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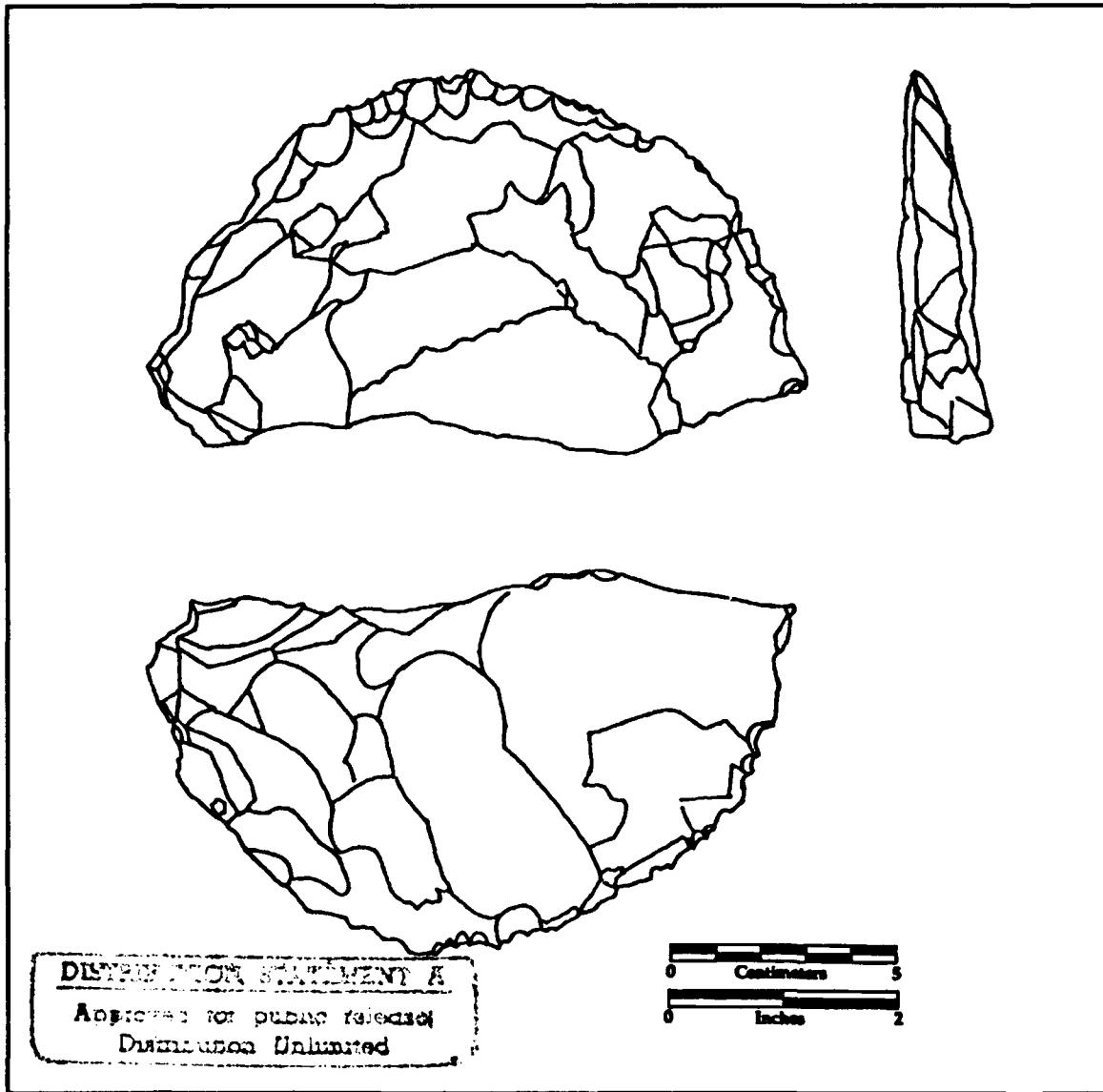


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**ARCHAEOLOGICAL INVESTIGATIONS AT 3SF332:
AN EARLY MISSISSIPPIAN AND
TENANT PERIOD SITE ON CUTOFF BAYOU,
ST. FRANCIS COUNTY, ARKANSAS**



GARROW & ASSOCIATES, INC.

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SITE ON CUTOFF BAYOU,
ST. FRANCIS COUNTY,
ARKANSAS**

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Submitted by:

Garrow & Associates, Inc.
510 South Main Street
Memphis, Tennessee 38103

Mitchell R. Childress

Mitchell R. Childress, Principal Investigator

Authored by:

C. Andrew Buchner and Mitchell R. Childress

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ABSTRACT

During March and April, 1991, archaeological testing was conducted at site 3SF332, located on Cutoff Bayou, in St. Francis County, Arkansas. The initial site identification had been made by Memphis District Corps of Engineers personnel. Garrow & Associates, Inc. was originally contracted to assess the significance of 3SF332 through a 50 percent general surface collection and the excavation of a 1 x 1 m test unit. At this time, 3SF332 was believed to be a tenant period house site. Following the initial field work, it became apparent that 3SF332 had a prehistoric component, as well as the historic component. Subsequently, a second purchase order was issued, designed to assess the significance of the prehistoric component. This additional Scope of Work called for a 25 percent controlled surface collection and the excavation of a second 1 x 1 m test unit. This report contains the results of a literature and records search, data recovery, and artifact analysis, with interpretations of the site based on the assemblage contents, and concludes with recommendations.

The prehistoric component at 3SF332 dates to the Early Mississippian period. This conclusion is based on a ceramic assemblage composed of Baytown Plain *var.* Baytown and Mississippi Plain *var.* Mitchell, the presence of Mill Creek chert hoe fragments, and trace quantities of daub. No features were recorded in either of the two 1 x 1 m test units excavated on the site.

The historic component recognized at the site dates from the final quarter of the nineteenth century to the present. 3SF332 fits into a pattern of tenant period scatters which have been recently investigated in Crittenden County by Garrow & Associates, Inc. These scatters are dominated by kitchen refuse, especially bottle glass. Architectural items occur in low frequencies. Interviews with local residents indicate that the structure which once stood at 3SF332 was moved ca. 1980 to a position some 2,000 feet to the southwest.

Recommendations for 3SF332 center on the fact that only 2 square meters of the 8,100 square meter site area (0.024 percent) has been subsurface tested. Despite the level of work conducted at the site, there remains a distinct possibility that subsurface features from either an Early Mississippian structure or historic outbuildings could be present. Without some form of plow zone stripping to locate sub-plow zone features, a determination of significance for 3SF332 cannot be made. We recommend that prior to any modification of the site area, a program of plow zone stripping be conducted. Two strips located parallel to the natural levee in areas of highest artifact density should be sufficient to allow for a determination of significance.

ACKNOWLEDGEMENTS

This report has benefited from the assistance of several individuals. Mr. Douglas Prescott and Mr. Jim McNeil, Memphis District COE, demonstrated flexibility and concern in the management of 3SF332. Their cooperation is greatly appreciated. Mr. Jerry Hilliard, Registrar of the Arkansas Archeological Survey, Fayetteville, is thanked for his prompt reply to requests for access to state site files. The two local informants, John and Edward, are warmly thanked for consenting to a personal interview.

A number of Garrow & Associates, Inc. employees contributed to the completion of this project. Field work was conducted by the senior author, who was assisted by Patrick Hopper, Preston Buchner, and Dan Qualls on separate occasions. Cleaning and processing of the artifacts was competently handled by Melissa Woods and Dan Qualls. Dan Qualls drew the sketch of the hoe fragment from unit 43. Kelly Costello produced the photographic prints used in the report. Vince Macek prepared the excellent graphics accompanying the document. Editing of the document was handled by Pat Baker in our Atlanta office.

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I. INTRODUCTION

This report describes the results of archaeological testing of site 3SF332 in St. Francis County, Arkansas conducted for the U.S. Army Corps of Engineers, Memphis District by Garrow & Associates, Inc., Memphis, in March, 1991. The site was originally identified by staff archaeologists of the U.S. Army Corps of Engineers, Memphis District as dating to the tenant phase of the historic period. The original scope of work was designed to allow for a significance assessment of this historic surface scatter. Under this scope of work (purchase order DACW 66-91M-0598), a 50 percent general surface collection was made and a single 1 x 1 m test unit was excavated. In the course of these investigations, it was discovered that a prehistoric component was also present at 3SF332, evidenced by the presence of ceramics and lithic debitage in the 50 percent surface collection. After consultation with Mr. Douglas Prescott, Memphis District COE, a second scope of work was formulated to allow for testing and evaluation of the prehistoric component of 3SF332. This expanded scope of work (purchase order DACW 66-91M-0715) called for a 25 percent controlled surface collection and the excavation of a second 1 x 1 m test unit. The reports of activities conducted under both scopes of work were to be incorporated into a unified document detailing the significance of all components present.

The following report documents the methods utilized to conduct the study, and the results achieved. The local environmental and physiographic conditions of the project area are reviewed in Chapter II. Information on the culture history of the central drainage of the Mississippi Alluvial Valley is presented in Chapter III. Chapter IV discusses the general research design used to guide the cultural resources investigations, as well as detailed discussions on the methods employed during the literature and records search, field investigations, and laboratory analysis. The results of the study are included in Chapter V. The document concludes with a summary and recommendations in the final chapter (VI). The appendices contain a copy of the completed Arkansas Archeological Survey site survey form and site location map, the project Scopes of Work, and resumes of the key project personnel.

II. LOCAL ENVIRONMENT AND PHYSIOGRAPHY

PROJECT SETTING

Site 3SF332 can be found on the 1981 USGS Chatfield, Arkansas quadrangle map, 7.5 minute series in the center of section 36, T5N, R6E, just west of the St. Francis-Crittenden county line (Appendix 1). It is located on the west bank of Cutoff Bayou, which feeds into Fifteenmile Bayou, and subsequently into the St. Francis River. 3SF332 is approximately 2 miles east of the community of Greasy Corner, approximately 1 mile southeast of the community of Democrat, and approximately 5 miles north of Hughes, Arkansas.

3SF332 is located in a cotton field along the crest of a northeast-southwest trending natural levee paralleling Cutoff Bayou. Immediately east of 3SF332, Cutoff Bayou bends to the northwest and the natural levee mirrors this turn. The most noticeable topographic feature of the site area is the steep, heavily vegetated bank on the eastern and southern perimeters of the site, created by Cutoff Bayou. The stream lies approximately 7 m lower than the surrounding flats and levees.

Northwest of 3SF332, across a large agricultural field, the terrain slopes gently away from the levee into a flat. The elevation of the site is between 200 and 205 feet above mean sea level (AMSL). The natural levee has a number of slightly elevated rises, separated at fairly regular intervals by lower intermittent drains. Note on the site location map in Appendix 1, between the bridge over Cutoff Bayou (BR202) and the center of section 36, the four 205 foot contour ovals demarking the natural levee crest. In the flat environment of the Eastern Lowlands, these rises are known to be favored locations for both prehistoric and historic settlement. The frame structure at the site location shown on the site map (Appendix 1) has been moved approximately 2,000 feet to the southwest near the Arkansas Highway 50 bridge over Cutoff Bayou, and it is currently occupied.

PHYSIOGRAPHY

St. Francis County contains three major physiographic regions: the Eastern Lowlands, Crowley's Ridge, and the Western Lowlands. Site 3SF332 is located in the Eastern Lowlands of the county, which is contained within the meander belt of the Mississippi River. Until ditch and levee construction was begun in the late nineteenth century, this part of the county was subject to overflow from both the Mississippi and St. Francis rivers. The surface alluvium exceeds 100 feet in depth

and is derived from soil, rock, and sediment from throughout the upper Mississippi River basin (Gray and Catlett 1966:76). The topography of this portion of the county ranges from level bodies of slackwater clays to undulating series of ridges and swales (Gray and Catlett 1966:63). These ridges represent natural levees of abandoned river channels.

Geologically there are only two divisions in St. Francis County, with the distinction being that the Eastern Lowlands formed in alluvium, while Crowley's Ridge and the Western Lowlands are capped in loess (Gray and Catlett 1966:76). The Eastern Lowlands is a gently undulating plain between 175 and 205 feet AMSL. Crowley's Ridge, the western border of the Eastern Lowlands, is the eroded remnant of an extensive plateau from 200 to 400 feet AMSL. Crowley's Ridge is composed of Eocene clays overlain by Pliocene sands and gravels and finally capped with approximately 80 feet of Pleistocene loess (Deneke 1981:120).

Drainage in the county is generally southward through a system of artificial ditches and natural drainways. The St. Francis River drains all of the county east of the drainage divide of Crowley's Ridge and empties into the Mississippi River near Helena, Arkansas. The flat landscape contains numerous sluggish streams, bayous, swamps, and oxbow lakes. Important drainages in eastern St. Francis County, in addition to the St. Francis River, include Fifteenmile Bayou, Blackfish Bayou, and Cutoff Bayou, on which 3SF332 is located.

SOILS

The project area is situated on one of 10 major soil associations found within St. Francis County (Gray and Catlett 1966:General Soil Map). This is the Earle-Bowdre association and consists of large areas of slackwater deposits on bottomlands. These soils are derived from thin beds of clayey sediments deposited over coarser material by still or slowly moving floodwater (Gray and Catlett 1966:5). This association occupies 22 percent of the county. Between the St. Francis River and the slackwater area dominated by this association lies the Dubbs-Dundee-Deulah association, located on old natural levees adjacent to bayous and oxbows of the St. Francis River (Gray and Catlett 1966:Figure 5).

Differences in elevation within the county are marked by distinctive sediment types. The USDA Soil Conservation Service has mapped the natural sediments in the study area as Earle clay, undulating (EcC), and Bosket-Dubbs fine sandy loams, undulating (BdC) (Gray and Catlett 1966:Sheet 36).

The Earle series consists of somewhat poorly drained soils in thin beds of alluvial clay in slackwater areas (Gray and Catlett 1966:16 and 76). Within the slackwater areas, Earle soils are on the higher elevations. These soils formed under a dense

forest of water tolerant hardwoods, and as a result, are medium to very strongly acid. Natural fertility is moderate and with good management can be used continuously for row crops. Alluvial series such as Earle are placed in the Azonal Order of soils. A representative profile of Earle clay, gently undulating phase soil is described by Gray and Catlett (1966:76) as:

...Ap-0 to 5 inches; very dark grayish-brown (10YR 3/2) clay; moderate medium to fine granular structure; hard when dry; firm when moist; plastic when wet; abundant roots with few pores; medium acid; abrupt, smooth boundary.

...Clg-5 to 30 inches; dark gray (10YR 5/1) clay with common, medium, distinct, yellowish-brown (10YR 5/4) and few, fine distinct, dark-brown (10YR 3/3) mottles; moderate, medium, angular blocky structure; hard when dry; firm when moist; plastic when wet; common, dark, soft concretions; very strongly acid; clear, smooth boundary.

...C2-30 to 37 inches; yellowish-brown (10YR 5/4) sandy clay, with many, medium, distinct, grayish-brown (10YR 5/2) mottles; weak, medium, subangular blocky structure; firm; common, small, dark concretions; few roots and pores; strongly acid; diffuse boundary.

The Bosket and Dubbs series soils are so intermingled that they were not mapped separately. The Bosket series are level to undulating well drained soils that are derived from medium textured general alluvium on natural levees bordering old stream channels (Gary and Catlett 1966:10 and 68). The Dubbs series are undulating, moderately well drained soils also derived from medium textured general alluvium on the natural levees of the Mississippi and its tributaries (Gary and Catlett 1966:14 and 68). Both of these series fall in the Gray-Brown Podzolic great soil group of the Zonal Order. A representative profile of the Bosket fine sandy loam, gently undulating soil is described by Gray and Catlett (1966:68) as:

...Ap-0 to 5 inches; dark-brown (10YR 3/3) fine sandy loam; weak, fine, granular structure; very friable; lower 2 inches is a compact plowsole; abundant roots and few pores; slightly acid; clear, smooth boundary.

...Bt-5 to 20 inches; dark-brown (10YR 3/3) sandy clay loam; weak, medium, subangular blocky structure; friable; common, thin, patchy, clay films on ped faces; common pores; medium acid; clear, smooth boundary.

...C-20 to 48 inches +; dark-brown (10YR 4/3) sandy loam; structureless; very friable; few roots; medium acid.

CLIMATE

The climate of St. Francis County is typical of the Mississippi Alluvial Valley and can be characterized as warm and moist, with relatively mild winters. The hottest month is July, with an average temperature of 81.0° F, and the coolest month is January, with average temperatures of 41.6° F (Gray and Catlett 1966:Table 12). Temperature extremes range from over 100° F in the summer, to the "teens" in the winter. The growing season lasts approximately 221 days (Gray and Catlett 1966:78).

Relative humidity averages about 70 percent throughout the year. Rainfall averages 50.94 inches per annum, with the greatest precipitation coming in the winter and early spring. Late summer and early fall is the driest time of year (Gray and Catlett 1966:77). Thunderstorms are common in the summer.

FLORA AND FAUNA

When settlers first arrived in eastern St. Francis County, the land was covered with dense hardwood forests. The rich alluvial soils supported some of the best hardwoods in the southern United States. Alluvial ridges and natural levees support red maple (*Acer rubrum*) and sweet gum (*Liquidambar styraciflua*), oaks (*Quercus* sp.), ash (*Fraxinus* sp.), honey locust (*Gleditsia triacanthos*), and hackberry (*Celtis occidentalis*). Lower lying areas and sloughs supported cypress (*Taxodium* sp.), water oak (*Quercus nigra*), willow oak (*Quercus phellos*), tupelo gum (*Nyssa aquatica*), birch (*Betula* sp.), cottonwood (*Populus deltoides*), sycamore (*Plantanus occidentalis*), willow (*Salix* sp.), shagbark and scalybark hickories (*Carya* sp.), elms (*Ulmus* sp.), and other water tolerant hardwoods. Cane could also be gathered in the floodplains. Today, in contrast to this unbroken forest, much of the acreage has been cleared for agriculture, and the original forest cover has been reduced to about eight percent or less of the land area (Deneke 1981:8).

The dense hardwood forest supported a wide variety of wildlife. Native mammals included bison (*Bison* sp.), white-tailed deer (*Odocoileus virginianus*), black bear (*Ursus americanus*), wolf (*Canis* sp.), bobcat (*Lynx rufus*), raccoon (*Procyon lotor*), opossum (*Didelphis virginiana*), red fox (*Vulpes vulpes*), grey fox (*Urocyon cinereoargenteus*), beaver (*Castor canadensis*), and squirrels (*Sciurus* sp.). The area also supported a diverse number of reptiles and amphibians. Turkey (*Meleagris gallopavo*) were an important source of food for the early inhabitants of the area, as were migratory mallard ducks (*Anas platyrhynchos*) and canadian geese (*Branta canadensis*). Fish from the larger streams, oxbow lakes, and beaver ponds, such as the flathead catfish, alligator gar, drum, buffalo, largemouth bass, walleye, channel catfish, bowfin, gar, suckers, and many smaller fish, were also important food sources for prehistoric and historic occupants (Morse and Morse 1983:15).

III. CULTURAL OVERVIEW

INTRODUCTION

The central section of the alluvial floodplain of the lower Mississippi River contains cultural remains associated with the entire span of human occupation in North America. Certain portions of the occupational record, particularly those characterized by the production of ceramics, have been more intensively researched than others, and investigation of the earlier phases has been hindered by differential preservation associated with landscape modification caused by shifting river channels and deposition of deep alluvium. Heavy alluvial deposition following the entrenchment of the main river channel and abandonment of braided stream surfaces probably affected the earliest site record most intensively. Morse (1982:22) has suggested that some of the first sites created in eastern Arkansas may now lie under many meters of floodplain silts and clays.

PREHISTORIC PERSPECTIVE

The prehistoric period in the southeastern United States is traditionally divided into four major periods: Paleoindian, Archaic, Woodland, and Mississippian. Each of these periods is defined by characteristic artifact assemblages and patterns of subsistence and settlement. Northeastern Arkansas has long been recognized as one of the richest archaeological areas in eastern North America in terms of the wealth and complexity of prehistoric settlement. The area has seen extensive investigation since the middle of the last century. More recently, a number of large-scale survey and excavation projects have been conducted in northeastern Arkansas (e.g., Anderson et al. 1989). These have greatly expanded the available data base on the prehistoric occupation of the area. In the following sections, a brief description of the culture history of the central Mississippi valley focusing on St. Francis County is presented in a period by period format.

THE PALEOINDIAN PERIOD

The Paleoindian period (ca. 11,500-9,800 B.P.) represents the earliest human occupation in the southeastern United States. The placement of these occupations in the terminal Pleistocene epoch indicates an adaptation to cooler climatic conditions and a different physiographic regime than found in the modern

Holocene epoch. Aboriginal groups of this period were likely small, mobile bands dependent upon a hunting and gathering economy. Although they may have hunted some of the megafauna that became extinct at the end of the Pleistocene, such as mastodon (*Mammut americanum*), bison (*Bison bison antiquus*), and ground sloth (*Megalonyx* sp.), it is likely that the subsistence base was varied and included a number of plant and animal foods. Most of the known finds in northeast Arkansas are from surface contexts and tend to occur along the major river systems. The major diagnostic artifacts of the Paleoindian period are lanceolate, fluted points.

The Dalton period is considered to be transitional between the Paleoindian and Archaic traditions. The key distinguishing feature of material culture is the unfluted, lanceolate Dalton point. In terms of chronological placement, Dalton is often considered either terminal Paleoindian or Early Archaic. Goodyear (1982) has argued that Dalton represents a distinct temporal interval between the two periods, occurring between 8,500-7,800 B.C., and has pointed out the continuity between the lithic reduction strategies employed by Paleoindian and Dalton populations (Goodyear 1982:384; see also Smith 1986:14). While technologically similar to Paleoindian, Dalton manifests an adaptive pattern that is more akin to later Archaic cultures. One of the most important game species from this time forward to the contact era seems to have been the white-tailed deer (Morse and Morse 1983:71). The Dalton tool kit is also distinguished by the addition of a larger number of special-function tools and the presence of the woodworking adze.

In contrast to other southeastern regions, northeast Arkansas is distinctive in yielding extensive and important data on Dalton site types, material manifestations, and spatial patterning. Much of this data has been generated from surveys and excavations conducted along the L'Anguille River just west of Crowley's Ridge. Excavations from sites such as Lace, Brand, and Sloan have uncovered evidence of possible burials and revealed features identified as living floors and shelter remains. The distribution of sites and types along the major drainages has also led to the formulation of competing settlement pattern models (Morse 1975, 1977; Morse and Morse 1983; Schiffer 1975; Price and Krakker 1975).

THE ARCHAIC PERIOD

The Archaic period has been dated from about 7,800-1,000 B.C. in northeast Arkansas. It is traditionally divided into three shorter intervals: Early Archaic (ca. 7,800-5,000 B.C.), Middle Archaic (ca. 5,000-3,000 B.C.), and Late Archaic (ca. 3,000-1,000 B.C.). Temporal divisions of the Archaic are primarily based on the occurrence of distinctive projectile points. These bifacial tools have been demonstrated to change in a patterned way through time and, although a plethora of names have been applied to different morphological forms, they occur as "clusters" (J. Chapman

1975) of related types with a particular spatial distribution. In addition to diagnostic biface types, other material markers provide means to subdivide the Archaic in the interior Southeast. These include types of groundstone artifacts (e.g., Kwas 1981; Elliott 1989), fragments of carved stone bowls, and variations in mortuary items.

The Archaic is characterized by a general and gradual increase in population that has been referred to as regional packing. This demographic trend is accompanied by adaptations geared to the intensive exploitation of different broad environmental zones and to the eventual demarcation of territorial boundaries archaeologically recognizable as phases (e.g., Anderson and Hanson 1988). Intensive exploitation of food resources is reflected in substantial quantities of fire cracked rock on many Archaic sites. This artifact class results from stone boiling techniques involving the use of skin bags or wooden bowls prior to the adoption of pottery (see Goodyear 1988).

Subdivision of the Archaic and consideration of its attributes are complicated in the central portion of the Mississippi valley by the presence of the river itself and by the contrast in ecotones represented by the broad floodplain and the immediately adjacent loess hills zone of extreme western Tennessee. The river may have acted as a cultural boundary during prehistory, but the precise nature of the boundary effect has not yet been delineated (Morse and Morse 1983:1). In addition to this factor, it seems that the varied resources of the floodplains and loess hills would have acted to differentially condition prehistoric cultural adaptations. The degree to which the archaeological record generated by Archaic activity reflects varied responses to environmental zones or boundaries between social units ("phases" or "culture areas") is a problem for future research. No attempt has been made to reconcile the contrasting schemes proposed for the Archaic of eastern Arkansas and western Tennessee (Morse and Morse 1983:99-134; Smith 1979, 1989) and no effort will be made to do so in this report. The review of both the preceramic and ceramic periods will draw more heavily on Arkansas data because of the project area location and because the data for western Tennessee are rather sparse (see Jolley 1985:7-13). However, because the project area is within the floodplain proper but occupies a space very near the interface of these two contrasting environmental regimes, brief consideration of data generated on both sides of the river seems to be in order.

Early Archaic

The transition to the Early Archaic is marked by the beginning of the Holocene period and the evolution of a new regime of flora and fauna. In contrast to Paleoindian adaptations, the Early Archaic appears to represent a shift to a more localized subsistence strategy based on the seasonal harvest of plant and animal resources. Similar to earlier occupations, Early Archaic sites tend to be light scatters, reflecting a mobile lifestyle by small groups. Diagnostic projectile points for this

period in the central valley include the San Patrice, St. Charles Notched, Hardin Barbed, Rice Contracting Stemmed, and examples in the Kirk/Palmer cluster (Morse and Morse 1983:104-108; Smith 1989:3). Terminal Early Archaic bifurcated forms, common in other areas of the southeast, appear to be absent (C. Chapman 1975:152; Morse and Morse 1983:104).

Middle Archaic

The Middle Archaic period is poorly represented in the lowlands of the northern Mississippi Alluvial Valley (C. Chapman 1975:177; House 1975:30). It can be roughly distinguished from the Early Archaic by the increased presence of groundstone artifacts and a less diverse stone tool kit. The Middle Archaic (ca. 5,000-3,000 B.C.) represents a period of increasingly localized exploitation of the resource base, and expanded efficiency in the utilization of terrestrial and riverine resources. Morse and Morse (1983:99) have suggested the term "Hypsithermal Archaic" be used for this period in the central Mississippi valley to denote population shifts away from the lowlands in response to a warmer, dryer climatic era. The suggested temporal duration of the "Hypsithermal Archaic" (7,000-3,000 B.C.) includes what is traditionally considered the latter portion of the Early Archaic. In contrast to the Morses, Carl Chapman (1975) has utilized observations from southeast Missouri to argue that the lowlands were occupied in the Middle Archaic. Just east of the project area, the rather scanty and problematic Middle Archaic record of western Tennessee (Jolley 1985:10; Smith 1989:3) suggests the use of a broad seasonal round by groups moving between the lower Tennessee River and the Mississippi River loess hills zone (Smith 1972:111). Information from the Missouri bootheel, Ozark highlands, and loess hills (see also Johnson and Brookes 1989) suggests that regional data bases from areas immediately adjacent to the lowlands can perhaps be synthesized in the future to formulate specific research questions focused on the Middle Archaic.

Firm identification of Middle Archaic artifacts associated with temporal divisions of the period has been difficult to achieve. Diagnostic artifacts for the Middle Archaic are thought to include basal notched Eva and Calf Creek points and side notched Hickory Ridge and Cache River projectile points (Morse 1982:22; Morse and Morse 1983:108-110). The side notched forms are morphologically similar to Early Archaic Big Sandy points. Their association with a Middle Archaic horizon, however, suggests the possibility of a distinctive and later side notched form. Smith (1989:4) has identified the Haywood point (see Smith 1979:Figure 15) of western Tennessee as one possible Middle Archaic marker for the region. Smith (1989:3) has also noted that classic Eva projectile points are almost non-existent more than 35 km west of the lower Tennessee River, and Morse and Morse (1983:108) point out a similar scarcity within the western lowlands of Arkansas. These observations call into question the recognition of a true basal notched horizon (Morse and Morse 1983:108-109) within the western lowlands. Smith (1989:5; Smith and Weinstein 1987:32) has suggested that his stemmed Bartlett (see Smith 1975:Figure 4) projectile point form

may be diagnostic of the latter portion of the Middle Archaic along the central Mississippi drainage. It appears rather obvious that more work on the Middle Archaic is required to explain many of the current chronological and material aspects of the period. Clarification of these issues could be greatly facilitated, if an intact Middle Archaic component could be located and excavated.

Late Archaic

The Late Archaic period (ca. 3,000-1,000 B.C.) continued the development of more sophisticated adaptations to localized resource zones. The large number of sites documented for this period suggests that population levels continued to increase. Human habitation of the lowlands expanded and intensified during this period (Morse and Morse 1983:115-134). The use of cultigens becomes widespread, with evidence for the use of native seed plants and tropical species (squash, gourd). Two temporal units, the Frierson and O'Bryan Ridge phases, have been tentatively identified in northeast Arkansas. Smith (1989; Smith and Weinstein 1987; Smith and McNutt 1988) has posited a number of Late Archaic/Poverty Point phases for extreme western Tennessee, based on the occurrence of diagnostic artifacts such as microblades and distinctive baked clay objects. Late Archaic sites are identified by a range of artifact types, including Gary, Big Creek, Burkett, and Table Rock/Motley Stemmed projectile points, chipped stone adzes, and rarely, steatite vessels (C. Chapman 1975:217; Morse and Morse 1983:122). Toward the end of the Late Archaic period, clear relationships with the Poverty Point complex of the lower Mississippi Alluvial Valley are evident in the widespread occurrence of baked clay objects and lapidary items, such as carved and polished beads (cf. Smith and McNutt 1988).

THE WOODLAND PERIOD

The Woodland period in the southeast is also divided into three periods: Early Woodland (1,000-500 B.C.), Middle Woodland (ca. 500 B.C.-A.D. 500), and Late Woodland (ca. A.D. 500-800). The Early Woodland period is traditionally marked by the introduction of pottery, the appearance of elaborate burial mound ceremonialism and the first evidence of intensive horticulture. Settlement systems were characterized by small dispersed villages located in the lowlands, with upland areas at best little more than seasonally occupied hinterlands (Morse and Morse 1983:143-144).

Early Woodland

The term Tchula has been used to refer to Early Woodland components in the northern portion of the lower Mississippi Alluvial Valley (Phillips et al. 1951:431-

436; Phillips 1970:876-886). No Tchula period phase has been formally defined on the Arkansas side of the river in the vicinity of West Memphis. Excavations at the McCarty site (Morse and Morse 1983:145-159), as well as limited evidence from the Turnage, Bradley, Red Oak (Phillips 1970:879), and Mound City sites, however, suggest the existence of a population aggregate within eastern Arkansas during the last millennium B.C. that exhibits a general affinity to the Turkey Ridge phase (Phillips 1970:878-879) of extreme northwestern Mississippi and southwestern Tennessee (see Morse and Morse 1983:145). Ceramic marker types for the period include some fairly elaborate specimens of Cormorant Cord Impressed, as well as Withers Fabric Impressed, Mulberry Creek Cord Marked, and Baytown Plain. These grog or clay tempered ceramic types contrast sharply with the sand tempered wares of the contemporaneous Pascola phase, situated farther to the north.

Middle Woodland

The Middle Woodland (ca. 500 B.C.-A.D. 500) period witnessed the reemergence of widespread exchange networks throughout the Southeast and Midwest, involving a number of raw materials and finely crafted finished goods. In fact, one of the most widely recognized markers of the Middle Woodland are exotic artifacts associated with the extensive, pan-Eastern Hopewellian culture. Marksville is the term used to describe the Mid-Southern Hopewellian expression along the Mississippi drainage. Artifacts involved in the Hopewell Interaction Sphere (Caldwell 1964; Seaman 1979) have been found in Middle Woodland burial mounds excavated near the project area, most notably at the Helena Mounds located at the southeastern terminus of Crowley's Ridge. The Helena Mounds, type site for the local Middle Woodland phase, contained numerous burials and artifacts suggestive of both northern and southern spheres of influence (Ford 1963). Recent analysis of the mortuary patterning at Helena (Mainfort 1988b) supports an interpretation of the societies within eastern Arkansas at this time as moderately stratified. Stratification was likely linked to differential success in trade relations. Mound City, in Crittenden County, may also represent a major Marksville mound site. Unfortunately, detailed investigations at Mound City have never been conducted and the site is currently endangered by the urban expansion of West Memphis.

A number of other large mound sites occur within the major drainages of the Mississippi and in seemingly more marginal locations (e.g., Pinson Mounds; see Mainfort 1986, 1988a), many of them containing burials associated with a wealth of imported goods, including copper, mica, galena, and shell artifacts. This information sheds light on ceremonial aspects of Middle Woodland societies in the Mid-South, but the general nature of the Hopewell/Marksville influence in northeast Arkansas is not well understood. The archaeological record of the Middle Woodland consists mainly of ceramic assemblages, with little detailed information on lifeways (but see Morse 1988). A pattern of dispersed autonomous villages and infrequently visited ceremonial centers is suggested (Morse and Morse 1983:162).

Late Woodland

The Late Woodland period (ca. A.D. 500-800) is poorly understood throughout the Southeast. The elaborate ceremonialism, trade networks, and earthworks associated with Middle Woodland times appear to have died out or become greatly attenuated. In northeast Arkansas, this period is divided geographically into two major study units – Baytown (Phillips 1970) in the southern portion of the region and along the eastern border, and Barnes (Dunklin phase), concentrated in the northern portion. In general, plain grog tempered pottery predominates, although cord marking is most typical of Baytown period sites, while sandy paste ceramics typify Barnes.

The Late Woodland developed into a Coles Creek period culture along and south of the Arkansas River after about A.D. 700. The Toltec site near Little Rock is a major regional center during the Coles Creek period (Rolinson 1982). During the Late Woodland, the foundations of the cultural adaptation known as the Mississippian developed in the central Mississippi valley, and northeast Arkansas may be the area where this development first emerged.

THE MISSISSIPPIAN PERIOD

Perhaps no period of southeastern prehistory has been more intensively researched than the Mississippian. Based on excavations at numerous sites and extensive surface collections, a cultural pattern for the latest prehistoric segment has been both defined and continuously refined. From about A.D. 900 until initial European contact in the sixteenth century, Mississippian societies of differential complexity controlled local and regional territories along most of the large rivers of the interior Southeast, including the central section of the Mississippi.

At the risk of oversimplification, we may summarize the cultural pattern of the Mississippian in eastern Arkansas in terms of its material and organizational attributes. The settlement pattern of Mississippian groups was focused on alluvial floodplains. These areas provided expanses of tillable soil which could be easily worked with available wood, bone, and stone agricultural equipment. Maize was the dominant food crop and was supplemented by beans, squash, and probably a variety of other foods that have low archaeological visibility. Domesticated crops were augmented with wild foods which had contributed to aboriginal diets in the southeast for centuries. These included nuts, berries, persimmons, greens, and roots. Protein sources included deer, turkey, small mammals, migratory water fowl, and aquatic species.

The focus on maize as a primary food crop, and the generally increased commitment to agriculture, had significant impacts on the organizational complexity of aboriginal societies in eastern Arkansas. The relatively egalitarian

Woodland societies of the region were apparently transformed into more hierarchically arranged constructs, with new emphases placed on hereditary leadership and the emergence of managerial organizations. This more complex social organization has been generally referred to as a chiefdom.

Increased organizational complexity is marked by the appearance of substructure platform mounds during the Mississippian. These served as the foundations for religious structures and the locations for the residences of high status individuals. Individual status distinctions were reinforced through differential access to non-subsistence items such as conch shell jewelry, native copper, and non-utilitarian chipped stone items. These status distinctions are reflected in variation of Mississippian burials.

During the initial stages of the Mississippian, Woodland-style conical burial mounds were still erected, reflecting continuity in local traditions. Continuity is also reflected in ceramic traditions, with the presence of clay tempered wares (Baytown) into the Mississippian. These were augmented by shell tempered plain and cord marked ceramics through time. After about A.D. 1000, shell tempered ceramics were the dominant types in Mississippian assemblages.

The chronology for the Mississippian is based on the recognition of phases or cultures for the area which are defined on temporal, spatial, and artifactual grounds. Regional chronology building is an outgrowth of the monumental work conducted in the central drainage by Phillips et al. (1951) during the 1940s. Mississippian sites are commonplace in this portion of Arkansas. The best documented initial Mississippian assemblage comes from the Zebree site in northeast Arkansas (Morse and Morse 1980), which is the type site for the Big Lake phase. Similar components have been recently recognized along the Mississippi drainage just east of the project area at the Shelby Forest site in Tennessee (McNutt 1988). In St. Francis County, Early and Middle Mississippian sites have been recorded, but more research is needed before local phases can be defined.

In the late Mississippian period, populations began to nucleate along the Mississippi and St. Francis rivers. Settlement into more compact villages with substantial wattle-and-daub houses occurred. Villages were linked to regional mound ceremonial centers, which were apparently the focus of important religious and social activities. Most of these activities were associated with the agricultural cycle and mortuary ceremonialism. In the project area, important mound centers during the "mature" Mississippian include the Beck, Belle Meade, and Pouncey sites. Local ceramic variations lead initially to the identification of four distinct phases in the Eastern Lowlands: Kent, Parkin, Nodena, and Walls (Phillips 1970), which are often interpreted as competing chiefdoms. In southern Crittenden County, late Mississippian sites have been previously classified as Walls phase (Phillips 1970), and have been more recently included in both the Kent (House 1982) and Horseshoe Lake phases (Smith 1990).

THE PROTOHISTORIC PERIOD

Protohistoric occupations (ca. A.D. 1540-1673) in the northeast Arkansas area have been reviewed or summarized by a number of authors (e.g., Phillips et al. 1951; Morse and Morse 1983:305-315; Morse 1990; Williams 1980; Smith 1990:165-169). Initial European contact in the general project area occurred in June 1541, when the de Soto entrada crossed the Mississippi River and encountered complex Mississippian polities in the Eastern Lowlands of northeastern Arkansas. Descriptions of existing cultures by the de Soto chroniclers are the only historic record of the late prehistoric Mississippian occupations in the region (Brain 1985). The chiefly province of Pacaha has been equated with the archaeological Nodena phase. Williams (1980) has identified the Armored phase as the seventeenth century coalescence of closely related Walls and Nodena phase populations. Horizon markers for the contact period include Chevron glass beads, Clarksdale bells, catlinite pipes, shell "buttons," sherd disks, and distinctive vessels. Several of the more distinctive vessel forms, as well as the sherd disks (gaming pieces?), of the protohistoric exhibit continuity with the latest pre-contact expressions of ceramic art in the Walls and Nodena phase areas (Childress 1989). Utilizing evidence from Kentucky, Lewis (1988) has argued strongly for the recognition of astragalus dice as another distinctive protohistoric marker in the central Mississippi drainage, although most researchers have been reluctant to accept these artifacts as diagnostic of the period (see Eisenburg 1989; Wesler 1991). Post-contact burial practices shifted to secondary interment in large earthen urns, demonstrating associations with the late Alabama River phase along the upper section of the Tombigbee River drainage.

HISTORIC OVERVIEW

Early Historic Period (ca. 1700-1861)

Following the de Soto expedition, there were no further written descriptions of northeastern Arkansas until 1673, when the Frenchmen Father Marquette and Louis Jolliet travelled down the Mississippi from Canada in canoes. During the 132 years between the de Soto expedition and this first recorded French expedition, the complex Mississippian chiefdoms with large populations had disappeared. There is little doubt that disease epidemics introduced by contact with Old World viruses depopulated large areas of the interior Southeast, including northeastern Arkansas (Smith 1987; Ramenofsky 1987). At the mouth of the Arkansas River, in 1673, the French encountered the Quapaw, who already possessed such European goods as beads, knives, and hoes. When remnants of La Salle's shipwrecked colony made their way from the Texas coast to Arkansas Post in 1682, they found several French trappers already living with various tribes. Henri de Tonti established Arkansas Post in 1686. By the end of the seventeenth century, parts of St. Francis County were

undoubtedly involved in the European trade network. Deerskins were the main export from Arkansas Post for over 100 years.

After the initial European discovery, Arkansas alternately was claimed as a possession of Spain ("Florida") or France ("Louisiana"). Both used the native American groups as allies in their wars with the British. During this time, smallpox further reduced the native populations. Spain acquired Louisiana again in 1792. Disrupted Native American groups, such as the Delaware and Shawnee, began moving west of the Mississippi. Cherokee began moving to the St. Francis drainage in 1795. Stringent religious and political requirements kept most American settlers from trying to move to Spanish territory until these strictures were eased at the end of the eighteenth century.

The Jefferson Purchase of 1803 acquired Louisiana Territory for the United States, making the area finally open for American settlement. Arkansas Post was taken over by U.S. government traders in 1804. Quapaw, Delaware, Chickasaw, and Osage all traded there. The Osage Treaty of 1808 ceded Indian rights to eastern St. Francis County (Hanson and Moneyhon 1989). Arkansas Post became the capitol of Arkansas Territory in 1819. La Petite Roche or Little Rock, located more than 100 miles upstream on the Arkansas, became the capitol of Arkansas Territory in 1820.

St. Francis County was created by act of the Arkansas Territorial Legislature in 1827 (Chowning 1954:5). The area had been included in Crittenden County prior to that. It is difficult to learn of the early history of the county, because records were lost in repeated fires of the courthouse (Goodspeed 1890:452-455). However, it is known that the county seat was Franklin until 1840 (Chowning 1954:8).

The earliest settlers in St. Francis County date to 1819. William Strong was its best known early settler. He built a four story building with 20 rooms and a verandah 12 miles north of the Forrest City area in 1827. It was built on the site of an Indian village, on a trail to Arkansas Post. Mr. Strong amassed large amounts of land through dubious means (Goodspeed 1890:453).

During this early period, the Military Road from Memphis to Little Rock was being surveyed. The Military Road followed an older Indian trail. Completed in 1829, the construction of the Military Road greatly facilitated immigration to Arkansas (Chowning 1954:7). Immigrants began to settle along this road.

The government used the Military Road to move Choctaw and Chickasaw Indians from Mississippi to Oklahoma along the 1830s "trail of tears" (Woolfolk 1982). Cherokee who were already living in Arkansas also ceded their lands and moved to Indian territory. The Quapaw had given up much of their territory as early as 1818, and ceded the final two million acres in 1824. The Native American population was essentially eliminated from Arkansas by 1840, although a contingent of Crow Indians had a village near Madison at Crow Creek at this time (Chowning 1954:8).

In 1836, Arkansas became a state. Steamboat traffic on the rivers and streams began to diminish the importance of the Military Road at this time. This trend is reflected in the movement of the St. Francis County seat from Franklin on the Military Road to Madison on the St. Francis River in 1840. Many veterans of the War of 1812 had been given tracts of land in eastern Arkansas for their service, the majority of which remained unoccupied and were sold for taxes when statehood was attained (Chowning 1954:8).

Railroad surveys in eastern Arkansas began in 1850-1851 (Woolfolk 1967). The railroads were important because the swamps of eastern Arkansas made the 133 miles from Hopefield to Little Rock almost intraversable. Early railroads were frequently washed out by floods, but in 1858 the Memphis and Little Rock Railroad was completed from Hopefield (West Memphis) to Madison. It did not cross Crowley's Ridge. Another line ran from Little Rock to DeValls Bluff, on the White River. Also in 1858, the first telegraph wire from Madison to Hopefield was strung.

The St. Francis courthouse moved briefly in 1855 to Mt. Vernon, but after burning down it was again moved back to Madison, where it remained until 1874. During the period from the 1840s up to the Civil War, St. Francis County enjoyed prosperity based on the plantation system. Cotton was the main cash crop, with large acreages also devoted to corn.

The Civil War and Reconstruction (ca. 1861-1874)

Arkansas' political position prior to the Civil War was complex. Most people favored the south, but were reluctant to break with the Union. Part of this reluctance stemmed from the state's underdeveloped transportation system and the hope for federal aid to improve it. However, after the Fort Sumter attack and President Lincoln's request for troops from Arkansas to help quell the rebellion, attitudes moved toward secession. In May, 1861, when Arkansas seceded from the Union, St. Francis County delegates were among those in favor.

During the war, much of the military action in Arkansas centered along the Mississippi River, with major battles at Memphis and Helena. In St. Francis County, no battles of importance were fought, although there were cavalry engagements at Stewart's Springs near Forrest City and at a crossing of the L'Anguille River (Chowning 1954:11). The courthouse burned again in 1862.

Period documentation from the reconstruction suggests that the white inhabitants of Crittenden County harbored much resentment against negro office holders and "carpetbaggers." The late nineteenth century was a period of violent racial strife in Arkansas, and at times, the state militia was called in (Woolfolk 1982). The reconstruction period ended in 1874 with the adoption of a new State constitution (Goodspeed 1890:392).

General Nathan B. Forrest engineered the railroad linkage of Memphis and Little Rock in 1869. He had Irish laborers clear and grade a four mile path from Madison west across Crowley's Ridge in what is now Forrest City. The town was laid out in 1869 at the site of Gen. Forrest's railroad camp commissary. The increasing importance of rail transportation is reflected by the movement of the county seat to Forrest City, away from Madison, the steamboat town, in 1874 (Chowning 1954:10).

Tenant Farm Activity Period (1874-1950)

Farming by tenant operators rather than landowners was a significant characteristic of Arkansas agriculture after the Civil War. After the Civil War many plantation owners subdivided their holdings into smaller units that were farmed by tenants. This decentralization of the old plantation system developed during the reconstruction period as a means of stabilizing labor relations between former slaves and landowners. Sharecropping arrangements varied, but the basic principle was that the tenant provided labor, while the landowner provided land, implements, draft animals, and supplies. The two then shared the crop, with contracts that varied widely (Hanson and Moneyhon 1989:56).

By 1880, 31 percent of all farm operations in Arkansas were carried on by tenants. But in delta regions like eastern St. Francis County, where cotton plantations had dominated the economy before the Civil War, this proportion was as high as 90 percent (Hanson and Moneyhon 1989:56). For the remainder of the nineteenth century, economic conditions worked to undermine smaller agricultural operators and force them into tenancy. This trend led to the introduction of large numbers of whites into what had been a primarily black tenant force. In 1890, the statewide proportion of tenant farms was at 32 percent, in 1900 this fraction had risen to 45 percent, and by 1910 the figure increased to 50 percent. In St. Francis County, the 1910 proportion of tenant farms was from 68-79 percent (Hanson and Moneyhon 1989:Figure 56). The rise in tenancy reached its high point in 1930, with 63 percent of all farms in Arkansas operated under this system.

Since 1930, the trend toward increasing tenancy has been reversed, primarily because of the introduction of agricultural mechanization that has made possible farm consolidation and the dispersal of tenants (Hanson and Moneyhon 1989:56). Tenancy has also closely paralleled farm size in the state. In 1900, the average farm size had been 126 acres, but by 1930 the figure stood at 66 acres. Increasing agri-mechanization and the effects of the Great Depression resulted in an increase in the average size of farms to 265 acres by 1978 (Hanson and Moneyhon 1989:56). With this shift, the number of tenants steadily declined. By 1940, the proportion of tenant farmers had dropped to 53 percent, by 1950 to 38 percent, and by 1969 the figure was only at 13 percent.

The importance of the tenant farm period in the archaeological record is that it represents the maximum occupation period for the Mississippi delta counties, prior to the recent development of nonfarming rural settlement. A preliminary analysis has suggested that there are between 30,000 and 50,000 tenant house sites in eastern Arkansas (Stewart-Abernathy and Watkins 1982:HA18). This dispersed settlement pattern during the tenant farm period contrasts sharply with the clustered settlement pattern prior to 1865 (Orser and Nekola 1985:68). Prunty (1955) has interpreted tenancy as a postbellum modification of the plantation system.

The archaeological characteristics and diagnostics of the tenant farm period have been summarized in the State Plan (Stewart-Abernathy and Watkins 1982:HA80). The settlement pattern during the tenant farm period is generally linear, following a road or bayou. Each stead is located approximately 100 m from the next, following a regular interval. These steads each contain a house, privy, mule shed or barn, chicken house, pig sty, and a well house on a 20 to 40 acre fenced lot. The vernacular architecture of the tenant house includes frame construction in single pen, abutted pen, shotgun, and double shotgun forms. In addition to domestic ceramics, glass, and refuse, general tools, agricultural implements, and structural materials (brick, glass, nails) are recovered, all dating from 1870-1950. Economic status is difficult to determine archaeologically, as tenants generally had cheaper (secondhand or out-of-date) goods supplied to them.

Draining and Clearing

The construction of flood control structures was largely accomplished during the tenancy period. The St. Francis basin had witnessed devastating damage in the major floods of 1858, 1862, 1867, 1882, 1883, 1886, and 1893, while medium floods occurred annually (Burke et al. 1945:4). The construction of levees and improved drainages was essential to the development of the area. Prior to 1850, levee construction had been unorganized and supported only by interested landowners. In 1858, the Governor of Arkansas appointed the first Swamp Land Secretary, who more or less organized levee construction by county (Burke et al. 1945:3). The Civil War slowed the development of the eastern portion of St. Francis County by delaying rebuilding of levees and railroads wrecked by flooding, neglect, and battle. Developments farther up the Mississippi basin lead to increased flood heights during the 1870s and 1880s. The Mississippi River Commission then interceded and began to construct and repair levees along the St. Francis River in 1887. The formation of the St. Francis Levee District in 1893 contributed further to the control of flooding.

In addition to flooding, the massive amount of timber was a tremendous obstacle to development of the Eastern Lowlands and was difficult to remove. So despite the construction of levees, land prices did not go up substantially until roads and railroads made areas accessible. The expansion of the rail network closely parallels

the boom in the timber industry. The cutting of timber began in earnest in the 1880s (Hanson and Moneyhon 1989:51). The timber became more valued in the 1900s, and the exhaustion of the forest in the 1920s by local mills led to the creation of much cleared acreage (Hanson and Moneyhon 1989:51). Numerous support towns were platted during this period and died with the exhaustion of the local timber resources (Stewart-Abernathy and Watkins 1982:HA19).

The Twentieth Century in Eastern Arkansas

In May, 1892, the Frisco Railroad bridge over the Mississippi River was opened. It was the first bridge over the Mississippi at Memphis and, at the time, the third largest bridge in the world (Woolfolk 1967). Prior to that time passengers and goods had to be ferried across the river. The second bridge linking Arkansas with the east opened in 1915. This Missouri-Pacific bridge was wide enough to have two-way traffic.

Arkansas railroads in the early twentieth century were one of the state's biggest businesses (Dew 1970:327-344). Large trunk lines such as the Iron Mountain Railroad crossed the state. Small independent lines were of regional importance. Industries, such as mines or lumber mills owned their own railroads. The Iron Mountain Railroad failed to complete a line through to Hughes and the project area in 1907. However, in 1913 the Missouri-Pacific Railroad opened a line from Marianna to Memphis, including a station at Hughes.

Hughes, the second largest town in St. Francis County, was incorporated in 1916. Its early history is interwoven with steamboats. The bad roads, lack of drainage, and swamps made it impractical to farm very far from the river, so there was very little cultivation in the area of Hughes. The area near the river was called the "front," while the swampy area away from the river was known as the "back" (Chowning 1954:30). The Hughes area was serviced primarily by boats until 1913 and the coming of the Missouri-Pacific Railroad. The residents north of Hughes were served by a post office at Democrat at this time. Hughes began to prosper after the rail line was completed and in less than a year the first gin opened. Flooding remained a problem; in 1927 and 1937 disastrous floods struck the area.

An agricultural depression after World War I and the nationwide depression of the 1930s severely affected the agricultural economy of Arkansas (Harrison 1954:356). Grain prices declined and property taxes could not be paid. Delinquency resulted in the foreclosure on millions of acres in rural Arkansas, which became state property. Individuals could settle this land by making a small clearing and building a home. They could then gain title to the land by making a nominal investment. Many small households surrounded by 20 to 40 acre plots date to this time period. Tracts of this delinquent acreage were also acquired by timber companies, who began to utilize forest management techniques at this time.

Since 1933, when the first allotment was placed on cotton, the importance of that crop has declined (Gray and Catlett 1966:78). Cotton production involved a considerable quantity of laborers, especially in the days when the crop was planted and picked by hand. Even after the introduction of mechanized cotton pickers, weeding was done with hand hoes by "cotton choppers." The increased use of agricultural chemicals put much of the rural population out of work. Today, a more diversified cropping system that includes soybeans, milo, wheat, rice, alfalfa, sorghum, and pasture characterizes most farms in the county. Machinery began to replace livestock as the major source of farm power, and the acreage of corn needed to feed livestock in the county decreased. Farms in St. Francis County have been decreasing in number and increasing in size since 1954 (Gray and Catlett 1966:78).

PREVIOUS ARCHAEOLOGICAL INVESTIGATIONS

The area in and around eastern St. Francis County, Arkansas has been the subject of numerous archaeological investigations, beginning in the late nineteenth century with C.B. Moore (1911) and Edward Palmer (1917). Standard references in northeast Arkansas include the report of archaeological investigations on the Cache River (Schiffer and House 1975), the Zebree archaeological project (Morse and Morse 1980), the Village Creek archaeological project (Klinger 1986), and the St. Francis Basin comprehensive overview program (Dekin et al. 1978). Morse and Morse (1983), Klinger et al. (1983), and Lafferty and Watkins (1987) have prepared excellent syntheses and listings of archaeological work conducted in northeast Arkansas by both avocational and professional archaeologists. The Arkansas Archeological Survey (AAS) also maintains a comprehensive list of publications and manuscripts available on a county by county basis.

A number of large-scale cultural resources surveys have been initiated in recent years. A survey of 90 miles of the L'Anguille River Basin in Lee, St. Francis, Cross, and Poinsett counties, in which 222 sites were documented, was conducted by Garrow & Associates, Inc. for the Memphis District Corps of Engineers (Anderson et al. 1989). This survey documents the nature of human occupation in the L'Anguille basin for the past 11,000 years. Important environmental information was also derived from a pollen sequence obtained from Hood Lake.

Other cultural resource management studies conducted in St. Francis and Crittenden counties include work on Big Creek (Dwyer 1978; LeeDecker 1979a; Klinger 1981, 1985; Klinger and Imhoff 1982; Kinger et al. 1983; McNeil 1984), Blackfish Bayou (LeeDecker 1979b), Little Cypress Bayou (Thomas 1986), Ten Mile Bayou and Fifteen Mile Bayou (Smith 1975), the Wapanocca National Wildlife Refuge (Jackson 1978), and in the West Memphis-Memphis Metropolitan area (Kern 1980, 1981). In addition, various surveys by the Corps of Engineers are reported by McNeil (1981, 1985a, 1985b). Investigations in Crittenden County conducted by the

Arkansas Archeological Survey are reported by McCurkan (1976), Williams (1988), Martin (1978), Dan Morse (1967), Phyllis Morse (1977), Cande (1980), and Waddell (1981).

Mississippian period sites associated with mound complexes have been the subject of much archaeological interest over the years (see Palmer 1917; Dellinger and Dickinson 1940; Perino 1966, 1967). Building on previous work by Phillips et al. (1951) and Phillips (1970), recent research on the Walls phase is reported by Smith (1990) and Lumb and McNutt (1988). The Parkin phase was the subject of a site cachement analysis by Phyllis Morse (1981). The Parkin phase may be associated with the province of Casqui, documented by the de Soto chroniclers (Morse and Morse 1983:292). East-central Arkansas, and the Kent phase in particular, has been intensively studied by John House for a number of years (1982).

The Belle Meade and Beck sites, east of the project location, may represent the first towns of the Aquixo encountered by the de Soto entrada west of the Mississippi River (Morse and Morse 1983:296). Belle Meade has been excavated by Memphis State University field schools in recent years. David Dye and Charles McNutt, Memphis State University, Department of Anthropology, utilized a ceramic collection excavated by an amateur archaeologist from the Belle Meade site in a paper utilizing mathematical clustering indices for whole vessel morphology (McNutt and Dye 1988). David Dye and Sheri Moore have also presented the results of excavations of a portion of a burned house floor from the Belle Meade site (Dye and Moore 1989).

Within 3 km of 3SF332 there have been three previous archaeological surveys. The first of these recorded two Baytown mound centers in the 1940s, as a part of the now famous archaeological survey of the lower Mississippi Alluvial Valley (Phillips et al. 1951). No additional sites were recorded until the CRM era, when a survey of Ten Mile Bayou recorded four additional sites (Reed and Reed 1975*). More recently, in a survey for the proposed Texas Eastern Pipeline, five additional sites were recorded and one site was revisited (Kelley et al. 1990). Consultations with local archaeologists indicate that 3SF332 was recorded in a survey for the Memphis District COE by Tim Klinger, but no site forms were submitted to the AAS and a report of the survey has not been submitted to the Memphis District COE. At least one shovel test was placed on 3SF332 at that time and it was Klinger's survey which gave 3SF332 a temporary designation of FTB3. No other information concerning this survey is currently available.

* The Ten Mile Bayou Survey report is not available and the title is unknown; thus, the References Cited section of this report does not contain a full citation.

IV. METHODS

LITERATURE AND RECORDS SEARCH

The literature and records search was conducted for the purpose of inferring the potential presence and character of cultural resources in the project area. This portion of the project investigation was conducted by the Field Director at a number of locations and from a number of sources. Information on recorded site locations within a 3 km radius of 3SF332 was supplied through correspondence with Mr. Jerry Hilliard, Registrar of the Arkansas Archeological Survey (AAS), Fayetteville. The St. Francis County Library in Forrest City, Arkansas was consulted for the purpose of researching local history and tenancy in St. Francis County. Environmental information was obtained from various government publications, including *Soil Survey of St. Francis County, Arkansas* (Gray and Catlett 1966). In addition, Garrow & Associates, Inc. maintains extensive libraries in both Memphis and Atlanta, which were reviewed in the preparation of this report.

METHODS OF FIELD INVESTIGATION

Field investigations of 3SF332 began on March 8, 1991. At this time, a 50 percent general surface collection was made and a 1 x 1 m test unit was excavated. Survey conditions were very good in the cotton stubble, with surface visibility close to 100 percent. Furrows ran in a roughly northeast-southwest direction and were utilized as guides in the 50 percent surface collection. The Field Director and one technician collected all visible artifacts, both historic and prehistoric, from every other furrow. In the course of the 50 percent surface collection, it was observed that there was a nearly continuous light scatter of historic artifacts covering the elevated surface of the natural levee southwest to Highway 50. But the collection area was restricted to the most concentrated portion of historic scatter, which included a small, sandy rise and a non-disc'd area with an old shovel test and survey stake identifying 3SF332. The limit of the 50 percent surface collection is illustrated in Figure 1, prepared from a field sketch map.

Test unit 1, a 1 x 1 m unit, was excavated 11 m west of the survey stake marking 3SF332. This unit was excavated in four 10 cm arbitrary levels and a 30 x 30 cm area was excavated in two 10 cm levels in the northwest corner of the unit. Only levels 1 and 2 yielded artifacts; below 20 cm was sterile. The maximum depth attained below the surface was 60 cm. All soils removed were screened through 1/4 inch

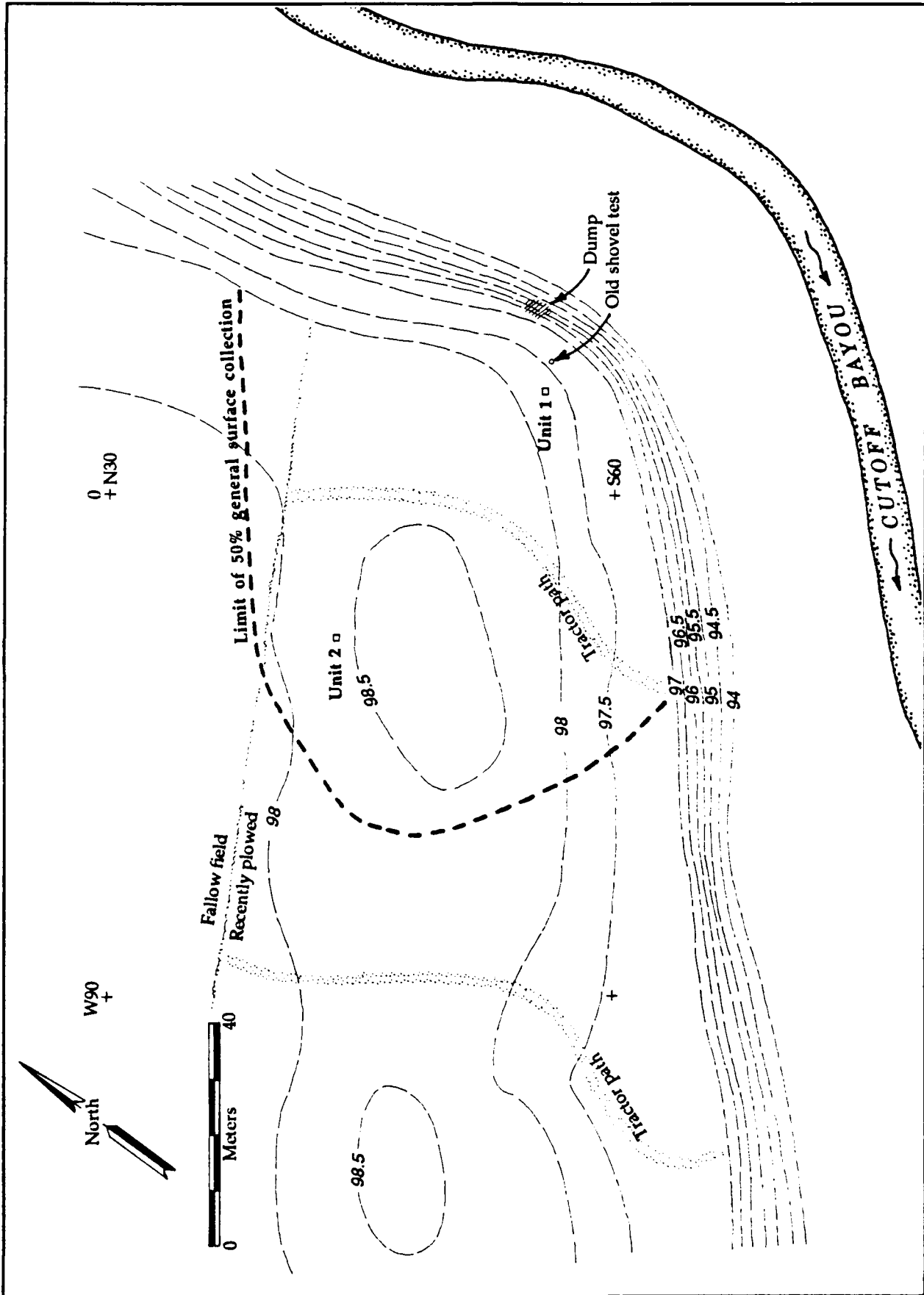


Figure 1. 3SF332 Site Plan.

mesh hardware cloth to insure consistent artifact recovery. Sediments were described by Munsell Soil Color Charts (1990), texture, and structure. Artifacts were bagged separately by level. A unit level form was completed for every level. The unit profiles were recorded with scale sketches and photographs upon termination of the unit. The unit was backfilled following these activities.

Following these initial investigations, consultations with Mr. Douglas Prescott indicated that the Scope of Work needed to be expanded in order to evaluate the significance of the previously unrecognized prehistoric component of 3SF332. On March 18, 1991, Mr. Douglas Prescott and Mr. James McNeil, Memphis District COE, inspected the site with the Field Director. At this time it was determined that a 25 percent controlled surface collection of a roughly 75 m x 91 m area, combined with excavation of another 1 x 1 m test unit, would be sufficient to assess the prehistoric component of the site. The area to be subjected to the 25 percent collection was roughly defined by tractor paths to the east and west, a fallow field to the north, and the steep bank to the south (see Figure 1). Sometime between March 8 and 18, the field was disced and scratched.

The 25 percent controlled surface collection strategy employed the use of 5 x 5 m units distributed across the apparent maximum extent of the artifact concentration. The goal of the surface collection was to obtain a provenienced 25 percent sample from the prehistoric component of the site. As such, no historic artifacts were collected in this percent sample. On March 28, 1991, a site grid was established incorporating a square area of 90 x 90 m or 8,100 square meters. The corners of this grid are illustrated in Figure 1. The grid was oriented along a 40° west of magnetic north bearing, perpendicular to the topography of the natural levee. Along the west and east margins of the 90 x 90 m collection area, blue pin flags were placed with a transit at 5 m intervals. Between these pin flags two lengths of twine marked with flagging tape at 5 m intervals were extended. With the collection units thus demarked, every other 5 x 5 m unit was collected. Each marked twine line was moved 10 m south following the collection of a row. This allowed for the collection of every other unit from every other row, or every fourth unit, thus achieving the desired 25 percent sample. Prior to moving the marked twine lines, the elevation of each collected unit was shot in with a transit and stadia rod. The first day instrument height (IH) was assigned an arbitrary elevation of 100.00 m; the contour lines on Figure 1 reflect this arbitrary designation.

The 5 x 5 m units were each identified by the coordinates of the northeast corner and assigned arbitrary numbers 1-81. A total pick up was executed within each collection unit selected for the sample. All artifacts were separately bagged by square location and the bag number assigned to each unit corresponded to the unit's arbitrary number. The distribution of sample units across the site area is graphically depicted in Figure 2. Units 1-56 were collected on March 28, 1991 and units 57-81 were

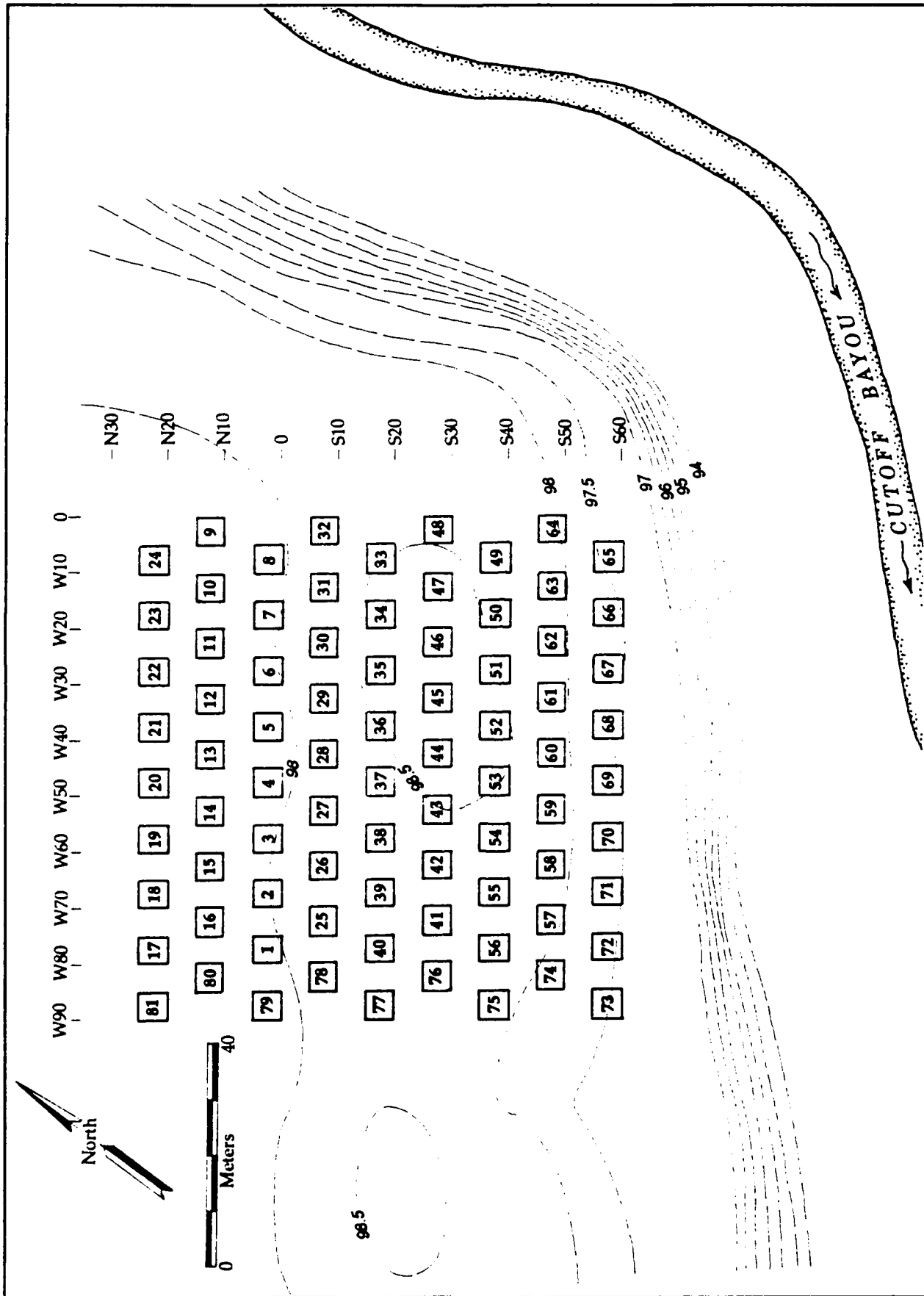


Figure 2. 25 Percent Controlled Surface Collection Units in Relation to Topography.

collected on April 1, 1991. In the interim between the two collection dates there was a winter storm with heavy rain and snow, but this did not produce significantly different visibility conditions between the units collected on those respective dates.

Test unit 2, a 1 x 1 m unit, was excavated on April 1, 1991. The northeast corner of the unit was placed at S11 W25, and the unit was aligned to the 25 percent surface collection grid. The position of this unit was determined in the laboratory following the washing and counting of the first 56 controlled surface collection units. Unit 2 was placed in an area containing a concentration of lithic debitage and ceramics located on the northwest flank of a sandy rise on the natural levee. This unit was excavated and recorded in the same manner as the first 1 x 1 m test unit. Unit 2 produced no artifacts below 20 cm, and was excavated in 10 cm levels to a maximum of 60 cm below the surface.

LABORATORY ANALYSIS

Artifacts collected during the field phase were processed at the facilities of Garrow & Associates, Inc. in Memphis, Tennessee. The work done in the laboratory included washing, counting, analyzing, and labeling of all specimens.

Historic Artifact Analysis

The historic artifacts were analyzed using a system based on South's (1977) artifact patterning concept. Four attributes for historic artifacts were recorded: Group (this refers to South's Kitchen Group, Architecture Group, etc.), Class (essentially raw material, such as ceramic, glass, metal, etc.), Type (a general artifact type, like pearlware), and Subtype (a specific artifact type, such as handpainted pearlware). The frequency of each category was computed against the artifact total for the site and any observed variation in the resulting frequencies was used to compare the results to known patterns and interpret site function(s). Historic site patterns will be discussed in greater detail below.

Kitchen ceramics are divided among three categories -- earthenware, stoneware, and porcelain, with earthenware being the most commonly recovered historic ceramic from nineteenth-century occupations. The definition of nineteenth-century earthenware types is less readily accomplished than for earlier ceramics, however. Ceramic types that developed following pearlware are primarily characterized by a decrease in the degree of cobalt tinting and the eventual creation of "white" ceramics referred to in the archaeological literature as "whitewares." In 1813, C. J. Mason and Company of England introduced a new ceramic type known variously as

"ironstone" or "stone china." This was an extremely high-fired ware which was normally vitrified, and thus technically a stoneware. However, vitrification did not always occur, and this characteristic cannot always be used with assurance to separate ironstones from other refined earthenwares. As archaeologist and ceramic historian George Miller has noted (1980:2), drawing distinctions between the various white bodied wares of the nineteenth century is difficult to accomplish. Research by Miller (1980) indicates that surface decoration, more than ware type, determines the relative socioeconomic status of different historic ceramics and, following Miller, many archaeologists are now focusing their analyses on decorative motifs and shying away from the creamware-pearlware-whiteware-ironstone debate. However, work by Garrow (1982) at the Washington Civic Center site in Washington, D.C. suggests a more accurate resolution to the difficulties in distinguishing whiteware from ironstone. Working with exceptionally large assemblages from tightly defined nineteenth-century contexts, Garrow (1982) was able to define a refined earthenware ceramic with a cream tinted paste and an opaque white glaze which was susceptible to crazing. He noted that the paste of this ceramic was more large grained than comparable ironstones and decorated earthenwares, and Garrow defined this type as cream colored ware, assuming it was the least expensive plain earthenware ceramic referred to in the price-fixing guides cited by Miller (1980). Cream colored ware (referred to in shorthand as CC ware by Garrow) is described as exhibiting the following characteristics: a yellow to ivory body cast; a grainy paste which was apparently not as well-fired as ironstone, and was hence lighter by volume than other ceramics; and a glaze which is susceptible to crazing. Following Miller (1980), Garrow divides white bodied late nineteenth-century ceramics into two categories: late refined earthenwares and ironstones. CC ware and the various decorative types found on nineteenth-century earthenwares (e.g., hand painting, transfer printing, edging, sponging, etc.) are included in the Late Refined Earthenware category, while both plain and decorated ironstones are included in the ironstone group. The characteristics of ironstone recognized by Garrow (1982) include a refined, stark white, bluish, or gray paste and a dense body and greater weight than comparable sherds.

While refined tablewares contributed the majority of sherds from the site assemblage, several stoneware sherds were also recovered. Stonewares, generally employed for utilitarian purposes, were made throughout the United States. Four glaze types are prevalent on these wares: (1) Alkaline, a sand and ash glaze indigenous to the Deep South and used from ca. 1820 until the 1890s; (2) Albany Slip, a clay slip glaze mined from the Albany, New York region and used from the early 1800s to the present; (3) Salt glazing, which is one of the oldest known glazes applied to stoneware, and which had a focus in the northeastern U.S. but was found throughout the country; and (4) Bristol Slip, a chemical and clay slip glaze which was made popular in the U.S. after 1884 and was used almost exclusively after 1920 (Greer 1981:211-212). The combined use of Albany and Bristol glazes on single vessels probably dates from the period between 1884 and 1920 (Greer 1981:212).

In addition to refined and coarse earthenware ceramics, a large quantity of bottle glass was recovered from across the site. While most early glass was free-blown, mold-blown and machine made bottles became common during the nineteenth and twentieth centuries. Mold-blown glass occurs after ca. 1818. Machine made bottles were used in commercial production beginning in 1893, although fully automatic devices were not introduced until 1917 (Jones and Sullivan 1989:39). All of the identifiable bottle glass recovered from 3SF332 is machine made. Of particular note are several pieces of solarized amethyst glass. "Sun colored amethyst," produced with manganese, was most common in the period including the last quarter of the nineteenth century until World War I (Jones and Sullivan 1989:13). Amethyst glass thus provides a *terminus ante quem* date of 1916 when found in historic site collections.

Architectural artifacts recovered from the site included whole and fragmented unglazed brick. No glazed brick was recovered from 3SF332. The unglazed brick was sorted into three categories, based on temper and color. Category 1 is described as light red (10R 6/6) brick with common medium to coarse brick bits and black inclusions. Category 2 brick is described as light reddish brown (5R 6/4) with the same temper as category 1, although it was observed to be slightly more coarse. Category 3 is described as ranging from dusky red (10R 3/3) to red (10R 4/6) with a very homogenous paste of the same color. Some specimens of this category exhibit circular holes, a characteristic of modern machine made brick. Categories 1 and 2, of which whole specimens were recovered from 3SF332, appear to be variants of earlier machine made bricks, and likely date to the early to mid twentieth century.

In addition to ceramics and glass, nails generally contribute one of the largest components on nineteenth-century sites. Nails can generally be separated into two types for this period: (1) cut nails, which were cut from flat sheets of metal and feature two tapering edges and two parallel edges; and (2) wire nails, which are round and are processed from metal cylinders. A recent discussion of nail types and frequencies by Orser et al. (1987:549-558), suggests that the relative proportion of cut nails to wire nails can serve as an index to the age of a structure and site. They propose that sites containing almost entirely cut nails will predate 1855; that sites featuring more cut nails than wire nails should date to the period from 1855 to ca. 1880; that sites featuring a relatively even mixture of wire and cut nails should date to the period from 1880 to 1890; and that sites featuring more wire nails than cut nails post-date 1900. At 3SF332 wire nails were found in equal proportion to cut nails, although unidentified nails outnumbered identified nails.

Prehistoric Artifact Analysis

3SF332 produced three classes of prehistoric artifacts: ceramics, lithics, and daub. Ceramic sorting was simplified by the lack of decorated sherds. The plain wares

recovered were sorted on the basis of paste type, in keeping with the classification procedure used throughout the Mississippi valley. All of the identifiable sherds were tempered with medium to coarsely ground clay. However, a significant number of these sherds contained a moderate amount of coarse shell in addition to clay tempering. Ceramics similar to these have been recovered from Chucalissa; formal descriptions have been presented by Lumb and McNutt (1988). The identifiable ceramics from 3SF332 fit Lumb and McNutt's (1988:9, 13, and 21) description for Baytown Plain *var. Baytown* and Mississippi Plain *var. Mitchell*. They note that the only distinction between the two in terms of temper is that *var. Mitchell* has no more than 5-10 percent added shell and its clay particles are on the average smaller than those in *var. Baytown*. Lumb and McNutt introduced this as a variety of Mississippi Plain rather than Baytown Plain because shell is considered a diagnostic trait of Mississippi Plain, and because sherds exhibiting this type of temper tend to be thinner than *var. Baytown*. Occasional leaching of shell and a dirty black core color on *var. Mitchell* are further observations of the differences between the two types. Rim forms on both types are generally plain, with either straight or slightly everted profiles and square to rounded lips.

The lithic materials recovered from 3SF332 were classified according to criteria outlined recently in the analysis of a much larger lithic collection from Archaic sites in Putnam County, Tennessee (Childress and Buchner 1991). This sorting scheme is based on observable morphological characteristics of cores and debitage. The lithic sample from 3SF332 was small and did not lend itself to any kind of elaborate analysis. The predominant raw material at the site consisted of small yellow-brown stream pebbles that had been reduced by random freehand percussion, and possibly bipolar bashing, to produce useable flakes. All of the smaller stones appear to be locally available Pliocene gravel.

CURATION

Artifacts recovered from this project are temporarily curated at the Garrow & Associates, Inc. facilities in Memphis. A permanent curation facility has yet to be determined by the Memphis District Corps of Engineers. All artifacts will be bagged and labeled according to the accession guidelines of the chosen curation institution.

V. RESULTS

LITERATURE AND RECORDS SEARCH

Information on recorded archaeological sites within 3 km of 3SF332 was obtained through correspondence with the Registrar of the Arkansas Archeological Survey, Fayetteville. Eleven sites have been recorded within this radius (Table 1). Nine of these sites consist of surface scatters and two sites are villages with mounds. Six of these sites are recorded as having only prehistoric components (3SF36, 3SF37, 3SF96, 3SF97, 3SF319, and 3SF320), two consist of twentieth-century surface scatters (3SF318 and 3SF322/3CT266), and three sites (3SF11, 3SF72, and 3SF321) are similar to 3SF332 in that they contain both prehistoric and late historic components.

There is a preponderance of Baytown period sites in the immediate area of 3SF332, with five of the nine prehistoric sites from Table 1 exhibiting Baytown components. Thompson Lake (3SF36) and Davis Place (3SF97) were included in Seriation Graph No. 4, Memphis area (Phillips et al. 1951:Figure 20). Both sites are placed in the E-D time range. At Davis Place, 396 sherds were collected, while at Thompson Lake, 265 sherds were collected. Baytown Plain dominates these collections, and Mulberry Creek Cord Marked is the second most frequently represented type. Larto Red Filmed and Wheeler Check Stamped are minority types in these collections. These two sites were evidently the focal point of the Baytown occupation of the area, with the other Baytown sites probably representing dispersed hamlets.

Sites 3SF11, 3SF96, and 3SF97 all contained lithics, sherds, and daub. Chronological placement of these sites cannot be made, because there is no information in the site files as to the type of ceramics present. The daub may indicate a Mississippian component on these sites, but any chronological placement of these sites is tentative. Site 3SF321 is unique among the sites in a 3 km radius of 3SF332, in that it is the only prehistoric site which does not contain ceramics. While this may indicate a special function Baytown or Mississippian site, it could also be Archaic.

LOCAL INFORMANT INTERVIEWS

Two residents of the housing community located at the Highway 50 bridge over Cutoff Bayou were interviewed on April 1, 1991. These men were retired, longtime residents of the area. They informed us that the structure which once stood on site 3SF332 had been moved ca. 1980 and that it was once part of the Davis Plantation

Table 1. Recorded Archaeological Sites within 3 km of 3SF332.

<u>Site Number</u>	<u>Description</u>	<u>Reference</u>
3SF36	Baytown village with two mounds "Thompson Lake" (12-O-3)	Phillips et al. 1951
3SF37	Baytown village with four mounds "Davis Place" (12-O-4)	Phillips et al. 1951
3SF11	Two loci surface scatter with lithics, sherds, daub, and historic materials	Reed and Reed 1975
3SF72	Surface scatter with lithics, sherds, daub, and historic materials	Reed and Reed 1975
3SF96	Surface scatter with lithics, sherds, daub, and bone	Reed and Reed 1975
3SF97	Surface scatter with Baytown and Mulberry Creek sherds, and lithic debris	Reed and Reed 1975; Kelley et al. 1990
3SF318	Surface scatter with mid to late twentieth- century kitchen and building materials	Kelley et al. 1990
3SF319	Surface scatter with Baytown and Tchefuncte sherds, and lithic debris	Kelley et al. 1990
3SF320	Surface scatter with Baytown, Mulberry Creek, and Alligator Incised sherds, and lithic debris	Kelley et al. 1990
3SF321	Surface scatter with lithics and early to mid twentieth-century kitchen and building materials	Kelley et al. 1990
3SF322/3CT266	Surface scatter with early to mid twentieth- century kitchen and building materials	Kelley et al. 1990

This structure is shown on the site on the 1981 USGS Chatfield, Arkansas quadrangle map, 7.5 minute series (see Appendix 1). This structure is a double shotgun or bungalow frame house and is currently situated approximately 2,000 feet southwest of the original location, just west of the Highway 50 bridge over Cutoff Bayou (Figure 3). Knowledge of the movement of this structure from 3SF332 allows for a case study in tenant period site formation processes. This knowledge may prove to have general utility in interpreting the archaeological assemblages of tenant period sites. An aerial photograph of the 3SF332 area taken in 1965 and published in the *Soil Survey of St. Francis County, Arkansas* (Gray and Catlett 1966) shows this structure, as well as another structure located approximately 300 feet north of 3SF332 on the natural levee of Cutoff Bayou. The local informants indicated that this second structure had been torn down for salvage.

The local informants indicated that this movement of the 3SF332 structure was accomplished to facilitate picking up laborers from a central location. This centralizing of labor residences contrasts with the tenancy period settlement pattern of dispersed residences. Evidently more than one structure has been moved to this location west of the Highway 50 bridge, as the 1965 aerial photograph shows only one structure in this location. As of April, 1991, there were three shotgun houses, the 3SF332 double shotgun house, and two sheds at this location.

GENERAL SURFACE COLLECTION

The 50 percent general surface collection resulted in the recovery of 330 historic artifacts and 34 prehistoric artifacts from site 3SF332. The collected artifacts are presented in Table 2. The majority of items recovered (n=176, or 48.4 percent) are kitchen related. Broken bottle glass (n=130, or 35.7 percent) is the major artifact class in the assemblage. Architectural artifacts are the second most frequently recovered group (n=105, or 28.8 percent), with brick as the dominant class (n=90, or 26.9 percent) within this group. The prehistoric materials (n=34, or 10.2 percent) consist of ceramics, lithics, and daub in a 24:9:1 ratio.

All of the identifiable bottle glass recovered from 3SF332 is machine made. Of particular note are the seven pieces of solarized amethyst glass. "Sun colored amethyst," produced with manganese, was most common in the last quarter of the nineteenth century, and generally dates before World War I (Jones and Sullivan 1989:13). Much of the clear, amber, and light green bottle glass recovered from the site is modern and appears to be broken soft drink and beer bottles. The dark blue bottle glass likely represents inexpensive, broken, "over the counter" medicine containers. The bottle glass indicates that 3SF332 was occupied from the late nineteenth to the late twentieth century.



Figure 3. Photograph of Structure Moved from 3SF332.

Table 2. Artifacts Recovered in the 50 Percent General Surface Collection.

HISTORIC ARTIFACTS	
KITCHEN GROUP	
CERAMICS	
Porcelain	
Soft Paste - Plain	1
Hard Paste - Molded	2
Hard Paste - Glazed	2
Earthenware	
White Ironstone - Plain	9
White Ironstone - Decal	3
White Ironstone - Banded	2
Stoneware	
Buff Paste - Albany int./Bristol ext.	1
Buff Paste - Albany ext./brown int.	1
Gray Paste - Salt Glazed	1
BOTTLE GLASS	
Machine Made	
Clear	73
Amber	18
Light Green	17
Amethyst	7
Dark Blue	5
Green	5
Clear - Painted	1
Light Blue	1
Unidentified	
Clear	2
Green	1
OTHER GLASS	
Milk Glass	10
Milk Glass Canning Seal	3
Opaque	1
Melted	7
METAL	
Screw Cap	1
Aluminum Cans	2

Table 2. Artifacts Recovered in the 50 Percent General Surface Collection (cont.).

ARCHITECTURE GROUP	
BRICK	
Category 1	25
Category 2	25
Category 3	40
CONCRETE	1
TILE	1
WINDOW GLASS	4
NAILS	
Cut Nail Fragments	2
Wire Nail Fragments	2
Unidentified Nail Fragments	5
ARMS GROUP	
AMMUNITION	
Plastic and Metal 12 ga. Shell	1
Brass .38 Cartridge	1
Plastic Shotgun "Wad"	1
ACTIVITIES GROUP	
HORSE/MULE SHOES	3
AXE HEAD	1
FARM IMPLEMENT TOOTH	1
ELECTRICAL MOTOR COIL	1
IRRIGATION PIPE FRAGMENT	1
HARDWARE	
Metal Fastener	1
Nut, Bolt, and Washer	1
Washer	1
Grommets	3
AUTOMOBILE	
Tie Rod End	1
Gas Cap	1
Clear Headlamp Glass	2
Safety Glass	2
CLOTHING GROUP	
Two Hole Plastic Button	1

Table 2. Artifacts Recovered in the 50 Percent General Surface Collection (cont.).

PERSONAL GROUP		
	Plastic Comb Fragment	1
	Unidentified Personal Metal Items	3
MISCELLANEOUS GROUP		
	COAL	5
	ABRAHAM FUR CO. METAL TAG	1
	UNIDENTIFIED PLASTIC FRAGMENTS	16
PREHISTORIC ARTIFACTS		
CERAMICS		
	Baytown Plain <i>var. Baytown</i>	10
	Mississippi Plain <i>var. Mitchell</i>	12
	Unidentified	2
LITHICS		
	Amorphous Cores	2
	Retouched Pieces	1
	Broken Flakes	2
	Debris	1
	Fire Spall	3
DAUB		1

White ironstone is the major ceramic type found at the site, the majority of which is plain (see Table 2). Decorated sherds include one blue and green decal, one light blue and green decal, and one red and green floral decal, all on white ironstone, and representing a minimum of three vessels. Two banded white ironstone sherds were recovered which may be institutional ironstone, although positive identification is impossible given the small size of the sherds. The five porcelain sherds recovered include both hard paste and soft paste porcelains. The two glazed sherds are blue on the interior and exterior and likely represent a single vessel. Of the three stoneware sherds recovered, the one with combined Albany and Bristol glazes is the most temporally sensitive, suggesting a date of between 1884 and 1920. Surprisingly, no CC ware was recovered. No ceramic backmarks were recovered either, from which manufacturing dates could be derived. However, the ceramic assemblage is consistent with the bottle glass assemblage in dating 3SF332 to the late nineteenth to mid twentieth century.

The architectural group is dominated by brick category 3, which is modern, machine made brick. Brick categories 1 and 2 are also machine made, but with more variation in tempering and color. These likely date somewhat earlier, from the early to mid twentieth century. If combined together, categories 1 and 2 are slightly more frequent than category 3, modern brick. Two battered whole bricks were recovered, each measuring 20 x 9 x 5 cm (8 x 3.5 x 2 inches) -- one each from categories 1 and 2, which allowed for their assessment as machine made. The remainder of the brick was fragmentary.

Nails constitute the second largest class of artifacts from the architectural group. Cut nail fragments are found in equal amounts to wire nails, at two each. Orser et al. (1987:549-558) suggest that sites which show a relatively even mixture of wire to cut nails date to the period from 1880 to 1890. However, the sample size is quite small, and the number of unidentified nails exceeds that of the identified nails (see Table 2). In spite of the small sample size, the nails appear to confirm a late nineteenth century initial historic occupation for 3SF332, as suggested by the earliest kitchen group artifacts.

The activities group is well represented in the general surface collection (see Table 2). One horse shoe and two narrower muleshoes would indicate an occupation of 3SF332 prior to 1930 and the mechanization of agriculture in the Eastern Lowlands. A single bit axe head was the only general tool recovered. Six pieces of hardware were recovered, but none are temporally diagnostic. The automobile pieces and the electric motor coil all appear to be fairly recent additions to the assemblage.

The least frequently represented artifact groups were the arms group, clothing group, and personal group. The arms group consisted of spent ammunition for .38 cal. and 12 ga. weapons. The 12 ga. shell and plastic wad was recent refuse. The .38 cal. cartridge was manufactured by "WRA Co." A white plastic button, with two machine drilled holes is the only clothing item recovered from 3SF332. The comb fragment is also plastic, indicating mid twentieth-century occupation.

Miscellaneous artifacts are dominated by plastic fragments (see Table 2). These plastic specimens appear to be modern, thin walled container fragments. Coal was included in the miscellaneous group, but whether these fragments derived from domestic use or steam tractor use is purely conjectural. The "Abraham Fur Company" metal tag was collected by Mr. Douglas Prescott, Memphis District COE, from 3SF332. The front depicts a fox face, encircled by the company name and "St. Louis, Mo." This tag may have come from a garment.

Two of South's (1977) artifact groups, tobacco and furniture, are not represented at 3SF332.

The 34 prehistoric artifacts recovered in the 50 percent general surface collection are presented at the end of Table 2. Ceramics dominated this sample (n=24, or 70.5 percent). Baytown Plain *var. Baytown* (n=10) and Mississippi Plain *var. Mitchell* (n=12) were found in nearly equal quantities. Three rim sherds were recovered. One *var. Mitchell* rim sherd had a plain, slightly expanded rim with a flattened lip. Two *var. Baytown* rims were also recovered: one had a plain, tapered rim with a rounded lip and the other had a straight rim with a flattened lip.

The lithic materials were all composed of yellow-brown stream gravel. Five of the nine pieces had been thermally altered and showed a red color. The lithics were all small (less than 1 inch in maximum diameter) and all appear to have been randomly struck from a number of different angles. A single piece of reddish orange, cane-impressed daub was recovered in this collection, which was also less than 1 inch in diameter.

TEST UNIT 1

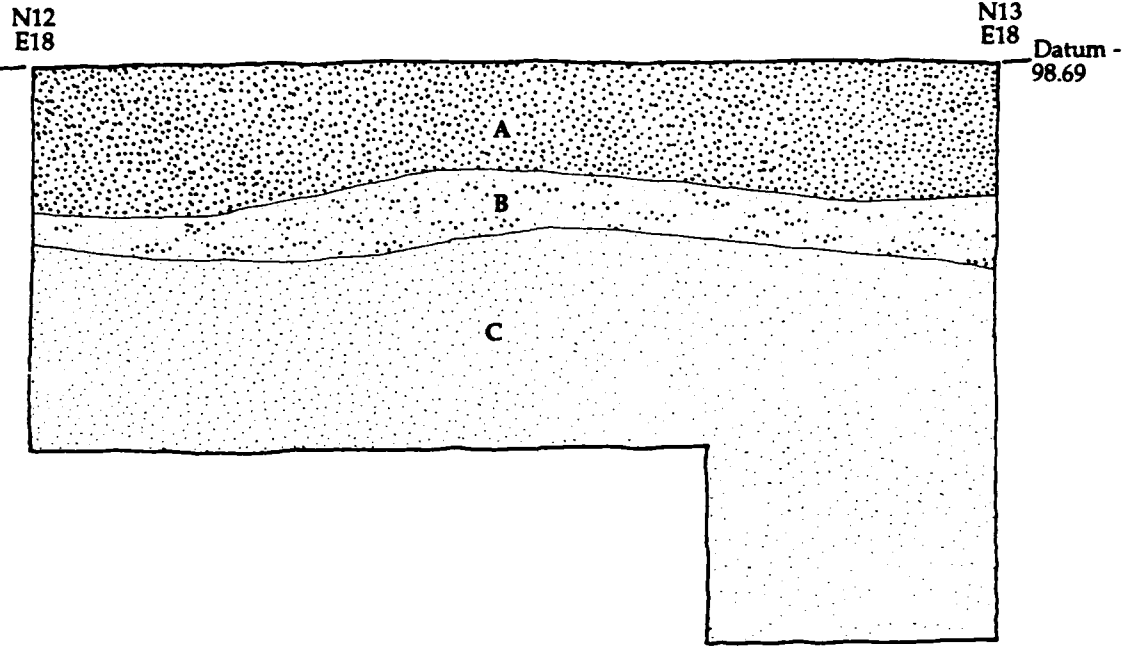
Test unit 1 was excavated as a 1 x 1 m unit following the 50 percent general surface collection on March 8, 1991. The artifacts recovered from unit 1 are presented in Table 3. Unit 1 was placed on the crest of the natural levee on the eastern portion of the site, near or at the former location of the double shotgun structure (see Figure 1). Artifacts were restricted to the upper 20 cm of the unit, in plow zone levels 1 and 2.

Omitting natural stone, 95 artifacts were recovered. Kitchen group artifacts again dominate the assemblage (n=71, or 74.7 percent). Machine made bottle glass is the most frequent class (n=69, or 72.6 percent). Following the trend in the 50 percent surface collection, the secondmost frequent artifacts are from the architectural group (n=13, or 13.7 percent). Coal is more frequently represented than in the 50 percent surface collection (n=9, or 9.5 percent). Level 1 contained (n=61) 64.2 percent of the recovered material and level 2 the remaining 35.8 percent.

Figure 4 illustrates the west profile of test unit 1. Zone A, the upper plow zone, extended from the surface to approximately 15 cm below surface and was composed of friable very dark grayish brown (10YR 3/2) silty clay loam with artifacts and charcoal particles. Zone B, from 15 to 20 cm below surface, was composed of brown (10YR 5/3) clay heavily mottled with very dark grayish brown (10YR 3/2) silty clay, with fewer artifacts and moderate charcoal particles. Zone B represents the deepest extent of the plow zone. Underlying this is Zone C, a very homogenous brown (10YR 5/3) sterile sandy clay. This soil profile conforms to the published descriptions of the Earle series (Gray and Catlett 1966).

Table 3. Summary of Items Recovered from Test Unit 1.

<u>Artifact Group</u>	<u>Provenience</u>		TOTAL
	<u>L-1</u>	<u>L-2</u>	
HISTORIC ARTIFACTS			
KITCHEN GROUP			
Burned White Ironstone	1	0	1
Clear Machine Made Bottle Glass	34	21	55
Light Green Machine Made Bottle Glass	6	2	8
Amber Machine Made Bottle Glass	3	1	4
Green Machine Made Bottle Glass	2	0	2
Milk Glass Canning Seal	1	0	1
Subtotal	47	24	71
ARCHITECTURAL GROUP			
Brick Category 1	2	0	2
Brick Category 3	1	2	3
Cement	1	0	1
Architectural Glass	1	2	3
Unidentified Nail	1	2	3
White Paint Chip	1	0	1
Subtotal	7	6	13
OTHER			
Coal	6	3	9
Unidentified Rusted Metal	1	0	1
Natural Stone	1	1	2
Subtotal	8	4	12
PREHISTORIC ARTIFACTS			
LITHIC			
Flake Fragment, Thermally Altered	0	1	1
TOTALS	62	35	97



- A Upper plowzone - 10YR3/2 very dark grayish brown friable silty clay loam with artifacts and charcoal particulation
- B Lower plowzone - 10YR5/3 brown clay, heavily mottled with 10YR3/2 very dark grayish brown silty clay with fewer artifacts, moderate charcoal particulation
- C 10YR5/3 brown homogenous sterile sandy clay

Figure 4. West Profile of Test Unit 1.

CONTROLLED SURFACE COLLECTION

The 25 percent surface collection resulted in the recovery of 151 prehistoric artifacts. The distribution of the artifacts across the sampling units is presented in Table 4. Ceramics composed slightly over half of the collection (n=78, or 51.6 percent). Lithics were also well represented (n=67, or 44.3 percent). Other artifacts present in trace amounts include daub (n=3) and bone (n=3). The bone was inspected in the laboratory and appeared to be modern deer bone. Eighty of the units had artifact totals ranging from 0-6, while unit 30 had 10 artifacts, the highest number.

The controlled surface collection data was used to develop a contour map of prehistoric artifact density on the site with a software program called *MacContour*®. This program utilizes coordinate values and associated quantities to extrapolate density patterns across a defined two dimensional space. A plot of the artifact density is presented in Figure 5, which is overprinted with contour lines from Figures 1 and 2. The site boundaries seem to be fairly well defined by the plot, with extremely low artifact densities in the flat areas to the north, west, and south, and the steep bank to the east. The plot indicates that the main prehistoric artifact concentration at 3SF332 is located northeast of the highest rise of the natural levee. However, there are a number of secondary concentrations, all of which are above the 98 m contour line. These secondary concentrations all cluster around the top of the small rise. East of the crest, there is a linear concentration paralleling the 98 m contour line. A photograph of the collecting of this row (S50) is illustrated in Figure 6, with the view to the northeast.

The ceramics recovered were mostly Mississippi Plain *var. Mitchell* (n=40 of 78, or 51.3 percent) and Baytown Plain *var. Baytown* (n=33 of 78, or 42.3 percent). Unidentified sherds (n=5) composed the remaining 6.4 percent of the sample. The majority of the ceramics (n=60, or 76.9 percent) were less than 1/2 inch in size. One of the eroded *var. Baytown* sherds from unit 50 may have been cord marked. Three rim sherds were recovered from the surface. Two of these were plain, tapered rims with slightly rounded lips of both *var. Mitchell* and *var. Baytown* paste. Another *var. Baytown* rim was plain and untapered with a flattened lip.

The lithic materials were dominated by debris (n=42 of 67, or 62.7 percent). Complete and broken flakes, together with flake fragments, represented 14.9 percent (n=10 of 67) of the lithics. Retouched pieces accounted for a small percent of the total (n=4 of 67, or 6.0 percent). Cores amounted to 9.0 percent (n=6) of the lithic sample. The cores had been reduced to very irregular shapes and small sizes by striking flakes from numerous directions. The worked pebble from unit 52 resembled a cobble core, but lacked the extreme battering and flaking present on the other cores. This piece resembles a "chopper."

Table 4. Artifacts Recovered in the 25 Percent Controlled Surface Collection.

Artifact Category	5 x 5 m Unit Number																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
CERAMICS																		
<i>var. Baytown</i>	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	2	0
<i>var. Mitchell</i>	0	0	1	0	0	0	0	0	2	2	0	0	0	0	0	1	0	0
Unidentified	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LITHICS																		
Complete flakes	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Broken flakes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Flake fragments	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Debris	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Retouched pieces	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Amorphous cores	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cobble cores	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Biface fragments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worked pebbles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fire spall	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OTHER																		
Daub	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Bone	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
TOTAL	0	0	1	2	2	0	0	1	2	3	2	2	0	1	1	1	2	0
NATURAL STONE	2	0	10	0	0	2	0	0	2	0	0	0	0	2	3	3	1	2

Table 4. Artifacts Recovered in the 25 Percent Controlled Surface Collection (cont.).

Artifact Category	5 x 5 m Unit Number																		
	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	
CERAMICS																			
<i>var. Baytown</i>	0	0	0	1	0	0	2	0	0	0	0	2	0	0	1	0	1	0	0
<i>var. Mitchell</i>	1	0	0	0	0	0	1	1	0	2	1	1	1	0	0	0	0	0	2
Unidentified	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0
LITHICS																			
Complete flakes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Broken flakes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Flake fragments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0
Debris	0	0	0	0	0	0	2	1	0	0	0	4	0	0	0	2	1	0	0
Retouched pieces	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Amorphous cores	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0
Cobble cores	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Biface fragments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worked pebbles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fire spall	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OTHER																			
Daub	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Bone	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1	1	0	2	0	0	5	2	1	2	2	10	1	0	4	2	2	2	3
NATURAL STONE	2	0	1	0	0	0	3	7	4	1	2	2	1	2	2	11	2	2	0

Table 4. Artifacts Recovered in the 25 Percent Controlled Surface Collection (cont.).

Artifact Category	5 x 5 m Unit Number																		
	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	
CERAMICS																			
<i>var. Baytown</i>	1	0	1	0	1	0	0	0	0	0	0	0	0	1	2	0	0	0	0
<i>var. Mitchell</i>	1	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Unidentified	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
LITHICS																			
Complete flakes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Broken flakes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Flake fragments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Debris	0	1	1	0	0	0	3	5	0	4	4	2	0	0	0	2	0	1	1
Retouched Pieces	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Amorphous cores	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cobble cores	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Biface fragments	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Worked pebbles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Fire spall	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OTHER																			
Daub	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bone	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	2	3	5	2	1	1	4	5	0	4	4	4	1	2	3	1	2	2	2
NATURAL STONE	6	2	3	6	4	11	4	8	6	8	8	1	3	2	1	0	1	1	2

Table 4. Artifacts Recovered in the 25 Percent Controlled Surface Collection (cont.).

Artifact Category	5 x 5 m Unit Number																	
	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72
CERAMICS																		
var. Baytown	0	0	0	1	2	3	1	2	2	3	0	0	0	0	0	0	0	1
var. Mitchell	0	0	1	2	2	1	2	4	2	0	1	0	0	0	2	0	0	0
Unidentified	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LITHICS																		
Complete flakes	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Broken flakes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Flake fragments	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Debris	0	0	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0
Retouched pieces	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Amorphous cores	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
Cobble cores	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Biface fragments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Worked pebbles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fire spall	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OTHER																		
Daub	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bone	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	2	4	5	5	6	6	5	4	1	0	0	1	2	0	0	1
NATURAL STONE	1	2	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0

Table 4. Artifacts Recovered in the 25 Percent Controlled Surface Collection (cont.).

Artifact Category	5 x 5 m Unit Number									TOTALS	Percent
	73	74	75	76	77	78	79	80	81		
CERAMICS											
<i>var. Baytown</i>	0	0	0	0	0	0	0	0	0	33	21.85
<i>var. Mitchell</i>	0	0	0	0	1	1	0	0	0	40	26.49
Unidentified	0	0	0	0	0	0	0	0	0	5	3.31
LITHICS											
Complete flakes	0	0	0	0	0	0	0	0	0	3	1.99
Broken flakes	0	0	0	0	0	0	0	0	0	3	1.99
Flake fragments	0	0	0	0	0	0	0	0	0	4	2.65
Debris	0	1	0	0	1	0	0	0	0	42	27.81
Retouched pieces	0	0	0	0	0	0	0	0	0	4	2.65
Amorphous cores	0	0	0	0	0	0	0	0	0	4	2.65
Cobble cores	0	0	0	0	0	0	0	0	0	2	1.32
Biface fragments	0	0	0	1	0	0	0	0	0	3	1.99
Worked pebbles	0	0	0	0	0	0	0	0	0	1	0.66
Fire spall	0	0	0	0	0	0	0	0	0	1	0.66
OTHER											
Daub	0	0	0	0	0	0	0	0	0	3	1.99
Bone	0	0	0	0	0	0	0	0	0	3	1.99
TOTAL	0	1	0	1	2	1	0	0	0	151	
NATURAL STONE	0	0	0	1	0	0	0	0	0	150	

Three broken bifaces were recovered in the 25 percent controlled surface collection. Hoe fragments were recovered from units 39 and 43. The hoe fragment from unit 43 (Figure 7) measures 12 x 13 cm and represents the distal end of a hoe. This large hoe fragment is composed of thermally altered Mill Creek chert, which is a pinkish red color. The working surface of the hoe exhibits silica polishing on the distal 1 to 3 cm. The unit 43 hoe appears to be a notched form. The other hoe fragment, from unit 39, is slightly darker, but also appears to be thermally altered Mill Creek chert. The unit 39 hoe fragment, however, had been retouched along one of the broken edges, producing a 5 cm wide scraping (?) surface. Silica polish is present along the length of the remnant hoe edge (6 cm). The third biface recovered was found in unit 76. This is a bifacially worked flake, with heavy retouch on the distal end. The raw material is a high-quality, probably non-local white chert. This specimen is the only example of this chert found on the site.

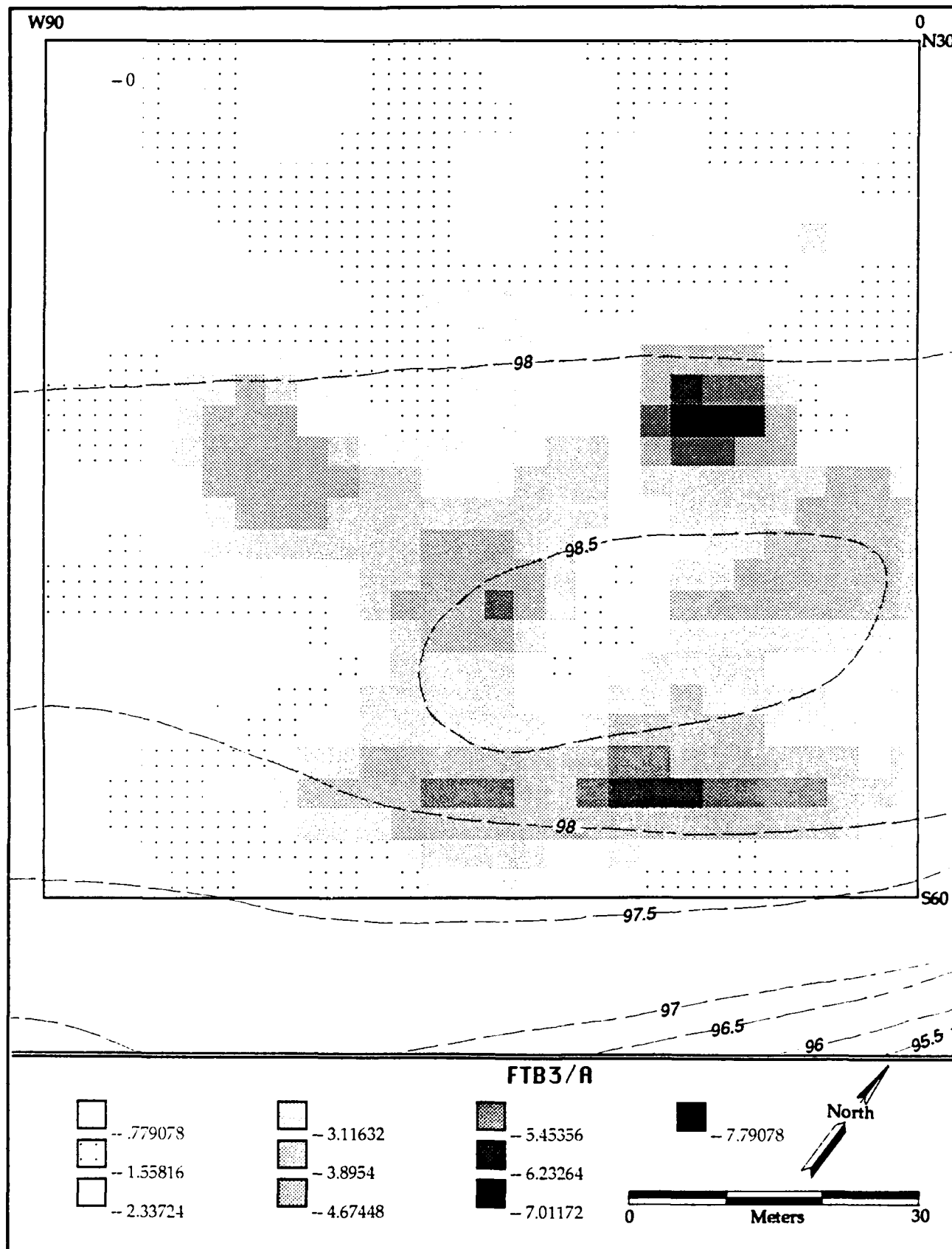


Figure 5. Extrapolated Artifact Density Plot.

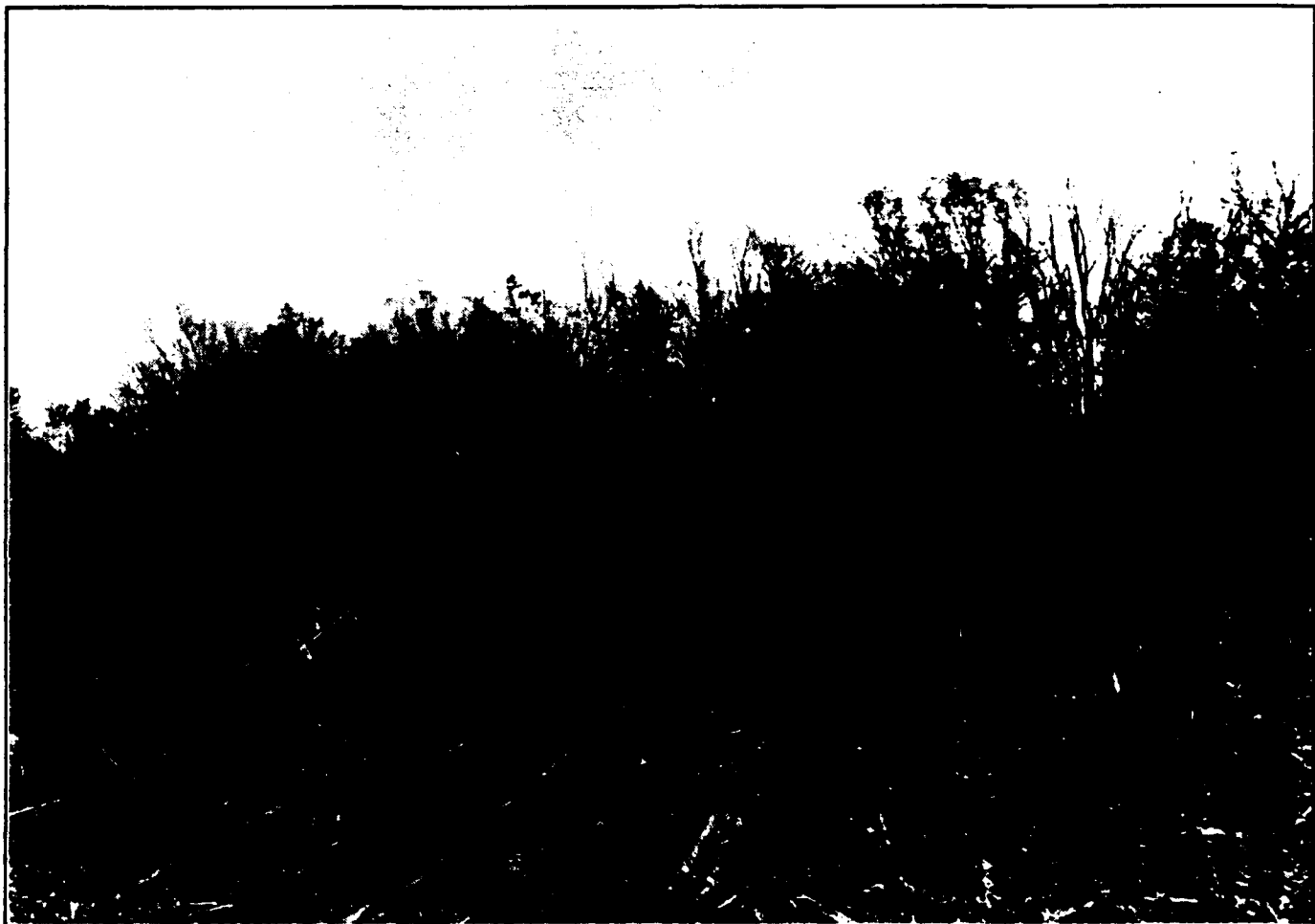


Figure 6. Photograph of the Collection of the S50 Row, View to Northeast.

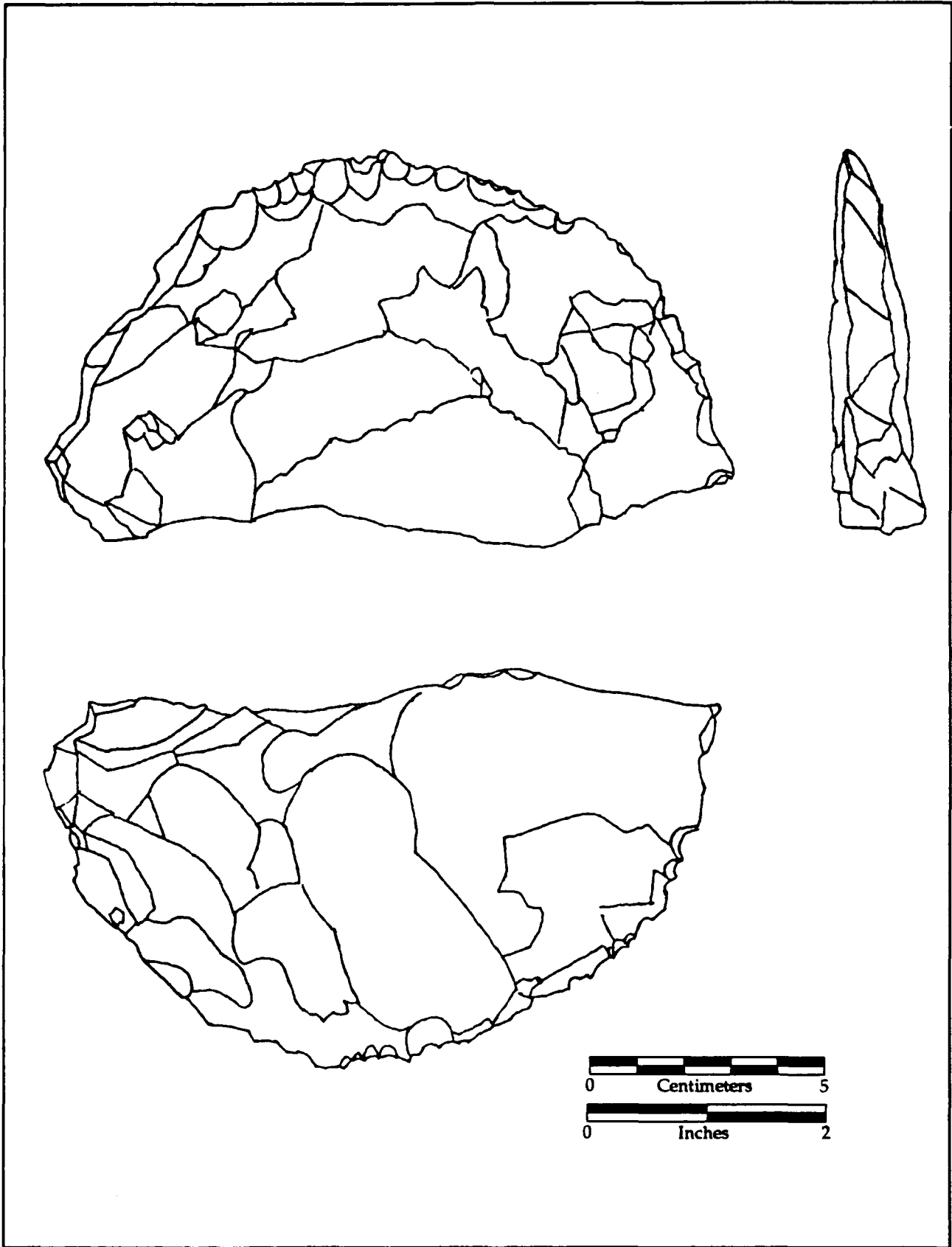


Figure 7. Hoe Fragment from Unit 43.

TEST UNIT 2

Test unit 2 was excavated as a 1 x 1 m unit following the completion of the 25 percent controlled surface collection on April 1, 1991. Using the results of the first 56 controlled surface collection units, this unit was placed in the highest area of lithic and ceramic concentration (see Figures 1 and 5). Test unit 2, like unit 1, contained artifacts only in the upper 20 cm of the plow zone. The northwest corner of test unit 2 was employed as a datum, with an arbitrary elevation of 98.23 m tied into the site topographic map.

The artifacts recovered from test unit 2 are presented in Table 5. The recovery from test unit 2 was sparse, with a total of only 23 artifacts. No features were found. Prehistoric artifacts were dominated by ceramics (n=13, or 81.3 percent), with three broken flakes representing the only lithics recovered. Although the sample is small, the dominance of *var. Mitchell* over *var. Baytown* may be significant. The broken and polished Mill Creek chert flake from level 1 is a resharpening flake from a hoe. A few historic artifacts were recovered (n=7) as well, although the amounts are greatly diminished compared to test unit 1 (n=94).

Figure 8 illustrates the north profile of test unit 2. Zone I, the plow zone, consisted of recently disced, very loose dark brown (10YR 3/3) sandy loam with artifacts and charcoal particles from 0 to 20 cm below the datum. Zone II was composed of dark brown (10YR 3/3) friable sandy clay loam mottled with very dark gray (10YR 3/1) sandy clay. Zone II was between 5 and 10 cm thick and extended from the base of the plow zone to 25 to 30 cm below datum. Zone III was composed of very dark gray (10YR 3/1) blocky sandy clay which extended from the base of Zone II to an uneven, irregular boundary with Zone IV at 45 cm below datum. Zone IV, which extended from 45 to 60 cm below datum was composed of compact dark brown (10YR 4/3) and very dark grayish brown (10YR 3/2) silty clay. This profile does not completely conform to the description of Bosket fine sandy loam presented earlier in this report, but shows characteristics of both the Bosket and Dubbs series, which are often intermingled (Gray and Catlett 1966).

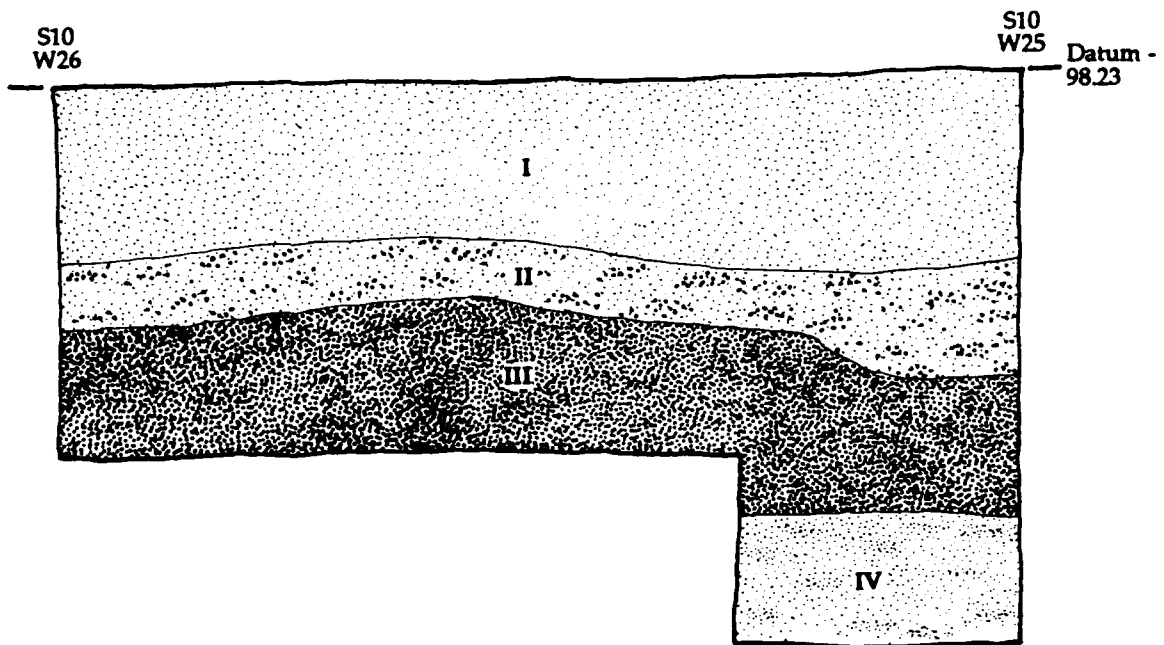
DISCUSSION OF PREHISTORIC COMPONENT

Combining the results of the four collections, the prehistoric component is represented by 199 artifacts. Ceramics comprise most of the assemblage (n=115, or 57.8 percent). Clay tempered sherds with small amounts of shell added (Mississippi Plain *var. Mitchell*) are the most numerous type (n=60, or 52.2 percent). Baytown Plain *var. Baytown* accounts for 40.0 percent (n=46) of the ceramics. Unidentified

Table 5. Summary of Items Recovered from Test Unit 2.

<u>Artifact Category</u>	<u>Provenience</u>		<u>TOTAL</u>
	<u>Level 1</u>	<u>Level 2</u>	
PREHISTORIC ARTIFACTS			
CERAMICS			
Baytown Plain <i>var. Baytown</i>	1	2	3
Miss. Plain <i>var. Mitchell</i>	1	7	8
Unidentified	0	2	2
LITHICS			
Broken Flake	1	2	3
Subtotal	3	13	16
HISTORIC ARTIFACTS			
KITCHEN GROUP			
Clear Bottle Glass	2	0	2
ARCHITECTURE GROUP			
Brick Category 1	0	2	2
Brick Category 2	0	1	1
OTHER			
Coal	0	1	1
Unidentified Metal	0	1	1
Subtotal	2	5	7
TOTAL	5	18	23

sherds, which were too small or eroded to be confidently sorted, amount to 7.8 percent (n=9) of the sample. The six rim sherds suggest the use of small, simple, plain vessels at the site, possibly jars or bowls. The rims recovered at 3SF332 seem to be quite comparable to those described for both Baytown Plain *var. Baytown* and Mississippi Plain *var. Mitchell* at the Chucalissa site in nearby Shelby County, Tennessee (Lumb and McNutt 1988:13 and 21). It would be interesting to know if any of the ceramic collections recovered from other nearby "Baytown" sites contained any Mississippi Plain *var. Mitchell* sherds. Given the number of surface scatters classified as Baytown along Cutoff Bayou (see Table 1), 3SF332 falls into a pattern of dispersed farmsteads around two sites with multiple mounds, Thompson Lake and Davis Place, in the late Baytown or early Mississippian period. Stratigraphic evidence and a single radiocarbon assay from Chucalissa suggest that



- I Plowzone - 10YR3/3 dark brown very loose sandy loam with artifacts, charcoal particles
- II 10YR3/3 dark brown friable sandy loam mottled with 10YR3/1 very dark gray sandy clay
- III 10YR3/1 very dark gray blocky sandy clay
- IV 10YR4/3 dark brown and 10YR3/2 very dark grayish brown compact silty clay

Figure 8. North Profile of Test Unit 2.

the type of ceramic complex found at 3SF332 dates prior to the mid fourteenth century, possibly within the interval A.D. 900-1300 (Lumb and McNutt 1988:119).

Lithic materials account for 40.2 percent (n=80) of the site collections and daub accounts for a small fraction of the total (n=4, or 2.0 percent). Nearly all of the lithic material indicates the reduction of small, locally available tan Pliocene gravels. The nearest source is unknown, but this material is known to erode from beneath the loess cap on the eastern side of the Mississippi and occurs in the vicinity of Crowley's Ridge. Both random freehand percussion and bipolar smashing of small pieces is indicated.

Some of the stone appears to have been heat treated. The presence of two large hoe fragments (25 percent CSC, units 39 and 43) and one broken hoe flake of polished Mill Creek chert (unit 2, level 1) indicate interregional exchange with the southern Illinois area. The manufacture and widespread exchange of large hoe forms seems to explode in the Emergent Mississippian period (ca. A.D. 800-1000) (Cobb 1989:84).

The only evidence for any prehistoric architecture at 3SF332 is the presence of trace amounts of daub in the samples. No features were located in either of the two test units. However, the presence of sub-plow zone features remains to be sufficiently investigated at 3SF332. Excavation of only two 1 x 1 m units is unlikely to detect features on a site approximately 8,100 square meters in area.

The test pits did reveal that the site is essentially a plow zone deposit. Unit 1 produced only one prehistoric artifact, while unit 2 produced 16, suggesting that the prehistoric occupation of the site was concentrated close to the sandy rise.

DISCUSSION OF HISTORIC COMPONENT

The historic component of 3SF332 strongly resembles that of other tenant period sites recently investigated by Garrow & Associates, Inc., in Crittenden County, Arkansas (Buchner and Weaver 1990; Childress 1990; Weaver 1991). It is clear from the analysis of comparison of 3CT263, 3CT267, 3CT268, 3CT269, 3CT270, and 3CT271, that kitchen group artifacts make up the bulk of the material remaining at these sites, ranging between about between 80 and 100 percent (Table 6). Excluding brick counts, architectural artifacts have surprisingly low frequencies (less than 10 percent). Weaver (1991:35) noted that this lack of nails, window glass, and other architectural hardware is noticeably different from historical house sites occupied by middle class farm families over the same time period.

Table 6. Comparative Historic Artifact Frequencies.

<u>Artifact Group</u>	<u>Site</u>						
	<u>3SF332*</u>	<u>3CT271</u>	<u>3CT263</u>	<u>3CT267</u>	<u>3CT268</u>	<u>3CT269</u>	<u>3CT270</u>
KITCHEN	81.7	95.7	100.0	99.4	92.3	91.6	94.8
Ceramics	9.0	17.4	31.5	8.2	6.2	21.7	5.2
Glass	53.7	74.0	58.0	91.2	86.2	69.9	89.6
Other	18.5	4.3	10.5	0	0	0	0
ARCHITECTURE	7.0	1.6	0	0	1.5	6.0	4.1
ARMS	1.2	0.4	0	0.2	0	1.2	0
CLOTHING	0.4	0	0	0.5	0.8	0	0
PERSONAL	1.6	0	0	0	0	0.6	0
ACTIVITIES	7.8	2.3	0	0	5.4	0.6	1.0
FURNITURE	0	0	0	0	0	0	0
TOBACCO	0	0	0	0	0	0	0
ARTIFACT TOTALS	242	258	19	613	130	166	193

* For comparative purposes, only the 3SF332 totals from the 50 percent general surface collection are included in these figures.

It was suggested by both Childress (1990:34-35) and Weaver (1991:35) that the artifact profiles of these sites would be consistent with short-term occupation of tenant or subsistence farmers. The lack of architectural artifacts at these sites suggests that structures, usually constructed of frame lumber, were dismantled and moved or salvaged by the occupants. Site 3CT263, which contained 100 percent kitchen related items, was hypothesized to be a dump (Buchner and Weaver 1990). However, at 3SF332 it is known that the structure was moved some 2,000 feet to another location, along an all weather blacktop road, to facilitate picking up laborers from a central location. Thus the characteristics of the 3SF332 historic assemblage provide a control case for the study of archaeological attributes of tenant period sites from which the structures have been physically removed. Essentially, the problem with the underrepresentation of architectural materials at tenant period sites is centered on understanding the site formation process.

Examination of Table 6 reveals that 3SF332 has the lowest percentage of kitchen group artifacts of the seven sites studied. The activities and architecture groups have expanded their percents at the expense of the kitchen group. The high value for kitchen subgroup "other" is the result of placing the thin plastic container fragments in this subgroup. In general, the 3SF332 data show higher percentages of all categories other than kitchen related items. Tobacco and furniture group materials have yet to be recovered from any of the seven tenant period sites investigated. Although the lack of furniture related items can perhaps be explained in terms of economic status, the lack of tobacco related items at any of the sites is enigmatic.

The ceramics, bottle glass, and nails all indicate that 3SF332 was occupied from the end of the nineteenth century to recent times. 3SF332 was part of the tenant settlement pattern, with another tenant structure located approximately 100 m to the north. The initial occupation of 3SF332 correlates with the beginning of large-scale clearing and draining of Arkansas's Eastern Lowlands. Because 3SF332 was located on Cutoff Bayou, transportation by boat was probably used during this initial occupation of the site. Democrat, where the post office was located, and Greasy Corner could both have been easily reached via Cutoff Bayou. A railroad line is located approximately one mile from the site and was placed in 1913. The site appears to have been in use until the structure (see Figure 3) was moved to Highway 50. The movement of the structure is indicative of new social patterns of farm consolidation and labor relations in an era of mechanized and chemical agricultural production.

VI. CONCLUSIONS AND RECOMMENDATIONS

A literature and records search, data recovery, and artifact analysis were conducted for site 3SF332 on Cutoff Bayou in St. Francis County, Arkansas. The results of the study have been presented in the preceding chapter. Interpretations of the site based on the assemblage content have been offered. The site was determined to have both Early Mississippian and historic tenant period components.

The literature and records search indicated that two Baytown mound centers and a number of Baytown surface scatters are located within 3 km of 3SF332. Several historic period scatters have been recorded in this radius as well. Interviews with local residents indicate that a frame tenant structure which stood at 3SF332 from ca. 1900 to ca. 1980, was moved 2,000 feet to the southwest and is still in use.

Data recovery at 3SF332 consisted of the excavation of two 1 x 1 m test units, a 50 percent general surface collection, and a 25 percent controlled surface collection for prehistoric artifacts only. The subsurface testing at 3SF332 revealed artifact concentrations similar to the surface scatters that were restricted to the upper 20 cm of the plow zone deposit. No apparent features were recorded. The 50 percent surface collection resulted in the recovery of 330 historic artifacts and 34 prehistoric artifacts. The 25 percent controlled surface collection resulted in the recovery of 151 additional prehistoric artifacts.

Analysis of this material indicates that 3SF332 was initially occupied during the Early (or "Emergent") Mississippian period, and the site likely represents one of several dispersed homesteads around mound centers. The ceramics and hoe fragments suggest a single component or one short-term farmstead occupation. Analysis of the historic materials suggests that 3SF332 was reoccupied no earlier than the last quarter of the nineteenth century, during large-scale clearing and draining of the Eastern Lowlands. The site was then apparently continuously occupied until the structure was removed from the site ca. 1980. The historic assemblage was compared to similar assemblages from Crittenden County and served to confirm a pattern of the archaeological characteristics of tenant period sites. This pattern is one dominated by kitchen group artifacts, especially bottle glass. The movement and/or salvage of tenant structures by low income residents is a site formation process which affects the architectural group artifact counts and interpretations of site function. The fact that 3SF332 is known to have had a structure removed provides a control case of the archaeological attributes of some tenant period sites previously suggested by Childress (1990) and Weaver (1991) to have had their structures removed.

Recommendations for 3SF332 center on the fact that only 2 square meters of the 8,100 square meter site area (0.024 percent) were subjected to subsurface testing. From the prehistoric artifact density plot (see Figure 5) it is apparent that several surface clusters of artifacts exist and that some lateral variation has been retained despite repeated plowing. Only one of these concentrations was tested (see test unit 2 results). There remains a distinct possibility that subsurface features from either an Early Mississippian structure or historic outbuildings could be present. Without some form of plow zone stripping to locate sub-plow zone features, a determination of significance for 3SF332 cannot be made. We recommend that prior to any modification of the site area, a program of plow zone stripping be conducted. Two strips located parallel to the natural levee and in the concentrated areas indicated by the artifact density plot would be sufficient to allow for a determination of significance.

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APPENDICES

**APPENDIX 1:
COMPLETED ARKANSAS SITE FORM
AND SITE LOCATION MAP**

ARKANSAS ARCHEOLOGICAL SURVEY

SITE SURVEY FORM Supplement

Date S. S. No. Assigned: _____

State Site No. 3SF332

Date S. S. No. Reassigned: _____

Project/Reporter's Site No. FTB3

Site Name(s) No site name assigned during this project.

County St. Francis

Site Visited By (name/address) C.A. Buchner, Garrow & Associates, Inc., 510 S. Main,
 TN 38103 Date 3/15/91

Info Provided By (name/address) C.A. Buchner, Garrow & Associates, Inc.

Form Filled Out By M.R. Childress, Garrow & Assoc., Inc. Date 4/16/91

Project Name FTB3 Archaeological Testing Project No. DACW-66-91M-0598

(optional for recording in field)

1/4 Sections			Sec	Twncshp	Range
NW	NW	SE	36	5N	6E

UTM Zone	Easting	Northing
15	736300	3876950

Instructions for Reaching Site (optional) Drive 2 miles east of Greasy Corner on State Route
50

USGS Quad (name, date, series) Chatfield, 1981, 7.5" (Provisional)

Owner (name/address) U.S. Army Corps of Engineers, Memphis, Tennessee (access rig

Tenant (name/address) _____

Prehistoric
 Contact Historic
 Historic
 Unknown

Single Artifact
 Artifact Scatter
 ≤ 100 Sq M
 > 100 Sq M
 Midden

Bluff Shelter
 Rock Art
 Lithic Quarry/Extraction
 Artifacts Exposed Only in Shovel Test/Test Excavation
 Artifacts Exposed Only in Highly Restricted Eroded Area

Structure
 Archival

Mound/Mound Group
 Other Surface-plowzone

Cultural Affiliation(s) Early Mississippian (A.D. 900-1300), 20th Cent. Hist.

Archeological Phase Assignment(s)

LOCATION OF SITE

DESCRIPTION OF SITE

DESCRIPTION OF SITE

Site Description Narrative (Field Observations) The site is a surface artifact scatter
located on a sandy, silty ridge in a plowed field adjacent to and overlooking
Cutoff Bayou. At the time of survey, the site had been recently plowed and
rained on, offering excellent surface visibility. Concentrations of prehistoric
material and more general scatter of historic.

Specific Topographic Setting Northwest of Cutoff Bayou channel along
northeast-southwest trending natural levee between 200' and 205' AMSL.

Soil Characteristics (Optional) Dubbs-Dundee-Deulah association (fine sandy loam on
natural levees).

Water Sources (types and distances) (optional) The main channel of Cutoff Bayou is
located 100 m southeast of site.

Other Environmental/Physiographic Factors (optional) _____

AAS SITE SURVEY FORM

State Site No. 3SF332

Project/Reporter's Site No. FTB3

Supplement

Site Features

NONSTRUCTURAL FEATURES

P/CH H

<input type="checkbox"/>	Midden.....	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Shell Midden.....	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Burials.....	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Visible Stratigraphy.....	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Other Subsurface Features	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Pictograph.....	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Petroglyph.....	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Other Surface Features	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>

HISTORIC STRUCTURES

Primary 0 (#)

Standing-Abandoned 0 (#) Standing-In Use 0

Fallen (in ruins and abandoned) 0 (#)

House moved from site location.

Service 0 (#)

Standing-Abandoned 0 (#) Standing-In Use 0

Fallen (in ruins and abandoned) 0 (#)

DESCRIPTION OF SITE

UNKNOWN EARTHEN STRUCTURES

PREHISTORIC/CONTACT HISTORIC STRUCTURES

Mounds _____ (#)

Truncated _____ (#)

Conical _____ (#)

Other _____ (#)

Other Earthworks

Other P/CH Structural Features

N/A _____

N/A _____

Chimney

Well

Other Historic Structural Features

N/A _____

N/A _____

No Extant Structure

Archival Evidence _____

Vegetative Evidence 1 _____

Other 1 _____

Historic Site Function

Domestic _____ Cemeterial _____

Commercial _____ Religious _____

Manufacturing

Craft _____

Industrial _____

Military _____

Transportation and Communication _____

Other _____

Nature of Deposit Surface-plowzone scatter in sandy loam; possible features, but none found during subsurface testing.

Depth 25 cm

Site Dimensions 8100

Total Sq M: 90 Meters X 90 Meters

Complete Incomplete Unknown

How Determined Controlled surface

Site Configuration _____

AAS SITE SURVEY FORM

CONDITION OF SITE

Site Disturbances

- Natural Causes
- Scientific Excavation
- Nonscientific Excavation
- Extensively Surface Copedected
- Construction
- Road/Highway
- Drainage Improvement/Channelization
- Agriculture
- Clear Cut
- Land Levelled/Graded
- Periodically Inundated
- Indefinitely Inundated
- Buried Site
- Redeposited Site
- Unknown
- Other _____

Vegetative Cover

- Cultivated
- Plowed
- Harvested
- Pasture
- Lawn
- Woods _____
- Swamp
- Orchard _____
- No Vegetation
- Other _____
- Unknown

Degree of Site Destruction

- Relatively Undistrbed
- Minor
- Moderate
- Major
- Totally Destroyed
- Unknown

Est. of Ground Visibility

- Poor (0-25%)
- Fair (26-50%)
- Good(51-75%)
- Excellent(76-100%)

Factors Affecting Artifact Visibility

Freshly plowed and rained on.

Project Strategy

- Transect
- Other Controlled Unit _____
- Other _____

On-Site Subsurface Investigations

- Shovel Test
- Test Excavation
- Test Exc for Eligibility
- Extensive Excavation
- Auger Test
- Coring
- Metal Detector
- None
- Other _____

Sample Unit Designation: _____
(for regional surveys)

Site Material Observations

- | | | |
|--|-------------------------------------|-------------------------------------|
| | P/CH | H |
| <input checked="" type="checkbox"/> Lithics | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> Ceramics | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> Metal | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <input type="checkbox"/> Human Skeletal Remains | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Shell | <input type="checkbox"/> | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> Faunal Remains | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <input type="checkbox"/> Floral Remains | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> Other Perishables | <input type="checkbox"/> | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> Building Materials | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> Glass | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> Other Materials | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Additional Artifact Descriptions

Two large Mill Creek chert hoe fragments
and a polished Mill Creek flake found;
trace amount of daub, one with cane
impression.

ARTIFACTS OBSERVED OR COLLECTED

Collection Method..... No Collection Made

- SURFACE
- Select
- Controlled
- General (100%)

- SUBSURFACE
- Select
- Controlled
- General (100%)

COMMENTS (e.g. method, criteria, field collection time) 50% GSC executed in every other plow furrow for historic; 25% CSC using 5m squares for prehistorics. Two 1 x 1 m test units, soil screened through 0.25" mesh.

Material Concentraton(s) See artifact density/distribution maps in project report.

AAS SITE SURVEY FORM

State Site No. 3SF332

Supplement

Project/Reporter's Site No. FTB3

Artifacts Retained by NonSurvey Personnel None known, although the site area has in all probability seen prior collection by amateurs.

Previous Collections/Subsurface Investigations Reportedly part of previous investigation by T. Klinger for U.S. Army COE, but apparently no forms or report were ever submitted.

Recommendations Site requires additional testing before National Register Status can be adequately determined. Shallow plowzone stripping should be conducted prior to planned landscape modification to check for sub-plowzone features.

Potential National Register Status

Not Eligible Eligible Undetermined

For Office Use Only

Nominated Date _____ Accepted Date _____
 Not Accepted

Type of Nomination (give name) and comments _____

RECOMMENDATIONS

Informant

Recorded Interview Notes taken on historic house; information in report.

Survey Personnel Visit Nonvisit

For the remaining Site Information Sources, record all sources checked for site information. Check the box only if positive results. If more than one source, indicate which ones were positive, which negative.

GLO Date _____
 Archival Maps

INFORMATION SOURCES

AAS SITE SURVEY FORM

State Site No. 3SF332

SITE INFORMATION SOURCES

Other Maps USDA SCS maps. USGS quads examined for evidence of historic structures.

Other Archival Sources Records at St. Francis Co. library (general info. on site area)

Published References

Limited Distribution Reports

Other Information Sources Records search performed with AAS prior to the present project indicated no sites were recorded at this location.

RECORDS GENERATED

Burial/Skeleton Records

Field Notes

Excavation Level Forms

Catalog Cards/Forms

Feature Forms

Artifact Analysis Forms

Oversize Site Maps

Profile Drawings

Field Specimen Inventory Forms

Other

Specialized Analysis Forms/Reports (specify) _____

Other Supplemental Data (specify) _____

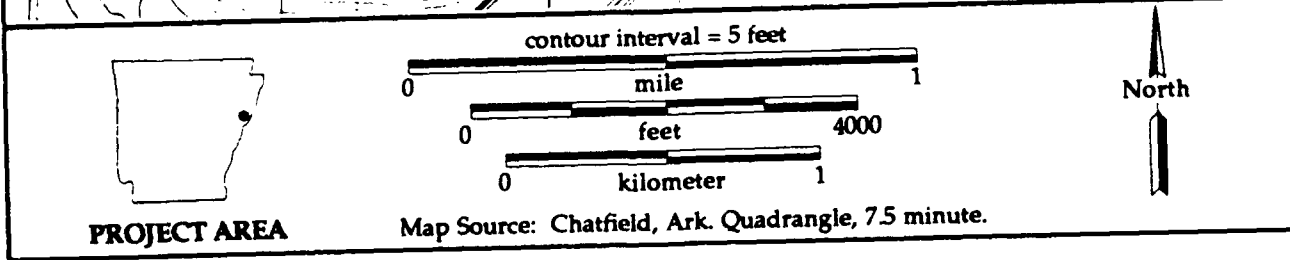
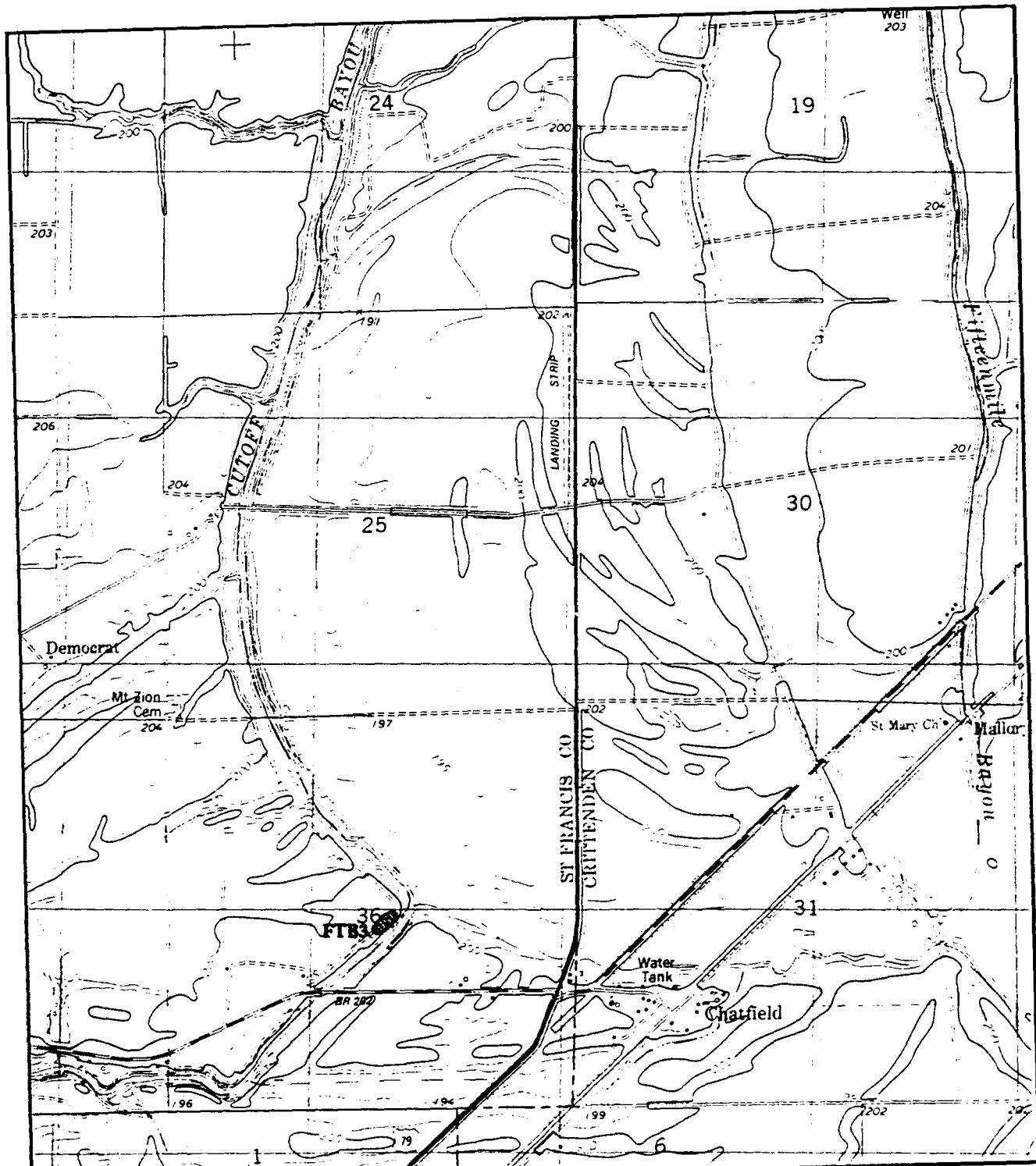
B/W Negative Numbers (contact prints) FTB3 - Roll #1; Nos. 1-24

B/W Prints: Nos. Included See Figs. 4 and 7 in report.

Slide Numbers _____

Other Photos/Slides from NonSurvey Personnel (type, source, numbers) Negatives and black and white photographs curated with project records.

Accumulated Accession Numbers _____



PROJECT AREA

Site Location Map.

APPENDIX 2: SCOPES OF WORK

SCOPE OF WORK

Testing and Evaluation of Site FTB3 in St. Francis County, Arkansas

1. The Contractor shall undertake a general surface artifact collection of fifty (50) percent of the surface of Site FTB3 in St. Francis County, Arkansas. The collection shall be made in such a fashion as to allow for future controlled surface collections representative of site content without plowing. Site boundaries will be delineated.
2. The Contractor shall undertake a Background/Literature Search relative to Site FTB3.
3. The Contractor shall excavate a 1 x 1 meter test unit of Site FTB3 to examine site subsurface content.
4. The Contractor shall perform analysis of data gathered relevant to Site FTB3 in order to evaluate the significance of the site.
5. The Contractor shall prepare a draft and ten (10) final copies of a report (in response to District comments) describing all activities required in this contract. The report will document the insignificance or significance of Site FTB3 and will be consistent with Arkansas State Standards.
6. The Memphis District will supply the Contractor with blue-line drawings and maps of the Site FTB3 area.
7. The Contractor will furnish all supplies and equipment necessary to complete contract requirements.

SCOPE OF WORK

Testing and Evaluation of the Prehistoric Component of Site FTB3 in St. Francis County, Arkansas

1. The Contractor shall undertake a controlled surface collection of the prehistoric component of Site FTB3 in St. Francis County, Arkansas.
2. The Contractor shall undertake a Background/Literature Search relative to Site FTB3.
3. The Contractor shall excavate a 1 x 1 meter test unit within the prehistoric area of Site FTB3 in order to examine site subsurface content.
4. The Contractor shall perform analysis of data gathered at Site FTB3 in order to evaluate the significance of the site.
5. The Contractor shall incorporate descriptions of activities undertaken in this purchase order with a report of activities at FTB3 previously prepared by the Contractor pursuant to purchase order DACW66-91-M-0598.
6. The Memphis District will supply the Contractor with blue-line drawings and maps of the Site FTB3 area.
7. The Contractor will furnish all supplies and equipment necessary to complete contract requirements.

APPENDIX 3: RESUMES OF KEY PROJECT PERSONNEL

**C. Andrew Buchner
Garrow & Associates, Inc.**

Education

B.A., Anthropology, Westminster College - 1984

M.A., Anthropology, Memphis State University - 1989

Areas of Specialization

Prehistoric Archaeology of Southeastern United States, Mississippi Period
Ceramics in the Central Mississippi Valley, West Tennessee Historical
Archaeology, and Cultural Resource Management

Professional Memberships

1987 Present Southeastern Archaeological Conference (Member)

1987 Present Arkansas Archaeological Society, Memphis Chapter (ex-VP)

1988 Present Southern Anthropological Society (Member)

1990 Present Alabama Archaeological Society (Member)

Professional Experience

1989-Present Archaeologist II, Garrow and Associates, Inc.

1989-1987 Field Director, Teaching Assistant, and Technician, Memphis
State University, Department of Anthropology

1983 Field School, Westminster College, Fulton, Missouri

Field Experience

Participation in over 20 anthropological and archaeological field projects in
Alabama, Arkansas, Florida, Georgia, Mississippi, Missouri, Tennessee, Puerto
Rico and the U.S. Virgin Islands; including sites from the PaleoIndian, Archaic,
Woodland, Mississippian, Protohistoric, and Historic Periods.

Publications and Reports

- 1988 Preliminary Archaeological Investigations of the West Mounds (22Tu520), Tunica County Mississippi. *Mississippi Archaeology* 23(2):64-75. Junior author with David H. Dye., Memphis State University.
- 1989 *A Phase I Reconnaissance Survey of the Proposed Forced-Main Sewer Line from the Bluff Road to the Mississippi River, Tipton County, Tennessee.* A Report submitted to the City of Munford, Tennessee. Co-author with Charles H. McNutt, Sr., Memphis State University.
- 1990a *A Cultural Resources Reconnaissance Survey of the Proposed East Tennessee Natural Gas Pipeline Loop and Lateral Expansions in Trousdale, Putnam, Blount, and Greene Counties, Tennessee.* Report submitted to East Tennessee Natural Gas Co. by Garrow & Associates, Inc.
- 1990b *A Cultural Resources Intensive Survey of the Ensley Berm Construction Project, Memphis, Tennessee.* Report prepared for the U. S. Army Corps of Engineers by Garrow & Associates, Inc. Co-author with Guy G. Weaver.
- 1990c *A Cultural Resources Reconnaissance of the Proposed Azalea Ridge Recycling and Waste Management Facility ,Sections 5, 8, and 9, Mobile County, Alabama.* Report prepared for Waste Management, Inc. by Garrow & Associates, Inc. Co-author with William Turner.
- 1990d *Archaeological Testing at Site 3Ct263 within the Proposed Edmondson Wastewater Pond, Crittenden County, Arkansas.* Report prepared for the U.S. Army Corps of Engineers, Memphis District, by Garrow & Associates, Inc. and Cultural Resources Investigations, Inc., Memphis. Co-author with Guy G. Weaver.
- 1990e *A Literature Search and Sample Cultural Resources Survey of the Brady Ranch Tract, Okeechobee County, Florida.* Report submitted to Chambers Development Co. by Garrow & Associates, Inc.

- 1990f *A Cultural Resources Reconnaissance of the Proposed Rio Anton Ruiz Flood Control Project at Punta Santiago, Humacao, Puerto Rico.* Report submitted to the U. S. Army Corps of Engineers, Jacksonville District, by Garrow & Associates, Inc. Co-author with Mitchell R. Childress.
- 1990g *A Cultural Resources Intensive Survey of Proposed Levees and Boat Access Ditches at the Big Creek Duck Club, Monroe County, Arkansas.* Report prepared for the U. S. Army Corps of Engineers, Memphis District, by Garrow & Associates, Inc.
- 1990h *A Cultural Resources Survey of 10.23 Acres of Proposed Nashville Airport Runway 2C Expansion, Davidson County, Tennessee.* Report submitted to Aviation Planning Associates, Inc., by Garrow & Associates, Inc.
- 1990i *A Cultural Resources Reconnaissance and Literature and Records Search for the Proposed Expansion of the Talladega County Landfill, Alabama.* Report prepared for Waste Away Group Group, Inc., Montgomery by Garrow & Associates, Inc.
- 1990j *A Cultural Resources Reconnaissance and Literature and Records Search for the Proposed Pike County Landfill, Alabama.* Report prepared for Waste Away group Group, Inc., Montgomery by Garrow & Associates, Inc. Co-author with Steve C. Cole and Mitchell R. Childress.
- 1990k *A Cultural Resources Survey of the High Head Branch Watershed, Burke County, Georgia.* Report prepared for the Georgia Department of Natural Resources by Garrow & Associates, Inc., Atlanta.
- 1990l *A Cultural Resources Survey of the Proposed 278 Acre Park bridge Development Tract, Fulton County, Georgia.* Report prepared for AMLI of Georgia, Inc. by Garrow & Associates, Inc., Atlanta.

Professional Papers Presented

- 1988 "Preliminary Archaeological Investigations of the West Mounds (22Tu520), A late Mississippian/Protohistoric Site located in Tunica County, Mississippi." Southeastern Archaeological Conference, 50th Annual Meeting, New Orleans.
- 1989 "Ceramic Analysis at the West Mounds (22Tu520), Tunica County, Mississippi." Southern Anthropological Society, 24th Annual Meeting, Memphis.
- 1990 "Mound A Excavations at the West Mounds (22Tu520), Tunica County, Mississippi". Eleventh annual Mid-South Archaeological Conference, Pinson State Archaeological Park, Tennessee.

Mitchell R. Childress
Garrow & Associates, Inc.

Education

- 1982 - B.A., Anthropology/Sociology, Rhodes College, Memphis, Tennessee (cum laude).
- 1983 - Graduate Studies, Anthropology, Washington State University, Pullman, Washington.
- 1989 - M.A., Anthropology, Memphis State University, Memphis, Tennessee.

Areas of Specialization

Ceramic and Lithic Analysis, Ethnoarchaeology, Prehistoric Archaeology of the Southeastern United States, Cultural Resource Management.

Professional Service, Memberships and Offices

- 1987 - Present: Member of the Arkansas Archaeological Society.
- 1987 - 1989: Vice President, Bluff City Chapter of the Arkansas Archaeological Society.
- 1990 - Present: Associate, Current Anthropology.
- 1987 - Present: Member of the Mid-South Association of Professional Anthropologists.
- 1987 - Present: Member of the Society for American Archaeology.
- 1987 - Present: Member of the Southeastern Archaeological Conference.
- 1987 - Present: Member of the Tennessee Anthropological Association.
- 1991 - Member, Planning Committee for 1992 Annual Meeting of the Society for Applied Anthropology.

Professional Experience

- 6/90 Currently employed by Garrow & Associates, Inc. serving as Branch Manager for the Memphis, Tennessee office and holding an Archaeologist II position. Project work has included serving as Principal Investigator or Field Director on archaeological survey and testing jobs in the southeastern U.S. and within the island of Puerto Rico. Adjunct Faculty, Department of Anthropology, Memphis State University.

- 9/87-5/90 Employed by Memphis State University as Curator of Education for C.H. Nash Museum, Department of Anthropology. I also held an

Adjunct Faculty Position in the Department and taught introductory courses in Archaeology.

- 6/87-9/87 Excavation at Late Mississippian site of Chucalissa (40SY1), Shelby County, Tennessee.
- 2/84-6/87 Employed as instructor of mathematics and science at Grace St. Luke's Episcopal School, 246 South Belvedere, Memphis, Tennessee.
- 6/86-9/86 Excavation at Late Mississippian site of Chucalissa (40SY1). Assisted in supervision of field school students enrolled in course administered through Memphis State University.
- 6/85-9/85 Excavation at Chucalissa (40SY1).
- 6/84-9/84 Excavation at Chucalissa (40SY1). Laboratory work at C.H. Nash Museum. Testing of suspected mound site near Reelfoot Lake, Obion County, Tennessee. Archaeological surface survey of areas in Tipton County, Tennessee.
- 2/84 Archaeological survey and limited testing of land for the proposed Bartlett Corporate Park, Shelby County, Tennessee. Work performed through Anthropological Research Center, Memphis State University.
- 10/83-12/83 Site survey work, testing and report writing concerning archaeological materials from Swan Bay (40HY66), Henry County, Tennessee.
- 1/83 Archaeological survey and testing, New Madrid, Missouri. United States Army Corps of Engineers, Memphis District.
- 1/82-3/82 Laboratory work at Memphis State University Anthropological Research Center. Involved in analysis of cultural materials collected during site survey work for the Tennessee Valley Authority at Little Bear Creek Reservoir, Franklin County, Alabama.
- 10/81-12/81 Site survey work at Little Bear Creek Reservoir Management Project, Tennessee Valley Authority, Franklin County, Alabama. Field technician.
- 6/80-9/80 Employed by Tennessee Department of Conservation, Division of Archaeology as a field technician at Fort San Fernando Historic Research Project, Memphis.

Additional Experience and Volunteer Work

- 1981 Four week intensive survey of archaeology and geology of the four corners area, Southwestern United States (Rhodes College).
- 1981 Assisted in limited testing at the DeSoto Park Mound site in downtown Memphis.
- 1983 Survey of lithic procurement sites in eastern Oregon and Washington (Washington State University).
- 1984 Assisted in the excavation of an historic well at the Gerber Annex/Falls Building site (40SY480) in downtown Memphis.
- 1984 Assisted in excavations at the historic Magevney House site in downtown Memphis.

Publications

- 1988 News from the Bluff City Chapter. *Field Notes, Newsletter of the Arkansas Archaeological Society* 223:4.
- 1990a Flaked Rhyolite Tools from Reynolds County, Missouri. *Missouri Archaeological Society Quarterly* 7(4) [in press].
- 1990b Mortuary Vessels and Comparative Ceramic Analysis: An Example from the Chucalissa Site. Manuscript on file, C.H. Nash Museum, Department of Anthropology, Memphis State University. [Submitted and recommended for publication in *Southeastern Archaeology* pending revisions].

Presented Papers

- 1989 An Assemblage of Vessels from the Chucalissa Site, Shelby County, Tennessee. Paper presented at the 46th Annual Meeting of the Southeastern Archaeological Conference, Tampa, Florida.
- 1990a A History of Excavations at Chucalissa. Presentation made at Cahokia Mounds Interpretive Center, Winter Lecture Series, Collinsville, Illinois.
- 1990b Unit 4 Mound Excavations at the Chucalissa Site, 1960-1967. Paper presented at the 11th Annual Meeting of the Mid-South Archaeological Conference, Pinson, Tennessee. (Senior author, with Camille Wharey)
- 1991 Phase II Testing in Putnam County. Presentation made at the Annual Meeting on Current Research in Tennessee Archaeology, Vanderbilt University, Nashville, Tennessee. (Senior author, with C. Andrew Buchner)

Cultural Resources Management Reports

- 1983 *Archaeological Investigations at the Swan Bay Site (40HY66), Henry County, Tennessee.* Anthropological Research Center, Department of Anthropology, Memphis State University. Submitted to the Tennessee Valley Authority, Norris, Tennessee. (Junior author, with Guy G. Weaver)
- 1984 *An Archaeological Reconnaissance for the Proposed Bartlett Corporate Park, Bartlett, Shelby County, Tennessee.* Anthropological Research Center, Department of Anthropology, Memphis State University. Submitted to the City of Bartlett. (Junior author, with Guy G. Weaver)
- 1990a *An Archaeological Survey of the Council Fire Development Tract, Hamilton County, Tennessee and Catoosa County, Georgia.* Garrow & Associates, Inc., Atlanta. Report submitted to Leonard Kinsey and Associates, Ltd., Chattanooga, Tennessee. (Senior author, with Patrick H. Garrow)
- 1990b *A Cultural Resource Reconnaissance Within the Proposed Flood Control Project Area on Río Grande de Manatí at Barceloneta, Puerto Rico.* Garrow & Associates, Inc., Atlanta. Report submitted to the U.S. Army Corps of Engineers, Jacksonville District, Jacksonville, Florida.
- 1990c *A Cultural Resources Reconnaissance of the Proposed Río Antón Ruíz Flood Control Project at Punta Santiago, Humacao, Puerto Rico.* Garrow & Associates, Inc., Memphis. Draft Report submitted to the U.S. Army Corps of Engineers, Jacksonville District, Jacksonville, Florida. (Junior author, with C. Andrew Buchner)
- 1990d *A Cultural Resource Reconnaissance for the Proposed Gaines Ferry Substation and Transmission Line Corridor, Hall County, Georgia.* Garrow & Associates, Inc., Atlanta. Report submitted to Oglethorpe Power Corporation, Tucker, Georgia.
- 1990e *A Cultural Resources Reconnaissance and Literature and Records Search for the Proposed Pike County Landfill, Alabama.* Garrow & Associates, Inc., Memphis. Report submitted to Waste Away Group, Inc., Montgomery, Alabama. (Third author, with S. C. Cole and C. A. Buchner)
- 1990f *Analysis and Interpretation of Artifact Collections from Four Archaeological Sites within the Country Club Gardens Permit Area, Crittenden County, Arkansas.* Garrow & Associates, Inc., Memphis. Report submitted to the U.S. Army Corps of Engineers, Memphis District, Memphis, Tennessee.

1991 *Prehistoric Occupations on Upper Spring Creek: Phase II Archaeological Testing at 40PM85 and 40PM89, Putnam County, Tennessee.* Garrow & Associates, Inc., Memphis. Report submitted to East Tennessee Natural Gas Company, Knoxville, Tennessee. (Senior author, with C. A. Buchner)

Unpublished Manuscripts, Research Reports and Other Submissions

1983 *The Hatley Farmstead and Cabin: Ethnoarchaeology of a Non-Structure.* Research project report on file, Department of Anthropology, Washington State University, Pullman, Washington.

1988a *Perspectives on Emerging Chiefdoms: A Comparative Analysis.* Paper submitted for the Southern Anthropological Association Student Paper Competition, 23rd Meeting, Tampa, Florida. Honorable Mention. (Abstract contained in program)

1988b *Choctaw Ball Racket Manufacture: An Ethnographic Example for Prehistory.* Manuscript on file, Department of Anthropology, Memphis State University. [To be submitted to *Tennessee Anthropologist*].

1989 *Measurement and Analysis of Whole Vessels from the Chucalissa Site (40SY1).* Final Practicum Report submitted in partial fulfillment of M.A. requirements, on file, Department of Anthropology, Memphis State University.