the north room the bedroom. The Simpsons left Waverly in 1955 and Bill Easter ran the ferry and lived in the concrete block house.

Honeybee Hendrix remembered the first frame shack burned and the second was torn down. He thought a frame structure was there for the ferryman even before the Adairs came to Waverly. He told a story about how an early ferryman unwittingly planted the tree growing in the middle of our excavations:

"You see this cottonwood tree? After this [ferryman's house] was put here the fellow had trouble getting his heater pipe to stay up. Heater pipe went through the wall and up. So he went out and cut a little cottonwood sapling about four inches in diameter, and drove it down there and tied his pipe to it to hold it up. So there's that little stake. 'Indicates fully grown tree' Yeah. That's cottonwood for you."

The concrete block house was torn down sometime after 1961, when the last ferryman left it. In that year, the ferry was moved from Waverly. The concrete slab that the house rested on stood intact until the summer of 1979, when it was removed to make way for the archaeological excavations of the remains of the mill structure.

History

This site represents the power source for the sawmill, grist mill, and cotton gin owned by George H. Young. Most of the machinery for these operations apparently was located to the south of our excavations, in the area mined for gravel. The exact date of the construction of the facilities at 22CL575 is unknown but it was sometime between 1835 and 1842. In 1835 George H. Young moved to Mississippi with his family. By 1842 Young was hiring slaves to cut wood for his steam mill. The advantage that this steam power gave Young over the other planters cannot be underestimated. Not only did it save him processing costs but it also brought in a steady cash flow as other planters paid to use its services. He ginned cotton, ground meal, and cut lumber for the other planters in the area.

By 1848, the mill was probably operating full-time. Young's mill slaves were already distinguished from his field slaves. This perhaps, reflects a slight difference in status. By 1850 the mill employed seven laborers and had an annual production of \$4,000. The importance of the mill to Col. Young may be seen in the figures recorded in the 1850 census, when Young's plantations produced a total of 121 bales of cotton. Other planters were receiving between \$31.62 and \$37.00 for their cotton bales so Col. Young could have realized between \$3,800 and \$4,400 for his cotton. The industrial facilities at Waverly produced as much if not more money for the Young family. This undoubtedly affected the status of the Youngs. While most of the planters had to rely on cotton for their money, Col. Young had the additional income generated by the mill. By producing income and lumber, the mill helped him to erect the Waverly Mansion, which was superior to any house in the vicinity.

The mill survived the Civil War unharmed only to burn May 1, 1878. At that time it was valued at \$3,000 to \$4,000. Perhaps because of the importance of the mill, it was rebuilt quickly. By 1880, Col. Young again had a sawmill in operation. Col. Young died in 1880 and he willed the mill complex to his son, William L. Young. In 1881, the Young Estate was paid over \$400 in ginning fees by H. C. Long, the storekeeper. The 1888 railroad survey map (Figure 13.3) while inaccurate in many respects shows a sawmill and gin down by the river where site 22CL575 was located. Possibly the small addition on the east of the sawmill structure was the power plant we excavated. It was a common practice at this time to separate the boiler and steam engine from the rest of the plant for safety.

Little is known about the later history of the complex. In 1911, William Young sold the timber rights in Sec. 30. This suggests that the sawmill was no longer in operation. An informant remembered working at the cotton gin located near the mansion as early as 1907. This suggests that the gin by the river was inoperative by then. Informants do not remember the mill complex, but some remember brick rubble on the site.

Description

The site was located on a bluff overlooking a bend of the Tombigbee River (Figure 13.1). This site had originally been identified as a cotton warehouse and ferry tender's house. The area around the site had been extensively disturbed by gravel quarrying and was not anticipated to reveal in situ archaeological remains. The site was heavily overgrown with poison ivy and vines. A concrete platform, the foundation of the last ferry tender's house, covered a part of the site.

Excavations

Augering at the site during the testing phase revealed the presence of brick rubble but little else. No test units were excavated at that time. In order to establish with certainty the disturbed nature of the site we used a backhoe during mitigation of the other sites, and scheduled a few days for profiling the trenches. Three backhoe trenches were excavated initially (Figure 16.2: #1,2,3). Trench #1 revealed a line of brick rubble, as expected. Trench #2 revealed several bricks that appeared to be in place. Trench #3 came down on a brick floor. At this point the backhoe was stopped and hand excavation begun. Excavation by hand showed Trench #3 came within 2 cm of a standing brick wall on the west side and 15 cm away from a brick wall on the east side, yet encountered neither. And Trench #1 had missed the corner of Structure E by less than a foot.

Obviously, the site was more than anticipated. We brought in a bulldozer to remove the concrete platform and vegetation. The bulldozer also removed the overburden to within 15 cm of the level of the bricks. This effectively destroyed the ferry tender's houses, although some material from those was excavated. Monitoring the bulldozing suggests that those houses would not have been fruitful to excavate. The remaining overburden was removed by hand. This clearing involved the removal, by hand, of approximately 20 m³ of dirt and gravel. A complex set of structures was exposed (Figures 16.3, 16.4). These structures are described below.

Stratigraphy

Extensive modification of the land surface took place at this site (Figures 16.5, 16.6). Beginning around 1840 and continuing up to the present, 3 m of gravel fill have been added to this spot, raising it well above the river. The process has not been continual accumulation. Numerous times the site has been worked over, cut into, and filled. The burning of the mill in 1878 had a major impact on the stratigraphy. The burn line from this event provides one of the few site wide stratigraphic correlations.

The original stratigraphy at the site sloped to the south and east. The basal layers of the site are composed of clays, intermixed with sands and silty sands.

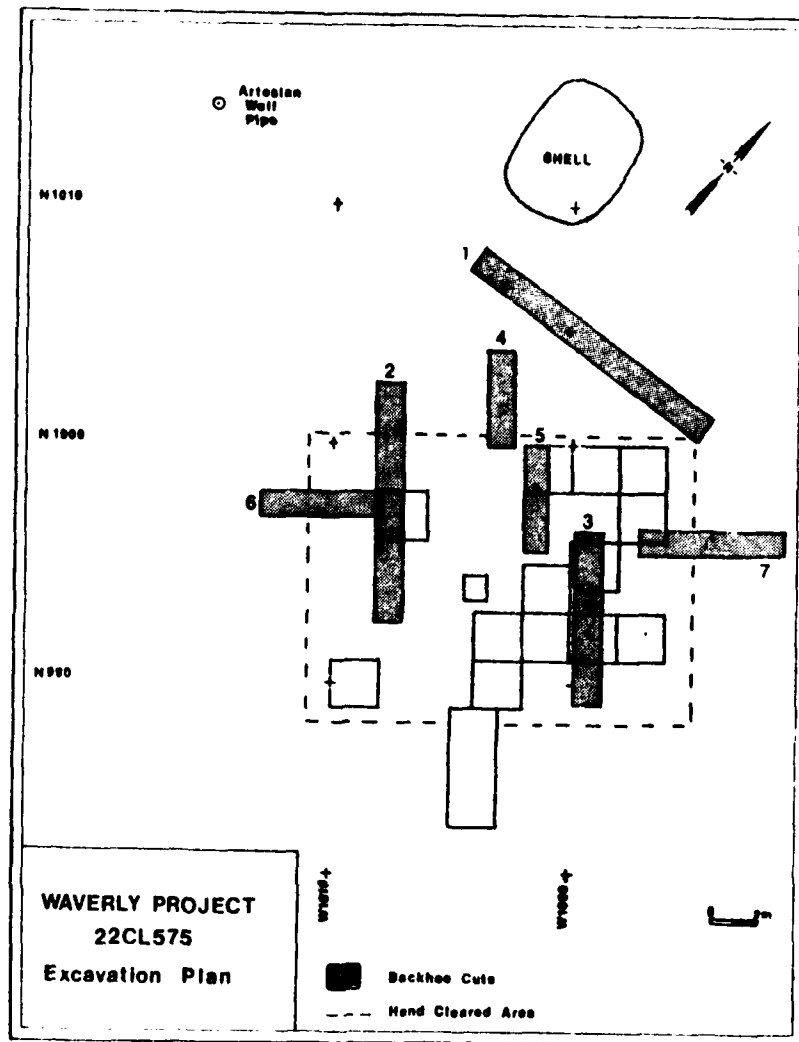


Figure 16.2.--Plan of Excavation, 22CL575.

The western and eastern halves of the site will be discussed separately since they have separate stratigraphic histories. To begin on the eastern side, it is possible that Strata 6b to 9 (outside wall Feature A) represents an attempt to level the area prior to the construction of the feature (Figure 16.5). Stratum 6 fill also occurs on the inside of Feature A. This fill episode would date pre-1841. A trench was excavated through Stratum 6b and into Stratum 7 for the construction of wall Feature A. After the wall was built, the trench was filled with sand and leveled. This event occurred ca. 1841. The top of Stratum 3 became the ground surface between 1841 and 1878. On the inside of the feature, the top of Stratum 6b served the same function. In 1878, the mill burned. Evidence of this event can be seen on the inside of Feature A. The surface of Stratum 6b is littered with fire-darkened pebbles and brick rubble. On the northern end of the site this pebble layer became a definite burn zone. All strata above this burn layer represent fill brought in after the 1878 fire. Within two years after the fire the mill was back in operation so Strata 1-7 and 9 date 1878-1880. Feature E was built after 1878 on top of similar fill.

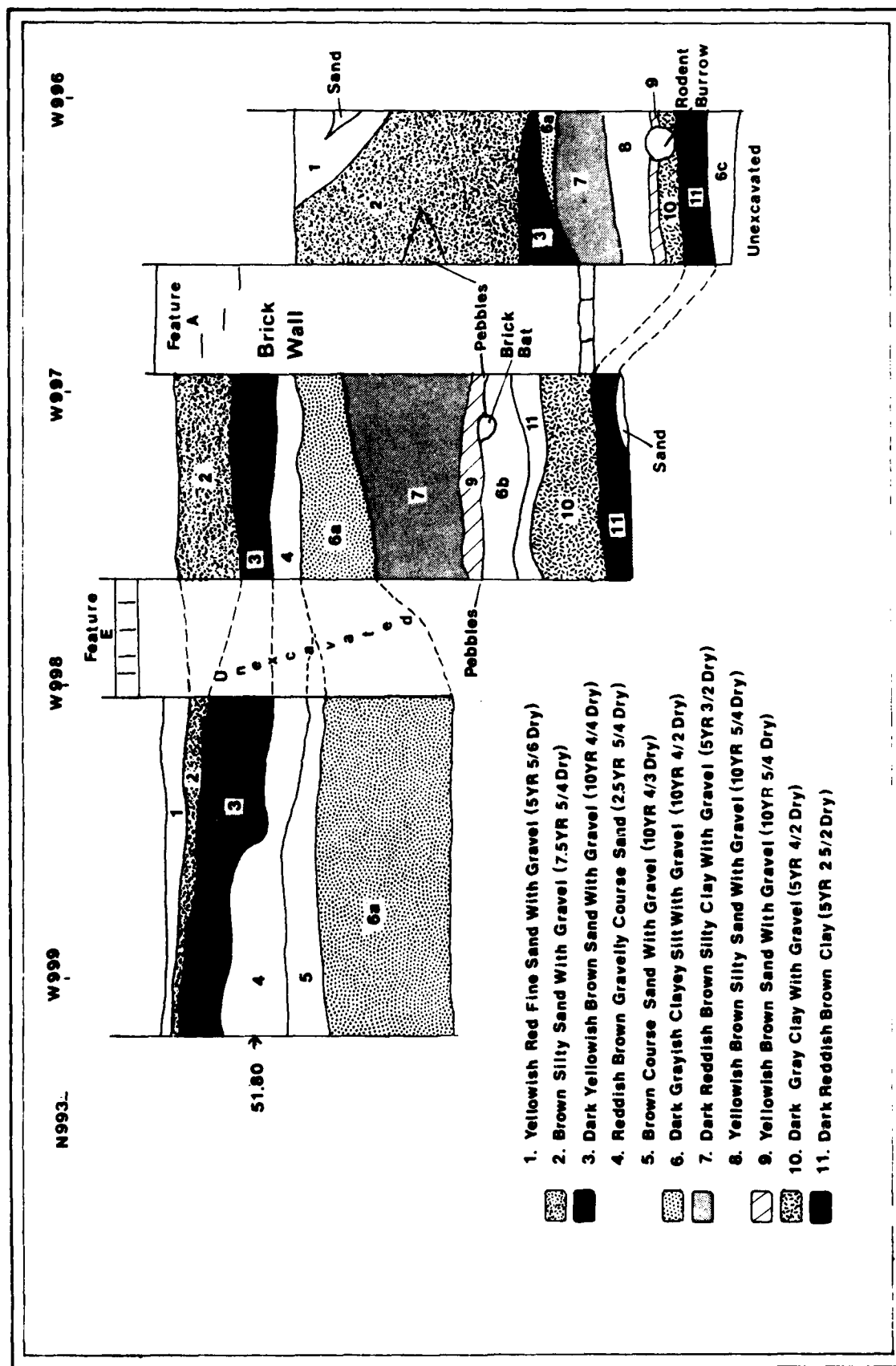


Figure 16.5.--Stratigraphic Section, 22CL575.

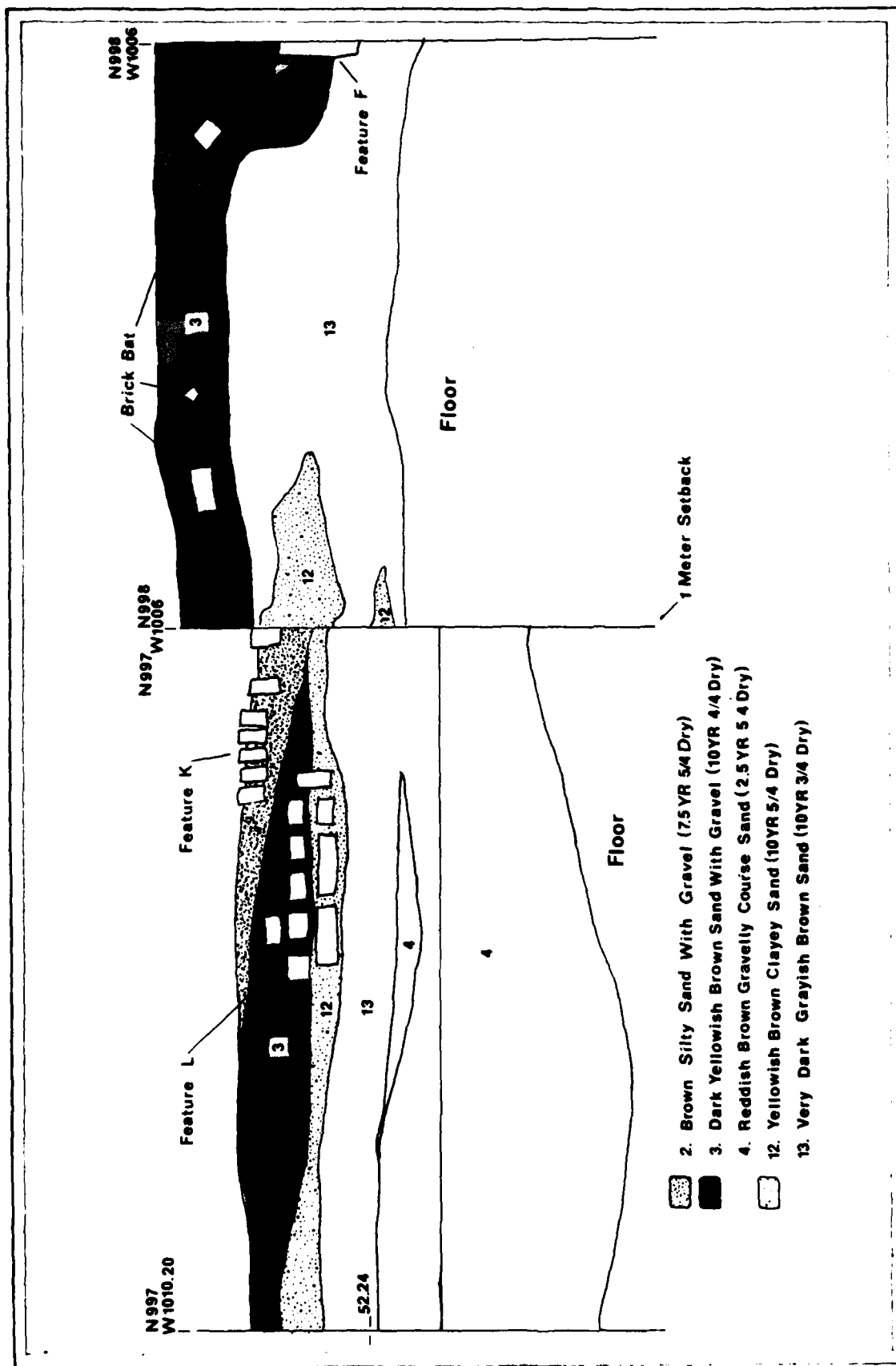


Figure 16.6.--Stratigraphic Section, 22CL575.

Excavations on the western side of the site were not as extensive. We did not reach the 1840 surface (Figure 16.6). The lowest level exposed on this side of the site was a reddish brown coarse gravelly sand (Stratum 4). This and the level above it represent a fill episode distinguishing Phase 1A from Phase 1C. After the initial construction during the early 1840s, selected areas of the site were filled. Features D, F, and L were built on this fill and date ca. 1841-1878. During and after the 1878 fire, Strata 2 and 3 accumulated. This is indicated by the presence of brick rubble in Stratum 3 and the occurrence of the 1878 burn line directly on top of Feature F. Feature K represents the rebuilding of the mill, ca. 1878-1880 and helps to date Stratum 2.

The final modifications of the site took place after about 1907. Large amounts of gravel fill were brought in and used to cover the site.

Structural Features

The building sequence may be broken down into four phases (Table 16.1; Figures 16.3, 16.4, 16.7-16.10). Phase 1 begins in the 1840s and ends with the burning of the complex in 1878. Phase 2 begins with the rebuilding of the industrial complex and ends with abandonment by the 1910s. Phases 3 and 4 involve the building and rebuilding of the ferry tender's house.

Table 16.1. Building Sequence, 22CL575.

Phase 1	1841(?) - 1878	(sawmill, grist mill, cotton gin)
1A:	A, B, C,	built
1B:	filling	
1C:	D, F, L	built
1D:	burn	
Phase 2:	1878 - 1911(?)	(sawmill, grist mill, cotton gin)
2A:	E, G, H, J, K, M	built
2B:	I	built
2C:	abandonment	
Phase 3:	1911(?) - 1931	(Ferry Tender's House)
3A:	filling	
3B:	N	built
3C:	destroyed	
Phase 4:	1931 - 1961 (?)	(Ferry Tender's House)
4A:	O	built
4B:	destroyed	

Feature A at Site 22CL575 was a rectangular brick building with one internal wall (Figures 16.3, 16.4). Stratigraphically, it belongs to the earliest building period at the site. The foundation measures 6.0 m in a north-south direction and 3.6 m along the east-west line. The walls form two open rectangles of different sizes. The longer of the spaces measures 3.85 x 2.9 m with the long axis running north and south. The smaller space is 2.3 x .8 m with the long axis on the east-west line. The walls average 35 cm thick in the southern end. The walls on the northern end (surrounding the smaller rectangle) are thicker. The east and west walls, at this point, average 65 cm thick. The internal wall separating the two open rectangles is 60 cm wide and the northern wall is 40 cm thick.

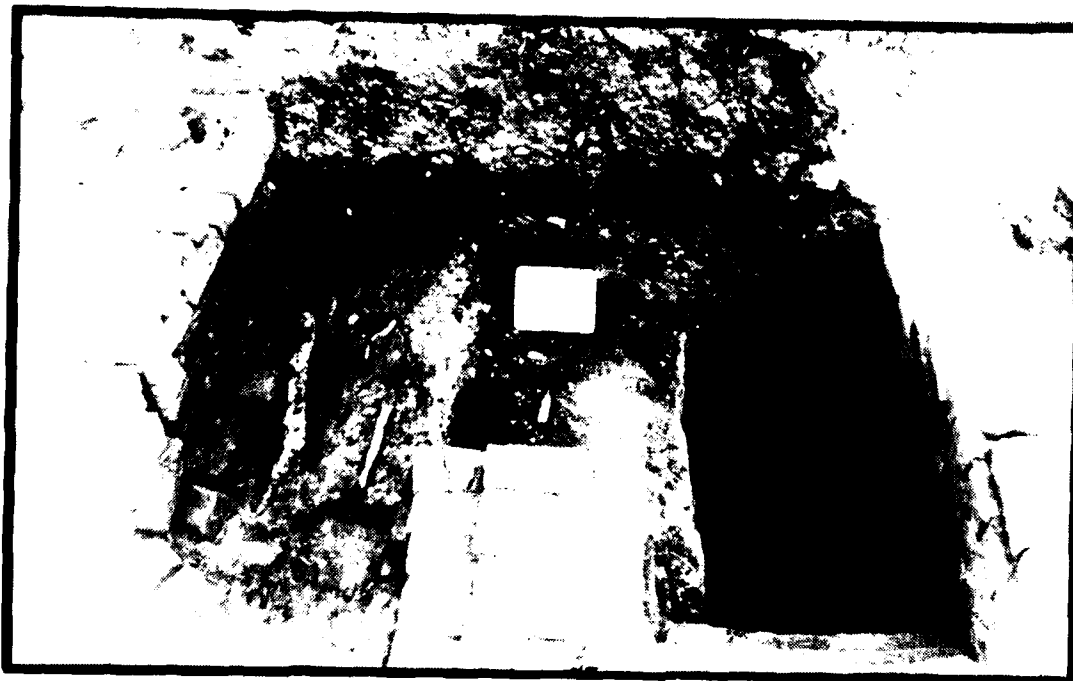


Figure 16.7.--Feature E, 22CL575, Just After Hand Clearing.

Figure 16.8.--Features C, D, G, and I, 22CL575.



Figure 16.9.--Features F, G, and H, 22CL575.

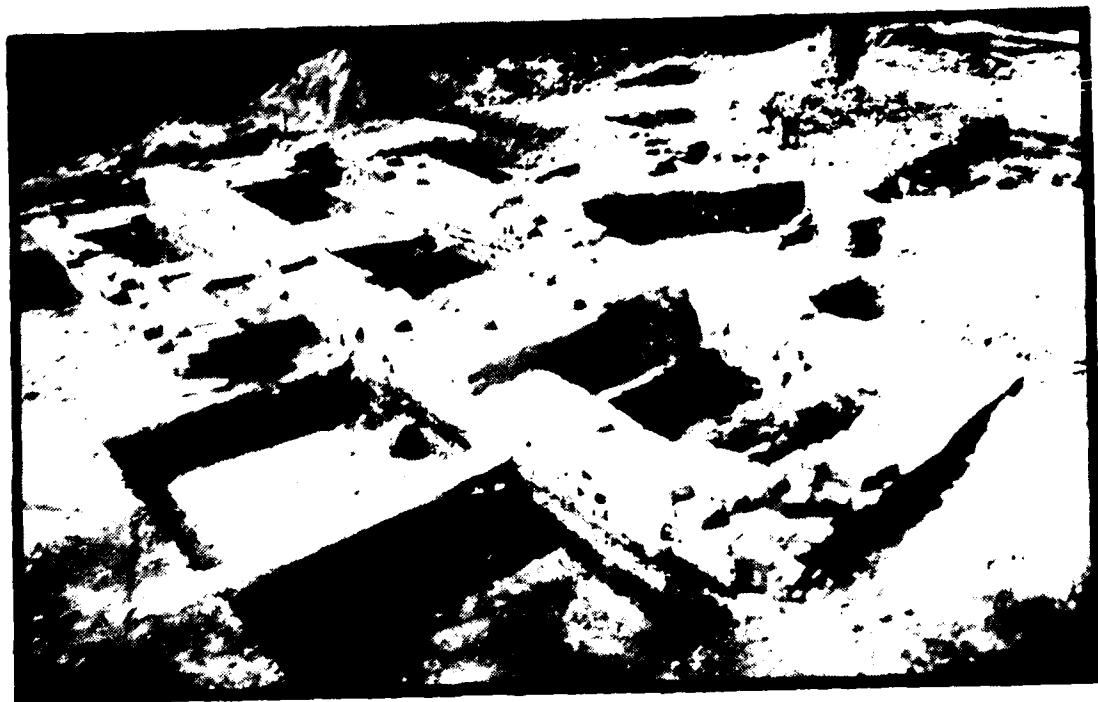


Figure 16.10.--Features A and E, 22CL575.

The walls of the structure are extant to a height of about 2.25 m at some points, with as many as 24 courses of bricks in a pattern of three courses of stretchers to one course of headers, similar to the American bond pattern of the early 19th century (Noel Hume 1969:123). This pattern is very regular on the external walls but somewhat less so internally. The external walls are finely pointed and show a smooth face while those on the interior are not as well pointed and show a rougher face. The average size of the bricks is 20.56 cm long, 10.01 cm wide, and 6.67 cm thick. The ranges for these bricks are not over 3 cm (length 19.50-22.00; width 9.00-11.00; thickness 5.50-7.50). The bricks are red with an occasional black glazed brick built into the wall in no particular order. The wall was cemented with 1-2 cm of white mortar.

A 10 cm wide skirt appears at the base of the walls on the southern end. This skirt is internal and does not disturb the smooth face on the exterior. The building was apparently constructed on a surface that sloped to the south resulting in the need for fewer courses of bricks on the northern end. This gives the base of the wall a stepped appearance.

The north wall of the structure was used as the support for something. The wall has an L-shaped cross-section, and two pyramid-shaped metal footings were found resting on the top part of the L. These footings measured 20.5 x 30.5 cm. Several large pieces of boiler plate were found above this. This feature was the original location of the boiler for the steam engine. The firebox was probably on the southern end and the boiler was supported above the brick foundation.

Feature B was a brick wall of unknown association. It was built on the same level as Feature A and presumably was contemporary with it. At some point in the past it was robbed, leaving only the bottom three courses of bricks and a large quantity of brick rubble. The disturbance appeared to have come from the west only. On the east side of the wall there was an abrupt break in the presence of brick rubble and a definite cleavage plane in the soil. The west side, in contrast, showed definite stratigraphic disturbance. This also indicated the area between Features A and B was filled in prior to the robbing of B. Because of the disturbance, the wall was not highly visible and our data on it are poor. The wall ran in a north-south direction for at least 5 m. It was 75 cm wide at the base and stood at least 1.2 m high.

Four iron bolts were found next to this wall on the east side. They lay vertical in the ground and appeared to be arranged in a square. These bolts may have been in place and appear to have been attached to a beam of wood. At the north end of this wall, and apparently not in situ, was an iron pipe. It was lying directly on top of the brick rubble and at an angle, sloping down to the north. The pipe had an external diameter of 8.5 cm, an internal diameter of 4 cm. It is possible that this pipe was used to bring water to the boiler from a nearby artesian well.

Feature C was assigned to the earliest stage of construction at this site due to its stratigraphic position and the artifacts associated with it. This feature is a brick wall of unknown function. It was not possible to tie this wall in with other structural features because of the disturbance caused by the destruction of Feature B. Feature C ran 5.35 m north-south, made a right angle on the northern end, and ran about 50 cm

east-west. On its north-south section, the wall averaged 42 cm thick while the east-west section averages only 25 cm. The wall at present stands 2 m tall and contains more than 25 courses of bricks. The bricks were laid alternately--headers and stretchers in a pattern similar to English bond (Noel Hume 1969:120). In addition, the top 53 cm of the east face of the wall was covered with mortar suggesting that it was finished at one time. Possibly this was a water reservoir for the boilers. The bricks were red with scattered inclusions of black glazed brick. The fill on the west side of the wall produced the earliest dated artifact at the site, a ceramic mark used between 1834-1854 (Godden 1969:538). On the southern end, the wall appears to have been cut into and later filled with trash from the 20th century.

Feature D, located adjacent to Feature C but not bonded to it, was a stepped T-shaped footing (Figure 16.8). This allowed it to support a heavy weight by spreading the pressure across a wider area. The base of this footing was much higher in elevation than the above described structures but was associated with them by its being under the burn line which sealed off all of the older phase. Thus, the western side of the Feature C wall was filled to nearly its top, then Feature D was built. The support was made of five courses of bricks bonded in the English pattern, each course smaller than the one below it. The top of the footing was 15 cm lower than the present top of Feature C. A greater proportion of glazed bricks occurred in this feature than elsewhere. The north-south part of the T was 1.15 m long, and the east-west portion (butting against Feature C) was 40 cm long.

Feature E was constructed after the 1878 fire and appeared to be analogous to Feature A. In any case, it was built directly on top of Feature A (Figure 16.7). The structure was rectangular, measuring 10.55 m north-south and 2.15 m east-west. An internal wall divided the large rectangle into two smaller ones. The southern rectangle was the largest, measuring 5.4 m north-south and 1.25 m east-west. The walls averaged 40 cm in thickness except the southern end and the internal wall. A platform at the southern end of this structure was made entirely out of black glazed brick; this suggested a firebox. This pavement was 1.55 m north-south and 2.1 m east-west. There might have been a wall on the northern end of the platform but only a fragment remained. This wall would have been 70 cm thick. The internal wall was more of a footing than a wall. It was four bricks thick and was set on a gravel fill. Only two of the brick courses of the pad were above the present level of the external walls.

The walls of the structure were 57 cm high and were composed of eight courses of bricks. The American style of bonding with one row of headers and several rows of stretchers was the most common; however, the bonding pattern was not regular over the entire structure. Another common pattern was to combine groups of headers and stretchers in the same course. By comparison, the brickwork of Feature E was much more hastily done than in Feature A. The work appears to have been undertaken with little regard for the finer points of bricklaying. The bricks in this feature did not show any average size difference from those in the feature below. The average length was 20.51 cm, width 9.98 cm, and thickness 6.53 cm. However, the ranges were considerably different. The range for length was 16-23 cm, width 9-11 cm, and thickness 6-7 cm.

In the center of the northern rectangle, below gravel fill, we located a wooden beam (Figure 16.10). This was in line with two fallen sections of wall so we may postulate that the beam ran east-west through the structure. The beam was 30 cm square (12x12 in) and was at least 2.15 m long. It was incorporated into the structure between the second and fifth courses of bricks. Found with this beam were two large flat iron pieces of undetermined function. One possibility is that this beam served the same function as the back wall of Feature A and that the two pieces of metal were part of the support platform.

Two gaps appeared in the upper course of bricks around the northern rectangle. These gaps were 10 cm wide and extended completely through the wall. One was located half way between the internal wall and the northern wall on the west side of the structure. The other was located close to the internal wall on the east side. Possibly they once held supports for some piece of machinery. A support of this type was found on the southern end of the structure. Here we found what appeared to be a 10 cm gap in the bricks (the wall was partially destroyed at this point). This gap did not go all the way through the wall. It extended 20 cm from the inside of the structure where it was blocked by the outside row of brick. This gap was not covered when excavated but could have been so in the past. In the gap were found small pieces of an L-shaped iron rail. The function of this feature was almost certainly some kind of support.

Feature E represented the rebuilt boiler platform. While the design was fundamentally analogous to Feature A, it was different enough to suggest a different technology.

Feature F was a brick floor or platform of which only a small fraction was exposed (Figure 16.9). Three massive brick features (G, H, I) lie directly on top of it, obscuring its extent. This appeared to be a roughly rectangular pavement running 4.25 m north-south. The east-west dimension was unknown, but it was more than 1 m in width. The feature was stratigraphically assigned to the oldest building phase at the site. It appeared to be contemporaneous with Features A, B, and C and to be earlier than Features D and L.

The platform was constructed of six courses of bricks in alternate rows of stretchers and headers forming a pattern known as English bond. The platform was 43 cm thick except at the partially disturbed northern end. The average brick size used in the platform was 20.44 cm in length, 9.54 cm in width, and 6.42 cm in thickness. The range was 19-22 cm in length, 9-10 cm in width, and 5.5-7 cm in thickness. The bricks were red with one black glazed brick included.

Feature G was a massive brick platform that served as a foundation for some piece of heavy machinery. The construction of this feature dated to the second phase of building at the site. Stratigraphically, Feature G rested on the 1878 burn line as well as overlying Feature F. The platform was a rectangle, oriented north-south. The long axis was 4.60 m, and the short axis was 1.65 m. The bricks were laid in the American bond pattern of one course of headers for every two courses of stretchers. There were 11 courses of brick, the lowest set out 10 cm to act as a skirt. The platform stands 74 cm tall in its present condition. The average brick size did not vary much from those previously described: length, 20.38 cm; width,

9.72 cm; and thickness, 6.42 cm. The size range was 19-22.50 cm long, 9-11 cm wide, and 6-7 cm thick. While some black glazed bricks occurred in the structure, the majority were plain red bricks. Three square gaps in this platform from east to west were 25 cm wide and 22 cm tall, spaced 1.15 m apart, and offset to the south. The function of these gaps is unknown. Excavation of the units provided little data on the function, producing only some trash, including food bone. A somewhat similar gap appeared in the northern end of Feature E. Feature H, described below, had two of these holes. In neither case was there enough data to postulate a function.

Feature H was similar to Feature G. It was a brick platform oriented north-south and measuring 2.75 m x 1.0 m (Figure 16.9). Like Feature G, it dated to the second building phase at the site (1878-1910), and partially overlies Feature F. There were seven courses of brick, the highest of which had been inset 7 cm. They were arranged in the American bond pattern of one course of headers and several courses of stretchers. The red brick platform was 52 cm tall and had some inclusions of black glazed brick. The average brick size for this feature was somewhat larger than others at the site: length, 20.88 cm; width, 10.04 cm; and thickness, 6.68 cm. The range of sizes was also broad: length, 19-22 cm; width, 9-11 cm; and thickness, 6.5-7 cm. Feature H had two holes, 25 cm wide and 22 cm tall, running east-west. The gaps were spaced 1.15 m apart and occur in the second to the fourth courses. They were exactly the same as those occurring in Feature G. Twelve centimeters above Feature H and on a level with the top of Feature G were found four pieces of cut and dressed stone. These fit together to form a composite grinding stone. One of the pieces has a rectangular pit gouged out of it which held an axle. Since this was found stratigraphically above Feature H, their association seems unlikely. It was possible that the stones were associated with Feature H, but the data were not conclusive.

Feature I was a small rectangular addition to Feature G. It was badly disturbed in the past and now only the east side was extant. The long axis was oriented east-west and was 1.65 m long. The north-south axis was 60 cm wide. This feature fit tightly against the southern wall of Feature G but was not bonded to it (Figure 16.8). Six courses of bricks were extant on the east side and this part was 41 cm tall. They appeared to have been laid in the American bond pattern, but it was hard to tell because of later disturbances. The brickwork on this feature appeared to have been hurried and showed poor quality of masonry.

Features F, G, H, and I represented the building and rebuilding of the steam engine platform. Feature F dated before 1878 and all the others dated after 1878. We do not have enough data to confirm it, however we may speculate the steam engine was replaced by a more modern technology. That would account for the change in the brick features.

Feature J was a rectangular support pier north and east of Feature G. Its long axis was east-west and measured 75 cm; the north-south axis measured 41 cm. The pillar was two bricks thick and stood 21 cm tall with one row of headers and one row of stretchers. The average brick size is: length, 20.58 cm; width 9.87 cm; and thickness, 6.41 cm. This average size ranged from 19.5-22 cm long, 9-11 cm wide, and 6-7 cm thick. This feature was contemporaneous with the second building phase at the site. Its alignment with Feature D suggested an association, probably a wooden wall.

Feature K appeared to have been a rectangular support pillar which has been disturbed. It ran 60 cm in an east-west line and 40 cm in a north-south direction. At present, only one course of bricks remains. This course consisted of two rows of seven bricks, laid on their sides and not bonded together. This feature was stratigraphically related to the second phase of building at the site.

Feature L, a rectangular support platform dating to the first building period at the site, was somewhat younger than Features A, B, C, and F. Stratigraphically, it lay on top of a period of filling at the site and appears roughly contemporaneous with Feature D. The long axis was east-west and was 52 cm, the north-south axis was 38 cm. It was made of three courses of brick without any apparent bonding pattern. The platform remaining was 28 cm tall.

Feature M was a rectangular (60x40 cm) brick platform to the south of Feature H. Stratigraphically, it was contemporaneous with Feature H. Unfortunately, the feature was disturbed in the past, and no structural data could be obtained.

Feature N was a rectangle of concrete blocks which was the foundation for one of the ferry tender's houses. These solid blocks were 30 cm x 25 cm x 5 cm. They dated to the third phase of building at the site. The size and shape of the house could not be determined due to later disturbances.

Feature O was a poured concrete floor laid in 1931 and associated with the last ferry tender's house. This building was constructed of standard concrete blocks, the bottom row of which was still present. The platform was 7.2 x 3.0 m and was oriented in a northeast-southwest line.

Artifacts

Some artifacts were recovered at this site which relate to the 20th century occupation by the ferry tender. These were not considered here. Most of the artifacts relating to the mill complex were not diagnostic. Two artifacts that were recovered below the 1878 burn line deserve special attention. The first was a green glass bottle base with the mark "LGW" dating between ca. 1855-1880 (Toulouse 1971:323). The second artifact was a ceramic mark "W.R. & Co." in use from 1834-1854 (Godden 1964:538). These two artifacts help to date the earliest phase of building at the site.

Summary

This site was an important part of the Waverly community. It aided Col. Young greatly and helped to establish his role as a community leader.

Our excavations revealed the power source for the mill complex. The steam engine which once sat on those brick foundations ran a sawmill, a grist mill and a cotton gin. It provided Col. Young with an income over and above that derived from cotton production.

Brick Kiln (22CL521)

Oral History

Northeast of the ferry landing in what was known to tenants as "Sandy Field" we excavated an early brick kiln. No informants remember such a kiln being in operation during their lifetime, although one informant led us to the site mentioning it was a "ruins" in the 1910s according to his grandmother. Honeybee Hendrix seems to remember the older people mentioning a brick kiln on the place, but thought they had told him it was located in the Bottoms to the north (Figure 10.1). A local expert on early brick kilns, Mr. Allen Puckett from Columbus, was consulted for information on what such a kiln would look like, and what the early brick making process involved.

Allen Puckett began working with his father making bricks when he was about six years old, and he was in his eighties when interviewed. He remembers the early type of brick kiln (pronounced "kill" locally) called a "scove kiln" which would most likely have been the type found on a plantation such as Waverly. This type of kiln would be operated, usually, during the off-period of the summer, after the crop had been laid by and the rainy season ended (i.e., late July-early August). A traveling brickmaker who was well-versed in setting up a small operation would be hired for the duration of the brick-making process. Slaves, and later, tenants on the place, manned the operation. The brickmaking expert would often supervise the operation for the sole purpose of being allowed to lay the new bricks afterwards, since these brickmakers were also bricklayers.

Clay for bricks, Mr. Puckett relates, was procured locally, but "they'd have to get somebody that knew a little something about it, cause you couldn't take just any kind of clay You got to have some idea what is good dirt." Clay would be brought in on wagons. The first step in the brick making operation would be to grind the clay. Mr. Puckett explained: "They had to prepare that dirt, and they had what they called a great big old tub mill, and all that was, was something that just stirred up the dirt and got it to the right consistency. . . . Now, a lot of times, they would have a mule that would turn this around." This type of mill was set up somewhat like a sorghum mill. The mule would be led in a circle to power the grinding mechanism housed in a tub-like container. Mr. Puckett's son, also in the brickmaking business, stated that the moisture content usually preferred was 18% or 19%.

When the clay was ground to the desired consistency, it was placed in wooden molds which shaped six bricks at a time. Mr. Puckett explains the preparation of the mold:

"They would wet this mold, and then they would put sand in it, and then they would shake out all the surface sand, and then they'd throw all this soft mud into here, and they'd take something and just rake it off, and then they'd take this [indicates mold], and just turn it over, turn the brick out. And a lot of times they'd have it on a little wooden board"

When three or four sets of six would be finished, they would be laid out to dry in the sun. "Just let them dry there, and after three or four days, they'd go there and turn the brick over so they'd dry on the other side. Take about ten days for them to dry, even in the summer time," Mr. Puckett explained. A shelter would often be built over the drying bricks so that any rain that fell would not damage them. After the bricks were dried, the firing process would begin. Small kilns, such as the one probably used at Waverly, would be built every time they were needed. Some of the dried bricks (called "green bricks") would be used to build the kiln. After the firing process was finished, then, these bricks forming the kiln would be dismantled and used for building, just as the bricks fired inside the structure.

The kiln would be a rectangular structure measuring about 30 or 40 ft long and about 20 ft wide. About every 5 ft, an "eye," or opening, was left in the wall of the kiln to feed wood through. These eyes went straight through the floor of the kiln to the other side, and wood was fed through both sides for even distribution of heat. A sturdy roof was constructed of bricks with a draft opening. The man tending the kiln could walk on the top of it and regulate the heat by means of the draft. "You don't stand still, though." The bricks would commonly be stacked in a pattern Mr. Puckett called "five over two" to maximize heat distribution:

"We'd take two bricks and we'd put them in long ways, and then we'd put five bricks on top of them. Then above them we'd put two more brick, and five over two. If you made them any tighter than five over two, you couldn't get the heat to go through them, you see."

In a small kiln, about two thousand bricks would be made at a time. The brick walls were supported during the firing process by an external framework of pine poles. "Just kind a held them from falling over, you see," Mr. Puckett explained. "The heat would expand, you see, and push them [the walls] out."

One man was usually hired to watch the fire. "He would go out and he'd have to fire about every 30 minutes, he puts his wood in, he could go and take him a little nap again, and then throw some more wood in it." The whole firing process took 13 or 14 days to complete. The fireman usually had a small shelter in which to nap and spend free time. Pine was preferred for firewood because it made a quick, hot blast. "You'd be glad to get a hold of a stick of that, and throw it in, because it would make a long flame that'd go on up the brick," Mr. Puckett said.

If fancy, glazed bricks were desired, a quantity of resinous pine, locally known as "fat" pine, would be used. "Every now and then they'd have a black-headed brick, they would burn something with fat pine in it, and that would give it kind of a resinous effect, then it'd be kind of a black head." Throwing salt in the kiln would create a glazed effect as well. When the firing process was finished and the bricks cooled, they were ready to be hauled away and used for whatever needed to be built that year. Often, these small, local kilns would produce enough brick to last two or three years in one firing. The traveling brickmaker/layer might then stay in the area and build chimneys. Mr. Puckett recalls his father saying he used to lay a whole chimney for five dollars, "Just think about that."

After the temporary kiln was used and torn down, the only trace of it ever having been there might be the burned ground floor. "Your burning section, your floor, would burn a different color. The material that was left would be burnt. Be a light yellow, or a smoked color, something like that. Your clay, whatever it is . . . would show you the inside of your kiln," Mr. Puckett explained. Sometimes this floor section would burn down as much as two feet under the original surface from the intense heat, which reached around 2200°f.

In general, brickmaking, Mr. Puckett admits, is "a pretty interesting business." Large companies such as the Columbus Brick Company, which Mr. Puckett and his son own, took over business from the small, temporary local kilns by about the turn of the century. Most people who needed brick at Waverly went to Columbus to buy some from around 1890 on. Walter Ivy, in fact, worked at the Columbus Brick Company for the Pucketts for a number of years as a young man, when his crop was laid by, and after it was harvested.

History

No solid historical data exists for this site. No informant remembers a kiln operating in this area. This would indicate that the site was not being used by 1910. This kiln is an example of a scove kiln. F. H. Clews (1969:236) describes scove kilns:

"Scove kilns are used to a considerable extent in the U. S. A. for firing bricks. In many ways they resemble the clamps used in this country, inasmuch as they are not permanent structures although they may be protected from the rain by long high-roofed sheds. Green bricks are set on edge directly on the ground in an indefinite series of arches, say, forty-five courses high and fifty bricks wide and 3 1/2 ft. thick. A kiln of thirty arches would contain nearly a million bricks. Space for the fuel and for the flues is left in the bottom fifteen courses of the arches but above this level the setting is fairly dense. The outer portions of the setting are built of underfired bricks and the outside of the setting is daubed with clay to make it gastight. This is called scoving, from which the name of the kiln derives. In the U.S.A. scove kilns are fired with wood, coal, oil, or gas. When coal is used, permanent side-walls, grates and fire-arches are customary and the supports to the roof structure can be used to carry cranes with which the bricks are set and drawn before the last arch is laid down. "The scove kiln, like the clamp, is comparatively economical in fuel because much of the heat in the products of combustion is transferred to the setting. Despite the fact that the kiln may be worked semi-continuously, no attempt is made to recover heat from the fired bricks. The scove kiln also suffers from the same drawback as the clamp, in that the firing is not well under control and the bricks may shrink and vitrify unevenly and the proportion of waste bricks may be high."

Several other brick kilns have been excavated in Mississippi and Alabama. Judith A. Bense (n.d.) reported the excavation of a brick kiln at 22L0710, located on Stinson Creek about 10 km north of Columbus, Mississippi. The excavations revealed three firing chambers and four firing rows. Firing chambers were evidenced by charcoal stains 40 to 70 cm wide.

Bense noted an "apron" of clay had been packed against the side for insulation during firing. The ridge, where the brick kiln was built, had been previously prepared by leveling with additional dirt. Bense thought the entire kiln was probably 7 x 6 m, with six or seven firing rows. The orientation of the firing chambers was east-west. A mid-19th century date was suggested, based on associated ceramics.

Further to the south, near Pickensville, Alabama, at Nance's Ferry (1PI76), Atkinson and Elliott (1978) reported the excavation of five brick kilns and a lime kiln. The kilns they excavated were scove kilns. These ranged from 5.4-8.5 m long and 4.35-6.8 m wide, with 4-8 firing chambers (Table 16.2). These kilns were much more informative than the Waverly kiln because they had not been completely harvested. Atkinson and Elliott were able to determine the stacking arrangement of bricks in the firing rows, the construction of the arch, and the wood being burned. Waverly charcoal was powdered.

Table 16.2. Comparison of Tombigbee Scove Kilns

Site	Length	Width	Firing Chambers	Firing Rows*	Chamber Width	Orientation E of N
1PI76 F#2	6.0m	4.4m	4	5	36-45cm	30o
F#3a	5.4	5.4	6	7	40 **	52o
F#3b	5.4	4.5	5	6	40 **	52o
F#4	8.5	6.8	8	9	40-52	32o
F#5	?	4.4	5	7	40-43	104o
22LO710	7.0	6.0	5	6	40-70	90o
22CL521	9.0	7.5	10	11	30-45	0o

* includes two outer wall rows in total

**from Figure 11 of Atkinson and Elliott (1978), adding 35 cm per outside wall

Comparison of the seven brick kilns excavated produced several similarities and differences. At 22LO710 and at Waverly evidence indicates attention was paid to a level surface. At Waverly this was the most elaborate since it was the only one with a brick floor; others were built directly on clay. Chamber orientation should reflect local wind currents; at Waverly, firing chambers were oriented north-south, at 22LO710 and Feature 5 at 1PI76 they ran east west, while other kilns trended northeast-southwest (Table 16.2). Usually the brick preservation in the kilns was poor, due to underfiring of the remaining bricks. Atkinson and Elliott (1978:107) estimate Feature 2 produced 86,000 bricks and Feature 5 produced 172,000 bricks. At Waverly, given 10 firing rows three bricks wide and two outside walls of two bricks thickness, we may estimate the number of bricks. Each firing row would contain 11,250 bricks (3 wide x 10/m of firing chamber x 7.5 m x 50 high), while each wall would contain 7,500 bricks (2 wide x 10/m x 7.5m x 50), totaling 127,500 bricks for the entire kiln. Using Atkinson and Elliott's ratio of size of kiln to bricks we would derive a figure of 200,000 to 225,000 bricks for the same kiln. We feel their estimates are probably high. Nevertheless, these kilns represent a considerable number of bricks. The Waverly kiln differs from the others in that it contained firing chambers on its long side, was larger, and had a brick bat floor rather than a prepared clay floor.

Although only the brick kiln was excavated, we must remember the related structures which must have been there as well. These included a temporary shack for the fireman, the tub mill for mixing clay, the clay pit, drying areas, brick molds, wood piles, and wagon roads. Although surface visibility in July was 100%, no additional areas were noted around the kiln.

Description

This site was located on the floodplain of the Tombigbee River, south of Mississippi Highway 50 (Figure 13.1). The area had been extensively disturbed due to bulldozers clearing the channel of trees. Still visible at the site was a partially destroyed mound, 40 cm high. This mound was composed of brick rubble and fired clay (Figures 16.11-16.14).

The stratigraphy of the site reflected its use as a brick kiln. The highest stratum at this site was a reddish brown clay (5YR4/4) mixed with brick rubble. This clay was 42 cm thick and contained the brick floor of the kiln. The brick floor rested directly on a layer of charcoal that varied between 4 to 22 cm but averaged 10 cm overall. Below the charcoal was a yellowish red clay (5YR5/6) extending at least 66 cm deep, where the water table was penetrated.

The excavation of a brick kiln provides data on the processes of brickmaking which can be used by historians of technology, as well as providing local data for comparison with the various domestic sites possibly using these kilns. The plan of excavation adopted for this site was to expose part of the kiln for detailed study and to use trenches to define the structural aspects of the site. Excavations were begun by placing four backhoe trenches in an effort to define the edges of the kiln. This effort was highly successful and we were able to plot the east, west, and south walls of the kiln. A bulldozer was used to clear off the northwestern quarter of the kiln, exposing the brick floor. After the floor was exposed, two firing chambers were excavated. In addition, a 1.5 x 2 m unit was excavated along the northern edge of the kiln floor to expose it in profile.

The excavations revealed the kiln was a rectangle, 9 m by 7.5 m (29 ft 10 in x 24 ft 7 in). It had a floor composed of brickbats with few whole bricks. The firing chambers were approximately 60 cm (2 ft) apart. Some of the firing chambers indicated by charcoal stain were on top of the brick floor and others consisted of actual separations in the brick floor. The width of the firing chambers averaged 40 cm (1 ft 4 in). The end of one chamber was closed with brickbats and contained charcoal. The remains of two arches were also found. These consisted of one course of bricks laid on their side. Very little of this feature was exposed.

Two post holes were noted. The first was a square hole in the brick floor, probably between two arches. Its function is unknown, although it may have supported the arch during construction. No wood was found in this feature. The second post hole was sectioned by a backhoe trench. This post hole also occurs between the same two arches and still contained wood.

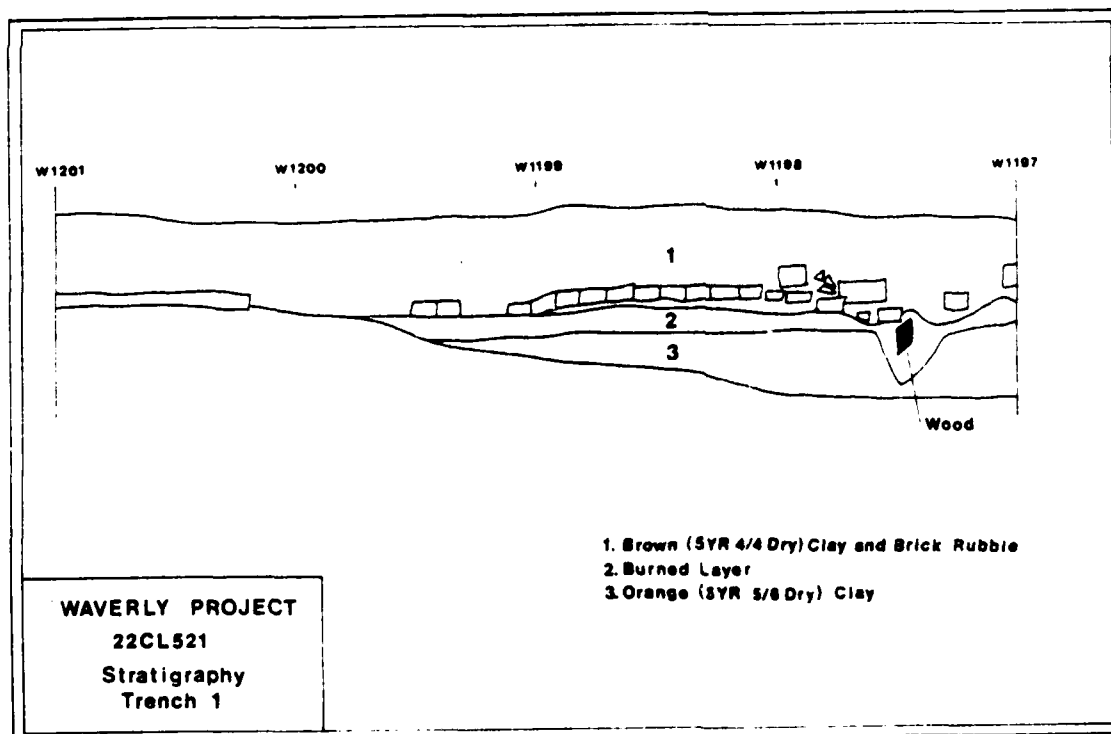
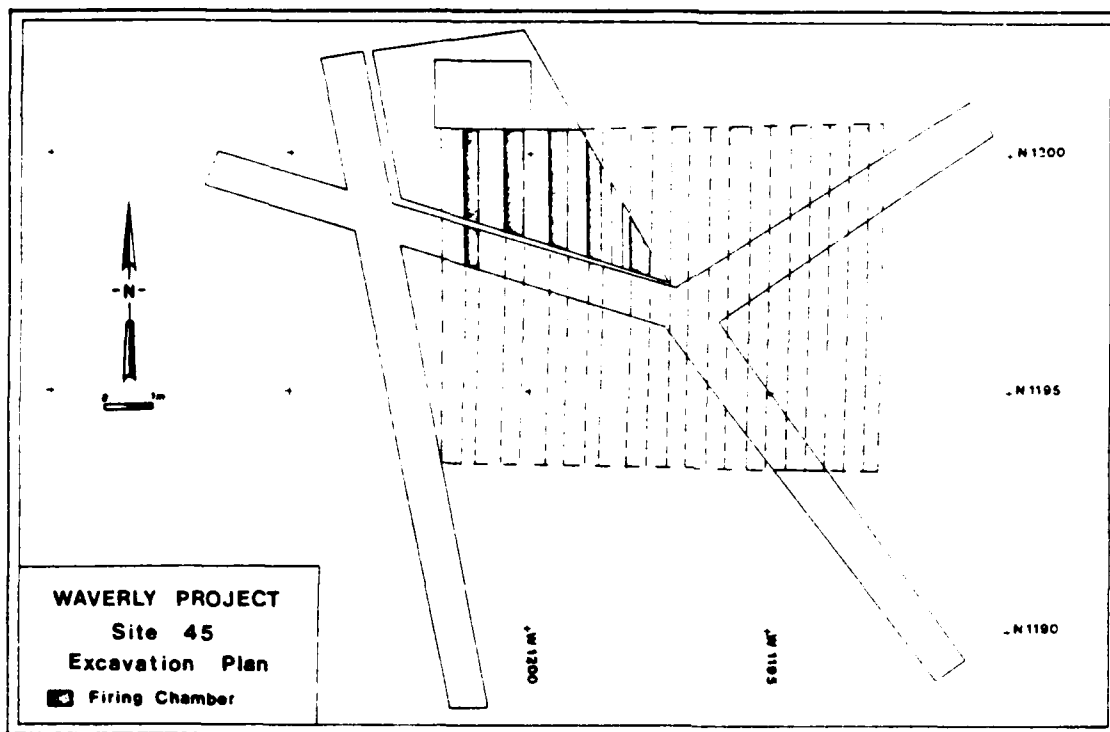


Figure 16.11.--Plan of Excavation, 22CL521.

Figure 16.12.--Stratigraphy, 22CL521.



Figure 16.13.--View of Kiln Floor and Firing Chambers.

Figure 16.14.--Kiln Floor and Base of Arches.

Very few non-brick artifacts were recovered at this site: a cow tooth (probably from the use of the area for pasture), a machine cut nail, and the base to a Lea & Perrins bottle. This bottle base dates ca. 1880-1900 (Toulouse 1971:277), possibly as early as 1877. Few whole bricks were recovered from this site. A total of seven bricks were measured. These had a range of 21.0-21.5 cm in length, 9-10 cm in width and 6.0-7.5 cm in thickness. The averages for these bricks are 21.21 cm in length, 9.85 cm in width and 7.0 cm in thickness.

Summary

Site 22CL521 represents a brick kiln dating from the mid- to late-19th century, based upon its absence from informants' memories and the few associated artifacts. The site could date as early as 1836, but more likely it is associated with one of several major construction episodes on the plantation, given its large size and multiple firings. Several buildings on the plantation were built of brick, including the warehouse, the steam mill, the western cotton gin, and the bath house.

The most likely explanation is that the kiln was used for rebuilding the mill complex between 1878 and 1880. The presence of a bottle base dating after 1877 and the lack of informant data indicates a use between 1877 and 1900. Certainly the reconstruction of the mill in 1880 fits this range. However, other possibilities exist, including the railroad bridge (1888). In those cases, the structure is further away from the kiln, and nearer the railroad and other possible sources like the probable brick kiln at 22CL573.

CHAPTER 17. THE HUMANLY TOUCHED THING

by Steven D. Smith, William H. Adams, and Timothy B. Riordan

Introduction

The "humanly touched thing" Loren Eiseley (1971:81) called the artifact and he spoke of its melancholy secret. We found tens of thousands of secrets about Waverly, and would like to share some here--melancholy and mundane. In the preceding chapters the places some of the Waverly tenants lived and worked were discussed. They reveal the very basic lifestyles with simple one and two room houses predominating, no running water in the houses or even nearby, and outdoor toilets. The scattering of little trash in the yard and the absence of trash pits and nearby dumps hints that the people were relatively neat or very poor in material things. Just how poor can only be imagined, but this is truly the archaeology of poverty. When compared to the poor farmers we studied in Silcott, Washington, these black tenants had even less.

In order to discuss the material culture of Waverly in common terms we have chosen to adapt a functional typology (Table 17.1) from one devised by Roderick Sprague. This serves as a useful vehicle to present these artifacts. We have also, in the next chapter, used this typology on the material culture sold at the general store in Waverly during the 1887-1888 period, and then compared that to the archaeological remains to see what might be missing from each. If one is interested in the technology producing these artifacts, and their specific variations and distributions at the sites, the reader is referred Appendices 7-10.

Clothing

The Waverly folk may have been aware of the latest fashions; however, because of availability and price they probably chose clothing that reflected a need for inexpensive, durable wear. This is evidenced both in the oral history and in the archaeology. From the oral history we know that overalls, shirts, socks, and work shoes were worn by the men. Dresses, stockings, and functional styles of shoes were worn by the women. Flour sacks were sometimes used to make clothing, especially underclothing and dresses. During pleasant weather people went barefoot. Straw hats shaded them from the hot sun as they worked in the fields.

Clothing was represented in the archaeological record by buttons, buckles, snaps, slides, studs, hooks, one zipper, and a few small cloth fragments. The people of Waverly chose from a very wide variety of materials for their buttons: ceramic, glass, metal, rubber, wood, shell, and bone. Glass and metal predominated. Of the 483 buttons, studs, and rivet buttons recovered, most were glass (30.2%; N=146) and metal (30.4%; N=147). Plastic (16.3%; N=79) and shell (15.5%; N=75) were a far second; wood (N=11) and bone (N=7) were much less evident and only five rubber buttons and one ceramic button were recovered. Figure 17.1 presents buttons, studs, and rivet buttons by material type and site. As might be expected metal and glass generally decrease in use or popularity through time, especially with the advent of plastic. There seems to be an increase in the use of shell and wood buttons through this period (sites have been relatively dated in this order by bottle and ceramic data).

Table 17.1. The Functional Typology.

<u>I. Personal items</u>		<u>III. Architecture</u>	
A. Clothing		A. Construction materials	
B. Footwear		B. Hardware	
C. Adornment		C. Tools	
1. Jewelry			
2. Cosmetics and perfume		<u>IV. Economic activities</u>	
D. Grooming and hygiene		A. Agriculture	
E. Indulgences		B. Hunting	
1. Tobacco		C. Trapping	
2. Alcohol		D. Fishing	
3. Drugs		E. Collecting	
4. Gambling		F. Logging	
F. Personal accoutrements		G. Mining and quarrying	
G. Infant care		H. Manufacturing	
		1. Handcraft	
<u>II. Domestic items</u>		2. Modern industrial	
A. Furnishings		I. Commercial services	
1. Furniture		1. Currency	
2. Drapery		2. Entertainment	
3. Decorative		a. Shows and theater	
B. Housewares and appliances		b. Commercial sports	
1. Culinary		c. Commercial music	
2. Gustatory		d. Commercial sex	
3. Cleaning		J. Transportation	
4. Laundry			
5. Sewing		V. Group services	
6. Portable illumination		A. Utilities	
7. Portable heating		1. Communication systems	
and cooling		2. Transportation systems	
8. Portable waste disposal		3. Mail	
and sanitation		4. Power	
9. Pest control		B. Taxation	
10. Domestic ritual			
11. Household music, art,		<u>VI. Group ritual</u>	
sports, and entertainment		A. Religious paraphernalia	
12. Household business		B. Fraternal paraphernalia	
(correspondence, bookkeeping)			
13. Yard maintenance			

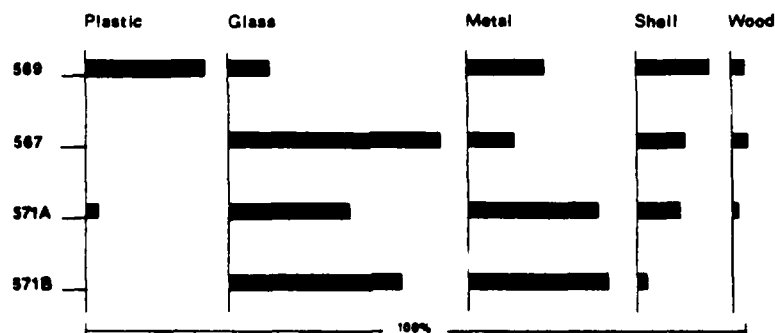


Figure 17.1.--Distribution of Various Buttons.

Common four hole sew-through buttons were the most frequent, 46.6% (N=211) of all buttons and studs. These buttons would most appropriately be used on shirts, undergarments, pants, and blouses. Twenty-four per cent (N=116) of the buttons were rivets associated with overalls. Two hole sew-through buttons were 23.% (N=112) of the total: loop buttons constituted only 6.2% (N=30). Unique styles of buttons were five hole sew-throughs (N=1), three hole sew-throughs (N=1), and collar studs (N=8). Five buttons were unclassifiable.

Decoration depended on the material type. Of the four hole sew-throughs, 82% (N=119) were plain milk glass. Only 16 glass buttons were embossed and three painted. Seven two hole sew-throughs had a oval center referred to as the "fisheye" pattern, the rest were plain, as was the only glass loop button. Metal and rivet buttons also exhibited little variety in decoration. Two and four hole sew-throughs were plain or crosshatched around the rim. Sanders' type loop buttons and rivets were not decorated but exhibited the names of many button factories and/or clothing companies. These companies reveal the diversity of manufacturers if not a diversity of clothing style:

Extra Fine	Red Ball	Liberty (with Shield)
Lee	"S"(with rope)	Hapgrade Pilot
Eagle (with shield)	W.O.V.	Finks Special, Detroit
L.T.J.	O'Brien Bros	C.R. Miller & Bros
"Anchor"	Big Smith	Carolina Special
Car Harts O'alls	Bear Brand	5 Stars & Laurel leaves"
AJAX	Big Ben	"Railroad engine"
Big Jack	"Three Stars"	S & L Perfection
Cone's Boss	The Flyer	Blue Buckle
Premium, St. Louis	Bull Dogs	B.L. & B. Memphis
"Concentric dots"	The Newport	Mechanic (man with hoop)
Waterbury Button Co.	H & H's	City Buttons Works, N.Y.

Plastic buttons became more diversified in their design and color with shades of green, red, blue, brown, black, and white. Designs were most often "fisheye" patterns with spirals, ribbing, and scalloping also exhibited. These designs and colors reflect the period from the mid-1930s to the present.

The people of Waverly used a wide variety of other types of clothing fasteners produced during the late 19th and the 20th century. For example, eight different types of buckles were noted. Snaps (N=7), garter or suspender clips (N=7), and slides (N=12) were also used at Waverly. Snaps and slides were made of metal except for one of each type made of plastic. Hooking fasteners were diverse in style and function. One example, a small brass wire loop, was sewed into a garment with the loop extending beyond the cloth. Eight corset stay fragments came from 22CL571. Items such as belt ends, plastic belt fragments, zipper ends, grommets, a suspender buckle ring, and a sliding bar belt buckle were also recovered.

Fragments of cloth recovered were few: only six small fragments of cotton fabric from 22CL569. Just one fragment was decorated with a blue plaid design; others were either black or white. Six fragments of nylon stockings were recovered in colors of tan, blue, black, and pink. Nylon for hosiery was first commercially available in 1940 (Dubois 1972:302). Thus, these fragments are from a recent context, probably the white occupation.

In summary, the black folk used a wide spread clothing market, as evidenced by the manufacture marks of rivets, but were not particularly diverse in their clothing styles. Availability, cost, and the need for a durable daily wear determined what types of clothing they would purchase. The only non-utilitarian items seen archaeologically during this time were corset stays. Later, but not until the 1940s, the Waverly Community could choose clothing more diverse in style. This was perhaps due to the availability of clothing making use of inexpensive materials like colorful plastic buttons and nylons. This transition in the clothing industry was coincident with the transition from black to white inhabitants of the Aaron Mathews Site.

The 1887-1888 ledger from Henry Long's Store (Long n.d.a) indicated a greater diversity of clothing than the informants remembered for a somewhat later time, but one similar in nature. Seasonality of cloth purchases indicated light-weight cloth such as lawn was bought during the summer, while linsey and cotton flannel clothing were bought in the winter. The most common entries in the ledger for cloth were calico, osnaburg, black domestic, cottonade, and stripes. Although sold at the store, overalls were not purchased by any tenants surveyed and were probably made at home.

Footwear

Footwear, like clothing, was utilitarian. As mentioned earlier, during good weather most of the community went barefoot. From the archaeological record we have only fragmentary evidence. No complete shoes were recovered. From the fragments we can see both high top and low cut shoes were in use; most often these were without stylistic attributes. No direct evidence occurred for boots, although one metal heel plate could have been from a boot. Rubber and leather materials were evidenced.

The 1888 store ledger listed very frequent purchases of shoes and boots, with only occasional mention of button shoes and fine shoes.

Personal Adornment

The people living at Waverly probably spent little of their income on the luxuries of jewelry, cosmetics, or perfumes. A total of 63 artifacts are listed here, if we include three pieces of children's plastic jewelry. Sixty-six per cent (N=42) of these artifacts were from 22CL569 and of those, 48% (N=20) were made of plastic, indicating the white sharecroppers there had more expenditure for, or more loss of, these items.

Jewelry was inexpensive "costume" variety. Brooches were composed of both metal and plastic with glass or plastic flowers, glass "diamonds," and plastic or glass beads. Charms, pendants, and beads for bracelets or necklaces were also plastic, glass, or metal. Only one artifact of this type was recovered at 22CL571B: a pendant with a baseball motif. Other charm motifs were a light bulb, military tank, and heart-shaped lockets. One copper ring had an incised decoration. Two pins were of special note. One recovered from site 22CL569 was a set of wings with a propeller in the center--the hat insignia of the Army Air Corps. The other pin was, in our opinion, the only jewelry item that could be considered to have "value." This was a porcelain button or brooch pin (its method of attachment was not evident) with a polychrome transfer-printed design from 22CL569.

Hair adornment items were fairly numerous. Six hair barrettes of plastic or metal were recovered. Rhinestones, molded animal, and comb style barrettes were seen. Hair styling required curlers. Only one hair pin was noted. All of the curlers and the hair pin were recovered from site 22CL569 except one, and that was from 22CL576, the dump area across the road.

Besides hair, the face and hands were given some attention. From 22CL569 came lipstick holders and nail polish bottles and brushes. From 22CL571A came cold cream jars and fragments. The latter could have been used for smoothing chapped skin and therefore as a hygiene item, but it is listed here as it primarily functioned as a moisturizer for beauty purposes. Only two perfume bottles were recovered.

Commercial products for adornment were not purchased by, or were not available to, the early tenant farmers of Waverly. Adornment may have been important to them but commercial items purchased for that purpose did not show up archaeologically. By the 1930s, when inexpensive plastic and metal jewelry was available, they purchased these in small quantities. Also at that time some concern was shown in being "fashionable." Perhaps this reflects a greater awareness of the outside world, or perhaps more likely, the fashion world was making stronger attempts to reach those who could not previously afford fashion. Except for the military insignia and baseball pendant, all other adornment items would normally have been associated with females.

Although the store ledger lists some adornment items, none was purchased by any of the tenants surveyed in Chapter 18. Only one bottle of perfume (\$.25) was bought.

Grooming & Hygiene

From the archaeological record a total of 137 artifacts could be identified as related to grooming or hygiene; however, this count did not include a large number of plastic, rubber, and metal closures, possibly tops to toothpaste, shaving lather, medicine bottles, and other such products. Artifacts associated with grooming activities constitute 28% (N=38) of the total number of artifacts in this category. Many were male oriented items like safety razor blades, lather tubes, and brushes. Other artifacts included plastic combs, and four hair tonic bottles labeled "Lyric" and "Cavalier".

Ninety-nine artifacts were associated with hygiene and health; 64 of these were medicine bottles or glass medical equipment; 16 small aspirin bottles were recovered. No brand names were noted. Most (89%, N=13) of these bottles were recovered from 22CL569. Relatively few medicine brands were identified:

D.D.D.	1	Hostetter's Bitters	1
White's Cream Vermifuge	1	B. B. (probably bitters)	1
Phillips Milk of Magnesia	1	Cod Oil (Cod liver oil)	2
McElree's Cardui	1	Mentholatum	1
Vick's Vapo Rub	6	Dr. Kilmer's Swamp Root Bitters	1
Vaseline	3	Wild Cherry Bitters	1
Rawliegh's . . . heum	2		

In addition to the above, two other bottles resembling patent medicine bottles were noted, but they did not have a brand name. These medicines

represent a variety of ailments. Nine of the medicines were for treating colds and flu. The four bitters products were probably used as a general "pick-me-up" for common ailments. The vaseline was used for minor skin irritations and burns. Cod liver oil was often used as a treatment for rickets or as a preventative. Phillip's Milk of Magnesia was used as a laxative and White's Cream Vermifuge was used to treat tapeworms. McElree's Cardui deserves some special attention. Used as a treatment for "woman's diseases", it was very popular in the South:

"The reverend promptly went into the patent medicine business as the creator of Wine of Cardui, 'Nature's Great Emmenagogue', with a wrapper illustrated by the picture of a plant, an indian maiden, an ill woman and the legend: 'the great spirit planted it, take and be healed'. In good time, Cardui and Black Draught stood forth together in black and yellow paint on just about every barn and shed in Dixie-universal symbol of recovery in the new south" (Carson 1961:21).

Nineteen bottles were classed as prescription bottles; these usually had the druggists' symbol for ounces on the back and Roman numerals indicating the capacity. In addition they usually have graded scales in ounces and cubic centimeters on the back. One of these bottles had a West Point, Mississippi, druggist's name embossed on the front (C.C. Wilsford). These bottles were made to be filled in a drugstore to meet a doctor's prescription or for other medicines and chemicals compounded by the druggist. They could have been filled with any medicine. They show trips were made to Columbus and West Point for medical purposes. Five pieces of eyedroppers and one glass rod applicator were found. These are likely to be associated with the medicines described above.

The Waverly folk seemed to have an appreciation for dental care. Seven plastic or bone toothbrushes or fragments of toothbrushes and an Ipana toothpaste tube were found.

Along with the glass pill bottles (probably aspirin) were 13 plastic snap-on caps from two sites, 22CL569 and 22CL571A. Three of them had the druggist's symbol molded into them. Four black plastic threaded caps are assumed to be from shaving or toothpaste tubes. The final artifact in this category was a band-aid.

Given the time frame of some 80 years, relatively few artifacts were placed in this category. This may imply the most often used remedies for ailments were those prepared at home. Certainly patent medicines and prescription drugs were not used in abundance. Again we are left with the problem of whether this was a lack of availability, income, or a conscious choice by the Waverly folk. From the oral history we know most people in Waverly made their own soap and home remedies were mentioned frequently. The store ledgers showed a remarkable similarity to the archaeological assemblage, even though considerably earlier in time. The most frequent purchases were lung balm, vermifuge, bitters, castor oil, quinine, tonic, and liniment, although cardui, paregoric, laudanum, and other medicines were mentioned. There appears to be some seasonality of purchase patterns with medicines bought most frequently during the winter and during the rainy season.

AD-A127 617

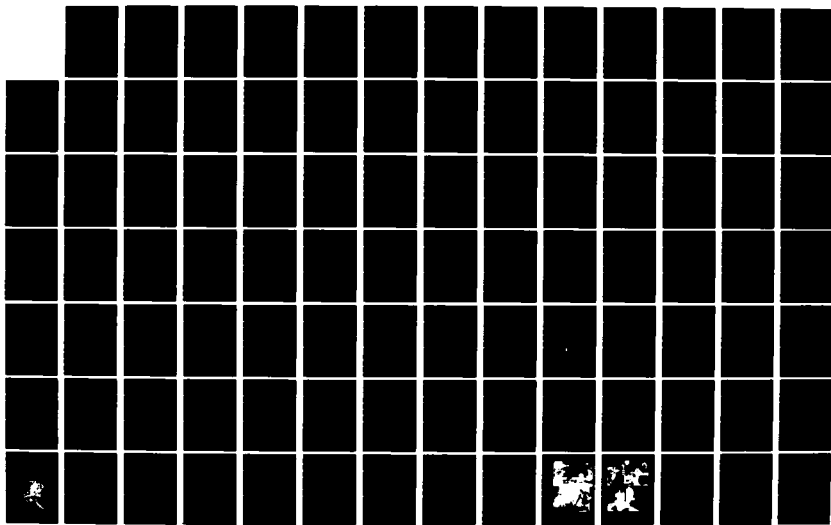
WAVERLY PLANTATION: ETHNOARCHAEOLOGY OF A TENANT
FARMING COMMUNITY(U) RESOURCE ANALYSTS INC BLOOMINGTON
IN W H ADAMS 16 DEC 88

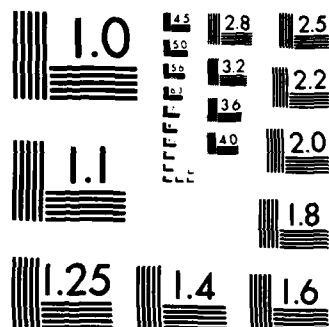
416

UNCLASSIFIED

F/G 8/7

HL





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

Indulgences

In this category were 848 artifacts, although this is a conservative figure. Like the previous category, no closure items or containers were included here that could not be positively identified as serving this function. Also, we do not know how many patent medicines were consumed for their alcohol rather than as medicine. Finally, we have not included 56 stoneware jugs which may have held whiskey.

Tobacco, especially in the form of snuff, was by far the most common form of indulgence. Numerous references to snuff were in the oral history and in the historical store records. The snuff jar was ubiquitous in the archaeological record with a minimum of 296 recovered. Of the snuff jars, 35% (N=103) were the traditional shaped amber jars and 65% (N=193) were clear. Snuff was used either by inhaling it up the nose or by placing it in the mouth. It was cheaper to use than other forms of tobacco. Snuff has been for some time a rural rather than an urban indulgence. "In 1930, sixty per cent of the snuff sold in the United States went to the rural south and the proportion of women snuff users rose because cigarette smoking by women was not yet widely accepted" (Conwood Corporation 1975). The clear snuff jars most likely served as drinking glasses when the snuff was gone. This was why they were produced in that shape and undoubtedly that was how they were used.

As an interesting aside, the traditional amber snuff bottle which held Levi Garrett Snuff usually contained various numbers of embossed dots on the bottom. The number ranged from one to five in our collection and were in many different patterns. The oral tradition states that the dots indicated the strength of the snuff, and this has apparently made its way into the literature (see Munsey 1970:80). After contacting glass manufacturers and the Conwood Corporation which produces Levi Garrett Snuff, we were unable to verify that information. The dots indicate nothing more than a particular mold pattern for the glass jars (Conwood Corporation 1975).

While snuff was the favorite form of tobacco consumption, smoking and chewing was also evident. Smoking paraphernalia consisted of ceramic reed pipes, a wood pipe bowl, a metal pipe cover, plastic and bone pipe stems, a match and two flint safes for lighters, pipe tamping and cleaning tools, 40 tobacco cans and can lids (Prince Albert seems to have been a favorite), and a tin foil tobacco pouch. Chewing tobacco was also mentioned in the oral history.

Alcohol was another form of indulgence evident. Hard liquor bottles were the largest group of alcoholic beverage bottles, accounting for 63 of the 78 glass artifacts in this category. All of them were flask shaped pint bottles. Fifteen bottles were identified as containing a specific product. Three whiskey bottles have trademarks "Schenley" and "I.W. Harper." A gin bottle was marked "H & A Gilley Ltd, Gin." One flask shaped bottle was marked "wine" on the base and six wine bottles were identified by shape, color and size. Only four identifiable beer bottles came from Waverly excavations. We might have expected more in relation to the other kinds of alcoholic beverage bottles found. This lack also carries over to metal containers. Only two cans could be identified positively as beer cans. One other cone-top can may also fit here. One aluminum beer can from site

22CL567 was litter from the nearby road, since aluminum beer containers were not available until the 1960s. Liquor consumption is supported in the metal artifact collection by closures labeled "Schenley" and "Gilley".

Other types of indulgences like gambling and other forms of drugs are not mentioned in the oral history for the blacks, although the planters raced horses and bet on fighting cocks. Gambling would not likely have been for cash but this cannot be ruled out. Moonshine liquor is very likely to have been consumed but is not evident, except perhaps in canning jars.

In summary, snuff was probably a daily habit partaken commonly by the men and women, as much a part of the culture as our cigarettes and coffee. Alcohol in the form of the "hard liquors" was also common. Beer may not have been a common form of alcohol consumption until the white occupation or it may have been home brewed. How much moonshine, if any, was consumed cannot be discerned.

The store ledgers showed a proportionately greater use of plug and smoking tobacco than snuff, although snuff was common. Occasional travelers and the planters bought cigars, cheroots, and cigarettes, but the black tenants did not. Alcohol is rarely mentioned in the store ledger as being sold to anyone, yet Long paid \$200 a year license for alcohol and tobacco sales. Only one pack of cards was sold to a tenant in our survey, but that could easily have been used in playing Rook or some other non-wagering game.

Personal Accouterments

Items commonly carried on the person were pocket knives, watches, purses, and eyeglasses. More unique items recovered but belonging to this category are a key tag, a luggage case handle, and umbrella fragments.

Watch parts were the most common items recovered in this category. Companies like Ingraham, Ingersoll, and Westclox were known for mass producing inexpensive pocket watches from the turn of the century until the 1930s when wristwatches became popular. Bailey states that pocket watches were generally carried by males (Bailey 1975:190). Only one watch band was recovered, and as might be expected on the basis of the later occupation it was recovered from 22CL569.

The eight eyeglasses were represented by glass lenses and plastic frames and bows. Four lenses were flat and four contoured. Oval was the most popular shape. One lens was from sunglasses. Plastic frames and bows were multicolored brown, red, white, and black. No metal frames were present. The plastic frames were all from site 22CL569.

Purses were all metal or plastic framed bag purses. A large case handle was noted that might have been part of luggage.

Personal items noted in the store ledgers for 1887-1888 included knives, pocket knives, pocket books, fans, umbrellas, and a parasol.

Infant Care

The only infant care items other than baby food containers were plastic stoppers for baby bottles. These were from 22CL569. Only one item for infant care was mentioned in the ledgers, one purchase of baby powder.

Furnishings

Items pertaining to furnishing or decorating a house were an almost insignificant amount of the material recovered at Waverly: only 122 artifacts fit this functional category. Even this does not really show how these items lack archaeological visibility, since 40 fragments probably came from seven mirrors. Another large number of artifacts here were bed spring fragments (N=21).

This invisibility in the archaeological record is the result of several factors. First, much of the furniture would, of course, be made of wood, which if left behind would have had a poor chance of surviving. Also, what furniture they did have would have been taken with the occupants when they moved. Still, despite these effects, sites occupied for 50 years or more might be expected to yield more artifacts in this functional category. We feel that another causal factor was the occupants' extreme poverty. Historically, we know that of the purchases made at Henry C. Long's store, approximately 80% were food or clothing items. Considering that much of the remaining 20% had to be for work items, very little money was left for much furniture other than perhaps a chest of drawers (there were no closets) and a table. Artifacts representing such household items included five drawer pulls, five metal and ceramic furniture castors, four bed frame plates, six furniture hinges, and bed springs (both cot and box spring styles). Also there were plastic table trim fragments, a glass furniture coaster, two ceramic castor wheels, six small butt hinges, and two plastic straps from lawn chairs.

Wall hangings and drapery items were extremely scarce. Only one wall clothing hanger, one drapery hook, six curtain rod ends, a plastic towel ring, two metal picture frame corners, and one bracket for shelving were noted.

Other items fitting into this category included six fragments of a plastic clock housing and for decoration one plastic flower. Also one small fragment of metal screening was recovered. This is especially interesting since Woofter's W.P.A. survey noted that less than one-fourth of the black tenants did not have screens while among the white tenants this figure was "considerably greater" (Woofter 1936:98). Our fragment was recovered from 22CL569.

As previously mentioned, a total of 40 mirror fragments, representing seven mirrors, were recovered: four mirrors from 22CL569 and 22CL576, and three from 22CL571A.

Besides the single plastic flower, other decorative items included nine milk glass fragments, representing four different vessels. Pressed designs included shell edges, ribbed, and loose basket weave motifs.

The above items make up a very small total of the material culture recovered at Waverly. It would be interesting to compare this with a sample of artifacts from sites having occupants of a known economic status higher than those excavated at Waverly. Such a comparison would give us a better feeling for how much of this invisibility is due to economic factors versus other causes like abandonment.

Housewares & Appliances

Culinary artifacts refer to items used in food preparation or storage. Gustatory artifacts refer to items used in food consumption like plates and forks. For convenience, these two related activities are examined separately below.

Food preparation activities were represented by 87 metal artifacts and two glass coffee pot tops for percolators. Water for coffee or tea was boiled in metal kettles. Our collection of artifacts includes an iron tea kettle from the Kentucky Stove Co. One informant mentioned that "At that time [ca. 1905] they would give you all things that pertained to a stove, it would go with the stove . . . pans, pots, kettles some spoons, I don't know . . . just everything, in the cost"

The Waverly folk did not purchase enamelware in great quantities or at least did not discard what they bought. Only 14 different fragments of this material were recovered. All except one fragment was from 22CL569 or 22CL576. The enamelware recovered represented pots, pot bases and lids, and one pan. Other cooking items were small fragments of cast iron caldrons, a pan handle, two utensil handles, three can openers, a corkscrew blade, and a fragment of a vegetable grater.

We have also included in this section stove parts although these served other useful functions such as keeping warm during the wet winter months. Fifty-eight fragments of cast iron stove parts were recovered, including round and rectangular burner plates, handles, stove legs and frames, pipes and flues, grate fragments, and a dutch oven base. Some of the frame parts were labeled "The New South." Fragments were evident at 22CL567, 22CL569, 22CL571A, and 22CL576.

A much greater number and types of material are seen in artifacts used for storage activities. A total of 794 complete and fragmentary artifacts can be noted here. This includes 56 ceramic jugs (from vessel counts), 15 jugs or crocks (vessel count), 260 can fragments and keys, 81 metal closures, 35 plastic and rubber closure or container fragments, and at least 344 glass containers (from 792 fragments). Wood containers are represented by three barrel hoops.

At least 129 canning jars were recovered from Waverly sites, 72% of these from site 22CL569. Furthermore, if 22CL576 is included as a dump for 22CL569, then 90% of all glass canning jars were associated with that site. Several canning jar brands were identified, including:

Ball Mason	Ball Perfect Mason
Hazel-Atlas	Kerr Self-Sealing Mason
Mason Patent Nov 30th 1858	Atlas
Atlas Good Luck	Knox Mason
Swayzee Mason	Ball Improved Mason

In addition to the jars, 64 canning jar closures were recovered. Sixty closures were opal (milk glass) and four were the transparent lightning type. While 22CL569 had the majority of canning related artifacts, 22CL571A had 38% of the closures. The following caps were identified: Genuine Zinc Cap (for Ball Mason Jars), Boyd's Genuine Porcelain Lined Caps; The Glass Works.....Pa.; Hazel-Atlas Caps For Mason Jars.

Metal canning jar lids had a similar distribution. Thirty-six canning jar lids were recovered, 66% (N=24) from 22CL569. Also 21 rubber canning jar liners and fragments were noted. Metal canning jar lids were labeled "Ball" and "Genuine Boyd's". The distribution of these canning jars and lids is of special interest. Oral history sources indicated that canning vegetables and meat was not known to the black occupants of Waverly until recently, although they did can fruit. Archaeologically, the numbers of these items are greater in the white occupied site. This may be an isolated incident from Waverly, a result of our excavation sample, or may be a sensitive indicator of ethnic differences among white and black tenants. If this is an indicator of the occupants' ethnicity, it must be viewed in terms of relative numbers of vessels or fragments since we are reminded that canning jars are useful for a number of different functions besides canning.

This lack of food preservation activity at Waverly was also evident in the ceramics. Stoneware vessels at Waverly represent only 21.8% (MNI) of the total vessels recovered. Furthermore, of these vessels, only 7.5% of them are known to be crocks (an additional 29.1% might be either a jug or a crock). It would seem that the early tenants were consuming their food soon after it was purchased, caught, or picked, and very little of it saved for lean times except by drying. Since we do not have white occupied sites during the early tenant period (late 19th and early 20th centuries) we cannot be sure whether this pattern was the result of ethnic or economic factors.

Other containers recovered at Waverly represented foods that were commercially packed and purchased by the people of Waverly. The kinds of foods packed in this manner are innumerable. None of the glass jars could be identified to the exact product or producer. Few of the metal cans could be discerned either. Among glass storage containers of this type, site 22CL569 had the most at 77%, again including 22CL576, that number became 90% of the total.

Tinned can foods probably played only a small role in the Waverly diet. Of the 260 tin can artifacts, 60% (N=157) came from 22CL569 and 22% from 22CL571A. With the addition of 22CL576, the 22CL569 total jumps to 70% (N=157+26). A large amount of the tin can artifacts were can keys. Of the total 111 can keys recovered, 98% (N=109) were found at 22CL569. If we subtract this from the total of can fragments, then the totals for the two sites become much closer at 56 for 22CL571A and 48 for 22CL569. This total number of tin can fragments is rather small. We must note that since few labels were legible, some of these cans may represent non-food items. Legible labels included "Cudahy Chili" and "Maxwell House Coffee". Can keys were predominately short, coffee can types; only two of the total were sardine can keys.

Concerning the tin can styles, it is interesting to note that only two cans were hole-in-the-top types. The most common type of can fragment was the round can with crimped base or top, which constituted 42% of the tin can fragments. Again, 58% (N=36) were recovered at sites 22CL569 and 22CL576.

Closures for food containers were constructed of metal and plastic. Metal closures were in the majority with a total of 81 fragments. The largest category of metal closures was the round friction cap at 63. Other items included lug caps, shaker tops, pivoting spouts, friction caps of rectangular, rhomboid, round, or oval shape, vacuum seal caps, a sardine cap, and "giles type" caps. Plastic closures for food containers numbered 35 items, all from 22CL569. Eighteen of these were plastic snap lids for food bowls and resealers from coffee cans. Other less conspicuous items were tabs for salt dispensers, dispensing spouts, bag closures (pinch tabs), end caps, and plastic stoppers.

In the more recent years at Waverly, the people were able to make use of a greater variety of commercially produced canned goods. The earlier domestic sites (late 19th century) were not purchasing such goods. The question remains as to whether this was a factor of availability, income, archaeological preservation, or ethnicity. Whatever the reason, commercially prepared goods were not a significant part of the diet at Waverly. Only coffee was consumed in any great quantity. The early residents of Waverly were not preserving food in any great quantities and it seems this pattern continued until whites occupied Waverly. It would be very useful to compare this pattern to other southern tenant farming sites to assess whether this is an isolated cultural pattern or a trend throughout the South.

Gustatory artifacts include items used to serve or consume food: plates, bowls, serving plates, condiment, extract and soda pop bottles, closures, and silverware. As might be expected, this is a rather large category including most ceramic and glass.

Ceramic vessels reveal some interesting insights into the people living at Waverly. As we might expect, ceramics tended to be utilitarian, inexpensive items. Plain white vessels were 48% of porcelain and earthenware.

Only 13% of vessels were porcelain. The site with the highest percentage of porcelain vessels is 22CL571B, the oldest domestic site. If we arrange the sites in chronological order as defined by bottles, nails, and window glass (Appendix 7), then porcelain vessels diminish in number through time. We feel this reflects a change in ceramic technology toward the manufacture of inexpensive but durable refined white earthenwares during the late 19th and 20th centuries.

Ceramics seem to have been purchased as replacement items rather than in sets. This is seen archaeologically as a diversity of decorative motifs and lack of similar styles. The lack of purchasing sets was noted in the Henry C. Long store records. This diversity has been noticed on other historic sites with occupants of lower economic status throughout the country (Gaw 1975; G. Miller 1974; Smith 1979).

Recently archaeologists have taken an interest in ceramic vessel form as a possible indicator of the status and diet of those persons occupying a particular site. Otto (1977) found that a greater number of banded bowls in use among the slaves at the Cannon's Point Plantation, an early 19th century site. "Banded bowl forms composed 29, 17, and 6% of the total tableware at the slave, overseer, and planter sites respectively. In contrast, transfer-printed serving flatware composed 19, 28, and 62% of the tableware totals at the slave, overseer, and planter sites, respectively" (Otto 1977:107). Otto hypothesized that serving bowls and flatware items should be sensitive indicators of social status on early 19th century plantations because the shape of the vessels reflected the dietary habits of the occupants. Slaves ate more of the "liquid based stews" where bowls would be appropriate (Otto 1977:104). The planter, on the other hand having the pick of the garden and livestock, would use more flatware vessels.

Based upon the Waverly sites we suggest another explanation also may be valid. Tenants at Waverly were also probably eating many liquid based stews. Informants have indicated that stoves were not used at Waverly until around 1905; cooking was done in an open hearth which limited cooking techniques and favored stews. Like the slaves studied by Otto, the Waverly tenants were busy in the fields during the daytime and keeping a stew going on the fire would make sense for them. If it is simply diet causing the "status" difference in ceramic vessels, then we would expect for bowls to be quite frequent at Waverly, as they were at Cannon's Point. However, flatware was much more frequent (58.5%) than bowls (15.7%) at each Waverly site. Certainly, the black tenants were on the lower end of the social status scale during the late 19th century.

Thus, we are left to explain why bowls were used by the slaves at Cannon's Point, but Waverly tenants were not using ceramic bowls as frequently. We feel that the answer lies with the availability of inexpensive earthenware in the late 19th century versus their lesser availability in the early 19th century. The planters purchased ceramics for the slaves (or in the case at Cannon's Point the slaves purchased their own ceramics) and the tenants at Waverly purchased ceramics for themselves; both had one major criterion--the expense of the product. Banded bowls may have been cheaper than flatware for the slaves to purchase. Later in the 19th century American mass-produced flatware became available and the tenants at Waverly were able to purchase a greater variety of tableware cheaply. Unfortunately Otto was unable to determine the cost of his ceramics which would help to disprove our hypothesis or support his. Also, we must remember that while bowls are appropriate for stews, it does not follow that only stews were eaten. Bowls can be used, if necessary, for other types of food.

The occupants at Waverly were making use of much more glass than earlier sites like Cannon's Point. A total of 264 glass fragments were included in the gustatory category representing 154 (MNI) artifacts. Sixty-eight per cent of these glass artifacts were tableware, primarily pressed glass serving vessels. Many styles and patterns were found ranging from the 1850s to the present. No one site had predominately older styles. Site 22CL569, however, had mostly the more recent styles including much glass from the 1930s, often labeled depression glass.

Glass vessel shape corresponded to the diversity seen in ceramics. Shapes included goblets, lids, tumblers, plates, cups, bowls, and relish trays with no sets noted. Of the tableware, 50% was recovered from 22CL569, 26% from 22CL571A, and 24% from the other five sites.

Seven condiment bottles were recovered: three ketchup, two worchestershire sauce, one mustard, and one mayonnaise jar. Brands of condiments were Heinz Ketchup, Duke's Mayonnaise, and Lea & Perrins Worcestershire Sauce. Nine extract bottles were also included here, but no types or brands were indentified. Most of these bottles were recovered at 22CL569.

Nineteen soda pop bottles were found, 53% found at 22CL569. Many were embossed or painted. The following brands were noted:

Royal Crown Cola	2	Pepsi-Cola	1
Nehi Beverages	1	O C Beverage	1
Coca-Cola	5	Moxie	1
Dr. Pepper	1	Bard's	1
Syrup of Phosphate	1		

Coca-Cola seems to have been the favorite soft drink at Waverly. The five Coke bottles represent 26% of all soda pop bottles. Coca-Cola had opened a bottling plant at nearby West Point as early as 1906.

Other glass in this category included seven glass bottle stoppers. The only one that could be identified was a Lea & Perrins stopper. The others could have been used in a variety of bottles but condiment bottles are the most common type. Along with the bottles mentioned above, 71 crown caps were recovered, 70% of these from 22CL569.

Seventy table utensils were recovered: eight tablespoons, nine spoon bowls, twelve teaspoons, one soup spoon, two iced tea spoons, one serving fork, eight table forks, six knife blades, four butter knives, five knife handles, 12 fragments of tableware handles, and two cutting knives. Brand names of silver plate manufacturers follow:

Simeon L. & George H. Rogers Company (Oneida)	Wallace N. S.
Wm. A. Rogers German Silver	Glastonbury
Niagara Silver Plate (Oneida)	Sheffield
House Bond Hardware Co. Memphis	Hull
Fairfield Silver Plate	Plaza Silver Plate
Regal Pure Silver Plate	Parker
Elmo Silver Plate	

The variety of different silver plate manufactures may indicate that sets of utensils were not being purchased. In fact, there are no examples of the above manufacturers on more than one utensil. As with ceramics the Waverly folk probably could not afford to purchase tableware utensils in large quantities like sets. However, we cannot be certain sets were not purchased since such items would not be expected to wear out or break as often as ceramics. If sets were purchased, only a few of the individual items would enter the archaeological record due to loss or breakage.

Gustatory items demonstrate a great diversity of manufacturers, vessel forms, and products. We also note an increase through time in the use of glass tableware. The people of Waverly, despite their low economic status, were able to consume a variety of inexpensive products not available to their predecessors.

Cleaning and laundry items were not common. In the category of cleaning and laundry, 37 metal artifacts and nine plastic items were buckets and tubs. While these could be used in a variety of functions we assume that at one time or another they held water for cleaning. Only three wire bucket handles were recovered from 22CL569. Four bail sockets, 10 bucket wires, one handle attachment, eight tub handles, and two bucket lock seam fragments were from 22CL571A. This is 67% (N=25) of the metal cleaning items. Plastic cleaning items were more positively correlated with cleaning. Bottle fitments with spray nozzle attachments probably holding some cleaning fluid were recovered from 22CL569.

Laundry items were easier to identify; the total of 24 artifacts included a glass clorox bottle, a glass washboard, fragments of a metal washboard, two sad irons, two clothes pin springs, and six fragments of bent wire coat hangers. The glass washboard was labeled "National," and the sad irons stamped 6 or 9. Finally we included a tent rope slip here. The residents of Waverly were not campers and the rope slip was used probably in some domestic function, like on a clothesline.

The Waverly folk most assuredly paid some attention to cleanliness. We know from the oral history that soap was made by the women of the community and we find evidence from the archaeology of typical rural methods of doing laundry in a tub with a washboard. Clothes were hung on a line to dry. Since many of the typical cleaning items of the early days of Waverly were probably made of wood, brooms for instance, we would not be likely to find evidence for them. What can be said is that the community did not use commercial cleaning items until more recent times. The 1887-1888 store ledger does indicate the occasional purchase of items in this category, like soap, soap bars, starch, bluing, and wash pans, as well as brooms.

Sewing was represented by 16 artifacts, all of metal: six fragments of scissors, four safety pins, a needle, a needle threader, three thimbles, and a button hook. The women of Waverly were probably not able to enjoy a sewing machine. Nine items were recovered from 22CL571A. As mentioned in Chapter 18, the sewing items are grossly under-represented archaeologically, based upon the purchases at Long's Store.

Illumination throughout most of the existence of the community was provided by oil lamps. The mansion enjoyed gas lights, but for the rest of the community, the smell of burning oil lamps was a common fragrance. Site 22CL569 did have electricity but not until the 1950s. The archaeological record demonstrates what is known from the oral history. Of the 91 lighting artifacts recovered at Waverly only 13% (N=12) were associated with the electric period of Waverly's existence. Surprisingly, another 36% (N=33) of these artifacts were flashlight parts and batteries from 22CL569. The remaining 46 artifacts were from oil lamps.

Forty-six of the oil lamp artifacts were lantern glass fragments. Other items included three wick lifters, a wick holder, a burner collar, two burner hoods, two reservoir tops, and one shade holder. The glass lamp fragments were divided rather equally among the sites. Thirty percent were from 22CL571A, 30% from 22CL569 and 22CL576, 27% from 22CL576 and 8% from 22CL571B.

Flashlight parts were composed of plastic glass and metal and included 21 D-cell batteries labeled "Eveready" and "Ray O Vac". These items were glass and plastic lenses, metal switches, and plastic fragments. Electrical parts included a light pull, four bulb bases, two bulb fragments, and a pull chain socket. Also one ceramic light fixture was recovered at 22CL569.

Heating artifacts recovered include those stove parts previously discussed under the culinary category and the cast iron fireplace tongs recovered from 22CL571A. Found at all sites were coal and slag. The wet winter seasons probably were quite miserable for the residents of the community given their drafty houses. The only heat source was probably the fireplace, to which a few chunks of coal were added to the wood on a really cold night.

Waste disposal and sanitation artifacts were not recovered. Privies were mentioned only once in the oral history and only then the one built by the WPA at 22CL569. No privies were discovered during excavation or testing at Waverly. Trash dumps were of course noted at 22CL571.

Pest control items would indicate the Waverly contended with rats. One labeled glass fragment at 22CL571A was from a bottle containing concentrated embalming fluid which we assumed was used to kill insects or rats. The other artifact was a plastic bag which contained rat and mouse poison from 22CL569. Domesticated rat bones were recovered in one site. No traps were found.

Household music, sports, and entertainment items were frequent in the archaeological record. Artifacts associated with music were all harmonica parts: five metal reed plates. Three of these were from 22CL571A, one from 22CL571B, and one from 22CL569. The latter site also had a plastic harmonica fragment.

No artifacts could be considered sports-oriented, except perhaps ammunition, discussed below under the hunting category. Other recreational activities were noted like bicycling, represented by one tire frame, a bicycle pedal, and two plastic reflectors.

The largest category of entertainment items was toys. The most abundant toys were clay, porcelain, and glass marbles. Sixty-one per cent (N=11) of the 18 porcelain marbles were recovered from 22CL571A. Three were from 22CL571B, three from 22CL569, and one from 22CL567. Of 106 glass marbles, 95 were from 22CL569. The remaining 10% were found at 22CL571A (N=5), 22CL567 (N=4), and 22CL571B (N=2). Marbles were decorated in a variety of styles. The porcelain marbles were hand-painted with colors of green, black, and white with blue swirl. One was a "Bennington" type. Glass marbles were diverse in color: opaque swirls, translucent swirls, solid opaques, and transparent solids and swirls.

There were also a large number of porcelain doll parts (N=40). Fifty-five per cent (22) of them were from 22CL571A, the rest were distributed as follows--22CL569 (N=7); 22CL571B (N=7); 22CL567 (N=1); and 22CL575 (N=1). Six plastic doll arms, legs, and torsos were recovered from 22CL569.

Other toys were diverse and often unique items for which we have only one or two examples, usually plastic or rubber. The only metal toys were a cast iron revolver, a sad iron, a "junior G man" badge, and a sports whistle. Of the 48 plastic toys, all came from 22CL569: a soldier, an oriental man, boxer, policeman, baby, cat, donkey, two sheep, a rooster, and a horse. Toy vehicles included plastic and rubber wheels, a car, two car or truck hoods, a pick-up truck, fire engine, and an airplane. Other diverse items included:

building blocks (N=2)	jewelry
doll house chair	whistle
spoon	gun trigger
farm fencing	federal agent badge
magnifying lens	cog
jacks	prize cases
photograph album fragments	milk can
rubber balls (N=2)	suction cup from arrow
"Harry Truman" token	plastic gem from toy ring

Other items in this category include two dog collars from 22CL569, one, a flea collar. Three extremely interesting items came from 22CL571A: fragments of a 35 mm film. Unfortunately no images were left on them.

On the basis of the oral history, the people entertained themselves with a variety of amusements, some defined by the individual's position in society. Entertainment at the mansion was often on a grand scale. One could refresh oneself at the bath house by wading, though it was too small for serious swimming. Cock fighting provided an opportunity to gamble. And of course, Waverly was known for its fox hunting. For the rest of the community, there was the river. No doubt the children cooled off during the hot summers by swimming in the river. The adults probably spent some time there also. We might assume that while fishing supplemented the diet, it also provided recreation. The oral history notes that social dances and church activities were common entertainment. The early tenants also participated in the Emancipation Day celebration at the mansion. In more recent times a card game called "Rook" was thoroughly enjoyed.

Household business refers to bookkeeping and daily record keeping, or letter writing. The literacy level of the average Waverly resident would probably have been low; attendance at the local school was highly erratic. The only items recovered from the archaeological record are seven pencil ends, three pen caps, a pen body, a plastic fountain pen, a metal top, a fountain pen pump, and three plastic pen bases. Two of the pencil ends were recovered from 22CL571A; the other artifacts were recovered from 22CL569.

Other artifacts here are a tape dispensing spool and a small machined metal artifact that appears to be a centerpoint for a drafting compass.

The 1887-1888 ledger indicated virtually no purchases by tenants of paper, ink, pencils, or other items indicative of literacy. Those items were sold at the store to the people in the mansion.

Yard maintenance, as has been noted in the oral history, was accomplished by cleaning with a hoe or broom. Ellen Mathews added a brick border to the garden in front of her house. Rakes and hoes are discussed in the agricultural category.

Construction

Construction artifacts are those used to fasten materials together: nails, screws, bolts, staples, and other attachments like washers and nuts. Also included here are brick, corrugated metal, and mortar. The category is demonstrative of the diversity of materials and artifacts available.

A sample of whole bricks was measured from each site except 22CL569 where no complete bricks were found. The sample size was usually 25, however more or less bricks were measured depending on availability. Table 17.2 presents the averages for the length, width, and thickness of bricks by sites. The average brick from all sites was 20.62 cm long, 9.84 cm wide, and 6.57 cm thick.

Table 17.2. Brick Measurements--Mean (cm)

Site	Sample	Length	Width	Thickness
22CL567	30	19.85	9.52	6.73
22CL575 B Main	25	20.38	9.72	6.42
B Floor	25	20.44	9.54	6.42
A1	50	20.51	9.98	6.53
A2	50	20.56	10.01	6.67
N pad	12	20.58	9.87	6.41
B Aux	25	20.88	10.04	6.68
22CL571A	25	20.90	9.94	6.52
22CL571B	25	20.90	9.96	6.38
22CL521	7	21.21	9.86	7.00

The bricks from the kiln (22CL521) were larger than those at any site and consequently this kiln probably did not provide the bricks for those sites. Only three bricks were labeled, two from site 22CL571A and one from 22CL567. They were labeled "Brooklyn Firebrick Works No 1". This company could not be located although there is a Brooklyn, Mississippi in the southeastern portion of the state. The presence of these three bricks tends to support the hypothesis based upon the nail seriation (Appendix 7), that 22CL571A and 22CL567 were built at about the same time.

Hardware

Architectural hardware items include things that would be attached to a structure but did not fasten materials together.

Door hardware included hinges, locks, and knobs. Hinge types were T-hinges (N=1), strap hinges (N=11), spring hinges (N=1), and two hasps. Three door rim locks, three striker plates, two lock escutcheon plates, and a lock latch were recovered from 22CL571A and 22CL569. Three modern layered steel padlocks came from 22CL569. Seven other older style solid hinged padlocks were recovered, five from 22CL571A, one from 22CL571B, and one from 22CL569. All locks were opened by a key. Six keys were recovered. Other items included two drop latches, eight stretch springs possibly used to keep doors closed, and two porcelain door knobs. A overhead pulley for a shed door was also recovered. Ornamentation of the folk architecture at Waverly, both inside and out, was practically non-existent.

A total of 18 artifacts seems to have functioned for plumbing activities, but it was extremely unlikely these houses had indoor plumbing facilities. Therefore the exact function of these items is unknown. Well heads are the most likely explanation for some of this material. The artifacts include eight iron, copper, lead, and brass pipe fragments; a flow reducing coupler and a pipe end plug. Other miscellaneous artifacts are a clamp, a radiator valve knob (probably from an automobile), a valve handle, a levered faucet, a steam valve, and three different sized bungs.

Tools

This section discusses the various tools used in and around the home. All 144 tools recovered were metal and the majority, 46% (N=66), were recovered from 22CL569. The most common tool was the file (N=41). The only other type of tool recovered in abundance was chain links (N=34). The following tools were recovered:

chisels	6	putty knife	1
trowel	1	hooks	15
awl	1	saw blades	11
saw screws	2	gimlet	1
axes/hatchets	6	chain links	34
pliers	3	files	41
auger bits	2	shovels	2
clamps	3	screwdriver	1
magnet	1	hammers	2
crow bar	1	riveter	1
pulley wheel	3	maul	1
swage	1	wedge	1
scythe	1	wrenches	2

Hardware items which may loosely fit into this category are 17 compression springs, an industrial pin, a cotter pin, seven metal rings, a roller bearing retainer ring, a whetstone, an electric sander pad, and a turnbuckle. These tools reflect the types of daily maintenance done by the Waverly Community. Most of the tools are commonly found on all domestic sites; however, some unique items deserve special attention. The riveter, for example, was probably used to rivet leather for horse equipment. The swage is the only piece of blacksmithing equipment recovered from 22CL571A. Files must have been used for a variety of sharpening functions, and they must have been inexpensive (or easily worn out) judging from the number found.

Agriculture

Included in this category are horse and mule equipage that also served in transportation. An equally valid argument could be made for placing these items in either category. Automobile items have been placed in the transportation category although some of the artifacts could have come from farm machinery. The importance of agriculture to the folk at Waverly cannot be overemphasized. The community existed as it did primarily because of cotton, and the community members were there as a result of a labor intensive agricultural system. As we have seen from the history and oral history this was equally true for the antebellum and postbellum existence of the community.

Undoubtedly the most important "tool" the tenant owned was his mule or horse. These are recognized in the archaeological record by 49 artifacts representing mostly metal parts of hames, straps, and bits, namely hooks, buckles, slides, rings, terrets, and snaps. One complete harness pad metal assembly was recovered and one stirrup was noted. Bits were snaffle and bar types. The breakdown of these artifacts by site were as follows: 22CL571B (N=8), 22CL571A and D (N=16), 22CL567 (N=5), and 22CL569 and 22CL576 (N=20). Seven mule shoes and nine horse shoes were distributed as follows: 22CL571B, one horse shoe; 22CL571A & D, six horse and two mule shoes; 22CL569 and 22CL576, two horse and four mule shoes; and one mule shoe from 22CL567. Only one artifact was used for the animals' care--a clipping comb from 22CL571A.

Also included in this category were hand tools used in the field or in truck patches. Fourteen artifacts included: eight hoes, a cow bell, a rake, two plow shares, a cultivator tooth, and a harrow tooth. Gasoline powered machinery was evidenced by a machine chain from a cultivator and three mower blades. All of the gasoline powered machinery parts were recovered from 22CL569.

Hunting

Hunting was probably a sport and a subsistence activity as suggested by the oral history. Archaeologically, hunting activities are represented by ammunition. One hundred forty-two shotgun and rifle shells, and one rubber stock butt were recovered (Table 17.3). The most popular firearm at Waverly was the 12 gauge shotgun with 39% (N=56) of all ammunition. Forty-six per cent of all ammunition was found at 22CL571A. Ammunition companies from which the Waverly Community purchased were:

Federal Cartridge Co.	Union Metallic Cartridge Co.
Peters Cartridge Co.	Western
Remington	Winchester Repeating Arms Co.
Remington-UMC.	

Table 17.3. Ammunition distribution

Type	22CL567	22CL569	22CL571A	22CL571B	22CL571D	22CL575
10 gauge	-	-	4	1	-	-
12 gauge	5	11	34	5	1	-
16 gauge	1	1	4	1	-	-
.410	-	2	-	-	-	-
.22 cal	-	9	2	-	-	15
.30 cal	-	1	-	-	-	-
.32 cal	-	1	2	1	-	-
.38 cal	5	1	11	5	-	-
.38 rim.	-	-	4	-	-	-
.44	1	-	-	-	-	-
.44-40	-	1	-	-	-	-
.45	-	8	1	-	-	-
primer box	-	-	1	-	-	-
lead ball	-	-	1	-	-	-
indet.	-	1	1	-	-	-
	12	36	65	13	1	15

Fishing

Fishing was, like hunting, a sport and a means of adding variety to the diet. We have evidence from the oral history that fishing was a particularly favorite pastime. One resident, Ellen Mathews, was known as a frequent visitor to the river. Perhaps this was an especially important activity to her as she grew older and was unable to keep working as vigorously as she did in her younger days in the fields.

Archaeologically, we have recovered 12 fish hooks, four line weights, and a plastic fishing line spool. Eight fish hooks were recovered at 22CL569.

Manufacturing

Two industrial sites were excavated at Waverly. All industrial artifacts came from 22CL575, the steam powered grist mill, sawmill, and cotton gin. The twelve artifacts included grate fragments for a steam boiler and two fragments from a grist stone. The other industrial site, the brick kiln, contained only bricks.

Transportation

Getting around in the late 19th century at Waverly was done mostly by horse, mule, or foot. We have evidence of some wagon parts; however, these could also have been used for horse-drawn farm machinery. Trips were made to West Point and later, when tenants could walk across the railroad bridge, they might have gone to Columbus. (The ferry might have been too expensive since a man on foot was charged 10¢ in 1863.) Horse and mule equipage has been discussed in the agricultural section.

Only 10 wagon parts were found, including five whiffle or swing tree clips (used on a wagon or other farm equipment), a wagon hub housing, two wheel hubs, a wagon axle plate, and a leaf spring modified for an unknown function.

In the more recent years of Waverly, the automobile came onto the scene. This arrival is well marked in the archaeological record. Automotive parts were constructed of metal, plastic, glass and rubber. A total of 81 artifacts was associated with gasoline powered machines, most of which could be positively identified as belonging to an automobile. Only two artifacts were from sites other than 22CL569 or 22CL576. These were a valve cap from 22CL571B and a tire valve from 22CL571A.

Suspension parts came in the form of three tie rod ends, and a leaf spring. Electrical parts included two generator brushes, two generator plates, two battery stay bolts, a coil, two battery caps, and an electrical fuel pump. Engine parts included two fragments of linkage, three fuel line fragments, a distributor rotor, three hoses, and a belt. Items related to the transmission were a rear housing and an instruction plate for a truck transmission. Items related to wheels and tires were three tire valves, four tire weights, a valve cap, and two brake line fragments. The exhaust system was represented by five fragments from an exhaust pipe and muffler. Other automotive items included a radiator drain cock, four housings for unidentified engine parts, two windshield wiper motors, a tire jack handle

and base, a cloth top frame, a gasoline fuel cap, and on-off switch, a lock plate for a car door, fragments of a plastic license plate holder, a steering wheel, and a side running board. Also noted were three fragments of glass from headlights.

Commercial Services

The only commercial services items were United States coinage. A surprising total of 77 coins was recovered from the Waverly excavations. Date ranges for the sites from all coins were:

22CL569	1887 to 1955
22CL571A	1884 to 1926
22CL567	1919 to 1941

Only one coin was recovered from 22CL571B, a 1937 dime, probably not related to its occupation.

Group Services

Waverly did not enjoy the benefits of outside communication, transportation, or power systems until very recently. Archaeologically we have very little evidence of group service items. At 22CL569 we did recover two radio knobs and 39 radio batteries; from the oral history we know a radio was used there. This site was the only one to have electricity. Eleven items may be considered here: five rubber coated electrical wires, an electric plug, a house fuse, four glass insulators, and a porcelain insulator. Three insulators are "telegraph" types and were found at 22CL567 and 22CL571A. The others were from 22CL569.

Under the category of taxation we must note the 46 tax tokens recovered from Waverly excavations, representing Mississippi, Alabama, and Missouri sales tax systems. Mississippi tokens were the most abundant (N=39; 80%). All but nine tokens were recovered from 22CL569. Five came from 22CL571A. One Missouri token was from 22CL571B. These were not made until 1935.

Miscellaneous

We could not determine the function of many artifacts. Some of these items were identifiable but their exact function could not be discerned. Among such items were five rubber hoses, three tubes, 18 rubber plugs labeled "United" and "Lockheed" (which may be battery plugs), a rubber handle to something, 12 rubber gaskets and washers, three plastic dispensing spools (thread?, tape?, fishing line?) and a leather strap.

Summary

The material culture of tenant farmers at Waverly has been examined for the archaeological sites there and briefly compared with the ledger data from 1887-1888. The above discussion telescopes material from the 1890s to the 1960s and provides a broad perspective. While it would have been useful to examine this using finer time increments, so much material was simply undatable that we had to use the longer time period. In order to examine tenant material culture during a shorter period, let us examine in the next chapter the purchases made by seven tenant farmers in 1887 and 1888.

CHAPTER 18. AN HISTORICAL PERSPECTIVE ON TENANT FARMER
MATERIAL CULTURE: THE H. C. LONG STORE LEDGER

by William H. Adams, Steven D. Smith, and Timothy B. Riordan

Introduction

The preceding chapter presented the functional typology for material culture and its application to the archaeological assemblages from Waverly. In order that the archaeological material may be placed in a fuller context, we have sampled data on material culture from the 1887-1888 ledger of the Henry C. Long General Store at Waverly. These data have been subjected to several kinds of analyses:

1. comparison of pricing structure;
2. comparison of seasonality of purchase;
3. reconstruction of the store inventory;
4. compilation by month of purchases by certain individuals;
5. comparison of tenant farmers' purchases with those of a black landowner, the storekeeper, and two planters;
6. contrasting the store inventory with the items' archaeological visibility.

Methods

The Henry C. Long General Store operated at Waverly from ca. 1877 to 1897. Two ledgers survive. One shows the store's purchases of stock and a list under the planter's name of purchases by tenants in 1877 and 1878. The planters' list shows the planter's name at the top of the page, and below that the monthly accounts for each tenant by dollar amounts rather than product. The sources for items purchased by the store were shown in Figure 8.1. The 1887-1888 ledger pages were organized differently: an individual's name was at the page top, and the daily purchases were listed below according to date, item, quantity, and price (Figure 18.1). From this we can see Christmas Eve purchases of candy and nuts by one of the planters and new clothes purchased by the tenants just before the Emancipation Day celebrations. The items listed by date include not only purchases, but also entries for items like mule rental, cotton ginning, ferriage, and legal fees.

The ledger records scores of individuals for the surrounding area and includes black and white, rich and poor, resident and visitor. Even the construction of the railroad is documented by purchases of various companies and those with notes "(G.P.R.R.)." A computer would be required to take full advantage of the wealth of data in the ledger, but because we did not have one available, we selected a sample for study. Subjectively, we are comfortable with the sample representing the community, for after studying it, the rest of the ledger was scanned for differences and similarities. We selected five tenants for two years and two tenants for one year, for a total of 12 tenant years of purchases. The individuals selected were ones mentioned in the oral history and for whom (in some cases) census data were available. Our first priority was to use those individuals living in our sites, but only Henry Goodall (22CL571B) was found in the ledger. These individuals are profiled below.

The final area of study lay in the archaeological visibility of tenant farmers in the late 1880s. In order to quantify our observations we compared the ledger data with the archaeological data from two houses at site 22CL571. For this study we chose the ledgers of seven black tenants, placing the items they purchased into a simplified version of our functional typology along with the prices of those items (Table 18.6). We then totaled the amount spent per year in each category, deriving a pattern of expenditure for a total of twelve tenant years of purchases. Items were placed into functional categories according to our historical and oral historical knowledge of the most probable primary function of the items. Some multifunctional items presented problems solved by consulting historical catalogs or farm almanacs and comparing their prices with those in the ledgers. Illegible items and other transactions, like ferriage, were subtracted from the totals.

In a similar manner we placed items recovered from our excavations into the functional categories. The houses at site 22CL571A and B provided the most comparable data. We used estimated minimum vessel counts for glass and ceramics, assigning a function on the basis of form, decoration, embossing and labeling. Historical catalogs were of great aid in this regard. Unidentified items and small unassignable fragments of glass or ceramics were subtracted from the totals. Our methodology was heavily influenced by South's (1977) Carolina Artifact Pattern studies, although we did not use his functional typology.

Pricing

One way for the storekeeper to earn extra money was through a system of differential pricing. This system varied from store to store. Often only a code rather than prices were marked on items. This allowed storekeepers to charge some people more than others without their knowledge (Carson 1965:93-94). This does not appear to be the case for the Long Store. Price differences do occur, but these appear to be related to three variables: (1) seasonal availability; (2) different quality; (3) credit system.

In order to examine these variables, we compared the unit prices paid by tenants, a black farmer, the storekeeper, and two planters at the Long Store (Table 18.1). Three commodities were chosen, under the assumption these would not include quality differences. Seasonality is seen in the rise of prices, peaking during the summer and the lowering as the new corn and sorghum crops become available (Figure 18.2). Meat prices fluctuate the most. The prices charged different kinds of customers indicate a differential pricing structure.

Table 18.1. Comparison of per unit costs for meat, meal, and molasses.

	<u>Meat</u>	<u>Meal</u>	<u>Molasses</u>
Tenant	\$.125 (lb)	\$.778 (bu)	\$.603 (gal)
Farmer	.112	.603	.560
Storekeeper	.106	-	.55
Planter	.105	.545	.533

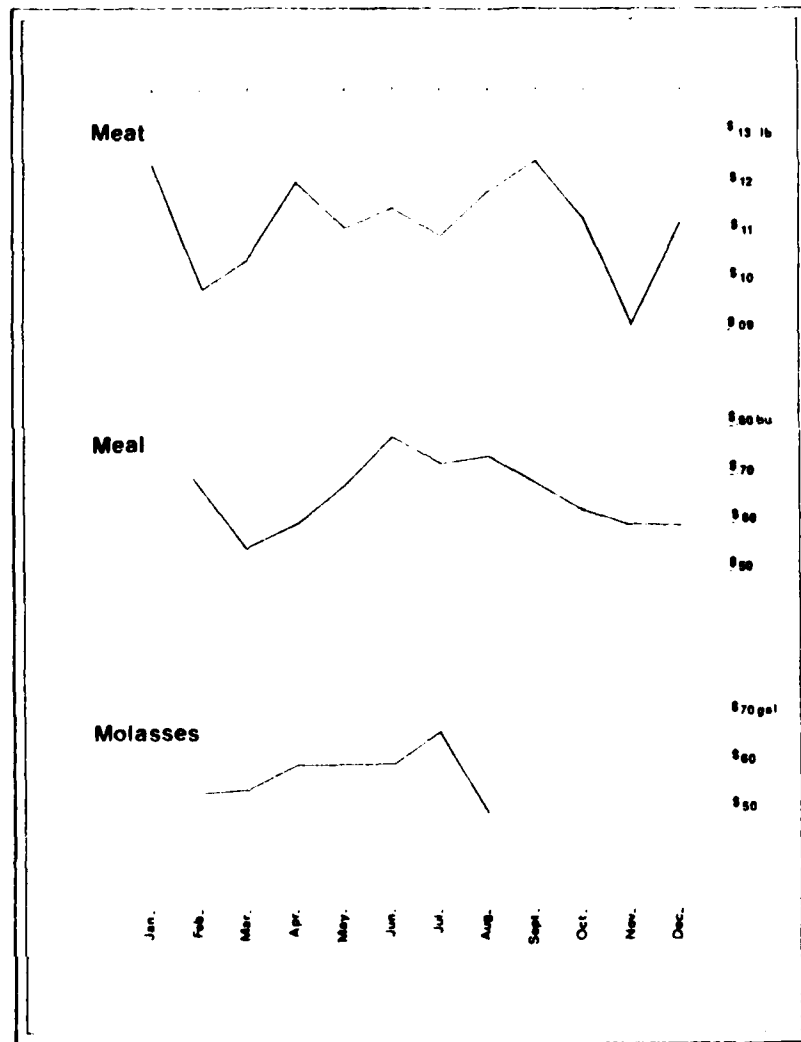


Figure 18.2.--Monthly Price Averages for Meat, Meal, and Molasses.

The white storekeeper and planters were paying less than the black farmer and tenant, but this should be considered as a reflection of credit and cash prices and ability to pay rather than directly racial. The storekeeper in America usually charged cash prices and credit prices, the latter dependent upon trustworthiness of the individual (Carson 1965:93). Thus, if you paid cash you paid less than if you charged items. In addition, a 10% interest was charged on any balance remaining after settling the debt at harvest. Even in the hands of benign and well meaning merchants such a system creates feedback, and eventually would force a tenant further into debt. There are indications of this cash price system in Long's 1887-1888 ledger. One entry mentions an item sold on credit, "coat and vest, cash price \$1.60." Other entries have two figures marked down, the one paid being 10% higher than the other.

Reconstructed Store Inventory

The store's inventory for 1887-1888 has been reconstructed by examining all the customers' purchases and organizing them within the same functional typology used for the archaeological materials (Table 18.2). While this inventory seems like a fair variety of goods, relatively few in each group of items would be purchased by a tenant in any given year. The inventory is what was available to them, the planter, and the traveler.

The storekeeper served a number of functions besides selling merchandise. Henry C. Long served the community in a pivotal role as banker, buyer, middleman, and postman. "There was, perhaps, no other rural citizen, living within a ten to twenty mile radius of the store, who touched life at as many different places as the retailer" (Carson 1965:118). "As a salesman, middleman, issuer of credit, banker, supplier of necessities and some luxuries, as shipper of farm crops and local manufactures, the country trader had contacts with all his neighbors and with the larger commercial world" (Carson 1965:117). Tenants' entries occasionally listed "Cash \$1.00" or some other amount, but usually in even dollars, indicating Long gave them cash to spend elsewhere. Just as frequent were entries showing Long served as middleman in transactions: "Hire mules 13 days \$7.80", "fixing wagon \$6.25", "By amt due him G.P.R.R. \$10.40", "Making coffin Wm Miller \$2.50." Henry Long paid their doctor, their taxes, and their fees for marriage, divorce, deeds, and lawsuits. He also bought their produce; for example, J. J. Arnold in October and November of 1888 settled up at the store as follows: fish \$ 2.20, 40 bu seed \$3.20, 22 bu corn \$16.20, 40 bu corn \$18.40, 68 days work \$61.20. "The country dealer's principal asset was the produce he collected through the barter trade" (Carson 1965:67).

Via Long, Georgia P. Young paid to have tenant(?) Jasper's chimney built (\$4.00) and a well cleaned (\$1.50). In 1880 Long paid \$1,200 for 10 mules which he sold then to various tenants and collected 15% interest. Thus, Long served an important role as middleman in a largely cashless society, providing tenants with supplies, buying their cotton and produce, redistributing produce within Waverly and seeing that the rest was sold to outside markets.

Purchaser Profiles

The following men were selected for study via the store ledgers, as outlined above. While the man's name was listed on the ledger, we should bear in mind that we are really examining the household consumption.

Henry Goodall was born in Mississippi in 1861 and was married to Lou (b. 1862) in 1883. They had four children, Ella (b. 1883), Sarah (b. 1884), Sidney (b. 1885), and Nona (b. 1898) (U. S. Census of Population 1900). We suspect they moved to the house at site 22CL571B at the time of their marriage and stayed there until about 1910. He was the only tenant for which detailed purchase records exist at Long's Store for the 1870s. In 1878, Goodall worked for Alexander Hamilton, who died that same year. In Hamilton's probated estate is a page (copy?) from Long's Store ledger, listing various tenants and their purchases under Hamilton's name. Goodall's purchases were compared for 1878, 1887, and 1888 (Table 18.3). Prices did not change much during this period, at least for the commodities examined in the store ledgers. The 1878 listing appears similar to the

later ones, but several items stood out--he purchased \$6.30 in eggs (probably 63 dozen), as well as chickens, fish, potash, and fodder. This probably indicated his status as a young bachelor, not yet established in his own house. The similarities between his amounts of purchases as a bachelor and those of the married household a decade later were considerable.

Married life brought an increase in costs of clothing and medicine, and a decrease in consumption of alcohol, tobacco, and laundry products. Clothing, shoes, and cloth were 22.4% of his purchases in 1878, but 34% the decade later. This means that combined with food, between 85% and 94% of the purchases at the Long Store were just food and clothing, leaving little money to purchase anything else. In 1887, Goodall ginned five bales of cotton. His rent for the year consisted of a third of the cotton crop, or 1.66 bales, worth \$74.50 that year. This would have left him with \$163.60, but he was only credited with the sale of one bale of cotton to Long, for \$44.70, and debts of \$149.26 for 1887. Both these amounts were carried over into the next year. Since he did not sell the other 2.33 bales to Long we must assume they went somewhere else, but not for cash. Had Goodall received cash, Long would have asked him to settle up his account, at least in part. Goodall continued adding to the debt in 1888. In the fall of 1888 he sold Long "1/2 of 3 B/C" for \$64.15, giving him \$108.85 in credits and \$289.38 in debts, or a net deficit of \$180.53 to start 1889.

Clem Mathews lived in a log house a few hundred feet to the southwest of the store. His son ran the steam-powered gin near the bath house, during the early 20th century. In 1887, his only credit was \$6.75 for corn, while by year's end he had accumulated \$132.66 in store debts. In 1888, he earned \$12.80 working on the railroad construction, sold \$2.50 worth of beef, and three bales of cotton for \$141.05, for a total credit of \$163.10 and indebtedness of \$369.39. This meant he started 1889 owing Long \$206.29.

Marshall Sissney (the last name is variously spelled) is remembered by informants as the ferryman at a later time. In 1887, he made few purchases (\$59.78) and sold only one bale of cotton (\$44.70) for a carryover of \$15.08 into the next year. In 1888, he owed Long \$70.62 more, and sold a bale of cotton for \$39.52, leaving him \$46.18 in debt, carried into 1889.

Walter Ivy lived in the quarters at the Upper Place. He owed Long \$31.06 for 1886, plus \$3.11 in interest (10%). By the end of 1887 he had increased his debt to \$114.17, less \$14.00 for 29 days of work in February and March. In November of that year he paid (via Long) for cotton picking help, but sold no cotton to Long. Presumably the entire crop went toward rent. The next year was little better, for he began 1889 owing Long \$129.55.

George Washington had no cotton picking or ginning charged to him in 1887. Apparently all the crop went toward rent, leaving him owing Long \$129.21 less \$.85 in credit. In 1888, he received \$6.00 from Drum Brothers for work on the railroad and also paid Long \$10.30 in cash. This meant he began 1889 owing Long \$249.76.

Table 18.3. Comparison of Henry Goodall's Purchases.

	1878		1887		1888	
	\$	%	\$	%	\$	%
Clothing	6.80	5.31	16.95	14.09	12.05	9.44
Shoes	7.75	6.06	11.00	9.14	11.25	8.82
Adornment	-	-	-	-	-	-
Grooming	-	-	-	-	.25	.20
Medicine	1.53	1.20	2.15	1.79	3.10	2.43
Tobacco	6.73	5.26	1.95	1.62	-	-
Alcohol	.75	.59	-	-	-	-
Personal	-	-	-	-	.40	.31
Infant Care	-	-	-	-	-	-
Furnishings	-	-	-	-	-	-
Food	69.56	54.36	71.05	59.06	64.70	50.72
Culinary	-	-	-	-	.85	.67
Gustatory	.20	.16	-	-	-	-
Cleaning	-	-	.50	.42	.30	.23
Laundry	2.15	1.68	.25	.21	-	-
Illumination	2.25	1.76	.60	.50	.55	.43
Entertainment & Business	.10	.08	-	-	-	-
Construction	.20	.16	-	-	.25	.20
Hardware	1.43	1.12	.80	.66	-	-
Tools	1.00	.78	-	-	1.50	1.18
Agric. Equip.	-	-	.50	.42	.90	.71
Feed/Seeds	1.35	1.05	-	-	11.18	8.76
Fishing	-	-	-	-	-	-
Hunting	2.35	1.84	.30	.25	-	-
Transportation	-	-	.20	.17	-	-
Other	9.70	7.58	.15	.12	-	-
Total	\$127.97	100.02%	\$120.31	100.01%	\$127.56	100.00%

William Taylor produced four bales of cotton in 1887, selling half to Long for \$83.40, the other half probably going for rent. He also paid \$10.00 in cash, leaving him owing only \$7.35 to Long. In 1888 no mention is made of paying Long for ginning or picking, but he did acquire \$60.00 in cash somewhere. He may have worked on the railroad construction or ginned his cotton elsewhere. In any case he began 1889 owing Long \$26.69.

Mort Dudley appeared only in one year, either 1887 or 1888, but he had been there for three years previously, since he owed three years' interest (\$1.50) on the house he rented (\$5.00 year). In addition he rented 5 ac for \$15.00, on which he produced two bales of cotton. One bale he sold to Long for \$45.65, the other (less 169 lb to Elija Collins) for \$29.35. He settled his account at the end of the year for cash, even.

Hiram Finney apparently was the ferryman in 1887 and 1888, since he was paid \$150.00 each year in wages for "labor at ferry" and was given a ration ("meat allowed at ferry \$17.08," "meal allowed \$7.80"). In addition to this he worked for the railroad in 1888, rented a sweet potato patch from Long, sold sweet potatoes and peas, and raised cotton. The ledgers do not mention how much cotton, perhaps it went to pay for the small farm he had recently bought. He settled his store debt in a variety of ways (Table 18.4).

Table 18.4. Hiram Finney, Credits and Annual Debts.

	1887	1888
meat	\$22.50	\$17.08
meal	9.75	7.80
wages	150.00	150.00
wages	37.50	-
cash	74.92	52.25
cash from others	-	-
rebates	6.82	-
peas	-	-
railroad	-	-
sweet potatoes	-	-
hauling	-	-
cotton	6.15	-
error	-	16.85
error on wagon	-	34.50
total indebtedness	-307.64	-451.98
balance forwarded	-9.90	+41.82

Comparison of Purchases

Purchases at the Long Store were compared to see what differences existed between the black tenants, a black landowner, and two planters. The data are presented in Appendix 6 and summarized here in Table 18.5. Several problems must be recognized before interpretation. Did the tenants have enough money to make significant purchases other than at Long's Store? This can only be approached in terms of their production of the major cash crop, cotton. On the Armstead Plantation just to the west of Waverly Ferry, the 1880 tenant average was 4.8 bales of cotton. From the ginning records of Long we suspect the 12 tenants surveyed did not produce quite this much, certainly they were not credited with more than two or three bales above their rent, for all but one finished the year in debt (by the equivalent of one to five bales of cotton). The average amount of purchases for the 12 tenants was \$112.18; this figure does not include banking transactions like mule rental and so forth. Given a production of four bales, less one for rent, this would provide an income of only \$120 to \$130 or so. Thus, we see the tenants had little, if any ability to purchase items outside of Waverly, without working as day laborers during slack periods in the agricultural calendar. We assume the ledger data for the tenants closely approximates their total purchases for the years indicated. The same is true for the black landowner and apparent ferryman, Hiram Finney. The same cannot be assumed for the storekeeper or planters. They obviously had much greater incomes, though how much is unknown. Their purchase patterns must be carefully compared with those of the blacks, who had much less purchase power. We feel differences in purchases probably reflect economic rather than social and racial factors, but of course social status placed the blacks in an inferior role economically.

Comparison of the various statuses does show some important differences. We would expect the greatest similarity between the black tenants and the black landowner, since the latter had just purchased his property and was most likely in little different economic position than a tenant. The storekeeper would support his own business, so we may expect

whenever possible, the storekeeper made his purchases there at his store. But he would also be in an excellent position to order better items directly from companies, and would have to go to town more often to handle business. The planter must have made substantial purchases in town and direct from various companies. Certainly he would not be satisfied with the same items his tenants had, but this is very subjective, and cannot be elaborated for lack of data. All we can do is see what the planter did buy there at Long's.

Table 18.5. Comparison of Tenant, Landowner, Storekeeper, and Planter.

	Black Tenant		Black Landowner		White Storekeeper		White Planter	
	\$	%	\$	%	\$	%	\$	%
Clothing	31.61	28.18	4.54	4.95	4.50	3.85	4.28	2.84
Shoes	7.88	7.02	9.42	10.26	1.50	1.28	4.88	3.24
Adornment	-	-	-	-	2.05	1.76	.31	.21
Grooming	.06	.05	-	-	.60	.51	.05	.03
Medicine	1.54	1.37	4.55	4.96	4.00	3.43	1.25	.83
Tobacco items	1.63	1.45	1.20	1.31	.20	.17	2.42	1.61
Alcohol	.12	.11	-	-	-	-	-	-
Personal	.36	.32	-	-	.30	.21	.25	.16
Infant Care	-	-	.14	.15	-	-	-	-
Furnishings	-	-	-	-	-	-	6.25	4.15
Food	43.04	38.37	26.32	28.67	24.43	20.92	81.50	54.09
Culinary	.09	.08	.15	.16	1.00	.86	.12	.07
Gustatory	.22	.20	.05	.05	-	-	.94	.62
Cleaning	.22	.20	.60	.65	6.40	5.48	1.20	.79
Laundry	.24	.21	.88	.96	2.40	2.06	2.23	1.48
Sewing	10.11	9.01	11.98	13.05	37.31	31.95	11.50	7.63
Illumination	.60	.53	2.85	3.10	16.40	14.04	3.56	2.36
Ent'ment/Bus.	.05	.04	2.42	2.64	2.88	2.47	1.35	.89
Constr. Mat'l	.97	.86	.05	.05	.20	.17	.04	.03
Hardware	.52	.46	.78	.85	1.30	1.11	9.65	6.40
Tools	.17	.15	1.15	1.25	1.00	.86	.30	.20
Agric. Equip.	2.35	2.10	3.95	4.30	1.60	1.37	.99	.66
Feed/Seeds	7.77	6.93	10.67	11.62	4.65	3.98	7.57	5.02
Fishing	-	-	-	-	-	-	.06	.04
Hunting	.22	.20	.82	.89	3.25	2.78	3.89	2.58
Transportation	1.86	1.66	7.17*	7.81	.50	.43	1.07	.71
Other	.54	.48	2.10	2.29	.30	.26	5.02	3.33
Total	\$112.18	\$99.98	\$91.79	\$99.97	\$116.77	\$99.99	\$150.68	\$99.97

*does not include \$28.75 for wagon.

Of the 27 groups presented as percentage of purchases in Table 18.5, the tenant was the highest in only four groups (clothing, alcohol, personal, and construction materials); however, only the clothing group is of a size sufficient enough to be significant. The tenant spent five to ten times what the others did for ready-made clothing, in terms of relative totals. The black landowner was highest in eight groups (shoes, medicine, infant care, home business/entertainment, tools, agricultural equipment, feed/seeds, and transportation), reflecting the increased expenditures necessary for a new farmer to replace the goods formerly supplied to him as

a tenant. Not shown was the purchase of a wagon for \$28.75. Including that would have skewed the other figures, since this was a large purchase with long life. Of particular interest was Finney's purchase of a year's (?) subscription to the Chicago Times and purchase of a 3rd and 5th Reader (McGuffy's ?). The storekeeper was highest in seven groups (adornment, grooming, culinary, cleaning, sewing, illumination, and hunting). While one could argue a greater emphasis on appearance from these data this would be inaccurate--the storekeeper could simply better afford non-essential items. Surprisingly, a third of Long's purchases were for cloth--obviously he was having his clothing made, instead of buying the ready-mades he sold. Not surprisingly, lamp oil, chimneys, and wicks were a substantial expenditure along with writing paper. The averages for the planters produced only six groups being the highest (tobacco, furnishings, food, hardware, fishing, and other). The planters' consumption must have been greater, so what we are seeing here are only the local purchases, less in value and more mundane.

Archaeological Visibility

With the store ledger we have the rare opportunity to study the kinds of items entering the cultural system at Waverly. In an archaeological site we study the residue, the outflow of that cultural system. The residue is incomplete. Some items never leave the system, and are curated sufficiently to be inherited by later people. Other items enter the archaeological system incompletely: for example, we find only the rim sherd of a plate or one blade of a pair of scissors. Some artifacts are lost, others discarded casually or purposefully: each is represented differently in the archaeological record. Once the items leave the cultural system they are subjected to a host of natural factors of movement and decay. Time diminishes the artifacts of mankind. We are left with bits and pieces. Let us use Eiselev's archaeological eye and examine the store inventory presented in Appendix 6. Imagine those items thrown away complete or as fragments, and lying in the ground for a century. What would remain?

What would remain can be seen by examining the artifacts recovered from the excavated sites. What would not remain in any quantity would be the organic materials like paper, cloth, leather, wood, and food products. Since food and clothing represented about 80%-90% of all the tenant purchases at the store, those groups are grossly underrepresented archaeologically. Nothing would remain of the cloth itself; of the finished clothing, only buttons, corset stays and hooks, and suspender hardware would last any length of time. Shoes would leave their more durable fragments, like hooks, buttons, eyes, nails, screws, and rubber soles and heels. Food generally was sold in bulk and wrapped in brown paper at the store. Items like sugar, rice, and meal would not be seen archaeologically. Meat represented the bulk of the food purchases, so we would expect bones, but the extremely acid soils of Waverly must have taken their toll. (The bones that did survive are etched and lack the outer cell layers.) While Long did sell condiments like extracts in bottles, the tenants rarely purchased any. In brief, virtually everything the tenant bought would have not survived more than a few years in the ground. What we are viewing archaeologically is the 10% to 20% of the purchases which did have a durable nature. Items like dishes and pans would survive, but the tenants rarely purchased them, according to the store ledgers. Glass survives well, but if we examine the ledgers, we see that in the average year, only \$1.54 was spent on medicines (4-6 bottles), and few other sources for glass were present, like a bluing

bottle, snuff bottles, lamps, and lamp chimneys. Canning jars are never mentioned in the ledgers, nor are any stoneware vessels, like jugs or crocks. Tin cans appear infrequently in the ledgers like in snuff, salmon, and sardines, and perhaps such items as turpentine and linseed oil. Construction hardware like hinges, and tools, would be expected to appear archaeologically, and they do, along with the agricultural equipment like hoes and harness hardware. By comparing the ledger data with the archaeological data we can begin to appreciate how much of the cultural data is missing. We would never know that Hiram Finney read Shakespeare from his McGuffey's 5th Reader, or read with interest the activities in Chicago. Even though we may learn much of tenant life from the archaeology, we must recognize the ephemeral tenant is largely invisible from the material realm, as well as the historical one.

The results of our comparisons between tenant expenditures and the archaeological record are seen in Table 18.6. The ratio (A:L) of the archaeological and ledger data provide a valuable perspective. Our results were at first heavily skewed by the items in the category of architecture and construction, like nails and window glass (10,137 nails, etc. as opposed to \$2.03 in the ledgers). However, subtracting out this category from both the expenditure and the archaeological columns provides us with a much more interesting perspective.

Food items (mostly meat), agricultural equipment, clothing, and shoes occurred in greater frequency historically than archaeologically. This probably results from poor preservation of organic remains. For the agricultural category, this may result from many items having fairly long lifespans, as well as the domestic nature of the sites. Food and clothing represent the major expenditures for tenants and are also the most archaeologically visible categories (discounting architecture and construction). Food and clothing represent 74.92% of all expenditures for tenants while these categories make up 49.80% of the items seen in the archaeological record. Woofter's (1936:102) study of 1933 commissary purchases of 25 tenants in Arkansas revealed that 64.40% of their purchases were for food and 14.20% were for clothing.

Table 18.6. Comparison of Archaeological and Store Ledger Data.

Category	Store Ledger		20CL571A62		20CL571B		Combined		Difference	Ratio A:L
	\$	%	N	%	N	%	N	%		
Sewing	16.11	9.18	8	1.58	1	0.01	10	1.56	-8.60	1:1000
Food	43.04	39.07	17	30.24	110	29.64	510	29.94	-1.14	1:1
Meats	1.09	1.08	25	11.81	9	2.28	32	1.92	1.16	1:1
Breadstuffs	1.22	1.20	170	12.33	64	16.21	234	13.21	11.19	1:1
Agriculture	10.13	9.20	45	3.26	34	8.63	79	4.65	-4.79	1:20
Clothing/Access	39.49	35.85	276	20.00	77	19.54	353	19.41	-15.08	1:100
Illum. & Heat	.60	.55	15	1.09	3	.74	18	1.01	.44	1:100
Grooming	1.60	1.45	40	2.90	12	3.04	52	2.93	1.48	1:100
Transportation	1.85	1.69	68	4.93	19	4.82	87	4.91	3.21	1:100
Personal Acc't	.36	.33	15	1.09	5	1.27	20	1.13	.80	1:100
Cleaning/Laundry	.44	.42	24	1.74	2	.51	26	1.47	1.04	1:100
Indulgences	1.75	1.59	109	7.90	13	3.35	122	6.58	5.09	1:100
Tools	.17	.15	41	2.97	11	2.80	52	2.94	2.76	1:100
Hunting	.12	.10	64	4.78	13	3.30	79	4.45	4.27	1:100
Entertainment	.05	.04	33	2.39	10	2.54	43	2.42	2.34	1:100
Adornment	--	--	8	.58	1	.01	9	.51	.50	1:100
Domestic Furnishings	--	--	17	1.24	4	1.01	21	1.18	1.16	1:100
Fire	--	--	2	.14	1	.01	3	.15	.14	1:100
TOTALS	110.15	100.00	1374	100.00	341	100.00	1455	100.00		

* Absent or infrequent present archaeological items.

Not too surprisingly, the category of sewing is quite underrepresented archaeologically at a A:L ratio of 1:16.38; this largely reflects lack of preservation of cloth, a major expenditure by the 1887-1888 tenants. Virtually everything else was represented archaeologically at higher frequencies than observed in the purchase data. The ranking by category produces three extremes needing discussion. Tools were 19.53 times as frequent archaeologically as they were in the ledgers. This may indicate that tools were kept after they were broken and that they were not discarded as "trash". Hunting items, like ammunition, appear 22.25 times as frequent archaeologically, probably due to faulty comparability: ledgers list ammunition by box, while the archaeological data is by individual cartridge. Household business and entertainment items appear 60.50 times as frequent in the sites as in the ledgers; the most reasonable explanation appears to be in the manner these artifacts became incorporated in the archaeological record: these artifacts are predominately children's toys like marbles and doll parts which were most likely lost rather than discarded. For most other artifacts from the site we are dealing with fragments swept out the door or kicked around the site, items having no further use.

Conclusions

This chapter has presented briefly an additional perspective on the materials from Waverly. Our first task was to examine the pricing structure of the store ledgers. We found that Long did price items differentially, but the price variations were probably more affected by seasonality and cash versus credit payment rather than social or racial status as such.

Our reconstruction of the inventory reflects a wide assortment of goods available to the customers of Long's store. However, the tenants were only rarely able to afford much of the store's available stock, instead they concentrated their purchases mostly on food and clothing. The ledgers also reveal Long's importance to the community. The services he performed were as pivotal to the community as the merchandise he sold.

Comparing the purchases of four social classes of individuals was not as fruitful as hoped. Purchases by the merchant and planter represent an unknown percentage of their total expenditures while tenant purchases were obviously more complete. It appears that tenants purchased more ready-made clothing than the other social classes and that planters may have purchased more food. This is at least true at the Long Store.

Our final task was to compare the store ledgers with the archaeological record. When we deleted the skewing of the archaeological results by the category of architecture and construction we were able to view the correlation of the two different sets of data. Many of our expectations seem to be confirmed. Food was underrepresented archaeologically as was clothing. Most incidentals were underrepresented in the ledgers. Still, it is obvious from both the historical and archaeological data that black tenant material culture was heavily oriented toward the necessities of existence: food and clothing.

CHAPTER 19. SETTLEMENT PATTERNS

by William H. Adams

Introduction

This chapter examines the settlement patterns on Waverly Plantation and focuses upon three main topics: (1) the relationship between settlement, soils, and topography, (2) the transportation network, (3) the evolution of the Waverly Plantation settlement system. Waverly existed throughout most of its history as a node in the area's transportation and redistribution networks, although within the Waverly Locality were other smaller nodes or concentrations. Narrowing our focus to just the single plantation, we examine the settlement system and pattern at Waverly Plantation. Then the residence patterns are compared to see internal variations of structure placement with regard to cultural and natural features.

In Chapter 4, we modified Trigger's (1978:169) three levels of settlement organization (individual, community, and region) by adding a fourth level above the individual, the neighborhood. The reasons for this are two-fold. First, the neighborhood is a social construct having past meaning. Second, we rarely have the opportunity to study a whole community, but rather study a specific area within a community. The 40 ac study area at Waverly Ferry contained about half of the black neighborhood there, the rest lay to the southwest. This was the strategic nucleus concentrating several nodes in the social, economic, and transportation networks, like the general store and the cotton gin. The people there interacted on an almost daily basis with one another, yet were part of a much larger group, the Waverly community. While our focus in this chapter is upon the Waverly Ferry neighborhood, we have tried to place it in the broader framework.

Earlier we distinguished between settlement pattern as the observable spatial remains of human activities and settlement system as the inferred relationships between human activities and the environment. The settlement system is ideational while the settlement pattern is physical. Of course, the settlement pattern reflects the individuals' and group's ideas about where to live and how to organize their individual spatial requirements. House location reflects not only the individual choice, but also the need to relate to the neighborhood. The location of neighborhoods within a community would be based upon the reasons for the existence of the community. A study of the settlement system addresses the interrelationship between the neighborhoods and their collective relationship with the physical, natural, and cultural environment within and outside the community. For example, Jeff and Ellen Mathews' house was located near that of their son, Aaron, in order to maintain kin ties, but the exact location was determined by individual preference and availability of land in that neighborhood. The neighborhood's location was determined by the community entrepot and industrial/transportation nucleus near the ferry and steamboat landings.

The community was defined on the basis of direct evidence of trade and credit arrangements planters like the Youngs, William Burt, G. H. Lee, and J. V. Cook had with the H. C. Long Store at Waverly Ferry. This minimally includes Sec. 17-20 and 29-31 in T17S R8E, and Sec. 12-15, 21-28, and 36 in T17S R7E (Figure 7.4). Given the roads and streams it seems likely the

community extended a mile further on the periphery, but those people do not appear in the surviving ledgers. Since no field survey was done except for a small portion of the G. H. Young Plantation, we must rely upon a single map made in 1909, for comparison of the plantations (Figure 19.2) (Worthen 1909). This limits inferences about the plantations' internal patterns, but does provide comparison of plantations as a whole with the road network, streams, and soils at that time.

Soils and Topography

In the western part of the Waverly Locality two soils predominate: Houston and Oktibbeha. Houston soil is productive and was attractive to farmers, yet while it accounted in 1909 for 21% of the area shown on Figure 5.4, only 11% of the structures were located on it. By contrast, the poorer Oktibbeha soil (20% of Waverly) lying adjacent to the Houston soil, contained 50% of the structures. This supports the hypothesis that, all other factors being equal, a farmer will locate his buildings on the poorest crop land he has available to him (Adams 1977a:77). Visual examination of the Clay County soil map for areas adjacent to Waverly supports this idea. Where structures do appear on the better soil, it is probably because the alternatives were simply not habitable, for example, Trinity clay along the streams. This may have an alternative explanation at Waverly, where the poorer farm land was evidently sold to blacks, who by 1909 would have owned the majority of dwellings on the soils map. The observable pattern would be no different, but the settlement system producing that pattern would be different. For the Bay Springs Mill Community, in northeastern Mississippi, we also found excellent correlation between soils, roads, and house sites (Adams et al. 1980).

Besides the soil association (apparently the prime determinant), location on main roads appears to be a significant factor, with 60.5% of the structures located on "good" roads and only 35.0% located on the secondary roads. However, 4.5% were not located on roads at all.

Several neighborhoods or house clusters are apparent on the 1909 map (Figures 7.4, 19.1). In one of these (Sec. 10, on the old R. F. Mathews Plantation), two rows of houses suggest the presence of slave quarters. Possibly other clusters on the map originated as slave settlements, however, evidence suggests a change in settlement pattern as a result of emancipation, and the shift from slavery to tenancy. We suggest this economic and social change should be reflected in the settlement pattern.

Transportation Networks

The road network begins at the ferry landing and forks about a mile to the west into the Upper and Lower Waverly Roads (Figures 5.1, 5.2, 19.1). The Upper Waverly Road forks in about two miles where the Town Creek Road heads toward the sequential town of Colbert/Barton/Vinton (just off the map to the north in Figure 19.1). Three miles west of the ferry, on the Lower Waverly Road, the Plymouth Road leads to the south. By 1909, it terminated at three houses, near the place where the proposed bridge was never built. In addition to these early roads, several good roads were built in the 19th century linking various portions of Waverly. Numerous farm roads lead from these main roads.

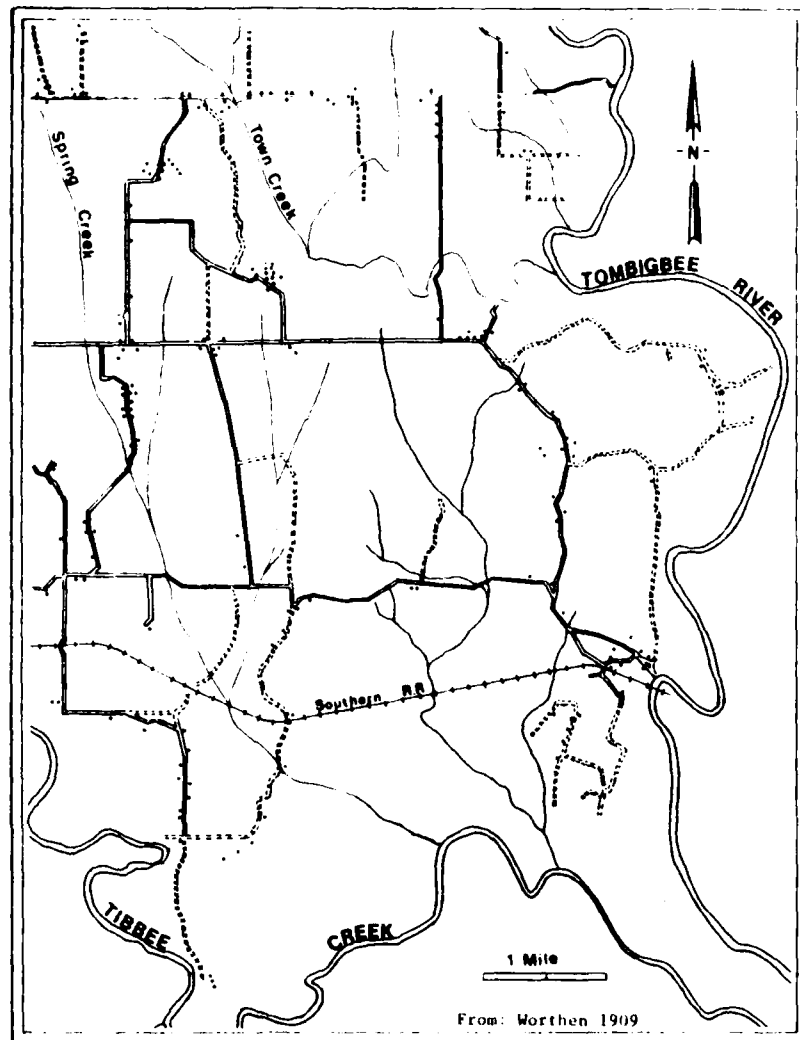


Figure 19.1.--The Waverly Community in 1909 (redrawn from Worthen 1909).

Roads appear to be good indicators of change in a given area, but with only one slice in time, 1909, we can only speculate as to why roads existed then or do not appear at all on the map. We can probably assume the roads existed for the following reasons: (1) transportation through the community; (2) transportation between plantations/farms; (3) transportation within plantations/farms. We assume the roads shown in 1909 were accurate for the first two kinds of roads, but not necessarily for the third. Generally, the secondary roads led back to a structure, although some appear to lead into fields, as at the Burt Plantation (Figure 5.1). Since Burt farmed the bottom land extending out from the road terminus more than 2.5 mi, we must assume field roads existed but were not placed on the map. Similarly, on the Martin/Rose Plantation, covering over 4 sq mi, only the Lower Waverly Road and one branch road to the north are shown; surely there would have been more roads. Although the Waverly roads are not used to define the community, probably roads could be useful in the absence of all other data. This would be done by viewing the roads as streams, flowing the

people and goods toward towns and villages. Such a model would use the "divides" as a means of separating different communities. This would entail examining which roads terminated and which creeks (or other natural barriers) were not crossed.

Once Plymouth became extinct, the need for the south road died as well, so it dead ends. On the west, one road in Sec. 20 ended about a half mile from the terminus of another road, indicating a possible "divide". (There probably was a wagon trail linking the people at either end as neighbors, but we can argue that their major economic orientation was reflected in the direction of the better roads.) To the north three roads did cross Town Creek, but two did not (one on either side). Town and Tibbee Creeks form the north and south boundaries of Waverly; these were evidently seen as barriers, but not insurmountable ones.

The river network was extremely important to Waverly throughout most of the 19th century. The ferry was the earliest development at Waverly, operating from at least 1836 until 1961. The ferryman lived in Site 24 during the early years of the 20th century, but about the time Abe Turner (the ferryman) left for Chicago, a new house was built at 22CL575 (Figure 5.1). This house burned and was replaced by another in the 1930s. The ferry landing today has dirt roads leading to it on both sides of the river, ramps cut deeply into the banks, and a concrete deadman for the ferry cable.

A ferryman's house should be expected at every ferry crossing. Factors affecting its placement include:

1. visibility--the ferryman should be able to see the ferry and cable, especially during floods;
2. hearing--passengers must contact the ferryman from both sides;
3. flood protection--the above factors necessitate its location adjacent to the ferry, but if the structure is a domestic site rather than just a shelter, it must be located above the floods.

These factors are consistent for the Waverly site and the ferry tender's site excavated at Silcott, Washington (Adams, Gaw, and Leonhardy 1975).

Steamboat traffic first reached Columbus in 1822; by the time Col. Young bought Waverly regular traffic extended to Cotton Gin Port to the north (Figure 1.1). Although Pitchlyn probably had a landing at Waverly, Col. Young built a fine warehouse in 1841 at the steamboat landing. Later sources mention a brick warehouse. Archaeological testing of the site (22CL572) revealed a large quantity of brick. Such a location was ideal for storage and loading, since it was nearly the highest in the area adjacent to the river, resting on a sheer cliff of bedrock. A steamboat could pull up right next to the cliff and lower its ramp to a wharf below or perhaps up to the warehouse itself. The warehouse was operated in the early 1850s by a partnership of Col. Young and W. L. C. Gerdine. Goods coming upriver from Mobile were unloaded and stored there for planters inland, with Young and Gerdine charging a commission. Cotton and other products were stored in the warehouse until the shipping season began.

In 1888, the Georgia Pacific Railroad selected the warehouse location as the crossing point over the Tombigbee. Because the warehouse did not appear on the survey map (Figure 13.3), it likely had ceased operating by then.

Waverly was evidently a regular stop for steamboat traffic and served as the entrepot for merchandise arriving and for shipping the cotton, lumber, hides, saddles, saddle blankets, and straw hats produced at Waverly.

The rail network came through Waverly in 1888 when the Georgia Pacific Railroad was built. The railroad survey map (Figure 13.3) shows the relation of the railroad to existing structures. The Henry C. Long Store (the Post Office) provided the railroad construction workers with supplies like food, tobacco, and tools, according to the 1888 ledgers. A spur line was built to the north, possibly to ship gravel from the quarry there. We know gravel was shipped by rail, but aside from the spur line, no evidence exists of any facilities. The spur line is evidenced by a flat graded ridge or indentation covered with cinders (as indicated by our test pit at 22CL573). The spur line does not appear in any railroad records (Columbus and Greenville Railroad 1915: Map V-1/5).

Two rail structures were built at Waverly, a depot and a waiting shed. The depot was likely built soon after 1888. It contained a waiting room for whites, a waiting room for blacks, a freight/baggage room, and a ticket office. By 1921, there was no longer a railroad agent at Waverly and the station became a flagstop. The depot was torn down about 1930 and replaced with a waiting shed which contained two open but partitioned areas for whites and for blacks. Passenger service was discontinued in 1948 (Round House 1977:n.p.).

The lack of a railroad agent by 1921 is one more indication of the demise of the community. (The Waverly Post Office had ceased in 1906.) We have no data on shipping by rail, but given its proximity to the other nodes in the networks we can only assume that it had major impact. The bridge at least allowed the Waverly tenants to walk the six miles to Columbus without having to pay the ferry.

Evolution of the Waverly Settlement System

The development of Waverly Plantation went through at least eight stages. While we give approximate dates for these, and they could be considered as periods in many respects, we feel these have broader implications for similar areas of the South. These stages were: (1) Native American, (2) Embronic Village, (3) Antebellum Plantation, (4) Reconstruction, (5) Initial Sharecropper, (6) Initial Tenant, (7) Later Tenant, and (8) Later Sharecropper. The settlement system at Waverly changed through time in response to economic and social developments and those changes are reflected in the settlement patterns. Because Waverly survived the Civil War unscathed, the antebellum plantation remained intact well into the 20th century. New structures were built, but the old also remained. By the turn of the century the older buildings were beginning to decay and their functions had ceased; the accretionary visibility of the antebellum plantation rapidly diminished and had largely disappeared by the 1930s.

Stage 1: Native American

Native American settlement at Waverly lasted until 1836 when Alexander Pitchlyn sold his plantation and perhaps his slaves to Col. Young. Very little is known about the later settlement system of this stage at Waverly other than the existence of a plantation there, the river crossing, and the probable steamboat landing.

Stage 2: Embryonic Village

With the 1830 treaty, white squatters began moving into the Waverly vicinity and they built a ferry and store on the west bank. We do not know specifically where these were located but assume that the Waverly Ferry has always operated in the same place. Without any locational data for this period we can only speculate that this node would have been similar to that of Martin's Bluff, upriver from Waverly (Figure 1.1). In response to an 1830 road authorization by the state, a small entrepot consisting of a few houses near a ferry, steamboat landing, and store soon developed (Elliott 1979: frontispiece, 5-11). On Midwestern rivers, Burghardt (1959:305-323) found that such an entrepot normally developed on the riverbank having the furthest hinterland and that if the port depended upon farmers it was usually on the west bank, while if it depended upon Eastern suppliers it was usually on the east bank. Given the excellent location at Waverly Ferry, the opening in the 1830s of the Black Prairie lands west of the Tombigbee River should have stimulated the growth of the embryonic village of Waverly into a major river port. That it did not do so probably is keyed to the economic dominance by that time of Columbus, downstream.

In summary, the commercial nucleus of Waverly was established at the intersection of the road and the river in conjunction with the opening of a new hinterland to the west. The potential of this place merely awaited an entrepreneur to develop it.

Stage 3: The Antebellum Plantation

Col. Young's purchase of Waverly in 1836 was a speculative venture. Recognizing its potential for development as a river town, Young platted a town there and named it Waverly (Latourrette 1839). Perhaps the Panic of 1837 and the decade of recovery made such a venture impossible for him, or perhaps he opted for a plantation there instead, following Pitchlyn's lead. In any case by 1841 he was well into developing his plantation to the north of that paper town. The plantation system employed a diversified economic base using extraction (producing livestock and cotton, logging), processing (ginning, tanning, sawing), and redistribution (store, warehouse). Each of these activities necessitated a specific spatial organization of the plantation.

Prunty (1955:465-466) has characterized the antebellum plantation settlement pattern in the South as resembling a nucleated village. This would describe Waverly as well. The "big house" was occupied by the planter's family; near it were dependent structures, like a kitchen, smokehouse, and stables. An administrative center containing an office and commissary usually was located near the big house for the planter's convenience and for security, but at Waverly the commissary may have been in the warehouse at the steamboat landing. Also near the big house would be

house servants' quarters and guest houses. The third feature, the slave quarters, was located as near the big house as practical. The fourth area was the industrial center of cotton gin, grist mill, sawmill, and warehouses.

The Young family owned a considerable amount of land at Waverly, particularly after the Civil War (Table 19.1: Figures 7.1-7.7). Thus, in terms of total size, the plantation at Waverly owned by Col. Young and his sons, a son-in-law, and a daughter-in-law, were much larger than the average plantation of 260-1000 ac (Prunty 1955:461; Woofler 1936). In addition to the land they owned, they rented the Martin/Rose Plantation, situated between their two large tracts of land.

Table 19.1. Acreage owned by the Young family.

	1836	1840	1850	1860	1872	1883	1902
G. H. Young	952	1602	1822	1983	1916	1647	-
G. V. Young	-	-	-	-	1280	360	781
J. H. Young	-	-	-	-	1120	479	484
G. P. Young	-	-	-	-	-	1584	973
W. L. Young	-	-	-	-	-	-	1601
W. A. Hamilton	-	-	-	160	160	67	-
	952	1602	1822	2143	4476	4137	3836

Col. Young divided his land into three parcels, Upper Place, Middle Place, and Waverly Place (Figure 5.1). While their locations were not specified, we can use their names as indicating the position on the roads or the river. The Upper Place was probably the southern half of Sec. 18, the northern half of Sec. 19, and fractional Sec. 20. These were reached by the Upper Waverly Road or by the bottoms road leading upriver. The Middle Place was probably midway between Waverly Mansion and the Upper Place, containing the tannery, Tanyard Field, and Indian Head Field (Figure 10.1). Waverly Place probably included the mansion, Red Field to the west, Sandy Field and the community pasture to the east, the industrial area and landing, and Pitchlyn Field to the south.

The maximum extent of Waverly Plantation from the 1840s to the early 20th century is shown in Figure 5.1. Greater detail is presented in Figures 7.1-7.5. Parcels in Sec. 18 and 24 changed hands between family members. William L. Young apparently inherited the Sec. 18 tract, the presumed Upper Place, where he may have served as manager. Col. Young sold to his daughter's husband, Alexander Hamilton, the northwest quarter of Sec. 24, by 1860; given the smallness of this parcel, and the generosity of Col. Young to his children, we suspect that Hamilton was involved in the management of the Middle Place. Hamilton owned and farmed land near West Point also. Hamilton's mansion, Burnside, was built by Col. Young on his property, as a wedding gift to his daughter. After Hamilton's death in 1879, the tract of land containing the house was deeded to Anna Young Hamilton.

Adjoining the Waverly Plantation to the south was the plantation of William Burt. He had managed to obtain plenty of good farming land, but none situated where he could build a house. Col. Young sold him 10 ac to provide a housesite, but the deed was never recorded, so the exact location

of this tract must be reconstructed. The house lay close to the warehouse and when the Georgia Pacific Railroad was built between them a number of cedars (lining his driveway) were destroyed, and a lawsuit resulted. Thus, we can assume the tract reached from the railroad south to the section line, a distance of about 970 ft, or about 5 ac, leaving only a width of 2 ac back from the river.

The Big House

On the Waverly Place, three mansions (Waverly, Tarawa, and Burnside) were built along the main road, each on a conspicuous knoll. Two other mansions, Burt's and Lee's, stood within a mile of Waverly Mansion. The Waverly Mansion lies very near the center of Col. Young's original purchase of Sec. 30. The site was carefully selected to take advantage of a central position, but it is also located in proximity to a good road, on a knoll, near an artesian well, and near the steamboat landing. Considering all the factors, a better location could probably not be found.

The Waverly Mansion was a splendid example of antebellum architecture. One enters into a central room rising four stories to a domed cupola. Two large rooms are on either side, on both the first and second stories. The third story has only storage rooms, while the fourth story is an observation deck to view the countryside from the cupola.

Outside to the west is Col. Young's law library. Behind the house today is a deep crater, where the brick ice house stored ice cut from the lilly pond or shipped from New England. Just to the northeast of the more modern kitchen addition one can see the brick supports for the original log cabin Col. Young and his family lived in from 1841 until perhaps 1858. Off to the northeast were the foxpens and other animal pens where prize fowl were kept and possums fattened. Going straight north some 66 m from the rear porch of the mansion one encounters a deep ravine. Following along the west edge another 30 m one finds a large brick-lined structure in the ground, with a diameter of 4 m. This was the gas reservoir which supplied the lighting for the house and was part of the original construction. The gas plant was located in the woods further to the north. Retracing our steps some 45 m to the east of the ravine's center and 22 m to the north we encounter the brick foundation for the stables, a structure about 9 by 9 m (30 by 30 ft). Down the hill from the mansion was the lilly pond, bath house (a small swimming pool), and artesian well, which aided by a hydraulic ram pumped water to the mansion. Sometime in the 19th century, a steam powered cotton gin was built next to these.

Slave Quarters

Slave quarters consisted of rows of small, generally one room, cabins, set fairly close together. Usually these would be accompanied by an overseer's house, slightly better in quality. The slave quarters appear to have two prime determinants of location, security and access to work areas, and several determinants of structural arrangement (population size, family numbers) as well as a symbolic aspect. Based upon averages for 1860 of 3.3 slaves per cabin at Waverly, we may expect one nuclear family per slave dwelling, no matter how many children (although this would have limits). Because of the size of Waverly, it was divided into three administrative units, each probably with its own slave quarters and overseer.

We suspect that the slave quarters for the Waverly Place would have been located between the mansion and Red Field to the west, or possibly along the ridge to the east, near the slave cemetery. The latter area has been surveyed, but no slave quarters were found. The reasons we suspect a slave quarters near the mansion are three-fold. First, the house needed quite a few servants to maintain it and the grounds. Second, the antebellum pattern was for the field slaves to live near the mansion (Prunty 1955). Third, the 1909 map suggests that other plantations near Col. Young's used a central location for an administrative center, since even in 1909 houses clustered in those central areas and roads tended to converge there.

Industrial Sites

The steam mill was built in 1841, north of the warehouse and next to the ferry landing. The mill complex contained a sawmill, grist mill, flour mill, and cotton gin. The locational factors affecting its placement were water, roads, fire hazard, lumber, and flood protection. The need for a good water supply was met by drilling an artesian well, evidenced today by the stand pipe there. Incidentally, holes cut in that pipe indicate the falling water pressure through time. While river water could be used, its silt load required more frequent boiler cleaning. It is no coincidence that a second steam powered cotton gin was placed at the other artesian well, next to the bath house. Fuel for the boilers was wood, cut in the nearby forests. Fuel was probably not a prime determinant of location, although access to wood floated down the Tombigbee would have been a contributing factor in site selection.

The boiler presented a fire hazard; it seems likely Col. Young decided to separate the steam mill from the cotton warehouse by some distance. Since the mill burned in 1878, the decision was a good one.

The mill's location on the road system is speculative, because a gravel quarry (1890s-1950s) removed all the roads to it, and even buried the site under several feet of Pleistocene gravel. We should expect that the cotton gin would be located between the cotton fields and the warehouse and that roads would connect each. We may deduce a road to the south leading to the warehouse.

Transportation of timber to the mill may have been a major factor in location. While logs could have been hauled on the road to the mill, water transportation was easier and would have allowed a larger area to be exploited. Col. Young owned three miles of riverbank for access to the surrounding forests. While other planters burned off their cleared land, Col. Young harvested the forest and cleared the land, reaping double benefits.

Flood protection must have been major consideration, since the site is built next to the river. He did not build on the lower, active floodplain, but instead constructed it on the lower part of the next terrace. The brick first story was built directly on bedrock with the steam boilers on the second story. At some point between about 1850 and 1878, the lower story was filled with gravel. Since the lowest brick floor (beneath the engine mounts for the 1880 mill) was at this higher level and cut into white bedded sand, this suggests one flood did reach up to the boiler level. This height was above that experienced in the "100 year flood" of 1979.

The mill burned in 1878, was rebuilt in 1880, and abandoned by 1909, since it does not appear on the soil survey map. In 1911, timber deeds were first made, indicating the Young's sawmill was no longer operating. In 1907 and 1908, W. C. Bridges operated a sawmill just west of the railroad depot. Later sawmilling used a portable saw, skidded to various locations around the plantation. Tenants and sharecroppers used the winter months to earn cash in the sawmills.

We have been told by informants where the tannery generally was located. We have no clue about other industrial locations, only their existence. Supposedly the first felt saddleblankets in the United States were made at Waverly. Also made at Waverly were felt hats and straw hats. Since these industries do not appear to have been located in the landing area, we assume the next most likely location might be the tannery area. But they could just as easily have been located on the Upper Place.

Brick kilns usually were built next to clay sources. These were constructed for one firing by preparing a packed clay floor, stacking dried bricks in rows, forming the rows with arches into firing chambers, then stacking bricks 40 or 50 courses high. The result was large rectangular stack of bricks. This was plastered with mud and often had a crude wooden shelter built over it to keep rain off. The prime determinants of location for scove kilns were good clay source and access to fuel. It appears that access to the road system to haul the bricks away was a secondary consideration. Thus, a brick kiln should be suspected if one encounters a large brick structure located on an active floodplain away from roads.

Informants mention an important activity for the later tenants was producing charcoal. Wood from clearing new fields was stacked in a circle, set afire, and covered with brush and dirt to form a charcoal kiln. The charcoal would be peddled in town for cash by those tenants. We assume that antebellum charcoal production occurred at Waverly.

In summary, both extractive and processing industries operated on Waverly Plantation. Extractive activities, of course, occurred at the resource location, and with the exception of the later gravel quarry, show little evidence today. The location of the processing center for the various items appears to be related to the weight ratio of raw material to finished product in several cases and this correlated to the distance each would be hauled. The roads were poor at best and unusable during rainy weather. Heavy raw materials were used near their sources if the product became lighter (wood became charcoal, wet clay became dry brick). In the examples of brick and charcoal kilns, the minimal investment in the industry, other than labor, meant that raw material sources were the prime determinant of industry location. On the other hand, capital intensive activities like sawmilling made transport of raw materials worthwhile.

Stage 4: Reconstruction

The period of Reconstruction in the South resulted in many changes in the economic, social, and settlement systems. For plantations, the loss of slave labor necessitated a shift to wage labor or giving land use rights. Few planters had the capital to pay wages so they were forced to provide the freed slave with land use rights in return for cash or cash equivalent in cotton. This shift eventually caused a different settlement pattern.

The Work Gang Settlement Pattern is defined here as the continued occupation or reoccupation of slave quarters after the Civil War during the transition from slave labor to tenant labor systems. Work gangs were used by planters as a means of organizing labor into essentially the same system of agriculture used under slavery, but with paid workers. Housing continued in the slave quarters. Archaeologically, we would not expect this change to be reflected in site location or internal spatial arrangements, although perhaps in the material culture. Generally this pattern lasted until the mid-1870s, but on sugar cane plantations it remained until at least the 1950s (Prunty 1955:470, 472).

Prior to 1878 at Waverly, the work gangs had ceased, presumably signaling a change in the settlement system. The freed slaves may have stayed on in the cabins and walked to their parcels. Many would not have far to go and would stay in the cabins until they were not repairable any longer. Apparently a few slave cabins were occupied at the Upper Place at Waverly until the turn of the century; at least the cabins were log and the place called the quarters. The Stage 4 at Waverly is of such short duration that little observable physical change would likely be observable in such sites. The continuity must be emphasized; aside from having freedom little else would have distinguished the work gangs from slaves.

Stage 5: Initial Sharecropper

The Initial Sharecropper Settlement Pattern represents the beginning of the dispersed settlement and consisted of new homesteads with few or no outbuildings. With a sharecropping system, the sharecropper is supplied with all tools and equipment and these were usually kept in a central barn (Prunty 1955:468). The mules were moved to the sharecropper's house only during the cultivation season, so probably no shelter was needed there. While the rest of the plantation remained much the same as in the antebellum plantation in terms of the amount of cropland, the location of the community pasture, and the amount of forested land (Prunty 1955:469), the only new development would be the dispersed homesteads. Thus, the initial sharecropper pattern can be characterized as units being dispersed across the plantation, but with the antebellum centralized power still evident; each unit consisted of 30-40 ac, a house, and few, if any, dependencies, such as a small shed or cotton shed (Figure 20.1).

With this system, we should expect to see housing dispersed across the plantation, but concentrated along roads, probably in kin groups. The development of the postbellum system and its various patterns was a gradual one, dependent upon balancing the need to be close to one's work and the need to be close to one's kin and friends. While we may characterize it as a dispersed settlement compared to the previous concentration of the slave quarters.

This settlement pattern began in the Waverly vicinity as early as 1869, when four one-room houses were built on the Martin Plantation, but by 1878 the sharecropping system was replaced by tenant farming. This was not the case elsewhere in the South where sharecropping remained dominant (Prunty 1955:467; Woofter 1936).

Stage 6: Early Tenant

The Early Tenant Settlement Pattern developed from the sharecropper system and exhibits little change in location of the homestead, but major changes in the spatial patterning within each unit. The tenant unit is very similar to a small farm, except for ownership. With the tenant system we begin to see the larger change occurring in the management of a plantation, namely, decentralizing administrative functions and passing greater control of the land into the hands of the tenants. The loss of economy of scale, caused by fragmentation into separate pastures and fields, may have been somewhat offset by the increase in labor force stability, by tying down the tenant's mobility with material possessions like tools and mules. The tenant place is much more complex in its spatial structure than that of the sharecropper because the tenant must build outbuildings for livestock and equipment.

For Waverly, the above discussion fits the oral evidence very closely, although a community pasture continued to be used by at least the residents near the ferry. Archaeological evidence of associated outbuildings was not found, so we would otherwise not be able to distinguish the sharecropper from the tenant. Archaeologically, this change is reflected in the appearance of domestic sites during the 1880s and 1890s in the study area, where no slave quarters had been located. Coincident with the switch to tenant farming came the sale of 52 ac in the northwest quarter of Sec. 19 on the Waverly Plantation to a former black tenant, Hiram Finney.

As stated above, Waverly Plantation was divided into three administrative units, at least from the 1840s to 1878. Each place was separate administratively and economically, as indicated by the H. C. Long Account Book keeping (Long n.d.a). Most likely the Upper Place was operated by William L. Young since his name appears there in the 1878 listing of expenditures and he eventually inherited it. In 1878, there were 22 tenants on the Upper Place, eight of whom had Young surnames.

At the Middle Place, 19 names are listed in the store ledger, but three of these could have been Young family, James/Jimy and Valley. Both James H. Young and G. V. (Val) Young had large holdings west of the Martin Plantation which would have kept them busy, so we do not know if the store list was for them or a tenant with the same name. The administrative need for the Middle Place may have been derived from the location of the tannery (based on oral sources and the place name, Tanyard Field). The tannery apparently was owned and operated by Thomas D. Watkins in 1850, for when he died in 1853 Alexander Hamilton and Beverly Young bought the fixtures. Possibly the manufacture of felt saddleblankets, felt hats, and straw hats occurred in this vicinity as well.

We do not know where all the tenants lived. In 1877 and 1878 there were about 63 tenants, by 1913 between 15 and 19 tenants lived on the plantation. The 1909 soil survey map shows a total of 25 structures within the plantation, but that included a railroad depot, a church, a school, a store, and two mansions. Via the oral history and limited survey we have identified a total of 45 structures (Figures 5.1, 10.1) including the following:

Waverly Mansion	bath house	cotton gin/sawmill
office	cotton gin	Burnside
ice house	post office	Tarawa
Young log cabin	warehouse	2 churches
gas plant	sawmill	school
stables	2 brick kilns	26 other structures

Based upon the 1913 probate for William L. Young, we should expect between 15 and 19 tenants, since 15 names appear as owing rent to the estate, while an additional four names appear on Young's account with Donoghue, Dee & Co. in Columbus. The four could have been relatives of the other tenants since they share surnames, or they could have been wage hands. In any case, we have 26 possible tenant houses in 1909 and in 1913 have 15-19 tenants to occupy them. By this time the plantation was suffering a substantial decline in population and some houses likely stood empty. These tenant house known in 1909 exhibit a dispersed pattern, generally being located near the main roads. Kin groups apparently stayed in close proximity to each other; for example, the Ivy family lived at the old slave quarters to the north, and Jeff and Ellen Mathews moved to be near their son, Aaron Mathews (sites 22CL571A and 22CL569). What we view on that 1909 map is the tenant settlement pattern.

The General Store

The other change evident in the settlement pattern besides the increased number of outbuildings at residences was the building of a general store and post office at Waverly. The Waverly Post Office was located at the crossroad leading down to the ferry landing in 1888 (Figure 13.3). The post office was operated by Henry Long from 1877 until 1897, then Capt. Billy Young ran it out of the mansion until 1906. Since Henry Long was the storekeeper, we might assume that the general store was also part of this structure. The 1888 railroad map indicated a rectangular structure on the north side of the ferry road; however, informants were quite certain the small structure on the south side was the post office. We feel the size of the two-story structure at site 22CL567, 18 by 18 ft, was too small to have operated as a general store for as many customers as Long had. Prior to the railroad, the storekeeper would have had to order a year's supply of goods at a time for many items, since the river traffic was limited to a few months a year. Although he could have kept the majority of his stock in the warehouse, this would have been very inefficient. The identification of the structure at site 22CL567 as a post office is tenuous given the disagreement between the oral data, the 1888 map, and the size and shape we think a store should be. Some informants said it was also an office, perhaps for the plantation. The location is an ideal one for a commercial structure such as a general store or post office, since it was located on the first high ground reached along the ferry road, and is at a cross roads. However, its small size and one other factor preclude it from being a good candidate for Long's Store. That other factor is that country general stores usually are built up from the ground about four feet to facilitate loading of wagons (Carson 1965:192). The archaeological evidence of floor height does not support this at all. This structure became a Masonic Lodge for blacks for about five years in the 1905-1915 period, and prior to 1913 became a tenant house.

A more likely spot for the Long general store was just across the road at site 22CL568, the Roosevelt Thomas House. This structure appeared on the 1888 railroad map as a long building, perpendicular to the road and was labeled as the post office. Informants often speak of this structure as being a "shotgun house," meaning a structure with only a single room width, but several rooms deep. Country general stores are characteristically narrow and deep, with their long axis perpendicular to the road. The reason for this is only speculative, but likely results from economy of space. A rectangular structure has more wall space for shelving and uses potentially less wasted aisle space. For example, a 20 by 40 ft structure equals a 28 by 28 ft structure in area but has eight feet more wall. On the basis of the 1888 identification of a rectangular structure at the cross roads as the post office and knowing that Long was the storekeeper, we now feel that the post office was at this site in 1888 when the map was drawn and that the structure across the road was built sometime after 1888 to serve as the post office.

Later, general stores operated out of itinerant loggers' front rooms near the railroad tracks, but they lasted only a few years and kept virtually no stock.

Residence Patterns

We have inadequate data to do any more than generalize about the relationship between the tenant house, dependencies, cultural and natural features like fences, roads, and topography. Our archaeological sample consists of six tenant houses out of at least 60 on the plantation. In addition, these houses were located near the industrial nucleus and the mansion, where some tenants may have worked as cash hands.

Within the study area were seven houses built in the 19th century; of these, four (Site 24, 22CL567, 22CL568, and 22CL569) lie within 10 m of the main road leading to the ferry, while three (22CL570, 22CL571A&B) were set as much as 200 m from a main road. Because three of the four houses were linked to the commercial and transportation networks in their primary functions as ferry tender's house, general store, and lodge, it may be that the pattern operating in the 1880-1930 period was construction of tenant houses away from the roads. However, within and just outside the study area after about 1930 most new houses were built next to the road.

The slope of each habitation site was less than 15%. The hillside sites were located on a ridgetop (22CL570) or a bench (22CL571) with Pikeville-Smithdale Complex soils, while the other sites were built on the high terrace. The industrial sites by contrast were built on the river bank or the lower floodplain (kiln site). The distance to a small stream was less than 200 m for each domestic site, although they may have obtained water from the artesian well at 22CL575, the mill site.

On an individual site basis, each house took advantage of the flatest terrain at each location. Where we have been able to know, the house faced south (22CL567, 22CL568, 22CL569, 22CL571A). Yard areas at each site were largely determined by topographic features or roads. At 22CL567, the Belle Scott site, roads were on two of the three sides, leaving virtually no yard. At 22CL568, the Roosevelt Thomas site, a road marked the front vard edge, and a stream the back. The sides were delineated by barbed wire

fences. The same situation occurred at 22CL569, the Aaron Mathews site. At 22CL570, the Lavinia Stepp house, no yard areas were noted via roads, fences, or topography; however, an enclosed area, perhaps a garden, was defined north of the chimney mounds. At 22CL571A, the eastern boundary was the bluff, and the western edge a small stream just behind Henry Goodall's House, 22CL571B. Barbed wire fence and an old road ran along the bluff, and the fence line then angled around behind the Ellen Mathews House. It would appear the yard area at each site was fenced with barbed wire. Informants mentioned the gardens were fenced in with stakes.

Since no outbuildings or gardens were noted in our excavations we must rely solely upon the oral history. At each site was room for a garden and small outbuildings, but the parcels farmed were definitely not the ones on which the houses were located. They could have farmed the area to the southwest or to the northwest at Sandy Field. Likely garden patches existed in the woods there, but the topography is steep enough at 22CL570 and 22CL571 that large area cultivation would have been impractical. What appears in the oral history on each site is that the house would be surrounded by a clean swept yard (often using a hoe), nearby would be a garden with paling fence, a few fruit trees, a smokehouse (which also served as a general storage shed), chicken house, hog lot, and mule barn. Privies were mentioned infrequently if at all, and apparently did not exist until late.

Trash was taken down into the bottoms somewhere. Informants did not remember having much trash to dispose of since garbage would be fed to the hogs and burnables consigned to the fireplace. Given the poverty of the inhabitants, much of the material entering the household would be items with long usage like tools, furniture, and clothing, or completely consumable like food. We found no trash pits or trash middens. Trash was found fairly evenly distributed throughout the yards, although some higher frequencies were noted, like the trash along the fenceline at 22CL569. These disposal areas were located about 10 m away from the structure. At 22CL569 this was north of the kitchen. At 22CL571A, this area was southeast of the structure along a fenceline and in gullies. Chemical and artifactual concentrations reveal activity areas around the chimney on the outside at Ellen Mathews' house, as well as inside around the hearth, suggesting this may have been a clothes washing area.

Stage 7: Later Tenant

The Later Tenant Stage was largely a continuation of the earlier one, but several important events and processes began here. This stage is defined as one of tenant farmers operating within a system of absentee landlords, beginning with the death of Billy Young and the subsequent closing of Waverly Mansion in 1913. The roots of this decay really began in 1897 when the Long General Store closed. With the post office closing in 1906, and the sawmill about 1909 we see the death of the old system. But a new system began even before the death of the old. Bridges built his sawmill near the railroad depot, loggers built houses nearby, a store building was moved there and eventually converted to a house, others operated small stores in their houses along the railroad. Because of the presence of this new construction along the railroad, we are left with the distinct impression that the nucleus of Waverly by World War I had shifted from a focus near the ferry and by then defunct steamboat landing to the

southwest and focused upon the railroad depot and road crossing. A new embryonic village had begun at Waverly, but whether it was black migration to the North following the war, the development of automobiles, or something else, this node had ceased by the 1921 closing of the depot. By the 1930s, few black tenants remained at Waverly and we see the permanent abandonment of their housesites (22CL567, 22CL568, 22CL570, 22CL571A, Site 24) during the 1920-1940 period.

The Later Tenant Settlement Pattern at Waverly is evidenced by the shift from the riverine network orientation of the nucleus at the ferry, to the rail network orientation near the depot. Spatial organization of individual tenant houses was probably not substantially different, merely their location was.

Stage 8: Later Sharecropper

The Later Sharecropper Settlement Pattern was not discussed by Prunty (1955) but is evident at Waverly. There, the economic system changed back to sharecropping, a process which began in the late 1920s and was completed by the end of World War II. The sharecropping system requires greater management control by the landowner; why this shift occurs coincident with the shift to an absentee landowner is especially interesting, for it should have been the opposite. The settlement pattern of a tenant site complex would have been assumed by the sharecroppers, so while the structures were not different, the material culture and disposal patterns may have been different. Thus, the later sharecropper pattern would be defined as having a house associated with several outbuildings, the latter not being used at all or for different purposes than intended by the original tenant farmer. This pattern is probably not distinguishable archaeologically from the earlier tenant pattern.

Summary

Prunty in his study of plantations proposed two postbellum settlement patterns, tenant and sharecropper. From the Waverly data we suggest that his model should be modified to provide five settlement patterns of potential archaeological application elsewhere in the South.

CHAPTER 20. ECONOMIC INTERACTION

by Timothy B. Riordan and William H. Adams

The road network formed an interaction web, linking the farmer to market, and funneling the nation's commerce to the farmer. The road network observable in maps and historical accounts was a physical phenomenon, manifest as a result of the social and economic systems. The physical geographic factors--terrain, climate, soils--mostly constrained or limited growth of the economy and society. But each system affects the others amplifying their differences and similarities. The transportation network of roads, rail, and river linked the places into increasingly larger and smaller units, family to neighborhood to town and back to neighborhood and family.

The economic and social networks are less visible directly, and we must infer much more, for we have much less evidence of direct linkage. Yet by examining six levels of interaction, we can begin to appreciate the relationships linking the families within Waverly and connecting Waverly to the larger aspects of American society. As historians like David J. Russo (1974) recognize, the small rural communities must be studied before we can really understand American history.

The Data

The economic patterns presented here are derived from the oral history, history, and archaeology. Complementarity appears best on a site specific level, where often all three approaches can be used, but as the community level is reached the history and oral history dominate. The area commercial level uses primarily oral history and history. When studying the regional and national networks, nearly all of our data is derived from the archaeology, and supplemented by the history.

The Networks

For purposes of analysis we have divided the economic network into six interaction levels. These serve as convenient vehicles for discussion but contain only some emic reality. In a nebulous way Waverly residents might have been aware of the various networks each participated in, directly or indirectly. We simply are not in a position to know how the people of Waverly thought of themselves in terms of economics. They undoubtedly were concerned with the local economy, both in relation to their neighbors and to the plantation owner and storekeeper. When they went to town and bought something they might not have been aware that the pennies spent there meant a loss of income for the local storekeeper and eventually might close him down, but certainly they were aware of the differences between Columbus stores and the ones at Waverly. Perhaps no one but the storekeeper and the planters were aware just how far the goods were traveling to reach Waverly, for they were the only ones in the 19th century with enough money to order something directly from outside the area. Some may have taken the time to read labels on medicine bottles and the few other products which would have shown the place of origin. While we suspect at least their awareness of the different levels of interaction, we shall never know. Nevertheless, we can study the people of Waverly from the etic viewpoint, by using the following networks:

1. the local network consists of the economic interaction between the individuals in Waverly, primarily involving the extraction and preliminary processing of agricultural and other goods for home consumption and for sale;
2. the local commercial network consists of the interaction between residents of Waverly and the commercial enterprises there, like the general store, cotton gin, and ferry;
3. the area commercial network includes the interaction between the people of Waverly and nearby villages and towns, like at West Point and Columbus;
4. the regional network indicates the interaction between the middlemen like the storekeeper and the regional producers of raw materials and finished goods;
5. the national network relates the production of the national economy to the consumers at Waverly, via the various middlemen;
6. the international network indicates those goods and raw materials produced outside of the United States but consumed at Waverly.

The Local Network

The local network differed tremendously through time as a result of the broader economic changes in the South. The local network also contained social differences (examined in the next chapter) and differences based on economic strategies. We would like to examine the local network in terms of extractive and processing activities for the planter and later his tenants. Where the processing activities are commercial in nature, like the cotton gin, they will be discussed under the local commercial network, since they draw upon a larger "market area" than the Waverly Plantation of Col. Young and kin.

The Plantation

The economic activities of the plantation may be expressed in terms of extracting, processing, and shipping, along with certain commercial aspects.

The extractive activities relate to the exploitation of natural resources and the production of agricultural goods. For Waverly, this includes cutting timber, mining gravel, making bricks, and raising cotton, corn, sheep, and cattle. With the exception of gravel, each of these products also was processed on the plantation, eliminating middlemen, and allowing Col. Young to reap a greater profit. In 1860, on his Waverly and Prairie Plantations, Col. Young produced 631 bales of cotton, 10,500 bu of corn, and 1500 bu of sweet potatoes, and raised 130 sheep, 450 pigs, 27 milk cows, and 25 beef cattle. The sheep were raised in the pasture north of the ferry landing. It took 137 slaves to operate the plantation at Waverly, while his sons had an additional 80 slaves, and his son-in-law had 88 slaves (some probably working at the tannery).

With several square miles of timber to harvest and forest to clear, much effort must have been expended in cutting trees and pulling stumps. While much of this timber probably was burned in place, by 1841 Col. Young had erected a sawmill on the riverbank, and the timber was hauled or floated to it. The lumbering of the forest probably kept several men fully occupied, unless Young bought timber from nearby planters. Certainly he would have wanted to keep his sawmill active. The housing demand for lumber on his plantation alone would have necessitated a fair amount of logging, and since he supplied a much larger market of nearby planters, he must have had several loggers. By 1850 his steam mill employed seven men, but this included ginning and grist milling.

Once the forests were cleared the agricultural production began. Even with horses, oxen, and mules, this required a considerable amount of labor. Col Young had, in 1860, 26 horses, 31 mules, and 11 oxen. The ratio of draft animal to slave was 1:2.32 in 1860, much better than the norm for upland cotton plantations where one draft animal was provided for every three to four slaves (Gray 1958:708). Large fields were used and devoted to one cash crop for years. In 1860, 567 ha on Waverly Plantation were improved, while 801 ha remained in forest. With tenants later the amount of land under cultivation decreased. The activities of large-scale production required a certain amount of specialization, with the work force divided into gangs. For cotton and corn this meant a group weeding by hand, and another group plowing. Others would be involved in herding the livestock and maintaining the roads and buildings, hauling produce to the warehouse, working in the mill (sawing wood, grinding flour, and ginning and pressing cotton), tanning hides, making shoes, making and repairing harness, blacksmithing, and gardening. Indeed, virtually all activities associated with a small village would be encapsulated at Waverly Plantation. For the slaves, the work day required of them was not the end of their toil. In order to obtain enough food they likely had small garden plots, gathered wild plant foods, trapped small animals, fished, and hunted, if they were similar to other slave plantations (Otto 1977).

The Tenants

After the Civil War the plantation system in the area took advantage of the new crop lien laws to develop a sharecropper and later a tenant farmer system of labor. In the first, the landowner furnished all the equipment and supplies, and the worker furnished the labor only; the landowner received a certain agreed upon portion of the crop. In the plantations at Waverly, this system was soon replaced by a renting system, whereby the tenant furnished his own equipment, mule, and labor, and paid the landowner rent in cash or often in cotton. This placed the risk more on the shoulder of the tenant, for if a bad year occurred, or a mule died, the tenant still owed the rent. "Some years they'd make somethin' and some years they didn't, but then some years when they did make great, they mopped up," said Albinus Dunlap. Most likely, however, the net profit and loss balanced out for those who remained for several years. The landlord could not afford to lose too many tenants by charging too high a rent, and would have to carry the tenants over in bad years to insure an available labor force. The system worked at Waverly for there is considerable evidence that a stable community had developed by the 1870s. While tenants did move into and out of the community, it appears that movement was lateral within the community much more frequently. Names of tenants from different plantations appear in

probate lists from the 1870s and 1880s and the store ledgers of 1878-1879 and 1887-1888, and often are repeated in the 1913 probate list of tenants and appear frequently in the oral history. We suspect those who stayed were the average tenants, those whose judgement, skills, and luck made them neither successful enough to buy land nor failures enough to skip out.

The tenants from several Waverly plantations were listed in the store ledger under a planter's name in 1878-1879, but by 1888 many, if not most, were being listed by their own names. In the 1870s the planter arranged credit for the tenant at Henry C. Long's general store for \$10 to \$15 a month. Since the listing in 1888 was by the tenant instead of the planter, we assume the financial arrangement by then lay between the tenant and the storekeeper, who by that time would have come to know each tenant and would have been in a position to evaluate their creditableness.

The tenant rented a plot of land, usually 15 ha, on which to make his cash crop. The tenants' fields were located in the old plantation fields in the bottoms, but their houses were built on higher ground where possible. This settlement system differs slightly from the usual one of having the house and fields on the same plot of land. In addition to the 15 ha, the tenant had access to the community pasture and was permitted garden space as well. The tenants also exploited a much larger area for acquiring wild foods, though we do not know if this was formally permitted or merely condoned.

On the Armstead Plantation, a mile west of Waverly Ferry, the average tenant (N=12) in 1880 tilled 14.6 ha in cotton and 1.9 ha in corn, producing 4.8 cotton bales and 59.6 bu of corn. He possessed \$9 worth of equipment, 1.9 draft animals, 2.5 cattle, 6.4 swine, and 14.5 poultry.

While nearly two-thirds of the cropland was devoted to cotton, other crops were of substantial importance. Corn was raised for animal and human consumption. The corn was taken to the nearest miller who charged one peck per bushel for grinding. Because of restrictions on liquor sales to blacks, some corn no doubt ended up in moonshine. Other crops of sufficient importance to warrant their own "patch" included field peas, sweet potatoes, peanuts, sorghum, and watermelon. At the house garden, surrounded by a paling fence, would be grown cabbage, lettuce, beets, turnips, mustard, collard, okra, English peas, and string beans. In a bad year, the house garden meant survival.

The produce was used fresh or dried. Field peas, beans, peanuts, and corn were dried, while greens could be harvested nearly the entire year. Sweet potatoes were kept in "kilns" in the garden. Hogs were butchered in the fall, salted, and smoked. Fruits were dried and canned. Archaeological sites produced few canning jars or crocks, indicating little preservation in such vessels. Informants stated that the blacks had not yet learned safe canning procedures for meats and vegetables, and hence were limited to canning fruits only (presumably in sugar). Whites did can meats and vegetables.

Seasonality largely reflected requirements of raising cotton. Cotton was planted from late March until well into April, from then until July the weeds were chopped, and from late August until December cotton was picked.

Based upon a sample of 12 tenants listed in the 1887-1888 ledger (Table 20.1; Figure 20.1) and the oral history we may construct the following calendar: December-January: worked at sawmills, brickyards, made charcoal, fix-up; February-late March: fix-up and construction (86.5% of annual nail purchase), set out onions, buy seeds, early plowing (44.4% of all plow points bought in March), planting, weeding begins in garden (12.5% annual hoe purchases); late March-late April: plant cotton, weed garden (25% of hoes replaced during this period); May-June: chop cotton (62.5% of hoes), plow (22.2% points), shear sheep in May; July-August: construction, plant winter vegetables, harvest vegetables; September-December: pick cotton, butcher pigs.

The summer and winter months, free from cotton-related chores, were spent gardening and obtaining a little extra cash by working at the sawmills, brickyards, or making charcoal to peddle in town. Those months were also times to work on the homestead, fixing roofs, building sheds, making things like furniture, repairing harness, and sewing clothing. Based upon the average thread consumption for 1887-1888, many clothes were made or mended in March (21%) and June (18.2%), with lesser numbers produced in July (12.7%), August (12.7%), and May (10.9%). The least amount of thread was used in April and from September to January. This appears to correspond in part with the increased demands of cotton production during those times.

The tenants supplemented their diets substantially with wild foods. Informants mention hunting raccoon, opossum, squirrel, rabbit, and turtle, fishing for brim, buffalo, catfish, and eel, gathering berries and nuts. Fish were taken with hook and line, fish baskets, and net seines. Pigs were turned loose in the woods to forage, and 100 lb shoats harvested by hunting. Hunting in 1888 was with cap and ball rifles, according to the Long Store ledgers, but the archaeology revealed a wider assortment of guns including: shotguns (10, 12, 16, and 20 gauge, .410), rifles and pistols (.22, .32, .38, .44, .45 caliber), but only one lead ball. Identification of faunal remains from the archaeological sites include deer, opossum, raccoon, fox, squirrel, grey squirrel, cottontail rabbit, swamp rabbit, ground hog, wood rat, partridge, prairie chicken, mallard, wood duck, scaup, soft shell turtle, snapping turtle, channel catfish, bullhead catfish, brim, bowfin, buffalo, red horse, sauger, and river mussels, domesticated fauna such as sheep, goat, pig, cow, chicken, duck, rabbit, and non-food fauna such as horse, dog, cat, Norway rat, and box turtle (Appendix 5).

Local Commerical

The local commerical network includes those enterprises serving as processing and redistribution centers. These include the general stores, post office, cotton gins, sawmills, grist mills, tannery, and ferry.

The Store

The first general store at Waverly pre-dates 1835, when it was a trading post to the Indians, and was run by Andrew Weir. Col. Young probably took over that store, at least he was listed in 1843 as selling merchandise there. W. L. C. Gerdine was listed in 1851 as a retailer. The next general store of record is that of Henry C. Long. This store probably dates from 1877 to 1897, based upon his purchase of lightning rods for the store on December 12, 1877, and his ceasing to be postmaster in 1897.

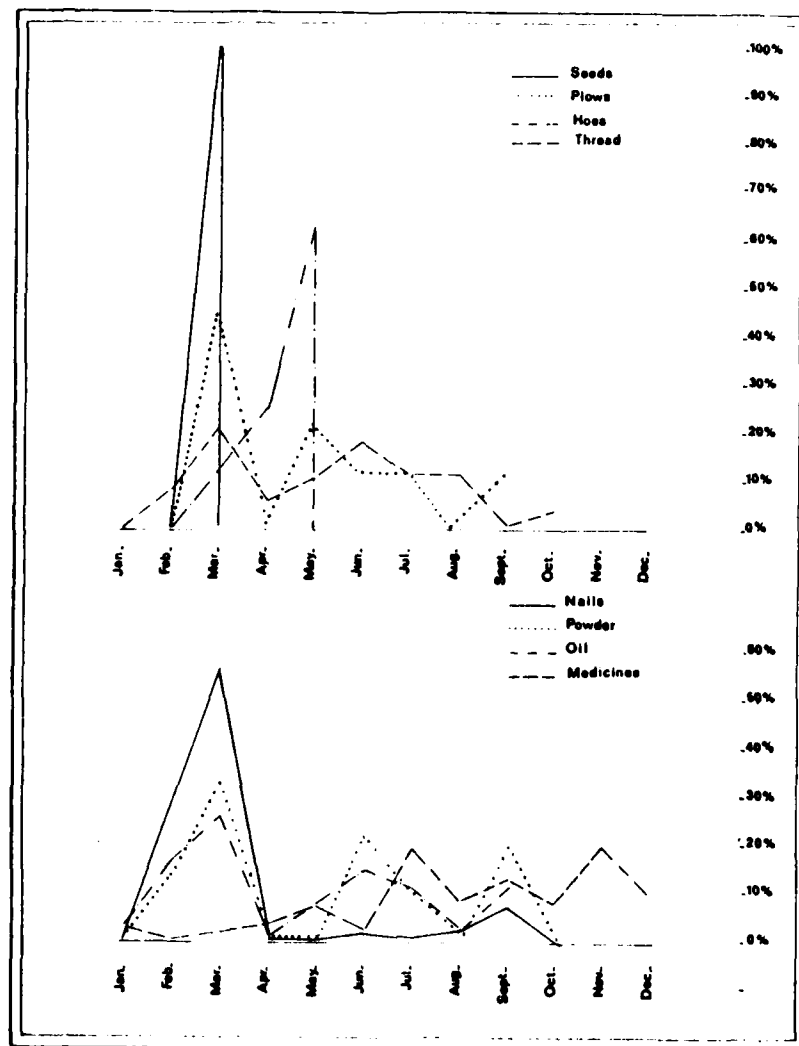


Figure 20.1.--Percentage of Annual Consumption for Selected Products in 1887-1888 at the H. C. Long General Store.

Table 20.1 Monthly Consumption of Selected Items

	J	F	M	A	M	J	J	A	S	O	N	D
cotton seed*				1								
seeds, papers of**			15									
onion sets*			2									
seed corn*			1									
turning plow**		1										
plow point**			4		2	1	1		1			
sweep**			1									
bull tongue**			1									
hoe**			2	4	10							
powder***	.20	.30				.20	.10		.16			
shot***	.10	.40				.30	.10		.24			
oil***	.10	.55	.85	.65	.25	.50	.35	.05	.55			
nails in lbs.	20	38	1			1		1	5	1		

* number of purchases

** number of units

*** dollar amounts

In the spring of 1878 Long bought a desk and showcase, and later that year paid W. S. Taylor \$66.25 for "work on store." In that same year his father-in-law, Alexander Hamilton, died and Long purchased from the estate a cotton gin. Since the gin at the ferry landing had burned in May, 1878, Long could have rebuilt it with Hamilton's gin, or he could have built it at the other artesian well near the bath house.

The market area for the general store was defined by the planters who chose to issue their tenants credit with Long. This included a radius of about 4-5 mi on the west side of the Tombigbee River. Within this area he apparently had a monopoly.

"Store trading areas are phenomena that are fixed in space for recognizable periods of time. Their boundaries are zones, not lines; the boundaries are flexible, not rigid. . . . Store trading areas are the joint product of many simultaneously interacting factors, so numerous that they almost defy generalization" (Applebaum and Cohen 1970:364-365).

Other Commerical Enterprises

A number of other commerical enterprises existed in Waverly for which we have insufficient data to examine closely. These included the cotton warehouse, the steampowered mill (sawmill, grist mill, cotton gin), another cotton gin, the tanyard, and felt "factory."

Area Commerical

The people of Waverly participated in a trade network involving stores and merchants in the surrounding area. This network expanded somewhat through time but it was primarily directed toward Columbus (6-8 mi east) and West Point (10 mi west). West Point could be reached directly by road but Columbus could only be reached by crossing the Tombigbee River. The Waverly Ferry could transport people and wagons across to the Columbus side. After the railroad reached Waverly in 1888, many people crossed the river for free by walking across the railroad bridge. For those rich enough or lazy enough, the railroad made regular stops at Waverly and could take people to Columbus or West Point.

While the planters always had the opportunity and perhaps inclination to trade with merchants outside the community, the tenants were more restricted. Up until the 1890s most of their purchases were probably made at the local store run by Henry C. Long. Occasional trips were made to Columbus or West Point but the expenditures were minimal.

After the closing of Long's store in 1897 this pattern changed. Although other stores operated at Waverly later, they were small. It was then necessary to make trips into town, set up new credit arrangements and make purchases. The coming of the automobile in the 1920s only accelerated this trend.

West Point and Columbus shared the Waverly trade but at different times one was more important than the other. Columbus was founded first and was the initial area-wide commerical center. It also had the advantage of being a river port. As an example, according to the list of firms and their bills

to Long's Store, Columbus supplied 52% of the goods sold through the Henry Long Store at Waverly in the 1870s and 1880s. Another 23% of the goods came out of the state. This leaves 25% of the goods at the store for which no location was given; some of these could have come from West Point. More kinds and larger quantities of goods could be brought by river at a cheaper cost to Columbus. But after the railroad reached West Point in the 1850s the town would have begun competing for Waverly's business. Because of competition by the railroads, river traffic declined by the 1890s and likely Columbus's advantage had by then diminished. By the 1910s the Waverly tenants were being furnished largely via West Point.

With the introduction of the automobile, Columbus's position on the other side of the river became a distinct disadvantage. Until the early 1960s, the only way to get a car across the river was by ferry. It was much simpler and cheaper to drive to West Point. This "post-automobile" pattern is reflected in the archaeology. Nine artifacts could be identified from the local area (Table 20.2). Two were from Columbus, while five were from West Point. Additionally, two other artifacts came from towns on the same side of the river as Waverly.

Regional Networks

Waverly people were tied to larger networks than the Columbus-West Point connection. Trips were sometimes made to surrounding towns like Meridian, Tupelo, and Birmingham, Alabama. Visits to the State Capitol in Jackson were possible. Defining the Regional Network is more difficult than defining the Area Commercial Network. It is tempting to include all of the South as the region. That certainly has historical validity. However, goods produced in Atlantic States like Virginia were more likely shipped through Gulf ports like Mobile than across the mountains. The Tombigbee River played a large part in the antebellum commerce at Waverly; however, by the 1880s a well developed rail network existed, so there is no way of knowing the route for manufactured goods after that time.

If we look at the archaeological data, there is a distinct break between 200 and 300 mi where no products appear (Figure 20.2; Table 20.2). A 200 mile circle around Waverly would include such important centers as Memphis and Chattanooga, Tennessee, Birmingham and Mobile, Alabama, and Jackson, Mississippi. This arbitrary region would include all of the major regional centers which would have been trading with Waverly, and, for the most part, it retains the orientation towards the drainage area of the Tombigbee River.

Three important centers in this network were probably Jackson, Birmingham, and Mobile. The primary antebellum center was Mobile. We assume that through its port facilities passed the major cash crop at Waverly, cotton, as well as most of the goods shipped up river to be consumed by the Waverly people. Since Mobile played such an important part in the regional trade network, it is surprising to note that not one artifact could be identified from there. The reason for this appears to be temporal: the excavated sites post-date 1880 and reflect the ascendancy of the railroad in the region's transportation network as well as a developing national manufacturing and marketing economy. Had we excavated earlier sites we would expect greater ties with Mobile to be demonstrated.

Table 20.2. Location of Manufacturers

Distance	Location	Manufacturer	Product	N	Date
<u>Low Access Area:</u>					
410	Okmulgee OK	Owens-Illinois	unknown	1	1935-1945
420	Sand Springs OK	Kerr Manufacturing Co.	canning jar	1	1915-
430	Dallas TX	C. R. Miller & Bros.	rivet button	1	?
890	Denver CO	Ingerson Mfg. Co.	tax token [#]	10	1945-1952
<u>Intermediate Access Area:</u>					
5	Columbus MS	Ervin Billups	medicine	2	?
10	Mavhew MS	Storer Apiaries	pen	1	?
10	West Point MS	--	medicine	1	?
	"	Coca Cola Company	soda pop	2	1906-
	"	Chandler Insurance Co.	calendar	1	?
	"	McCollum Insurance Co.	calendar	1	?
20	Starkville MS	Buck's	pimento spread	1	?
40	Tupelo MS	Coca Cola Company	soda pop	1	1916-
90	Birmingham AL	Borden, Inc.	Bama	1	?
125	Jackson MS	Knox Bottle Company	medicine	1	1933-1952
	"	"	Pepsi Cola	1	1933-1952
	"	"	soda pop	1	1933-1952
	"	"	unknown	13	1933-1952
	"	"	wine	1	1933-1952
	"	"	alcohol	1	1933-1952
125	-- MS	--	soda pop	1	?
140	Memphis TN	Mansfield Drug Co.	medicine	1	?
	"	B L & B	button	1	?
	"	House Bond Hardware Co.	spoon [#]	1	?
200	Chattanooga TN	Chattanooga Bottle Glass	unknown	1	1927-
	"	Chattanooga Medicine Co.	medicine	2	?
300	Evansville IN	Crown Pottery Co.	ceramic	4	1891-ca 1927
340	East St. Louis, IL	Obear-Nestor Glass Co.	unknown	1	1915-
340	Laurens SC	Laurens Glass Co.	unknown	1	1915-
350	St. Louis MO	Adolphus Busch Glass Co.	unknown	1	1911-
	"	B.B.	unknown	1	1886-1928
	"	?	bitters(?)	1	?
	"	?	bitters	1	?
	"	Premium	unknown	1	?
360	Alton IL	Owens-Illinois	button	1	?
	"	"	aspirin	1	1955-1965
	"	"	medicine	2	1935-1945
	"	"	unknown	1	1938-1948
	"	"	unknown	1	1937-1947
	"	"	unknown	1	?
	"	"	unknown	1	1937-1947
	"	"	unknown	3	1936-1946
	"	Illinois Glass Co.	unknown	1	1930-1940
	"	"	medicine	2	1916-1929
	"	"	unknown	4	1916-1929
	"	"	medicine	1	1900-1916
	"	"	vermifuge	1	1916-1929
	"	"	alcohol	1	1916-1929
390	Paris IL	V.O. Colson	plastic calendar	1	?
470	Greensboro NC	Vick Chemical Co.	Vapo Rub	6	1905-
520	Omaha NE	Cudahy Davis Co.	beans	1	?
<u>High Access Area:</u>					
340	Louisville KY	Louisville Glass Co.	unknown	1	1855-1886
	"	Kentucky Glass Co.	unknown	1	1849-1855
	"	"	alcohol	3	?
	"	Kentucky Stove Co.	tea kettle	1	?
390	Terre Haute IN	Root Glass Co.	unknown	1	1901-1932
	"	Owens-Illinois	medicine	1	1936-1946
410	Cincinnati OH	"	unknown	1	1936
	"	D.T. Williams	valve cap	1	?
	"	Osborne Register Co.	tax token [#]	1	1937-1944
420	Kings Mills OH	Peters Cartridge Co.	ammunition [#]	17	?
420	Indianapolis IN	Fairmont Glass Works	alcohol	2	1945-1960
	"	"	ketchup	1	1945-1960
	"	"	unknown	1	1945-1960

Table 20.2. Location of Manufacturers (continued).

<u>Distance</u>	<u>Location</u>	<u>Manufacturer</u>	<u>Product</u>	<u>N</u>	<u>Date</u>
430	Huntington WV	Owens-Illinois	unknown	1	1935-1945
	"	"	unknown	1	?
	"	"	Duke's Mayo.	1	?
	"	"	unknown	1	1932-1952
	"	"	unknown	1	1934-1944
460	Charleston WV	Owens-Illinois	unknown	1	?
	"	"	unknown	1	1934-1944
460	Muncie IN	Ba'l Corporation	alcohol	1	1940
	"	"	alcohol	2	1941
	"	"	unknown	4	1888
	"	"	unknown	1	1964
480	Streator IL	Owens-Illinois	medicine	1	1929-1949
	"	"	Royal Crown	1	1956
	"	"	Royal Crown	1	1950
	"	"	unknown	1	1936-1946
	"	"	unknown	1	1946
	"	"	unknown	1	1931-1941
480	Marion IN	Foster-Forbes Glass Co.	unknown	1	1929-
480	Gas City IN	Owens-Illinois	unknown	1	1931
	"	"	unknown	1	1929-1949
	"	"	unknown	1	1959-1969
490	Ravenswood WV	Trinkle China Co.	ceramic	1	1934-
490	Lancaster OH	Anchor-Hocking Glass	alcohol	4	1938-
	"	"	unknown	8	1938
	"	"	soda pop	1	1938
500	LaSalle IL	Western Clock Mfg. Co.	pocket watch	1	?
530	Chicago IL	Armour & Co.	unknown	1	?
	"	McBrady	unknown	1	?
	"	Dallemand & Co.	alcohol	1	?
	"	Glastonburg	spoon	1	?
	"	Cracker Jack Co.	toy	3	?
	"	Swift and Co.	unknown	1	?
540	Clarksburg WV	Owens-Illinois	unknown	1	1944
	"	"	unknown	1	1938
550	Fairmont WV	Owens-Illinois	aspirin	1	1956-1966
560	Freeport IL	W.T. Rawleigh Medicine	medicine	1	"
570	Toledo OH	Owens Bottle Co.	medicine	1	1911-29
	"	"	unknown	5	1911-29
	"	"	Cod Liver Oil	1	1911-29
	"	"	condiment	1	1911-29
	"	Owens-Illinois	medicine	1	1939
	"	"	unknown	1	1929-1939
	"	"	unknown	1	1935
580	Washington PA	Tygart Valley Glass Co.	unknown	1	1940-1960
590	East Liverpool OH	Homer Laughlin	ceramic	1	1943
	"	"	ceramic	1	1931-1939
	"	"	ceramic	1	1900-
	"	Vodrev Pottery	ceramic	1	1896-1920
	"	Taylor, Smith & Taylor	ceramic	3	1901-
	"	Carnation McNicol	ceramic	1	1892-1920
	"	Hall China Co.	ceramic	1	1908-1968
	"	Goodwin Brothers	ceramic	1	1898-1930
	"	Knowles, Taylor & Knowles	ceramic	1	1872-1919
	"	"	ceramic	1	1870-1928
	"	Cartwright Brothers	ceramic	1	1891-1928
600	Sebring OH	Sebring Pottery	ceramic	1	1880-1924
600	Pittsburg PA	A & D.H. Chambers	unknown	1	1843-1886
	"	Dr. J. Hostetter	bitters	1	?
610	East Palestine OH	W. S. George	ceramic	1	1909-1955

Table 20.2. Location of Manufacturers (continued).

Distance	Location	Manufacturer	Product	N	Date
620	Detroit MI	Fink's	rivet button	1	?
	"	Autopulse	fuel pump	1	?
650	Knox PA	Knox Glass Bottle Co.	medicine	1	1924-1968
	"	Knox Glass Bottle Co.	unknown	1	1924-1968
660	Clarion PA	Owens-Illinois	unknown	1	1957-1967
	"	Owens-Illinois	unknown	1	1938-1948
680	Winona MN	J.R. Watkins	medicine	1	?
680	Brockway PA	Brockway Machine Bottle	aspirin	1	1925-
	"	"	medicine	1	1907-
	"	"	unknown	1	1907-
	"	"	unknown	2	1925-
700	Baltimore MD	Swindell Brothers	unknown	1	1920-1959
710	Wrightsville PA	W.H. Company	stove damper	1	?
750	Buffalo NY	Mentholatum Co.	Mentholatum	1	?
	"	?	Petro. Jelly	1	?
750	Bridgeton NJ	Owens-Illinois	aspirin	1	1958-1968
	"	"	extract	1	1929-1949
760	Millville NJ	T.C. Wheaton Co.	aspirin bottle	1	1946
760	Glassboro NJ	Owens-Illinois	medicine	1	1938
	"	"	alcohol	1	1938
	"	"	unknown	1	1938
760	Niagara Falls NY	Niagara Silver Plate	spoon#	1	?
790	Trenton NJ	Buffalo Pottery	ceramic	1	1903-
810	Binghampton NY	Dr. Kilmer's	medicine	1	?
820	Elizabeth NJ	L.B. Beerbower	ceramic	1	1879-1927
830	? NY	Chesborough Mfg. Co.	Vaseline	2	?
	? NY	Revelon Distributors	lipstick	1	?
830	Brooklyn NY	Sheffield	spoon#	1	?
830	New York NY	Lummis Glass Co.	unknown	1	1940-1955
	"	Schenley Distillers	alcohol	3	?
	"	Phillips Milk of Magnesia	medicine	1	?
	"	John Duncan & Sons	Lea & Perrins	3	?
	"	City Button Works	rivet button	1	?
	"	Colgate & Company	unknown	1	?
850	Oneida NY	Oneida Silver Company	spoon#	1	?
	"	William A. Rogers & Co.	spoon#	2	?
880	Bridgeport CT	Union Metallic Cartridge	ammunition#	34	?
910	Waterbury CT	Waterbury Button Co.	button	2	?
	"	Sherman Bronson	button	1	?
910	Bristol CT	L. Ingraham	watch#	1	?
920	New Haven CT	Winchester	ammunition#	20	?
920	Wallingford CT	Wallace N.S.	spoon	1	?
950	Hartford CT	Hartford Insurance	calendar	1	?
1000	Boston MA	?	unknown	1	?
<u>International:</u>					
1250	Bank Harbor NB	Connors Brothers	sardines	1	?
6200	Scotland	Campbellsfield P. Co.	ceramic	1	1850-1884
6250	England	J. & G. Meakin	ceramic	1	1945
	"	W. & E. Corn	ceramic	1	1864-1894
	"	T.J. & J. Mayer	ceramic	1	1843-1855
	"	J. & G. Alcock	ceramic	1	1839-1846
	"	Moore Brothers	ceramic	1	1872-1905
	"	W. Ridgeway & Company	ceramic	1	1834-1853
6500	Holland	Theodorus Mennen Ltd.	Tobacco	1	?
9000	Japan	Best Flints	Lighter Flints	1	?

Labor Related product

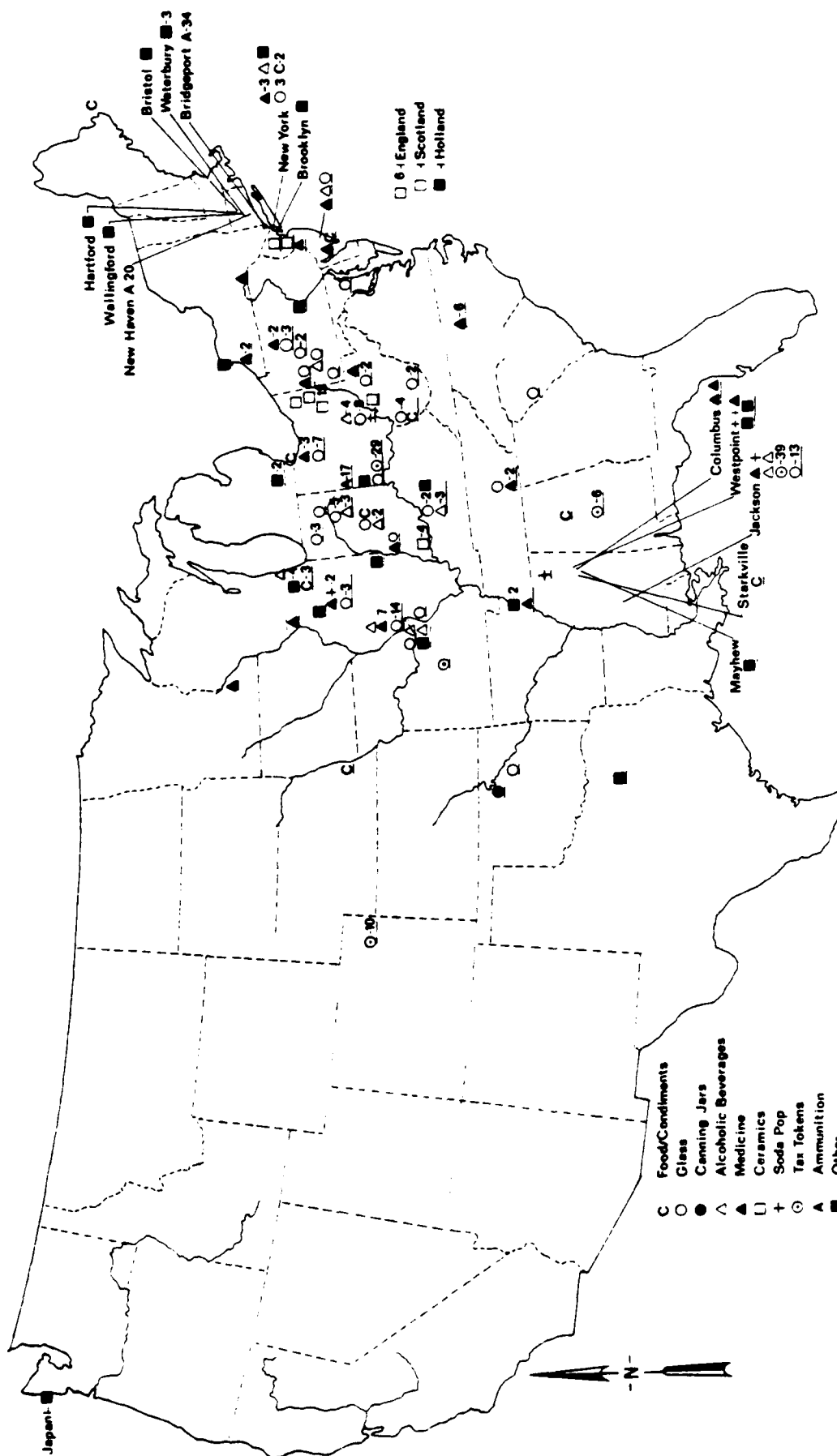


Figure 20.2.—Waverly Artifacts by Manufacturers' Locations.

Thirty-three artifacts were identified as coming from the regional network. The Knox Glass Bottle Company of Mississippi operated between 1933-1952 and accounts for 18 artifacts. Not included were 39 tax tokens issued between 1937-1952 by Mississippi and six tax tokens from Alabama. Other cities which contributed artifacts to the sample include Memphis (3), Chattanooga (3), Birmingham (1), an unknown location in Mississippi (1), and Tupelo (1). Of the regional items, all dateable ones post-date 1927.

National Networks

Waverly cannot be viewed as an isolate. From its first settlement until today it has been deeply involved in a national trade network. From the beginning Waverly cotton was shipped downriver to feed the growing demands of an expanding economy. During the bad times, when cotton mills slowed, Waverly suffered from low cotton prices. The community was never intended to be totally self-sufficient. Although the plantations and farms produced much of the goods necessary to carry on the daily business of agriculture, the people had to import all manufactured items from elsewhere. They bought processed food from Chicago, Illinois, medicine from Winona, Minnesota, canning jars from Sand Springs, Oklahoma, and overalls from Dallas, Texas (Figure 20.2).

In an effort to see if Waverly's participation in the National Market changed through time or if some products came from a particular area and not others, we present the data on a series of maps (Figures 20.2-20.6). The majority of dated and traced items are 20th century; with the exception of ceramics and a few bottles the manufactured goods post-date 1880. Only 12 items pre-date 1890; and only 13 items have date ranges beginning in the 19th century, mostly those continue into the 1920s. Of the total of 298 artifacts traced, 147 were not specifically dated by their markings. The problem in presenting the goods within a temporal framework is that many are not dateable except quite generally, or else they were manufactured for decades. In order to illustrate the changes brought about by the development of the trucking industry after World War I, we have presented those artifacts with pre-1920 terminal dates versus post-1920 initial dates in Figure 20.3. Unfortunately, not enough data were available for better analysis. Food/Condiment and Alcohol manufacturers are shown on Figure 20.4. Food supplies were scattered throughout the country but alcohol producers appear concentrated in the Midwest. For the most part, the other distributions have less obvious meaning.

No one would seriously expect the Waverly people to be ordering individually from all these places. Without doubt they were buying the goods from a store in West Point or Columbus. Nevertheless, their purchasing involved them in a national market and made them compete for goods not only with others from Waverly but with housewives in Missouri, mechanics in Pennsylvania, and laborers in New York. Because of this competition, the study of the national network tells us less about Waverly people and more about American people.

As archaeologists we are accustomed to looking at the people who created a site or artifact. As historical archaeologists, we become comfortable with studying the technology used to produce an artifact even though that technology was a thousand miles distant from the people we were

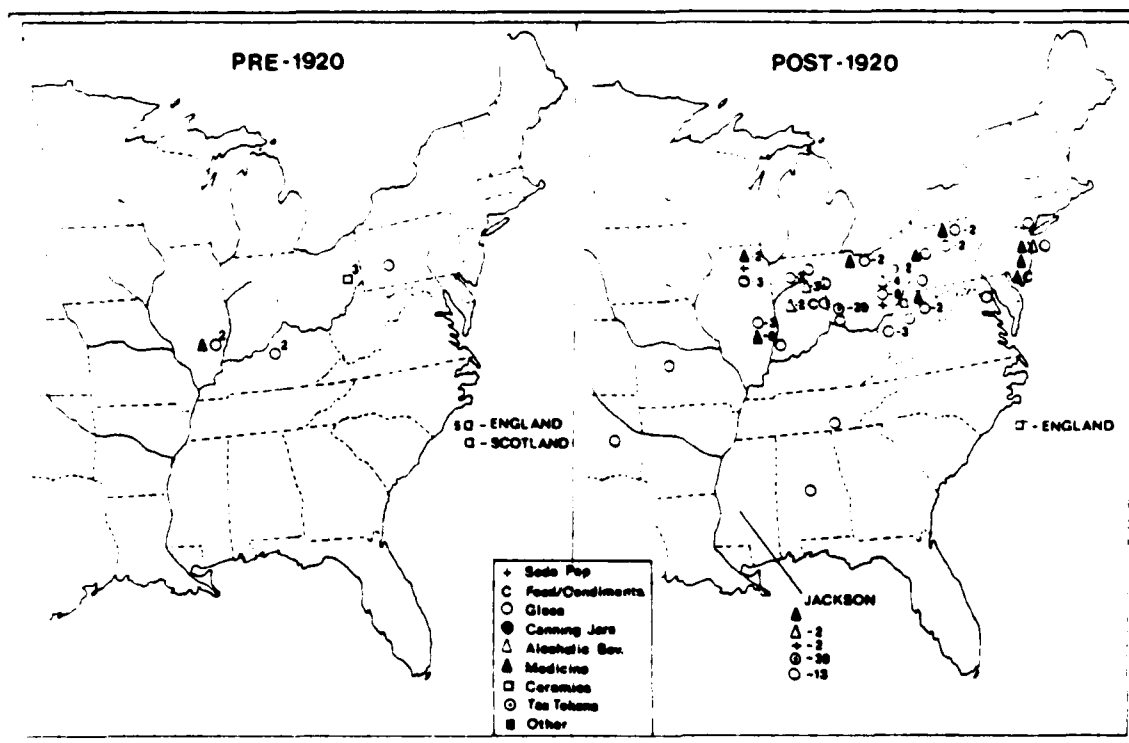


Figure 20.3.--Pre-1920 and Post-1920 Artifact Manufacturer Locations.

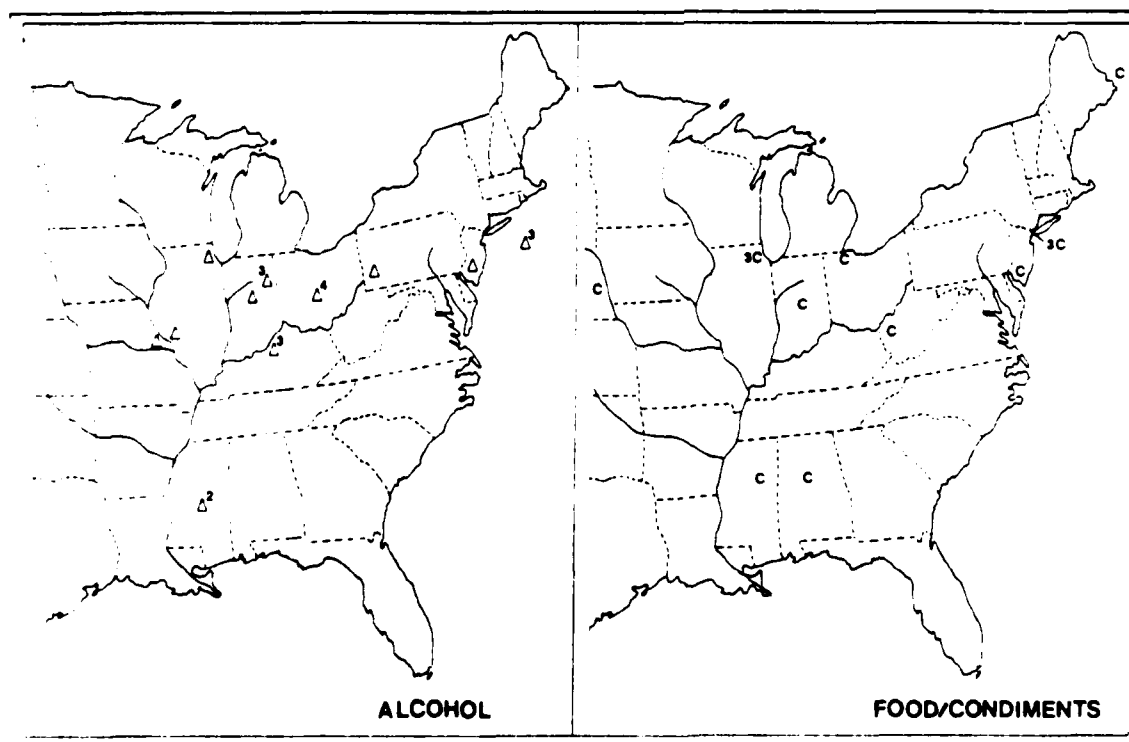


Figure 20.4.--Food/Condiment and Alcohol Manufacturing Locations.

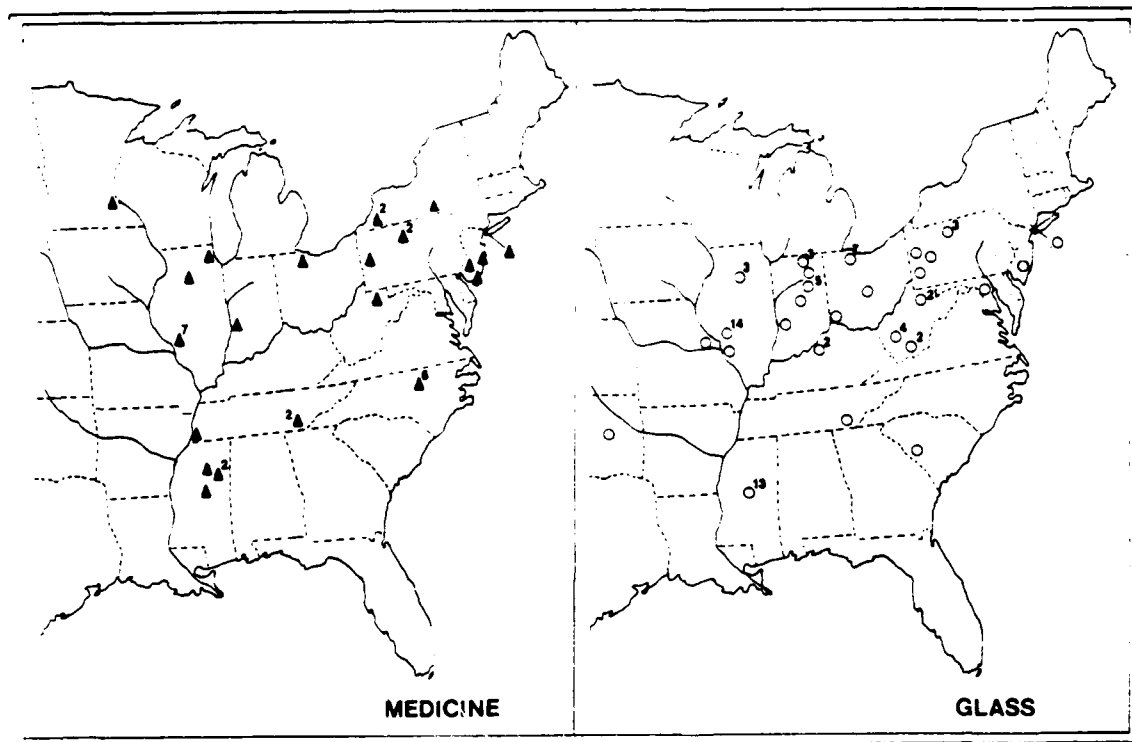


Figure 20.5.--Glass and Medicine Manufacturing Locations.

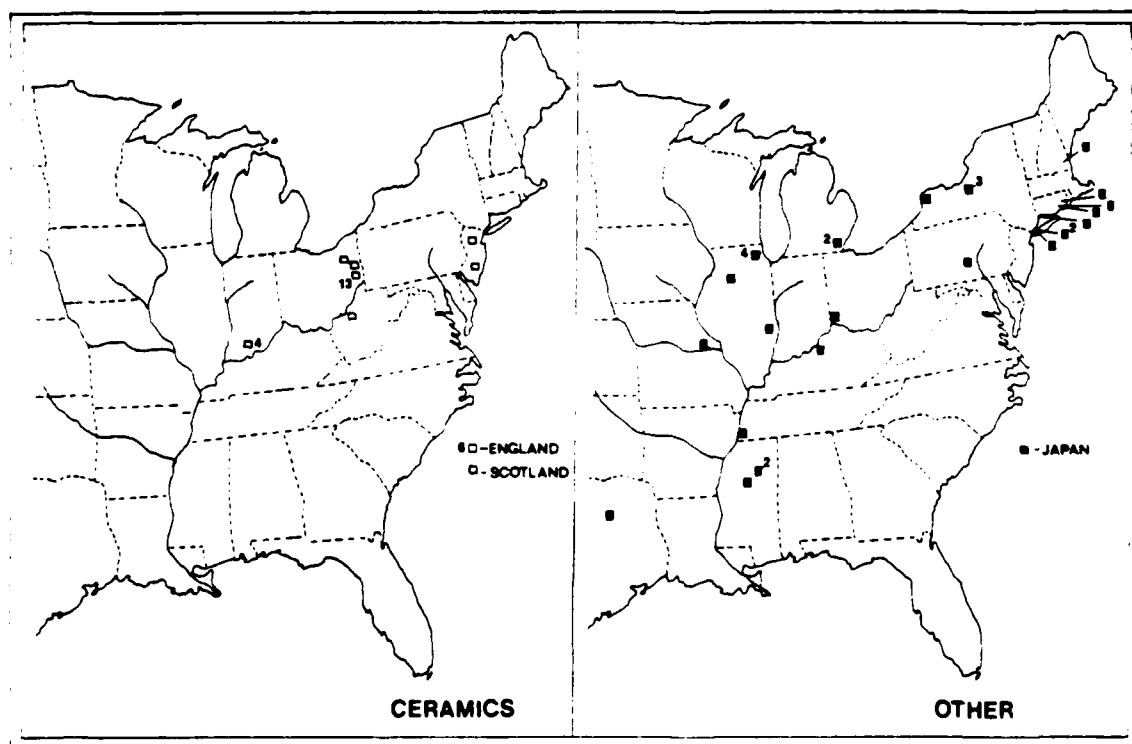


Figure 20.6.--Ceramics and Other Artifact Manufacturing Location.

studying. The investigation of national trade networks and marketing carries this process one step further, away from individuals and groups of people into the realms of economics, geography, and transportation. This is more difficult than it seems and accounts for the lack of such studies. In order to study national trade networks, it is necessary to know where the goods originated and in what quantities they were purchased. Under the best circumstances, the archaeologist sees only a tiny part of this system. Of the goods listed in the Henry C. Long account book for Waverly, less than half of the total dollar amount of goods would survive archaeologically. All of the cloth would be gone; all the meat, flour, rice, and paper would disappear. Few of the surviving items would be useful for the study. Paper labels disappear from bottles leaving their former contents and manufacturer unknown. Painted tin cans rust over and become unrecognizable. What is left for the archaeologists is a small fraction of what was purchased.

Some archaeologists, aware of these limitations, have ventured to say something about national trade patterns. Perhaps the first study of this kind in historical archaeology was initiated by Klein (1973:68-77). While the article presented no data and tested no hypotheses, it did offer suggestions for the study of changing market economics. In his discussion Klein mentioned local, short range, and long range classes. Because of a lack of data these terms were never defined.

Another attempt to study national trade networks was made by Adams (1976) at Silcott, Washington. With a sample of 1,043 locationally identified artifacts, he plotted the manufacturing locations and was able to show that 87.8% of the products recovered came from locations over 1,000 miles distant. In addition, he noted that this area was the major industrial center for the United States. This corresponds well with geographical concepts of the American Manufacturing Belt, basically encompassing the northeast quarter of the United States, containing 65% of the manufacturing capacity of the United States (Pred 1964:274).

Archaeologists have also examined trade from sites very close to the manufacturers, in New York and in Vermont (Schuyler 1974, 1980; Elliott 1977).

The significance of this agreement between archaeologists and geographers is not that it exists but rather that it was approached from different directions. The geographer defined the concept by observing production flowing out of the factories, the archaeologist defined the concept by tracing artifacts back to their source. This indicated that even 1,500 miles from the Manufacturing Belt it was possible to study changes in economic patterns. For example, at Silcott, Adams found that liquor and medicines came primarily from the Midwest, while other products like tobacco, ceramics, and machinery were shipped further (Adams 1977a:81,84).

This study will now focus on two questions about national trade networks: (1) Are there some kinds of artifacts that travel further than others? (2) Is there a regional supply difference?

Before we can begin to answer these questions we must delve into the realm of economic geography. Geographers have long been interested in the national economy and how goods are moved to gauge the direction and quantity

of goods leaving the factory. These are called "commodity flows". To clarify this process, in 1964 Allan Pred (1970) proposed a typology of commodity flows, based on market accessibility and on industry type.

Accessibility was defined by Pred (1970) using a percentage of access below New York City through a combined land and sea transportation network. Figure 20.7 shows the percentages and the three accessibility areas Pred defined arbitrarily: high (0-25%), intermediate (25-40%), and low (more than 40%). Naturally those areas within the manufacturing belt possess the greatest access to the market because they have the largest population and the best transport network. Pred (1970:273) provides two assumptions on access to the national market: "there is some relationship between market or population proximity and the distribution of manufacturing . . . [and] there is some relationship between market accessibility and distance."

Pred divided industry into three groups. Raw Material and Power Oriented Industries extract raw materials and refine them for other uses. These industries, like bauxite mining, are located at the raw material and take little notice of population. Market Oriented Industries, the backbone of American manufacturing, serve regional or national markets and require a location with good market accessibility. Labor Related or Agglomeration Economies, are those industries adding enough value to a product that transportation costs are not a factor, or they are industries having cheap per unit production costs.

Pred's framework was used in developing Tables 20.3 and 20.4. A total of 298 Waverly artifacts have been placed in this typology. The international items are not included here. No raw material or power oriented artifacts were recovered. Materials of this sort shipped to Waverly were used and would not generally survive archaeologically. The plantation blacksmith would have imported pig iron and excavation of that site would likely produce these materials; however, without metallurgical analysis we would not be able to identify its point of origin. Market oriented artifacts include ceramics, bottles, medicines, foods, and a host of other items. This is the bulk of the material flowing into Waverly, with 206 artifacts were assigned to this group. The labor related industries contributed 92 artifacts to the Waverly sample. This total includes pocket watches, silverware, ammunition, tax tokens, and some plastic items.

Before we begin the analysis of these artifacts, we must strongly emphasize that the way we are using the typology is directly opposite to the way it was set up. Pred was viewing commodity flows from one area to another. We are observing commodity flows from many areas to one specific area. This does not effect the outcome of the analysis, however, only the application of the results. Whereas Pred could apply the typology nationwide, the Waverly results will be valid only for archaeological sites in the Intermediate Market Accessibility Area.

In order to expand the analysis and give it greater applicability, three other sites, Bay Springs Mill, Mississippi; Silcott, Washington; and Sandy Ground, New York, were chosen for analysis. Silcott was located within an area of low market accessibility, while Sandy Ground is in the area of highest accessibility. Bay Springs Mill sites date to the 1840-1890 period generally (Adams et al. 1980). The Silcott material dates primarily to the 1900-1930 period, the Sandy Ground artifacts to the 1890-1920 period.

and the Waverly artifacts 1900-1950, so the data are fairly comparable. Because of the differences in sample size, percentages were used in the analysis.

Sandy Ground presents a problem since it is based on the glass containers from two features (Schuyler 1980:58). The total sample size of 330 compares well with the Waverly sample, but only market oriented industries are included.

In his analysis of commodity flows Pred (1970:280-282) determined that manufacturers in areas of high market accessibility who produce Market Oriented goods will have the highest number of flows, most of which will go to destinations within the high accessibility area. They will, however, be able to ship a reasonably large amount of freight to intermediate and low accessibility areas. Manufactures in Intermediate areas will have less flows overall and be mostly confined to short flows. They cannot be competitive with the High Access areas and they will face stiff competition in the Low access areas.

Table 20.3. Market Oriented Artifacts.

Source Access Area	Bay Springs		Waverly		Silcott		Sandy Ground	
	N	%	N	%	N	%	N	%
Low	0	0	3	1.5	222	22.7	2	.6
Intermediate	6	28.6	67	32.5	198	20.3	0	0
High	15	71.4	136	66.0	546	57.0	328	99.4
Total	21	100.0	206	100.0	976	100.0	330	100.0

Table 20.4. Labor Related Artifacts.

Source Access Area	Bay Springs		Waverly		Silcott		Sandy Ground	
	N	%	N	%	N	%	N	%
Low	0	0	10	10.9	0	0	0	0
Intermediate	0	0	1	1.1	0	0	0	0
High	12	100.0	81	88.0	114	100.0	0	0
Total	12	100.0	92	100.0	114	100.0	0	0

Figure 20.8 shows the Market Oriented and Labor Related percentages from the four sites by location of manufacture. Bay Springs and Waverly show the profile for sites in the Intermediate area. Manufacturers in the Intermediate area for Waverly artifacts account for 32.5% of the market oriented sample while 66.0% of the sample comes from the High Access area. Imports from the Low Access area were almost non-existent (1.5%). The reasons for this profile are simple. Because of economics of scale, factories in High Access areas are able to produce more cheaply than any others. This allows them to make a trade off between production costs and transportation costs. The differences between Bay Springs and Waverly may be explained by their location and dates of the sites. Bay Springs dated earlier and was oriented toward the Tennessee River flowing north, while Waverly dated later and was oriented toward the Tombigbee River flowing south. Also, the sample from Bay Springs was quite small.

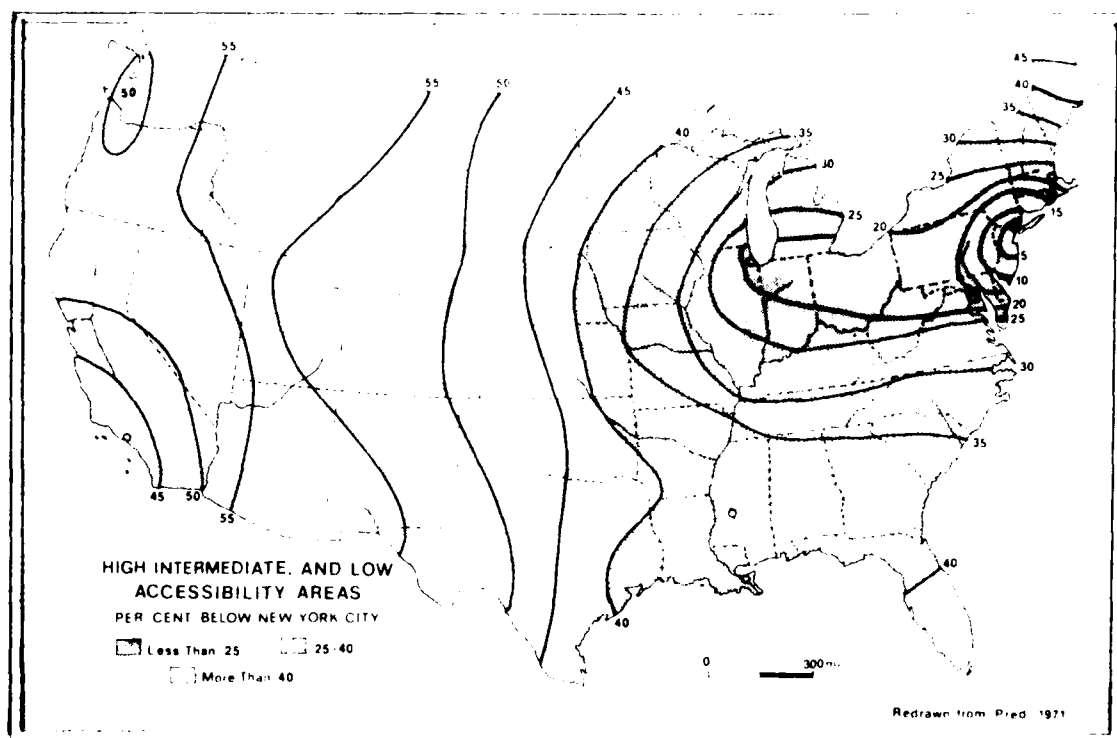


Figure 20.7.--Market Accessibility Areas (from Pred 1970).

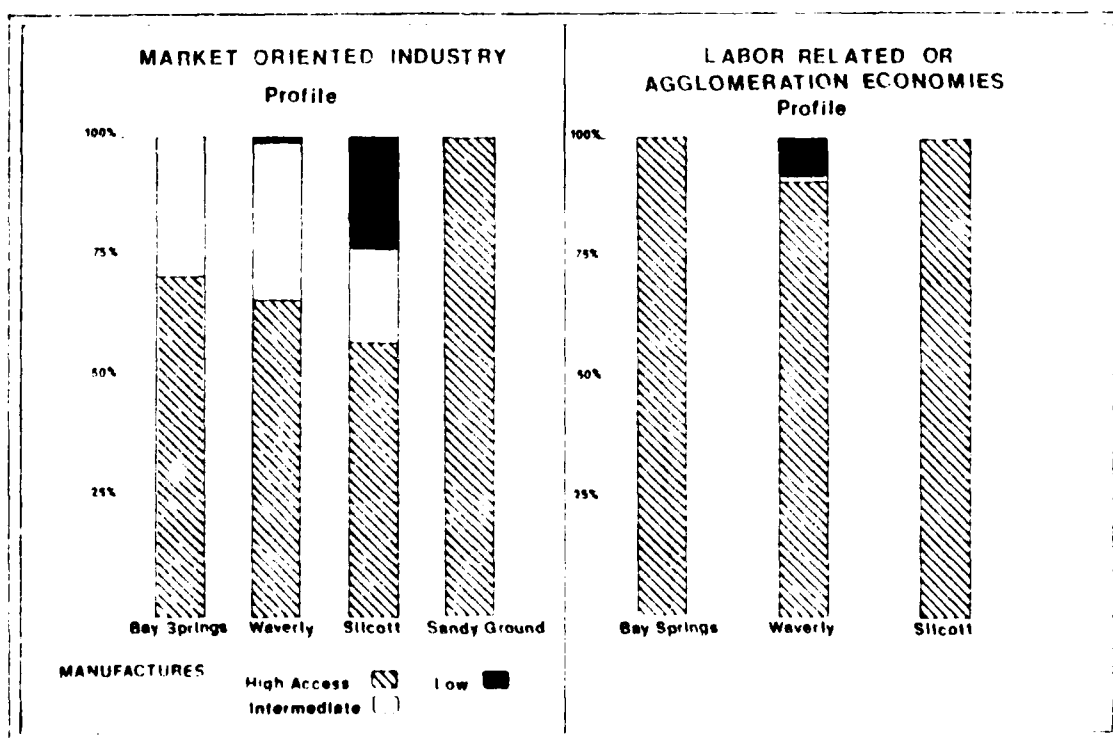


Figure 20.8.--Market Oriented and Labor Related Industries' Profiles by Community and by Manufacturers' Locations.

Silcott, in a Low Market Access area shows a different profile. The producers in the Low Access areas are benefiting from short transport and lower costs so the number of their sales increases. The producers in High Access areas, being able to absorb higher transport costs (because they are more efficient) have increased their sales. Intermediate area producers cannot compete as well in this area because they are not as close as one group or as efficient as the other.

Sandy Ground shows the profile we would expect from a site in the High Access area: 99.4% of the artifacts were manufactured nearby. Two bottles (.6%) were produced in San Francisco, but since we do not know the kind of bottle, we cannot explain its presence. Possibly those two were in the Labor Related or value added category and were able to absorb the large transport costs.

Labor Related Industries show different characteristics than Market Oriented ones. Producers in High Access areas will produce far more than any others because of their closeness to a large, cheap labor pool. A large part of this production will go to areas of Intermediate and Low Market Access. Producers in Intermediate areas will produce less and will ship to areas close by. They will not be able to compete in other markets. Low access area manufacturers will produce only for their region for the same reasons. In fact, few industries of this type will be found in Low Access areas (Pred 1964:283).

The profiles for Labor Related Industries are also shown on Figure 20.8. Again these conform well to expectations. Because transport costs are not important, producers in High Access areas dominate the market. Silcott and Bay Springs both show only High Access area goods. Waverly is somewhat abnormal, as 10.9% of the Labor Related artifacts come from a Low Access area in contradiction to expectations. The problem is not as great as it seems however. All of these artifacts are from a single manufacturer in Denver and represent a specialized commodity, tax tokens. The manufacturer's location is highly significant: "By definition, industries of this type [i.e. Labor Related] are infrequently in areas of low market proximity, though they may be found in subareal high population concentrations or in those rare instances where, as in Colorado, the degree of unionization acts as a locational force" (Pred 1964:283). Labor Related Industries, then, are primarily situated near areas of high population. For them, transport costs are of minor importance.

From this study, we can see that artifacts found on archaeological sites do show a pattern of distribution imposed by the national market and following well-regulated economic rules.

International Networks

We need to emphasize that many of the materials flowing into Waverly had their ultimate origin in places outside the United States. Raw materials from all over the world became the finished products Waverly people bought in Columbus. We have no way to measure this process, no way of knowing if one kind of coffee was preferred over another. All we know is that the links in the network existed. Only ten artifacts can be identified as coming from outside the United States. Six ceramic vessels came from England and one from Scotland. Holland contributed tobacco, New Brunswick sold sardines, and Japan delivered a plastic package.

Conclusion

The implications of this study are far reaching. Every historic archaeological site in the country possesses a "profile" of the national market. The configuration of each profile is determined by its relationship to the American Manufacturing Belt. Sites within each Access area should show roughly the same profile. This should be an area for future research.

This study also has diachronic implications. Both Waverly and Silcott are 20th century sites which reflect ties to the Manufacturing Belt. How did these ties change through time? Geographers view the manufacturing belt as a constantly growing, changing, and evolving entity. Each time the Manufacturing Belt changes, the Market Access area changes. The development of a National Market is indicated in thousands of sites across the country. Until we understand the economic patterns controlling the National Market, we will never know how individual sites fit into the system.

The potential for studying market economics through archaeology is great but nothing will come of it unless we start. This study has been but one way of organizing the research, many others are possible.

Conclusion

The implications of this study are far reaching. Every historic archaeological site in the country possesses a "profile" of the national market. The configuration of each profile is determined by its relationship to the American Manufacturing Belt. Sites within each Access area should show roughly the same profile. This should be an area for future research.

This study also has diachronic implications. Both Waverly and Silcott are 20th century sites which reflect ties to the Manufacturing Belt. How did these ties change through time? Geographers view the manufacturing belt as a constantly growing, changing, and evolving entity. Each time the Manufacturing Belt changes, the Market Access area changes. The development of a National Market is indicated in thousands of sites across the country. Until we understand the economic patterns controlling the National Market, we will never know how individual sites fit into the system.

The potential for studying market economics through archaeology is great but nothing will come of it unless we start. This study has been but one way of organizing the research, many others are possible.

CHAPTER 21. SOCIAL SYSTEMS

by David F. Barton

Introduction

Waverly has been described as a community of planters, a location for tenant farmers, and a collection of homes. Waverly, as a community, has experienced youth, maturity, and old age. The population has ranged from a handful in the 1830s to a few hundred during the late antebellum period. Over the past century and a half, the main groups of people living at Waverly included planters, slaves, tenants, small landholders, and sharecroppers. Just as the geographical boundaries and economic history of Waverly may be constructed through the use of historical, archaeological, and oral sources, aspects of group-consciousness at Waverly over the years may be approached. This chapter defines and describes the group networks operating at Waverly, expresses elements of group interaction, and reviews several institutions which have been a part of the community.

Human Groups

Cultural anthropologists and sociologists have developed a great many ways to divide people into groups or sets based upon common characteristics displayed by group members. Statistical groups are etic constructs designed by anthropologists in terms of common characteristics displayed by group members, although the people in the groups may themselves not be aware of the existence of the group. These groups, such as the group of all people in a community over the age of 50, are created for the purpose of analysis. Anthropologists also recognize emic human groups--those existing in the minds of people.

Two varieties of emic groups include societal groups and social groups. Inherent in the term societal group is the concept of common identity, a recognition of belonging to a group. Societal groups include the mental sets by which people sort themselves out, although group members may never interact. Irish Catholics from Boston may never meet other Irish Catholics in Los Angeles, yet they share a common identity. By processing the various societal groups into their mental template, people acquire a model of the way their society is organized. Social groups also exhibit a common identity; the difference between the two types of groups is that social group members interact and associate with one another. Groups may also be distinguished in terms of the kinds of bonds holding group members together. Three major types of groups determined by recruitment method are: (1) groups based on birth or kinship; (2) groups based on geography; and (3) groups based on a common interest or characteristics.

Groups Represented at Waverly

Societal Groups

In general, the diverse people living at Waverly may be divided into five separate societal groups. These groups were comprised of members who shared a common identity with others living where plantation-based settlement and economic systems developed. Broad settlement and economic

systems for the area have been discussed earlier. These societal groups include planters, middle class, slaves, tenant/sharecroppers, and independent small landholders.

The term "planter" has traditionally been applied to farmers based on the number of slaves (later, tenants) employed, and the size of landholdings. By the decade prior to the Civil War, the 10 Waverly planters (Table 7.2) were all "Big Planters" (Weaver 1945:38) with an average of 71 slaves and 294.6 improved hectares apiece. Waverly planters, along with other Southern planters, were expected to be shrewd in business dealings, skillful in plantation management, involved in community political affairs, and benevolent in family affairs. An almost chivalric code of speech and action was employed by many planters in the South. In essence Waverly was a transplanted Georgia community with George H. Young at its head. Waverly, pre-Civil War, was an amalgam of his family and other successful planters, several of whom had married his daughters. Symbolic of his exalted place in the community, Young erected a magnificent mansion. Even with the downfall of the slavery system during the Civil War, the planter system continued through the early 20th century when the last of the Young sons died. Features which may be associated with planters at Waverly include: (1) possession of prestige and wealth; (2) occupancy of a great house; (3) control of land to be worked; (4) white race; (5) freedom; (6) and sedentary life style. The middle class was represented at Waverly by the overseers, the tanner, the storekeeper, and a few others.

Slaves were individuals, often referred to as chattel, who were other people's property and obliged to perform the functions prescribed by their owners. Throughout the South, slaves were used for plantation labor including household tasks, field tasks, and commercial functions like milling and livestock tending. At Waverly, additionally, slaves operated the ferry, brick kiln, and steam engine as well as performing carpentry and mechanical duties. Slaves were often housed in simple structures with a minimum of ornament. Southern Slave Codes and other regulations restricted the education of slaves and the practicing of religious beliefs (Stampp 1956:156, 192). Although historical sources tend to indicate that the life of slaves at Waverly was not overly harsh, slaves remained property with greatly restricted freedoms. Features which may be associated with slaves at Waverly include: (1) lack of prestige; (2) simple housing; (3) minimal possessions; (4) black race; (5) possessed by others; and (6) restricted lifestyle.

Tenants and sharecroppers were farmers who did not own land. Following the Civil War, many former slaves, as freedmen, entered into formal or informal crop lien relationships with their former masters or other planters. In the South tenants typically were people who paid for the use of agricultural land either by a share of the crop or by cash rental. At Waverly, tenants were distinguished from sharecroppers in the following way. Tenants provided agricultural equipment, mules, and tools and paid a yearly rent in cash or one 500 lb bale of cotton for the use of each 15 ac plot of land. Sharecroppers were provided the tools, mules, land, and usually one-half of all fertilizer in return for one-half of their cotton crop. Tenants and sharecroppers retained a common identity in that each group did not own their means of production, the land they worked. Features which may be associated with tenants/sharecroppers at Waverly included: (1) lack of prestige; (2) simple houses; (3) few possessions, no landownership;

(4) black and white races; (5) semi-freedom (i.e. tied to rental agreements); and (6) mobile life style. At Waverly, tenants and sharecroppers differed, in general, as follows: (1) sharecroppers tended to be more transient than tenants; and (2) sharecroppers were predominantly white, tenants black.

Several black tenants in the late 19th century through a combination of industry and common sense were able to purchase small tracts of land, thereby becoming independent farmers. During the 1880s several former black tenants were able to make a first payment on a farm and give a mortgage for the balance. The first black landowner, Squire Stepp, purchased 80 ac of land. By 1900, 19 of 49 landowners at Waverly were blacks. With this new ownership trend at Waverly, black owner-operated family farms were added to the categories of sharecropper/tenant farms and plantations. The distinction between a farm and a plantation was that the latter applied to a piece of land on which a body of black farmers was managed. The lifestyles of independent black farmers were probably quite similar to the patterns of their tenant/sharecropper neighbors throughout the South. They had more in common with their renting neighbors than with the local planters. Home dwellings, style and quantities of food consumed, and social customs of black landholders were much like tenant styles. The difference lay in the fact that the independent landholders owned their source of production. The trend of small black landholders at or near Waverly has continued to the present, with several former tenants and descendants owning land to the west and northwest of the mansion. Features which may be associated with small landholders at Waverly included: (1) some prestige; (2) simple houses; (3) few possessions and landownership; (4) black race; (5) freedom; and (6) sedentary life style.

Social Groups

Social groups at Waverly included the societal groups of planters, slaves, tenant/sharecroppers, and independent landowners. During the periods when the various societal groups were present at Waverly, group members interacted and associated with members of the same and other groups. Members of societal groups were also members of, usually, several social sub-groups.

In antebellum Waverly, planters were often members of several socio-economic and political groups. George H. Young was an active Whig and States Rights party member; several other planters in Lowndes County subscribed to the Democratic Party. Young and others were elected to local political positions on bridge, road, and police commissions. Occasionally individuals like Young were elected to the state legislature and federal offices. Although no formal church or school was located at Waverly prior to the Civil War, a few planters were affiliated with churches and schools in Columbus or elsewhere. On a more informal level, planters and their families probably met regularly at dinners or picnics to discuss current economic and social trends or just to enjoy themselves. We must again emphasize the kin-based nature of the planter society here. Relatives like G. H. Lee came to Waverly soon after Col. Young arrived to build their own plantation. Others married into the Young family.

Although there is no historical reference to group associations in which slaves at Waverly were involved in the antebellum period, nuclear family and kin-based groups probably met on a regular basis to discuss their day-to-day lives. Topics discussed would have primarily dealt with activities within the family or the dealings of other slaves who lived within a few miles of the Waverly quarters (Stamp 1956:361).

Planters living at Waverly after the Civil War retained social group membership in churches, schools, and political organizations. An all white school was established in 1879 at the outskirts of Waverly and continued until 1900. People still met regularly to discuss current events. A few planters, unhappy with the development of Reconstruction policies, joined groups like the Red Shirt Brigade of the Ku Klux Klan and the Executive Committee of Ten for Beat One. Members of the Red Shirt Brigade were concerned with keeping political control of the local counties away from blacks and Republican whites. The Executive Committee of Ten for Beat One, which included William Young as a member, was a group of planters which resolved not to rent land or employ any blacks who were officers of Negro clubs or who had voted on the Republican ticket. In 1893, the National Fox Hunters Association was organized at the Waverly mansion. Cock fighting and horse racing were also popular group activities at Waverly during the late 19th century.

Waverly slaves became Waverly tenants after Emancipation, although many moved to Columbus and elsewhere during and following the Civil War. A good deal of the social life of Waverly tenants in the late 19th century centered around the Waverly Mt. Pisgah Missionary Baptist Church located three-quarters of a mile northwest of the mansion and organized in 1876. A Baptist and a Methodist Church, both black, were established in 1900 and 1902, respectively. Many black tenants were members of fraternal organizations like the Masons and the Pennyworks Society which held regular meetings in the 1905-1915 period. Tenants also met informally to help each other in community work projects like building and quilting bees. Dances were regularly held in the abandoned railroad depot building. Christmas and Emancipation Day, May 8, were celebrated with large dinners, group socializing, and "drum beatin's". "Courtin'" and baseball, with 18 players and crowds of fans, were also popular activities. Independent black landholders probably participated in similar activities, although oral and historical corroboration is unavailable.

White sharecroppers, who became the dominant population of Waverly during the 1940s, also participated in co-operative activities like group weed poisoning, cotton picking, and hog butchering. The closest white church was in Columbus, although several families irregularly attended churches in West Point. Occasionally, families would meet for Sunday School or prayer meeting at local homes. Traveling preachers at times would spread the gospel in place of local prayer-leaders. Youngsters often went to school for a few months out of the year in either Columbus or West Point. People got together informally to play card games and chat about local events, especially in the winter when there was more leisure time.

Community membership varied over the 130 year life span of Waverly. Transitionally, planters and slaves were replaced by planters and tenants with the addition of black landholders in the late 19th century; black tenants were superceded by white sharecroppers who eventually moved away.

Groups Based on Birth

Until 1880 when George H. Young died, a tight planter kin network of Youngs existed at Waverly. Col. Young, his sons, son-in-law, and daughter-in-law owned a combined total of 4,137 ac through 1883. George H. Young was the undisputed head of the family, quartered in Waverly Mansion. The lesser mansions, Tarawa and Burnside, housed Young children and in-laws within a mile of the mansion. Other Youngs lived nearby. With the death of Captain Billy and Major Val in the early 20th century, the closest Young kin were the Banks' in Columbus, who only occasionally visited Waverly.

As was common in the slavery South, slaves often acquired the name of their masters. Not surprisingly, several slaves named Young lived at Waverly through the Civil War. A few remained as tenants on the Middle Place and Upper Place, although undoubtedly others left for Columbus and other areas. No blacks named Young were listed as black landowners at Waverly in 1900. Several black tenant families, whose origins are unclear, resided at Waverly by 1900 including Ivy, Hawkins, Matthews, Sesny, Haney, Goodall, Stepp, and Thomas. White sharecropping families who began arriving in the 1930s from Alabama, Tennessee, and other parts of Mississippi included Barham, Blankenship, Eads, and Wallace. Although black tenant and sharecropper families tended to be large and extended, renters moved away from Waverly for a variety of reasons. Some farmers became too old to farm and moved on to town apartments or nursing homes; many restless youngsters wanted to make a start elsewhere as laborers in towns or cities.

Groups Based on Geography

The boundaries of Waverly have varied greatly over the past 150 years. The maximum amount of land owned by the combined Young clan was just over 4,476 ac in 1872. Prior to the Civil War, field slave groups worked the fields referred to as Tanyard, Indian Head, Red, Sandy, and Pitchlyn. Two to three overseers superintended their work under the direction of the Young family. Field slaves probably lived in groups of cabins, often placed adjacent to these fields. Slaves who worked the commercial operations lived near their work centers. Overseers were housed nearby. House slaves lived near the mansion. The Young family was clustered in mansions and houses within one mile of each other.

Despite Emancipation, freedmen in the South who became tenants still operated under an economic system designed by planters. As tenants, geographical boundaries were imposed on them by landlords. Thus, groups of renters were referred to by group names (i.e. the Waverly tenants, the Lee Tenants). During the late 19th and early 20th centuries, tenants farmed plots in the above mentioned fields, yet the total number of acres cultivated at Waverly was gradually reduced. When the Young bachelor brothers died, the mansion was closed. During the same period, the community lost its stores and post offices. Waverly was thus composed of groups of tenants, small landholders, and absentee landlords in Columbus.

The white sharecroppers who moved to Waverly in the 1940s principally lived in the area south and east of the mansion. No more did groups of tenants live in Ivy Bottoms to the north. Many dwellings deteriorated rapidly and were abandoned. By the late 1950s, the sharecroppers had moved away.

At present, Waverly has moved to the west and north as former black tenants bought small farms for agriculture and cattle raising. Where once the community had centered on the mansion, the present Waverly has moved to within one-half mile of Mississippi Route 50.

Groups Based on Common Characteristics or Interests

Such groups include clubs, churches, and social classes. Clubs or fraternal organizations at Waverly were probably the most transient. The historical literature provided only one reference at Waverly to an anti-black organization called the Executive Committee of Ten for Beat One. The Pennyworks Society and the Masons lasted for not much more than a decade.

Churches at Waverly were more predominant through its history. No white church was ever constructed at Waverly, although three black tenant churches of Baptist and Methodist denominations were started there. Church to black tenants was an important feature of life. The graveyards of the two black tenant churches are located in proximity to the churches. Outside of occasional prayer meetings, white planters and sharecroppers attended churches in West Point and Columbus.

Prior to the 1930s, social class and ethnic status at Waverly were closely tied. In many respects, Waverly contained two classes: the white, landed, monied, upper class, and the black, slave-turned-freedman, renter, poor lower class. The upper class controlled land and money in the community through the early 20th century. Tenant renters were all black, usually poor, with no landholdings. A small middle class included such individuals as Henry Long, the storekeeper at Waverly from the 1870s-1900. He was an entrepreneur who married a granddaughter of George H. Young and owned a negligible amount of land. But his kin ties may have placed him in the upper class instead. Although a few black tenant-turned-landholders may approach this middle class through land wealth, their ethnic backgrounds and their lifestyles are more similar to the tenants than to the small white landholders.

After the 1940s, the white sharecroppers maintained a similar social position as did the earlier and concurrent black tenants. Neither group owned land, although individuals had a variety of portable material possessions. Blacks and whites were obliged to enter into trade relationships with stores in West Point and Columbus. Although social status appears comparable for the two groups, differences based on ethnicity were also common. In general, tenants and sharecroppers adapted similarly to life at Waverly. During the tenant/sharecropper period after 1913, the upper class was still represented by the white landowner, namely the Young descendants living in Columbus.

Comparisons of Groups at Waverly

Material Culture

Through approximately 1907, consumer goods could be purchased by planters, tenants, and storeowners alike on site at various stores in Waverly. During these years, oral and historical sources indicate that a variety of products could be purchased at these retail outlets, especially the Henry C. Long store. Although planters probably bought goods elsewhere,

it is assumed that tenants bought almost all of their goods at this store under a credit system. After the cotton harvest, the debts and interest accrued were paid off, or forwarded to the next year after a poor season.

The ledgers from the Henry C. Long store for 1887-1888 indicated similarities and differences in the patterns of goods purchased at this outlet. According to the ledgers, apparently, in the late 1880s there were substantial differences in the quantity and variety of day-to-day purchases of consumer goods by black tenants, black landowner, white planters, and the storekeeper. Each group consumed the same basic foodstuffs including meal, meat, molasses, and flour. Food items purchased almost exclusively by the planter class included canned salmon and oysters. In terms of personal indulgences, snuff, tobacco, and plug tobacco were typically consumed by tenants; planters and the storeowner smoked cigars and smoking tobacco. Although the ledgers indicate that the planter group purchased more prestige items like salmon and smoking tobacco than did the tenant groups, the ledgers show many similarities in the item purchasing: foodstuffs and other goods were commonly consumed across the four groups.

The materials from the archaeological sites are more difficult to distinguish in terms of group association. At sites 22CL567, 22CL571A and 22CL571B, black tenants were presumed the only occupants from oral sources. At 22CL569, black tenants and white sharecroppers occupied the site. Therefore, we can indicate the kinds of material present at an all black site, although we cannot separate the black from white material at the other sites.

Oral history sources indicate the goods consumed by black tenants in the period 1900-1940 were quite similar in type and quantity to the goods consumed by white sharecroppers in the period 1940-late 1950s. The later whites, in general, purchased more durable clothing and included more beef in their diets. There is an indication that the sharecroppers also built sturdier houses with better construction materials.

Lifestyles

The lifestyles of tenants and sharecroppers were quite similar. The oral history contains detailed descriptions of agricultural, household, and industrial work routines followed by the two groups. In agriculture, white sharecroppers used more fertilizers and power equipment than had earlier tenants; sharecropper men also worked regularly in the portable sawmill operations at Waverly, unlike the earlier tenants. In the house, sharecropper women performed their household tasks, like washing clothes, hauling water, and smoking meat similar to the tenant women except for a few differences. White farmwives were familiar with the processes for canning both fruits and vegetables; black women only knew how to can fruits. Blacks were fond of chitterlings, (i.e. prepared hog intestines); whites preferred other cuts of pork.

Group Interaction at Waverly

Racial Relations in the Community

Prior to the white sharecropper period of the 1940s, social class and race were intimately associated at Waverly; the whites were the upper class. References in historical and oral sources indicate that racial tension was not a prevalent issue at Waverly.

In antebellum Waverly, George H. Young has been pictured as a benevolent master. In a series of letters to a colleague in Virginia during the 1840s, he indicated his attitudes toward his slaves. In one episode, he related that he would "never punish my own (slaves) if I can avoid it and others not at all." In the same letter, he hoped that an obstreperous slave would quiet down so that unpleasant difficulties would not ensue through a visit by the Patrol. In another letter, Young made arrangements to ensure that members of a certain slave family were kept within communication distance (2 to 4 mi) and "in more humane hands than last year." The frequency of mistreatment of slaves at Young's hand or through his overseers is not mentioned in historical sources. This is not to indicate that he never mistreated them; apparently, however, he was a fair master overall.

Capt. Billy, one of Col. Young's sons, was remembered by tenants as being a just man. Apparently his participation in the radical white Executive Committee of Ten for Beat One did not affect his sense of fairness with blacks. One oral source told the story of Capt. Billy's hiring of a white overseer who was contemptuous of blacks. After the overseer hit a black laborer, Billy told him to "get his papers and get away from there. He didn't hit his Negroes and didn't allow nobody else to hit 'em." Capt. Billy also would not allow the erection of a work bell to signal tenants to work, a slave days carry over used on many large southern post-Civil War plantations.

During sharecropper days at Waverly post-1940, only a few blacks remained in the community. Oral sources indicate the relaxed nature of black-white relations during this period. Co-operative activities between the two groups were also arranged. For many years, blacks worked side by side with whites in the groundhog sawmills and in the cotton fields. In one case, a black granny woman applied a folk remedy to heal a white man's arm. Indicative of pleasant relations in general, black and white children played together at Waverly.

If racial tension existed at Waverly, it is well hidden in oral and written sources. Perhaps the answer for this lack of tension lies in the nature of the sequent occupation at Waverly and the extreme social and economic gulf separating the races. During the late 19th century, only a few whites, planters, and the storeowner, lived at Waverly; the rest of the population was black or mulatto. Through the 1930s, almost the entire population was black. When the sharecropping whites moved in during the 1940s, many of the blacks moved away. In one sense, there were not enough members of ethnic groups during the different sequent occupations to produce or inflame racial tensions.

Schools and Churches

Interaction in schools and churches appears to have been negligent at Waverly. The two main schools--one white, one black--established at Waverly were completely segregated. Following the disintegration of the Waverly white school district due to declining enrollments in the late 19th century, white children went to segregated schools in West Point. The black school continued until the mid-1950s when it was disincorporated. Education in the community was always split along racial lines; no source, oral or historical, indicated any comparison between the quality of education in the two schools.

Church interaction was also minimal. Whites went to church in Columbus or West Point from the mid-19th century. Blacks had a few small churches at the outskirts of the Waverly community. There is no indication that Waverly church populations were racially mixed, although a few whites may have occasionally attended Mt. Pisgah Missionary Baptist Church and a few blacks may have joined white sharecropper home prayer meetings. As with schools, church membership was predominantly segregated on a racial basis.

Institutions at Waverly

Institutions may be viewed as organized ways of doing things. In other words, they are formal, regular or established sets of procedures, characteristic of groups performing a similar function in a society. At Waverly, several institutions which have been present at various times over the past 150 years include slavery, schools, churches, and government.

The historical perspective of Waverly indicates the prominent place the institution of slavery had at Waverly prior to the Civil War. Slaves performed a majority of the economic functions including agricultural and commercial activities at Waverly. Procedurally, slaves were guided by overseers who were instructed by planters/managers. Slaves performed work functions with prescribed standards of conduct and lived in housing provided by their owners. The economic importance of slavery should not be underestimated. Cotton production was a very labor intensive activity. In the decade prior to the Civil War, the value of George H. Young's slaves surpassed the value of his land. Slavery at Waverly was an institution with broad economic and social ramifications.

Schools at Waverly from the 1870s through the 1950s were the only formal educational institutions, although a few of the Young family may have been schooled at home by hired tutors; most of the Young children were educated in the Northeast. The formal black and white schools, however, only met four or five months of the year in one-room schoolhouses. Historical and oral sources do not indicate the quality of education, although it may be assumed that the education of youngsters at Waverly was not restricted to these formal institutions. Young people received informal lessons from parents, other family members, community elders, and peers. These lessons probably included religious teachings, common sense accounting for use at the stores in Waverly or West Point, and behavior standards common to the community.

At Waverly religious institutions have always been important to black tenants. The churches, located at the periphery of the old Waverly Plantation, functioned to satisfy the spiritual needs of the community and to provide religious explanations and guidance to understand the happenings of the world. Planters and white sharecroppers must also have had spiritual needs since they often traveled to West Point, Columbus, or held services in their homes.

Government offices or institutions at Waverly are only represented by the Post Office at the Henry C. Long store from 1879 to 1897. Postal business volume continually declined during the late 19th century; the service was replaced by rural free delivery in 1906. The closest government offices to Waverly were within 10 mi at the county seat offices in West Point (Clay County) and Columbus (Lowndes County).

Disintegration of Waverly

Several occurrences contributed to the demise of the community of Waverly. As described in the history, the loss of central leadership, the transition from landlord dominance to small owner-operated farms, the declining productivity of cotton farming, and the inadequacies of the tenant system were four main reasons.

A concomitant disintegration of group coherence at Waverly accompanied the community disintegration. The societal and social groups described above were dissolved at various periods of time. With the death of Capt. Billy Young in 1913, the planter group was not represented on-site at Waverly: plantation matters were pursued by the Banks family in Columbus on an absentee basis. The majority of black tenant farmers had moved away or died by the mid-1940s. White sharecroppers had all moved seeking better housing and employment by the early 1960s. As one oral source commented, "A rolling stone never gathered no moss, and they didn't gather any."

Organizations and institutions also followed the pattern of demise. The Fraternal Order of Masons and the Pennyworks Society barely lasted a decade. Declining enrollment in the Waverly white school, established in 1876, forced closure within 25 years. The black school closed in 1955; the black church remained at the outskirts of Waverly. No white church was ever established.

As the productivity of the soil was depleted and the community leaders died, Waverly became a community of tenants, small owner-operators, and sharecroppers. As the various societal group members died or moved on, the social groups and institutions such as schools, churches, and the post office they maintained during their residencies were discontinued. The only remaining social group is the transplanted local black church.

CHAPTER 22. THE WAVERLY COMMUNITY

by William H. Adams, Betty J. Belanus, and Howard G. Adkins

The Historical Perspective

The Waverly Locality in Clay County, Mississippi, contained 68 sq km (26 sq mi), and extended from the Tombigbee River seven miles westward into the prairie and from Town Creek on the north to Tibbee Creek on the south. Col. George H. Young's Waverly mansion and plantation steadings in Sec. 30 were the hub of the community. Other planters like Burt, Lee, Martin, Rose, Crusoe, Gerdine, Matthews, Armstead, and Hamilton owned and operated plantations in the community. Community ties were based upon kinship and friendship, these probably established prior to the migration from Georgia. The economy was structured and sustained through cotton production.

Waverly was perhaps typical of plantation communities throughout the Tombigbee Valley and throughout Mississippi. Unfortunately, this characteristic settlement has been ignored by historians and historical geographers. Furthermore, the literature is replete with studies and references to plantations in other geographic regions of the state, but only casual references are directed at those in the Tombigbee River Valley. Climate, soil, terrain, vegetation, and accessibility favored it emerging as an ideal plantation setting. Moreover, with its favorable site and regional position, Waverly could have become a thriving village, but Col. Young, the mentor of Waverly, and other planters chose a more pristine planter life. In fact, this seems to have been the ultimate goal of the settlers in the 1830s and 1840s. Col. Young had, in fact, platted the town of Waverly on paper, but never developed it.

Very few Mississippi communities occupied a more strategic historical location. The west bank of the Tombigbee at the southeast end of the divide between the southeasterly flowing Town and Tibbee Creeks was a natural outlet for prairie cotton moving to Young's warehouse and landing for transshipment to Mobile. However, the railroad completed from Mobile through the prairie via West Point in the 1850s captured much of the river traffic. River shipments through the Waverly landing terminated in the late 1880s. Roads were least developed of the three traffic modes although the Big Trading Path, Gaines' Trace, and the Columbus to Pontotoc road passed through the community in order to use the ferry crossing. The early development of Waverly Plantation can be traced to the early settlement by whites and half-blood Indians.

Among the early inhabitants and perhaps the most prominent family in the immediate area were the Pitchlyns. John Pitchlyn was an enterprising and trusting white, raised by the Choctaw Indians "from his fourth year" and who had married into a half-blood Choctaw family. His prominence among the Indians was revealed by the fact that he was, at their request, the official interpreter at all major treaty negotiations. The Pitchlyns lived south of Tibbee Creek at the now extinct town of Plymouth until the Treaty of Dancing Rabbit Creek was signed in 1830, after which they moved north of Tibbee Creek into Chickasaw territory and resided with a half-blood Chickasaw grandson--Alexander Pitchlyn. By this time white settlers had

entered the territory and were illegally squatting along the west bank at the ferry crossing. Among the early squatters were Weir, Hughes, Mullens, and Weaver who engaged in commercial activities. Settlement by whites was not official until 1836. In that year Alexander Pitchlyn sold land he had received as a temporary homestead under terms of the Treaty of Pontotoc to Col. Young of Georgia, for \$3,000.

George H. Young first visited Mississippi in 1833 to "view and select favorable cotton lands." To this end he was successful, acquiring land in three separate tracts in the Tombigbee Valley and Black Prairie. After residing on the prairie for five years, Young selected a site at Waverly for his permanent home and moved his family there in 1841. Like other pioneer families, they first resided in a log house, but in the late 1850s the mansion, which more than any other came to be identified with the community, was completed. Under Col. Young's guiding influence, Waverly had emerged by 1860 as a prosperous plantation community with slavery and cotton firmly entrenched in its economic and social fabric.

By using the classification scheme devised by Herbert Weaver (which takes into account land and slave ownership) all in Waverly were "big planters." For example, between 1850 and 1860, the number of slaves increased from 406 to 711 and improved hectares from 1,898 to 2,946 (4,690 to 7,280 ac). To overcome the diseconomies associated with the scale of operation, Young organized his plantation into Upper, Lower, and Home Places. Overseers were employed at annual salaries approximating \$350 and a percentage of the crop.

The industrial and commercial needs of Waverly were largely supplied by a brick kiln, tanyard, post office, warehouse, and a steam-powered sawmill, cotton gin, flour and grist mill. As a complete antebellum plantation the need for a store was negated. The J. M. Hughes store closed in 1841 and the H. C. Long commissary did not open until about 1877. Young and Gerdine, however, acquired supplies and merchandise for their planter friends on consignment from factors in Mobile.

When Young migrated to Mississippi he was politically a Whig, but he shifted his alliance to the State Rights Party when the Whig Party split over the Texas question and the Compromise of 1850. Young was elected to the Mississippi State Legislature but was unsuccessful in his bid to represent the state in the United States House of Representatives. Disillusionment with the political situation in the 1850s, failure to win support of the non-planter class, and the increasing complexity of plantation management caused Young to resign from active politics.

Waverly was spared the physical destruction associated with the Civil War; however, the abolition of slavery deprived the planters of more than half their capital investment. Similarly, the demise in cotton produced was critical. Waverly planters had produced 2,527 bales in 1860 but the crop in 1870 totaled only 631 bales. Circumstantial evidence arrived at by comparing per capita cotton yields in 1860 with those in 1880 suggest that slave labor was more profitable. However, individual yields in 1880 may have been less because during the 20 years the soil may have lost much of its productive capacity. In addition, the diminishing supervision of tenant farmers, and tenants caught between the cost-price squeeze were unable to provide inputs necessary for more successful farming.

Slavery was replaced by a work gang system in 1865, and by tenant renting and sharecropping by the end of Reconstruction. Through formal contracts landowners agreed to provide land, equipment, animals, furnishings, and supplies; tenants agreed to work the land and pay for its use in cotton. Black tenants lived in slave quarters and worked in teams or squads. By 1875 contracts had become less formal and were primarily verbal agreements. Landowners arranged for tenants to receive credit seldom exceeding \$12-\$15 per month at the plantation commissary. Slave quarters were abandoned and replaced by tenant houses constructed on 12-20 ha (30-50 ac) units. By the turn of the century tenants were responsible for securing their own furnishings and supplies from merchants in West Point and Columbus. Credit was guaranteed by a lien on the crop.

Most tenants ended the year in the same financial strait in which it had begun. However, the efforts of Gus Halbert, Squire Stepp, and Issac Wilson, and perhaps a few others, were successful. Stepp and Wilson were the first black landowners. By 1900, 38% of the landowners were black, but the amount of land owned was disproportionately less, only 5%.

The commissary operated by H. C. Long was a nearly complete commercial center for the community. Available at the commissary were food, clothing, supplies, and cash for paying day laborers, cotton pickers, taxes, and legal services. Merchandise for the commissary was acquired on credit at interest rates of 7%-10%, and sold on credit at interest rates of 10% to the planters and 10%-20% to tenants. The commissary was an economic asset in that it controlled the expenditures of tenants and kept them within their means to pay. As the number of tenants and cotton production declined the profitability of the commissary also declined, and this probably was the cause for its discontinuance in the late 1890s. Thereafter, small stores capitalized at less than \$700 provided only the lowest order of goods and services within the community.

The period after the Civil War and Reconstruction saw the deaths of the community leaders and great changes in the lives of all living at Waverly. Work gangs and sharecropping were used at first, but by the 1880s a more stable tenant farmer system prevailed. By 1880, the mansion was occupied by two bachelor Young sons, William Lowndes (Billy) and George Valerius (Val), who, like three of their brothers, were veterans of the War Between the States. George Hampton Young had died in 1880, and his grown children had scattered themselves and their families around the three counties of Clay, Lowndes, and Monroe. One of his daughters, Anna Young Hamilton, and her husband Alexander had settled in a handsome estate near Waverly called Burnside. One of the Hamilton daughters married Henry C. Long, who ran a store and became postmaster of Waverly until 1900.

In the year 1888, the Southern Railroad laid their track through Waverly, crossing the river over the impressive trestle bridge that could turn from the center to allow steamboats to go by. The black tenant farmers, some of them descendants of former slaves, brought their cotton in the early fall to the Waverly gin near the mansion. "Captain" Billy and "Major" Val Young were building up their soon to be famous fox hound pack. Three years later the National Fox Hunters Association was organized at Waverly.

The population in Waverly increased during the antebellum years, largely through an increase in slaves, and declined during the post war years. This demise was reflected in the discontinuance of the white school in 1899 and the steady decline in average daily attendance at the black school. The miscegenation of the population was also interesting. Samples taken from the population schedules of an area inclusive of Waverly revealed that in 1870, 24% were white, 63% were black, and 13% were mulatto, and in 1880 21% were white, 42% were black, and 37% were mulatto.

In some years the cost of producing cotton exceeded the price farmers received. The low profit margin was not a stabilizing influence on the community. For example, W. L. Young who died in 1913 was the last plantation landowner to reside in the community. In the years following, George Y. Banks (grandson of G. H. Young) who inherited the Waverly properties, made extensive repairs to the mansion and allowed it to be used by family members for pilgrimages during the 1920s and 1930s. Banks resided in Columbus and operated the plantation in absentia. In 1905, the plantation was running smoothly under the auspices of the Young brothers, who were getting older but still loved to hunt and entertain their sporting cronies. Members of the family who lived in nearby Columbus (Banks' and Hopkins') and in Monroe County (Evans') came to visit in the summer, enjoying themselves at the bath house and in the gardens around the mansion. Capt. Billy ran the post office from the mansion library. The brick cotton gin next to the bath house still ran, with its accompanying grist mill. The boiler was fired by an old ex-slave named Clem Mathews, Sr. A sawmill was operated near the railroad by a white man named Bridges. Henry Long's store had ceased operation, but an outsider named Brooks had opened one near the railroad, selling groceries to the community. The black tenant families--Ivy, Mathews, Sessney, Haney, Goodall, Stepp, Hawkins, Thomas--worked their farms on a "renting" basis, and owned their own mules and tools. Their church and school were nearby, and they lived a quiet existence.

By 1915, both Captain Billy and Major Val had died. Waverly plantation land was now the property of the Banks family through Lucy Young Banks, the youngest of Billy and Val's four sisters, who had married George Banks of Columbus. The mansion stood empty, although much of its lovely furniture was still inside. It was watched over by Abe and Ida Turner, long-time residents of Waverly. The tenant farmers, numbering about two dozen, lived in reasonably comfortable frame houses, several north of the mansion in the river bottom called Ivy Bottoms, where the large Ivy family had settled. The only white family besides the Youngs to live in Waverly for years, a beekeeper named Hendrix and his children, moved onto the place. The Waverly cotton gin had ceased to run; Brooks had moved, leaving his store to be used as a dwelling for a farming family. Bridges had been murdered scandalously. His sawmill was taken over by Mr. Gorey. The mail was now brought by the rural free delivery system. The regular Waverly depot had yielded to a small flagstop waiting shed. The farmers did most of their dealings on credit with Chandler-Walker Mercantile, a large store in West Point which "furnished" their needs and bought their cotton. In general, the plantation of Waverly had become a community of independent tenant farmers who had to look outside of that community for many of the services previously provided there.

By 1935, the Adairs, a white family the Banks family had hired in 1931 to watch over the mansion and farm and run the ferry, had become settled. One married daughter, Milly Decker, and their sons, John Onus, Robert, and Hershel, had moved onto the place also. The sons began a thriving timbering business, and old man "Doc" Adair tended the ferry. Mrs. Adair and Milly took care of the mansion. More relatives of the Adairs, the Collins, were soon to move to Waverly as well. A few new houses were built, making use of the lumber from older buildings beginning to tumble down. The older Adairs had a new cottage near the mansion, and John Onus Adair was building a handsome farmhouse on the site of Brooks' old store building. Black tenants, many of whom had grown up in Waverly, worked the land, and still lived in houses scattered around the place.

By 1945, many more white families had moved onto the place, and several of the older black families had moved out of Waverly Ferry, but still nearby. John Onus and Robert Adair had begun to run a small "ground-hog" sawmill that could be moved around the place. John Onus also made arrangements with a number of white farmers to provide them with equipment. These tenant farmers sharecropped for him for half of their crop. For some families--like the Barhams, Blankenships and Eads--farming was the livelihood and sawmilling the "make ends meet" job. For others, especially for skilled sawyer Homer Wallace, farming came second to the sawmill job. A couple of new houses had been built, and a few had been lost. John Onus Adair's new farmhouse had tragically burned, and a number of the houses in the now-abandoned Bottoms had been torn down for their lumber and used to improve other houses. The farmland lay, as always, mostly in the rich river bottom, but the dwelling houses were now centered in the area near the mansion. The white families sent their children to school in West Point and went to church either in West Point or Columbus. But they had a close comradery, getting together often at night to play cards, and to help each other with small tasks whenever they were needed. Electricity had not yet come to Waverly; so, many things were still done the "old timey" ways.

By 1960, very few families remained in Waverly Ferry. A few farm families, like the McDills, had been there into the late 1950s, but government restrictions and other factors made it unprofitable to farm cotton in the area. John Onus Adair and his wife lived in a small comfortable house they built near the farmhouse that burned, and the lumbering operations were being taken over by their grandson. The ferry would be moved the next year further down the river--the new Highway 50 bridge across the Tombigbee near Waverly provided a new, convenient crossing place. Passenger train service had been discontinued. Electricity had finally come to Waverly. The demise was so complete that by 1960, 42% of the land was forested (Figure 22.1), and assuming that equal amounts of open land were in cultivation and pasture then no more than about 20% would have been cultivated. As revealed in Figure 22.1, most cultivated land was in the western half of the community in the prairie. Waverly had declined significantly as a farming community.

Travel to and from Waverly could be achieved by various means in the old days. The closest towns were (and are) West Point to the west and Columbus to the southeast; outside trade was conducted almost exclusively with these towns. The Clay County seat, West Point, lies 10 mi from Waverly with no major travel obstacles in between. Columbus is 2 mi

closer, but one must cross the Tombigbee to get there. Either town could be reached by train since the railroad had come through in 1888. Waverly was a regular stop with a depot and ticket agent until the early 1900s, and then became a flagstop until the late 1940s when passenger trains were discontinued. It cost nothing to walk to Columbus, and many people did just that, crossing the railroad "trussel" bridge. People with horses could ride them or hitch them to a wagon or buggy, but the common tenant farmer had only his farm mules to hitch to his wagon. Foot passengers as well as vehicles could cross the river on the Waverly ferry most of the year, although spring floods or "high waters" made crossing dangerous.

By the 1920s the automobile began to catch on, and those who could afford one (and even some who really could not) bought cars and early trucks. This obviously made travel to town easier. It did not, however, end the "horse and buggy" days in the area; many could not afford to either buy or keep up a gasoline-consuming vehicle and continued to use more traditional means of getting to town. The building of State Highway 50 in the late 1950s made getting around much easier than on the previous gravel or "rock" roads. By then, farm horses and mules were almost obsolete.

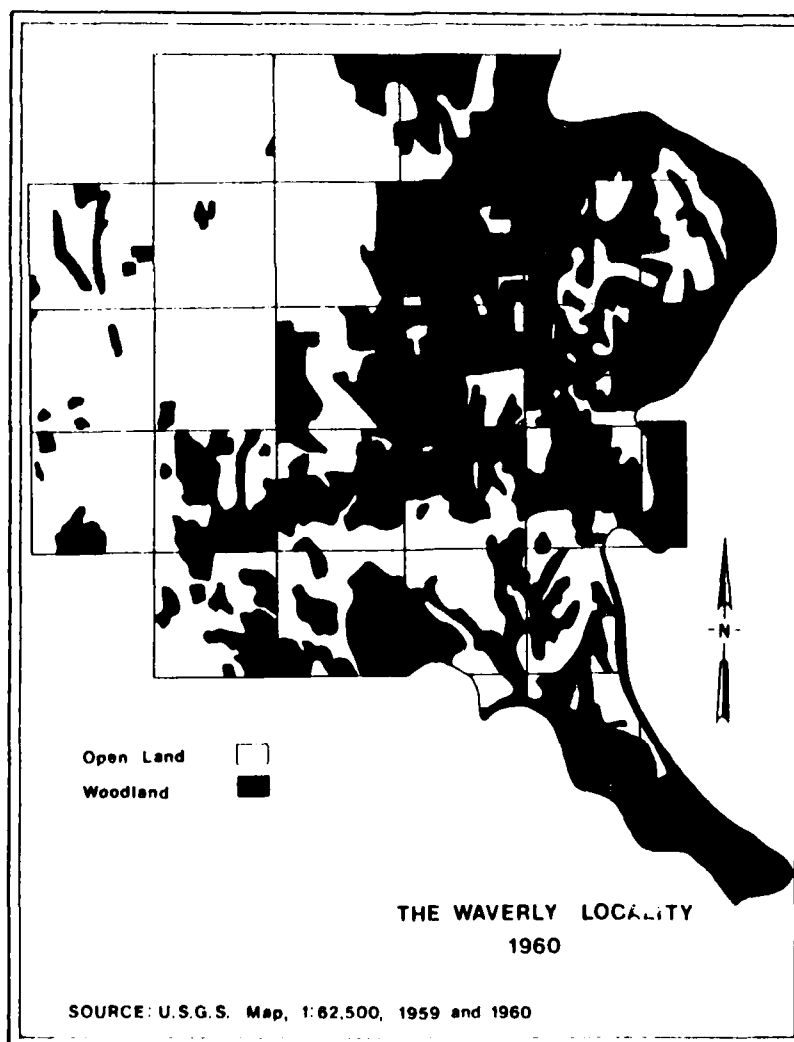


Figure 22.1.--Open Land and Wooded Land in Waverly, 1960.

Today, "Waverly" denotes an area extending past its traditional border. A number of black tenants managed to buy their own land bordering Waverly proper in the 1940s. Roosevelt Thomas bought a tract of land once owned by the Hopkins and erected an attractive new home. Douglas Ivy, the youngest son of the large Ivy clan, had bought some of the old Lee plantation land, adjoining Waverly on the north and west; a number of black families live in houses on his land. Gradually these areas, so close to Waverly Ferry, were joined in what is now called Waverly Community. This area, largely black, includes Mt. Pisgah Missionary Baptist Church, the site of a black school (discontinued in the 1950s), and a residential area west of the school site where several black families have settled. While Waverly Ferry is still tagged "Waverly" to the black community, "Waverly" has shifted to the north and west of the original area since the 1940s.

Waverly is, today, largely wooded-over and grown "into a tangle" as informants put it. The large fields in the river bottom have given way to a gravel quarry, and a strip from north to south along the river is being cleared by the Army Corps of Engineers as part of the Tennessee-Tombigbee Waterway. The only families living in Waverly Ferry now are those of Robert Snow, Allen Snow, Robert Wayne Decker, and John Onus Adair.

The mansion, which had stood empty, wasting and forlorn for many years, had been bought by the Snow family, outsiders who were in the process of restoring it to near its former glory. So, although the Waverly area had deteriorated as a vital community, steps were already being taken to preserve its history. The mansion stands proud, almost fully restored and nationally recognized as one of the finest ante-bellum mansions of the South (Crocker 1973:xii, 129-135). With its formal gardens and well-kept lawns, it forms a sort of oasis in the now-overgrown area. Soon, 40 ac of Waverly will be incorporated into a federal recreation area. The traditional area of Waverly will go through yet another metamorphosis.

As was shown in the chapter on settlement, the history of Waverly breaks roughly into eight stages: Native American; Embryonic Village; Antebellum Plantation; Reconstruction; Initial Sharecropper, Early Tenant, Later Tenant, and Later Sharecropper. These stages reflect changes in ways of earning a living, family and social life--some subtle and some distinct. The constant throughout is that there was a community called Waverly. The people who lived there and the way they lived and arranged themselves on the landscape of Waverly has been the object of this study.

Thus, as a plantation community, Waverly experienced youth, maturity, and old age. The youthful stage of development terminated in the mid-1850s, when it had become a fully grown plantation community. During the maturation years changes were from slavery to tenancy, consignment buying through factors located at Mobile to the commissary and merchants in West Point and Columbus, and cotton produced under the watchful eye of the landowner or hired supervisor to independent tenancy. Old age which began in the 1880s was characterized by a new (largely black) landownership and declining cotton yields.

Local History

The study of Waverly is a study in local history. It reflects the small, but growing trend in American history to seek an understanding of the broad processes of American life by examining their affect upon smaller aspects of America, and by studying the local contribution to regional and national processes. This trend is somewhat radical, for instead of the traditional view of American history as a result of governmental policy and national events affecting the local citizenry, it takes the position that those national facets merely are a reflection of the combined effect of many local trends. David J. Russo (1974:3) has stated that "the basic direction of the focus of attention is clear: It will have to be steadily 'upward,' from the local to the national community." As we should have known all along, the local history is a microcosm of national history, simply seen from different vantage points. "Instead of maintaining a national perspective, we should assume moveable vantage points that take account of the levels of communities all Americans live in simultaneously: countryside or town or city, state, region, as well as nation" (Russo 1974:ix). Hence, the tenant farmer community at Waverly provides a local history, but one with broader implications. This study is one of few addressing tenant farmers within a historical context, and the only one using an ethnoarchaeological approach. Similar studies will undoubtedly follow.

The study of Waverly Plantation was conceived as a wholistic endeavor and was designed to collect and synthesize a diverse range of data about the development and adaptation of an evolving community. While we may bemoan the missing data, nevertheless we found much data on this community. We began with a much broader focus for our study, because we did not know what the archaeological research would reveal. The archaeological research centered upon the entepot nucleus for Waverly Plantation; to understand that nucleus it was necessary to obtain a broader data base and place the archaeological data in an historical perspective of the entire plantation. By broadening the data base to include nearby plantations, it also enhanced our chances of encountering mention of Waverly in the accounts of those other places. Waverly Plantation did not exist in isolation, of course. Through a network of business, marriage, and friendship, Waverly was one small, but important part of a larger group of plantations we have labelled the Waverly Locality. Within that locality was a community of planters who socialized and participated in a single redistribution network prior to the Civil War. That redistribution network centered upon the Waverly Ferry entrepot.

The Waverly Ferry entrepot consisted of Col. Young's warehouses, steamboat landing, ferry, and mill complex, all located in the study area. With the coming of the railroad west of the community in the 1850s, some of this function probably became slightly diminished. However, the prominence of the Waverly Ferry commercial area continued until the early 1890s. The planters relied upon the Henry C. Long Store to supply their tenants with merchandise and to arrange ginning and shipping of their cotton. Thus, the Waverly community, from its inception in 1836 until the 1890s, was defined by the group of white planters using this entrepot. The slave community occupied the same space as the planters and they were tied to the same networks, but not by choice. The black community of the entire 19th century was an artifact of the planters' community. With the gradual

decline of the planters' community as a result of their leaders dying, there came a concomitant change in the settlement, economic, and social systems, as the blacks labored in work gangs and sharecropping arrangements. In the late 1870s they began to undertake a greater responsibility in the land's management, when they became renting tenants.

While the white planter community was still in transition socially and economically, the blacks had developed a fairly stable tenant society which would endure another 50 years or more. Being a tenant farmer meant being tied intimately to the land as all successful farmers must be, getting to know the parcel of land, the vagaries of soils, slope, rainfall, pests, and seasons; getting to know the land so that in the worst season they could survive; saving money or establishing credit to buy equipment and learning about that credit system. The tenants were like pioneer farmers, except they lacked many of the accumulated and requisite knowledge and skills a pioneer needed. Yet the Waverly tenants survived and even prospered well enough for some to buy their own farms. The black tenant system operated at Waverly at least 60 years (ca. 1880 to ca. 1940), twice as long as slavery had been there (1833-1865).

In order to understand the tenant community, we had to study its historical antecedents to find from where the tenants came and how the plantations had developed. One of the major thrusts of this project has been to show that the plantation system did not cease with the Civil War, but instead evolved into new systems using tenant labor instead of slave labor, and eventually, machinery instead.

Tenant Farmers

Everyday life of common people has been a subject which only recently is gaining respectability among scholars. Several studies were done on tenant farmers in the 1920s and 1930s (Branson 1923 a,b,c; Thomas 1934; Woofter 1936) and recently new attention has been devoted to the subject (Ransom and Sutch 1977). These studies were devoted to socio-economic evaluations of tenant farming or pointed a finger at the evils of tenant farming. Most were negative in tone, portraying the tenant farmer as an exploited, impoverished being who lived from hand to mouth and was oppressed by the landowner. No one can deny that the greater numbers of tenant farmers were exploited and impoverished and sometimes oppressed, but they were, nonetheless, vital human beings with hopes and expectations, a distinct culture, and a system of making it through the years without either starving or having their spirits broken.

Two book-length studies of individual tenant farmers have helped humanize the abstract view of the lives of "the South's landless poor" (Maguire 1975; Rosengarten 1974). Maguire's study is of Ed Brown, a black Georgia tenant and Rosengarten's is of Nate Shaw, a black Alabama tenant. Both authors employed oral history in compiling biographies of the men. Although both offer good details on the lives of tenant farmers, they center on the men as individuals, moving from place to place, and not on the study of the interrelationship between people in one place. The oral history of Waverly offers such a study, filling a gap in the research on tenant farmers.

Waverly offered a good opportunity to study variations in tenant arrangement and the ramifications of these differences. Beginning in the late 1870s the Young brothers arranged to have black tenants work the land on a renting basis. Renting was a preferential arrangement among tenants, since it offered a good deal of independence, more so than sharecropping did. The farmer owned his own work animals and tools. He paid the landowner in part of the crop. In Waverly, the arrangement was one bale of cotton per 15 ac plot.

The rent paid for the use of the tenant's house and outbuildings, a garden spot and patches of land for corn and other staple crops. How the tenant used the land allotted to him was his own business in Waverly, as long as he produced his rent cotton. In addition, renters at Waverly were encouraged to clear "new land" in the early 20th century--that is, clear the trees out of wooded areas and create new farm land. The tenant had free use of this land for two or three years, and the advantage of being able to make a few dollars from burning the cleared trees for marketable charcoal. One black informant's description of clearing the garden patches in the woods (up to the 1930s) was identical to the slash-and-burn techniques used elsewhere in the world. At Waverly a patch would be cleared, and the trees burned to provide nutrients for the soil. That patch would be used just a few years and then abandoned.

Renters were fairly stable tenants. This fact is reported in Woofter's (1936) work on tenant farming, and evidence from Waverly is in agreement. Among the most stable renters at Waverly were the Ivy family, who worked Waverly land for over 40 years, and Abram Turner, who was there even longer. One reason why the renters were so content with Waverly was probably the benevolence of the Young brothers and the amount of independence allowed them by the absentee landlordism of the Banks in later years.

The change from independent renting to sharecropping by the 1940s was in many ways puzzling. No one connected with Waverly commented at length about the change. Hints of the owners wishing to "clean up" their land, especially the Bottoms settlement area, were made by one white informant; however, no substantial evidence was apparent that the owners ever forced any renters off their Waverly land. Yet, by 1944, the farming arrangements had been changed completely to sharecropping by whites. Several black renters had managed to buy their own land nearby; most of the rest were, by then, too old to work much land. The sheer decline of the work force may, then, have had a great deal to do with the necessity to make new arrangements for working the land. If any racial tension underlies this change, it is well hidden.

Sharecroppers did not own their own work animals and tools. Instead, they used those owned by the landowner or his agent--in the case of Waverly, John Onus Adair owned most of the equipment used. They worked the crop on a 50-50 basis. The sharecropper was a very mobile tenant, moving on and off a number of farms during his career. The turnover of white sharecroppers at Waverly is representative. The average number of years that sharecropping families stayed in Waverly was about five--a few stayed as little as one season, and only one stayed more than 15 years.

The decline in cotton production in Waverly reflected a general decline of production in the area which had begun in the 19th century, especially in the sandy soil regions. Government restrictions may have had some influence as well, as one informant suggested. Since timbering operations were still going on, and a chance to sell substantial amounts of gravel from land once used as cotton fields arose, the Banks could afford to let the cotton farming cease, it seems. In any case, the last cotton was grown in Waverly in 1957.

Everyday tenant life in Waverly in the early days (before 1910) was fairly primitive. Before 1900, few tenants had cookstoves and most cooked on the fireplace with heavy iron utensils designed for that purpose. Log houses, most of which had been built before the Civil War or soon after, were the predominant form of architecture. Many had stick and mud chimneys, since brick was expensive. According to informants, most did not have glass windows, although the sites we excavated did have glass windows. "Coal oil" (kerosene) lamps lit the houses. The tenants in this period grew or raised most of their food. The staples were pork and chicken, corn, sweet potatoes, sorghum molasses, and vegetables in season. These were supplemented by wild plants and animals. The social life of the Waverly tenants, all of whom were black in this early period, centered around the church. Informal get-togethers were also common, and families were close. The crops dictated a yearly cycle: planting in the spring, cultivating in the early summer, a rest period until the crop was ready, harvest in late summer and early fall, then finding outside work to make ends meet until spring came again. Tenants used respites from the cotton chores to improve their houses, repair tools, and do odd jobs for extra cash.

The yearly cycle of the cotton crop remained stable, but changes took place in the everyday lives of the tenants in the early 20th century. The modern convenience with the earliest impact was probably the cooking stove. Walter Ivy pointed out an incentive for buying one at that time: merchants offered a complete set of the new utensils needed to cook on one with the purchase of a new stove. Although this did not necessitate a diet change it did permit a greater variety of cooking techniques used. We suspect that the change in cooking, from fire place to stove-top, made easier the task of home canning as well.

Gradually, the necessity of adding a room to contain a stove prevailed and houses expanded. The usual response to this problem in Waverly was to build a "shed room" or lean-to addition to the back end of the house. New frame houses began to replace log houses. This presents problems for archaeologists trying to define the kitchen area in a structure, if each room in the house could be and was used as a kitchen at some point in time, as illustrated by site 22CL569.

No sentiment was afforded the historic log structures: many were in bad repair, and salvageable logs made good firewood. Indeed, the recycling of building materials was so pervasive (and the structure so unsubstantial) we were lucky to have been able to find any remains at all. Door hinges, door knobs, bricks, window panes--all were reused.

Other technological improvements during the first two decades of the 20th century included new farm machinery that made farmwork more efficient,

and the acceptance of pesticides. Mules and horses were still the power in front of the plow; cars, trucks, and tractors were owned by very few people in Waverly until the late 1930s. The people were not opposed to change: they simply were unable to afford it. An addition to a family's domestic agriculture became possible around 1930; a regular local milk run allowed the farmer to build up a small herd of dairy cattle and sell milk.

Everyday life for Waverly's white sharecroppers, who began moving in during the 1930s, was not too different from that of the black renters. The slightly more well-to-do white families had better built houses and better clothing, but most whites lived in a fashion similar to their black neighbors. One technological advantage known earlier to white farmwives was the process of canning vegetables. Whites seem also to have included beef more often in their diets. Without electricity and other modern conveniences, however, most of the old ways of doing things such as washing clothing out of doors in a big iron wash kettle, hauling water from the nearest well, and salting down and smoking meat were necessary.

Technological advances in farming--the use of tractors and increasing yield by prudent use of fertilizer--allowed the Waverly sharecroppers more time to do non-farming work. The small sawmill run by the Adairs was the universal form of alternate work in Waverly at this time. A handful of families was all that was necessary to keep the farming operations and sawmill going. Waverly's white families were close and socialized informally in each other's homes.

If the Waverly cotton production and sawmill operations had not gradually declined, and more families had stayed into the later 1950s, the installation of electricity in the area might have caused a startling change in their way of life. This change would have happened gradually. Today, the former Waverly inhabitants probably could not bear to give up the refrigerators and freezers, electric fans or air conditioners, washing machines, hot water heaters, and electric lights that they have totally adopted into their lives. Yet, most spoke of their everyday lives in the simpler days of Waverly with pride and a substantial amount of nostalgia. Food was better back then; people did not want so much, so they made do with less back then; religion was more honest back then; people got enough exercise in their daily hard work and did not have to jog back then. However, a number of people, especially black informants, felt very strongly that they have emerged from a dark age into the light since modernization began and they could take full advantage of it.

A Material View

Housing consisted of one and two room dwellings, often log, sometimes with a shed kitchen addition. Set on cypress or brick piers, these houses had catted chimneys of mud and sticks or less frequently of bricks. Their construction was expedient and upkeep was minimal. The walls and floors had cracks "you could throw a dog through." Buttons, coins, and small trash fell through the floorboards and remained for the archaeologist to find. Children and dogs played next to and under the house, leaving their playthings. Outside the houses, the yards were kept clean by hoeing or sweeping the dirt bare so bugs and varmints were kept away. Flowers like

jonquils were planted around the house, and with a few bricks scattered in the leaves today are all that mark those houses. Soon after a house was abandoned it was scavenged for usable materials.

The yard and surrounding area was kept clean of most trash for we found no trash middens, no clusters of discarded equipment or piles of trash. Pieces of these were found, but these were small, a plate fragment or broken file, things easily overlooked when dropped in the grass or swept out the door. The lack of materials bespeaks a lack of affluence, an awareness or pride of neatness, or both. Tenants spoke of burning trash or hauling it to the Bottoms. They also remembered not having that much to throw away at all, for if it would be useful it was kept. The archaeological data support both the poverty and the hauling of trash. We feel from both the lack of materials and the kind present, that these people were outside of the mainstream of American consumption patterns, even though they were certainly participants. The archaeological study of poverty has its limitations, but these can be tempered a bit through recourse to comparative data from the oral and archival sources. By combining the three viewpoints we can better evaluate what was there, and validly infer what was not.

From the store ledgers we see the extent the storekeeper was the pivot in the local economy, serving as banker, buyer, seller, and intermediary in practically every exchange, commercial and legal. Also from those ledgers we see just how marginal the tenants were in 1887-1888, with so many tenants ending one year just as they began it, in debt. We see the seasonality of purchasing, as it reflected the agricultural calendar. Plows and hoes were bought most often in the planting and cultivating period, while nails and cloth were bought during slack times in the cotton schedule. The material poverty of the tenants was seen by examining the available credit, left over after buying the necessities like food and clothing. Between 80% and 90% of purchases were for food and clothing, leaving little for other goods, including tools. Their credit was limited to the income they could be expected to generate from cotton production. The majority of items purchased would not be likely to remain archaeologically due to preservation or long life--either the item was consumed immediately by the people or it was durable enough they would not throw many away.

Despite being somewhat invisible, they nevertheless did leave a record of their living in those sites. Buttons and buckles reveal work clothing. Relatively few personal items like jewelry, watches, glasses, or adornment were found. The folk medicine mentioned in the oral history was supported by the lack of many different commercial medicines from these sites; the store ledgers indicated that only 4-6 medicine bottles a year were bought. House furnishings were not very evident, but we would expect for those to have been taken by the occupants when they left. Oral and archival data indicated that furniture would be sparse. Kitchen items were a bit more frequent, especially storage items like jugs, crocks, cans, and canning jars. But even those were not plentiful. Since 90% of the canning jars came from the Aaron Mathews site, occupied by whites after 1942, the assertion that blacks did not know how to can anything but fruit was supported. Ceramic tableware usually was plain white and was likely purchased piece-meal. Few artifacts associated with cleaning, laundry, or hygiene were found, but informants remembered making soap as late as the

1950s, a time when electricity arrived there. Only one site showed electrical artifacts, site 22CL569, and the rest were lit with coal oil lamps, judging from the lamp parts and chimneys found. While economic activities are hard to define from the archaeological remains, evidence was found of fishing and hunting equipment and gardening tools. The faunal remains show an important reliance upon wild animals for food.

We were unable to acquire more than a few photographs taken at Waverly and must use historical photographs taken elsewhere in Mississippi during the depression of the 1930s (Figures 22.2-22.5). These images fit the oral descriptions by informants and could easily have been taken at Waverly in their houses.

The Demise of Waverly

Prior to the Civil War, Waverly Plantation thrived on producing and processing of raw materials, and on the flow of goods using the steamboat landing as entrepot for the western hinterland. As Col. Young prospered, so did his neighbors who were so intimately involved with him. The war left their lands and homes unscathed and mostly removed only its labor force. Freed slaves moved away and to the north, others came to replace them, but in fewer numbers. This meant less land could be cultivated. It is tempting to suggest the ultimate of demise of Waverly stems from having too much land and too few to work it. This would have placed the landowners in a positive feedback relationship gradually eroding the capital necessary for operating plantations. But that would not be a sufficient explanation, for many other factors contributed to the demise. Waverly farmers failed to use adequate fertilizer and the soil nutrients were depleted by continually planting cotton. This was aided by the community pasture system which kept animal fertilizer from the cotton fields. In the space of three years, 1878 to 1880, three of Waverly's major leaders died and the steam mill burned. The mill was soon replaced, but what of the leaders? New landowners, both white and black, bought land changing both the demography and geography. Black landowners and tenants established credit in nearby towns, siphoning money away from the local economy. Indeed we might argue that such a centrifugal factor was a force continually causing entropy in any rural settlement, and was a force which continually must be countered by attracting outside capital via travellers, tourists, and others.

Waverly developed as an entrepot for steamboat shipping. What is the relationship between the decline of Waverly and the decline of steam traffic on the Tombigbee River? Or was the construction of the railroad in 1888 a contributing factor, with farmers circumventing Henry Long's Store and shipping directly? Long's Store closed in 1897, apparently, but why did it close? Was this a result of the same factors that caused the decline of country stores across America after 1890 (Carson 1965:275-280)? Had business declined to the point that Long could not operate at a profit or had he become sufficiently wealthy or bored or in ill health, that he gave up? He did not die then, but a decade later. Did the store burn? We have no hard evidence except that the chimney at 22CL568 was a double chimney for rooms parallel to the road, suggesting a later structure than shown on the 1888 map and remembered by informants, so there may have been a store which burned and was replaced by the tenant house. The white school closed in 1900, the post office in 1906, the rail depot in 1921, and the black school in 1957. Lastly, the automobile--the greatest single agent of culture change in America--had its impact on the community.



Figure 22.2.--Mantle of Mississippi Tenant Farmer (Library of Congress 58444 F34-32068).

Figure 22.3.--Fixing Meal (Library of Congress 58444 F34-32059).



Figure 22.4.--Kitchen Area of a Tenant House (Library of Congress 58444 F34-52289).

Figure 22.5.--Waiting in Kitchen (Library of Congress 58444 F34-31957).

CHAPTER 23. THE WAVERLY PROJECT

by William H. Adams, Timothy B. Riordan,
Steven D. Smith, and David F. Barton

"To make a sharp separation between narrative and analytic method is not at all what we are after; it is rather to fuse the two in a brighter and clearer illumination of the past."

-- H. Stuart Hughes (1964:86)

The Study

The Waverly Project fused humanistic and scientific methods and objectives in what is hopefully a "brighter and clearer illumination of the past." In keeping with scholarly tenets, we have tried to state data explicitly and not mistake opinion for fact. We have also tried to go beyond data presentation, by interpreting those data within general frameworks, whose ultimate objective may be the derivation of cultural rules. We have studied tenants at Waverly who were intrinsically interesting, but also because they provided insights into how tenants elsewhere lived, and ultimately a view of mankind.

We have tried to heed the call of several historical archaeologists in this study. J. C. Harrington's (1979) complaint on the lack of interpretation in reports, particularly contract ones, was well-founded. But in our search for new and sweeping interpretations of sites let us not forget the transitory nature of most interpretations and the permanent need for adequate data presentation. Interpretations are needed to point new avenues toward larger goals. However, we need more basic site reports, containing well-organized and well-illustrated data. Stanley South's (1977:113) pleas for quantifiable and comparable data should be followed. The responsibility to publish the data in useable form must always be paramount. Our analysis has only begun to achieve what needs to be done. We have been eclectic in our analysis and had to be. What was accomplished was finished less than a year after the fieldwork ended.

While the Waverly Project blends humanism and science, as we recently advocated (Adams 1979), this report should be considered as only a step toward those goals. We still need basic methodological strictures and theoretical objectives. The Waverly Project posed numerous questions and managed to answer many. The quality of the answers depended largely upon the available data. When we began the project we created a research design and a series of potentially answerable questions and objectives. In the course of the project, additional questions were added and some discarded as unanswerable. This chapter examines successes and failures of the project, to provide a perspective for guiding future research. After years of trying to ascertain the best ways to study extinct communities, we are not yet convinced of the best methods, but we are fairly certain of some wrong ones. This chapter reflects upon the ideas used in various components of the study, and seeks to discover how these might better have been employed to answer our questions more fully, or to phrase questions more clearly.

The ethnoarchaeological research combined three separate and related perspectives. Each perspective was employed to answer related research questions developed from the General Research Design for the Tennessee-Tombigbee Waterway. These questions and our methods were presented in Chapters 3 and 4. They centered upon five research strategies: material culture, economic systems, social systems, settlement systems, and settlement patterns. Those were discussed in Chapters 17-21. We formulated a model for plantation settlement in Chapter 4 based upon the literature, and examined the applicability of that model at Waverly, the latter necessitating a revision of the model.

In the following sections the methods of history, oral history, and archaeology are examined to reveal the successes and failures of each and to suggest ways whereby each can be used separately and jointly for greater illumination of the past.

History

The history of Waverly required a synthesis of written and oral data because we found that the historical documents were not forthcoming after the 1910s, while the oral data was sparse prior to the 1910s. Some oral data was obtained for antebellum plantation days, and some archival data was found for the 1930s, but for most purposes we view the overlap period as about 1900-1920. The last specific document on Waverly was Capt. Billy Young's Probate Estate, listing tenants and rent due in 1913. That year serves as a convenient boundary between the oral history and the history in terms of effective use and it marked the change from planter to absentee landlord supervision of tenants.

The oral research did turn up written and photographic data, often in a round-about fashion. Working through the kin system we eventually talked to a descendant of Col. Young, now living in Oklahoma who had some letters, but who referred us to a cousin in Georgia interested in family history. That cousin casually mentioned a group of letters at Duke University. So we called the archives there and obtained 32 letters written by Col. Young to Gov. James McDowell of Virginia during the 1840s. Other examples are less dramatic, but just as important.

Archival research meant two people working for two months in the state archives of Mississippi and Alabama and county libraries, archives, and courthouses for Lowndes, Clay, and Monroe Counties. Contacts or visits were made to the major southern repositories and the Library of Congress. Family members were contacted. Although the plantation had once kept voluminous records, these had been pilfered through the years as souvenirs and finally burned. Only a few plantation records, notably H. C. Long's Store ledgers for 1887-1888, have been located. Others probably survive.

The reader will probably note that we have assembled a fair amount of historical data for the periods up through Reconstruction, but after that the data wane. We do not feel this represents a lack of research or attention to the last years of the 19th and the beginning years of the 20th century. Instead we feel this results from internal changes within the Waverly community which affected the focus and visibility of data. The decline in river transport by the 1880s had diminished the importance of Waverly at a time when the plantations were being merged and also subdivided

into small black farms. Waverly had ceased being an important place. With a decrease in population, the closing of the store, post office, and railroad, Waverly by the 1920s had ceased being a place except in the minds of inhabitants. This decline in importance was apparently responsible for a decrease in the available data, either in real terms or in focus. As various functions ceased or were assumed by larger entities the focus on Waverly diminished to the point of invisibility.

Documentation is not readily available, if it exists at all, for the events transpiring during the past half century. It seems as though the absentee operation of plantations negated the recording of economic activities. Most tenants had no compelling need to keep documents or to record their their experiences. To some degree this may have been related to a lack of education, lack of free time from the labor demands of cotton, and absence of a permanent attachment to the land.

Despite a lack of focus and visibility in the later years we were still able to collect and synthesize data on the development of the economic, settlement, and social systems at Waverly Locality.

The settlement-oriented research questions were perhaps the most clearly answered, because they are the most linked to physically observable factors. The question of how the community was structured and located was best answered through comparison of the 1909 soil survey map with the development of the community by reconstructing landownership. Board of Police Minutes were helpful in determining the number and general alignment of early roads in the area. Close inspection of the Clay County Soil Survey helped answer how demography was influenced by physiography, especially soil types, but that question was too general to be answered with our data. We created detailed plat maps of landownership and settlement from Abstract of Title, Section Division, and Land Roll data for part of Clay County thereby helping to answer how the nature of the community changed.

The economic system was reasonably well defined by our research. We were able to delineate the extent of light industries, but not always their location. Operation of the sawmill, gin, brick kilns, and tannery were established in varying detail, and these were also addressed via the oral history. We were able to establish the early importance of the river shipping and the dominance of Young in the redistribution network. Later by analysis of the store ledgers we were able to characterize the pivotal role of the storekeeper in the local economy and the purchasing patterns of tenants and others at his store. These purchases were then compared to the archaeological record.

One objective was to study the racial relationships at Waverly. This is difficult to achieve, for the data are inherently biased. Letters from Young to McDowell in the 1840s provide insight into what Young said his views were, and portray him as a kind master. During Reconstruction, Billy Young was a member of an enforcing group, yet was characterized by black informants as a fair man. The oral data generally revealed harmony, and the historical data generally provided no comments. According to Loewen and Sallis (1974:162), this area of Mississippi was the major center for KKK activities, yet we could not obtain any information that problems existed at Waverly. The fact that the blacks were tenant farmers rather than

WAYERLY PLANTATION: ETHNOARCHAEOLOGY OF A TENANT
FARMING COMMUNITY(U) RESOURCE ANALYSTS INC BLOOMINGTON
IN W H ADAMS 16 DEC 80

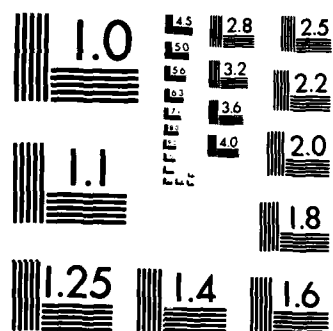
UNCLASSIFIED

F/G 8/7

NL

국립중앙도서관
중앙도서관
국립중앙
도서관

習字練習



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

sharecroppers and thus were given more flexibility and responsibility, and the fact that they were a stable community until the 1930s may be used to indicate that the Waverly area suffered less discord than elsewhere.

Oral History

Oral history, as used in the Waverly Project, forms an important research tool for the following reasons: (1) it complements the historical research by bringing the historical data up to the present; (2) it overlaps with the archival data to provide a different viewpoint; (3) it focuses on the area, sites, and people we wish to study; (4) it complements the archaeology by obtaining data on the specific sites being excavated; (5) it supplements the archaeology by providing data on analogous sites; (6) it complements the archaeology by acquiring data on those material things not likely to be found in a site.

Oral History Research Questions were drawn from the general research design and further molded into the Oral History Questionnaire. Even with pretesting, some of the questionnaire inquiries were patently clumsy or unclear to informants. Such questions as numbers 29, 37, 39, or 72 were confusing and should be reworded if used again (Appendix 2). Synthesizing informant responses into answers to the research questions was problematic. Specific dates or date ranges for changes in settlement or economic systems were often vague in informants' minds. Informants were hesitant to speculate back that far (of course, from the standpoint of accuracy, this is good).

Many settlement questions were answered in a general way and corresponded well with the archaeological and historical data. Informants were in agreement Waverly was a good place to live. People also remembered how houses and outbuildings were built and their general placement on the cultural landscape, although they rarely referred to physiographic factors like terrain and streams. Trash was either burned or hauled away. Informants did not distinguish changes in the settlement pattern other than that more rural people were moving to urban centers after the 1930s. The boundaries of Waverly and the numbers of people residing there were similarly vague in the minds of informants.

Informants had clearer perceptions of local economic systems operating at Waverly after 1910. Memories of groundhog sawmills, cotton gins, and farming and their effects on population movements were vivid. People remembered where local farm products were sold, although they obviously had no idea of where their local products ended up in regional and national networks. Several described local home industries and self-sufficient farmsteads, as well as purchases in various towns and mail service. The differences between sharecroppers and tenant farmers were known by almost every informant.

Social systems could be partially reconstructed from informant responses. Specific questions about education and religion received specific responses. School was attended a few months out of the year, squeezed between agricultural activities; almost everyone questioned attended church. The idea of place was broad-based in the minds of many; people had a strong attachment to their land. Informants, in general, valued their kin relations, their homes, whether owned or rented, religious convictions, hard work, and honesty in their dealing with others. Informal

education at home and with neighbors seemed more important than formal schooling, although schools were well-attended. Informants freely told stories of their past, many of these stories told them by their parents. These stories were expressed mainly in the form of historical and humorous anecdotes.

Taken as a whole, the oral historical information collected from the former residents of the Waverly community is a valuable record of the history of a small community. Change, as well as retention, is revealed. Patterns of life and choices available to the family and individual become apparent. Much information is given on some aspects of life in Waverly, showing their importance. Less emphasis is given by informants to matters they felt unimportant. Sometimes, however, lack of information indicates personal or controversial subject matter that the informants would rather not discuss. The researcher must be sensitive to the variations in information or lack thereof, and interpret that information accordingly.

The most complete information was recorded on the subjects of everyday life in the Waverly area. The questions asked by the researcher were designed primarily to elicit information helpful to the archaeologists, which tended to weigh the information in favor of descriptions of houses and grounds, food, clothing, disposal patterns, occupations, and tools. Yet other lines of questioning offered ample opportunity for the informant to discuss other matters: idea of place and neighborhood, social activities, religion, education and oral forms of folklore (tales, legends, jokes, nicknames, sayings and the like) about the area. To a greater or lesser extent, all of these aspects were covered in the oral information as well.

Interesting and important subjects not covered specifically in the questioning included race relation, relation of daily life to world events, and changes over a period of time. These, and other subjects, emerged from the questioning naturally in some cases, as a matter of curiosity from the researcher in other cases and not at all in a few cases. The subject of change was paid particular attention to by the informants. This subject took on many aspects: the change in Waverly's physical appearance or inhabitants of the time the informant lived there, the change in ownership of the land and mansion, and the change in means of procuring goods and travelling from place to place, and changes in farm technology. Most important to many informants, however, was the change between the way of life in "the old days" (i.e., approximately pre-electricity in the area) and today's modern world.

It is curious to examine what sorts of data informants neglected to supply. The polarities of neglected information in the Waverly oral history are, first, some of the most personal environmental facts and, second, the relation of their everyday lives to outstanding current events. Examples of the first category are the lack of recalling what furniture was contained in their houses and where it was placed, and vagueness about where they disposed of their trash. Only a few pieces of outstanding furniture were vividly remembered by informants like a new bedroom suite or fancy chiffarobe. Other pieces were generally dismissed as plain iron beds, straight back chairs, and wooden tables. Perhaps because they were such common pieces, they were disregarded. Possibly, however, the most familiar household items become so familiar they are rendered nearly invisible after using them every day for decades.

Regarding trash disposal, most informants dismissed the question with, "Well, we just threw it away, is all." Various vague answers were given to further questions. Some said they burned what they could, and did not have much else to throw out, since nearly everything that could be used again was saved. A few said they hauled their nonburnable trash to out-of-the-way places on the farm either in the Bottoms or near the river bank. But, the answers were so vague that it is nearly impossible to establish any specific disposal pattern for the area from oral information. Perhaps informants saw this as a rather personal, or else stupidly obvious question, and were either reluctant or embarrassed to answer it. The more likely reason is that people did not give disposal of trash the least thought and were hard-pressed to think of exactly what they did do with their trash while living in Waverly. Similarly, informants had difficulty remembering if they had privies, and if so, where these were located. Marley Brown (1973) noted the same problem at the Mott Farm. Again, the mundane aspects of life were easily forgotten.

Relations of their own everyday lives to major current events were few and far between. Curiosity of the researcher led to direct questions about how Waverly inhabitants fared during the Depression. The only major event commented upon naturally during the course of interviews was World War II. (One informant may have given a clue as to why this is so when she mentioned she was listening to the battery operated radio when Pearl Harbor was bombed.) The most vivid memory of World War II is the rationing of food that was enforced. Although a number of relatives, and a few former Waverly inhabitants themselves, fought in the war, little is mentioned about their service. The rationing of food during the war sometimes becomes confused with the scarcity of food during the Depression in the informants' minds; therefore, sometimes when we asked about the Depression, we received answers which actually reflected what happened a decade later. The folk, it has been suggested by Richard M. Dorson and others, have their own criteria for historic chronology which is personal and reflects important events in their own lives. The Waverly oral history evidence supports this.

Archaeology

Most of our archaeological research questions are low level, general questions seeking to derive an empirical data base to preserve for the future. This concern for preserving archaeological data has become a real problem, and one with no easy answer. What is to be preserved? How can this be done reasonably? When the recreation area is finished, the excavated sites will have their remaining areas bulldozed into parking lots and roads. Other sites will be preserved. But what of the information from these sites? The artifacts and project records will be stored at the Mississippi Department of Archives and History, so future scholars can re-examine the collections. Steps were taken to assist preservation, like "permanent" labeling of artifacts, and their placement in plastic bags with labels inside. Paper bags and paper boxes only last a few decades. Hopefully, plastic will be better. Metal artifacts had a "representative sample" selected and preserved with physical and chemical treatment. But without close supervision many artifacts will deteriorate. Now this report is also an artifact of Waverly. Will it survive? Microfilm copies of the report are with National Technical Information Service in Washington and hopefully will survive.

The empirical data were assembled to determine the very basic answer of what was to be found at Waverly. By providing archaeologists with a usable catalog of the data we hope that others may someday ask different and better questions of the data than we did. But no matter how detailed we get, someone will fault us for not including their particular topic of interest, or presenting it inadequately (for them). We tried to anticipate the criticisms of the humanists by presenting within the text, general discussions of material culture in a way that perhaps the people of Waverly themselves would understand, calling an axe, an axe. We attempted to anticipate the scientists' criticisms by presenting a material-based descriptive typology, so that their Type 1 could be correlated with our Type A01-03-09B.

We attempted to define each site on the basis of distinctive features, like aspects of architecture, fence lines, paths, roads, disposal patterns, and topography. But we did not achieve most of those goals. The reasons for this varied for each site. Our areal sample was too small to have much chance of intersecting linear features like paths. The structures were built of wood, on wooden blocks or brick piers. Recycling of building materials has a long tradition in rural society, and thus, anything remaining of use was carted off.

Site limits need to be defined for contractual purposes, but the reason behind this lies in ascertaining the boundaries so that a meaningful sampling strategy can be established. In our surface collection or excavation we may determine the practical or pragmatic site limits, beyond which archaeological research will uncover mostly negative information of where things were not located. But this is not an emic construct, necessarily. We only assume that distribution of artifacts reflects some cognitive boundary as well. Occasionally a chimney base remained to focus our attention.

Disposal patterns were examined. In the area around a structure excavation revealed the amount and kinds of trash discarded and lost there. This provided clues to the occupants' attitudes toward trash disposal. If much trash are found, then the people were: not concerned about it, had much to throw away, had a long time to discard items, or any or all of the above. But if little trash was evident, several other options are available: they may have been poor and had little to throw away; they may have been neat and discarded far from the house; they only lived there a short while; no one lived there at all; any or all of the above. Presence or absence of trash, in great or little quantity, cannot by itself indicate anything beyond its mere existence. The behavior we seek to understand can only be inferred. For example, the excavations at the Belle Scott Site produced virtually no artifacts compared to the other tenant sites. This should be expected given its original commercial function; however, oral data specified that a tenant later lived there. Hence, trash would be expected near the structure or in a dump. Finding where people discarded their trash and other waste is exceedingly difficult in a rural setting where hundreds of acres were available for use. Such activity areas lack focus and definition. Informants were vague about locations. Even when there is reasonable focus, a bluff edge or gully near a site, nothing was found. So we have stated what was found and infer that off-site trash disposal was partly responsible. But the material poverty and perhaps, just as significant archaeologically, the lack of manufactured

items probably contribute as much or more toward the general paucity of artifacts on the domestic sites. We think they were poor and did not have much, but we are left in the position of a NASA scientist discussing the Viking data: "Absence of evidence is not evidence of absence."

After every project we all ask ourselves "What would we have done differently, given the chance?" In the case of Waverly, several things come to mind in retrospect. Certainly there were lots of minor ones which would speed up the fieldwork and improve the overall efficiency and quality of the work. But these involve personnel assignments, and which squares to be excavated first and the like, none of which is very useful to others faced with similar circumstances. A few comments can be made, however.

Regarding survey, it is essential to contact the people who know the area the best and not only talk with them but also listen. At this level of effort it is not so important to ascertain what was there as what might have been there. Few informants will agree anyway.

On the mill site (22CL575) we used heavy equipment to aid our excavations. The use of heavy equipment on historical sites is the subject of a manuscript currently being prepared for publication (Adams and Dorwin 1979). We used a combination bulldozer and backhoe to strip gravel overburden from the excavation area, as well as to clear the site of small trees and brush. This worked quite well. The backhoe was also used to excavate a reported well, a brick kiln, and to dig stratigraphic trenches.

The excavation strategy worked. In retrospect, the idea of narrow slot trenches was good but impractical, due to the wooded nature of the sites. The trenches worked fairly well on the only grass covered site, 22CL569. The objectives of the trenches were to encounter features and obtain a lateral sample of artifact distribution away from the houses. In retrospect we would use the trenches in areas where roots would not be a problem, but not in forests. (We are currently experimenting with mechanical trenchers as a substitute to hand excavation in testing situations.)

The biggest mistake we made was interpreting the auger samples from the mill site as indicating the site had been quarried away in the gravel mining there. Who would suspect that beneath a meter of sterile Pleistocene gravel would be two brick buildings? The site is similar to urban sites with respect to the intensity of occupation; clearly the location on the riverbank, next to the ferry landing was so critical that land modification was economical. We do not normally associate this kind of activity with rural sites, even small rural industrial sites, but obviously now we must not be surprised to encounter it. Fortunately we went back to the site, tested it further, and found the unexpected structures.

Nine site areas investigated archaeologically included four domestic sites, three trash dumps, two industrial sites, and a specialized site of unknown function. This last site also served as a domestic site at a later date. Viewed separately these sites reveal something about individuals. The excavations at 22CL571A tell us that Ellen Mathews grew daffodils and spent considerable time and effort on her house flower garden. She went so

far as to build a decorative border of bricks around it. Excavations at 22CL575 have shown that George H. Young considered the mill complex so important that he had it rebuilt almost as soon as it cooled from the devastating fire.

However, if we view these as parts of the community we begin to see community wide patterns. These patterns are probably applicable to other tenant farming communities in the South. As an example we can look at the fate of many of Waverly structures. After being abandoned for some time, the structures were torn down and all of the useful lumber and bricks were salvaged. These were used to improve occupied structures and build new ones. This fate befell sites 22CL567, 22CL569, 22CL571A, and possibly 22CL571B, and 22CL575. It would not be surprising to find a house having parts of four other houses built into it. This has large implications for the archaeology of tenant farmers or any rural site. Identifying the shape and configuration of the dismantled house becomes even more difficult. Distributions of architectural hardware will be skewed, as will other features. Dating sites is made more difficult by this recycling and by their continual occupation.

Perhaps the most significant implication of this process is the recycling. We know objects like bricks and lumber are recycled when possible. A study of the window glass from Waverly suggests as much as a 50 year difference between the Waverly samples and a proposed dating system. One possible explanation for this would be the recycling of old window glass. How does this recycling affect non-architectural artifacts? We do not have the data to answer that question, but future studies of tenant farmer communities should be aware of these processes.

Another pattern which can be seen on a community level is the low visibility of tenant farmers. Part of this may be related to the recycling process mentioned above, but to a great extent, this is reflective of a general lack of material goods among tenant farmers. The farther one goes back in time, the less visibility these people have. Because these sites have such low visibility, they must be handled more carefully. Our testing at Waverly did not provide us with sufficient information to adequately plan the mitigation. In dealing with sites like these, an extensive Phase II testing program is essential. From several standpoints much of the trenching we did was not beneficial. It took too much time and yielded very little data. If this had been done as a testing phase operation, it would have provided most of the planning data necessary for the mitigation. Included in this project, it was more of hinderance than a help. However, despite its drawbacks, the trenching did provide valuable data on artifact distribution.

A good example of the lack of planning data is site 22CL575. The initial survey demonstrated brick rubble buried under gravel. It was assumed that this was the location of a ruined brick warehouse. A larger Phase II testing would have demonstrated this to be false. Not having this information, we planned to do minimal work at the site. As it turned out we had to negotiate for another three weeks of work.

The mitigation (Phase III) of the Waverly sites was definitely hampered by inadequate planning data. In normal circumstances a Phase I survey precedes a Phase II testing. For Waverly, a survey had been

conducted (Elliott 1978) but only on a reconnaissance level. No systematic survey of the recreation area occurred during Phase I. This meant during Phase II we had to take the most intensely occupied part of the Waverly Plantation, find all the structures within a 40 ac area, and test each, including magnetometer survey and soil sampling. We tested nine of 11 sites discovered, using 32 test units with total area of 40.5 sq m. In addition we augered site 22CL575. This meant the average was four 1x1 m units per site. This is much too low to acquire the kind of information of site size, depth, and complexity needed to plan mitigation.

Finally, the most basic conclusion derived from the excavations is that tenant farmer sites are useful for the study of social processes. As hard as it is to find the site and interpret it, the excavations at Waverly show that it can be done. It would have been interesting to have excavated around the Waverly Mansion. Certainly the site would have been easier to define and interpret, but its usefulness as a representative of the community is questionable. The tenant farmers made up the bulk of the community and they are the least known. We hope that this report, in part, rectifies this.

Ethnoarchaeology: Manipulating the Separate Realities

In the past 20 years a few studies have incorporated both oral history and ethnographic methods in the study of past settlements to complement both archaeological and historical research. For each site investigated at Waverly we found informants who had lived in the site or had visited it while the structures were in use. In each of these studies, a continuous individual model framework (Adams 1977a:137) was used in which informants who had had personal experiences at the sites as young individuals were interviewed.

A variety of cultural resource projects which may be successfully investigated through an ethnoarchaeological approach are being contemplated or have begun through the sponsorship of federal government, universities, and granting institutions. A massive burst of cultural resource energy will be spent on oral history/archaeology projects along the Tennessee Tombigbee Waterway over the next five years. Several federal agencies like the Forest Service are developing oral history contracts in response to cultural resource mandates from Washington. Universities are developing salvage folklore programs in addition to their more traditional archaeological surveys. With this large number of studies being generated, the question becomes one of how to analyze the data being collected by the folklorists, archaeologists, and historians.

The above comments have examined the three approaches that together become ethnoarchaeology. This section examines the ways in which the separate realities produced by each method were used to develop feedback to better understand the data generated by other approaches. The use of a multiple approach produces both complementary and synergistic data and means of integrating those data. We must take advantage of this ability whenever we are able to use multiple perspectives on a data set. The folk memory furnishes one perspective, the archaeology a different one, the history a third, but they can all be related.

Through the use of an ethnoarchaeological approach, the past may be constructed more fully by a team of researchers than if an archaeologist, a folklorist, or an historian studied the area separately. This synergistic approach generates feedback between the various components because each component provides a slightly diverse view of the subject. The greater the number of views, the greater the chance we can better understand it by considering the individual data sets produced as an analog of the others. As a model, an ethnographic or folk analogy helps explain an archaeological situation. Analogies are inductive, and as such can prove nothing, but only be regarded as either more, or less, acceptable statements. Many possible analogs exist for a particular archaeological thing or event; analogs are only useful to the extent to which they present new perspectives and increase the number of multiple working hypotheses. By using specific analogs the researcher must seek out the best fit among several possibilities, but the choice must be regarded as only a statement of probability.

Unlike the archival and archaeological data, which tend to be more fossilized and firm, and either present or absent, the oral data is more open-ended and dependent upon the skills of the researcher. The oral data are less circumscribed, less definite, less finite, than archival and archaeological. Each data source is finite and when researching each we keep wanting to look in one more archive and to excavate one more unit in the site, and to find one more informant. But time and funding are nearly always less than the available data. Sites are only so big and so deep, and census takers only visited in certain years, yet the human memory can be so vast that we rarely obtain but a small sample of the informant's potential.

The problem at hand is to manipulate the separate realities of the various disciplines studying a data set. The concepts of redundancy and complementarity help explain the relationship between the various approaches. Redundancy of data occurs when the folklorist, the archaeologist, or the historian uncovers or acquires data which has also been discovered by one or more of his colleagues. Although his colleague will see that data in a different light, the combination of different perspectives sheds new light on the material culture being investigated.

A second form of data is developed when information discovered in one reality or mode has no corollary in either of the other two perspectives. This involves a lack of redundancy and each perspective complements the other. In many cases in ethnoarchaeology, the data acquired from the various perspectives is complementary. Especially when studying a small community where historical records are sparse, oral history and archaeology can often complement the scanty items found in printed historical sources.

Complementarity implies that a message which is clear from one perspective is not redundant within another. Synergy refers to messages redundant within more than one perspective. One perspective may be used to flesh out questions arising about the same message viewed through another perspective. Complementary data derived from ethnoarchaeological investigations are often more prevalent than synergistic data. This is especially true when the archaeological data represent deposits which predate the memories of oral history informants and their parents or grandparents. Complementarity may even be viewed as a continuum of

perceptions from no memory to partial memory of archaeological sites. At Waverly, a 19th century industrial gin and mill foundation was discovered archaeologically. The oldest living informant (aged 86) from the Waverly community could not remember the structure or any stories from relatives or neighbors about the mid to late-19th century site. The complementarity of this situation lies in the fact that the archaeology provided a message on the sites, one largely not redundant in the oral history. The reasons for this are two-fold. First, informants were too young to remember first hand about the pre-1910 period. Second, because the buildings were gone, the focal point for maintaining a folk memory was also removed. At Waverly the mansion still stood, reminding people of it and nearby sites, but the sites themselves were too changed for informants to recognize many details. Complementarity may be viewed as a continuum of perceptions from no memory to partial memory in relation to the archaeological or historical data.

Synergistic data were also produced from Waverly. Oral history informants indicated the location of a now gone log dogtrot house at a specific location. Archaeologically, both the pens and the breezeway were reflected as rectangular soil stains.

The preceding discussion was not meant to imply that all data, or messages, from ethnoarchaeological research projects can be fit into neat categories either complementary or synergistic in nature. Much data collected from this style of research is vague; some pieces fall in the cracks.

Ethnoarchaeological research projects should be guided by certain general parameters in order to integrate the separate realities of archaeology, history, and oral history. To insure the integrity of the data collected from a combined archaeological, historical, and oral historical field studies, certain basic minimal standards should be developed. The oral history and history should be used to complement the messages found through the archaeology.

The oral history informants may be used to assist in determining archaeological locations, identifications, and functions. Their comments often help fill in the micro-histories of sites and the macro-histories of regions which have not been well documented historically. Triangulation of oral data concerning archaeological or historical topics is quite important: the more informants that agree upon a "fact," the more probability of its truth. Truth, however, remains relative.

In ethnoarchaeological community studies, it is important to locate as much primary and secondary source material concerning the economic, settlement, and social systems of a region under study. Although printed historical sources only rarely discuss the material culture of traditional, rural societies, macro-site histories may be useful in explaining economic and transportation-oriented research questions.

Ethnoarchaeology combines the viewpoints of archaeologists, folklorists, and historians. The concept of synergy explains why it is important to combine the three perspectives. By viewing the whole from a number of positions, a better overall grasp is acquired. Information theory and the concept of redundancy provide a framework in order to understand better how each message within the whole is coded and decoded by

those who view pieces of the whole. By viewing ethnoarchaeological data collected in terms of complementarity and synergy, the different realities add to each other and provide a clearer picture of the material culture remnant being viewed.

Conclusions

The Waverly project, viewed as a whole, is both a beginning and an end. It stands as an important contribution to historical archaeology and is complete in itself. As much as one would like to continue adding data and refining conclusions, there comes a time when an end must come. The data must be tied together and presented in some sort of a report. The Waverly Project is now at an end. But, as a data base, Waverly is only beginning. The data are available for comparison with other projects. It will be particularly interesting to others working along the Tombigbee but it has general interest to anyone interested in Southern history and culture.

Beyond the science, beyond the long words and numbers, beyond the tables, charts and drawings, were people. The houses did not build themselves, nor did the artifacts disperse themselves across the landscape. People worked at Waverly and worked hard. Their labors produced the material things we found. We must look beyond the material things to know the pride George Young knew when he looked at his new house or the bitterness that a slave felt when looking at the same house. We must try to feel the sore muscles of Henry Goodall as he sat before the fireplace at night or the elation of Hiram Finney when he bought his farm. This is Waverly and the closer we come to understanding this, the easier it is to understand the processes that led to the settlement and development of this small section of the Tombigbee Waterway. "Mark Twain's experience comes to mind, in which, after he had mastered the analytic knowledge needed to pilot the Mississippi River, he discovered the river had lost its beauty. Something is always killed. But what is less noticed in the arts--something is always created too" (Pirsig 1974:77). Like Mark Twain, we have tried to master a large and everchanging subject, full of shoals, snags, and beauty; we have tried to create something meaningful from the death of a Mississippi community.

References Cited

A. C. News

- 1975 Newsletter of the A. C. Spark Plug Division, Flint, Michigan.
- A. C.
n.d. Record of marks. Ms. on file with the A. C. Spark Plug Division, Flint, Michigan.
- Ackerman, Robert E.
1970 Archaeoethnology, ethnoarchaeology, and the problems of past cultural patterning. In Ethnohistory in southwestern Alaska and the southern Yukon: method and content, edited by Margaret Lantis, pp. 11-47. Studies in Anthropology 7. The University Press of Kentucky, Lexington.
- Adair, James
1930 The history of the American Indians. Johnson City, Tennessee.
- Adams, John, and Marv Adams
1978 Carnival glass: from sideshow to sideboard. In Encyclopedia of collectibles, buttons to chess sets. Time-Life Books, Alexandria, Virginia.
- Adams, William Hampton
1973 An ethnoarchaeological study of a rural American community: Silcott, Washington, 1900-1930. Ethnohistory 20(4):335-346.
1974 Preparation of line drawings from photographs. Historical Archaeology 8:112-114.
1976 Trade networks and interaction spheres--a view from Silcott. Historical Archaeology 10:99-112.
1977a Silcott, Washington: ethnoarchaeology of a rural American community. Reports of Investigations, 54. Laboratory of Anthropology, Washington State University, Pullman.
1977b History, historicity, and archaeology. Northwest Anthropological Research Notes 11(2):135-142.
1979 Historical archaeology: science and humanism. North American Archaeologist 1(1):85-96.
- Adams, William H., and Linda P. Gaw
1977 A model for determining time lag of ceramic artifacts. Northwest Anthropological Research Notes 11(2):218-231.
- Adams, William H., Linda P. Gaw, and Frank C. Leonhardt
1975 Archaeological excavations at Silcott, Washington: the data inventory. Reports of Investigations, No. 53. Laboratory of Anthropology, Washington State University, Pullman.
- Adams, William Hampton, Dale L. Martin, Jack D. Elliott, Jr., and James E. Adams
1979 Interim report: test excavations at Waverly Ferry, Clay County, Mississippi. Technical Report 1216. Report submitted to Interagency Archeological Services-Atlanta. Resource Analysts, Inc. (formerly Soil Svstems, Inc.), Bloomington, Indiana.

Adams, William Hampton, Steven D. Smith, David F. Barton, Timothy B. Riordan, and Stephen Poyser

- 1980 Bay Springs Mill: historical archaeology of a rural Mississippi cotton milling community. Ms. report submitted to Interagency Archeological Services-Atlanta. Resource Analysts, Inc. (formerly Soil Systems, Inc.), Bloomington, Indiana.

Adams, William Hampton and John T Dorwin

- 1979 The use of heavy equipment on historical sites: Waverly Plantation and Bay Springs Mill, Mississippi. Paper presented at the Southeastern Archaeological Conference, Atlanta.

Adkins, Howard G.

- 1972 The historical geography of extinct towns in Mississippi. Ph.D. dissertation, University of Tennessee. University Microfilms, Ann Arbor.
- 1973 The geographic base of urban retardation in Mississippi, 1800-1840. West Georgia College Studies in the Social Sciences 12:35-40.
- 1979 The historical geography of extinct towns in Mississippi. The Southern Quarterly 17:123-152.

Aiken, Charles S.

- 1973 The evolution of cotton ginning in the Southeastern United States. The Geographical Review 63:196-224.

Altman, Seymour and Violet Altman

- 1969 The book of Buffalo pottery. Crown, New York.

Anderson, Adrienne

- 1968 The archaeology of mass-produced footwear. Historical Archaeology 2:56-65.

Anderson, Brenda

- 1980 Personal communication from Ball Corporation, Muncie, Indiana.

Anonymous

- 1832 Map of state of Mississippi, Louisiana, and the Arkansas Territory. Department of Archives and History, Jackson.
- 1958 Dilettanti 4. Mississippi State College for Women, Columbus, Mississippi.
- 1980 Times change, and so must toys in Cracker Jack boxes. Tri-State Trader 13(6).
- n.d. Major Val Young, tribute. American Field. In possession of Mrs. Jack Shaw, West Point, Mississippi.

Applebaum, William and Saul B. Cohen

- 1970 The dynamics of store trading areas and market equilibrium. In Economic geography: selected readings, edited by Fred E. Dohrs and Lawrence M. Sommers, pp. 363-402. Thomas Y. Crowell, New York.

Armstead, R.A.

- 1881 Probate Court Estate #390, Clay County Courthouse, West Point, Mississippi.

Arnold, Lionel K.

- 1968 Introduction to plastics. Iowa State University Press, Ames.

- Ascher, Robert
1974 Tin*can archaeology. Historical Archaeology 8:7-16.
- Ascher, Robert, and Charles H. Fairbanks
1971 Excavation of a slave cabin: Georgia, U.S.A. Historical Archaeology 5:3-17.
- Atkinson, James R. and Jack D. Elliott, Jr.
1978 Nance's Ferry: a 19th century brick and lime making site, Pickens County, Alabama. Report submitted to the U. S. Army Corps of Engineers, Mobile District. Department of Anthropology, Mississippi State University, Starkville.
- Bailey, Chris H.
1975 Two hundred years of American clocks & watches. Rutledge, Prentice-Hall, Englewood Cliffs, New Jersey.
- Baird, W. David
1971 Peter Pitchlyn: chief of the Choctaws. University of Oklahoma Press, Norman, Oklahoma.
- Banks, Lucille Webb, and Anna B. A. Brown
1905 Waverly, the heart of hospitality. The Commercial Appeal. November 1, 1905, p. 14. Memphis, Tennessee.
- Barber, E. A.
1901 Anglo-American pottery, old English china with American views. Patterson and White, Philadelphia. (2nd revised and enlarged edition.)
1904 Marks of American potters. Patterson and White, Philadelphia.
- Barnard, F. A. P.
1912 Autobiographical sketch of Dr. F. A. P. Barnard. Publications of the Mississippi Historical Society 12:108-116.
- Bartovics, Albert F.
n.d. The archaeology of Daniels Village: an experiment in settlement archaeology. Ms. Preliminary dissertation draft. Brown University, Providence.
- Baskervill, Patrick Hamilton
1916 The Hamiltons of Burnside, North Carolina and their ancestors and descendents. Richmond, Virginia. Snow Collection, Waverly, Mississippi.
- Bassett, John S. (editor)
1926 Correspondence of Andrew Jackson (Vol. 2). Carnegie Institution, Washington, D.C.
- Bemrose, Geoffrey
1952 Nineteenth century English pottery and porcelain. Faber and Faber, London.
- Bense, Judith Ann
n.d. Preliminary manuscript report on the testing program, Tennessee-Tombigbee Waterway. Report submitted to the U. S. Army Corps of Engineers--Mobile.
- Berkhofer, Robert F.
1969 A behavioral approach to historical analysis. The Free Press, New York.
- Bixler, Leo
1962 Pine tar and its uses. Pennsylvania Folklife 13(3):18-23.

- Black, Glenn A.
1967 Angel Site: an archaeological, historical, and ethnological study. Indiana Historical Society, Indianapolis.
- Blake, Sylvia B.
1971 Flow blue. Wallace Hamstead, Des Moines.
- Blassingame, John W.
1972 The slave community. Oxford University Press, New York.
- Booher, Fred, and Rose Booher
n.d. Graniteware, identification and value guide. Collector Books, Schroedor Publishing, Paducah, Kentucky.
- Borden, Inc.
1980 The first 120 years of Cracker Jack. Borden, Inc., Columbus, Ohio.
- Boswell, George W.
1971 Folk recipes of the South. Mississippi Folklore Register 5:1-9.
- Bowen, Joanne
1975 Probate inventories: an evaluation from the perspective of zooarchaeology and agricultural history at the Mott Farm. Historical Archaeology 9:11-25.
- Brand Names Foundation
1947 43,000 years of public service. Brand Names Foundation, New York.
- Branson, E.C.
1923a Social occasions and contacts in a rural county. The Journal of Social Forces 1:162-163.
1923b Farm tenancy in the Cotton Belt: how farm tenants live. The Journal of Social Forces 1:213-221
1923c Farm tenancy in the Cotton Belt: the social estate of white farm tenants. The Journal of Social Forces 1:450-457.
- Briceland, Alan
1971 Ephraim Kirby: Mr. Jefferson's emissary on the Tombigbee-Mobile frontier in 1804. The Alabama Review 24:83-113.
- Bridgeman, Percy
1946 The logic of modern physics. MacMillan, New York.
- Brooks, Philip C.
1966 Comments on definitions of oral history. In The Proceedings of the First National Colloquium on Oral History. Elizabeth I. Dixon and James V. Mink, editors, Oral History Association, Inc., Los Angeles.
- Brose, David S.
1967 The Custer Road Dump Site: an exercise in Victorian archaeology. The Michigan Archaeologist 13(2):37-128.
- Brown, Marley
1973 The use of oral and documentary sources in historical archaeology: ethnohistory at the Mott Farm. Ethnohistory 204:347-360.
- Browne, Ray B.
1978 "A night with the hants" and other Alabama folk experiences. Bowling Green University Popular Press, Bowling Green, Ohio.

- Bunkley, J.K.
1943 Military and naval recognition book. D. Van Nostrand, New York.
- Burghardt, A. F.
1959 The location of river towns in the central lowland of the United States. Annals of the Association of American Geographers 49:305-323.
- Calvert, Anne Gates
1965 A history of Clay County, Mississippi prior to 1900. Unpublished M.A. Thesis, Mississippi State University.
- Campbell, Hannah
1964 Why did they name it...? Fleet, New York.
- Carline, O. G.
1896 Communication to Honorable H.D. Money, Treasury Department, April 22, 1896. Snow Collection, Waverly, Mississippi.
- Carlisle, L. T.
1925 Reminiscences of West Point and Clay County. Ms. in Bryan Public Library, West Point, Mississippi.
- Carroll, Thomas B.
1931 Historical sketches of Oktibbeha County. The Dixie Press, Gulfport, Mississippi.
- Carson, Gerald
1961 One for a man, two for a horse. Bramhall House, New York.
1965 The old country store. E. P. Dutton, New York.
- Cates, H. R.
1917 Farm practice in the cultivation of cotton. U.S. Department of Agriculture Bulletin 551, U.S. Department of Agriculture, Washington, D.C.
- Caywood, Louis
1955 Green Spring Plantation: archeological report. Colonial National Historical Park, Yorktown, Virginia.
- Chandler, M.
1968 Ceramics in the modern world. Doubleday, Garden City, New Jersey.
- Chang, K. C.
1967 Rethinking archaeology. Random House, New York.
- Chapell, Gordon T.
1949 Some patterns of land speculation in the Old Southwest. Journal of Southern History 15:463-477.
- Circular
n.d. Filed in special collections, Mississippi State University.
- Clark, Hyla M.
1977 The tin can book. New American Library, New York.
- Clark, Thomas D.
1944 Pills, petticoats and plows: the Southern country store. Bobbs-Merrill, Indianapolis.
1973 The South since Reconstruction. Bobbs-Merrill, New York.

Clay Co., Mississippi
1887 Minutes of the Chancery Court. Clay County Courthouse, West Point, Mississippi.

n.d. Clay County Abstract Books.

n.d. Clay County Board of Supervisors, 1877, 1879. Clay County Courthouse, West Point, Mississippi.

n.d. Clay County Chancery Court, West Point, Mississippi.

n.d. Clay County Deed Books, C, D, F, and 7. West Point, Mississippi.

n.d. Clay County Land Rolls, West Point, Mississippi.

n.d. Personal Property Rolls, Clay County Courthouse, West Point, Mississippi.

Clay County Leader

Clay County, Mississippi. November 1885, April 1882, January 1883, March 1888, March 1890, Clay County Courthouse, West Point.

Clews, F. H.

1969 Heavy clay technology. Academic Press, New York.

Colgate-Palmolive

1967 Chronology of the Colgate-Palmolive Company. Ms. on file in company office, Cincinnati, Ohio.

Collard, Elisabeth

1967 Nineteenth century pottery and porcelain in Canada. McGill University Press, Montreal.

Collingwood, Robin George

1946 The idea of history. Oxford University Press, New York.

Columbus and Greenville Railway Company

1915 Map V-15. On file, Columbus and Greenville Railroad Office Building, Columbus.

1928 Roadway Completion Report, January 19, 1928, Mississippi Department of Archives and History, Jackson.

1976 Round House. (Quarterly Newsletter).

Columbus Democrat

Columbus, Mississippi. Mississippi State University. November 1856, September, 1856.

Columbus Life and Insurance Company

Minutes, October 29, 1852; October 15, 1853; February 19, 1855.

Columbus Whig

1843 Columbus, Mississippi, Mississippi State University, December 1843.

Commission on Interracial Cooperation

1937 The South's landless farmers. Commission on Interracial Cooperation, Atlanta, Georgia.

Confederate Army Vouchers

n.d. Microfilm #M346, roll #1,154. National Archives, Washington, D.C.

Conwood Corporation

1975 A history of snuff. Conwood Corporation, Memphis, Tennessee.

- Crocker, Mary Wallace
1973 Historic architecture in Mississippi. University Press of Mississippi, Jackson.
- Daniels, Rosalie
1970 Folk toys and amusements of rural Mississippi children. Mississippi Folklore Register 4:68-75.
- Davis, Reuben
1890 Recollections of Mississippi and Mississippians. Houghton Mifflin, Boston.
- Debo, Angie
1961 The rise and fall of the Choctaw Republic. University of Oklahoma, Norman.
- Deetz, James
1968 The inference of residence and descent rules from archeological data. In New perspectives in archeology, edited by Sally R. Binford and Lewis R. Binford, pp. 41-48. Aldine, Chicago.
1977 In small things forgotten. Anchor, Garden City, New Jersey.
- de Caro, Francis Anthony
1972 Folklore as an "historical science:" the Anglo-American viewpoint. Unpublished Ph.D. dissertation, Department of Folklore, Indiana University.
- de Laguna, Frederica
1960 The story of a Tlingit community: a problem in the relationship between archeological, ethnological and historical methods. Bureau of American Ethnology Bulletin 172.
- Dietz, Richard F.
1980 Letter from Remington Arms Co., February 29, 1980.
- Dinan, J. V.
1975 Letter from the Director of Public Relations, A-C Spark Plug Division, with a history and chronological chart of trade marks.
- Dolphin, Richard
1977 Collecting beer cans: a world guide. Bounty Books, Crown, New York.
- Donovan, Timothy Paul
1973 Historical thought in America: postwar patterns. University of Oklahoma Press, Norman.
- Dorson, Richard M.
1971 American folklore and the historian. University of Chicago Press, Chicago.
1972 The oral historian and the folklorist. In Selections from the fifth and sixth national colloquia on oral history, 1970, 1971, edited by Peter D. Olch and Forrest C. Pogue, pp. 40-49. Oral History Association, New York.
- Doster, James F. and David C. Weaver
n.d. Historic settlement in the upper Tombigbee valley: report of a literature search. Preliminary Ms. on file at the Center for the Study of Southern History and Culture, The University of Alabama, University.

- Dubois, J. H.
 1942 Plastics. American Technical Society, Chicago.
- 1972 Plastics history U.S.A.. Gahners Books, Boston.
- East, Dennis
 1971 New York and Mississippi Land Company and the Panic of 1837. Journal of Mississippi History 33:299-331.
- Eidt, Robert C.
 1973 A rapid chemical field test for archaeological site surveying. American Antiquity 38(2):206-210.
- Eiseley, Loren C.
 1969 The unexpected universe. Harcourt Brace Jovanovich, New York.
- 1971 The night country. Charles Scribner's Sons, New York.
- 1973 The man who saw through time. Charles Scribner's Sons, New York.
- Elliott, Jack D., Jr.
 1978 A cultural resources survey of selected construction areas in the Tennessee-Tombigbee Waterway, Alabama and Mississippi, Vol. 2. Report submitted to the U.S. Army Corps of Engineers, Mobile District. Department of Anthropology, Mississippi State University, Starkville.
- 1979 A report on the locations of historic activity loci at Martin's Bluff (East Aberdeen 22Mo819), Mississippi. Report submitted by author to Interagency Archeological Services-Atlanta.
- Elliott, Suzanne W. [Spencer-Wood]
 1977 Historical archaeology and the national market: a Vermont perspective 1795-1920. Unpublished Ph.D. dissertation, University of Massachusetts, Amherst.
- Evans, D.A.
 1979 Mother Monroe: a series of historical sketches of Monroe County. Mother Monroe, Aberdeen, Mississippi
- Evans, W.A.
 1938 Val and Billy Young and Waverly, Bryan Public Library, West Point, Mississippi.
- 1939 Gaines Trace in Monroe County, Mississippi. Journal of Mississippi History 1:100-109.
- 1942 Steamboats on the Upper Tombigbee in the early days. Journal of Mississippi History 4:216-224.
- Fairbanks, Charles H.
 1974 The Kingsley Slave Cabins in Duval County, Florida, 1968. Conference on historic site archaeology papers, 1972 7:62-93.
- 1980 A nineteenth century iron reinforced tabby building. Paper presented at the 13th annual meeting of the Society for Historical Archaeology, Albuquerque.
- Farmers' Register
 1835 3:508. On file, Mississippi State University.

- Fawcett, Clara Hallard
1964 Dolls: a new guide for collectors. Charles T. Branford, Boston.
- Fewkes, Jesse W.
1900 Tusayan migration traditions. Bureau of American Ethnology, Annual Report for 1897-98, 19:577-633.
- Field Survey Map
1836 Townships 16 & 17, Ranges 6, 7, and 8 East. Clay Co. Courthouse, West Point.
- Field Notes for Clay County, Mississippi
n.d. Copies filed in Clay County Courthouse, West Point, Mississippi.
- Fields, J.
1845 Probate Court Estate #441 Lowndes County Department of Archives and History, Columbus, Mississippi.
- Firestone, Harvey S.
1922 Rubber history and its development. Indiana University Press, Bloomington.
- Flannery, Kent V.
1976 Evolution of complex settlement systems. In The early Mesoamerican village, edited by Kent V. Flannery, pp. 162-173. Academic Press, New York.
- Florence, Gene K.
1979 Collectors book of depression glass. Collectors Books, Paducah, Kentucky.
- Fogel, R. and S. Engerman
1974 Time on the cross: the economics of American Negro slavery. Little, Brown & Company, Boston.
- Fontana, Bernard L. and J. Cameron Greenleaf
1962 Johnny Ward's Ranch: a study in historic archaeology. The Kiva 28(1-2):1-115.
- Foreman, Grant
1932 Indian removal: the emigration of the five civilized tribes of Indians. University of Oklahoma Press, Norman, Oklahoma.
- Gaines, George Strother
1964 Gaines' reminiscences. Alabama Historical Quarterly 26:133-229.
- Gatchell, D.K.
1944 Know your tableware. Edwards Brothers, Ann Arbor.
- Gaw, Linda P.
1975 The availability and selection of ceramics in Silcott, Washington, 1900-1930. Northwest Anthropological Research Notes 9(1):166-179.
- Genovese, Eugene
1974 Roll, Jordan, roll. Pantheon Books, New York.
- Gibson, Arrell M.
1971 The Chickasaws. University of Oklahoma Press, Norman, Oklahoma.
1973 The Indians of Mississippi. In A History of Mississippi (Vol. 1), edited by Richard Aubrey McLemore, pp. 69-89. University and College Press of Mississippi, Hattiesburg, Mississippi.

- Gifford, J.C.
1960 The type variety method of ceramic classification as an indicator of cultural phenomena. American Antiquity 25:341-347.
- Glassie, Henry
1972 A folkloristic thought on the promise of oral history. In Selections from the fifth and sixth national colloquia on oral history, 1970, 1971, edited by Peter D. Olch and Forrest C. Pogue, pp. 54-57. Oral History Association, New York.
- Godden, Geoffrev A.
1964 Encyclopedia of British pottery and porcelain marks. Bonanza Books, New York.
- Gonzales, John Edmond
1973 Flush times, depression, war and compromise. In A History of Mississippi (Vol. 1), edited by Richard Aubrey McLemore, pp. 284-309. University and College Press of Mississippi, Hattiesburg, Mississippi.
- Gould, Richard A.
1978a Beyond analogy in ethnoarchaeology. In Explorations in ethnoarchaeology, edited by Richard Gould, pp. 249-293. School of American Research. University of New Mexico Press, Albuquerque.
1978b From Tasmania to Tucson: new directions in ethnoarchaeology. In Explorations in ethnoarchaeology, edited by Richard A. Gould, pp. 1-10. School of American Research. University of New Mexico Press, Albuquerque.
- Grav, Lewis Cecil
1958 History of agriculture in the southern United States to 1860. Peter Smith, Gloucester, Massachusetts.
- Greaser, A. and R. H. Greaser
1973 Homespun ceramics: a study of spatterware. Wallace-Homestead, Des Moines.
- Guarantee Tire and Rubber Company (G.T.R.C.)
1919 Automotive supplies catalog. Indianapolis.
- Guide to Vital Statistics Record in Mississippi
1942 Church Archives (Vol. 2). Prepared by the Mississippi Historical Record Survey Service Division, W.P.A., Mississippi Historical Records Survey, Jackson, Mississippi.
- Guilland, H.F.
1971 Early American folk pottery. Chilton, Philadelphia.
- Gunn, Larry
1971 Some slang terms of the south Mississippi sawmill industry. Mississippi Folklore Register 5:84-88.
- Gutman, Herbert C.
1976 The black family in slavery and freedom, 1750-1925. Pantheon Books, New York.
- Haley, Alex
1976 Roots. Doubleday, Garden City, New York.
- Hamilton, Alexander
1879 Probate Court Estate #349, Clay County Courthouse, West Point, Mississippi.

- Handler, Jerome S. and Frederick W. Lange
1978 Plantation slavery in Barbados: an archaeological and historical investigation. Harvard University Press, Cambridge.
- Hanson, Lee and Dick Ping Hsu
1971 Nineteenth century transfer printed earthenwares from Rome, New York. Historical Archaeology 5:74-91.
- Harrington, J. C.
1979 The importance of interpretation in historical archaeology. North American Archaeologist 1(1):75-84.
- Hassan, Fekri A.
1980 Rapid field quantificative determination of phosphate in archaeological sediments. Paper presented at the 45th annual meeting of the Society for American Archaeology, Philadelphia. xeroxed.
- Hazard, Mrs. Charles B.
1921 The old plantation home. Confederate Veteran 29.
- Henry, Robert Selph
1944 "First with the Most" Forrest. McCowat-Mercer Press Jackson, Tennessee.
- Herskovitz, Robert M.
1978 Fort Bowie material culture. Anthropological Papers of the University of Arizona 31. University of Arizona Press, Tucson.
- Higman, Barry W.
1974 A report on excavations at Montpelier and Roehampton. Jamaica Journal 8:40-45.
- Hilgard, Eugene W.
1860 Report on the geology and agriculture of the state of Mississippi. E. Barksdale, Jackson, Mississippi.

1883 Report on the cotton production of the State of Mississippi with a discussion of the general agricultural features of the state. In Miscellaneous documents of the House of Representatives for the Second Session of the Forth-Seventh Congress 1882-1883 (Vol 13). U.S. Government Printing Office, Washington, D.C.
- Historical Statistics of the United States, Colonial Times to 1957.
1957 U.S. Government Printing Office, Washington, D.C.
- Holmes, George K.
1893 The peons of the South. Annals of the American Academy of Political and Social Science 4:265-274.
- Hopkins, Edward Randolph
1935 Some reminiscences of Lowndes County History. Ms. on file, Mississippi Department of Archives and History, Jackson.
- House of Representative
1829 Journal of House of Representatives. State of Mississippi.
1830 Department of Archives and History, Jackson, Mississippi.
- Houser, John R.
1980 Letter from Public Relations--Oil Products, Shell Oil Company, March 20, 1980.

- Howard, Milo B.
1980 Letter from Director, Department of Archives and History, State of Alabama, February 25, 1980.
- Howell, George W.
1971 Monroe County and her people to February 9, 1821. Northeast Mississippi Historical Journal 4:1-52.
- Hudson, Charles
1966 Folk history and ethnohistory. Ethnohistory 13:52-69.
- Hughes, G. Bernard
1959 Victorian pottery and porcelain. Macmillan, New York.
1960 English and Scottish earthenware 1600-1860. Abby Fine Arts, London.
- Hughes, H. Stuart
1964 History as art and as science: twin vistas on the past. Harper & Row, New York.
- Hutchinson's Code of Mississippi
1798-
1848 Department of Archives and History, Jackson, Mississippi.
- Humphrey, Richard V.
1969 Clay pipes from Old Sacramento. Historical Archaeology 3:12-33.
- IAS and MDCOE (Interagency Archeological Services and Mobile District Corps of Engineers)
1977 Tennessee-Tombigbee Waterway, Alabama and Mississippi, Tombigbee River Multi-Resource District, proposed mitigation plan (3 vols.). U. S. Army Corps of Engineers, Mobile District and Interagency Archeological Services--Atlanta.
- Ingersoll, Daniel Winthrop, Jr.
1971 Settlement archaeology at Puddle Dock. Unpublished PhD dissertation, Department of Anthropology, Harvard University, Cambridge.
- Ingraham, Joseph H.
1835 The Southwest by a Yankee. Harper Publishing Company, New York.
- International Institute of Synthetic Rubber (I.I.S.R.)
1973 Synthetic rubber: the story of an industry. International Institute of Synthetic Rubber, New York.
- Jenkins, J. Geraint
1966 Traditional country craftsmen. Praeger, New York.
- Jennings, Jesse D.
1941 Chickasaw and earlier Indian cultures of northeast Mississippi. Journal of Mississippi History 3:155-226.
- Johnson, Charles S., Edwin R. Embree, and W. W. Alexander
1935 The collapse of cotton tenancy. University of North Carolina Press, Chapel Hill.
- Johnson, David F.
1948 Uniform buttons, American armed forces 1784-1948. Privately published.

- Johnston, Richard B.
1964 Proton magnetometry and its application to archaeology. Prehistory Research Series 4(2). Indiana Historical Society, Indianapolis.
- Jones, Olive
1971 Some comments on the Newman dating key. Society for Historical Archaeology Newsletter 4(3):7-13.
- Jones, Timothy
1976 Chronology of development in the tin can. Ms., Seminar in Historical Archaeology, University of Idaho.
- Kappler, Charles J.
1904 Indian affairs: laws and treaties (Vol. 2). U.S. Government Printing Office, Washington, D.C.
- Karr, Charles L. and Carroll R. Karr
1951 Remington handguns. Stackpole Publisher, Harrisburg, Pennsylvania.
- Kelley, Arthell
1973 The geography. In A History of Mississippi (Vol. I), edited by Richard Aubrey McLemore, pp. 3-23. University and College Press of Mississippi, Hattiesburg, Mississippi.
1974 Atlas of Mississippi, edited by Ralph D. Cross and Robert W. Wales, pp. 4-7. University Press of Mississippi, Jackson, Mississippi.
- Kelly, Roger E., and Marsha C. S. Kelly
1977 Brick bats for archaeologists: values of pressed brick brands. Historical Archaeology 11:84-89.
- Kendrick, Grace
1963 The antique bottle collector. Old Time Bottle Publishing, Salem, Oregon.
- Klein, Joel
1973 Models and hypothesis testing in historical archaeology. Historical Archaeology 7:68-77.
- Kottman, Arthur
1979 Insulators, colorful supports for wires. In Encyclopedia of Collectibles, Inkwells to Lace. Time-Life Books, Alexandria, Virginia.
- Kramer, Carol
1979 Introduction. In Ethnoarchaeology: implications of ethnography for archaeology, edited by Carol Kramer, pp. 1-20. Columbia University Press, New York.
- Kresge, S.S.
1913 Catalog 1913, S.S. Kresge Company. Reprinted 1975 by Random House, New York.
- Laidacker, Samuel
1951 Anglo-American china, Part II. By the author, Bristol, Pennsylvania.
- LaMotte Chemical Products Company
n.d. Instruction manual, TRL colorimeter. Chestertown, Maryland.
- Lardner, Dionysius
1832 A treatise on the progressive improvement and present state of the manufacture of porcelain and glass. Longman, Rees, Orme, Brown, and Green, London. (Reprinted 1972 by Noyes Press, Park Ridge, New Jersey.

- Larsen, Ellouise Baker
1950 American historical views on Staffordshire china. Doubleday and Co., Garden City, New Jersey. (Revised and enlarged edition.)
- Latourette, John
1839 An accurate map or delineation of the state of Mississippi. Map division, Library of Congress.
- Laws of Mississippi
1830, 1839, 1840, 1866, 1867, 1872.
- Lee, Ruth W.
1946 Early American pressed glass. Lee Publications, Wellesley Hills, Massachusetts.
- Lees, William
1979 An economic explanation of material change at Limerick Plantation, South Carolina. Conference on Historic Site Archaeology Papers 1978 13:269-285.
- Leftwich, George C.
1916 Pioneers in Mississippi. Publications of the Mississippi Historical Society. Centennial Series 1, 445-446.
- Lehner, Lois
1978 Ohio pottery and glass: marks and manufacturers. Wallace-Homestead Book Co., Des Moines, Iowa.
- Lief, Alfred
1951 The Firestone story: a history of the Firestone Tire & Rubber Company. McGraw-Hill, New York.
1965 A close-up on closures. Glass Container Manufactures Institute.
- Lincecum, Gideon
1906 Life of Apushmataha. Publications of the Mississippi Historical Society, 9:415-485.
- Linton, Ralph
1936 The study of man. D. Appleton Century, New York.
- Lipscomb, William Lowndes
1909 A history of Columbus, Mississippi. S.D. Lee Chapter of the Daughters of the Confederacy, Birmingham, Alabama.
- Little, William L.
1969 Staffordshire blue: underglaze blue transferprinted earthenware. B.T. Batsford, London.
- Loewen, James W. and Charles Sallis, editors
1974 Mississippi: conflict and change. Random House, New York.
- Logan, Herschel C.
1959 Cartridges. Stackpole Publisher, Harrisburg, Pennsylvania.
- Long, Henry C.
n.d.a Account book. Snow Collection, Waverly, Mississippi.
n.d.b Payment and receipt book. Snow Collection, Waverly, Mississippi.

- Lorrain, Dessamae
1968 An archaeologist's guide to nineteenth century American glass. Historical Archaeology 2:35-44.
- Love, William A.
1903 Lowndes County: its antiquities and early settlers. Publications of the Mississippi Historical Society 7:351-372.
1910 General Jackson's Military Road. Publications of the Mississippi Historical Society 11:390-418.
- Lowndes Co., Mississippi
Lowndes County Board of Police Minutes. 1835, 1836, 1838, 1841, 1842, 1843, 1848, 1850, 1853, 1854, 1857, 1858, 1859, 1860, 1861, 1869 Columbus, Mississippi.
1834 Lowndes County Personal Property Rolls. 1834. Department of Archives and History, Jackson, Mississippi.
n.d. Lowndes County Deed Book 12, Lowndes County Courthouse, Columbus, Mississippi.
- Lyman, Richard Lee
1977 Analysis of historic faunal remains. Historical Archaeology 11:67-73.
- Macon Beacon
1878 Microfilm on file, Mississippi State University, May, 1878.
- McDaniel, George W.
1979 Preserving a family's history: black family life, 1770-1979, on the Bennehan-Cameron Plantation. Paper presented at the American Anthropological Association Conference, Cincinnati, Ohio.
- Maguire, Jane
1975 On shares: Ed Brown's story. W. W. Norton and Company, New York.
- Marcellus, Jack
1980 Letter from Consumer/Market Research Specialist, Pattern Historian, Onieda Ltd., Silversmiths, April 15, 1980.
- Martin, Thomas
1870a Probate Court Estate #1648, Lowndes County Courthouse, Columbus, Mississippi.
1870b Will Record Book #1, Lowndes County Courthouse, Columbus, Mississippi.
- McVey, Lou Taylor
n.d. Waverly Mansion. Manuscript, Bryan Public Library, West Point, Mississippi.
- Miller, George L.
1974 A tenant farmer's tableware: nineteenth century ceramics from Tabb's Purchase. Maryland Historical Magazine 69(2):197-210.
1979 Classification and economic scaling of 19th century ceramics. Historical Archaeology 14:1-40.
- Miller, Henry M.
1979 Pettus and Utopia: a comparison of the faunal remains from two late seventeenth century Virginia households. Conference on Historic Site Archaeology Papers 1978 13:158-179.

- Miller, Henry M. and Lynne G. Lewis
 1978 Zoocultural resource utilization at a low country South Carolina plantation. Conference on Historic Site Archaeology Papers 1977 12:250-265.
- Miller, W. Frank
 1979 Remote sensing applications in archaeological investigations: Sharpley's Bottom, Vinton, Barton, and Colbert, Mississippi. Report submitted to Interagency Archeological Services--Atlanta, Mississippi State University, Starkville.
- Miller, W. Frank, and others
 1973 An ecological study of the Tennessee-Tombigbee Waterway. Mississippi State University, Starkville.
- Mobile Merchants
 1859 Microfilm on file, Mississippi State University, Vol. IV., October 26, 1859.
- Mobile Register and Journal
 Microfilm on file, Mississippi State University, Mobile, Alabama, 1845, July 1872.
- Monroe County
 n.d. Monroe County Deed Book 3, Aberdeen, Mississippi.
- Monroe County
 n.d. Monroe County Land Rolls, Aberdeen Mississippi.
- Montell, William Lynwood
 1970 The saga of Coe Ridge. University of Tennessee Press, Knoxville.
- 1972 The oral historian as folklorist. In Selections from the fifth and sixth national colloquia on oral history, 1970, 1971, edited by Peter D. Olch and Forrest C. Pogue, pp. 50-53. Oral History Association, New York.
- Montgomery Ward & Co.
 1895 Montgomery Ward & Co. Catalogue and Buyer's Guide, 1895. [Reprinted 1969 by Dover Publications, New York.]
- Moody, John
 1920-1968 Moody's industrial manual. Moody's Investment Service, New York.
- Moore, John Hebron
 1958 Agriculture in ante-bellum Mississippi. Octagon Books, New York.
- Moore, N. Hudson
 1903 The old china book, including Staffordshire, Wedgewood, Lustre, and other English pottery and porcelain. Tudor, New York.
- Moseman
 1976 Moseman's illustrated guide for purchase of horse furnishings, goods. [Reprint of 1892 edition. Arco Publishing, New York.]
- Mudar, Karen
 1978 The effects of socio-cultural variables on food preferences in early 19th century Detroit. Conference on Historic Site Archaeology Papers 1977 12:323-391.

- Mullins, Sue A.
 1979 The southern coastal plantation: view from St. Simon's Island, Georgia. Paper presented at the 12th Annual Meeting of the Society for Historical Archaeology, Nashville.
- 1980 Coastal plantations: St. Simon's Island, Georgia. Paper presented at the 13th Annual Meeting of the Society for Historical Archaeology, Albuquerque.
- Munsey, Cecil
 1970 Collecting bottles. Hawthorne Books, New York.
- 1972 The illustrated guide to the collectables of Coca Cola. Hawthorne Books, New York.
- Murdock, George Peter
 1965 Social structure. The Free Press, New York.
- Murdock, George Peter, et al.
 1945 Outline of cultural materials. Yale Anthropological Studies II, New Haven.
- Myers, Merle W.
 1948 Geography of the Mississippi Black Prairie. Unpublished Ph.D. dissertation, Department of Geography, Clark University, Worcester, Massachusetts.
- Nathans, Sydney
 1979 Fortress without walls: a black community after slavery. Paper presented at the American Anthropological Association Conference, Cincinnati, Ohio.
- Nelson, Lee H.
 1962 Nail chronology as an aid to dating old buildings. Technical Leaflet 48. American Association for State and Local History, Nashville, Tennessee.
- Neville, Bert
 1962 Directory of river packets in the Mobile-Alabama-Warrior-Tombigbee trades, 1818-1932. Selma, Alabama.
- Nevins, Allan
 1966 Oral history: how and why it was born. Wilson Library Bulletin 40:600-601.
- Noel Hume, Ivor
 1966 Excavations at Tutter's Neck in James City County, Virginia, 1960-1961. U. S. National Museum Bulletin 249. Smithsonian, Washington, D.C.
- 1969 Historical archaeology. Alfred A. Knopf, New York.
- 1970 A guide to artifacts of colonial America. Alfred A. Knopf, New York.
- 1973 Creamware to pearlware: a Williamsburg perspective. In Ceramics in America, edited by I. M. G. Quimby. University of Virginia, Charlottesville.
- Oakley, Bruce C., Jr.
 1969 A postal history of Mississippi Stampless Period, 1799-1860. Magnolia Publishers, Baldwin, Mississippi.

- Orr, J.A.
1906 A trip from Houston to Jackson, Mississippi in 1845. Publications of Mississippi Historical Society 9:173-178.
- Osgood, Cornelius
1971 The jug and related stoneware of Bennington. Charles Tuttle, Rutland, Vermont.
- Osofsky, Gilbert
1969 Puttin on ole massa. Harper & Row, New York.
- Oswalt, Wendell H.
1974 Ethnoarchaeology. In Ethnoarchaeology, edited by C. B. Donnan and C. W. Clewlow, Jr., pp. 3-11. University of California, Institute of Archaeology, Monograph 4. Los Angeles.
- Oswalt, Wendell H. and James W. VanStone
1967 The ethnoarchaeology of Crow Village, Alaska. Bureau of American Ethnology, Bulletin 199.
- Otto, John Solomon
1975 Status differences and the archaeological record: a comparison of planter, overseer, and slave sites from Cannon's Point Plantation (1794-1861, St. Simon's Island, Georgia). Ph.D. dissertation, University of Florida. University Microfilms, Ann Arbor.

1977 Artifacts and status differences: a comparison of ceramics from planter, overseer, and slave sites on an antebellum plantation. In Research strategies in historical archeology, edited by Stanley South, pp. 91-118. Academic Press, New York.
- Owlsey, Frank L.
1949 Plain folk of the Old South. Quadrangle Books, Chicago.
- P.P.A.A. (Periodical Publishers' Association of America)
1934 Nationally established trademarks. Periodical Publishers' Association of America, New York.
- Paredes, Americo
1961 Folklore and history. In Singers and storytellers, edited by Mody C. Boatright, Wilson M. Hudson, and Allen Maxwell, pp. 56-68. Southern Methodist University Press, Dallas.
- Phelps, Dawson A.
1950 The Robinson Road. Journal of Mississippi History 12:153-167.
- Phillips, Ulrich Bonnell
1918 American Negro slavery, Appleton & Co. New York.

1968 The slave economy of the Old South. Louisiana State University Press, Baton Rouge.
- Pirsig, Robert M.
1974 Zen and the art of motorcycle maintenance. Bantam Books, New York.
- Pitchlyn, John
1835 Probate Court, Estate #37. Lowndes County Department of Archives and History, Columbus, Mississippi.
- Pope, George W.
1934 Determining the age of farm animals by their teeth. Farmer's Bulletin 1066. U. S. Government Printing Office, Washington.

Postal Record

n.d. Waverly, Mississippi. Snow Collection, Waverly, Mississippi.

Pred, Allan

1964 Toward a typology of manufacturing flows. The Geographical Review 54:65-84.

1970 Toward a typology of manufacturing flows. In Economic geography: selected readings, edited by Fred E. Dohrs and Lawrence M. Sommers, pp. 267-286. Thomas Y. Crowell, New York.

Price, Beulah M. D'Olive

1972 Riving shingles in Alcorn County. Mississippi Folklore Register 6:108-114.

Price, Cynthia R.

1979 19th century ceramics in the eastern Ozark border region. Monograph Series 1. Center for Archaeological Research, Southwest Missouri State University, Springfield.

The Primitive Republican

Columbus, Mississippi June 1851; September, 1851; January, 1852; March, 1852; July, 1852: Mississippi State University.

Prout, W.E.

1975 A historical documentation of Colbert, Waverly, and Palo Alto, Mississippi. Mississippi State College for Women, Columbus Mississippi.

Prunty, Merle, Jr.

1955 The renaissance of the southern plantation. The Geographical Review 45(4):459-491.

Rainwater, Dorothy T.

1975 Encyclopaedia of American silver manufactures. Crown Publishing, New York.

Ramsay, John

1947 American potters and pottery. Tudor, New York.

Rand McNally Commercial Atlases

1890, 1920, 1940 Rand McNally & Co., Chicago.

Randall, Mark E.

1971 Early marbles. Historical Archaeology 5:102-105.

1979 Marbles as historical artifacts. Marble Collectors Society of America, Trumbull, Connecticut.

Ransom, Roger L. and Richard Sutch

1977 One kind of freedom: the economic consequences of Emancipation. Cambridge University Press, Cambridge.

Rathje, William

1978 Archaeological ethnography ... because sometimes better to give than receive. In Explorations in ethnoarchaeology, edited by Richard A. Gould, pp. 49-75. School of American Research, University of New Mexico Press, Albuquerque.

Redfield, Robert

1973 The little community and peasant society and culture. University of Chicago Press, Chicago.

Resolutions

- 1875 Resolutions of Beat No. 1. November 14, 1875. Cited in Anne Gates Calvert 1965, A history of Clay County, Mississippi prior to 1900. Unpublished M.A. Thesis, Mississippi State University.
- Rhodes, D.
1957 Clay and glazes for the potter. Chilton, Philadelphia.
- Rice, Prudence M.
1976 Rethinking the ware concept. American Antiquity 41:538-543.
- Riley, Franklin L.
1900 School history of Mississippi. B.F. Johnson Publishing Company, Richmond, Virginia.
- Riordan, Timothy B.
1977 Silcott harvest 1931: a study of the individual through archaeology. Northwest Anthropological Research Notes 11(2):232-239.

1978 Relative economic status of black and white regiments in the pre-World War I army: an example from Fort Walla Walla. Paper presented at the 31st annual Northwest Anthropological Conference, Pullman.

n.d. Historical archaeology of Fort Walla Walla. Preliminary draft, Ph. D. dissertation, Department of Anthropology, Washington State University, Pullman.
- Riordan, Timothy B., William Hampton Adams, and Steven D. Smith
1979 Archaeological investigations at Waverly Ferry, Clay Co., Mississippi: mitigation interim report. Technical report 1419. Report submitted to Interagency Archeological Services-Atlanta. Soil Systems, Inc. Bloomington, Indiana.
- Robinson, Ian H.
1979 Letter, Conwood Corporation, Memphis, Tennessee.
- Rodabough, John E.
1975 Port of Aberdeen. Aberdeen Examiner. Aberdeen, Mississippi.
- Roenke, Karl G.
1978 Flat glass: its use as a dating tool for nineteenth century archaeological sites in the Pacific Northwest and elsewhere. Northwest Anthropological Research Notes, Memoir 4.
- Romans, Bernard
1961 A concise natural history of East and West Florida. Pelican Publishing Company, New Orleans.
- Rosengarten, Theodore
1974 All God's dangers. Alfred A. Knopf, New York.
- Rowland, Dunbar
1925 History of Mississippi: the heart of the South (Vol I). The S. J. Clarke Publishing Co., Chicago.
- Rowland, Dunbar and A.G. Sanders
1927 Mississippi provincial archives 1729-1740, French Dominion (Vol. 1). Department of Archives and History, Jackson.
- Ruffin, Edmund
1860 Notes on the cane-brake lands. Richmond, Virginia.

- Russo, David J.
1974 Families and communities: a new view of American history. The American Association for State and Local History, Nashville.
- Saastamo, Susan A.
1971 The application of a functional typology in the analysis of artifacts from the excavation of Old Fort Colville, Spring, 1970. M.A. Thesis, Department of Sociology and Anthropology, University of Idaho, Moscow.
- Salaman, R. A.
1977 Dictionary of tools used in the woodworking and allied trades c. 1700-1970. Charles Scribner's Sons, New York.
- Saunders, James Edmonds
1969 Early settlers of Alabama. Genealogical Publishing Company, Baltimore
- Scarborough, William Kauffman
1966 The overseer: plantation management in the Old South. Louisiana State University, Baton Rouge, Louisiana.
1973 Heartland of the Cotton Kingdom. In A History of Mississippi (Vol. 1), edited by Richard Aubrey McLemore, pp. 310-351. University and College Press of Mississippi, Hattiesburg, Mississippi.
- Schiffer, Michael B.
1976 Behavioral archeology. Academic Press, New York.
1978 Methodological issues in ethnoarchaeology. In Exploration in ethnoarchaeology, edited by Richard A. Gould, pp. 229-247. School of American Research, University of New Mexico Press, Albuquerque.
- Schlesinger, Arthur M. Jr.
1969 A critique of the scientific hope. In The historian and the climate of opinion, edited by Robert Allen Skotheim, pp. 188-195. Addison-Wesley, Reading, Massachusetts.
- Schuyler, Robert
1974 Sandy Ground: archaeological sampling in a Black community in metropolitan New York. Conference on historic site archaeology papers 10(2):99-120.
1980 Sandy Ground: archaeology of a 19th century oystering village. In Archaeological perspectives on ethnicity in America, edited by Robert L. Schuyler, pp. 48-59. Baywood, Farmingdale, New York.
- Sears, Roebuck and Company
1902 Catalogue No III. Sears, Roebuck and Company, Chicago. [Reprinted 1969 by Bounty Books, New York.]
1906 Catalogue. Sears, Roebuck and Company, Chicago. [Reprinted 1971 by D.B.I Books, Deerfield, Illinois.]
1927 Catalogue. Sears, Roebuck and Company, Chicago.
- Seasonwein, Milton B.
1980 Letter from Schenley Industries, Inc. New York, New York,
- Schoenwetter, James, and Alfred E. Dittert, Jr.
1968 An ecological interpretation of Anasazi settlement patterns. In Anthropological archeology in the Americas, edited by Betty J. Meggers, pp. 41-66. Anthropological Society of Washington.

- Schwartz, Marvin D.
1975 Collector's guide to antique American clocks. Doubleday, Garden City, New York.
- Silvers, James W.
1944 Land speculation profits in the Chickasaw Cession. Journal of Southern History 10:84-92.
- Simpkins, Francis Butler
1959 A history of the South. Alfred A. Knopf, New York.
- Smith, Carlyle S.
1960 Cartridges and bullets from Fort Stevenson, North Dakota. Plains Anthropologist 1(1):25-29.
- Smith, J. Frazier
1941 White pillars: the architecture of the South. Bramhall House, New York.
- Smith, Samuel D.
1977 Plantation archaeology at The Hermitage: some suggested patterns. Tennessee Anthropologist 2:152-163.
- Smith, Steven D.
1979 The Villier Site: historic excavations. In Excavations at four Archaic sites in the lower Ohio Valley, Jefferson County, Kentucky, edited by Michael B. Collins. Department of Anthropology, University of Kentucky, Lexington.
- Snow Collection
n.d. Miscellaneous papers. Waverly, Mississippi.
- Solomon, Jack, and Olivia Solomon
1979 Cracklin bread and asfidity. University of Alabama Press, University, Alabama.
- Sorrels, William
1955 The lonely millionaire. The Commerical Appeal, May 22, 1955.
- South, Stanley
1964 Analysis of the buttons from Brunswick Town and Fort Fisher. Florida Anthropologist 17(2).

1972 Evolution and horizon as revealed in ceramic analysis in historical archaeology. The Conference on Historic Site Archaeology Papers 1971 6:71-116.

1974 Palmetto parapets: exploratory archeology at Fort Moultrie, South Carolina, 38CH50. Anthropological Studies 1, Institute of Archeology and Anthropology, Univerisity of South Carolina, Columbia.

1977 Method and theory in historical archeology. Academic Press, New York.
- Southern Argus
Columbus, Mississippi December 1836: October, 1837: November, 1837: January-October 1838: January 1839: February 1839: Mississippi State University.
- Southern Broad-Axe
1859 West Point, Mississippi. April, July, November 1859. Mississippi State University.

Southern Standard

Columbus, Mississippi. February-October 1851; January-December, 1852;
September-December, 1853. Mississippi State University.

Spears, James E.

- 1970 Some Negro folk pregnancy euphemisms and birth superstitions.
Mississippi Folklore Register 4:24-27.

St. Paul's Episcopal Church Parish Register

1852-

- 1910 Columbus, Mississippi. Mississippi Department of Archives and History,
Jackson.

Stamp, Kenneth

- 1956 The peculiar institution. Vintage Books, New York.

Stanislawski, Michael B.

- 1974 The relationships of ethnoarchaeology, traditional, and systems
archaeology. In Ethnoarchaeology, edited by C.B. Donnan and C.W. Clewlow,
Jr, pp. 15-26. University of California Institute of Archaeology,
Monograph 4. Los Angeles.

- 1978 If pots were mortal. In Explorations in ethnoarchaeology, edited by
Richard A. Gould, pp. 201-227. School of American Research, University
of New Mexico Press, Albuquerque.

Steward, Julian

- 1942 The direct historical approach to archaeology. American Antiquity
7:337-343.

Stiles, Daniel

- 1977 Ethnoarchaeology: a discussion of methods and applications. Man
12:87-103.

Struever, Stuart

- 1968 Problems, methods and organization: a disparity in the growth of
archeology. In Anthropological archeology in the Americas, edited by
Betty J. Meggers, pp. 131-151. Anthropological Society of Washington.

Sunny South

Aberdeen, Mississippi. October 1856; June 1857; March 1858; April 1859.
Evans Memorial Library, Aberdeen.

Swanton, John R.

- 1939 Final report of the United States DeSoto Expedition Commission. U. S.
Government Printing Office, Washington.

Svidnor, Charles Sackett

- 1933 Slavery in Mississippi. Peter Smith, Gloucester, Massachusetts.

Sykes, Eugene Lanier

- 1941 A trip to Waverly. Ms. on file, University of Mississippi, Oxford.

Tanner, H.S.

- 1836 A map of Mississippi with its roads and distances. Department of
Archives and History, Jackson.

Taynor, Marcy

- 1980 Letter from Consumer Communications Representative, Borden, Inc.,
Columbus, Ohio, May 8, 1980.

- Teague, George A. and Lynette O. Shenk
1977 Excavations at Harmony Borax Works. Publications in Anthropology 6.
National Park Service, Western Archaeological Center.
- Terkel, Louis
1970 Hard times; an oral history of the Great Depression. Pantheon Books, New York.
- Thomas, Norman
1934 The plight of the share-cropper. League for Industrial Democracy, New York.
- Thomas Register
1931-
1960 Thomas register of American manufacturers. Thomas Publishing, New York.
- Thompson, Mike L.
1980 Letter from Manager. Business Tax Bureau, Missouri Department of Revenue, February 28, 1980.
- Thompson, Stith
1955-
1958 Motif-index of folk literature (Vols. I-VI). Indiana University Press, Bloomington.
- Thoreau, Henry David
1958 Walden, or life in the woods. Harper and Row, New York.
- Thorn, C. J.
1947 Handbook of old pottery and porcelain marks. Tudor, New York.
- Toelken, Barre
1979 The dynamics of folklore. Houghton Mifflin, Boston.
- Toulouse, Julian H.
1967 When did hand bottle blowing stop? Western Collector 5(8):41-45.
1969a A primer on mold seams, part I. Western Collector 7(11):526-535.
1969b A primer on mold seams, part II. Western Collector 7(12):578-587.
1971 Bottle makers and their marks. Thomas Nelson, New York.
1977 Fruit jars. Thomas Nelson, Nashville.
- Tremont Nail Company
n.d. Pamphlet and nail samples. Tremont Nail Company, Wareham, Massachusetts.
- Trigger, Bruce
1978 Time and traditions: essays in archaeological interpretation. Columbia University Press, New York.
- Tringham, Ruth
1978 Experimentation, ethnoarchaeology, and the leap frogs in archaeological methodology. In Explorations in ethnoarchaeology, edited by Richard A. Gould, pp. 169-199. School of American Research, University of New Mexico Press, Albuquerque.
- Turner, J.A.
1969 The cotton planters manual. Negro Universities Press, New York.
(Reprint of 1857 edition, C.M. Saxton and Company, New York).

Turner, William

- 1907 Transfer printing on enamels, porcelain and pottery. Chapman and Hall, London.

Union Carbide

- 1976 Our history. Pamphlet from Union Carbide Company.

U. S. Census of Agriculture

- 1850 Mississippi, Lowndes County. Department of Archives and History, Jackson.
1860 Mississippi, Lowndes County. Department of Archives and History, Jackson.
1870 Mississippi, Lowndes County. Department of Archives and History, Jackson.
1880 Mississippi, Clay County. Department of Archives and History, Jackson.
1900 Mississippi, Clay County. Department of Archives and History, Jackson.
1910 Mississippi. U.S. Government Printing Office.

U. S. Census of Manufactures

- 1850 Mississippi, Lowndes County. Department of Archives and History, Jackson.
1880 Mississippi, Clay County. Department of Archives and History, Jackson.

U. S. Census of Population

- 1820 Population Schedules of the Fourth Census of the United States. U.S. Government Printing Office, Washington, D.C.
1830 Population Schedules of the Fifth Census of the United States, Mississippi. U.S. Government Printing Office, Washington, D.C.
1830 Slave Schedule, Georgia, Oglethorpe County. Department of Archives and History, Jackson.
1840 Free Schedule, Lowndes County. Department of Archives and History, Jackson.
1850 Slave Schedule, Lowndes County. Department of Archives and History, Jackson.
1860 Free Schedule, Lowndes County. Department of Archives and History, Jackson.
1860 Slave Schedule, Lowndes County. Department of Archives and History, Jackson.
1900 Mississippi, Clay County. Department of Archives and History, Jackson.
1910 Mississippi. U. S. Government Printing Office, Washington, D.C.

U. S. Department of Agriculture

- 1941 Climate and man. U. S. Government Printing Office, Washington, D.C.

U. S. Post Office Department

- n.d. Records of appointments of postmasters 1832-1930. Washington, D.C.
1832 Postmaster appointments for Monroe, Clay and Lowndes Counties, Mississippi. Microfilm, Department of Archives and History, Jackson, Mississippi.

- 1830- Selected pages of Mail Route Registers relating to post offices at
1862 Jackson, Columbus, Holmsvill, Leaksville. Mississippi Department of Archives and History, Jackson, Mississippi.
- U.S. Patent Office
1972 Records of patents.
- U.S. War Department
1889a The War of the Rebellion, a compilation of the official records of the Union and Confederate Armies. Serial No. 57 Washington, D.C.
1889b The War of the Rebellion, a compilation of the official records of the Union and Confederate Armies. Serial 58. Washington, D.C.
- Vila, George R.
1968 The story of Uniroyal, 75 years of progress. The Newcomer Society in North America, New York.
- von Frese, Ralph R. B. and Bruce A. Losee
1979 Report on the archaeomagnetic characteristics of the Waverly Ferry Recreation Area (Clay County, MS). In, Interim report: test excavations at Waverly Ferry, Clay County, Mississippi, by W. H. Adams, et. al. Technical Report 1216. Resource Analysts, Inc. (formerly Soil Systems, Inc.), Bloomington, Indiana.
- W. P. A. (Works Progress Administration)
1941 Slave narratives: a folk history in the United States from interviews with former slaves (Vol. 9, Mississippi). U. S. Government Printing Office, Washington.
- Wailes, B.L.C.
1854 Report on the agriculture and geology of Mississippi, embracing a sketch of the social and natural history of the state. Philadelphia.
- Wakefield, H.
1962 Victorian pottery. Thomas Nelson and Sons, New York.
- Ward, Rufus
1869 Collection, Series V folder 4. Mississippi State University.
- Waserman, Manfred J.
1975 A bibliography of oral history. Oral History Association, New York.
- Watkins, James L.
1904 The commercial cotton crops of 1900-1901, 1901-1902, and 1902-1903. U.S. Department of Agriculture, Bureau of Statistics, U.S. Government Printing Office. Bulletin No. 28.
1905 The commercial cotton crop of 1903-1904. U.S. Department of Agriculture, Bureau of Statistics, U.S. Government Printing Office. Bulletin No. 34.
1908 King Cotton: a historical and statistical review, 1790 to 1908. (Reprinted by Negro University Press, New York, 1969).
- Watkins, L. W.
1950 New England potters and their wares. Harvard University, Cambridge.
- Watkins, Thomas
1853 Probate Court Estate #752, Lowndes County Courthouse, Columbus, Mississippi.

- Watson, Patty Jo
1979 Archaeological ethnography in western Iran. Viking Fund Publications in Anthropology, 57. The University of Arizona Press, Tucson.
- Waverly Statement of Significance
n.d. Department of Archives and History, Jackson, Mississippi.
- Weatherman, Hazel M.
1974 Colored glassware of the depression era. Weatherman Glassbooks, Springfield, Missouri.
- Weaver, Herbert
1945 Mississippi farmers, 1850-1860. Vanderbilt University Press, Nashville.
- Wedgwood, Cicely Veronica
1944 William the Silent, William of Nassau, Prince of Orange 1533-1584. Yale, New Haven.
- Welsh, Mary J.
1901 Recollections of pioneer life in Mississippi. Publications of the Mississippi Historical Society 4:343-356.
- West Point Leader
West Point, Mississippi. August, 1894; February, 1901; May, 1893; January, 1907. Clay County Courthouse, West Point.
- Westbrook, Moses
1854 Probate Court Estate #776, Lowndes County Department of Archives and History, Columbus, Mississippi.
- Wetherbee, J.
1974 A handbook of white ironstone. By the author, Canajoharie, New York (mimeographed).
- Wheless, V. B.
n.d. The sales tax token in Mississippi. Sales and Use Tax Division, Mississippi State Tax Commission, Jackson.
- Whitall, Tatum & Co.
1880 Catalog. Whitall, Tatum & Co. (Reprinted 1971 by Pyne Press, Princeton).
- Wharton, Vernon Lane
1947 The Negro in Mississippi 1865-1890. The University of North Carolina Press, Chapel Hill.
- White, James M.
1902 Papers of prominent Mississippians. Publications of the Mississippi Historical Society 5:264.
- White, Newman Ivey
1952-
1964 The Frank C. Brown Collection of North Carolina folklore. Duke University Press, Durham, North Carolina.
- White, Theodore E.
1953 A method of calculating the dietary percentage of various food animals utilized by aboriginal peoples. American Antiquity 18:393-399.
- Whitlock, John B.
1980 Letter from Gerber Products Company, Fremont, Michigan.

- Whitney, J. C.
1980 Automotive parts & accessories catalog. J. C. Whitney & Co, Chicago.
- Wiggins, William H.
1974 "Free at last": a study of Afro-American emancipation celebrations. Unpublished Ph.D. dissertation, Department of Folklore, Indiana University.
- Willey, Gordon R. and Philip Phillips
1958 Method and theory in American archaeology. University of Chicago Press, Chicago.
- Williams-Wood, C.
1972 Staffordshire potlids and their potters. Faber and Faber, London.
- Wilson, Eugene M.
1974 Form changes in folk housing. Geoscience and Man 5:65-71.
1975 Alabama folk houses. Alabama Historical Commission, Montgomery.
- Winters, Howard D.
1969 The Riverton Culture. Illinois State Museum, Reports of Investigations 13. Springfield.
- Woofter, Thomas J.
1936 Landlord and tenant on the cotton plantation. Research Monograph 5. Works Progress Administration, Washington D.C.
- Worthen, E. L.
1909 Soil survey of Clay County, Mississippi (Advance Sheets) U.S. Government Printing Office, Washington, D.C.
- Yeoman, R. S.
1970 A guide book to United States coins. Western Publishing, Racine, Wisconsin.
- Yetman, Norman
1970 Life under the peculiar institution. Holt, Rhinehart & Winston, New York.
- Yoder, Don
1963 The folklife studies movement. Pennsylvania Folklife 13:43-56.
- Young, Mary Elizabeth
1961 Redskins, ruffleshirts, and rednecks: Indian allotments in Alabama and Mississippi. University of Oklahoma Press, Norman, Oklahoma.
- Young, George Hampton
Letters to James McDowell, Nov. 18, 1841; Jan. 7, 1842; April 8, 1842; July 24, 1847; May 13, 1848; Sept. 25, 1842. On file, Duke University Archives.
1849 Letter to Val Young, July, 1849.
1857 Letter to Susan Young, September 4, 1857.
- Young, Sarah Banks
1862 Letter. February, 27, 1864.
- Young, William Lowndes
1913 Probate Court Estate #2365, Clay County Courthouse, West Point, Mississippi.

Zeiner, Helen Marsh

1944 Botanical survey of the Angel Mounds Site, Evansville, Indiana.
Unpublished Ph.D. dissertation, Department of Botany and Bacteriology,
Indiana University, Bloomington.

Pages 405 through 472
are on microfiche
at back of book.

APPENDIX 7. MATERIAL CULTURE STUDIES

Introduction

After the excavations at Waverly, we were faced with an incredible mass of unorganized data. The various kinds of typologies have already been presented in Chapter 4. Those were functional, descriptive, and mixed. The functional typology was used in Chapters 17 and 18 to discuss the archaeological remains and the historical ledger data. Such discussion helps us to understand the people at the Waverly sites, but it lacks the detail necessary for comparison with sites elsewhere. To do that requires detailed artifact drawings, descriptions, and measurements. This appendix presents the typology used at Waverly and examines the various kinds of artifacts from the standpoint of technology, chronology, and production. In Appendix 8, photographs and scale drawings of artifacts are presented. These drawings were made on photographs to maintain accuracy using the photobleach method (Adams 1974). In Appendix 9, the artifacts are described in detail. A terse abbreviated style was used in the descriptions to save space; although this will inconvenience the reader initially, the system soon becomes familiar. Appendix 10 presents the distribution of artifacts by site.

The result of our efforts is a catalog of the materials recovered in the excavations. The organization of the Waverly catalog could have been more systematic and more rigorous. But we feel the catalog is presented in a usable manner. Some kinds of artifacts were organized hierarchically while other kinds simply were listed in some kind of order. Hopefully, other researchers with access to good collections of 19th and 20th century material will spend the necessary time to devise a more acceptable and comprehensive typology for those materials. For a project of Waverly's size this was simply not possible.

The first step in the analysis was to divide the artifacts into 16 materials based on their material; each has been given a capital letter designation (Table 1).

Each of these groups requires a separate typology. While most of these material groups are self-explanatory, some need clarifying. The ceramics from Waverly were divided into four materials groups because each is historically significant and we had need of more levels of distinction than in the other groups. Other groups like plastics include a wide range of materials, but archaeologists have not studied them in as great a detail as ceramics. The composition of these materials is at least as different from one to another as porcelain is from stoneware. However, we do not have the historical information necessary to make such divisions.

The material groups are discussed and defined in the following sections. The material groups are further sub-divided into classes, categories, types, and varieties. No two materials will have exactly the same typology, simply because different characteristics are important in each material.

Classes are based generally on function. This is true for all materials except the four ceramic wares. Within the ceramic materials, classes are based on description of the glaze. Classes can be broadly defined (e.g., metal kitchen equipment), or they can be more specific (e.g., glass buttons). The definition of the class is dependent on the number of artifacts assigned to that class and the amount of historical data available on those artifacts.

Categories are primarily based on description and most often on the shape of an artifact. Again, the ceramics are an exception. The categories in the ceramic materials are based on the decorative technique.

Types are generally based on technology where applicable, or on morphology. The technological aspects are most important in glass and less so in the other materials. Within the ceramic materials, types are based on vessel form.

Varieties are based exclusively on descriptive attributes. Included in this would be measurements, maker's marks, and information specific to the particular artifact. This is the most specific level of the typology. The artifact descriptions include most additional attributes.

For example, let us examine the classification of two aspirin bottles, A01-01-04A and A01-01-05B. Both are glass bottles, and as such are designated Material A, Class 01 (A01 for short). At Waverly we recognized 34 categories of bottles within Class A01. All bottles having round bodies, parallel sides, and rounded shoulders were designated Category A01-01. Within that category were 12 types. Classified as Type 04 were bottles with cup bottom mold, machine made in a two piece mold, and having a snap cap lip. They were distinguished from Type 05 on the basis of two distinctive features, lip form and absence of the suction cutoff scar. Within Type A01-01-04 four varieties were distinguished on the basis of their basemarks, while Type A01-01-05 had only two varieties.

Table 1. Waverly Materials

Material Group	N	%
A Glass	24,893	45.66%
B Porcelain	300	.55
C Stoneware	896	1.64
D Earthenware, common	94	.17
E Earthenware, refined	3,335	6.12
F Metal	23,964	43.98
G Plastic	604	1.11
H Wood	29	.05
I Bone artifacts	19	.03
J Shell artifacts	74	.14
K Leather	158	.29
L Paper	-	-
M Cloth	14	.02
N Stone	3	.00
O Rubber	101	.18
P Miscellaneous	21	.04
Total	54,495*	99.98%

* does not include metal scrap, faunal, floral material, and other miscellaneous material.

MATERIAL GROUP A: GLASS ARTIFACTS FROM WAVERLY

by Timothy B. Riordan

This section presents the glass artifacts found at Waverly, the data organization, and a discussion of the glass technology producing the artifacts.

Glass

The fusion of silica and an alkali produces glass, an inorganic, hard, brittle, non-crystalline substance. Other substances are added to this mixture, making it more durable, more or less colorful, or more workable. It is generally translucent and, almost always, transparent. The use of glass dates to ancient times and the techniques for producing glass underwent little change until the beginning of the 19th century. Technological breakthroughs in the 19th and 20th centuries have made glass products more available and less expensive. Because of this trend, glass has become one of the most abundant substances recovered from archaeological sites of this period.

The sites excavated in the proposed Waverly Ferry Access Area are typical of late period archaeological sites in this respect, with 24,883 pieces of glass recovered during the excavations. This represents 45.66% of the artifacts recovered by this project (Table 1). These were tabulated by color and fragments (6,398 or 27% of the glass) with distinctive features separated for further analysis.

Developments in glassmaking technology occurring after the mid-19th century led to an increasing standardization of the final product, evident in the glass from Waverly. Also evident is an expansion in the uses of glass during this period. Besides its function as a container, glass was put to a large number of uses including architecture, recreation, decoration, dress, lighting, and many other specialized purposes. Because of these trends, the analysis must proceed along two separate yet related lines. The study of the technology used to produce the artifacts can contribute to the general history of technology while a study of the function of an artifact can reveal data on the user of that artifact. In order to analyze such a diverse mass of data, a typology must be developed which can be specific enough to reflect small changes in technological processes and, at the same time, contain broad functional groups to aid in the analysis of the behavior of the persons using such artifacts.

Technology

The technology for making glass bottles changed rapidly in the 19th century. Since much of the typology is based on technology, a clear understanding of these processes is necessary to comprehend the divisions into types and varieties, and will also apply to the class level.

Bottle Making Technology

At the beginning of the 1800s free-blown and dip molded were the two common methods of making bottles. Free-blown glass involved the use of a blowpipe and a pontil rod. The blowpipe was used to expand the glass to the desired shape. The pontil rod was then attached to the base of the bottle

to allow the neck to be finished. This process resulted in an asymmetrical product with no mold seams but with a rough ring of glass on the bottom known as a pontil mark. By 1800, this method of bottle production was in decline (Lorrain 1968:38).

Dip molds were the second common way of producing bottles, about 1800. The mold was tapered with the larger end near the top. Glass blown into this mold conformed to the mold shape and was then finished by hand. This process produced a more symmetrical product. A pontil mark appears on the base and a mold seam often ran horizontally across the body of the bottle. Dip molds were used in the 18th century and achieved their greatest popularity between 1790 and 1810 (Lorrain 1968:38; Toulouse 1969a:530). However, dip molds continued to be used for wine bottles well into the 19th century (Toulouse 1969a:531) and, in machines, are still used to make jars.

The three-piece mold was developed in 1821 by H. Ricketts' Company of Bristol (Jones 1971:9). This consisted of a dip mold with a hinged mold on top for finishing the neck area. The lip still had to be finished by hand. According to Lorrain (1968:38) this mold was developed around 1810 and was replaced in the 1840s. Toulouse (1969b:578) stated this mold type was most common during the period 1870-1910 but our experience on 1890s to 1930s sites suggests they are not very common. Another kind of three piece mold consisted of three hinged pieces or "leaves" set, generally, 120° apart, leaving three side seams. This mold was usually reserved for art glass or highly decorated bottles (Toulouse 1969b:578). The base will have either a cup bottom or post bottom mold.

With the use of hinged molds, bottom molds became common in the 19th century. Post bottom molds are older than cup bottom molds, although both were common. Cup bottom molds are more common in machine-made bottles. Toulouse (1969b:582-583) states:

"The name 'post bottom mold' comes from the design of the bottom plate. It has a raised platform in the center of the bottom forming area and this is called the post. Its top area surface is shaped to the desired contour of the bottom of the bottle within the ring seam formed by the post. . . . [In the cup bottom mold] in contrast with the post bottom mold, the part that shapes the bottom of the bottle is cut into the bottom plate as a small depression or cup."

These two seam types are easily recognizable in all but the smallest base fragments. Bottles made using a post bottom mold will exhibit seams running down the side on the base (Figure 1). This seam will always be centered. The cup bottom mold produces seams which join a horizontal seam above the heel.

Around 1840, the two-piece hinged mold began to be used with two mold varieties. The earlier appears to be the hinged-bottom mold. This mold, as the name implies, consisted of two halves hinged at the bottom, producing a seam which extended straight across the bottom. This type of mold was in use as early as the 1750s in England (Jones 1971:9) and continued to be used into the 1880s. This mold began to replace the three-piece mold in the 1840s (Lorrain 1968:40). The second variety was the side-hinged mold. Bottles produced in this mold would exhibit either a cup or post bottom mold and had side seams running from the bottom mold seam up to the neck area.

The lip would be finished by hand, with the exception of this type, which was illustrated in Toulouse (1969a:58). However, no further information could be found concerning its use.

The need for a pontil mark was eliminated when the snap case was invented. The snap case was a tool for gripping the bottle while the neck was being finished.

"The snap case consisted of two pieces of iron, which could be clamped around the bottle. . . . The snap case usually left slight indentations on the side of the bottle, but there is no mark. If a bottle has a hand-finished neck with mold marks but no pontil mark, it can be assumed that a snap case was used" (Lorrain 1968:40).

While bottles of this type date after 1850, the presence of a pontil mark does not necessarily mean a bottle is pre-1850.

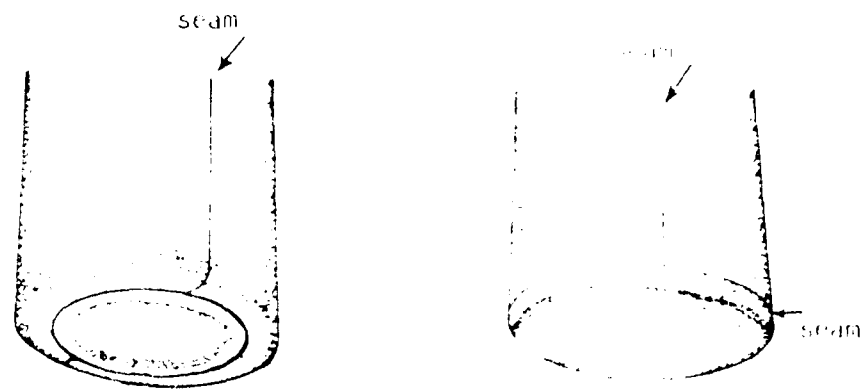


Figure 1.--Post Bottom Mold (left) and Cup Bottom Mold (right).

Another innovation, about which exists some controversy, is the development of the lipping tool (a plug in the bottleneck and two forming arms used to form the lip into a desired shape). The tool was developed in England in the 1830s and was in use in this country by the 1850s. Lorrain (1968:43) and Toulouse (1969a:58) state that the lipping tool was used in America before the 1850s.

That was the glassmaking technology of America in the mid-century. A major change had occurred from free blown bottles to machine mold bottles. During the next 30 years no major changes took place. There were additions and refinements, but the basic technology remained the same until the development of a semi-automatic bottlemaking machine occurred in 1882. That machine did not prove workable, however, until the 1890s when commercial production began on a large scale. The semi-automatic designation does not refer to the finishing process, as has been commonly assumed.

"Glass was gathered at the pot as usual, brought to the machine and a pontil was severed by a pair of shears. . . . In such a position that a 'gob' fell into a newly added blow pipe. . . . So long as glass had to be brought to the machine in this manner, the machine was called 'semi-automatic'. The 1904 patent of the Owens machine was the transfer of glass to the machine mechanically leading to the first "automatic" machine" (Toulouse 1962:41).

The only observable difference between bottles produced on a semi-automatic machine and an automatic machine would be the suction cut off scar on the base of bottles produced by an Owens patent machine (Jones 1971:9). For a long time, archaeologists dealing with this period have assumed that machine-made bottles, as we know them today, were first produced after 1903 (cf. Lorrain 1968; Teague and Shenck 1977). This is not true. Machine-made bottles could be as early as 1882, and we should consider the early 1890s as the beginning of large-scale machine bottle production. However, mold blown bottles were to remain an important part of bottle production well into the 1920s (Jones 1971:8).

Four characteristics prove conclusively a bottle was machine-made: (1) one or more circular seams on top of the finish; (2) ghost seams; (3) valve scar; (4) suction cut-off (sc) scar

Circular seams on top of the finish are important because:

"One thing almost all machines have in common is a "tip" or "plunger" which merely defines the inner throat diameter of the finish. . . . The tip necessarily contacts glass. Since to guide the tip a collar also descends into contact with the glass--therefore the junction between tip and collar leaves a seam and this seam is circular in form" (Toulouse 1969b:583).

Ghost seams result from the use of separate blank molds and finish molds during machine manufacture. They appear as faint lines paralleling mold seams but often curved or ragged. Occasionally a ghost seam will appear on the bottle base and will look like a post bottom mold seam, but the ghost seams will disappear about one quarter of the way up the body.

Valve scars are the third definite characteristic of machine-made bottles. This mark results from a machine using a dip mold to form the blank. The blank is then forced from the mold by a push-up plunger or valve. This action leaves a mark on the base of the bottle.

"Generally the diameter is from 1/2 to 7/8ths of an inch. It is most often found on wide mouth foods of the 1930s and 1940s and even later on many milk containers. The aspect is hard, i.e. strongly marked, often indented deeply enough that a fingernail may follow it as an indented groove" (Toulouse 1969b:583).

A suction cut-off scar is a definite sign of machine manufacture and also a post-1904 date. This process is part of that patented by Owens in 1904. The scar results from the shearing action necessary to stop the glass flow in an automatic bottle-making machine and appears as an irregular circle on the base of bottles. Often the edges are ragged or "feathered" due to the stress caused by the shearing action. Depending on how much expansion of the glass is necessary, a sc scar can be either "hard" or "spread." A hard sc scar will be nearly round and be confined to the base of a bottle. A spread sc scar will be more irregular and often will extend over the heel of a bottle onto the side (Toulouse 1969b:583).

Two other characteristics have been used to distinguish machine manufacture. By themselves they are of dubious usefulness. The first is the parting line or neck seam: a seam encircling the neck below the finish and indicating the finish mold was separate from the body mold. This

process was used on blown in the mold bottles as well as machine-made bottles. The earliest patent for such a process was in 1860, long before machine bottle-making (Toulouse 1969b:584). The second of these dubious characteristics is a mold seam running up to and over the lip. Lorrain (1968:43) mentions this as being a characteristic of machine-made bottles. There are bottles other than machine-made bottles having seams running up to and over the lip. Bottles exhibiting this characteristic were being produced as early as 1858 (Toulouse 1969b:583) in a blowback mold. This mold had the finish as an integral part of the mold. The glassblower would expand the glass until it began to come out of the top of the mold. It would then be broken off and polished. This can be confused with modern machine-made bottles.

This has been a brief summary of glass bottle-making in the 19th and 20th centuries. In addition, we have tried to show the attributes left on the glass by each of these processes. These attributes were used in designing the typology.

Glass Typology

This section discusses the glass typology as it was devised and used to describe function, technology, and descriptive attributes. The first division, class, is based mostly on function (Table 2). The category division is based on description and/or function. The next division, type, is based on technology and/or description. The final division into varieties is based on description.

Table 2. Glass Classes

A01 Bottles	A06 Jar Bases	A10 Closures	A14 Toys
A02 Bottle Bases	A07 Fragments	A11 No Class	A15 Electrical
A03 Bottlenecks	A08 Tableware	A12 Buttons	A16 Beads
A04 Jars	A09 Lighting	A13 Other	A17 Clothing
A05 Jar Rims			

Bottles from Waverly

A bottle is defined as a narrow necked container, as opposed to a wide-mouthed container (jar). The dividing line appears to be at 25mm, with only one exception--gallon jugs. The bottles were divided into three classes, A01 Complete Bottles, A02 Bottle Bases, and A03 Bottlenecks, to facilitate using the system (Table 2). Jars were similarly divided. A better typology could be devised by establishing the complete range of attributes for whole bottles, but this would be a very time consuming task. We had very few complete bottles from Waverly, so we developed the typology as pragmatically as possible.

Class A01: Complete Bottles

The whole bottles recovered from the Waverly sites were divided into 33 categories (Table 3). Division was made on the morphology with primary emphasis on the base shape. Whenever possible, we used designations of the bottlemakers (Whitall, Tatum & Co. 1880). Also significant at this level was the configuration of the body and shoulder areas. Descriptions and frequencies of bottle types and varieties are presented in Appendix 9.

As previously stated, types were based on technology. The technology used to produce the base was treated first, then finish technology was observed. The description of the lip finishes is also based on the Whitall, Tatum Company Catalog of 1880. Fuller descriptions of finish types and illustrations are given under Class A03: Bottlenecks.

Table 3. Class A01, Bottle Categories

A01-01	Round, sides parallel, shoulder round
A01-02	Round, sides parallel, shoulder round, vial.
A01-03	Round, sides parallel, no shoulder, vial.
A01-04	Round, sides parallel, shoulder square.
A01-05	French square, sides parallel, shoulder round.
A01-06	[null category]
A01-07	Rounded rectangular with one oval face, sides parallel, shoulder round
A01-08	Rounded rectangular, sides parallel, shoulder round.
A01-09	Rounded rectangular, sides tapering, panelled, shoulder round.
A01-10	Beveled rectangular: sides tapering, shoulder round.
A01-11	Flared rectangular, sides expanding, shoulder round.
A01-12	Beveled rectangular, sides parallel, panelled, shoulder round.
A01-13	Octangular oval, sides tapering, shoulder square.
A01-14	Narrow oval, sides parallel, shoulder round.
A01-15	Rounded rectangular, sides tapering, shoulder round.
A01-16	Rounded rectangular, sides tapering, shoulder tapered.
A01-17	Squared oval, sides parallel, shoulder round:
A01-18	Prescription, sides parallel, shoulder tapered square.
A01-19	Octangular oval, sides parallel, shoulder round.
A01-20	Double beveled prescription, sides parallel, shoulder tapered round.
A01-21	Rounded square, sides parallel, shoulder round.
A01-22	Prescription, sides parallel, shoulder tapered.
A01-23	Double beveled prescription, sides parallel, shoulder tapered square.
A01-24	Round, sides parallel, shoulder tapered.
A01-25	Square diamond, sides tapering, shoulder round.
A01-26	Half diamond-half oval, sides parallel, shoulder round.
A01-27	Hexagonal, sides tapered, shoulder square.
A01-28	Crescent, sides parallel, shoulder round.
A01-29	Milville, sides parallel, shoulder tapered round.
A01-30	Beveled rectangular with one oval face, sides parallel, shoulder tapered round.
A01-31	Square oval, sides hour glass, shoulder square.
A01-32	Double beveled prescription, sides parallel, shoulder round.
A01-33	Narrow oval, sides expanding, shoulder round.

Of a total of 83 whole or partial bottles recovered, more than half have base or sidemarks identifying the bottlemakers (Table 4). Fifteen bottles also were embossed with the name of the product or company filling the bottle (Table 5). In addition, specific information was collected on four bottles:

Table 4. Companies and Products for Waverly Routes

Company	Product	S67	S68	S71A	S71B	S72	S73	S74
Coca Cola	soda pop		2					1
Royal Crown Cola	soda pop						1	
Pepsi Cola	soda pop		1					
Nehi Beverages	soda pop		1					
Dr. Pepper	soda pop		1					
Ward's	soda pop		1					
O.C. Beverage	soda pop	1						
Moxie	soda pop			1				
C.C. Wilford	medicine						1	
Chattanooga Medicine	medicine							1
J. W. Watkins	medicine			1				
Dr. Kilmer's Swamp-Root	medicine				1			
Mansfield Drug Co.	medicine						1	
Ervin Billups	medicine				1			
D.D.D.	medicine			1				
White's Cream Vermifuge	medicine							1
Phillips' Milk of Magnesia	medicine		1					
Schenley	alcohol					1		
Dr. J. Hostetter's	bathtub				1			
L.M. Harper	alcohol		1					
H. & A. Gilley	alcohol							1
Dallemund & Co.	alcohol						1	
National Distillers	alcohol			1				
Lee & Perrine	confinement		1	1				
Duke's	confinement		1					
H. J. Boenz	confinement						1	
Sachs & Co.	food						1	
E. Hoyt	perfume			1				
Colgate & Co.	perfume			1				
Clayton Branch	cleanser		1					

Topic: Books + Manuscripts + News + Notes + Titles

Company	Date	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2423	2424	2425	2426	2427	2428	2429	2430	2431	2432	2433	2434	2435	2436	2437	2438	2439	2440	2441	2442	2443	2444	2445	2446	2447	2448	2449	2450	2451	2452	2453	2454	2455	2456	2457	2458	2459	2460	2461	2462	2463	2464	2465	2466	2467	2468	2469	2470	2471	2472	2473	2474	2475	2476	2477	2478	2479	2480	2481	2482	2483	2484	2485	2486	2487	2488	2489	2490	2491	2492	2493	2494	2495	2496	2497	2498	2499	2500	2501	2502	2503	2504	2505	2506	2507	2508	2509	2510	2511	2512	2513	2514	2515	2516	2517	2518	2519	2520	2521	2522	2523	2524	2525	2526	2527	2528	2529	2530	2531	2532	2533	2534	2535	2536	2537	2538	2539	2540	2541	2542	2543	2544	2545	2546	2547	2548	2549	2550	2551	2552	2553	2554	2555	2556	2557	2558	2559	2560	2561	2562	2563	2564	2565	2566	2567	2568	2569	2570	2571	2572	2573	2574	2575	2576	2577	2578	2579	2580	2581	2582	2583	2584	2585	2586	2587	2588	2589	2590	2591	2592	2593	2594	2595	2596	2597	2598	2599	2600	2601	2602	2603	2604	2605	2606	2607	2608	2609	2610	2611	2612	2613	2614	2615	2616	2617	2618	2619	2620	2621	2622	2623	2624	2625	2626	2627	2628	2629	2630	2631	2632	2633	2634	2635	2636	2637	2638	2639	2640	2641	2642	2643	2644	2645	2646	2647	2648	2649	2650	2651	2652	2653	2654	2655	2656	2657	2658	2659	2660	2661	2662	2663	2664	2665	2666	2667	2668	2669	2670	2671	2672	2673	2674	2675	2676	2677	2678	2679	2680	2681	2682	2683	2684	2685	2686	2687	2688	2689	2690	2691	2692	2693	2694	2695	2696	2697	2698	2699	2700	2701	2702	2703	2704	2705	2706	2707	2708	2709	2710	2711	2712	2713	2714	2715	2716	2717	2718	2719	2720	2721	2722	2723	2724	2725	2726	2727	2728	2729	2730	2731	2732	2733	2734	2735	2736	2737	2738	2739	2740	2741	2742	2743	2744	2745	2746	2747	2748	2749	2750	2751	2752	2753	2754	2755	2756	2757	2758	2759	2760	2761	2762	2763	2764	2765	2766	2767	2768	2769	2770	2771	2772	2773	2774	2775	2776	2777	2778	2779	2780	2781	2782	2783	2784	2785	2786	2787	2788	2789	2790	2791	2792	2793	2794	2795	2796	2797	2798	2799	2800	2801	2802	2803	2804	2805	2806	2807	2808	2809	2810	2811	2812	2813	2814	2815	2816	2817	2818	2819	2820	2821	2822	2823	2824	2825	2826	2827	2828	2829	2830	2831	2832	2833	2834	2835	2836	2837	2838	2839	2840	2841	2842	2843	2844	2845	2846	2847	2848	2849	2850	2851	2852	2853	2854	2855	2856	2857	2858	2859	2860	2861	2862	2863	2864	2865	2866	2867	2868	2869	2870	2871	2872	2873	2874	2875	2876	2877	2878	2879	2880	2881	2882	2883	2884	2885	2886	2887	2888	2889	2890	2891	2892	2893	2894	2895	2896	2897	2898	2899	2900	2901	2902	2903	2904	2905	2906	2907	2908	2909	2910	2911	2912	2913	2914	2915	2916	2917	2918	2919	2920	2921	2922	2923	2924	2925	2926	2927	2928	2929	2930	2931	2932	2933	2934	2935	2936	2937	2938	2939	2940	2941	2942	2943	2944	2945	2946	2947	2948	2949	2950	2951	2952	2953	2954	2955	2956	2957	2958	2959	2960	2961	2962	2963	2964	2965	2966	2967	2968	2969	2970	2971	2972	2973	2974	2975	2976	2977	2978	2979	2980	2981	2982	2983	2984	2985	2986	2987	2988	2989	2990	2991	2992	2993	2994	2995	2996	2997	2998	2999	3000	3001	3002	3003	3004	3005	3006	3007	3008	3009	3010	3011	3012	3013	3014	3015	3016	3017	3018	3019	3020	3021	3022	3023	3024	3025	3026	3027	3028	3029	3030	3031	3032	3033	3034	3035	3036	3037	3038	3039	3040	3041	3042	3043	3044	3045	3046	3047	3048	3049	3050	3051	3052	3053	3054	3055	3056	3057	3058	3059	3060	3061	3062	3063	3064	3065	3066	3067	3068	3069	3070	3071	3072	3073	3074	3075	3076	3077	3078	3079	3080	3081	3082	3083	3084	3085	3086	3087	3088	3089	3090	3091	3092	3093	3094	3095	3096	3097	3098	3099	3100	3101	3102	3103	3104	3105	3106	3107	3108	3109	3110	3111	3112	3113	3114	3115	3116	3117	3118	3119	3120	3121	3122	3123	3124	3125	3126	3127	3128	3129	3130	3131	3132	3133	3134	3135	3136	3137	3138	3139	3140	3141	3142	3143	3144	3145	3146	3147	3148	3149	3150	3151	3152	3153	3154	3155	3156	3157	3158	3159	3160	3161	3162	3163	3164	3165	3166	3167	3168	3169	3170	3171	3172	3173	3174	3175	3176	3177	3178	3179	3180	3181	3182	3183	3184	3185	3186	3187	3188	3189	3190	3191	3192	3193	3194	3195	3196	3197	3198	3199	3200	3201	3202	3203	3204	3205	3206	3207	3208	3209	3210	3211	3212	3213	3214	3215	3216	3217	3218	3219	3220	3221	3222	3223	3224	3225	3226	3227	3228	3229	3230	3231	3232	3233	3234	3235	3236	3237	3238	3239	3240	3241	3242	3243	3244	3245	3246	3247	3248	3249	3250	3251	3252	3253	3254	3255	3256	3257	3258	3259	3260	3261	3262	3263	3264	3265	3266	3267	3268	3269	3270	3271	3272	3273	3274	3275	3276	3277	3278	3279	3280	3281	3282	3283	3284	3
---------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	---

A01-07-01A bears the embossing "SCHENLEY" a trademark used for whiskey and other distilled spirits since 1890. The designation "D-9" on the base of the bottle is a permit number held by Schenley Industries, Inc. (Seasonwein 1980). This was found at 22CL571C.

A01-14-01C is embossed "I.W. HARPER", a trademark used for Kentucky Straight Bourbon Whiskey since 1872 (Seasonwein 1980). The designation "D859", apparently a permit number, may be associated with this trademark. This was found at 22CL569.

A01-14-01A bears the permit number "D-9" associated with Schenley Industries, Inc. This was found at 22CL571A.

A01-28-01A bears permit number "D23" assigned to Hiram Walker and Sons, Inc. (Anderson 1980). This was found at 22CL567.

Two other permit numbers were noted--"D-148" and "R-592"--but no information was available.

Class A02 Bottle Bases

Most of the data on glass containers recovered from the Waverly sites came in the form of fragments: bottle bases and bottlenecks. Bottle bases represent the most useful of the fragments for dating purposes. The technology used to produce the bottle bases has been outlined in the previous section. A total of 247 bottle bases was recovered from the various sites and these have been divided into 37 categories on the attribute of shape. The shape categories were set up following the Whitall, Tatum & Co. Catalog of 1880, with additions on the basis of our previous archaeological work and on geometric designs (Table 6; Figure 2). Bottlemakers were identified from 81 marks (Table 5), bottle fillers were identified from 17 embossed labels (Table 4, 7).

Specific information was collected on a number of bottle bases. The Ball Corporation of Muncie, Indiana provided their permit numbers as well as those for whom they make bottles (Anderson 1980).

"Liquor bottles can usually be dated by referring to the permit numbers assigned the brewer and the manufacturer. Ball Corporation had five assigned numbers, one for each glass plant location where these were made. Any two-digit figure shown in conjunction with a Ball permit number indicates the year the bottle was manufactured (i.e. a bottle showing 73-48 was made in Muncie, Indiana, in 1948)".

The following lists their permit numbers:

Muncie, Indiana	73	Okmulgee, Oklahoma	126
Hillsboro, Illinois	76	Asheville, North Carolina	161
Mundelein, Illinois	172		

Brewers' permit numbers provided by Ball Corporation were:

Barton	4-R-9 (Newark), D-396
James B. Beam Distilling Company	D-334
Brown-Forman Distillers Corporation	D-10
The Fleischmann Distilling Corporation	D-247
General Distilling Company	D-562 and 7-BD-56, (Bonded)
Glencoe Distilling Company	CIN-D-1
Heaven Hill Distilleries, Inc.	D-85
Merchants Distilling Corporation	D-300
Schenley Industries, Inc.	D-9
Joseph E. Seagram & Sons, Inc.	D-126
The Stonegate Distillery, Inc.	7-D-85
Hiram Walker and Sons, Inc.	D-23
Schenley (Dant)	LOU D-2
John P. Dant	7-R-27

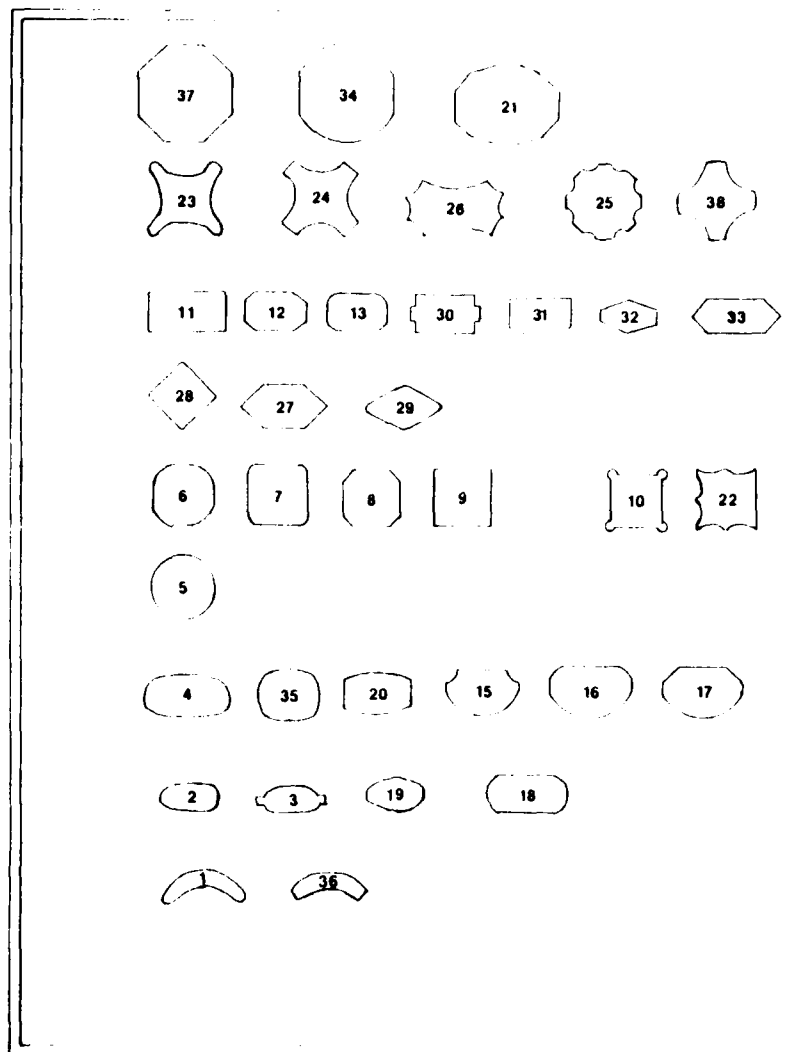


Figure 2.--Bottle Base Shapes for Class A02.

Table 6. Class A02: Bottle base Categories

A02-01	Crescent	A02-20	"Pickle" oval
A02-02	Narrow oval	A02-21	"Pickle" diehexagonal
A02-03	Union oval	A02-22	Flat extract
A02-04	Wide oval	A02-23	Extract
A02-05	Round	A02-24	Beveled extract
A02-06	Squared round	A02-25	Catsup
A02-07	Rounded square	A02-26	Fluted pepper
A02-08	French square	A02-27	Pepper
A02-09	Square	A02-28	Rhomboid
A02-10	Drake's square	A02-29	Small diamond
A02-11	Rectangular	A02-30	Union oval squared
A02-12	Beveled rectangular	A02-31	Beveled rectangular with rounded corners
A02-13	Beveled rectangular	A02-32	Square diamond
A02-14	Category No. 11	A02-33	Flared rectangular
A02-15	Fluted Prescription	A02-34	Double beveled prescription
A02-16	Beveled	A02-35	Squared oval
A02-17	Beveled prescription	A02-36	Double beveled crescent prescription
A02-18	Philadelphia oval	A02-37	Octagonal
A02-19	Flared oval	A02-38	Fluted round

Table 7. Information Derived from Brewers Permit Numbers

<u>Bottle Base</u>	<u>Permit#</u>	<u>Company</u>	<u>Ball Plant & Location</u>	<u>Year</u>
A02-02-02A	D23	Hiram Walker & Sons	73 Muncie	1940
A02-00-02F	D148			
A02-02-02C	D23	Hiram Walker & Sons	73 Muncie	1941
A02-02-02B	D460			
A02-02-02D	D2	Schenley Industries		
A02-02-02E	D9			
A02-02-02K	D10	"	"	
A02-02-02L	D9			
A02-02-02M	D9	"	"	
A02-02-02N	R803			
A02-13-06A	D126	Joseph E. Seagram & Sons	73 Muncie	1941

Class A03: Bottle Necks

The term bottle neck is used here to indicate fragments of bottles exhibiting evidence of lip finish. Commonly these fragments extend from the lip down to the shoulder area. Neck fragments without any evidence of lip form are classed under Fragments (Class A07).

In the excavations we recovered 237 whole or partial bottle necks. These were classified into 10 categories based on the shape of the lip. The primary reference for this classification was the Whitall, Tatum & Co. catalog for 1880. The bottle neck categories and types are shown in Table 8 and Figures 3 and 4. A few definitions are in order so that the distinctions between categories may be made clear:

- (1) Prescription lips have a mouth tapering from the lip to the neck hole.
- (2) Patent lips possess a lip which is flat across the top.
- (3) Ring lips have a round head of glass forming the lip. This is not the term used in the Whiteall, Tatum & Co. catalog, but it is commonly used in historical archaeology and is used here to avoid confusion.
- (4) Crown lips are adapted for the crown cap. These lips are too late in time to be mentioned in the Whitehall catalog.
- (5) Threaded lips are threaded for screw caps.
- (6) Canister lips possess a shelf for the placement of a lid. Milk bottles with cardboard lids were a familiar example.
- (7) Cork lips are tall in relation to their width. This refers to a particular finish type and not the closure's use. They are commonly found on alcoholic beverage containers. The Whitall, Tatum & Co. catalog calls these ring lips, but we chose not to confuse this with what are commonly called "ring lips."

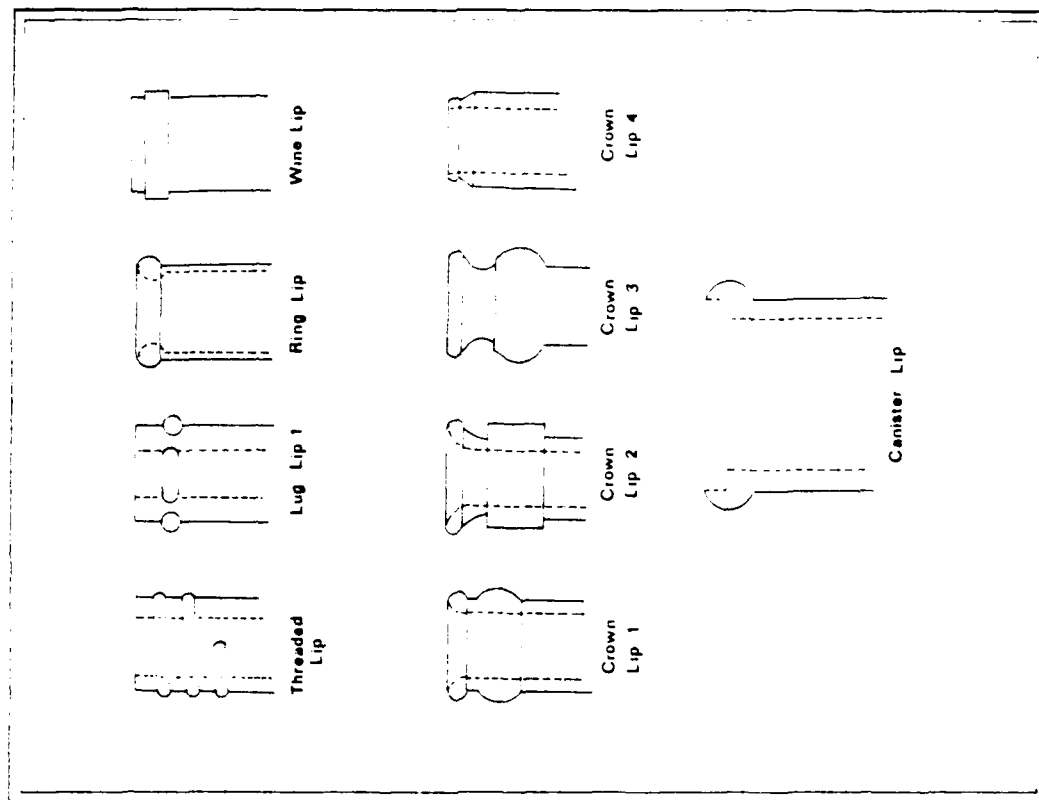
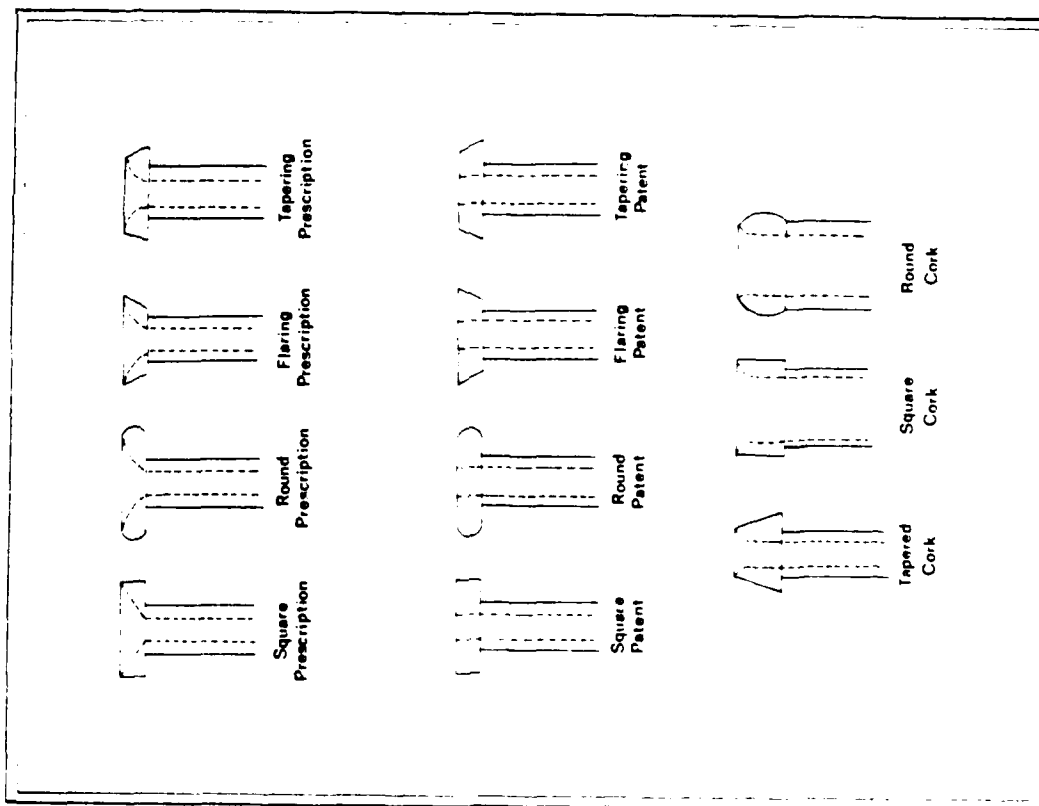


Figure 1.-Lip English Types.

- (8) Lug lips are a form of threaded lips. They have small, separate projections or "lugs" on the finish which engage a cap to hold it tight.
- (9) Wine lips have a narrow ring below the mouth where the cord is tied to hold the closure in place.

Within each category, type distinctions were made on morphology and technology. Thus, a patent lip with sides straight up and down is a square patent, and a lip with sides expanding toward the mouth is a flaring patent lip. The next important criterion was collar type. Finally technology was used as a dividing point. A generalized example of the type distinctions is shown on Figure 4.

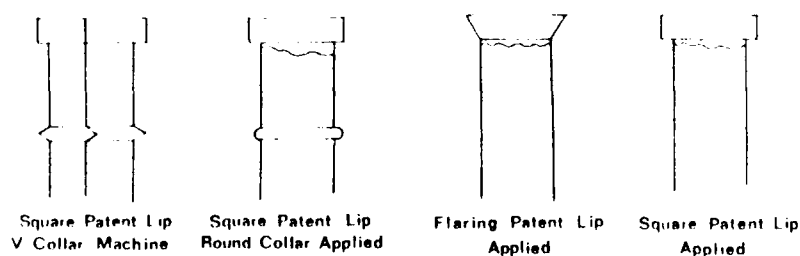


Figure 4.--Generalized Type Distinctions for Bottle Necks.

Table 8. Class A03: Bottleneck Categories

1) Prescription Lip	6) Canister Lip
2) Patent Lip	7) Miscellaneous
3) Ring (round) Lip	8) Cork Lip
4) Crown Lip	9) Lug Lip
5) Threaded Lip	10) Wine Lip

The bottle necks provide only limited information on dating the sites or on the products contained within the bottles. We realize some authors have tried to assign a function to specific lip finishes, but have seen enough exceptions to these rules to conclude this would be of limited value. It may be possible that the percentage of each bottleneck category present at a site changes through time. Certainly crown lips will not be found dating before 1892 (Lief 1965:17). The data from Waverly is suggestive (Figure 5) but further comparative work needs to be done.

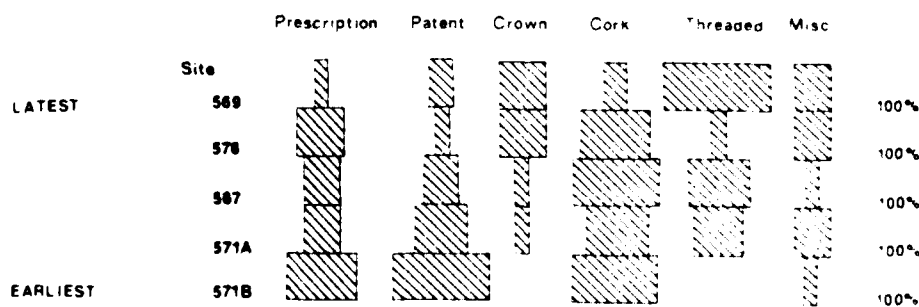


Figure 5.--Percentage of Bottle Necks by Category.

Class A04: Jars

A jar is defined as a wide mouthed container. A separation appears to exist between bottles and jars on the criterion of mouth diameter and the dividing line is 25 mm.

The technology used to produce the jars recovered at Waverly did not differ from that used to produce the bottles. Many of the terms applied to the bottles are used to describe the jars. However, jar closures underwent major changes in the 19th and 20th centuries. In order to understand the typology, we must first understand the development of this new technology.

Jar Closures

The first modern jar with a practical closure was developed by John L. Mason and patented in 1858.

"Mason's idea was to start a diagonal thread slightly below the top and let it vanish before reaching the shoulder. When the cap was screwed down, its rim imprisoned the rubber. What he achieved was a strong seal on the shoulder" (Lief 1965:12).

After the success of the original Mason jar, jar technology began to progress rapidly. Lewis R. Boyd patented (1869) a glass liner for the zinc caps to prevent contact of metal with the contents. A new closure was developed in 1882 by Henry W. Putnam. Termed a "Lightening Fastener," this closure consists of a glass cap held in place by a wire bail. The wire bail is connected to a lever device attached to the neck. This closure had the advantage of allowing the hot air to vent from the jar before closing.

The first commercially acceptable jar closure was the Phoenix cap developed in 1892: this allowed hot processed foods to be packed.

"The Phoenix was a two piece cap with a metal plate and a rubber washer held on the jar top by a tongue and eye compressing neckband crimped under a ring on the finish. Low cost and machine applied, it was easy to unlock. For the Phoenix finish, the cap maker furnished dimensional specifications to the jar manufacturers. These correspond to fixed sizes of caps and, as with crown and Mason jar finishes, constituted a step towards standardization."

The first step towards a vacuum seal jar was taken in 1902 with the development of the Giles jar and cap. This closure consisted of a horizontal ledge below the mouth of the jar, a rubber gasket, and a flanged cap to press the gasket against the sidewall. This jar was used primarily for cold-packed vacuum processing.

Along another technological line, the Amerseal cap was invented in 1906. This cap was made to engage a lug finish. This was the first cap to be knurled on the edges for ease of grip. The major advantage of this cap was its ease of removal and replacement.

The next step in jar closures was the Sure Seal cap developed in 1908. This was an improvement in the vacuum seal.

"The skirt of this metal cap formed a groove for the gasket and was crimped under the glass finish. Food packers admired its ability to withstand pressures developed in sterilizing, but users had to struggle to remove it. The ledge was eliminated. The skirt was

compressed into a V shape for smooth contact with the rubber forced against the glass. Next, the bead of the cap was chucked to diminish the diameter and make the seal. In a new pry-off form this cap became a great success on tumblers. An Anchor opener lifted it with a flip or two. However, the cap was distorted on removal and had no reclosure value. Making a virtue of a fault, the manufacturers pointed out, it's tamperproof" (Lief 1965:22).

A major breakthrough in bottle and jar closures occurred in 1919 with the use of a shallow, continuous thread screw cap. Previous to this, only two types of screw caps were used, the Mason type with several threads and the lug type. In 1924, the Glass Container Manufacturers set-up industry standards for the continuous thread cap. The new cap had many factors in its favor: easy to make, sealed well, opened and closed easily, and decorated easily. It soon began to replace cork and other closures.

Meanwhile, research aimed at improving the vacuum seal cap was progressing. In 1925, a cap was invented having a rubber gasket in an angled skirt. The jar was sealed in a vacuum chamber. When the cap was applied it pressed the gasket against the side of the finish. This was the first vacuum side seal and is the form we know today.

Jar Categories and Types

Fifty-one whole jars were recovered from the Waverly sites. These were divided into the 10 categories shown on Table 9. The system is the same as that used for bottles. The primary division is on the shape of the base with additional, finer divisions based on body and shoulder morphology. Base shapes are shown in Figure 2. The division into types is the same as for bottles. Technology is the prime consideration and the base area is treated first, then the finish area. Varieties are based on size, color, basemark, and other distinguishing attributes.

Seven companies made the 51 jars (Table 10). Eight other jars had marks giving evidence of the company which distributed the product (Table 11). Of these eight jars, five are jars of Vick's Vapo Rub and date after 1907 (Campbell 1964:132).

Table 9. Class A04: Jar Categories

- A04-01. Rounded square, sides parallel, shoulder round.
- A04-02. Rounded square, sides parallel, no shoulder.
- A04-03. Round, sides expanding, interior glass beveled, no shoulder.
- A04-04. Round, sides expanding, no shoulder.
- A04-05. Round, sides parallel, no shoulder.
- A04-06. Rounded square, sides parallel, shoulder square.
- A04-07. Rounded cross, sides expanding, no shoulder.
- A04-08. Round, sides parallel, shoulder square.
- A04-09. Pickle oval, sides parallel, shoulder square.
- A04-10. Round, sides parallel, shoulder round.

Eighteen amber snuff jars form a major part of the sample. The style of this bottle is fairly old. It was in existence by 1885 and possibly much earlier (Conwood Corporation 1975). Eight clear jars were also identified as snuff jars. These were made to be reused as tumblers. Tumblers such as these were first produced after 1902 by the Hazel-Atlas Glass Company in Clarksburg, West Virginia. They are still produced there today by the Anchor Hocking Glass Corporation (Robinson 1979).

Table 10. Manufacturers of Waverly Jars

Company	Date	567	569	571A	571B	571C	571D	575	576	521
Anchor-Hocking	1938-	-	8	-	-	-	-	-	1	-
Ball Co.p.	1888-	-	3	-	-	-	-	-	-	-
Brockway Glass	1925-	-	1	-	-	-	-	-	-	-
Hazel-Atlas	1902-1964	-	-	1	-	-	-	-	-	-
" "	1920-1964	1	8	4	-	-	-	-	2	-
Kerr	1915-1946	-	-	1	-	-	-	-	-	-
"	1944-	-	3	-	-	-	-	-	1	-
Knox--Miss.	1932-1953	-	5	-	-	-	-	-	-	-
Owens-Illinois	1930,40,50	1	-	-	-	-	-	-	-	-
"	1934 or 44	-	1	-	-	-	-	-	-	-
"	1935 or 45	-	-	-	-	-	-	-	1	-
"	1936 or 46	-	1	-	-	-	-	-	1	-
"	1937 or 47	-	-	1	-	-	-	-	-	-
"	1938	-	1	-	-	-	-	-	-	-
"	1938 or 48	-	1	-	-	-	-	-	-	-
"	1957 or 67	-	1	-	-	-	-	-	-	-
"	1959 or 69	-	1	-	-	-	-	-	-	-
Tygart Valley	1940-1960	-	1	-	-	-	-	-	-	-

Table 11. Companies and Products for Jars.

Company	Product	Number
Vick Chemical Co.	medicine	6
Chesborough Mfg. Co.	medicine	2
Mentholatum	medicine	1
Armour & Co.	food	1

Class A05: Jar Rims

The class of jar rims is composed of fragments of the finish area of jars. Almost all of the jar rims recovered were broken into very small fragments. Identifying a minimum number of jar rims would be impossible, so we have been forced to rely on a count of fragments. A total of 692 jar rim fragments was recovered. Categories for these fragments were based on the type of closure: A05-01 Threaded; A05-02 Lug; A05-03 Vacuum side seal; A05-04 Ring; A05-A05-05 Lightning. The technology used to produce the jar rims has been discussed under the bottles and the jars.

In those categories highly fragmented, finish morphology proved to be more useful than technology as a dividing attribute. This is particularly

true of the threaded lips. In this category, types are based on methods of making a seal and on morphology. "Original seal" refers to the Mason patent for jars which seal on the shoulder. "Top seal," or "Improved" refers to jars which seal on the lip or a sealing ledge around the lip. Finally, "beaded" or "Modern" refers to jars which seal on both the lip and on a collar.

No attempt was made to identify the various vacuum side seals present. Many of the closures previously discussed would fit any or all of the vacuum side seal types recovered. These types are illustrated in Figure 6.

The "Hero" type of lightning lip has been identified on the basis of morphology. It has a very distinctive lip form composed of tall neck with two very large collars below the lip. This type of lip is a variation of the original lightning lip and dates after 1894 (Poulouse 1977:37, 126).

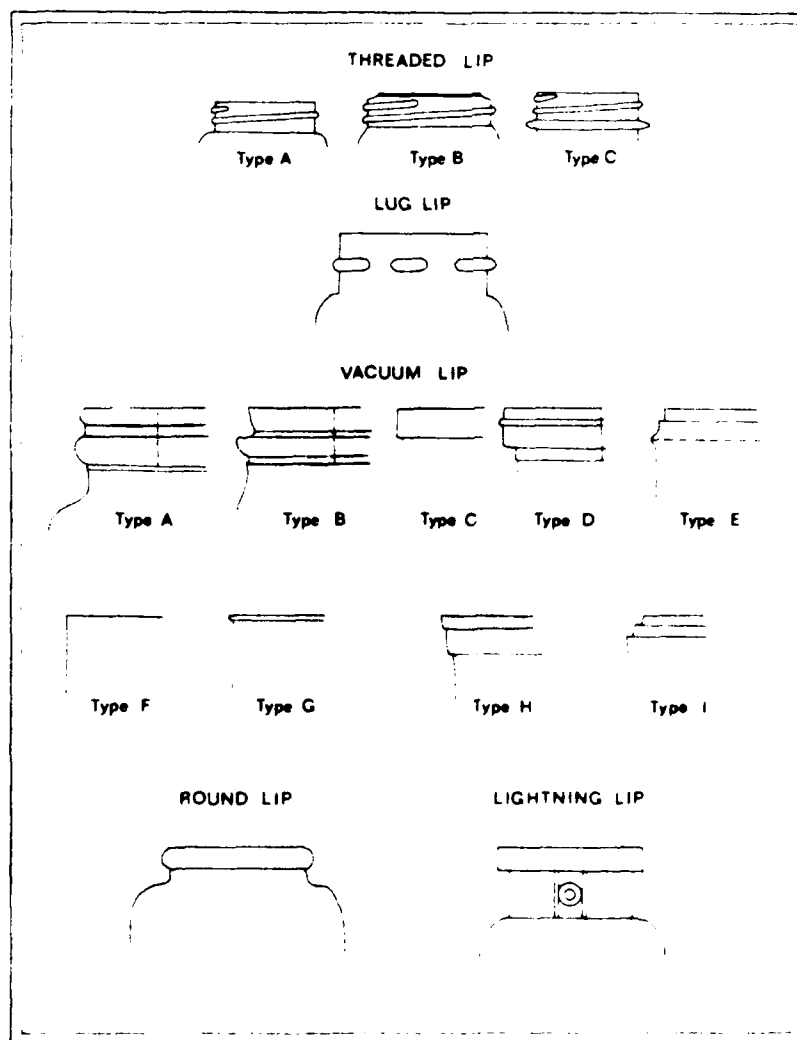


Figure 6. -- Jar Rims.

Class A06: Jar Bases

Fragments of jars exhibiting marks of basal technology were put in this class. The jar bases provide much information useful for dating the sites. They also reveal insights about the Waverly community. The technological aspects of jar production have been discussed previously. The typology for jar bases is the same as that for bottle bases. The first division, into categories is based on shape: A06-01 Rounded square; A06-02 Round; A06-03 Rectangular. The types are based on technology.

Jar bases formed a numerically large part of the glass sample from Waverly. A total of 341 jar bases was recovered. Of those, 39 bases had identified maker's marks and are listed in Table 10. In addition, three bases had marks identifying a product or a location for the product and are listed in Table 11.

Of the 341 jar bases recovered, 114 or 33% were from amber or clear snuff jars. The total may actually be higher but most of the clear jars/tumblers were not included. The only clear jar bases included were those definitely associated with snuff. This obviously represents a major choice by the Waverly community.

Class A07: Fragments

This is the largest of the classes because it contains all the fragments too small to be included elsewhere. The categories are descriptive and are listed on Table 12. Since this is such a large class each of the categories will be discussed separately.

Table 12. Class A07: Fragments

A07-01. Flat glass	A07-06. Pressed glass
A07-02. Bottle glass, lettered	A07-07. Art glass
A07-03. Bottle glass, non-lettered	A07-08. Carnival glass
A07-04. Milk glass	A07-09. Etched glass
A07-05. Jar glass, lettered	A07-10. Painted glass

Category A07-01: Flat Glass by Margaret Langhorne Rothman

History

Flat glass is the category in which perfectly flat glass was placed. This glass was used for windows, mirrors, and safety glass. Karl G. Roenke (1978), in his study of 19th century flat glass, describes three processes of flat glass production: crown, cylinder, and plate.

The earliest flat glass in the United States, crown glass, was produced by blowing a mass of molten glass with a blow pipe, then attaching a metal rod or "punky" and breaking off the pipe. Removing the pipe left a hole in the glass. Using the punky, the glass was then spun in front of a fire to keep it malleable. The spinning caused the glass, and the hole, to flatten and enlarge, creating a circular sheet called a table. The table was cooled vertically, then cut into the required sizes. Much of the glass was wasted

because of the circular shape and the hole in the center of the table. Crown glass was produced primarily in England into the latter half of the 19th century, while in Continental Europe, the cylinder method was used. By 1820, the cylinder process had been adopted in the United States and only one known factory was manufacturing crown glass.

Cylinder glass is the oldest known form of flat glass. In the 19th century, it was the predominant flat glass in the United States and Europe with the exception of England. The several variations in cylinder glass production all involve basically the same steps. A mass of molten glass is blown to form an elongated bulb, attached to a punty, and the blowing pipe broken off. With the help of the punty, the bulb is formed into a long cylinder. The cylinder is split longitudinally; originally after it had cooled, later while the glass was still hot. The latter reduced production time. It was then flattened with a rod or a wooden block on the end of a metal rod. Cylinder glass was of poorer quality than crown glass, but it was more economical to produce and more versatile. There was no waste due to the shape or a central hole. Larger panes of glass were feasible with the cylinder glass method.

The third process of flat glass production is plate glass. The procedure may date from as early as the Roman period, but the French are credited with its invention in 1688 (Roenke 1978:9). Plate glass was obtained by pouring molten glass onto a metal table, then spreading it evenly with the aid of a roller. The table had guides for thickness. Plate glass was only roughly even in thickness and was cloudy from contact with the table and the roller. Thus, it was called "rough plate". This limited its use to objects or buildings which did not need crystal clear glass. A more finished product, "polished plate", was obtained with a few extra but expensive steps. Its manufacture required costly machinery and a great deal of labor, restricting its use to luxury items like coaches and large mirrors.

Later the plate glass process developed into "rolled plate." In 1870, the Chance Brothers of England invented a machine from which sheets of glass were formed by pouring liquid glass through two rollers (Roenke 1978:11). Also in the latter half of the 19th century attempts were made to draw sheets of glass. The method was not successful until the early 20th century. Today, drawn sheet glass is the principal method of flat glass production.

The Waverly Artifacts

To facilitate the analysis of the flat glass unearthed at Waverly, a workable typology was devised. All flat glass in category A07-01 was divided using three types: mirror glass; window glass; and extremely thick flat glass. Each type was divided further into varieties on the basis of thickness to test Karl G. Roenke's (1978:116) hypothesis that window glass became thicker through the 19th century.

Mirror glass is flat glass with evidence of tarnishing or blackened areas. This is the residue of a backing placed on the glass to give it its reflective quality. From the 14th century to the 19th century, the primary method of obtaining mirror glass was the "tin and mercury process" (Roenke 1978:11). In 1835, Justus von Liebig produced the method of silvering, which survives today. Fragments of the latter were found at Waverly.

Mirror glass was divided into four varieties--A: less than 2mm; B: 2-2.9mm; C: 3-3.9mm; and D: beveled edges. Forty fragments of mirror glass were recovered: nine from 22CL569; 30 from 22CL571; and one from 22CL576.

The flat glass which is thinner than 5.1mm and shows no evidence of silvering falls under the type, window glass. It is divided into five varieties--A: 1-1.9mm; B: 2-2.5mm; C: 2.6-2.9mm; D: 3-3.9mm; and E: 4-5mm. A total of 2,944 pieces of window glass were recovered from the sites at Waverly. More than half, 1,599 or 54.3%, comes from 22CL569. Site 22CL567 had 715 or 24.3%; 22CL571 had 597 or 20.3%; 22CL575 had 13 fragments or .04%; and 22CL576 had 20 or 0.7%. Tables 13 and 14 show the distribution of the variety totals among the sites.

Table 13. Window Glass Varieties by Site

Variety	567	569	571A	571B	571C	571D	575	576	Total
A	165	42	87	142	1	12	4	-	453
B	439	1365	83	200	-	5	9	8	2109
C	81	85	53	11	-	-	-	10	240
D	30	52	3	-	-	-	-	1	86
E	-	55	-	-	-	-	-	1	56
Total	715	1599	226	353	1	17	13	20	2944

Table 14. Percentages of Window Glass by Site.

Variety	567	569	571A	571B	571C	571D	575	576	Total
A	23.1	2.6	38.5	40.3	100.0	70.6	30.8	-	15.4%
B	61.4	85.3	36.8	56.6	-	29.4	69.2	40.0	71.6
C	11.3	5.3	23.4	3.1	-	-	-	50.0	8.2
D	4.2	3.3	1.3	-	-	-	-	10.0	2.9
E	-	3.5	-	-	-	-	-	10.0	1.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0%

Of the 35 pieces of flat glass thicker than 5.0 mm, two were found at 22CL567; 12 at 22CL569; eight at 22CL571; two at 22CL575; and 11 were found at 22CL576.

Roenke (1978) hypothesized that flat glass thickened during the 19th century. The information from Waverly appears to substantiate this hypothesis; however, the dates assigned the various thicknesses are much too early for Waverly, using Roenke's data (1978:116) (Table 15). Given the flat glass distribution at Waverly it would be suggested that 22CL567 was occupied from a fairly early date in the 19th century onward; however, other artifacts and historical data suggest a date of 1890 and later for the site. The absence of Variety E window glass (4-5mm thick) and the low number of thicker glass fragments indicate that the structure either fell into disuse or no new glass panes were added after the turn of the century. The latter might indicate a low income level for the occupants.

According to the varieties found at 22CL569, it was built at a later date than 22CL567. The percentage of extremely thin window glass, Variety A, is low, but the percentages for the thicker varieties are quite high.

Referring to Roenke's table, this indicates that the site was occupied well into the 20th century (Table 16). The window panes also may have been replaced several times, based upon the wide variety of window glass thicknesses. The percentages of thin and relatively thick window glass are substantial, which could indicate that as window panes were broken they were replaced, possibly from salvaged buildings elsewhere.

Table 15. Window Thickness Data from Roenke (1978:116).

Date Range	Mode Thickness Inches	Mode Thickness mm	Waverly Variety
1810-1825	0.055	1.75	A
1820-1835	0.055	1.75	A
1830-1840	0.045	1.50	A
1835-1845	0.045-0.055	1.50-1.75	A
1845-1855	0.065	2.00	B
1850-1865	0.075	2.30	B
1855-1885	0.085	2.75	C
1870-1900	0.095	3.00	D
1900-1915	0.105	3.30	D

Table 16. Window Glass Dates for Waverly.

Site	Approx. Mode	Thickness Date*	Probable Construction	Difference in years
22CL567	B	1845-1865	ca. 1895	30-50
22CL569	B	1845-1865	ca. 1900	35-55
22CL571A	A	1810-1845	ca. 1890	45-80
22CL571B	B	1845-1865	ca. 1890	25-45

*based on Table 15

Based on Roenke's table, the structure at 22CL571A appears to have been constructed in the first half of the 19th century and used into the 20th century. Again, historical data contradict this. The structure was probably not built until the 1880s or later. After the first quarter of the 20th century, it possibly was not used, or, again, the owner could not afford its upkeep.

Using the data from Tables 13 and 14 we suggest that 22CL571B was built before 22CL571A and was not occupied as long. The low percentage of both varieties B & C and the absence of D & E would seem to indicate that few window panes were replaced. If we use the date ranges from Roenke, then the structure was not occupied by 1900, possibly as early as 1870. On the other hand, the other archaeological and historical data indicated the building was probably not constructed until the 1880s or 1890s.

Site 22CL571C was a scattering of trash and the dearth of window glass substantiate this belief. The fact that only Variety A window glass was unearthed here also strengthened the idea since thin window glass replaced by thicker glass may have been thrown here. The same suggestion can be applied to 22CL571D, a dump for the house at 22CL571A.

Site 22CL575 would date to the first half of the 19th century using Roenke's data, however, the site contained very little window glass, and presumably the structure had few windows. The lack of window glass 2.6mm and greater is a possible indication of abandonment in the first half of the 19th century and/or that window panes were unnecessary.

Site 22CL576 appears to be a later site since it contained only 20 window glass fragments mostly thicker than 2.5mm.

Roenke hypothesized, and his study confirmed, that flat glass increased in thickness during the 19th century and into the 20th century. He also emphasized (Roenke 1978:117) that his dates were regional and needed refinement. Using Roenke's tables, the dates are consistently too early for Waverly; however, the trend remains the same, just shifted later in time. Several explanations for the time discrepancy may be offered. Much of the window glass in the Pacific Northwest during the early and mid-19th century may have come from England but with American annexation of that territory in the 1840s the source may have shifted to American manufacturers who supplied thicker glass. But at Waverly the possibility exists that the source continued to be England, where thinner glass continued to be made. Another explanation is the recycling of window glass at Waverly. Applying Roenke's age ranges of window glass thicknesses to the sites at Waverly, it has been possible to develop relative dates for the structures by using glass seriation. Sites 22CL571C, 22CL571D, and 22CL576 have too small a sample to be used.

Seriation of Flat Glass

On the basis of percentages of window glass varieties within a site, it can be assumed that site 22CL571B is the oldest, followed by 22CL571A, then 22CL567 with 22CL569 the most recent (Figure 7). No conclusions can be drawn from the 35 pieces of thicker flat glass (more than 5 mm), but their distribution does not change the order of these four sites.

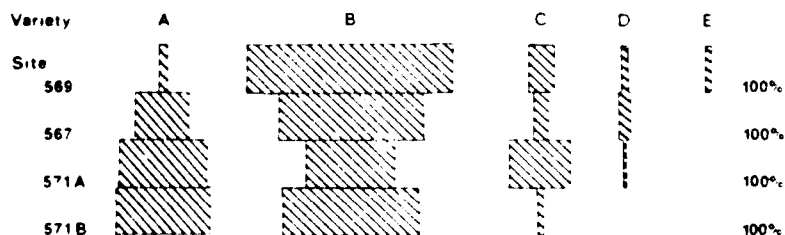


Figure 7.--Window Glass Percentages by Site and Variety.

A07-02 Bottle Glass, Lettered This category contains body fragments of bottles with embossed lettering. Embossing on bottles is not a significant temporal marker. The earliest embossed bottles were made in the 1700s and some embossing is still used (Jones 1971:10). Embossing on panel bottles begins in the late 1860s.

The types for this category are based on the shape of the original bottle. Since many of the fragments were small and no shape could be ascertained, a type was created for lettered fragments of unknown bottle shape. This type accounted for 61% of all the lettered bottle glass.

A total of 353 fragments were assigned to this category. These fragments represent a minimum of 249 bottles. Although the fragments were small, we were able to identify 57 (23%) of the bottles to the product or the company (Tables 4 and 5). Many of the fragments will never be identified.

A07-03 Bottle or Jar Glass, Non-Lettered This is the largest category of glass and consists of body sherds with no distinguishing characteristics. A total of 17,735 fragments of glass were placed in this category.

A07-04 Milk Glass This category contains 44 fragments of white colored glass. Two types are represented; plain fragments and pressed fragments. At least three vessels are represented by the pressed fragments.

A07-05 Jar Glass Lettered Fragments Lettered glass fragments that are from jars were assigned to this category. These fragments primarily represent canning jars. The types are based on the distinction between canning jars and other jars.

A total of 209 canning jar fragments were recovered, representing at least 126 jars. A total of 71% of all these canning jars was found at site 22CL569. If the canning jars from site 22CL576 (probably a dump for 22CL569) are added to this total, 83% of all the fragments were found at this site. Canning jar fragments are easily dateable when they are embossed. Ninety-three of the jars were dateable and these are listed in Table 17.

Table 17. Dated Canning Jar Fragments

Jar	Date*	567	569	571A	571D	576
Ball Perfect Mason (9)	ca. 1935	-	28	1	-	-
Mason's Patent	1895-1915	-	1	2	1	-
Ball Perfect Mason (7)	ca. 1935	6	2	2	2	-
Atlas	1896-1920	-	11	1	1	-
Atlas Goodluck	1920-1935	-	-	-	1	-
Knox Mason	1924-1951	-	9	-	-	-
Kerr Self Sealing Mason	1915-present	-	12	-	-	-
Ball Mason	1895-1910	-	7	-	-	-
Atlas H-A Mason (2)	ca. 1920	-	1	-	-	-
Atlas H-A Mason (1)	1921-1964	-	1	-	-	-
Kerr	1912-present	-	1	-	-	-
Swayzee Mason	1894-1906	-	-	-	-	1
Ball Perfect Mason (1)	1900-1915	-	-	-	-	2

* all dates from Toulouse (1977).

One hundred embossed fragments of non-canning jars were recovered. Ninety-five fragments were from 22CL569 and five were from 22CL576. These fragments represent nine jars at 22CL569 and four jars at 22CL576. "Duraglass" is a trademark used by the Owens-Illinois Glass Company after 1940 (Toulouse 1971:170). Seven jars from 22CL569 and three jars from 22CL576 bear this trademark.

A07-06 Pressed Glass Fragments. The fragments in this category are probably from tableware vessels. They are fragments of glass that show evidence of having been pressed in a mold. The fragments are too small for vessel shape to be determined. Types are based on the color of the glass. Table 18 shows the number of fragments by site. Even though the fragments are small, a number of patterns have been identified. These are shown on Table 19. The dates given are highly speculative.

Table 18. Pressed Glass Fragments

Type	567	569	571A	571B	571D	575	576
-01 Clear	2	19	47	13	4	4	3
-03 Green Depression	-	5	-	-	-	-	-
-04 Emerald Depression	-	-	3	-	-	-	-
-05 Pink Depression	2	3	-	-	-	-	-
-06 Blue Depression	1	1	-	-	-	-	-
-07 Amber Depression	-	1	-	-	-	-	-

A07-07 Art Glass Fragments A number of special types of glass are contained within this category. Two types were established: Latticino Glass and Painted Art Glass. Latticino glass is a clear glass with colored enamel threads running through it. One piece of this glass was recovered from 22CL571A. Painted Art Glass is a colored glass which has been painted for decoration. One piece of this glass was recovered from 22CL569.

Table 19. Identified Pressed Glass Fragments, 22CL571A

Pattern	Reference	Date	Fragments
Prism (A07-06-01A)	Lee 1946:62	ca 1850-80	1
Gooseberry (A07-06-01B)	Lee 1946:476	?	1
Stippled Clover (A07-06-01F)	Lee 1946:580	ca 1870-1900	1
Thousand Eye (A07-06-01G)	Lee 1946:503	ca 1870-?	1

A07-08 Carnival Glass Fragments Carnival glass is a pressed glass that was iridized with metallic salts. This type of glass was first produced in 1907 and went out of style by 1925 (Adams and Adams 1978:55). Seven pieces of carnival glass were found at 22CL569, but none was large enough to allow pattern identification.

A07-09 Etched Glass Fragments One piece of glass with etching was recovered from site 22CL571A. It was too small to identify further.

A07-10 Painted Glass Fragments This category contains fragments of items that were in everyday use. It includes bottles, jars and jars/tumblers. Some have the name of the product painted on them while others have only a design. The types were set up on the basis of the color of the glass. Seventeen fragments were assigned to this category and these represent 10 vessels and/or containers. These vessels reflect a process called Applied Color Labeling which was developed in the United States around 1920 (Munsey 1972:59). The process involves the use of a coloring agent, a silicate and a plastic resin, and is used extensively to apply designs to glass.

Class A08: Tableware

All glass vessels associated with serving food or decorative pieces were assigned to this class. Categories were established by vessel shape and, in some cases, by parts of vessels. Types were set up by shape and technology. The tableware categories are shown in Table 20.

A total of 379 fragments was assigned to this class and they came from at least 96 vessels. Fourteen of these vessels are tumblers which probably were sold as containers of jelly. They are decorated with the Applied Color Labeling process which was developed in the 1920s (Munsey 1972:59). All of these vessels with one exception are from 22CL569.

The 82 remaining vessels are pressed glass. The production of pressed glass vessels began in 1827 with the invention of the pressing machine (Lorrain 1968:38). This allowed glassmakers to produce a cheap yet attractive product and by 1845 pressed glass was common in American households. Several of the clear patterns have been identified and are listed in Table 21. Caution is necessary in using these dates because it was not uncommon for these patterns to be produced into the 20th century. The dates represent only the earliest known date of production.

In addition to the clear glass patterns, several of the depression glass patterns have also been identified (Table 22). These are primarily from site 22CL569.

Table 20. Class A08: Tableware Categories.

A08-01. Goblets	A08-05 Handles	A08-09 Plates
A08-02. Lids	A08-06 Unknown Rims	A08-10 Cups
A08-03. Tumblers	A08-07 Unknown Vessels	A08-11 Bowls
A08-04. Unknown bases	A08-08 Serving Vessels	

Table 21. Clear Pressed Glass Tableware Patterns

<u>Pattern</u>	<u>Reference</u>	<u>Date</u>	<u>22CL569</u>	<u>22CL571A</u>
Lattice (A08-01-01A)	Lee 1946:562	1880-?	-	1
Thumbprint (08-01-01F)	Lee 1946:182	ca 1860-?	1	-
Panelled Diamond Point (A08-03-03B&D)	Lee 1946:332	1860-?	2	-
Beaded Loop (A08-06-01E)	Lee 1946:244	ca 1880-?	-	1
Ashburton (A08-06-01J)	Lee 1946:9	ca 1850-?	1	-
Thousand Eye (A08-06-01K)	Lee 1946:504	ca 1870-?	1	-
Waffle (A08-07-01A)	Lee 1946:140	ca 1850-?	1	-

Table 22. Depression Glass Patterns

<u>Pattern</u>	<u>Typology</u>	<u>Company</u>	<u>Date</u>	<u>Reference</u>
Doric	A08-06-01M	Jeanette Glass	1935-38	Florence 1979:54
Floragold	A08-06-01O	Jeanette Glass	1950s	Florence 1979:64
Fortune	A08-04-03H	Hocking Glass	1937-38	Florence 1979:76
Jade-ite	A08-07-03D	Anchor Hocking	1945-63	Weatherman 1974:148
	A08-09-01A			
	A08-10-01A			
Miss America	A08-08-01A	Hocking Glass	1935-37	Florence 1979:112
Ring	A07-06-01D	Hocking Glass	1927-32	Florence 1979:150
Royal Ruby	A08-04-02E,F	Anchor Hocking	1939-50s	Weatherman 1974:147
	A08-10-01B			
Spun	A08-03-03A	Imperial Glass	1935-	Weatherman 1974:147
Twisted Optic	A08-06-01L	Imperial Glass	1927-30	Florence 1979:188

Class A09: Lighting

Two systems of lighting are evident in the artifact sample from Waverly, fossil fuel and electrical. All six electrical lighting artifacts came from site 22CL569, while the 47 fossil fuel lighting artifacts were spread more evenly (only six were found at 22CL569). The class was divided into categories: A09-01 Chimneys; A09-02 Shades; A09-03 Prisms; A09-04 Electrical Lighting; A09-05 Lamp Bases. The categories are based primarily on function while the types are based on shape.

Class A10: Closures

This class was composed of glass artifacts used to seal or close other artifacts such as bottles and jars. A total of 171 fragments representing 71 closures were represented. These fragments were separated into categories based on function and into type by shape; the categories were A10-01 Canning Jar Lids; A10-02 Stoppers; A10-03 Cold Cream Jar Lids;

A10-04 Unknown Closures. The category of canning jar lids contains two types of lid, the Boyd cap liner and the lightning cap. The Boyd cap liner was invented in 1869 (Toulouse 1977:109) and the lightning cap was invented in 1882 (Toulouse 1977:126).

Cold cream jar lids are found only at sites 22CL571A and B. These are milk or opal glass box lids similar to those illustrated in the Whitall, Tatum & Co. catalog (1880:25).

Class A11: Null

Class A12: Buttons

A total of 143 glass buttons was recovered from the Waverly sites. These were divided into three categories based on method of attachment. Types were based on shape. Categories were A12-01 Sew-Through; A12-02 Loop; and A12-03 Misc. Fragments. Sew-through buttons represent 99% of the glass buttons. The only loop back button comes from 22CL571A. Common shirt buttons are found in many of the old catalogs (Kresge 1913:74; Sears, Roebuck & Co. 1902:940; 1908:1004) advertised as agate buttons. These are everyday buttons with many uses. Little information could be obtained on them for dating purposes. None of them had maker's marks. A collar button was found at 22CL571A.

Class A13: Other Glass Artifacts

This is a diverse class made-up of unique items. Those artifacts which were too unique to form their own class were lumped here. Categories are based on function while types are sometimes based on function and sometimes based on descriptive attributes. Categories are A13-01 Spectacles; A13-02 Medicine Droppers; A13-03 Syringes; A13-04 Rods; A13-05 Tubes; A13-06 Domestic Furnishings; A13-07 Washboards; A13-08 Automotive. Twenty-three artifacts are contained within this class. No information is available for dating or other analyses.

Class A14: Toys

This class is made-up of one category, A14-01 Marbles. A total of 106 marbles was recovered from the Waverly sites. A total of 95 of these came from site 22CL569. The marbles have been divided into types along lines proposed by Randall (1979). Glass, handmade marbles were first produced in Germany in 1846 and continued to be produced until World War I. The first machine-made marbles appeared about 1901. It is significant that no Cat Eye marbles were found at Waverly.

"The second great change for the American marble industry occurred about 1950-51. The Japanese developed and marketed in the U.S. a radically new marble design--the Cat Eye. . . . Nevertheless, the introduction of that single design brought about a drastic change in the marble assemblages seen in America--almost every other design was discontinued with the exception of Solids, Transparents and Patterned Opaques" (Randall 1979:18).

Only three marbles showing signs of hand-manufacture, namely pontil marks, were found at Waverly. All of these came from 22CL569. All of the other 103 marbles are machine-made and probably date between 1901-1950.

Class A15: Electrical

This class includes artifacts associated with the use and transmission of electricity, but not lighting. Four artifacts, insulators, were separated into two types. The first is the common telegraph insulator. This type was invented almost at the same time as the telegraph in 1844. In 1865 internal screw threads were added (Kottman 1979:18). The second type is an elongated insulator probably domestic. Its function is unknown.

Class A16: Beads

Seven glass beads were recovered from Waverly. The categories were A16-01 Spherical; A16-02 Disk; A16-03 Half Disk. They were described by shape, color and translucency. They are all modern in appearance.

Changing Glass Technology In The United States

Glass making technology changed rapidly during the 19th and early 20th centuries. Each change in technology leaves a telltale mark on the artifacts produced by that technology. The study of these artifacts will allow us to date the changes in technology more precisely. For example, we know that machine-made bottles began to be produced in the 1880s. This does not mean that free-blown or mold-blown bottle making immediately ceased. As late as 1917 a full 50% of the bottles produced in this country were mold-blown (Jones 1971:8). The process of replacement was very slow; the study of this process could provide a good dating tool for historical sites.

What we are advocating is not a new archaeological technique but rather an old and successful one, seriation. The changing technology of glassmaking and the artifacts produced by it fit all the requirements for study by seriation. The artifacts are numerous and widely distributed; the technologies have known beginning and sometimes ending dates and they all came from a uniform geographic area. With an increasingly efficient transportation network developing in the 19th century, glassmakers had to compete in a national rather than a local market. It seems reasonable that those who did not keep up with the changing technologies became less able to compete and went out of business. The results of this process should be a battleship curve reflecting the beginning of the change, its popularity, and its decline and replacement.

The data from the Waverly sites were used to test these assumptions. Each of the sites has been broadly dated by oral history informants. This information is presented below:

22CL569	ca. 1900-1970	22CL571A	ca. 1890s-1942
22CL576	ca. 1909-1970	22CL571D	ca. 1890s-1942
22CL567	ca. 1890-1930	22CL571B	ca. 1890s-1910

Using these dates we can ask a number of questions. First, "Is there a change in the color of glass produced through time?" A total of 21,654 glass artifacts (excluding window glass and marbles) were recovered from the Waverly sites (Tables 23 and 24).

Table 23. Glass Fragments Sorted By Site and Color

Site	Clear	Amethyst	Brown	Green	Blue	Black	Burned	Misc	T
22CL567	582	100	218	100	71	0	20	28	1119
22CL569	9381	167	633	436	298	1	25	326	11267
22CL571A	2534	410	1444	446	290	1	131	208	5464
22CL571B	568	351	281	271	136	0	62	68	1737
22CL571C	6	5	48	2	7	0	2	1	71
22CL571D	341	100	120	45	119	0	17	8	723
22CL575	50	0	12	15	40	0	1	3	121
22CL576	563	56	312	85	131	0	0	4	1151
22CL521	0	0	0	1	0	0	0	0	1
Total	13,998	1,189	3,069	1,400	1,092	2	258	646	21,654

Table 24. Glass Color Percentages

Site	Clear	Amethyst	Brown	Green	Blue	Black	Burned	Misc
22CL567	52.0	8.9	19.5	9.0	6.3	0	1.8	2.5
22CL569	83.3	1.5	5.6	3.9	2.6	*	*	2.0
22CL571A	46.4	7.5	26.5	8.1	5.3	*	2.4	3.8
22CL571B	32.7	20.2	16.2	15.6	7.8	0	3.6	3.9
22CL571C	8.5	7.0	67.6	2.8	9.9	0	2.8	1.4
22CL571D	43.4	13.8	16.6	6.2	16.5	0	2.4	1.1
22CL575	41.3	0	9.9	12.4	33.0	0	*	2.5
22CL576	48.9	4.9	27.1	7.4	11.4	0	0	*
22CL521	0	0	0	100.0	0	0	0	0

Figure 8 results from ordering the above percentages by site dates as suggested by the oral history. Sites 22CL571C and 22CL521 were eliminated because their sample size was too small. The figure shows a marked increase in the percentage of clear glass over time. A number of explanations are possible for this phenomenon: (1) increasing use of clear glass and less use of other colors; (2) increasing use of all colors of glass with clear glass use increasing faster; (3) decreasing use of other colors and clear glass use remaining the same.

If we look at the original figures for glass fragments (Table 23), it is evident that the use of clear glass is increasing over time and that the use of other colors is decreasing.

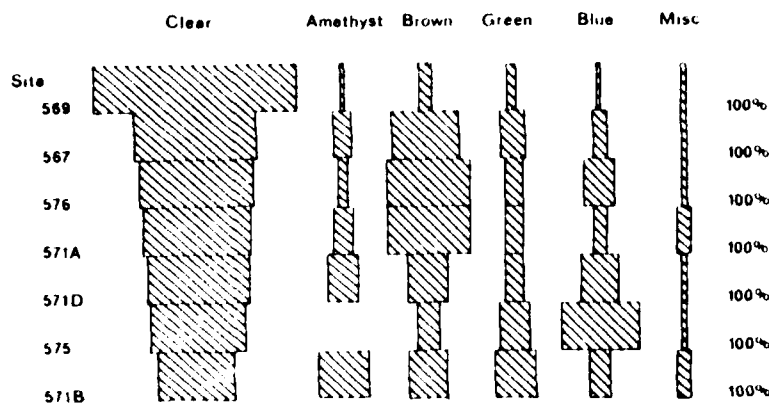


Figure 8.--Percentages of Glass Color by Site.

Amethyst is not really the original color of the glass: it was originally clear but exposure to sunlight has turned it amethyst. Manganese was used in the 19th century to "decolorize" glass. Unfortunately, this element is unstable and the rays of the sun cause it to turn color. The main source for manganese before World War I was Germany. World War I caused a shift to the use of selenium by the glass industry (Kendrick 1963:59). Amethyst glass generally would not be found on historical sites dating to the period of World War I and shortly thereafter.

No amethyst glass was recovered at site 22CL575. The first of several houses was constructed there sometime around 1920. By that time almost no manganese had been used in glass for six years. Possibly the sample from 22CL575 represents the glass produced for the national market around the year 1920. Support comes from the brown glass fragments. Brown glass has been used extensively to package alcoholic beverages. During the 1920s, a large market for brown glass bottles was eliminated by Prohibition. The decrease in the percentage of brown glass found at 22CL575 could be the results of this event.

A second question of major importance to late 19th and 20th century archaeologists is, "When did machine making of bottles replace mold-blowing?" We have already mentioned that this replacement was a slow process, starting in the 1880s and continuing into the 1920s. Jones (1971:8) mentions that in 1905 most bottles were hand made, in 1917, 50% of the bottles were made by machine, in 1922, 80% were machine made and by 1924, 90% were machine-made. This should be reflected in the glass recovered on historical sites.

Table 25 shows the number of glass bottles, bottle bases, bottlenecks, jars, and jar bases recovered at Waverly showing evidence of machine manufacture. Jar rims were not included in this total because they were too fragmented. The numbers represent minimum number of individuals rather than fragments.

Table 25. Glass Containers From Waverly

Site	Machine		Non-Machine		Total
	N	%	N	%	
22CL567	54	80.6	13	19.4	67
22CL569	340	87.4	49	12.6	389
22CL571A	151	59.0	109	41.0	266
22CL571B	28	28.3	71	71.7	99
22CL571D	17	48.5	18	51.5	35
22CL576	102	93.6	7	6.4	109

The percentages were used to portray graphically the slow change in bottle-making technology (Figure 9). This chart compares well with the chart showing changes in glass color (Figure 8). The position of site 22CL576 has changed, although, the difference between it and the other two sites at the top of the chart are not as great as between the top three and the bottom three. There appear to be three separate groups in the chart. The most modern group is composed of 22CL576, 22CL569 and 22CL567. These sites were occupied primarily during the time that machine made bottles had

taken over the market, possibly the late 1920s or early 1930s. The second group is composed of sites 22CL571A and 22CL571D. These sites represent the transition between bottles made by hand and those made by machine. Their primary occupation probably dates to the 1910s and early 1920s. Site 22CL571B is the oldest of the sites and is by itself at the bottom of the chart. It represents the initial period of machine-made bottles.

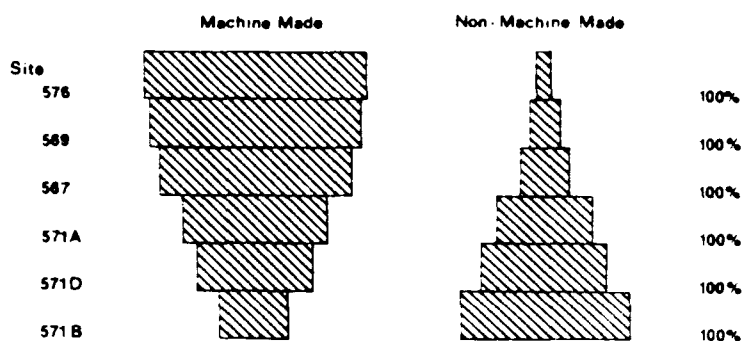


Figure 9. Machine-Made vs. Non-Machine-Made Glass Containers.

Conclusions

The glass artifacts from the Waverly sites have shown that changes did take place in glassmaking technology during the late 19th and early 20th centuries. This change was gradual, similar to most cultural changes.

The value of this study lies not so much in documenting a change which was already known but rather in providing a dating tool for late period historical sites. The charts accompanying this study are not specific to Waverly, or Mississippi or even to the South. They represent changes in the National Market and could, therefore be applied to sites anywhere in the country.

Studies of well-dated sites that were occupied for a short time may refine the relationships shown here, or may even date particular assemblages. This study provides a relative dating for the Waverly sites. Other sites may be compared to this sequence to assess their relative dates. Hopefully, a chart can be developed which will allow the relative placement of any site in relation to a known chronological sequence. The usefulness of this tool in the further analysis of historical materials would be tremendous.

MATERIAL GROUPS B-E: CERAMIC ARTIFACTS FROM WAVERLY

by Albert F. Bartovics and William H. Adams

The Ceramic Typology

Ceramic artifacts have been studied more than most other kinds of artifacts. Hence, this ceramic typology has a greater foundation upon which to build an organizing framework. This essay presents the ceramics available to residents of Waverly from 1836 onward--those artifacts which could be recovered in the excavations. Some ceramic groups were not recovered. In the past, historical archaeologists would not have mentioned those items missing from an assemblage. However, creating null classifications has two main purposes. First, it informs others that the null category or type was considered and that all similar artifacts were rejected from that category or type. Second, it emphasizes that certain categories were missing from an assemblage. The latter assists in understanding sites in time and in purchasing patterns. Many reasons exist for why a given ceramic ware or decorative category does not appear in an archaeological assemblage: by seeking consistent negative information we can begin to establish a pattern, a redundancy. In this first part we present the available ceramics; in the next we present the frequency at Waverly. [The discussion of the ceramic typology is a revised version of the ceramic study from Daniels Village (Bartovics n.d.); the study of the Waverly ceramics was made by William H. Adams; Al Bartovics examined the Waverly ceramics but was not otherwise involved in the project.]

Ceramic assemblages of the 19th and 20th centuries can be divided into four wares (see Gifford 1960; Rice 1976). Porcelain is generally characterized by a vitrified body resulting from very high firing temperatures, making it completely impermeable. Stoneware bodies are normally fused at moderately high temperatures making them less glass-like than porcelain but still quite impermeable to water. However, thicker stoneware types may be incompletely fired and thus absorb some moisture on a broken edge. Common earthenware is usually composed of inferior clays with no elaborate preparation and fired at temperatures which usually permit considerable absorption of water through unglazed surfaces (some later types do achieve a measure of impermeability). Refined earthenware clays are generally prepared more carefully than common earthenware clays in order to achieve more ambitious decorative effects: they are normally fired below or just to the point of impermeability.

Table 26 shows three initial levels of typological distinction. The first, discussed above, is the major ware (for example, Ware B, Porcelain), based upon the amount of clay preparation and firing temperature. Generally these have some functional significance: stonewares are often utilitarian vessels for storage and preparation of foods and other items, whereas refined earthenware and porcelain provide vessels for serving, eating, and drinking. All of this is highly dependent upon the time period under consideration. The second level of distinction is that of Class (for example, Class B01, Oriental Export); usually this separation is made on the basis of body (paste) and glaze. Thus, C02-07 would include the range of most American made slipglazed crocks, jugs, and other vessels, while E03-01 would include all plain white tableware of the 19th century.

Table 26. Ceramic typology

<u>Ware/Material</u>	<u>Class</u>	<u>Category</u>
<u>B Porcelain</u>	01 Oriental Export	01 Plain
	02 Hard paste	02 Relief
	03 Soft paste	03 Edge painted
		04 Transferprint
		05 Decal
		06 Stencil
		07 Annular
		08 Sponge
		09 Handpainted
		10 Tinted glaze
<u>C Stoneware</u>	01 Saltglaze	01 White
		02 North American grey white
		03 Imported bottle
		04 Yellow
	02 Slipglaze	01 Bristol slip
		02 Albany slip
	03 Slipglaze/Saltglaze	01 Bristol slip
		02 Albany slip
	04 Alkaline glaze	
	05 Clear glaze	01 Modern
		02 Lead glaze
	06 Bisque	01 Black Basalt
<u>D Common Earthenware</u>	07 Miscellaneous	
	08 Unglazed	01 Tiles
	01 Redware	01 Unglazed
		02 Glazed
		03 Brick
	02 Yellow-ware	01 Common
		02 Rockingham glaze
		03 Rockingham green
	03 Marbles, clay	
	04 Pipes, clay	
	05 Nature American	
<u>E Refined Earthenware</u>	00 Not assignable	00 Not assignable
	01 Creamware	01 Plain
	02 Pearlware	02 Relief
	03 Pearlware/whiteware	03 Edge painted
	04 Whiteware	04 Transferprint
	05 Delft	05 Decal
		06 Stencil
		07 Annular
		08 Sponge
		09 Handpainted
		10 Tinted glaze
		11 Luster

Wares and Classes

Ware B: Porcelain

B01 Oriental Export

Export porcelain, a class of early 19th century ware, includes varieties having hand painted decoration in both underglaze blue and overglaze orange, red, and gold (Noel Hume 1970:257-265; Hanson and Hsu 1975:117-119). The class combines Types 5 and 7 from South's (1972:85) typology. No Oriental export porcelain was recovered from Waverly.

B02 Hard Paste

The differences between hard and soft paste are not always easily discernable to the eyes, but generally hard paste porcelain has an abrupt, well defined boundary between the body and the glaze, while soft paste bodies merge into the glaze. In addition, the hard paste takes on a much more vitrified appearance in the edges, apparently due to higher firing temperatures. Decorative categories include plain, relief decoration (ribs, curvilinear, bursts), overglaze polychrome transferprint, overglaze transferprint with gold bands handpainted, floral decals, gold annular, handpainted geometric, handpainted floral. Most porcelain from Waverly was hard paste.

B03 Soft Paste

Soft paste glazes blend into the bodies, making them similar to vitrified earthenwares, with which they form nearly a continuum. Fewer decorative styles are noted from Waverly; most pieces are plain, a few relief decorated with scrolls, lines, and scallops, and only one specimen overglaze transfer printed.

B04 Non-tableware

Under this class of artifacts found at Waverly were marbles, dolls, toys, buttons, and figurines, primarily bisque, a few are glazed, many handpainted.

Ware C: Stoneware

C01 Stoneware, Saltglaze

C01-01 White saltglaze stoneware provided an alternative to creamware. Type 01 is undecorated; Type 02 is decorated with incised lines filled with brown or cobalt blue; Type 03 has handpainting in red; Type 04 has overglaze polychrome handpainting in red, yellow, black, green, and blue (Hanson and Hsu 1975:121). None of the above were recovered at Waverly.

C01-02 North American saltglaze stoneware comprises domestically produced stoneware jugs and crocks glazed using salt vapor as flux for the most common exterior surface (Noel Hume 1970:100-101; Osgood 1971), although the interior of most products and the exterior of some is coated with the distinctive brown Albany slipglaze (Osgood 1971:59). The body color varies from a steel gray to a soft buff. Both colors are often present in the same vessel due to uneven firing. Decoration is generally limited to incised

lines, or hand painted or stenciled decoration in underglaze colors, principally cobalt blue. Stencil decoration post-dates 1840 according to Ramsay (1947:140). Noel Hume (1970:100) and others (e.g., Guillard 1971:40-42) indicate that a number of well-established stoneware potters existed in New England before the 19th century. Limited production continues today. Only stencil decoration in cobalt blue was noted at Waverly.

C01-03 Imported bottle saltglaze is a class of stoneware described by Noel Hume (1970:78-80) as a 19th century English product. The bottles are generally small (one pint or less) and saltglazed on the exterior. Some, however, have a smooth surface indicating some sort of slipglaze. The bodies appear to be more carefully prepared and more densely consolidated than North American saltglaze stoneware. One other variety of more substantial size included in this class has a surface treatment which appears to be 19th century version of the older Fulham style brown saltglaze stoneware (Bemrose 1952:8; Hughes 1960:40-42; Noel Hume 1970:79-80). No examples of this category were recovered at Waverly.

C01-04 Yellow saltglaze stoneware is another distinctive but very rare class of utilitarian stoneware. The orange peel effect on the surface of this yellow body is faint by comparison to other saltglaze types, but cannot be confused with the smooth glaze of a common yellow-ware discussed below. No examples of this category were noted at Waverly.

C02-01 Slipglaze

C02-01 Bristol slipglaze stoneware has a smooth surface and is named after the place in England where William Powell invented it in 1835 (Hughes 1960:43-44). Vessels of this type are commonly glazed by dipping the top in a brown slipglaze to its mid-line and its base to the same line in a creamy white slipglaze. Uniformly brown or white vessels are also represented, the latter often with a blue sponge-printed design or an overall blue tint. The source of this type is probably American (e.g., see Osgood 1971:122-123), but is apparently still associated with the name "Bristol" (Sears, Roebuck and Company 1902:798). Even though Hughes (1960:43) indicated an early date (1835) for English production, the type is distributed mainly in twentieth century strata at Daniels Village and at Silcott (Bartovics n.d.; Adams, Gaw, and Leonhardy 1975).

C02-02 Albany slipglaze stoneware has a smooth surface, ranging from nearly matte to lustrous and ranging in color from light brown and chestnut, to dark brown and black. Included within this category were vessels some might call "Michigan" slipglaze. Due to variations in clay source and firing temperature and placement in kiln the paste and glaze may vary tremendously. Such variation when combined with turning marks and vessel thickness can provide vessel count but apparently little else.

C03 Slipglaze/saltglaze

C03-01 Bristol slipglaze/saltglaze stoneware combines the two glazes on different parts of the same vessel.

C03-02 Albany slipglaze/saltglaze combines an Albany slip and saltglaze on the outside of the vessel.

C04 Alkaline glaze

Alkaline or ash glazes are characterized as having a mottled green appearance. The glaze often runs and vitrifies. Several specimens were found at Waverly.

C05 Clear glaze

C05-01 Modern clear glaze varieties of stoneware have a colorless glaze allowing the body color or underglaze decoration to show through. Only a handle from one specimen was recovered from Waverly.

C05-02 Lead glaze varieties of stoneware were absent from Waverly.

C06 Bisque stoneware

No examples of bisque stoneware were noted in the Waverly assemblage.

C07 Miscellaneous stoneware

This class includes burned and otherwise unclassifiable fragments.

C08 Unglazed

C08-01 Mosaic tiles appear in small rectangular pieces in red and white.

Ware D: Common Earthenware

D01 Redware

D01-01 Common redware forms identified are utilitarian and include milk pans, bowls, and storage jars. These may be covered on the interior with a clear lead glaze flecked with dark specks, with a white slip under a clear glaze, or with an exterior opaque, copper-green glaze. Redware is not usually used for ceramic dating in Colonial periods because of its continuous presence throughout the 17th and 18th centuries. It is useful, however, when dealing with the 19th century because it is replaced by other wares during that time. From Waverly, only one small bowl of redware was recovered, probably 20th century in date.

D01-02 Doorknobs of redware paste have a brown vitrified glaze. These are distinct from Rockingham (D02-02) only in the lack of the mottled paste.

D01-03 Bricks include both handmade and machine-made with marks.

D02 Yellow-ware

D02-01 Some of the redware forms were eventually replaced by common yellow-ware, which has a clear glaze over a fairly yellow body. Thin vessels are often decorated with blue and white bands of slip, and occasionally with a "mocha" design in blue against a white panel. Vessels were found at Waverly with blue bands, with brown bands, and with black and white bands. American manufacturers are mentioned in the literature (e.g., Barber 1904:41-42 and ff.).

D02-02 Rockingham glaze: A different kind of yellow-ware is covered with a mottled glaze which varies from a few dark but iridescent streaks and blotches to a dark glaze with occasional light streaks. This type is called Rockingham glaze yellow-ware after a similar glaze invented in England during the late 18th century (Bemrose 1952:19). However, many specimens found on American sites are of domestic origin in view of the popularity of this ware with American manufacturers (Barber 1904:28, 32, 44, 58, 93, 105, 110, 143, 144, 148, and 161). One vessel from Waverly has a molded figure of "Rebecca at the well."

D02-03 A distinctive variant of this ware, Rockingham/green glaze yellow-ware, combines Rockingham glaze on one surface and a light green glaze on the other. No specimens were noted for Waverly.

D03 Clay marbles

Clay marbles were made primarily in Germany and date from the 18th century until the mid-1930s (Randall 1971:103; 1979:9).

D04 Reed stem pipes

Short stemmed or reed stemmed pipes, differ from earlier "kaolin" clay pipes by the lack of the long clay stem and by the greater varieties of clay used.

Ware E: Refined Earthenware

E01 Creamware

Creamware was developed about 1762 by Josiah Wedgwood from a more deeply tinted style normally decorated with bright colored glaze effects (Hughes 1959:23; Noel Hume 1970:125, 1973:219). The body and glaze of creamware still contain traces of the same impurities (presumably iron oxide) which colored plain surfaces of the darker ware. By late 1775, however, successful efforts to limit the Cookworthy patent (1768) to porcelain allowed earthenware manufacturers to lighten ceramic bodies by adding better quality ingredients (Hughes 1959:23), and this gave rise to the lighter creamware observed archaeologically (Noel Hume 1970:126-128). The body of creamware is thin relative to the size of the vessel and is identified most readily by a distinctive yellow tint to the glaze which must be carefully distinguished from the off-white qualities of some pearlware and whiteware. No creamware was found at Waverly.

E02 Pearlware

Pearlware was developed from the lighter creamware about 1779, also in the hands of Josiah Wedgwood, by adding larger proportions of flint and white clay to the body and a small amount of cobalt oxide to the glaze (Hughes 1959:24; Noel Hume 1970:128, 1973:232). Plain pearlware sherds can be attributed to both completely uncolored vessels and those with only localized decoration, like painted edge styles. Pearlware is identified by the glaze treatment which varies from a faintly green hue associated with Wedgwood to a deep blue from the Leeds Pottery (Hughes 1959:24). Some authors (e.g., Hanson and Hsu 1971) apparently include very pale blue glaze on some whiteware which approaches a pearlware cast where the glaze gathers: the classification system used here does not.

E03 Pearlware/Whiteware

The distinction between pearlware and whiteware is currently being reconsidered by many historical archaeologists. The problem is a gradual change from 1780 to 1880 and later. At the beginning is pearlware, at the end is whiteware, between lies the disagreement. In part the problem is that in small fragments the two are often indistinguishable. Pearlware is a soft bodied earthenware with a bluish glaze. However, the same can be found in whiteware. Some whiteware had a blue tint to the glaze. Some whitewares are underfired. The results appear too similar to distinguish with any certainty. Hence, Class E03, Pearlware/whiteware, is used here to refer to those ceramics from the 1820 period onward which would be classified by some researchers as pearlware and others as whiteware. These may have a bluish tint to the glaze or no tint on a generally soft or hard body. The pastes in "ironstones" and related wares vary between 4.6 and 6.0 on the Moh scale (Pilling n.d., cited in Ingersoll 1971:191) and can vary in the same vessel (South 1974:247-248). George Miller (1980:2-4) notes that the term "pearlware" is rarely mentioned in 19th century documents from the ceramic industry, although variations of "pearl" do appear in marks on whiteware specimens of the 1830s and 1840s.

E04 Whiteware

Whiteware refers to a series of potentially distinguishable varieties of felspathic earthenware including "stone china," "ironstone china," their contemporary imitations, and modern descendents. Certain authorities (e.g., Barber 1901:47-48, Noel Hume 1970:130-131; South 1972:85) distinguish between "ironstone" (usually classed with stonewares) and common whiteware (considered an earthenware), but others (e.g., Hughes 1959:47; Godden 1971:8; Wetherbee 1974:20) classify both within a broad class of white-bodied earthenware, based on improvements associated with William and John Turner (before 1800), Josiah Spode II (about 1805) and Charles James Mason (by 1813). These early products were decorated in imitation of more expensive Oriental and European porcelain. By about 1820 (Noel Hume 1970:130-131) poorer quality whiteware was marketed in competition with late creamware and pearlware. Glaze color varies considerably from a creamy tint descriptive of early Mason products (Hughes 1960:156; Godden 1971:21) and blue-gray tint of Spode's stone china (Hughes 1960:157) to the pure white and faintly blue "granite ware" produced in quantity after 1850 (Hughes 1960:176; Wetherbee 1974:19-20). Because no meaningful criteria could be applied to distinguish E03 from E04 all whiteware is classed here under E03.

Decorative Categories

The following categories are used to further describe the above classes of wares. Not all categories apply to every class, for example, we would not expect the decal transfer category to be found on a creamware vessel. However, for consistency, the range of possibilities is presented, even though many are null sets. Often a vessel may have more than one decorative treatment, for example a gold banded, handpainted transfer printed cup. In such cases the vessel is classified under the category having the most temporal significance. The decorative categories also had price differences affecting their selection and purchase.

George Miller has determined that four pricing levels existed for earthenware in the first half of the 19th century:

- (lowest) 1. undecorated, cream colored (cc);
2. shell edge, sponge, banded, mocha, finger trailed slip;
3. handpainted;
4. transferprint.

By the late 1850s and through the 1870s, plain white ironstone largely replaced the transferprinted price level, and after this point the cost level differences diminish (Miller 1980:3-4).

Category 01 Plain glaze, plain body

Glaze may be white, off-white, or blueish.

Category 02 Plain glaze, relief decorated body

Relief decoration may take the form of incised lines, molded designs, sprigging (affixing a clay figure), embossing, or repousse (pushed out from the inside).

Category 03 Painted Edge Styles

Blue and green edge decoration on pearlware and whiteware table service is very common. The rims are hand painted under the glaze, usually in conjunction with some form of incised or embossed relief. Noel Hume (1970:121, 1973:242) describes several pearlware varieties and mentions those of whiteware; other authorities (e.g., Hughes 1959:25) mention the style only in passing. A more lengthy but subjective discussion by Daniel W. Ingersoll (1971:203-206) agrees well with information obtained from the East dump at Daniels Village (Bartovics n.d.). The terminology used in the literature is a mess, especially the terms "feather-edge" and "shell edge." Noel Hume (1970:131) restricts feather-edge to creamware. The problem is that this style is an evolving mental template with considerable variation through time. The templates of the potter, merchant, buyer, and archaeologists need to be distinguished. The category of Painted Edge may be an emic category, but the types will be etic.

Fine molded edge pearlware is distinguished by edge relief consisting of closely spaced (more than 1.3 per inch) line segments incised radially. A majority of examples are blue, but green ones exist. The most common form of molding on pearlware consists of radially embossed ribbing, either straight or curvilinear, often punctuated at regular intervals with a simple frond motif. These are segregated into common blue edge and common green edge types, and include two other simple forms for convenience: one variety in blue without molded relief but carefully painted to achieve a similar effect, and another in green with a beaded rim.

A distinctive class of elaborate edge pearlware exhibits more complex embossed patterns or foliage, blossoms and other motifs. The band of blue painting around the rim is normally about half as wide as the embossed relief. Although South (1972:85) specifies the period of manufacture to be 1800 to 1820, Noel Hume (1973:241) illustrates an example dated between 1815 and 1830.

Much of the blue edge decoration on whiteware vessels occurs with molding comparable to that of the common pearlware styles. Unlike the pearlware classes, however, varieties with little or no relief are distinguished from those with definite embossed patterns. The resulting common blue edge and reduced relief blue edge whiteware categories exhibit similar but distinguishable characteristics.

Category 04 Transfer Printed Styles

Transfer printing on refined earthenware became popular during the third quarter of the 18th century and continued to the present. The earliest commercial success appears to have been overglaze transfer printed creamware, usually in black (Little 1969:16).

Rusty-brown overglaze transfer printed pearlware with hand applied color (Williams-Wood 1972:44) has no date range assigned. Overglaze printing was out of fashion on earthenware during most of the 19th century until revived for use on inexpensive whiteware.

The earliest underglaze transfer printing occurs in cobalt blue from about 1780, primarily on pearlware but occasionally on creamware (Little 1969:15; Noel Hume 1973:249). Early style blue transfer printed pearlware is characterized by coarse engraving which lacks the technique of stippling (Little 1969:18). Shortly after 1800 improved transfer paper was introduced which permitted the use of common line and stipple engraving for decorating pottery (Hughes 1960:127; Little 1969:19).

The vast majority of 19th century underglaze printing consists of line and stipple engraving. Although little attempt has been made to distinguish different transfer media or engraving techniques for the middle 19th century, differentiation according to color is possible (Collard 1967:113-147; Hughes 1960:129-131; Laidacker 1951:ix; Turner 1907:94). Early non-blue transfer printed whiteware includes sepia, pink, purple, maroon, green, and black monochromes as well as a few examples in two such colors combined on the same vessel. Most authorities (e.g.; Hughes 1960:129; Little 1969:17; Turner 1907:94) date the introduction of these colors in underglaze printing after about 1825, although some in brown and perhaps black are known to have been made between 1810 and 1820.

Pale blue transfer printed whiteware, flowing color transfer printed whiteware in blue (Blake 1971), mulberry, and purple, and printed whiteware from the later 19th century are characterized by simplified engravings (fewer and finer lines with reduced use of shading), several distinctive colors (light gray, blue-green, and turquoise), and return to overglaze printing often with some hand coloring. Related technological changes have yet to be systematically documented from technical literature on ceramic manufacture (e.g., Chandler 1968; Rhodes 1957). The principal transfer printed motifs on later whiteware consist of floral sprays and geometric patterns (Altman and Altman 1969:156-163; Ingersoll 1971:208; Wakefield 1962:35); those topographical scenes which do occur are more simple than previous styles. Later style transfer printed whiteware includes all variations except the flowing color prints combined with previously described earlier styles and the reproductions, metallic transfer prints, and polychrome decal transfers discussed below.

Reproduction transfer printed whiteware includes the very popular facsimiles of early 19th century patterns and was introduced shortly before 1900 as the originals began to be collected as antiques. As with many other reproductions, however, these are distinguishable by the late whiteware body and glaze as well as by the quality of the blue color (Laidaker 1951:xiii; Turner 1907:87). Other colors are more difficult to characterize unless they are among the later hues described above.

As early as 1835, a process for transfer printing in gold was patented in Great Britain (Hughes 1960:130), but gold and silver (probably platinum) colored prints did not appear at Daniels Village until the early 20th century (Bartovics n.d.). These must not be confused with either the metallic luster or the gold/silver banded styles described below. Gold/silver transfer printed whiteware occurs in very delicate floral sprays and geometric patterns generally characteristic of later style printing.

Category 05 Polychrome Decal Transfer Printed

A distinctive style of polychrome transfer print is very common throughout most of the twentieth century. The process was apparently patented in 1852 (Williams-Wood 1972:48) and became commercially successful by 1863 (Ingersoll 1971:208). The design is printed on paper coated with a film in the manner of a decal transfer (Gatchell 1944:6). Although the technique is commonly used for most modern transfer printing, it is difficult to identify as a monochrome. On the other hand, polychrome prints in two or more colors with excellent registration due to the decal process are far more readily identifiable. The only other transfer printed vessels in more than one color were obviously done with separate, non-registered transfers for each hue.

Category 06 Stencil

This decorative category is a variation of hand painting and has been classified as such by some authors (cf. Price 1979:20-21). The repetitious designs and the puddling of the ink within each pattern are characteristic.

Category 07 Annular Banded Hand Painted Polychrome

This category consists of vessels with several hand painted annular bands. When hand painting is combined with transfer printing and sponge printing, the fragments are classified with the appropriate transfer or sponge printed styles for analytical purposes. Painting in metallic media are discussed under miscellaneous decoration below.

Category 08 Sponge Decorated

Two sponge decorated styles have been identified on earthenware, sponge printed whiteware and Wheildon style cream-colored earthenware. Sponge printed whiteware, sometimes called spatterware (Greaser and Greaser 1973), includes at least three variants based on the nature and extent of the printing. An amorphous pattern is produced by a repeated printing using an unmodified sponge-like applicator; hand painted or transfer printed scenes can have foliage or clouds added by printing with a small bit of applicator in appropriate colors (Noel Hume 1973:241); or the sponge can have designs cut into the printing surface in order to produce a repetitive motif.

"Stamping frequently occurs in combination with sponging and handpainting, and the decorated zone is often bounded by thin painted lines above and/or below" (Price 1979:20). Price gives a site occurrence date of late 1840s and early 1850s in the Ozark area for stamped decorated whitewares (1979:20).

Category 09 Handpainted

Handpainted topographical blue pearlware, consists of a non-floral subject on pearlware in underglaze blue. The earliest is a Chinese house design (Noel Hume 1970:129), while later varieties include insects, animals, and birds.

Floral hand painted blue decoration occurs on both pearlware and whiteware. The class also includes miscellaneous non-topographical motifs like hand painted bands which often accompany floral motifs.

Hand painting in colors other than blue is also quite common, usually as a polychrome variety. Unlike the blue styles, however, pearlware and whiteware are more easily distinguished since certain colors are apparently confined to one or the other type. Definite examples of floral hand painted polychrome pearlware are characterized by dark brown, tan, sage green, orange, and yellow as well as blue. Infrequent non-blue monochromes are included in this class for convenience. The earlier one used softer pastel hues (1795-1815), the later (1815-1835) using bright colors. Price (1979:21) further distinguishes these into: "1) overall bluish glaze tint with earthen-colored fineline decoration, and 2) overall white glaze tint with brightly colored fineline, 'sprig,' and broadline decoration" Price (1979:21) dated these as 1795-ca 1830 for the earthen hues and 1830-1860 or later for the brighter hues but this probably reflects time lag, whereas Noel Hume (1970) gave manufacture dates. We should also remember that some handpainting of ceramics was done by the homemaker:

"The proprietors of potteries are accustomed to furnish vases, urns, and other pieces of ornamental shapes, in the state of bisquit, to ladies who exercise their taste and ingenuity in embellishing them by painting and gilding. Being then returned to the manufacturer, the glaze is applied, the baking is finished in the gloss oven, and the gilding is burnished . . ." (Lardner 1832:64).

Category 10 Tinted Glaze

Two styles of colored glaze decoration on refined earthenware are tinted glass white earthenware and green glaze cream-bodied earthenware. Green glaze cream-bodied earthenware is an 18th century style. Tinted glaze white earthenware occurs only in the 20th century contexts. Similar ware with the body tinted to make glaze chips less obvious (Altman and Altman 1969:30) was included in this category. Examples from Waverly include light brown, blue, green, pink, yellow. Also included here are multicolored British majolica. The glaze may exhibit only a slight colored cast in which the body shows through or it may be a dark glaze covering all.

The Waverly Ceramics

This section examines the ceramic artifacts found at Waverly sites. The preceding essay presented the typology for ware classes and categories. This examines the vessel forms (the types in our classification) and their decoration. The focus is on: (1) comparison of wares; (2) non-vessel ceramics; (3) decorative categories; (4) vessel form; (5) form vs. decoration; (6) ceramic dating.

Discussion of Wares

The following examines the various frequencies of the ceramic wares. Later their dates will be examined. In the parts immediately below, the discussion of wares will center upon usage as vessels, then the non-vessel data will be presented.

Porcelain

The porcelain vessels are presented with the earthenware for decorative style and vessel form. Porcelain vessels seem fairly common compared to early 19th century sites. The ratio of porcelain to earthenware at Waverly ranged from 24:89 at 22CL571A to 8:80 at 22CL569; this compares reasonably well with the late 19th century site at Fort Bowie (55:182 sherds; Herskovitz 1978:109) and early 20th century sites at Silcott (averaging 1:7.6; Adams 1977a:65). This seems to demonstrate that by the late 19th century porcelain had ceased being a status item.

As will be shown later, the porcelain exhibited much less decorative diversity than earthenware. Tables 27 and 28 present the distribution of porcelain and earthenware for both minimum number of individual vessels (MNI) and for fragments by site and vessel form. For MNI vessels, we found that porcelain tableware averaged 17.1% of the combined earthenware and porcelain totals, ranging from 8.0% to 21.7% on the domestic sites. For porcelain frequency, the two houses at 22CL571A&B were quite similar, while the ones near the road were more similar to each other than to the ones at 22CL571. We have no explanation for this difference, although this difference appears for other material items.

The minimum number of individual vessels (MNI) was determined by tabulating the number of vessel rims and bases by decorative category; for example, two hand painted cup bases plus three embossed cup rims were counted as five vessels, while two hand painted cup bases plus three hand painted cup rims would be counted as only three vessels unless the particular pattern was different.

A small number of non-vessel porcelain artifacts (architectural, furniture, toys, and dolls) was recovered (Table 29). Architectural artifacts included an electric ceiling light fixture from 22CL569 and plain white doorknobs from 22CL571A&B. Two porcelain furniture caster wheels were found at 22CL571A. Toys found in the excavations included marbles, toy dishes, and doll parts. Porcelain marbles were found at the following sites:

	567	569	571A	571B
plain white	1	2	9	3
handpainted	-	1	2	-

Table 27. Distribution by Vessel Form (MNI Count)

Form	Ware	22CL567		22CL569		22CL571A		22CL571B		22CL571D		Total	
		N	%	N	%	N	%	N	%	N	%	N	%
Cups	P	1	3.2	2	2.3	8	10.0	3	3.6	-	-	13	4.3
	E	6	19.4	13	14.8	18	18.6	12	20.0	2	15.0	51	17.1
Saucers	P	3	9.7	3	3.4	6	5.3	5	8.3	1	12.5	18	6.0
	E	5	19.1	26	29.5	9	8.0	6	10.0	-	-	46	15.4
Bowls, small	P	-	-	-	-	3	2.6	1	1.7	3	12.5	7	2.7
	E	3	9.7	9	10.3	10	8.8	4	6.7	1	12.5	27	9.0
Bowls, large	P	-	-	-	-	-	-	-	-	-	-	-	-
	E	1	3.2	2	2.3	7	6.2	2	3.3	-	-	12	4.7
Plate, 7"	P	-	-	-	-	2	1.8	-	-	-	-	2	.7
	E	-	-	2	2.3	1	.9	-	-	-	-	3	1.0
Plate, 8"	P	-	-	-	-	3	2.7	-	-	-	-	3	1.0
	E	3	9.7	6	6.8	2	1.8	1	1.7	-	-	12	4.0
Plate, 9"	P	-	-	-	-	-	-	-	-	-	-	-	-
	E	2	6.4	9	10.3	4	3.5	-	-	-	-	15	5.0
Plate, 10"	P	-	-	-	-	-	-	-	-	-	-	-	-
	E	2	6.4	3	3.4	7	6.2	5	8.3	-	-	17	5.7
Plate, indet.	P	-	-	-	-	2	1.8	2	3.3	1	12.5	5	1.7
	E	2	6.4	7	8.0	21	18.6	10	16.7	2	25.0	42	13.9
Misc. vessel	P	1	3.2	2	2.3	-	-	2	3.3	-	-	5	1.7
	E	2	6.4	4	4.5	10	8.8	5	8.3	-	-	21	7.0
Total		51	99.8	88	100.2	113	100.0	60	100.0	8	100.0	299	100.0
Porcelain		5	16.1	7	8.0	24	21.2	13	21.7	3	37.5	52	17.1
Earthenware		26	83.9	81	92.0	89	78.8	47	78.3	5	62.5	247	82.9
		31	100.0	88	100.0	113	100.0	60	100.0	8	100.0	299	100.0

Table 28. Distribution by Vessel Form (Fragment Count)

Form	Ware	22CL567		22CL569		22CL571A		22CL571B		22CL571D		Total	
		N	%	N	%	N	%	N	%	N	%	N	%
Cups	P	2	.8	-	-	31	6.1	6	2.5	-	-	41	2.4
	E	25	9.8	87	12.2	84	16.6	21	8.6	17	43.8	229	13.1
Saucers	P	6	2.4	7	1.0	7	1.4	9	3.7	1	4.2	20	1.7
	E	13	5.1	282	39.5	88	17.4	16	6.6	1	4.2	399	22.8
Bowls, small	P	-	-	-	-	8	1.6	1	.4	-	-	10	.7
	E	6	2.4	74	10.4	103	20.3	15	6.3	1	4.2	199	11.4
Bowls, large	P	-	-	-	-	-	-	-	-	-	-	-	-
	E	14	5.5	13	1.8	39	7.7	2	.8	-	-	68	3.9
Plate, 7"	P	-	-	-	-	3	.6	-	-	-	-	3	.2
	E	-	-	33	4.6	1	.2	-	-	-	-	34	2.0
Plate, 8"	P	-	-	-	-	7	1.4	-	-	-	-	7	.4
	E	29	11.4	17	2.3	13	2.6	3	1.2	-	-	62	3.6
Plate, 9"	P	-	-	-	-	-	-	-	-	-	-	-	-
	E	29	11.4	83	11.6	36	7.2	-	-	-	-	148	8.7
Plate, 10"	P	-	-	-	-	-	-	-	-	-	-	-	-
	E	1	.4	45	6.3	38	7.5	59	24.2	-	-	143	8.2
Plate, indet.	P	-	-	-	-	12	2.4	2	.8	-	-	14	.8
	E	34	13.4	3	.4	20	3.9	110	45.1	9	22.5	166	10.1
Misc. vessel	P	1	.4	2	.3	2	.4	-	-	-	-	5	.3
	E	63	24.6	45	6.3	16	3.2	-	-	-	-	124	7.0
Sub-total		274	100.0	714	100.0	507	100.0	244	100.0	24	100.0	1579	100.0
Unclassifiable	P	11		19		58		16		1		105	
	E	119		781		409		242		27		1578	
Porcelain		7	2.5	21	3.0	128	25.3	28	11.5	8	33.3	184	11.7
Earthenware		267	97.5	693	97.0	379	74.7	216	88.5	16	66.7	1395	88.3
Total		274	100.0	714	100.0	507	100.0	244	100.0	24	100.0	1579	100.0

Mark Randall (1979:13) felt that the porcelain marbles were probably made in Germany, but gives no dates other than production during the entire 19th century and into the 20th century.

Dolls were present at every site, but most frequent at 22CL571A. Tables 29 and 30 list their distribution. Three of the legs have brown glaze, high heeled shoes, and are marked "0" and "2"; these date after 1860 when the fashion changed in Europe from flat soled to high heeled shoes (Fawcett 1964:27) and compare well with illustrations from dolls for the 1860-1890 period (cf. Fawcett 1964:67,72). One bisque head from 22CL571A uses a back comb with hair drawn back from the forehead and ringlets on the back; this dates 1850-1870 (Fawcett 1964:72 B,D). Two heads date to the late 19th century (cf. Fawcett 1964:64 top) and are from 22CL571A and D. The heads range from 2.0-2.5 cm high; the arms and legs are from small dolls. The flesh tinted bisque dolls are larger but only small fragments were found. No dolls represent blacks, even though such dolls were apparently made.

Porcelain toy dishes were found at each domestic site. Their distribution and kind follow: 22CL567--one small lid; 22CL569--one lid and one cup; 22CL571A, two cups, one pitcher, one plate, and one soap dish (?); 22CL571B--one small cup or bowl.

Table 29. Miscellaneous Non-Vessel Ceramic Artifacts (Fragment/MNI).

Type	567	569	571A	571B	571C	571D	575	576	Frag	MNI
B02-01-97A light fixture	-	3/1	-	-	-	-	-	-	3	1
B02-01-98A door knob	-	-	1	1	-	-	-	-	2	2
B02-01-99A casterwheel	-	-	2	-	-	-	-	-	2	2
B04-01-97A marbles, plain	1	2	9	3	-	-	-	-	15	5
B04-09-97A marbles, painted	-	1	2	-	-	-	-	-	3	3
B04-09-100 doll parts	3/1	7/3	22/7	6/3	-	1/1	1/1	-	40	18
B04-01-103 syringe tip	-	-	1	-	-	-	-	-	1	1
B04-01-104 buttons	1	-	-	-	-	-	-	-	1	1
B04-04-102 brooch	-	1	-	-	-	-	-	-	1	1
C08-01-01 tile	-	16	-	-	-	-	-	-	16	16
C08-01-02 tile	-	3	-	-	-	-	-	-	3	3
D01-02-01 door knob	-	2	-	-	-	-	-	1	3	3
D03-01-97 marble	-	3	2	2	-	-	-	-	7	7
D04-01-01 reed pipes	-	-	3/3	2/2	-	1/1	-	-	6	6
D04-01-02 reed pipes	-	-	11/7	2/2	-	1/1	-	-	14	10
D04-02-01 reed pipes	-	-	1/1	-	-	-	-	-	1	1
D04-02-02 reed pipes	-	-	8/6	-	-	-	-	-	8	6
D05-01-01 prehistoric	-	-	-	-	-	-	2/2	-	2	2
Total fragments	5	38	62	16	-	3	3	1	128	--
Total MNI	5	32	41	13	-	3	3	1	--	98

Table 30. Distribution of Doll Parts

	<u>22CL567</u>	<u>22CL569</u>	<u>22CL571A</u>	<u>22CL571B</u>	<u>22CL571D</u>	<u>22CL575</u>
<u>plain bisque</u>						
hands together	1	-	1	-	-	-
feet together	-	-	1	-	-	-
legs	-	-	4	-	-	-
hair	-	-	2	-	-	-
head	-	-	1	-	-	-
<u>flesh tinted bisque</u>						
head fragments	1	5	-	2	-	-
<u>glazed</u>						
head	-	-	2	-	1	-
head fragments	-	-	7	3	-	1
arm	-	2	3	-	-	-
leg	-	-	1	1	-	-
torso	1	-	-	-	-	-

Common Earthenware

Remarkably few artifacts were made from common or coarse earthenware (Tables 29 and 31). Three bowls each occurred at 22CL569 and 22CL571A. A total of 33 common earthenware artifacts included door knobs, smoking pipes, playing marbles, or prehistoric ceramics.

Clay marbles, according to Randall (1971:103; 1979:9) date from at least the early 18th century until the mid 1930s and possibly until the 1960s. Since the clay marble can be made at home by children it has limited utility for dating. Although made primarily in Germany, clay marbles were manufactured in the United States from 1884 to 1918, when cheaper machine-made glass marbles largely replaced them. They are listed in the 1923 Sears, Roebuck Co. catalog.

The clay pipes were short stemmed, reed stemmed, or elbow pipes, as they are variously called. In these there is a short stem attached to the bowl. No long stemmed pipes were recovered. The paste varies from a gray to buff to brown, and the clay is molded into many designs: cross-hatching, swirls, flutes, rings, ribs, and effigy faces. They are characteristic of the mid 19th century, but no specific date has been assigned. They are similar to the ones illustrated by Humphrey (1969:24), but the Waverly specimens were badly fragmented and no maker's marks were discerned.

Two sherds of grit tempered, prehistoric pottery were found in the gravel fill (along with a projectile point) at the steam powered gin and grist mill (22CL575).

Stoneware

Stoneware was relatively common at each of the sites representing 19.5% of the vessel fragments and 21.8% of the vessel MNI (Tables 32-37). By comparing Tables 32 and 33, we may see the relative frequency by glaze for the combined sites (Table 36).

Table 11. Stoneware and Common Earthenware, Vessel Count (MNI).

Stoneware	22CL567		22CL569		22CL571A		22CL571B		22CL571C		22CL571D		22CL575		22CL576		Total	
	N	Z	N	Z	N	Z	N	Z	N	Z	N	Z	N	Z	N	Z	N	Z
Jugs	6	75.0	13	56.5	12	54.4	8	66.7	5	100.0	10	90.9	1	50.0	4	80.0	59	63.4
Crocks	2	25.0	2	8.7	3	11.1	-	-	-	-	-	-	-	-	-	-	7	7.5
Crock or Jug	-	-	3	13.0	3	11.1	2	16.7	-	-	-	-	-	-	-	-	8	8.6
Lid	-	-	2	8.7	1	3.7	2	16.7	-	-	-	-	-	-	-	-	5	5.4
Miscellaneous	-	-	-	-	5	18.5	-	-	-	-	1	9.1	1	50.0	1	20.0	8	8.6
Earthenware																		
Redware bowl	-	-	1	4.3	-	-	-	-	-	-	-	-	-	-	-	-	1	1.1
Yellowware bowl	-	-	2	8.7	2	7.4	-	-	-	-	-	-	-	-	-	-	4	4.3
Rockingham bowl	-	-	-	-	1	3.7	-	-	-	-	-	-	-	-	-	-	1	1.1
Total	8	100.0	23	99.9	27	99.9	12	100.1	5	100.0	11	100.0	2	100.0	5	100.0	93	100.0

Table 12. Stoneware Vessels (MNI) by Category

	22CL567		22CL569		22CL571A		22CL571B		22CL571C		22CL571D		22CL575		22CL576		Total	
	N	Z	N	Z	N	Z	N	Z	N	Z	N	Z	N	Z	N	Z	N	Z
C01-02	2	25.0	2	10.0	2	8.3	2	16.7	-	-	1	9.1	-	-	2	40.0	11	12.6
Jug	-	-	-	-	1	4.2	-	-	-	-	-	-	-	-	-	-	1	1.1
Crock	-	-	2	10.0	1	4.2	-	-	-	-	-	-	-	-	-	-	3	3.4
Lid	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C02-01	2	25.0	4	20.0	3	12.5	3	25.0	-	-	1	9.1	-	-	1	20.0	14	16.1
Jug	2	25.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2.3
Crock	-	-	3	15.0	-	-	-	-	-	-	-	-	-	-	-	-	3	3.4
Jug or Crock	-	-	-	-	1	4.2	-	-	-	-	-	-	-	-	-	-	1	1.1
Miscellaneous	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C02-02	2	25.0	7	35.0	4	16.7	-	-	3	60.0	4	36.4	-	-	1	20.0	21	24.1
Jug	-	-	1	5.0	1	4.2	-	-	-	-	-	-	-	-	-	-	2	2.3
Crock	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2.3
Jug or Crock	-	-	-	-	-	-	2	16.7	-	-	-	-	-	-	-	-	2	2.3
C03	-	-	-	-	3	12.5	1	8.3	2	40.0	2	18.2	-	-	-	-	8	9.2
Jug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C04	-	-	-	-	-	-	2	16.7	-	-	2	18.2	1	50.0	-	-	5	5.7
Jug	-	-	1	5.0	1	4.2	-	-	-	-	-	-	-	-	-	-	2	2.3
Crock	-	-	-	-	3	12.5	-	-	-	-	-	-	-	-	-	-	3	3.4
Jug or Crock	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2.3
Miscellaneous	-	-	-	-	-	-	2	16.7	-	-	-	-	-	-	-	-	2	2.3
C05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	1	4.2	-	-	-	-	-	-	-	-	-	-	1	1.1
C07	-	-	-	-	3	12.5	-	-	-	-	1	9.1	1	50.0	-	-	6	6.9
Miscellaneous	-	-	20	100.0	24	100.2	12	100.1	5	100.0	11	100.1	2	100.0	5	100.0	87	99.6
Total	8	100.0	20	100.0	24	100.2	12	100.1	5	100.0	11	100.1	2	100.0	5	100.0	87	99.6

Table 13. Stoneware Fragments

	22CL567	22CL569	22CL571A	22CL571B	22CL571C	22CL571D	22CL575	22CL576	Total
N	1	7	18	13	13	4	-	2	46
Z	7.4	3.7	8.1	13.4	-	11.4	-	11.8	7.4
22CL567	3	3	1	10	10	-	-	4	21
22CL569	2	5	1	1	1	-	-	2	11
22CL571A	15	14	123	22	22	1	-	1	188
22CL571B	20	22	248	23	23	18	-	4	368
22CL571C	-	-	15	3	6	19	-	-	24
22CL571D	-	-	31	3	3	6	-	-	40
22CL575	-	98	7	14	2	5	3	-	126
22CL576	-	-	1	1	1	1	-	-	4
Total	41	188	404	97	31	35	4	17	877
	100.0	100.0	100.0	99.9	100.0	99.8	100.0	100.0	100.0

Table 14. Ceramic Ware Frequency by Fragment for Vessels and Non-vessels.

	22CL567	22CL569	22CL571A	22CL571B	22CL571C	22CL571D	22CL575	22CL576	Total
N	25	42	178	28	2	7	-	-	232
Z	6.0	7.5	7.7	4.8	3.5	8.6	-	-	5.2
Vessel	61	188	466	97	31	35	4	17	877
Non-Vessel	25	42	178	28	2	7	-	-	232
Total	86	230	644	125	33	42	4	17	1109
	100.0	100.0	100.0	99.9	100.0	99.9	100.0	100.0	100.0

Table 15. Ceramic Ware Frequency by MNI for Vessels and Non-vessels

	22CL567	22CL569	22CL571A	22CL571B	22CL571C	22CL571D	22CL575	22CL576	Total
N	8	20	26	13	5	3	-	-	52
Z	16.5	18.0	17.1	18.0	100.0	15.8	-	-	13.0
Vessel	8	20	26	13	5	3	2	5	87
Non-Vessel	26	80	89	67	5	5	6	2	255
Total	34	100	115	80	10	8	8	7	342
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Vessel forms are predominantly jugs (63.4% MNI of stoneware and common earthenware combined; Table 31), while crocks are represented by only seven vessels (7.5%), of which several are butter churns. The jugs are cylindrical, while the crocks tend to be more globular. Even if the vessels labelled as "jug or crock" are all crocks (that is, large-mouthed storage vessels), this means that there are four times as many jugs as crocks (59:15). Several of the jugs are stenciled as containing whiskey, but any could have been used for molasses as well.

Mass produced stoneware does not seem to have received the attention that folk produced stonewares have received. In addition, such ware does not have the kind of popularity fluctuations noted in porcelain and earthenwares, reflecting the shift of stonewares to a utilitarian function by the 19th century.

According to Watkins (1950:31) the production of saltglazed vessels (with an interior slip, C01-02) dated from 1790-1860, although Ramsay (1947:140) gives an earlier date of 1775. Bartovics (n.d.) assigns an occurrence date of 1826-1905 to these vessels. Only a few sherds (21 of 860 stoneware fragments or 2.4%) of this category were recovered at each site (Table 32).

Albany slipglazed exterior stoneware, C02-02, was made from 1830 on according to Ramsay (1947:144) and predominates from the late 1850s to the late 1880s (Watkins 1950:31), when presumably white slip replaced it in popularity. A total of 368 of 877 stoneware fragments (42.0%) were Albany brown slip exterior, while Bristol (white) slip (C02-01) was represented by 204 fragments (23.2%).

Analysis of the glaze distribution by site (Table 31) reveals saltgalzed to be slightly more prevalent at the later sites (22CL567, 22CL569). Alkaline glaze (C04) by contrast, is absent from 22CL567, represented by 5% at 22CL569, but 16.7% and 33.3% at 22CL571A and 22CL571B. This suggests that alkaline glaze should be a good indicator of pre-1910 or even earlier occupation, since 22CL567 and 22CL569 date only to the 20th century in terms of occupation. Slipglaze stoneware is also much more frequent at the later sites: 75% at both 22CL567 and 22CL569, 41.7% at 22CL571B, and 37.6% at 22CL571A (Table 31). Seriation of each glaze illustrates the above discussion (Figure 10). What this shows is that like the index of diversity for porcelain and earthenware discussed later, sites 22CL567 and 22CL569 are most similar to each other, while different from the 22CL571 sites. If we assemble the available oral, historical, and archaeological data, the order of occupation should be: 22CL571B, 22CL571A, 22CL569, 22CL567, in terms of initial dates. With only slight variation this order is revealed in the seriation.

Table 36. Stoneware Glazes.

glaze	fragments	MNI
C01 Salt	9.8%	17.2%
C02 Slip	64.2	51.7
C03 Salt/slip	7.0	9.2
C04 Alkaline	16.1	13.8
C05 Clear	.1	1.1
C07 Misc.	1.8	6.9
	100.0%	99.9%

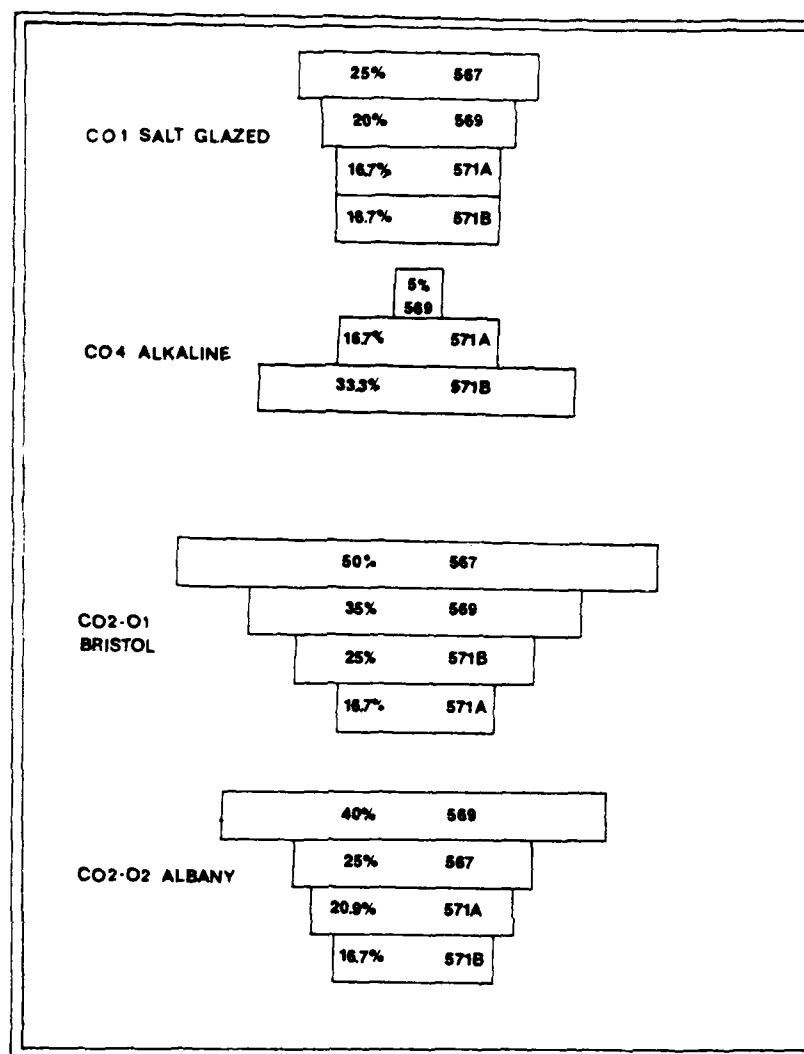


Figure 10.--Seriation of Stoneware Glazes by Vessel MNI.

Decoration

In order to visualize the presence and absence of decorative elements in this assemblage, a matrix analysis was performed. In the first matrix (Table 37A), the decorative categories are presented at the top, while vessel forms are shown on the right. These are then reordered by column rank in Table 37B, and by both column and rank in Table 37C. Black squares are missing data. Several reasons could exist for missing data: (1) no such combination of vessel form and decoration exists; (2) such combinations were available but not ordered by the retailer; (3) the vessels were available at the retailer but the consumer could not afford it or preferred other categories; (4) the vessels were purchased, used, and discarded (or moved elsewhere) from areas not sampled for each site. Regarding point #1, historical data should exist to confirm each variable, but no attempt has been made here to do so. In some cases, point #2 would be testable if detailed account books exist; this would also make point #3 testable and

hence, point #4. Unfortunately for the Waverly data, the assumption must be made that the ceramics recovered are representative of the total ceramics used at a site. What the matrix in Table 37C shows is that plain, decal transferprinting, embossing, and transferprinting predominate in the ceramic assemblage. Furthermore, cups, saucers, small bowls, and miscellaneous serving vessels are much more frequently decorated than plates and large bowls. Since this matrix combines presence/absence for all four domestic sites at Waverly, and combines both porcelain and earthenware, let us examine these in finer detail. Porcelain and earthenware were combined to examine the decorative categories used at Waverly.

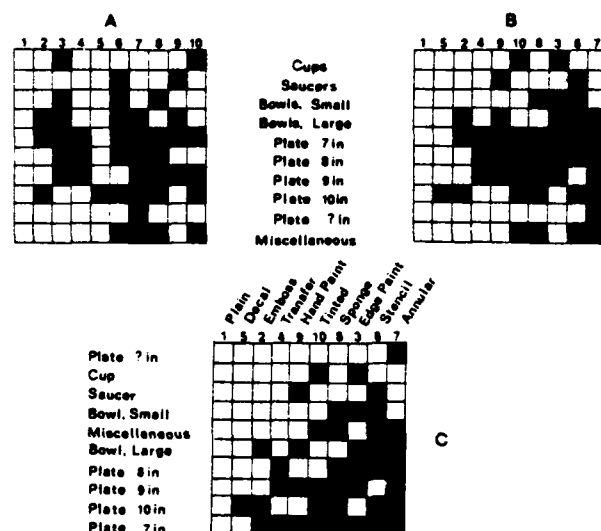


Table 37. Matrix of Decorative Styles Using Presence/Absence.

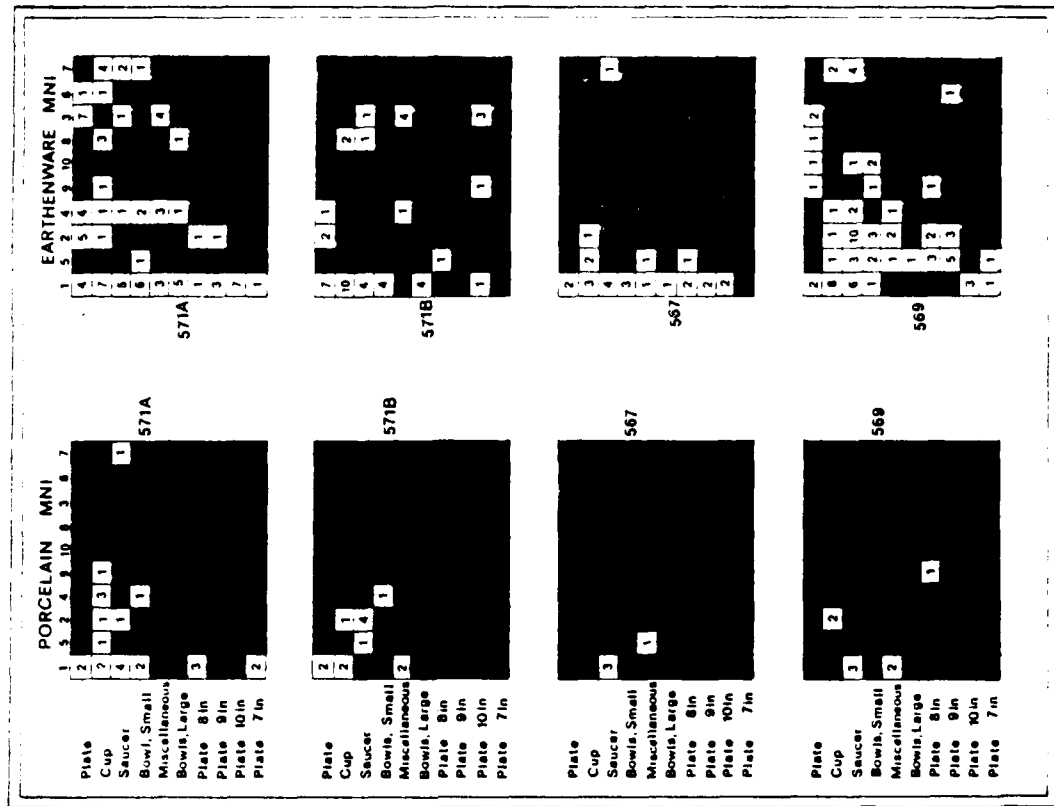
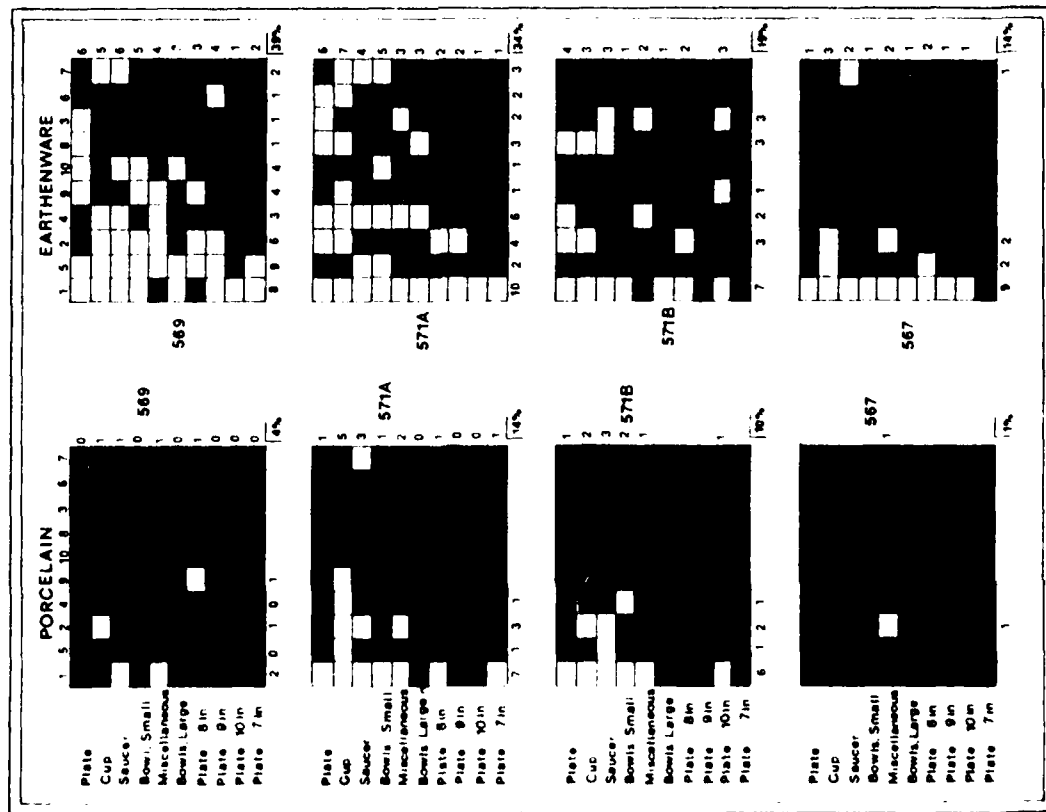
Using the ranking from Table 37C, each site was plotted for porcelain and for earthenware. Several assumptions were made: first, that all 100 possibilities (10x10) exist and could have been ordered by the retailer and second, that the presence or absence is reflective of socioeconomic preference or purchasing ability. These matrices produce some striking results, revealing the diversity of decoration between sites as well as within each site assemblage.

An index of diversity may be derived by determining the percentage of the matrix in which vessels are present (Table 38). The frequency of diversity follows:

	22CL567	22CL571B	22CL571A	22CL569
porcelain	1%	10%	14%	4%
earthenware	14%	19%	34%	39%

However, since the percentage of matrix completion is dependent upon sample size, some adjustment must be made to be able to compare diversity between sites with different sample sizes. Although neither site could be expected to fill the matrix, this means that a site (22CL567) producing only 30 vessels has only half the probability of filling a matrix as does a site with 60 vessels (22CL571B). Hence, the matrix frequency is divided by the sample size to produce an index of diversity:

	22CL571A	22CL571B	22CL569	22CL567
porcelain	12.4	16.7	3.9	3.3
earthenware	30.1	31.7	44.3	46.7



The above indicate that for earthenware and porcelain, sites 22CL571A and 22CL571B are nearly the same, sites 22CL567 and 22CL569 are nearly the same, and the two sets of sites are different from one another in terms of the diversity of the ceramic assemblage by decorative style.

If we look more closely at the data, by presenting actual occurrence, rather than presence/absence, we derive Tables 39-42. These show sample size by vessel form and decorative style, percentage within each ware, and averages. For the four domestic sites, 48.8% of all porcelain and earthenware vessels are plain, 14.1% are embossed, 8.9% decal transferprinted, 7.9% transferprinted, 7.6% edge painted, and 13.7% other categories.

The majority of ceramics are plain. Of 242 earthenware vessels from the four domestic sites, 113 (46.7%) were plain, 32 (13.2%) relief decorated, 23 (9.5%) decal transferprint, 22 (9.1%) edge painted, 18 (7.4%) transferprinted, and 34 (14%) other categories (Tables 41 and 42). Nearly all (17 of 23) decal decorated ceramics were from 22CL569, the latest site. The data from Table 42 is shown in a cumulative graph (Figure 11). This shows two things: the proportion of decorative categories and their change through time (sites are ordered temporally). The decorative elements seriate well, and so we feel the site differences are probably best explained on availability, production, and popularity rather than on selection per se, that is, the ceramics are temporally significant. Several trends are evident through time: (1) decreases in plain whiteware, edge painted, and sponge decorated ceramics; and (2) increases in relief decoration and decal transferprinting.

Examining these decorative categories by vessel form (Figure 12), we see that 41.3% to 57.1% of all cups, saucers, plates, and small bowls were plain white, that large bowls were less often (23.1%) decorated, while miscellaneous vessels were more often decorated (81.0%). Decal transferprinting was used on 6.1% to 11.5% of each form. Transferprinting was found in about the same proportion (4.1%-7.7%) except in miscellaneous vessels where it was more common (23.8%). Relief decoration ranged from 6.1% of all cups to 21.7% of all saucers. Other categories varied considerably in frequency by vessel.

Vessel Form

The decorative style provided the distinction on the category level. For the type level the vessel form was used:

<u>Type</u>	<u>Vessel form</u>	<u>Type</u>	<u>Vessel Form</u>
-00	not assignable	-07	saucer rim
-01	cup rim	-08	saucer body
-02	cup body	-09	saucer base
-03	cup base	-10	plate rim
-04	bowl rim	-11	plate body
-05	bowl body	-12	plate base
-06	bowl base	-13	misc. vessel

Table 40. Sample Frequency by Decoration and Vessel (% of MNI).

PORCELAIN											
	1	2	3	4	5	6	7				
Plate	8.3										
Cup	8.3	4.2	4.2	2.3	4.2						
Saucer	16.7		4.2								4.2
Bowl, Small	8.3			4.2							
Miscellaneous											
Bowls, Large											
Plate 8in	12.5										
Plate 9in											
Plate 10in											
Plate 7in	8.3										
571A											
Plate	15.4										
Cup	15.4		7.7								
Saucer		7.7	30.8								
Bowls, Small				7.7							
Miscellaneous	15.4										
Bowls, Large											
Plate 8in											
Plate 9in											
Plate 10in											
Plate 7in											
571B											
Plate											
Cup											
Saucer											
Bowls, Small											
Miscellaneous											
Bowls, Large											
Plate 8in											
Plate 9in											
Plate 10in											
Plate 7in											
567											
Plate											
Cup											
Saucer	7.5										
Bowls, Small		2.5									
Miscellaneous											
Bowls, Large											
Plate 8in											
Plate 9in											
Plate 10in											
Plate 7in											
568											
Plate											
Cup											
Saucer	37.5		2.5								
Bowls, Small											
Miscellaneous	2.5										
Bowls, Large											
Plate 8in											
Plate 9in											
Plate 10in											
Plate 7in											
571A											
Plate	4.5	5.6	4.5								
Cup	7.9	1.1	1.1								
Saucer	5.6										
Bowl, Small	6.7	1.1									
Miscellaneous	3.4										
Bowls, Large	5.6										
Plate 8in	1.1										
Plate 9in	3.4	1.1									
Plate 10in	7.9										
Plate 7in	1.1										
571B											
Plate	14.9		4.2	2.1							
Cup	21.3										
Saucer	8.5										
Bowls, Small	6.5										
Miscellaneous	8.5										
Bowls, Large											
Plate 8in											
Plate 9in											
Plate 10in											
Plate 7in											
567											
Plate	7.7										
Cup	11.5	7.7	3.8								
Saucer	15.3										3.8
Bowls, Small	11.5										
Miscellaneous	3.8	3.8									
Bowls, Large	3.8										
Plate 8in	7.7	3.8									
Plate 9in	7.7										
Plate 10in	7.7										
Plate 7in											
568											
Plate	2.5										
Cup	10.0	1.2	1.2	1.2							
Saucer	7.5	3.8	12.5	2.5							2.5
Bowls, Small	12	2.5	3.8								5.6
Miscellaneous											
Bowls, Large											
Plate 8in											
Plate 9in											
Plate 10in											
Plate 7in											

Most of the Waverly ceramics were so badly fragmented and scattered in the yards that little mending and physical reconstruction was possible. However, by measuring the curvature of the rim and base, many vessel forms and sizes could, nevertheless, be determined. In addition, a minimum number of individual vessels (MNI) could be determined using size and other attributes. These MNI figures are minimums, more vessels could and would have been present in the assemblage. The use of MNI of ceramic vessels has been infrequent in the literature; however, vessel count seems to be a more accurate portrayal of the past than the usual method of counting only the fragments. We have done both here.

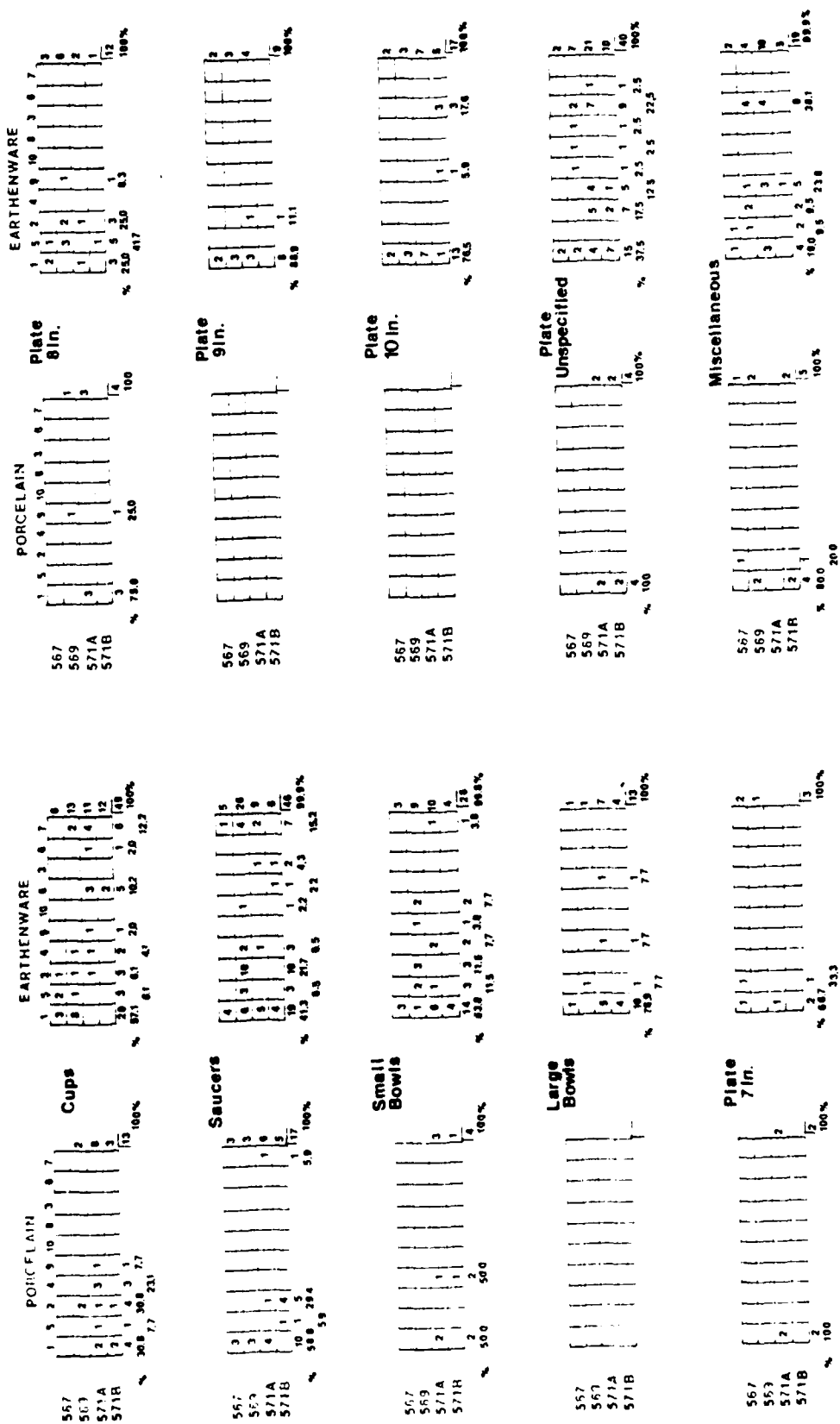


Table 41. Comparison of Decorative Categories by Vessel and Site.

AD-A127 617

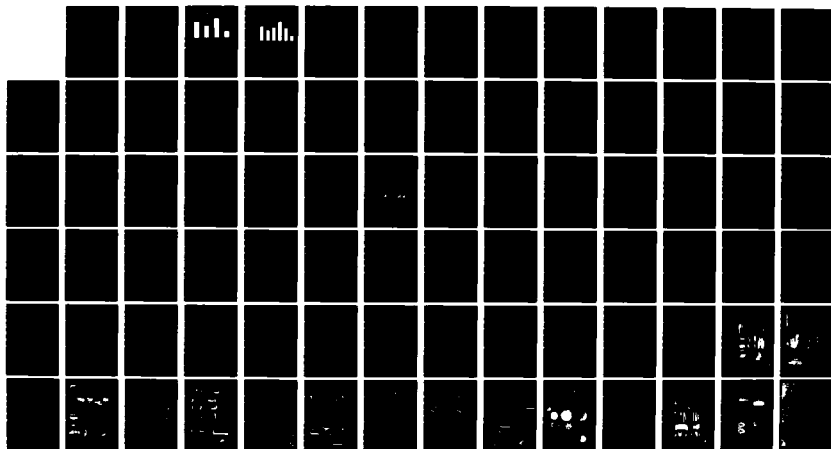
WAVERLY PLANTATION: ETHNOARCHAEOLOGY OF A TENANT
FARMING COMMUNITY(U) RESOURCE ANALYSTS INC BLOOMINGTON
IN W H ADAMS 16 DEC 80

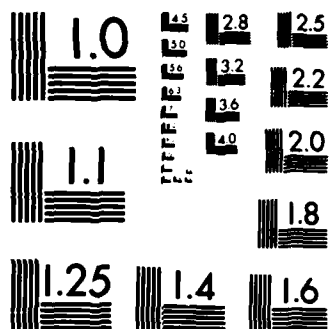
6/6

UNCLASSIFIED

F/G 8/7

NL





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

Table 42. Comparison of Vessel Form by Decorative Category and Site.

	PORCELAIN				EARTHENWARE					PORCELAIN				EARTHENWARE				
	567	569	571A	571B	567	569	571A	571B		567	569	571A	571B	567	569	571A	571B	
Plate																		
Cup																		
Saucer																		
Bowls, Small																		
Miscellaneous																		
Bowls, Large																		
Plate 8in																		
Plate 9in																		
Plate 10in																		
Plate 7in																		
	3	5	15	6	29	100				28	21	42	30	113	100			
Plate																		
Cup																		
Saucer																		
Bowls, Small																		
Miscellaneous																		
Bowls, Large																		
Plate 8in																		
Plate 9in																		
Plate 10in																		
Plate 7in																		
	2	2	5		9	100				1	21	6	2	32	100			
Plate																		
Cup																		
Saucer																		
Bowls, Small																		
Miscellaneous																		
Bowls, Large																		
Plate 8in																		
Plate 9in																		
Plate 10in																		
Plate 7in																		
Plate																		
Cup																		
Saucer																		
Bowls, Small																		
Miscellaneous																		
Bowls, Large																		
Plate 8in																		
Plate 9in																		
Plate 10in																		
Plate 7in																		
Plate																		
Cup																		
Saucer																		
Bowls, Small																		
Miscellaneous																		
Bowls, Large																		
Plate 8in																		
Plate 9in																		
Plate 10in																		
Plate 7in																		
Plate																		
Cup																		
Saucer																		
Bowls, Small																		
Miscellaneous																		
Bowls, Large																		
Plate 8in																		
Plate 9in																		
Plate 10in																		
Plate 7in																		
Plate																		
Cup																		
Saucer																		
Bowls, Small																		
Miscellaneous																		
Bowls, Large																		
Plate 8in																		
Plate 9in																		
Plate 10in																		
Plate 7in																		
Plate																		
Cup																		
Saucer																		
Bowls, Small																		
Miscellaneous																		
Bowls, Large																		
Plate 8in																		
Plate 9in																		
Plate 10in																		
Plate 7in																		

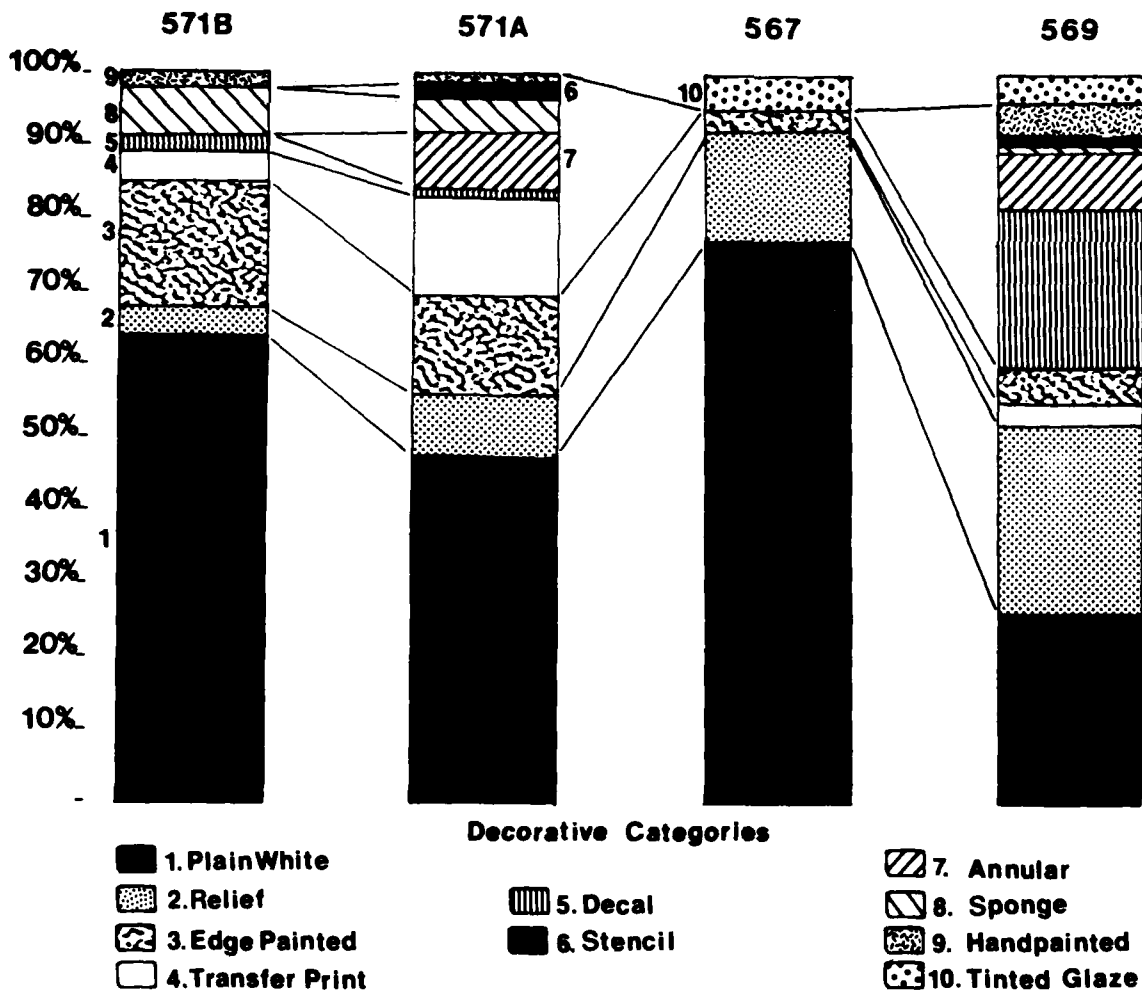


Figure 11.--Cumulative Graph of Percentage of Decorative Categories for Ceramic Assemblages from the Domestic Sites.

Table 27 presents the frequency of occurrence for each porcelain and earthenware vessel form by site. A total of 299 vessels (MNI) was recovered from the four domestic sites. Sites 22CL575 and 22CL576 contained only a few ceramic fragments. By combining porcelain and earthenware vessels, we see that 21.4% are cups, 21.7% are saucers, 10.7% small bowls, 4.3% large serving bowls, 32.8% plates, and 9.1% miscellaneous vessels. Of these, 17.1% are porcelain vessels and 82.9% are earthenware (Table 27). However, using sherd count, these figures would be 6.5% porcelain and 93.5% earthenware (Table 28). If we were to use fragment count (Table 28) instead of vessel count, the results would be considerably different for some vessels (Table 43).

Table 43. Vessel Form Using MNI vs. Fragment Count.

Vessel	MNI	Fragment
cups	21.4%	15.4%
saucers	21.7	24.8
small bowls	10.7	11.8
large bowls	4.3	3.9
plates	32.8	33.7
misc.	9.1	10.4
	100.0	100.0

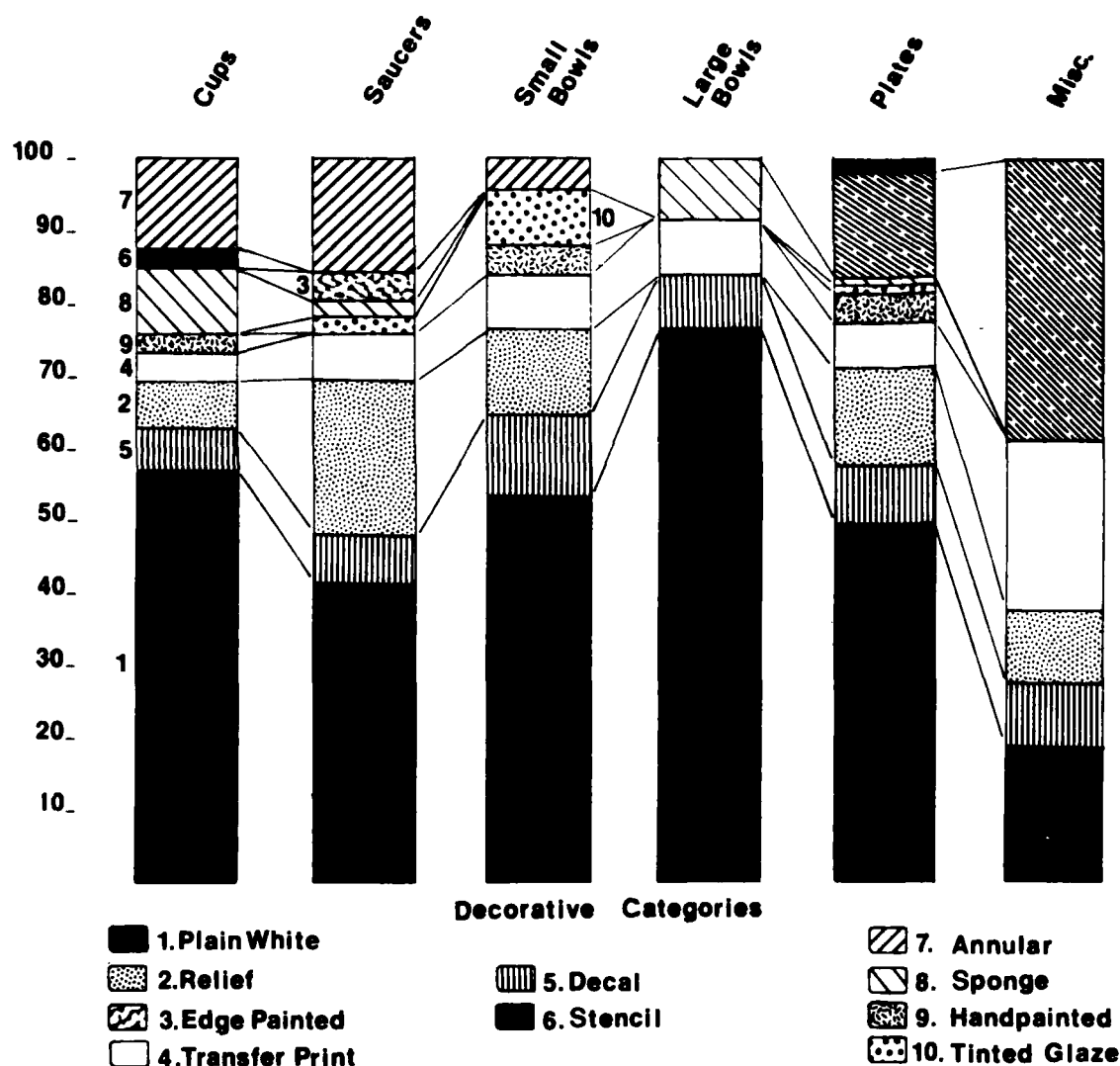


Figure 12.--Percentage of Vessel Decoration for Earthenware.

However, the results are generally quite similar for two reasons. First, the fragment count/MNI ratio is 1735:299 or about six to one classifiable sherds per vessel; these were primarily rim and base fragments, the criteria for determining MNI. Had the body sherds been included, the above figure would be different, since different shaped vessels will break into different numbers of sherds, depending on body thickness, hardness, curvature, and size. A lawlike generalization can be posited regarding the relationship between vessel curvature, time, and density of occupation: in high density areas (like yards) the intensity of activity and duration of occupation will produce a trend toward flat sherds. Curved vessel fragments are crushed by feet until nearly flat sherds are produced.

Comparisons with data from a historical source and four other historical sites reveals how the proportion of vessel forms differs (Table 44; Figure 13). These four sites are:

-- Silcott, Washington, a small farming community in the southeastern part of the state; five sites dated to the 1880-1930 period (Adams 1977a; Adams, Gaw, and Leonhardy 1975; Gaw 1975).

Table 44. Comparison of Waverly Domestic Sites with Other Data.

	Sears 56 pc.	Sears 80 pc	Silcott	Villier	Custer Road	Waverly	Walla Walla Black	Walla Walla White
cups	10.7	15.0	27.9	30.0	11.0	21.4	17.0	27.4
saucers	10.7	15.0	15.7	23.3	-	21.7	6.0	12.7
bowls, small	10.7	15.0	21.5	10.0	46.0	10.7	44.0	15.8
bowls, large	3.6	2.5	*	*	*	4.3	*	*
plate, 6 inch	10.7	15.0	-	-	-	-	-	-
plate, 7 inch	10.7	15.0	-	-	-	1.7	-	-
plate, 8 inch	10.7	-	-	-	-	5.3	-	-
plate, 9 inch	10.7	15.0	-	-	-	5.0	-	-
plate, 10	-	-	-	-	-	5.7	-	-
plate, unspec	-	-	26.7	33.3	28.0	15.1	20.0	27.7
misc.	21.5	7.5	8.1	3.3	15.0	9.1	8.0	16.3
	100.0	100.0	99.9	99.9	100.0	100.0	100.0	100.1

*included in miscellaneous vessels.

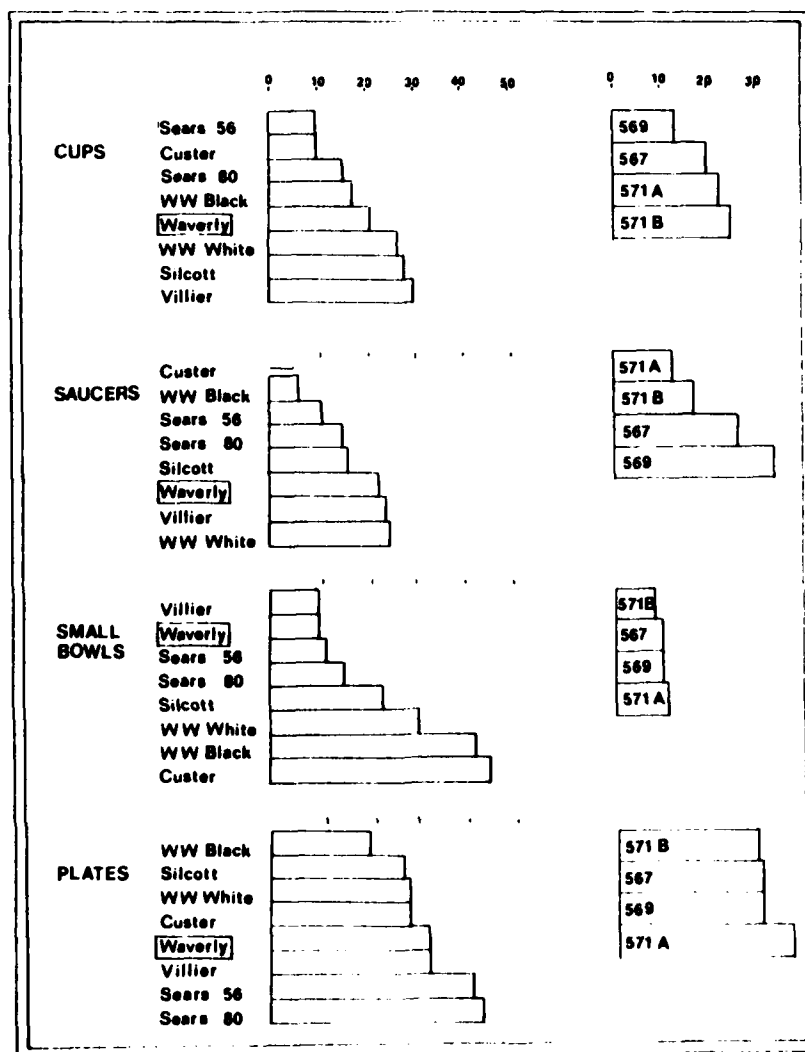


Figure 13.--Frequency by Vessel Form for Waverly and other Sites.

- Fort Walla Walla, a military post in southeastern Washington, assemblage dated 1900-1910, contained material from both black and white regiments (Riordan 1978, n.d.).
- Custer Road Dump, Michigan, military dump dating 1876-1896, the material included here is only the USQMD plain whiteware (Brose 1967).
- Villier site, Kentucky, a farmer's house dating 1880s-1930s (Smith 1979).

In addition, the Sears Roebuck catalog (1902:788) was consulted to acquire data on ceramic sets. The 56-piece and the 80-piece sets are compared by frequencies for the vessel forms examined here to provide the percentage of each form had sets been purchased.

Cups at Waverly ranged from 15.9% to 25% of the ceramic assemblage, with an average of 21.4% (note: the averages include Areas C and D at 22CL571). This is most similar to the Fort Walla Walla data, but the range is comparable to each site being compared.

Saucers at Waverly ranged from 13.3% to 32.9% with an average of 21.7%. This is most comparable to the Villier Site and is much higher than all others. This may be a result of saucers being used as small plates, or the other sites may be low due to use of coffee mugs without saucers.

Small bowls at Waverly ranged from 8.4% to 10.4%, averaging 10.7% when 22CL571D is included. Again, the most similar assemblage is that of the Villier Site. Small bowls are comparatively less frequent at Waverly than the other sites being compared. Between the Waverly domestic sites there is virtually no difference in frequency.

Large serving bowls ranged from 1.1% to 6.7% with the average 4.3%. Compared with the Sears catalog (1902:788) this figure is slightly higher than for the sets (2.5%, 3.6%). Large bowls at the other sites were classified under the miscellaneous category.

Plates ranged from 30.0 to 37.3%, averaging 32.8%. The difference between the Waverly sites was not great, except 22CL571A. Compared to the other data, Waverly sites appeared to be similar in usage of plates.

Miscellaneous vessels ranged from 6.8% to 11.6%, averaging 9.1%. Since this category included non-tableware vessels such as washing pitchers and chamber pots it is difficult to compare with other sites.

Ceramic Dating

Ceramics are used more for dating sites than are probably any other class of artifacts. Mostly this is a result of their durability and the amount of study given them. Dating methods for the ceramics from a site include: (1) maker's mark; (2) decorative style; (3) decorative elements (patterns); (4) ware. In addition, the kind of date must be considered. At present the literature contains many different opinions on dates, often divergent. Some ceramic dates are those of manufacture for a particular ware, style, pattern, or mark (eg., Godden 1964; Hughes 1960; Lehner 1978), others are for their occurrence archaeologically (eg. Price 1979; Bartovics n.d.), while most are a mixture of manufacture dates, occurrence dates, and opinion (eg., South 1972). To complicate matters, one frequently cited source is quite misleading. Ramsay's 1947 work arbitrarily gives a terminal date of 1900 for all ceramics, since he was only studying the 19th century!

To further complicate the matter has been the fallacious assumption that the ceramics arrived at the consumer's pantry within an extremely short time after manufacture. As we have previously shown, a considerable difference may exist between the manufacture date and the ceramic artifact's occurrence within an archaeological context. At Silcott, the ceramics had a "lifespan" 22 years longer in the system than did the bottles (Adams and Gaw 1977), while at Fort Walla Walla, the ceramics had a time lag of 18 years and the bottles 4.5 years (Riordan n.d.). On the basis of these sites we would suggest that ceramics would tend to date 20 to 30 years earlier than the archaeological context in which they were found (particularly in rural areas among poor farmers).

Mark Dates

The mark dates are presented in Tables 45 and 46, giving the mean range (the range of the mean initial and mean terminal dates), the mean median date or central point date, the maximum range (the range between the earliest initial and the latest terminal dates), and the minimum range (the range between the earliest terminal and latest initial dates). While none of these ranges provides easy interpretation of site dates, one aspect emerges: the ceramic dates are much earlier than the historical dates.

Decorative Style Dates

Tables 47 and 48 provide dates on various decorative categories. The date ranges given are from Bartovics' study of Daniels Village. Those dates are 2-6 years later than those of South (1972:85) for initial dates to place them in the next five year incremental period. Thus, if South gave 1827, Bartovics assigned that to the 1831-1835 increment. By doing this Bartovics has diminished the amount of time lag for the ceramics, something which South had also done. Thus the dates assigned here are perhaps a decade later than the actual manufacture date.

In order to better understand the dates, following discussion will present several different methods, based upon South's (1972) median dating technique, and that of Adams and Gaw (1977) for mean range dating. South's formula is simply the derivation of a weighted average or mean for the midpoint or median date for a ceramic date range (South 1972). Table 48 presents the calculation of this formula; the South method is shown in column Xf--this is the fragment weighted mean of median dates. Columns If and Tf are the fragment weighted means of the initial and terminal dates. The next four columns present the same approach but apply it to the vessel count (MNI) instead of the fragment count. This method should be more accurate, since it eliminates bias incurred by the vagaries of fragmentation. It will of course have a smaller sample number, but one more representative of the sample population.

Table 49 compares the results of the above weighted means with the mark dates. Several biases need to be restated. For the weighted averages, as much as 10 years or more have been added to the ranges stated, in order to minimize time lag. Thus, the dates given are later than the actual manufacture date. The mark dates contain a different bias, inherent originally. Until the late 19th century, most American potteries did not mark their pieces or marked them with fake British marks, because the total domination by the British of the world ceramic market made American products more difficult to sell in America. This means that earlier American marks will be underrepresented in the sample.

Table 45. Range and Mean Dates from Ceramic Marks.

	22CL567	22CL569	22CL571A	22CL571B
Mean Initial	1883	1907.9	1865.6	1868
Mean Median	1903	1919.2	1877.9	1884.8
Mean Terminal	1927	1937.8	1889.6	1901.5
	I T	I T	I T	I T
Mean Range	1883-1927	1908-1938	1865-1890	1868-1902
Maximum Range	1878-1930	1872-1968	1843-1920	1839-1928
Minimum Range*	1891-1924	1945-1911	1892-1855	1891-1846

*the minimum range is that between the latest initial and the earliest terminal dates, hence at site 22CL569 the deposit began not much later than 1911 and ceased no earlier than 1945, ignoring time lag.

I=Initial: T=Terminal

Table 46. Ceramic Marks and Manufactures

Top	Site*	Maker	Place	Date	Ref
EMA-00-02A	3	Homer Laughlin	East Liverpool, Ohio	1943	Lehner 1978:48
-02B	3	Homer Laughlin	"	1931-39	Lehner 1978:48
-02C	3,3	Homer Laughlin	"	1900-present	Lehner 1978:48
-02D	3	Vedrey	"	1896-1920s	Lehner 1978:53
-02E	3	W.S. George	"	1906-1955	Lehner 1978:53
-02F	3	Taylor, Smith, Taylor	"	1901-present	Barber 1964
-02G	3	Taylor, Smith, Taylor	"	1901-present	Barber 1964
-02H	3	Taylor, Smith, Taylor	"	1901-present	Barber 1964
-02I	3	C.F. Company	"	1891-post 1900	Ramsey 1937:259
-02J	1,3,3	C.F. Company	"	1891-post 1900	Ramsey 1937:259
-02N	3	J. & C. Meakin	England	post-1945	Godden 1964:427
-02O	5A	W. & E. Corn	England	1864-1894	Godden 1964:425
-02P	5A	Carnation McNicol	East Liverpool, Ohio	1892-1920	Lehner 1978:50
-02Q	5A	T.J. & J. Mayer	England	1843-1855	Godden 1964:424
-02R	5A	L.B. Berbowser	"	1879-post 1900	Ramsey 1937:167
-02S	1	Cartright Brothers	East Liverpool, Ohio	1886-post 1924	Lehner 1978:43
-02U	3	Goodwin Prothers	"	1872-1919	Lehner 1978:45
-02V	1	Sebring Pottery Company	Sebring, Ohio	1878-ca.1930	Lehner 1978:83
-02X	5B	J. & C. Alcock	England	1839-1846	Godden 1964:27
-02Y	5B	Moore Brothers	England	1872-1905	Godden 1964:447
-02Z	5B	Knowles, Taylor, Knowles	East Liverpool, Ohio	1876-1928	Lehner 1978:47
-02AA	5B	Knowles, Taylor, Knowles	"	1841-1928	Lehner 1978:47
-01-12E	5A	Campbellfield Pottery Company	Glasgow, Scotland	1850-1884	Godden 1964:125
-04-12BB	10	Trenle China Company	Virginia	1934-	Lehner 1978:53
-12A	9	William Ridgeway & Company	England	1834-1853	Godden 1964:3303
-12C	3	Buffalo Pottery Company	Trenton, NJ	1903-	Altman & Altman
-05-09A	3	Hull China Company	East Liverpool, Ohio	1908-1911	Lehner 1978:45,46
-09D	3	Taylor, Smith, Taylor	"	1936-68	Lehner 1978:52
-09D	3	Taylor, Smith, Taylor	"	1907-present	Lehner 1978:52

1: 22CL567 3: 22CL569 5: 22CL571 9: 22CL575 10: 22CL576

Table 47. Ceramic Dates.

Typology	Occurrence Date*	Manufacture Date	Source
B01 Oriental Export Porcelain	1796-1830*		
B02 Hard Paste Porcelain			
B03 Soft Paste Porcelain			
C01 Salt Glazed Stoneware			
-01 White undecorated	1726-1805		
-02 North American	1826-1905		
-03 Imported bottle	1826-1850		
-04 Yellow	1831-1870		
C02 Slipglaze Stoneware			
-01 Bristol slip	1896-1905		
-02 Albany slip exterior		1830- 1857-1888	A:144 B:31
C03 Slipglaze/Saltglaze			
-01 Bristol slip	1896-1940	1860-	A:144
-02 Albany slip interior/ salt exterior		1790-1860	B:31
C04 Alkaline			
C05 Clear Glaze			
D01 Redware	1941-		
D02 Cream slip, lead		1825-1875	A:134
-01 Common		1830-	A:148
-02 Rockingham	1826-1880	1827-	A:74
-03 Rockingham green	1841-1920		
-04 Rockingham blue	1906-1920	1840-1870	A:147
F01 Pearlware/Whiteware			
-01 Plain			
-02 Embossed/Relief Decorated			
-03 Edge painted			
PW common blue edge	1811-1845		
PW common green edge	1811-1830		
PW elaborate edge	1821-1835		
WW common blue edge	1826-1880		
WW common green edge	1826-1830		
WW reduced relief blue bud pattern arrow	1836-1880		
Typology	Occurrence Date*	Manufacture Date	Source
-04 Transferprint black overglaze early style blue dark blue medium blue early non-blue pale blue flowing color later style reproduction gold/silver line/stipple romantic borders	1786-1815 1816-1850 1821-1875 1826-1875 1831-1865 1841-1900 1856-1915 1891-1920 1901-1910	1756- 1828- 1870*- 1835- 1810- 1810-	D:16 C:129 C:129 C:130 C:127 C:130
-05 Decal monochrome polychrome Stencil	1901-1950		
-06 Annular CW/PW WW	1801-1835 1831-1900 1891-1940 1836-1870		
-08 Sponge spatter stamped	Gold/silver banded	1840-1860	E:20
-09 Hand painted topographical blue floral polychrome floral blue floral polychrome banded polychrome soft pastel bright	1786-1815 1801-1830 1816-1865 1826-1870 1831-1860 1795-ca. 1830 1830-1860 1911-1970	E:21 E:21 E:21 E:21 E:21 E:21 E:21	F F F F F F F
-10 Tinted glaze British majolica		1851-1902	C:200

*Occurrence dates are from Bartovics' estimates (n.d.), unless otherwise noted. A: Ramsay 1947; B: Watkins 1950; C: Hughes 1960; D: Turner 1907; E: Price 1979; F: Noel Hume 1973.

Table 48. Formula Dating.

--Formula Dating, Site 567

EOB Whiteware	I	T	X	D	f	Xf	If	Tf	V	Xv	Iv	Tv
-03 common blue edge	1826-1880	1853	54									
reduced relief blue edge	1836-1850	1855	44									
-04 Transferprint												
early style blue	1786-1815	1800.5	29									
dark blue	1816-1850	1833	34									
medium blue	1821-1875	1848	54									
early non-blue	1826-1875	1850.5	49									
pale blue	1831-1865	1848	34									
flowing color	1841-1900	1870.5	59									
later style	1856-1915	1885.5	59		4	7542	7424	7664	2	3771	3710	3830
reproduction	1891-1920	1905.5	29									
gold/silver	1901-1930	1915.5	29									
-05 decal polychrome	1901-1950	1925.5	49		18	34659	34210	34218	3	5776.5	5703	5850
-07 annular	1831-1900	1865.5	69									
banded polychrome	1831-1860	1845.5	29									
gold/silver banded	1891-1940	1915.5	49		1	1915.5	1891	1940	1	1915.5	1891	1940
-08 sponge	1836-1870	1853	34									
-09 hand painted												
floral polychrome	1826-1870	1848	44									
floral blue	1816-1850	1840.5	49									
-10 tinted glaze	1911-1970	1940.5	59									
Total					23	44116.5	43533	44704	6	11467	11306	11620
Avg.						1916	1892.7	1943.6		1910.5	1884.3	1936.7

--Formula Dating, Site 569

EOB Whiteware	I	T	X	D	f	Xf	If	Tf	V	Xv	Iv	Tv
-03 common blue edge	1826-1880	1853	54		1	1853	1826	1880	1	1853	1826	1880
reduced relief blue edge	1836-1850	1855	44		1	1855	1836	1880	1	1855	1836	1880
-04 Transferprint												
early style blue	1786-1815	1800.5	29									
dark blue	1816-1850	1833	34									
medium blue	1821-1875	1848	54									
early non-blue	1826-1875	1850.5	49									
pale blue	1831-1865	1848	34		1	1848	1831	1865	1	1848	1831	1865
flowing color	1841-1900	1870.5	59		54	10,1817	100,224	103,410	6	11,313	11,136	11,490
later style	1856-1915	1885.5	59									
reproduction	1891-1920	1905.5	29									
gold/silver	1901-1930	1915.5	29									
-05 decal polychrome	1901-1950	1925.5	49		135	259942.5	236,635	262,250	16	24,456	24,218	25,100
-07 annular	1831-1900	1865.5	69		3	5596.5	5493	5706	1	1865.5	1831	1900
banded polychrome	1831-1860	1845.5	29									
gold/silver banded	1891-1940	1915.5	49		21	40225.5	39911	40740	5	9572.5	9450	9600
-08 sponge	1836-1870	1853	34									
-09 hand painted												
floral polychrome	1826-1870	1848	44		5	8212	8130	8250	1	1848	1826	1870
floral blue	1816-1850	1840.5	49									
-10 tinted glaze	1911-1970	1940.5	59		20	135834	129770	131900	1	1940.5	1911	1970
Total					243	558215	504548	540470	47	64488	64016	65550
Avg.						2300	2076.7	2219.8		1912.4	1884.8	1936.7

I = initial date
 T = terminal date
 X = median date
 D = duration
 f = number of fragments
 Xf = product of median date x fragment count
 If = product of initial date x fragment count
 Tf = product of terminal date x fragment count

Xv = product of median date x vessel count
 Iv = product of initial date x vessel count
 Tv = product of terminal date x vessel count

Table 48. (cont.)

--Formula Dating, Site 571A

Site Whiteware	I	T	X	D	F	Xf	If	Tf	V	Xv	Iv	Tv
-01 common blue edge	1826-1880	1853	54	11	20383	20086	20680	8	14824	14628	15040	
reduced relief blue edge	1836-1880	1858	49									
-10 Transferprint												
early style blue	1786-1815	1800.5	29									
dark blue	1816-1850	1833	34									
medium blue	1821-1875	1848	54	2	3496	3642	3750	3	1848	1821	1875	
early non-blue	1826-1875	1850.5	49	6	11173	10956	11250	2	5551.5	5478	5625	
pale blue	1831-1865	1848	34	11	20328	20141	20515	2	3496	3652	3730	
flowing color	1841-1900	1870.5	59	1	1870.5	1841	1900	1	1870.5	1841	1900	
later style	1856-1915	1885.5	59	31	58430.5	57536	59365	7	13190.5	12992	13475	
reproduction	1891-1920	1905.5	29									
gold silver	1901-1930	1915.5	29	2	3831	3802	3860	2	3831	3802	3860	
-05 decal polychrome	1901-1950	1925.5	49	8	15404	15208	15600	3	5778.5	5703	5857	
-07 annular	1831-1900	1865.5	69	7	13038.5	12187	13300	5	9327.5	9155	9500	
banded polychrome	1831-1860	1845.5	29									
gold silver banded	1891-1940	1915.5	49	8	52324	15128	15520	6	11493	11346	11640	
-08 sponge	1836-1870	1853	34	20	37060	36720	37400	5	9265	9180	9350	
-09 hand painted												
floral polychrome	1826-1870	1848	44	4	7392	7304	7480	1	1848	1826	1870	
floral blue	1816-1855	1840.5	49	1	1840.5	1816	1865	1	1840.5	1816	1865	
-10 tinted glaze	1911-1970	1940.5	59	34	65979	64974	66680	-	7762	7641	7887	
Total				146	275718	271971	279465	49	92123.5	90874	93390	
Avg.					1886.5	1862.6	1914.1		1880.5	1854.6	1905.9	

--Formula Dating, Site 571B

Site Whiteware	I	T	X	D	F	Xf	If	Tf	V	Xv	Iv	Tv
-01 common blue edge	1826-1880	1853	54	18	33354	32868	32840	5	9265	9130	9400	
reduced relief blue edge	1836-1880	1858	49									
-10 Transferprint												
early style blue	1786-1815	1800.5	29									
dark blue	1816-1850	1833	34									
medium blue	1821-1875	1848	54									
early non-blue	1826-1875	1850.5	49	1	1850.5	1826	1875	1	1850.5	1826	1875	
pale blue	1831-1865	1848	34									
flowing color	1841-1900	1870.5	59									
later style	1856-1915	1885.5	59	5	5656.5	5568	5745	1	3771	3710	3830	
reproduction	1891-1920	1905.5	29									
gold silver	1901-1930	1915.5	29									
-05 decal polychrome	1901-1950	1925.5	49									
-07 annular	1831-1900	1865.5	69	2	3731	3662	3820	1	1665.5	1631	1700	
banded polychrome	1831-1860	1845.5	29	1	1845.5	1831	1860	1	1845.5	1831	1860	
gold silver banded	1891-1940	1915.5	49									
-08 sponge	1836-1870	1853	34	17	31501	31212	31790	6	11118	11016	11220	
-09 hand painted												
floral polychrome	1826-1870	1848	44									
floral blue	1816-1855	1840.5	49									
-10 tinted glaze	1911-1970	1940.5	59	1	3861	3822	3940	1	1940.5	1911	1970	
Total				146	81819.5	80789	82650	17	31656	31257	32055	
Avg.					1836.5	1836.1	1883.1		1860	1839.6	1885.6	

I = initial date
 T = terminal date
 X = median date
 D = duration
 F = number of fragments
 Xf = product of median date x fragment count
 If = product of initial date x fragment count
 Tf = product of terminal date x fragment count

V = product of median date x vessel count
 Xv = product of initial date x vessel count
 Tv = product of terminal date x vessel count

Table 48. (cont.)

--Formula Dating, Site 571C

103 Wareware	I	T	X	D	f	Xf	If	Tf	V	Xv	Iv	Iv
-3 common blue edge	1826-1880	1853	54	2	3706	3652	3740	1	1853	1826	1880	
reduced relief blue edge	1830-1880	1858	44									
-4 Transferprint												
early style blue	1786-1815	1800.5	29									
dark blue	1816-1850	1833	34									
medium blue	1821-1875	1848	54									
early non-blue	1826-1875	1850.5	49									
pale blue	1831-1865	1848	34									
flowing color	1841-1900	1870.5	59									
later style	1856-1915	1885.5	59									
reproduction	1891-1920	1905.5	29									
gold/silver	1901-1930	1915.5	29									
-5 decal polychrome	1901-1950	1925.5	49									
-67 annular	1831-1900	1865.5	69									
banded polychrome	1831-1860	1845.5	29									
gold/silver banded	1891-1940	1915.5	49									
-68 sponge	1836-1870	1853	34									
-69 hand painted												
floral polychrome	1826-1870	1848	44									
floral blue	1816-1865	1840.5	49									
-10 tinted glaze	1911-1970	1940.5	59									
Total				2	3706	3652	3760	1	1853	1826	1880	
Avg.					1853	1826	1880					

--Formula Dating, Site 571D

103 Wareware	I	T	X	D	f	Xf	If	Tf	V	Xv	Iv	Iv
-3 common blue edge	1826-1880	1853	54	1	1853	1826	1880	1	1853	1826	1880	
reduced relief blue edge	1830-1880	1858	44									
-4 Transferprint												
early style blue	1786-1815	1800.5	29									
dark blue	1816-1850	1833	34									
medium blue	1821-1875	1848	54									
early non-blue	1826-1875	1850.5	49									
pale blue	1831-1865	1848	34									
flowing color	1841-1900	1870.5	59									
later style	1856-1915	1885.5	59									
reproduction	1891-1920	1905.5	29									
gold/silver	1901-1930	1915.5	29									
-5 decal polychrome	1901-1950	1925.5	49	2	3851	3802	3900	1	1925.5	1901	1950	
-67 annular	1831-1900	1865.5	69									
banded polychrome	1831-1860	1845.5	29									
gold/silver banded	1891-1940	1915.5	49									
-68 sponge	1836-1870	1853	34	2	3706	3672	3740	1	1853	1836	1870	
-69 hand painted												
floral polychrome	1826-1870	1848	44									
floral blue	1816-1865	1840.5	49									
-10 tinted glaze	1911-1970	1940.5	59									
Total				5	9410	9300	9526	3	5631.5	5563	5700	
Avg.					1882	1860	1904		1877.2	1854.3	1900	

I = initial date
 T = terminal date
 X = median date
 D = duration
 f = number of fragments
 Xf = product of median date x fragment count
 If = product of initial date x fragment count
 Tf = product of terminal date x fragment count

Xv = product of median date x vessel count
 Iv = product of initial date x vessel count
 Tv = product of terminal date x vessel count

Table 48. (cont.)

--Formula Dating, Site 575

003 Whiteware	I	T	X	D	f	Xf	If	Tf	V	Xv	Iv	Tv
-03 common blue edge	1826-1880	1853	54									
reduced relief blue edge	1836-1880	1858	44									
-04 Transferprint												
early style blue	1786-1815	1800.5	29									
dark blue	1816-1850	1833	34									
medium blue	1821-1875	1848	54		1	1848	1821	1875	1	1848	1821	1875
early non-blue	1826-1875	1850.5	49									
pale blue	1831-1865	1848	34									
flowing color	1841-1900	1870.5	59									
later style	1856-1915	1885.5	59									
reproduction	1861-1920	1905.5	29									
gold/silver	1901-1930	1915.5	29		1	1915.5	1901	1930	1	1915.5	1901	1930
-05 decal polychrome	1901-1950	1925.5	49									
-07 annular	1831-1900	1865.5	69									
banded polychrome	1831-1860	1845.5	29									
gold/silver banded	1891-1940	1915.5	49									
-08 sponge	1836-1870	1853	34									
-09 hand painted												
floral polychrome	1826-1870	1848	44									
floral blue	1816-1865	1840.5	49									
-10 tinted glaze	1911-1970	1940.5	59									
Total					2	3763.5	3722	3805	2	3763.5	3722	3805
Avg.						1881.8	1861	1902.5		1881.8	1861	1902.5

--Formula Dating, Site 576

003 Whiteware	I	T	X	D	f	Xf	If	Tf	V	Xv	Iv	Tv
-03 common blue edge	1826-1880	1853	54									
reduced relief blue edge	1836-1880	1858	44									
-04 Transferprint												
early style blue	1786-1815	1800.5	29									
dark blue	1816-1850	1833	34									
medium blue	1821-1875	1848	54									
early non-blue	1826-1875	1850.5	49									
pale blue	1831-1865	1848	34									
flowing color	1841-1900	1870.5	59									
later style	1856-1915	1885.5	59									
reproduction	1891-1920	1905.5	29									
gold/silver	1901-1930	1915.5	29									
-05 decal polychrome	1901-1950	1925.5	49		2	3851	3802	3900	1	1925.5	1901	1950
-07 annular	1831-1900	1865.5	69									
banded polychrome	1831-1860	1845.5	29									
gold/silver banded	1891-1940	1915.5	49									
-08 sponge	1836-1870	1853	34									
-09 hand painted												
floral polychrome	1826-1870	1848	44									
floral blue	1816-1865	1840.5	49									
-10 tinted glaze	1911-1970	1940.5	59									
Total					2	3851	3802	3900	1	1925.5	1901	1950
Avg.						1925.5	1901	1950				

I = initial date
 T = terminal date
 X = median date
 D = duration
 f = number of fragments
 Xf = product of median date x fragment count
 If = product of initial date x fragment count
 Tf = product of terminal date x fragment count

Xv = product of median date x vessel count
 Iv = product of initial date x vessel count
 Tv = product of terminal date x vessel count

Table 49. Comparison of Mark Dates with Fragment and MNI Weighted Dates.

<u>Site</u>	<u>Date Source</u>	<u>Initial</u>	<u>Median</u>	<u>Terminal</u>	<u>Sample N</u>
567	Fragment	1892.7	1918	1943.6	23
	Vessel	1884.3	1910.5	1936.7	6
	Mark	1889.7	1908	1927	3
	Historical	ca.1900	ca.1915	ca.1930	
569	Fragment	1878.7	1905.2	1931.6	293
	Vessel	1886.8	1912.9	1939	45
	Mark	1905	1923.6	1936.2	15
	Historical	ca.1900	ca.1935	ca.1969	
576	Fragment	1901	1925.5	1950	2
	Vessel	1901	1925.5	1950	1
	Mark	1934	-	-	1
571A	Fragment	1862.8	1888.5	1914.1	146
	Vessel	1854.5	1880.0	1905.9	49
	Mark	1865.6	1875.2	1888.2	5
	Historical			1941	
571B	Fragment	1836.1	1859.5	1883.0	44
	Vessel	1838.6	1862.0	1885.6	17
	Mark	1868.0	1884.9	1901.8	4
	Historical	ca.1883	1898	ca.1910	
571C	Fragment	1826	1853	1880	2
	Vessel	1826	1853	1880	1
	Mark	-	-	-	-
571D	Fragment	1860	1882	1904	5
	Vessel	1854.3	1877.2	1900.0	3
	Mark	-	-	-	-
575	Fragment	1861.0	1881.8	1902.5	2
	Vessel	1861.0	1881.8	1902.5	1
	Mark	1834.0	1843.5	1853.0	1

In any case, we are able to derive a group of mean dates from the sites using various methods, but what do these numbers mean? Because of the aforementioned problems, as well as many others which we cannot discuss here (such as variations in the production and demand curves, economic booms and slumps in the producer's economy and the buyer's economy, transportation improvements, distribution, taste and other selective factors, idiosyncrasy, and curational ability and inability) we must regard with a certain amount of caution the dating of objects with a long lifespan. Such numbers derived from various formulas are not really dates, but merely first approximations of dates. They are not facts, but like the sherds themselves, artifacts which need interpretation.

Because the sample size is too small to be meaningful at Sites 22CL571C, 22CL571D, 22CL575, and 22CL576, they will not be examined further. Let us examine the four domestic sites. Site 22CL567 was occupied by 1913 and until about 1930. It has the closest correlation between the historic and formula dates, but the initial dates are each a decade or more too early. Site 22CL569, built about 1900 and occupied until 1969, shows the formula dates are several decades earlier than the mark dates and the historical dates, further, the site was occupied 30 years later than indicated by the ceramic dates. Site 22CL571 began to be occupied most likely by the 1890s for Areas A and B. Ceramics from both areas date considerably early than the historical dates, as much as 60 years. Thus, the first approximation is that these methods produce a series of overlapping date ranges which bear only some correspondence to the historical reality, and are generally 20 to 30 years too early.

MATERIAL F: METAL ARTIFACTS

by Steven D. Smith

The metal artifacts (Material F) from Waverly were divided into 27 different classes (Table 50), based primarily on broad functional assignments. Artifacts listed under this material type include items of iron or steel, copper, brass, and tin. A total of 23,964 separate metal artifacts was recovered from Waverly excavations or 44% of the total number of artifacts. These artifacts represent a wide range of manufactured objects from the second half of the 19th century to the present.

Throughout this period there was an increasing mechanization of our national culture and an increase of specialized, precision-made objects. This is especially evident after the turn of the century; a time when our culture seemed to explode with items created by mass production technology and the arrival of the automobile. This specialization is well illustrated in the sample of metal artifacts recovered from Waverly. For the historical archaeologist, who must identify and create order from the array of corroded metal paraphernalia representative of this cultural period, the days can be long frustrating journeys through catalogs and technical journals. And in the end, many artifacts, especially those that are part of some large machine or tool, can only be known as a "framing part," "spring," or "miscellaneous screw."

A hierarchical typology based on morphology or material type, like the one describing glass or ceramics, was not practical with the metal artifacts. Instead it seemed most useful and convenient to arrange artifacts primarily by functional criteria. Thus, the Waverly metal typology is, in fact, a catalog. Classes were devised to include a broad range of artifacts used in human activity. Categories generally define specific groups of artifacts with a similar function, while types attempt to distinguish like items. Varieties describe and measure significant attributes of the same type. At the variety level artifacts were separated by metal alloy. Iron or steel materials were in the great majority and unless otherwise noted in the artifact description, metal artifacts may be assumed to be of this composition. Many types are self-evident by their common nomenclature and therefore are not individually discussed. Such items are listed in the artifact descriptions. Company names mentioned in this section are those for which we were able to locate information of interest for dating or distributional analysis. Others, for which we could find no information, are listed in the artifact descriptions.

Class F01: Fasteners by Karen Jo Walker

Artifacts in this category include nails, spikes, tacks, screws, bolts, staples, and machine rivets. Categories F01-00 through F01-07 consist of nail types and are discussed separately from the remaining Categories 08 through 11. Three main sources were of tremendous importance in the creation of the following typology: Nelson (1962), Fontana and Greenleaf (1962), and Tremont Nail Company Pamphlet (n.d.). The framework for our typology was based primarily on Nelson's work. The category level is based upon technology (machine cut or wire cut), the type upon the kind of nail (e.g. finishing, roofing), and the variety upon length.

Table 50. Class Distinctions for Metal Artifacts, F01-F27.

F01 Fasteners	F15 Clothing Hardware
F02 Door Hardware	F16 Recreation & Sports Equipment
F03 Lighting & Electrical	F17 Grooming & Clothing Care
F04 Plumbing	F18 Toys
F05 Other Construction	F19 Writing & Painting
F06 Ammunition	F20 Closures
F07 Metal Tools	F21 Kitchen Equipment & Cleaning
F08 Coins & Tokens	F22 Tableware & Utensils
F09 Industrial	F23 Tin Cans
F10 Wire	F24 Stove Parts
F11 Wagon & Automotive	F25 Miscellaneous Hardware
F12 Agricultural Tools	F26 Furniture & Household Furnishings
F13 Horse Equipment	F27 Unidentified Metal
F14 Adornment & Personal	

Each category (Table 51) represents a different technological phase in the development of the nail industry. Three categories (F01-01, F01-02, and F01-03) and several types noted here were not represented in the Waverly sites. The initial step in identifying nail types was delineating nail attributes (i.e., characteristics reflecting mode of manufacture and often the intended function). The three basic features examined were the head (size, shape reinforcement, design), shank (bevel, taper, cross-section, sheer), and point (shape, facets, cross-section). Because of fragmentation, corrosion, and wear, the attributes were not always evident.

Table 51. Class F01: Fastener Categories.

00 Unidentifiable nails	06 Wire nails and spikes
01 Hand-wrought nails	07 Tacks
02 Early machine-cut nails, handmade heads	08 Bolts
03 Machine-cut sprigs & brads	09 Staples
04 Early machine-headed nails	10 Screws
05 Modern machine-cut nails and spikes	11 Rivets/Stud

The nail measurements and classification into varieties (size) included the head in the overall length measurement. Fontana and Greenleaf (1962:55-56) stated that the head length was not included in the length measurements assigned to various pennyweights. Thus, some of the Waverly nails will have been placed in the next higher size. This amount should not be significant since the system used to assign a nail to a variety was that if a nail even slightly exceeded 1 1/4 inch it was classified as a 1 1/2 inch nail. Comparisons with other sites can be made by using the population curve as a whole, allowing for an upward skewing. Internal consistency has not been affected. We have used the pennyweight data presented by Fontana and Greenleaf (1962:56), but are aware of the changes occurring within that system during the 19th century. Table 52 presents the varieties used for all fasteners except the following cases: spikes, redesigned nails, miscellaneous nails, and unknown nails. Variety A was set aside for those nails which could be typed yet were unmeasurable due to fragmentation or extreme corrosion.

Table 52. Nail Varieties.

Variety	Inches	mm	Pennyweight
A	-	-	-
B	1	25	2d
C	1 1/4	32	3d
D	1 1/2	38	4d
E	1 5/8	42	4 1/2d
F	1 3/4	45	5d
G	2	51	6d
H	2 1/4	57	7d
I	2 1/2	64	8d
J	2 3/4	70	9d
K	3	76	10d
L	3 1/4	83	12d
M	3 1/2	89	16d
N	3 3/4	95	-
O	4	102	20d
P	4 1/4	107	-
Q	4 1/2	114	30d
R	4 3/4	121	-
S	5	127	40d
T	5 1/4	134	-
U	5 1/2	140	50d
V	5 3/4	146	-
W	6	152	60d
X	6 1/4	159	-
Y	6 1/2	165	-
Z	6 3/4	172	-
AA	7	178	-

F01-00 Fragments. Category 00 was designed to define unidentifiable nails--those artifacts recognized as nails but where analysis could not be carried any further.

F01-01 Hand-wrought nails. During the 17th and 18th centuries nails were hand-wrought. Due to slow process of hand-making each nail they were always scarce. Hand-wrought nails were made from cutting nail-rods or nail-splits of a specified size from a metal plate. These malleable rods were then drawn to a point by hammering and headed in a vise with a hammer (Fontana and Greenleaf 1962:52). In general, hand-wrought nails are recognizable by their lack of uniformity in all features and the lack of shear marks caused by machine manufacture. The Waverly assemblage did not have examples of this nail category.

F01-02 Early machine-cut nails, heads hademade. Manufacture of "plate" or machine-cut nails began in America in 1775 by Jeremiah Wilkinson of Cumberland, Rhode Island (Fontana and Greenleaf 1962:44). In the early 19th century many patented machines appeared which cut nails from rectangular iron sheets. These early hand operated machines headed the nails with a hammer as a separate step. Nails in this category "were made from rectangular strips of iron plate and tapered to a point by a single cut across the plate. The thickness and height of the plate determined the thickness and length of the nail" (Fontana and Greenleaf 1962:52). The

nails were cut by a hand-operated blade and later headed in a vise. The time period for this category is ca. 1790 to the mid 1820s (Nelson 1962:6). No nails of this category were noted in the Waverly assemblage.

F01-03 Machine-cut sprigs and brads. Flooring brads were first introduced around 1800 and were cut, heads included, from an iron plate (Nelson 1962:6). Three types of sprigs and brads were examined in this category. The early machine-cut sprigs and brads had "L" or "T" notches and curved corners. The shanks were beveled and tapered. The point corners were curved. These nails were common from ca. 1805 to ca. 1820. Later perfected "L" and "T" headed brads had sharply cut corners, a beveled and tapered shank and sharply cut points. These brads were rectangular in cross-section. None was noted in the Waverly collection.

F01-04 Early machine headed cut nails. After 1825 water and steam powered machines automatically headed the nails. This greatly increased nail production and allowed for some exportation of American made nails. Nelson places these nails in the period from around 1815 to the late 1830s and describes them as being "Distinguished by their irregular heads which vary in size and shape, usually eccentric to shank" (Nelson 1962:7). The heads as well as nail lengths and widths generally became more uniform later in the period. In addition, "nails generally have a rather distinct rounded shank, caused by a wide heading clamp (Nelson 1962:7). No nails of this category were recovered at Waverly.

F01-05 "Modern" machine-cut nails and spikes. Most cut nail types were perfected by the late 1830s and have changed very little since then. The period from 1850-1888 is considered as the "hey-day" of the American machine-cut nail industry (Fontana and Greenleaf 1962:46). Besides the those devised by Nelson (1962:7), several other types were added to this category. Unfortunately, precise dating of the types is not possible other than to note that they belong to a time frame from the 1830s to the present. While some of these nails were made with a specific function in mind, for example flooring nails (Type 01), others like the common cut nail (Type 02) were made for versatility. Among the Waverly collection the following 11 types were distinguished (Figure 14):

Type 00 Machine-cut nails, unidentifiable. Corrosion and fragmentation prevented further analysis of these specimens.

Type 01 Flooring or casing nails. The heads of these nails were small, rectangular with an immediate tapering of the beveled shank (allowing nails to be driven flush). The points were rectangular in cross-section.

Type 02 Common cut nails. Heads of these nails were square or rectangular with a beveled and tapering shank. Points were rectangular in cross-section.

Type 03 Cut Spikes. Heads were domed with square reinforcing around the dome. The shank was beveled and tapered. The points were rectangular in cross-section.

Types 04, 05, 06, 07. These four categories will be described briefly since no examples of them were recovered from Waverly. They are: 04 cut spikes with a square head and square reinforcing (boat spikes), 05 fine machine-cut finishing nails, 06 unidentifiable cut spikes, and 07 hinge design (square head with two opposite sides concave).

Type 08 Square headed spike. These spikes had a thick, square head with square shank that was not tapered. The points were chisel shaped. Varieties for spikes follow (Table 53).

Table 53. Varieties for Spikes, F01-05-08

Variety	Head L	Head W	Shank L		Shank T
	mm	mm	in	mm	mm
A	19	19	6 1/4	159	10
B	19	19	8 1/4	210	10
C	13	13	8 1/2	216	10
D	23	23	9 1/4	235	10
E	19	19	--	--	10

Type 09 "headless" blunted spike. Heads of this type were defined by a flaring of the shank. The shanks were square with no taper. Points were four faceted but blunt. Only one variety was noted. Its head measured 25mm long, 25mm wide, and the shank was 11 in or 280mm long and 19mm thick.

Type 10 Common rosehead spike. The head of this type of spike was square expanding toward the base of the head to form a truncated pyramid. The shanks were square in cross-section with no taper; the points were chisel shaped. Varieties are presented in Table 54.

Table 54. Type 10 Varieties

Varieties	Head L	Head W	Shank L		Shank D
	mm	mm	in	mm	mm
A	19	19	--	--	10
B	19	19	8	203	10
C	23	23	8 1/4	210	10
D	19	19	8 1/2	216	10
E	19	19	6	152	10
F	16	16	7 3/4	197	6
G	19	19	6 1/4	159	10
H	--	--	4	102	10
I	25	25	--	--	13
J	19	19	10	254	10
K	19	19	7	178	10
L	19	19	7 1/4	184	10
M	19	19	5 1/2	140	10
N	19	19	9 1/4	235	10
O	19	19	10 1/4	261	10
P	23	23	8	203	10
Q	19	19	8 1/4	210	10
R	--	--	8	203	10

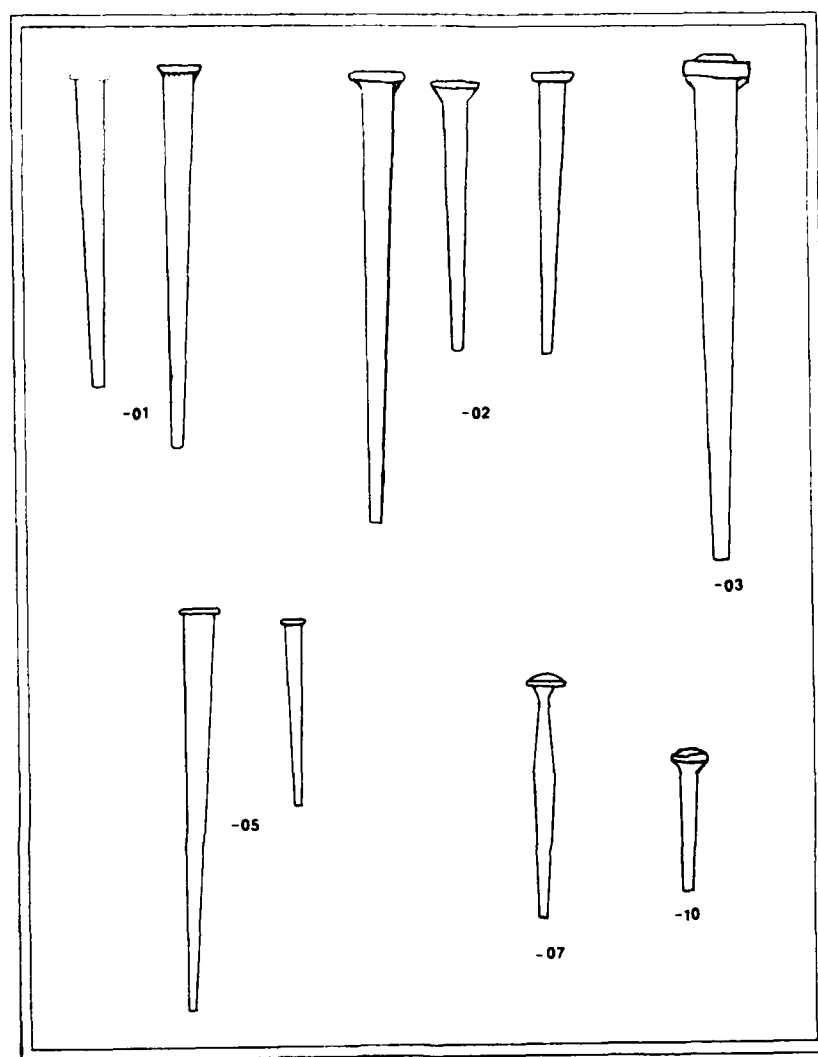


Figure 14.--Nails Types.

Type 11 Wrought head nail. These nails have irregular, oval three faceted heads with a beveled and tapered shank. The points are rectangular in cross-section.

Type 12 Miscellaneous and unknown machine-cut nails. These nails are those with unique and/or unknown attributes. They are described in Appendix 9.

Type 13 Rail spikes. These railroad track spikes have a elongated oval head which is slightly off-center. The shank is square in cross-section with no taper. The point is chisel-shaped. Varieties are noted in Table 55.

Table 55. Rail Spike Varieties

Variety	Head L	Head W	Shank L		Shank T
	mm	mm	in	mm	mm
A	--	--	--	--	16
B	39	29	5 3/8	135	16
C	35	29	5 5/8	144	15
D	35	29	6	153	15
E	37	30	5 7/8	150	14
F	36	28	5 3/4	147	15
G	33	24	6	152	15
H	33	29	5 5/8	142	15
I	--	--	--	--	15
J	--	--	--	--	13
K	36	32	5 1/2	140	16
L	41	35	5 1/2	141	19

Type 14 Redesigned nail. These nails have been modified by hammering. The exact reason for this modification is unknown; perhaps they were used as chisels. The heads have been hammered into the shank and are irregular, the shanks are three faceted and tapered. Varieties are defined by the point style. Variety A has the square blunt point of a machine-cut nail. Variety B has had the point hammered into a chisel shape.

Type 15 Miscellaneous and unidentified spikes. These spikes are those with unique or unidentifiable attributes. Varieties were as follows: Variety A: the head of this spike is missing; the shank is square in cross-section and 10 mm thick; the point is chisel shaped. Variety B: the head is missing and the shank is tapered and 13 mm thick; the point is also chisel shaped. Variety C: the head is absent and shank is tapered with a 7 mm thick rectangular cross-section; the point is chisel shaped. Variety D: the head is missing, shank square and 13 mm thick. The point is chisel shaped.

F01-06 Modern Wire Nails and Spikes. "These nails are usually manufactured from steel wire, which is held in gripper dies and headed (producing gripper marks on shanks); then wire is advanced and sheared to length with cutter die; and wire stock is then advanced to repeat operation" (Nelson 1962:7). Although wire nails had been produced early in the 19th century in France, various economic and political barriers had kept them from spreading rapidly to the United States. In 1879, the H. P. Nail Company of Cleveland, Ohio, became one of the first American naileries to successfully produce wire nails from non-imported wire steel (Bessemer). Wire nails were quickly adopted and by 1895 were three-fourths of the total United States nail production. For most purposes, wire nails had replaced the machine cut types by the turn of the century. However, even today it is still possible to find those nails without much problem. For instance, the Tremont Nail Company of Wareham, Massachusetts, still commercially produces machine cut nails especially for historic reconstructions.

Type 00 Unidentifiable wire nail. Nails could not be further analyzed because of fragmentation or corrosion.

Type 01 Flooring brad. These nails had a small bulbous head. The shanks contained gripper marks and had four faceted points.

Type 02 Common wire nail. The heads of these nails were flat and round. The shanks, as with all wire nails, were round in cross-section and contained gripper marks. Points were four faceted.

Type 03 Roofing nails. The heads of these nails were much larger than the shanks and were flat and round. The shanks had gripper marks, points were four faceted.

Type 04 Gutter spikes. These nails had the same attributes noted on the common wire nails although they were much larger. For the purposes of this typology they are defined as those nails over 5 in or 127 mm long.

Type 05 Miscellaneous and unknown spikes. These are unique wire fasteners (Table 56).

Table 56. Miscellaneous Spikes

Variety	Head L	Head W	Shank D	Shank L		Point
A	19mm	19mm	16mm	4 3/4 in	121mm	chisel
B	13	13	10	3 1/2	89	shovel
C	35	31	23	8	203	four facet
D	19	19	7	4 1/4	109	round
E	--	--	13	8	203	round
F	16	16	7	2 1/4	57	four facet
G	16	16	16	3	76	chisel

Type 06 Miscellaneous and unknown wire nails. Like the spikes above these nails have some unique or unknown attributes. Varieties are listed below. Variety A: the head of this nail is "wing" shaped, with a diameter of 9mm; the shank has gripper marks and is 3 in or 76mm long; the point is four faceted. Variety B: this has the attributes of a common wire nail but has a flattened point; its length is 3/8 in or 79mm; Variety C: this has a "T" shaped head and the shank is smooth (no gripper marks); the point is four faceted; the length is 4 1/4 in or 108mm; Variety D: this has no head and it appears that it was made purposely in this mode; the shank does have a collar and gripper marks; the point is four faceted and the nail is 1 1/8 in or 28mm long.

F01-07 Modern Wire Tacks. Wire tacks were perfected early in the history of the wire nail industry and there has been little change in their manufacture since that time. Only upholstery tacks were noted in the Waverly collection. This upholstery tack (Variety A) had a large head in the shape of an umbrella. The shank was round and probably pointed. Our specimen was fragmented and had a head diameter of 20mm.

F01-08 Bolts. These fasteners well illustrate the diversity of material culture during the late 19th and early 20th centuries. Thirteen types and 18 different varieties were recognized. Bolts were distinguished from screws by the lack of a slotted head for securing the fastener with a screwdriver. Many of the bolts noted below are recognized by several common names. Our nomenclature was determined by an assortment of old and new department and hardware catalogs and dictionaries. Varieties have been defined by lengths, except for the unidentified specimens.

Type 00 Unidentified Bolts.

Type 01 Carriage Bolts. These bolts are defined by a round conical head which has a square neck directly beneath it. The threads do not extend completely to this neck, usually stopping at approximately mid-length and leaving a smooth shank to the neck.

Types 02, 08, 09 Machine Bolts. Machine bolts have a square, round, conical, or hexagonal head with a smooth shank to the threads. The threads extend no further than mid-length. See the artifact descriptions for differences between types.

Type 03 Countersunk Bolts. Bolts in this type have a tapering head for fitting into a countersunk seat. The head is round and the threads extend to mid-length. This bolt is illustrated in a catalog as a tire bolt (Ward 1895:406).

Type 04 Countersunk, Expanding Head Bolt. This bolt is distinguished from the previous category by the head having a gradual taper to the shank. There is no sharp distinction between the head and the shank.

Type 05 Countersunk, Square Head Bolt. This bolt is similar to F01-08-03, except for its square-shaped head.

Type 06 Carriage Bolt, Ridged Head. This specialized carriage bolt has an extended lip around a round conical head; it is otherwise similar to F01-08-01.

Type 07 Extended Carriage Bolt. The lower neck of this bolt extends to approximately mid-length before meeting a round shank.

Type 10 "U" Bolt. These U-shaped bolts are threaded on both arms.

Type 11 "Eye" Bolt. This type of bolt has a loop or "eye" as a head. One is illustrated as a whiffletree tongue (Ward 1895:596). Threads go to mid-length.

Type 12 Tap Bolts. These bolts have the threads extending up the entire shank to the head. They are both square and hexagonally headed.

Type 13 Carriage bolt, end tapered. These bolts are similar to F01-08-01 except for having a tapered tip instead of a square tip.

Type 14 Carriage Bolt/"U" shaped head. This unusual bolt has a depressed saddle or "U" head (oval in cross-section), and beneath this a square neck. The threads extend to the neck.

F01-09 Staples. Three types of staples were recovered. Fence staples attach wire to fenceposts; wide staples are multipurpose fasteners; and framing staples are for frame corners. Wide staples have square corners. The framing staples are solid corrugated metal with one edge sharpened.

F01 10 Screws. Screws are defined in this typology as those fasteners with a slotted head and continuous helical ribbing. The one exception to this is an "eye" screw which has a loop for a head. This was

probably used for threading rope or perhaps for securing a drop latch. Also, all except the machine screw, discussed below, have tapered ends.

Type 00 Unidentified screws. Two varieties of screws have a specialized though unknown purpose. One has a cylindrical head with a tapering shank. The other has an appearance similiar to the ridged carriage bolt (F01-08-07) with a tapering screw point.

Type 01 Countersunk head, flat. These screws have a tapering head and are generally used in wood. The shank is tapered to the end.

Type 02 Eye Screw. These were defined above.

Type 03 Round head screws. These screws have a round conical head and a tapering shank and are also used in wood.

Type 04 Machine Screw, countersunk. These screws are very similiar to the bolts F01-08-02, except that they have a slotted head. The heads are round with threads extending only to mid-length.

F01-11 Rivets. These fasteners are headed pins with no threading. They have many functions, like securing a wood handle to a shovel shank. Some may have been used to secure leather. Waverly rivets are round, flat and round conical headed.

Discussion

A total of 335 bolts, screws, staples, and rivets was recovered at Waverly. Most of these items, 33% (N=111) were fence staples. Appendix 10 presents the distribution of bolts, screws, staples, and rivets by site.

The distribution of wire cut nails and machine cut nails is presented in Tables 57-59. The machine cut nails appear to be more frequent at the earlier sites as defined by the oral history and other artifacts. If we take the ratio of wire cut to machine cut nails we derive a figure which appears to have some utility in relative dating for late 19th and early 20th century sites (Table 57, Figure 15). Fontana and Greenleaf (1962:48-50) provide some data of use here; in 1888 20% of the nails made in the United States were wire cut, while by 1895 75% were wire cut, and by 1902 wire nails had largely replaced machine cut in normal usage. Complete annual production figures for wire cut and machine cut nails should provide the basis for a probability dating technique comparing the ratio of machine cut to wire cut nails in the production curve to that derived from individual house sites. The technique should have value for dating sites from the 1870 to 1910 period. The ratio seriation produces an ordering quite comparable to the ordering derived from window glass, ceramics, glass, and oral data. Along with the percentage seriation, these suggest that the earliest sites 22CL575 and 22CL571B (as well as the dumping areas there, Areas C and D) were built prior to 1888. Sites 22CL571A and 22CL567 were likely constructed at about the same time, during the 1888 to 1895 period. Sites 22CL576 and 22CL569 were built much later, probably after 1902. These dates are speculative in terms of the nail dating technique suggested here, but they are remarkably close to dates derived from other sources. We should bear in mind that later nails will be used in repairing a house, and that the nails recovered in the excavations represent the lifespan of the house,

not just its construction. Hence, a house occupied into the 20th century will have an ever increasing number of wire nails incorporated into its framework, and hence there will be a skewing to a later period. The scavenging of building materials mentioned in the oral history must be noted here, for that practice would affect the nail frequencies as well.

Table 57. Ratio of Wire Cut to Machine Cut Nails

	567	569	571A	571B	571C	571D	575	576
wire cut	580	5216	3400	614	5	46	15	22
machine cut	675	561	3766	1908	179	230	142	8
Ratio W:M	.86	9.30	.90	.32	.03	.20	.11	2.75

F02 Door Hardware

F02-01 Hinges include four main types and one hasp type. T-hinges, strap hinges, butt hinges, and spring hinges were noted. The strap hinges were tapered on both arms. Butt hinges were loose jointed types where the pin is not removable. The spring hinge has a spring instead of a pin as a center pivot. The types are illustrated in the Montgomery Ward Catalog (1895:380). Hinge hasps have one plate as a hinge and the opposite side slotted for locking with a padlock.

F02-02 This category includes padlocks, door rim locks, and various parts and keys. Padlocks have both hinged shackles and turning shackles. One hinged shackle padlock, called an "eagle" padlock is illustrated in the Montgomery Ward Catalog (1895:381). Another has an ornate buffalo head as escutcheon plate and on the drop was "S and Co." The turn shackle locks were analogous to modern layered steel varieties seen today. Keys include skeleton and flat steel types. Rim locks are fixed locks fastened to the door with the striker fastened to the door frame (Herskovitz 1978:61).

F02-03 Latches are simple drop latch and ring drop latch styles.

F02-04 A runner wheel for an overhead hung shed or barn door was recovered.

F02-05 The category defines door plates without locking mechanisms. The plates contained holes for door knobs.

Class F03: Lighting & Electrical

This class includes anything used for illumination or to direct an electrical current.

F03-01 Lamp parts in this category are all, except one artifact, part of kerosene lamps. Kerosene was first put on the market in 1856 (Darbee 1965:7). Only wick lifter knobs have any written information providing patent dates of 1870, 1871 and 1883. Two companies are noted but only the M.B. Co. may be identified. These initials may stand for the Manhattan Brass Company of New York. The only artifact associated with an electrical lamp was a chain pull.

Table 58. Distribution of Wire Cut Nails by Site.

Variety Wire	22CL567		22CL569		22CL571A		22CL571B		22CL571C		22CL571D		22CL575		22CL576		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
A	88	15.2	533	10.2	925	27.2	213	34.7	-	-	19	41.3	5	33.3	2	9.1	1780	18.0
B	6	1.0	31	.6	1	.03	1	.2	-	-	3	6.5	-	-	-	-	41	.4
C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
D	47	8.1	117	2.2	58	1.7	6	1.0	-	-	1	2.0	-	-	-	-	229	2.3
E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
G	147	25.3	1269	24.3	509	15.0	124	20.2	-	-	5	10.9	-	-	3	13.6	2077	20.8
H	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
I	88	15.2	1341	25.7	781	23.0	131	21.3	1	20.0	8	17.4	-	-	3	13.6	2333	23.3
J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
K	95	16.4	893	17.1	560	16.5	83	13.5	2	40.0	4	8.7	1	6.7	2	9.1	1640	16.5
L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
M	56	9.7	653	12.5	367	10.8	31	5.0	1	20.0	3	6.5	2	13.3	1	4.5	1114	11.3
N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
O	15	2.8	146	2.8	38	1.1	15	2.4	-	-	-	-	5	33.3	5	22.7	225	2.3
P	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
Q	10	1.7	107	2.1	65	1.9	7	1.1	-	-	1	2.2	-	-	4	18.2	104	1.0
R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
S	16	2.8	54	1.0	46	1.4	1	.2	1	20.0	1	2.2	-	-	2	9.1	121	1.2
T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
U	8	1.4	40	.8	35	1.0	2	.3	-	-	1	2.2	1	6.7	-	-	87	.9
V	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
W	2	.3	13	.3	-	-	-	-	-	-	-	-	1	6.7	-	-	27	.3
X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
Y	1	.2	18	.4	4	.1	-	-	-	-	-	-	-	-	-	-	23	.2
Z	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
a	-	-	1	.02	-	-	-	-	-	-	-	-	-	-	-	-	1	0.0
Subtotal	580	100.1	5216	100.02	3400	100.03	614	99.9	5	100.1	46	100.1	15	100	22		9898	100.1

Table 59. Distribution of Machine Cut Nails by Site.

Variety Machine	22CL567		22CL569		22CL571A		22CL571B		22CL571C		22CL571D		22CL575		22CL576		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
A	417	61.8	399	71.1	2826	75.0	1416	74.0	170	95.0	184	80.0	121	85.2	-	-	5534	74.1
B	3	.4	6	1.1	1	.03	2	.1	-	-	-	-	-	-	-	-	12	.2
C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
D	40	5.9	12	2.1	55	1.5	60	3.2	2	1.1	4	1.7	1	.7	-	-	174	2.3
E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
G	45	6.7	32	5.7	266	7.1	171	9.0	2	1.1	12	5.2	3	2.1	1	12.5	532	7.1
H	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
I	56	7.4	53	9.5	275	7.3	128	6.7	1	.6	10	4.4	2	1.4	3	37.5	522	6.9
J	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
K	61	9.0	31	5.5	199	5.3	89	4.7	1	.6	11	4.8	8	5.6	3	37.5	403	5.4
L	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
M	52	7.7	18	3.2	106	2.8	28	1.5	3	1.7	8	3.5	3	2.1	-	-	218	2.9
N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
O	2	.3	6	1.1	20	.5	6	.3	-	-	1	.4	4	2.8	1	12.5	40	.5
P	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
Q	2	.3	3	.5	6	.2	6	.3	-	-	-	-	-	-	-	-	17	.2
R	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
S	2	.4	-	-	5	.1	2	.1	-	-	-	-	-	-	-	-	10	.1
T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
U	-	-	1	.2	6	.2	-	-	-	-	-	-	-	-	-	-	7	.1
V	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
W	-	-	-	-	1	.03	-	-	-	-	-	-	-	-	-	-	1	.01
X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
Z	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0
ST, machine	675	149.7	561	8.8	3766	44.8	1908	71.1	179	74.9	230	77.2	142	76.3	8	26.7	7470	35.2
ST, wire	580	42.7	5216	81.8	3400	40.4	614	22.9	5	2.1	46	15.4	15	8.1	22	73.3	9884	50.6
ST, InJet.	104	7.7	599	9.4	1241	14.8	162	6.0	55	23.0	22	7.4	29	15.6	0	0	2212	11.3
T	1359		6376		8407		2684		239		298		186		30		19580	

Site #22CL521 contained 1 variety A nail.

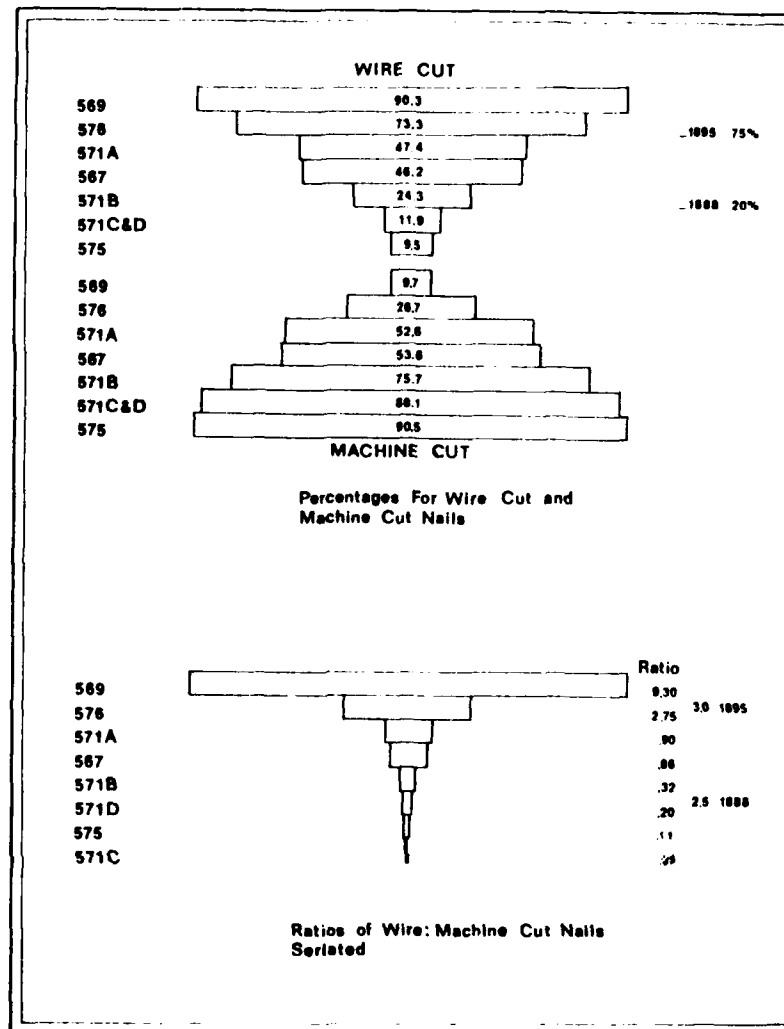


Figure 15.--Nail Seriation.

F03-02 A bent wire shade pull was recovered.

F03-03 Two types of bulb bases were found. They were the common threaded light bulb type and a flashlight bulb.

F03-04 Other flashlight parts were thumb switches, lamps and front covers. One patent date was from 1930.

F03-05 One "Paulding" bulb socket was recovered.

F03-06 Fuses were of two types: the common house use and an automotive fuse.

F03-07 One radio tube was recovered from 22CL569.

Class F04: Plumbing

This class of metal artifacts includes all items pertaining to transporting water, steam, or gas. As might be expected, only a small number of items (17) makes up this class. Since it is unlikely the people living at Waverly enjoyed piped in heating or plumbing we assume the majority of these items served some secondary function. Categories include iron, brass, copper and lead pipe, a pipe clamp, bungs, one faucet, and a steam valve with "D.T. Williams Co. Cin. O." stamped on it. This company lists itself as a manufacturer of steam and water valves, whistle valves, and radiator valves. Sometime between 1952 and 1960 this company became part of the Schaible Co. (Thomas Industrials 1931-32:10241; 1960). Two other plumbing devices, another valve handle and a flow reducing coupler, were recovered.

Class F05: Other Construction

This class of metal artifacts pertains to construction items not associated with fasteners. This class consists of iron roofing material recovered at site 22CL569.

Class F06: Ammunition

While no firearms were recovered in the Waverly excavations, a large number (142) of rifle, pistol, and shotgun cartridges was found. Shotgun cases included 10, 12, 16, and .410 cases, and rifle and pistol cartridges ranged through .22, .30, .32, .38, .44, and .45 calibers. A lead ball also was recovered.

F06-01 Ten gauge shotgun headstamps included U.M.C. No. 10 Club, No. 10 Nitro, and No. 10 New Club. These are headstamps of the Union Metallic Cartridge Company which was in business from 1867 until its merger with Remington in the early 20th century. However, the No. 10 case was produced no earlier than 1874 and the Club brands were made from 1888 to 1891 (Herskovitz 1978:51). New Club was manufactured from 1891, and finally, No. 10, Nitro was a brand first in production in 1899 (Herskovitz 1978:51). There seems to be a discrepancy in the exact date of the U.M.C.-Remington merger. Logan (1959:10) puts it at 1902, while Karr and Karr (1951:7) place it at 1910. Site reports have used both of these dates (see Fontana and Greenleaf 1962:80; C. Smith 1960:235; S. D. Smith 1979:681). A letter to the Remington Arms people brought this response. "The U.M.C. Ammunition Company with comparable headstamp markings on ammunition existed from the years 1888 to 1910. The Remington-UMC designation existed from 1910 to 1934" (Dietz 1980). It is possible that the misunderstanding lies with the effect of the 1902 merger. Though the merger took place in 1902, UMC continued to use its headstamp until 1910. The merger probably did not immediately stop the production of U.M.C. headstamps.

Another headstamp, Winchester No. 10 Repeater, is from the Winchester Repeating Arms Company. Winchester began in 1886 when the New Haven Arms Company was reorganized into that company (Logan 1959:8).

F06-02 Twelve gauge shotgun cases in this category contained headstamps of U.M.C. Co. No. 12 Club, first produced in 1874 (Herskovitz 1978:51), Club, New Club, Nitro Club, Rem-U.M.C. Nitro Club, Rem-U.M.C. New

Club, and Winchester Repeater (see above). One U.M.C. No. 12 also contained the initials S.G. (shotgun?). The Winchester Repeating Arms Company was also represented by a headstamp W.R.A. Co. No. 12 Rival. Herskovitz (1978:51) states that this case could have been manufactured between the late 1870s and 1900s. Another headstamp noted was Western No. 12 Xpert. The Western Cartridge Company was founded in 1898 by F.W. Olin and later bought the Winchester Repeating Arms Company in 1932. Both became divisions of Olin Industries in 1944 (Logan 1959:201). Two other companies are represented by headstamps of Indian 12 R.H.A. Co. and P.C.C. 12 Prize or League. R.H.A. Co. is the Robin Hood Ammunition Co. of Swanton, Vermont, now out of business (Logan 1959:190-191). P.C.C. is the Peters Cartridge Company, which began in 1887 and became part of du Pont in 1934 (Dietz 1980).

F06-03 Companies noted on 16 gauge shotgun shells include Winchester, U.M.C., and Remington-U.M.C. One new headstamp was a Federal Monark No. 16. We assume this is the Federal Cartridge Co.; no other information was located (Logan 1951:190).

F06-04 Short and long cases were noted among the .22 caliber rifle cartridges. The .22 long rifle was developed around 1871 by Stevens Arms and Tool Company, though short cases had been in use as early as 1857 (Herskovitz 1978:47). Headstamps included U, H, Super X (nickel plated), Peters H.V., F, a Diamond symbol, P, R, XP, and Hi Speed. Most of these headstamps are in use today including U (Union Metallic Cartridge Company, Remington, or du Pont), H, Hi Speed (Winchester, Olin Industries), Peters H.V., P and XP (Peters Cartridge Company-du Pont), and Super X, Diamond symbol (Western Cartridge Company, Olin Industries). R is assumed to be Remington and F the Federal Cartridge Co. (Logan 1959:190).

F06-05 .30 caliber, bottle case, centerfire cartridges were produced from 1892. In 1898 the U. S. Military began producing a .30 caliber rifle for their own use and it became known as the Model 1898 rifle. No headstamp was noted on the single example of this cartridge at Waverly.

F06-06 Short case rimfire and long case centerfire cartridges were among the collection of .32 caliber cases recovered at Waverly. A short case rimfire headstamp U.M.C., .32 S & W dates from as early as 1878 (Herskovitz 1978:47). One long case centerfire headstamp Rem-UMC also contained the numbers 32-85iv. Information on this was not located, though the 85 may refer to the grains of powder as was often noticed of similar headstamps in Logan's Cartridge Book. Another long case cartridge bore the headstamp W.R.A. Co. .32 W.C.F. which was used in Winchester's Model 1873 repeating rifle and Winchester single shot rifles (Herskovitz 1978:47).

F06-07 Short and long case centerfire and rimfire cartridges were noted in this category of .38 caliber cases. Short case headstamps were U.S. .38 S & W, UMC .38 S & W, Peters .38 S & W, W.R.A. Co. .38 S & W, and Rem-UMC .38 S & W. These were used in Smith and Wesson revolvers which date from 1877 onward (Herskovitz 1978:45). U.M.C. manufactured this round from circa 1890 to 1901 (Smith 1960:27). Long case cartridges had headstamps of W.C. Co. .38 long, W.R.A. Co. .38 W.C.F., U.M.C. Co. .38 long, and W.R.A. Co. .38 S & W S P L. S P L on the latter refers to a special load perhaps a wad cutter (Logan 1959:127). The rimfire cartridges were stamped H and U (see above).

F06-08 Both .44 and .44-40 caliber cases were long case centerfires. The .44 caliber long case centerfire was first produced in 1875 or 1876 for single shot rifles (Herskovitz 1978:49). The headstamp noted in the Waverly collection was a U.M.C. .44 S & W. One .44-40 cartridge W.R.A. Win was also recovered. These were made for Winchester's Model 1873 rifles and other revolvers, from around 1910 (Smith 1960:28). Herskovitz (1978:49) noted the round was quite popular.

F06-09 .45 caliber centerfire, long case headstamps included Peters .45 Colt, and Western .45 Colt. The popular Colt .45 revolver was first produced in 1873; these cartridges are of a later model, probably after 1879 (Herskovitz 1978:49).

F06-10 A primer can marked 100 U.M.C. Primers No. 2 was found. These apparently were for New Club and brass shot shells. They were made of copper, and are interchangeable with primers of other brands which have the same number (Logan 1959:197-8).

F06-11 .410 shotgun cases contained headstamps of Western and W.W., an unknown company.

F06-12 One lead ball was found at 22CL571A. A 16.5mm diameter measurement corresponds roughly to a 65-70 caliber firearm.

Class F07: Metal Tools

A rather diverse collection of tools was recovered at Waverly. Because many categories were represented by only one artifact some are discussed in conjunction with others.

F07-01 Two types of wrenches were recovered. The monkey type wrench has a lower moveable jaw which decreased or increased the size of the jaw gap by a turning screw. The general purpose wrench is an S-shaped crescent.

F07-02 Two types of files were noted, a common mill file and a tapered end file. Most of these files were in poor condition.

F07-03 One small pointed trowel was recovered. It had a tanged shaft for attaching to a wooden handle. It was similar in size to a 5 in trowel.

F07-04 Four types of chisels were noted. One exhibits an expanding tip on a long shaft with a tang for attachment to a handle. Another tapering chisel had a badly beaten head from use. Bar chisels may have been hand crafted. They seemed to be bars of metal that had been ground to a blade on one end and beaten to a head on the other. Another tapering, bladed chisel had a round head for battering. The final type was a more typical hexagonal shafted hand chisel.

F07-05 Links of chains were recovered in three types. Jack chains are S-shaped links, and double eye chain links are a single loop closed in the middle to form a double eye by twisting the wire around the center. Oval links are oval shaped.

F07-06 Axes and hatchet heads are of five different types. The first is a broad axe style hand axe called a carpenter's axe. The second type is a fine-bladed axe with the top in a perpendicular line to the pole and the bottom expanding towards the blade. This style is typed as a felling axe in The Dictionary of Tools (Salaman 1977:54). The third type also has a flat top though the blade is thin and the head is rounded at the lug. This is also a type of felling axe. The final two are a double bitted axe and a straight-sided axe similar to a "Ceylon" axe (Salaman 1977:53) except it lacks a lug and rounded pole.

F07-07 Three different saw types were represented in the Waverly tool collection. Also recovered were two saw screws. Crosscut saws are used to cut across wood grain, and the name usually applies to large one or two man log cutting saws (Salaman 1977:414). Our specimen had three cutting teeth to one cleaning tooth. Hacksaws are bow saws framed for support of a flexible band. Usually they are used for metal cutting (Salaman 1977:421). Finally, a gasoline powered chainsaw blade was recovered. Saw screws were labeled "H. Disston & Sons Philad'a" and "Beardshaw & Sons Sheffield." Disston's saw making business started as early as 1840 (Salaman 1977:417). The business was incorporated in 1886 (Moody 1920:491). Though they are still in business, most of their products were not made after the 1920s (Herskovitz 1978:80; Salaman 1977:417). The Beardshaw & Sons screw was not complete and though we could not locate any information on the company to confirm the identity of the artifact we believe it to be a saw screw.

F07-08 Pliers were of two types. One was a slip-jointed common general purpose pair and the other was a specialized tool for tin shaping. This pair had a solid metal bar below the jaw thought to be used for that purpose.

F07-09,10 These two categories were represented by a gimlet handle and an awl.

F07-11 A wide variety of hooks were used. Many are variations of simple J-shaped hooks which often lent evidence of hand forging. Threaded "eye" and S-shaped hooks were also recovered.

F07-12 A metal putty knife with a tang for a wood handle was found.

F07-13 The only drill bits recovered at Waverly were large hand operated auger bits. They are similar to the "scotch" pattern of auger bits described by Salaman (1977:44).

F07-14 Shovels include flat-bladed, round ended spades, and a scoop shovel with a broad flat blade and upturned sides, probably used for shoveling coal.

F07-15 Both C-clamps and ring type clamps were recovered.

F07-16 Only one screwdriver was found and this has a metal loop handle.

F07-17 One bar magnet was recovered.

F07-18 Two hammers were noted. A claw hammer has a bifurcated pane, used for pulling nails, the other was a solid headed sledge hammer (Salaman 1977:221).

F07-19 through 27 An array of single specimen tools are among the tool collection. None contained any company names which would be of further analysis use. Single items were: crow-bar, rivetor, pulley wheel, fireplace tongs, maul, blacksmithing swage (metal working form), wood wedge, and a scythe blade.

Class F08: Coins & Tokens

This class of metal artifacts encompasses metal coinage, state tax tokens, and political tokens. All coinage was from the United States Mint.

F08-01 Mississippi, Alabama, and Missouri Tax Tokens were recovered from the excavations at Waverly. All were round with a square center hole. Some plastic tokens were recovered and are discussed in the section dealing with plastic artifacts.

Mississippi tax tokens were issued from 1936 to 1952, and throughout that period approximately 150 million tokens were produced. The 1936 Mississippi Legislature enacted Chapter 155 which enabled the government to collect a privilege tax on firms, corporations, or persons in the "business of selling any tangible personal property" which they could pass on to the consumer (Wheelless n.d.:2). In order to cover taxes totaling a fractional amount of one cent of this sales tax the state authorized the production of one and five mill tokens. Osborne Register Company of Cincinnati, Ohio won the bid to produce the tokens. One and five mill tokens looked the same. The rule for computing sales tax was to multiply the amount of sales by two. "The first figure on the right of the decimal point is the number of mills or tokens due" (Wheelless n.d.:14). Thus, on a \$1.25 sale the tax was two cents plus five mills ($1.25 \times 2 = 2.50\text{¢}$). One mill tokens were made of aluminum and five mill of brass. Around 1942 fiber tokens were being made and sometime after plastic tokens were produced, by the Ingnersen Manufacturing Company of Denver, Colorado (Wheelless n.d.:17).

Alabama tokens were in use from 1937 to 1947 (Howard 1980). They were also issued in one and five mill denominations. Alabama tax tokens had a round center hole. Missouri tax tokens were first issued in cardboard starting in 1935. They were stamped only on one side. In 1937 zinc tokens were issued and plastic was utilized starting in 1943. They were issued in one and five mill denominations. By 1962, the Missouri Sales Tax had risen to the point that the tokens were useless and were declared illegal (Thompson 1980).

Coins

Coinage found in an archaeological context may be assumed to be the result of accidental loss and not purposely discarded. Given coins of equal value and sites occupied by persons of equal economic status, then the probability of recovering a coin of a specific date on such sites might assumed to be a factor of the availability of that coin's production and circulation.

Lincoln pennies (F08-01) recovered from the Waverly excavations offered an opportunity to examine this assumption. A total of 51 Lincoln pennies from Waverly ranged in date from 1916 to 1955 (two coins dated 1909 and 1947 were recovered but not included in this test). These coins were plotted on a graph by year with the total number of coins minted for that year

(Figure 16). The mint total was derived by adding the total of all pennies minted in Denver, San Francisco, and Philadelphia (Yeoman 1970). Yeoman noted that the quantities recorded for coins have no relation to the actual quantities reaching circulation because many issues were deposited in the treasury as backing for paper currency. Though this is a particular problem for gold and silver coins it is assumed here that penny circulation would not have been affected by governmental hoarding (Yeoman 1970:3) and if affected it would have been relative to the amounts minted on a yearly basis.

The number of pennies recovered at Waverly closely corresponds to the number of coins minted in any given year. Therefore, the probability of recovering a penny of a particular date in an archaeological context is determined by the number of them minted. Coins of more value, such as those with gold or silver in them, may not correspond to minting amounts as closely. The probability of recovering a penny of a particular date from a site is not likely to be affected by the national economy. This is because, at least in the 20th century, more coins were minted during times of economic stress.

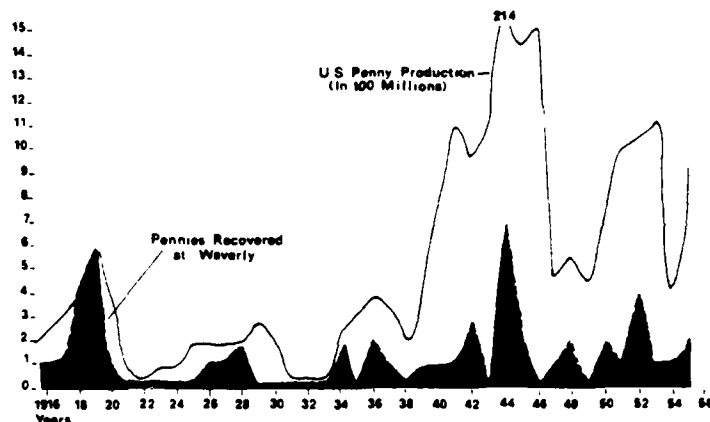


Figure 16.--Penny Production Compared to Waverly Sample.

F08-02 Indian Head pennies with a shield and laurel wreath on the reverse side were minted from 1860 to 1909. From 1909 to 1958 the Lincoln penny with reverse wheat ears was issued (Yeoman 1970:82-88). Distribution of coins at Waverly is presented in Table 60.

F08-03 Three types of nickels were recovered from Waverly excavations. The Liberty Head nickel with reverse roman numeral five was minted from 1883 to 1913. In 1913 the Indian Head with reverse buffalo was first minted and in 1922 and it continued until 1938. Then from 1938 until the present the Jefferson nickel has been in production (Yeoman 1970:93-95).

F08-04 Three different dime types were noted, dating 1906, 1917, and 1937. The Liberty Head (designed by Charles Barber) was minted from 1892 to 1916. In 1916 the Winged Liberty Head, often called Mercury Head, began to be minted and continued until 1945. The present Roosevelt dime has been in production since 1946 (Yeoman 1970:110-112).

Table 60. Site Distribution for Coinage

Date	<u>22CL567</u>	<u>22CL569</u>	<u>22CL571A</u>	<u>22CL571B</u>
1884	-	-	1	-
1889	-	1	-	-
1890	-	-	2	-
1892	-	-	1	-
1898	-	1	-	-
19--	-	-	1	-
1901	-	-	1	-
1904	-	1	1	-
1906	-	-	1	-
1907	-	2	-	-
1908	-	1	-	-
1909	-	1	-	-
1916	-	1	-	-
1917	-	2	2	-
1918	-	2	2	-
1919	1	1	4	-
1920	-	1	-	-
1926	-	-	1	-
1927	-	1	-	-
1928	-	2	-	-
1930	-	1	-	-
1934	-	1	-	-
1936	-	2	-	-
1937	-	2	-	1
1939	-	2	-	-
194-	-	1	-	-
1940	-	1	-	-
1941	1	1	-	-
1942	-	3	-	-
1943	-	2	-	-
1944	-	7	-	-
1945	-	1	-	-
1947	-	1	-	-
1948	-	2	-	-
1950	-	2	-	-
1951	-	1	-	-
1952	-	5	-	-
1953	-	1	-	-
1954	-	1	-	-
1955	-	2	-	-
unidentifiable	-	1	-	-
total	<u>2</u>	<u>57</u>	<u>17</u>	<u>1</u>
Mean date	1930	1933.7	1908.7	1937
Range	1919-1941	1889-1955	1884-1926	1937

F08-05 A 1943 Washington quarter was recovered; these were minted beginning in 1932 (Yeoman 1970:123).

F08-06 A 1917 half dollar was recovered, a Standing Liberty style coin minted from 1916 to 1947 (Yeoman 1970:138).

F08-08 In the miscellaneous token category we recovered a political token which bore the head of Harry S. Truman and a brief biography of him on the reverse side.

Class F09: Industrial

Artifacts which are part of a commercial or industrial function are listed in this class. Because of the domestic nature of all but two of the sites, this class pertained to only 12 items. These artifacts are iron grates for boilers and various fragments of these grates. They were all found at site 22CL575.

Class F10: Wire

This class included barbed wire, bailing wire, and electrical wire. The barbed wire type was a modern common twist pattern. Single strands of wire were composed of copper or iron. The electrical wire was rubber coated.

Class F11: Wagon & Automotive Parts

This class may be termed transportation items. It includes all those items which would belong to a car or gasoline powered farm vehicle. Also wagon hitching parts, excluding harness equipment, may be found here. Categories try to encompass large types of items which can be grouped by functional similarities. Body parts of cars and electrical devices are examples. Because of the diversity of materials found in the typical automobile this was not always possible. Thus, we have a multipurpose category labeled simply "Other Automotive." Plastic from automobiles is located in the plastic section.

F11-01 The suspension category is represented by leaf springs. One spring had been reused as a wagon tongue.

F11-02 Wheels and braking are represented by six types: tire valve caps, tire valves, wheel balance weights, hubs (both wagon and automotive), and automotive brake lines. The tire valve had several patent dates ranging from 1900 to 1917.

F11-03 The only car body part found at Waverly is a side running board of stamped metal.

F11-04 The automotive engine parts category also includes those artifacts which would transport fuel to the engine. Thus, fuel lines, fuel sediment bulb brackets (illustrated in the Sears & Roebuck Catalog (1927:480), and various linkages are incorporated. Several spark plugs were recovered. They are labeled AC M-8 Coralon, Wizard Standard 98, Champion S-12Y, and Autolite. The AC spark plug division of General Motors began in Flint, Michigan, in 1908 and was called the Champion Ignition

Company (AC News 1975:1). In 1922 they changed their name from Champion to AC (AC stands for Albert Champion the founder). The particular specimens recovered at Waverly have stenciled letters AC in which the bar of the A is attached to the right arm of the A but not the left arm. This label was used from August 19, 1940 to April 21, 1941 (A. C. n.d.:1). Autolite was the brand name of the Electric Autolite Company of Toledo, Ohio. It is now called the Eltra Corp. The brand name has since been passed on to the Ford Motor Company and the Bendix Autolite Company in Defiance, Ohio (Dinan 1975).

F11-05 The steering category is only represented by a steering wheel and three tie rod ends.

F11-06 Transmission parts are represented by an instruction plate for a truck transmission and a rear housing section.

F11-07 Two Mississippi auto license tags were recovered. One was dated Oct 1967.

F11-08 Electrical parts for automobiles include a coil, windshield wiper motors, electrical fuel pump, battery stays, generator housing plates, and generator brushes. The windshield wiper motors have several patents listed which ran from 1927 to 1943. The first successful mechanical fuel pump was invented in 1927. Our specimen is an Autopulse Model 500 from Detroit, Michigan. The battery stays are specialized bolts and perhaps should have been included in the fasteners class but were placed here because of their obvious association. The generator brushes are illustrated in the Guarantee Auto Catalog (G.T. & A Catalog 1919:14).

F11-09 The wagon and hitching category was represented by two types of artifacts. These were swing tree or whiffletree clips and a wagon axle plate.

F11-10 This large category of auto parts included fragments of exhaust pipes and mufflers, a tire jack, housings for engine parts, lock plates for an automobile or truck door, a radiator drain cock, and a gas cap.

Class F12: Agricultural Tools

This class of artifacts is separated from the general tool class because of their specialized function as tools for working the ground in gardening and commercial activities. Categories included hoes, a cow bell, rake, and farm machinery parts. The hoes were all tanged for attachment to a wooden handle as was the rake. Machinery parts included a chain link from a combine or similar vehicle, two mower blades, a plow share, one cultivator tooth, and two harrow teeth.

Class F13: Horse Equipment

Categories in this class include harness equipment, horse shoes, bits, and stirrups. A curry comb is included as an obvious accouterment.

F13-01 A wide assortment of harness equipment is listed here. Buckles are rectangular fixed bar and rectangular roller types. The latter has the tongue on the side. Round harness rings are from 37-90mm in diameter, and D-shaped rings are much smaller at 27-30mm. Screw type hame rings are illustrated in the Montgomery Ward catalog (1895:326). Terrets are similar to hame rings and are placed on harness pads. They are also illustrated on the page listed above. Snaps are single and double eye types. One entire harness pad was recovered.

F13-02 Horse shoes are distinguished from mule shoes by shape. Horse shoes are rounded near the toe and quarters while mule shoes are more rectangular. Mule shoe arms are nearly parallel to each other.

F13-03 Two types of bits were recovered, snaffle and bar. Snaffle bits are jointed at the mouth bar and are easier on the horse. The bar bit is a single iron bar in a fixed position. Ours had a port mouth indented at the center. This type is illustrated in the Montgomery Ward Catalog (1895:338).

F13-04 One brass clipping comb was recovered.

F13-05 Finally, an open stirrup with center foot bar was recovered. This is shown in Moseman's Illustrated Guide Of Horse Furnishings (Moseman 1976:284).

Class F14: Adornment and Personal

Metal artifacts in this class include those items which would normally be found on an individual, in a pocket, or in hand as a personal possession, excluding clothing.

F14-01 Pocket Knives. These artifacts were bone, wood or brass handled "pen" or folding blade knives and their fragments. They had one or two blades and did not lock in the open position.

F14-02 Watches and Parts. Watch artifacts were all parts of pocket watches except for a goldtone watch strap. Pocket watches were popularly carried by males until after ca. 1930, though the wristwatch had been introduced around World War I. After the 1950s the pocket watch suffered a severe decline in popularity in the United States (Bailey 1975:190). Several companies are represented in the Waverly assemblage. Western Clock Co., of La Salle, Illinois was in business from 1895 to 1930 (Schwartz 1975:166). They began manufacturing pocket watches in 1899 and the trademark "Westclox" was used from 1909. In 1930 the company became part of General Time Instruments Corp., which changed its company name to Westclox in 1936 (Bailey 1975:187).

Two other companies represented in the Waverly assemblage are the Roger Ingersoll & Brothers of Waterbury, Connecticut and the E. Ingraham Company of Bristol, Connecticut. The former company was in business from 1892 to 1922 and the latter has been in business since 1911. Ingersoll and Ingraham produced a great number of inexpensive watches around the turn of the century (Bailey 1975:210). Ingersoll was taken over by the Waterbury Clock Company though the brand name "Ingersoll" was used until 1951 when

the U. S. Time Corp. purchased Waterbury. At that time they adopted the brand name "Timex" (Bailey 1975:216-17). Ingraham began producing pocket watches in 1911 and discontinued making in 1967 (Bailey 1975:217).

F14-03 Jewelry. Decorative jewelry and military insignia are represented in this category. Metal jewelry found at Waverly could be described under the rubric of costume jewelry. Often plastic flowers, nonprecious gems, glass, and other inexpensive decorative motifs were glued or pinned to metal backings. The one military insignia recovered was a set of wings with a propeller in the center which was a cap insignia worn by the Army Air Corps and its Cadets (Bunkley 1943:48).

F14-04 Umbrellas were represented at Waverly by their collapsing struts. No complete frames were recovered.

Class F15: Clothing Hardware

This class of metal artifacts includes all items associated with clothing. Buttons, rivets, snaps, buckles, slides, grommets, clips, heel plates, and zippers are discussed below.

F15-01 This category includes buttons and rivets. South has defined 32 button types found on colonial and mid-19th century sites in America (South 1964). Button types found at Waverly are for the most part later than those, although a great deal of stylistic change had not occurred. Waverly buttons were constructed of iron, brass, white metal, or copper.

Four piece rivet buttons are typically found on overalls as bib attachments. Companies listed below are usually the cloth manufacturers. "Lee's" was established in 1889 as the H.D. Lee Mercantile Company (Moody's 1968:606). "Big Smith" is a brand name for the overalls produced by Smith Brothers' Manufacturing Company in Carthage, Missouri. Some companies had their company locations on their labels like Finck's Detroit, Premium of St. Louis, and C.P. Niller of Dallas.

Sander's type buttons are three piece buttons with a "eye" loop for attachment. The loop is soldered to a flat piece of metal which acts as a base for another separate piece to be crimped over it. This final piece can easily be stamped with a design and it is perhaps for this reason that it is a popular style for military buttons (Johnson 1948:13). Two button manufacturers are represented in this collection, the City Button Works of New York and Waterbury Button Company of Waterbury, Connecticut.

Also noted in the Waverly metal button collection are two and four hole sew through types. They appear to be stamped out and all are of iron or brass except one white metal button. One button was from the Sherman Bronson Company of Waterbury, Connecticut.

Only two metal loop buttons were recovered and one unusual button of plain iron with four rings on the back side. Finally, a three piece rivet button was stamped "B.L. & B. Memphis" on the back.

F15-02 Snaps for two types of clothing are recognized. One was a rivet style snap for overalls and the other a reclosable shirt snap.

F15-03 Garter or suspender clips were found.

F15-04 A great variety of clothing buckles was noted. Types are separated by shape and bar style. Solid frame buckles have a pivoting center bar with two or three prongs to insure strap immobility. Movable frame buckles are double hinged bars with a two pronged separate section attached through the hinges. One is stamped Pat 1855. Two types of fixed bar buckles include square and rectangular center bar buckles with a single prong and "D" shaped buckles. More often than not these buckles are curved rather than flat. Also brass suspender buckles with three prongs are noted. Many suspender buckle plates were recovered. These plates cover the actual buckle and are usually very ornately stamped into shell, scroll, floral, leaf, and cornucopia designs. A military style belt buckle was recovered at 22CL569. This type has a bar which slides between two plates to secure the belt.

F15-06 Grommets are metal "eye" rings for rope or string attachment to cloth or canvas. One and two piece grommets were found and were all of brass or white metal alloy. One is stamped Pat 1884 No. 2.

F15-07 Hooking fasteners for clothing are rather interesting. One has a spring steel band with a heart-shaped brass eyelet attached. This is identified as a corset stay by Herskovitz (1978:37). Another small one piece wire hook is illustrated in the Montgomery Ward Catalog (1895:891) as a "Delong patent hook and eye" fastener, sewn into a garment.

F15-08 Miscellaneous clothing hardware included a belt end of a cloth belt, a metal boot heel, and two zipper ends. They were labeled "serva" and "Gripper Zipper's." The modern version of the zipper was first sold on October 28, 1914, after several prototypes of "hookless" and slide fasteners had failed. The story of the invention of this device is quite interesting. It was slow to gain popularity and did not really sell until the 1920s. The word zipper was coined by a B. F. Goodrich Co. executive and the name "Talon" zippers was first used in 1928 (Campbell 1964:205).

Class F16: Recreation and Sports Equipment

This class of metal artifacts encompass those items which may be used for recreation. Categories include camping, fishing, music, and bicycle parts. Though fishing may be considered under subsistence, it was not an occupation at Waverly, and probably only served to supplement the diet. For this reason it is grouped in this class.

F16-01 This rope slip, used to keep a tent rope taut, is illustrated in Herskovitz (1978:64). A patent date of 1880 is stamped into this artifact.

F16-02 Fishing equipment included hooks, sinkers, and spinners. Sinkers are lead and two types were noted. They are a split bar style and a bead thread-through.

F16-03 In this category of music are harmonica reed plates.

F16-04 One tire frame part for a bicycle was recovered.

Class F17: Grooming & Clothing Care

This large class of artifacts includes items for making or repairing clothing, and items for personal hygiene and appearance.

F17-01,-02,-04,-05,-06,-08,-12,-13 These artifacts are separated from the rest by their primary function as clothing care items. Scissors are blunt tipped and pointed types. One set of scissors has an offset finger hole. Pins are modern shield head safety pins and the bent wire fibula style. The safety pin was first introduced around 1857 (Noel Hume 1970:255). Two sad irons for pressing clothing were recovered. They have a "6" or "9" on their tops. One needle threader was recovered as were three thimbles. Other items include springs from clothes pins, metal washboard fragments, and one button hook.

F17-03,-07,-10,-11,-14 These categories contain personal hygiene and cosmetic items. Cosmetic artifacts are lipstick holders from Revlon of New York, and Ponds Extract Co. Ponds Extract Company was formed about 1913 (PPAA 1931:70). Revlon Products Corp. was formed in 1933 and it became Revlon Inc. in 1955 (Moody's 1960:1369).

Class F18: Toys

Artifacts in this class were primarily used in the amusement of children. This class is represented by only four separate items: a revolver of cast iron, a brass badge (labeled "Junior G Man"), a small sad iron, and a whistle.

Class F19: Writing & Painting

Items pertaining to writing or painting included pencil eraser ends, pen caps, and a drafting compass center pin.

Class F20: Closures

This class of metal artifact defines those items which closed or sealed metal or glass containers. Such devices are obviously closely tied to the development of the containers they seal and therefore the reader is referred to the following section concerning tin containers and to the previous section on glass development, especially canning jars. Additional information of special interest will be included in this discussion.

F20-01 and -02 Friction caps are closurers which fit snugly against the rim of a container. The friction cap would be pried open and is re-useable. Paint cans are an example. Round and rectangular caps were found at Waverly. Crown and giles type caps have been discussed in the glass section. Several companies were noted on the friction caps. "Bama" of Borden Industries is located at Birmingham, Alabama. A "pop up" lid from the Gerber Company was recovered at 22CL569. This type of lid has been used by them since 1963 (Whitlock 1980).

F20-03 Threaded caps are divided into continuous threaded caps, lug caps, and canning jar caps and liners. The continuous threaded cap grew out of the industrialization occurring in America after World War I. The need was soon recognized for standardizing the dimensions of glass

containers and metal caps. Prior to this, screw caps had not been extensively used in the closure industry except for Mason type canning jars, olive jars, some specialty bottles, and lug type seals (Lief 1965:27). In 1924 the glass manufacturers gave "formal approval" to standardization specifications (Lief 1965:27). After this, continuous threaded caps immediately became popular and cork closures began to decline. The lug method of sealing began with the Amerseal cap in 1906 and although this replaceable cap was popular with housewives, the glass finish was difficult to make and therefore it was not popular with the glass manufacturers (Lief 1965:22). The lug style finish has interrupted threads which engage indentations in the side of a metal cap. Lug caps became popular later with the industry in the 1950s, especially on vacuumized food products. They could be opened with a single quarter turn and because the top seal was a plastisol compound, it was easy to adapt to steam vacuuming. This provided the industry with a high-speed capping technique (Lief 1965:40-41). The two piece canning jar cap (a threaded ring with a separate glass or metal cap) was an invention of Lewis R. Boyd in 1869. The previous all zinc cap gave a metallic taste to the food contents. Boyd's new seal allowed a glass and later a metal top on that portion of the cap that came in contact with the food (Toulouse 1977:92).

F20-04 Two types of dispensing tops were noted, a twist open and shaker type.

F20-05 Surprisingly, only one Hutchinson stopper was recovered and this was from 22CL571B. This type of closure was a piece of looped wire, attached to a gasket and fitted inside a bottle. When a bottle was filled with a soda drink, the carbonation forced the gasket against the inner shoulders of the bottle sealing the contents. The wire loop extended above the lip of the bottle. To open, one just tapped the loop extending slightly beyond the lip of the bottle. This released the seal with a loud "pop" (Lief 1965:14). This type of seal was invented in 1879.

F20-06, -07, and -08 Friction closures and flip top cans have been discussed above and in the tin can section.

F20-09 Pivoting spouts were all constructed of aluminum.

F20-10 Sanitary can tops are discussed in the tin can section.

F20-11 Vacuum seal caps fit over the lip of the glass container and are held in place by atmospheric pressure against the inner vacuum. It is necessary to pry these caps off which usually bends the cap making it difficult to re-seal.

Class F21: Kitchen Equipment & Cleaning

Artifacts in this class include those items and fragments of containers for food preparation or household cleaning. These artifacts were constructed of cast iron, enamelware, or metal that had been galvanized.

F21-01 Handles. This category includes handles of various tubs and buckets. They were most often bent wire pieces attached to plates which were riveted to the container. We assumed the smaller thick D-shaped and oval handles were for tubs while the thin wire handles were for buckets.

F21-02 Cauldrons. No complete cauldrons were found. However, several cast iron fragments were recovered that were obviously once part of such large pots.

F21-03 Lids. Covers for tea or coffee pots were cast iron and enamelware.

F21-04, 06. Enamelware fragments and containers were colored blue, blue speckled white, gray speckled, gray swirl, and plain white. Enamelware or Graniteware was introduced by the Lalance and Grosjean Manufacturing Company in Paris in 1878 (Booher n.d.:8). Shortly afterward many countries including the United States began production of various types of enamelware. Our collection did not exhibit manufacturing trademarks.

F21-05 Round cast iron griddles for stove-top cooking were recovered.

F21-07 An iron tea kettle was labeled "Kentucky Stove Co., Louisville, KY." This company was listed in the 1921 Thomas Register as being located at 1401 Garland Street. The pot was illustrated in the Montgomery Wards Catalog (1895:427).

F21-08. Only fragments of buckets, the locking seams, were recovered from Waverly excavations.

Class F22: Tableware & Utensils

Flatware and cutlery items, handles, can openers, and various food preparation tools are delineated in this class.

F22-01 Spoons are separated into types by size and shape of bowl with traditional nomenclature. Tablespoons were brass or iron spoons with bowls between 30-47mm in width and 60-75mm in length. They are generally used for food distribution. One tablespoon was backstamped "Simeon L. and George H. Rogers Company Xtra, Onieda, New York" (Marcellus 1980). The particular pattern noted on the Waverly example was at first called "Enchantment" and then in 1936 changed to "Bounty." At that time the company began to include the backstamp on the spoon, thus our spoon dates from 1936 or later.

Teaspoons are smaller bowled spoons measuring from 30-33mm in width and from 51-54mm in length. Several teaspoons were stamped "Wallace N.S." stands for Wallace nickel silver which was produced by Wallace Silversmiths of Wallingford, Connecticut. From 1834 to the present the company has been under several names. In 1897 they began placing their backstamp on nickel silver flatware (Rainwater 1975:180). Another backstamp was "Pat July 9, 12 Wm A. Rogers German Silver." This is the William Rogers & Sons Company, a firm organized in 1865 and which became a part of the International Silver Company in 1898 (Herskovitz 1978:65-66). The company was advertised in the Sears & Roebuck Catalogs of 1902 and 1927. "Niagara Silver Plate" another backstamp, must be from the Oneida Plant located at Niagara Falls from 1880 to 1914 (Rainwater 1975:121). The Glastonbury Silver Company, backstamp "Glastonbury," was located in Chicago, Illinois, and in operation from 1931 to 1950 (Rainwater 1975:58). Finally, the Sheffield Silver

Company of Brooklyn, New York, backstamp "Sheffield", registered its trademark in 1919; 1908 marked its first year of business and it became part of Reed & Barton Silversmiths in 1974 (Rainwater 1975:153).

Soup spoons are defined by their rounded bowl shape, and iced tea spoons by a long handle and small bowl. Soup spoon backstamps included "Regal," from the Royal Silver Manufacturing Co. of New Haven, Connecticut, which was in business from 1910 to 1945 when it became part of Majestic Silver Company. From 1910 to 1942 the Royal Silver Manufacturing Company produced flatware. The backstamp "Elmo" may be Ellmore Silver Company of Meridan, Connecticut. It was founded in 1935 and went out of business in 1960 (Rainwater 1975:49). However, "Elmo" was not noted by Rainwater as an Ellmore backstamp. We could not locate information on "Fairfield Silver Plate," "Hull," or "House Bond Hardware" of Memphis, Tennessee.

F22-02 Forks were described by size. A two pronged or tined serving fork is constructed of cast iron. Tableforks are four tined. One handle of a fork has a thin center bar that became abruptly wider near the top. It is shown in the 1902 Sears & Roebuck catalog as the tipped pattern.

F22-03 Table knives were butter and cutting styles with steel or cast iron centers.

F22-04 Various handles and fragments of handles were recovered that could not be identified as a particular utensil type.

F22-05 Corkscrew blades for opening cork closed bottles are similar to modern styles.

F22-06 The combined bottle/can opener or "church key" style opener is in the Waverly collection.

F22-07 A small fragment of a vegetable grater was recovered.

Class F23: Tin Cans and Containers

This class of artifacts includes all iron and tin plated containers and their various sealing devices. The early development of the tin can has been examined thoroughly in Fontana and Greenleaf (1962). This has provided a framework for the following overview of tin can history.

Though numerous methods of preserving food were tried, the first widely popular tin canning method was the hole-in-the-top can first patented in 1810 in England (Fontana and Greenleaf 1962:68). This type of can had a hole left in the top of the can through which the food was forced and then cooked in the can. The small pin-hole which allowed gases to escape was soldered closed as a last step. The actual can was cut by hand (Clark 1977:14; Fontana and Greenleaf 1962:68). Various improvements were made in production of the can throughout the 19th century which became a completely automated process by the 1880s. Fontana states that a diagnostic attribute of the completely automated hole-in-the-top can was "the notching of the four corners of the body blank so that the ends of the body were locked together before soldering the seam. This prevented the edges coming apart when the ends were affixed. The

notching above is not to be confused with the locked seam side which is not thermetic and is suitable for dry foods only" (Fontana and Greenleaf 1962:70).

The hole-in-the-top can commonly continued as late as the 1920s (Clark 1977:18).

The "open top" or sanitary can was first seen on grocery shelves around 1902. This type of can was double seamed requiring no solder but was sealed instead by a rubber compound (Clark 1977:18). Experimentation on this style of can had begun as early as 1888 (Fontana and Greenleaf 1962:73). An important date in tin can manufacturing is 1901. At that time the American Can Company was formed which merged 125 independent factories from 60 different companies (Clark 1977:31). Other companies, resisting this kind of pressure, began to produce cans with the words "Not made by a trust." Table 61 provides a series of notable dates in the development of tin containers. The letter in parentheses corresponds to references noted below.

F23-01 Can keys recovered at the Waverly excavations were bent wire and molded keys used to roll up a scored strip around the can. Coffee cans are an example of this type. They were no longer than 53 mm. One sardine can key was recovered which was 85 mm long.

F23-02 This is a catch-all category for end-crimped cans which could not be identified further; it includes sanitary and hole-in-the-top cans.

F23-03 Cans with crimped ends and lock seams include oval tobacco cans, friction cap cans, cone top cans, sanitary cans and their various fragments. The familiar "Prince Albert" can was well represented at Waverly. "Prince Albert" smoking tobacco was introduced in 1907 by R. J. Reynolds (Campbell 1964:100). Sanitary cans were accompanied by company labels from Shell Oil, Maxwell House Coffee, Budweiser, and Cudahy. Maxwell House coffee began to be produced around 1882 although the cans from this collection are obviously later (Campbell 1964:16). The "Cudahy" brand name was first used in 1890 (Brand Names Foundation 1947:1). The Shell Oil noted on the oil can is their "X-100 Motor Oil" brand probably filled in New Orleans by the International Lubricants Corp. a subsidiary of Shell Oil. This brand was canned from 1938 to 1951 (Houser 1980).

F23-04 Molded and stamped cans contained no seams, the top being crimped onto the body. Sardine cans, shoe polish cans with friction caps are examples in the Waverly collection.

F23-05 Bail sockets are used for attaching a wire handle to a can.

F23-06 The seams of lock and soldered seams are often the only parts left of cans found at Waverly. These are recorded in this category.

F23-07 Round flat-end cans with soldered seams constitute this category.

F23-08 This category includes the modern flip top can.

Table 61. Tin Can Chronology

1810	Nicholas Appert publishes a paper on the preservation of food in containers. August de Heire and Peter Durand patent tin plate canisters. They were first produced in 1813 for British Army and Navy (J). Fontana places this at 1811 (F).
1837-39	William Underwood adopts tin containers in place of glass. His packing business began in 1839 (F). Jones places it earlier, in 1837 (J). Seafoods like salmon, and oysters began to be canned in New York.
1848	Issac Winslow begins packing corn--patents his process in 1862 (F).
1853-56	Gail Borden cans his famous condensed milk. Jones places the first canned milk in 1853. Clark states it was issued in 1856 (J; C).
1856	Bessemer steel invented. By the 1860s tin cans began to be made with steel instead of iron (J; C).
1862	Double seam cans first used (J).
1867	George W. Dunbar experiments with packing shrimp (F).
1868	David Butterfield & Harry Hibbard begin canning vegetables. Also "tagger top" can invented in England (J). "Tagger top" refers to a sealing device, either foil or tin plate, which must be pierced to obtain the contents of the can. This then can be resealed with a cap. Kerosene cans are a good example (F).
1870s	Single color lithography successfully applied to metal. Multiple color lithography not commercially used until 1890s (C).
1875	Libby Canning Co. starts making two pound tapered tin can for corned beef (J).
1876	First canned boneless ham with familiar oval shape patented. Sardine canning starts in Maine by J. Wolf (J).
1880s	Beginning of automated tin can making in the form of side-seam soldering machines. From this time until around 1900 side-seams are notched on corners to hold can together before soldering.
1884	Sardine can with depressed top enables manufacturers to by-pass the separate step in which gases had to be vented (F).
1885	Evaporated milk first produced by Helvetia Milk Condensing Co. This is the hole-in-the-top can used today.
1890	Lacquer coated cans appear. Key-opening device for meat cans first used (J). The Edwin Norton Co. of Chicago developed key method of rolling a scored strip in 1895 (F). In 1906 Bjelland and Gromestadt (Europe) patent a key-strip opener for a double seamed can (F).

Table 61. (continued).

1898	American Tinplate formed. Cobb Preserving Company introduces first fully automated canning (C).
1900	Modern day open top can invented (J). By 1920s hole-in-top cans have been replaced by this can except for evaporated and condensed milk (C). Also, first steel barrel and modern lock seams on cans began to be used (J). Tindeco (Tin Decorating Company, Baltimore, Maryland) formed (C).
1901	American Can Company and Heekin Can Company formed (C).
1904	G. W. Cobb forms Sanitary Can Co (F); sardine cans begin to be made by automatic machinery; Edwin Norton founds Continental Can Co. (C).
1905	Incorporation of Continental Can Company (F).
1906	Modern paint can with resealable lid invented (J).
1907-09	First canned tuna (F). Clark and Jones place it at 1909.
1980	American Can Co. "absorbs" Sanitary Can Co.(J)
1920s	First pocket sized aspirin tablet tins were produced by Bayer. Aspirin tablets are new idea (J).
1932	Oil cans first used (J).
1935	Beer first sold in cans, both flat top and cone shaped. Krueger's Special Beer first, followed in same year by Pabst and Schlitz (C).
1930s	Electric tin plating begins mid-1930s. During World War II silver was sometimes used.
1947	Aersol can invented during World War II, markets for public in 1947 (J).
1959	Coors introduces aluminum beer can in 7 oz size; 11 oz aluminum can experimented by Primo Beer, both marketed for one year (D).
1962	Beer cans with lift tabs introduced by Alcoa (D).
1963	12 oz aluminum beer can introduced by Hamm's (D).
1965	Finger-ring tabs introduced, replaces lift tabs (D).

(J) Jones 1976; (F) Fontana and Greenleaf 1962; (C) Clark 1977;
(D) Dolphin 1977

F23-09 Rectangular squeeze tubes are recovered in this category. Mennen Lather Shave and Ipana toothpaste are products noted on the labels of some of these tubes. Dental cream or toothpaste was first put into tubes by the Colgate Company in 1896, the paste had been first produced and packaged in jars in 1873 (Colgate-Palmolive 1967).

F23-10 Flat end cans with lock seams includes types containing friction caps or hole-in-the-top cans. The seams folded over and locked together. Most of these are in very poor condition.

F23-11 One gold tin foil tobacco pouch was recovered.

Class F24: Stove Parts

F24 The stove parts class includes fragments of cast iron stoves. Eight burner plates were found in both round and square styles. Brand names "The New South" and "W.H.Co., Wrightsville, Pa" are stamped into some fragments.

Class F25: Miscellaneous Hardware

Among most historical site artifact assemblages are a wide assortment of construction hardware items that are difficult to assign to a particular class. This class is designed to group such items.

F25-01 Threaded square and hexagonal nuts are the most common types recovered at Waverly. One wing nut and five varieties of special purpose nuts for unidentified functions were found. One variety is round with four lugs protruding from the outside like a ship wheel. Another has an extension on one side of a square nut shape, perhaps to aid in tightening the nut. Still another has six legs on the base. Similiar nuts are illustrated and called spindle arm nuts, front radius rod nuts, and brake shoe support nuts (G.T.R.C. 1919:44-5). Apparently most of these nuts could have originated as automobile parts. Other varieties are domed headed and closed square headed nuts.

F25-02 Round washers come in a large variety of sizes from 13-77 mm across; none is a locking washer. Unusual washers include hexagonal, one with lug insets, and conical washers possibly used on wagons or automobiles.

F25-03 Compression and stretch springs were recovered. Stretch springs had hooks on either end and are thought to have been door springs.

F25-04 through -10 Three barrel hoops were recovered at 22CL576. Among single represented items are a cotter pin, round headed pin, a gear, several metal rings not believed to be harness rings, a turnbuckle, a roller bearing retainer ring, and a pipe end fitting.

Class F26: Furniture & Household Furnishings

Artifacts associated with the furnishing or adornment of various rooms are listed here. Surprisingly few items were found (52 separate artifacts), of which 21 are bed springs. Varieties of bed springs include bent wire square and diamond shaped styles and the common compression spring variety. Furniture casters are all tanged for attachment to the

bottoms of wood furniture. Metal drawer pulls are C- or U-shaped, only one ornatately decorated. Only one hook for hanging clothing was recovered. Four bed plates for attaching the metal frame to head and foot boards were recovered. Drapery furnishings are practically non-existent. One hook for a drape, four curtain rod brackets and a round curtain rod end completes this category. The only items that could be considered ornamental are two picture frame corners. Furniture hinges are heart-shaped brass. Finally, one shelving bracket and one fragment of screen was recovered.

Class F27: Unidentified Metal

A total of 246 separate metal artifacts remains as unidentified but potentially identifiable. This does not include those thousands of fragments of metal designated as scrap. The majority of this class seemed to be parts of other metal objects and framing for various machinery. Categories were designed on the basis of material type (metal alloy) and loose pigeon-holes based on shape, like plates, rods, framing parts, and bar metal.

MATERIAL GROUPS G-P: MISCELLANEOUS ARTIFACTS

by Steven D. Smith

Artifacts of material other than ceramic, glass, or metal were well represented at Waverly. A total of 1084 miscellaneous artifacts, or 1.88% of all artifacts, was analyzed (Table 62). This does not include brickbat, mortar, coal, slag, or slate fragments. Faunal remains are examined in Appendix 5. Artifacts discussed here for the most part represent a period of American culture from World War I to the present. As might have been expected because of its later occupation, 75% (N=810) of the sample was recovered from site 22CL569.

Classes and categories are arranged primarily along the guidelines set forth for metal. The diversity of material types is remarkable. Historical archaeology reports have in the past not concentrated a great deal of effort in the analysis of miscellaneous artifact materials. Considering the complex technological history of materials like plastic, for example, this lack of serious study is understandable. Still, we cannot totally ignore the large data base these artifacts represent for the analysis of 20th century sites. The following brief artifact discussions are presented with the hope they may provide a base for further research on 20th century technological history.

Material G: Plastics

History

Plastic is the name given a diverse array of organic or synthetic materials of large molecular weight that in its process of manufacture is sufficiently flowable (by heat or solvent) so in the final stage it can be shaped by molding or pressing (Arnold 1968:3-5; Dubois 1972:1-2). For the archaeologist who must initially contend with this material in terms of dating, there are few technological attributes of practical application. However, some general guidelines may be gleaned from a rather complex history of these substances so artifacts may be placed in a proper perspective.

The earliest commercial use of plastics in the United States was in the 18th century when keratin served as lantern windows (Dubois 1972:4). This substance made from cow or horse hooves or cow horns, when sufficiently pliable could be molded in useable shapes. This material was also used for combs; the first in the United States is reported to be Enoch Noyes of Newburyport, Massachusetts who established a shop around 1760 (Dubois 1972:6). During this time and into the 19th century horn buttons were also produced.

The exact date when other kinds of plastic buttons first appeared is not clear. Charles Burroughs invented preforming and flash molds which "started the button industry" (Dubois 1972:109). The Charles Burroughs Company was established in 1869. However, the Waterbury Button Company began molding buttons sometime after a Samuel Peck began producing shellac plastics with the Scovil Manufacturing Company in 1855 (Dubois 1972:16). Dubois does not state the type of plastic the Waterbury Button Company

Table 62. Miscellaneous Artifacts

MATERIAL G: PLASTIC

G01 Clothing Hardware

- 01 buttons
- 02 fasteners
- 03 footwear
- 04 snaps

G02 Adornment & Personal

- 01 hair barrets
- 02 jewelry
- 03 eye glasses
- 04 purses

G03 Tokens

G04 Toys

- 01 dolls
- 02 human figures
- 03 animal figures
- 04 vehicles
- 05 null
- 06 building toys
- 07 jewelry
- 08 misc. toys
- 09 photographic albums
- 10 reflectors

G05 Miscellaneous Plastic

- 01 flint safes
- 02 dispensers
- 03 flashlight parts
- 04 pipe stems
- 05 pens
- 06 knobs
- 07 clocks
- 08 calendar holder
- 09 calendar cards
- 10 flowers
- 11 automotive
- 12 band-aids
- 13 straps
- 14 film
- 15 cable trim
- 16 household

G06 Unidentified Plastic

- 01 white
- 02 black
- 03 transparent
- 04 red

G07 Closures

- 01 snap-on caps
- 02 threaded caps
- 03 lug caps
- 04 fitments
- 05 bag closures
- 06 stoppers
- 07 tabs
- 08 end caps
- 09 cap liners

G08 Grooming

- 01 combs
- 02 brushes
- 03 hair curlers

G09 Scrap Plastic

G10 Containers

- 01 bags
- 02 egg cartons
- 03 misc. containers

MATERIAL H: WOOD

H01 Buttons

- 01 five hole
- 02 two hole
- 03 four hole

H02 Pencil Fragments

H03 Wood Fragments

H04 Pipes

- 01 bowl

MATERIAL I: BONE

I01 Brushes

- 01 tooth brushes

I02 Buttons

- 01 four hole

I03 Pipes

- 01 pipe stems

I04 Bone Handles

- 01 tableware
- 02 indet.

MATERIAL J: SHELL

J01 Non-artifactual

J02 Buttons

- 01 two hole
- 02 four hole
- 03 stud

MATERIAL K: LEATHER

K01 Shoes

- 01 upper fragments
- 02 insole fragments
- 03 heel fragments
- 04 indet. fragments
- 05 outsole fragments
- 06 vamp fragments
- 07 toe cup fragments
- 08 complete shoes
- 09 quarter fragments

K02 Straps

K03 Fragments

K04 Misc. Leather

- 01 key tags
- 02 indet.
- 03 dog collars
- 04 gloves

MATERIAL M: CLOTH

M01 Nylon

M02 String

M03 Cloth

MATERIAL N: STONE

N01 Prehistoric Artifacts

N02 Construction Materials

- 01 mortar
- 02 slate
- 03 tile

N03 Industrial

- 01 coal
- 02 slag
- 03 chalk
- 04 mill stones

N04 Tools

- 01 whetstones

MATERIAL O: RUBBER

O01 Sealers

- 01 gaskets & washers

O02 Toys

- 01 tires
- 02 bicycle pedal
- 03 automobiles
- 04 balls

O03 Closures

- 01 fruit jar liners
- 02 threaded closures
- 03 caps

O04 Shoes

- 01 heels
- 02 outsoles, stitched
- 03 outsoles, cemented
- 04 uppers
- 05 labels
- 06 outsoles, nailed

O05 Buttons

- 01 two hole
- 02 metal loop

O06 Misc. Rubber

- 01 hoses & tubes
- 02 electrical plugs
- 03 electric sander pads
- 04 handles
- 05 rifle butts
- 06 automotive belts
- 07 dog collars
- 08 wire
- 09 suction cups

O07 Indet. Fragments

- 01 red
- 02 blue
- 03 black/white

MATERIAL P: MISC. MATERIALS

P01 Batteries

- 01 D cell
- 02 rods
- 03 C cell
- 04 radio
- 05 AA cell

used. Since Scovil did produce buttons, probably Scovil was the first to mold shellac buttons about 1855. Rubber buttons had been produced as early as 1851 (Dubois 1972:16).

Celluloid plastic was first produced commercially in 1870 (Dubois 1942:2). During the late 19th and 20th centuries celluloid products continued to grow until at their peak some 40,000 tons of celluloid were produced per year (Dubois 1972:46). Celluloid was molded into combs, collars, corset stays, shoe heels, spectacle frames, mirror backings, and piano keys. At this time, 1919, casein plastic also entered the American markets though it had been used in Europe as early as 1897 (Dubois 1972:33). Casein was produced from skim milk and was often used for button molding.

The modern synthetic plastic industry really began with the invention by Dr. Baekelands of phenol-formaldehyde resin in 1909 (Dubois 1942:2). This substance was immediately recognized for its industrial potential and began to be produced by a number of new companies, including the General Bakelite Co. (1910), the Candentite Co. (1910), and the Redmanol Chemical Products Co. (1914). Phenol is a carbolic acid compound obtained from coal or synthetically from benzene and air. This plastic has a natural amber color and, early in its history, only darker colors were used with this material. It had its most prominent role in the electrical, telephone, and automobile industries. In 1917 plastic steering wheels were introduced and the next year gear shift knobs, door handles, and radiator caps were among some of the uses of this plastic in the automobile industry (Dubois 1972:168).

Until 1928, when urea or amino acid plastics were first introduced, plastics were not available in a wide variety of colors, especially bright and pastel colors. Shades of amber, dark red, dark green, black, brown, and off-white or ivory were typical of this pre-urea period (Dubois 1942:47; 1972:159). However, urea plastics changed the market. Besides providing a wide range of bright colors, urea plastics were odorless, tasteless, and could be made translucent. Thus, this plastic was ideal for food packaging and for lighting fixtures. From this point onward through the 1930s, plastic began to play an increasingly conspicuous role in the American home. This market explosion of plastics is clearly evident in the closure industry. Prior to the development of urea plastic, the only extensive use of plastics by the closure industry was for collapsable tube caps. These were first used by Mennen in 1920 after the tin shortage caused by World War I (Dubois 1972:170). During the 1930s, however, the wide range of decorative colors, versatility of design potential, and perhaps most importantly, the decline in plastic prices, quickly made plastic an important material for closures (Lief 1965:30).

The 1930s also mark a time when plastics history becomes difficult to track because of rapid developments of new plastic types. Acrylics were first produced in the United States in 1931, Vinyl was introduced in 1928, and styrene in 1937 (Dubois 1972:84, 98, 106). Other dates from this time period of possible use to archaeologists are:

- 1927 moisture proof cellophane introduced and immediately used to package food and tobacco;
- 1927 Simmons Co. experiments with the first plastic furniture;

- 1939 most all washing machine agitators made of phenolic plastics;
- 1942 first polyethylene bottle blown;
- 1945 molded plastic closures with hinged resealing fitment made;
- 1951 plastic tube containers developed in Switzerland;
- 1955 plastic tube sealed containers (e.g., for oil) introduced;
- 1965 Corfam, invented in 1958, introduced to public but taken off market in 1971.

This brief overview of plastic may be of some use as a basis for dating plastic artifacts. Trademarks and brand names offer another method. Chemical analysis would undoubtedly assist, but since a plethora of other datable objects from the 20th century should exist on sites such detailed work would probably not be cost effective.

The typology devised for the cataloging of plastic artifacts is based on function with the classes, categories, and types being similar to the metal typology. A total of 604 plastic artifacts was recovered in the Waverly excavations, and as might be expected, 93.5% of those were from 22CL569, the house occupied until 1969. The next highest plastic artifact total was from 22CL571A, with only 2.8% of the plastics found there. Those companies for which we were able to find information, are mentioned here in this chapter, while others are mentioned in the artifact descriptions.

Plastic artifacts

G01 Plastic Clothing Hardware: Artifacts in this class are those items used for fastening clothing, like snaps, straps, belts, and footwear. Buttons are of three types: two and four hole sew through, and those with metal or plastic loop attachments. Generally, two and four hole buttons are most often black, ivory, or brown, while loop buttons come in a wider variety of colors. One plastic collar stud was recovered.

G02 Adornment & Personal: Plastic artifacts in this class are those normally found on the body or near at hand, excluding clothing. One brown hair barrette was recovered but the others were children's barrettes with elf and flower decoration. Jewelry included plastic beads and a brooch. Several eyeglass frames and bows were found.

G03 Plastic Tokens: Mississippi five and one mill tax tokens were found only at site 22CL569. A history of metal tax tokens is given in the metal typology. The reader is referred to that section. Plastic tokens were used sometime after 1942; one mill tokens were white or cream colored, while five mill tokens were blue (Wheless n.d.:17).

G04 Toys: This diverse class of artifacts includes human and animal figures, vehicles, jewelry, building toys, and doll parts. Among the toys were Cracker-Jack prizes, first introduced in 1912 (Anon. 1980:17). At that time they were made of wood or metal, while plastic prizes were first used in 1947 (Taynor 1980:3).

G05 Miscellaneous Plastic: This artifact class well illustrates the diversity of products constructed of plastic: dispensers, advertising, pens, flashlights, smoking paraphernalia, and fragments of automobiles. Most of these items date from the 1930s onward.

G06-09 Unidentified Plastic and Scrap: These are fragmented or unidentifiable and separated only by color.

G07 Plastic Closures: Closures included threaded, lugged, snap-on stoppers, bag closures, and fitments. Fitment is the name given a type of closure with a specialized function beyond that of sealing the container. Baby bottle closures with a plastic nipple, eye droppers, and spray nozzles are examples. Among manufacturing companies noted in the assemblage are Rexall Drug Co., a name first used in 1947 (Moody's 1954:2354) and Bristol-Meyers Co. which was labelled as 1887 but Moody's (1954:1362) placed its incorporation date as 1900.

G08 Grooming: This class contains artifacts associated with hair care, toothbrushing, and shaving. One comb was made of Lucite, an acrylic produced by E.I. du Pont de Nemours and Co. (Arnold 1968:20). The shaving brush was an "Ever-ready" brand and was illustrated in the 1927 Sears Roebuck catalog (Sears 1927:527). Hair curlers are "toni" type, with a patent no. 2,099,358, placing them in 1937 or later (U.S. Patent Office 1972).

G10 Plastic Containers: Containers in the Waverly assemblage are bags, styrofoam egg containers, and modern butter containers. Styrofoam is a brand name for an expanded bubble plastic first used in World War II and now produced by the Dow Chemical Co. (Dubois 1972:254).

Material H: Wood Artifacts

Only 29 wood artifacts were recovered from the Waverly sites. Eleven are buttons, both two and four hole types. Twelve of the 16 wood fragments recovered are burned. Other wood artifacts include pencil wood and a pipe stem. Table 62 provides an index for this class.

Material I: Bone Artifacts

This material type includes the 19 bones which had been modified into tools or ornamental devices. Bone deposited as food refuse is treated in Appendix 5. Bone artifacts include buttons, handles, and toothbrushes. Seventy-nine per cent (N=15) of the bone artifacts were recovered from site 22CL571A. Table 62 provides a reference index for this material type.

Material J: Shell

All 74 shell artifacts recovered at Waverly were buttons. Table 62 provides an index for this material type.

Material K: Leather

Sixty-one per cent (N=96) of the 158 leather artifacts recovered at Waverly were from various parts of shoes. The only other large number of leather artifacts noted are unidentifiable fragments (N=55 or 35%). Table 62 lists the various categories of leather.

Class K01: Shoes

Shoe leather from the Waverly was not amenable to in depth analysis because they were in a very poor state of preservation and fragmentary. No whole shoes were recovered though there was one example of a complete recovery of all the fragments from one shoe at 22CL569.

The development of the shoe industry was presented by Adrienne Anderson (1968:56-65). The following summarizes that article as a general guide.

The year 1811 marks the beginnings of the shoe industry. At that time a machine was introduced which mass produced wooden pegs. That invention, along with a pegging machine invented in 1829, was of considerable aid to speeding the production of shoes. Anderson (1968:61) states that the "era of pegged shoes" was in the first half of the 19th century. Some nailed shoes were used at this time but they were hand driven; the nailing machine was not developed until G. W. Parrots first patented it in 1862.

Two machines that had a tremendous influence on the shoe industry were the rolling machine invented in 1845 and the sewing machine in 1846. The rolling machine compressed leather sole fibers adding to their durability. Soon after the sewing machine was invented, a machine for stitching leather uppers using a waxed thread was invented.

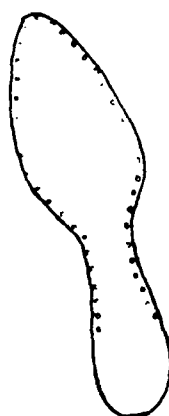
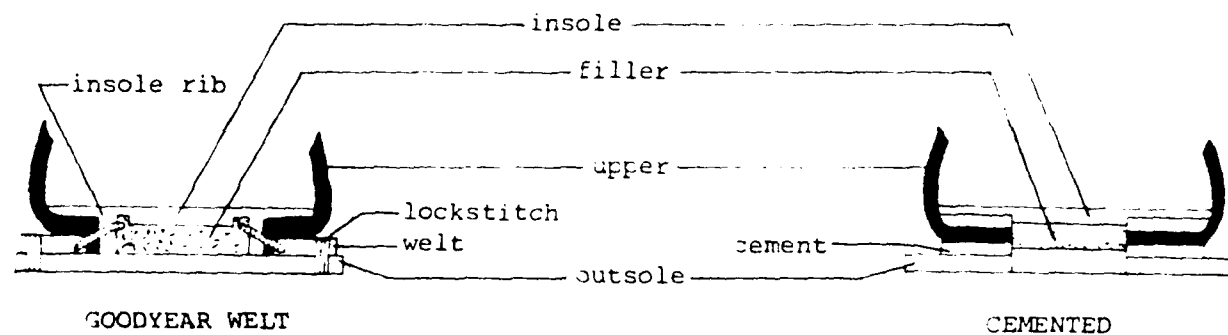
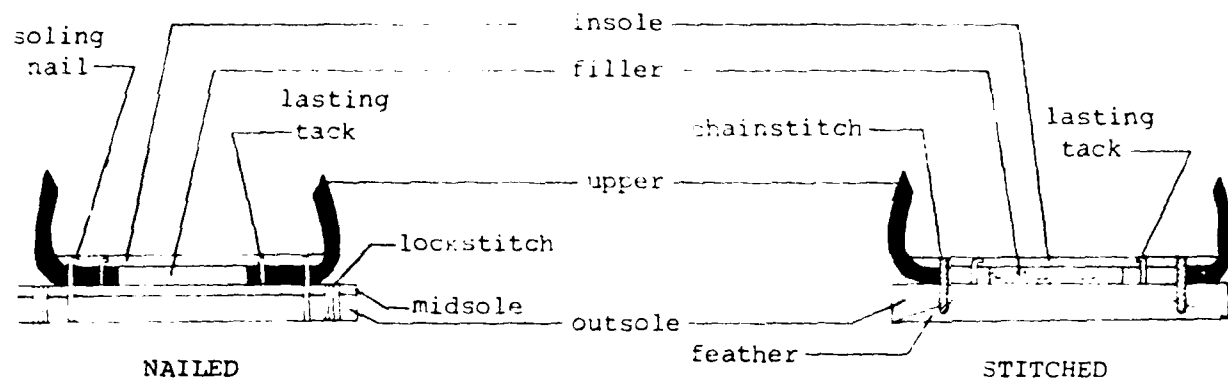
During the Civil War the first "crooked" shoes were developed for different feet. Up to that time shoes were not made for a left or right foot nor were they sized except for "wide" and "slim." In 1888 shoe sizes were standardized by the Retail Boot and Shoe Dealers National Association (Anderson 1968:59).

The pegging and nailing of shoes began to be replaced by stitching in the 1860s because of a number of machinery inventions. Most notable was Colonel Gordon McKay's stitching machine in 1862. Shoes made by that machine type are easily recognizable because they have "stitching on the foot side of the insole" (Anderson 1968:59).

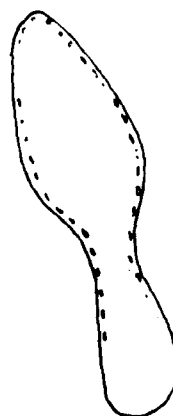
The final step in the automation of shoe manufacturing was to mechanize the action of attaching the heel to the shoe. This was accomplished around 1875. In the 1880s a method of using screws for shoe making was perfected. It made use of brass wire that was cut, threaded, and forced through the shoe and upper and the riveted heel (Fontana and Greenleaf 1962:105).

By 1880 shoe manufacturing was fairly standardized, the major manufacturing methods being the McKay's Stitching Method, the standard screw method, the nailed method, and finally the Goodyear Welt (Anderson 1968:62) (Figure 17). This latter method can be recognized by the rib on the underside of the insole. The following chronology of mass-produced footwear is based upon Anderson (1968:64):

- ca. 1811 machine manufacture of wooden pegs;
- 1829 hand operated pegging machine;
- 1830 patterns for cutting shoe uppers; manufacture of counters;
- 1844 vulcanization process patented by Goodyear (first developed 1839; see rubber);



Nailed sole



Machine stitched sole



Turned sole

Figure 17. Shoe Features (redrawn from Anderson 1968).

- 1845 rolling machine;
- 1846 Elias Howe's sewing machine;
- 1854 Davey pegging machine (first "true" shoe making machine):
- ca. 1860 L. R. Blake's stitching machine; power driven manufacture of shoes; lasts for right and left shoes;
- ca. 1862 McKay's patent of Blake's process, stitching completely around shoe eliminating nail reinforced toe; cable nailing machine; standard screw machine;
- ca. 1875 Goodyear welt stitcher; automatic heeling machine
- 1888 standardization of shoe sizes;
- 1899 United Shoe Machinery Corporation;
- ca. 1912 methods of manufacture standardized;
- 1926 cement shoe production practical;

The following terms were used in the artifact descriptions for shoes and need to be defined:

- Counters: a stiffener giving form to a boot or shoe around the heel;
- Foxing: extra leather fixed into or on top of back part of quarters, essentially as trim. Term is also used to describe the process of repairing shoes with new leather;
- Lasts: block form for shaping and drawing shoe uppers;
- Quarters: side of shoe upper from heel to laces;
- Vamp: shoe upper from lacing to toe in front of ankle.

Classes K02, K03, K04

Other leather items besides shoe leather included a machine-stitched glove, straps, and an assortment of leather fragments which could not be identified.

Materials L and M: Paper and Cloth

A total of 14 cloth artifacts was recovered from Waverly excavations all from site 22CL569. Fragments of nylon stocking were noted in blue, tan, black, and pink colors. Cotton black, white and blue plaid on white fragments were also recovered. No paper artifacts were recovered.

Material N: Stone

Historic period stone artifacts like brick, mortar, coal, slag, chalk, counts are not reliable because they were only collected on a presence/absence basis. A whetstone and a grist stone are noted here.

Material O: Rubber

One hundred and one separate rubber artifacts were recovered, a great many being fragments of whole artifacts. Sixty-five per cent of them were from site 22CL569.

The development of the rubber industry began in Paris. In 1803 the first factory, producing elastic bands for garters and braces, was built (International Institute of Synthetic Rubber 1973:12). Rubber goods began to be produced in England in 1810 (Firestone 1922:10). However, until 1839, when Charles Goodyear first vulcanized rubber, the product was highly subject to temperature changes and solvents making it sticky and plastic.

Vulcanization, a process involving adding sulphur and heating the rubber, forges crosslinks in the chemical chains of the substance and thus constructs a three-dimensional network of chemical bonds. This gives rubber its elasticity instead of plasticity (International Institute of Synthetic Rubber 1973:22). From this point on rubber began to be used in a variety of products like combs, buttons (1851), and footwear. Pneumatic tires had been experimented with early in the development of the industry but the first patent for such a tire was in 1888 by John Dunlop (International Institute of Synthetic Rubber 1973:14).

The late 19th century saw a great many rubber companies come into existence. In 1892 nine companies merged to form the United States Rubber Company: the Goodyear Metallic Rubber Co. of Naugatuck, Connecticut, American Rubber Co. of Cambridge, Massachusetts, L. Cardee Company of New Haven, Connecticut, Lycoming Rubber Co. of Williamsport, Pennsylvania, National India Rubber Co. of Bristol, Rhode Island, Boston Rubber Co. of Milltown, New Jersey, New Brunswick Rubber Co. of New Brunswick, New Jersey, The New Jersey Rubber Co. of New Brunswick, and one year later the Woonsocket Rubber Co. of Woonsocket, Rhode Island (Vila 1968:10). All of these companies were primarily in the footwear and waterproofing business at that time. In 1917 this conglomerate created a brand name for its footwear called "Keds." Also that same year the name U.S. Royal was adopted for its tire division (Vila 1968:12). Another company to play a major role in rubber production was the Firestone Tire and Rubber Co. which first came into being in 1900 (Lief 1951:9).

The "rubber boom" began in 1910, partly resulting from the invention of synthetic rubber. The first patent for synthetic rubber was issued in Germany in 1909 (International Institute of Synthetic Rubber 1973: 16). From that time the industry developed rapidly and produced a myriad of different synthetic rubber types. The industrial development began to mesh somewhat with the plastic industry and was certainly as complex.

The rubber artifacts were divided into seven classes.

001 and 003 Sealers and Closures The sealers and closures categories are represented by gaskets, washers, plugs, canning jar liners, and automotive battery caps. We were unable to identify the exact devices into which the gaskets, washers, and plugs would fit.

002 Toys Rubber toys include vehicle wheels, a bicycle pedal, a car, and the inside of a golf ball.

004 Shoes Eighteen shoe heels were recovered. They are single and double lift types with both solid and hollow insides. Rubber soles are nailed. Outsoles are cemented and nailed.

005 Buttons Only five rubber buttons were noted. One contains a Star of David and "Goodyear's Pat. 1851. N.R.C." (National Rubber Co.?).

006, 007, and 008 Miscellaneous Among miscellaneous rubber items are electric plugs, sander pads, a rifle butt, various handles, automotive belt, dog collar, and suction cups. Fragments are separated by color and counted.

009 Hoses Hoses are believed to be from automobiles though their exact function could not be discerned. They were all recovered from site 22CL569.

Material P: Miscellaneous Materials

This final material type was created for those items which did not seem to fit into any particular pigeon-hole. As it turned out only one class of artifacts could not be placed within the typology. These were dry-cell batteries. Perhaps a material type of chemical products could be created here.

Batteries were flashlight style "AA", "C", and "D" sized batteries and paper cased ham radio batteries. "Eveready" is a trademark of the Carbon Products Division of Union Carbide Corporation first formed in 1898 and formally incorporated in 1917. However, the "Eveready" trademark goes back to around 1886 when Charles Brush formed a company to produce various carbon products. In 1890 the company introduced the world's first commercial dry cell battery (Union Carbide 1976:1).

DATING THE ARCHAEOLOGICAL SITES

by Timothy B. Riordan and William H. Adams

Introduction

This section examines the temporal position of the Waverly sites, answering the question central to any archaeological study: when was the site occupied? Chronology is, and must always be, important to archaeologists. Without firm control over the time sequence, the artifacts are not understandable and the search for patterned behavior is useless.

Many methods have been used to date archaeological sites. The most common and useful ones are historical documentation and oral history. These provide the best dates for our archaeological components. There can be no substitute for a thorough history and oral history of the site. The details provided by these studies are invaluable in ordering our archaeological data. Unfortunately, documentation seldom is as detailed as we would wish, and when dealing with sites on the lower end of the economic and social status scales, this lack of detail becomes acute. This is a serious problem with the Waverly sites. There is no documentation for most of the sites. Much oral history data has been collected and some of it is useful for dating the sites:

22CL567	ca. 1890-1930	22CL571A&D	ca. 1890s-1942
22CL569	ca. 1909-1970	22CL571B	ca. 1890s-1910
22CL576	ca. 1890-1930		

But, even in the sharpest of memories, events which are not considered significant at the time (e.g.; a neighbor's abandoning a house) will tend to be blurred or forgotten after 30 years. Oral history is seldom precise enough for archaeological purposes, and some sites are too old to be remembered by informants. The only recourse is to date the sites by the artifacts recovered.

Numerous methods have been devised to accomplish this goal. Some of the more commonly used methods are pipestem dating, seriation, and the South ceramic dating formula. An assumption common to all of these methods is that the artifacts recovered from a site accurately reflect the time period of that site. This is not always true; any number of factors could skew the data away from the time of site occupation. Increasing production of an item could result in a greater percentage of that item over time and make the site seem younger than it really is. The economic status of site occupants could obscure the real date of the site in a number of ways. In addition to these factors, other processes (popularity, patterned behavior, time lag, transportation, abandonment of the site, post abandonment processes, and the availability of data on a particular artifact class) could affect the sample.

The process of dating a site by the artifacts is incredibly more complex than placing the raw data into one side of a method and deriving a date from the other side. We do not intend to argue the validity of any of these methods. They have proven useful by their application on many historical sites. We only wish to emphasize these date the artifact sample, not the occupation of the site. Analogy can be made to radiocarbon dating in prehistoric archaeology, where any number of factors affect the sample composition and one sample is not sufficient for a firm date.

In the analysis of Waverly material culture, we were not content to use only one method, but rather used several methods at our disposal. This section brings these analyses and their results together, so that by comparison, a date of occupation is derived for each site. Although the analyses have been extremely diverse, they can be grouped into three general types: those based on manufacturers' marks, those based on technology, and those based on production statistics. Each of these groups has advantages and biases that need to be understood before any conclusions can be drawn about the occupation of the Waverly sites.

Manufacturers' Marks

Only two kinds of artifacts were useful for this type of analysis, glass containers and ceramic vessels. While other kinds of artifacts show makers' marks, they are not common enough to be statistically relevant or too little is known historically about the manufacturers. Glass and ceramics, however, are extremely common on historical sites and both artifact groups have been studied extensively. Historical data on manufacturers' marks was collected from a few basic sources, Toulouse (1971) for glass and Barber (1904), Ramsay (1947), Godden (1964), and Lehner (1978) for ceramics.

This dating method is similar to the South Ceramic Dating Formula. Each of the identified marks is dated and mean initial, median and terminal dates are calculated for the the sample. The assumption here, as in the South Formula, is that the mean median of the manufacturers' marks will approximate the median of the occupation range of the site. The concept of Time lag has been postulated to account for the difference between the two statistics. Time lag assumes that different kinds of artifacts are retained in the cultural system for differing lengths of time. On late 19th and early 20th Century sites, mean median dates for ceramics are about 12-25 years earlier than the mean occupation of the site (Adams and Gaw 1977; Riordan n.d.). Bottles, on the other hand, are only 4-5 years earlier (Riordan n.d.). This method is still being refined but has produced consistently useful results.

Table 63 presents the manufacturers' mark data. The first column shows the mean of initial, median, and terminal dates for five Waverly sites, using both glass and ceramic artifacts. The next column lists the number of marks that contributed to the initial and terminal dates. The last column shows the total number of marks used. Most marks contributed both initial and terminal dates, while some only had an initial date.

This method is inconclusive for the Waverly sites. The sample sizes at 22CL571B and 22CL567 are too small to be relied upon. It is interesting to note, however, that the mean initial glass date for 22CL567 is after the date of abandonment of the site provided by the oral history. This skewing of the data is probably due to roadside dumping of trash after abandonment. The ceramic samples from 22CL571A and 22CL576 are also too small to be statistically valid. The remaining samples are useful in providing relative dates for the sites. Site 22CL569 provides a good example of time lag. The ceramic sample dates 30 years earlier than the glass sample. The glass sample from 22CL571A appears to be later in time than expected; we suggest this has resulted from abandonment activities, whereby bottles from that last year were left at the site instead of being hauled to the dumps in the

bottoms. Because of a general lack of manufacturer's marks recovered from the sites, this method has been only partially successful in dating the Waverly sites.

Table 63. Manufacturer' Mark Dates

	Mean Initial	Mean Median	Mean Terminal	Sample Number I/T	Number of Marks
22CL567					
GLASS*	1931.7	1941.8	1952.4	12/12	12
CERAMIC*	1883	1903	1927	3/2	3
22CL569					
GLASS	1930.4	1942.0	1953.6	76/33	76
CERAMIC	1907.9	1912.2	1937.8	16/7	17
22CL571A					
GLASS	1925.5	1935.0	1944.4	36/32	36
CERAMIC*	1865.6	1871.9	1889.6	5/4	5
22CL571B					
GLASS*	1919	1923	1927	2/2	2
CERAMIC*	1868	1884.8	1901.5	4/4	4
22CL576					
GLASS	1923.8	1931.9	1939.9	20/18	20
CERAMIC*	1934	----	----	1/0	1

*sample probably too small to be statistically valid

Technology

The technology used to produce an artifact is often useful in dating that artifact. In the simplest terms, an artifact cannot date earlier than the technology that produced it. Perhaps a more useful concept is that technological processes are replaced in the same way decorative styles are. They are invented, gradually replace older technologies, and are themselves replaced in time. This makes them suitable for study by seriation. From an archaeological standpoint, this provides a ranking of sites by age. No specific dates can be derived, but differences can be observed.

Three different artifact groups were studied to show changes in technology: glass containers (Figure 9; Table 25), nails (Figure 15; Tables 57-59), and window glass (Figure 7; Tables 13 and 14). Based on these seriations, 22CL571B is consistently older than any of the other sites. Table 64 shows five sites ranked by age and artifact study. Sites 22CL567 and 22CL571A appear to be similar in age. Based on the nail seriation, 22CL567 is older than 22CL571A, but their position in the other analyses is reversed. This is probably because of the specialized nature of 22CL567. It was built before 1882 and served an unknown, non-domestic function until the early 1900s. Then, it became a domestic structure. While the nails date from the original construction of the building, most of the trash is of later origin. Site 22CL569 and the dump associated with it, 22CL576, are

consistently younger than any of the other sites. The seriation of technological processes has proved to be useful in ordering the site data. While no specific dates were derived, the relative age of the sites is known.

Table 64. Age of Waverly Sites Based on Seriation by Technology.

	Glass Containers	Window Glass	Nails
Youngest	22CL576		22CL569
	22CL569	22CL569	22CL576
	22CL567	22CL567	22CL571A
	22CL571A	22CL571A	22CL567
Oldest	22CL571B	22CL571B	22CL571B

Production and Popularity

Three methods have been used to study the production and popularity of selected artifact groups: seriation, historically known production curves, and the South Ceramic Dating Formula. The first of these, seriation, has been used to study differences in glass color (Figure 8; Tables 23 and 24) and changes in stoneware glaze (Figure 10). The glass color seriation showed an increasing use of clear glass over time and provided a relative ordering of the sites, with 22CL571B the oldest and 22CL569 the youngest. The seriation of stoneware glaze types showed 22CL571B to be the oldest and 22CL567 to be the youngest.

Production curves for two groups of artifacts, coins and nails, have provided important insights for the dating of the sites. Coins have often been used to date sites but the analysis of pennies recovered at Waverly questions this use. When the frequency of pennies recovered is plotted against the production curve of pennies (Figure 16), we can see an almost one to one correlation between production and recovery. This indicates that the date of a penny is related more to the national production of pennies than to the date of the site. This effect is probably less of a problem with coins of higher value.

While the production of pennies may not have been very useful in ordering the sites, the production of machine cut versus wire cut nails does appear to be significant (Figure 18). This curve shows clearly that machine cut nails were being replaced rapidly during the early 20th century. It is assumed that, except in an unusual case, more nails will be used during building construction than in any other year that a site is occupied. Therefore, the percentage of machine cut nails recovered should be roughly equal to the percentage of total nail production represented by machine cut nails over the period 1880-1960. By comparing the machine cut nail percentage from a site to that of the production curve, we should be able to date the construction of a building with fair accuracy. Using this system, the following dates have been derived for the Waverly sites:

22CL567 1891 22CL569 1905 22CL571A 1892 22CL571B 1888.

Like all the dating methods discussed in this appendix, this index is skewed in some ways. In order for the dates to be accurate, one has to assume that the house builder would have simply used whatever nails were available (i.e.; a mixture of wire and machine cut). If the builder believed that

machine cut nails made a stronger house, he could consciously affect the nail percentages to reflect an older date than the actual construction. Reuse of nails from older structures could have the same effect. Preliminary application to other sites supports the validity of the method; but, since the method has not been tested fully as yet, we might accept the order of the sites but not necessarily the actual dates.

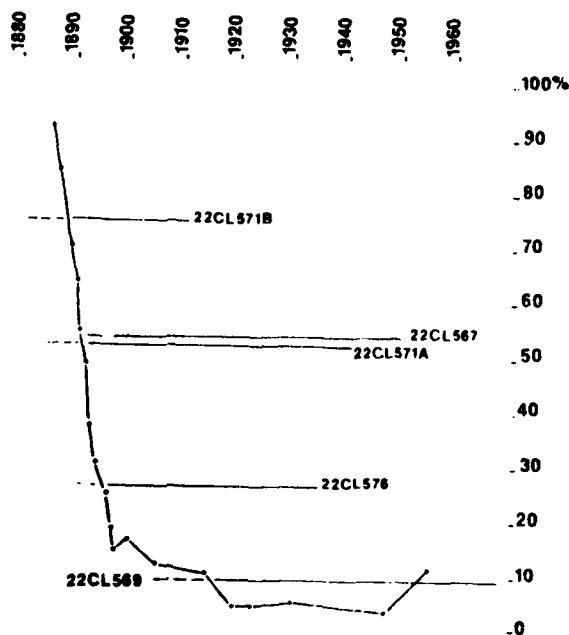


Figure 18. Nail Production Curve (Wire Cut plus Machine Cut Equal 100%). Source: U. S. Census of Manufactures, 1880-1950.

The final dating method addressed in this section is the South Ceramic Dating Formula (Table 45-49). Two methods of calculating this formula have been used, fragments and minimum number of vessels. It would appear that using vessel MNI rather than fragment count is a more accurate indicator of median date. Using vessel MNI and the ceramic dating formula, the median is: 22CL567, 1910; 22CL569, 1912.9; 22CL571A, 1880; and 22CL571B, 1862.

Analysis

Thus far we have discussed many methods for dating the Waverly sites. Some have produced absolute dates while others have produced only relative dates. In several cases the methods do not agree. We still cannot be sure of the dating of the sites, although we can come within a couple of years (Table 65). The sites can be ranked in each of the methods from youngest to

oldest. Only four sites have enough data to contribute to all nine analyses and these are ranked in Table 66. The results of this ranking are clear and lead us to Hypothesis 1: the rankings, youngest to oldest, produced by the various dating methods accurately reflect the actual age ranking of the sites. In this case the null hypothesis should be: the rankings produced by the various dating methods are unrelated and could have been produced by random chance. One method of testing these hypotheses is Kendall's Coefficient of Concordance (W) (Winkler and Hays 1975:874-876). The statistic, W, can vary between 0 and 1, with zero indicating no concordance and 1 indicating perfect concordance. The value of this statistic is that it is comparable across different sets of data. The coefficient for the data shown in Table 66 is .84 and indicates a very high concordance among the various methods. This indicates a tendency for the same rankings to occur in each of the different methods. Because of this, we must reject the null hypothesis that the rankings could occur by random chance. The rankings produced by the various methods are reflective of the age of the sites. Therefore, 22CL571B is judged to be the oldest site, followed by 22CL571A, 22CL567, and 22CL569 in ascending order.

Table 65. Probable Occupation Dates for Waverly Sites.

	Maximum Initial	Minimum Initial	Minimum Terminal	Maximum Terminal
22CL567	?	ca. 1888	1930	1950
22CL569	late 1890s	ca. 1905	1969	1969
22CL571A	1880s	1890s	1942	1942
22CL571B	1883*	1890s	1910	1920s

*Goodalls' marriage

#Construction date, occupation date ca. 1905-1910.

Summary

We began this section with a question, "When were the sites occupied?" The sites have been arranged in an order by relative age but very little has been said about the chronological age. Unfortunately, dating historical sites is incredibly complex. The use of artifacts for sophisticated analysis is yet in its infancy. Five of the nine methods used here have never been employed on these artifact classes. Seriation has been used extensively in archaeology but has seldom been applied to late period historical sites. Nail and glass seriations promise to be useful tools for the future but they need to be further refined. This is true of all analytical methods used in this study. Until sites of short occupancy but large artifact sample size are analyzed, this goal cannot be reached. In the end, we must fall back on the meager documentation and the memories of Waverly that do exist.

Table 66. Relative Ranking of Selected Sites, Youngest to Oldest

	22CL567	22CL569	22CL571A	22CL571B
Glass marks	2	1	3	4
Ceramic marks	2	1	4	3
Glass container seriation	2	1	3	4
Window glass seriation	2	1	3	4
Nail seriation	3	1	2	4
Glass color seriation	2	1	3	4
Stoneware seriation	1	2	3	4
Ceramic formula	2	1	3	4
Nail production	3	1	2	4
W	19	10	26	35

Kendall's Coefficient of Concordance:

$$\begin{aligned}
 W &= \frac{12 \left[\frac{2^2}{(19)} + \frac{2^2}{(10)} + \frac{2^2}{(26)} + \frac{2^2}{(35)} \right]}{81(4)(15)} - \frac{3(5)}{3} \\
 &= \frac{28344}{4860} - \frac{15}{3} \\
 &= 5.84 - 5 \\
 &= .84
 \end{aligned}$$

Appendix 8. Artifact Illustrations

On page 595:

A A08-03-04A
B A04-03-01C
C A04-03-02A
D A04-03-01A
E A01-33-01A
F A08-06-01I
G A01-01-12A
H A01-12-02A
I A04-10-05A
J A08-07-03G
K A08-03-03B
L A08-01-01A
M A08-01-01A
N A08-11-01A
O A13-01-01A
P A08-07-03B
Q A15-01-02A
R A09-05-01A

On page 596:

A A01-02-01B
B A01-03-01A
C A08-07-03A
D A08-10-01D
E A08-03-04F
F A08-03-04B
G A08-03-04B
H A08-04-02C
I A10-02-02A
J A13-06-02A

On page 597:

A A01-09-01A
B A01-19-01A
C A01-15-01A
D A01-21-01A
E A01-27-01A
F A01-05-03A
G A04-01-03A
H A01-23-02B
I A01-10-01A
J A01-31-01A
K A01-13-01A
L A04-07-01A
M A04-03-01B
N A01-12-04A
O A01-14-01A

On page 596:

A E03-03-10J
B E03-04-04C
C E03-04-10F
D E03-04-12B
E E03-04-10E
F E03-04-12C
G E03-04-13D
H E03-04-13B
I E03-05-10B
J E03-05-10H
K E03-06-01A
L E03-08-01A
M E03-08-00F

On page 606:

A B02-01-13D
B B02-02-101A
C B04-09-100A
D B04-09-100B
E B04-09-100E
F B04-09-100F
G B04-09-100J
H B04-09-100M
I B04-09-100N
J B04-09-100O
K F08-01-01A
L F06-10-01A
M F14-02-01G
N B04-04-102A
O G04-08-07A
P F14-03-06A
Q F14-03-01A
R F15-04-05A
S F15-03-01B
T F18-04-01A
U G07-06-02A

On page 607:

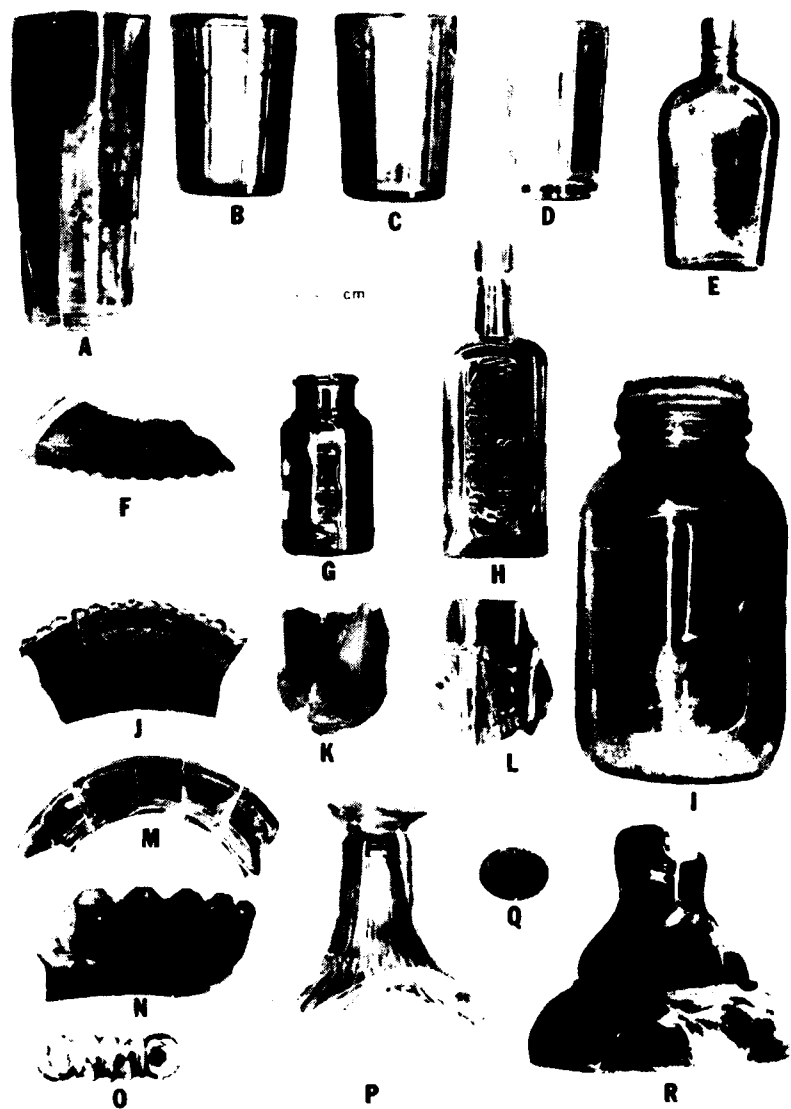
A-O F27-01-05A

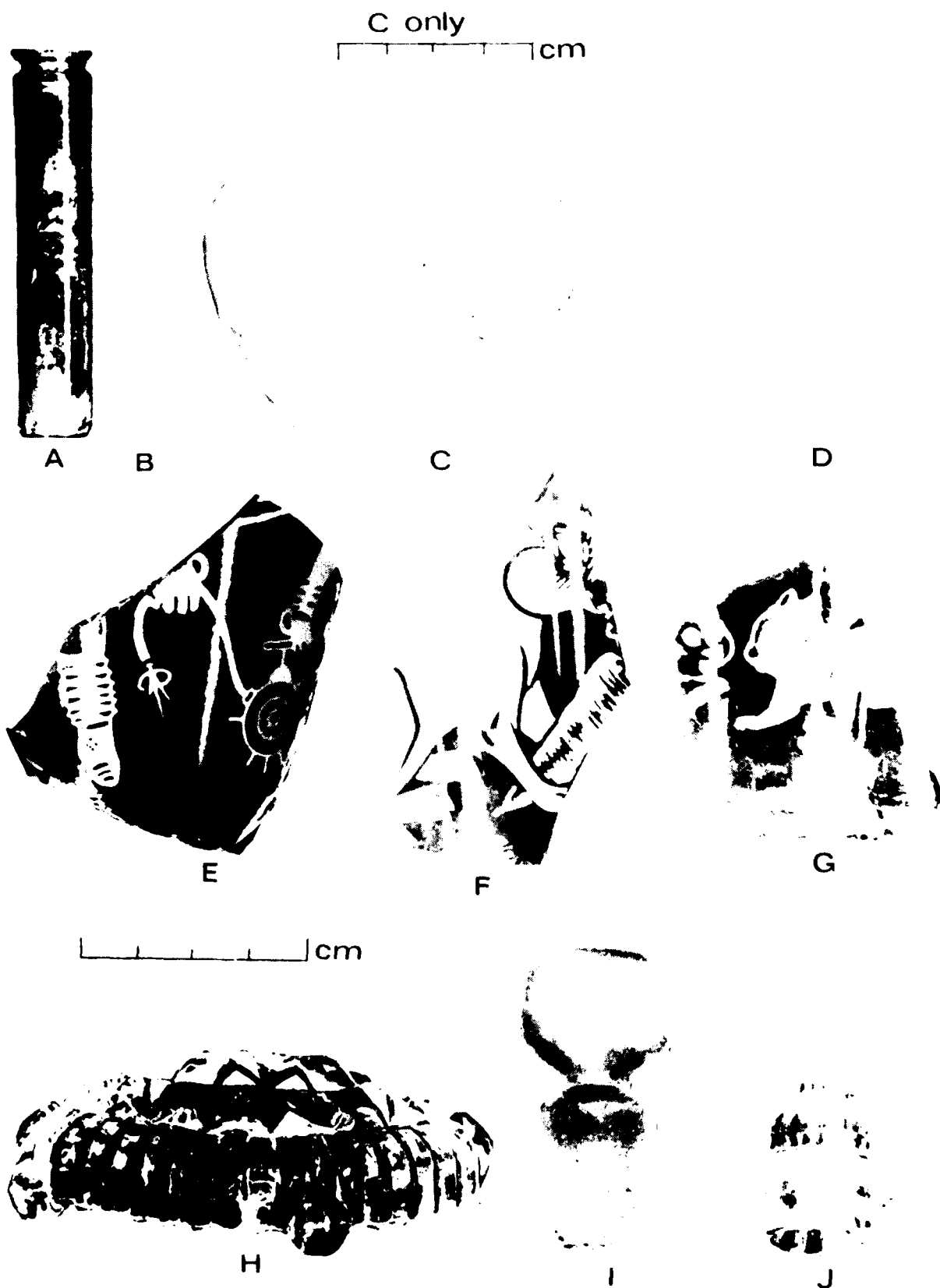
On page 608:

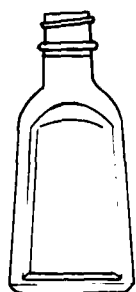
A F02-01-04A
B F02-01-02B
C F04-03-01B
D F04-03-02A
E F04-03-01A
F F07-18-02A
G F07-11-01G
H F07-08-02A
I F07-08-01A
J F07-01-01A
K F07-20-01A
L F07-01-02A
M F07-13-01A
N F07-02-01P
O F07-02-01U
P F07-24-01A
Q F07-11-01H
R F07-06-04A
S F07-06-01A
T F02-02-01B
U F02-02-01C
V F02-02-01D
W F02-02-01F
X F02-02-05A
Y F02-02-02A

On page 609:

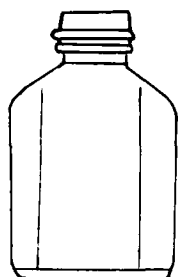
A F12-03-05A
B F12-01-01A
C F13-02-02F
D F13-02-02B
E F13-05-01A
F F13-03-02A
G F13-01-01E
H F13-01-04A
I F17-01-01A
J F17-01-03A
K F17-13-01A
L F22-03-01E
M F22-01-04F
N F22-01-01F
O F24-04-03B
P F24-04-02C
Q F16-02-01E
R F26-01-01B
S F26-04-01B



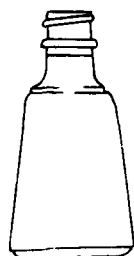




A



B



C



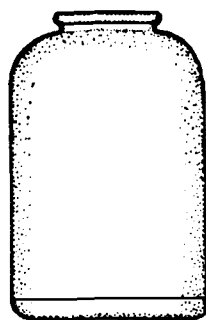
D



E



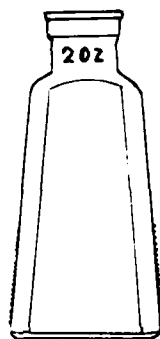
F



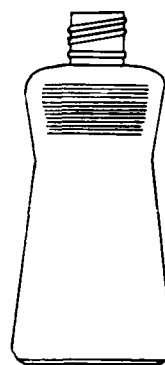
G



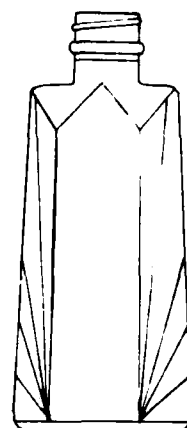
H



I

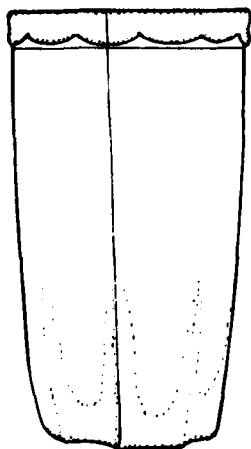


J

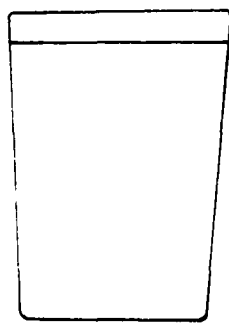


K

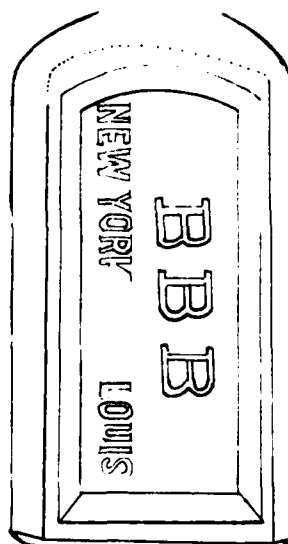
cm



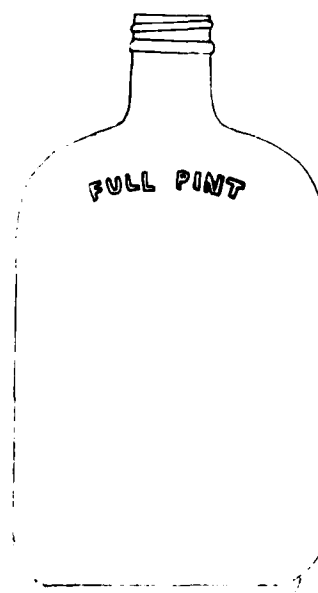
L



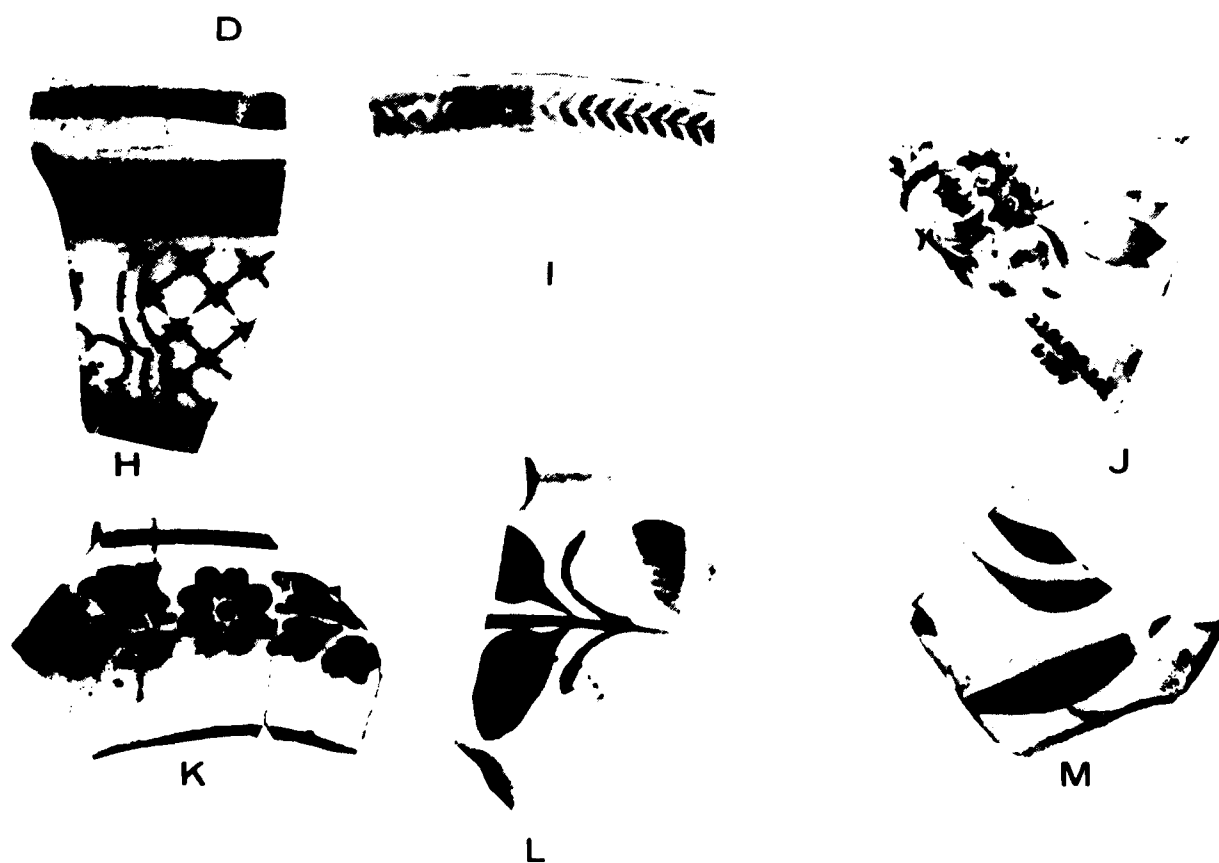
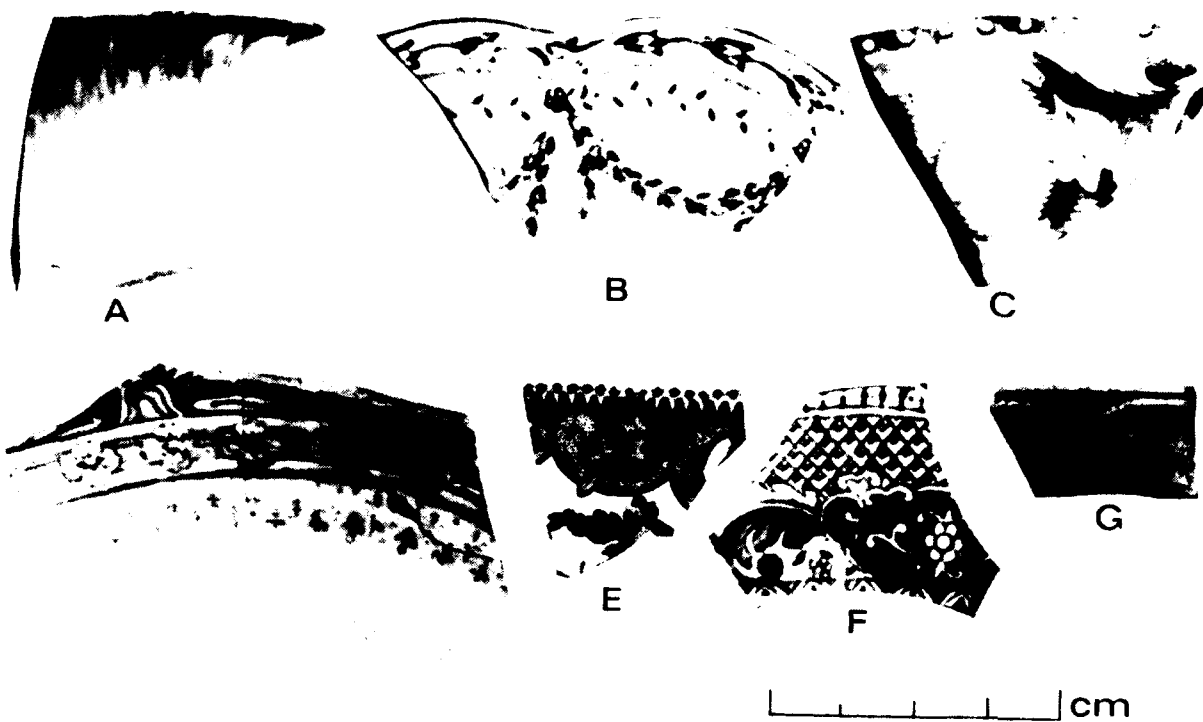
M



N



O





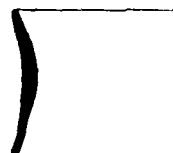
B02-01-01A



B02-01-01B



B02-01-01C



B02-02-01A



B02-04-01A



B02-01-03A



B02-01-03B



B02-01-03C



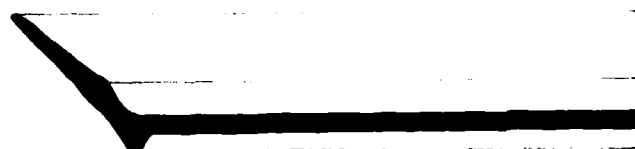
B03-01-03A



B03-01-03C



B03-01-03B



B02-01-06 D



B02-01-06A



B02-01-10A



B02-01-09A



B02-01-06B



B02-01-06C



B02-09-11A



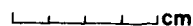
B02-01-09B



B02-01-09C



B02-01-04A



B02-01-12A



B02-01-12B



B02-01-13B



B02-02-13A



A



B



C



D

B02-02-101



C01-02-01B



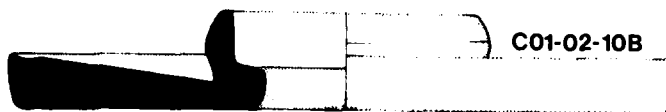
C01-02-04A



C01-02-10A



C02-02-01B



C01-02-10B



C

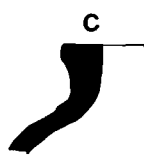


D



C01-02-10C

C03-02-01B



C

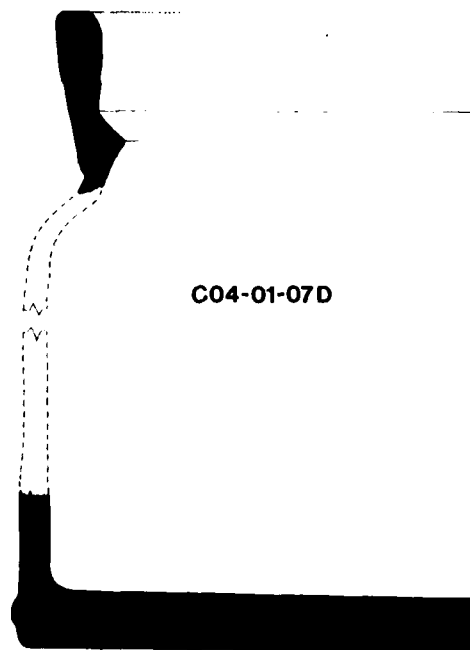
cm



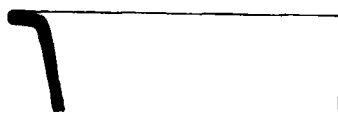
C04-01-07A



C04-01-07C



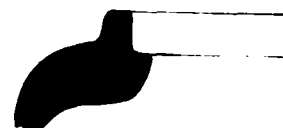
C04-01-07D



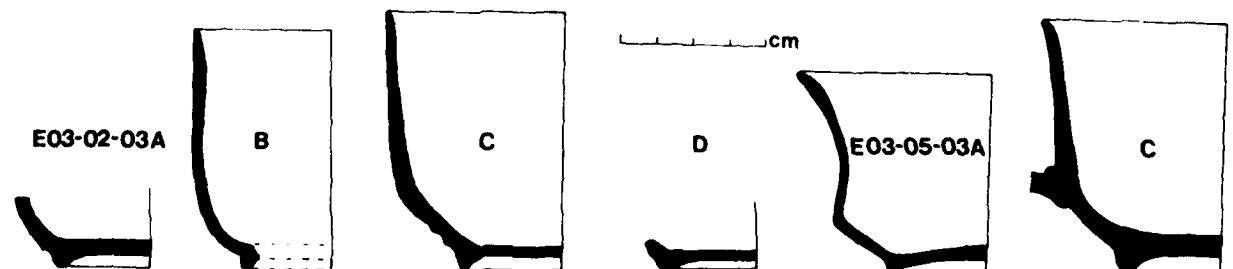
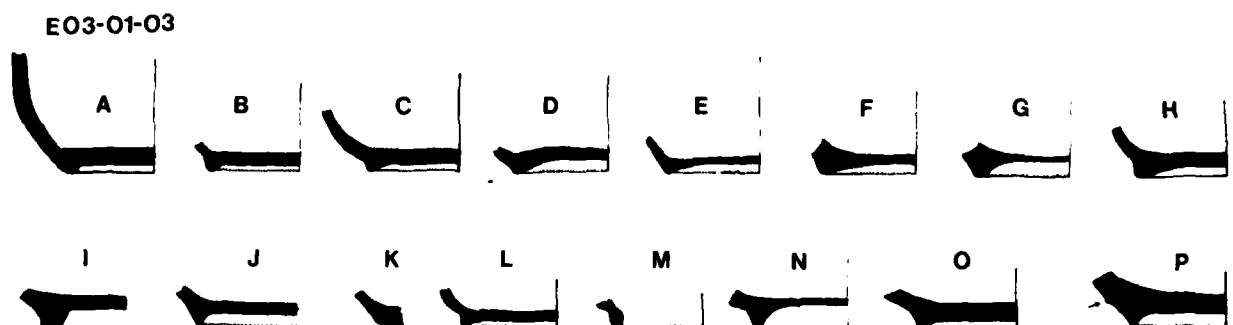
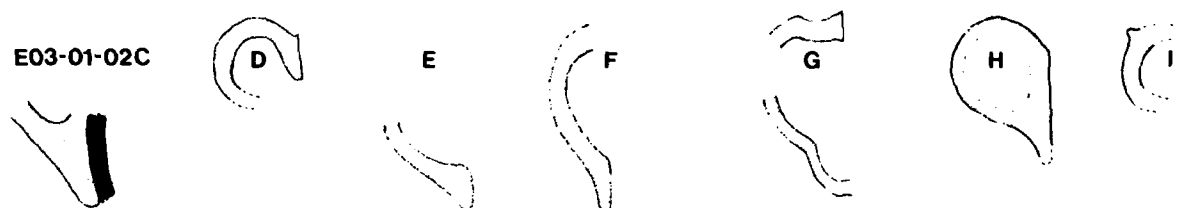
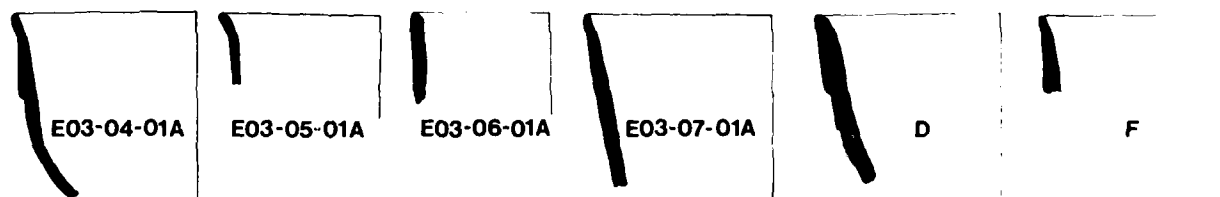
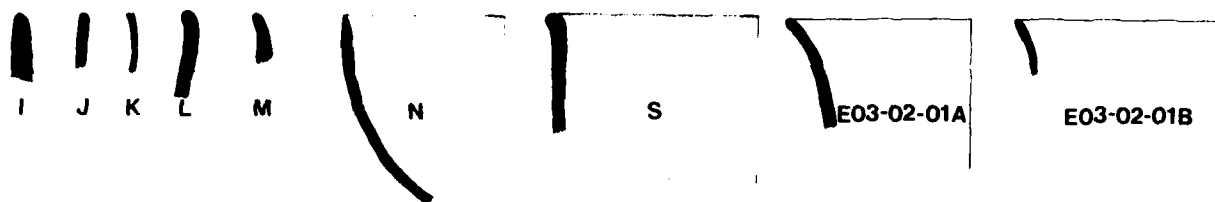
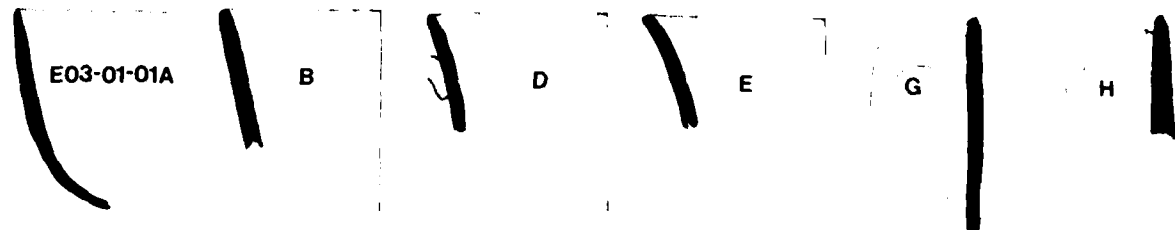
C04-01-04A



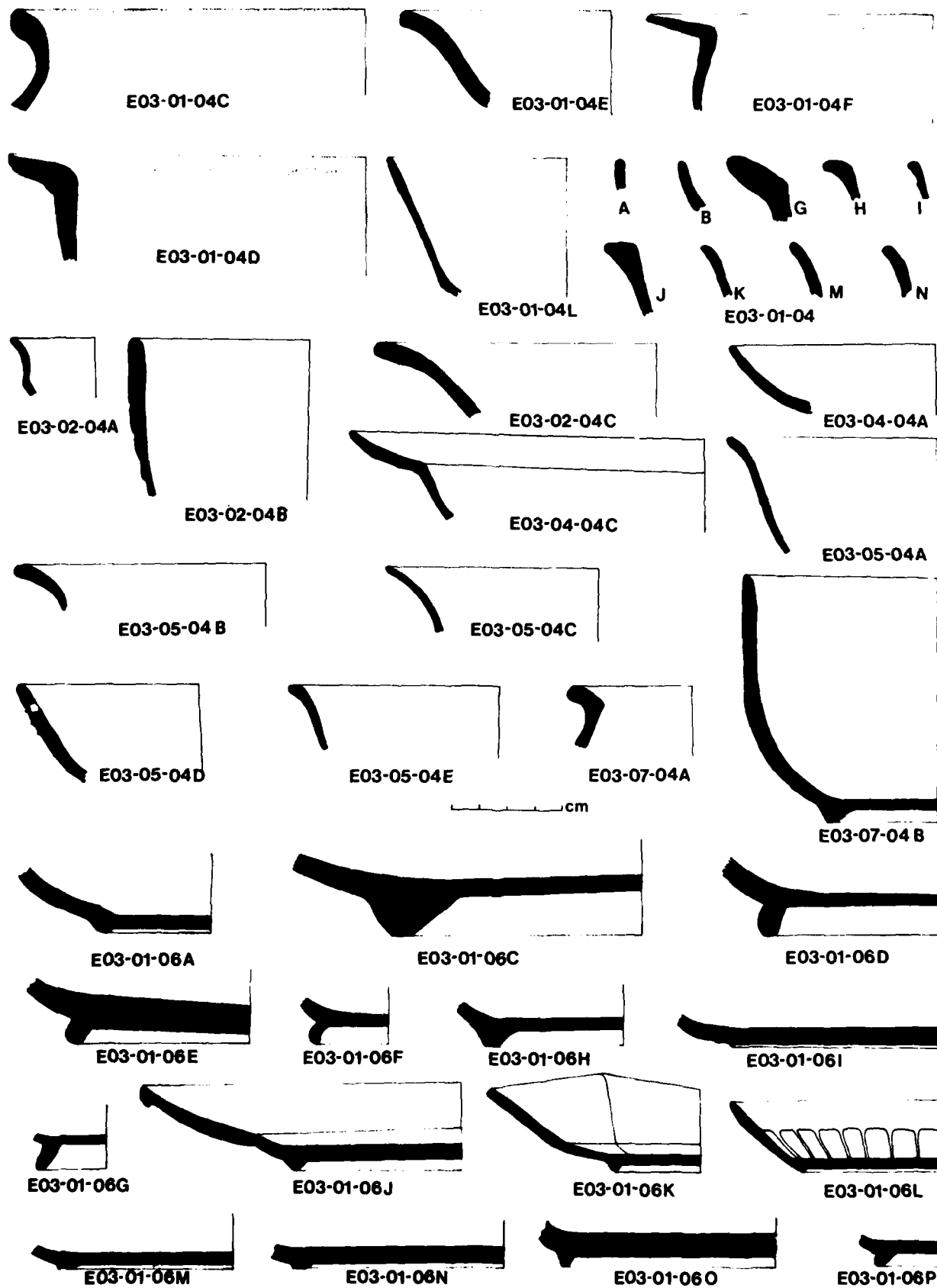
D01-01-06A
600

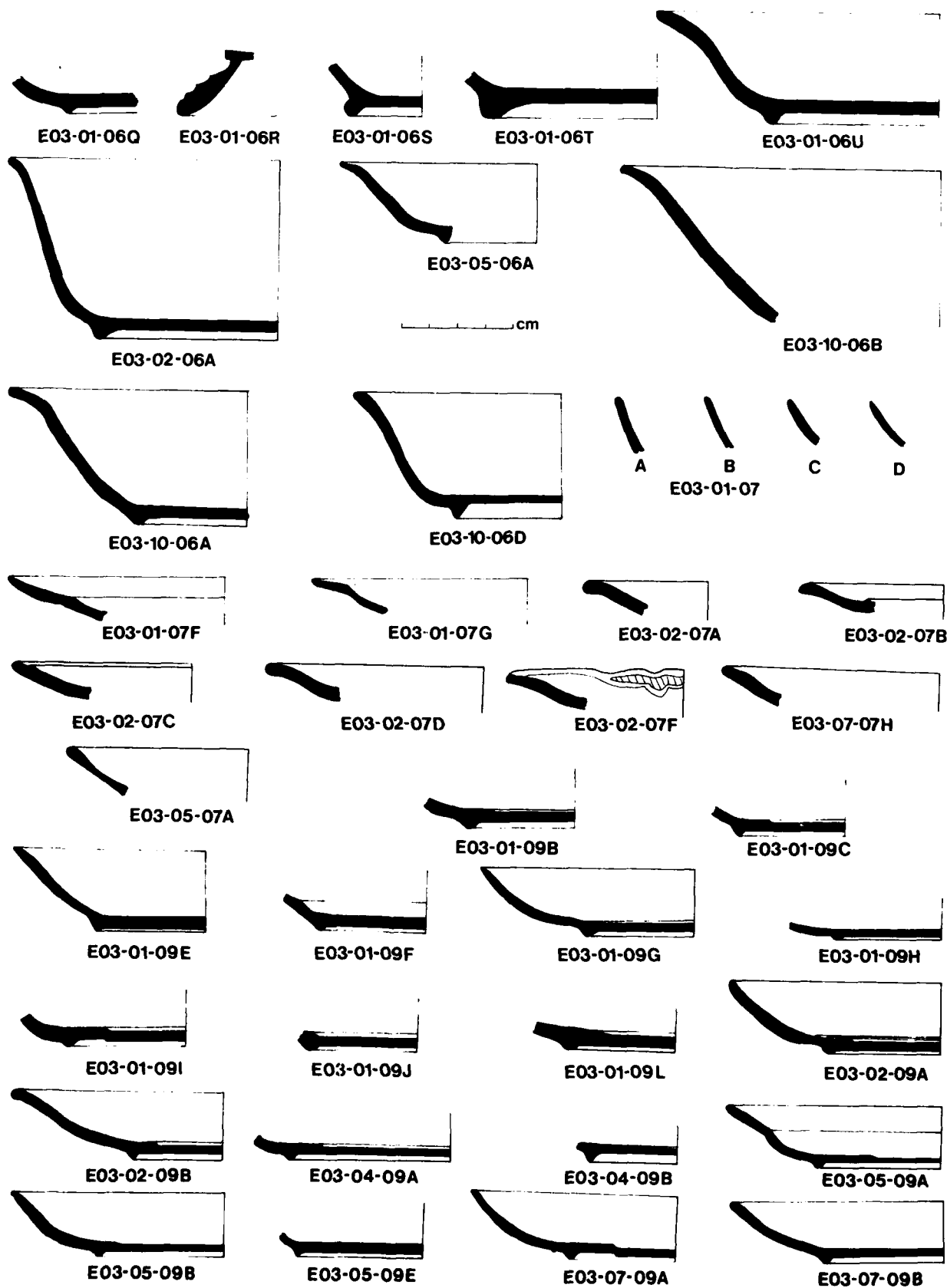


D02-02-01B



cm







E03-01-10A



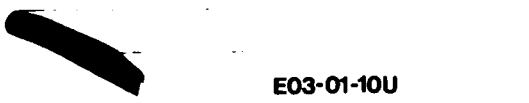
E03-01-10I



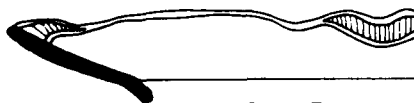
E03-01-10P



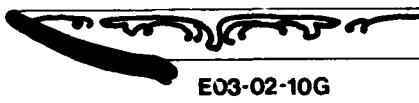
E03-01-10S



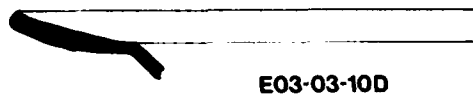
E03-01-10U



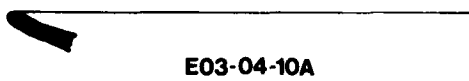
E03-02-10E



E03-02-10G



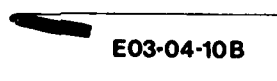
E03-03-10D



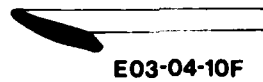
E03-04-10A



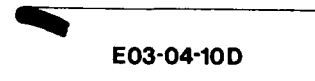
E03-04-10E



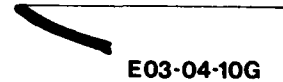
E03-04-10B



E03-04-10F



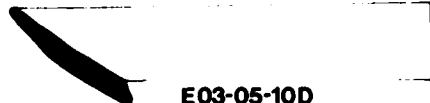
E03-04-10D



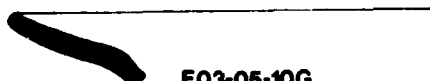
E03-04-10G



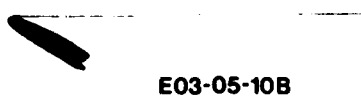
E03-05-10A



E03-05-10D



E03-05-10G



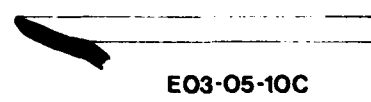
E03-05-10B



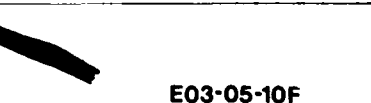
E03-05-10H



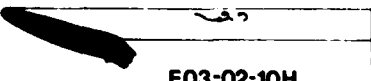
E03-05-10E



E03-05-10C



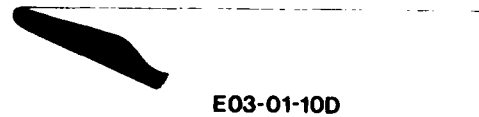
E03-05-10F



E03-02-10H



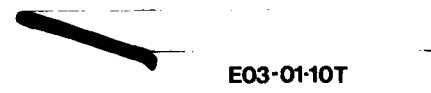
E03-01-10C



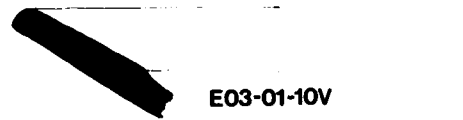
E03-01-10D



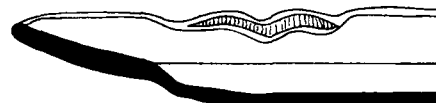
E03-01-10R



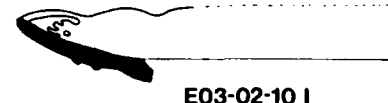
E03-01-10T



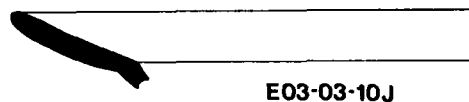
E03-01-10V



E03-02-10F



E03-02-10I



E03-03-10J

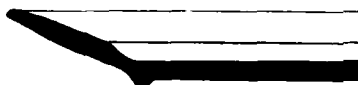
cm



E03-01-12B



E03-01-12D



E03-01-12F



E03-01-12I



E03-01-12K



E03-01-12N



E03-01-12V



E03-01-12X



E03-01-12-AA



E03-01-12BB



E03-10-11A



E03-04-12B



E03-04-12C



E03-05-12A



E03-05-12B



E03-01-12C



E03-01-12E



E03-01-12G



E03-01-12J



E03-01-12M



E03-01-12U



E03-01-12W



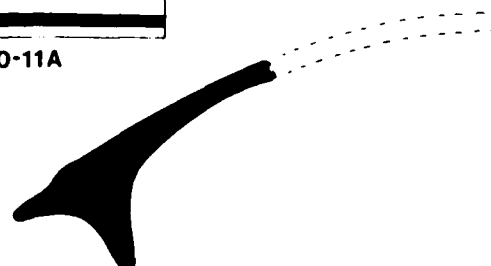
E03-01-12Y



E03-01-12Z

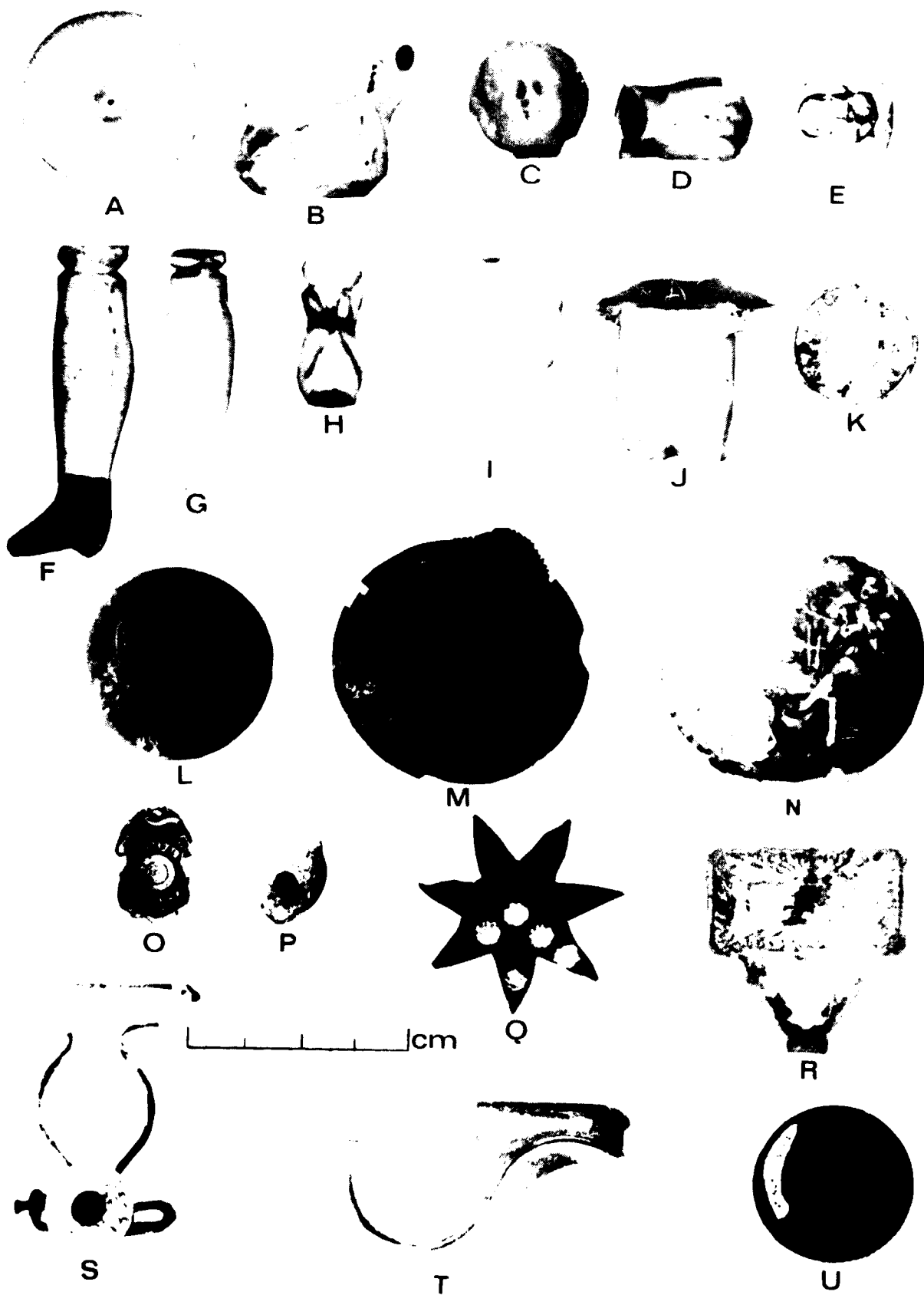


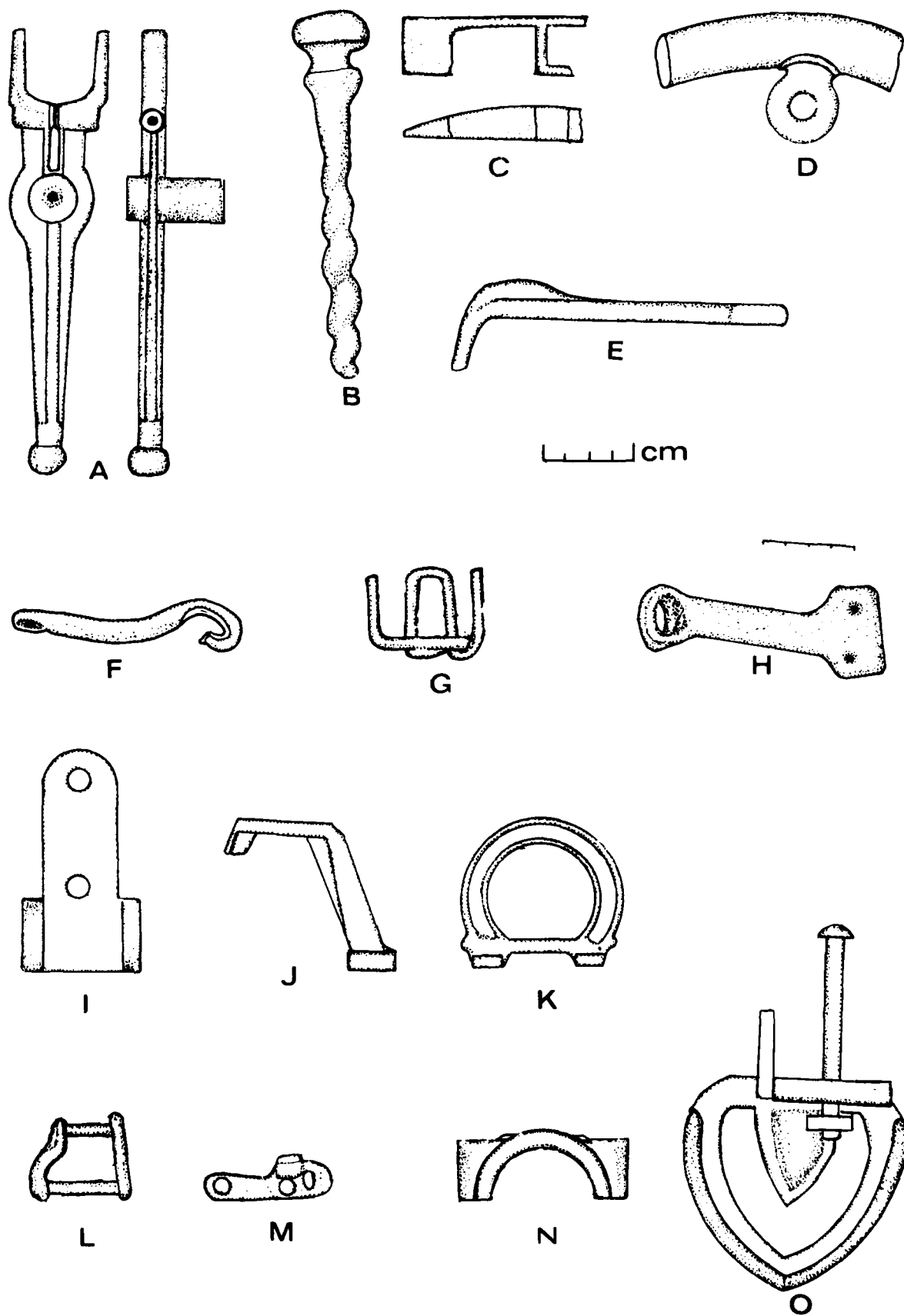
E03-04-13C

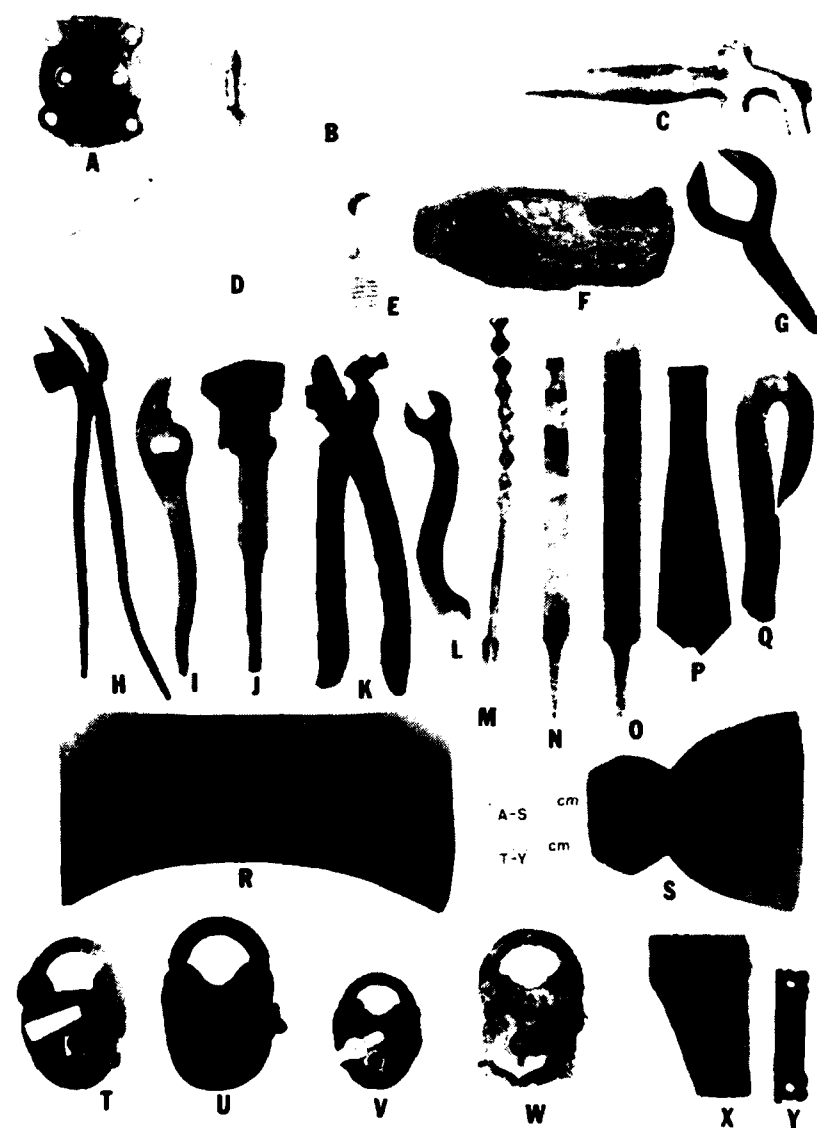


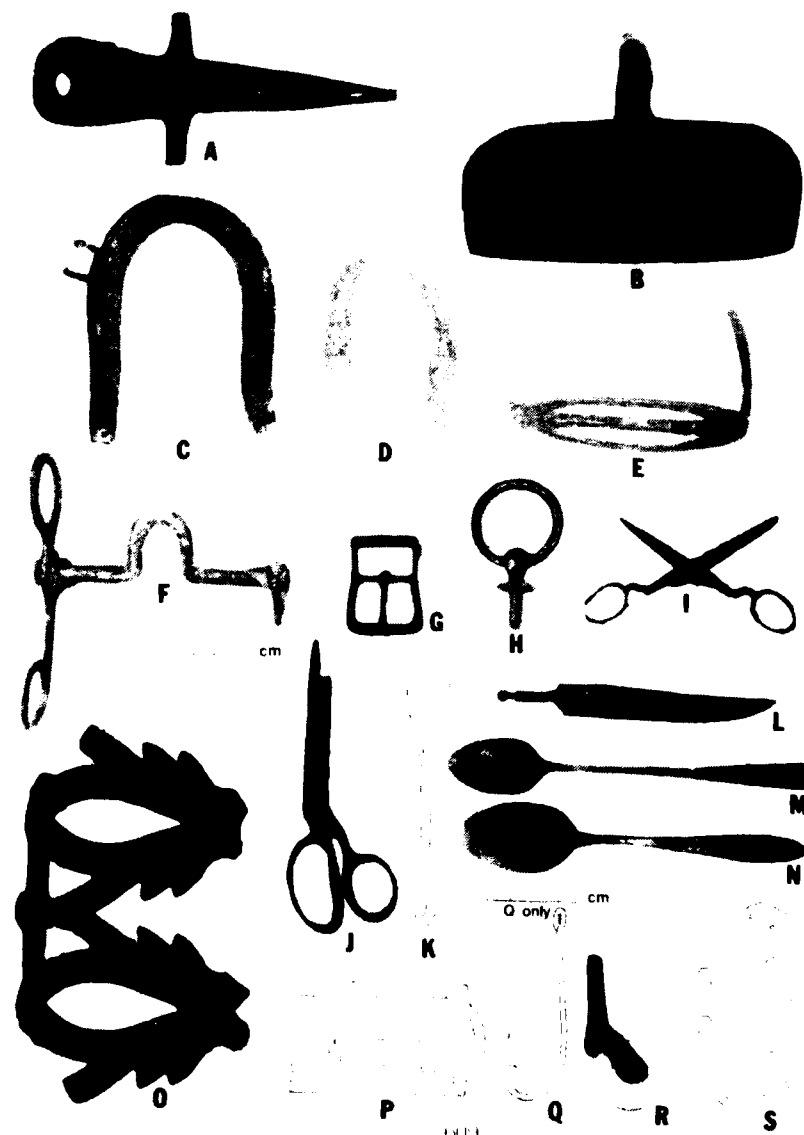
E03-01-13A

cm









END

FILMED

6-83

DTIC