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A Cultural Resources Intensive Survey of
the E. H. Godwin Construction Site, Shelby
County, Tennessee (Southwest Memphis
Quadrangle)

by
David H. Dye and A. Lee Foster

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**A Cultural Resources Intensive Survey of the
E.H. Godwin Construction Site,
Shelby County, Tennessee
(Southwest Memphis Quadrangle)**

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ABSTRACT

This report describes an intensive cultural resources survey of a 8 ha (20 ac) parcel of property lying between Brooks Road and Nonconnah Creek in southwestern Shelby County, Tennessee for E.H Godwin & Co. of Memphis, Tennessee. A literature and records search was conducted in conjunction with surface inspection and shovel testing. The survey was carried out over 100 percent of the project area as a prerequisite for securing a wetlands permit from the Memphis District, Corps of Engineers to allow earth removal from the area under consideration. The Nonconnah Creek floodplain to the north is protected under the terms of a conservation easement. The records search revealed that a small farmhouse and outbuildings were constructed on the property in 1939, but were demolished in the 1960's. Surface observation and shovel testing revealed the presence of two prehistoric sites. Subsequent test excavations indicate no intact archaeological deposit exist at either site. No further archaeological work is recommended.

TABLE OF CONTENTS

ABSTRACT	i
TABLE OF CONTENTS	ii
LIST OF FIGURES	iii
LIST OF TABLES	iv
 I. INTRODUCTION	
Purpose of the Study	1
Project Location	1
 II. ENVIRONMENTAL SETTING	
Climate	4
Physiography and Soils	4
Flora and Fauna	6
 III. ARCHAEOLOGICAL AND HISTORICAL OVERVIEW	
Prehistoric Background	10
Paleo-Indian Period	10
Dalton Period	10
Archaic Period	10
Woodland Period	12
Mississippi Period	15
Protohistoric Period	17
Historic Background	17
Previous Archaeological Research	18
 IV. RESEARCH METHODS	
Archival Methods	19
Field Methods	19
 V. PROJECT RESULTS	
Background and Literature Search Results	20
Fieldwork Results	20
 VI. CONCLUSIONS AND RECOMMENDATIONS	24
References Cited	25
Appendix A: Archaeological Site Descriptions	30

LIST OF FIGURES

1.	General Project Location.	2
2.	Project Location in Relation to the Surrounding Topography.	3
3.	Regional Physiographic Placement of Project Area.	5
4.	Memphis and Falaya Soils in Topographic Relationship to Associated Soil Types.	7
5.	Generalized Prehistoric Cultural Chronology for Western Tennessee: Paleo-Indian - Middle Archaic Periods.	11
6.	Generalized Prehistoric Cultural Chronology for Western Tennessee: Middle Archaic - Late Archaic Periods.	13
7.	Generalized Prehistoric Cultural Chronology for Western Tennessee: Poverty Point - Early Woodland Periods.	14
8.	Generalized Prehistoric Cultural Chronology for Western Tennessee: Early Woodland - Mississippi Periods.	16
9.	Sites 40SY512 and 40SY513.	32
10.	Site 40SY512, Test Unit 1: West and South Profiles.	33
11.	Site 40SY513, Test Unit 1: West and South Profiles.	34

LIST OF TABLES

1.	Eastern North American Late-Quaternary Stratigraphy South of the Glacial Margin.	8
2.	Archaeological Sites Recorded in the Nonconnah Creek Drainage.	21
3.	Artifact Inventory for Site 40SY512.	35
4.	Artifact Inventory for Site 40SY513.	36

I. INTRODUCTION

PURPOSE OF THE STUDY

This archaeological survey was conducted during May and June of 1990 for E.H. Godwin & Co. of Memphis, Tennessee, to locate recorded or unrecorded cultural resources, prehistoric or historic archaeological sites or National Register architectural sites, which would be negatively impacted by construction activities proposed for approximately 8 ha (20 ac) in southwestern Shelby County, Tennessee. The cultural resources reconnaissance was carried out in compliance with the Federal Water Pollution Control Act (33 U.S.C. § 1341), National Historic Preservation Act of 1966 (P.L. 89-665), as amended; the National Environmental Policy Act of 1969 (P.L. 91-190); Executive Order 11593, "Protection and Enhancement of Cultural Environment;" the Archaeological Resources Protection Act of 1979 (P.L. 96-95); and the Advisory Council on Historic Preservation, "Procedures for the Protection of Historic and Cultural Properties" (36 CFR Part 800).

PROJECT LOCATION

The project area is located in western Tennessee, in southwestern Shelby County, 1.3 km (0.78 mi) due south of I-55. The property is 300 m (0.2 mi) east of the Illinois Central railroad at Brooks Road. Chapman Chemical Co. is located to the west. The project location is indicated on the Shelby County General Highway Map (Figure 1) and the Southwest Memphis, Tenn.-Ark. 7.5 minute series quadrangle map (Figure 2). Bounded on the north by a line 0.8 km (0.5 mi) south of Nonconnah Creek, between creek miles 2.8 and 3.1, and on the south by the 600 block of Brooks Road, the western boundary is an unnamed creek and the eastern boundary is a property line, represented by a partially standing fence row.

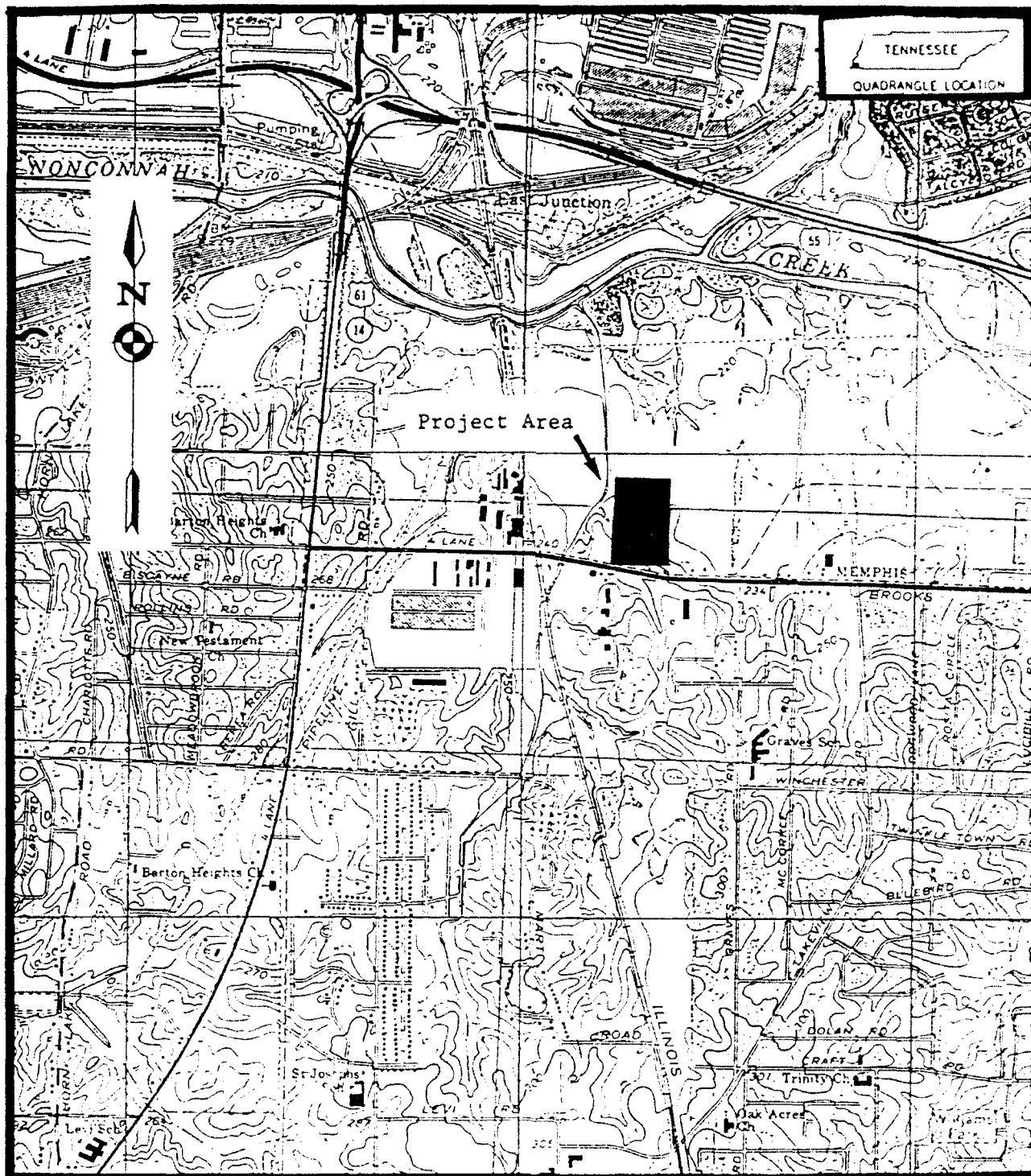


Figure 2. Project Location in Relation to the Surrounding Topography. (Map Source: U.S.G.S. Southwest Memphis, Tenn.-Ark. 7.5" quadrangle map, 1965. Scale: 1:24000).

II. ENVIRONMENTAL SETTING

CLIMATE

The Lower Nonconnah Valley is characterized by relatively mild winters, hot summers, and abundant rainfall. The average annual temperature is 17° Celsius (62° Fahrenheit). Extreme and frequent changes in the weather, both from day to day and from season to season, are common because of cold air from Canada and warm, moist air from the Gulf of Mexico. July is the warmest month with an average of 28° C (82° F); January is the coldest month, averaging 6° C (42° F). The average dates of the last freezing temperature in spring and of the first freezing temperature in autumn are March 20 and November 12, respectively. The interval between these dates, the growing season, lasts 238 days on the average. The average annual precipitation is 127 cm (50 in) per year. In general, precipitation is heaviest in winter and early spring when low pressure systems cause widespread rains. A second period of heavy precipitation occurs in late spring and early summer when local showers and thunderstorms are common. Precipitation generally is lightest in late summer and early fall. Severe storms are infrequent. Heavy snowstorms are uncommon, and snow seldom remains on the ground for more than a few days (Sease et al. 1970:2-5).

PHYSIOGRAPHY AND SOILS

The project area, located in the Mississippi Valley Loess Plains ecoregion (Omernik 1987), is characterized by gently rolling to hilly uplands dissected to various degrees by creeks and rivers (Figure 3). Natural elevations within the project area range from approximately 64 to 76 m (210 to 250 ft) amsl. This plain, locally called the West Tennessee Plain, slopes westward toward the Mississippi River, forming a 80 km (50 mi) wide belt or zone of rolling hills, and in some areas nearly flat, irregular plains (Miller 1974:7). The uplands are separated by the nearly flat alluvial plains of the Wolf and Loosahatchie Rivers and Nonconnah Creek.

The loess belt, extending from the Ohio River to the Gulf of Mexico (Fenneman 1938:30), is underlain by Gulf Coastal Plain marine gravel, sand, silt, and clay deposited during the Tertiary Period. The loess deposits generally thin from west to east. Three layers of loess are recognized. The upper layer, the Peorian loess, was deposited during the Woodfordian substage of the Wisconsin stage, the underlying Roxana silt accumulated during the late Altonian substage, and a third, thinner layer, the Loveland/Sicily Island silt, is recognizable in places immediately above, and in many places partly mixed with Coastal Plain sediments. The Loveland/Sicily Island silt formed during the Middle Pleistocene Illinoian Stage.

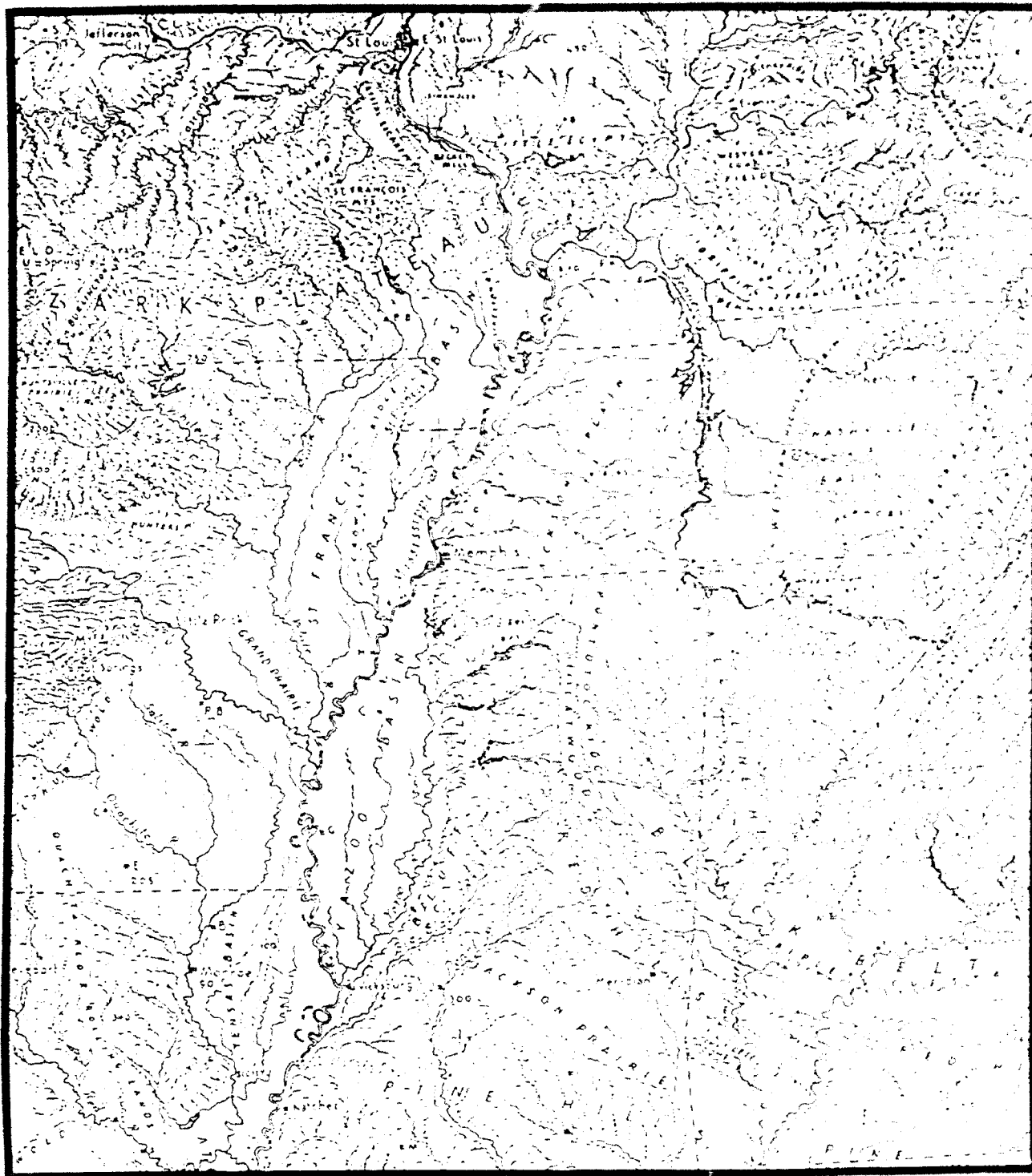


Figure 3. Regional Physiographic Placement of Project Area.
(from Raiz 1957).

Located in extreme southwestern Tennessee, Nonconnah Creek, a medium-sized stream originating in the loess uplands of southeastern Shelby County, flows in a westerly direction for approximately 21 km (13 mi) before draining into the Mississippi River. Nonconnah Creek drains a 184 km² (71 mi²) area and is located near the center of the Mississippi Embayment. Once a meandering stream flowing within a broad floodplain, the creek was channelized this century; the urban sprawl of Memphis now occupies much of the floodplain, most of which has been landfilled for construction.

Two soil types are found within the study area: Memphis silt loam and Falaya silt loam (Figure 4). Memphis silt loam, composed of deep, well-drained upland soils formed in loess, represents windblown deposits (loess) from Mississippi Valley braided stream surfaces to the west. The plowzone is a brown, friable silt loam 18 cm (7 in) thick. The uppermost 25 to 51 cm (10 to 20 in) of the subsoil is a brown to reddish-brown, friable silty clay loam underlain by a brown to reddish-brown, friable silt loam.

Falaya silt loam is a somewhat poorly drained, nearly level soil on first bottoms within the floodplain. The surface layer is a brown, friable silt loam about 15 cm (6 in) thick and the underlying material is a friable silt loam containing brown and gray mottles (Sease et al. 1970).

FLORA AND FAUNA

The Late Quaternary stratigraphy south of the glacial margin in eastern North America is summarized in Table 1. These climatic and associated vegetative episodes are indicative of the paleoenvironmental sequence for the West Tennessee Plain in general and the Lower Nonconnah Creek area in particular. Paleobotanical studies in West Tennessee (Delcourt and Delcourt 1978, 1981, 1987; Delcourt et al. 1978, 1980) detail the vegetational record during the past glacial and postglacial periods for the project area.

Forty thousand years ago, during the late Altonian Substage of the Wisconsin Stage, the Laurentide Ice Sheet extended south into the Great Lakes region. At this time the West Tennessee Plain were covered in an Oak-Hickory-Southern Pine Forest (Southeast Evergreen Forest). Warm, dry conditions favored a mosaic of oak-pine forests and prairies with warm-temperate trees in the Nonconnah Creek floodplain. A period of mild warming occurred 28,000 to 23,000 years ago during the Farmdalian Substage. A major climatic cooling at 23,000 years ago brought about the replacement of the upland oak-pine forest and prairie, and bottomland forest by a relatively more closed forest cover of white spruce (*Picea glauca*), larch (*Larix*), fir (*Abies*), and cool-temperate deciduous forest taxa (Delcourt et al. 1980:125).

During the Woodfordian substage (23,000 to 12,500 years ago) beech (*Fagus* spp.), black walnut (*Juglans nigra*), hickory (*Carya*

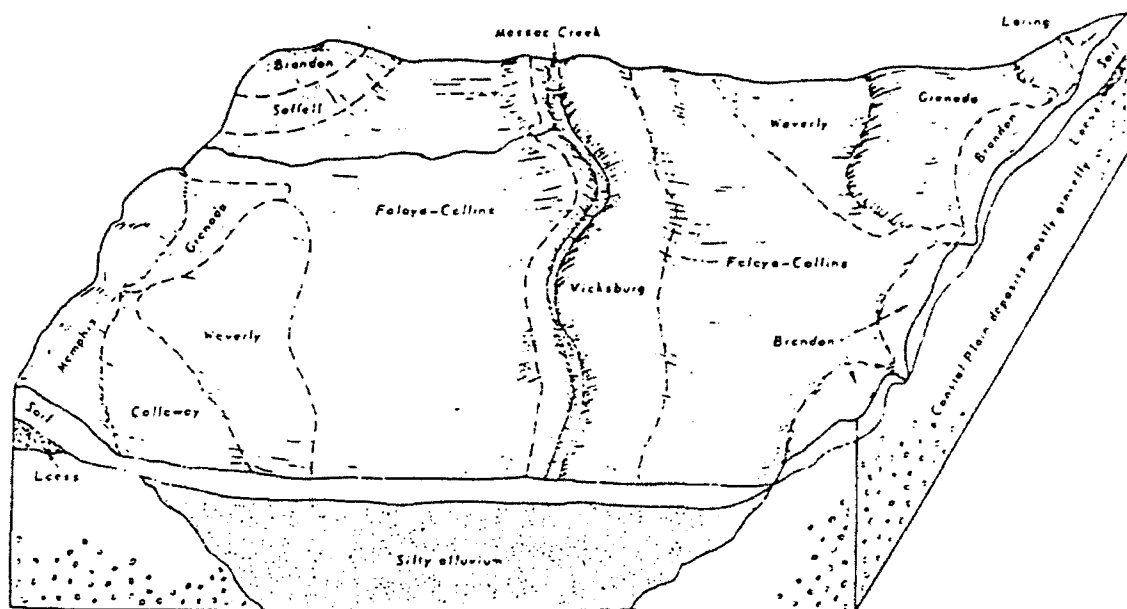


Figure 4. Memphis and Falaya Soils in Topographic Relationship to Associated Soil Types. (from Humphrey 1976:6).

Table 1. Eastern North American Late-Quaternary Stratigraphy South of the Glacial Margin. (from Delcourt and Delcourt 1981, 1987).

Holocene Stage		Late-Holocene interval	0 yr B.P.
		Mid-Holocene interval	4,000 yr B.P.
		Early-Holocene interval	8,000 yr B.P.
Wisconsinan Stage	Woodfordian Substage	Late-Glacial interval	12,500 yr B.P.
		Full-Glacial interval	16,500 yr B.P.
	Farmdalian Substage		23,000 yr B.P.
	Altonian Substage		28,000 yr B.P.
			>75,000 yr B.P.

spp.), oak (*Quercus* spp.), yellow poplar (*Liriodendron tulipifera*), and other mesic deciduous forest taxa prevailed on the loess bluffs which served as a major refuge for deciduous forest taxa (Delcourt et al. 1980:129). During the peak in continental glaciation 18,000 years ago Mixed Hardwood Forests composed of hemlock (*Tsuga*), pine (*Pinus*), spruce, fir, oak, birch (*Betula*), elm (*Ulmus*), ash (*Fraxinus*), ironwood (*Carpinus-Ostrya*), maple (*Acer*), and beech prevailed along the West Tennessee loess bluffs.

Two mastodons (*Mammuth americanum*) have been excavated and dated from Shelby County, Tennessee. One dates to the early Woodfordian (Corgan 1975:84) (23,000 B.P.), while the other, from the Lower Nonconnah Creek locale, dates to the middle Woodfordian (Brister et al. 1982; Delcourt et al. 1980) (17,000 B.P.). Mastodons and other Pleistocene megafauna became extinct at the end of the Pleistocene.

Between 17,000 and 16,500 years ago major climatic amelioration resulted in the initial disintegration, then northward retreat of the Laurentide Ice Sheet. During this time the Oak-Hickory-Southern Pine Forest (Southeast Evergreen Forest) expanded rapidly into the West Tennessee loess uplands. From 12,500 to 8,000 years ago (Early-Holocene interval) the Oak-Hickory-Southern Pine Forest remained stable. From 8,000 to 4,000 years ago (Mid-Holocene interval) another major vegetative change took place as a result of increased warmth and aridity. By 5,000 years ago modern climatic and vegetative conditions had been established in the Nonconnah Creek area.

The pre-settlement vegetation approximately 200 years ago was characterized by a continuation of the Southern Pine Forest (Delcourt and Delcourt 1981, 1987). The loess-capped uplands supported mesic forests of American beech (*Fagus grandifolia*), sugar maple (*Acer saccharum*), ashes (*Fraxinus* spp.) red and white oaks (*Quercus falcata* and *Q. Alba*) as well as hickories.

Secondary species included elm, American chestnut (*Castanea dentata*), yellow poplar, sweetgum (*Liquidambar styraciflua*), and walnut, as well as smaller species including flowering dogwood (*Cornus florida*), black cherry (*Prunus serotina*), red mulberry (*Morus rubra*), common persimmon (*Diospyros virginiana*), sassafras (*Sassafras albidum*), and winged elm (*Ulmus alata*).

Floodplain forests along streams such as Nonconnah Creek, where sedimentation was rapid, were dominated by willows (*Salix* spp.) and river birch (*Betula nigra*). Poorly drained alluvial floodplains favored oaks, gums (both *Nyssa sylvatica* and *N. biflora*), and bald cypress (*Taxodium distichum*). Elms, ashes, cottonwoods (*Populus* spp.), maples, hackberry (*Celtis laevigata*), hickories, sycamore (*Platanus occidentalis*), and persimmon occupied better-drained, immature alluvial soils. On developed soils the successional vegetation was a Oak-Hickory Forest with the addition of sweetgum, beech, magnolia (*Magnolia* spp.), and hollies (*Ilex* spp.). In impounded areas, swamp habitats were characterized by black willow (*Salix nigra*), cottonwood, bald cypress, gum, a variety of oaks, hickory, sweetgum, elm, ash, planer-tree (*Planera aquatica*), persimmon, honey locust (*Gleditsia triacanthos*), red maple (*Acer rubrum*), silver maple (*Acer saccharinum*), and cane (*Arundinaria gigantea*) (Delcourt et al. 1980:113-114).

A number of native animal species were resident in the Lower Nonconnah Creek vicinity in the past, but many have been either eliminated or drastically reduced in number. Native mammals include beaver (*Castor canadensis*), black bear (*Ursus americanus*), bobcat (*Lynx rufus*), gray fox (*Urocyon cinereoargenteus*), grey wolf (*Canis lupus*), opossum (*Didelphis marsupialis*), rabbit (*Sylvilagus* spp.), raccoon (*Procyon lotor*), red fox (*Vulpes fulva*), red wolf (*Canis niger*), squirrel (*Sciurus* spp.), and white-tailed deer (*Odocoileus virginianus*) (Shelford 1963). A number of migratory waterfowl and other birds are found in the area. Migratory and resident ducks and geese, as well as turkey (*Meleagris gallopavo*), were an important source of food for Native Americans and early settlers. Numerous species of reptiles, amphibians, fish, and invertebrates, which inhabit aquatic environments, are numerous in the area.

The West Tennessee ecology has been altered in numerous ways since Euro-American settlement in the early nineteenth century. In some respects, these represent a continuation of Native American practices of land clearing and animal predation, but the early settlers had the means and population to impact the environment to a much greater degree. With the increasing production of cotton in the mid to late nineteenth century in the loess hills section, widespread soil erosion and surface denundation resulted in extensive siltation. Low lying terraces adjacent to stream floodplains, favored locales for Native American settlements, consequently may have been covered with adjacent upland sediments (Smith 1979b:1).

III. ARCHAEOLOGICAL AND HISTORICAL OVERVIEW

This archaeological and historical overview is an abbreviated cultural chronology for the Mid-South. Several standard references for the general area include: Dye and Cox (1990), Griffin (1952), Morse and Morse (1983); Phillips (1970); and Phillips et al. (1951). More specific and local treatments may be found in Anderson (1987), Jolley (1981), Mainfort (1986, 1988) Peterson (1979a, 1979b), Smith (1979), and Smith and Weinstein (1987),

PREHISTORIC BACKGROUND

Paleo-Indian Period

The Paleo-Indian period (10,500 - 8500 B.C.) represents the initial human occupation of the study area (Fagan 1987; Morse and Morse 1983:50-69). The Paleo-Indians migrated across the Bering Land Bridge from northeastern Asia. Fluted projectile points (Crowley's Ridge and Sedgewick) and other components of the Paleo-Indian lithic tool kit principally are found as dispersed surface scatters, perhaps representing sparse populations of small Mid-Southern hunting and gathering bands (Figure 5). In western North America, and elsewhere in the New World, there is evidence that Pleistocene megafauna, particularly mastodon (*Mammut americanum*) and mammoth (*Mammuthus* spp.), were hunted by these early Native American hunters and gatherers. Fluted points have been recorded in association with mastodon remains near Kimmswick, Missouri (Graham et al. 1981). East of the Mississippi River Paleo-Indians probably depended on modern large game species. In addition to the procurement of game, Paleo-Indians relied upon generalized wild plant gathering.

Dalton Period

The Dalton period (8500 - 7500 B.C.) in the study area is characterized by the emergence of a culture which began to exploit a wider variety of game, particularly with the extinction of the Pleistocene species (Goodyear 1974, 1982; Morse and Morse 1983:70-97). This expression flourished in floodplain and upland areas, with band groups focusing their procurement activities around particular watersheds. The Dalton people produced lanceolate shaped projectile points (Dalton) without the distinctive flutes of the earlier Paleo-Indian period (Figure 5).

Archaic Period

The warmer and drier climate of the Hypsithermal between 7000 and 3000 B.C. coincided with a particular adaptation known as the Archaic (Morse and Morse 1983:99). With attendant changes in the biota came an adaptation characterized by intensified and

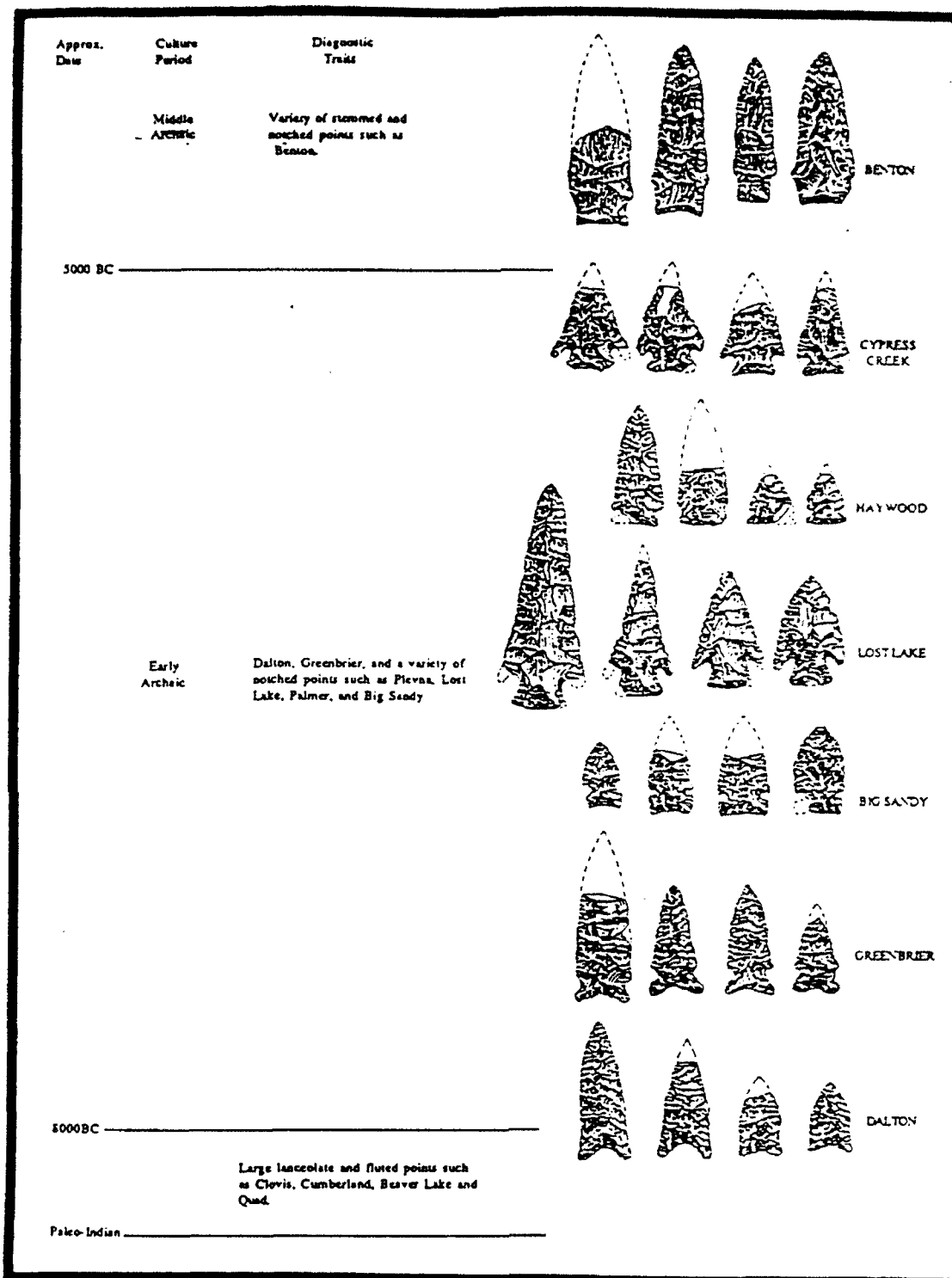


Figure 5. Generalized Prehistoric Cultural Chronology for Western Tennessee: Paleo-Indian - Middle Archaic Periods.
(Sources: Anderson 1987; Smith 1979a, 1979b)

diversified exploitation of locally available resources. Mid-Southern hunters and gatherers established a seasonal round of exploitation, procuring various plant and animal species for subsistence in the particular location and time of their availability. The Archaic is divided into three temporal units: early, middle, and late.

The Early Archaic period (7900 - 6000 B.C.) is represented by few sites in the study area. Populations at this time were composed of small, mobile groups, but somewhat larger than earlier cultures. They produced corner and side notched and bifurcate stemmed projectile points (Cypress Creek, Kirk Corner Notched and Stemmed, Palmer, Ecusta, Big Sandy Side Notched, and St. Albans and Plevna) and a variety of uniface flake tools (Figure 5).

The Middle Archaic (6000 - 3000 B.C.), according to Walthall (1980:57-58), is marked by three phenomena which are watershed events in Archaic economy and adaptation: an intensification of the warmer and drier climatic conditions produced by the Altithermal, increased territorialism and regional diversity, and the appearance of certain new technological developments, specifically, groundstone, bone, and antler implements. There is little indication that Middle Archaic populations were present to any large degree in the study area (Morse 1975; Smith 1979:2). Distinctive projectile points include Stanley and Eva forms (Figures 5-6).

The Late Archaic (3000 - 500 B.C.) (Morse and Morse 1983) in the Central Mississippi Valley, is marked by increased population and a more sedentary way of life with permanent occupations occurring in lowland areas and the firm establishment of a seasonal round. Regionally, after 1200 B.C., the Late Archaic has been termed the Poverty Point period. Evidence of this culture is known for the study area based on specific artifact forms such as baked clay objects and distinctive projectile points such as Ponchartrain, Motley, Harris Island, and Flint Creek (Figure 6). A greater level of social integration began to evolve as band level society gave way to a more complex tribal organization.

Woodland Period

Archaeologically, there is little to distinguish the Early Woodland (Farnsworth and Emerson 1986) or Tchula period (Dye and Brister 1986a) (500 B.C. - 0) way of life from the earlier Archaic cultures. The period is marked, however, by the introduction of pottery such as Cormorant Cord Impressed and Tchefuncte Stamped. Projectile point types such as Weems and McCarty have been identified in eastern Arkansas in association with Tchula components (Morse 1986) (Figure 7). There is an indication, however, that northern traits such as Adena projectile point styles and sand tempered pottery were adopted. According to Smith (1979:3), Early Woodland or Tchula populations peaked, then dropped off sharply during this time. Camps and small villages

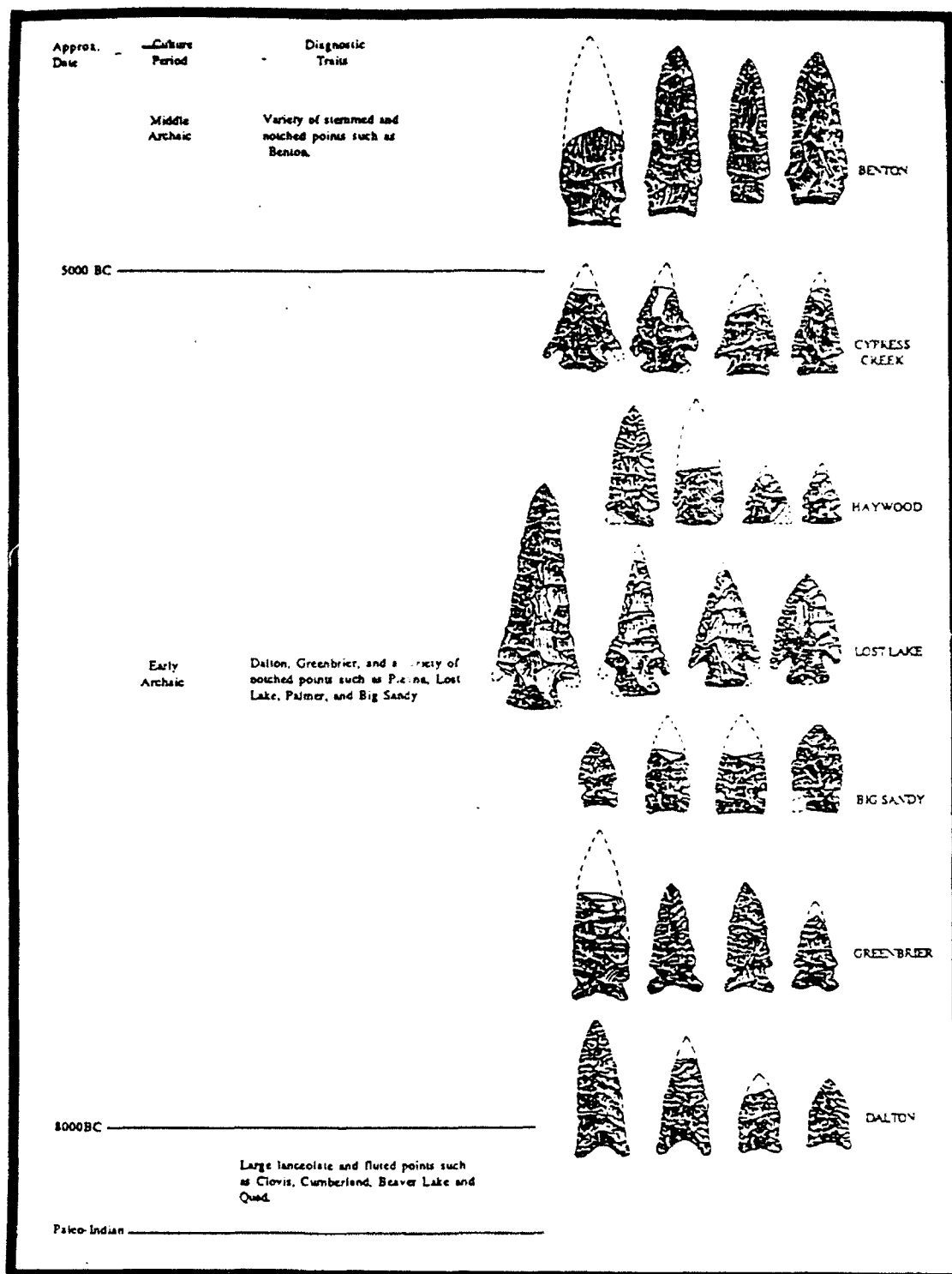


Figure 6. Generalized Prehistoric Cultural Chronology for Western Tennessee: Middle Archaic - Late Archaic Periods. (Sources: Anderson 1987; Smith 1979a, 1979b)

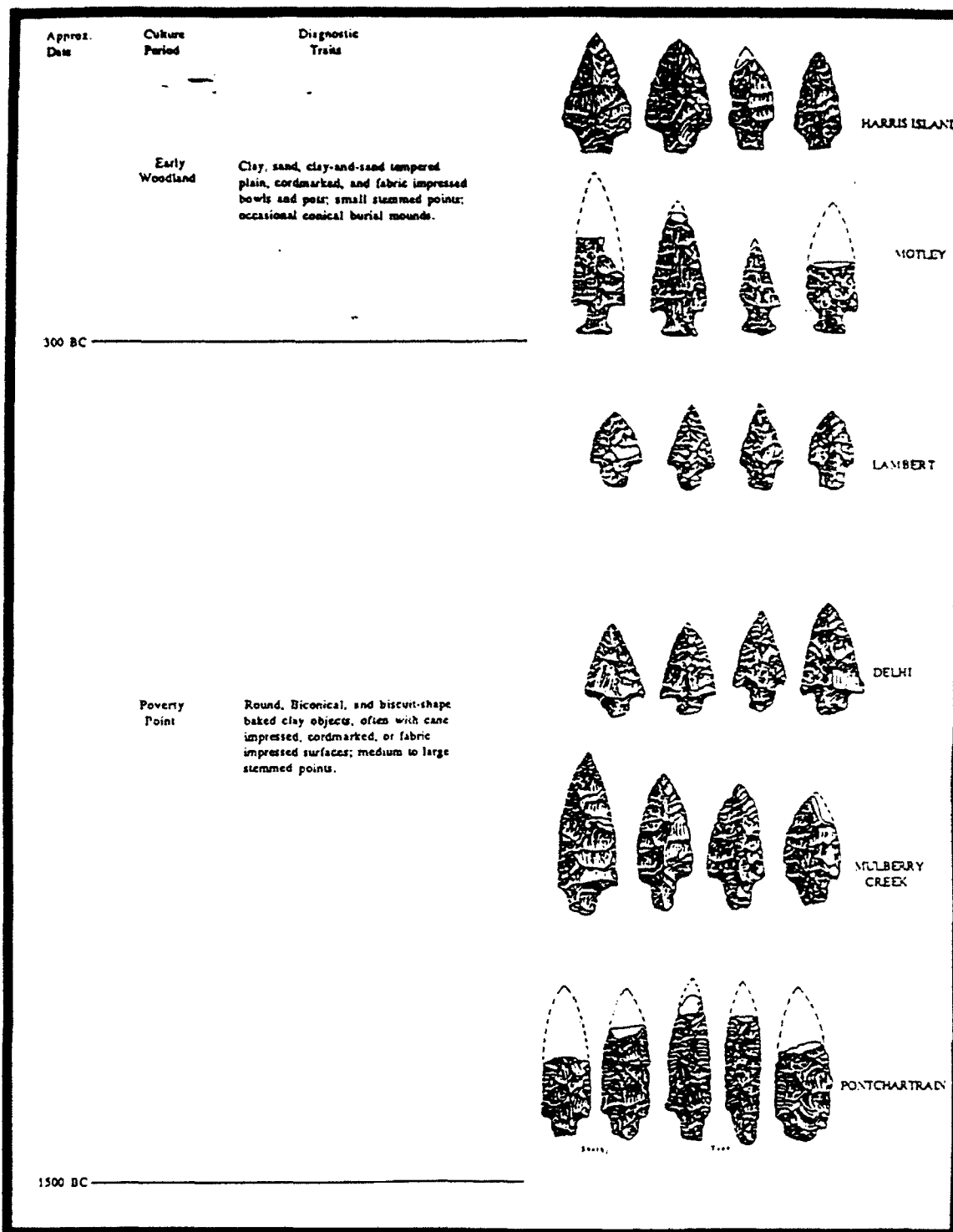


Figure 7. Generalized Prehistoric Cultural Chronology for Western Tennessee: Poverty Point - Early Woodland Periods.
(Sources: Anderson 1987; Smith 1979a, 1979b)

appear in the study area.

The Middle Woodland period (0 - A.D. 400) is highlighted by the local involvement in the Hopewell trade network known locally as Marksville. Increased sedentism may be indicated by the appearance of more villages. Sand and grog tempered pottery with fabric or cord impressions was produced during this period in the study area (Figure 8). Regionally important archaeological sites include Pinson (Mainfort 1986, 1988) in western Tennessee and Helena Crossing (Ford 1963) in eastern Arkansas.

The Late Woodland period (A.D. 400 - 700) is marked by an increased reliance on horticulture, with a proliferation of small farmsteads represented by small sites on low ridges (Morse and Morse 1983). Upland drainages appear to have been abandoned for the more productive alluvial valleys of the larger streams and rivers. Locally known as the Baytown phase, clay tempered ceramics are plain, cord impressed, or painted red (Figure 8).

Mississippi Period

The Mississippi period represents the most complex prehistoric pattern of social integration. It arose around A.D. 700 and lasted until European contact around A.D. 1540. One of the distinguishing physical characteristics of the period is the large substructure mounds constructed as platforms for public and and private (elite) residences. These mounds have sloping sides and ramps. Domestic structures had dirt floors, upright posts interlaced with woven cane (wattle), and walls plastered with clay (daub).

The characteristic Mississippian settlement pattern is a town or village oriented around a central plaza with a mound at one end surrounded by domestic structures. Horticulture was practiced with cultivation of beans, squash, and maize on natural levees. This activity was supplemented with seasonally available animals and wild plants, indicated archaeologically by the existence of upland encampments. Further, major groups of towns are found along the Mississippi River bluffs and floodplain in the vicinity of the study area. Principal among these is the town of Chucalissa (40SY1). Five components have been identified at Chucalissa: Ensley (A.D. 1000-1200), Mitchell (A.D. 1200-1350), Boxtown (A.D. 1350-1400), Early Walls (A.D. 1400-1500), and Late Walls (A.D. 1500-1550) (McNutt and Lumb 1988:135).

Ceramics are characterized by fine and coarse shell tempered bottles, bowls, jars and a variety of effigy wares. Decorations include incised, punctated, painted, and appliqued motifs (Figure 8). The distinctive motifs of the Southeastern Ceremonial Complex (Galloway 1989) are often seen on artifacts from sites in the vicinity of the study area.

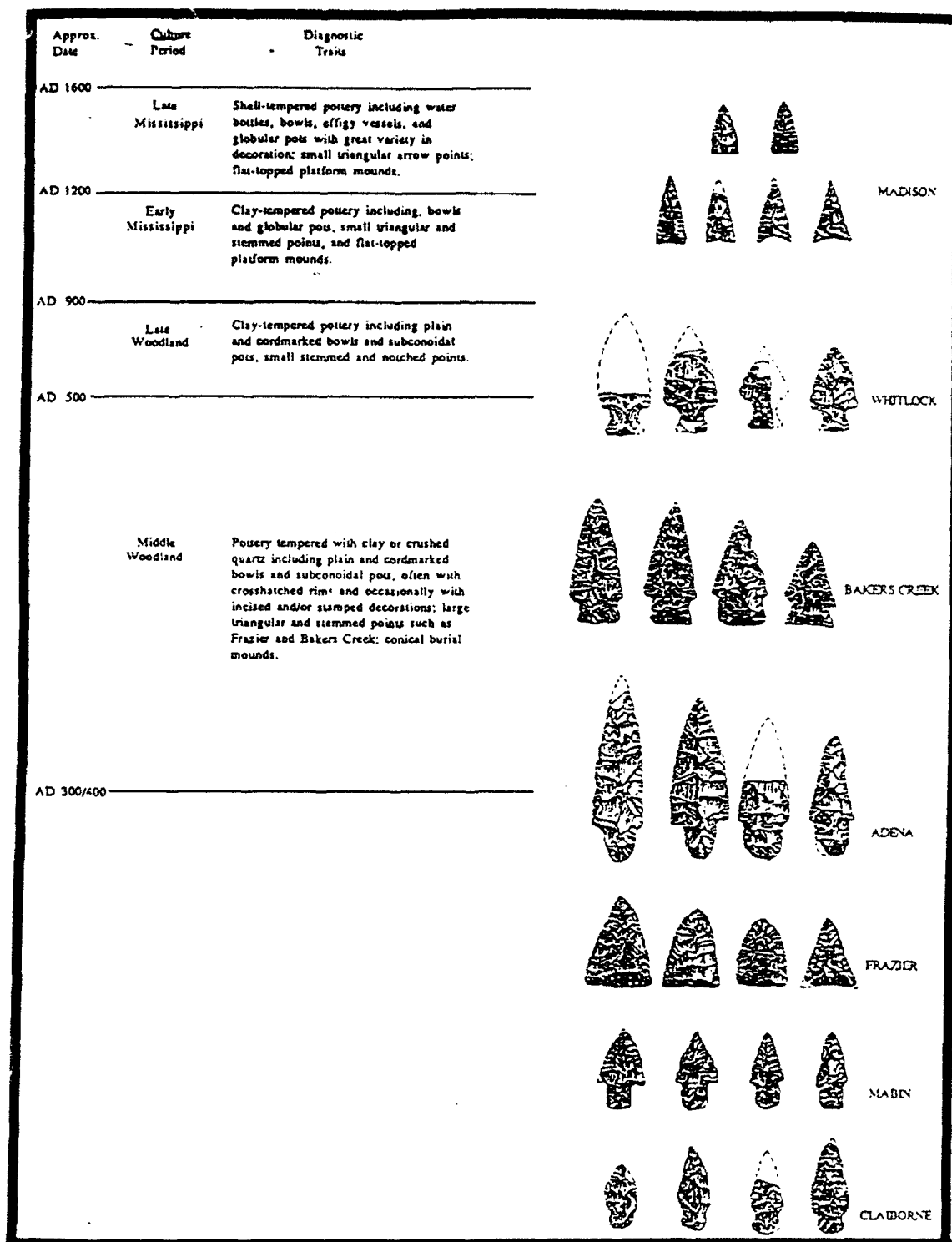


Figure 8. Generalized Prehistoric Cultural Chronology for Western Tennessee: Early Woodland - Mississippi Periods.
(Sources: Anderson 1987; Smith 1979a, 1979b)

Protohistoric Period

The Protohistoric period (A.D. 1540 - 1700) begins with de Soto expeditions arrival at the Quizquiz polity near Walls, Mississippi in May of 1541. The Mississippian lifestyle ended with the initial intrusion of European explorers and attendant diseases. The de Soto entrada brought devastating changes to native populations in the mid-South. European artifacts representative of the early Protohistoric include chevron beads and Clarksdale bells (Brain 1975; Smith 1987).

The middle portion of the Protohistoric period is not well understood (Dye and Brister 1986). The Protohistoric period effectively ends with the arrival of French (McWilliams 1981) and English (Crane 1981) explorers in 1698 from the Gulf and Atlantic Coasts respectively. Much of western Tennessee was devoid of human populations throughout much of the period, with the exception of hunting parties. Distinctive Native American artifacts include unifacial scrapers, catlinite disk pipes, shell "buttons", and nonrepousseé copper hawk plates (Smith 1987; Williams 1980).

HISTORICAL BACKGROUND

The Chickasaw claimed West Tennessee; prior native populations had been decimated by disease leaving vast portions of and western Tennessee to be claimed by those who survived the epidemics such as the Chickasaw. West Tennessee was sold to the United States on October 19, 1818 through the Jackson Purchase treaty, arranged between treaty commissioners Andrew Jackson and Isaac Shelby with Chickasaw leaders Levi Colbert and his brothers (Satz 1979:53-54).

With the removal of the French in the mid-eighteenth century from the Mississippi Valley and the arrival of the Spanish, permanent establishments were built near the mouth of Nonconnah Creek. By the late eighteenth century a fort, trading post, and several residences were constructed.

Created by legislative act on November 24, 1819, Shelby County was named in honor of Isaac Shelby. There may have been less than 20 settlers within the county limits at this time; no other settlements existed within 120 km (75 mi.) of the small settlement.

As a result of the expanding capitalist society and its dependence upon the cotton industry in the mid-nineteenth century, the population of Memphis grew rapidly (Wolf 1982:278-285). Population growth to the east brought about increased land clearance and settlement along Nonconnah Creek throughout the nineteenth century. By the mid-twentieth century urban expansion centered upon the lower reaches; a process which continues today in the upper reaches.

PREVIOUS ARCHAEOLOGICAL RESEARCH

Primary data on the Nonconnah Creek drainage was obtained by the Memphis Archaeological and Geological Society (Kee et al. 1952), Commonwealth Associates (1979), and Memphis State University (Davis 1972:34-35; Smith and Weinstein 1987). Early research in the region concentrated on large sites with associated mound arrangements (Moore 1911; Thomas 1894). Regional chronologies have been the focus of several studies (Griffin 1952; Phillips 1970; Phillips et al. 1951). Morse and Morse (1983) and Smith (1990) have published regional overviews stressing past lifestyles and adaptive strategies. Additional archaeological investigations include surveys in the adjacent Wolf (Peterson 1979a) and Loosahatchie (Peterson 1979b) watersheds.

IV. RESEARCH METHODS

ARCHIVAL METHODS

A comprehensive examination of the archaeological literature and existing records was conducted to assess the potential for locating cultural resources within the project area. Prior to the start of field work, the State of Tennessee site files, housed at the Department of Anthropology, Memphis State University, were reviewed to identify sites located in or near the study area. A property search was conducted at the office of the County Assessor for Shelby County, Tennessee, to determine the existence of historical structures which may have existed in the project area. Finally, a literature search was conducted to summarize area and regional cultural history as it pertains to the study area.

FIELD METHODS

Field testing was conducted by A. Lee Foster (M.A. in anthropology) and Jeffrey B. Roaten, a Memphis State University anthropology undergraduate. Field methods focused upon locating previously unidentified loci of prehistoric and historic activity through the identification of material remains or features within the study area. This was accomplished by direct observation of the ground surface and by shovel testing of 100 percent of the project area. The former method was utilized for portions of the study area which were recently plowed, had received sufficient rain to expose cultural materials, and were clear of vegetation. Observation was accomplished by making traverses of the study area at five meter intervals. Cultural materials noted during this procedure were assigned horizontal provenience within five meter square collection units. Shovel testing was used for those portions of the study area which were wooded or where the ground surface was otherwise obscured. Shovel tests of 30 x 30 cm were excavated at five meter intervals to subsoil and screened through quarter inch hardware cloth. Cultural materials from each shovel test were retained for analysis. Visibility generally was good for visual examination.

For each of the two sites identified by the above methods, a one meter by one meter excavation unit was placed in the approximate site center. Each unit was excavated to a depth of 30 cm using 10 cm levels. All materials from the units were screened through quarter inch hardware cloth and culturally relevant materials conserved for further analysis. Soils were described by both texture and Munsell soil color.

V. PROJECT RESULTS

BACKGROUND AND LITERATURE SEARCH RESULTS

State of Tennessee site files revealed no archaeological sites within the project area. However, there are three recorded archaeological sites within a three kilometer (1.9 mi) radius of the study area: 40SY35 (Early, Middle and Late Woodland, and Mississippian components), 40SY47 (Early Archaic, Poverty Point, and Early and Middle Woodland components), and 40SY51 (Early and Middle Woodland components). These three sites have been destroyed by highway and other development activities. Table 2 provides site information on archaeological sites within the Nonconnah drainage for which site forms are available.

A records search at the office of the Assessor for Shelby County, Tennessee, revealed that a five-room frame farm dwelling and two outbuildings had been constructed in the project area (Ward 60, Block 229, Parcel 12) in 1939 and subsequently demolished during the 1960's. The house was reported to have a concrete block foundation with concrete posts and/or piers, a gable roof, an asphalt shingle roof, and double hung windows. Memphis State University will curate the field records, field notes, and associated data.

FIELD WORK RESULTS

Two prehistoric sites were identified as a result of the survey: a Woodland site (40SY512), and a site with Woodland and Mississippian components (40SY513). A detailed discussion of these two sites may be found in Appendix A.

Table 2. Archaeological Sites Recorded in the Nonconnah Creek Drainage. (from Smith and Weinstein 1987:9-11).

<u>Site No.</u>	<u>Identifiable Periods of Occupation*</u>	<u>Condition or Land Use</u>
40 SY 3	EW, M	overgrown
40 SY 6	M	destroyed - industry
40 SY 7	PI, EA, PP, EW	destroyed - subdivision
40 SY 23		destroyed - industry
40 SY 24		destroyed - industry
40 SY 25		destroyed - I-55
40 SY 29	EA, PP, E/MW	destroyed - commercial
40 SY 30	EW, MW, M	destroyed - I-240
40 SY 31	PP, EW, MW	destroyed - I-240
40 SY 32	MA, PP, M	destroyed - I-240
40 SY 34	MA, PP, EW	destroyed - I-240
40 SY 35	EW, MW, LW, M	destroyed - I-55
40 SY 36		destroyed - subdivision
40 SY 37	PP, EW, MW, M	destroyed - development
40 SY 38	EA, MA, LA, PP, EW, MW, LW, M	destroyed - elec. substation
40 SY 39		destroyed - development
40 SY 40	EA, MA, LA, PP, EW, MW, LW, M	destroyed - development
40 SY 41	LA, PP, EW, MW	destroyed - development
40 SY 42		destroyed - development
40 SY 43	PP, EW, MW	destroyed - I-240
40 SY 44	PP	destroyed - elec. substation
40 SY 45	EA, MA, LA, PP, EW, MW, M	destroyed - development
40 SY 46	EA, PP	destroyed - I-240
40 SY 47	EA, PP, EW, MW	destroyed - industrial
40 SY 48	LA, PP	destroyed - development
40 SY 49	PP, EW, LW, M	destroyed - development
40 SY 50	PP	destroyed - I-240
40 SY 51	E/MW	destroyed - development
40 SY 52	EW	destroyed - development
40 SY 53	EW, MW	destroyed - development

40 SY 54		destroyed - development
40 SY 55	PP, EW, MW	destroyed - development
40 SY 56	MA, LA, PP, EW, MW, M	destroyed - development
40 SY 57	MA, LA, PP, EW, M	destroyed - development
40 SY 58	PP, EW, M	overgrown
40 SY 59	PP	destroyed - development
40 SY 70		destroyed - development
40 SY 72		destroyed - development
40 SY 78		destroyed - development
40 SY 80		agriculture
40 SY 81	MW, M	destroyed - I-240
40 SY 85		destroyed - street widening
40 SY 86		destroyed - development
40 SY 87	EM, MW	overgrown
40 SY 90	EA, PP, EW, MW	destroyed - development
40 SY 91		destroyed - road and park
40 SY 112	EW, MW	destroyed - developed
40 SY 114		destroyed - development
40 SY 115		destroyed - development
40 SY 118	EW	overgrown
40 SY 119	EW	destroyed - development
40 SY 120	PP	destroyed - development
40 SY 121	EW	destroyed - development
40 SY 122		overgrown
40 SY 123		overgrown
40 SY 124	PP	agricultural
40 SY 125	EW	agricultural
40 SY 126		agricultural
40 SY 127		agricultural
40 SY 128	EW	destroyed - nursery
40 SY 129	EM, MW	destroyed - nursery
40 SY 130		destroyed - nursery
40 SY 131		destroyed - nursery
40 SY 132		destroyed - nursery

40 SY 212	EW	destroyed - ditch lining
40 SY 227	EW	overgrown
40 SY 228		overgrown
40 SY 229		overgrown
40 SY 230		destroyed - nursery
40 SY 230		overgrown
40 SY 231	PP, M	destroyed - borrow and pipeline
40 SY 256	EW	agricultural
40 SY 257		agricultural
40 SY 258		agricultural
40 SY 259		agricultural
40 SY 260		destroyed - development
40 SY 261		agricultural
40 SY 262		agricultural
40 SY 264		agricultural
40 SY 265		agricultural
40 SY 266		agricultural
40 SY 267		agricultural
40 SY 268		agricultural
40 SY 269	EW	agricultural
40 SY 270		agricultural
40 SY 272		agricultural
40 SY 273		agricultural
40 SY 274		agricultural
40 SY 275	EW, MW	agricultural
40 SY 276	EW	agricultural
40 SY 277	EW	agricultural
40 SY 278		agricultural
40 SY 281		destroyed - development
40 SY 307	EW, MW	agricultural

PI = Paleoindian; EA = Early Archaic; MA = Middle Archaic; LA = Late Archaic; PP = Poverty Point; EW = Early Woodland; MW = Middle Woodland; LW = Late Woodland; M = Mississippian.

VI. CONCLUSIONS AND RECOMMENDATIONS

A background and literature search was carried out in order to locate previously recorded archaeological sites within or adjacent to the project area. The literature search revealed no previously recorded archaeological sites exist within the proposed construction area. Visual observation and intensive shovel testing was conducted on a five meter grid. Intensive shovel testing located two small, shallow, prehistoric sites (40SY512 and 40SY513). Materials observed in both the plowed area and the shovel tests were sparse. No further archaeological investigations are recommended within the project area.

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APPENDIX A

SITE 40SY512

Site 40SY512, discovered in May 1990, is a Woodland habitation site occupying a bluff above the Nonconnah Creek floodplain approximately 335 m (1100 ft) south of Nonconnah Creek, and adjacent to (east of) a small northerly-flowing feeder creek at 69 m (230 ft) amsl. An indeterminate portion of the site probably has been lost through bluff sloughing. The site measures approximately 90 m (300 ft) east-west by 53 m (175 ft) north-south. The site, located at 35° 3' 54" north latitude and 90° 2' 46" west longitude (UTM Zone 15, Northing 3884020, Easting 0769400), within the plowzone. The southern half of the site is under cultivation, while the northern half is wooded. Prehistoric material, including lithics and ceramics were noted as a light scatter across the plowed portion of the site. These materials were also recovered in small quantities in the shovel tests in the wooded portion of the site. Recovered lithics (Table 3) include a sandstone nutting stone, unmodified sandstone, unmodified slate, primary decortication flakes, secondary decortication flakes, bifacial thinning flakes, one biface, and a proximal fragment of a small to medium stemmed projectile point, tentatively identified as a Woodland Gary point (Cambron and Hulse 1964). Ceramics included five fragments of fired clay and one undecorated clay-tempered sherd. The latter is diagnostic of a Woodland component. No artifact concentrations, nor faunal or botanical remains were observed on the site. A one meter by one meter excavation unit revealed the site to be within the plowzone (Figures 9-10). The test unit produced no undisturbed artifacts or features).

SITE 40SY513

Site 40SY513, discovered in May 1990, is an open habitation site with possible Woodland and Mississippian components. Occupying a knoll approximately one kilometer (0.6 mi) south of Nonconnah Creek and 120 m (394 ft) east of a small feeder creek which flows north into Nonconnah Creek, the site is located at 35° 3' 46" north latitude and 90° 2' 46" west longitude (UTM Zone 15, Northing 3883800, Easting 0769400) at 72 m (240 ft) amsl. The portion of the site in the study area is approximately 50 m (164 ft) east-west by 75 m (246 ft) north-south. An indeterminate portion of the site probably lies to the west of the study area. The site was under cultivation at the time of observation and prehistoric material was a light lithic scatter, including three utilized flakes, four bifaces, and two projectile points (Table 4). One projectile point was a medium-sized triangular point, possibly diagnostic of the Woodland period. The second projectile point, small and triangular, was identified as a Madison point, diagnostic of the Mississippi period (Cambron and Hulse 1964). No concentrations of artifacts were detected on

this site. No faunal or botanical remains were observed. The one meter by one meter excavation unit revealed the site to be within the plowzone (Figures 9, 11). The test unit produced no undisturbed artifacts or features.

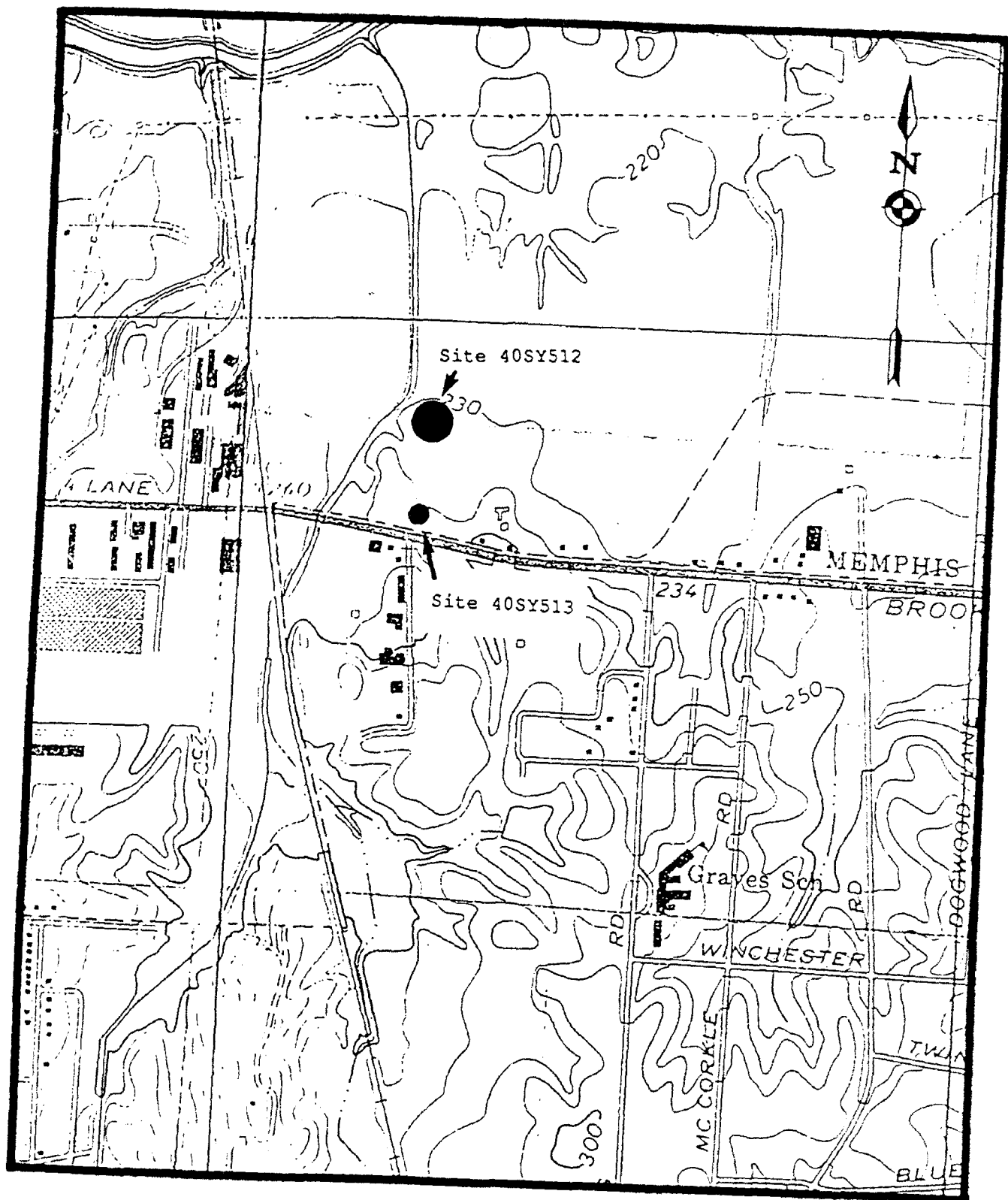


Figure 9. Sites 40SY512 and 40SY513.

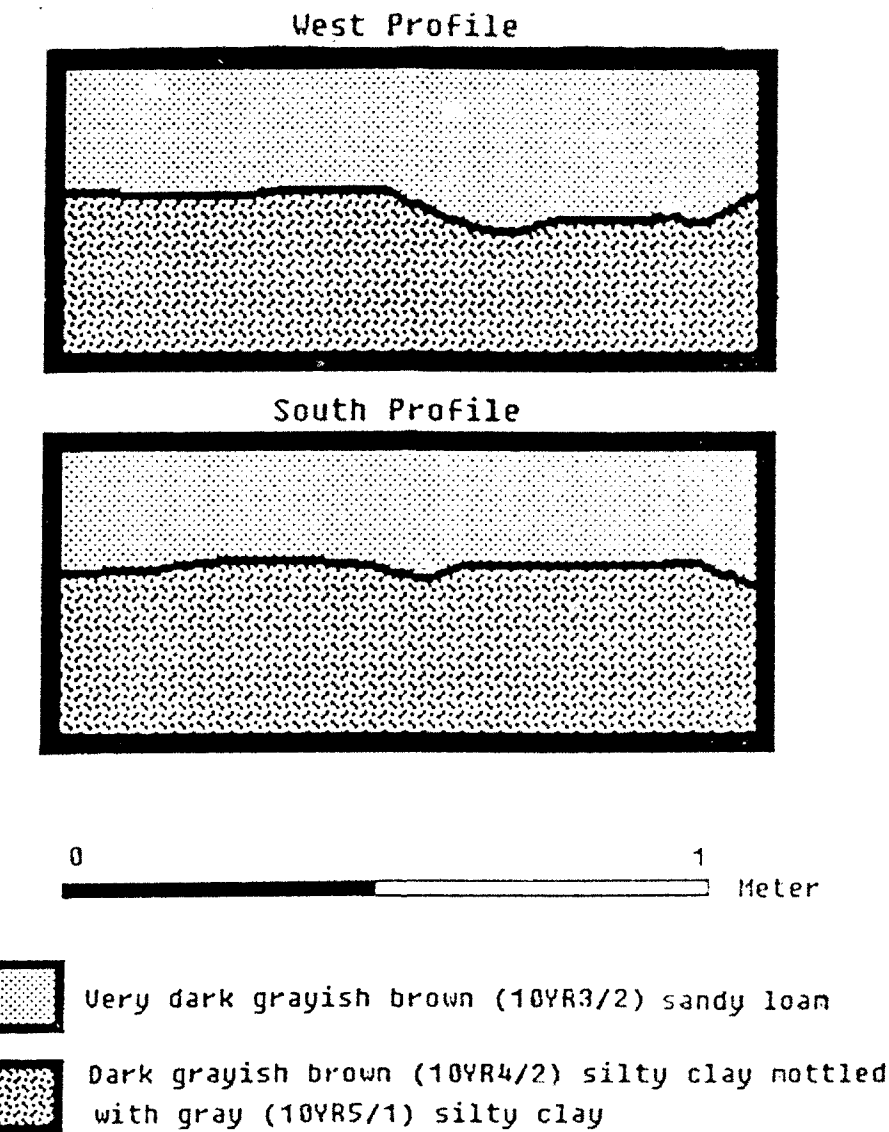
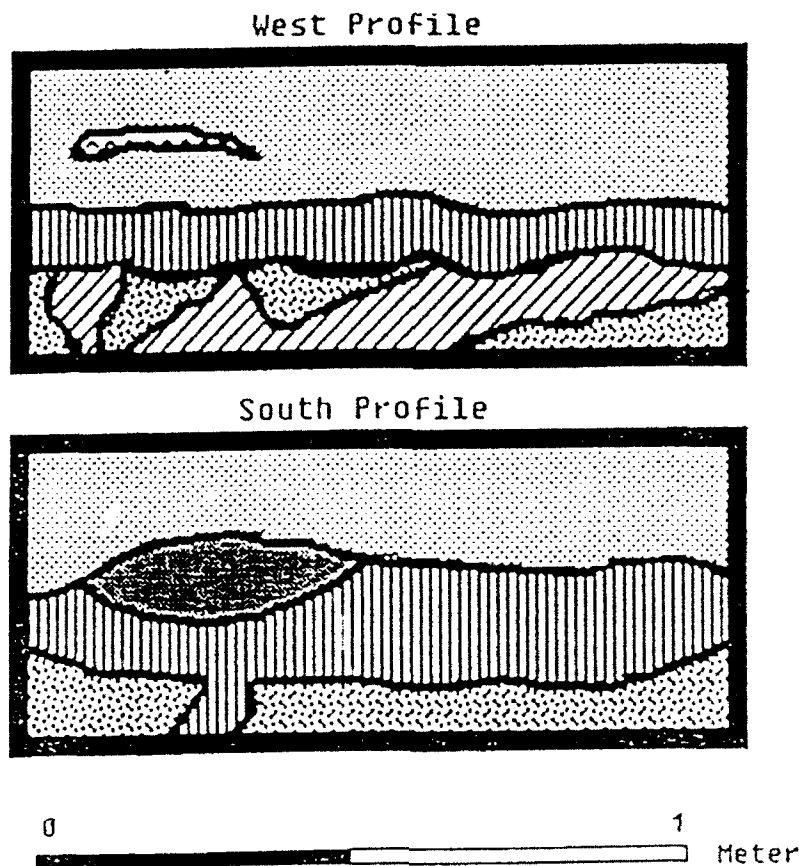


Figure 10. Site 40SY512, Test Unit 1: West and South Profiles.



-  Very dark grayish brown (10YR3/2) sandy loam
-  Dark grayish brown (10YR4/2) silty clay mottled with gray (10YR5/1) silty clay
-  Gray (10YR5/1) silty clay lightly mottled with very dark brown (10YR2/2) clayey silt
-  Dark gray (10YR4/1) silty clay
-  Very dark grayish brown (10YR3/2) silty clay mottled with gray (10YR5/1) silty clay
-  Light gray (10YR6/1) silty clay

Figure 11. Site 40SY513, Test Unit 1: West and South Profiles.

Table 3. Artifact Inventory for Site 40SY512.

SURFACE COLLECTION

Ceramics	2
Plain Grog Tempered (Baytown Plain)	
Debitage	8
Primary Decortication Flakes	16
Secondary Decortication Flakes	27
Bifacial Thinning Flakes	17
Utilized Flakes	2
Biface	1
Nutting Stone	1
Slate	1
Historic Artifacts	<u>3</u>
Salt Glaze Ceramic (2)	
Lead Seal (1)	
Total	78

SHOVEL TESTS

Fired Clay	5
Ceramic	1
Baytown Plain	
Projectile Point/Knife (Gary?)	1
Secondary Decortication Flakes	2
Bifacial Thinning Flakes	4
Sandstone	<u>1</u>
Total	14

Unit 1

Level 1

Historic Artifacts	2
Clear Bottle Glass (1)	
White Ware (1)	
Shatter	3
Unmodified Pebbles	<u>8</u>
Total	14

Level 2

Bifacial Thinning Flakes	<u>1</u>
Total	1

Table 4. Artifact Inventory for Site 40SY513.

SURFACE COLLECTION

Projectile Point/Knife (Madison)	2
Utilized Flake	3
Biface	4
Nutting Stone	1
Slate	1
Historic Artifacts	<u>11</u>
White Ware (5)	
Blue Bottle Glass (1)	
Green Bottle Glass (3)	
Clear Bottle Glass (2)	
Total	22

Unit 1
 Level 1

Historic Artifacts (Brick)	4
Debitage	6
Secondary Decortication Flakes	1
Bifacial Thinning Flakes	1
Sandstone	1
Unmodified pebbles	<u>8</u>
Total	21

Level 2

Historic Artifacts	6
Coal (2)	
Brick (4)	
Debitage	4
Secondary Decortication Flakes	2
Bifacial Thinning Flakes	2
Unmodified pebbles	<u>2</u>
Total	16