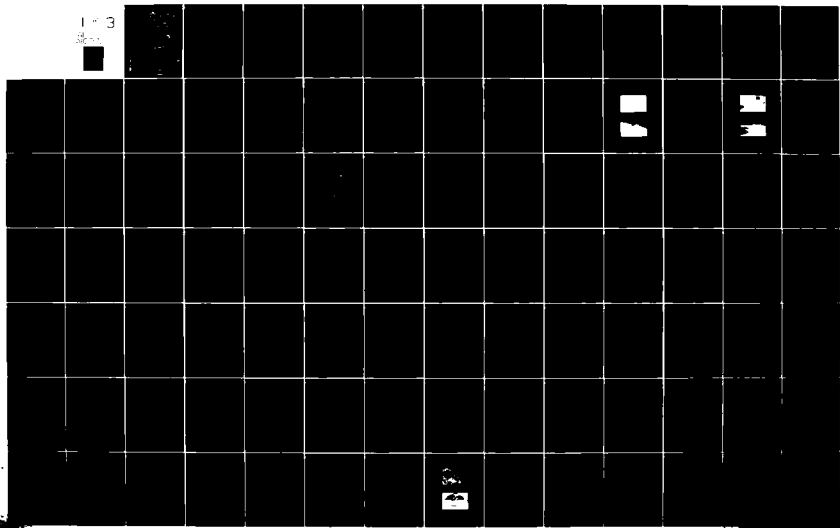


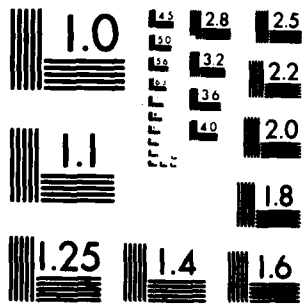
AD-A107 172

MISSISSIPPI STATE UNIV MISSISSIPPI STATE DEPT OF ANTH--ETC F/G 5/6  
ARCHAEOLOGICAL SALVAGE EXCAVATIONS AT THE TIBBEE CREEK SITE (22--ETC(U)  
JUN 81 J W O'HEAR, C LARSEN, M W SCARRY DACW01-77-C-0015  
NL

UNCLASSIFIED

1-3





MICROCOPY RESOLUTION TEST CHART  
NATIONAL BUREAU OF STANDARDS 1963 A<sub>1</sub>

**LEVEL IV**

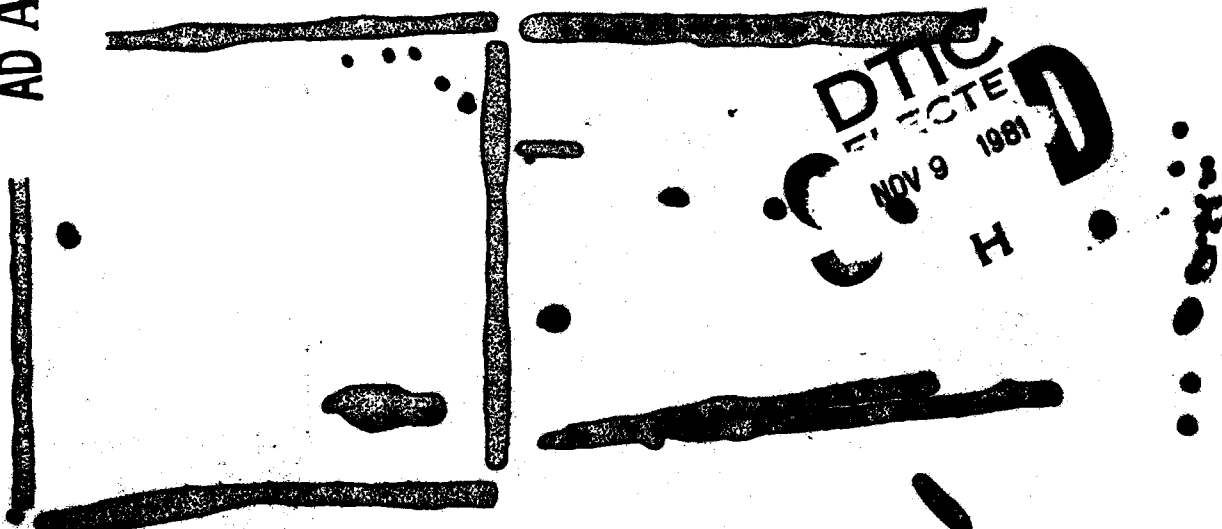
**ARCHAEOLOGICAL SALVAGE EXCAVATIONS**

**AT THE**

**TIBBEE CREEK SITE (22L-000)**

**LOWNDES COUNTY, MISSISSIPPI**

AD A107172



**DTIC**  
**EXTRACTED**  
 NOV 9 1981  
**H**

**DISTRIBUTION STATEMENT A**  
 Approved for public release  
 Distribution Unlimited

**JOHN W. O'HEAR, CLARK LARSEN, MARGARET M. SCARRY,  
 JOHN PHILLIPS, AND ERICA SIMONS**

**DEPARTMENT OF ANTHROPOLOGY  
 MISSISSIPPI STATE UNIVERSITY  
 JUNE 2002**

**81 11 02 210**

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER	2. GOVT ACCESSION NO. AD-A107172	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) Archaeological Salvage Excavations at the Tibbee Creek Site (22Lo600) Lowndes County, Mississippi		5. TYPE OF REPORT & PERIOD COVERED Final Cultural Resources
7. AUTHOR(s) John W. O'Hear, Clark Larsen, Margret M. Scarry, John Phillips and Erica Simons		6. PERFORMING ORG. REPORT NUMBER
9. PERFORMING ORGANIZATION NAME AND ADDRESS Department of Anthropology Mississippi State University Mississippi State, MS 39762		8. CONTRACT OR GRANT NUMBER(s) DACW01-77-C-0015
11. CONTROLLING OFFICE NAME AND ADDRESS US Army Corps of Engineers PD-EC Mobile District, Mobile, AL 36628		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)  Same as 11		12. REPORT DATE June 1981
		13. NUMBER OF PAGES 251
		15. SECURITY CLASS. (of this report) unclassified
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report)  unlimited		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)  unlimited		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Cultural Resources Archaeology Tennessee-Tombigbee Waterway Alabama Mississippi		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number)  (over)		

## Block 20. Abstract.

The Tibbee Creek archaeological site (22Lo600) was found during land clearing for the Columbus Lock and Dam of the Tennessee-Tombigbee Waterway in Lowndes County, Mississippi. Salvage excavations were begun in the late fall of 1976, and were completed in August 1977 after several weather delays.

This multicomponent site was located on Tibbee Creek in the floodplain of the Tombigbee River, at the western edge of the floodplain. Archaeological components ranging from the early portion of the Gulf Formational stage at approximately 1000 B.C. through the Mississippian stage dating about A.D. 1200 were present at the site. The indications are that the site locale functioned as a transitory camp during the Gulf Formational stage as well as through the later Miller I and II phases of the Middle Woodland period. The most intensive occupation of the site occurred during the late Woodland Miller III phase. Two house structures, several burials, and a large number of cooking/storage pits associated with the Miller III component were found during the excavations. The indications are that the site functioned as a base camp during Miller III.

The final prehistoric component present at the Tibbee Creek site was a Mississippian farmstead which is assignable to the Lyon's Bluff phase and is closely aligned with the Moundville phase. Major features of this Mississippian component are a large wall trench house with 72 m<sup>2</sup> of floor area, a group of 11 burials, nine of which were in a planned cemetery, and a number of ancillary pit features.

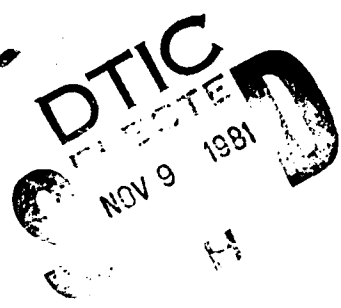
6 ARCHAEOLOGICAL SALVAGE EXCAVATIONS

AT THE

TIBBEE CREEK SITE (22L6600)

LOWNDES COUNTY, MISSISSIPPI

9 Final report



By

10 John W./O'Hear

Clark/Larsen, Marge M./Scarry

John C./Phillips, and Erica/Simons

12 265

A final report on excavations undertaken in cooperation with the U.S. Army Corps of Engineers Mobile District in partial fulfillment of Contract Number

15 DACW01-77-C-015

Department of Anthropology  
Mississippi State University  
Mississippi State, Mississippi

11 June 1981

412462

5013

### ABSTRACT

The Tibbee Creek archaeological site (22Lo600) was found during land clearing for the Columbus Lock and Dam of the Tennessee-Tombigbee Waterway in Lowndes County, Mississippi. Salvage excavations were begun in the late fall of 1976, and were completed in August 1977 after several weather delays.

> This multicomponent site was located on Tibbee Creek in the floodplain of the Tombigbee River, at the western edge of the floodplain. Archaeological components ranging from the early portion of the Gulf Formational stage at approximately 1000 B.C. through the Mississippian stage dating about A.D. 1200 were present at the site. The indications are that the site locale functioned as a transitory camp during the Gulf Formational stage as well as through the later Miller I and II phases of the Middle Woodland period. The most intensive occupation of the site occurred during the late Woodland Miller III phase. Two house structures, several burials, and a large number of cooking/storage pits associated with the Miller III component were found during the excavations. The indications are that the site functioned as a base camp during Miller III.

The final prehistoric component present at the Tibbee Creek site was a Mississippian farmstead which is assignable to the Lyon's Bluff phase and is closely aligned with the Moundville phase. Major features of this Mississippian component are a large wall trench house with 72 m<sup>2</sup> of floor area, a group of 11 burials, nine of which were in a planned cemetery, and a number of ancillary pit features.

Accession For	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NTIS GRA&I			
DTIC TAB			
Unannounced			
Justification			
By			
Distribution/			
Availability Codes			
Avail and/or			
Dist Special			
			A

## TABLE OF CONTENTS

	Page
ABSTRACT.....	i
LIST OF TABLES.....	iv
LIST OF FIGURES.....	vii
LIST OF PLATES.....	viii
ACKNOWLEDGEMENTS.....	xi
I. INTRODUCTION: O'Hear.....	1
II. THE SITE AND ITS ENVIRONMENT: O'Hear.....	8
Environmental Setting.....	8
Site Description.....	12
III. METHODS OF EXCAVATION AND ANALYSIS: O'Hear.....	17
Site Layout and Square Excavation.....	17
Stripping for Recovery of Features.....	21
Feature Excavation Methods.....	22
Laboratory Methods and Analysis.....	25
IV. EXCAVATION UNITS: O'Hear.....	27
Stratigraphy.....	27
Excavation Units.....	30
V. FEATURES: O'Hear.....	49
Basin Shaped Pits.....	49
Compound Pits.....	71
Irregular Pits.....	80
Stepped Postholes.....	80
Smudge Pits.....	86
Miscellaneous Features.....	88
Features with Incomplete Data.....	88
Disturbances.....	89
VI. STRUCTURES AND POSTHOLES: O'Hear.....	91
Structure 1.....	91



	Page
Structure 2.....	99
Structure 3.....	106
VII. BURIALS: O'Hear and Larsen.....	127
Burial Descriptions.....	128
Miller III Burials.....	147
Mississippian Burials.....	149
VIII. CULTURAL MATERIALS: .....	153
Ceramics: O'Hear.....	153
Lithics: O'Hear and Phillips.....	176
Bone and Shell Artifacts: O'Hear.....	198
Historic Artifacts: O'Hear.....	204
IX. FLORAL REMAINS: Scarry.....	207
X. FAUNAL REMAINS: O'Hear and Simons.....	218
XI. SUMMARY AND CONCLUSIONS: O'Hear.....	238
REFERENCES CITED.....	246

## LIST OF TABLES

Table		Page
1	Square 500R554 Ceramics.....	31
2	Square 500R545 Ceramics.....	31
3	Square 449.5R524.5 Ceramics.....	32
4	Square 495R505 Ceramics.....	32
5	Square 480R545 Ceramics.....	33
6	Square 480R525 Ceramics.....	33
7	Square 475R505 Ceramics.....	34
8	Square 474R523 Ceramics.....	34
9	Square 460R525 Ceramics.....	35
10	Square 460R505 Ceramics.....	35
11	Square 440R545 Ceramics.....	35
12	Square 500R554 Lithic Artifacts.....	36
13	Square 500R545 Lithic Artifacts.....	37
14	Square 499.5R524.5 Lithic Artifacts.....	39
15	Square 495R505 Lithic Artifacts.....	40
16	Square 480R545 Lithic Artifacts.....	41
17	Square 480R525 Lithic Artifacts.....	42
18	Square 475R505 Lithic Artifacts.....	43
19	Square 474R523 Lithic Artifacts.....	44
20	Square 460R525 Lithic Artifacts.....	45
21	Square 460R505 Lithic Artifacts.....	46
22	Square 440R545 Lithic Artifacts.....	47

LIST OF TABLES (continued)

Table		Page
23	Shell from Excavation Units.....	48
24	Ceramic Artifacts from Features.....	50
25	Lithic Artifacts from Features.....	53
26	Shell and Bone from Features.....	56
27	Basin Shaped Pits.....	61
28	Compound Pits.....	72
29	Irregular Pits.....	81
30	Features with Incomplete Data.....	90
31	Ceramics from Structure 1 Wall Trenches.....	95
32	Lithic Artifacts from Structure 1 Wall Trenches.....	96
33	Shell and Bone from Structure 1 Wall Trenches.....	98
34	Shell and Bone from Burial Pits.....	98
35	Measurements of Structure 2 Exterior Wall Post Holes...	102
36	Measurements of Structure 2 Internal Post Holes.....	103
37	Artifacts from Feature 100, Structure 2.....	103
38	Artifacts from Selected Post Holes, Structure 2.....	104
39	Post Hole Data, Graded Area A.....	107
40	Post Hole Data, Graded Area B.....	114
41	Ceramic Artifacts from Post Holes.....	122
42	Lithic Artifacts from Post Holes.....	124
43	Ceramics from Burial Pits.....	129
44	Lithic Artifacts from Burial Pits.....	130
45	Sex, Age, and Stature Summary, Tibbee Creek Site Skeletons.....	132
46	Cranial Measurements, Tibbee Creek Site Skeletons.....	133

## LIST OF TABLES (Continued)

Table	Page
47 Postcranial Measurements, Tibbee Creek Site Skeletons.....	134
48 Discoidals.....	197
49 Antler Projectile Points.....	201
50 Plant Remains from the Tibbee Creek Site.....	210
51 Wood Identifications.....	211
52 Percentages of Wood Genera by Successional Characteristics.....	212
53 Habitats, Season(s) of Availability and Known Uses of Seeds Identified in the Tibbee Creek Site Samples..	213
54 Animal Species Identified, Tibbee Creek Site.....	219
55 Faunal Remains, Square 495R505.....	221
56 Faunal Remains, Square 499.5R524.5.....	223
57 Faunal Remains, Feature 8.....	230
58 Faunal Remains, Feature 14.....	232
59 Faunal Remains, Feature 13.....	233
60 Faunal Remains, Feature 18.....	235
61 Faunal Remains, Feature 19.....	236

## LIST OF FIGURES

Figure		Page
1	Tibbee Creek Site and Environs.....	14
2	Topographic Map.....	16
3	Plan of Excavation.....	19
4	Plan View of Squares 500R525 and 480R545.....	20
5	Feature Map Graded Area A.....	23
6	Feature Map Graded Area B.....	24
7	Profiles.....	28
8	Basin Shaped Pits.....	65
9	Basin Shaped Pits.....	66
10	Basin Shaped Pits.....	67
11	Compound Pits.....	74
12	Compound Pits.....	75
13	Irregular Pits.....	83
14	Smudge Pits and Stepped Postholes.....	84
15	Structure 1.....	93
16	Structure 2.....	100
17	Ceramic Artifacts.....	166
18	Adzes.....	181
19	Artifacts in Association with Burials 5, 9, and 11.....	200
20	Miscellaneous Iron Artifacts From the Surface.....	206

## LIST OF PLATES

Plate		Page
I	General view from the center of the site looking south.....facing page	6
II	View of the upper terrace of the creek bank north of square 500R525.....facing page	6
III	View from the site to the north with waterscreen in foreground and shelters in background.....facing page	7
IV	View from the site to the southeast taken a few hours before the site flooded on March 5, 1977.....facing page	7
V	Unnumbered pit feature in Graded Area A after scouring by floodwaters showing artifacts sorted from fill.....facing page	68
VI	Feature 77 (field number 123) after cross sectioning.....facing page	68
VII	Wall Trenches 6 and 7 of Structure 1 after cross sectioning and removal of the trench fill.....facing page	87
VIII	Feature 66, a smudge pit with carbonized wood and bark pedestaled.....facing page	87
IX	View to the north in Graded Area B during initial troweling.....facing page	92
X	Burial 4.....facing page	92
XI	Burial 1.....facing page	135
XII	Burial 2.....facing page	135
XIII	Burial 3.....facing page	135
XIV	Burial 10.....facing page	135

## LIST OF PLATES (Continued)

Plate	Page
XV Burial 5 (top) and Burial 6 (bottom) with shell gorget on the chest of Burial 5.....	facing page 138
XVI Burial 7.....	facing page 138
XVII Burial 9.....	facing page 138
XVIII Burial 12.....	facing page 138
XIX Burial 11.....	facing page 143
XX Burial 13.....	facing page 143
XXI Burial 15.....	facing page 143
XXII Burial 15.....	facing page 143
XXIII Sand Tempered Ceramics.....	facing page 158
XXIV Sand Tempered Ceramics.....	facing page 158
XXV Sand Tempered Ceramics.....	facing page 161
XXVI Sand Tempered Ceramics.....	facing page 161
XXVII Grog Tempered Ceramics.....	facing page 169
XXVIII Grog Tempered Ceramics.....	facing page 169
XXIX Shell Tempered Ceramics.....	facing page 174
XXX Shell Tempered Ceramics.....	facing page 174
XXXI Projectile Points.....	facing page 184
XXXII Projectile Points.....	facing page 184
XXXIII Projectile Points.....	facing page 187
XXXIV Projectile Points.....	facing page 187
XXXV Chipped Stone Tools.....	facing page 188
XXXVI Adzes.....	facing page 188

LIST OF PLATES (continued)

Plate		Page
XXXVII	Pecked and Ground Stone Artifacts.....	facing page 196
XXXVIII	Bone, Shell and Miscellaneous Artifacts.....	facing page 196



## ACKNOWLEDGEMENTS

The Tibbee Creek site project would not have been possible except for the assistance of a great number of people. Listed below are the persons participating in the project and their individual contribution.

Bill Appleton	Field school student
Jim Atkinson	Advice
Roberta Avila	Typing, bookkeeping
Hope Barrowes	Typing
Jeyne Bennett	Crew member, lab assistant
M. P. Bidy	Loan of equipment
James Black	Field school student
Crawford Blakeman	Principal Investigator
Helga Bluestone	Lab worker
Mike Burnett	Field assistant, lab worker
Sherry Brown	Field worker
Tom Conn	Field assistant
Joel Converse	Field school student
Martha Daudrill	Field worker
Donny Dimino	Bulldozer operator
John Dixon	Field worker
Ginger Flynn	Drafting
Margaret Flynn	Artwork
Wayne Goldsmith	Field worker
Abner Harrison	Advice
Dee Henry	Field worker
Ned Jenkins	Advice
Clark Larsen	Human Osteology
Albert Lee	Resident Engineer, C. of E., assistance
Geoff Lehman	Field and lab worker
Dick Marshall	Advice
Charles Moorehead	C. of E., reviewer
Catherine Neie	Field and lab worker (volunteer)
Jerry Nielsen	Archaeologist, C. of E., adminis- tration and advice
John Peterson	Head, Department of Anthropology M.S.U., administration, advice
John Phillips	Lithic analysis, artwork, report assistance
Janet Rafferty	Editorial assistance, advice
Marvin Rickman	Field school student
Marge Scarry	Ethnobotany
Father Merle Schmidt	Field and lab worker (volunteer)

Ernie Seckinger	C. of E., reviewer
Barbara Seegraves	Typing
Elizabeth Simmons	Field School student
Erica Simons	Faunal analysis
Bruce Smith	Peer review
David Stampley	Typing
Luanne Stewart	Field worker
Mike Taylor	Field worker
Fred G. Thompson	Mollusc identification
Rick Walling	Darkroom, drafting, report assembly
Susan Welch	Field School student
Elizabeth Wing	Faunal analysis
Jack Wynn	Editorial assistance, advice
Vech Vechorik	Field and lab worker

My appreciation of the help of all these people is very deep. I would also like to express my appreciation for the use of the facilities, and help from the staff, of the Cobb Institute of Archaeology during the final report editing phase of the project. This report is respectfully dedicated to Crawford Blakeman and Jerry Nielsen.

  
 John W. O'Hear  
 Principal Investigator

## I. INTRODUCTION

In the first weeks of July 1976, land clearing began in a large bottomland area on the west side of the Tombigbee River to the south of a major tributary, Tibbee Creek. The clearing was the first stage in the construction of the west bank portion of the Columbus Lock and Dam complex, one of four locks and dams under construction between Gainesville, Alabama and Aberdeen, Mississippi within the river section of the Tennessee-Tombigbee Waterway. During this clearing, a large pre-historic Indian site was found on a low ridge next to Tibbee Creek at the northern edge of the cleared zone, in an area which previously had been covered with thick second growth woods.

Few archaeological sites are as distinct as the Tibbee Creek site was after it had been cleared. From as far as a half mile away, the site was distinctly visible as a hump of dark soil, literally covered with freshwater mussel shell, which rose from the light brown alluvial soils of the surrounding bottom. The construction personnel notified the Corps Resident Engineer's Office at the Lock and Dam site across the river of their find. Before the Resident Engineer could respond, a local artifact collector also learned of the discovery and notified the Mobile District Office of the Corps and archaeologists at Mississippi State University.

Jerry Nielsen, archaeologist with the Mobile District, visited the newly found Tibbee Creek site on July 15, 1976, for the purpose of assessing the significance of the site and to determine if the site was faced with any immediate danger of further disturbance. As a result of this visit, Nielsen prepared a Report of Findings summarizing the site situation, describing the site, and assessing the components present on the basis of a small representative surface collection. Also prepared was documentation for a Determination of Eligibility to the National Register.

This initial assessment of the site was roughly as follows. From the examination of several bulldozer cuts placed in the site by the

clearing crew, the site appeared to contain two major cultural zones. The upper part of the site was composed of a highly concentrated shell midden containing large amounts of Late Woodland, Miller III pottery and a small amount of Mississippian pottery. Below this rich midden was a lighter colored sandy zone containing Early Woodland pottery. The amount of material exposed on the surface of the site was immense. No actual measures are available, but there must have been at least 100,000 potsherds exposed on the site surface along with an equal number of lithic specimens.

There was never any doubt that Tibbee Creek was a significant site. Under Jerry Neilsen's lead, the Mobile District began negotiations with Crawford Blakeman, archaeologist at Mississippi State University, for the salvage excavation of the site. Construction had been halted in the site area, and the site was not in danger of further disturbance from construction activities for a least six months. But word of the site had spread rapidly among local artifact collectors, and it was felt that the site was immediately endangered by pothunting.

A proposal was submitted to the Corps of Engineers by Mississippi State University on October 22, 1976, for the funding of salvage excavations at the site. The proposal provided for seven weeks of field work with a ten person field party followed by 11 weeks of laboratory analysis and report preparation with a lab staff of three persons. Crawford Blakeman was Principal Investigator for the project and O'Hear was Project Director.

Fieldwork began on November 22, and almost immediately, mother nature decided she was not going to cooperate. We were entering what was to become one of the wettest and coldest winters on record in the eastern United States, and the weather conditions combined with the low topographic position of the site and its totally cleared and exposed situation were to have drastic effects on the fieldwork.

The period from November 22 through December 13 was spent testing the site with the excavation of a series of test units. We knew that winter digging was not going to be pleasant for the crew, and to at least partially protect both the crew and the excavations we constructed

three shelters of lumber frames covered by clear plastic backed with chicken wire. The shelters were eight foot cubes and were light enough to be moved between excavation units. We also set up a large army tent, complete with wood stove, to serve as field headquarters, equipment storage, and as a place for the crew to warm up during breaks and lunch. The shelters were a mixed success. They did serve to cut the wind somewhat, but they did not protect the excavation units very well. At one point, while three 1 x 1 meter squares were opened up we received five inches of rain in a 24-hour period. Upon returning to the site, these squares had been reduced to round craters with the stakes floating in water that filled them.

Hoping that the worst of the weather was over, the first stripping operations were conducted on December 14. The day after the first block was stripped, it rained for three days. After this point, the temperature rarely got above freezing, and the amount of water on the site caused us to either be digging in frozen, or rarely, in fluid mud. During one storm, the two shelters that had been set up on the graded area were destroyed. They had been staked down and the bottoms partially sandbagged, but when we returned to the site, both had been crushed flat and blown about 200 meters from where they had originally stood.

Fieldwork was suspended on January 7, 1977, when it became apparent that most of our time was being spent dealing with weather damage to the excavations, and that the quality of the excavation we were able to perform was suffering because of unfavorable conditions. Therefore, it was decided to return to the lab to begin analysis, and the field work was scheduled to resume on March 7 in order to take advantage of the availability of a large temporary workforce of M.S.U. students during the spring break. On March 3 it began to rain, and continued raining on March 4. On March 5, the project director learned over the radio that the Tombigbee River was flooding, and the predicted crest was to be at least 2 m over the highest elevation of the site. On Saturday morning, March 5, O'Hear and Conn went out to the site expecting it, along with all of our large field equipment that was stored in the tent, to be underwater. Fortunately it wasn't; the

highest 20 to 30 cm of the site including the tent, was still above water; however the site was completely cut off from land. We waded out to the site through water about one meter deep, and devised a method that would save the equipment. What we ended up doing was loading the screens, pump hoses, and other equipment into wheelbarrows. These were then floated across the water to high ground, with one person providing locomotion by pulling on a rope attached to the front of the wheelbarrow, while the other person steered against the swift current. We recovered all of the equipment except for the tent and the waterscreen frame.

Sometime later that day the site was completely inundated. A shelter frame, without plastic, was left standing over the control block on the highest part of the site, and we were able to observe from the dam construction area on the opposite bank of the river that the top one to two feet of this eight-foot box remained out of the water.

The appearance of the site after the flood waters receded was incredible. All of the stripped area had eroded down to the basal clay, leaving tremendous numbers of water-sorted artifacts littering the surface. The spoil piles from the stripping had been sorted by the flood, with the artifact content of the soil remaining more or less in the same spot and all of the sand and silt being deposited in a long dune downstream from the pile. The tent had filled up with sand and remained on the site, but the wood stove that had been inside it was never found.

By March 21, the site had dried out sufficiently to begin the excavations again. After spending a few days getting the site set up and excavating a burial that had been exposed by the flood a second area of the site was stripped on March 24. This stripping revealed a profusion of features, postholes, several burials, and a large wall trench structure. A large student crew was used at the site during the weekend of March 26 and 27, with the effort focusing on removing burials exposed by the stripping.

On March 28 it began to rain, and continued raining for seven days. It was learned that the site was expected to

flood for the second time in less than a month. On Sunday, April 3, Blakeman and O'Hear borrowed a boat, and removed the equipment from the site during a driving thunderstorm. It ended up that the site did not go entirely underwater during this flood, which was a relief because we expected to loose the second graded area just as we had lost the first.

To say the least, we were beginning to become concerned about the future of the site. Enough money remained in the contract for a little over a week of excavation with a full crew, which was totally insufficient to investigate even the portion of the site that was currently stripped. We began negotiations with the Corps for additional funding and an extension of the excavation period.

An agreement was reached to use the M.S.U. Archaeological Field School to complete the excavations during the coming summer. At about the same time, Crawford Blakeman resigned his position at M.S.U. to return home to Kentucky to assume management of his family's business, and O'Hear assumed the Principal Investigatorship of the project. A modification proposal was submitted to the Corps and accepted. This proposal was to fund five weeks of additional field work using the field school.

The field school began on June 8 with a class of 6 students. O'Hear directed the fieldwork and taught the class and Mike Burnett served as field/teaching assistant. The excavation focused on the investigation of the features exposed in the second graded area. The five weeks budgeted for the excavation were not sufficient to clear the features exposed in this area, and excavation by the field school continued for another five weeks until the end of the summer sessions on August 5.

Some laboratory work was performed by the field school students, but the bulk of the sorting and analysis was carried out by personnel in the archaeology lab at M.S.U.

## PLATE I

General view from the center of the site looking south. The bulldozer trench in the foreground is at the deepest portion of the midden. The white flecks are mussel shells.

## PLATE II

View of the upper terrace of the creek bank north of square 500R525.





Plate I.

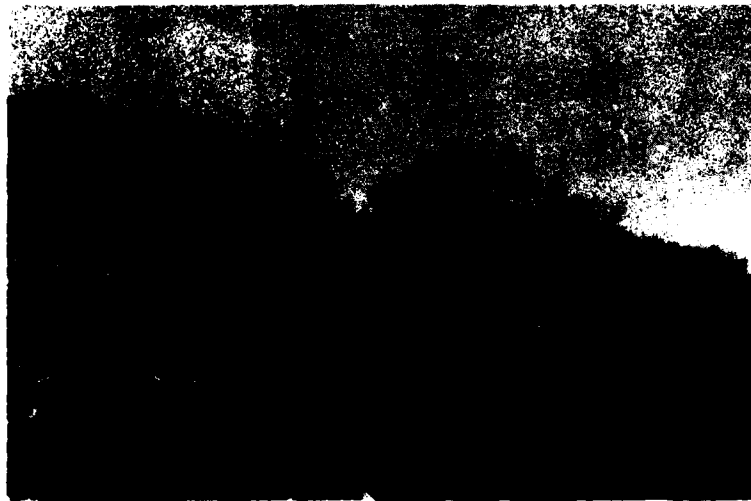


Plate II.

## PLATE III

View from the site to the north with water-screen in foreground and shelters in background.

## PLATE IV

View from the site to the southeast taken a few hours before the site flooded on March 5, 1977. The confluence of Tibbee Creek and the Tombigbee River is at the treeline in the extreme left.



Plate III.



Plate IV.

## II. THE SITE AND ITS ENVIRONMENT

### Environmental Setting

The Tibbee Creek site (22Lo600) extends along the crest of a low alluvial ridge on Tibbee Creek at the extreme western margin of the Tombigbee River floodplain approximately seven miles northwest of Columbus, Lowndes County, Mississippi. The specific location of the site is Township 18 South, Range 17 East, West 1/2 of fractional Section 11.

The area around the Tibbee Creek site is marked by environmental diversity, due to the intersection of three major physiographic zones within 20 kilometers of the site. The junction of two of these zones, the Mississippi Black Prairie (known in Alabama as the Black Belt) and the Tombigbee alluvial valley, occurs virtually at the site. The third physiographic zone, the Tombigbee Sand Hills, begins 17 km up the river from the site and also borders the valley's eastern edge.

From the confluence of its East and West Forks, the river flows south to roughly divide the Black Prairie from the Tombigbee Sand Hills. The Sand Hills are developed on the Upper Cretaceous Eutaw and Tuscaloosa formations, and are a less rugged counterpart of the Tennessee River Hills at the headwaters of the Tombigbee River drainage. The better drained uplands of the Tombigbee Sand Hills were originally forested in shortleaf pine (*Pinus echinata*) interspersed with post oak (*Quercus stellata*), blackjack oak (*Q. cinerea*), and Spanish oak (*Q. coccinea*). In the floodplains adjacent to the Tombigbee River and its major tributaries the dominant tree species were loblolly pine (*Pinus taeda*), white oak (*Quercus alba*), swamp chestnut oak (*Q. prinus*), willow oak (*Q. phellos*), water oak (*Q. nigra*), elms (*Ulmus* sp.), beech (*Fagus grandifolia*), hickories (*Carya* sp.), maple (*Acer* sp.), sweetgum (*Liquidambar styracflua*), yellow poplar (*Liriodendron*

tulipifera), and cypress (Taxodium distichum). (Lowe 1913:10-13).

Lithic resources occurring in the Tombigbee Sand Hills and found at the Tibbee Creek site include cherts in gravel form, ferruginous sandstones of varying induration, and ferruginous conglomerates.

Below the Tombigbee Sand Hills, the Tombigbee River begins to cut through the chalk formations of the Black Prairie, and it is here that the river emerges as the most potent local environmental factor affecting settlement and subsistence in the area. When it enters the prairie, the river begins to meander, and is characterized by an extremely low stream gradient of approximately 0.34 m/km, with an average channel width of about 100 m. From banks which rise from 4.5 to 9 m above the river, the floodplain expands to a width of up to 11 kilometers. The total area drained by the Tombigbee River above this point is approximately 14,000 km<sup>2</sup> and includes most of northeast Mississippi and portions of northwest Alabama. The size of the catchment has rendered the broad flat floodplain especially susceptible to flooding, with the area being inundated over 100 times since the recording of flood data began in 1893. The most severe flood recorded at Columbus, Mississippi, was in 1949 when the river attained an elevation of 51.2 m (168.2 ft. A.S.L.). It has been estimated that a flood in 1892 may have achieved an elevation of 52.7 m (173 ft.) (U.S. Army Corps of Engineers 1965: 4-14).

Immediately to the west of the Tombigbee River floodplain at this point is the Black Prairie, which is coincident with the outcrop zone of the Upper Cretaceous Selma group. The upper part of the Selma group is the Demopolis Chalk; the lower portion is the Mooreville Chalk including the Arcola limestone member. The dominant lithology of the Selma group is dense grey to blue chalk, sandy chalk, and soft limestone. Lithic resources are poor to nonexistent. Some small quartzite pebbles are found within the formations, but were not extensively collected by prehistoric peoples.

The Selma group is characteristically a non-waterbearing deposit and consequently springs are rare (Myers 1948:45). Many of the higher creeks in the Black Prairie are small and are frequently devoid of

water during late summer and early fall. The floodplains of the major creeks are frequently broad and well developed, and include an estimated 20 to 25% of the total area of the prairie (Myers 1948:37-39).

The most distinctive aspect of the natural vegetation of the prairie uplands was the presence of true, grassy treeless prairies which may have covered between 1/3 and 1/2 of the prairie's central and southern uplands at the time of European contact (Myers 1948:132). In the moist southeast, these prairies cannot be attributed to a lack of precipitation. An association between soil types and the prairie vegetation is implied in original soil descriptions of the area which were based on vegetation (Myers 1948:ii and 129). A subsequent examination of the relationship between the distribution of prairie flora and soils in the Alabama Black Belt has shown a significant association between alkaline clay soils and prairie and between acid loams and forests (Jones and Patton 1966:77).

In association with the prairie areas were upland forests composed primarily of stunted post oaks and blackjack oaks. In the bottomland areas along creeks there were well-developed hardwood forests containing numerous species of oaks and hickories as well as walnut (Juglans nigra), elm, maple, sweetgum, boxelder (Acer negundo) and cypress. Dense canebreaks as high as 10 m made some of the stream bottoms almost impenetrable.

The proximity of Tibbee Creek, the Tombigbee River, and the two physiographic zones on opposite sides of the river at varying distances probably combined to increase the variety and abundance of the floral and faunal resources exploitable from the Tibbee Creek site. As of 1963 the Tombigbee River was still regarded as unpolluted and fish population surveys indicated a fish biomass of 621 kg/hectare (3381 lb/acre) with 27 fish species represented. The freshwater drum (Aplodinotus grunniens) has the highest specific population with the catfish family (Ictaluridae) second in abundance. These species, along with the highfin carpsucker (Carpoides velifer), tend to dominate the river to the exclusion of popular gamefish species such as bass (Micropterus sp.), crappie (Pomoxis sp.) and sunfish (Lepomis sp.)

(Taylor 1964). Also found in the Tombigbee River and its tributaries are as many as 18 species of turtles which occupy both stillwater and slackwater habitats (Miller et al. 1973:109-117). The oxbow lakes, backwater ponds, and sloughs of the periodically inundated floodplain would make the exploitation of both fish and turtles easier and provide an excellent waterfowl habitat. Not to be ignored are freshwater molluscs including pelyceps and gastropods whose remains are so visible at the Tibbee Creek site. Forty-six species of mussels have been identified in the Tombigbee River (Jenkins et al. 1975:41), and 20 species of gastropods were identified from the Tibbee Creek site faunal samples alone (see Ch. 10).

Among the available mammalian fauna were those typical of the southeastern United States, the most prominent being deer (Odocoileus virginianus), puma (Felis concolor), bobcat (Lynx rufus), red wolf (Canis niger), red and grey foxes (Vulpes fulva and Urocyon cinereoargenteus), raccoon (Procyon lotor), opossum (Didelphis marsupialis), rabbits (Sylvilagus sp.), squirrels (Sciurus sp.), beaver (Castor canadensis) and otter (Lutra canadensis). The woodchuck (Marmota monax), no longer found within the area today, has been identified among the faunal remains recovered from the nearby Cofferdam site (Blakeman et al. 1976:115). Black bears (Ursus americanus) also found the dense canebreaks of the area attractive (Myers 1948:135).

A wide variety of edible plants are available in the area and undoubtedly played a major role in prehistoric subsistence systems. The most significant during some cultural periods were probably the mast-producing trees such as oaks, hickories and black walnut. Other plants of potential importance were the persimmon (Diospyros virginiana), paw paw (Asimina triloba), red mulberry (Morus rubra), crab apple (Malus angustifolia), huckleberry (Vaccinium vacillans), blackberry (Rubus sp.), muscadine and other grapes (Vitis sp.), plum (Prunus angustifolia) and maypop (Passiflora incarnata). Periodic inundation, scouring and other disturbance to the floodplain would have created the disturbed soil habitats conducive to the growth of pioneer species such as

chenopod and amaranth. Amaranthus spinosus (spiny amaranth) was one of the first plants to appear in the cleared areas around the Tibbee Creek site during the excavations and quickly covered the whole area.

East central Mississippi is characterized by a mild, humid continental climate which is produced by the interaction of a number of factors including altitude, proximity to the Gulf of Mexico, and the unimpeded movement of frontal systems. Tropical gulf air dominates the warm seasons and is associated with high temperature and humidity, convection storms and tornadoes. During the winter, weather conditions are determined by the interaction of polar continental air masses and warm gulf air (Myers 1948:56). Winter and spring frontal storms are those most likely to produce flooding along the Tombigbee River. The flooding is aggravated by the lack of foliage and saturated ground. Flood-producing storms generally last from two to four days and cover the upper drainage basin of the Tombigbee River system. Local flooding can occur in the summer as the result of intense thunderstorms (Corps of Engineers 1965:14).

In the vicinity of Lowndes County, Mississippi, the temperature extremes range from a January average of 7.8°C (46°F) to a July average of 27.8°C (82°F). On the average the area receives 131.4 cm (51.75 in) of precipitation annually with September being the driest month with 6.96 cm (2.76 in) and March the wettest with 15.3 cm (6.01 in). The growing season begins with the last killing frost about March 25 and lasts for 222 days until the first killing frost about November 2 (U.S.D.A. 1941:936).

#### Site Description

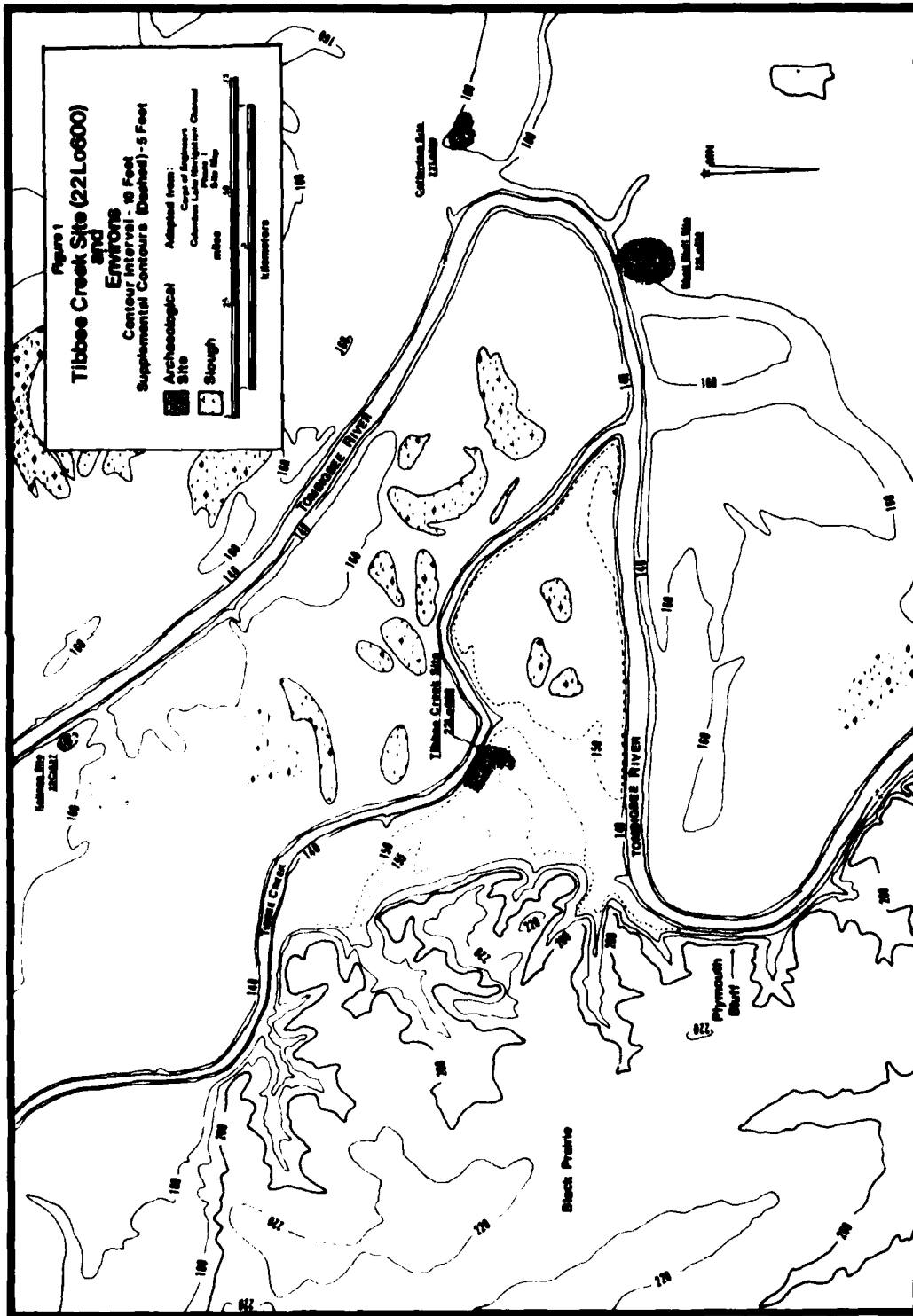
The Tibbee Creek site is located on the right bank of Tibbee Creek, approximately 0.9 km upstream from the confluence of Tibbee Creek and the Tombigbee River. About 2 km north of the site, the Tombigbee River begins to take a large triangular-shaped meander to the east (see Fig. 1). Cutting through the approximate center of this meander is Tibbee Creek, which meets the river just south



of the meander's apex. On the western side of the meander, the Tombigbee River floodplain abuts directly on the clay and chalk hills of the Black Prairie with little or no terrace formation between them.

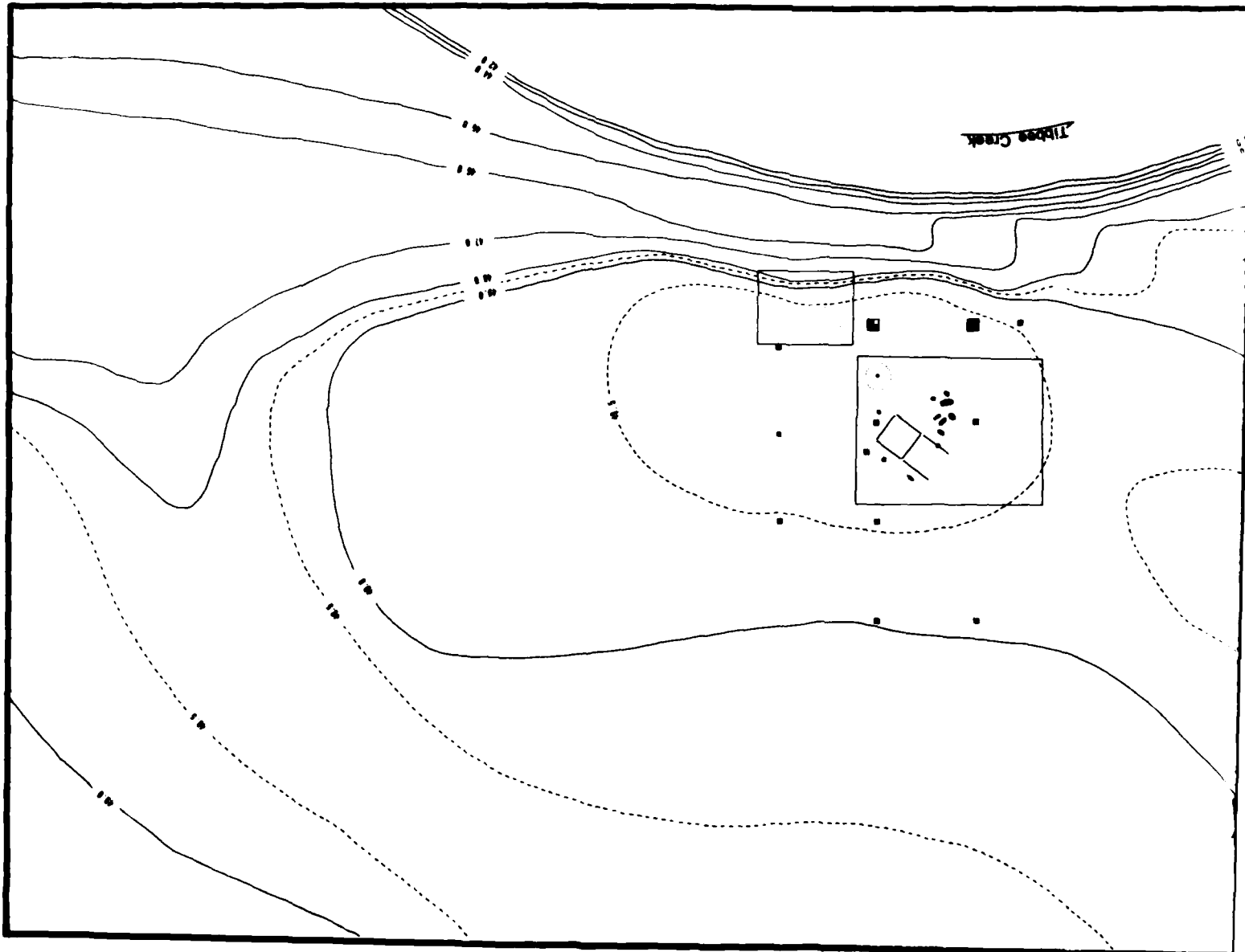
The site is located along the crest of a low ridge of alluvial soils immediately on the bank of Tibbee Creek and about 300 m east of the edge of the floodplain. The site has an elevation of 45.7 m A.S.L., and is about seven meters above the normal summer and fall level of Tibbee Creek. The formation of this alluvial ridge seems to have been caused at least in part by deposition from Tibbee Creek during floods. The ridge and the site are situated where the relatively narrow floodplain of Tibbee Creek joins the broad floodplain of the Tombigbee River. Upstream from the site, Tibbee Creek has a restricted floodplain caused by high chalk bluffs on its south or right-hand side, which is also the cutbank at this point. When floodwaters enter the Tombigbee River floodplain, the stream velocity decreases and part of the sediment load is dropped, increasing deposition in the site area. It was observed during the project that in flood, much of the water coming out of Tibbee Creek is diverted directly south across the southern half of the meander and immediately west of the site.

The bed of Tibbee Creek in the area of the site is chalk with a minimum of sediment cover. Immediately downstream from the site there is a shoals area about 50 m long caused by the crossing of a sandier more erosion-resistant member of the chalk formations. This is the same strata of the Eutaw Formation which forms the "Ledge" at Plymouth Bluff located on the river proper about 2 km southwest of the site. This shoals area is attractive to mussels, and might have been used by the Indians as an aid to fishing but no remains of a weir or fishtrap was present.



The ridge on which the site is situated measures approximately 300 m in length and averages 70 m in width. The total area of the site is approximately 20,000 m<sup>2</sup> or two hectares. The central portion of the site where the midden deposits are thickest and introduced materials most concentrated runs about 70 meters along the creek and is 40 m wide composing an area of approximately 2800 m<sup>2</sup> (see Fig 2).

The site had suffered considerable disturbance due to land clearing prior to our investigations. The site had been totally cleared of vegetation using standard land clearing techniques. The equipment used were large bulldozers (D7's and D8's) equipped with curved land clearing blades and ripper attachments. The latter are sets of four long chisel-shaped blades which are mounted on the back of the dozer and dragged through the ground to loosen soil and break roots. It was very fortunate that only one area in our excavations had been loosened with these ripper blades. Most of the disturbance had been caused by the removal of large trees. This was done by running the dozer blade under the root ball of a tree from one side and pushing the tree upwards, taking advantage of the weight of the tree trunk and crown to lever the tree out of the ground. This tree uprooting caused the most damage to the site, although the extent of the damage was not readily apparent since the holes had been partially filled in and smoothed. After the trees had been felled, they were pushed up into piles and burned. While it had not been possible to avoid the damage done by clearing because the site was not recognized until after the trees were felled, the Corps should be commended for limiting burning on the site. During clearing, the land clearers also put four short bulldozer cuts into the center of the site.



1

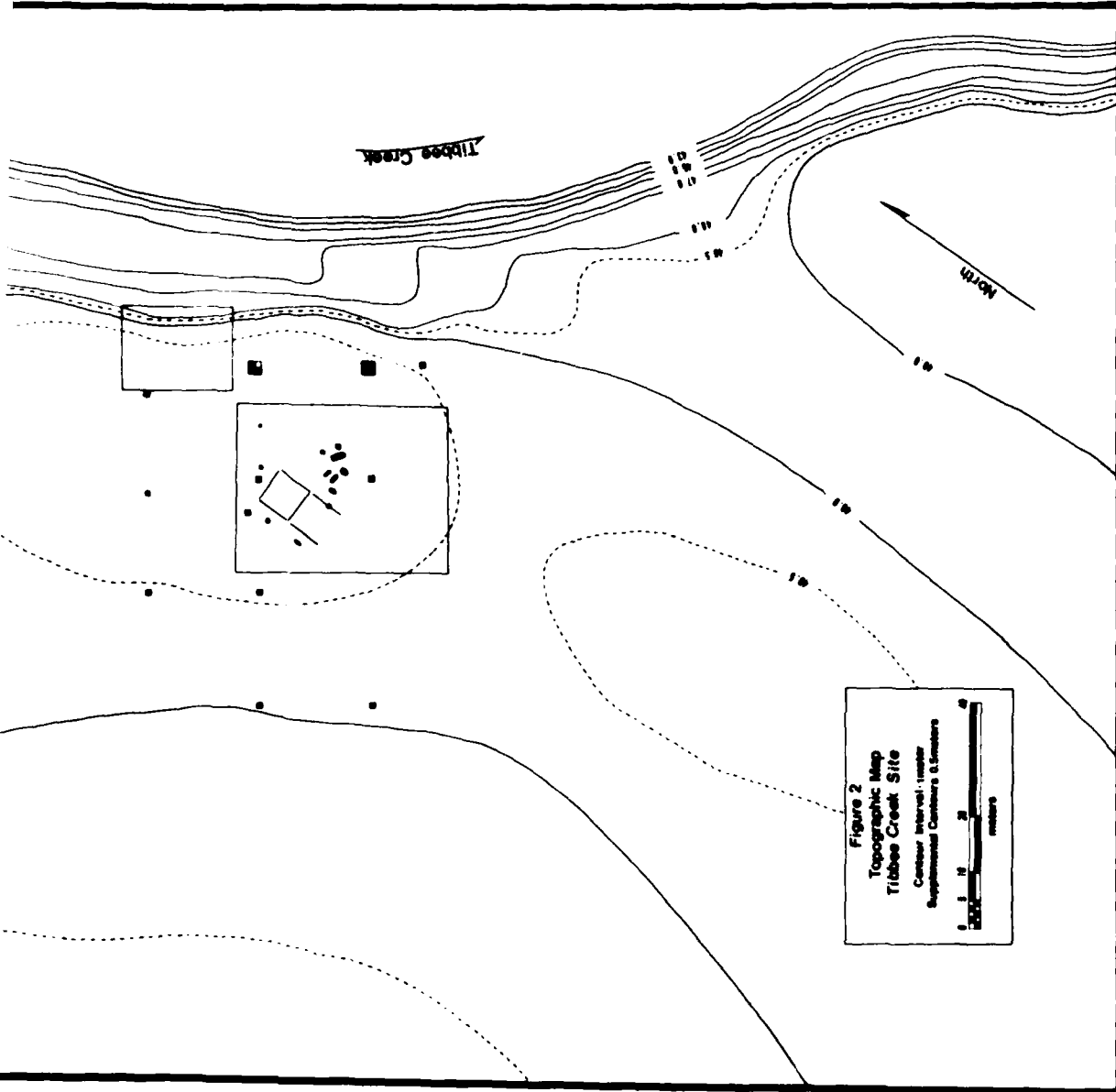


Figure 2  
Topographic Map  
Tribbes Creek Site  
Contour Interval: 1 meter  
Supplemental Contours @ 0.5 meters

2

### III. METHODS OF EXCAVATION AND ANALYSIS

The excavations at the Tibbee Creek site were structured in a two-phase approach. The first phase, originally budgeted for two weeks of the seven-week field season had as its goal the examination of the midden and other deposits at the site through the excavation of a systematic grid aligned sample of 1x1 and 2x2 meter test squares. The second phase of the excavations had as its goal the investigation of the settlement plan of the site through the stripping off of major blocks of midden and other deposits to the level where cultural features could be recognized, mapped and excavated.

Consideration was given to conducting a controlled surface collection prior to the initiation of excavation, but the surface collection was considered to be unfeasible and probably biased for several reasons. First, as mentioned in the Site Description (Chapter II), the surface of the site had been severely disturbed by land clearing. Also, a number of uncontrolled surface collections had been made prior to the beginning of our work. These two factors, disturbance and prior collections, made us question the reliability of a controlled surface collection. However, in retrospect, a controlled surface collection would have been valuable, particularly for recognizing and isolating the diffuse Mississippian component which would be revealed later in the project.

#### Site Layout and Square Excavation

The first step in the investigation was the preparation of a small scale topographic map of the site (Figure 2) and the laying out of a metric grid system. All measurements during the project

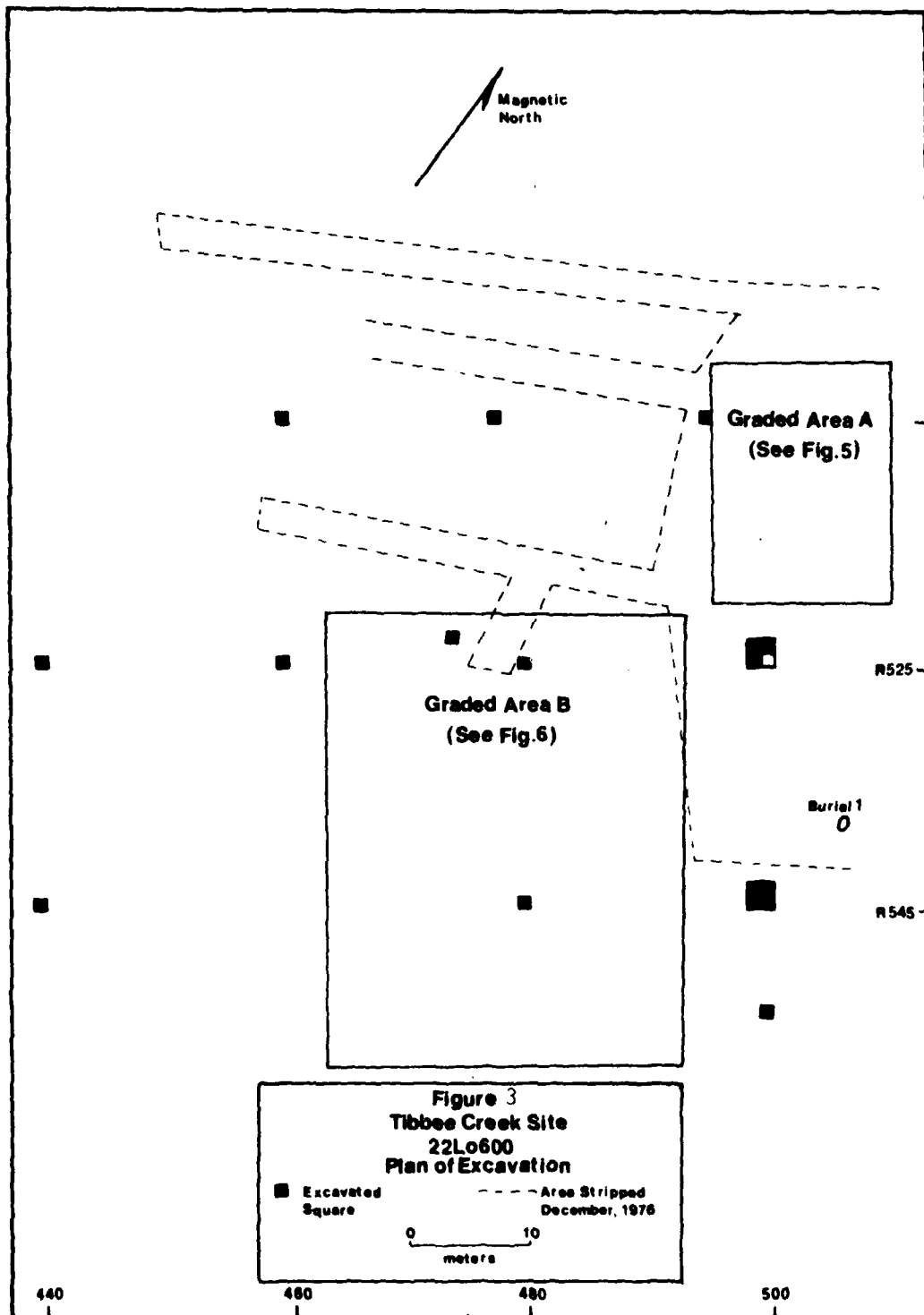
were made in the metric system. Points within the excavation grid were designated  $n_1 Rn_2$  with  $n_1$  increasing in value towards the creek, and  $n_2$  increasing in a downstream direction. The hypothetical 00R00 point was located so as to allow the entire site area to be contained within the upper right or positive-positive quadrant of the cartesian system. The actual base lines of the excavation grid were the 500 line, oriented parallel to the creek on the crest of the ridge, and the R505 line, located at the upstream edge of the area of thick midden accumulation. The R lines of the grid were oriented  $55^\circ$  east of magnetic north or  $57^\circ 30'$  east of true north. Elevations were taken from a benchmark consisting of a 2x4 stud driven 1.5 meters into the ground and given an assumed elevation of 50 m. Figure 3 presents a plan of the excavation units.

The central area of the site was staked at 20 m intervals. These stakes became the upper right datum stake of the test units. Some units along the R505 line had to be moved slightly off of the 20 m interval in order to avoid disturbed areas.

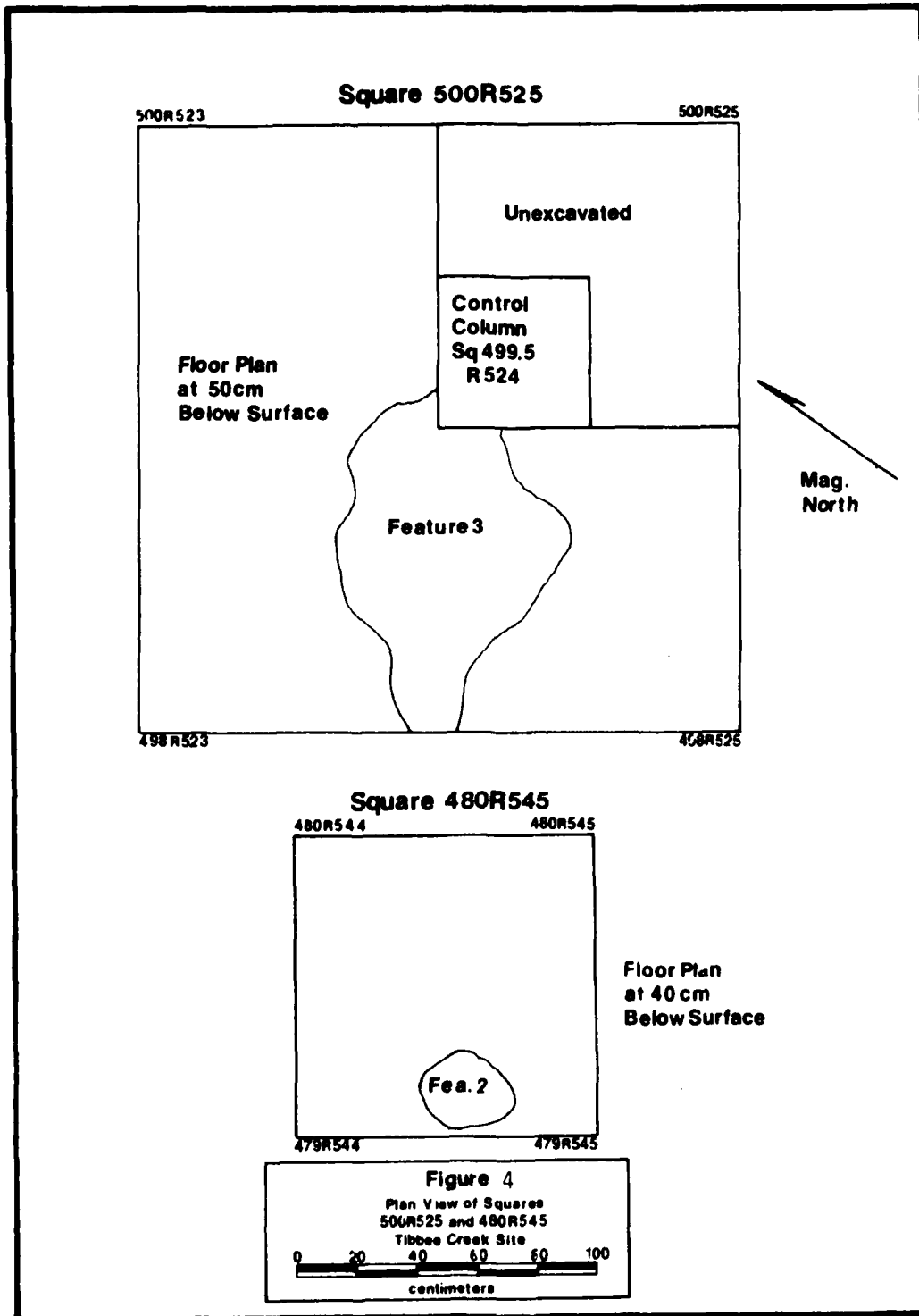
Eleven test pits, consisting of 1 2x2 m and 10 1x1 m squares were excavated, using 20 cm arbitrary levels from ground surface for vertical control. The general excavation material was waterscreened through 6.4 mm (1/4 in) mesh screen.

The only variation in this excavation method was in the case of square 500R525. In order to isolate a unit which could then be excavated by natural zones, three of the four 1x1 m quadrants of this 2x2 meter square were removed and discarded. After Zones, A, B, and the midden stained upper level of Zone C were taken out, a shallow pit and four postholes were recognized intruding into Zone C<sub>2</sub>. The features were recorded and excavated and the unit then taken down well into the sterile clay subsoil.

It was planned to excavate the four .5x.5 m quadrants of this partially isolated 1x1 m square separately, but only one was actually excavated. This unit, designated square 499.5R524.5 was excavated by







natural strata. Due to its thickness, Zone C was excavated by 10 cm levels within the zone. All soil from this block was waterscreened through 6.4 mm (1/4 in) and 2 mm (1/16 in) mesh screen. At the end of the first field session, an effort was made to preserve the remainder of the block for excavation at the continuation of the field work. The sides of the block and surrounding square were shored up with plywood panels braced with crossed 2x4's and the square was partially backfilled, but the block did not survive the flood. Most of Zone A was scoured off, Zone C eroded out from under Zone B, and the surrounding square was almost completely filled in by silt and sand.

#### Stripping for Recovery of Features

With the completion of the excavation units, except for the control block, the first stripping operations were performed on December 14, 1976, using a small John Deere 450 bulldozer with a fully adjustable blade. Weather and soil conditions were poor, but as the weather was expected to deteriorate even further in the coming weeks it was decided to proceed. The major problem encountered was the extreme wetness of the soil. In preparation for the stripping, the area to be stripped was dewatered as much as possible by using completed or slumped excavation units and the old bulldozer trenches as sumps and pumping out the water which accumulated in them. For two days prior to the stripping, these catchments were pumped out twice a day, reducing at least the standing water on the site.

Stripping began in a roughly rectangular block running parallel to the creek and centered on the 500 line of the grid (Figure 3 ). Square 500R525, containing the control block, was left on a pedestal and the profiles used as a guide to stripping depth. During the actual earth moving, one crew member walked alongside the machine watching directly behind the blade, while two crew members walked behind the machine defining and flagging features and postholes as they were revealed. After several cuts had been made, it became apparent that it was necessary to remove Zones A, B, and the upper 10 cm of Zone C

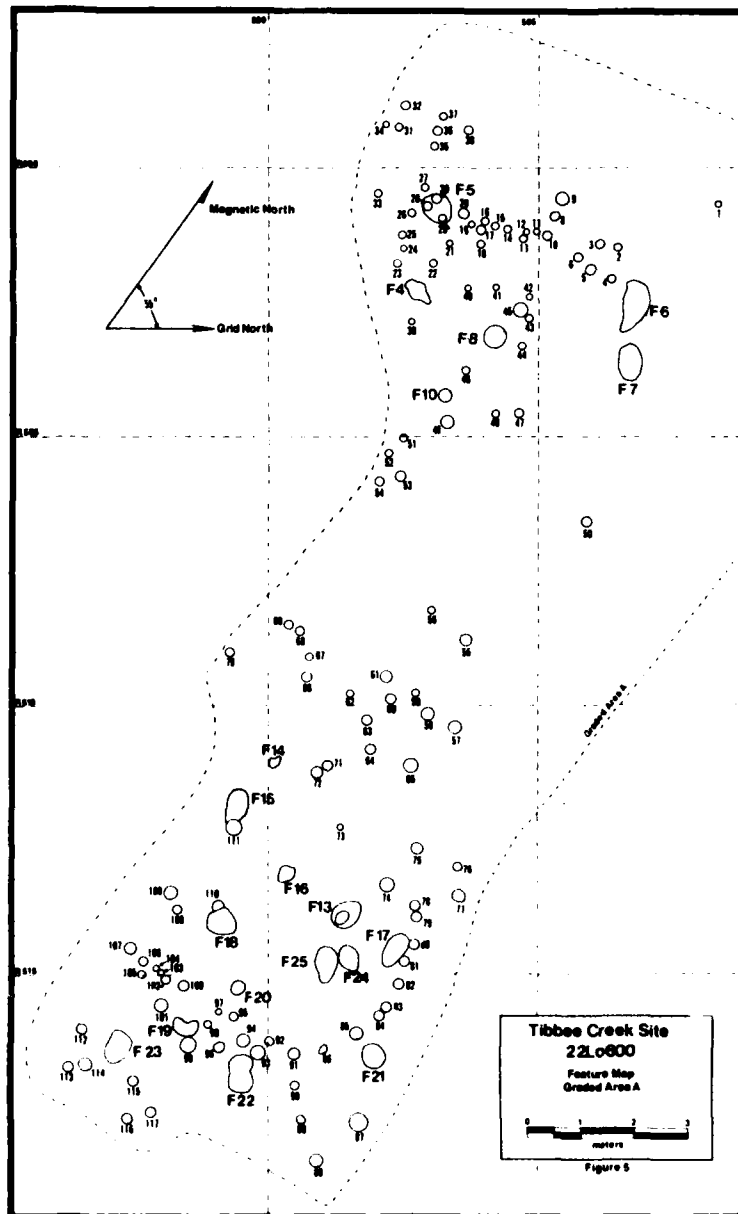
in order to recognize features intruding into Zone C. When the block on the 500 line was complete, four slot cuts the width of the bulldozer blade or about 1.5 m wide were made to the west of the block. Three of these cuts were perpendicular to the western border of the block and the third was perpendicular to the southernmost of the first three cuts.

Approximately one third of this first stripped area was investigated before fieldwork was suspended in January. Figure 5 shows the postholes and features recorded. This area of excavated features is termed Graded Area A. As mentioned previously, the remainder of the stripped area around Graded Area A was destroyed by flood scouring.

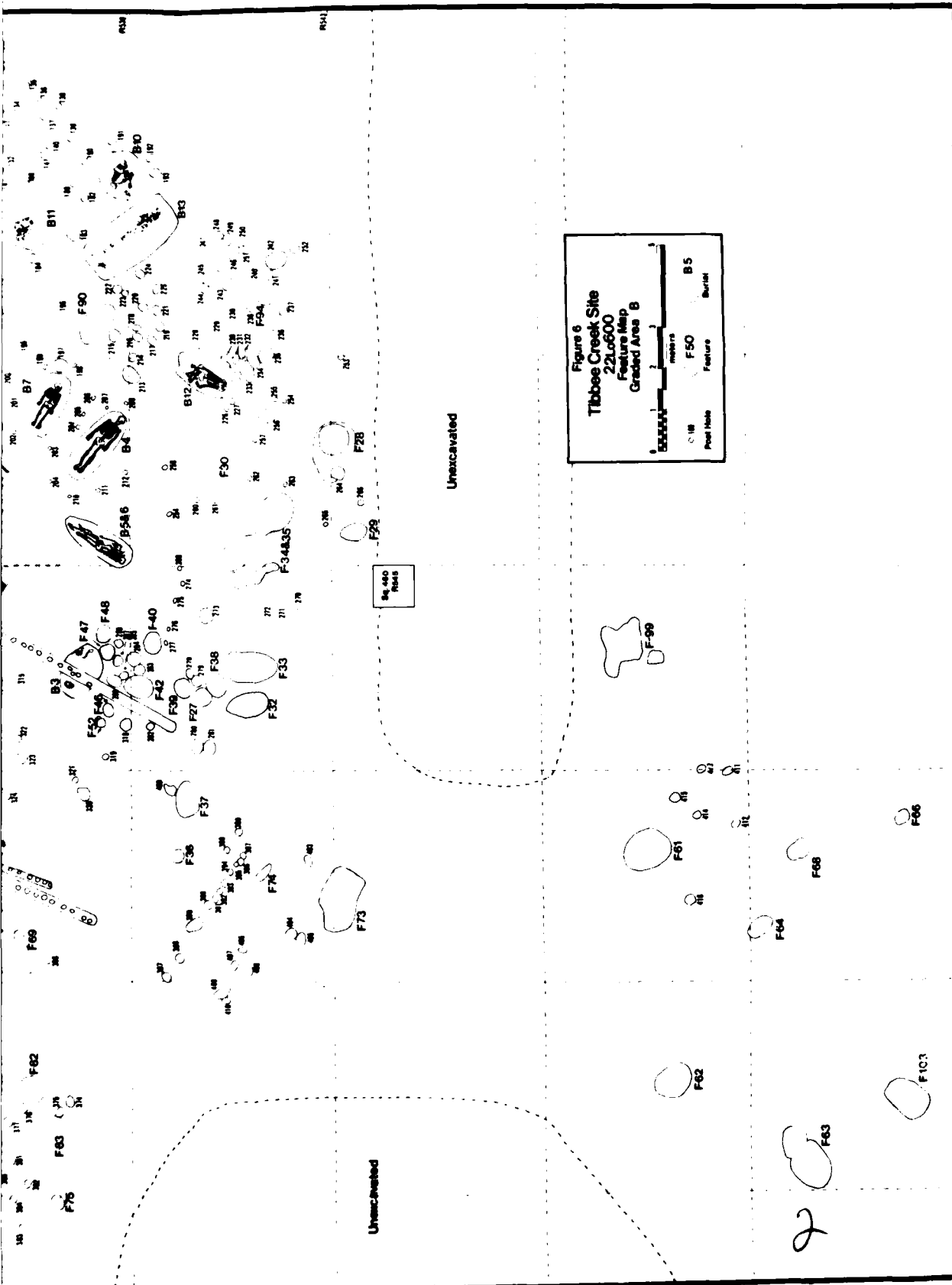
The second phase of stripping operations at the site took place on March 24, 1977, using the same machinery and much the same stripping technique. This second stripped area is designated Graded Area B (Figure 6). On July 1, 1977, the bulldozer was again brought to the site and Graded Area B was expanded.

#### Feature Excavation Methods

The manner of investigating features and postholes was more or less standard through the course of the excavations. After a feature was defined on the graded surface, it was mapped into the site floor plan using a plane table and alidade (a transit was used during the last week of the project) and it was assigned a consecutive feature or posthole number. The loose nature of the soil of Zone C at the level of stripping made it impractical to trowel down large areas because the definition gained by troweling would be lost to even the lightest rain, or in some cases, to heavy dew. Generally, 5 x 5 meter squares were troweled down, the features investigated and mapped before moving on to another block. This method had the distinct drawback in that there were some problems of correlations between blocks, and also we were never able to see large blocks opened up at the same time and get an impression of the overall site layout.







In some instances, two blocks were under excavation at the same time, and runs of feature numbers and posthole numbers were assigned to each block. Numbers within a run that were not used in the block they were first assigned to were not used at all to avoid confusion, hence the sequential list of feature numbers contained blocks of unused numbers.

Features were excavated in the following manner. After the outline of the feature had been defined on the stripped surface, a preliminary plan view was drawn and the feature was cross sectioned. Pits were usually cross sectioned through their longest axis. The pit fill was removed with trowels and small tools and the effort was made to recover shell and bone as intact as possible. After cross sectioning, the pit profile was examined for internal stratification and the remaining half excavated by natural zones if necessary. Very few features were stratified, most contained a homogeneous "midden" fill. Soil, pollen, charcoal, and flotation samples were taken from the last half of the pit. After the profile was recorded, the second half of the feature was taken out with small tools. All feature fill was waterscreened through a 6.4 mm (1/4 in) screen placed over a 2 mm (1/16 in) mesh screen. Postholes were excavated in the same manner as features.

There was some variation in this excavation method with regard to certain individual features. These are noted in the discussions of the individual features. The two house structures which were recognized during fieldwork were investigated with methods particular to the individual structure. These methods are described in the discussion of the structures in Chapter VI.

#### Laboratory Methods and Analysis

Aside from a minimum of artifact washing, all lab processing of the materials and specimens from the Tibbee Creek site was carried out in the Archaeological Lab in the Department of Anthropology at the Mississippi State campus. Nearly all lots of material from the site

contained large amounts of mussel shell in varying stages of deterioration. The first step in the lab processing was the hand sorting of the mussel shell from the remainder of the material. Once the mussel shell was segregated, the artifactual material was sorted into lithics, ceramics, bone and charcoal. The mussel shell, already reasonably free of dirt due to the waterscreening of the material in the field, was hosed off to remove any adhering dirt, dried, weighed, and boxed up. All lithics, ceramics, and bone was washed individually by hand and bagged up separately. The manner of analysis of the individual classes of artifacts, such as ceramics and lithics is given in the section of the report dealing with those materials.

The 2 mm screen samples were processed in two different manners. Material from the first session of excavation was hand sorted into the following classes: charcoal, bone, small gastropods, chert, pottery, and shell debris. This was an extremely time consuming procedure. The fine screen material from the second session of excavation was floated to separate out botanical material, but the remainder of the sample was not sorted.

A problem arose during the lab analysis and report preparation with regard to the numbering of features and scattered postholes. Both numbering sequences contained sizeable gaps of unassigned numbers due to the field procedure of assigning blocks of numbers to excavation blocks. Also, there were some postholes which were assigned feature numbers and vice versa. And finally, some posthole and feature numbers were assigned to disturbances caused by trees and to patches of midden remaining after stripping. In order to reduce the feature and posthole lists to a manageable length, and to delete the above discrepancies, the features and postholes were renumbered for this report. After renumbering, the new number was noted in red pen on all field forms, and several lists of equivalency and correlation were inserted in the site records. It is for this reason that the feature numbers on sign boards in photographs such as Plate VI do not correspond to the number those features have in figures and text.



#### IV. EXCAVATION UNITS

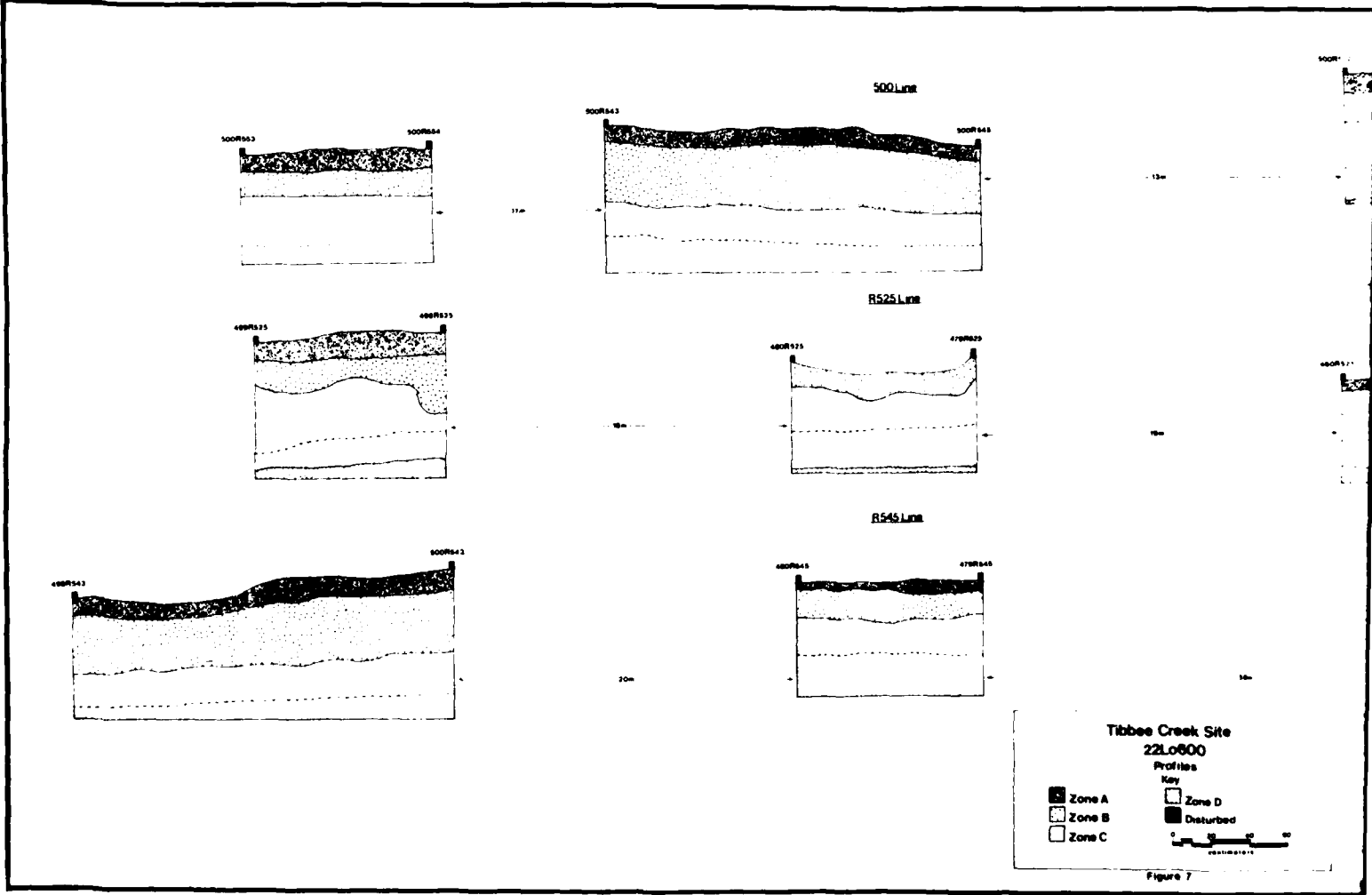
##### Stratigraphy

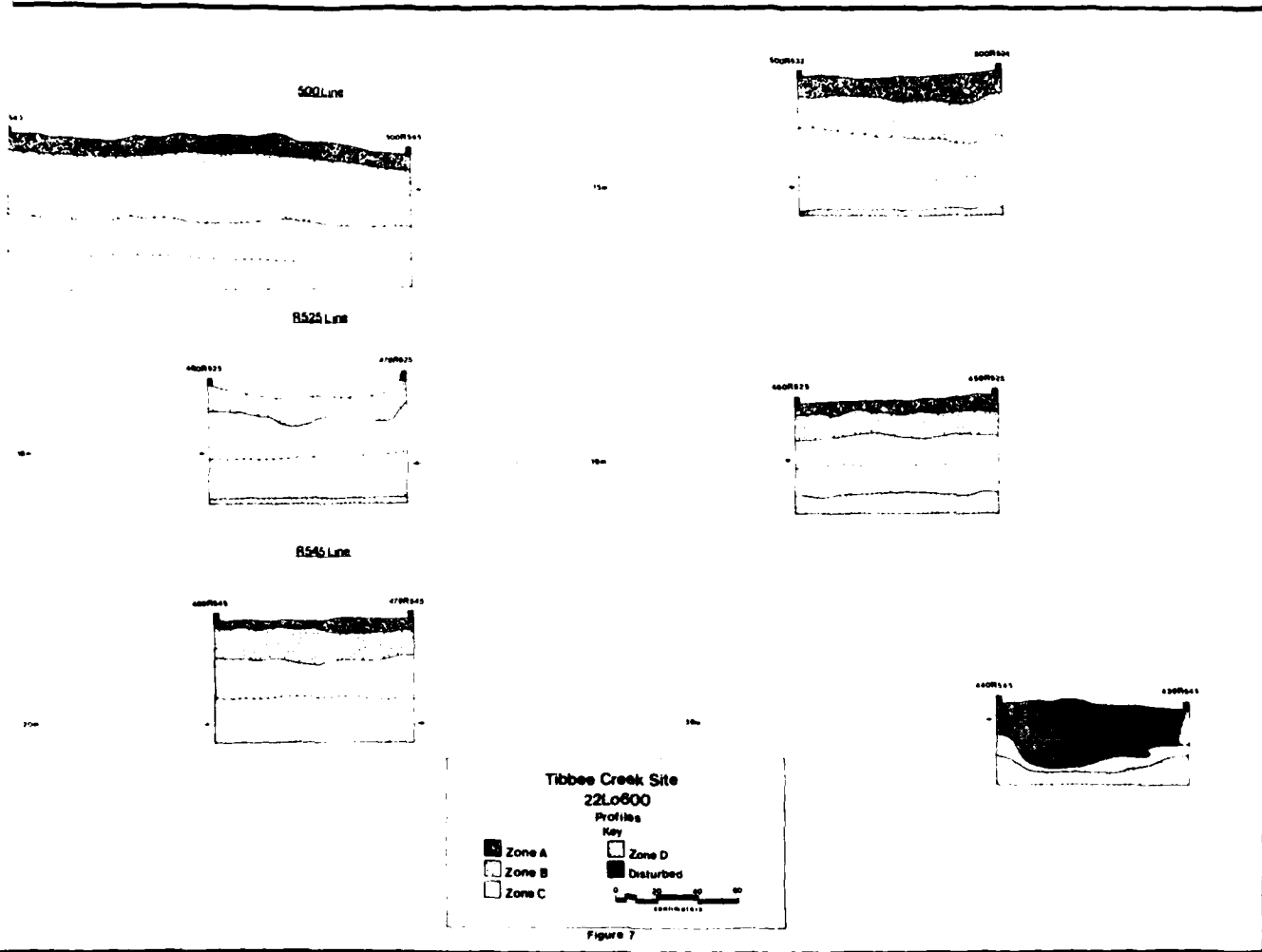
The Tibbee Creek site stratigraphy consisted of four major strata which varied slightly in composition, color and thickness between different areas of the site but retained stratigraphic and cultural equivalence between areas and excavation units. Some squares, particularly those in the shallower deposits located off the ridge of the site had suffered damage to the upper zones during the land clearing. A Munsell soil color chart was not available for use during the excavations, but all notes on color and composition of the strata were made by one individual and hence should be comparable between excavation units.

Interrupted profile sections through three transects of the site; the 500 line, R525 line and R545 line are presented in Figure 7. The following are descriptions of the individual strata.

Zone A This Zone was present in all squares except those which had been disturbed and represents an old plowzone with a minor amount of additional alluvial deposits resulting from post-plowing flooding and alluviation. Zone A varied in thickness between 10 and 20 cm. The soil was a black to very dark brown sandy loam which contained a moderate amount of broken up mussel shell and artifacts. For comparison, the density of shell in Zone A in units along the 500 line of the grid system was approximately 29 kg/m<sup>3</sup>. It is likely that some of the shell in Zone A has been destroyed by leaching in a situation similar to that described by Winters (1969:3) at the Riverton sites. The Mississippian and historic material at the Tibbee Creek site was confined for the most part to Zone A.

Zone B This thick shellbearing zone is predominately Woodland midden and represents refuse from the Miller I through Miller III components. The zone was present throughout the site and varied in thickness from a maximum of approximately 34 cm in the deepest area of the site along the 500 line of the grid system to a thickness of 10 to 12 cm in





2

peripheral areas. The soil matrix was a very dark brown to black sandy loam or clayey sand similar to the soil of Zone A. Mussel shell was highly concentrated in Zone B, with a density of approximately  $126 \text{ kg/m}^3$  in Square 500R525, or about 4.5 times the density contained in the zones over and underlying it. The shell consisted of whole and crushed valves with pockets and lenses of tightly compacted shell present in units along the 500 line. Animal bone, ceramics and lithic material was also highly concentrated in Zone B. The bulk of Zone B represents a Miller III deposit, but Miller I and Miller II material also occurred. There was no well defined stratigraphic separation of the Miller I, II, and III materials either in physical stratigraphy or artifact stratigraphy, but there is a tendency for the earlier sand tempered Miller ceramic wares to occur toward the bottom of the zone. This is most visible in squares near the 500 line, as can be seen in Table 1.

Zone C This was the most variable stratum at the site, and is also the least understood in terms of origin and content. Originally defined as two zones during the first stages of the fieldwork, it was later realized that the color differences on which the distinction was made was caused by staining from the concentrated dark midden overlying Zone C. The texture of Zone C was a very sandy loam approaching a true sand in the units along the 500 line. The upper portion was stained and mottled to a dark to medium brown for a depth of 20 to 30 cm. Below the staining, the color was a light brownish yellow. Throughout its thickness, Zone C was very loose and extremely unstable when moist. In excavation units, it would frequently slump out from under the more compact Zone B. When dry, the soil of Zone C would set up to a hardness reminiscent of soft sandstone.

Materials from the Gulf Formational stage consistently occurred within the upper portions of Zone C. Both Wheeler series and Alexander series pottery was present but very scattered. There was also a marked absence of heat treated red chert which was the dominant chert color in the overlying zones. Little material other than ceramics and

lithics were present, no bone and very little charcoal and shell was detected within Zone C. The density of artifacts decreased markedly below the upper 20 to 30 cm of Zone C, and the lowest portions were essentially sterile.

Zone D Zone D is the sterile, yellow to brownish yellow clay subsoil at the site. The transition between Zones C and D was continuous and somewhat arbitrarily defined. Within an area about 5 cm thick there was a marked change from sandy to clayey texture, but no observable change in soil color.

No excavation units were carried below the upper 20 cm of Zone D, but examination of a large slump in the creek bank and the profile of a backhoe trench placed in the north central portion of the site showed what lay below the limits of the excavation. The clay subsoil of Zone D continued to a depth of about two meters through the site area. At two meters, a one meter thick zone of small yellow chert gravels was present. No cultural materials were observed any deeper than Zone C in the excavation units.

#### Excavation Units

A total of 10 1x1 and 1 2x2 meter test squares were excavated at the site during the testing portion of the project. Most units were taken down to the sterile clay of Zone D, but three units; 475R505, 474R523 and 460R505 were destroyed by rain prior to completion.

The material found in the excavation units are summarized in the following tables. The ceramics from the units are listed in Tables 1 through 11, the lithic artifacts from the test units are listed in Tables 12 through 22 and shell from the units is presented in Table 23.

TABLE 1. SQUARE 500R554, CERAMICS

Artifact Type	Level			Total
	1	2	3	
SHELL TEMPER				
Mississippi Plain var <u>Warrior</u>	27	21	-	48
GROG TEMPER				
Tishomingo Plain	149	23	-	172
Tishomingo Cordmarked	19	21	-	40
SAND TEMPER				
Baldwin Plain	45	39	-	84
Furrs Cordmarked	5	-	2	7
Alexander Incised	1	-	-	1
TOTAL	246	104	2	352

TABLE 2. SQUARE 500R545, CERAMICS

Artifact Type	Level			Total
	1	2	3	
SHELL TEMPER				
Mississippi Plain var. <u>Warrior</u>	77	9	1	87
Moundville Incised var. <u>unspecified</u>	1	-	-	1
GROG TEMPER				
Tishomingo Plain	1912	492	5	2409
Tishomingo Cordmarked	441	218	-	659
Gainesville Fabric Impressed	1	-	-	1
Residual Incised	-	1	-	1
SAND TEMPER				
Baldwin Plain	202	98	-	300
Alexander Incised	1	1	-	2
Alligator Bayou Stamped	1	-	-	1
Furrs Cordmarked	8	3	-	11
FIBER TEMPER				
Wheeler Plain	-	-	1	1
TOTAL	2644	823	7	3474

TABLE 3. SQUARE 499.5R524.5, CERAMICS

Artifact Type	Zone					Total
	A	B	C/L1	C/L2	C/L3	
SHELL TEMPER						
Mississippi Plain var. <u>Warrior</u>	3	-	1	-	-	4
GROG TEMPER						
Tishomingo Plain	27	203	24	17	-	271
Tishomingo Cordmarked	7	55	2	3	-	67
Wheeler Check Stamped	-	1	1	-	-	2
Gainesville Fabric Imp.	-	-	1	-	-	1
SAND TEMPER						
Baldwin Plain	-	6	8	-	-	14
Furrs Cordmarked	-	1	1	-	-	2
FIBER TEMPER						
Wheeler Plain	-	-	-	-	3	3
TOTAL	37	266	38	20	3	363

TABLE 4. SQUARE 495R505, CERAMICS

Artifact Type	Level			Total
	1	2	3	
SHELL TEMPER				
Mississippi Plain var. <u>Warrior</u>	10	-	-	10
GROG TEMPER				
Tishomingo Plain	742	74	-	816
Tishomingo Cordmarked	181	13	-	194
Gainesville Fabric Impressed	12	-	-	12
SAND TEMPER				
Baldwin Plain	23	5	-	28
Furrs Cordmarked	6	4	0	10
Saltillo Fabric Impressed	-	1	-	1
FIBER TEMPER				
Wheeler Plain	-	5	7	12
TOTAL	974	102	7	1083

TABLE 5. SQUARE 480R545, CERAMICS

Artifact Type	Level		Total
	1	2	
SHELL TEMPER			
Mississippi Plain var. <u>Warrior</u>	20	3	23
GROG TEMPER			
Tishomingo Plain	299	14	313
Tishomingo Cordmarked	44	8	52
Residual Incised	1	-	1
SAND TEMPER			
Baldwin Plain	102	11	113
Furrs Cordmarked	5	3	8
Basin Bayou Incised	1	-	1
FIBER TEMPER			
Wheeler Plain	1	1	2
TOTAL	473	40	513

TABLE 6. SQUARE 480R525, CERAMICS

Artifact Type	Level			Total
	1	2	3	
SHELL TEMPER				
Mississippi Plain var. <u>Warrior</u>	21	-	-	21
GROG TEMPER				
Tishomingo Plain	447	4	-	451
Tishomingo Cordmarked	120	8	-	128
Gainesville Fabric Impressed	6	-	-	6
SAND TEMPER				
Baldwin Plain	115	13	4	132
Alexander Incised	-	1	-	1
Basin Bayou Incised	2	1	-	3
Saltillo Fabric Impressed	-	1	-	1
Residual Incised	1	-	-	1
TOTAL	713	28	4	745



TABLE 7. SQUARE 475R505, CERAMICS

Artifact Type	Level		Total
	1	2	
SHELL TEMPER			
Mississippi Plain var. <u>Warrior</u>	1	2	3
GROG TEMPER			
Tishomingo Plain	244	182	426
Tishomingo Cordmarked	67	51	118
SAND TEMPER			
Baldwin Plain	17	13	30
Furrs Cordmarked	11	2	13
TOTAL	340	250	590

TABLE 8. SQUARE 474R523, CERAMICS

Artifact Type	Level	Total
	1	
SHELL TEMPER		
Mississippi Plain var. <u>Warrior</u>	32	32
GROG TEMPER		
Tishomingo Plain	490	490
Tishomingo Cordmarked	115	115
Gainesville Fabric Impressed	4	4
SAND TEMPER		
Baldwin Plain	90	90
Furrs Cordmarked	3	3
TOTAL	734	734

TABLE 9. SQUARE 460R525, CERAMICS

Artifact Type	Level			Total
	1	2	3	
SHELL TEMPER				
Mississippi Plain var. <u>Warrior</u>	24	1	-	25
GROG TEMPER				
Tishomingo Plain	511	18	3	532
Tishomingo Cordmarked	129	10	1	140
Residual Incised	1	-	-	1
SAND TEMPER				
Baldwin Plain	40	2	-	42
Alexander Pinched	1	-	-	1
Furrs Cordmarked	5	-	-	5
TOTAL	711	31	4	746

TABLE 10. SQUARE 460R505, CERAMICS

Artifact Type	Level		Total
	1	2	
GROG TEMPER			
Tishomingo Plain	181	10	191
Tishomingo Cordmarked	50	31	81
SAND TEMPER			
Baldwin Plain	28	-	28
Plain Pipe Fragments	2	0	2
Furrs Cordmarked	3	-	3
TOTAL	264	41	305

TABLE 11. SQUARE 440R545, CERAMICS

Artifact Type	Level		Total
	1	2	
GROG TEMPER			
Tishomingo Plain	8	16	24
Tishomingo Cordmarked	4	2	6
TOTAL	12	18	30

TABLE 12. SQUARE 500R554, LITHIC ARTIFACTS

Artifact Type	Level				Total
	1	2	3	4	
RED CHERT					
Primary Decortication Flake	10	5	1	1	17
Secondary Decortication Flake	10	22	6	-	38
Shatter	21	12	6	4	43
Biface Thinning Flake	-	1	-	-	1
Undifferentiated Flake	143	106	15	6	270
Pebble	8	38	98	8	152
Class 1 Preform	-	1	-	-	1
Class 1 Projectile Point	2	1	-	-	3
Distal End	-	2	-	-	2
Utilized Flake	12	-	1	-	13
YELLOW CHERT					
Primary Decortication Flake	-	3	4	-	7
Secondary Decortication Flake	1	3	8	-	12
Shatter	1	-	2	3	6
Biface Thinning Flake	-	1	1	-	2
Undifferentiated Flake	13	10	20	-	43
Pebble	37	53	86	5	181
Class 1 Preform	-	-	2	-	2
Drill Fragment	-	1	-	-	1
GREY CHERT					
Undifferentiated Flake	5	-	1	-	6
TALLAHATTA QUARTZITE					
Undifferentiated Flake	-	-	2	-	2
QUARTZ					
Pebble	5	6	9	1	21
OTHER CHERT					
Pebble	5	22	-	-	27
FERRUGINOUS SANDSTONE					
Fragment	2	5	40	1	48
FERRUGINOUS CONGLOMERATE					
Fragment	-	1	1	-	2
WHITE SANDSTONE					
Fragment	2	6	-	5	13
TOTAL	277	299	303	34	913

TABLE 13. SQUARE 500R545, LITHIC ARTIFACTS

Artifact Type	Level				Total
	1	2	3	4	
RED CHERT					
Primary Decortication Flake	86	64	5	-	155
Secondary Decortication Flake	387	278	6	-	671
Shatter	302	143	26	-	471
Biface Thinning Flake	55	32	6	1	94
Undifferentiated Flake	1040	245	72	2	1359
Pebble	39	51	10	-	100
Class 1 Preform	1	3	2	1	7
Small Triangular Preform	1	-	-	-	1
Bifacial Tool Fragment	6	5	-	-	11
Class 1 Projectile Point	6	2	-	-	8
Distal End	2	2	-	-	4
Midsection	3	1	-	-	4
Shaft Drill	1	-	-	-	1
Expanded Base Drill	-	1	-	-	1
Micro Perforator	-	-	-	-	-
Utilized Flake	35	24	-	-	59
YELLOW CHERT					
Primary Decortication Flake	8	13	-	-	21
Secondary Decortication Flake	20	69	-	-	89
Shatter	23	19	-	-	42
Biface Thinning Flake	4	2	-	-	6
Undifferentiated Flake	90	61	-	-	151
Pebble	247	92	39	-	378
Class 1 Preform	1	-	-	-	1
Distal End	2	-	-	-	2
Midsection	1	-	-	-	1
Utilized Flake	1	-	-	-	1
Core	2	-	-	-	2
GREY CHERT					
Biface Thinning Flake	-	-	4	-	4
Undifferentiated Flake	9	7	4	-	20
Drill Tip	-	-	1	-	1
TALLAHATTA QUARTZITE					
Distal End	-	1	-	-	1
QUARTZ					
Pebble	46	32	12	-	90

TABLE 13. (CONTINUED)

Artifact Type	Level				Total
	1	2	3	4	
<b>OTHER CHERT</b>					
Undifferentiated Flake	5	-	6	-	11
Pebble	-	56	51	-	107
Utilized Flake	1	-	-	-	1
<b>FERRUGINOUS SANDSTONE</b>					
Fragment	-	5	-	-	5
<b>WHITE SANDSTONE</b>					
Fragment	30	11	25	1	67
<b>PECKED AND GROUND STONE ARTIFACTS</b>					
Ground Sandstone Fragment	-	-	8	-	8
Quartzite Hammerstone	-	1	-	-	1
<b>TOTAL</b>	<b>2454</b>	<b>1220</b>	<b>277</b>	<b>5</b>	<b>3956</b>

TABLE 14. SQUARE 499.5R524.5, LITHIC ARTIFACTS

Artifact Type	Zone						Total
	A	B	C/L1	C/L2	C/L3	C/L4	
RED CHERT							
Primary Decortication Flake	2	27	5	2	-	-	36
Secondary Decortication Flake	11	37	32	7	-	-	87
Shatter	12	70	27	7	-	-	116
Biface Thinning Flake	4	11	11	1	-	1	28
Undifferentiated Flake	83	426	42	51	23	-	625
Pebble	-	15	-	2	-	1	18
Class 1 Preform	-	1	1	-	-	-	2
Bifacial Tool Fragment	1	6	1	-	-	-	8
Class 3 Projectile Point	-	3	-	-	-	-	3
Drill Shaft	-	1	-	-	-	-	1
Microtool	1	-	-	-	-	-	1
Utilized Flakes	1	8	-	-	-	-	9
Core	-	-	1	-	-	-	1
YELLOW CHERT							
Primary Decortication Flake	-	-	2	-	-	-	2
Undifferentiated Flake	1	1	-	1	-	-	3
Pebble	3	22	1	-	-	3	29
GREY CHERT							
Biface Thinning Flake	-	-	-	-	1	-	1
Undifferentiated Flake	-	2	-	-	-	-	2
QUARTZ							
Pebble	2	1	-	-	-	1	4
OTHER CHERT							
Undifferentiated Flake	2	-	-	-	1	-	3
Pebble	10	11	-	-	-	-	21
FERRUGINOUS SANDSTONE							
Fragment	-	2	-	1	-	-	3
WHITE SANDSTONE							
Fragment	-	-	-	-	-	2	2
TOTAL	133	644	123	72	25	8	1005

TABLE 15. SQUARE 495R505, LITHIC ARTIFACTS

Artifact Type	Level			Total
	1	2	3	
<b>RED CHERT</b>				
Primary Decortication Flake	38	17	1	56
Secondary Decortication Flake	95	75	6	176
Shatter	91	31	7	129
Biface Thinning Flake	11	15	-	26
Undifferentiated Flake	502	100	21	623
Pebble	28	5	23	56
Class 1 Projectile Point	-	1	-	1
Small Triangular Preform	-	1	-	1
Biface Fragment	3	-	-	3
Micro Perforator	1	-	-	1
Utilized Flake	23	24	-	47
Retouched Flake	-	1	-	1
<b>YELLOW CHERT</b>				
Primary Decortication Flake	3	-	5	8
Secondary Decortication Flake	6	-	2	8
Shatter	3	-	1	4
Undifferentiated Flake	10	5	4	19
Pebble	51	23	26	100
<b>GREY CHERT</b>				
Undifferentiated Flake	14	-	-	14
<b>QUARTZ</b>				
Shatter	-	1	-	1
Pebbles	20	5	3	28
<b>OTHER CHERT</b>				
Undifferentiated Flake	2	-	-	2
Pebble	61	-	-	61
<b>FERRUGINOUS SANDSTONE</b>				
Fragment	1	-	4	5
<b>FERRUGINOUS CONGLOMERATE</b>				
Fragment	-	-	1	1
<b>WHITE SANDSTONE</b>				
Fragment	1	-	7	8
<b>TOTAL</b>	<b>964</b>	<b>304</b>	<b>111</b>	<b>1379</b>

TABLE 16. SQUARE 48OR545, LITHIC ARTIFACTS

Artifact Type	Level			Total
	1	2	3	
<b>RED CHERT</b>				
Primary Decortication Flake	16	13	-	29
Secondary Decortication Flake	59	4	1	64
Shatter	82	30	1	113
Biface Thinning Flake	12	1	-	13
Undifferentiated Flake	316	100	3	419
Pebble	14	25	3	42
Class 1 Preform	-	3	-	3
Class 1 Projectile Point	1	-	-	1
Small Triangular Preforms	3	-	-	3
Biface Fragment	3	-	-	3
Utilized Flake	1	-	-	1
Core	1	2	-	3
<b>YELLOW CHERT</b>				
Primary Decortication Flake	5	15	-	20
Secondary Decortication Flake	2	1	-	3
Shatter	3	3	-	6
Undifferentiated Flake	20	30	-	50
Flaked Pebble	1	-	-	1
Pebble	14	25	3	42
<b>GREY CHERT</b>				
Undifferentiated Flake	4	-	-	4
<b>QUARTZ</b>				
Pebble	12	2	-	14
<b>OTHER CHERT</b>				
Pebble	27	6	-	33
<b>FERRUGINOUS SANDSTONE</b>				
Fragment	1	-	-	1
<b>WHITE SANDSTONE</b>				
Fragment	2	5	1	8
<b>TOTAL</b>	<b>604</b>	<b>316</b>	<b>16</b>	<b>935</b>



TABLE 17. SQUARE 480R525, LITHIC ARTIFACTS

Artifact Type	Level			Total
	1	2	3	
RED CHERT				
Primary Decortication Flake	53	5	-	58
Secondary Decortication Flake	157	14	1	172
Shatter	143	6	4	153
Biface Thinning Flake	23	4	-	27
Undifferentiated Flake	248	76	16	340
Flaked Pebble	1	-	-	1
Pebble	6	6	2	14
Class 1 Projectile Point	2	-	-	2
Small Triangular Preforms	3	-	-	3
Projectile Point Stem	1	-	-	1
Distal End	2	-	-	2
Midsection	3	-	-	3
Expanded Base Drill	-	-	1	1
Utilized Flake	71	1	-	72
Core	2	-	-	2
YELLOW CHERT				
Primary Decortication Flake	5	5	-	10
Secondary Decortication Flake	8	5	3	16
Shatter	2	-	-	2
Biface Thinning Flake	2	-	-	2
Undifferentiated Flake	2	10	12	24
Flaked Pebble	2	-	-	2
GREY CHERT				
Biface Thinning Flake	1	-	-	1
Undifferentiated Flake	2	1	-	3
TALLAHATTA QUARTZITE				
Undifferentiated Flake	-	1	1	2
QUARTZ				
Undifferentiated Flake	1	-	-	1
OTHER CHERT				
Pebble	-	2	4	6
FERRUGINOUS SANDSTONE				
Fragment	-	-	3	3
WHITE SANDSTONE				
Fragment	-	3	13	16
TOTAL	836	152	90	1078

TABLE 18. SQUARE 475R505, LITHIC ARTIFACTS

Artifact Type	Level		Total
	1	2	
RED CHERT			
Primary Decortication Flake	20	12	32
Secondary Decortication Flake	39	31	70
Shatter	44	21	65
Undifferentiated Flake	211	139	350
Pebble	5	4	9
Class 1 Projectile Point	-	2	2
Class 2 Projectile Point	1	-	1
Class 8 Projectile Point	1	-	1
Biface Fragment	1	-	1
Utilized Flake	-	1	1
Retouched Flake	-	1	1
YELLOW CHERT			
Primary Decortication Flake	4	1	5
Secondary Decortication Flake	2	1	3
Undifferentiated Flake	6	2	8
Pebble	29	10	39
QUARTZ			
Pebble	9	5	14
OTHER CHERT			
Undifferentiated Flake	1	-	1
Pebble	-	6	6
FERRUGINOUS SANDSTONE			
Fragment	-	1	1
WHITE SANDSTONE			
Fragment	-	1	1
TOTAL	373	238	611

TABLE 19. SQUARE 474R523, LITHIC ARTIFACTS

Artifact Type	Level	Total
	1	
RED CHERT		
Primary Decortication Flake	23	23
Secondary Decortication Flake	95	95
Shatter	126	126
Biface Thinning Flake	30	30
Undifferentiated Flake	215	215
Class 1 Preform	1	1
Class 1 Projectile Point	1	1
Distal End	1	1
Micro Perforator	1	1
Utilized Flake	93	93
Retouched Flake	1	1
YELLOW CHERT		
Primary Decortication Flake	1	1
Secondary Decortication Flake	1	1
Shatter	3	3
Biface Thinning Flake	1	1
Undifferentiated Flake	4	4
Pebble	4	4
Utilized Flake	2	2
GREY CHERT		
Undifferentiated Flake	1	1
TOTAL	604	604

TABLE 20. SQUARE 460R525, LITHIC ARTIFACTS

Artifact Type	Level			Total
	1	2	3	
<b>RED CHERT</b>				
Primary Decortication Flake	38	17	-	55
Secondary Decortication Flake	177	11	6	194
Shatter	136	12	2	150
Biface Thinning Flake	22	1	3	26
Undifferentiated Flake	138	28	-	166
Pebble	15	9	-	24
Class 1 Preform	1	1	-	2
Biface Fragment	3	-	-	3
Class 1 Projectile Point	3	-	-	3
Projectile Point Stem	1	-	-	1
Distal End	2	-	-	2
Micro Perforator	-	-	1	1
Utilized Flake	41	5	1	47
<b>YELLOW CHERT</b>				
Primary Decortication Flake	5	2	-	7
Secondary Decortication Flake	4	1	2	7
Shatter	-	1	-	1
Undifferentiated Flake	-	3	1	4
Flaked Pebble	-	-	1	1
Pebble	37	9	18	64
<b>GREY CHERT</b>				
Undifferentiated Flake	1	-	-	1
<b>QUARTZ</b>				
Pebble	7	-	-	7
<b>OTHER CHERT</b>				
Pebble	42	2	-	44
<b>WHITE SANDSTONE</b>				
Fragment	1	2	-	3
<b>TOTAL</b>	<b>674</b>	<b>104</b>	<b>35</b>	<b>813</b>

TABLE 21. SQUARE 460R505. LITHIC ARTIFACTS

Artifact Type	Level		Total
	1	2	
RED CHERT			
Primary Decortication Flake	14	6	20
Secondary Decortication Flake	18	10	28
Shatter	12	11	23
Biface Thinning Flake	-	2	2
Undifferentiated Flake	183	9	192
Pebble	6	-	6
Small Triangular Preform	2	-	2
Distal End	-	1	1
Drill Shaft Fragment	1	-	1
Micro Perforator	2	-	2
Utilized Flake	1	4	5
Retouched Flake	-	1	1
YELLOW CHERT			
Primary Decortication Flake	3	-	3
Secondary Decortication Flake	-	1	1
Undifferentiated Flake	8	2	10
Pebble	11	10	21
QUARTZ			
Pebble	9	1	10
OTHER CHERT			
Pebble	7	-	7
FERRUGINOUS SANDSTONE			
Fragment	1	5	6
PECKED AND GROUND STONE ARTIFACTS			
Drilled Sandstone	1	-	1
TOTAL	279	63	342

TABLE 22. SQUARE 440R545, LITHIC ARTIFACTS

Artifact Type	Level			Total
	1	2	3	
RED CHERT				
Primary Decortication Flake	1	1	-	2
Secondary Decortication Flake	3	1	-	4
Shatter				
Pebble	1	-	-	1
YELLOW CHERT				
Undifferentiated Flake	2	-	-	2
Pebble	2	9	-	11
OTHER CHERT				
Pebble	-	1	-	1
FERRUGINOUS SANDSTONE				
Fragment	1	3	-	4
PECKED AND GROUND STONE ARTIFACTS				
Ground Sandstone Fragment	-	1	-	1
TOTAL	10	16	-	26

TABLE 23. SHELL FROM EXCAVATION UNITS

Square	Level/Zone	Weight (gms)	Weight/m <sup>3</sup>
500R545	1	3,048	3,810
" "	2	1,392	1,740
" "	3	15	19
" "	4	6	8
499.5R524.5	A	767	25,541
" "	B	1,420	37,871
" "	C-1	1,393	55,720
" "	C-2	227	5,341
500R554	1	1,107	5,535
" "	2	24	120
495R505	1	6,107	30,535
" "	2	2,022	10,110
480R525	1	13,604	68,020
" "	2	3,860	19,300
" "	3	11	55
480R545	1	3,622	18,110
" "	2	1,136	5,680
" "	3	9	45
475R505	1	782	3,910
" "	2	29	145
474R523	1	14,790	73,950
460R505	1	49	245
460R525	1	966	4,830
" "	2	28	140
" "	3	7	35

## V. FEATURES

A majority of the field effort at the Tibbee Creek site involved the investigation and excavation of features which were revealed by the stripping operations in Graded Areas A and B. Features are defined in this report as associated sets of artifacts, or in most cases the archaeological remains of various kinds of prehistoric constructions which by their size and nature must be dissected and examined in the field and cannot normally be taken back to the lab intact for further analysis. In a broad sense, features include pits, postholes, structural patterns, burials, and discrete artifact concentrations. This chapter will deal with pit type features and miscellaneous type features. Burials, postholes, and the architectural features of recognized structures will be treated in Chapters VI and VII.

For analysis and presentation, the 79 non-structural or non-burial features from the Tibbee Creek site were divided into seven groups including basin shaped pits, compound pits, irregular pits, smudge pits, stepped postholes, and miscellaneous or unique features. In addition, there are seven pit features for which the excavation data is incomplete and these are presented together. Feature numbers were also assigned to a number of natural features such as root casts, tree scars, and midden patches. These will be treated at the end of this chapter.

The ceramic artifacts recovered from features are presented in Table 24, the lithic artifacts in Table 25, and shell and bone are presented together in Table 26. Plan and cross section drawings of features are illustrated in Figures 8 through 14.

### Basin Shaped Pits

A total of 35 basin shaped pits were found at the site. Basin shaped pits are defined as round or oval pit features in which there





TABLE 24. (CONTINUED)

Artifact Type	33A	33B	34-5	36	37	38	41	42	43	44	46	47	48	49	50	51	55	57	58	59	61	62	63	64	65	
<b>SHELL TEMPER</b>																										
Mississippi Plain, var. Warrior	-	-	20	-	-	-	-	2	-	-	1	-	3	-	-	2	-	-	-	-	-	-	-	2	25	-
Notched Handle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mississippi Plain, var. Hale	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Moundville Incised, var. unspecified	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>GROG TEMPER</b>																										
Tishomingo Plain	32	91	3	98	12	11	18	14	18	3	2	16	14	22	35	3	9	5	2	25	112	432	13	8		
Tishomingo Cordmarked	10	25	-	23	13	2	5	2	2	2	-	-	5	58	25	1	7	1	1	15	58	271	1	1		
Alligator Incised	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheeler Check-Stamped	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-
Residual Grog Temper	-	-	10	-	-	-	4	3	-	-	-	-	-	-	19	-	-	-	-	-	-	-	-	1	-	6
<b>SAND TEMPER</b>																										
Baldwin Plain	13	25	15	4	16	-	-	4	-	3	6	-	21	-	9	3	9	1	2	15	20	108	-	-	-	-
Furrs Cordmarked	1	4	3	-	-	-	-	-	-	-	3	-	1	-	1	1	2	-	-	-	-	5	10	-	-	-
Alexander Incised	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alexander Punctate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Saltillo Fabric Impressed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sand Temper Podal Support	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Residual Sand Temper	-	-	-	2	-	-	-	-	1	-	-	-	-	-	9	-	-	-	-	-	-	-	4	-	-	
<b>FIBER TEMPER</b>																										
Wheeler Plain	-	-	3	-	-	-	-	-	-	-	-	-	-	-	7	-	-	-	-	-	-	1	2	13	-	
<b>MISCELLANEOUS</b>																										
Limestone Temper Plain	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fired Clay	-	-	5	-	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	-	-	-	
<b>(total)</b>	56	29	163	7	180	25	13	29	20	27	12	6	16	46	80	107	8	27	7	5	65	219	863	14	15	

TABLE 24. (CONTINUED)

Artifact Type	Feature Number										Total									
	68	69	70	71	73	74	75	76	77	78		79	80	82	88	90	94	100	102	102
SHELL TEMPER																				
Mississippi Plain, var. Warrior				3										1	2	8			14	107
Noded Handle																				2
Mississippi Plain, var. Hale																				2
Moundville Incised, var. unspecified																				1
GROG TEMPER																				
Tishomingo Plain	15	22	16	10	90	4	6	7	125	2	12	2	45	5	17	30	2	140	2025	
Tishomingo Cordmarked	9	2	7	1	52	2		5	54	2	8	1	12	1	11	1		41	901	
Alligator Incised																			3	
Wheeler Check-Stamped									1										7	
Residual Grog Temper	21			2	103			10	25		5	5	11					89	395	
SAND TEMPER																				
Baldwin Plain	1	2		4	22	4			12	1			4	2	5	1	2	30	499	
Furrs Cordmarked				1	5	2												1	55	
Alexander Incised																			1	
Alexander Punctate																			1	
Saltillo Fabric Impressed																			1	
Sand Temper Podal Support																			1	
Residual Sand Temper	3				30				14							1	11		79	
FIBER TEMPER																				
Wheeler Plain		9			2														1	41
MISCELLANEOUS																				
Limestone Temper Plain														1						2
Fired Clay	5				9								5							90
Total	54	35	23	21	313	12	6	22	231	5	25	13	74	8	35	41	5	328	4213	

TABLE 75. LITHIC ARTIFACTS FROM FEATURES

Artifact Type	Feature Number																																
	2	3	4	5	6	7	8	10	11	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	30	32	33						
<b>RED CHERT</b>																																	
Primary Decortication Flake	-	2	2	-	1	9	2	1	1	-	-	-	1	1	-	1	3	7	-	7	21	-	-	-	-	-	10	26					
Secondary Decortication Flake	-	7	17	5	2	2	-	-	12	3	2	14	15	9	4	3	1	52	4	18	27	-	2	6	-	-	14	89					
Shatter	3	6	9	3	11	3	5	-	17	-	4	17	19	8	2	2	7	56	17	22	1	-	2	1	-	-	69	52					
Biface Thinning Flake	-	11	3	3	-	-	-	-	2	-	-	1	4	-	3	-	8	-	17	-	-	-	-	-	-	-	4	24					
Undifferentiated Flake	2	6	26	8	10	7	21	1	32	2	1	18	15	8	8	8	12	49	18	80	146	-	4	17	-	-	100	111					
Pebble	-	2	-	1	6	1	4	2	18	-	3	4	2	-	-	-	2	1	-	51	-	-	8	-	-	-	13	7					
Flaked Pebble	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-					
Bifacial Tool Fragment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	1	-					
Class 1 Preform	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	2	1					
Class 2 Preform	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-					
Class 3 Preform	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Irregular Preform	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Class 1 Projectile Point	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-						
Class 2 Projectile Point	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-					
Class 3 Projectile Point	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Class 15 Projectile Point	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-					
Class 15 Projectile Point	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Distal End	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	1					
Missection	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Drill Fragment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1					
Microtool Fragment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2					
Retouched Flakes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1					
Utilized Flakes	-	1	-	-	-	-	-	-	2	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	4	3					
Core	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
<b>YELLOW CHERT</b>																																	
Primary Decortication Flake	1	-	-	-	-	-	-	1	-	-	-	-	1	-	-	1	-	1	-	1	-	1	-	1	-	-	8						
Secondary Decortication Flake	1	-	-	-	-	-	-	1	-	-	-	-	1	-	-	1	-	1	-	1	-	1	-	2	-	-	5						
Shatter	2	-	-	1	-	-	-	4	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	3	3						
Biface Thinning Flake	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-					
Undifferentiated Flake	-	-	-	-	-	2	-	1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9						
Pebble	3	3	-	7	11	3	1	1	24	1	4	4	-	-	-	-	15	15	5	24	24	4	1	12	-	31	16						
Flaked Pebble	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Class 1 Preform	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1						
Class 2 Preform	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Distal End	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Utilized Flake	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Adze	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Hammerstone	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
<b>GREEN CHERT</b>																																	
Shatter	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Biface Thinning Flake	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Undifferentiated Flake	-	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1					
<b>TALLAHATTA QUARTZITE</b>																																	
Secondary Decortication Flake	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Undifferentiated Flake	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
<b>QUARTZ</b>																																	
Shatter	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Pebble	-	1	1	-	3	-	-	-	-	-	1	4	-	-	-	-	3	-	-	5	1	-	-	-	-	-	7	6					
Hammerstone	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
<b>OTHER CHERT</b>																																	
Shatter	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Biface Thinning Flake	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-					
Undifferentiated Flake	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Pebble	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-					
<b>FERRUGINOUS SANDSTONE</b>																																	
Fragment	-	-	1	-	-	1	-	4	1	1	-	-	-	-	-	-	-	4	-	-	-	-	1	-	-	-	4						
Ground Fragment	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4						
Pitted Stone, Type 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Pitted Stone, Type 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
<b>MISCELLANEOUS</b>																																	
Burned Rock (g. not counted in total)	-	-	-	-	-	-	-	91	-	-	-	3472	-	-	-	1460	-	-	-	10	25	-	-	-	-	-	2400						
Charred Wood	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Limestone Fragment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
TOTAL	12	19	62	29	46	27	18	6	112	12	17	62	58	31	14	20	46	206	46	122	278	11	16	41	7	269	163						

TABLE 25. (CONTINUED)

Artifact Type	feature Number																											
	33A	33B	34-5	36	37	38	41	42	43	44	46	47	48	49	50	51	52	53	55	57	58	59	61	62	63	64		
RED CHERT																												
Primary Decortication Flake	5	5	22	-	-	2	4	-	1	-	-	-	2	1	1	0	-	-	-	1	-	1	6	10	49	-		
Secondary Decortication Flake	16	13	42	1	76	1	2	3	5	21	1	2	-	2	44	19	-	2	-	10	2	1	9	32	99	1		
Shatter	15	1	57	1	33	5	5	6	6	2	2	2	2	19	14	41	-	12	3	5	2	3	15	11	228	5		
Biface Thinning Flake	6	4	15	1	19	-	1	-	1	8	-	1	-	-	-	-	6	-	1	-	-	-	1	5	30	-		
Undifferentiated Flake	26	11	88	1	115	15	34	6	3	36	8	2	3	-	34	30	9	56	12	10	1	8	12	100	309	20		
Pebble	6	1	33	-	-	3	3	-	1	2	-	-	-	1	5	-	-	-	1	-	-	1	-	6	8	2		
Flaked Pebble	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Bifacial Tool Fragment	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Class 1 Preform	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	1	-		
Class 2 Preform	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Class 3 Preform	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Triangular Preform	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-		
Class 1 Projectile Point	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	8	1		
Class 2 Projectile Point	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Class 3 Projectile Point	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	-		
Class 13 Projectile Point	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Class 15 Projectile Point	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Distal End	1	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	2	-		
Midsection Fragment	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Drill Fragment	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Microtool Fragment	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1		
Retouched Flakes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1		
Utilized Flakes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	4	1	1		
Core	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-		
YELLOW CHERT																												
Primary Decortication Flake	-	2	-	-	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	1	1	1	1	-		
Secondary Decortication Flake	1	2	1	-	4	-	-	-	1	-	-	-	-	1	1	1	-	-	-	-	-	-	1	1	1	-		
Shatter	1	-	2	-	2	-	-	-	1	-	-	-	-	5	1	4	-	-	-	-	-	-	-	-	11	-		
Biface Thinning Flake	-	1	1	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Undifferentiated Flake	2	5	7	-	3	1	2	-	-	-	-	-	-	10	1	2	2	3	-	1	1	-	-	8	15	1		
Pebble	-	3	18	2	5	9	1	12	-	2	-	-	1	23	5	14	-	1	3	2	-	2	4	15	36	1		
Flaked Pebble	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Class 1 Preform	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-		
Class 2 Preform	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-		
Distal End	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Utilized Flake	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Adze	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Hammerstone	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-		
GREY CHERT																												
Shatter	-	-	-	-	-	2	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Biface Thinning Flake	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-		
Undifferentiated Flake	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
TALLAHATTA QUARTZITE																												
Secondary Decortication Flake	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Undifferentiated Flake	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
QUARTZ																												
Shatter	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	-	-		
Pebble	-	-	10	-	4	-	-	-	-	-	-	-	-	2	5	-	-	-	-	2	1	1	1	2	7	1		
Hammerstone	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
OTHER CHERT																												
Shatter	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-		
Biface Thinning Flake	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-		
Undifferentiated Flake	1	-	-	-	-	3	10	-	-	-	-	-	-	-	1	-	2	-	-	-	-	-	-	-	7	-		
Pebble	-	-	1	-	26	-	-	-	4	-	-	-	-	12	3	-	26	-	7	-	-	-	8	26	41	-		
FERRUGINOUS SANDSTONE																												
Fragment	1	-	4	-	11	1	-	-	-	-	-	-	-	2	4	-	-	-	-	3	-	1	5	4	-			
Ground Fragment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-		
Pitted Stone, Type 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Pitted Stone, Type 2	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
MISCELLANEOUS																												
Burned Rock (g) (not counted in total)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Petrified Wood	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Limestone Fragment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	-		
TOTAL	84	50	307	6	301	37	57	37	18	79	11	7	9	72	127	130	18	102	20	19	11	17	61	228	863	33		

TABLE 25. (CONTINUED)

Artifact Type	Feature Number																	TOTAL			
	65	68	69	70	71	73	74	75	76	77	78	79	80	82	87	88	90		94	100	102
RED CHERT																					
Primary Decortication Flake	-	2	-	3	5	12	-	-	1	2	35	-	2	6	-	-	-	2	2	2	283
Secondary Decortication Flake	1	11	4	-	14	142	4	2	3	30	13	2	2	7	1	-	9	9	2	22	992
Shatter	2	5	17	1	6	80	4	2	2	62	34	3	1	31	-	-	6	18	2	18	1123
Biface Thinning Flake	-	1	3	-	-	33	2	-	2	13	1	-	-	9	1	-	12	3	-	4	263
Undifferentiated Flake	6	19	30	3	16	132	3	3	5	53	3	4	2	18	1	1	-	7	2	134	2101
Pebble	1	2	-	-	2	11	-	2	-	5	111	-	1	1	1	-	18	-	2	5	360
Flaked Pebble	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	-	-	13
Bifacial Tool Fragment	-	-	-	-	-	5	2	1	-	-	-	-	1	-	2	-	-	-	-	1	17
Class 1 Preform	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8
Class 2 Preform	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Class 3 Preform	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	6
Triangular Preform	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Class 1 Projectile Point	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	14
Class 2 Projectile Point	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Class 3 Projectile Point	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
Class 13 Projectile Point	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Class 15 Projectile Point	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Distal End	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	10
Midsection	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Drill Fragment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	5
Microtool Fragment	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	1	-	-	-	9
Retouched Flakes	-	-	-	-	-	10	-	-	-	5	-	-	-	-	1	-	-	-	-	-	18
Utilized Flakes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20
Core	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
YELLOW CHERT																					
Primary Decortication Flake	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	1	26
Secondary Decortication Flake	-	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	2	1	1	37
Shatter	-	-	-	1	-	5	-	-	-	2	-	1	1	-	-	-	1	2	1	-	56
Biface Thinning Flake	-	-	-	-	-	6	1	-	-	-	1	-	-	-	-	-	-	-	-	-	14
Undifferentiated Flake	-	1	-	-	-	13	1	-	-	1	-	-	-	2	-	-	-	-	3	1	101
Pebble	1	5	-	4	-	23	1	-	3	3	11	1	1	6	1	2	8	-	1	5	446
Flaked Pebble	-	1	-	-	-	-	-	-	1	1	-	-	-	1	-	-	-	-	-	-	5
Class 1 Preform	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5
Class 2 Preform	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Distal End	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Utilized Flake	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Adze	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Hammerstone	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
GREY CHERT																					
Shatter	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5
Biface Thinning Flake	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Undifferentiated Flake	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6
TALLAHATTA QUARTZITE																					
Secondary Decortication Flake	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1
Undifferentiated Flake	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
QUARTZ																					
Shatter	-	2	-	-	-	6	-	1	-	2	4	-	1	2	-	-	-	-	2	-	88
Pebble	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Hammerstone	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
OTHER CHERT																					
Shatter	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4
Biface Thinning Flake	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Undifferentiated Flake	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24
Pebble	1	4	6	-	-	8	-	-	-	12	-	-	5	4	-	-	-	-	-	21	218
FERRUGINOUS SANDSTONE																					
Fragment	2	8	1	1	1	6	-	-	-	3	-	-	2	-	2	-	3	8	1	-	93
Ground Fragment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5
Pitted Stone, Type 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Pitted Stone, Type 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
MISCELLANEOUS																					
Burned Rock (g)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	420
(not counted in total)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7885
Petrified Wood	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Hammerstone Fragment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8
TOTAL	14	62	62	13	44	503	19	13	17	195	214	12	18	93	8	3	511	59	19	217	6412

TABLE 26. SHELL AND BONE FROM FEATURES

Feature Number	Shell (grams)	Vertebrate Bone Counts					Total
		Mammal	Bird	Reptile	Amphibian	Fish	
2	133	2	-	2	-	-	4
3	909	10	4	6	-	5	25
4	767	18	-	2	-	-	20
5	540	8	-	1	-	-	9
6	369	13	1	1	-	-	15
7	223	8	-	1	-	-	9
8	1364	20	-	16	-	23	59
10	178	-	-	-	-	-	-
14	204	-	-	-	-	-	-
15	269	10	-	4	-	-	14
16	426	17	1	1	-	-	19
17	284	31	3	-	1	2	37
18	1704	-	-	-	-	-	-
19	341	-	-	-	-	-	-
20	714	21	-	-	1	-	22
21	149	15	-	1	-	-	16
22	1364	44	-	5	-	2	51
23	881	12	-	-	-	2	14
24	155	18	1	-	-	-	19
25	147	8	-	2	-	-	10
26	-	-	-	-	-	-	-
27	792	21	-	-	1	-	22
28	4544	95	18	2	-	5	120
30	4714	73	6	11	-	1	91
32	6873	129	3	18	-	4	154
33	2822	167	8	15	-	4	194
33A	2471	53	6	3	-	4	66
33B	1392	148	13	9	-	-	170
34-5	10980	142	12	12	-	2	168
36	341	1	-	-	-	2	3

TABLE 26. (CONTINUED)

Feature Number	Shell (grams)	Vertebrate Bone Counts					Total
		Mammal	Bird	Reptile	Amphibian	Fish	
37	16560	216	28	32	-	11	287
38	3039	20	4	4	-	-	28
41	2132	17	-	1	-	2	20
42	1895	12	1	3	-	1	17
43	589	5	2	1	-	-	8
44	539	11	1	3	-	-	15
46	82	1	-	-	-	-	1
47	28	3	-	-	-	-	3
48	138	2	-	-	-	-	2
49	1948	43	2	21	-	1	67
50	170	4	5	-	-	-	9
51	1704	27	15	3	-	2	47
55	450	5	-	2	-	-	7
57	1108	40	3	3	-	-	46
58	57	1	-	-	-	-	1
59	114	1	-	-	-	-	1
61	4658	49	4	9	-	1	63
62	4629	142	4	29	-	3	178
63	21195	2347	119	145	8	240	2859
64	341	10	1	1	-	-	12
65	586	4	-	2	-	-	6
67	228	19	-	1	-	-	20
68	817	18	-	1	-	-	19
69	1867	21	-	1	-	-	22
70	50	3	-	-	-	-	3
71	1105	23	1	1	-	1	26
73	12468	276	7	25	-	4	312
74	202	4	-	-	-	-	4
75	192	3	-	-	-	-	3
76	167	13	-	-	-	-	13



TABLE 26. (CONTINUED)

Feature Number	Shell (grams)	Vertebrate Bone Counts					Total
		Mammal	Bird	Reptile	Amphibian	Fish	
77	27974	293	4	36	-	5	338
78	170	3	1	2	-	-	6
79	21794	31	1	5	-	-	37
80	190	3	-	-	-	-	3
82	1272	39	2	6	-	2	49
83	4	-	-	1	-	-	1
87	124	7	-	3	-	-	10
88	212	2	-	-	-	-	2
90	1236	12	-	4	-	-	16
94	436	37	1	4	-	6	48
100	114	-	-	-	-	-	-
102	38794	179	12	37	-	22	250
Total	217428	5032	294	498	11	357	6190

is a continuous transition between the sides and bottom of the pit, usually in a smooth curve. Most are hemispherical or sub-hemispherical in cross section, but some of the larger and shallower examples tend to have flattened bottoms.

The sample of basin shaped pits from the Tibbee Creek site varies greatly in size and depth. Their maximum length ranges from 130 to 25 cm with a mean of 57 cm. The width, measured at the widest point perpendicular to the length ranges from 120 to 18 cm with a mean of 47 cm. Finally, maximum depth ranges from 40 to 5 cm with a mean of 16 cm. Six of the basin shaped pits are associated with the Mississippian component, 26 are associated with the Miller III component, and one is of uncertain association.

Summary data for basin shaped pits is given in Table 27. Pits that could not be adequately treated in the table format are discussed individually below. Plan and cross sectional drawings of basin shaped pits are presented in Figures 8, 9 and 10.

Feature 19. This medium sized basin shaped pit was found in the southern portion of Graded Area A. From the top, the pit was kidney shaped with dimensions of 52 and 42 cm. In profile, the west wall dropped acutely to the rounded bottom while the east wall sloped gently to the rounded bottom. The maximum depth of the pit, located at about the center, was 19 cm. The general fill was dark brown clayey sand containing scattered broken shell. At the west end, there was a concentration of mussel valves in an area about 20 cm in diameter extending 2.5 cm into the pit. No charcoal was noted in the fill. Analysis of the small sample of animal bone from the pit (Chapter X, Table 61 show snake, turtle, fish and small rodents that were probably incidental inclusions. The overall density of artifacts was low, consisting of 12 sherds and 14 pieces of chert debitage. The latest ceramics are Tishomingo series, indicating a Miller III association.

Feature 22. This feature consists of two basin shaped pits with one intruding the other. The intruded pit on the south end is

designated 22A and the intrusive pit on the north end is designated 22B. The two parts of the feature were visible before excavation as separate concentrations of material, but no boundaries in soil color or texture could be noted. After cross sectioning, a vague boundary could be seen but the fills were not separated in the field.

Feature 22A appears to have been an oval pit about 60 cm long and 30 cm wide with steeply sloping walls and a flattened bottom at a maximum depth of 23 cm. Feature 22B appears to be a simple basin 45 cm long, 30 cm wide and 9 cm deep that intruded into the southern fifth of Feature 22A. The fill from both pits was dark brown clayey sand. Sixty-eight of the 71 sherds were grog tempered, with the ratio of plain to cordmarked about 7 to 1. The fill contained an interesting assemblage of red chert tools. The Class 2 and Class 13 projectile points listed in Table 25 were found in Feature 22A. Also within the general feature fill were two distal ends from medium size points, two preform fragments, a fragment of a drill shaft and a moderately large amount of red chert debitage.

Feature 29. This was a small basin shaped pit located at the southeast edge of Graded Area B. The oval top was 65 cm long and 44 cm wide. The pit profile showed an almost hemispherical shape with rounded sides and bottom with a maximum depth of 25 cm. The pit was filled with dark brown clayey sand containing mussel shell, bone, artifacts and small scattered charcoal. Unfortunately, except for a flotation sample, the fill from this feature was lost before it was screened. It was placed in a wheelbarrow when the feature was excavated on March 31, 1977, but when the rains that began April 1 threatened to flood the site again on April 3, the fill was discarded in order to salvage the wheelbarrow. The only artifact specimens remaining from the feature are two unfinished antler tine projectile points (see Ch. VIII) that were bagged separately during excavation. The excavation form notes that shell tempered sherds were present in the fill, indicating a Mississippian association.

TABLE 27. BASIN SHAPED PITTS

Feature Number	Component	Dimensions (cm)			Shape	Fill	Content	Remarks
		L	W	D				
8	Miss.	41	40	22	Circular, with steeply sloping sides and round bottom.	Dark brown clayey sand.	Shell, bone, charcoal, pottery, lithics.	Density and size of shell decreases toward bottom.
14	Miss.	28	27	18	Oval with steeply rounded sides and round bottom.	Dark brown clayey sand.	Shell, pottery, lithics.	
15	M. III	48	40	19	Oval with west wall steeply sloping and other walls less steep.	Dark brown clayey sand.	Shell, bone charcoal, pottery, lithics.	Intruded into Posthole 111.
16	M. III	39	30	16	Circular, hemispherical cross section.	Dark brown clayey sand.	Shell, bone, pottery, lithics.	
18	M. III	76	50	20	Irregular oval, rounded sides and bottom.	Dark brown clayey sand.	Whole shell, bone pottery, lithics.	
19	M. III	52	42	19	Irregular oval, gently curved sides and bottom.	Dark brown clayey sand.	Shell, pottery, lithics.	Shell confined to a small pocket in west half.
22A	M. III	60	42	22	Oval, steep curved sides, flattened bottom.	Dark brown clayey sand.	Shell, bone, pottery, lithics.	Intruded by Feature 22B, see description.
22B	M. III	45	40	9	Circular, gently curved sides and bottom.	Dark brown clayey sand.	Shell, bone, pottery, lithics.	Intruded into Feature 22A. Fills not separated, see description.
27	M. III	30	30	14	Round with hemispherical cross section.	Dark brown clayey sand.	Shell, bone, pottery, lithics.	

TABLE 27. (CONTINUED)

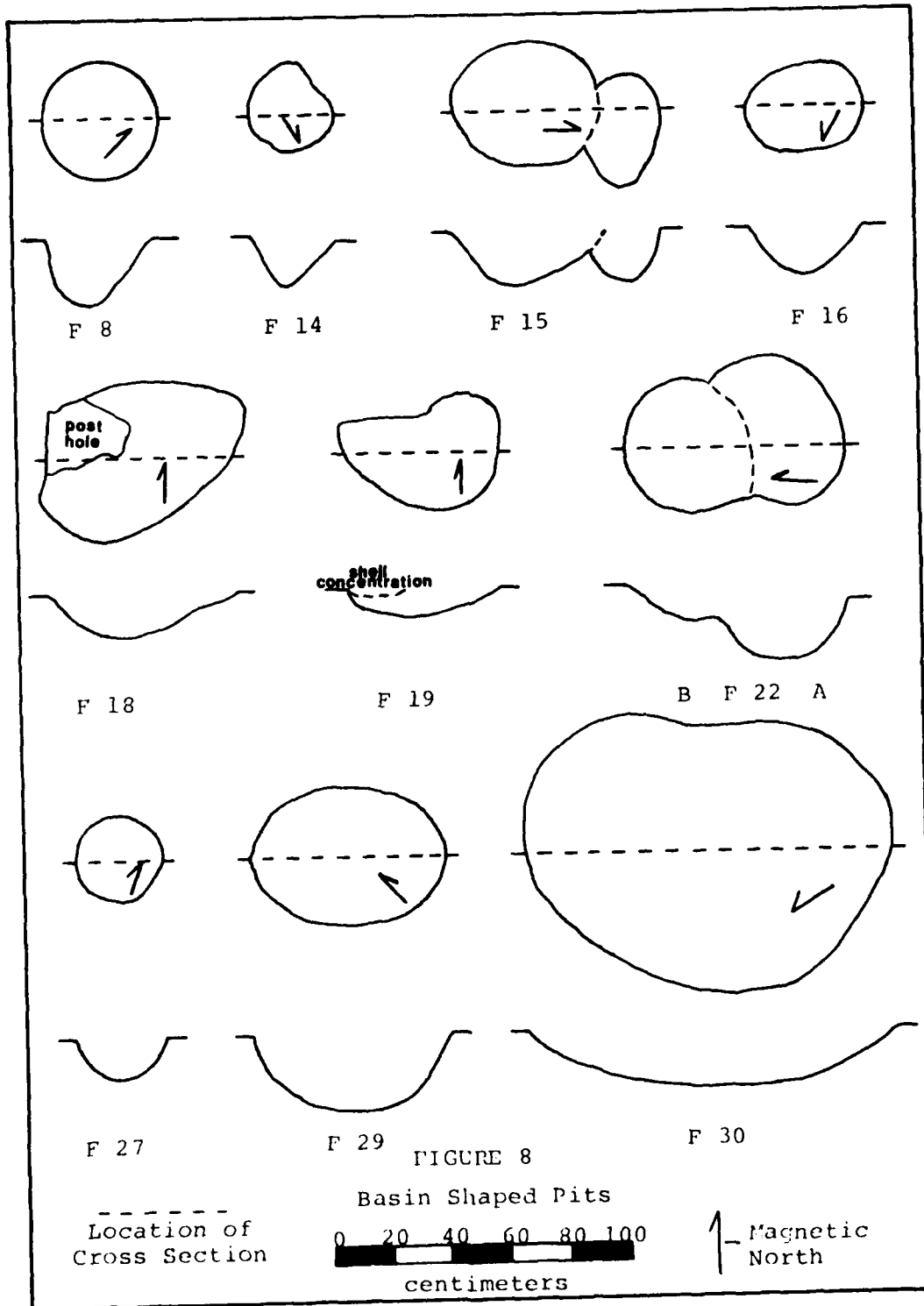
Feature Number	Component	Dimensions (cm)			Shape	Fill	Content	Remarks
		L	W	D				
29	Miss.	65	44	25	Oval with hemispherical cross section.	Dark brown clayey sand.	Shell, bone, pottery, lithics.	Feature fill lost in flood.
30	M. III	123	97	22	Oval, steep curved sides, flattened bottom.	Dark brown clayey sand.	Shell, bone, pottery, lithics.	
33A	M. III	90	75	40	Oval, deep, hemispherical cross section.	Dark brown to black clayey sand.	Shell, bone, pottery, lithics, scattered charcoal.	See description.
36	M. III	35	25	17	Roundish, steeply sloping sides and round bottom.	Brown sandy clay.	Pulverized shell, bone, pottery, lithics.	
38	M. III	53	35	15	Oval, with hemispherical cross section.	Dark brown to black clayey sand.	Shell, bone, pottery, lithics.	
43	M. III	38	23	8	Elongated oval, shallow with curved sides and bottom.	Dark brown clayey sand.	Shell, bone, pottery, lithics.	
44	M. III	80	50	11	Oval, steep curved sides, irregular bottom.	Dark brown clayey sand.	Shell, bone, pottery, lithics.	
46	M. III	35	29	11	Irregular oval, shallow curved sides, rounded bottom.	Light brown and dark brown clayey sand.	Shell, bone, pottery, lithics.	See description.
47	Miss.	39	38	27	Circular, with bowl shaped cross section	Medium brown sandy clay.	Crushed shell, bone, pottery, lithics.	Low density of material.
48	M. III	33	30	8	Squarish oval, with shallow irregular bottom.	Mottled dark brown clayey sand.	Shell, bone, pottery, lithics.	

TABLE 27. (CONTINUED)

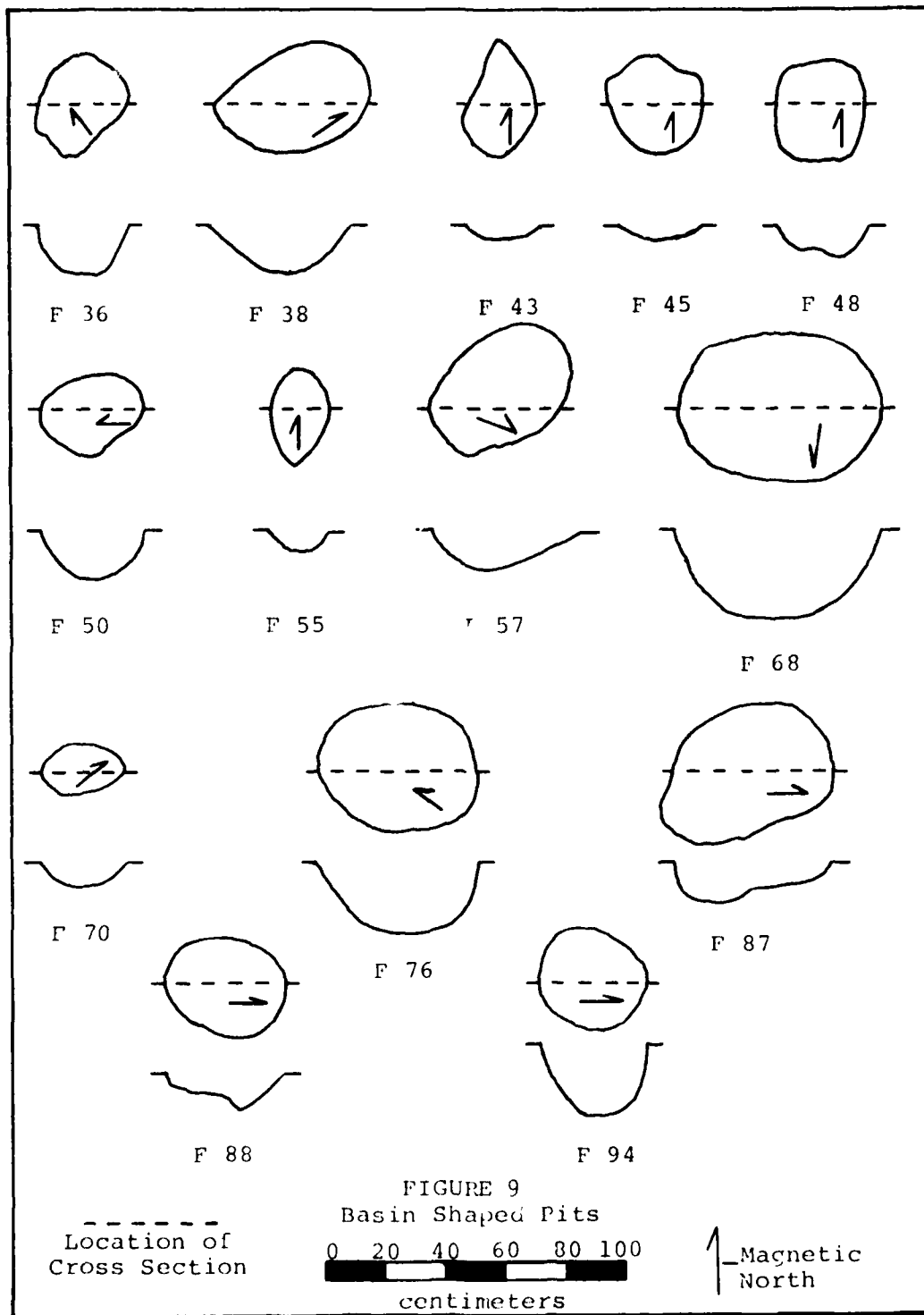
Feature Number	Component	Dimensions (cm)			Shape	Fill	Content	Remarks
		L	W	D				
50	M. III	35	30	17	Irregular oval, with a deep bowl shaped cross section.	Dark brown to black clayey sand.	Pottery, lithics some shell and bone.	See description.
55	M. III	35	19	7	Oval, straight sides and round bottom.	Light brown sand.	Shell bone, pottery, lithics.	
57	M. III	49	44	13	Oval, with rounded sides and bottom.	Dark brown clayey sand.	Shell, bone, pottery, lithics.	See description.
58	M. III	38	26	13	Oval, with steep rounded sides and round bottom.	Dark brown clayey sand.	Lithics, pottery, shell, bone.	
61	M. III	130	120	8	Oval, with short curved sides and flattened bottom.	Medium brown clayey sand.	Shell, bone, pottery, lithics.	
63A	Miss.	108	92	32	Round/oval, steep curving sides, rounded bottom.	Dark brown clayey sand.	Shell, bone, pottery, lithics.	Intruded by Feature 638, see description.
64	M. III	70	40	5	Oval, shallow irregular bottom.	Dark brown clayey sand.	Shell, bone, pottery, lithics.	
68	M. III	67	48	29	Oval, deep with rounded sides and bottom.	Dark brown clayey sand.	Shell, bone, pottery, lithics.	
70	M. III	25	18	9	Irregular oval, rounded sides and bottom.	Dark brown clayey sand.	Shell, bone, pottery, lithics.	
76	M. III	50	42	23	Oval, curved sides and bottom with south wall at a less acute angle.	Dark brown clayey sand.	Shell, bone, pottery, lithics.	

TABLE 27. (CONTINUED)

Feature Number	Component	Dimensions (cm)			Shape	Fill	Content	Remarks
		L	W	D				
77	M. III	108	100	13	Irregularly oval, smoothly curved sides and bottom.	Dark brown sandy clay.	Shell, bone, pottery, lithics.	High density of mammal bone.
79	M. III	99	95	11	Round/irregular, curved sides, round flattened bottom.	Dark brown clayey sand.	Much shell, bone, pottery, lithics.	
80	M. III	42	40	8	Round, hemispherical cross section.	Dark brown clayey sand.	Shell, bone, pottery, lithics.	
87	?	53	43	14	Irregular oval, curved sides and bottom, deeper at south end.	Light brown clayey sand.	Shell, bone, lithics.	Very little material, no pottery.
88	M. III	40	31	11	Irregularly oval, curved sides and irregular bottom.	Dark brown clayey sand.	Crushed shell, bone, pottery, lithics.	
94	Miss.	35	34	23	Round, steeply curved sides and round bottom.	Dark brown clayey sand.	Shell, bone, pottery, lithics.	See description.







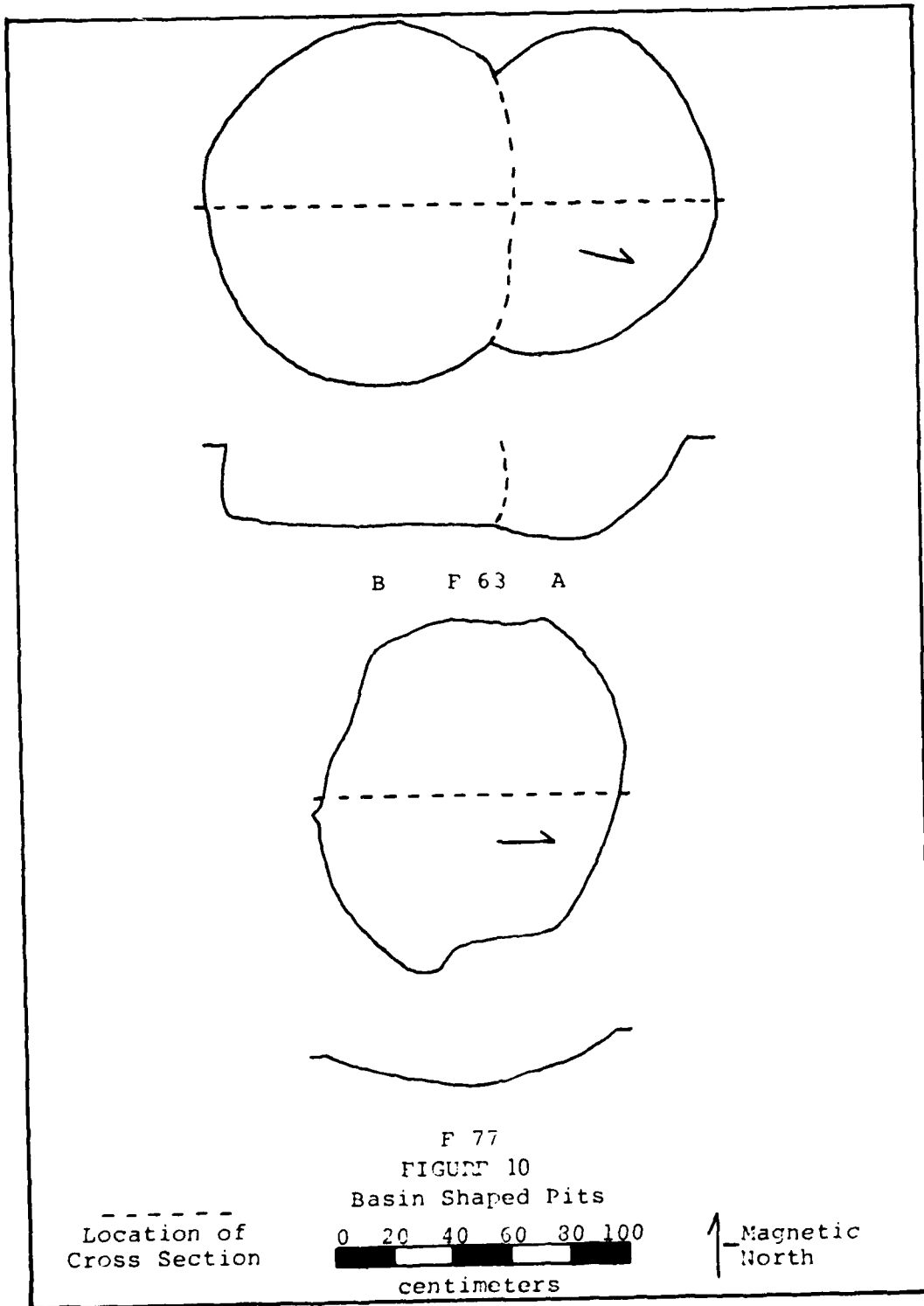


PLATE V

Unnumbered pit feature in Graded Area A  
after scouring by floodwaters showing arti-  
facts sorted from fill.

PLATE VI

Feature 77 (field number 123) after cross  
sectioning.



Plate V.



Plate VI.

Feature 33. This is a very complex feature located immediately east of and oriented parallel to Feature 32, but apparently is associated with an earlier component. The top of the pit was roughly oval with dimensions of 140 cm and 90 cm. When a depth of 12 cm was reached during removal of the western half during cross sectioning, two distinct circular pits were recognized within the confines of the original pit outline. The southern pit was designated Feature 33A and the northern pit Feature 33B. After the distinction between the two sub-features was made, the fills were excavated and processed separately.

The southern pit, 33A had top dimensions of 90 cm east-west and 75 cm north-south. In cross section the pit was basin shaped with a maximum depth of 40 cm. Feature 33B had top dimensions of 70 by 35 cm and an irregular cross section with a maximum depth of 15 cm. The fill in 33A was a dark brown clayey sand which contained a large amount of shell and some animal bone. The fill in Feature 33B was a light-brown less-clayey sand which contained less shell and more animal bone than Feature 33A. A complete or almost complete carapace of a box turtle (Terrapene carolina) was present in the east half of Feature 33B.

There are significant differences in the ceramic assemblages between 33A and 33B which suggest that even though they appeared as one pit when encountered, they are actually separate features with Feature 33B being earlier than Feature 33A. The basal portion of 33B contained only Baldwin Plain and Furrs Cordmarked ceramics. A number of these were rather large sherds but no vessels could be reconstructed. Feature 33A contained Tishomingo Plain and Cordmarked in addition to Baldwin and Furrs.

Feature 46. This small, basin shaped pit contained two different fills. The top of the pit was an irregular oval measuring 35 by 29 cm. In approximately the center of the pit there was a bilobed area of dark brown clayey sand which extended to a depth of only 3 cm. The rest of the pit was filled with a light brown clayey sand and had a maximum depth of 11 cm. The pit contained shell, bone, pottery and lithics but in relatively small amounts.

Feature 50. This small Miller III pit was roughly oval in plan view and bowl shaped or hemispherical in cross section. The top measured 35 by 30 cm and the maximum depth was 17 cm. Very little shell and bone was included in the dark brown-black clayey sand fill, but the number of artifacts was high considering the relatively small size of the pit. The 80 pottery sherds from the fill included 22 Tishomingo Plain and 58 Tishomingo Cordmarked. Of the 134 pieces of chert debitage and tool fragments, 95 were red chert including one preform, and 39 were yellow chert including three preforms. It is interesting that the ratio of plain to cordmarked pottery in this feature sample is approximately 2 to 1 in favor of cordmarking, which is the opposite ratio found in most features containing Tishomingo series pottery.

Feature 57. This feature appears to be two small pits, one intruding the other, but the distinction could be made only on the basis of shape as no differences in the fills could be observed. The larger pit at the east side is a deep basin, with top dimensions of about 38 by 30 cm and a maximum depth of 18 cm. The smaller pit at the west end is also a deep basin, 30 by 25 cm and 14 cm deep. The fill in both pits was a dark brown clayey sand with very scattered shell and artifacts. The latest pottery found in the fill is the Miller III Tishomingo series.

Feature 63. This feature appears to be two different pits, with the southern pit intrusive into the northern pit. The bilobed shape of the pit top suggested that two pits were present, but even after cross sectioning, the two fills could only be distinguished by the presence of less charcoal toward the northern end of the pit profile. No other differences in fill could be discerned and a dividing line could not be determined, hence the two fills are presented together in the tables. The southern pit appears to have been cylindrical in shape with a round top, straight sides and a flat bottom. The top measured 120 by 102 cm and the pit had a maximum depth of 28 cm. The

northern pit appears to have been bowl shaped with a round top, slanting walls and a more or less flat bottom. The diameter of the top was 90 cm and the maximum depth 32 cm. The fill in both sides of the feature was a dark brown sandy clay that contained large amounts of shell, bone and artifacts. The vast majority of the chert debris is red chert, and a number of chipped tools were found. The tools include a Class 1 preform, a small triangular preform, eight Class 1 small triangular points, a Class 3 point, a microtool fragment, and a re-touched flake. The only tool of yellow chert is a large pebble with extensive end battering that probably functioned as a hammerstone. A Type 1 pitted stone of ferruginous sandstone was also found in the feature. Of the 863 sherds found in the feature fill, 25 are Mississippi Plain var. Warrior which indicates a Mississippian association for the feature. It should be mentioned that shell-tempered pottery was found in both the northern and southern sides of feature 63.

Feature 94. This small bowl shaped pit had top dimensions of 35 and 34 cm and a maximum depth of 23 cm. The dark clayey sand fill contained a moderate amount of shell, bone, pottery and lithics, but is notable for the inclusion of two decorated pieces of shell tempered pottery. A noded strap handle (Plate XXIX M) and a noded Mississippi Plain var. Warrior rim (Plate XXX E) were found in the fill.

#### Compound Pits

Thirteen features were classed as compound pits. This class of pit is defined as those pits that have definite sides and bottoms. They are usually oval or circular in plan, have vertical or inslanting straight sides, and flat or slightly rounded bottoms. In all cases however, there is a distinct break between the sides and bottom, and in most cases the pits are symmetrical and seem to have been rather carefully dug to a purposeful form. These compound pits are also highly variable in size. Length ranges from 130 to 25 cm with a mean of 76 cm, width ranges from 102 to 22 cm with a mean of 59 cm, and depth ranges from 39 to 7 cm with a mean of 24 cm. As these figures show,

TABLE 28. COMPOUND PITS

Feature Number	Component	Dimensions (cm)			Shape	Fill	Content	Remarks
		L	A	D				
2	Miss.	35	31	17	Oval, straight to slightly curved sides, flat bottom.	Dark brown clayey sand.	Shell, bone, pottery, lithics.	Recognized at 20 cm B.S. in Sq. 480R545.
10	M. III	25	22	7	Round/oval, straight sides, flat bottom.	Dark brown clayey sand.	Shell, pottery, lithics.	
21	M. III	49	40	19	Circular, straight walls, flat bottom.	Mottled brown clayey sand.	Shell, bone, pottery, lithics.	
26	M. II	51	51	27	Round, straight to slightly inslanting sides, flat bottom	Black sandy clay inside lining of orange fired clay.	Charcoal, pottery lithics.	See description.
28	M. II M. III ?	130	96	25	Irregular circle, straight slanting walls, flat bottom sloping to west.	Dark brown-black sandy clay.	Shell, bone, charcoal, pottery, lithics.	See description.
32	Miss.	90	58	39	Oval, straight almost vertical walls, rounded bottom.	Dark brown clayey sand.	Shell, bone, scattered charcoal, pottery, lithics.	See description.
37	M. III	105	65	26	Oval, south wall vertical, north wall slanted, flat bottom.	Dark brown clayey sand.	Shell, bone, pottery, lithics, fired clay.	See description.
62	Miss.	118	82	35	Irregular oval, slanting sides, flat bottom at deeper south end.	Dark brown clayey sand.	Shell, bone, scattered charcoal, pottery, lithics	See description.
63B	Miss.	120	102	28	Roughly circular, straight sides, flat bottom.	Dark brown clayey sand.	Shell, bone, charcoal, pottery, lithics.	Intrusive into Feature 63A, see description.



TABLE 26. (CONTINUED)

Feature Number	Component	Dimensions (cm)			Shape	Fill	Content	Remarks
		L	W	D				
82	Miss.	65	60	33	Roughly circular, north side vertical, south side sloping continuous with bottom.	Dark brown clayey sand.	Shell, bone, pottery, lithics.	Fill contained a large number of Gar scales.
84	?	35	35	14	Circular, straight sides, slightly rounded bottom.	Black clayey sand.	Charcoal.	Did not contain any shell, bone or artifacts.
85	?	48	44	15	Circular, straight walls, flat bottom.	Dark brown clayey sand.	Shell, little bone, charcoal, lithics.	Pit fill lost prior to screening.
102	Miss.	120	85	31	Oval, east wall vertical, west wall sloping, flat bottom in east end.	Dark brown clayey sand, three strata of varying shell content present.	Shell, bone, pottery, lithics.	Sides and bottom heavily fired, see description.

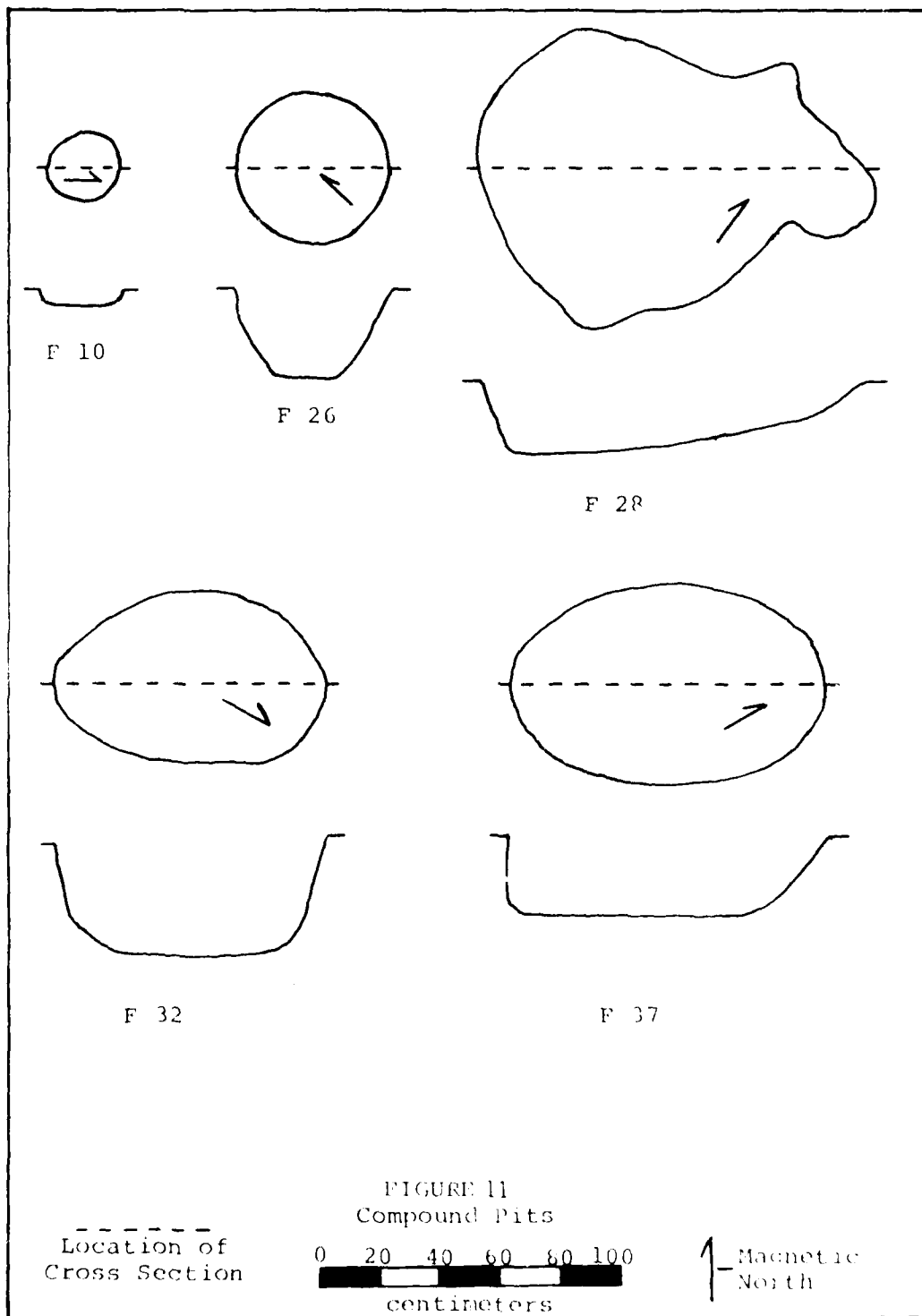


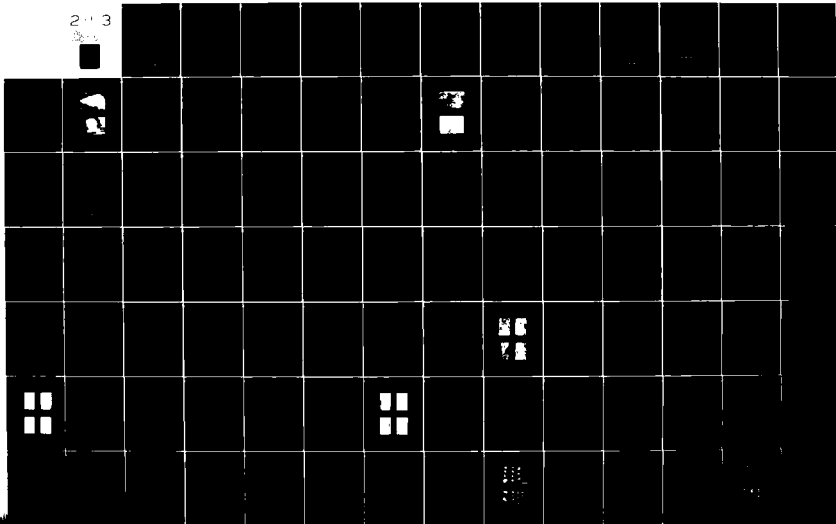
FIGURE 11  
Compound Pits

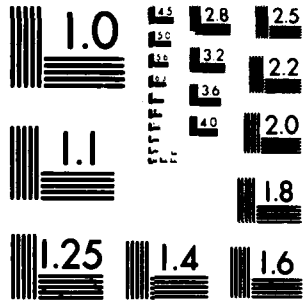
AD-A107 172

MISSISSIPPI STATE UNIV MISSISSIPPI STATE DEPT OF ANTH--ETC F/G 5/6  
ARCHAEOLOGICAL SALVAGE EXCAVATIONS AT THE TIBBEE CREEK SITE (22--ETC(U)  
JUN 81 J W O'HEAR, C LARSEN, M M SCARRY DACW01-77-C-0015  
NL

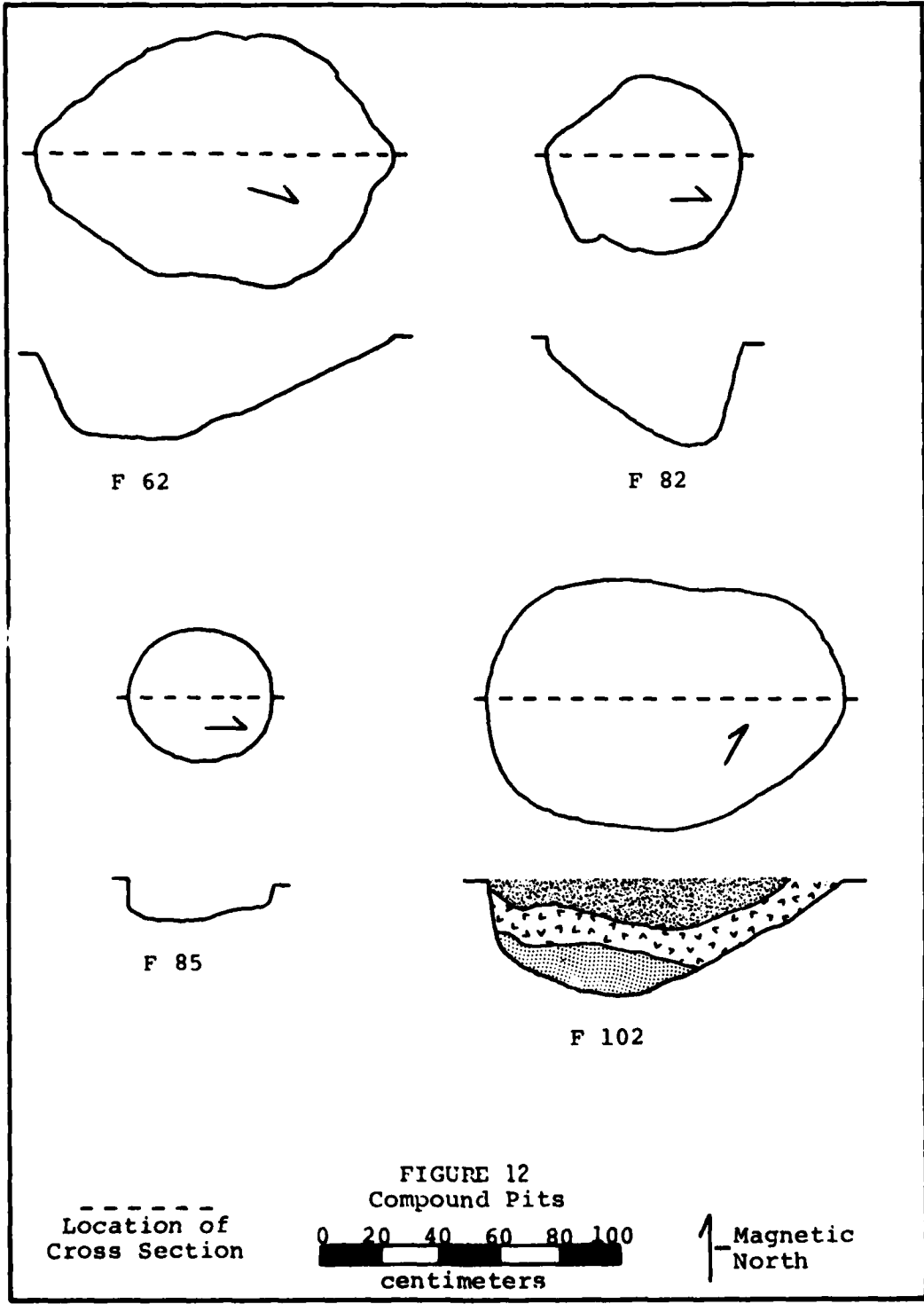
UNCLASSIFIED

2 3





MICROCOPY RESOLUTION TEST CHART  
NATIONAL BUREAU OF STANDARDS 1963-A<sub>1</sub>



F 62

F 82

F 85

F 102

-----  
Location of  
Cross Section

0 20 40 60 80 100  
centimeters

↑ Magnetic  
North

FIGURE 12  
Compound Pits

the compound pits are generally deeper than the basin shaped pits.

Of the 13 compound pits, six are associated with the Mississippian component, three are associated with the Miller III component, one is associated with the Miller II component, one is either Miller II or Miller III, and two are of uncertain association.

Feature 26. This medium sized pit was found directly under the legs of Burial 1 and showed signs of intense firing. The top of the pit was circular, measuring 51 cm in diameter, and had a maximum depth of 27 cm. The sides were more or less flat and sloped to a flattened bottom. Fired clay from 1 to 2 cm thick was present in patches on the walls and bottom of the pit, with greater thicknesses occurring on the bottom. The fill was homogeneous and consisted of a black clayey fill that contained no shell, bone or visible pieces of charcoal but did contain numerous small bits of fired clay. No fired clay is listed in Table 28 because the small pieces in the fill all passed the ¼-inch screen or dissolved and the fired clay adhering to the bottom and walls was not removed. The artifact assemblage from the pit was small, consisting of one Baldwin Plain sherd, 11 pieces of yellow chert debitage and a quartz pebble. The sherd suggests a Miller I association, and the total lack of red chert is interesting.

Feature 28. This large pit is located in the southeast part of Graded Area B. From the top the pit was shaped like a ragged oval, with the west side rounded and the east side irregularly shaped. The dimensions of the top were 130 cm in maximum length and 96 cm in maximum width. The west wall was almost vertical, meeting the bottom at a depth of 25 cm. The east wall sloped at a less acute angle and met the bottom at a depth of 12 cm. The pit bottom was flat and sloped downward from east to west.

The pit appears to have been filled with primary refuse rather than with general midden debris. The dark brown, almost black, clayey sand of the fill contained a large amount of mussel shell, all of which appeared to be the same species. The mussels were present in

whole unbroken valves and also in unopened paired valves. Of the 120 pieces of animal bone in the fill, 95 were mammal, 18 bird, two reptile, and five fish. Relatively large fragments of wood charcoal were scattered through the fill with no apparent concentration. The artifact assemblage was not large in terms of numbers of items. The 47 pieces of chert debitage included red and yellow chert. No chipped tools were found. The ceramic sample of 34 sherds consisted of 17 classified as Tishomingo Plain and 17 Baldwin Plain. All but three of the Tishomingo Plain sherds are from a single vessel. The grog particles in this vessel are very sparse but are distinct nonetheless. In places, no grog is visible for a distance of 2 to 3 cm along the edge of the sherd. The paste is very sandy. The base of the vessel is not present, but the large rim sherd indicates a straight-walled vessel with a direct flattened rim. The other three Tishomingo Cordmarked sherds from the feature have dense grog. The Baldwin Plain sherds are all tempered with fine sand. The absence of cordmarked pottery is noteworthy.

A sample of wood charcoal from Feature 28 was submitted for a dating determination. The sample (UGa-2449) dated at  $2000 \pm 120$  B.P. or 50 B.C., which is somewhat earlier than the date was expected to be.

Feature 32. This feature is a very regular oval-shaped pit with straight, slightly inslanting walls and a flat bottom. The top dimensions are 90 by 58 cm and the pit had a maximum depth of 9 cm. The pit was filled with dark brown sandy clay that contained an abundance of mussel shell, burned animal bone and unburned animal bone. Charcoal was present only in small flecks scattered through the fill. At nine cm below the top of the pit and almost the exact center of the pit there was a large water worn cobble of local glauconitic sandstone that had been intensively fired to a bright orange. The cobble measured 15 x 10 x 10 cm and weighed 2400 g. The lithic assemblage found in the fill consisted of red chert debitage and a very small amount of yellow chert. Shaped tools included biface and preform fragments. The ceramics included a number of shell-tempered types: Mississippi Plain var. Warrior and var. Hale, a noded strap handle, and one incised sherd.

Most of the ceramics in the fill were Tishomingo Plain or Tishomingo Cordmarked, but these are probably incidental inclusions in the pit fill. Four pieces of fired clay were also found in the fill.

The shell-tempered pottery associates Feature 32 with the Mississippian component. The burned rock, fired clay, burned bone and general high density of food refuse in the pit fill suggests that this feature had a function associated with cooking.

Feature 37. This oval straight-sided and flat-bottomed pit contained a highly concentrated midden fill and on the basis of the ceramics dates to the Miller III component. The top of the pit measured 105 by 65 cm. The southern wall dropped straight down to the flat bottom at 26 cm below the surface. The north wall slanted at about 60° to the bottom. The general color of the pit fill was a dark brown sandy clay, but the feature was so heavily charged with artifacts that there seemed to be little room for soil. In addition to over 16 kg of mostly whole bivalve shells, the pit fill contained 287 pieces of animal bone. Also present were 31 fragments of fired clay, but no charcoal was observed except scattered small flecks.

The 137 identifiable sherds from the fill included 98 Tishomingo Plain, 23 Tishomingo Cordmarked, and 16 Baldwin Plain, indicating a Miller III association. The lithic assemblage consisted mostly of red chert debitage; of 260 pieces of debitage, 243 were red chert. No chipped tools were present. A drilled bear canine (Plate XXXVIII H) was found at the base of the pit on the west side.

Feature 37 is one of the richest Miller III features found at the site in terms of sheer density of material. The function of the pit is uncertain, but the high incidence of animal bone and the fired clay suggest cooking. Few of the sherds from the pit fill are large and they seem to represent a large number of vessels. This would indicate that the fill is not primary refuse but has been redeposited. The mussel shell likewise includes a mixed assortment of a number of species.

Feature 62. This pit, located in the southern extension of



Graded Area A, was one of the largest and deepest features found. In plan view, the top of the pit was an irregular oval measuring 118 cm north-south and 80 cm east-west. In cross section, the northern side or bottom of the pit sloped gently to a deeper basin in the southern end. This basin had a diameter of approximately 55 cm and had a maximum depth of 35 cm below the surface. The pit was filled with dark brown sandy clay soil that contained shell, a large amount of bone, scattered charcoal, and a moderate amount of artifacts. In addition to red and yellow chert debitage, the pit contained a hammerstone made from yellow chert. No chipped tools other than utilized flakes were present. While the vast majority of ceramics from the pit fill were Tishomingo Plain or Tishomingo Cordmarked, two shell-tempered Mississippi Plain var. Warrior sherds were also present, suggesting a Mississippian association for this pit.

Feature 102. This large, oval, stratified Mississippian pit was located at the extreme southern end of the southern extension of Graded Area B. The top of the pit was oval, measuring 120 cm by 85 cm. In cross section, the west wall sloped at about a 30° angle to a flat bottom approximately halfway down the length of the pit. The east wall dropped almost vertically to the flat bottom at a depth of 31 cm. The pit fill was stratified on the basis of varying amounts of shell (see Figure 12). The uppermost fill contained a moderate amount of shell in a dark brown, clayey sand. The middle zone was densely-packed shell in an identical soil, and the basal fill was also a dark brown, clayey sand, but almost devoid of shell and artifacts.

The sides and bottom of the pit had been subjected to intense heat, firing them bright orange and red to a depth of 1 to 2 cm. This firing, along with the presence of 420 g of burned rock suggests that this pit functioned in cooking, and the concentrated mussel shell zone suggests that shellfish were one food that was processed.

### Irregular Pits

These features share little in common except for their irregular shape. Most are elongate in that they are only about half as wide as they are long. Of the ten pits included in this group, one is Mississippian, six are Miller III, one is Miller II and two are of unknown association. Summary data are presented in Table 29. Plan and cross section drawings of the irregular pits are presented in Figure 13.

Feature 4 is the only irregular pit that needs special discussion. This elongate pit had been intruded by two possible post holes that showed up as circular patches containing whole mussel shell at the base of the pit fill.

### Stepped Postholes

Three features in Graded Area A (Numbers 5, 13, and 20) appear to be stepped post holes. These features are round or oval in plan, have rounded or flat bottoms with a small circular area resembling a post hole that extends 10 to 20 cm below the base of the larger pit. This type of post hole is generally interpreted as a device for setting large or tall posts, with the larger pit portion serving as a setting ramp and/or as a settling basin. The following are descriptions of these stepped post holes. Plans and cross sections are illustrated in Figure 14.

Feature 5. This small pit was located in the northern portion of Graded Area A, and appears to be a shallow stepped post hole (Fig 14). In plan view, the feature is somewhat irregular with a straight side on the south edge. Two post holes intruded into the west side of the feature, but did not extend below the base of the pit, while a third post hole intruded 10 cm below the base of the pit at the eastern side. The fill of the two western post holes could be distinguished from the pit fill, while the fill in the eastern deeper post was indistinguishable from the pit fill, suggesting it was part of the feature. The maximum

TABLE 29. IRREGULAR PITS

Feature Number	Component	Dimensions (cm)			Shape	Fill	Content	Remarks
		L	W	D				
3	M. III	110	80	12	Irregular/oval, vertical to curved sides, flat bottom.	Dark brown clayey sand.	Shell, bone, pottery, lithics.	Recognized at 50 cm B.S. in Sq. 500R525.
4	M. III	58	35	9	Elongate, curved sides, irregular bottom.	Dark brown/black clayey sand.	Shell, bone, pottery, lithics.	See description.
23	M. III	61	47	11	Oval, 3/4 of pit less than 4 cm deep, west 1/3, 12 cm deep.	Dark brown clayey sand.	Shell, bone, pottery, lithics.	Post hole at south end, recognized at base of fill.
338	M. II	70	40	12	Irregular/oval, shallow rounded sides, very irregular bottom.	Light brown sand.	Shell, bone, pottery, lithics.	See feature 33 description.
41	M. III	102	91	9	Irregular/rectangular, shallow irregular bottom.	Dark brown clayey sand.	Shell, bone, pottery, lithics.	
65	M. III	60	30	13	Irregular, smooth bottom deeper in north end.	Dark brown clayey sand.	Shell, bone, pottery, lithics.	
67	?	117	45	8	Elongate, shallow curved sides, flat bottom in north end, curved bottom in south end.	Dark brown clayey sand.	Shell, bone.	No ceramics or lithics.
73	?	158	88	33	Rectangular/rounded, steep curved sides, irregular bottom.	Dark brown/black clayey sand.	Shell, bone, ceramics, lithics.	
74	M. III	43	19	13	Irregular/oval, V-shaped cross section.	Dark brown clayey sand.	Shell, bone, pottery, lithics.	

TABLE 29. (CONTINUED)

Feature Number	Compo- nent	Dimensions (cm)			Shape	Fill	Content	Remarks
		L	W	D				
90	Miss.	125	27	24	Elongate, irregular trough-shaped cross section.	Light brown clayey sand.	Shell, bone, pottery, lithics.	Resembled a burial pit.

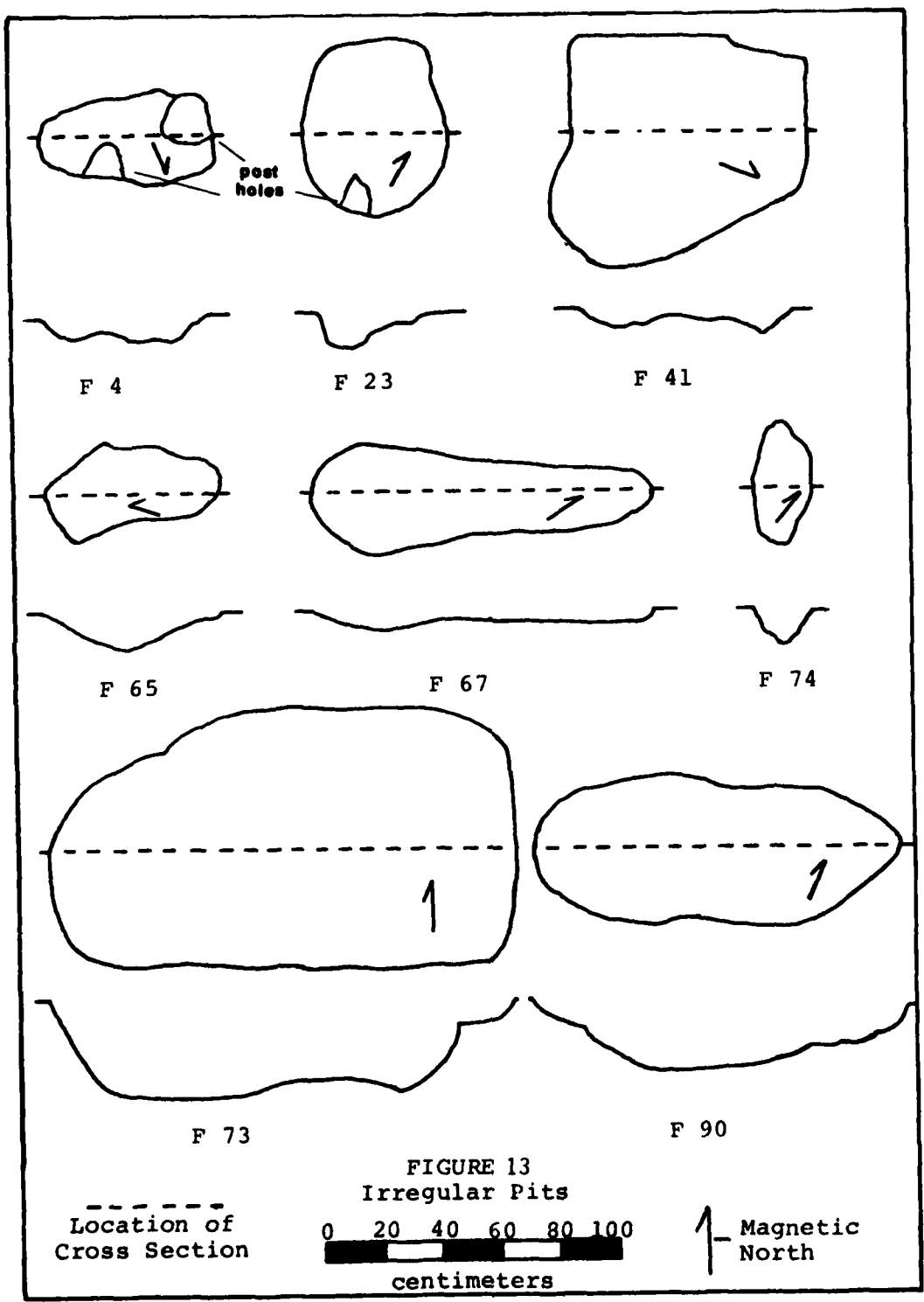


FIGURE 13  
Irregular Pits

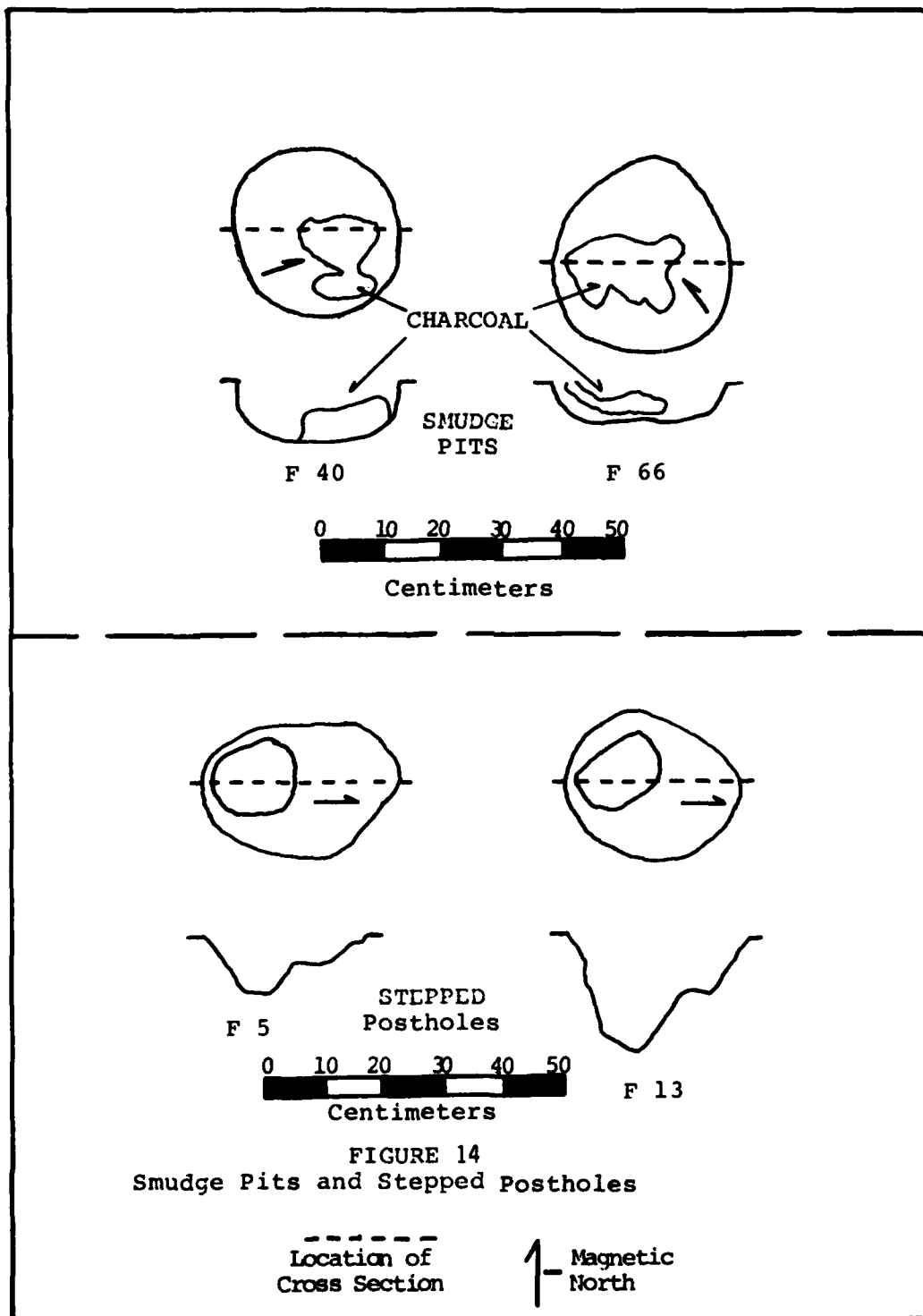


FIGURE 14  
Smudge Pits and Stepped Postholes

dimensions at the top were 55 by 39 cm, and the average depth of the basin portion of the pit was 12 cm. The fill consisted of a clayey sand, medium brown in color, containing a small amount of shell and artifacts. The majority of the sherds from the pit are Tishomingo Plain and Cordmarked, indicating a Miller III provenience.

Feature 13. This was a well defined and rather symmetrical stepped post hole found at the southern end of Graded Area A. The top was roughly oval, measuring 57 by 51 cm. The sides sloped gradually to a flat bottom at a depth of 25 cm, with the post hole at the southern end extending down for an additional 20 cm. The post hole measured 30 by 20 cm. The fill was homogeneous throughout the pit and post hole and consisted of a dark brown sand with very little clay. A moderate amount of shell was in the fill, consisting mostly of whole valves. Analysis of the vertebrate bone sample from Feature 13 shows deer, raccoon, squirrel, pine vole, turtle, and fish to be represented (Table 55). Of the 63 sherds found in the fill, 62 were of the Tishomingo series. The lithic assemblage included both red and yellow chert debitage and burned rock. While this Miller III stepped post hole is located within a cluster of post holes at the south end of Graded Area A, it cannot be directly related to a structure.

Feature 20. This feature, like Feature 13, also resembles a stepped post hole. The top of the feature was circular with dimensions of 30 by 28 cm. The south half of the pit had a rounded basin shaped bottom, at a depth of 10 cm, but the northern portion contained a cylindrical, flat bottomed post hole that went down for another 20 cm for a total depth of 30 cm. To a depth of 10 cm, or to the level of the bottom of the basin, the fill was a mottled light to dark brown clayey sand. Once the bottom of the pit was reached, the post hole became recognizable as a distinctly darker area of almost black clayey sand. There was no recognizable difference in artifact or debris density between the two fills. A moderate amount of shell was scattered through the feature, and 22 bone fragments were found. Cultural material was very sparse,

consisting only of two Tishomingo Cordmarked sherds, one Baldwin Plain sherd and no lithics. While the very small artifact collection makes assignment tenuous, a Miller III association is suggested.

#### Smudge Pits

Three features of a type which are commonly termed "smudge pits" were found in Graded Area B. Features 40, 66 and 75 are each small, round shallow excavations which contain little other than concentrations of charred plant material. These features are commonly found on Mississippian sites and have been interpreted as facilities connected with hide smoking, pottery firing or mosquito control (Binford 1967, 1977), but real function is uncertain. Similar features have been found in Mississippian contexts at site 1P12 (Jenkins 1979:7). The Tibbee Creek site examples are notable in that they do not contain maize remains, which is a common inclusion elsewhere.

Feature 40. This was a small "smudge pit" located to the east of the southern east wall of Structure 1. The pit was a simple basin in form with top dimensions of 30 by 27 cm and a maximum depth of 10 cm. The fill was a black sandy soil with little clay that contained a number of large pieces of wood charcoal. The charcoal was concentrated in the bottom of the pit on the east side. No shell, bone, lithics or ceramics were found in the fill. Analysis of the botanical material from the feature revealed the presence of hickory nut shell, carbonized hickory wood and white oak wood (see Chapter IX).

Feature 66. This small shallow pit measured 33 by 28 cm and had a depth of 6 cm. In the center of the pit, surrounded by black sandy fill was a mass of charcoal 20 by 10 cm and 3 cm thick (Plate VIII). The charcoal mass contained hickory nutshell fragments, hickory wood charcoal, unidentified wood charcoal, and unidentified bark. No artifacts were found in the fill.

Feature 75. This small circular pit measured 23 cm in diameter



## PLATE VII

Wall trenches 6 and 7 of Structure 1 after cross sectioning and removal of the trench fill. The bottle caps along the bottom of the trenches mark postmolds intruding past the trench bottom. The trenches were sprayed with water prior to the picture causing the dark discoloration around the periphery.

## PLATE VIII

Feature 66, a smudge pit, with carbonized wood and bark pedestaled.



Plate VII.



Plate VIII.

and had a maximum depth of 16 cm. The fill was a black sandy soil that contained some shell, Tishomingo Plain pottery, and lithics. The upper 3 cm of the fill was an almost solid mass of unidentified wood charcoal.

#### Miscellaneous Features

Two features do not conform to any of the feature classes presented above, and are described individually below.

Feature 12. This feature was an oval shaped concentration of chert flakes found in the middle part of Graded Area A. The concentration appeared to be inclusive within Zone C, and no staining was present around the flakes to distinguish that area from the surrounding yellow sandy soil. It was intended to go back to this feature after the later features intruding into Zone C were cleared, but Feature 12 was not investigated prior to being destroyed by flooding.

Feature 99. This feature is an area of fired clay located at the north edge of the southern extension of Graded Area B. The feature appeared to be inclusive within the soil of Zone C and presumably dates to the Archaic or Gulf Formational component. Two distinct areas were present (see Figure 6). The larger area was shaped like a fat "X" and measured 155 and 120 cm across the arms. The smaller area was a rounded square measuring 45 cm on the diagonal. The upper portion had been removed during stripping, but the remainder was of uneven thickness, ranging from 1 to 6 cm thick. No ceramics or lithics were found in association, but a human molar and a rodent incisor were found imbedded in the clay.

#### Features With Incomplete Data

Of the 79 pit type features from the Tibbee Creek site, data are incomplete for seven pits. In all cases, these features were damaged

or destroyed by heavy rain before they were completed, and the data that are not available are cross sections or depth measurements which were normally the last observations made. These features should serve as a caveat to future excavators dealing with loose soils, that you cannot expect features to survive for continued excavation at a later date. The available information on these seven features is summarized in Table 30.

#### Disturbances

Several feature numbers were assigned to root casts and tree disturbances. Feature numbers 11, 52, 53, 56, 60, and 78 all represent root casts, probably caused by pine trees which were ripped out of the ground during the clearing of the site.

One large tree disturbance was partially excavated during the fieldwork before its nature was realized. A large mottled area, containing two separate concentrations of material was assigned feature numbers 34 and 35. After this area was cross sectioned, it was found that the area represented a tree tip up or "cradle knoll." The area was represented by a discontinuous ring of midden material surrounding an area of mottled subsoil clay. The tip up contained shell tempered pottery, but the age of the feature is not certain, as it could be any time later than or including Mississippian. The position of this feature, and the other feature like root casts, are shown in Figures 5 and 6 .

TABLE 30. FEATURES WITH INCOMPLETE DATA.

Feature Number	Component	Dimensions (cm)			Shape	Fill	Content	Remarks
		L	W	D				
17	M. III	70	40	ca. 10	Irregular oval, shallow irregular bottom.	Dark brown clayey sand.	Shell, bone, pottery, lithics.	Half of pit excavated, rest slumped after rain.
24	M. III	52	41	-	Irregular oval, cross section not recorded. Noted as being shallow.	Dark brown clayey sand.	Shell, bone, pottery, lithics.	Half excavated, remainder slumped after rain.
25	M. III	60	42	-	Irregular oval, cross section not recorded.	Dark brown clayey sand.	Shell, bone, pottery, lithics.	Half excavated, remainder slumped after rain.
42	Miss.	73	55	ca. 8	Oval, shallow with irregular bottom.	Dark brown clayey sand.	Shell, bone, pottery, lithics.	Destroyed by rain before cross section drawn.
49	Miss.	32	20	ca. 10	Oval, basin shaped.	Dark brown clayey sand.	Shell, bone, pottery, lithics.	Cross section not drawn.
59	M. III	30	22	-	Oval, shallow.	Dark brown clayey sand.	Shell, bone, pottery, lithics.	Half excavated, remainder slumped after rain.
71	Miss.	94	22	-	Elongate, shallow at north end, deeper at south end.	Dark brown clayey sand.	Shell, bone, pottery, lithics.	Resembled a wall trench, had post hole at south end.

## VI. STRUCTURES AND POSTHOLES

Two definite house structures, one possible house structure, and over 300 scattered postholes were found at the Tibbee Creek site. Structure 1 is a large Mississippian wall trench house; Structure 2 is a small circular Miller III house; and Structure 3 is an incomplete posthole arrangement in Graded Area A which appears also to be associated with the Miller III component. It is likely, if not certain that other house structures existed at the site, and it is possible that one or more existed within the confines of our excavations but were not recognized as structures. A large dense cluster of postholes was found to the east of Structure 1 and to the south of Structure 2 (see Figure 6) but it would be possible in this area to define any number of structures from the same basic set of postholes.

Data on the non-structural postholes found at the site are contained in Tables 39 and 40 following the discussions of the individual structures.

### Structure 1 (Plates VII, IX and Figure 15)

This two-room Mississippian wall trench structure was found in the central part of Graded Area B. The southern 3/4 of the house was uncovered during the first stripping of Area B while the northern 1/4 was uncovered when Graded Area B was expanded.

Structure 1 was defined by eight wall trenches which were assigned consecutive numbers. Wall Trenches 2, 3, 5, and 8 defined a square room approximately 6 m on a side with a floor area of 34 to 36 m<sup>2</sup>. Wall Trenches 1 and 6-7 formed the east and west sides of the southern room. Wall Trench 4, only 75 cm long, was adjacent and perpendicular to Wall Trench 3 and extended into the interior of the south room.

No floor level was recognized in the structure and it is felt that the floor of this latest structure at the site was within the disturbed plowzone. Also, the central and northwestern portion of the north room

## PLATE IX

View to the north in Graded Area B during initial troweling. The barely visible dark lines are wall trenches of Structure 1 with the eastern center corner at right center.

## PLATE X

Burial 4. Note mussel shell on sternum.



Plate IX.



Plate X.



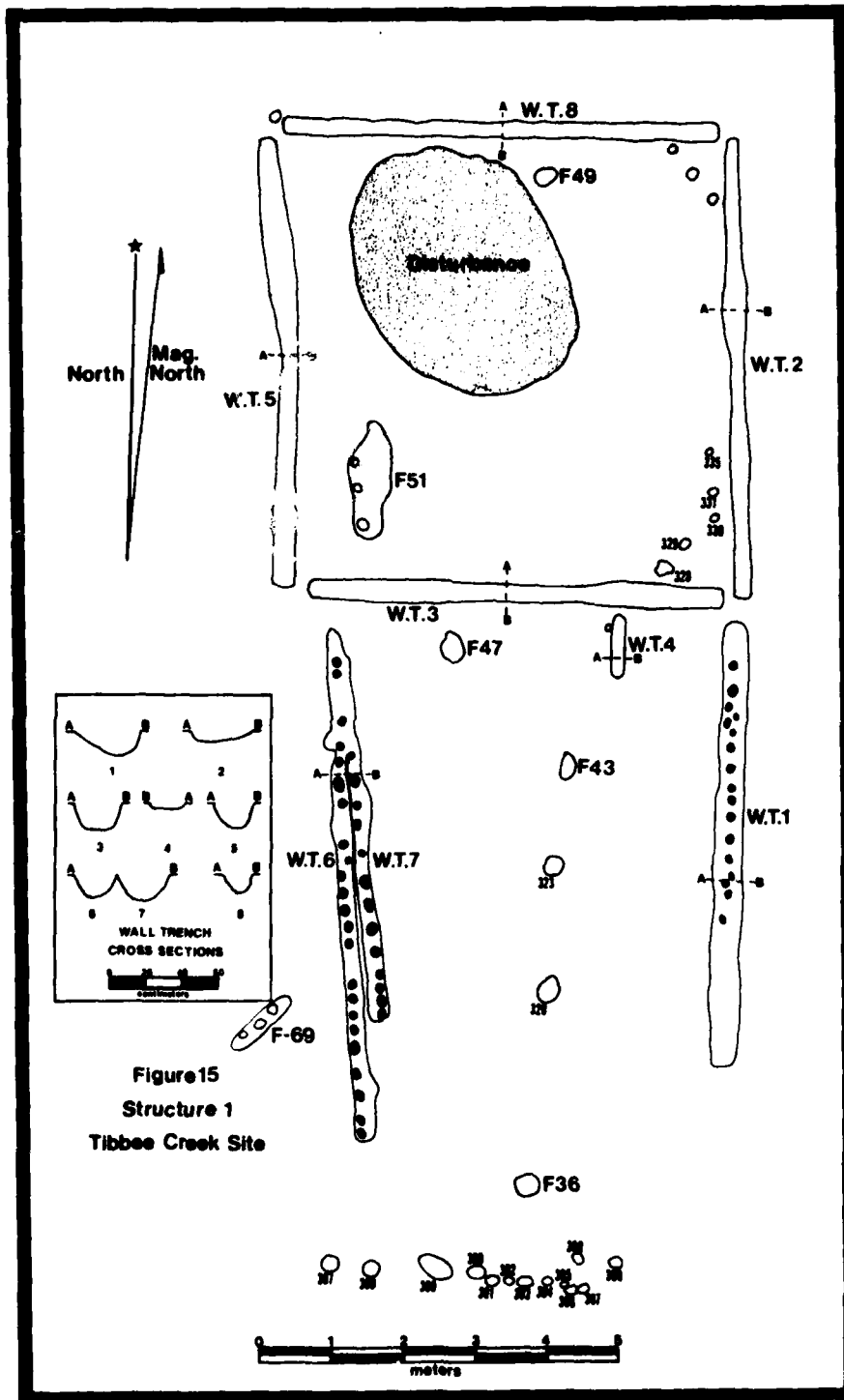


Figure 15  
Structure 1  
Tibbee Creek Site

had been considerably disturbed by the removal of a large tree during the clearing of the site.

The wall trenches were investigated in the following manner. Beginning at the left hand end of the trench facing the interior of the structure, the trenches were cross sectioned at 1 m intervals and the profiles were recorded. After the cross sections were completed, the remainder of each trench was cored out and the fill was screened. The fill in all of the trenches appeared homogeneous from the surface, therefore no postholes could be distinguished in the unexcavated fill. After they were excavated, all of the trenches had irregular bottoms, however, postholes could be detected only in the side walls of the south room in Wall Trenches 1 and 6-7. This was because the postholes in these trenches extended below the base of the trench.

The artifacts recovered from the wall trenches are listed in Tables 31, 32, and 33. Wall trench 1 had cut through a Miller III burial (Burial 3) and fragments of human bone from this interment were found scattered through the fill of the wall trench.

The southern end of the south room was not closed by a wall trench, *but appears to have been walled off by a line of posts placed 1.5 m south of the terminus of the east and west walls.* This line of postholes runs from Posthole 387 through 399. Feature 47 is a small Mississippian pit located at the north end of the southern room close to Wall Trench 3, but its function is not known. Also in the south room there is a more or less central line of features and postholes including Features 36 and 43 and Postholes 320 and 323. In the north room, Postholes 328 through 330 close off the southeast corner of that room with Postholes 331 and 335 extending along the east wall. The northeastern corner is similarly closed by three unnumbered postholes. The roles of Features 51 and 69 in relation to the structure is uncertain. Both are short, fat wall trench-like features which contain three post holes. Feature 51 is in the southwest corner of the north room of the house and is parallel to and 80 cm from the west wall. Feature 69 is outside the confines of the structure near the southwest corner of the south room. Feature 51 could be interpreted as the supports for an internal feature such as a sleeping bench or partition. The role of Feature 69 is

TABLE 31. CERAMICS FROM STRUCTURE 1 WALL TRENCHES

Artifact Type	Wall Trench Number								Total
	1	2	3	4	5	6	7	8	
<b>SHELL TEMPER</b>									
Mississippi Plain var. Warrior	8	2	9	-	10	5	3	8	45
<b>GROG TEMPER</b>									
Tishomingo Plain	162	43	105	2	154	126	22	87	699
Tishomingo Cordmarked	77	21	53	-	89	100	12	50	402
Solomon Brushed	-	-	-	-	-	2	3	-	5
Gainesville Fabric Impressed	-	-	-	-	-	1	-	-	1
Residual Pinched	-	1	-	-	-	-	-	-	1
<b>SAND TEMPER</b>									
Baldwin Plain	40	12	24	-	32	66	6	50	230
Furrs Cordmarked	3	7	5	-	6	12	3	14	50
Alexander Incised	-	-	-	-	2	-	-	3	5
Alexander Pinched	-	-	-	-	-	-	-	-	-
<b>FIBER TEMPER</b>									
Wheeler Plain	3	2	-	-	-	-	-	1	6
Wheeler Dentate Stamped	-	5	14	2	-	-	-	-	21
<b>MISCELLANEOUS</b>									
Sherdlets	18	17	76	-	38	-	-	51	200
Fired Clay (gms)	9	-	2	-	-	2	1	10	24
<b>TOTAL</b>	<b>320</b>	<b>110</b>	<b>288</b>	<b>4</b>	<b>331</b>	<b>314</b>	<b>50</b>	<b>274</b>	<b>1691</b>

TABLE 32. LITHIC ARTIFACTS FROM STRUCTURE 1 WALL TRENCHES

Artifact Type	Wall Trench Number								Total
	1	2	3	4	5	6	7	8	
<b>RED CHERT</b>									
Primary Decortication Flake	155	10	17	2	18	23	3	18	246
Secondary Decortication Flake	38	13	16	-	20	30	4	33	154
Shatter	98	74	87	4	88	119	14	143	627
Biface Thinning Flake	3	1	3	-	1	7	-	4	19
Undifferentiated Flake	-	80	151	5	224	295	41	139	935
Flaked Pebble	1	-	-	-	-	-	-	-	1
Pebble	21	10	21	-	20	40	4	30	146
Class 1 Preform	1	-	-	-	-	-	-	-	1
Class 2 Preform	1	-	-	-	-	-	-	-	1
Class 3 Preform	-	-	1	-	1	1	-	-	3
Class 1 Projectile Point	-	1	-	-	-	1	-	3	5
Biface Fragment	-	-	-	-	-	-	-	1	1
Drill Fragment	1	-	-	-	-	-	-	-	1
Micro Tool Fragment	-	-	1	-	-	-	-	-	1
Retouched Flake	1	-	1	-	1	1	-	3	7
<b>YELLOW CHERT</b>									
Primary Decortication Flake	-	-	-	-	1	1	-	3	5
Secondary Decortication Flake	-	4	1	-	-	2	-	14	15
Shatter	10	6	7	-	6	8	-	6	20
Undifferentiated Flake	53	20	11	1	33	34	2	108	262
Pebble	-	-	-	-	-	-	-	-	-
Class 1 Preform	-	1	-	-	-	1	-	-	2
Class 1 Projectile Point	-	-	-	-	-	-	-	1	1
<b>GREY CHERT</b>									
Shatter	2	-	-	-	-	-	-	-	2

TABLE 32. (CONTINUED)

Artifact Type	Wall Trench Number								Total	
	1	2	3	4	5	6	7	8		
QUARTZ										
Undifferentiated Flake	8	3	3	-	1	4	-	-	1	34
Pebble					8				8	
OTHER CHERT										
Shatter								2	2	4
Undifferentiated Flake					2					10
Pebble					10					10
Biface Fragment						10				10
FERRUGINOUS SANDSTONE										
Fragment	9	-	4	-	9	6	3	9	40	
TOTAL	406	223	327	12	446	590	71	529	2604	

TABLE 33. SHELL AND BONE FROM STRUCTURE 1 WALL TRENCHES

Wall Trench	Shell (grams)	Vertebrate Bone Counts					Total
		Mammal	Bird	Reptile	Amphibian	Fish	
1	13320	238	17	17	1	11	284
2	2471	65	2	9	-	2	78
3	4727	145	4	28	-	2	186
4	59	-	-	1	-	-	1
5	5396	154	8	19	-	6	187
6	16160	205	8	25	1	6	245
7	2215	23	-	5	-	2	30
8	4311	147	4	24	-	6	181
Total	48659	977	43	128	2	42	1192

TABLE 34. SHELL AND BONE FROM BURIAL PITS

Burial Number	Shell (grams)	Vertebrate Bone Counts					Total
		Mammal	Bird	Reptile	Amphibian	Fish	
4	521	7	-	3	-	-	10
5&6	-	457	11	15	-	3	486
7	6021	64	2	21	-	3	90
8	259	4	-	1	-	-	5
9	2483	117	1	8	-	2	128
10	1278	-	-	-	-	-	-
11	2513	33	3	9	-	4	49
12	1292	91	2	18	-	1	112
13	47000	108	62	164	-	24	358
15	41152	28	-	7	-	4	39
Total	102519	909	81	246	-	41	1277

unclear. Except for the fact that most of Structure 1 had walls placed in wall trenches, little can be determined about the details of its construction. There was a lack of certain support posts in the interior of the north room, indicating that perhaps this structure was constructed using a tensioned pole method. With this construction technique, posts in the trenches are bent over towards the middle and interwoven to form the roof. This technique is described in detail for structures at Hiwassee Island in eastern Tennessee (Lewis and Kneberg 1946:49-54). Some of the structures at Hiwassee Island also had porch type structures attached to fully enclosed structures in an arrangement similar to Structure 1 at the Tibbee Creek site.

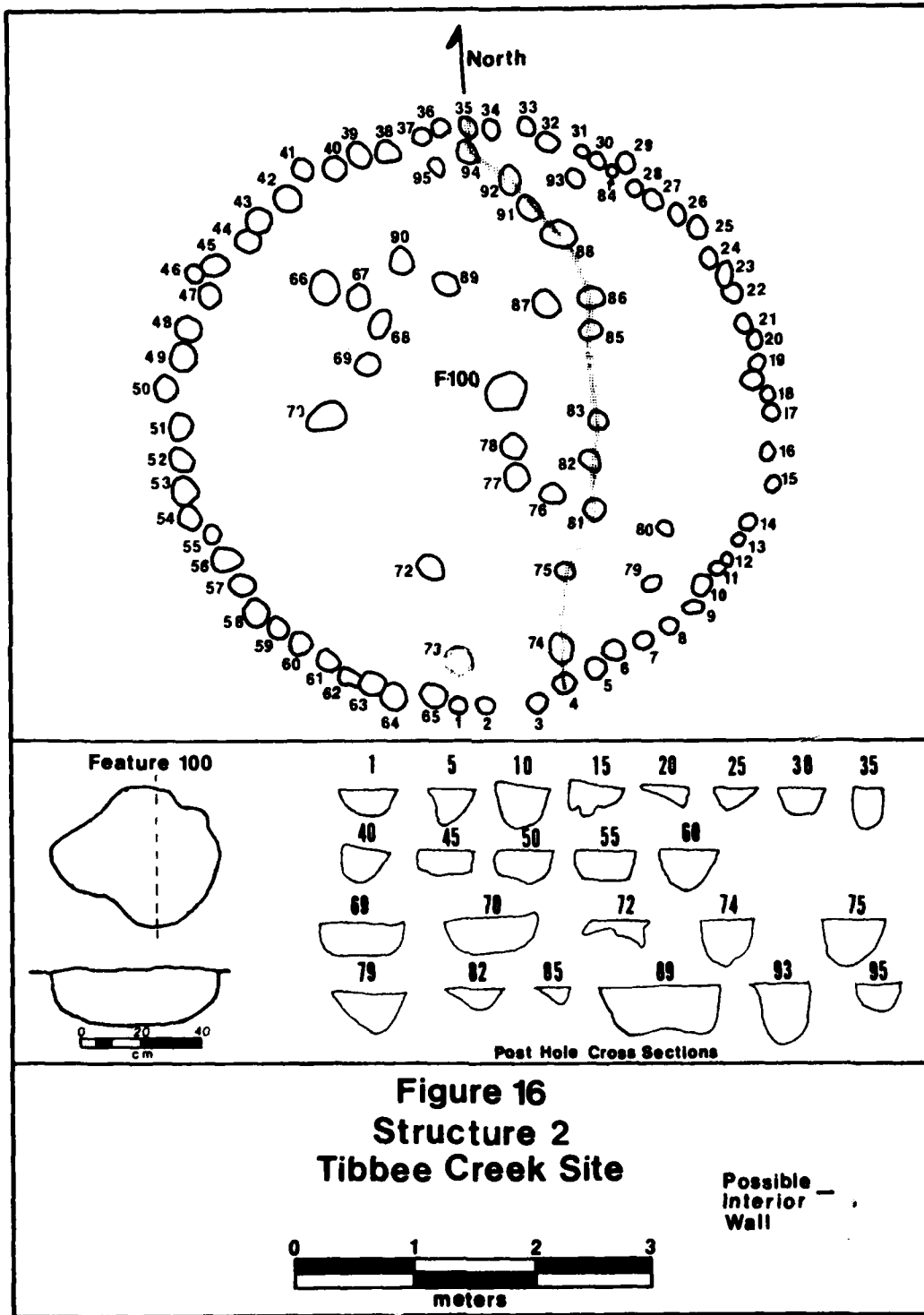
The majority of the wall trench structures at the Bessemer site near Birmingham, Alabama, did not contain interior roof support posts. Of the eleven square and rectangular wall trench structures under and around the "domiciliary mound," nine did not have internal supports (DeJarnette and Wimberly 1941:44-57).

There is no indication that the walls of Structure 1 were covered with daub. While some fired clay was found in pit features near the structure, no large pieces or pieces showing cane or grass impressions were found anywhere on the site. No concentrations of clay which could be interpreted as the remains of daubed walls that had been washed down by rain after abandonment of the structure were found in association with the house.

In concluding our discussion of Structure 1, it is apparent that the structure was in use long enough to need some rebuilding. This is evidenced by the double wall trench (number 6 and 7) on the west wall of the southern room. It was not possible to determine which of these trenches was original and which was secondary, but it is our overall impression that Wall Trench 7 was built to shore up or replace Wall Trench 6.

#### Structure 2 (Figure 16)

This small circular Miller III structure was found by stripping operations during the summer 1977 field season. The wall posts were very well defined and outlined a structure 5 m in diameter. They were





recognized immediately at the base of the midden when exposed by a very clean pass of the bulldozer. The first posts uncovered were Postholes 44 through 65. The edge of the first cut through the house was cut back and the profile examined in search of a possible floor level but none was apparent. An effort was also made to define the wall posts higher up in the midden within the major portion of the house that had not been stripped, but the postholes could not be recognized until the base of the midden was reached. After removing a large portion of the house interior by hand, in vain hopes of finding artifacts or debris concentrations which could indicate a floor level, the remainder of the overlying midden was stripped off to reveal the complete structure pattern. No artifact concentrations suggesting a house floor were found. After the structure was completely uncovered, it was recognized that the northernmost edge of the structure had lain within the first area of the site stripped in the fall of 1976. Fortunately, this section of the wall was situated at the very edge of this stripped area which had extensively eroded, but the postholes had been preserved by alluvium piling up at the edge of the stripped area, rather than being destroyed by scouring as was the case with the remainder of this stripped area.

Diameters were taken on all of the exterior wall posts (Table 35) but only a sample were cross sectioned. The sample consisted of every fifth posthole, with half of these being cross sectioned at right angles to the wall arc to detect any inward or outward slanting, and the other half cross sectioned at a tangent to the wall line. A sample of the posts in the interior of the structure were also cross sectioned (Table 36), and the central fire pit (F 100) was excavated (Table 37). It should be noted that the postholes of Structure 2 were assigned numbers in their own sequence from 1 to 95 in a listing separate from the other postholes at the site. The artifacts recovered from Structure 2 postholes are listed in Table 38.

The architectural features of the house are as follows. The walls of the almost perfectly circular structure were made of 65 closely set, sometimes overlapping individually set posts which ranged in diameter from 29 to 13 cm with a mean diameter of 18.3 cm, and ranged in depth

TABLE 35. MEASUREMENTS OF STRUCTURE 2 EXTERIOR WALL POST HOLES

Post Hole Number	Diameter (cm)	Depth (cm)	Post Hole Number	Diameter (cm)	Depth (cm)
1	15	10	33	15	
2	18		34	19	
3	29		35	14	11
4	16		36	16	
5	16	12	37	17	
6	21		38	18	
7	17		39	20	
8	17		40	18	10
9	18		41	19	
10	20	12	42	23	
11	13		43	19	
12	14		44	22	
13	16		45	20	11
14	17		46	20	
15	18	12	47	19	
16	16		48	20	
17	13		49	21	
18	14		50	20	9
19	14		51	18	
20	13	5	52	18	
21	14		53	19	
22	15		54	17	
23	18		55	19	7
24	16		56	24	
25	14	7	57	17	
26	16		58	20	
27	18		59	20	
28	17		60	22	12
29	18		61	16	
30	16	8	62	15	
31	19		63	19	
32	19		64	18	
			65	17	
			Mean	18.30	9.69

TABLE 36. MEASUREMENTS OF STRUCTURE 2 INTERNAL POST HOLES

Post Hole Number	Length (cm)	Width (cm)	Depth (cm)	Post Hole Number	Length (cm)	Width (cm)	Depth (cm)
66	35	25		81	34	32	
67	25	25		82	29	25	13.0
68	21	20		83	19	18	
69	25	16	12.0	84	27	24	
70	30	22	12.5	85	21	21	11.0
71	17	16		86	22	18	
72	25	18	9.0	87	29	25	
73	17	16	0.9	88	30	22	
74	17	15	15.0	89	45	24	15.0
75	17	17	16.0	90	29	26	
76	31	28		91	37	29	
77	17	16		92	31	25	
78	20	18		93	28	23	20.0
79	28	27	15.0	94	41	25	
80	40	26		95	24	18	12.0
				Mean	27.03	22.00	12.67

TABLE 37. ARTIFACTS FROM FEATURE 100, STRUCTURE 2

Artifact Type	No.	Artifact Type	No.
<u>CERAMICS</u>		<u>LITHICS (Cont.)</u>	
Tishomingo Plain	2	<u>Quartz</u>	
Baldwin Plain	2	Pebble	1
Sand Tempered Eroded	1	<u>Ferruginous Sandstone</u>	
<u>LITHICS</u>		Fragment	1
<u>Red Chert</u>		<u>White Sandstone</u>	
Primary Decortication	1	Fragment	2
Secondary Decortication	2	Total	24
Shatter	2		
Other Flake	2		
Pebble	2		
<u>Yellow Chert</u>			
Secondary Decortication	1		
Shatter	1		
Other Flake	3		
Pebble	1		

TABLE 38. ARTIFACTS FROM SELECTED POST HOLES, STRUCTURE 2

Artifact Type	Post Hole Number													Total
	1	5	10	30	40	60	69	70	74	75	85	89	93	
<b>CERAMICS</b>														
Mississippi Plain var. Warrior	-	-	-	1	-	-	-	-	-	-	-	-	-	1
Tishomingo Plain	1	-	-	-	-	1	1	1	-	4	1	-	-	9
Tishomingo Cordmarked	-	-	1	-	-	1	-	-	-	1	-	1	1	6
Baldwin Plain	1	-	-	1	-	-	-	-	1	3	1	1	-	8
Furrs Cordmarked	-	-	-	-	-	-	-	-	-	1	-	-	-	1
<b>LITHICS</b>														
<u>Red Chert</u>														
Primary Decortication Flake	-	-	-	2	-	-	-	-	-	-	-	-	2	4
Secondary Decortication Flake	1	-	-	-	1	-	1	-	-	-	-	4	1	8
Shatter	-	2	1	2	-	-	-	1	1	4	2	3	-	16
Other Flake	-	1	-	4	3	2	3	3	1	-	2	6	1	26
Pebble	-	-	1	-	-	2	1	1	2	1	-	-	-	8
Utilized Flake	1	-	-	-	-	-	-	-	-	-	-	-	-	1
<u>Yellow Chert</u>														
Other Flake	-	-	-	-	-	-	1	1	-	1	-	-	-	3
Pebble	1	-	-	1	-	1	-	2	2	1	-	3	-	11
<u>Quartzite</u>														
Pebble	-	-	1	-	-	2	-	-	1	-	-	1	-	5
<u>Ferruginous Sandstone</u>														
Fragment	-	-	-	-	-	-	-	1	-	-	-	3	-	4
<u>White Sandstone</u>														
Fragment	1	-	-	-	-	-	1	-	-	-	-	-	-	2
Total	6	3	4	11	4	9	8	11	8	16	6	22	5	113

from 1 to 20 cm with a mean of 12.6 cm. The central support postholes, if the structure had a supported roof rather than a tensioned roof, are not readily identified. The larger and deeper postholes in the interior do not form any apparent arrangement.

There was an alignment of posts in the structure that seems to represent an internal wall or partition of some sort. This arc-shaped alignment included Postholes 74, 75, 81, 82, 83, 85, 86, 88, 92, and 94. The small floor space of the structure would argue against interpretation of this arc as a wall, but the fact that this alignment met the structure wall at the edge of the possible southern door strengthens the interpretation of this line as an internal feature. Another possibility is that this arc represents the supports for a raised sleeping area that is present in most ethnographically described southeastern houses (Swanton 1946:422).

Charcoal from the central fire pit of Structure 2 was radiocarbon dated at  $985 \pm 55$  years B.P. (UGa-2445), or 965 A.D. This date seems reliable and acceptable and is in line with the sparse collection of cultural material found associated with the house. While only five potsherds were found in the central feature, two were Tishomingo Plain (Table 38). These sherds were not particularly large, but they were larger and less eroded than the sand tempered pottery from this pit. The single sherd of Warrior Plain from Posthole 30 was very small (about 1 cm across) and is attributed to intrusion.

There are two small circular single post structures reported from the upper Tombigbee drainage. Jennings (1941:163) describes a small circular structure with a diameter of 4.3 m (14 ft) from site MLe18. Structure 5 appears to have had a central feature (Jennings 1941: Figure 3). While MLe18 was predominately a Chickasaw site judging from the general ceramic collection, a Miller II or III component was present, as indicated by the Baldwin Plain, Tishomingo Cordmarked and Furrs Cordmarked pottery recovered in small amounts.

The other small circular structure is from the Bynum site (Cotter and Corbett 1951:12). This structure (feature 22) was located away from the main area of large Miller II structures and had a diameter of

4.6 m (15 ft). A firepit was located inside the structure just east of the center in a position which virtually duplicates the position of the central feature in Structure 2 from Tibbee Creek site (Cotter and Corbett 1951:Figure 5). The artifact sample from the Bynum structure is not diagnostic but includes both sand and grog tempered wares.

### Structure 3

This possible structure is represented by a very incomplete arc-shaped alignment of postholes at the southern end of Graded Area A, centered roughly on point 500R515 of the excavation grid. The alignment was not recognized as a structure during the field work, partially due to the extremely wet conditions under which this area was investigated.

A total of 30 postholes remain to delineate the wall of a roughly circular structure. These include Postholes 73, 74, 78-86, 90-104, and 108-111. The length or maximum diameter of these postholes ranges from 9 to 26 cm with a mean of 18 cm. The arc would define a structure approximately 4.5 m in diameter, which is roughly the same size as Structure 2.

Two stepped postholes, Features 13 and 19, are located within the confines of the arc and could represent internal support posts, but the association is not certain. The postholes from this area that were excavated contained Tishomingo series ceramics, indicating a Miller III association for this possible structure.

TABLE 39. POST HOLE DATA, GRADED AREA A

Post Hole Number	Dimensions (cm)	Depth (cm)	Fill	Notes
1	9 x 12	2	dk. brown soil, shell fragments	moderately distinct very shallow, basically round
2	16 x 14	12	dk. brown soil, shell	well defined round shape
3	16 x 13	6	dk. brown soil, shell	well defined round shape
4	16 x 14	13	med. brown soil, shell	poor definition
5	18 x 16		med. brown, shell	moderately distinct
6	15 x 14	16	med. brown, shell	bottom rounded
7	20 x 28	11	dk. brown, much shell	flat bottom
8	15 x 15	9	med. brown, shell	rounded bottom
9	24 x 20	4	dk. brown, shell	irreg. shape, rounded bottom
10	14 x 16	4	dk. brown, shell flecks	rounded bottom
11	14 x 13	6	dk. brown, bits of shell whole shell valves at bottom	round bottom
12	8 x 8	3	dk. brown, shell & charcoal fragments	not very distinct, possibly a bulldozer rut
13	16 x 14	23	dk. brown, shell	bottom slightly rounded
14	17 x 12	15	dk. brown, shell	bottom rounded
15	16 x 13		dk. brown, shell	bottom slightly rounded
16	18 x 17	19	dk. brown, shell	

TABLE 39. (CONTINUED)

Post Hole Number	Dimensions (cm)	Depth (cm)	Fill	Notes
17	18 x 16	17	med. brown, shell	16 combines with 17 at NW corner
18	18 x 16		dk. brown, shell	
19	14 x 13	7	dk. brown, shell	
20	23 x 20		dk. brown, shell	
21	13 x 11		darker than surrounding soil, flecks of shell at top	
22	18 x 7	1	grey brown mottled, med. shell bottom flattened	
23	14 x 10	5	med. brown mottled with lt. brown, shell	
24	11 x 11		med. brown	
25	15 x 14	6	more uniform brown than surrounding soil, shell	
26	15 x 13	8	darker than surrounding soil, flecks of shell	
27	18 x 16		brown, dark in center flecks of shell	hole tilted at 70° to the east
28	13 x 11	16	brown, shell	under feature 5
29	12 x 11	12	brown, some shell	under feature 5
30	21 x 19	10	brown, shell	under feature 5
31	18 x 18	2	dk. brown, gr. brown	bottom flattened
32	20 x 19	10	dk. brown, shell	irreg. shape with good definition



TABLE 39. (CONTINUED)

Post Hole Number	Dimensions (cm)	Depth (cm)	Fill	Notes
33	18 x 12	6	dk. brown, shell	
34	12 x 10	2	dk. brown	
35	15 x 12	13	dk. brown mottled lt. brown, shell	
36	28 x 20	10	dk. brown, shell	
37	14 x 13	12	dk. brown, shell	
38	23 x 22	13	dk. brown, shell	
39	6 x 12	3	dk. brown	
40	11 x 10	2	med. brown, shell	
41	12 x 11	4	med. brown, concentration of shell in center	
42	12 x 11	14	dk. brown, small amount of shell	
43	17 x 19	9	med. brown, shell	
44	13 x 13	5	lt. brown, many whole mussel valves, almost a stack of them	
45	24 x 25	7	dk. brown, filled with bits of shell	
46	16 x 15	2	one shell	
47	16 x 12	2	dk. brown, bone fragments, shell fragments	

TABLE 39. (CONTINUED)

Post Hole Number	Dimensions (cm)	Depth (cm)	Fill	Notes
48	14 x 12	4	mottled brown, slight amounts of shell	
49	22 x 23	14	med. brown, some shell and charcoal	
50	20 x 18	2.5	med. brown, few bits of shell	
51	17 x 18	8	med. to lt. brown mottled with grey clay, shell pockets	
52	16 x 13	5	med. brown, moderate amounts of shell	
53	22 x 12	4	brown mottled soil, small pieces of shell	bottom flat
54	16 x 12	4	dk. brown, small amount of shell	
55	20 x 19	10	dk. brown, dense shell	
56	14 x 9	1	dk. brown, shell	flat bottom
57	18 x 26	13	dk. brown to grey, shell SS piece	
58	21 x 20	13	dk. brown silty soil, shell	
59	9 x 10	11	lt. brown, much shell	profile tapered to a flat bottom
60	20 x 17		brown stain with scattered shell	no profile, only a surface stain
61	30 x 26	10	dk. brown to black soil charcoal and shell fragments	

TABLE 39. CONTINUED

Post Hole Number	Dimensions (cm)	Depth (cm)	Fill	Notes
62	16 x 14	6	lt. brown to grey sandy soil shell fragments	
63	19 x 20	4	med. brown, little shell	
64	18 x 17	8	dk. mottled with med. brown	
65	19 x 30	10	med. brown mottled with grey few shell fragments	
66	17 x 19	2	med. brown, few shells	
67	14 x 12	13	slightly darker than subsoil, dense shell, some charcoal	
68	13 x 18	9	lt. brown, shell	
69	13 x 15	6	lt. brown sandy soil, shell fragments	
70	12 x 18	5	med. to dk. brown soil, shell fragments	
71	18 x 17	8	dk. brown, shell	part of feature 15
72	20 x 22	10	med. brown, shell	part of feature 15
73	10 x 10	17	lt. brown mottled soil, small pieces of shell	possible root stain
74	26 x 25	21.5	dk. brown sand, shell	
75	21.5 x 18	6	med. brown, shell	
76	11 x 18	3.5	lt. brown	possible root stain
77	24 x 24	2	dk. brown, shell fragments	possible bulldozer rut

TABLE 39. (CONTINUED)

Post Hole Number	Dimensions (cm)	Depth (cm)	Fill	Notes
78	20 x 18		midden	
79	23 x 20		midden	
80	10 diam.		midden	
81	19 diam.		midden	
82	18 x 17		midden	
83	18 diam.		midden	
84	17 diam.		midden	
85	23 x 27	14	dk. brown	
86	23 x 9	7	brown, shell	
87	43.5 x 31.5	15	med. brown, shell	conical shape
88	23 x 19.5	6	med. brown sandy fill, charcoal, shell	flat bottom
89	16 x 14	6	med. brown sandy fill, scattered shell	
90	17 x 15	10	med. brown, shell	
91	22 x 16	9.5	brown, some shell	
92	18 x 12.5	3.5	med. brown, bits of shell	
93	27 x 24	17	med. brown, shell	
94	29 x 25		dk. brown, midden	
95	15 x 13	18	brown, one piece of shell	
96	17 x 20	11	med. brown, shell	

TABLE 39. (CONTINUED)

Post Hole Number	Dimensions (cm)	Depth (cm)	Fill	Notes
97	12 x 11	4	dk. brown sand	
98	18 x 15	35	dk. brown, concentrated shell	post hole is slanted
99	32 x 26		dk. brown, shell	
100	18 x 18	11	dk. brown, shell	
101	23 x 24	26	dk. brown, whole shell	possible post hole
102	17 diam.	9	dk. brown fill turning into yellow sand, shell	
103	10 diam.		dk. brown, many whole shells	conical shape
104	10 x 11	5	dk. brown, sandy, mostly shell	
105	14 x 10	7	dk. brown sand, shell	
106	18 diam.	13	dk. brown sandy fill, some shell	
107	25 x 16	14	dk. brown sand, shell	
108	16 x 17	9	lt. brown, whole shell	
109	21 x 25	20	dk. brown, shell	
110	20 x 25	18	dk. brown sand, shell	intruded into NW side of Fea. 27
111	35 x 24	17	dk. brown sand turning to lt. brown at bottom, shell	Fea. 22 intruded into NE end of post mold
112	disappeared in mud			

(Abbreviations: lt. - light, med. - medium, dk. - dark, Ss - sandstone)

TABLE 40. POST HOLE DATA, GRADED AREA B

Post Hole Number	Dimensions (cm)	Depth (cm)	Fill	Notes
118	25 diam.		midden	
119	22 x 20		midden	
120	25 x 20	13	midden, shell	
121	25 x 23			
122	26 x 19	13	dk. brown sandy clay with shell	
123	42 x 19	14	dk. brown sand with shell	
124	27 x 24		midden	
125	12 x 11		midden	intrusive into Feature 93
126	15 diam.		midden	
127	22 x 21		midden	
128	35 x 23		midden	
129	26 x 25		midden	
130	21 x 20		midden	
131	19 x 17		midden	
132	22 x 21		midden	
133	24 x 20		midden	
134	26 x 24		midden	
135	24 x 23		midden	
136	18 x 13		midden	
137	30 x 21		midden	
138	19 diam.		midden	
139	25 x 22		midden	
140	22 x 21		midden	
141	30 diam.		midden	
142	16 diam.		midden	
143	40 x 30		brown sand, shell, sherds	
144	25 x 23	15	dk. brown sand, shell lithics, sherds	
145	35 x 30	8	dk. brown sand, shell	
146	20 diam.		midden	
147	25 diam.		midden	
148	29 x 23		midden	
149	23 x 21		midden	
150	20 x 18		midden	
151	25 diam.		midden	
152	15 diam.		midden	
153	20 diam.		midden	
154	20 diam.		midden	
155	24 x 20		midden	
156	20 x 16		midden	
157	26 x 17		dk. brown sand	

TABLE 40. (CONTINUED)

Post Hole Number	Dimensions (cm)	Depth (cm)	Fill	Notes
158	27 diam.	15	dk. brown sand, small shell	
159	22 x 20	10	dk. brown sand	
160	15 x 12		dk. brown sand, lithics	
161	20 x 15		dk. brown sand, shell, sherds, lithics	
162	15 x 14		midden	
163	18 diam.		midden	
164	20 x 17		midden	
165	20 diam.		midden	
166	20 diam.		midden	
167	18 diam.		midden	
168	30 x 25		midden	
169	20 diam.		midden	
170	20 diam.		midden	
171	18 diam.		midden	
172	22 diam.		midden	
173	30 x 23		midden	
174	24 diam.		midden	
175	15 diam.		midden	
176	12 diam.		midden	
177	20 x 16		midden	
178	24 x 20		midden	
179	12 diam.		midden	
180	24 x 18	6	black clayey sand, sherds, shells, flakes charcoal	
181	14 diam.		midden	
182	18 diam.		midden	
183	36 x 28		midden	
184	25 x 23		midden	
185	25 x 18		midden	
186	25 x 23		midden	
187	23 x 20		midden	
188	36 x 33		midden	
189	30 x 29		midden	
190	20 x 18		midden	
191	25 x 18		midden	
192	28 x 22		midden	
193	30 x 29		midden	
194	30 x 27		midden	
195	25 x 24		midden	
196	35 x 34		midden	
197	20 x 20		midden	

TABLE 40. (CONTINUED)

Post Hole Number	Dimensions (cm)	Depth (cm)	Fill	Notes
198	20 diam.		midden	
199	21 diam.		midden	
200	20 diam.		midden	
201	20 diam.		midden	
202	20 diam.		midden	
203	20 diam.		midden	
204	18 diam.		midden	
205	19 diam.		midden	
206	21 diam.		midden	
207	19 diam.		midden	
208	18 diam.		midden	
209	20 diam.		midden	
210	16 diam.		midden	
211	18 diam.		midden	
212	21 diam.		midden	
213	44 x 41		midden	
214	16 x 12		midden	
215	35 x 27		midden	
216	17 x 13		midden	
217	25 x 24		midden	
218	12 x 10		midden	
219	23 x 21		midden	
220	22 x 21		midden	
221	24 x 21		midden	
222	16 x 8		midden	
223	28 x 20		midden	
224	19 x 18		midden	
225	19 x 17		midden	
226	19 diam.		midden	
227	20 x 17		midden	
228	25 x 18		midden	
229	54 x 29		midden	
230	14 x 13		midden	
231	19 x 18		midden	
232	22 x 15		midden	
233	43 x 27		midden	
234	40 x 28		midden	
235	37 x 30		midden	
236	30 x 29		midden	
237	24 x 19		midden	
238	20 x 16		midden	
239	19 x 18		midden	
240	35 x 18		midden	
241	15 x 14		midden	
242	58 x 56		midden	



TABLE 40. (CONTINUED)

Post Hole Number	Dimensions (cm)	Depth (cm)	Fill	Notes
243	33 x 30		midden	
244	16 x 14		midden	
245	31 x 25		midden	
246	40 x 33		midden	
247	24 x 20		midden	
248	21 x 17		midden	
249	17 x 15		midden	
250	22 x 20		midden	
251	19 x 17		midden	
252	22 x 21		midden	
253	14 diam.		midden	
254	16 x 13		midden	
255	16 x 14		midden	
256	38 x 32		midden	
257	16 diam.		midden	
258	18 diam.		midden	
259	15 diam.		midden	
260	18 diam.		midden	
261	15 diam.		midden	
262	15 diam.		midden	
263	13 diam.		midden	
264	35 x 34		midden	
265	14 diam.		midden	
266	13 diam.		midden	
267	16 diam.		midden	
268	19 diam.		midden	
269	14 diam.		midden	
270	14 diam.		midden	
271	12 diam.		midden	
272	16 diam.		midden	
273	36 x 32		midden	
274	15 diam.		midden	
275	14 diam.		midden	
276	10 diam.		midden	
277	11 diam.		midden	
278	25 x 24		midden	
279	27 x 26		midden	
280	29 x 27		midden	
281	29 x 27		midden	
282	36 x 35	6	dk. brown sand, some shell, few sherds	
283	25 x 24		midden	
284	29 x 28		midden	
285	40 x 29		midden	
286	28 x 27		midden	

TABLE 40. (CONTINUED)

Post Hole Number	Dimensions (cm)	Depth (cm)	Fill	Notes
287	26 x 25		midden	
288	30 x 29		midden	
289	10 diam.		midden	
290	15 diam.		midden	
291	10 diam.		midden	
292	10 diam.		midden	
293	20 diam.		midden	
294	13 diam.		midden	
295	9 diam.		midden	
296	10 diam.		midden	
297	10 diam.		midden	
298	9 diam.		midden	
299	10 diam.		midden	
300	15 diam.		midden	
301	10 diam.		midden	
302	9 diam.		midden	
303	12 diam.		midden	
304	12 diam.		midden	
305	10 diam.		midden	
306	10 diam.		midden	
307	15 diam.		midden	
308	13 diam.		midden	
309	9 diam.		midden	
310	19 x 17		midden	
311	10 diam.		midden	
312	14 diam.		midden	
313	12 diam.		midden	
314	16 diam.		midden	
315	15 diam.		midden	
316	20 diam.		midden	
317	20 diam.		midden	
318	20 x 18	18	brown sand	cluster of shell on top
319	13 diam.		midden	
320	19 diam.	9	brown sandy clay, broken shell	
321	43 x 30		midden	
322	21 diam.	31	dk. brown sand, shell, sherds	
323	27 diam.	19	dk. brown sand, shell, pottery	
324	19 diam.		midden	
325	18 diam.		midden	
326	18 diam.		midden	
327	21 diam.		midden	

TABLE 40. (CONTINUED)

Post Hole Number	Dimensions (cm)	Depth (cm)	Fill	Notes
328	28 diam.	15	brown sand, shell	
329	16 diam.		brown sand, shell	
330	12 diam.		midden	
331	13 diam.		midden	
332	21 x 19		midden	
333	21 diam.		midden	
334	30 diam.	8	brown sand	
335	23 x 17		midden	
336	31 x 24	13	dk. brown sand, pebbles, some shell	
337	24 x 17	13	lt. orange brown clay, sherds, shell	
338	13 diam.	10	lt. brown sand, small amts. of shell, some chert, sherd	
339	30 x 24		midden	
340	28 diam.	33	midden	
341	14 x 14	16	brown sand, shell	
342	32 x 32	11	brown sand, shell	
343	20 diam.	30	brown sand, shell turtle shell	
344	21 x 18		midden	
345	20 diam.	21	dk. brown sandy clay, pottery, shell	
346	19 x 17		midden	
347	29 x 24		midden	
348	18 diam.	10	brown sand	
349	16 diam.		midden	
350	16 diam.		midden	
351	14 diam.		midden	
352	14 diam.		midden	
353	21 x 19		midden	
354	18 x 16		midden	
355	20 x 19		midden	
356	16 x 14		brown sand, shell	
357	16 x 15		midden	
358	21 x 20		midden	
359	23 x 22		midden	
360	23 x 22		midden	
361	22 x 14	15	dk. brown sandy clay, shell	
362	23 x 13	17	dk. brown sand, shell, sherds	
363	11 x 9		midden	
364	20 x 17	10	brown sandy clay, fine shell	

TABLE 40. (CONTINUED)

Post Hole Number	Dimensions (cm)	Depth (cm)	Fill	Notes
365	40 diam.	25	dk. brown sand, shell	
366	21 x 20	8	dk. brown sand	cluster of shell
367	27 x 20	28	brown sand	
368	19 x 18	7	brown	
369	23 x 16		midden	
370	45 x 35		midden	
371	47 x 21		midden	
372	42 x 35	9	dk. brown sand, shell	
373	13 x 10		midden	
374	31 x 24	14	brown sand, shell	
375	24 x 22		midden	
376	17 x 15		midden	
377	26 x 20		midden	
378	19 x 15		midden	
379	20 diam.		midden	
380	20 x 18		midden	
381	42 x 37		midden	
382	21 x 19	18	brown sandy clay	
383	17 x 16	30	dk. brown sand one shell	
384	21 x 19		midden	
385	20 x 19		midden	
386	14 x 12		midden	
387	24 x 22		midden	
388	22 x 18		midden	
389	40 x 30		midden	
390	14 x 13		midden	
391	16 x 15		brown sand, shell	
392	16 x 15		midden	
393	15 diam.		midden	
394	15 x 14		midden	
395	17 diam.	23	brown sand, large whole shell and fragment	
396	19 x 18		midden	
397	17 x 16		midden	
398	17 x 14		midden	
399	20 x 16		midden	
400	17 diam.		midden	
401	22 x 20		midden	
402	18 x 16	13	brown sandy clay, shell sherds	
403	32 x 23	12	brown sand	
404	27 diam.	9	dk. brown sand, shell several pieces of broken chert	

TABLE 40. (CONTINUED)

Post Hole Number	Dimensions (cm)	Depth (cm)	Fill	Notes
405	31 diam.	12	dk. brown sandy clay, small amts. of charcoal, some shell	
406	19 x 15		midden	
407	19 x 18		midden	
408	29 x 27	13	dk. brown sand, shell	
409	30 x 22		midden	
410	15 x 14		midden	
411	20 x 17		dk. brown sandy clay	
412	23 x 16		midden	
413	30 x 20		midden	
414	27 x 20		midden	
415	27 x 25		midden	
416	21 x 17		dk. brown sandy clay, shell	
417	15 x 15	22	med. brown, shell, lithic	
418	12 diam.	7	dk. brown to lt. brown sand, shell	

(Abbreviations: lt. - light,  
med. - medium, dk. - dark)



TABLE 41. (CONTINUED)

Artifact Type	Post Hole Number													
	356	374	391	403	404	405	408	411	416	417	418	419	420	421
SHELL TEMPER	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mississippi Plain	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GROG TEMPER	-	-	-	66	1	1	-	-	1	-	-	-	-	-
Tishomingo Plain	-	-	-	15	1	-	-	2	-	-	-	-	-	-
Tishomingo Cordmarked	-	-	-	15	-	-	-	-	-	-	-	-	1	-
Residual Grog Temper	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SAND TEMPER	-	-	-	-	-	4	-	-	-	-	-	-	1	-
Baldwin Plain	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Furrs Cordmarked	-	-	-	-	-	7	-	-	-	-	-	-	-	-
Alexander Incised	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FIBER TEMPER	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wheeler Plain	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MISCELLANEOUS	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fired Clay	-	-	-	-	1	-	-	-	-	-	-	-	-	-
TOTAL	-	-	-	107	3	1	-	2	-	1	-	1	2	1

TABLE 42. Lithic Artifacts from Post Holes

Artifact Type	Post Hole Number																																								
	2	3	4	6	7	8	10	13	14	15	16	17	19	20	26	27	29	31	32	33	34	35	36	37	38	40	41	42	43	44	45	47	49	50	52						
RED-CHERT																																									
Primary Decortication Flake				1	1					1										1		1		1			1								1						
Secondary Decortication Flake											2	1								1				1		1															
Shatter			4					2	1	1		2	3																												
Biface Thinning Flake																																									
Undifferentiated Flake				3	3			2	2	1	2	6	2	3	1	5	2	1		2		1	4				2														
Pebble																																									
Class 1 Preform																																									
Bifacial Tool Fragment																																									
Class 1 Projectile Point																																									
Class 2 Projectile Point																																									
Utilized Flake																																									
Retouched Flake																																									
Core																																									
YELLOW-CHERT																																									
Primary Decortication Flake																																									
Secondary Decortication Flake																																									
Shatter																																									
Biface Thinning Flake																																									
Undifferentiated Flake																																									
Pebble																																									
Utilized Flake																																									
Core																																									
GREY-CHERT																																									
Primary Decortication Flake																																									
Shatter																																									
Undifferentiated Flake																																									
Utilized Flake																																									
TALLAHATTA QUARTZITE																																									
Class 13 Projectile Point																																									
QUARTZ																																									
Shatter																																									
Pebble																																									
OTHER-CHERT																																									
Undifferentiated Flake																																									
Pebble																																									
FERRUGINOUS SANDSTONE																																									
Fragment																																									
Ground Fragment																																									
TOTAL	7	1	1	1	6	3	3	6	7	4	10	6	1	5	1	8	1	2	3	8	1	3	7	8	1	1	1	3	2	6	-	8	5	3	-	-	-				



TABLE 42. (CONTINUED)

Artifact Type	Post Hole Number																												
	54	55	56	58	60	65	86	87	88	89	91	93	95	99	114	120	143	144	145	157	159	160	161	180	304	320	323	325	340
RED CHERT																													
Primary Decortication Flake					1	1		2		2		1		1															
Secondary Decortication Flake			1	1	3	2	2	1	1	1	2		1																
Shatter			1	2	1	8	3	6	9	2	8	4	2		3	3		1	1	2		1	2				2	4	2
Surface Thinning Flake																													
Undifferentiated Flake			1	2	2	6	2	5	3	3	2	18	2	10	3	3		1	2		5						1	10	
Pebble						0		3	1	3	2	2	1															4	2
Class 1 Preform																													
Bifacial Tool Fragment																													
Class 1 Projectile Point																													
Class 2 Projectile Point																													
Utilized Flake						1					2						1	1											
Retouched Flake																													
Core																													
YELLOW CHERT																													
Primary Decortication Flake																													
Secondary Decortication Flake																													
Shatter																													
Surface Thinning Flake																													
Undifferentiated Flake																													
Pebble																													
Utilized Flake																													
Core																													
GREY CHERT																													
Primary Decortication Flake																													
Shatter																													
Undifferentiated Flake																													
Utilized Flake																													
TALLAHATTA QUARTZITE																													
Class 13 Projectile Point																													
QUARTZ																													
Shatter																													
Pebble																													
OTHER CHERT																													
Undifferentiated Flake																													
Pebble																													
FERRUGINOUS SANDSTONE																													
Fragment																													
Ground Fragment																													
TOTAL	3	1	5	1	33	17	16	17	7	10	38	3	8	15	6	12	3	6	3	21	3	6	3	21	5	34	4	6	

TABLE 42. (CONTINUED)

Artifact Type	352	355	356	374	391	403	404	405	406	411	416	417	418	419	420	421
RED CHERT																
Primary Decortication Flake	2	-	-	1	-	6	4	1	-	-	-	-	-	-	-	-
Secondary Decortication Flake	-	-	-	-	1	35	13	3	2	-	-	-	-	-	-	-
Shatter	-	-	-	-	-	14	1	2	1	-	-	2	-	-	-	-
Biface Thinning Flake	-	-	-	-	-	11	5	2	-	-	-	-	-	-	-	-
Undifferentiated Flake	7	-	1	3	-	33	5	5	1	2	-	-	-	1	2	-
Pebble	-	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-
Class 1 Preform	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sifacial Tool Fragment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Class 1 Projectile Point	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-
Class 2 Projectile Point	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Utilized Flake	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Retouched Flake	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-
Core	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
YELLOW CHERT																
Primary Decortication Flake	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Secondary Decortication Flake	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shatter	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-
Biface Thinning Flake	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Undifferentiated Flake	-	-	-	-	-	4	-	-	-	-	-	-	-	1	1	-
Pebble	3	-	-	-	-	9	-	1	-	-	-	-	-	1	1	1
Utilized Flake	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Core	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GREY CHERT																
Primary Decortication Flake	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shatter	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Undifferentiated Flake	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Utilized Flake	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TALLAHATTA QUARTZITE																
Class 13 Projectile Point	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
QUARTZ																
Shatter	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pebble	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHER CHERT																
Undifferentiated Flake	1	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-
Pebble	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FERRUGINOUS SANDSTONE																
Fragment	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	1
Ground Fragment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	14	-	3	5	-	127	29	14	4	2	-	2	-	1	3	4

## VII. BURIALS

A total of 14 human burials were found at the Tibbee Creek site during the excavations. Two of the burials, numbers 1 and 2, were exposed by the severe erosion which took place during the March, 1977, flood while the remaining twelve burials were located as the result of stripping operations in Area B. The burials from Area B include seven individuals, numbers 4, 5, 6, 7, 11, 12, and 13, who were interred in six graves within a small Mississippian cemetery.

Once they were located, the burials were excavated in a conventional manner. The skeleton and any accompanying artifacts were exposed in place, photographed, drawn and removed. The fill from burial pits was screened through 6.3 mm (1/4 in) mesh screen. The artifacts from burial pit fill are presented in Tables 43 and 44, and the bone and shell from burial pits is listed in Table 34. In addition to the general screening of the burial pit fill, samples of soil from immediately around the skeleton were screened through 1.6 mm (1/16 in) mesh to check for small artifacts such as beads. A large number of beads was found with Burial 15 and all of the fill from around this skeleton was fine screened.

The weight of the bulldozer used to strip the site caused considerable breaking, cracking and warping of the bones. In most cases, the long bones were cracked transversely into three to six pieces and the skulls were similarly cracked. The degree of breakage varied directly with the depth of the skeleton below the level of stripping, with the deeper burials sustaining much less damage. Burials 5 and 6, whose skulls were only 10 to 20 cm below the surface were badly crushed, while the skull of Burial 13 at a depth of 70 to 80 cm was in very good shape with very little cracking. While this damage to skeletal remains by machinery weight is sometimes a necessary evil in salvage type operations, it could be avoided to

some degree by stripping with "stand-off" type machinery such as a backhoe or "Gradall."

The skeletons were washed, sorted and inventoried at the M.S.U. lab prior to being sent to the second co-author at the Department of Anthropology, University of Michigan for analysis. Prior to analysis, the bones from each burial were reconstructed. Cranial and postcranial measurements were recorded where possible using standard anthropometric equipment (spreading calipers, sliding calipers and osteometric board) following for the most part procedures outlined by Bass (1971).

The sex criteria utilized were those discussed by Krogman (1962). In addition, enough of the pubis was present from several of the skeletons to use the Phenice (1969) technique. Age criteria included those of Todd (1920) for the symphyseal face of the pubis, Krogman (1962) for epiphysial closure, Moorrees, Fanning and Hunt (1963a, 1963b) for the development of the adult and deciduous dentition, and Merchant and Ubelaker (1977) for subadult bone lengths. Most of the individuals from the Tibbee Creek site are subadult, thus facilitating more accuracy in the age estimate at death.

A summation of sex, age and stature is presented in Table 45. Cranial measurements are given in Table 46 and postcranial measurements are listed in Table 47. It should be noted that the fragmentary nature of the bone limited measurement to a considerable extent. The following are descriptions of the individual burials.

#### Burial Descriptions

##### Burial 1 (Plate XI)

This burial was exposed by the March flooding at the extreme downstream end of Graded Area A. When found, most of the skull except for the occipital was washed away, and the left arm and vertebral column were exposed. The burial was covered up with plastic sheeting for excavation when fieldwork was restarted, but during a weekend, a trespasser on the site scraped away most of the

TABLE 43 . CERAMICS FROM BURIAL PITS

Artifact Type	Burial Number														
	1	4	5&6	7	8	9	10	11	12	13	15				
<b>SHELL TEMPER</b>															
Mississippi Plain var. Warrior	-	1	7	17	-	-	-	1	8	87	-				
Moundville Incised var. unspecified	-	-	-	-	-	-	-	-	-	4	-				
<b>GROG TEMPER</b>															
Tishomingo Plain	3	55	180	146	12	28	3	21	93	741	27				
Tishomingo Cordmarked	1	18	83	87	-	19	2	3	16	238	7				
Wheeler Check Stamped	-	-	-	-	-	-	-	-	-	4	-				
Alligator Incised	-	-	-	4	-	-	-	-	-	1	-				
<b>SAND TEMPER</b>															
Baldwin Plain	1	6	42	54	5	32	12	5	23	292	7				
Furrs Cordmarked	3	1	2	6	-	5	1	-	-	112	-				
Saltillo Fabric Impressed	-	-	-	-	-	-	-	-	1	-	-				
Alexander Incised	-	-	-	-	-	1	-	-	-	28	-				
Alexander Pinched	-	-	-	-	-	6	1	-	-	-	-				
<b>FIBER TEMPER</b>															
Wheeler Plain	-	1	-	2	-	-	13	-	2	1	-				
Wheeler Dentate Stamped	-	-	2	-	-	-	-	-	-	1	-				
Residual Fiber Temper	-	-	1	-	-	-	-	-	-	-	1				
<b>Total</b>	10	82	318	316	17	91	31	31	143	1509	42				

(fired clay not included)

TABLE 44. LITHIC ARTIFACTS FROM BURIAL PITS

Artifact Type	Burial Number															Total
	1	4	5&6	7	8	9	10	11	12	13	15	15	Total			
<b>RED CHERT</b>																
Primary Decortication Flake	-	2	31	23	3	9	-	20	6	73	3	170				
Secondary Decortication Flake	2	15	44	71	3	46	12	46	14	175	8	436				
Shatter	1	14	61	116	5	29	97	30	56	625	21	1055				
Biface Thinning Flake	-	-	21	6	1	9	2	5	6	21	-	71				
Other Flake	5	35	155	125	16	51	34	77	55	935	28	1516				
Pebble	-	1	15	20	2	4	16	6	10	61	4	139				
Class 1 Preform	-	-	1	1	-	-	-	-	-	1	-	3				
Class 1 Projectile Point	-	1	-	2	-	1	-	-	-	3	-	7				
Small Triangular Preform	-	-	3	-	-	-	-	-	-	8	-	11				
Biface Fragment	-	-	1	-	-	2	-	1	1	10	1	16				
Micro Perforator	-	1	2	-	-	-	-	-	-	-	-	3				
Utilized Flake	-	1	-	-	-	-	-	-	-	17	-	18				
Retouched Flake	-	-	3	-	-	-	-	1	-	7	-	11				
<b>YELLOW CHERT</b>																
Primary Decortication Flake	-	-	1	2	-	-	-	1	3	6	-	13				
Secondary Decortication Flake	-	4	3	4	-	2	-	1	5	9	-	28				
Shatter	-	3	6	17	-	2	-	2	6	40	1	77				
Biface Thinning Flake	-	-	2	-	-	-	-	-	2	2	-	6				
Undifferentiated Flake	-	1	15	12	-	2	1	5	11	51	-	98				
Pebble	1	10	38	50	2	47	10	22	33	226	11	450				
Class 1 Preform	-	-	-	3	-	-	-	-	-	-	-	3				
Class 2 Preform	-	-	-	1	-	-	-	-	-	-	-	1				
Class 3 Preform	-	1	-	-	-	-	-	-	-	-	-	1				
Class 1 Projectile Point	-	-	-	-	-	-	-	-	-	1	-	1				
Class 19 Projectile Point	-	-	-	-	-	-	1	-	-	-	-	-				
<b>GREY CHERT</b>																
Shatter	-	-	-	9	-	-	53	1	17	-	-	79				
Undifferentiated Flake	-	-	-	5	-	-	2	1	4	-	3	15				

TABLE 44. (CONTINUED)

Artifact Type	Burial Number															Total
	1	4	5	6	7	8	9	10	11	12	13	15	Total			
TALLAHATTA QUARTZITE	-	-	-	-	5	-	4	11	7	-	-	2	29			
Shatter	-	-	-	-	-	-	-	1	-	-	-	-	1			
Undifferentiated Flake	-	-	-	-	-	-	-	-	-	-	-	1	1			
Drill Fragment	-	-	-	-	-	-	-	-	-	-	-	-	-			
QUARTZ	-	1	-	-	8	-	1	-	-	4	53	3	69			
Shatter	-	-	-	-	-	-	-	-	-	-	-	1	2			
Pebble	-	-	-	-	-	-	-	-	-	-	-	-	3			
OTHER CHERT	-	-	-	-	12	-	5	-	-	6	6	-	29			
Pebble	-	-	-	-	-	-	-	-	-	-	-	-	-			
FERRUGINOUS SANDSTONE	-	4	4	4	24	-	2	-	4	-	57	1	96			
Fragment	-	-	-	-	-	-	-	-	-	-	10	-	10			
Ground Fragment	-	-	-	-	-	-	-	-	-	-	-	-	-			
Possible Adz	-	-	-	1	-	-	-	-	-	-	-	-	1			
TOTAL	9	94	407	516	32	216	240	229	239	2397	88	4466				

TABLE 45. SEX, AGE AND STATURE SUMMARY, TIBBEE CREEK SITE SKELETONS

Burial Number	Sex	Criteria	Age	Criteria	*Stature (cm)
1	Male (?)	large femoral head	adult	epiphyseal closure	---
2	Female	gracile cranium	adult	partial suture closure	---
4	Male	Phenice, 1969	39-44	Todd, 1920	170.1 ± 3.42
5	Female	gracile crania and postcrania	15-18	Moorrees, Fanning and Hunt, 1963a; Merchant and Ubelaker, 1977	155.9 ± 3.82
6	?	---	12	Moorrees, Fanning and Hunt, 1963a	---
7	?	---	6	Moorrees, Fanning and Hunt, 1963a; Merchant and Ubelaker, 1977	---
8	?	---	6 mo's.	Moorrees, Fanning and Hunt, 1963b	---
9	?	---	2	Moorrees, Fanning and Hunt, 1963a 1963b	---
10	Female	small femoral head	adult	senile osteoporosis	---
11	?	---	6 mo's	Moorrees, Fanning and Hunt, 1963b	---
12	Male	Phenice, 1969	45-50	Todd, 1920	---
13	Male (?)	robust crania and postcrania	15-17	Moorrees, Fanning and Hunt, 1963a; epiphyseal closure	---
15	?	---	2	Moorrees, Fanning and Hunt, 1963a; 1963b; Merchant and Ubelaker, 1977	---



TABLE 46. CRANIAL MEASUREMENTS, TIBBEE CREEK SITE SKELETONS

Measurement Description	Burial Number									
	3	4	5	6	7	9	10	12	13	15
Mandible										
Bicondylar breadth	(127)	(117)	113.6	112	(88)	(133.5)	124.3	(84)		
Condylar breadth	23.1	17.6	12.5	20.5	24	(12.5)	20.5	(12.5)		
Bigonial breadth	103.1	93.1	95.0	80.4	71.5	(104)	103.1	65.0		
Asc. ramus height, coronoid	68	60.0	52.4	46.4	56.1	69.4	62.0			
Asc. ramus height, condyle	65.8	53.1	42.1	36.7	25.3	60.1	54.2	25.5		
Min. breadth, asc. ramus	32.9	37.7	32.4	28.5	20.7	(29.3)	35.8	21.5		
Symphysis height	35.5	35.9	25.3	20.8	20.8	(23)	37.6			
Symphysis thickness	15.8	10.5	13.8	11.7	12.2	13.2	15.5	18.3	11.5	
Length	104	105	102	79	62	104				
Cranial Vault	113.2							111.9		
Bregma-lambda						93.0				
Biorbital breadth						36.2				
Orbital breadth						111				
Temporaleis length						79.6				
Temporaleis height						(91)				
Min. frontal breadth						141				
Bregma-inion	143					146				
Bregma-opisthion	113.4					100.3		112.0		
Bregma-nasion	47.3					36.4				
Lambda-inion										
Opisthion-inion	96.8									
Asterion-asterion	172									
Nasion-lambda	177									
Maximum length	138					163		182		
Maximum breadth	136					137		(194)		
Parietal arc	140							131		
Frontal arc	60							133		
Lambda-inion arc										
Inion-opisthion arc						51		52		
Asterion-asterion arc	120									

—, right side measurement.

( ), estimated measurement.

TABLE 47. POSTCRANIAL MEASUREMENTS, TIBBEE CREEK SITE SKELETONS

Measurement Description	Burial Number															
	4		5		6		7		9		10		12		15	
	left	right	left	right	left	right	left	right	left	right	left	right	left	right	left	right
<b>Femur</b>																
Head diameter	50.4	50.9														
Max. length	(459)	(459)														(155)
A.-p., midshaft	31.3	28.4													10.3	10.2
Trans., midshaft	25.8	26.2													12.2	11.2
Circumference, midshaft	103	101													46	46
A.-p., subtro.	25.0	27.6													13.3	13.1
Trans., subtro.	32.5	32.6													15	14.5
<b>Tibia</b>																
Max. length	(385)	(385)													131.7	132.2
A.-p., midshaft	34.0	32.0													12.1	11.7
Trans., midshaft	18.4	19.7													9.8	9.7
Circumference, midshaft	98	94													46	46
<b>Fibula</b>																
Max. length	362	(360)													129.1	
<b>Clavicle</b>																
Max. length	159	157													107.6	
<b>Ulna</b>																
Max. length	(270)	272													(285)	
<b>Humerus</b>																
Max. length	325	332													124.0	
Max. diam., mids.	21.8	22.6													11.5	
Min. diam., mids.	16.3	15.2													8.5	
Circum., mids.	78	77													44	
Head diameter	46.6	48.3														
Bicipond. brth.	61.2	(63.7)													57.6	
<b>Radius</b>																
Max. length	258	(260)													(272)	95.4

( ), measurement estimate.



Plate XI.



Plate XII.



Plate XIII.



Plate XIV.

PLATE XI

Burial 1.

PLATE XII

Burial 2. Only the skull, cervical vertebra and the shafts of the left humerus and tibia are exposed.

PLATE XIII

Burial 3. Miller III burial cut through by Wall trench 1 of Structure 1.

PLATE XIV

Burial 10. Note large Tishomingo sherd on chest.

PLATE XI

Burial 1.

PLATE XII

Burial 2. Only the skull, cervical vertebra and the shafts of the left humerus and tibia are exposed.

PLATE XIII

Burial 3. Miller III burial cut through by Walltrench 1 of Structure 1.

PLATE XIV

Burial 10. Note large Tishomingo sherd on chest.

exposed portion of the burial, using a large potsherd as a digging tool. Excavation of the remains of the burial, however, did provide some information. The skeleton was lying semi-flexed on the back, head to the south, with the arms to the sides and the legs flexed to the right. All bones were in a very fragmentary and poorly preserved condition. The burial pit had washed away; the only indication of a pit was a slightly darker soil color within the confines of the body. No artifacts were found in association. The burial intruded into a precedent pit full of fired clay (Feature 26) that was directly under the pelvis and legs. A concentration of fired clay was found at the left side of the skull and above the skull. There was no sign of burning on any of the bones.

Fusion of all epiphyses indicates that the individual was adult and the large femoral head suggests the sex was possibly male. No pathologies or non-metric variants were observed.

The cultural association of Burial 1 is uncertain due to the lack of associated artifacts, but a Miller III or Mississippian association is most likely.

#### Burial 2 (Plate XII)

This burial was also exposed by the flood, but was entirely destroyed by a local relic collector prior to being investigated. The burial was located at the extreme downstream margin of the site. A photograph of the burial taken prior to its destruction shows it to be an adolescent or adult fully flexed lying on the left side.

#### Burial 3 (Plate XIII)

This burial was found during the stripping of Graded Area B. The skeleton was fully flexed lying on the left side with the head to the west in a very poorly defined pit. The burial had been cut through by Wall Trench 1 of Structure 1, removing all of the burial except for the skull and legs. Based on the partial obliteration

of the cranial sutures the individual was adult, and the gracile skull indicates a possible female. The frontal, parietals and occipital of the skull could be reconstructed, and fragments of the other cranial flat bones were present, along with fragments of the femora and tibiae. No artifacts were found in association, but the burial position and the disturbance of the burial by the Mississippian wall trench suggest a Miller III association.

#### Burial 4 (Plate X)

This individual was buried in a roughly rectangular pit 2.1 m long, .75 m wide and .30 m deep when encountered. The skeleton was fully extended on the back with the arms to the side. The orientation of the body was east-west with the head to the east. The only artifact found in association was a single mussel shell lying directly on the sternum with the interior down and the shell oriented with its long axis parallel with the shoulder line. While there was some mussel shell included incidentally in the pit fill, this shell is felt to have been placed purposely because of its position, orientation and completeness. The skeleton was in good condition and all bones were present. Based on the pelvis, the individual was male and was between 39 and 44 years old at death based on the symphyseal faces. There was a healed fracture of the distal left ulna and a healed fracture of the fourth left metacarpal. There was a bifurcate sternal end on a lower left rib. The only pathology noted was a septal aperture of the left humerus. Burial 4 is associated with the Mississippian component, judging from the burial position and the presence of shell-tempered pottery in the pit fill.

#### Burials 5 and 6 (Plate XV)

These two individuals were buried on top of each other in an oblong squarish pit. The pit measured 182 cm long by 69 cm wide at its widest point at the shoulders of the skeletons, and was 21

PLATE XV

Burial 5 (top) and Burial 6  
(bottom) with shell gorget on  
the chest of Burial 5.

PLATE XVI

Burial 7.

PLATE XVII

Burial 9. Note Bear canine at  
the end of the left arm.

PLATE XVIII

Burial 12.





Plate XV.

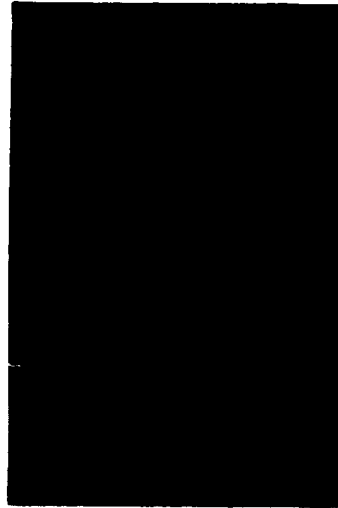


Plate XVI.

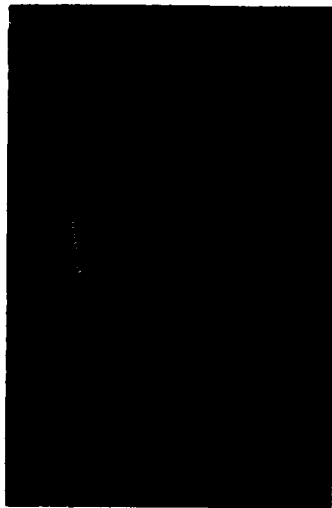


Plate XVII.



Plate XVIII.

cm deep from the graded surface. Both burials were fully extended on the back, oriented north-south with the heads to the south and faces to the west. The hands of Burial 5 rested on the pelvis and the feet were together. The hands of Burial 6 were to the sides and the feet were apart. The pelvis were directly on top of each other while the heads of the burials were lying side by side. Burial 5 had a circular marine shell gorget with an engraved cross design (Plate XXXVIIA: Fig 19) lying face up on the middle of the left clavicle; no artifacts were associated with Burial 6. The bones of both skeletons were in good but somewhat fragmented condition. All parts of both skeletons were present except that the left fibula of Burial 5 was missing. Epiphyseal closure and dental development indicates that Burial 5 was 15 to 18 years old and female, based on the thin gracile bones. Burial 6 was 12 years old based on dental development; sex is unknown. The only non-metric variants observed were left lambdoidal ossicles and an ossicle at lambda. A sample of the bones of Burial 5, consisting of most of the vertebrae and ribs, was submitted to the University of Georgia Center for Applied Isotope Studies. The date received was  $290 \pm 70$  B.P. or 1660 A.D., which is much too late considering the Mississippian association of the burial.

#### Burial 7 (Plate XVI)

This child was interred in an oval pit which was much wider than necessary to accommodate the body. The pit measured 135 cm long, 90 cm wide, and had an average depth of 20 cm. The skeleton was lying fully extended on the back with the head to the east, the legs together, and the arms to the side with the hands outside the pelvis. No artifacts were associated with Burial 7. The skeleton was in a good state of preservation and the whole skeleton was present. Based on dental development, the individual was six years of age at death, but the sex is indeterminate. The only pathology noted was the presence of cribra orbitalia and no non-metric variants were

present. The burial is associated with the Mississippian component based on its location parallel and adjacent to Burial 4 and the presence of shell tempered ceramics in the fill of the burial pit.

#### Burial 8

This infant burial was located in a small pit approximately 2.5 m west of the western-most wall of Structure 1. The burial pit measured 63 cm in length, 39 cm maximum width, and was an average of 7 cm deep. The skeleton was semiflexed lying on the back, with the lower legs drawn up under the body and the arms to the side. The body and pit was oriented east-west with the head to the west. The burial was in a somewhat poor state of preservation in part due to the very small size of the bones, but the entire skeleton appears to have been present. Tooth development indicates an age at death of six months and the sex of the burial is unknown. The only pathology was cribra orbitalia and no non-metric variants were observed. The cultural association of this infant is somewhat uncertain. The small burial pit contained only 17 sherds; 12 Tishomingo Plain and 5 Baldwin Plain. However, the placement of the burial outside and parallel to the west wall of Structure 1 suggests that it is associated with that Mississippian structure, especially considering that Burial 9, another small child, was buried in a similar situation.

#### Burial 9 (Plate XVII)

This child was buried in a small elongate pit approximately 2.5 m west of the southern west wall of Structure 1. The burial pit was 105 cm long, 39 cm wide and 9 cm deep. The skeleton was lying semiflexed on the back, oriented north-south with the head to the south. The legs were both flexed to the midline of the body with the left foot lying on the right tibia. The arms were to the sides with the hands outside the pelvis.

This burial was accompanied by a number of artifacts, including a columella bead choker, two drilled bear canines and a problematical antler object. The choker consisted of four large columella

beads (Plate XXXVII B-E) that were directly under the chin. The bear canines (Plate XXXVII I-J) were at the end of the left hand, positioned with the drilled roots adjacent as if they had been attached. The antler "plummet" shaped object (Plate XXXVII K) was at the very foot of the burial pit and was resting directly on the pit floor. There were two additional artifacts near the skeleton that may be associated. A basal fragment of a lanceolate biface, resembling a Class 2 projectile point, was found at the end of the right hand. The second possible association was an unmodified mussel shell found lying directly on the upper left ribs. The skeleton was in a fair state of preservation and the complete skeleton was present.

The dental development and long bone length of Burial 9 indicates an age at death of two years. The sex of the child is unknown. The only pathology noted was cribra orbitalia and no non-metric variants were observed. While no Mississippian pottery was found in the burial pit fill, this burial appears to be associated with the Mississippian component represented by Structure 1 because of the burial placement outside and parallel to the wall of the house, in a situation similar to Burial 8 and possibly Burial 15. A radiocarbon sample consisting of the vertebral column, ribs and scapulae of Burial 9 was submitted for dating, but the sample (U.Ga-2451) had an activity higher than the 1950 standard.

#### Burial 10 (Plate XIV)

This Miller III burial was buried in a shallow, ill-defined pit which barely cut through the shell midden into the yellow sand zone underlying the midden. The pit was roundish-irregular in shape, measuring 80 by 90 cm and with a rounded bottom a maximum of 10 cm deep below the midden. The skeleton was fully flexed lying on the left side with both legs drawn up near the chest and the arms flexed between the legs. The body was oriented east-west with the face to the south. The shoulders and upper chest of the burial were covered with a large sherd representing about one-third of a medium sized Tishomingo Cordmarked bowl. The sherd was oriented with the rim at the neck of the skeleton and had broken into two large

pieces. The vessel was cordmarked for about 8 cm below the rim with the lower portion of the pot appearing to be very smoothed-over cordmarking. The vessel represented by this sherd is reconstructed in Figure 17.

The whole skeleton was present but the bone was in a somewhat poor state of preservation. The individual was an adult judging from marked cortical involution and female judging from the small femoral head and gracile bones. Pathologies noted were cribra orbitalia and general advanced senile osteoporosis. Non-metric variants present were an ossicle at lambda and multiple left and right lambdoidal ossicles.

A sample of the bones from this burial consisting of the vertebral column and ribs was submitted for dating, but like the other bone dates from the site is much too late for this Miller III burial. The date received was 240 $\pm$  800 B.P. or A.D. 1710 (UGa-2452).

#### Burial 11 (Plate XIX)

This infant burial was found in a shallow round pit. The pit had a diameter of 110 cm and a maximum depth of 10 cm. The body was semi-flexed, oriented east-west with the head to the east and was located in the center of the pit. The legs were both flexed to the outside with the feet together on the approximate centerline of the body; the arms were both bowed at the elbows to the sides. The only possible artifact accompanying the burial was, again, a mussel shell on the chest. In this case the shell was a trapezoidal fragment from the wall of a large mussel shell. The edges were not cut but appeared to be broken off. It is not certain if the shell was intentionally placed or incidental.

The skeleton was in a very poor condition and very fragmentary, perhaps due to its shallowness and the weight of the stripping machine. The age of the individual at death was six months based on dentition. The only pathology was cribra orbitalia and no non-metric variants were observed. The presence of a sherd of

PLATE XX

Burial 13. Note the depth of the burial pit.

PLATE XIX

Burial 11. Note triangular mussel shell fragment on chest.

PLATE XXII

Burial 15. Closeup of chest area showing masses of Marginella and Goniobasis beads.

PLATE XXI

Burial 15. The facial portion of the skull has slumped onto the chest.

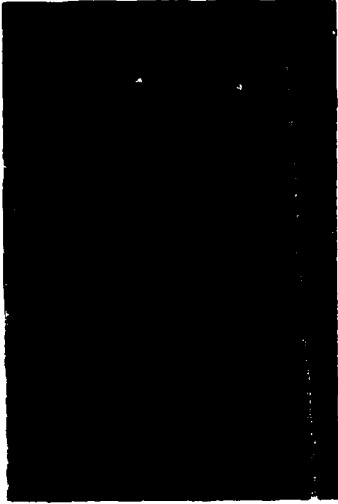


Plate XX.



Plate XXII.

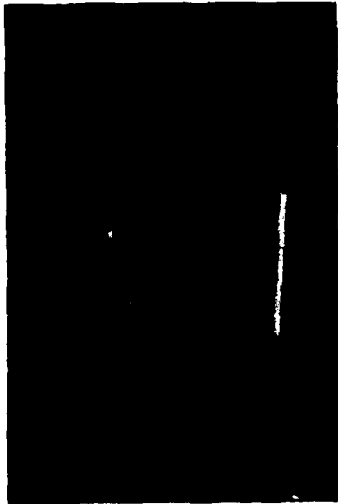


Plate XIX.



Plate XXI.

Mississippi Plain var. Warrior in the pit fill indicates a Mississippian association for this infant.

#### Burial 12 (Plate XVIII)

This was the only adult semi-flexed Mississippian burial found at the site. The skeleton was in an oblong pit whose top dimensions were considerably larger than the floor dimensions. The top measured 160 by 95 cm while the bottom was 40 cm shorter, measuring 120 by 95. This resulted in there being shallow ledges at the head and foot of the burial pit. The body was semi-flexed, lying on the back with the left leg drawn up so the left foot was at the pelvic canal and the right leg crossing it at a right angle to the vertebral column. The right arm was parallel to the body with the hand outside the pelvis while the left arm was flexed to the exterior at the elbow with the hand flexed inward to the pelvis. The knee of the right leg rested on the shelf at the foot of the pit.

Two artifacts were found associated with this burial; a bird bone "barrette" to the right top center of the skull, and a long chert "pin" lying under the right parietal (Plate XXXVII F-G). Presumably the two were associated as a hair ornament. The individual was 45 to 50 years old at death based on the pubic symphyseal faces. The sex was male based on the very robust crania and post crania. No non-metric variants were observed, but pathology includes osteoarthritic lipping of the coronoid process of the left ulna and the head of the left radius. Also, the distal quarter of the right tibia and fibula are fused which could be of traumatic origin.

#### Burial 13 (Plate XX)

This was one of the more interesting Mississippian burials from the site and is unique in several regards. The individual was buried in a very large deep pit. The pit was 235 cm long and an average of 105 cm wide and was 80 cm deep. The pit walls were nearly straight and the pit floor very flat. Whereas all of the



other burials from the site only intruded perhaps a maximum of 5 cm into the clay subsoil, this burial pit was dug approximately 60 cm into the hard clay. The other mature burials were also in pits which were barely large enough for the body, whereas this pit was much larger than necessary to accommodate the body.

The skeleton was originally fully extended and placed slightly to the right of the pit centerline. The skeleton had been disturbed considerably sometime after interment. The femurs and tibiae were completely gone but fragments of the fibulae were present in their correct position. The foot bones were scattered in four clusters at the foot of the pit. The left half of the pelvis was flipped on top of the right half. Most of the arms were gone, except for the proximal ends of the humeri and the distal part of the right ulna. Both hands were present, but displaced from their anatomical positions. The skull and the chest areas were essentially intact; in fact the skull was the best preserved one from the site, probably because the depth of the pit saved it from crushing by the weight of the stripping equipment.

Two artifacts were associated with Burial 13. A large sherd of Moundville Incised var. Carrolton (Plate XXX A) was lying on the lower left side of the chest. The second artifact was an antler tine projectile point (Plate XXXVII P), found imbedded between the head of the left humerus and the acromion of the scapula. There was no healing of bone around the point, and presumably death occurred shortly after the wound.

Based on epiphyseal fusion and dental development, the age at death was between 15 and 17. The sex is possibly male based on the robust crania and postcrania. A non-metric variant was the presence of an os inca. The distal right ulna, osteoma and clavicular diaphyses show areas of porosity, probably of infectious origin.

Summarizing this burial's situation, the skeleton appears to have been "robbed" of long bones sometime after burial. The presence of the proximal portions of the humeri suggest that the bone was at

least partially decomposed and brittle. It was thought that perhaps the grave had been looted by artifact collectors since it would have been easy to locate with a probe due to its depth, but pot-hunters would not be likely to leave the skull and chest area intact.

Burial 14. This burial number was not assigned.

Burial 15 (Plates XXI - XXII)

This child burial was located at the bottom of a circular pit which contained a very large amount of mussel shell. The pit had a diameter of 110 cm with a zone of concentrated shell 30 to 40 cm thick in the upper parts. From Table 34 it can be seen that 41 kg of shell was contained in this lens. Under the shell lens, the pit contained a 15 cm thick zone of relatively clean yellowish brown sand at the base of the feature. The skeleton was contained within this zone.

The body was flexed, lying on the back in a somewhat curious position. The legs were each drawn up to the side of the body in a "crouched" manner. The left arm was flexed at the elbow with the hand at the skull while the right arm was flexed the opposite direction with the hand at the right knee. The skull had slumped post mortem so the facial part was lying on the chest area. The body was oriented east-west with the head towards the east.

A mass of Goniobasis and Marginella beads was found covering the chest area of Burial 15. Most of the beads were scattered with no discernible pattern, but some were found in adjacent linear rows. The impression is that the beads were sewn onto or into some sort of garment which covered the chest of the burial. A total of 225 Goniobasis and 183 Marginella beads were found, but no differences in position between the two types were noted.

The bone from Burial 15 was in an excellent state of preservation, probably due to the large amount of shell overlying the skeleton.

The dental development and long bone lengths indicate an age at death of two years. The sex is unknown. No pathologies or non-metric variants were observed.

The cultural association of Burial 15 is uncertain. The latest ceramics found in the pit fill are Miller III, but this is not conclusive given the overall low density of shell-tempered, Mississippian ceramics at the site. The location of the burial in relation to Structure 1 is similar to the situation noted for Burials 8 and 9 in that the burial pit is located approximately 2.5 m from the wall of the house at a point approximately midway down a wall or walltrench. Burial 15 differs from Burials 8 and 9 in that it was interred in a round pit filled with primary refuse in the form of a dense lens of mussel shell, and in that the body was not oriented to cardinal directions.

#### Discussion

A total of 14 human burials were found at Tibbee Creek, and all can be associated with either the Miller III or the Mississippian component. Burials 3 and 10 are definite Miller III interments and it is likely that Burial 2 is also Miller III judging from the burial position. The cultural association of Burial 1 is uncertain but it is Miller III or later. The remaining 10 burials (Numbers 4-9, 11-13, and 15) appear to be associated with the Mississippian component, with the association made either on the basis of diagnostic artifacts included in the pit fill or by reference to their position relative to Mississippian features. A summary of the burials from each component is presented below.

#### Miller III Burials

Disregarding for the moment Burial 1 and its uncertain association, there appears to be a significant regularity in burial position among the three Miller III burials. Each body was placed on its left side in a small shallow pit which was just large enough to contain the tightly flexed body. The legs were drawn up tightly against the body.

The body does not seem to have been oriented with regard to the cardinal directions. The only grave goods found with the Miller III interments was a large sherd from a Tishomingo Cordmarked bowl which covered the chest area of Burial 10.

The Tibbee Creek Site Miller III burials contrast with the larger sample of Miller III burials that was found at the Cofferdam site (Blakeman, Atkinson and Berry 1976). The Cofferdam site is located only 2.3 km west of Tibbee Creek on the opposite side of the Tombigbee River (Fig. 1). The norm for Miller III burials at this site appears to have been placement of the body on the back in a semi-flexed position with the legs to the side within a large recycled cooking-storage pit or sometimes in a shallower pit of some form. Data is incomplete on the shallow pit burials because of extensive disturbance and removal of all but the lowest cultural deposits before the investigations began. Cofferdam Burial 17 was the only fully flexed burial found at the site. The individual was buried in a small pit, fully flexed but lying more or less on the back with the legs up. Cofferdam Burial 24, semiflexed in a recycled cooking-storage pit, resembled Burial 10 at the Tibbee Creek site in that it was accompanied by a large sherd of Tishomingo Cordmarked. The sherd with Burial 24 was lying next to the body rather than on top of it. Comparison of the two sherds from the different burials shows that they differ in vessel size and shape, but they are very similar in paste and temper. Both have very dense grog temper. Data from the Cofferdam site served as the basis for the definition of the Cofferdam Phase of the Miller III Period, which is dated "...somewhere between A.D. 500 to A.D. 750, with the later date being more probable" (Blakeman, Atkinson and Berry 1976:136).

A number of fully flexed Miller III burials were found in the village area of the Bynum Mounds site (Cotter and Corbett 1951) which is located about 57 air kilometers northwest of the Tibbee Creek site on one of the northernmost tributaries of the Tibbee Creek drainage. Eleven fully flexed burials were interred in small shallow pits at Bynum, and all of these burials for which a breakdown of the sherds from the pit fill is given show a preponderance of Tishomingo series

ceramics. None of these burials had grave goods, but six of the eleven burials were located in a cluster of individual pits which resembles a cemetery area (Cotter and Corbett 1951:14-15).

The largest population of Miller III burials from a single site in the Tombigbee drainage is from site 1Pi61 in the Gainesville Reservoir area. Preliminary analysis of these burials seems to show two distinct groups. One group is similar to the Cofferdam burials in being semiflexed while the other resembles the Tibbee Creek site and Bynum burials in being fully flexed (Jenkins 1979, personal communication).

From the brief summaries above, it appears that there are two distinct modes of Miller III burial: semi-flexed in large pits that appear to have originally been dug for a purpose other than burial; and fully flexed in small pits which may or may not have been especially dug for burial. What is not certain is whether these differences in burial practice are cultural or chronological or whether they simply represent burial in the most expedient manner available. Perhaps if an old pit was available, the burial was made in it often with no need for compacting the body, while burial in a burial pit required that the body be made as compact as possible to limit the amount of effort in grave digging. A point against the expediency hypothesis is that the two modes of burial seem to occur in a more or less mutually exclusive manner, with only fully flexed burials at the Tibbee Creek site and Bynum, virtually all burials semi-flexed at Cofferdam, and discrete groups of partially and fully flexed burials at 1Pi61.

Little can be said about the health of the Miller III population from the Tibbee Creek site because of the small number of burials. However, the presence of *cribra orbitalia* in Burial 10 probably indicates anemia due to iron deficiency. This pathology was also found in the Mississippian burials and will be discussed further below.

#### Mississippian Burials

Six Tibbee Creek site burials can be definitely associated with the Mississippian component because of the inclusion of Mississippian shell tempered pottery within the burial pit fill (Table 43).

Three burials (numbers 8, 9, and 15) are thought to be associated with the Mississippian component because of their placement and orientation with reference to the walls of Structure 1, the Mississippian wall-trench house.

Referring to the plan of Graded Area B (Fig. 6), the Mississippian burials can be divided into two groups. The first group consists of six burial pits which are arranged in a cemetery like manner to the east of Structure 1. Included in this cemetery area are Burials 4, 5, 6, 7, 11, 12, and 13. The "core" of the cemetery is two rows containing two burial pits each. The north-south row contains Burials 4 and 7. Each was buried fully extended with the heads to the east in more or less rectangular burial pits spaced 0.75 m apart. Tangent to the south end of this north-south row is an east-west row of two pits which contained Burial 12 in the eastern pit and Burials 5 and 6 in the western pit. The two pits are 4 m apart. Burials 5 and 6 were extended while Burial 12 was partially flexed and the heads of all three skeletons were to the south. Each of these two pit rows contains an adult male approaching senility in one pit, and children or subadults in the other pit.

The other two burials in the cemetery area are numbers 11 and 13 and both deviate from the pattern established in the "core" of the cemetery. Burial 11, with an age at death of six months, is the only infant or small child in the cemetery area, and also differs in being buried in a round pit with the head to the west. Other infants or small children appear to have been buried either to the north or west of Structure 1.

Burial 13 also presents an anomalous situation. As mentioned in the above burial description, this teenage male was buried in a rectangular pit which was much larger and deeper than any other burial pit on the site. Considerable effort had to be expended to dig the pit deep into the dense clay subsoil. There is some indication of violent death. An antler tine projectile point was lodged in the left shoulder and there were signs of infection in the right shoulder. The burial had

also been robbed of the long bones of the legs and arms with an interesting avoidance of the shoulder areas. Finally, the burial pit of Burial 13 was oriented northwest-southeast rather than to the cardinal directions like the other burials.

The second group of burials is not a distinct grouping in space like the cemetery area, but these three infant or small child burials are regularly placed with reference to the walls of Structure 1. Burial 8, a six-month-old infant, was placed 2.75 m north of the north wall of the house in a small pit oriented parallel to the wall and positioned approximately at the center of the wall. Burial 15, a two-year-old child, was placed in a round pit 2.75 m west of the center of the west wall of the north room. Burial 9, another two-year-old child, was placed in an oblong pit oriented parallel to the west wall of the south room of Structure 1 and 2.75 m west of the center of that wall. This 2.75 m spacing of infant and child burials in relation to the walls of Structure 1 is repeated in the location of the cemetery with reference to the house. The pit containing Burials 5 and 6, which is the closest cemetery burial pit to Structure 1, is located 2.75 m east of the center of the southern east wall of Structure 1.

It can be seen that there is considerable variation in burial placement and burial preparation within the small population of Mississippian burials at the Tibbee Creek site. First, there appear to be distinctions, based on age, which determine whether an individual was buried in a cemetery area or in pits outside the house walls away from the cemetery area. At the Tibbee Creek site, after the age of two years, individuals appear to have been buried in the cemetery area.

The pairing of senile males with children or subadults in the two rows of the core area of the cemetery is also notable; particularly when the lack of adult females in the population is considered. Finally, the much greater amount of labor invested in the burial pit for Burial 13, the orientation of this burial pit cross cutting the other rows of the cemetery, and the robbing of the long bones from this young male indicate that this burial was buried with a burial program

distinct from the other burials. It is tempting to associate the differences observed in Burial 13 with the violent wounds he apparently received.

There is some evidence of anemia due to iron deficiency in the Mississippian population, particularly among the infants and children. Three burials, numbers 7, 9, and 11 had indications of cribra orbitalia, which has been shown to probably represent prehistoric anemia in both the New and Old Worlds (Lallo, Armelagos and Mensforth 1977; Carlson, Armelagos and Van Gerven 1974). Given the dependence on agriculture of this Mississippian group and the relationship of that lifeway and iron metabolism, this seems a likely explanation for this pathological lesion involving the superior aspect of the eye orbits. The several traumatic pathologies and robust bone, particularly of the males, suggests an active and robust population.



## VIII. CULTURAL MATERIALS

### Ceramics

Ceramics of four major temper groups were found at the Tibbee Creek site: fiber, sand, grog, and shell temper. This includes ceramics attributable to phases of all the chronological periods from middle Gulf Formational through and including Mississippian. In this analysis, ceramics were assigned to twenty pottery types, all of which had been previously defined or recognized in the Tombigbee River drainage. With the exception of fragments of two pipes and a fragment of a pottery gorget, all of the pottery artifacts from the Tibbee Creek site represent sherds from vessels.

During the analysis, pottery was classified into descriptive provisional types based on combinations of the two traditionally important ceramic attributes: temper and surface treatment or decoration. These descriptive types were then correlated with types previously defined within the central Tombigbee valley using the sources and references cited in the individual type descriptions presented below. An attempt was made to classify all sherds regardless of size, but in retrospect the use of a system for segregating the very small sherds such as that described by Jenkins (1978b) would probably have produced better results. It is felt that in many cases the counts for plainware have been biased by the inclusion in the plain categories of sherds which were perhaps cordmarked but too small for the cordmarking to be recognized. While the ceramic classification used was not innovative nor did it attempt to solve any of the problems in ceramic classification in the Waterway area, it is hoped that it will not add to the confusion of either.

Jenkins (1978a, 1978b), Steponaitis (1978) and their associates have made the difficult initial steps toward devising a type-variety

system of nomenclature which can be applied to Tombigbee collections. This type-variety system shows considerable potential for clearing up many of the ambiguities and personal preferences which have burdened previous typologies and analyses of Tombigbee valley material. In this report, only the shell tempered pottery was classified according to type-variety nomenclature (Steponaitis, 1978). It was possible to do so with this class of pottery because detailed descriptions had been published and also because all decorated shell tempered sherds were segregated during analysis. For other temper groups, notes are made in the discussions on the relation of the Tibbee Creek site materials to Jenkins' (1978a) classification.

#### Fiber Tempered Pottery

Three of the four recognized types of fiber tempered pottery were found at the Tibbee Creek site. The majority of the collection is Wheeler Plain, followed by a few sherds of Wheeler Dentate Stamped and one sherd of Wheeler Punctate. The fourth type, Wheeler Simple Stamped, is not present at all. The following descriptions are specific for material recovered from the Tibbee Creek site.

##### Wheeler Plain

Haag 1942, Sears and Griffin 1950

Sorting Criteria: Presence of varying amounts of fiber in the sherds presumably as temper. The fiber is visible as casts, linear pits, and laminations. The surface finish of the sherds is plain, but most examples have a roughened surface due to fiber impressions.

Description: There is considerable variation in the composition of the paste and the density of tempering material within the Wheeler Plain sherds. Indeed, there is variation in most attributes of the pottery including thickness and surface finishing. The amount of fiber varies greatly from sparse to very dense. In some sherds the fiber is barely visible, while in others it appears to have once accounted for up to 25% of the total volume of the sherd. In one sherd with pronounced casts, there are upward of 50 tabular casts per  $\text{cm}^2$  in the edge of the

sherd which crosscuts the lengthwise orientation of the fibers. Usually, the fibers are oriented with their length parallel to the rim.

The paste varied greatly from a silty, almost chalky paste with very little sand to a hard paste containing a moderate amount of sand. Generally, the sherds with much fiber have little sand and vice versa. The color of the sherds shows little variation. The surface color is a light brown to orange, but the smoother surfaces of the sandier sherds tend toward a darker brown. The color of the core in those sherds which have not oxidized all the way through is dark brown to black.

While most sherds show numerous fiber impressions on their surfaces, some have been smoothed or "floated" and have a smooth surface with few or no fiber impressions. The smooth-surfaced sherds usually have a sandier paste.

Discussion: The Wheeler Plain sherds vary in thickness from 1.4 to 0.8 cm, with the sandier and smoother sherds tending to be thinner. No restorable vessels or large sherds are present in the collection, and consequently little can be said about vessel form. The slight curvature of the sherds suggests rather large vessels. Rims are straight and direct with sloppily rounded or flattened lips. No bases or appendages were found.

The Wheeler Plain from the Tibbee Creek site could easily have been sorted into Jenkins' (1978) var. Wheeler and var. Noxubee based on the different proportions of sand and fiber included in the paste.

#### Wheeler Dentate Stamped

Haag 1942, Sears and Griffin 1950

Sorting Criteria: Fiber tempered pottery showing rows of square punctations made with a comb-like instrument or possibly a roulette.

Description: The paste and temper density is the same as Wheeler Plain. The sherds from Tibbee have a moderate to large amount of fiber and a non-sandy paste. The punctations are 2 to 4 mm wide, less than 1 mm deep and arranged in short rows with the distance between

individual punctations varying between 4 and 6 mm. The stamping is applied rather haphazardly, but rows of punctations have a tendency to be very roughly parallel. One large rimsherd has widely spaced rows oriented at approximately 45 degrees from vertical.

Discussion: The Wheeler Dentate Stamped from this site doesn't conform exactly with Jenkins' var. Warsaw, differing in having more fiber and less sand. This material could be considered to be dentate stamping on Wheeler Plain var. Wheeler while Jenkins' Wheeler Dentate Stamped var. Warsaw is equivalent in paste and temper to his Wheeler Plain var. Noxubee. These dentate stamped sherds are similar to var. Warsaw in having a thickness which is generally less than 1 cm.

#### Wheeler Punctate

Haag 1942, Sears and Griffin 1950

Sorting Criteria: Fiber tempered pottery showing punctations which appear to have been made individually and not with a stamping instrument.

Description: The one sherd of Wheeler Punctate has round, random, overlapping punctations 3 mm in diameter and 1 mm or less deep. The paste is sandy with a moderate amount of fiber and the sherd is 0.8 cm thick.

Discussion: This sherd would conform to Jenkins' Wheeler Punctate var. Panola.

#### Sand Tempered Pottery

The sand tempered pottery from the Tibbee Creek site can be divided into three distinct ware groups having both cultural and chronological meaning. The first group is the Alexander series ware from the late Gulf Formational period. Included are the types Alexander Incised, Alexander Pinched, and their plainware counterpart O'Neal Plain. The second group is associated with the earlier phases of the local Miller culture and included the types Baldwin Plain, Furrs Cordmarked and Sallillo Fabric Impressed. The third group is associated with the Miller sand tempered wares but is decorated with incising and zone stamping and

has a more southern origin. Included in this third group are the types Basin Bayou Incised and Alligator Bayou Stamped. The following descriptions are based on material recovered from the Tibbee Creeksite.

O'Neal Plain

Haag 1942, Heimlich 1952

Whether or not it is possible to accurately and consistently sort the plain sand tempered pottery into the O'Neal Plain type associated with Alexander and the Baldwin Plain type is and continues to be a subject of some controversy among archaeologists working in the Tombigbee valley and elsewhere. Some investigators (cf Rucker 1974, Blake-man, Atkinson and Berry 1976) feel that sorting of the two types is possible, while other (Jenkins 1978a) feel that consistent separation is not possible. In the Tibbee Creek site analysis only sherds with Alexander associated attributes other than coarse temper were classed as O'Neal. This included mainly podal supports and a few bossed rims. Plain sherds which could not definitely be associated with Alexander attributes were classified as Baldwin Plain regardless of temper characteristics.

Alexander Incised (Plate XXIII A-K)

Haag 1942, Heimlich 1952

Sorting Criteria: Coarse sand tempered ceramics with a wide variety of incised designs; sometimes combined with punctations. Incising is generally uniform with closely spaced geometric designs.

Description: Each Alexander Incised sherd from the Tibbee Creek site is unique in terms of the placement and motif of the incising. The paste and temper, however, are rather uniform and consist of a hard, dense but also somewhat friable paste containing large amounts of rounded to sub-angular sand grains. The texture of the sherds feels something like poorly indurated sandstone and sand grains can easily be rubbed off the surface of most sherds. The color of the paste ranges from the "mouse grey" described by Haag (1942:514) to a medium brown and light orange. The brown and orange sherds have a grey core. Sherd thickness varies from 7 to 9 mm.

PLATE XXIV

Sand Tempered ceramics

A-C Alligator Bayou Stamped

D-K Basin Bayou Incised

PLATE XXIII

Sand tempered ceramics

A-K Alexander Incised

L-M Alexander Punctate

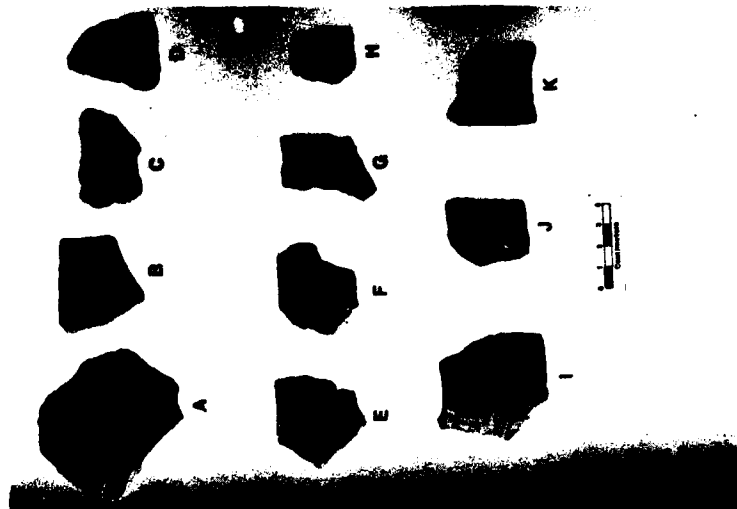


Plate XXIV.



Plate XXIII.

The incising appears to have been made in a wet paste. It is usually well executed and closely spaced; on some sherds the purpose of the incising appears to have been to produce the raised lands between grooves rather than the grooves themselves (see Plate XXIII H-I). The designs appear to be complicated geometric panels adjacent to one another. Individual designs are illustrated in Plate XXIII D-I.

Two sherds have punctations in combination with incision. One of these (Plate XXIII G) is an example of what DeJarnette, Walthall and Wimberly (1975:11) have called Crump Punctate. It has parallel rows of punctations which interrupt the lands between the closely spaced incised lines. With regard to rim treatment, one large but eroded incised sherd (Plate XXIII A) has a series of pinches below the rim; the "Crump Punctate" sherd has the characteristic Alexander rim bosses; and one sherd has closely-spaced vertical nicks.

Discussion: It is difficult to relate the Alexander Incised from the Tibbee Creek site to Jenkins' (1978a) five varieties since they are based primarily on motif and our collection is so small and varied that the major motifs cannot be identified.

Alexander Punctate (Plate XXIII L-M)

Haag 1942, Heimlich 1952

Sorting Criteria: Same paste and temper as Alexander Incised. Decoration consists of punctations made by pinching the wet clay with the fingernails.

Description: Same paste as Alexander Incised, but tending to a coarser sand temper. The punctations on all the specimens from the Tibbee Creek site seem to be made with the fingernail, and are usually applied in rows. Although classified as Alexander Incised, one sherd has pinching in the lands between incised lines.

Discussion: These sherds would be classified as Alexander Punctate var. Prairie Farms in Jenkins' (1978a) type variety system.



Baldwin Plain (Plate XXV A-F)

Jennings 1941, Cotter and Corbett 1951

Sorting Criteria: All plain surfaced sand tempered pottery was included in the type Baldwin Plain. Sherds containing any amount of burned clay or grog were not included regardless of how "sparse" or "rare" the grog particles were.

Description: The sherds are tempered with sand, and generally have a sandy paste. The size of the sand particles ranges from small to large, but no sherds have sand grains greater than 1 mm in size. It must be admitted that some sherds are very similar to Alexander series pottery in terms of having large grains and a similar paste, but due to the intergrading of all ware characteristics, no attempt was made to segregate large and small grain variants as has been attempted by other investigators (Rucker 1974, Blakeman, Atkinson and Berry 1976).

The sherds vary in color from greys to browns, tan, yellow and orange, but the color of the core is usually grey. The surfaces are well smoothed with the coarser grained examples being slightly gritty. The sherds vary from 7 to 10 mm in thickness.

No vessel reconstructions can be made due to the small size of most of the sherds. The sherds all appear to be from large vessels. One coarse sand tempered sherd is a fragment of a flat bottom or base. Most of the rims are either slightly inflaring or slightly outflaring with a small fold or lip to the exterior. The lips are round or flattened. One sherd (Plate XXV E) has a pronounced exterior fold with an additional strip of clay added to the top of the lip after it was folded.

Discussion: The question of whether O'Neal Plain can be segregated from Baldwin Plain was deliberately avoided during the analysis. After the analysis was completed, it was the author's opinion that in most cases the coarse sand could be segregated from the fine sand, but from impressions of other ware characteristics and rim forms it does not seem that all of the coarse sand sherds are part of the Alexander

PLATE XXVI

Sand tempered ceramics

A-G Furrs Cordmarked

PLATE XXV

Sand tempered ceramics

A-F Baldwin Plain

G-I Saltillo Fabric Marked

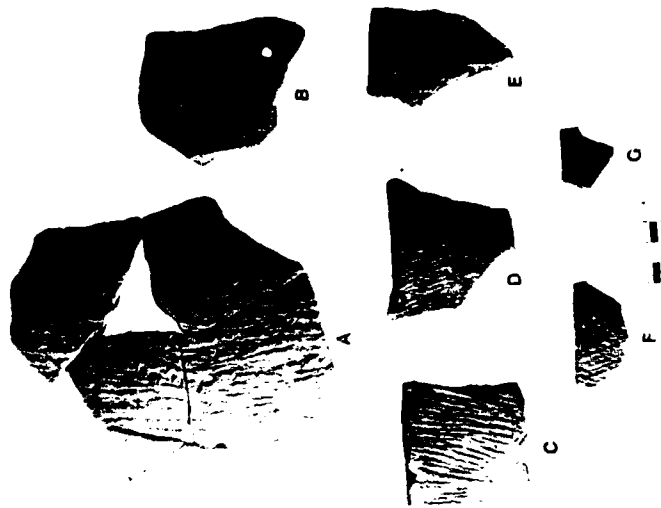


Plate XXVI.



Plate XXV.

assemblage as the name O'Neal Plain would imply. Jenkins' division of Baldwin Plain into the coarse var. Lubbug Creek and the fine sand var. Blubber Creek seems to be a workable division, but the question of whether it has chronological or cultural meaning must await further work.

Furrs Cordmarked (Plate XXVI)

Jennings 1941, Cotter and Corbett 1951

Sorting Criteria: Sand tempered pottery with linear cordmarking or impressing.

Description: The temper and paste of the Furrs pottery is the same for Baldwin Plain discussed above. There seems to be less Furrs with coarse sand than was the case with Baldwin, but some cordmarked sherds with coarse sand are present.

The cordmarking is more or less random, but there is a tendency for cordmarking near the rim to be perpendicular to the rim. The size of the cords is rather small, averaging about 1 mm. The cord appears to be simple twisted cord applied with a cord wrapped paddle. On some sherds the cordmarking has been partially obliterated by later smoothing.

Few comments can be made on vessel form, but all the sherds appear to be from large vessels. Rims are straight or slightly outflaring with a slight plain fold to the exterior. One small rim (Plate XXVI G) has a pronounced fold or possibly an appliqued strip at the rim on the exterior which was cordmarked separately.

Discussion: Jenkins (1978a) recognizes one variety of Furrs, a fine sand temper var. Pickens. Future work may make it possible to define a coarse sand tempered variety of Furrs, but this division was not made with the materials from the Tibbee Creek site due to the relatively small size of the Furrs Cordmarked sample.

Saltillo Fabric Marked (Plate XXV G-1)

Jennings 1941, Cotter and Corbett 1951

AD-A107 172

MISSISSIPPI STATE UNIV MISSISSIPPI STATE DEPT OF ANTH--ETC F/G 5/6  
ARCHAEOLOGICAL SALVAGE EXCAVATIONS AT THE TIBBEE CREEK SITE (22--ETC(U)  
JUN 81 J W O'HEAR, C LARSEN, M M SCARRY DACW01-77-C-0015  
NL

UNCLASSIFIED

3 1 3

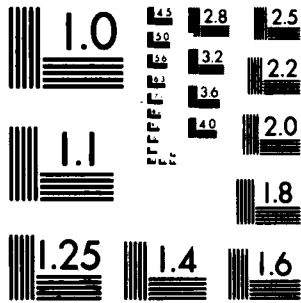
3000



END

DATE

FILED



MICROCOPY RESOLUTION TEST CHART  
NATIONAL BUREAU OF STANDARDS 1963-A<sub>1</sub>

Sorting Criteria: Sand tempered pottery with fabric impressions or impressions resembling fabric made with a cordwrapped dowel.

Description: The paste and temper of Saltillo Fabric Marked are the same as for the types Baldwin Plain and Furrs Cordmarked. The surfaces of the sherds have been roughened by either impressing with woven fabric or careful parallel impressions with a cordwrapped dowel. The actual method is not certain, but experiments show that the patterns can be duplicated with a cordwrapped dowel. The marking is sometimes smoothed over, frequently to the point that the surface shows only closely spaced pits with no distinct cord markings.

None of the sherds are large enough to reconstruct a vessel, but large pots are indicated by the sherd curvature. Rims are straight or slightly outflaring. Some outflaring rims have a small fold to the exterior.

Discussion: Jenkins divides Saltillo into var. China Bluff and var. Tombigbee based respectively on wide and narrow dowel marks. All of the specimens from the Tibbee Creek site seem to be made with a narrow dowel, with impressions 3 to 6 mm across.

Alligator Bayou Stamped (Plate XXIV A-C)

Willey 1949, Wimberly 1960

Sorting Criteria: Tempered with fine sand with very occasional small clay particles. Decoration is broad line incising outlining areas of dentate or rocker stamping.

Discussion: The sample of Alligator Bayou Stamped is very small, and all examples are from the surface. The paste of the sherds is very hard, dark brown to black in color all the way through, and tempered with fine sand with very scattered micaceous grains. The thickness is between 5 and 6 mm. The surfaces are very well finished and very smooth; they appear to be "floated" and have a low lustre.

The decoration consists of incised lines, 2 to 4 mm wide and less than 1 mm deep which outline stamped panels. On one sherd (Plate XXIV A) the panel is filled with carefully applied dentate stamping in parallel rows and resembles Marksville Stamped var. Newsome (Phillips

1970, Fig. 50). On the others the panel is filled with rocker stamping and resembles Marksville Stamped var. Manny (Phillips 1970, Fig. 49). One rocker stamped sherd (Plate XXIV C) shows an incised line with a terminal punctuation identical to those illustrated by Wimberly (1960, Fig. 53) from the Porter Village.

Discussion: The dentate stamped sherd could be classified as Jenkins' Alligator Bayou Stamped var. Sumpter while the rocker stamped sherds would be classed as either var. Goodsons Ferry or var. River Bend.

Basin Bayou Incised (Plate XXIV D-K)

Willey 1949, Wimberly 1960

Sorting Criteria: Tempered with fine sand and having a hard compact paste. Incised with broad, shallow incised lines.

Description: It is possible that some of the sherds which have been classified as Basin Bayou would be classified as Alexander Incised by some investigators, but it is felt that the specimens classed as Basin Bayou are distinct from the specimens of Alexander in both ware characteristics and the execution of the incising. The paste of the sherds is very compact and either black or brownish orange in color. The temper is very fine and somewhat micaceous. Thickness varies between 5 and 7 mm.

The incising appears to have been executed while the paste was rather dry. The incised lines vary from 2 to 4 mm across and are generally less than 0.5 mm deep. Width and depth of the incising can vary greatly within a single line. Rectilinear and curvilinear motifs are present. The rectilinear motif (Plate XXIV E-G) appears to be interlocking triangular shaped elements that are oriented with the apex of the triangle pointing down from the rim. The incising is neat and well executed compared to the curvilinear specimens (Plate XXIV D, I-K) upon which the incising tends to be executed with less attention to uniformity of breadth and depth. The curvilinear motifs cannot be accurately determined from this sample. The lines are oriented in parallel rows, with much variation in spacing between individual lines. The lines often terminate abruptly, or may intersect



other lines at right angles.

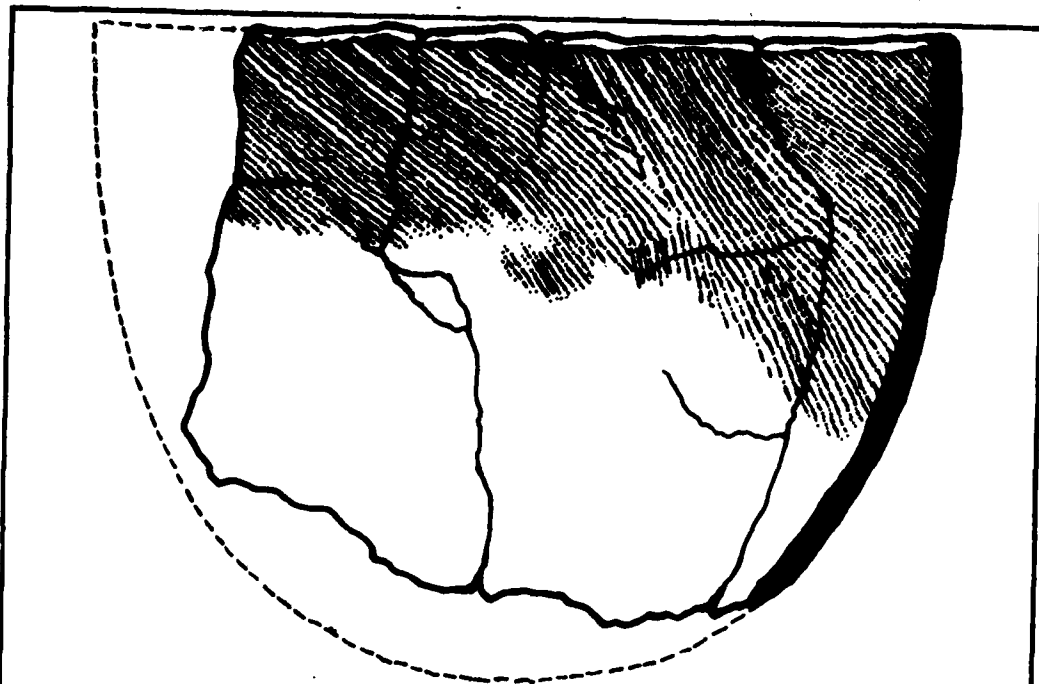
Discussion: The Basin Bayou Incised from the Tibbee Creek site does not compare well to the four varieties set up by Jenkins (1973a). The sloppy curvilinear incised sherds are similar to his Basin Bayou var. West Greene, and one sherd resembles var. River Bend.

#### Other Sand Tempered Pottery Artifacts

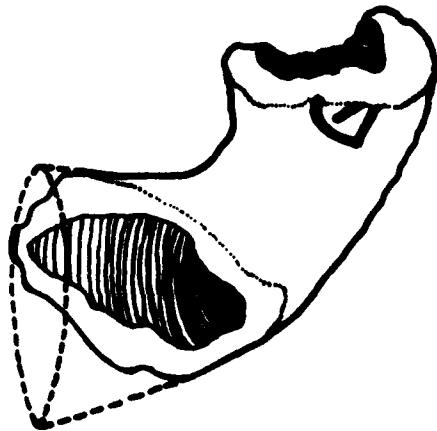
Pipe Fragments: Fragments of two sand tempered pipes were found. The most complete example is from the surface, and consists of most of the mid-section of an equal arm flaring elbow pipe (Fig. 17 ). The pipe is made from very hard pottery tempered with medium fine sand and has a very smooth finish. All of the bowl rim and most of the stem rim are missing. The maximum diameter of the stem-bowl juncture is 29 mm and the outside diameter of the mouthpiece is about 39 mm. The bowl end is blackened on the interior. There appears to be an incised design on the side of the bowl, consisting of a crudely incised rounded square with a central punctation. This pipe is very similar to one described by Moorehead (1972) and Nielsen and Jenkins (1973) from site 1Gr2. From its provenience at 1 Gr2 and its ware characteristics, these authors propose an early date and a possible association with Alexander ceramics. While there is no provenience for the specimen from the Tibbee Creek site, it is similar in paste and temper to the Alexander ceramics from the site.

Fragments of a second possible sand tempered pipe were found in Level 1 of square 460R505. It is very fragmentary and eroded, making reconstruction difficult. It is made of fine, friable sand tempered pottery, closely resembling the Furrs Cordmarked paste. The fragments are from the midsection of a cylinder or cone between 6 and 7 cm in diameter. On the interior is the juncture of two internal cavities, one deep and the other shallow. No blackening is visible.

Gorget Fragment: A fragment of what appears to be a sand tempered pottery gorget was found on the surface. The fragment suggests an ellipsoid artifact, with a biconical hole on the midline. It is broken at both ends.



TISHOMINGO CORDMARKED  
VESSEL FRAGMENT FROM  
BURIAL 10 (HALF SCALE)



SAND TEMPERED  
ELBOW PIPE FRAGMENT  
FROM SURFACE  
(FULL SCALE)

FIGURE 17  
CERAMIC ARTIFACTS

### Grog Tempered Pottery

The majority of the ceramics from the Tibbee Creek site are tempered with crushed fired clay or grog. The grog tempered pottery was classified into five major types: Tishomingo Plain, Tishomingo Cord-marked, Gainesville Fabric Marked, Wheeler Check Stamped, and Alligator Incised. As with the other temper groups, the following descriptions are based on material from the Tibbee Creek site.

#### Tishomingo Plain

Jennings 1941, Cotter and Corbett 1951

Sorting Criteria: Plain surfaced sherds showing any amount of grog. Sherds were classified as Tishomingo regardless of how sparse or dense the grog content and regardless of the amount of sand in the paste.

Description: Tishomingo Plain, as it appears at the site, is a very heterogeneous type, showing considerable variation in paste, temper, rim form, and vessel shape. The sherds are tempered with burned clay or grog, generally in angular fragments. The amount of grog can vary from very dense, giving the sherds a lumpy, contorted texture, to sparse with only a few clay particles visible in the broken edge of a sherd. Generally, the sherds with sparse grog have a sandier paste, and the dense grog sherds have a silty paste, but the grading between extremes is continuous.

The color of the sherds varies from black through all shades of brown including brownish orange. Fire clouding is extensive, indicating that not much attention was paid to careful regulation of the firing atmosphere. The sherds vary from 4 to 9 mm in thickness, with most sherds being 6 to 7 mm thick. There is also variation with regard to surface finishing. Some sherds are very well finished, with smooth, almost burnished surfaces, while others are rough and irregular in thickness. Some of the rougher surfaces appear to be smoothed over cordmarking, but if no distinct cordmarking or other marking was present, the sherd was still classified as plain.

The most common rim forms are straight or slightly excurvate with rounded to crudely flattened lips. Slight folding of the rim at the lip is present on most excurvate rims and some straight rims.

Most of the sherds are from large vessels. The vessel type indicated is a globular pot with rounded bottoms and straight to slightly restricting orifices, similar to those illustrated by Blakeman, Atkinson and Berry (1976:46) for Tishomingo Cordmarked vessels from the Cofferdam site.

There are also a number of additional vessel types indicated by sherds. Several rims are from small simple bowls, with a diameter from 15 to 20 cm. There is a pronounced flaring rim sherd from Feature 100, and two other flaring rims from the surface. Also found on the surface is a fragment of a flat base and a fragment of a large thick flat base with tetrapodal supports. Another fragment of a grog tempered podal support was found in Feature 92. Appendages are rare. The only grog tempered appendages found from the Tibbee Creek site were a fragment of a small thin loop handle from the burial pit of Burial 13 and a fragment of a triangular rim lug from Level 1 of Square 480R5252. Two discoidals made from plain grog tempered sherds were found on the surface.

Discussion: Jenkins (1978a) reduces Tishomingo to variety status, making it a sparse grog, sandy paste variety of Baytown Plain, and classifies the dense grog sherds as Baytown Plain var. Roper. While both of these varieties are subsumed under the type Tishomingo in this study, Jenkins' division should prove useful and valid in either a cultural or chronological fashion if standard sorting criteria can be devised.

Tishomingo Cordmarked (Plate XXVIII)

Jennings 1941, Cotter and Corbett 1951

Sorting Criteria: Grog tempered pottery which has surfaces with cord impressions; otherwise the same as Tishomingo Plain.

Description: The paste and temper characteristics for Tishomingo Cordmarked are the same as for Tishomingo Plain described above.

The other surfaces of the sherds have been roughened with cord-marking. The cords are small in size, between 0.5 and 2 mm in diameter. The marking is generally haphazard and overlapping on the body of

PLATE XXVIII

Grog tempered ceramics

A-K Tishomingo Cordmarked

PLATE XXVII

Grog tempered ceramics

A-B Gainesville Fabric Impressed

C-G Wheeler Check Stamped



Plate XXVII.

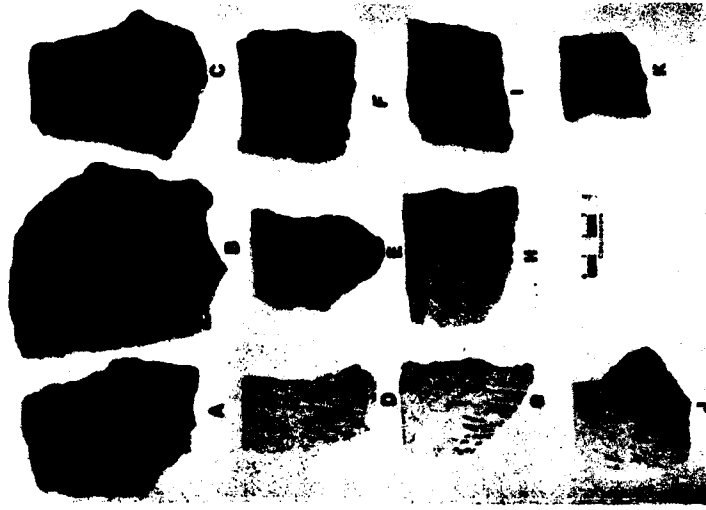


Plate XXVIII.

the vessel, but immediately under the rim the cordmarking is frequently non-overlapping and applied perpendicular to the rim. Some rim sherds have cordmarking only in a small band around the rim, with the lower parts of the body being either plain or well smoothed cordmarked. The opposite is also true with some rims having a plain band around the rim on an otherwise cordmarked vessel. On a very few sherds, cordmarking was carefully applied in orderly rows meeting at an angle producing a crosshatched effect.

As was the case with Tishomingo Plain, the rims are either straight or slightly outflaring. Small exterior folds are common. The rim lips are sloppily rounded or flattened.

All of the sherds of Tishomingo Cordmarked appear to be from rather large vessels. There are no sherds from small bowls as was the case with the plainware. There is one sherd from Feature 77 which is from a large plate. A large sherd of Tishomingo Cordmarked representing about 1/3 of the vessel was found covering Burial 10. The vessel form indicated is a simple straight sided deep bowl with a diameter of 24 cm and a maximum depth of 20 cm. A half-scale drawing reconstruction is illustrated in Figure 17. The cordmarking is limited to the upper 1/2 to 1/3 of the pot, and was made with small cords applied at about a 45° angle to the rim. The sherd is tempered with very dense grog, with grog particles making up about half the volume of the sherd. There are no recognizable cordmarked vessel bases in the collection, which is not surprising since most cordmarked vessels seem to be plain or smoothed over towards the bottom. There are also no cordmarked appendages present.

Discussion: Our Tishomingo Cordmarked would include both varieties proposed by Jenkins (1978a): Mulberry Creek Cordmarked var. Tishomingo for the sparse grog sherds, and var. Aliceville for the dense grog sherds.

Gainesville Fabric Impressed (Plate XXVII A-B)  
Nielsen and Jenkins 1973

Sorting Criteria: Grog tempered pottery with fabric or cord wrapped dowel impressed surfaces.

Description: There was very little Gainesville Fabric Impressed at the Tibbee Creek site most of the larger sherds were from the surface.

The paste is the same as that for Tishomingo Plain and Cordmarked, but all of the specimens have moderate to dense grog temper. The cord wrapped dowel impressions are narrow, with impressions between 2 and 3 mm across. The impressions are overlapping but generally show the same orientation and do not crosscut. The orientation of the impressions is generally parallel to the rim.

The rims are straight to slightly outflaring, with small folds to the exterior on the outflaring examples. No vessel forms can be determined, but all the sherds seem to be from large vessels.

Discussion: Jenkins (1978a) classifies grog tempered fabric marked pottery into four varieties of the type Withers Fabric Marked, with divisions based on differing amounts of grog and sand in the paste and the presence of wide and narrow dowel impressions. Only one of his varieties, Withers Fabric Marked var. River Bend which is dense grog, sparse sand, narrow dowel seems to be present in this collection.

Wheeler Check Stamped (Plate XXVII C-G)

Haag 1941, Heimlich 1952

Sorting Criteria: While Wheeler Check Stamped could best be called a minority type at the Tibbee Creek site based on the total number of sherds, it is the third most common grog tempered ware after Tishomingo Plain and Tishomingo Cordmarked.

The paste and temper of the sherds is the same as for Tishomingo Plain. The outer surfaces of the sherds are covered with check stamping which appears haphazardly applied and overlapping, but as was the case with Gainesville Fabric Marked, there seems to have been more attention given to alignment and less over stamping near the rim, where the checks are generally applied parallel to the rim. The checks are either square or rectangular in shape. The size of the check varies



greatly from 4 mm to 12 mm across. In general, the square checks are toward the larger end of this range, and the rectangular checks are toward the smaller. The checks are frequently smoothed over.

All of the rims in the collection are straight to very slightly outflaring with an exterior fold. Check stamping is present all the way to the lip; there are no plain bands such as is found in Tishomingo Cordmarked. There are no restorable vessel forms, but again, all the sherds seem to be from large vessels.

Discussion: Jenkins (1978a) divides Wheeler Check Stamped into two varieties; var. Barnes Bend with rhomboidal checks and var. Sipsey with rectangular checks; but both of these varieties are described as having sparse grog. Since all of the specimens from the Tibbee Creek site have moderate to dense grog and there is a complete absence of rhomboidal checks, it is difficult to subsume the material into one of Jenkins varieties. Perhaps future work will define an additional variety with much grog and rectangular or square checks.

#### Alligator Incised

Phillips 1970, Jenkins 1978a

Sorting Criteria: Grog tempered pottery with incised lines.

Description: Very few grog tempered incised sherds were found at Tibbee. Three sherds were found in Feature 62, and one sherd was found on the surface. The sherds from Feature 62 all appear to be from the same vessel and have random sloppy incisions on a plain surface. The one sherd from the surface is small, but the pottery is well made with a very smooth surface and has fine incising, almost engraving, in a pattern of rhomboids about 1 cm across.

Discussion: The sherds from Feature 62 are representative of Alligator Incised var. Oxbow (Phillips 1970:39) which has also been defined in the Tombigbee area by Jenkins (1978a). The association of the fine incised sherd from the surface is uncertain.

### Shell Tempered Ceramics

The latest prehistoric ceramics from the Tibbee Creek site are tempered with crushed shell and decorated mainly with incising. Recent research on Mississippian sites in the Tombigbee River drainage (Jenkins 1978b) and on the ceramic collections from the Moundville site (Steponaitis 1978) has indicated that most shell tempered pottery from the central Tombigbee valley shows similarity or identity with the Moundville collections (Jenkins 1978a). A type variety nomenclature for Moundville has recently been formulated (Steponaitis 1978) and will be applied (on what should be considered a trial basis) to the shell tempered pottery from the Tibbee Creek site.

The Moundville typology includes four types: Mississippi Plain, Moundville Incised, Carthage Incised, and Hemphill Engraved and a number of varieties for each type. The following types and varieties are recognized in the Tibbee Creek site collection.

#### Mississippi Plain (Plates XXIX and XXX E)

Phillips 1970, Steponaitis 1978

var. Warrior: Most of the shell tempered sherds from the Tibbee Creek site are tempered with coarse shell, have smooth unburnished surfaces, and are classified as var. Warrior. The shell is crushed and frequently grey or black indicating it was also burned. The paste is generally compact and shows moderate to low amounts of sand. The surfaces of the sherds are medium brown to light brown and orange; the color of the core is generally grey. Thickness ranges from 5 to 9 mm.

There are a few large sherds, but no vessel forms can be reconstructed. Most of the rims are outward flaring and seem to be from medium to large flaring rim jars or short-necked jars. A few rims have pronounced exterior folds. The lips are rounded or more rarely flattened and are generally well executed. Other than large jars, the only other vessel forms indicated by the rim sherds are medium to small simple bowls.

The collection contains several handles. Two of these, one from a wall trench of Structure 1 and the other from Feature 94, are medium-

## PLATE XXIX

## Shell tempered ceramics

- A-G Mississippi Plain var. Warrior  
 H-I var. Warrior rims with strap handle attachments.  
 J-K var. Warrior loop handles  
 L-M var. Warrior noded strap handles  
 N var. Warrior noded adorno  
 O var. Warrior sherd discoidal

## PLATE XXX

## Shell tempered ceramics

- A Moundville Incised var. Carrollton  
 B Carthage Incised var. unspecified  
 C Hemphill Engraved var. unspecified  
 D, F-G Moundville Incised var. unspecified  
 E Mississippi Plain var. Warrior noded rim

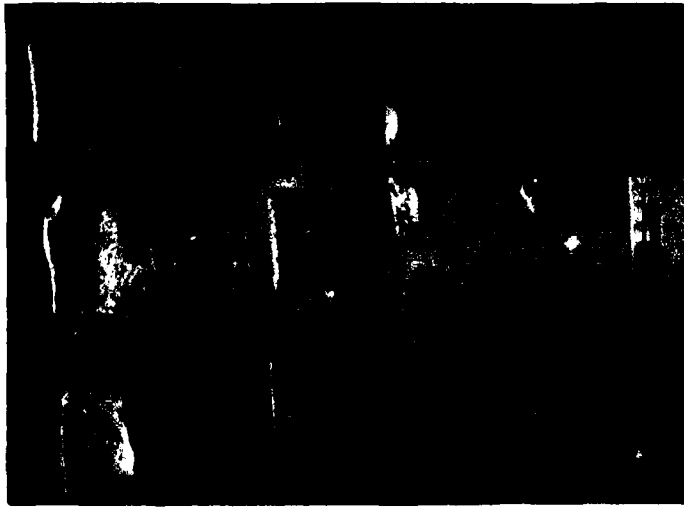


Plate XXIX.

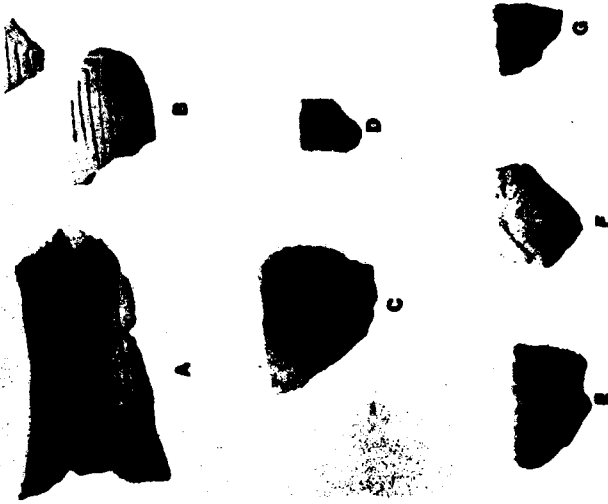


Plate XXX.

sized wide strap handles with one or two nodes on the middle of the handle. A rim attachment for a strap handle was found in Level 1 of Square 495R505. There are two small thin loop handles with a flattened cross section from the surface and the rim attachment for a similar handle from the burial pit of Burial 7.

Except for the handles, the only other applied decorations are two rims with applied nodes below the rim (Plate XXX E). One of these is from the surface, the other from Feature 94. A 42 mm diameter shell tempered discoidal made from a sherd was found in Feature 34-35.

Moundville Incised (Plate XXX A,D,F-G)

DeJarnette and Wimberly 1941, Steponaitis 1978

var. Carrolton: The only shell tempered incised sherd from the site which could be confidently placed in a variety is a large sherd of Moundville Incised var. Carrolton which was found resting directly on the chest of Burial 13 (Plate XXX A). The sherd is from a shortnecked large jar with a three-line incised arch below the neck. The surface is well smoothed but not burnished, and the body is 5 mm thick.

var. unspecified: Shell tempered sherds showing incision but no other diagnostic patterns or motifs are classified as var. unspecified. Most of these are small sherds showing only one line or possibly two parallel lines (Plate XXX D,G).

One sherd from the surface is also classified as unspecified, but does show part of the design (Plate XXX F). It is a sherd from a small bowl and shows an incised arching line below the rim, within which is another more acutely angled incised arch.

Carthage Incised (Plate XXX B)

Steponaitis 1978

var. unspecified: Only two sherds of burnished, dry paste incised pottery were found, both from the surface and probably from the same vessel. The incised motif does not fit any of the varieties defined by Steponaitis. The sherds are tempered with extremely fine shell and have almost polished surfaces both inside and out. The larger sherd is from the wall and bottom of a flat bottomed small bowl or perhaps a

bottle. The design consists of nested rectangles or squares made with lines 1 mm wide and less than 1 mm deep.

Hemphill Engraved (Plate XXX C)

Steponaitis 1978

var. unspecified: There is only one sherd of engraved ware and it is from the surface. It is somewhat eroded. The sherd is tempered with very fine shell and is only 4 mm thick. The engraved design seems to have been either concentric circles or arches. It is possible that the sherd is an example of Hemphill Engraved var. Wiggins.

#### Lithics

A wide variety of chipped and ground stone artifacts was found at the Tibbee Creek site. In addition to the materials from the general excavation and feature excavation, a large sample of chipped tools, particularly projectile points, was collected from the site's surface after it was scoured by flooding. While the context of these surface specimens is not known, they have been used in the following classification to define descriptive classes of tools and projectile points, in the hope that they can be later placed in their proper cultural and chronological niche by comparison with specimens from better contexts.

The projectile points from Tibbee have been classified according to a descriptive-morphological classification specific for the site, rather than being typed according to one of the "type name" systems such as Cambron and Hulse (1964) or a morphological classification system from a different area such as Faulkner and McCollough (1973). It is recognized that many of the projectile point classes described here are similar or identical to those defined or recognized before, examples being the Madison and Gary type points, but in order to retain some continuity in the following descriptions, reference is made to named types similar to the descriptive classes, but the specimens are presented in the tables and discussions by the descriptive class number.

During the analysis of the lithic artifacts, all debitage was classified and counted according to the type of raw material and

debitage type. The categories used are defined below. All chipped tools and identifiable fragments of projectile points were segregated from the collection for further study. With regard to the current uncertainty about the types of chert available in the middle Tombigbee valley, and the degree to which prehistoric heat treatment changed the color and flaking qualities of the chert, the classification used in this report is based on color only. The most common unmodified chert type at the site was a yellow to tan, fine to coarse grained chert which has commonly been called yellow jasper. When this yellow chert is heated, it changes color to a deep red or sometimes a dark pinkish color. However, it is possible that red chert occurs naturally as reported by Rucker (1974:10-11); therefore red color alone does not mean that heat treatment was used. In the Tibbee Creek site analysis, specimens were classified as red chert if they showed any red surfaces or a reddish tinge; specimens were classified as yellow chert if they showed no red coloration. It is hoped that controlled replicative studies of raw materials and heat treatment such as those recently reported by Ensor (1978) will clear some of this confusion.

Other than the locally available yellow and red cherts, non-local materials for chipped stone tools were present at Tibbee in small quantities. The most common exotic is Tallahatta Quartzite from further south in the coastal plain (Dunning 1964). Present in small amounts is a grey chert, highly variable in color and texture, which is probably from the Fort Payne formation in Northern Alabama and Mississippi. Some quartz is present, but mostly as unmodified pebbles or shatter. Quartz occurs in the area but is not abundant. Finally, a number of different chert types which occur very rarely or as unique specimens are listed as Other Chert. Most of this chert appears to be a variegated, sometimes fossiliferous chert which occurs in the basal part of the Tuscaloosa formation in the northeasternmost section of Mississippi (McCluskey 1978). The following are descriptions and definitions of the categories used in the analysis of the chert debitage and tools from Tibbee Creek.

### Debitage

Primary Decortication Flake Flakes which retain the cortex or rind of the water worn chert pebble or cobble on more than 75% of their dorsal surface.

Secondary Decortication Flake Flakes which have cortex, but on less than 75% of the dorsal surface.

Shatter Fragments of chert which show blocky angular fracture with no well developed flake scars. This category probably includes pieces produced by two distinct methods. The first is due to unintentional fracturing along internal fracture planes during knapping of a pebble. The second method is chert fractured by heat, either during heat treatment or by being used as hearth rock. Hence this category probably includes both truedebitage from knapping and some fire cracked rock.

Biface Thinning Flake These are flakes which retain a portion of the bifacial edge of a tool at the proximal or striking platform end of the flake. They represent waste from either the thinning or resharpening of a biface.

Undifferentiated Flake This category includes all flakes which show no cortex and none of the attributes of bifacial thinning flakes. This type of flake constitutes the majority of the chertdebitage.

Flaked Pebble These are pebbles which are essentially unmodified except for the removal of a few random flakes with no attempt to produce a functional edge.

Pebble These are pebbles which show no modification except for possible heat treatment.

Cores These are chert pebbles which have been extensively flaked but do not show any evidence of being made into a tool such as a Type 1 preform. They are generally amorphous in form, and usually retain some cortex.

Utilized Flake These are flakes which have wear or blunting of one or more edges. Use is frequently detected by the presence of small irregularly spaced flake scars along the edge.



Retouched Flakes These are flakes which show retouch, generally a steepening of the cutting edge, along one or more edges of an otherwise unmodified flake.

#### Chipped Tools

Nearly all of the chipped tools are bifacially worked except for microtools with unifacial retouch, uniface adzes, and miscellaneous retouched flakes. The following are descriptions of the bifacial tool categories used.

Type 1 Biface/Preform These are chert pebbles, rarely large flakes, which have been roughly flaked bifacially, with percussion flaking only, to the extent that the long axis of the artifact is apparent but it has no refinement. These artifacts are generally asymmetrical and may not be bifacially flaked around the whole periphery of the artifact. They probably represent either the initial stages of biface manufacture, or very crude cutting or chopping tools.

Type 2 Biface/Preform These are bifaces which have been bifacially worked along their entire periphery by percussion flaking. All or most of the cortex has been removed but the tool edges have not been retouched and there is no hafting modification.

Type 3 Biface/Preform These appear to be finished biface artifacts with retouched edges but no hafting modification.

Small Triangular Preform These are small triangular bifaces which are unfinished examples of Class 1 projectile points. They generally seem to have been made from small flakes, and are usually thick in the middle and exhibit an extensively step fractured "hump" on the midline of the artifact where efforts to thin the tool failed.

Biface Fragment This category includes all bifacially worked fragments which could not be confidently identified as either a preform fragment or as the midsection or distal end of a projectile point.

Midsection These are fragments from the midsection of finished projectile points.

Distal End These are fragments of projectile points retaining the tip or distal end of the tool, but none of the hafting area.

Stemmed Perforator (Plate XXXV P-Q, S-T) These are perforators reworked onto stemmed projectile points. A small projection 3 to 4 mm long has been flaked at the point of a short triangular blade.

Asymmetrical Stemmed Perforator (Plate XXXV U-V) These tools have an asymmetrical tip flaked onto the blade of a stemmed projectile point. Two specimens are present, one has an 8 mm long tip and the other has a 12 mm long tip.

Thick Bodied Perforator (Plate XXXV R) This tool has a short, thick body which resembles a Type 2 preform with a 5 mm long spur at one end.

Expanded Base Drill (Plate XXXV D-H) The expanded base drills have a long rod shaped projection and either a globular rounded base or an expanding triangular shaped base. The length of the shaft on the complete specimens ranges from 15 to 27 mm.

Stemmed Drill (Plate XXXV A-C) Three drills from the surface have drill shafts reworked on the blade of rounded expanding stem projectile points.

Long, Triangular Drill (Plate XXXV K-O) These artifacts have narrow triangular thick blades with unfinished or straight bases. They range from 42 to 52 mm in length, and may actually be projectile points rather than drills.

Shaft Drill (Plate XXXV I-J) These are small rod-like bifaces which have pointed or rounded ends and no apparent haft modification.

Drill Shaft Fragment These are fragments of the tip or midsection of a drill.

Adze (Plate XXXVI, Fig. 18) There are a number of uniface and biface tools from the Tibbee Creek site which appear to be adzes. Generally rectangular, they have straight or slightly excurvate ends and straight sides. Most specimens show extensive step fracturing and crushing on one or both ends, and sometimes on the sides. There appear to be two types of adzes in the collection. The first type is worked more less unifacially and retains the cortex of the pebble over all

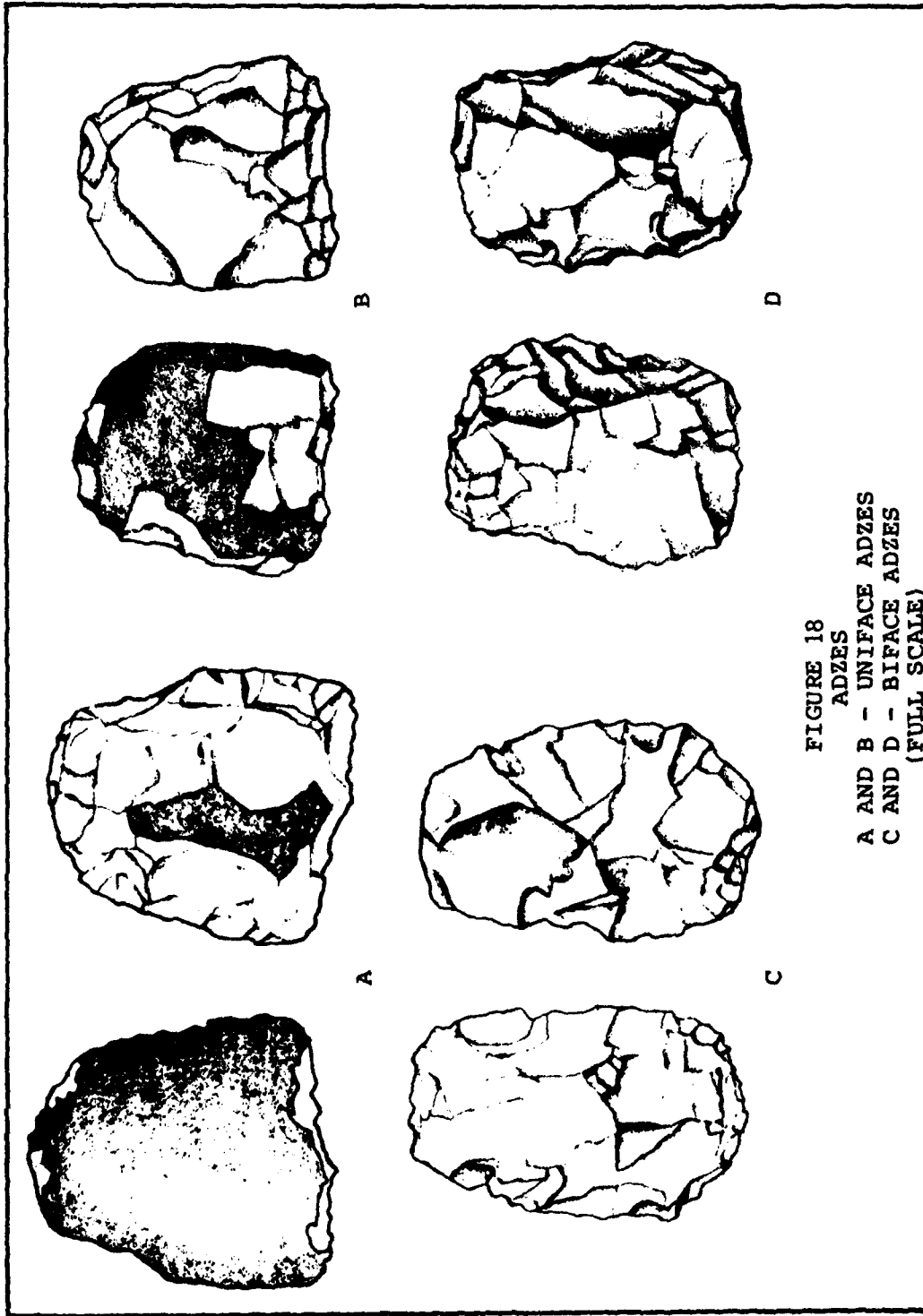


FIGURE 18  
ADZES  
A AND B - UNIFACE ADZES  
C AND D - BIFACE ADZES  
(FULL SCALE)

most of one face of the artifact (Plate XXXVI A-K). The opposite face has been flaked free of cortex with flakes removed from all edges producing a noticeable ridge along the midline of the tool. These are not true unifacial tools in that most specimens show a few flakes removed at the bit ends on the cortex covered surface. These uniface adzes range from 41 to 60 mm in length with an average of 51 mm, 25 to 41 mm wide with a mean of 33.7 mm, and 11 to 22.5 mm thick with an average of 15.1 mm.

The second type of adze is similar to the first except that it is worked bifacially and retains little or no cortex (Plate XXXVI L-V). These bifacial adzes are generally smaller than the uniface adzes, ranging from 41 to 54 mm long with a mean of 46.7 mm, 28 to 36 mm wide with a mean width of 32.5, and 11 to 19 mm thick with a mean of 14.8. Of the total of 32 specimens in both types, only two uniface examples show any signs of heat treatment, while the remainder are made from moderate sized yellow chert pebbles.

Chert Pin (Plate XXXVIII G) This is an interesting artifact which was found in association with Burial 12, and serves as something of a warning to those (like the author) who are in the habit of applying functional designations to artifacts. It is a long triangular biface made from red chert, with a straight base. The artifact is 69 mm long, 13 mm wide at the base, and has a maximum thickness of 7 mm. It has a sharp point, but both blade edges are extensively ground down and rounded. It was found at the head of Burial 12 in association with a bone "barette," and seems to have been a pin used to hold the hair in conjunction with the barrette. If the artifact had not been found in this context, it probably would have been classified as an extremely worn drill.

Microtools A distinctive assemblage of Miller III microtools has previously been defined in the Gainesville reservoir area by Jenkins (1975) from sites 1Gr2 and 1Pi18. Jenkins defines four types of microtools: perforators, bipoined perforators, shaft drills, and expanded base drills. While the perforators and expanded base drills were found at the Tibbee Creek site, the bipoined perforators and shaft drills were

not present. But a third type of microtool, which has been termed micro-side scraper, was found. The following are descriptions of these microtools.

Microperforator. These are the most common type of microtool found at the site. They have a thin projection flaked on one end of a generally amorphous flake. They are variable in shape except that most have a rounded thickened body below the shaft which was presumably how it was held. The length of the perforators ranges from 3 to 11 mm. All are made from red chert.

Micro-expanded Base Drill. There is only one example of this tool type and it is from the surface. It is 28 mm long with a shaft 19 mm long and a square base 13 mm wide. The tool is made of red chert and exhibits considerable polishing or wear at the tip.

Micro-side Scraper. These are small, flat flakes of red chert which have been shaped to a roughly triangular shape by steep retouch along the edges. Two specimens have somewhat pointed ends and could represent a combination scraper-perforator. A Miller III association is indicated by the fact that three examples are from Level 1 of excavation units, while another is from Feature 70, a Miller III pit.

#### Projectile Points

##### Class 1. Small Triangular Projectile Points (Plate XXXI A-Y)

These small triangular points conform to the Madison type (Cambron and Hulse 1964), and were the most common type of point found at this site. While a total of 117 identifiable specimens were found, measurements and descriptions are based on 29 complete points. The points range in length from 17 to 36 mm with a mean length of 24.2 mm. Widths range from 12.5 to 18 mm with a mean of 14.6 mm and thickness varies from 3 to 6 mm with a mean of 3.9 mm. The blade edges are straight or rarely slightly excurvate or incurvate. Bases are flat or slightly incurvate. Of the 29 complete points, 25 are made from red chert, while four are made from yellow chert. These points are associated with the Miller III component (Blakeman, Atkinson and Berry 1976) and the Mississippian component.

PLATE XXXII

Projectile Points

A-H	Class 4 Projectile Points
I-Q	Class 5 Projectile Points
R-X	Class 13 Projectile Points
Y	Class 7 Projectile Points
Z-DD	Class 9 Projectile Points

PLATE XXXI

Projectile Points

A-Y	Class 1 Projectile Points
Z-DD	Class 2 Projectile Points
EE-RR	Class 3 Projectile Points

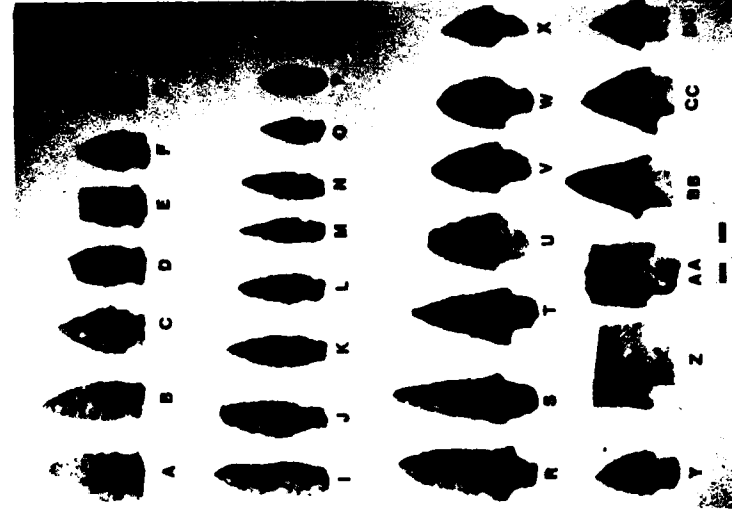


Plate XXXII.

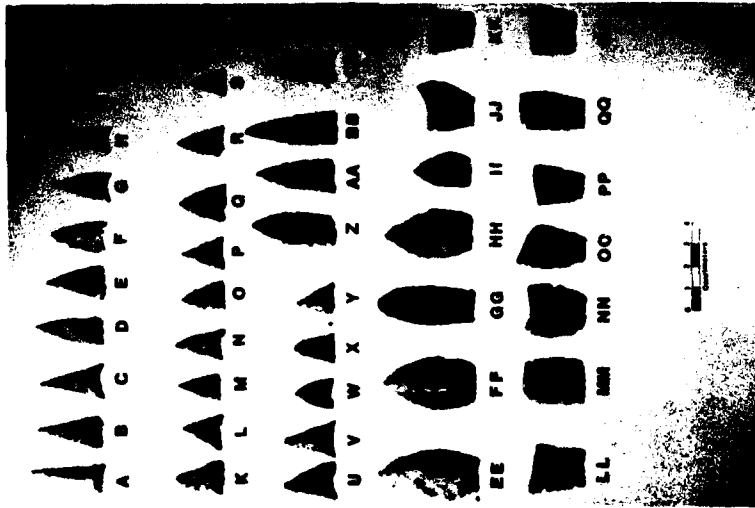


Plate XXXI.

Class 2. Medium Triangular-Lanceolate, Straight Blade (Plate XXXI Z-DD)

To the author's knowledge, these points, along with the Class 3 points described below have not previously been recognized as a type in the Tombigbee River drainage. The points are long triangular or lanceolate in shape, with more or less parallel blade edges along about half the length of the blade. The bases are flat to slightly excurvate. The total length ranges from 33 to 42.5 mm with a mean of 37.9 mm; basal width ranges from 11.5 mm to 16.5 mm with a mean of 14.5 mm, and thickness varies from 4 to 8 mm with a mean of 5.3 mm. All specimens are made from red heat treated chert.

Most specimens of class 2 are from the surface. One was found in the fill of Feature 22, a Miller III pit suggesting a late Woodland association for this class.

Class 3. Small to Medium Excurvate Blade, Straight Base (Plate XXXI EE-RR)

These points are distinguished from the preceding Class 2 by the pronounced excurvature of the blade. The points are generally ovate in shape, with the straight to slightly excurvate base being narrower than the widest portion of the blade. The length of the points range from 27 to 46.7 mm with a mean of 36.5 mm; the maximum width of the blade ranges from 16 to 24.5 mm with a mean of 20.6 mm; the base width ranges from 10 to 20 mm with a mean of 15.4 mm; and the maximum thickness ranges from 3.5 mm to 9 mm with a mean of 6.5 mm. All examples are made from red heat treated chert.

No specimens of Class 3 points were found in the features, but three specimens were found in Zone B of the control column square 499.5R 524.5, indicating a Miller III association.

Class 4. Medium, Shallow Side Notched (Plate XXXII A-H)

Included in this type are points which are lanceolate in shape with a straight or rounded base that may be unfinished. The expanded stem is formed by shallow side notching, the blade is excurvate, and the distal end is acute. Flaking is broad and random or in a few cases



collateral, and the base, stem, and blade edges are thinned. Total length varies from 31 to 51 mm with a mean of 39.7 mm, the maximum width of the blade varies from 17 to 24.5 mm with a mean of 20.5 mm, and maximum thickness varies from 6.5 to 9.5 mm with a mean of 8.1 mm. Of the 12 specimens in this class, 11 are made from red chert while one is made of gray chert. All of the specimens are from the surface and no cultural association can be advanced.

Class 5. Narrow Thick Rudimentary Stemmed (Plate XXXII I-Q)

Points included in this class are generally crude with little or no fine retouch. The narrow thick blade has straight to slightly excurvate blade edges. The straight to slightly expanding stem is made by crudely reducing the width of the blade near the base or by the removal of shallow side notches. The base is straight or slightly excurvate. The points range in length from 32 to 57 mm with a mean of 47.7 mm, maximum blade width ranges from 13 to 20.5 mm with a mean of 15.5 mm, and the maximum thickness varies from 6 to 14.5 mm with a mean of 9.4 mm. Of the 11 specimens, all from the surface, 10 are made from red heat treated chert and one is made from yellow chert. The points resemble the type Bradley Spike (Cambron and Hulse 1964), which is assigned an Early Woodland association.

Class 6. Medium-Large, Narrow Straight Stem, Rounded Base (Plate XXXIII L-P)

The projectile points included in this class are medium to large stemmed points with straight stems and rounded stem bases. The blades are straight to slightly excurvate and somewhat asymmetrical with one shoulder more pronounced than the other. The flaking is somewhat irregular with a minimal amount of fine retouch along the blade edges. The points range from 58 to 83 mm long with a mean of 66.4 mm; the maximum width at the shoulder ranges from 18 to 26 mm with a mean of 23 mm; the length of the stem ranges from 12 to 15 mm with a mean of 13.8 mm, and the maximum thickness of the points ranges from 8.5

PLATE XXXIV

Projectile Points

- A-B Class 19 Projectile Points
- C-D Class 17 Projectile Points
- E-H Class 18 Projectile Points
- I-V Miscellaneous and Unique Projectile Points

PLATE XXXIII

Projectile Points

- A-B Class 11 Projectile Points
- C Class 15 Projectile Points
- D-F Class 8 Projectile Points
- G-K Class 14 Projectile Points
- L-P Class 6 Projectile Points
- Q-R Class 10 Projectile Points
- S-W Class 16 Projectile Points

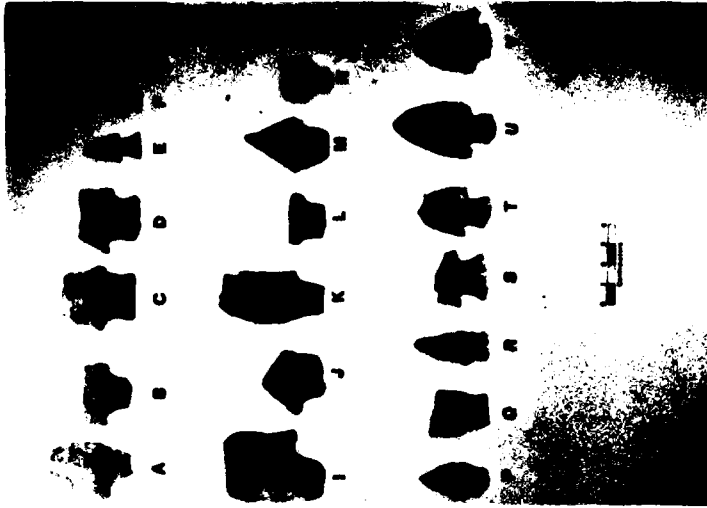


Plate XXXIV.

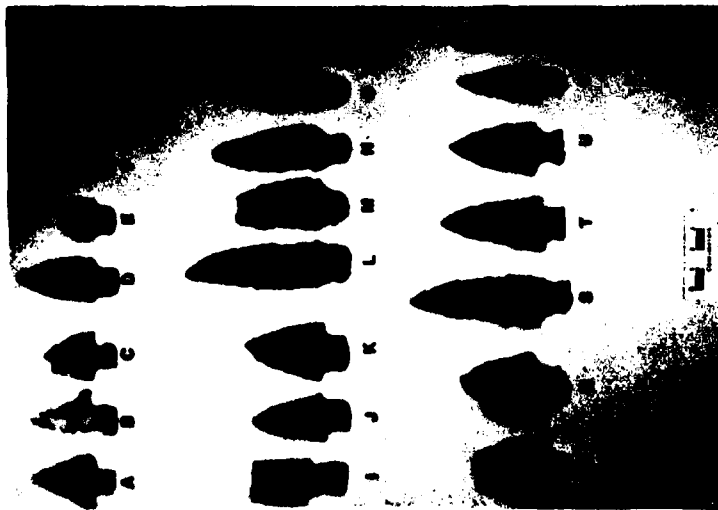


Plate XXXIII.

PLATE XXXVI

Adzes

- A-K Unifacially Worked Adzes
- L-V Bifacially Worked Adzes

PLATE XXXV

Chipped Stone Tools

- A-C Stemmed Drills
- D-H Expanded Base Drills
- I-J Shaft Drills
- K-O Triangular Drills
- P-Q, S-T Stemmed Perforators
- R Thick Bodied Perforator
- U-V Asymmetrical Stemmed Perforator

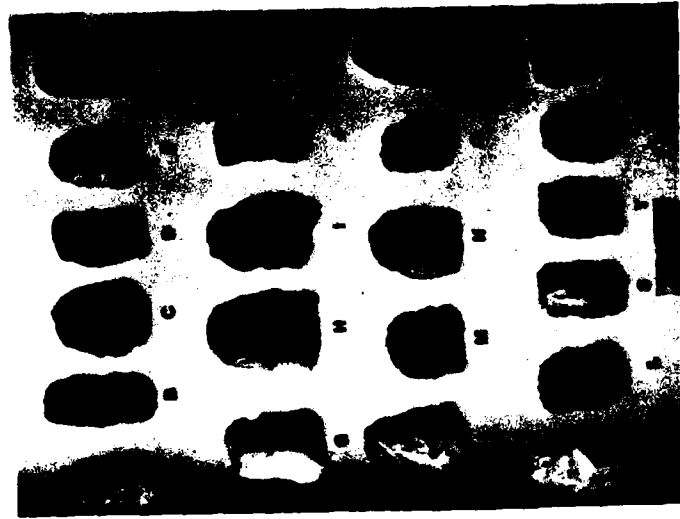


Plate XXXVI.

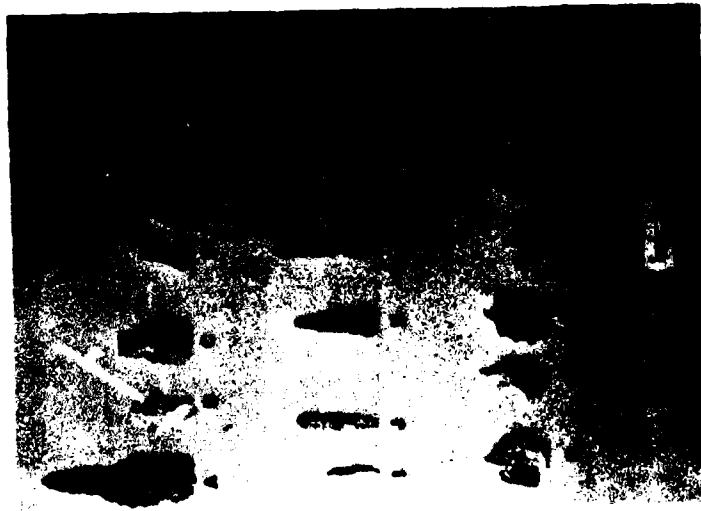


Plate XXXV.

to 23 mm with a mean of 10 mm. All of the specimens of Class 6 are made from red chert and were found on the surface.

Class 7. Medium Small, Broad Straight Stem With Rounded Base, Weak Tapered Shoulders (Plate XXXII Y)

One point is included in this class. It has an excurvate blade and an acute distal end. The straight broad stem has an excurvate base and meets the blade at weakly tapered shoulders. The point shows both random and collateral flaking. The cross section of the blade is bi-convex. The base, stem and blade edges are thinned with fine pressure retouch. The total length of the point is 42 mm, width is 22 mm at the shoulders, and the maximum thickness is 7.5 mm. The stem is 13.5 mm long and 15.5 mm wide at the base. The point is made of red chert. In form, this Class 7 point resembles the Adena type defined by Cambron and Hulse (1964) which they assign a Transitional Archaic to Middle Woodland association. Our specimen is from the surface, making association unknown.

Class 8. Medium, Straight Stem and Base, Weak Horizontal Shoulder (Plate XXXIII D-F)

The points included in this class have a straight base and stem and weak horizontal shoulders. The blade is straight to slightly excurvate with an acute distal end. Flaking is generally collateral but may be crude and the points are either median ridged or biconvex in cross section. The basal edge of three specimens is thinned while that of the fourth is unfinished. All four examples are thinned along the stem and blade edges. Total length ranges from 42 to 51 mm with a mean of 46.5 mm, the shoulder width varies from 21 to 29 mm with a mean of 23.3 mm, and the thickness ranges from 8 mm to 12.5 mm with a mean of 10.2 mm. The length of the stem ranges from 11 to 15.5 mm with a mean of 12.5 mm and the width at the base of the stem varies from 14.5 to 21 mm with an average of 16.2 mm. All three points in this class are made from red heat treated chert. Three specimens are from the surface, but one example was found in Level 1 of Square 475R505, suggesting a possible Late Woodland association.

Class 9. Medium to Medium Large, Straight Stem and Base (Plate XXXII Z-DD)

This class includes points with a straight base and stem and strong shoulders which may be either horizontal or inversely tapered. Blade edges are either straight or excurvate with an acute distal end. Flaking is random or collateral resulting in a biconvex or plano-convex cross section. All examples are thinned along the stem and blade but basal treatment varies with some being ground, others thinned, and some unfinished. The points range in length from 40 to 54 mm with a mean of 46.6 mm. The shoulder width ranges from 26.5 to 43 mm with an average width of 33.8 mm and the maximum thickness ranges from 8.5 to 14 mm with a mean of 10.6 mm. Stem length varies from 7 to 12 mm with a mean of 10.8 mm and the width of the stem at the base ranges from 16 to 19.5 mm with a mean of 18.2 mm. Four specimens in this class are made from red chert and two are made from gray chert. All specimens are from the surface and no cultural association is possible.

Class 10. Medium Large, Broad Shoulders, Straight Stem (Plate XXXIII Q-R)

The two points in this class have broad tapered or horizontal shoulders and a short, straight stem with a rounded, poorly finished base. The blade is broad and excurvate with a plano-convex cross section. Flaking is random and crude with some retouch along the blade, base, and stem edges. Both specimens are broken and few measurements are possible. One example has a shoulder width of 35 mm. The thicknesses of the two points are 12 and 13 mm and the stem lengths are 12 and 14 mm. Both specimens are made from red chert and are from the surface.

Class 11. Medium, Straight Base and Stem, Strong Horizontal Shoulders (Plate XXXIII A-B)

The two points included in this type have a straight base and stem and strong horizontal shoulders. The blade is incurvate with an acute distal end. Flaking is roughly collateral producing a blade cross sec-

tion which is median ridged. On one example the base is thinned but the other has an unfinished base. Both points have thinning along the blade and stem edges. Length ranges from 42 to 43 mm with a mean of 42.5, width at the shoulder on the complete specimen is 26.5 mm and the maximum thickness on both specimens is 10 mm. In the hafting area, the stem length ranges from 10 to 14 mm with a mean of 12 mm, and the basal width ranges from 12 to 14 mm with a mean of 13 mm. Both specimens are from the surface and are made from red chert. They are generally similar to Cotaco Creek points (Cambron and Hulse 1964) which is aligned with a Late Archaic to Early Woodland association.

Class 12. Medium Contracting Stem, Horizontal Shoulders

The three points in this class have an unfinished or rounded base, contracting stem, and horizontal shoulders. All are broken on the blade, but both incurvate and excurvate blades are represented. The width at the shoulder ranges from 28 to 37 mm with an average of 32.3 mm, maximum thickness ranges from 9 to 12 mm with a mean of 10.6 mm and stem length ranges from 11 to 13 mm with an average length of 11.8 mm. All are made of red chert, and are from the surface. No cultural association is advanced.

Class 13. Medium Large Contracting Stem (Plate XXXII R-X)

The points included in this class have contracting stems with rounded or flattened bases and usually have pronounced shoulders. The blades are straight to slightly excurvate and four specimens have shallow, indistinct serrations. Total length ranges from 42 to 71.5 mm with a mean of 53 mm, shoulder width ranges from 18 to 30 mm with a mean of 24.7 mm, and the length of the stem ranges from 6 to 13.5 mm with a mean of 13.6 mm. The points are made from a variety of cherts. Five are local red chert, three are yellow chert, two are yellow-cream fossiliferous chert, one is pink fossiliferous chert, three are mottled pink chert, one is gray chert, and three are made from Tallahatta quartzite. Most of the Class 13 points are examples of the Gary type (Cambron and Hulse 1964) which Jenkins (1975:142) has found in strati-



graphic association with Miller I ceramics. One point from Tibbee was found in Feature 22, which also contained Miller III ceramics, but the association between the point and ceramics within the mixed pit fill is not certain.

Class 14. Medium Stemmed, Horizontal Shoulders, Serrated Blade (Plate XXXIII G-K)

The points in this group have a straight to slightly rounded base on a straight to slightly expanding stem and horizontal shoulders. A major attribute is fine serration on the blade. Flaking is random or sometimes collateral producing blade cross sections which are median-ridged, plano-convex, or biconvex. Total length ranges from 49 to 54 mm with a mean of 52 mm, shoulder width varies from 23.5 to 29 mm with a mean of 26 mm and the maximum thickness ranges from 9 to 11 mm with a mean of 9.8 mm. The stem ranges from 12 to 17 mm long with a mean of 13.6 mm, and the basal width varies from 14.5 to 17 mm with a mean of 16 mm. Four examples are made of red chert, and one is made from yellow chert. These points closely resemble the Flint Creek type (Cambron and Hulse 1964) and probably have a Late Archaic to Early Woodland association.

Class 15. Medium Small, Excurvate Blade, Strong Horizontal Shoulder (Plate XXXIII C)

The one point in this class is rather small, with a straight base on an asymmetrical stem. The shoulders are broad and excurvate and the blade is excurvate. Flaking is shallow and random with some thinning by small pressure retouch along the base, stem, and blade edges. The point is 24 mm wide at the shoulder, the stem is 11 mm long, 12.5 mm wide, and the maximum thickness is 7.5 mm. The raw material is red chert. This point was found in Feature 6 which has a Miller III association and the point may be contemporary.

Class 16. Medium Large Expanded Stem, Rounded Base (Plate XXXIII S-W)

These points have an expanding stem with a rounded base which is unfinished on some examples. The shoulders are either tapered or hori-

zontal and the blade is straight or excurvate with an acute distal end. Flaking is crudely done and may be random or somewhat collateral. Four points have thinned bases while three are unfinished. Blade cross sections can be either biconvex, plano-convex, median ridged, or rhomboid. Total length ranges from 55.5 to 81 mm with a mean of 64 mm, shoulder width ranges from 23 to 30.6 mm with a mean of 27 mm and thickness ranges from 16 to 19 mm with a mean of 17.5 mm. Six examples are made of red chert and one is of yellow chert. All specimens are from the surface and no cultural association is made.

Class 17. Medium, Expanded Stem, Straight Base, Excurvate Blade  
(Plate XXXIV C-D)

This group includes those points with an expanding stem and a straight base which may or may not be finished. The shoulders are tapered, horizontal, or slightly barbed, and the blade is incurvate. Flaking is crude and random resulting in a cross section that is thick and roughly biconvex. Two specimens with a finished base are thinned along the base, stem, and blade, while the third point with an unfinished base is not thinned at all. All examples are broken, and no length measurements are possible. The shoulder width varies from 28 to 32.5 mm with a mean of 32.3 mm and the maximum thickness varies from 10 to 11.5 mm with a mean of 11 mm. The stem length ranges from 8.5 to 14.5 mm averaging 12.5 mm and the basal width varies between 19 and 23.5 mm with a mean of 21.8 mm. All points in this group are made of red chert and were found on the surface.

Class 18. Small Corner-Side Notched (Plate XXXIV E-H)

This is a catchall category which includes four small points found on the surface which have been modified for hafting by notching. Two specimens have small side notches; one has broad shallow corner notches making a pronounced flaring stem; and the fourth specimen appears to also have been side notched but the base is broken away. The points range in length from 29 to 24 mm with a mean of 26 mm; shoulder width ranges from 14 to 12 mm with a mean of 13.3; basal width varies from 14 to 13 mm with a mean of 13.5 and the maximum thickness ranges from

6 to 4 mm with a mean of 5 mm. All examples are made from red heat treated chert. Since all the specimens are from the surface, no cultural provenience can be advanced confidently, but given the size and workmanship of the points, a late Woodland Miller III or possibly a Mississippian association is likely.

Class 19. Medium Contracting Stem, Horizontal or Barbed Shoulders  
(Plate XXXIV A-B)

The two contracting stem points in this class have horizontal or slightly barbed shoulders and excurvate blades. The base is straight or rounded and the cross section of the blade is biconvex. The flaking is random and the points are not thinned. Both points are broken, but the example which is not broken at the shoulder measures 31 mm across. The maximum thickness varies from 10 to 12 mm, and the stem length ranges from 11 to 12 mm. Both points are made from yellow chert. One is from the surface but the other was found within the cranium of Burial 10 but it appears to be a chance inclusion rather than the result of an inflicted wound. The cultural association of these points is uncertain, but the association with Burial 10 may indicate a Late Woodland age.

Miscellaneous and Unique Projectile Points (Plate XXXIV I-V)

A number of unique projectile points were found on the surface of the Tibbee Creek site and are not described in detail because of their uncertain provenience and their lack of similarity to specimens from controlled contexts. These points are illustrated in Plate XXXIV I-V.

Pecked and Ground Stone Artifacts

Sandstone Slab Mortars Two large sandstone slab mortars were found on the surface of the site. Both are made of fine grained ferruginous sandstone. The smaller specimen is 21 cm long with an average width of 12 cm and has a very uniform thickness of 3.7 cm. It is extensively ground and polished on both faces and several large flakes have been removed from two edges. The larger specimen is 25 cm long, 16 cm wide,

and averages 3.9 cm in thickness. One face shows no working or wear; the other face has wear only on the higher spots. Both mortars are large and heavy artifacts, with the small specimen weighing 2.2 kg and the larger weighing 4.5 kg.

Sandstone Mano (Plate XXXVII C) A well-shaped rectangular sandstone mano was found on the surface of the site. It is made of light brown, medium grained, dirty white sandstone. It measures 9.9 cm long, 7 cm wide, and 2.6 cm thick. One face is flat but the other has two flat surfaces meeting in a median ridge.

Pitted Stone, Type 1 (Plate XXXVII A-B) Type 1 pitted stones are frequently called nutting stones, but this functional designation will not be used. These specimens are made of either ferruginous sandstone or ferruginous conglomerate. They are generally irregular in shape and vary from 3 to 5 cm in thickness. They have smooth, sub-hemispherical depressions in one or both faces which range in size from 2 to 3 cm in diameter.

Pitted Stone, Type 2 Type 2 pitted stones are frequently called anvil stones and are distinguished from Type 1 by the form of the pit. Rather than having a smooth, round depression, the depression is rough and appears to have been formed by repeated pecking on one spot. These specimens are generally smaller in size than the Type 1 specimens but are about the same thickness. All of the Type 2 specimens are made from ferruginous sandstone.

Ground Sandstone Fragments The most common ground stone artifacts from the Tibbee Creek site are amorphous fragments of ferruginous sandstone which show polishing or wear on one or more surfaces. Most of these appear to be fragments of larger tools, but some appear to be complete tools.

Discoidals (Plate XXXVII G-I) Three stone discoidals were found at the Tibbee Creek site, all of which came from the surface. Two are complete, one is fragmentary, and the three are very dissimilar in size. Measurement data is given in Table 48 below.

## PLATE XXXVIII

## Bone, Shell and Miscellaneous Artifacts

- A Engraved Marine Shell Gorget
- B-E Large Columella Beads
- F Bone "Barrette"
- G Chert Pin
- H-J Drilled Bear Canines
- K Antler "Plummet"
- L-M Unfinished Antler Projectile Points
- N-P Finished Antler Projectile Points
- Q Broken Bone Awl with Butchering Marks
- R Notched Bone
- S Antler Pin
- T Fossil Sharks Tooth
- U Fossilized Antler Tool

## PLATE XXXVII

## Pecked and Ground Stone Artifacts

- A-B Type 1 Pitted Stone
- C Sandstone Mano
- D-E Gorget Fragments
- F Atlatl Weight
- G-I Discoidals

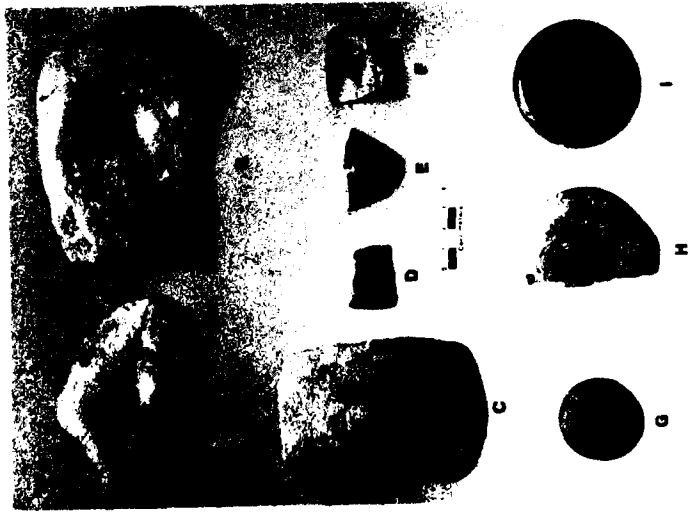


Plate XXXVII.

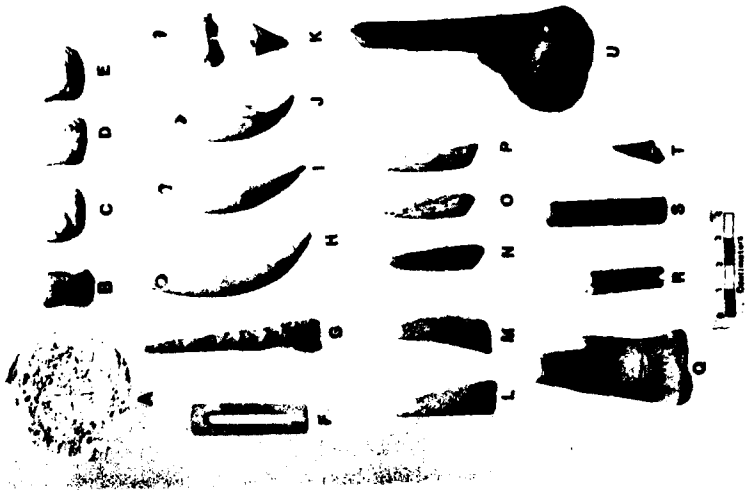


Plate XXXVIII.

TABLE 48. DISCOIDALS

<u>Specimen</u>	<u>Material</u>	<u>Diameter</u>	<u>Thickness</u>
A	Quartzite	6.8 cm	3.3 cm
B	Hard, fine-grained sandstone	3.9 cm	2.8 cm
C	Limonite	6.1 cm	2.1 cm

Specimen A (Plate XXXVII H) is about one-half complete and is the least well finished. Both surfaces are smooth and polished, but the edges are rough and smoothed only on the high spots. Specimen B (Plate XXXVII G) is well shaped but shows no polish. It is slightly conical in cross-section, with one face having a diameter of 4.0 cm while the other is 3.7 cm in diameter. There is a very shallow and wide groove around the middle of the edge. Specimen C (Plate XXXVII I) is finely made and very symmetrical varying only 1 mm in diameter around the circumference. All of the surfaces are smooth and highly polished, and the edges are evenly rounded. While this discoidal is highly polished, its surfaces are covered with very fine scratches showing no particular orientation. It should be noted that when Specimen C was found, it was almost entirely encrusted with a white carbonate material about 1 mm thick. This coating was removed over most of the artifact with a weak acid solution.

Atlatl Weight (Plate XXXVII F) A hematite Atlatl weight was found in the large tree disturbance in Structure 1 during the cross-sectioning of this area. Unfortunately, the artifact was shattered when the senior author struck it with a pickmattock, but it could be reconstructed. It is rounded-triangular in shape, with a length of 3.8 cm, and the sides measuring 3.5, 3.6, and 4.2 cm. The straight hole through the center is 1.2 cm in diameter. Approximately half of the longer side has been broken away, but slight polish on the edges and high points of the break scar suggest the weight continued to be used after breaking.

Stone Gorget Fragments (Plate XXXVII D-E) Two fragments of stone gorgets were found on the surface of the site. One was made from hematite, the other from fine grained ferruginous sandstone. The hematite specimen is triangular in shape, 9 mm thick, and is broken through a biconical hole in the midline of the artifact. The biconical hole is 4 mm in diameter at the surface, and the two cones meet at the center. The sandstone specimen is a fragment from the middle of a gorget and does not show traces of holes. It is 3.1 cm wide and 9 mm thick.

#### Bone and Shell Artifacts

Preservation of bone and shell at the Tibbee Creek site was good in most contexts. This was undoubtedly due to the large amounts of mussel shell on the site and the generally calcareous origin of the local soils. But from the following description, it can be seen that very few bone tools were found, which seems unusual considering the preservation and the presence of large amounts of animal bone within the midden. Not counting bone or antler artifacts from burials or the several specimens of antler tine projectile points, only three bone or antler tools were found in the general excavations.

Deer Metacarpal Awl (Plate XXXVIII Q) A proximal end fragment of a split bone awl made from a deer metacarpal was found in the fill of Feature 3. The distal or working end of the specimen is entirely broken off. The bone was split longitudinally, and the cut edges were smoothed. Transverse butchering marks are present approximately 17 mm from the articular surface.

Notched Bone (Plate XXXVIII R) A rectangular, notched, long bone splinter was found in Level 2 of Square 500R545. This fragment is broken at the end opposite the notch. It is 32 mm long and 10 mm wide. The notch is hemispherical in shape, 2 mm wide and 2 mm deep. The function of this artifact is not known, but in a descriptive sense, it very much resembles the nock portion of an arrow shaft.

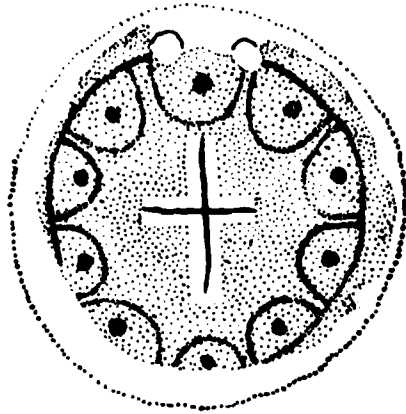


Bone Barrette (Plate XXXVIIIF) This artifact was found at the head of Burial 12, and in conjunction with a chert pin found nearby, appears to represent a barrette type hair ornament. It is made from the shaft of a large bird longbone which was originally about 18 mm in diameter. It is 46 mm long and 12 mm wide with a central cut out slot 31 mm long and 4 mm wide. All surfaces are highly smoothed and polished.

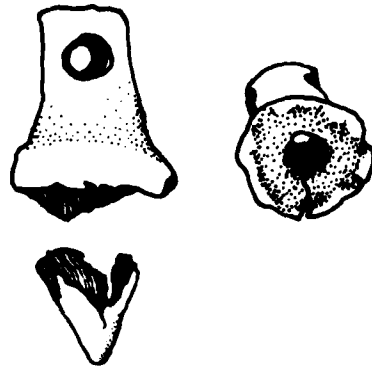
Antler Pin (Plate XXXVIII S) This is a well-made, symmetrical, cylindrical object made of dense antler, 48 mm long and 10 mm in diameter. One end is flat and smooth; the other is more rounded and also battered and scratched. This artifact could have been used as a punch or drift, possibly for indirect percussion in chert tool manufacture.

Antler Plummet (?) (Plate XXXVIII K Fig. 19) This problematical antler object is not well preserved and shows a considerable amount of erosion. Coupled with the artifact's fragmentary condition, this erosion makes the reconstruction of the artifact difficult and puzzling. It appears to have been a plummet-shaped object about 50 mm long with a constricting neck 21 mm long. The neck is drilled through two sides with 3.5 mm holes, and drilled longitudinally with a 4 mm hole. This longitudinal hole continues through the neck. Most of the body of the plummet is missing except for the tip end. The body is hollow with extremely thin walls. Those small sections of wall preserved on the tip and neck measure 1.3 mm in thickness. The function of this artifact is not known.

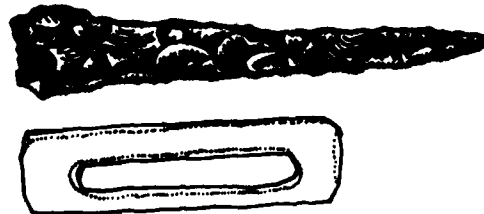
Antler Tine Projectile Points (Plate XXXVIII L-P) Four completed and two unfinished antler points were found at the site. The unfinished specimens are from Feature 29 and appear to have been discarded at approximately the same stage in the manufacturing sequence. Specimen A (Plate XXXVIII L) is 40 mm long, has a whittled, faceted base, and a small central perforation in the base, 3 mm wide and 1 mm deep. Specimen B (Plate XXXVIII M) has been grooved around the circumference at the tine and snapped off. It has a slightly larger central perforation 4 mm wide and 2 mm deep. Except for the cut or grooved bases



RECONSTRUCTION OF  
SHELL GORGET FROM  
BURIAL 5



ANTLER PLUMMET  
SHAPED OBJECT  
FROM BURIAL 9



CHERT PIN AND  
BONE BARRETTE  
FROM BURIAL 11

FIGURE 19  
ARTIFACTS IN  
ASSOCIATION WITH  
BURIALS 5, 9, AND 11  
(FULL SCALE)

and the central perforations, the antler tine is unaltered.

The measurements and provenience information on the completed specimens is given in Table 49 below.

TABLE 49. ANTLER PROJECTILE POINTS

<u>Specimen</u>	<u>Provenience</u>	<u>Length</u>	<u>Basal Diameter</u>	<u>Socket Depth</u>
C	480R545, L1	38 mm	10 mm	14 mm
D	Wall Trench 1	43 mm	9 mm	14 mm
E	Burial 13		fragmentary	
F	Burial 13	38 mm	9 mm	14 mm
Mean		39 mm	9 mm	14 mm

The outer surfaces of all of the completed points have been shaped into a fairly symmetrical cone by whittling or grinding, leaving their surfaces covered with longitudinal facets. Specimen C has been polished and smoothed to partially obliterate these facets. It should be noted that the tips on all the complete points are not very sharp, but given the position of specimen F in the shoulder of Burial 13 (see Chapter VII), their use as projectiles is certain. From the Tibbee Creek site points, we are able to make some notes on their sequence of manufacture. First a suitable tine tip is separated from the remainder of the tine by grooving and snapping it off. The base is then whittled to shape and the drilling of the socket begun. The socket is drilled with some tool using a rotary motion, leaving a series of circular scars on the interior of the socket. The point is then finally shaped by whittling and in some cases is further smoothed by polishing.

Drilled Bear Canine Teeth (Plate XXXVIII H-J) Three drilled bear canines were found, two in association with Burial 9 and one in the fill of Feature 37. The two specimens from the burial both show longitudinal splitting of the enamel, polish on the root, and wear or heavy polishing of the root tip. The smaller tooth from the burial is 39 mm long, measures 14 mm in diameter at the beginning of the enamel, and

has a biconically drilled hole 4 mm in diameter at the root tip. The dimensions of the larger tooth are 62 mm, 14 mm, and 4 mm respectively. The specimen from Feature 81 measures 69 mm, 15 mm, and 4 mm. The tooth from Feature 81 is very much worn, with the root end worn completely smooth and round, and most of the enamel worn off.

Antler Gouge (Plate XXXVIII U) This artifact from the surface might be more appropriately discussed in the section on stone artifacts as it is made of fossil or permineralized antler. It is a longitudinally split section of antler retaining most of the basal attachment area. The rounded tip and edges of the split section are considerably worn. The total length of the artifact is 95 mm, and the bit is 24 mm wide. The antler is probably Pleistocene in age, since Pleistocene cervid fossils can be found upstream from the site in Tibbee Creek and its tributaries.

Engraved Shell Gorget (Plate XXXVIII A, Fig. 19) This gorget was found on the left clavicle of Burial 5. Unfortunately the gorget was poorly preserved and consequently was damaged along the lower and bottom margins during excavation. The gorget is made from a section of the wall of a large marine whelk, probably Busycon perversum. It was originally about 55 mm in diameter, 2 to 3 mm thick, and has two 3 to 4 mm holes for suspension at the upper margin. The design is on the interior, concave surface of the shell and is reconstructed in Fig. 19. Basically the design consists of a central raised cross surrounded by a ring of hemispherical elements each containing a central perforation. The ring of hemispheres is bordered on the exterior of the circle by at least one incised line. Kneberg (1959:13) classifies this type of motif as the Circular Cross Design and considers it an earlier Mississippian design.

#### Shell Beads

Five types of shell beads were found at the site. Most specimens were found with burials, but two types are represented by a single specimen from non-burial context. Each type is discussed below.

Large Columella Beads (Plate XXXVIII B-E) Four large beads, cut from the columella of a large conch or whelk shell, were found with Burial 9. The beads were strung in a tight choker type necklace with the beads directly under the jaw. They range from 14 to 23 mm in length with a mean length of 19 mm; 13 to 14 mm thick with a mean of 13.5 mm; and 20 to 22 mm wide with a mean of 21 mm. Three have been drilled biconically from both ends with holes ranging from 4 to 5 mm in diameter. One has been drilled with a straight hole 3 mm in diameter.

Small Columella Bead One small bead made from the columella of a small gastropod was found in the fill of Feature 13. It is 4.5 mm long, 3.0 mm in diameter, and has been drilled with a straight hole 2 mm in diameter.

Small Cut Shell Bead A single small bead cut from the wall of a gastropod shell was found on the surface during the cleaning of stripped area A. It is 4.7 mm in diameter, 215 mm long, and has been drilled with a straight hole 2 mm in diameter.

Goniobasis and Marginella Beads A large number of Goniobasis and Marginella beads were found with Burial 15. The beads covered the chest and pelvic area of this child burial and were probably sewn onto a garment. The Goniobasis beads were made by grinding away the side of the shell with the operculum, removing about one-third of the diameter of the shell and producing a flat surface. This creates a loop around the columella by which the shell could be strung or sewn. A total of 225 Goniobasis beads were found with Burial 15.

The Marginella beads were made by making a small perforation at the whorl end of the small gastropod. The shell could then be strung through this perforation to the opposite end of the operculum. A total of 183 Marginella beads were found with Burial 15.

Freshwater Pearl A small freshwater pearl was found within the fill of Feature 65. The pearl is only 1.5 mm in diameter but is very lustrous. It shows no alteration and probably was an incidental inclusion in the pit.

### Historic Artifacts

A very small collection of historic artifacts was found at the Tibbee Creek site. Most of the specimens are from the surface and the entire collection consists of a gunflint, five sherds of earthenware, the top of a glass snuff bottle, five cut or wrought nails, and a hand wrought singletree loop.

The gunflint, along with the small cut nails, was found in Zone A of the control block, Square 499.5R524.5 The small rectangular flint is made of light gray slightly banded chert similar to some of the light gray varieties of chert from the Fort Payne formation in northern Alabama. It is made from a snapped-off section of a prismatic blade with a technique similar to the "Clacktonian" method used to produce commercial flints. Fine retouch is present along the basal edges and the striking end is step fractured and battered. The maximum length of the artifact is 21 mm, the width is 18 mm and the thickness is 6 mm. This size of flint could be used either in a light sporting rifle or a pistol.

The five sherds of historic ceramics are from the surface and appear to represent only two vessels. Two sherds are buff paste coarse earthenware with a brown lead glaze and appear to be from a medium size crock. The largest sherd is from a flat bottom, and has heavy glaze on the interior but only a light smearing on the exterior. The other sherd is from the body and has heavy glaze on both surfaces. The other three sherds are pink paste coarse earthenware that are not glazed but appears to be burnished. All the sherds are small, but two are from a flat bottom. The molded brown glass snuff bottle top is identical to those currently made.

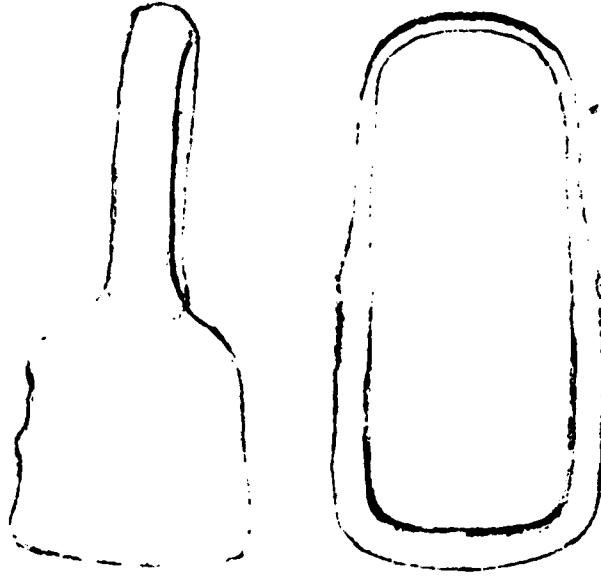
Three different types of nails are represented in the sample of five specimens. The two small cut nails from the control block are both broken and bent as though they were used to fasten horseshoes and later cut off in replacing the shoe. These possible horseshoe nails have shafts 3 mm thick, 4 mm wide, and a rounded square head measuring 6 by 6.5 mm.

Two larger cut nails were found on the surface. One is broken but both are the same size. The complete nail is 82 mm long, and the shafts of both specimens are 4 mm thick, 8 mm wide and have heads about 10 mm square. The last nail (Figure 20) is also from the surface and is a short 37 mm long, hand wrought nail with a very broad head resembling a roofing nail. The tapered shaft is 5 mm thick and 6 mm wide at the base of the head and the head is 18 mm square. The shaft attaches slightly off the center of the head.

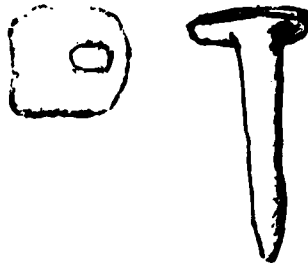
The only other iron artifact is a hand wrought loop from a single-tree illustrated in Figure 20. It consists of a squared loop of wrought iron, 15 to 18 mm square which is flattened in half of the loop to a thickness of 5 mm and a width of 50 to 58 mm. The ends of the square bar stock are welded together with an overlapping weld at the small diameter end. In use, the widened portion holds the wooden singletree while the loop is attached to the harness. A fragment of a similar singletree loop was found at the Nince's Ferry Brick Kiln Site (Atkinson and Elliot 1978:90).

The sparsity and diversity of historic material make interpretation of the historic uses of the Tibbee Creek site difficult. The use of horses and horse-drawn equipment or vehicles is indicated by the horseshoe nails and singletree loop. This could have been either for transportation or agriculture. Given the length of time which had passed since the site was last cultivated, it is likely that mules or other draft animals were used. The scarcity of nails at the site would indicate that a substantial structure was not built at the site and the absence of any tableware or glass other than the snuff bottle argues against the site being the locale of a house. The gunflint indicates that hunting or shooting were carried out at or nearby the site.

It is most likely that the site was used intermittently for a number of short-term purposes due to its higher elevation and proximity to the creek. Just what all of these uses are is not known.



SINGLETREE LOOP  
(HALF SCALE)



WROUGHT NAIL  
(FULL SCALE)

FIGURE 20  
MISCELLANEOUS IRON ARTIFACTS  
FROM THE SURFACE



## IX. FLORAL REMAINS

Paleoethnobotany has the potential to provide insights pertaining to: 1) the environment in which a site's occupants functioned; 2) man's use of that environment and 3) the impact of man's use on that environment. However, the extent to which the analysis of plant remains from a particular site can be used to address such issues is dependent upon conditions of preservation and recovery. In most cases the initial preservation of plant remains results from carbonization. Because of this, only a small portion of the plants utilized will be preserved. Furthermore, the chances of preservation by carbonization are not equal for all types of plant material. Larger, denser materials are more apt to survive than smaller, fragile ones. Similarly, by-products of food preservation are more apt to be preserved than those parts which are generally consumed. Preservation of plant remains is further affected by the post-depositional conditions on a site. Disturbances, fluctuations in the soil moisture content and freezing and thawing of the soil can all negatively affect the preservation of plant materials. Finally, excavation and laboratory techniques can affect both the condition and recovery of plant remains.

The analysis of Tibbee Creek site plant remains was begun with the hope that they would contribute to our understanding of the transition from a subsistence system based on hunting and gathering supplemented by small scale cultivation to a subsistence system based on intensive corn agriculture. The Late Woodland Miller III and Mississippian occupations at the site span the period during which this transition is believed to have occurred (Ford, 1974:403-407; Smith, 1974). Unfortunately, it soon became apparent that there were severe problems with preservation. Coupled with the limited number of samples analyzed, this greatly restricted the interpretive value of the Tibbee Creek site materials. There is no way to estimate the proportion of plants that were originally preserved at the site. It is, however, obvious, from the condition of the materials recovered, that post-depositional

events were highly detrimental to their preservation. It seems quite likely that the same weather conditions which so greatly hampered excavation were in large measure responsible for the poor preservation of botanical materials. The plant remains recovered were generally fragile and warped and show abundant evidence of recent fracturing. These characteristics can probably be attributed to the repeated exposure of the cleared, and in some cases stripped, site to flooding and freezing.

Due to the preservation problems, analysis and interpretation of the Tibbee Creek site plant materials have been restricted to a presentation of methods and results and a brief discussion of the data as they reflect subsistence practices and environmental conditions.

#### Sample Collection and Treatment

The samples submitted for analysis were collected from the control square 499.5R524.5 which was excavated by natural zones prior to the stripping of the site and from a variety of features exposed when the overburden on the site was removed. The plant remains were recovered by the use of 6.4 mm (1/4") and 2 mm (1/16") nested water screens. Plant remains were hand picked from other materials caught in the screens, prior to their submission for analysis. The samples from the control square represent each of the four natural zones at the site. However, the sample from Zone C level 1 was misplaced and, hence, not available for analysis. A total of 26 feature samples was processed for plant remains. However, half of these features were later found to represent mixed contexts and were dropped from further consideration. Features included in the analysis were: five Miller III features (#'s 13, 30, 36, 65, and 74) and six Mississippian features (#'s 29, 40, 42, 63, 82, and 90).

Laboratory processing of the zone and feature samples followed standard paleoethnobotanical procedures. Samples were weighed and then sorted under a binocular microscope. Due to the time constraints and large size, two of the samples (Zones A and B) were randomly split prior to sorting. Proportionate representation of materials in these samples was then estimated on the basis of their representation in the

processed subsamples. Once sorted, the plant remains were identified using manuals such as Martin and Barkley (1961), Brown (1928) and Brown and Panshin (1934) and by reference to the author's comparative collection.

The botanical materials identified fell into four categories: carbonized wood, nutshells, corn remains and seeds. Each category was treated separately. Wood charcoal was weighed and where possible a sample of 20 fragments was drawn and identified to genus. The poor preservation of the wood made this process generally difficult, and in a number of cases impossible. In the discussion of the environment that follows, all wood identifications should be regarded as tentative. Nutshells were sorted by genus, weighed and counted. It should be noted, that the very high counts of hickory shell (*Carya* sp.) relative to their weight is a product of extensive recent fracturing of this material. Corn remains were sorted by kernel and cupule fragments and counted. There were no cobs recovered and none of the fragmentary remains were in measurable condition. The few seeds which retained their diagnostic characteristics were identified and counted. The presence of unidentifiable seed fragments was also noted.

### Results

Because of the limited number of samples analyzed and the preservation problems, samples will not be discussed individually. Rather, the samples will be grouped by cultural association and discussed in terms of subsistence and environment. The zone samples from square 499.5R524.5 will be grouped in accordance with cultural associations assigned in Chapter IV. Thus, the plant materials from Zone A will be considered to be Mississippian; those from Zone B, Miller III and Miller II; and those from Zone C, Gulf Formational. Zone D represents the sterile subsoil. The few plant remains recovered from this zone are believed to be intrusive and will not be considered in the report.

Summary information about the identified plant remains is presented in Tables 50 through 52. Table 50 lists the quantities of plant materials found in each sample. For the sake of clarity, the samples

TABLE 50. PLANT REMAINS FROM THE TIBBEE CREEK SITE

PROVENIENCE	TOTAL PLANT wt. (g)	WOOD CHARCOAL wt. (g)	Carya sp. wt. (g)	HUSHELL		Juglans nucif. wt. (g)	Juglans cinerea wt. (g)	ZEA MAYS		OTHER
				Quercus sp. wt. (g)	#			Kernels	Cupules	
<u>Gulf</u> <u>Formation 1</u> 499.5R524.5 Zone C2	14.13	8.42	4.47	693	1.22	624	.02	3	-	Vitis sp. 1 Gallium sp. 1 Diospyros virginiana 1
<u>Miller 111</u> 499.5R524.5 Zone B	16.22	5.17	7.39	2890	2.73	1731	.11	7	-	c.f. Rubus sp. 44 frag.
Feature 30	7.4	5.3	3.9	400	.2	48	-	-	2 frag.	---
Feature 36	2.2	.6	1.4	160	.2	44	3	3	-	Polygonaceae 1
Feature 65	16.0	15.9	.1	20	-	-	-	-	-	---
Feature 74	.3	.15	.08	14	.05	7	.01	1	-	---
Feature 13	26.06	17.93	7.88	3600	.75	160	-	-	-	c.f. Gleditsia triacanthos 2 frag. unknown 2 frag.
<u>Mississippi</u> Feature 29	12.15	8.4	3.6	625	.03	13	-	.12	2	Vitis sp. 2; unknown 6 frag.
Feature 63	52.43	2.95	48.9	1960	.02	8	.52	4	4	c.f. Prunus americana 1 Carya husk 6 frag.
Feature 82	3.2	.77	1.98	337	.07	19	-	.03	5	c.f. Prunus serotina 2 frag.
Feature 90	2.95	.96	1.91	480	.05	13	-	.03	2	Gallium sp. 1 Unknown 1 frag.
Feature 40	8.6	8.6	-	2	-	-	-	-	-	---
Feature 42	1.5	.6	.8	44	-	-	-	-	3	---
499.5R524.5 Zone A	3.12	.48	1.54	611	.44	246	-	-	4	Vitis sp. 2 c.f. Rubus sp. 10 frag.

TABLE 51. WOOD IDENTIFICATIONS

Wood Type	Miller III			Total	%	Mississippian			Total	%	
	Feat. 30	Feat. 36	Feat. 65			Feat. 29	Feat. 63	Feat. 40			Feat. 42
Monocot	--	--	--	--	--	--	1	--	1	2	2.7
<u>Quercus</u> sp.	6	14	--	20	47.6	8	8	16	3	35	47.9
<u>Juglans</u> sp.	--	1	--	1	2.4	--	--	--	--	--	--
<u>Carya</u> sp.	5	1	5	11	26.2	8	5	4	3	20	27.4
<u>Fraxinus</u> sp.	4	--	--	4	9.5	2	1	--	--	3	4.1
<u>Castanea dentata</u>	2	--	--	2	4.8	--	--	--	--	--	--
<u>Sassafras albidum</u>	2	--	--	2	4.8	--	--	--	--	--	--
<u>Gleditsia triacanthos</u>	1	1	--	2	4.8	1	--	--	1	2	2.7
<u>Liquidambar styraciflua</u>	--	--	--	--	--	--	1	--	2	3	4.1
<u>Ulmus</u> sp.	--	--	--	--	--	--	1	--	--	1	1.4
<u>Pinus</u> sp.	--	--	--	--	--	1	1	--	2	4	5.5
<u>Fagus americana</u>	--	--	--	--	--	--	--	--	3	3	4.1

TABLE 52. Percentages of Wood Genera by Successional Characteristics

	Wood Type	M. III	Miss.	M. III & Miss.
Climax genera:	<u>Quercus</u>	47.6	47.9	48.2
	<u>Carya</u>	26.2	27.4	27.1
	<u>Juglans</u>	2.4		.9
	<u>Castanea</u>	4.8		1.8
	<u>Fagus</u>		4.1	2.6
	<u>Liquidamber</u>		4.1	2.6
		<u>81.0</u>	<u>83.5</u>	<u>83.2</u>
Subclimax genera:	<u>Fraxinus</u>	9.5	4.1	6.1
	<u>Gleditsia</u>	4.8	2.7	3.5
	<u>Sassafras</u>	4.8		1.8
	<u>Pinus</u>		5.5	2.6
	<u>Ulmus</u>		1.4	.9
	monocot		2.7	1.7
		<u>19.1</u>	<u>16.4</u>	<u>16.6</u>

TABLE 53. Habitats, Season(s) of Availability, and Known Uses of Seeds Identified in the Tibbee Creek Site Samples

Plant	Habitat	Season(s) Available	Known Uses
<i>Ambrosia</i> sp. (ragweed)	open ground colonizer	July-October	
<i>Diospyros virginiana</i> (persimmon)	pioneer, alluvial bottoms terraces, 1st bottoms	fall	fruit edible raw; dried fruit made into bread; (Swanton 1946:288, 363)
<i>Galium</i> sp. (bedstraw)	rich woods, waste ground meadows	May-July	used for medicinal beverage; (Yarnell 1964:160)
<i>Gleditsia triacanthos</i> (honeylocust)	pioneer, alluvial floodplains, bottom lands, found near streams	fall	inner pulp of pod sweet, edible; beer made by fermenting sweet pods; (Yanovsky 1936:36)
Polygonaceae (knotweed family)	open ground colonizer	summer, fall	poterbs; seeds eaten parched or ground into meal; roots used for soups or steams; used for medicinal beverage; (Yanovsky 1936:20; Yarnell 1964:157)
<i>Prunus americana</i> (plum)	pioneer, bottom lands near swamps, streams	summer	fruit edible raw
<i>Prunus serotina</i> (cherry)	pioneer, deep rich moist soils	summer	fruit edible raw
<i>Rubus</i> sp. (blackberry)	open ground colonizer	summer	fruit edible raw; dried and stored; (Swanton 1946:244; Yanovsky 1936:34)
<i>Vitis</i> sp. (grape)	pioneer rich woods	summer	fruit edible raw, dried; (Swanton 1946:287)
<i>Carya</i> sp. (hickory)	better drained bottom lands	fall	nut edible, used for oil
<i>Juglans nigra/cinerea</i> (walnut/bitternut)	well drained soils	fall	nut edible
<i>Quercus</i> sp. (acorn)	better drained bottom lands	fall	nut edible, some species require leaching to remove tannic acid.

have been grouped by cultural association. Counts and weights are given for nutshell fragments while only counts are given for corn remains and the few additional identified seeds. The quantities were not converted to percentages, as it was felt this would be misleading given the preservation problems. Data pertaining to habitats, seasonality, and use of the identified nut and seed remains are presented in Table 53. Wood identifications, for those samples in which the wood was sufficiently preserved for identification, are given in Table 51.

#### Subsistence

One sample has been provisionally assigned to the Gulf Formational stage. This is the sample from Zone C. This sample produced a total of 8.07 grams of hickory shell (Carya sp.), 1.22 grams of acorn shell (Quercus sp.) and .02 grams of Butternut shell (Juglans cinerea). In addition, one bedstraw seed (Galium sp.), one grape seed (Vitis sp.), and one persimmon seed (Diospyros virginiana) were identified in the samples. These latter plants are open ground colonizers and their inclusion in the samples may be fortuitous. However, it is noteworthy that both grape and persimmon have edible fruits known to have been used by historic Indian groups (Swanton 1946:287-288).

A total of six samples assigned to the Miller III occupation were analyzed. These included: the Zone B column sample, two basin shaped pits (Features 30 and 36), two irregular shaped pits (Features 65 and 74) and one stepped post hole (Feature 13). Nutshells were the most common plant food remain recovered from the samples. Hickory shell (Carya sp.) was the most abundant; it was present in all of the samples analyzed. Acorn shell (Quercus sp.), though by count and weight less frequent than hickory, occurred in five of the six samples. Both butternut (Juglans cinerea) and walnut (Juglans nigra) were present in very small quantities. Butternut occurred in three of six samples and walnut in only one sample. Two fragments of corn kernel (Zea mays) were recovered from one of the basin shaped pits. Also present in the samples were: a seed of the knotweed family (Polygonaceae); two fragments of a legume, possibly honeylocust (Gleditsia triacanthos); and 44 fragments of a compound fruit tentatively identified as blackberry (Rubus



sp.). All of these plants have edible parts and it is likely that their presence in the samples is a reflection of their use as food.

The Mississippian occupation at the site was represented in seven samples. These include: the Zone A column sample; one basin shaped pit (Feature 29); two compound pits (Features 63 and 83); an irregular shaped pit (Feature 90); a smudge pit (Feature 40); and one feature for which the data were incomplete (Feature 42). As in the Miller III samples, hickory shell (Carya sp.) was the most abundant plant food remain and was present in all of the samples. Acorn shell (Quercus sp.) was present in five of seven samples. However, inspection of Table 50 shows that in quantity—either weight or count—it was generally less abundant than in the Miller III samples. Butternut (Juglans cinerea) was present in five samples and walnut (Juglans nigra) in one. But, in all cases quantities were quite small. It should be noted that one of the samples (Feature 40) from which both acorn and butternut were absent, contained only two fragments of hickory shell and 8.6 grams of wood. Corn remains (Zea mays) were low in density in any given sample but were found in four of seven samples. Miscellaneous identified seeds from the Mississippian samples included: one bedstraw seed (Galium sp.); four grape seeds (Vitis sp.); two species of Prunus (possibly P. americana and P. serotina) and ten fragments of the compound fruit tentatively identified as blackberry (Rubus sp.). All of these plants are pioneers and with the exception of bedstraw, produce edible fruits which were probably utilized.

#### Environment

The combination of the poor preservation of the wood charcoal and of limited number of samples analyzed severely restricts the utility of the data for environmental interpretation. In only seven of the samples analyzed—three from Miller III and four from Mississippian contexts—was the wood sufficiently well preserved to allow identification. Even for these samples, the identifications must be considered provisional. Table 51 presents counts of identified wood fragments and estimated percentage compositions of wood types for each period. However, the percentage figures should be viewed with caution

given the identification problems.

Inspection of Table 51 reveals that oak (Quercus sp.) and hickory (Carya sp.) combined account for 73.8% of the wood in the Miller III samples and 75.3% in the Mississippian samples. If the wood types are grouped by their successional characteristics (Table 52), it can be seen that 81% of the Miller III sample and 83.5% of the Mississippian sample are composed of climax genera. Given the similarity of the figures for the Miller III and Mississippian samples, they will be considered together in the following brief comments of the environment.

The variety of wood types identified reflects the environmental diversity in the vicinity of the Tibbee Creek site. All of the genera identified are found in bottomland habitats today (U.S. Army Engineer District, Mobile, nd.); however, they reflect a variety of topographic and edaphic conditions. Oak (Quercus sp.) and hickory (Carya sp.) are the dominant trees on the better drained ridges of the bottom lands. They are commonly found in association with butternut and walnut (Juglans cinerea and J. nigra), chestnut (Castanea dentata) and sweetgum (Liquidambar styraciflua). Thus, the majority of identified woods could appear to represent utilization of the ridge habitats. The subclimax genera identified occur in a variety of habitats including new land—e.g. created by point bar deposits or ox-bow cut-offs—river margins and clearings either natural or man-made. It is not possible given the available data to attempt to interpret the occurrence of the subclimax genera other than to note their presence is reflective of a disturbed environment either natural or man-made.

#### Summary and Conclusion

The poor preservation of the plant remains from the Tibbee Creek site, combined with the small number of samples analyzed, severely restricted the analysis and interpretation of these materials. It was found that hickory shell (Carya sp.) was the dominant food remain found in the samples from all three time periods. Acorn shell (Quercus sp.), while present in all three periods seems to decrease slightly in quantity through time. Corn (Zea Mays) was identified from one Miller III sample and from four Mississippian samples. There

is thus some indication of an increase in the use of corn from Miller III to Mississippian times. The various plant remains identified appear to reflect the diversity of the local environment and indicate utilization of both climax and subclimax habitats.

Though the data are limited, they are consistent with the results reported from other Miller III and Mississippian sites in the Tennessee-Tombigbee drainage. There are several reports of corn from Miller III contexts (Caddell 1979:120; Blakeman et. al. 1976:121) but it does not appear in any quantity until Mississippian times (Caddell 1979:122; Smith 1975). The Tibbee Creek site results thus add to a growing body of data which indicates that though corn was present in the Late Woodland period, it did not serve as a major food source until the Mississippian period.

The plant food remains other than corn also fit with the emerging picture of food use in the area. In a recent study of four sites in the central Tombigbee River drainage, Caddell (1979:120-122) noted several trends in plant utilization in the assemblages she analyzed. These include: 1) an increase in the amount of corn remains from the Miller III to the Mississippian period—though hickory shell is the dominant plant food remain recovered from all periods including Miller III and Mississippian; 2) the frequency of acorn shell in the samples declined through time; 3) the frequency of butternut/walnut decreased through time; and 4) there was an increase through time in the number and variety of seeds from herbaceous annuals. The Tibbee Creek site data support the first two trends noted by Caddell. The frequency of butternut/walnut in the Tibbee Creek site samples appears to increase through time on the basis of the number of samples in which it occurred. However, these never occurred in quantity and the small number of samples analyzed increases the probability of sample bias. The Tibbee Creek site data are not sufficient to address Caddell's fourth point.

In summary, despite the problems due to poor preservation and the limited number of samples analysed, the Tibbee Creek site results are generally in line with results reported from comparable sites in the Tombigbee River area.

## X. FAUNAL REMAINS

The faunal remains from the first field session and the second session were analyzed using different methodologies and levels of analysis due to budgetary constraints. A detailed analysis was made of the faunal materials from two excavation units, Squares 495R505 and 499.5R524.5, and five features, Features 8, 13, 14, 18, and 19. The material analyzed included material from 6.4 mm (1/4 in) mesh screen and also material from the 2 mm (1/16 in) mesh screen. All of these proveniences were excavated during the first field session. The analysis was performed by Simons at the Florida State Museum under the direction of Dr. Elizabeth S. Wing.

The animal bone from the second field session, which constitutes material from features in Graded Area B, was not analyzed in detail. This was unfortunate, as much larger and better preserved faunal samples were present in this area than in the excavation units and the features in Graded Area A. Instead, the bone from Graded Area B was identified as to class only. The divisions used were mammal, bird, reptile, amphibian, and fish. Invertebrate material, both bivalve and univalve, was weighed. The tabulation of this sorting is presented in Tables 23, 26, 33 and 34.

A list of the species represented in the samples which were subjected to detailed analysis is presented in Table 54. In addition to the species listed there, two additional species were recognized in material from the second excavation session. The proximal portion of a bear femur was found on the surface of the site after the flooding. The remaining portion of the shaft is broken and splintered and the broken area shows signs of burning. The specimen is probably from the black bear, Euarctos americanus. The other species is wild turkey, Meleagris gallopavo. Several skeletal elements of this bird were recognized in material from features in Graded Area A during the sorting.

The analysis of the material from the two excavation squares is presented in Tables 55 and 56. Zone B contained by far the highest concentration of all faunal remains, both vertebrate and invertebrate. As

TABLE 54 . ANIMAL SPECIES IDENTIFIED, TIBBEE CREEK SITE

## VERTEBRATES

<u>Mammals</u>	<u>Common Name</u>
<u>Didelphis marsupialis</u>	opossum
<u>Sylvilagus sp.</u>	rabbit
<u>Sciurus carolinensis</u>	gray squirrel
<u>Glaucomys volans</u>	flying squirrel
<u>Microtus pinetorum</u>	vole
<u>Sigmodon hispidus</u>	cotton rat
<u>Procyon lotor</u>	raccoon
<u>Canis familiaris</u>	domestic dog
<u>Odocoileus virginianus</u>	white tailed deer
<u>Birds</u>	
<u>Amphibia</u>	
Anura	frog or toad
<u>Reptile</u>	
serpentes	snake (unidentified)
<u>Terrapene carolina</u>	box turtle
<u>Kinosternon subrubrum</u>	musk turtle
<u>Sternotherus sp.</u>	musk turtle
<u>Chrysemys sp.</u>	pond turtle
<u>Trionyx sp.</u>	soft shelled turtle
<u>Fish</u>	
<u>Ania calva</u>	bowfin
<u>Lepisosteus sp.</u>	gar
<u>Ictalurus sp.</u>	catfish (freshwater)
Sciaenidae	drum

TABLE 54. (Continued)

<u>Aptodinotus grunniens</u>	drum
<u>Micropterus</u> sp.	bass
<u>Rajiformes</u>	ray
INVERTEBRATES	
<u>Pelecypod</u>	
Unioniidae	mussels (unidentified)
<u>Gastropod</u>	
<u>Anguispira</u> sp.	
<u>Angulosa</u> sp.	
<u>Campeloma crassula</u>	
<u>Catinella</u> sp.	
<u>Gastrocopta armifera</u>	
<u>Gastrocopta contracta</u>	
<u>Gastrocopta tapanniana</u>	
<u>Hawaia minuscula</u>	
<u>Helicodiscus</u> sp.	
<u>Mesodon inflectus</u>	
<u>Mesodon thyonoidus</u>	
<u>Planorbula wheatleyi</u>	
<u>Pleurocera prasinatum</u>	
<u>Polygyra pusillus</u>	
<u>Pupoides albilabris</u>	
<u>Retinella</u> sp.	
<u>Stenotrema stenotrema</u>	
<u>Strobilops texana</u>	
<u>Ventridens</u> sp.	
<u>Viviparus georgianus</u>	

TABLE 55. FAUNAL REMAINS, SQUARE 495R505

Level 1 (0-20 cm)

## MAMMALS

Odocoileus virginianus - 1 left pelvis, 3 phalangesCanis familiaris - 1 atlas fragmentSylvilagus sp. - 2 left humerus distal ends; vaner?

Large mammal - many burned

Medium mammal - 2 phalanges; 1 humerus distal (burned); 11 shaft fragments; 4 miscellaneous

## REPTILES

Serpentes - 2 vertebrae

Chrysemys sp. - 10 shell fragment (8 miscellaneous, 2 marginals) some burned

Kinosternidae - 3 shell fragments (1 neural, 1 marginal, 1 costal)

Trionyx sp. - 2 shell fragments

Turtle - 7.1 g.

## OSTEICHTHIES

Sciaenidae (possibly Aplodinotus grunniens) - 1 grinding platform

Osteichthies - 1 articular; 1 miscellaneous

Unidentified bone - 49.8 g. (some burned)

## MOLLUSCA

Unioniidae - 5961.5 g.

Campeloma crassula - 88.6 g.Pleurocera sp. - 52.0 g.Goniobasis sp. - 52.5 g.Angulosa sp. - 0.5 g.Mesodon inflectus - 0.2 g.Level 2 (20-40 cm)

## MAMMALS

Canis familiaris - right skull fragment

TABLE 55. (CONTINUED)

Large mammal - 19 fragments (some burned)  
 Medium mammal - 4.1 g. (some burned)  
 Mammal - 3.1 g. (1 with cut mark)

## REPTILES

Serpentes - 1 vertebra  
Kinosternidae - 1 marginal  
Trionyx sp. - 2 shell fragments  
 Large turtle - 5 shell fragments (2 burned); 1 limb fragment (burned)  
 Small turtle - 4 shell fragments  
 Unidentified bone - 8.2 g. (some burned)

## MOLLUSCA

Unioniidae - 2190.3 g.  
Campeloma crassula - 36.7 g.  
Pleurocera sp. 7.6 g.  
Goniobasis pupoidea - 5.7 g.  
Mesodon inflectus - 0.1 g.

Level 3 (40-60 cm)

## OSTEICHTHIES

Unidentified bone - 0.3 g.

## MOLLUSCA

Unioniidae - 2.7 g.  
Goniobasis sp. - 0.3 g.



TABLE 56. FAUNAL REMAINS, SQUARE 499.5R524.5

Zone A

## MAMMALS

Sylvilagus sp. - right maxilla with teethSciurus carolinensis - right calcaneum

Carnivora (small animal) - cheek tooth

Large Mammal (possibly deer) - 10 fragments: 8 shaft (3 burned),  
1 tooth, 1 unidentifiedSmall Mammal - 5 fragments: 2 metapodial (1 burned), 1 tooth,  
2 unidentified

## REPTILES

Serpentes - 5 vertebrae (1 burned)

Chrysemys sp. - 1 shell fragmentTerrapene sp. - 1 shell fragment (burned)

Kinosternidae - 3 shell fragments

Turtle - 8 shell fragments (some burned)

## AMPHIBIANS

Anura? - 1 vertebra

## OSTEICHTHIES

Ictalurus sp. - 1 right articular fragment, 1 dentaryScianidae (possibly Aplodinotus grunniens) - 3 teeth (1 burned)Aplodinotus grunniens - 1 otolith fragment

Osteichthies - 14 vertebrae; 8 spine fragments

Unidentified bone - (some burned)

## MOLLUSCA

Pleurocera sp. - 3.5 g.Campeloma crassula - 2.0 g.Goniobasis pupoidea - 3.4 g.

Unioniidae - 745.0 g.

## Zone B

## TABLE 56. (CONTINUED)

## MAMMALS

Odocoileus virginianus - 13 fragments: 4 pelvis fragments,  
2 radius fragments, 1 metatarsal frag-  
ment, 1 metapodial distal epyphysis, 1 scapu-  
la fragment, 1 carpal, 1 phalanx, 1 lower  
premolar, 1 unidentified

Large Mammal (possibly deer) - 87 fragments (some burned, some with  
cut marks)

Canis familiaris - 1 incisor

Didelphis marsupialis - 1 proximal end of ulna (burned)

Sylvilagus sp. - 1 tooth

Sciurus carolinensis - 1 right astragalus, 1 cheek tooth

Small Mammal - 7 fragments: 2 radius fragments, 1 metapodial  
fragment, 4 phalanges

Unidentified Mammal - 32 fragments (some burned)

## REPTILES

Serpentes - 6 vertebrae (1 or 2 burned)

Chrysemys sp. - 7 fragments: 2 marginals, 5 costals

Terrapene sp. - 9 fragments: 2 marginals, 1 neural, 6 miscellaneous

Kinosternon sp. - 1 plastron fragment

Kinosternidae - 5 shell fragments

Small turtle - 5 shell fragments

Unidentified turtle - 43 fragments (some burned)

## BIRDS

Unidentified bird - 1 shaft fragment

## AMPHIBIANS

Anura - 2 vertebrae

## OSTEICHTHIES

Ictaluridae - 1 spine fragment

Ictalurus sp. (possibly I. furcatus or I. punctatus) - 1 spine  
fragment

Lepisosteus sp. - 2 scales, 1 mouth fragment

Scianidae (possibly Aplodinotus grunniens) - 7 teeth (some burned)

TABLE 56. (CONTINUED)

Micropterus sp. - 1 right dentary fragment  
Rajiformes - 3 vertebrae  
Osteichthies - 12 vertebrae, 31 spine fragments, 1 ray fragment,  
 33 miscellaneous  
 Unidentified bone - (many burned fragments) 56.1 g.

## MOLLUSCA

Pleurocera sp. - 30.2 g.  
Campeloma crassula - 18.4 g.  
Goniobasis pupoidea - 33.3 g.  
Mesodon thyonoidus - 0.8 g.  
Goniobasis sp. - 1.9 g.  
Anguispira sp. - 1.0 g.  
Helicodiscus sp. - 0.1 g.  
Gastrocopta armifera - 0.2 g.  
Mesodon inflectus - 0.2 g.  
Stenotrema stenotrema - 0.7 g.  
 Unioniidae - 8021.2 g.  
Pupoides sp. - 0.1 g.  
 Unidentified shell - 1.3 g.

Zone C Level 1

## MAMMALS

Odocoileus virginianus - 1 vertebra; 1 right cubonavicular;  
 2 teeth fragments  
Sylvilagus sp. - 1 incisor (burned); 1 cheek tooth  
Sciurus carolinensis - 1 left dentary; 1 incisor; 1 cheek tooth  
Glaucomys volans - 1 cheek tooth  
Microtus pinetorum - 2 teeth  
 Rodentia - 1 incisor  
 Large Mammal (possibly deer) - 33 fragments:

## REPTILES

Serpentes - 5 vertebrae  
 Kinosternidae - 1 neural; 1 coracoid

TABLE 56. (CONTINUED)

Small turtle - 7 shell fragments  
 Large turtle - 1 tibia; 5 shell fragments

## OSTEICHTHIES

Amia calva - 1 pharyngeal mouth piece  
 Scianidae (possibly Aplodinotus grunniens) - 2 teeth  
 Osteichthies - (possibly catostomidae)  
 Osteichthies - 15 vertebrae; 5 rays; 1 tooth; 15 spines, 1 preurax  
 fragment; 79 miscellaneous fragments  
 Unidentified bone (some burned)

## MOLLUSCA

Unioniidae - 1250.3 g.  
Mesodon sp. - 0.2 g.  
Anguispira sp. - 0.2 g.  
Mesodon inflectus - 0.2 g.  
Campeloma crassula - 0.5 g.  
Ventridens sp. - 0.6 g.

Gastrocopta contracta  
Retinella sp.  
Trochilops texana  
Helicodisus sp.  
Hawaia minuscula  
Planorbula wheatleyi  
Gastrocopta armifera  
Pupoides albilabris  
Polygyra pusillus

—TRACE

## Zone C Level 2

## MAMMALS

Odocoileus virginianus - 1 pelvis fragment; 1 carpal  
Sciurus carolinensis - 2 teeth; 1 right tibia (burned)  
 Large mammal (possibly deer) - 2 fragments; 1 tooth; 1 patella frag-  
 ment  
 Medium mammal - 2 shaft fragments

TABLE 56. (CONTINUED)

Small mammal - 2 phalanges; 3 unidentified

## REPTILES

Serpentes - 2 vertebrae

Kinosternidae - 5 shell fragments

Turtle - 3 shell fragments

Small turtle - 5 shell fragments

## BIRDS

Unidentified bird - 1 shaft fragment

## OSTEICHTHIES

Amia calva - skull fragment

Amia calva (?) - pharyngeal mouth fragment

Micropterus sp. - 1 pharyngeal mouth fragment

Sciaenidae (possibly Aplodinotus grunniens) - 3 teeth

Lepisosteus sp. - 1 skull fragment; 1 tooth

Rajiformes - 1 vertebra

Osteichthies (possibly catostomidae) - 1 unidentified

Osteichthies - 33 miscellaneous; 10 spines; 1 tooth; 13 vertebrae

Unidentified bone

## MOLLUSCA

Unioniidae - 331.0 g.

Ventridens sp.

Hawaia minuscula

Retinella sp.

Gastrocopta armifera

Pupoides albilabris

Ventridens sp.

Anguispira sp.

Helicodisus sp.

Pleurocera sp.

Goniobasis sp.

Strobilops texana

— TRACE

TABLE 56. (CONTINUED)

<u>Stenotrema stenotrema</u>	]	— TRACE
<u>Viviparus georgianus</u>		
Unidentified shell		

Zone C Level 3

## OSTEICHTHIES

Scianidae (possibly Aplodinotus grunniens) - 1 tooth

Osteichthies - 2 vertebrae; 1 spine

Unidentified bone (some burned) - 1.7 g.

## MOLLUSCA

<u>Helicodiscus</u> sp.	]	— TRACE
<u>Strobilops texana</u>		
<u>Gastrocopta armifera</u>		
<u>Retinella</u> sp.		
<u>Anguispira</u> sp.		
<u>Pupoides albilabris</u>		
<u>Hawaia minuscula</u>		

would be expected, the most prevalent mammal remains are those of the whitetailed deer, Odocoileus virginianus. Other mammals occur in small amounts. Reptiles are represented primarily by turtles with both aquatic and terrestrial species present. Unidentified snake is represented by vertebrae, some of which are burned, suggesting that snakes were also consumed. Fish remains are primarily from "rough" species, with catfish, gar, and drum identified. Also present was one fragment from bass, and three vertebrae from a ray. The majority of the fish bone could not be identified to species.

The frequency of vertebrate and invertebrate material drops drastically from Zone B to Zone C. Deer continues to be the most frequent mammal represented; turtle and fish are also represented in approximately the same proportion as in the overlying zone. Faunal remains almost disappear below the 20 cm level of Zone C, and the few pieces found below 20 cm are all small in size and probably represent intrusions.

Faunal samples from five features in Graded Area A were analyzed in detail. Three of these features, Features 13, 18, and 19, are associated with the Miller III component on the basis of ceramics and two contained small amounts of shell tempered pottery, indicating they are associated with the Mississippian component. Descriptions of the individual features are contained in Chapter V.

The faunal remains from the two Mississippian basin shaped pits, Features 8 and 14, are tabulated in Tables 57 and 58 respectively. The density of faunal material is low and includes only one identifiable mammal; one squirrel tooth from Feature 8. Small amounts of turtle and fish were also contained in the samples from these features. It is our overall impression that the faunal remains from these features do not represent primary deposits, but represent mixed samples from the general midden filling the pits.

The faunal remains from the three Miller III features are tabulated in Tables 59, 60, and 61. The largest sample of material comes from Feature 13, which is a stepped posthole which may be associated

TABLE 57. FAUNAL REMAINS, FEATURE 8

## MAMMALS

- Sciurus carolinensis - 1 cheek tooth  
 Large mammal - 13 fragments; 1 tooth fragment  
 Medium mammal - 3 fragments  
 Small mammal - 2 phalanges

## REPTILES

- Kinosternon sp. - plastron fragment  
 Small turtle - 2 shell fragments (one burned)  
 Turtle - 9 shell fragments  
 Serpentes - 4 vertebrae (2 burned)  
 Unidentified bone - 9.5 g. (some burned)

## OSTEICHTHIES

- Amia calva (?) - 1 vertebra  
Lepisosteus sp. - 1 scale; 2 tooth  
 Scianidae (possibly Aplodinotus grunniens) - three teeth  
Ictalurus sp. - 1 spine; 1 dentary  
 Osteichthies - 8 vertebrae; 6 miscellaneous

## MOLLUSCA

- Unioniidae - 1285.0 g.  
Campeloma sp. - 5.0 g.  
Goniobasis pupoidea - 2.4 g.  
Pleurocera prasinatum - 2.9 g.  
Angulosa sp. - (2 worked shells)

- Gastrocopta armifera  
Strobilops texana  
Retinella sp.  
Catinella sp.  
Pupoides albilabris  
Helicodiscus sp.  
Anguispira sp.

— TRACE



TABLE 57. (CONTINUED)

<u>Hawaia minuscula</u>	] —TRACE
<u>Goniobasis sp.</u>	
<u>Viviparus georgianus</u>	
Unidentified shell	

TABLE 58. FAUNAL REMAINS, FEATURE 14

## MAMMALS

Medium mammal - 5 fragments

Small mammal - 1 humerus fragment; 1 radius fragment

## REPTILES

Serpentes - 3 vertebrae (1 burned)

Trionyx sp. (?) - 1 shell fragment

Turtle - 1 marginal

Small turtle - 2 shell fragments

## OSTEICHTHIES

Lepisosteus sp. - 7 scales

Scianidae (possibly Aplodinotus grunniens) - 1 tooth

Osteichthies - 4 vertebrae, 1 spine

Unidentified bone - (some burned) 6.5 g.

## MOLLUSCA

Unioniidae - 199.7 g.

Goniobasis pupoidea - 2.1 g.

Pleurocera sp. - 1.1 g.

Gastrocopta armifera

Pupoidea albilabris

Retinella sp.

Helicodiscus sp.

Catinella sp.

Unidentified shell

—TRACE

TABLE 59. FAUNAL REMAINS, FEATURE 13

## MAMMALS

Odocoileus virginianus - 1 tibia fragment

Procyon lotor - Left humerus (proximal end and shaft, epiphysis unfused)

Sciurus carolinensis - one left ulna

Microtus pinetorum - 1 right dentary; 4 teeth (3 cheek teeth, 1 incisor)

Small mammal - 9 fragments: 2 metapodial distal ends, 5 phalanges, 1 femur distal end, 1 unidentified

Medium mammal - 1 phalanx fragment

Large mammal - 12 fragments (6 burned)

Unidentified mammal - 21 fragments (4 burned)

## REPTILES

Serpentes - 10 vertebrae

Chrysemys sp. - 2 costal fragments; 1 plastron fragment

Kinosternidae - 3 costals; 1 neural; 1 marginal

Small turtle - 6 shell fragments

Trionyx sp. - 2 shell fragments (one burned)

## BIRDS

Unidentified bird - 5 fragments

## OSTEICHTHIES

Ictaluridae - (possibly I. furcatus or I. punctatus) 1 spine, 2 otoliths

Scianidae (possibly Aplodinotus grunniens) - 10 teeth

Osteichthies - 40 miscellaneous; 8 vertebrae; 1 ray; 9 spine fragments

Amia calva - 1 skull fragment

Unidentified bone - 18.0 g. (some burned)

## MOLLUSCA

Unioniidae - 715 g.

Campeloma sp. - 2.1 g.

Angulosa sp. - 0.5 g.

Mesodon inflectus 0.2 g.

TABLE 59. (CONTINUED)

<u>Retinella</u> sp.	] — TRACE
<u>Anguispira</u> sp.	
<u>Hawaia minuscula</u>	
<u>Strobilops texana</u>	
<u>Helicodiscus</u> sp.	
<u>Pupoides albilabris</u>	
Unidentified shell	

TABLE 60. FAUNAL REMAINS, FEATURE 18

## MAMMALS

- Sylvilagus sp. - 1 tibia fragment  
Sciurus carolinensis - 2 left astragali 2 cheek teeth  
 Large mammal (possibly deer) - 10 shaft fragments ( 3 burned)  
 Medium mammal - 17 shaft fragments  
 Small mammal - 2 metapodials; 2 phalanges; 1 unidentified

## REPTILES

- Serpentes - 2 vertebrae  
 Kinosternidae - 1 neural; 1 marginal  
Sternotherus sp. - plastron fragment  
Trionyx sp. (?) - 1 shell fragment  
 Small turtle - 18 fragments

## OSTEICHTHIES

- Ictaluridae - 1 spine fragment  
 Scianidae (possibly Aplodinotus grunniens) - 5 teeth  
 Osteichthies - 7 vertebrae; 8 spines; 1 scale  
 Unidentified bone - 13.0 g.

## MOLLUSCA

- Unioniidae - 1625.3 g.  
Campeloma crassula  
Goniobasis pupoidea - 0.8 g.  
Ventirdens sp. - 0.6 g.  
Mesodon inflectus - 0.5 g.

Strobilops texana

Retinella sp.

Hawaia minuscula

Gastrocopta tapanniana

Planorbula wheatleyi

Pupoides sp.

—TRACE

TABLE 61. FAUNAL REMAINS, FEATURE 19

## MAMMALS

Sigmodon hispidus - 3 cheek teeth

Microtus pinetorum - 0.1 g.

Rodentia - 0.1 g.

## REPTILES

Serpentes - 4 vertebrae (3 burned)

Kinosternidae - 2 shell fragments

## OSTEICHTHIES

Osteichthies - 3 vertebrae; 2 spines; 2 mouth parts

Unidentified bone - 3.7 g.

## MOLLUSCA

Strobulops texana

Hawaia minuscula

Pupoides albilabris

} - TRACE

with a possible Miller III structure, Structure 3 (Chapter VI). Mammals represented include deer, raccoon, squirrel, and vole, but most of the material is unidentifiable. Reptiles include turtles and snake, and bird is represented by five unidentified fragments. The feature contained a high percentage of fish material, with the identified specimens coming from catfish, drum, and bowfin.

Feature 18, a basin shaped pit, contained less faunal material, with the identified mammals including rabbit, squirrel, and possibly deer. The turtles and snakes are again represented, as are the rough fishes. The final Miller III sample, from Feature 19, another basin shaped pit, contained very little in the way of faunal material.

### Summary and Conclusions

Excavations at the Tibbee Creek site were carried out in two separate excavation sessions during 1976 and 1977. The first phase of the excavations consisted of an investigation of the site deposits through the excavation of a grid aligned sample of test units. The second phase of the excavations focused on the investigation of the community structure of the site through the stripping off of the site deposits over large blocks using heavy machinery in order to investigate the cultural features thus exposed. Two separate areas, designated Graded Areas A and B, were stripped, but most of Graded Area A was destroyed by flood scouring prior to complete investigation.

The Tibbee Creek site was a multicomponent site, with components ranging for over 2000 years through the cultural and chronological continuum from the Gulf Formational period (Walthall and Jenkins 1976) at approximately 1000 B.C. through the earlier portion of the Mississippian stage at approximately A.D. 1200. The majority of the data from the site bear on the two latest components, the Late Woodland Miller III component and the Mississippian component. The following summarizes, by component, the major results of the investigations.

#### Gulf Formational Component

The Gulf Formational stage is represented at the Tibbee Creek site primarily by the Wheeler and Alexander ceramic assemblages that were confined more or less to Zone C of the site. The amount of Wheeler and Alexander wares was not great, and they were scattered thinly throughout the central portion of the site. The Wheeler ceramic series is represented by the type Wheeler Plain, Wheeler Dentate Stamped, and Wheeler Punctate. It is likely that at least the Class 12 contracting stem projectile points, which are similar to Gary type points, are associated with the Wheeler and possibly the Alexander ceramics.

With the possible exception of Feature 99, a prepared clay area in Graded Area A, no features can be assigned to the Gulf Formational



stage. However, this feature is similar to clay floors which occur in association with Wheeler pottery at sites along the Tennessee River (Webb and DeJarnette 1942).

Jenkins (1978b:4) notes that dentate stamping is most prevalent in the later portion of the Wheeler continuum, and punctate decoration occurs earlier. Nearly all of the decorated Wheeler sherds from the Tibbee Creek site were dentate stamped, suggesting a later placement for the Wheeler component at the site.

The Alexander pottery series is represented by the types Alexander Incised, Alexander Punctate and O'Neal Plain. At the Tibbee Creek site, these ceramic types were found within the same zone as the Wheeler pottery and no stratigraphic separation was evident.

In summary, the Gulf Formational component or components appear to represent very diffuse and sporadic occupations of the site. Little investment was made in the way of features or other facilities.

#### Woodland Stage

The Woodland stage in the Tombigbee River drainage is represented by a long ceramic tradition known as the Miller culture. Miller was first defined by Jennings (1941) on the basis of excavations near Tupelo, Mississippi and divided into three divisions: Miller I, II and III. Much of the effort since Jennings' work in the Tombigbee River drainage focused on revising and further subdividing Jennings' original tripartite division (cf Blakeman, Atkinson and Berry 1976 and Jenkins 1978b). Given the small sample of radiocarbon dates from the Tibbee Creek site on Miller components, and the general sparsity of Miller I and Miller II materials, our discussion of the Miller components will follow the Miller I, II, III division with no real attempt at further subdivision.

#### Miller I

Next to the Miller III component, Miller I is the best represented component at the Tibbee Creek site. Unfortunately, however, few features were found which could possibly be associated with the Miller I component.

and its identification is based primarily on ceramic types found at the site.

Local Miller I ceramics are composed of the types Baldwin Plain, Saltillo Fabric Marked and Furrs Cord Marked. All of these types were present at the site, generally in relatively small amounts, but in themselves are not diagnostic of a Miller I component as all three types continue, in different relative frequencies into the subsequent periods and phases. What is diagnostic of the Miller I component are the several minority types found at the site, including Basin Bayou Incised and Alligator Bayou Stamped.

The lack of features and the general sparseness of the Miller I material suggests that the Tibbee Creek site functioned as some sort of limited purpose site during this time, probably as a transitory camp.

#### Miller II

The Miller II component at the Tibbee Creek site is even more nebulous than the Miller I component. The division between Miller I and II is based on the decline of Saltillo Fabric Marked in favor of Furrs Cord Marked. Given the mixed nature of most of the assemblages from the site, this Late Middle Woodland occupation is very hard to define. Given the overall ratio of 4 to 1 between Baldwin Plain and Furrs Cord Marked, and the small amount of Saltillo Fabric Marked, it is likely that a Miller II component was present. Lacking from the collection are the foreign minority types such as the McLeod ceramics which Jenkins (1978b) uses as horizon markers for Miller II. One possible Miller II pit is Feature 28, but the radiocarbon date on this pit of 50 B.C. ± 120 is too early for a Miller II assignment.

The Miller II component does not appear to be an intensive occupation, and probably represents sporadic occupations on the nature of a transitory extractive camp.

#### Miller III

The Miller III component at the Tibbee Creek site was by far the

dominant component at the site. It was responsible for the greatest amount of midden accumulation, the greatest number of features, and by far the greatest number of artifacts. All indications are that the Miller III occupation was both intensive and extensive. In terms of area, the Miller III component covered a much larger area than the preceding or subsequent occupations.

The Miller III ceramic assemblage is dominated by the grog tempered types Tishomingo Plain and Tishomingo Cord Marked. Minority types which are probably associated include Wheeler Check Stamped, Gainesville Fabric Marked and Alligator Incised. The projectile points associated with the Miller III component include the Class 1 small triangular points and probably the Class 2 and Class 3 points.

Major Miller III features include Structure 2 and Structure 3, Burial 3, Burial 10 and probably Burial 2. The pit feature assemblage includes 26 basin shaped pits, 3 compound pits, 3 stepped postholes, and 5 irregular pits.

The exact chronological position of the Tibbee Creek site Miller III component with relation to the two major provisional chronologies (Blakeman, Atkinson and Berry 1976, Jenkins 1978) devised for the Tombigbee River Valley is not clear cut. In general, the roughly two to one ratio of plain to cord marked pottery in the Miller III features would indicate placement of the site within the early Vienna subphase of the Miller III phase within the Jenkins chronology (Jenkins 1978b:9). However, this subphase is felt to date somewhere between A.D. 700 and A.D. 800, which is about 200 years earlier than the radiocarbon date of A.D.  $965 \pm 55$  on Structure 2 at the Tibbee Creek site.

Comparison of the Tibbee Creek site data with the Cofferdam site, located only about two km west of the site reveals more differences than similarities. As mentioned in the burial discussion (Chapter VII), nearly all of the Miller III burials from Cofferdam were placed semiflexed in large, deep, recycled storage/cooking pits. Large, usually bell shaped pits of the type found at Cofferdam were entirely lacking at the Tibbee Creek site and the few Miller III burials were all fully flexed in small shallow pits.

Radiocarbon dates on Miller III features from the Cofferdam site have a very wide spread. They range from about A.D. 450 to approximately A.D. 1200. In the original report on the site (Blakeman, Atkinson and Berry 1976) the Cofferdam phase, which subsumes the Miller III component, is felt to date between A.D. 500 and A.D. 750. The Tibbee Creek site radiocarbon date falls within the range of the Miller III dates from Cofferdam, but the exact chronological relationship between the two sites cannot be determined at this point.

Structure 2 is the best preserved Miller III house at the site. The house was constructed with walls made of closely-spaced, individually set, small diameter poles and had a more or less centrally placed fire pit. There is some indication of a partition or bench along the east wall of the house. The close spacing of the wall posts would indicate that the structure was reasonably weather tight, which suggests that the house was used as a cold season habitation.

The faunal remains indicate that a large number of animal species were utilized by the Miller III inhabitants. Included in the species used are white-tailed deer, raccoon, squirrel, dog, opossum, various turtles, snakes, birds (probably including turkey), rough fishes and a variety of mussels and gastropods. While their exact contribution to the overall diet is not certain, the mussel was a very visible component of the Miller III diet at the site.

#### Mississippian Stage

The Mississippian stage component at the Tibbee Creek site is perhaps the best preserved of the several components present at the site, probably due in part to the lack of disturbance to this last prehistoric occupation.

The ceramic assemblage is represented by shell tempered pottery of the types Mississippi Plain var. Warrior, Moundville Incised var. Carrolton, Moundville Incised var. unspecified, Carthage Incised and Hemp-hill Engraved. Associated projectile points are the Class 1 small triangular points which were also made during the preceding Miller III component.

The Mississippian component appears to represent the remains of a single Mississippian farmstead. The component is dominated by Structure 1, a large two room wall trench structure. This large house was probably constructed with a bent pole, arbor roof type of construction in the classic form of the "small pole" house. The most notable attribute of the house is its large size and two room construction, with something in excess of 72 m<sup>2</sup> of floor area. This is about twice as large as most Mississippian wall trench houses, but it is possible that both rooms were not in use simultaneously.

Associated with the house, and apparently laid out with reference to the walls of the house was a small cemetery just east of the house composed of six burial pits containing the remains of a total of seven individuals. Also associated with the house were three individual burials of infants or small children on the north and west sides of the structure, bringing the total number of Mississippian individuals buried at the site to 11.

As noted in Chapter VII, there are several interesting regularities in the placement and form of burial which indicates that manner and placement of an individual varied according to several factors. Babies and small children below the age of two were not generally buried in the cemetery, but rather were buried on the opposite side of the house. The two rows in the cemetery proper each contained an old male in one pit and children or adolescents in the other pit. Finally, a teenaged male who appears to have suffered violent injuries was anomalous in being buried in a direction which crosscut the other burial orientations, in being buried in a pit four to five times as large as the others, and in being disturbed after burial for the removal of most of his long bones. Finally, it should be pointed out that no adult females were buried at the site.

Other Mississippian features include six basin shaped pits, six compound pits, one irregular pit and three "smudge pits". Most of these pits are either to the south or west of the house.

The ceramics and other artifacts associated with the Mississippian component and the form of construction of the house allow a reasonably

confident cultural and chronological placement of this small Mississippian farmstead. Steponaitis (1978) has presented a provisional chronology for the Moundville phase based on ceramics. The phase is broken down into three periods: Moundville I, II and III, with Moundville I being the earliest, dating between A.D. 1100 and 1250. While the ceramic collection is small, the sherd of Moundville Incised var. Carrolton found on the chest of Burial 13 argues for placement of the site within the Moundville I period. No other decorated shell tempered ceramics are complete enough for confident placement. As pointed out in Chapter VIII, the shell gorget from Burial 5 is also felt to be an early motif.

The Lyon's Bluff site is a large Mississippian center with one platform mound located on Line Creek about 30 kilometers up the Tibbee Creek drainage from the Tibbee Creek site. Marshall (1973) has defined two mature Mississippian and two late Mississippian phases on the basis of material from Lyon's Bluff. The mature phases are the Tibbee Creek phase and the Lyon's Bluff phase and the late phases are the Sorrels phase and Mhoon phase.

The Tibbee Creek site appears to be most closely aligned with the Lyon's Bluff phase, which Marshall points out has close similarities to Moundville (Marshall n.d.). Specific similarities are the larger size of the Lyon's Bluff phases houses (up to about 20 feet square) and the presence of more incised ceramics in comparison to the preceding Tibbee Creek phase. It is unfortunate that the samples submitted on the Mississippian burials from the Tibbee Creek site did not produce good dates. If they had, more precise placement of the component might have been possible.

An alternate hypothesis should be presented with regard to the cultural and temporal position of Structure 2, and the relation of this small round house to the large Mississippian house represented by Structure 1. Given the general unreliability of the radiocarbon dates from the Tibbee Creek site, it is possible that the date of 965 A.D. on Structure 2 is in error, and that this structure is also associated with the Mississippian component. In support of this interpretation is the

presence of one Mississippi Plain var. Warrior sherd from Post Hole 30 of Structure 2 (Table 36). While I hesitate to make assignment on the basis of one small sherd, a Mississippian assignment to Structure 2 would make the combination of Structure 1 and Structure 2 into a beautiful example of a winter-summer house pair. The presence of different habitations for different seasons is well represented in southeastern U.S. ethnography, and appears to have considerable time depth (Faulkner 1977). A seasonal house pair identified at the Gypsy Joint site in southeast Missouri (Smith 1978), is of approximately the same age as the Tibbee Creek site Mississippian component, but this house pair differs from the possible house pair at the Tibbee Creek site in that both structures are rectangular.

In conclusion, there is still much to be learned from the data resulting from the Tibbee Creek site excavation. This report does not pretend to be an exhaustive analysis of all the data, but it is hoped that the data from the site have been presented with a format and level of completeness which will make it amenable to reanalysis and further analysis by future scholars.

## REFERENCES CITED

- 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 U.S. Army Corps of Engineers, Mobile, Alabama.
- Bass, W. M.  
1971 Human osteology: A laboratory and field manual of the human skeleton. Missouri Archaeological Society. Columbia.
- Binford, Lewis R.  
1967 Smudge pits and hide smoking: The use of analogy in Archaeological reasoning. American Antiquity 32, No. 1.  
1972 Archaeological reasoning and smudge pits--revisited. In An Archaeological Perspective. Seminar Press, New York.
- Blakeman, Crawford H., Jr., James R. Atkinson, and G. Gerald Berry  
1976 Archaeological excavations at the Cofferdam site, 22Lo599, Lowndes County, Mississippi. Report submitted to the U. S. Army Corps of Engineers, Mobile, Alabama.
- Brown, H. P.  
1928 Atlas of the commercial woods of the United States. Bulletin of the New York State College of Forestry. Syracuse University, Syracuse, New York.
- Brown, H. P., and A. Panshin  
1934 Identification of the commercial timbers of the United States. McGraw-Hill Book Co., New York.
- Caddell, Gloria M.  
1979 Plant resources, archaeological plant remains, and prehistoric plant-use in the Central Tombigbee River Valley. Unpublished M.A. Thesis, Department of Anthropology, University of Alabama, University, Alabama.
- Cambron, James W., and David C. Hulse  
1964 Handbook of Alabama Archaeology: Part 1: Point types. Archaeological Research Association of Alabama.
- Carlson, D. S., G. J. Armelagos, and D. P. Van Gerven  
1974 Factors influencing the etiology of Cribra Orbitalia in prehistoric Nubia. Journal of Human Evolution, 3:405-410.



- Cotter, John L., and John M. Corbett  
1951 Archeology of the Bynum Mounds, Mississippi, Natchez Trace Parkway. Archaeological Research Series No. 1, National Park Service, U. S. Department of the Interior.
- DeJarnette, David L., and Steve B. Wimberly  
1941 The Bessemer Site. Geological Survey of Alabama, Museum Paper 17. University, Alabama.
- DeJarnette, David L., John A. Walthall, and Steve B. Wimberly  
1975 Archaeological investigations in the Buttahatchee River Valley, Lamar County, Alabama. In Journal of Alabama Archaeology, Vol. 11, No. 1.
- Dunning, Arthur B.  
1964 The Tallahatta formation in Clarke County, Alabama. Journal of Alabama Archaeology, 10: 50-60.
- Ensor, H. Blaine  
1978 An evaluation and synthesis of changing lithic technologies in the central Tombigbee Valley. Paper presented to the 35th Annual Southeastern Archaeological Conference, Knoxville, Tennessee.
- Faulkner, Charles H., and Major C. R. McCollough  
1973 Introductory report of the Normandy Reservoir salvage project: Environmental setting, typology, and survey. Normandy Archaeological Project, Vol. 1. Report of Investigation No. 11. Department of Anthropology, University of Tennessee.
- Ford, Richard I.  
1974 Northeastern archaeology: Past and future directions. Annual Review of Anthropology 4:385-414.
- Genoves, S.  
1967 Long bone proportionality and its relation to stature in mesoamerican populations. American Journal of Physical Anthropology, 26: 67-78.
- Haag, William G.  
1942 A description and analysis of Pickwick pottery. In An archaeological survey of Pickwick Basin in the adjacent portions of the states of Alabama, Mississippi and Tennessee. W. S. Webb and David L. DeJarnette, Bureau of American Ethnology, Bulletin 129.
- Heimlich, Marion Dunlevy  
1952 Guntersville Basin pottery. Alabama Museum of Natural History, Museum Paper 32. University, Alabama.

- Jenkins, Ned J.  
 1975 Archaeological investigations in the Gainesville Lock and Dam Reservoir: 1974. Report submitted to the National Park Service, Atlanta, Georgia.
- 1978a Abbreviated ceramic type/variety descriptions from the Gainesville Reservoir. A preliminary statement, Office of Archaeological Research, University of Alabama.
- 1978b Ceramic chronology in the Gainesville Reservoir. Paper presented to the Southeastern Archaeological Conference, Knoxville, Tennessee, November, 1978.
- Jenkins, Ned J., Cailup B. Curren, and Mark F. DeLeon  
 1975 Archaeological site survey of the Demopolis and Gainesville Lake navigation channels and additional construction areas. Report submitted to the National Park Service.
- Jennings, Jesse D.  
 1941 Chickasaw and earlier Indian cultures of northeast Mississippi. In The Journal of Mississippi History, Vol. 1, No. 3.
- Jones, Alice Simms, and E. Gibbes Patton  
 1966 Forest, "prairie", and soils in the Black Belt of Sumter County, Alabama, in 1832. Ecology 47: 75-80.
- Kneberg, Madeline  
 1959 Engraved shell gorgets and their associations. Tennessee Archaeologist, 15: (1): 1-39.
- Krogman, W. M.  
 1962 The Human Skeleton in Forensic Medicine. C. C. Thomas, Springfield.
- Lewis, Thomas M. N., and Madeline Kneberg Lewis  
 1946 Hiwassee Island: An archaeological account of four Tennessee Indian peoples. University of Tennessee Press, Knoxville.
- Lallo, J. W., G. J. Armelagos, and R. P. Mensforth  
 1977 The role of diet, disease and physiology in the origin of porotic hyperostosis. Human Biology, 49: 471-484.
- Lowe, E. N.  
 1913 Forest conditions of Mississippi. Mississippi State Geological Survey, Bulletin 11.

- Marshall, Richard A.  
1973 The prehistory of Mississippi. In A History of Mississippi. Richard Aubrey McLemore (Editor), University and College Press of Mississippi. Jackson.
- n.d. Mississippian phases at Lyon's Bluff site, (22oK1). East Central Mississippi, mimeograph.
- Martin, C. Martin, and William D. Barkley  
1961 Seed identification manual. University of California Press, Berkeley, California.
- McCluskey, George H.  
1978 The Yellow Creek lithic resource survey: A preliminary report. Paper presented at the 35th Annual Southeastern Conference, Knoxville, Tennessee.
- Merchant, V. L., and D. H. Ubelaker  
1977 Skeletal growth of the protohistoric Arikara. American Journal of Physical Anthropology, 46: 61-71.
- Miller, W. Frank  
1973 An ecological study of the Tennessee-Tombigbee Waterway. Report submitted to the U. S. Army Corps of Engineers, Mobile District, by the Institute for Environmental Studies, Mississippi State University.
- Moorehead, Charles W.  
1972 An early sand tempered elbow pipe from the Tombigbee River. Journal of Alabama Archaeology, Vol. 18, No. 2.
- Moorrees, C. F. A., E. A. Fanning, and E. E. Hunt  
1963a Age variation of formation stages for ten permanent teeth. Journal of Dental Research, 42: 1490-1502.
- 1963b Formation and resorption of three deciduous teeth in children. American Journal of Physical Anthropology, 21: 205-213.
- Myers, Merle W.  
1948 Geography of the Mississippi Black Prairie. Ph.D. dissertation, Clarke Univeristy.
- Nielsen, Jerry J., and Ned J. Jenkins  
1973 Archaeological investigations in the Gainesville Lock and Dam Reservoir. 1972. Report submitted to the National Park Service.
- Phenice, T. W.  
1969 A newly developed visual method of sexing the Os Pubis. American Journal of Physical Anthropology, 30: 297-302.

- Phillips, Phillip  
1970 Archaeological survey in the lower Yazoo Basin, Mississippi, 1949-1955. Papers of the Peabody Museum of Archaeology and Ethnology, Harvard University, Vol. 60.
- Rucker, Marc D.  
1974 Archaeological survey and test excavations in the upper-central Tombigbee River Valley: Aliceville-Columbus Lock and Dam improvement areas, Alabama and Mississippi. Report submitted to the National Park Service.
- Sears, William H., and James B. Griffin  
1950 Fiber tempered pottery of the Southeast. Prehistoric Pottery of the Eastern United States. Museum of Anthropology, University of Michigan, Ann Arbor.
- Smith, Bruce D.  
1974 The emergence and expansion of the Mississippian cultural adaptation: A subsistence strategy viewpoint. Paper presented at an Advanced Seminar on Mississippian Development, School of American Research, Santa Fe, New Mexico.  
  
1978 Prehistoric Patterns of Human Behavior. Academic Press, New York.
- Smith, Earle  
1975 Appendix 3. A study of plant remains: Archaeological plant remains from West Alabama. In Archaeological investigations in the Gainesville Lock and Dam Reservoir: 1974.
- Steponaitis, Vincas P.  
1978 Some preliminary chronological and technological notes on Moundville pottery. Paper presented at the Southeastern Archaeological Conference, Knoxville Tennessee, November, 1978.
- Swanton, John R.  
1946 The Indians of the Southeastern United States. Bulletin 137 Bureau of American Ethnology. U. S. Government Printing Office, Washington, D. C.
- Taylor, Mahlon Pipkin  
1964 A survey of certain physical, chemical and biological characteristics of the Tombigbee River. M.S. thesis, Mississippi State University, Department of Zoology.
- Tood, T. W.  
1920 Age changes in the pubic bone: The male white pubis. American Journal of Physical Anthropology, 3: 285-334.

- United States Department of Agriculture  
 1941 Climate and man. Yearbook of Agriculture. House Document No. 27, 77th Congress, 1st Session, U.S. Government Printing Office.
- U. S. Army Corps of Engineers  
 1965 Flood plain information report, Tombigbee River and tributaries at Columbus, Mississippi. U.S. Army Corps of Engineers, Mobile District.
- U. S. Army Engineer District, Mobile  
 n.d. First supplemental environmental report. Continuing environmental studies Tennessee-Tombigbee Waterway Alabama and Mississippi, Vol. V, Appendix B - An ecological study of the Tennessee-Tombigbee Waterway. Corps of Engineers, Mobile, Alabama.
- Webb, W. S., and David L. DeJarnette  
 1942 An archaeological survey of Pickwick Basin in the adjacent portions of the States of Alabama, Mississippi and Tennessee. Bureau of American Ethnology Bulletin 129.
- Walthall, John A., and Ned J. Jenkins  
 1976 The Gulf Formational stage in Southeastern prehistory. Bulletin 19, Southeastern Archaeological Conference. edited by Drexel A. Peterson, Jr., Memphis, Tennessee.
- Willey, Gordon R.  
 1949 Archaeology of the Florida Gulf Coast. Smithsonian Miscellaneous Collections, Volume 113.
- Wimberly, Steve B.  
 1960 Indian pottery from Clarke County and Mobile County, Southern Alabama. Alabama Museum of Natural History Museum Paper 36. University, Alabama.
- Winters, Howard D.  
 1969 The Riverton culture, a second millenium occupation in the central Wabash Valley. The Illinois State Museum Report of Investigations, No. 13, and the Illinois Archaeological Survey.
- Yanovsky, Elias  
 1936 Food plants of the North American Indians. U.S.D.A. Miscellaneous Publications, No. 237. U.S. Government Printing Office, Washington, D.C.
- Yarnell, Richard A.  
 1964 Aboriginal relationships between culture and plant life in the Upper Great Lakes region. Museum of Anthropology, University of Michigan, Anthropological Papers 23. Ann Arbor.

END

DATE  
FILMED

12-81

DTIC