

CHARACTERISTICS OF LATE WOODLAND AND MISSISSIPPIAN SETTLEMENTS
IN THE BLACK WARRIOR VALLEY, ALABAMA

by
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Abstract

This thesis is an investigation of the settlement pattern and settlement system of the Moundville chiefdom in west-central Alabama. Previous analyses of Moundville settlement have focused largely upon mound sites in the region. Little attention has been paid to the smaller outlying sites within the valley, often referred to as farmsteads. Farmsteads are believed to be the basic unit of production in most Mississippian societies, yet currently there is little understanding of their number or distribution within the Black Warrior Valley or whether other types of sites exist. As a step towards gaining a better understanding of Moundville-era settlement dynamics, a site survey was conducted during the summer of 1999. General characteristics of Late Woodland and Mississippian settlement in the Black Warrior Valley and the implications of these results on the Moundville settlement system and political economy are discussed.

Chapter One: Introduction

Purpose

For much of the history of archaeology, archaeologists have focused on impressive sites possessing monumental architecture and the sometimes spectacular artifacts that could be found there. Influenced by the models of chiefdom hierarchy such as that of Elman Service (1962), archaeologists have provided models that indicate that the elite residents of these sites maintained tight control over the general population. Largely ignored, however, are the smaller outlying sites that can provide valuable insights into the actual power relations between these elites and commoners. Recently, archaeological attention has become much more focused on the household-level of occupation as a means to better understand the settlement system of prehistoric societies (e.g., Mehrer 1995; Rogers and Smith 1995).

Within the Moundville chiefdom in west-central Alabama, little is known to date about the types of outlying sites that may exist, the number of these sites, their pattern of dispersal, or their relationship to Moundville itself and the single-mound sites that are present throughout the valley. A site survey was planned and carried out during the summer of 1999 as part of a multi-year effort to provide a better understanding of the settlement dynamics of the Black Warrior Valley.

Settlement Patterns and Systems

The landmark monograph of settlement pattern studies is generally considered to be *Prehistoric Settlement Patterns in the Virú Valley* (1953) by Gordon Willey. Willey defined settlement patterns as:

the way in which man disposed himself over the landscape on which he lived. It refers to dwellings, to their arrangement, and to the nature and disposition of other buildings pertaining to community life. These settlements reflect the natural environment, the level of technology on which the builders operated, and various institutions of social interaction and control which the culture maintained. Because settlement patterns are, to a large extent, directly shaped by widely held cultural needs, they offer a strategic starting point for the functional interpretation of archaeological cultures (1953:1).

This definition was modified by Winters (1969) to distinguish between settlement *pattern* and settlement *system*. Settlement pattern is defined as “the geographic and physiographic relationships of a contemporaneous group of sites within a single culture” and the settlement system is “the functional relationships among the sites contained within the settlement pattern” (Winters 1969:110). Therefore, settlement patterns refer to the physical relationships both between sites and between sites and their environment. Settlement systems consider the social relationships between the residents of particular sites. An understanding of a settlement system requires that each site be looked at with a regional perspective in mind (e.g., how the residents of a particular site fit into the larger social order and how communities interact with one another). The residents of some sites within the settlement system may perform important social and/or ceremonial roles (e.g., the elites) while others may be involved in more mundane day-to-day tasks (e.g., commoners).

In the case of the Moundville chiefdom in the Black Warrior River Valley, the settlement pattern will be explored by describing the general characteristics of the geographic and physiographic settings of sites by cultural stage. The settlement system will be examined using previous models of chiefdom studies and the ways in which these models explain the function of outlying sites.

Chieftoms

In order to come to an understanding of presumed elite-commoner relations, we must first define what we mean by the term *chieftdom*. A chieftdom can be viewed as a step between an egalitarian society and a complex, industrial society (Table 1). While it

Childe (1936)	Service (1962) Johnson and Earle (1987)	Sahlins (1963) Earle (1978)	Fried (1967)
Hunter-gatherers	Band (family level)	Head Man	Egalitarian society
Farmers	Tribe (local group)	Big Man	Ranked society
Civilization	Chiefdom	Simple Chiefdom	Stratified society
		Complex Chiefdom	
	State	State	State

Table 1. Some common anthropological typologies of social evolution (adapted from Earle 1994).

is impossible to give this subject a thorough treatment here, I will discuss several of the key definitions as they apply to this paper.

Oberg (1955) provides an early definition of the term *chieftdom* as:

multivillage territorial chiefdoms governed by a paramount chief under whose control are districts and villages governed by a hierarchy of subordinate chiefs. The distinguishing feature of this type of political organization is that the chiefs have judicial powers to settle disputes and to punish offenders even by death and, under the leadership of the paramount chief, to requisition men and supplies for war purposes (Oberg 1955:484).

In other words, in this type of social organization there are two layers of chiefs: the paramount chief and the subordinate chiefs.

According to Sahlins (1958:251-252), most Polynesian societies consisted of one large ramage with a paramount chief at its head. The chief controlled the lands and their resources, as well as the ability to mobilize labor. Hence, the chief essentially managed

the economy. Surplus resources were passed up the social hierarchy to be redistributed by the chief. Ramage-based organization was generally understood to occur in areas with more dispersed resources and, hence, a more dispersed population. This dispersion would require a greater mobilization of labor and a larger network of distribution.

Service (1962) took Sahlins' notion of Polynesian chiefly redistribution and applied it globally. According to Service, "chiefdoms are *redistributional societies* with a permanent central agency of coordination" (1962:144, italics in original). In other words, goods (usually subsistence goods) flow into the center to be redistributed among the population by the chief in times of need. Further, "It is the presence of the office of chief that makes it a chiefdom" (Service 1962:150; see also Sahlins 1972:139). Therefore, the office of chief becomes *corporate*, superceding the individual.

The notion that redistribution was the central characteristic of a chiefdom formed the basis of much of the archaeological discussion of chiefdoms throughout the 1970s (e.g., Hatch 1975; Larson 1971; Peebles 1974). More recent discussions of chiefdoms have shown that chiefly redistribution as an essential economic characteristic was uncommon and that smaller settlements were largely self-sufficient (e.g., Carneiro 1991; Earle 1977; Peebles and Kus 1977; Taylor 1975).

The concept of chiefdom has also been attacked as part of a rigid evolutionary typology consisting of a mere compilation of traits (e.g., Yoffee 1993). To sidestep this problem, I will adopt a broad definition of chiefdom as put forth by Arnold (1996). In her view, the concept of the chiefdom is still useful if kept simple with an emphasis on changes in organizational structure. A chiefdom can be described as having a permanent, ascribed social hierarchy, usually a supra-community political integration, and distinctive patterns of labor organization in which some control the disposition of labor of non-kin (Arnold 1996:1-2). Keeping this definition in mind, let us turn to the examination of models of the political structure and economy of Mississippian societies in general and review the problem of Moundville specifically.

Models of Chiefdom Complexity and Settlement in Mississippian

Definition of Mississippian. The “Mississippian Culture,” broadly defined, refers to “sedentary farmers of the interior riverine region in eastern North America during late prehistoric times” (Teltser 1996:474). Mississippian groups focused on maize agriculture and were characterized by dense populations, earthworks (mounds), and a ranked social structure. Archaeologists have tended to refer to Mississippian societies as chiefdoms, yet there are several competing definitions of what constitutes Mississippian culture. Griffin (1985) focuses on cultural innovation and contact with other groups while Smith (1978a) views Mississippian as a specific adaptation to the meander-belt zones of major river systems of the eastern United States. However, while the Moundville-era occupation of the Black Warrior Valley can be seen as an adaptation to a meander-belt niche (see Hooks 1986), not all groups that are viewed as Mississippian are found in these zones. For the purposes of this discussion, I will use John Scarry’s recent characterization of Mississippian as:

those peoples of the late prehistoric Southeast who practiced cleared-field agriculture with maize as the dominant crop, who had hierarchical political organizations with evidence of ascriptive status differentiation, and who shared a set of religious cult institutions and iconographic complexes (1996:13).

This inclusive definition encompasses groups living across much of the interior Southeast that have traditionally been considered Mississippian, including those that do not necessarily reside in meander-belt zones, such as those in the Georgia Piedmont who exploited equally food-rich shoals (see Anderson and Joseph 1988:56; Hally and Rudolph 1986:2-3; Shapiro 1990).

Models of Mississippian Complexity. Several different theoretical models of Mississippian chiefdom complexity have been proposed. Steponaitis (1978) described a simple chiefdom as having one level of hierarchy above the local community.

Steponaitis' complex chiefdom is a top-down model in which a high-level chief controls a number of lower-ranking chiefs. Each lower ranking chief controls a certain territorial district. Within this system, tribute flows from bottom to top, each chief owing tribute to their superior until the top of the hierarchy is reached. Each segment of this hierarchy is associated with archaeologically distinct settlements (Steponaitis 1978:420-421). In other words, there are either one or two levels of chiefs above the local community; one level being a simple chiefdom and two levels being a complex chiefdom.

A second model has been proposed by Anderson (1994, 1996), following Wright (1984). Anderson defines a complex chiefdom as characterized by two levels of administrative hierarchy (or chiefs) above the local community, but measures it from the bottom up rather than from the top down. Chiefdoms are multicommunity units in which villages or minor centers are directed by the centrally dwelling chiefs. The size and power of the chiefdom is measured by the number of archaeologically distinct subsidiary communities (Anderson 1996:231-232). Therefore, complex chiefdoms have at least two levels of community hierarchy above the local community. In this model, the local community consists of a village-level group or possibly a cluster of farmsteads (which in Steponaitis' model would represent the lowest level of hierarchy and not the local community). Chiefdoms generally cycle between simple and complex based on the administration of the flow of tribute. More tribute requires more territory which, in turn, requires more secondary centers to process the flow of tribute to the major center (Anderson 1994, 1996).

Beck (1997) has questioned the validity of both of the above models of chiefdom complexity. He argues that they are lacking because they take into consideration only one variable when examining the complexity of chiefdoms. Steponaitis addresses the number of levels of chiefs while Anderson addresses the number of levels of multicommunity hierarchy. Each model lumps seemingly different chiefdoms together into broad categories. In Beck's view, this one-dimensional approach masks the diversity

inherent within chiefdoms, making it difficult to properly examine variation. Similarly, Blitz (1999:589) has argued that the simple-complex chiefdom cycle, with its emphasis on the management of tribute, does not take into account the possibility of the formation of polities “by a compromise between the desire for autonomy and the need for mutual security” and that power is perhaps most effective when concentrated in one center.

I find it unlikely that chiefly cycling can adequately explain Moundville settlement. The definition of cycling is that “administrative or decision-making levels within the societies occupying a given region fluctuate between one and two levels above the local community” (Anderson 1994:1). Anderson’s discussion of Moundville as an example of chiefly cycling, however, is based on a previous model of Moundville’s development, which showed a period of steady growth and increasing power followed by collapse (Anderson 1994:145-150). In his view (following that of Peebles [1987b] and others), secondary mound centers developed as tribute management centers during the height of Moundville’s power. We now know that Moundville was built quickly and underwent a gradual decline, and several of these secondary mound sites were in fact constructed when Moundville was experiencing this decline (Knight and Steponaitis 1998). Since these mounds are not all fully contemporaneous, it is likely that they represent the political fragmentation of the Moundville polity rather than being strategically positioned to channel tribute to the major center.

General Models of Mississippian Settlement. While there is considerable variation in settlement patterning within Mississippian chiefdoms, three basic models are recognized. These are: (a) mound/village centers with dispersed farmsteads loosely clustered around them; (b) an even dispersal of all sites across the local landscape; and (c) nucleated centers/towns with no outlying farmsteads (Figure 1). For the purposes of this discussion, *farmstead* is defined as a one-to-two-household, rural, year-round settlement which focused primarily on horticultural activity (Knight and Solis 1983; Mehrer and Collins 1995:47; Smith 1995:236). These domestic units are generally seen as the basic

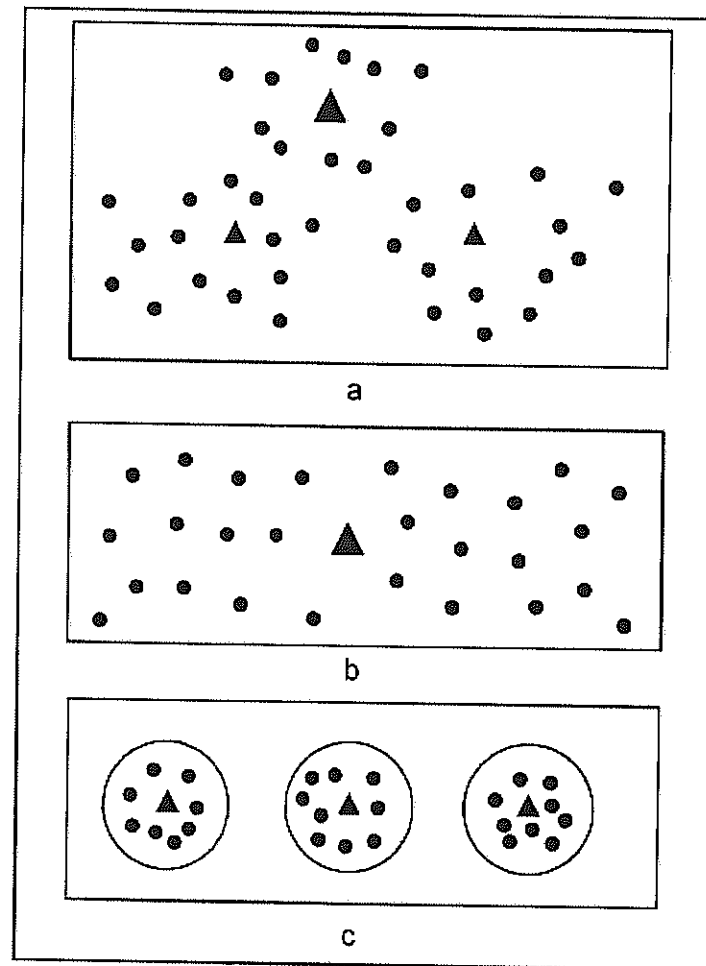


Figure 1. Schematic Diagram of Mississippian Settlement Types. (a) mound/village centers with dispersed farmsteads loosely clustered around them; (b) even dispersal of all sites across the local landscape; (c) nucleated centers/towns with no outlying farmsteads. Large triangles represent mound sites. Small dots represent farmsteads in (a) and (b) and household units in (c).

units of production in Mississippian societies (see Blitz 1993:99; Mehrer 1995; Muller 1993:137, 1997:262; Rogers 1995:81; Smith 1978a:489). They were likely self-sufficient, although they were probably not fully autonomous. The domestic unit is also the minimal unit of production in Mississippian groups, such as Dallas in the east Tennessee River Valley, that lived primarily in nucleated villages (Polhemus 1987, 1990).

Bruce Smith has proposed that Mississippian populations were ideally dispersed within floodplains as an adaptation to take advantage of both the environmental and social situation:

Many, if not all, Mississippian populations could be generally characterized as having a settlement system consisting of dispersed farmsteads surrounding a local center, with this system representing a flexible compromise solution to the opposing pressures of optimum energy utilization and optimum social-cohesion-boundary-maintenance abilities (1978a:491).

By dispersing, farmstead residents could take full advantage of agriculturally productive soil and biotic resources while still linked by local centers that provided defense and a place for social gatherings (Smith 1978b:200; 1995:243). These local centers could be either a mound site or what has been termed a *nodal center*, or a social and ceremonial gathering place for these dispersed sites that serves as an intermediate form of social organization between mound sites and household-level sites (Mehrer 1995; Mehrer and Collins 1995).

Muller (1978, 1993) shows a cluster of small sites in the immediate vicinity of the Kincaid site, a large Mississippian center on the Ohio River, with site density declining with distance from the center (Figure 2). Similarly, Blitz (1993) describes a cluster of dispersed farmsteads around the Lubbub Creek mound in the Tombigbee Valley of western Alabama (see also Jenkins 1982:129, 137-138).

Some Mississippian societies conformed to a settlement system characterized by a relatively even dispersal of sites. Late Lamar (A.D. 1520-1660) occupations in the upper Oconee valley in Georgia provide the best example. The upper Oconee data indicate the presence of small, dispersed settlements in both upland and lowland settings, with few large sites present (Kowalewski and Hatch 1991). A similar pattern of dispersed farmsteads is seen in the Apalachee area of the Florida Panhandle (Payne and Scarry 1998). Also, in the American Bottom following the emergence of Cahokia, outlying

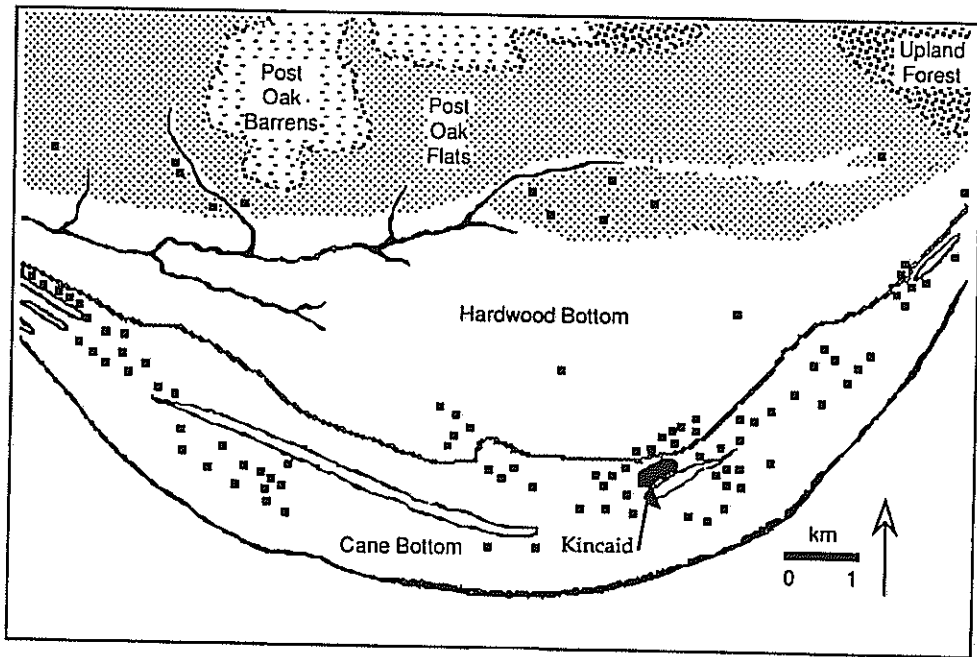


Figure 2. The Kincaid Locality. (From Muller [1993] *Lower Ohio Valley Mississippian Revisited: An Autocritique of "The Kincaid System."* In *Archaeology of Eastern North America: Papers in Honor of Stephen Williams*, edited by J. B. Stoltman, pp. 127-142. Archaeological Report 25, Mississippi Department of Archives and History, Jackson. Used by permission).

settlements became more dispersed, most likely due to a more stable social integration. The stability provided by Cahokia reduced the need for people to gather together in nucleated villages for defensive purposes. These people adopted a more energy-efficient adaptation to a landscape dotted with narrow ridges separated by marsh and open water; a pattern that continued throughout the Mississippian stage with no noticeable relationship to the occupational histories of the nearby mound centers. While this dispersed pattern is a direct result of the rise of Cahokia, the influence of local centers on settlement aggregation seems to be minimal (Milner 1990:29). Similarly, the settlement pattern of the Hasinai Confederacy, while a protohistoric and not a Mississippian group, consisted primarily of single farmsteads, small hamlets, and a few large villages dispersed along the major stream valleys of east Texas (Wyckoff and Baugh 1980).

The final settlement system type to be discussed here is the nucleated village with very few or no outlying sites. This can be seen in the settlement of the Dallas phase. The

Dallas phase is characterized by compact towns, such as Toqua, Citico, and Bussell Island, located along alluvial bottomlands at close intervals to each other (Lewis and Lewis 1995; Polhemus 1987:1240-1250; 1990). However, Davis (1990:250-251; see also Schroedl 1998) notes that several small Dallas phase sites have been recorded in the Little Tennessee River Valley, the majority of which seem to cluster near the mound/village centers. Similarly, Parkin phase settlement in Arkansas also consists of large villages with no corresponding farmsteads (Morse 1990).

This presentation of the basic Mississippian settlement models will be compared with existing data from the Moundville chiefdom below. Following a presentation of the general characteristics of geographic and physiographic settings of sites by cultural stage, the validity of each model will be discussed with respect to the Moundville case and a tentative assessment of the Moundville system will be presented.

Chapter Two: Background

Moundville

The Moundville site in west-central Alabama is located on a Pleistocene terrace overlooking the Black Warrior River at Hemphill Bend (Figure 3). The site is approximately 300 ha in area and consists of 29 mounds arranged around a quadrilateral plaza (Figure 4). It has attracted considerable archaeological attention over the past 150 years.

Physical Environment. Moundville is located on the Gulf Coastal Plain below the Fall Line Hills (Figure 5). Within the study area, the average daily temperature is 63 degrees and the average yearly precipitation is 49 inches (K. Johnson 1981:Table 1). Above the fall line (the transition between the Piedmont and Coastal Plain), the Black Warrior River is restricted by the rugged terrain, but once in the Coastal Plain:

the river meanders freely across a broad alluvial plain. Traces of abandoned meanders, oxbows, and ridge and swale topography document the importance of lateral erosion as the dominant fluvial force. The geometry of the older and the present meanders, especially the wave length, radius of curvature, and channel widths indicate that hydrologic characteristics, such as the discharge and channel dimensions, do not seem to have varied appreciably in recent times (Hooks 1986:40-47).

The constant activity of the river can be seen through the abundance of meander scars which have occurred over several thousand years. However, the construction of the lock and dam system has slowed the flow of the river, thus affecting the cutoff rate (Joo 1990:14). Major floods occur every three to five years. One of these floods, which crested approximately 25 feet above flood level (personal observation of the flood gauge at Moundville Archaeological Park), occurred during the preparation of this thesis.

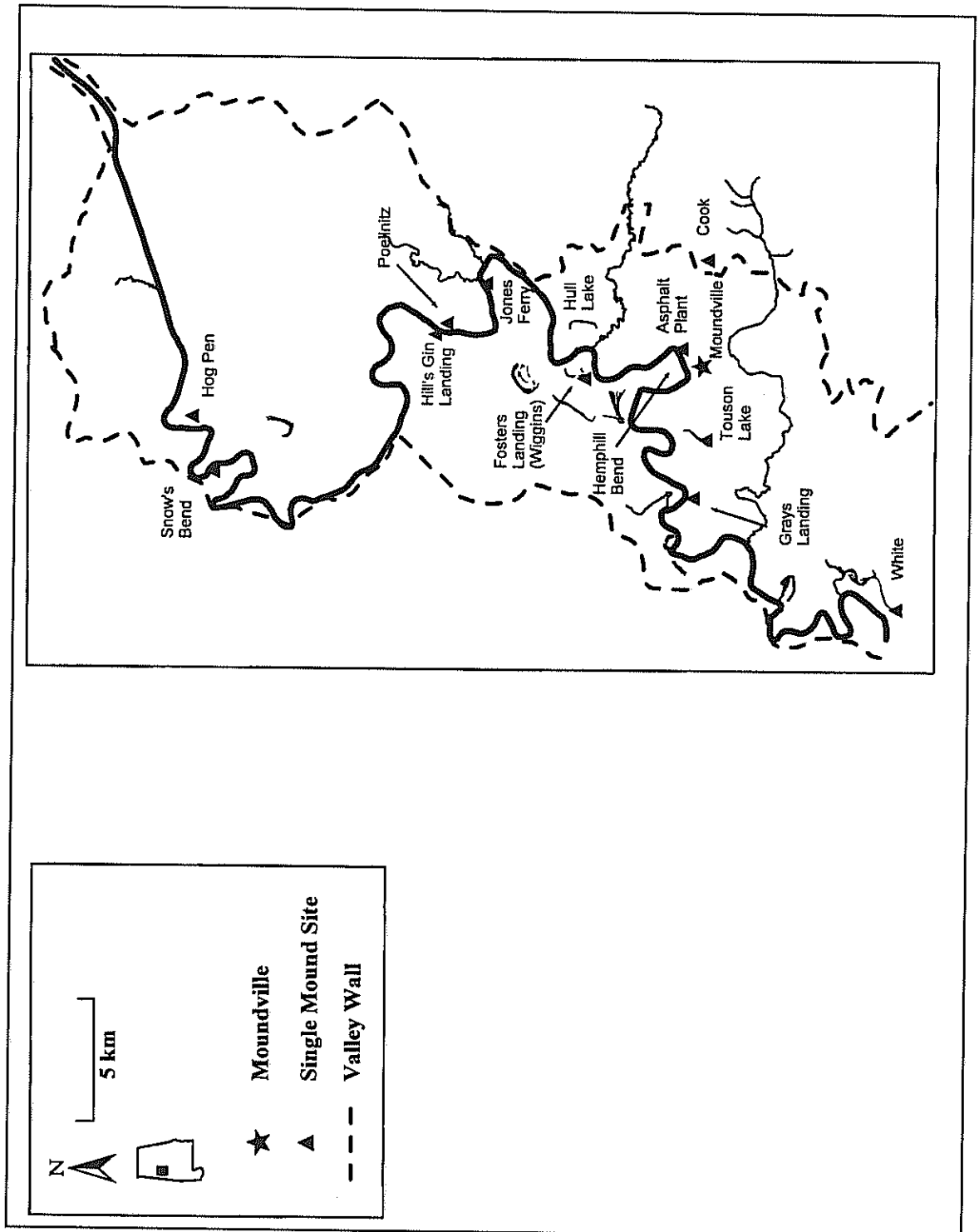


Figure 3. The Moundville Chiefdom

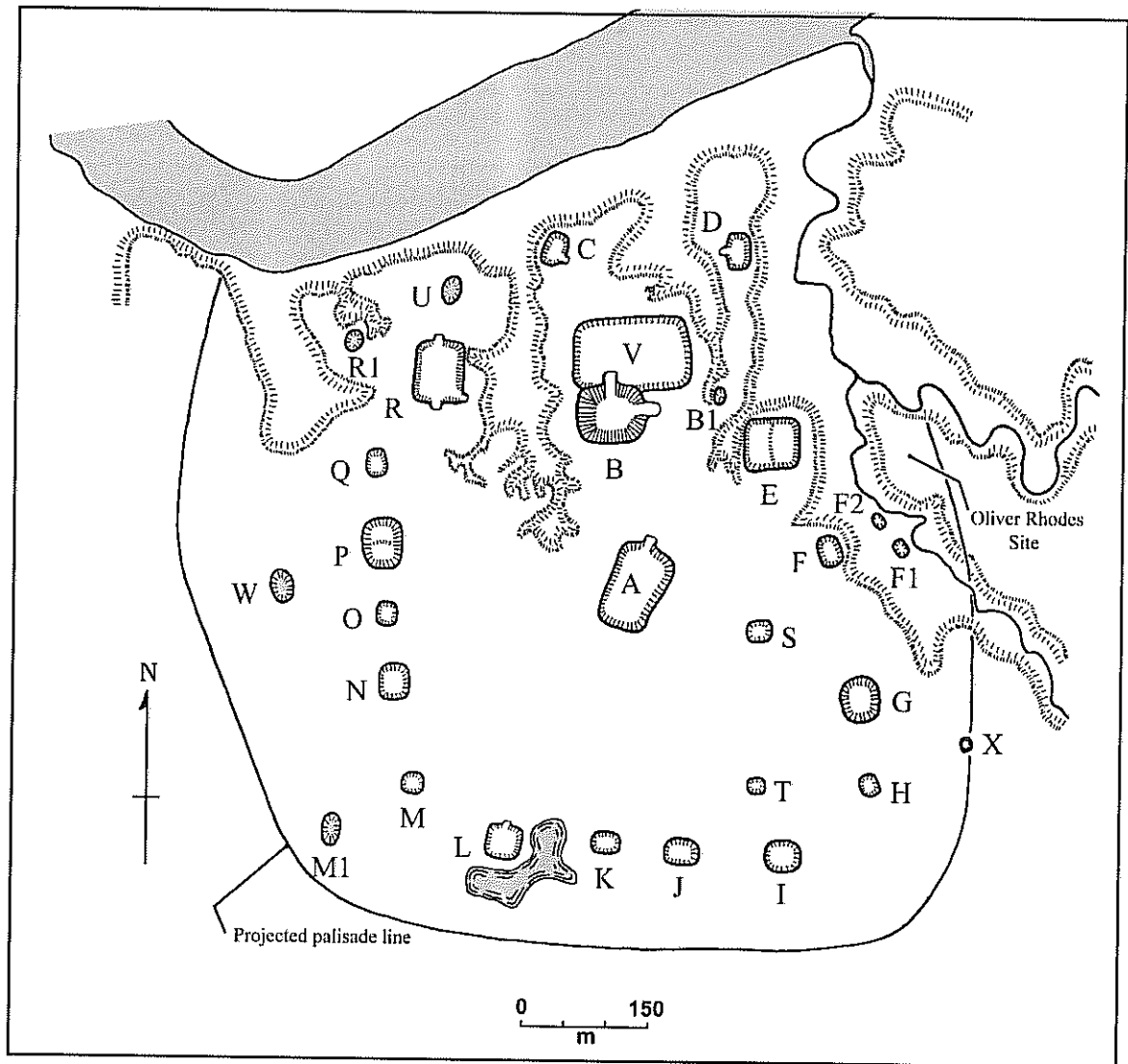


Figure 4. Moundville site plan. (Knight and Steponaitis 1998; used by permission).

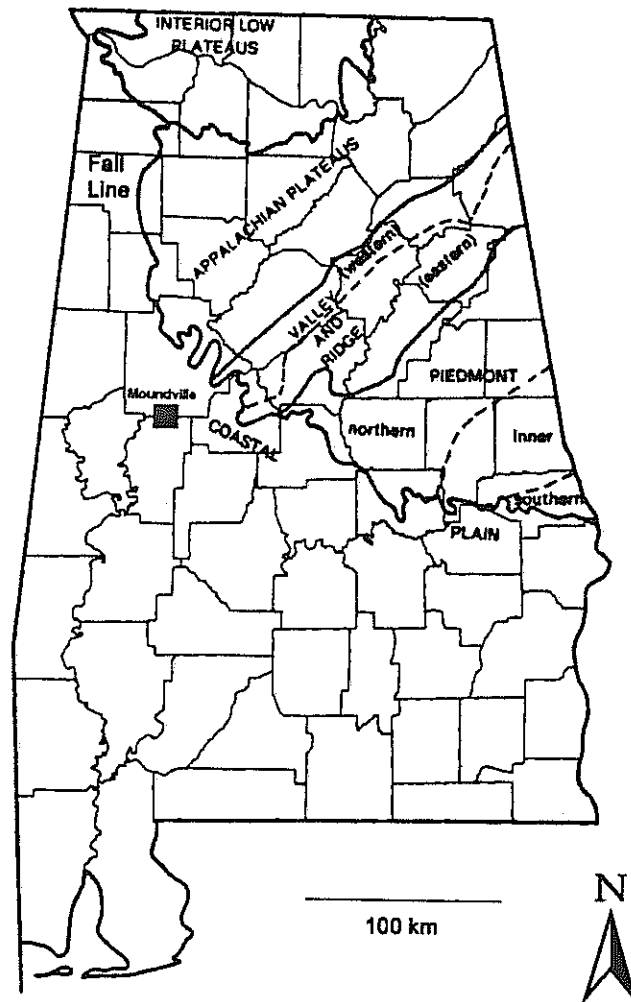


Figure 5. Physiographic Regions of Alabama.

The major divisions within the study area are the Fall Line Hills, Terrace Zones, and the floodplain (K. Johnson 1981; C. M. Scarry 1986). The Fall Line Hills bracket the floodplain and are characterized by rolling hills, winding ridge tops, steep slopes, and intermittent streams. Forest cover consists of mixed hardwoods and pine with oak, pine, and hickory the most dominant species (C. M. Scarry 1986:Table 4.8). Soils in the Fall Line Hills are not well-suited for cultivation (K. Johnson 1981).

The terrace zones are the high stream terraces above the Black Warrior River that avoid all but the most severe floods. The Moundville site lies on one of these high terraces. Terrace soils are moderately to well-drained and of moderate to high fertility (K. Johnson 1981). Oak, pine, and hickory are again the most dominant species (C. M. Scarry 1986:Table 4.9).

The floodplain averages 6-7 km in width (Joo 1990) and is composed of levees and ridges that drain quickly after floods, first bottoms that hold water after floods, and swamps that are wet year round. Soils are fertile because of the high rate of alluvial deposition (K. Johnson 1981). Oak, beech, pine, and maple, holly, and sweetgum are the primary tree species (C. M. Scarry 1986:Table 4.10).

The diversity of this environment provided a wealth of subsistence possibilities for prehistoric inhabitants. The productivity of the terrace and floodplain soils allowed for productive maize cultivation while the surrounding forest, both in the uplands and bottomlands, provided a variety of nut species (C. M. Scarry 1986). In addition, wild game such as deer, beaver, turkey, rabbit, squirrel, opossum, turtle, and fish were abundant in the forest, the river, streams, and oxbow lakes (Michals 1981).

Previous Investigations. Early investigations at Moundville were carried out by investigators sent by the Smithsonian Institution in 1869 and 1882 and consisted of minor excavations and, more importantly, sketch maps (Steponaitis 1983a). Following this work, Clarence B. Moore investigated the site in 1905 and 1906, excavating “trial holes”

and sometimes more extensive excavations in all of the major mounds (Moore 1996 [1905, 1907]).

The first professional excavations at Moundville were carried out by the Alabama Museum of Natural History and the Civilian Conservation Corps (CCC) from 1930 to 1941. These investigations resulted in the excavation of nearly 4.5 ha., over 2,000 burials, over 75 structure patterns, and the recovery of hundreds of thousands of artifacts (Peebles 1979).

The “Moundville phase” was originally defined by DeJarnette and Wimberly (1941) and refined by McKenzie (1966) based on distinctive ceramic types found in the region. In the late 1970s, a team from the University of Michigan Museum of Anthropology (UMMA), under the direction of Christopher Peebles, conducted research designed in part to identify subphases within the Moundville phase. The result was the division of the Moundville phase into three subphases, Moundville I-III. The protohistoric Alabama River phase was renamed Moundville IV in the 1980s.

Previous investigations had assumed that each of the ten secondary mound centers in the Black Warrior Valley were contemporaneous with the height of Moundville’s dominance. This led to an interpretation of Moundville as a dynamic, powerful polity with political influence as far north as the Tennessee River Valley (e.g., McKenzie 1966; Peebles 1971). In addition, the temporal model of the Moundville phase was that of a long, steady increase in development and power, culminating in the Moundville III phase, followed by a sharp collapse between Moundville III and IV (e.g., Peebles 1987b).

More recent investigations have revised this picture of the site’s history. The local chronology is defined by distinctive ceramic markers (Steponaitis 1983b), therefore the phases discussed below are largely *ceramic* phases (e.g., Knight and Steponaitis 1998:10). Those readers familiar with the local chronology will note that the dates used below are slightly different from others that have appeared in print (Figure 6). Knight et al. (1999) have recently revised the Moundville chronology using a combination of

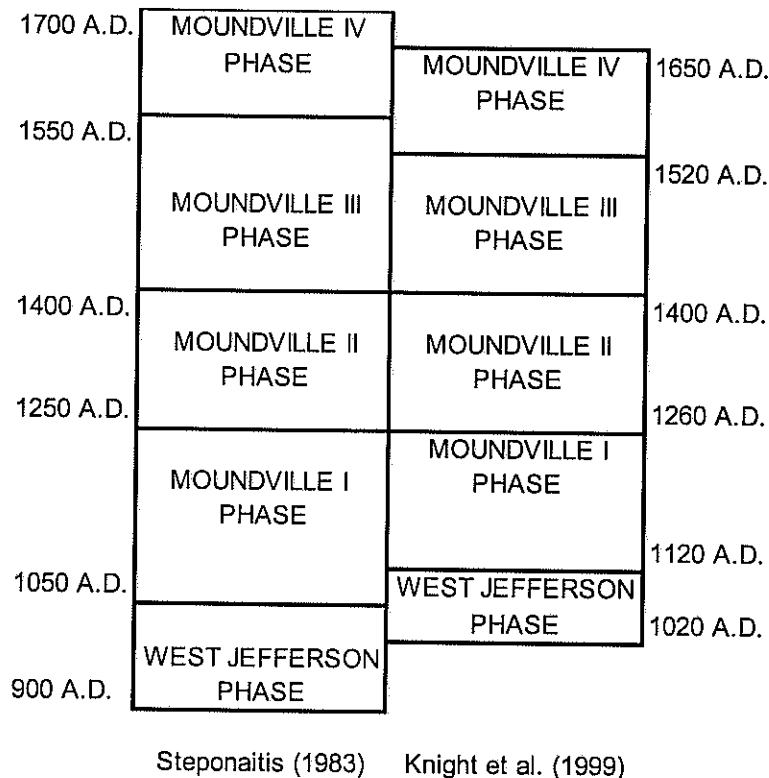


Figure 6. Revised Moundville chronology. Adapted from Knight et al. (1999).

previously unpublished radiocarbon dates and the Gibbs Sampler method, a technique that re-estimates calibrated radiocarbon date distributions according to archaeologically defined constraints (see Knight et al. 1999).

Political Development. The beginnings of the Moundville chiefdom can be seen in the Late Woodland West Jefferson phase (ca. 1020-1120 A.D.). Little information is available on West Jefferson phase sites in the Black Warrior Valley near Moundville, but it is possible to make some preliminary observations based on the few sites that have been excavated upriver in Jefferson County (Ensor 1979; Jenkins and Nielsen 1974; Jenkins 1978). West Jefferson groups seem to be characterized by nucleated villages with no evidence of hierarchical social organization. Grog-tempered pottery predominates, and there is evidence for an increase in agricultural production late in the phase (Knight and Steponaitis 1998; C. M. Scarry 1993; Welch 1990).

During the early Moundville I phase (ca. 1120-1200 A.D.), termed *Initial Centralization* by Knight and Steponaitis (1998), agricultural dependence continued to increase (C. M. Scarry 1995, 1998). The large nucleated villages of the West Jefferson phase are believed to have given way to smaller, more dispersed farmstead sites. Mound construction began at this time, seen at the Asphalt Plant site and Mound X at Moundville (Knight and Steponaitis 1998:13). It is not known whether other types of sites exist.

The late Moundville I/early Moundville II phases, termed *Regional Consolidation* (ca. 1200-1300 A.D.), saw the construction of the palisade (C. M. Scarry 1995, 1998) as well as the construction of most of the major mounds around the central plaza and a sharp increase in the population at Moundville. However, as maximum population estimates at Moundville range from about 1,000 to 3,000 (Peebles 1983:190, 1986:29, 1987a:27, 1987b:9-10; Steponaitis 1998:42), it is likely that the majority of the population of the Black Warrior Valley inhabited outlying areas. The mound construction at Moundville, as well as the construction of the Jones Ferry, Poellnitz, and Hog Pen mounds elsewhere in the valley, indicates the probable emergence of a political hierarchy (Knight and Steponaitis 1998:15).

At the beginning of the late Moundville II/early Moundville III phase (*The Paramountcy Entrenched*; ca. 1300-1450 A.D.), the population at Moundville sharply declined. It has been suggested that the elites continued to live at Moundville while the commoners moved (or were forced) out into the valley. Evidence for this occurrence is as follows: an increase of burials at Moundville; a corresponding drop in sheet middens that postdate 1300 A.D.; and the occupation of eight minor mound centers elsewhere in the valley (Knight and Steponaitis 1998; Steponaitis 1998; Welch 1998).

The late Moundville III and Moundville IV phases (A.D. 1450-1650) saw the collapse of the Moundville chiefdom. Most mounds at Moundville itself had fallen into disuse. Secondary mound centers continued to grow and cemeteries began to be established. Village-size occupations are seen at mound sites (e.g., White) and at non-mound

sites (e.g., Powers). This indicates the increasing independence of outlying sites at the expense of Moundville. By the Moundville IV phase (formerly termed the Alabama River phase), all evidence of social hierarchy had disappeared (Curren 1984:240-242; Knight and Steponaitis 1998:21-22; Sheldon 1974).

Models of Moundville's Settlement. As mentioned above, previous models of Moundville had determined that its influence extended all the way north to the Tennessee River. More recent studies have reduced the sphere of Moundville's direct political control to the 25-40 km area of floodplain immediately to the north and south of the site (Figure 3) (see Welch 1998). The reasons for this reduction in size are as follows: (a) contemporary sites are clustered for 25 km north and 15 to 35 km south of Moundville, but then there is a gap for nearly 50 km to the north and 35 km to the south; (b) ceramic chronology and decoration begins to vary more than 25 km from Moundville; and (c) it has been recognized that chiefdoms generally encompass only the distance that can be traveled on foot in a day (Welch 1998:134; see Hally 1993 for elaboration on point [c]). In addition, investigations by the University of Michigan Museum of Anthropology (UMMA) in the late 1970s had begun to show that not all the mounds were occupied at the same time; in fact, several mounds emerged significantly later in time than others and well after the construction of Moundville (Figure 7) (Knight and Steponaitis 1998; Welch 1998).

Most earlier studies of the prehistoric settlement of the Black Warrior Valley focused largely on Moundville itself and the surrounding single-mound sites (Figure 3). Little attention was paid to sites not possessing a mound. However, by the 1970s, the surrounding river valley had begun to receive greater archaeological attention. Early analyses of Moundville phase settlement indicated a three- or four-tiered pattern of settlement: major center, minor center, village, and farmstead (Peebles 1978:40-43; Steponaitis 1978:437). These early analyses also calculated the catchment radii for each single-mound site and concluded that these mounds were ideally positioned to funnel

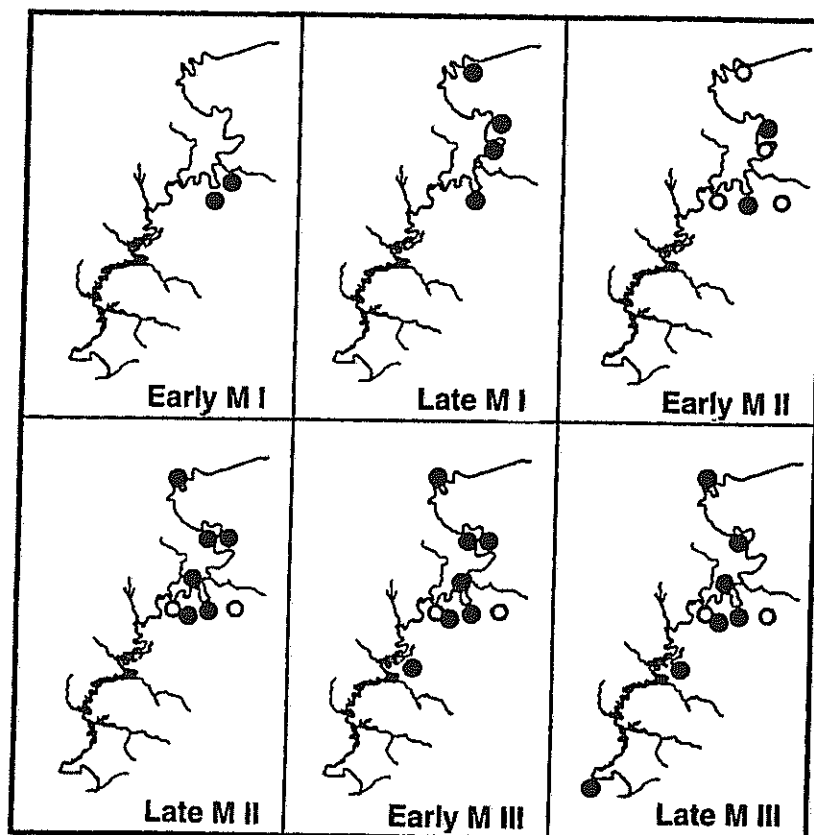


Figure 7. Mound Settlement Pattern of the Moundville Chiefdom. Closed circles indicate definite occupation; open circles indicate probable occupation. (Welch 1998; used by permission).

subsistence goods and tribute to Moundville, following the chiefly redistribution model of Service (1962).

A re-examination of these analyses by Bozeman (1982) resulted in the elimination of the “village” category. These “villages,” when re-examined, were actually large, overlapping Late Woodland artifact scatters with one or more additional, more spatially restricted, Mississippian occupation (Bozeman 1982; Welch 1990:211, 1998:135). The presence of the earlier and larger Late Woodland components proved to be misleading when calculating site size.

Until the 1970s, there was no evidence that farmsteads existed in the Black Warrior Valley. There were no excavated farmsteads in much of the Mississippian world

until Smith (1978a, 1978b, 1995) reported the careful investigation of the Gypsy Joint site, a Powers phase farmstead in southeastern Missouri (Figure 8). Since Smith's report, however, evidence for the existence of this type of rural settlement in the Black Warrior Valley has been provided by several surveys. A University of Alabama field school under the direction of John Walthall surveyed a 6 square kilometer portion of the Black Warrior floodplain in 1976 (Bozeman 1982:157-159; Walthall and Coblenz 1977). Walthall's survey recorded forty-one sites, twenty of which were described as Mississippian farmsteads based on the presence of small scatters of shell-tempered sherds. Similarly, a UMMA crew surveyed several large fields in 1978, resulting in the discovery of over a dozen Mississippian sherd scatters (Welch 1998:138, field notes on file at Moundville Archaeological Park). These surveys provided the first indication that these types of small-scale sites existed; however, to date none of the sites recorded in 1976 and 1978 have been excavated.

It is generally believed that the majority of the Moundville chiefdom's population lived in dispersed farmsteads within the Black Warrior Valley (e.g., Welch 1998); however, currently we have little understanding of the way in which these farmsteads were dispersed due to the lack of systematic large-scale survey coverage of the area (but see Alexander 1982; Bozeman 1982; Walthall and Coblenz 1977).

University of Alabama cultural resource management (CRM) surveys in the 1980s and 1990s have resulted in the identification and excavation of five of these farmstead sites in the Black Warrior Valley: Mill Creek (Alexander 1982; Mistovich 1986, 1987), Oliver (Alexander 1982; Michals 1998), 1Tu423 (Alexander 1982; Mistovich 1986), Big Sandy Farms (Ensor 1993), and Pride Place (H. Johnson 1999) (Figure 9). Two additional farmsteads, Yarborough (Solis and Walling 1982) and Tibbee Creek (O'Hear et al. 1981), were excavated in the nearby Tombigbee drainage (see Figure 8). Upon excavation, they consisted typically of one to four or five structures, often with a central hearth, several burials, and pits. A brief summary of these sites follows.

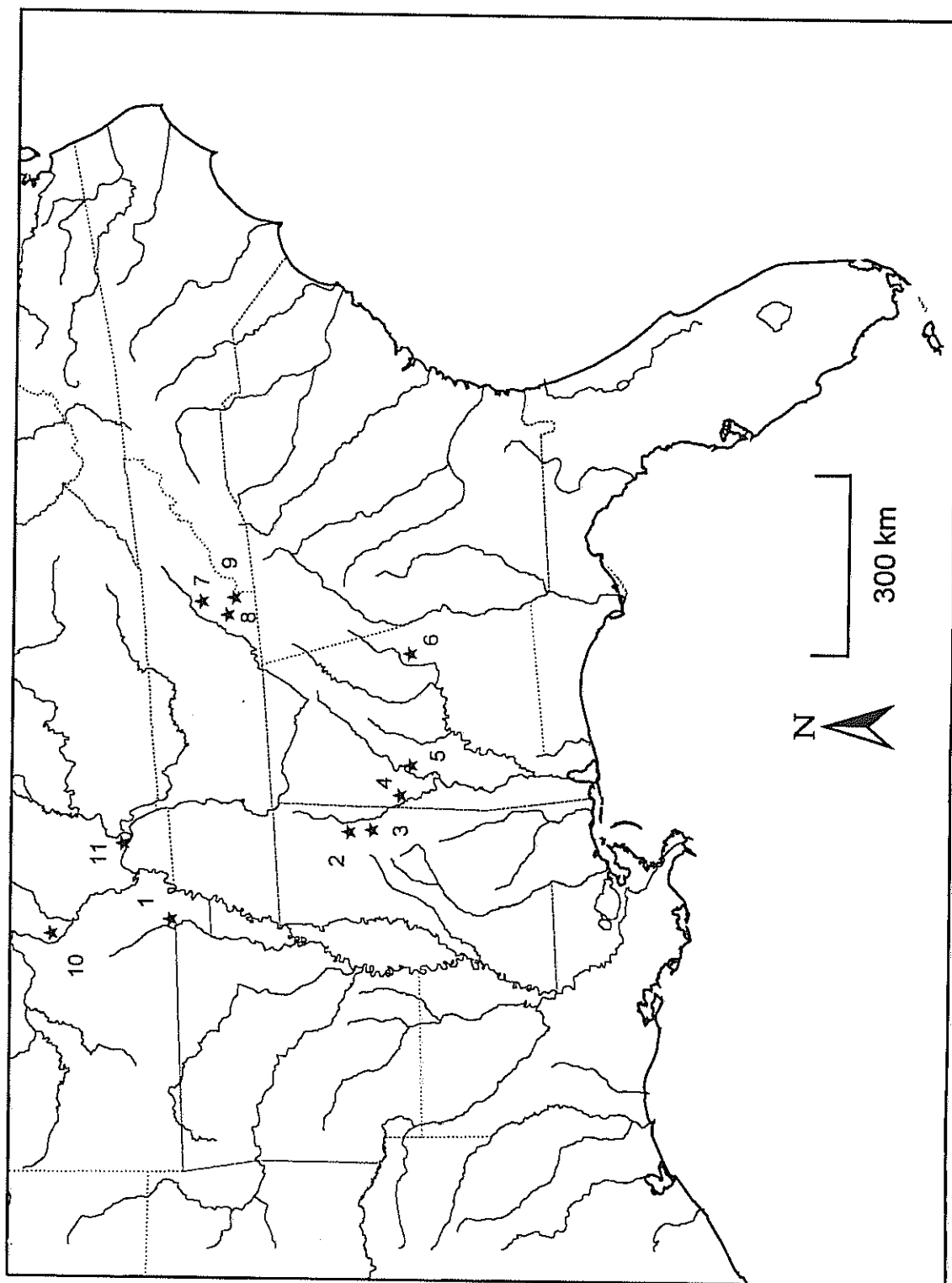


Figure 8. Sites Discussed in Text: (1). Gypsy Joint; (2).Yarborough; (3).Tibbee Creek; (4).Lubbub; (5).Moundville; (6). Davis Farm; (7). Bussell Island; (8). Toqua; (9). Citico; (10). Cahokia;

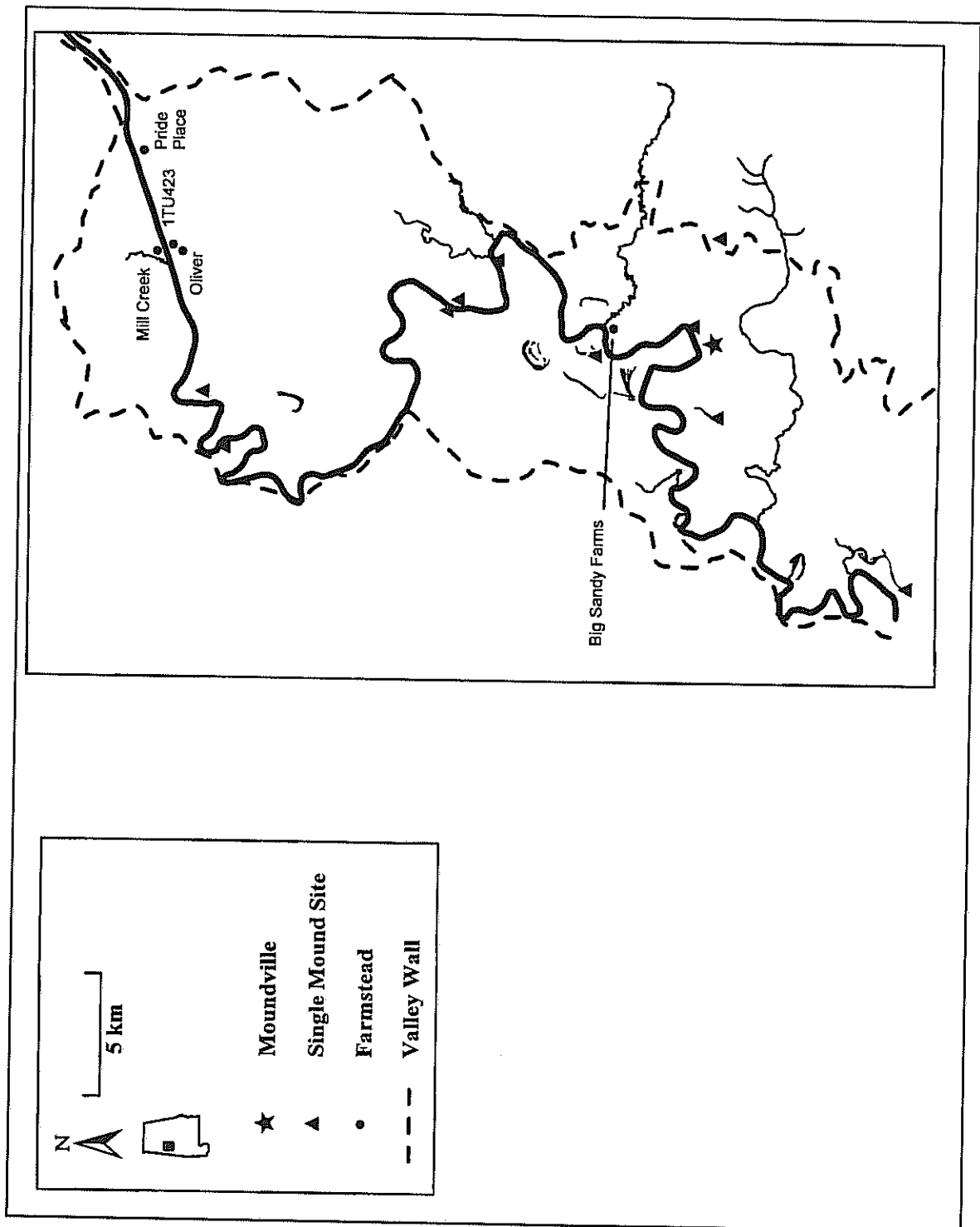


Figure 9. Excavated Farmsteads in the Black Warrior Valley.

Farmstead Excavations

Yarborough (22C1814) and Tibbee Creek (22Lo600). The Yarborough and Tibbee Creek sites are located in the Tombigbee drainage approximately 80 km to the northwest of the Black Warrior Valley (Figure 8). These were the first excavated farmsteads near the Moundville region and provided important early information. The Yarborough site revealed an oval/round singly-set post structure with a substantial midden and dates primarily to the Sorrells phase, contemporaneous with Moundville III (Figure 10) (Solis and Walling 1982). Tibbee Creek, excavated by O'Hear et al. (1981), possessed a single rectangular wall-trench structure (Figure 11) that dates to the equivalent of the late Moundville I or Moundville II phase (Mistovich 1995).

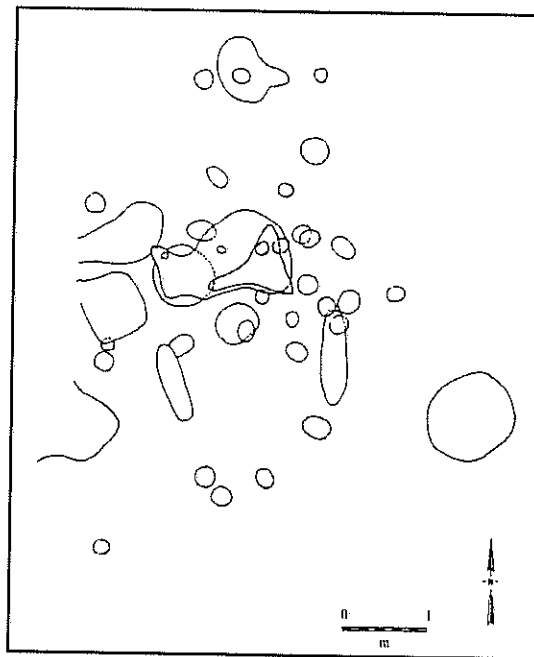


Figure 10. Plan view of Structure 1 at Yarborough. Adapted from Solis and Walling (1982). Courtesy Office of Archaeological Services, University of Alabama Museums, Mississippi State University, and the United States Army Corps of Engineers, Mobile District.

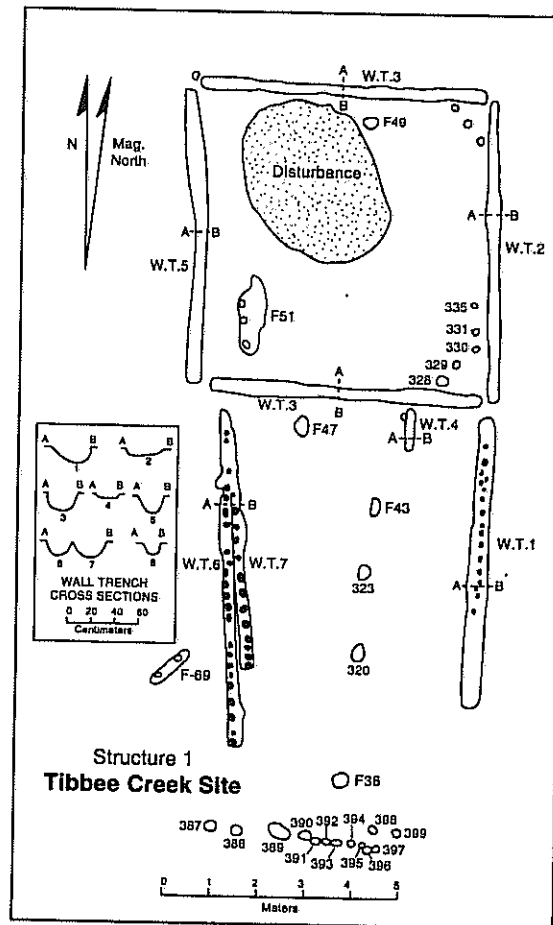


Figure 11. The Summerville I household at Tibbee Creek (Mistovich 1995; adapted from O'Hear et al. 1981:93). Reprinted from *Mississippian Communities and Households*, Rogers and Smith (1995), with the permission of the University of Alabama Press.

Mill Creek (1Tu265). The Mill Creek site, located near the confluence of Mill Creek and the Black Warrior River (Figure 9), consisted of a 75-cm deep midden, two possible structures, pits, and burials (Figure 12). These structures were nearly the same size: one 6 x 5 m and the other 6.75 x 5.5 m. A poorly preserved burial was identified within Structure 1; however, no hearth or prepared floor was identified (Mistovich 1987). Structure 2 was originally assigned to the West Jefferson phase based on grog-tempered pottery found in post holes, while Structure 1 was believed to be of early Moundville I

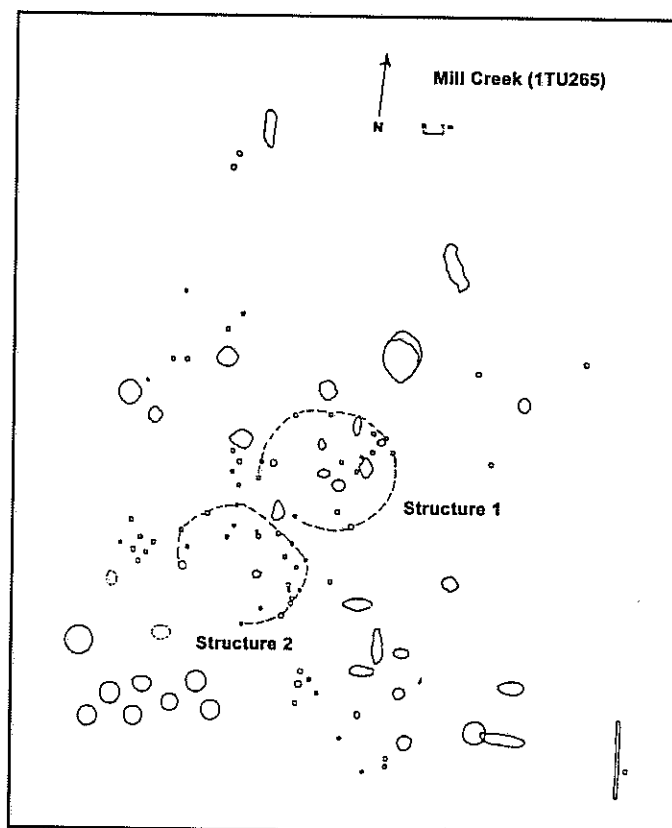


Figure 12. Plan view of the Mill Creek site.
Adapted from Mistovich (1987).

construction (Mistovich 1987, 1988, 1995). However, Welch (1998) has argued for different phase assignments. He believes that Structure 2 is a late Moundville I occupation and that the grog-tempered pottery in post holes is an accidental inclusion from an earlier occupation at the site. In addition, the only pit with plentiful pottery, Feature 30, contained Moundville Engraved sherds, which are thought not to make their appearance until late Moundville I. Structure 1 is reinterpreted as a Moundville II/III occupation based on radiocarbon dates and on Moundville II/III diagnostic sherds such as beaded rims and Moundville Engraved, *var. Hemphill*. Four additional burials at the site with shell-tempered sherds in the fill support this interpretation (Welch 1998:142-143).

Oliver (1Tu459). The Oliver site is located near the Mill Creek site on a terrace near the Black Warrior River (Figure 9). The original visitation of the site resulted in a

modest collection of one anvil stone, lithic debitage, two Historic Creek sherds, and one Late Woodland sherd. As such, the Oliver site was originally deemed to be insignificant (Alexander 1982:249-250). However, as the site was being destroyed by earth-moving activities, rectangular wall-trench structures and midden-filled pits were noted. Salvage operations were conducted, allowing the pits to be excavated but no mapping was completed before the site was completely destroyed. Examination of ceramics found in the feature fill indicated that the Oliver site was likely an early Moundville I phase farmstead (Michals 1998).

1Tu423. Site 1Tu423 (Figure 9) was recorded by Paul Welch in 1981 and first described by Alexander (1982:163). Limited testing of the site (Figure 13) was conducted during the Oliver Lock and Dam project in the mid-1980s by Tim Mistovich (1986). One pit (Feature 1), containing shell-tempered pottery, was excavated along with one burial (Feature 2). This burial was accompanied by a Mississippi Plain, *var. Warrior* shallow flaring-rim bowl, indicating an unknown Moundville-stage occupation. Due to the extent of erosional damage and the lack of undisturbed midden, the site was deemed ineligible for further work and no additional information is available (Mistovich 1986). It is likely, however, based on the pottery recovered and the relatively small size of this site that it was a Mississippian farmstead.

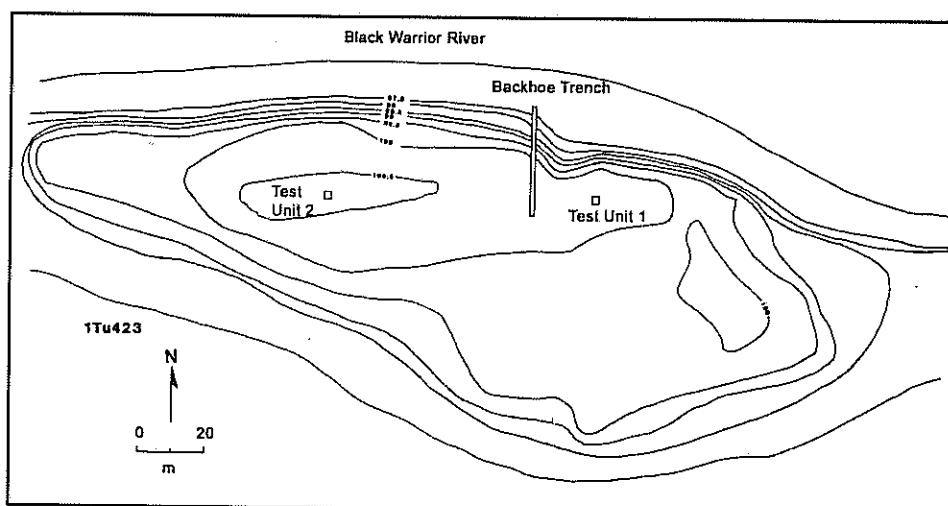


Figure 13. Plan view of site 1Tu423. Adapted from Mistovich (1986).

Big Sandy Farms (1Tu552). The Big Sandy Farms site was partially excavated along a gas pipeline right-of-way in 1990 (Figure 9) (Ensor 1993). Four structures and assorted pits were excavated (Figure 14). Three of these structures were semisubterranean, two of which contained a central hearth. Structure 1 was constructed using wall trenches along two sides and single-set posts along the other two. No wall trenches and few posts were observed for Structure 2, making its method of construction uncertain. Structure 3 extended outside the right-of-way and was not excavated (Ensor 1993). The site report describes an additional structure, Structure 4, but this is questionable.

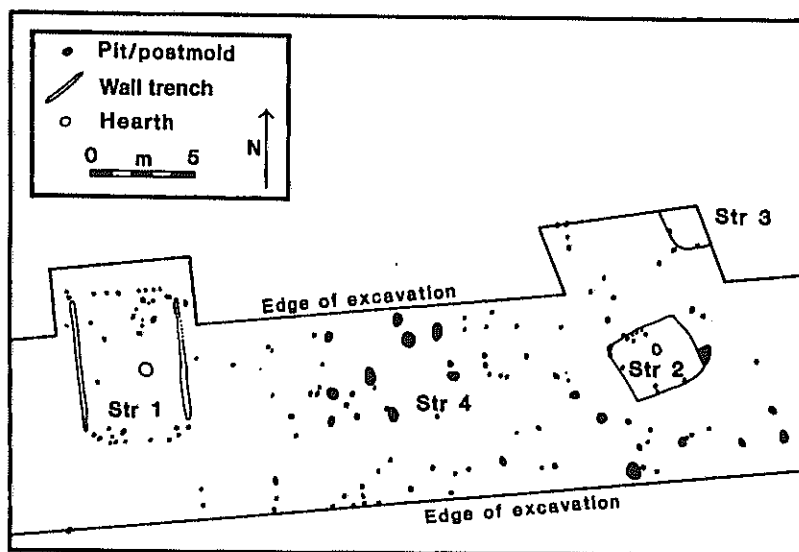


Figure 14. Features at the Big Sandy Farms site (after Ensor 1993). From Welch (1998), used by permission.

Few chronologically diagnostic artifacts were recovered during this excavation, making phase determination difficult. As semisubterranean house construction occurs at Moundville during the early Moundville I phase (C. M. Scarry 1995), it is possible that this type of construction at Big Sandy Farms indicates an early Moundville I component. Diagnostic Moundville III artifacts (beaded rims, a short-neck bowl, and red-painted

pottery) were recovered from pit fill near Structure 4, indicating an additional Moundville III occupation (Ensor 1993; Welch 1998).

Pride Place (1Tu1). Pride Place was originally recorded by David DeJarnette in the 1930s and was relocated and partially excavated by the University of Alabama's Office of Archaeological Services (OAS) in 1998 and 1999 to avoid disturbance by sewer construction (Figure 9) (H. Johnson 1999). As a result, 243 features were excavated, including six burials and two structures (Figure 15). Small Gulf Formational and West Jefferson components are present at Pride Place but the primary occupation dates to the Moundville III phase. This is indicated by the presence of beaded rim, short-neck, flared-rim, and constricted bowls as well as Carthage Incised, *var. Carthage*, Moundville Engraved, *var. Hemphill*, and red and white painted sherds (H. Johnson 1999).



Figure 15. Plan View of Pride Place (after H. Johnson 1999).

At this point, Pride Place is tentatively considered to be a farmstead; however, the high number of burials recovered during the 1930s and 1990 excavations (n=16) indicate that it may have been a more substantial occupation. In the Black Warrior Valley, off-mound burials and cemeteries become more common in the Moundville III phase with the beginning of Moundville's decline (Knight and Steponaitis 1998). Hunter Johnson (1999:11) has suggested that Pride Place may have been a nodal center of the sort that

has been described in the American Bottom (Mehrer and Collins 1995), but more excavation is necessary in order to make this sort of determination.

Mill Creek, Oliver, 1Tu423, Big Sandy Farms, and Pride Place are currently the only excavated farmsteads in the Black Warrior Valley. These examples are not sufficient to indicate of patterns of farmstead dispersal, estimate of the number of farmsteads, or to determine if other types of outlying settlement may exist in the Black Warrior Valley. Maxham (2000), utilizing ceramic data from three non-mound sites (1Tu66, 1Tu768, and Oliver), has noted that applying the label *farmstead* to all non-mound sites may be an error. Her work indicates that the assemblage from a feature at one of these sites, 1Tu66, does not indicate residential activities; rather, it is inferred that elite or ceremonial activities may have taken place based on a higher ratio of serving to cooking vessels than has been noted at farmsteads in general. According to Maxham, in order to come to a complete understanding of the interaction between all members of the Moundville society (both elite and commoner), we must understand both the hierarchical and heterarchical relationships (e.g., the interaction both between elite-commoner and commoner-commoner). Non-elite interaction likely played an important role in the lives of residents of the valley, yet archaeologists have traditionally looked at the more dynamic material remains of the elites. It is speculated that community nodes, places where non-elites met for social and ceremonial activities, should be archaeologically distinct and could provide valuable information on the nature of non-elite interaction (Maxham 2000). However, at this point we do not possess sufficient data to recognize the existence of these nodal centers.

In order to provide a first step towards a more comprehensive understanding of the settlement dynamics of the Black Warrior Valley, a multi-year site survey has been planned. The goals of the survey are to identify and record outlying sites within the Black Warrior Valley so that a general model of the characteristics and relationships of

settlements may eventually be proposed. The first field season of work took place during the summer of 1999.

Chapter Three: Project Design and Methods

Survey Transects

Two three-mile wide transects were identified for intensive survey (Figure 16). These transects were placed so that they extended east to west across the alluvial floodplain of the Black Warrior Valley, thus encompassing a range of topographic conditions within the floodplain as well as areas both near and far from mound centers.

One transect was placed so that its southern boundary followed the Hale/Tuscaloosa county line, intersecting Moundville itself and the Asphalt Plant mound. The second was placed three miles to the north, and intersected the Hill's Gin Landing, Poellnitz, and Foster's Landing (Wiggins) mounds. In both cases, the western boundary was delineated by the valley wall and the eastern boundary was delineated by Highway 69. This eastern boundary was chosen because of an increase in modern disturbance that occurs to the east of the highway.

Field Methods

The survey consisted of the intensive surface collection of cultivated fields within the selected transects. Crew members were spaced at approximately five-meter intervals as they moved across the field. Individual artifact locations were temporarily marked with pin flags until site boundaries were delineated (Figure 17). Upon delineation, sites were measured, plotted on 7.5' USGS topographic quadrangle maps, and artifacts were collected. Early in the field season, an attempt was made to identify spatial patterning of artifacts within site boundaries. However, as a grid was not utilized, this quickly proved to be fruitless and this procedure was abandoned.

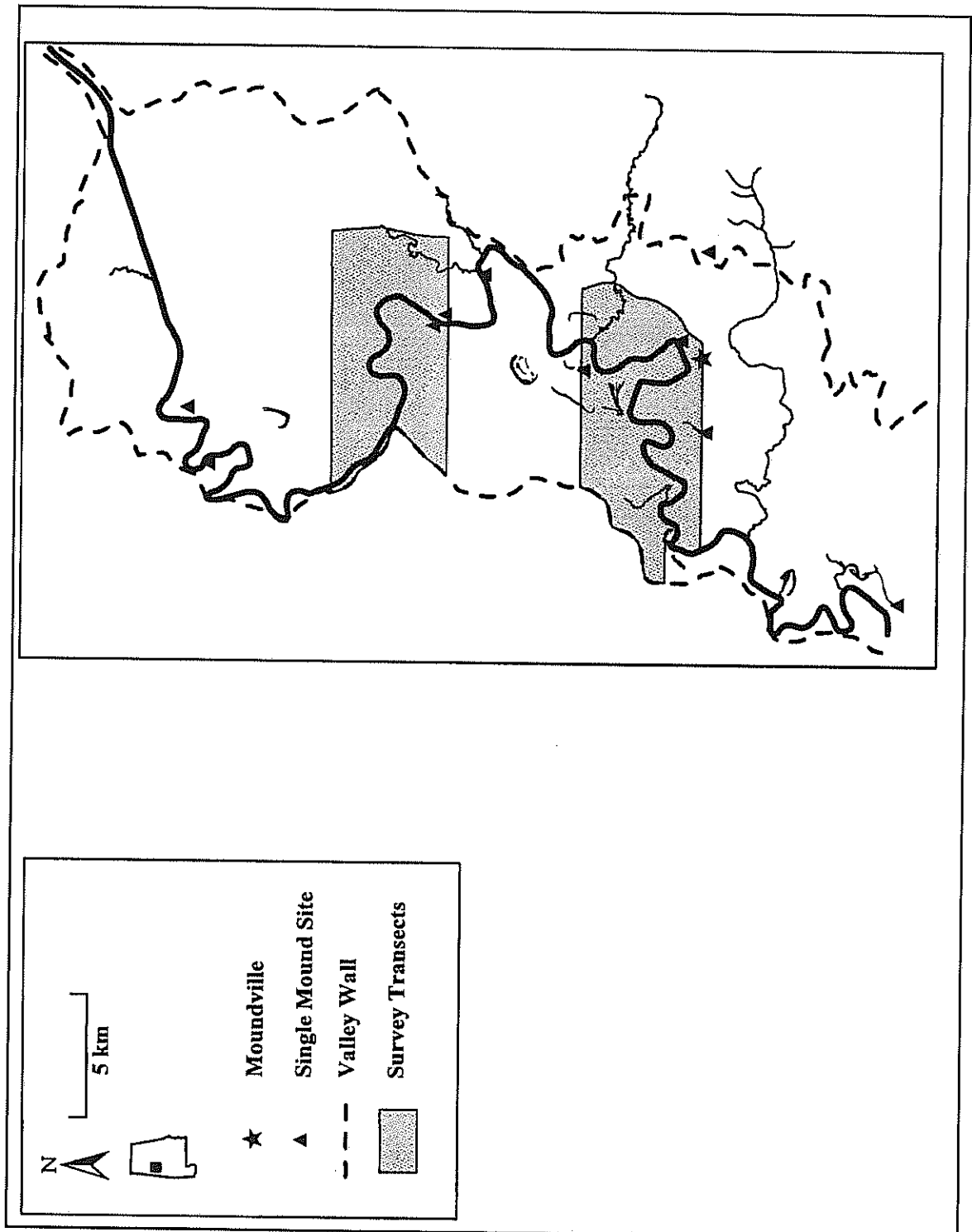


Figure 16. Survey Transects



Figure 17. Site Delineation

Previously unrecorded sites were measured, mapped, and recorded in the Alabama State Archaeological Site File (ASASF). When previously recorded sites within the selected transects were encountered, an additional collection was made and the site was re-mapped.

In two areas, the survey extended past the boundaries of the chosen transects. The northeast section of the southern transect was extended to encompass the entire area surveyed by the University of Alabama in 1976. Also, the northeast section of the northern transect was extended slightly to take advantage of two large cultivated fields (Figure 18). The extension of these two transects resulted in the addition of nearly thirty sites (both previously recorded and newly recorded) to the study sample.

The 1999 survey covered a total of 3 km². A search of the National Archaeological Database (NADB) revealed that an additional 12 km² have been surveyed by a variety of individuals within the two transects that make up the current study area (Alabama Historical Commission 1977; Betterton 1990; Bozeman 1982; Clinton and Mistovich 1989, 1990a, 1990b; Holmes and Kittrell 1989; Meyer 1990; Mistovich 1990a, 1990b; Mistovich and Martin 1990; Oakley 1990; Oakley and Jones 1999; Ryba 1990; Shaw 1992; U. S. Army Corps of Engineers 1983, 1999; Walthall and Coblentz 1977). Much

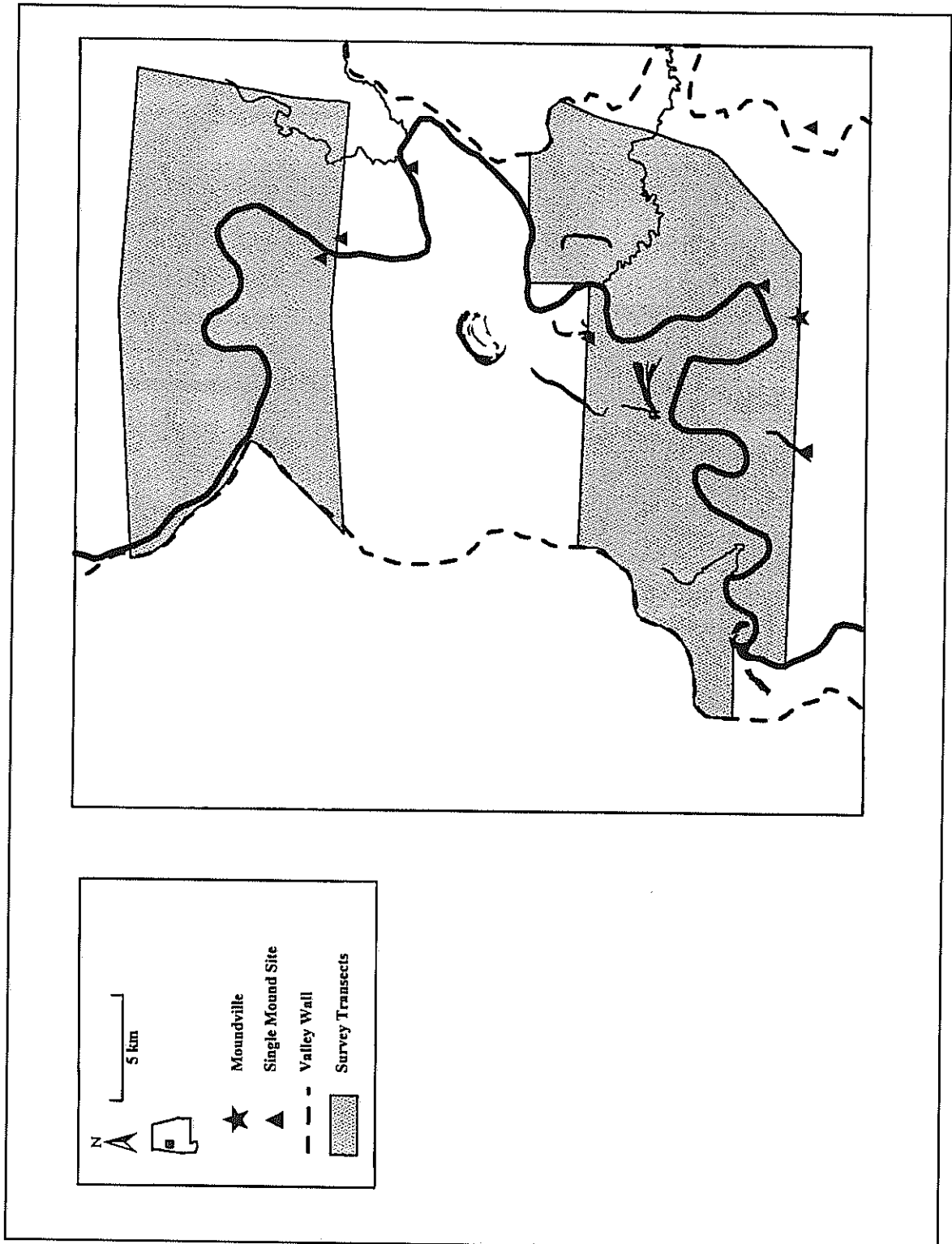


Figure 18. Transect Extensions.

of this additional 12 km² was not in cultivation in 1999. The combination of these and other efforts has resulted in the identification of 130 prehistoric archaeological sites in addition to the twenty sites newly recorded in 1999. Of these 150 sites, seven (including Moundville itself) possess a mound; five of these seven can be placed within the Moundville ceramic sequence.

Laboratory and Analytical Methods

Following the completion of fieldwork, collections were analyzed in an attempt to place them within the framework of the existing Moundville chronology. In addition to those collections obtained as a result of the 1999 fieldwork, the collections curated at Moundville Archaeological Park were re-analyzed. Many of these collections had not been studied since they were obtained in the 1930s; therefore, artifact counts were often not available. These artifact counts can be found in Appendix B. Collections for a substantial number of sites (n=32) could not be located in storage at Moundville Archaeological Park (MAP). As many of these sites were recorded either well over fifty years ago or by avocational archaeologists, it is likely that these relevant collections do not reside at MAP. In order to attempt a placement of these sites within the Moundville sequence, I relied on ASASF data and/or on published artifact totals (when possible).

Lithic Classification. Lithic artifacts were counted and sorted by artifact and material type. They were analyzed only for newly recorded sites as it was believed that pottery would provide a more secure chronological index. No attempt was made to place sites possessing only lithic artifacts within the Moundville chronology.

Ceramic Classification. Aboriginal ceramics were classified following the type-variety system as used in the Lower Mississippi Valley by Phillips (1970) and modified for west-central Alabama (the Black Warrior and Tombigbee drainages) by Jenkins (1981) and Steponaitis (1983). Identification of temporal affiliation was attempted by

studying individual sherds. Since in most cases temper was sufficient to determine a stage affiliation, vessel morphology was not considered.

When possible, sites were assigned to stages and/or phases through the use of diagnostic ceramic sherds. Sand- and limestone-tempered types are considered to be diagnostic of the Early and Middle Woodland stage while grog-tempered sherds are considered to be diagnostic of the Late Woodland stage in the study area (Jenkins 1981).

It is generally believed that the Late Woodland stage is represented by the Baytown culture in the Black Warrior Valley. The only excavated Baytown-related sites are the West Jefferson Steam Plant sites in the upper Black Warrior Valley. By definition, West Jefferson assemblages are dominated by grog tempering; however, two to ten percent of the assemblage may be shell-tempered (Jenkins and Nielsen 1974; Ensor 1979; Seckinger and Jenkins 1980). The presence of grog-tempered sherds on a particular site was considered to be representative of a Late Woodland component, although it is possible that pre-West Jefferson sites may exist that also possess grog-tempered pottery.

Mississippian assemblages in the Black Warrior Valley are nearly 100 percent shell-tempered (Steponaitis 1983:81). Therefore, all pure shell-tempered assemblages were assigned to the Mississippian stage.

In several cases, both grog- and shell-tempered sherds were recovered. Following the West Jefferson phase definition, if shell-tempering made up less than ten percent of the assemblage, the site was considered to be strictly Late Woodland. Exceptions to the "10% rule" were made when a shell-tempered sherd bore a particular mode, such as a beaded rim, that can be firmly dated within the Moundville sequence. Any site with an assemblage made up of both grog-tempered pottery and greater than ten percent shell tempering was considered to have both a Late Woodland and a Mississippian component.

Twelve sites produced material diagnostic to specific phases within the Moundville sequence (Figure 19). These included Moundville Incised, *vars. Moundville* and *Carrolton* (Moundville I/II), Moundville Engraved, *vars. Hemphill, Tuscaloosa*, and

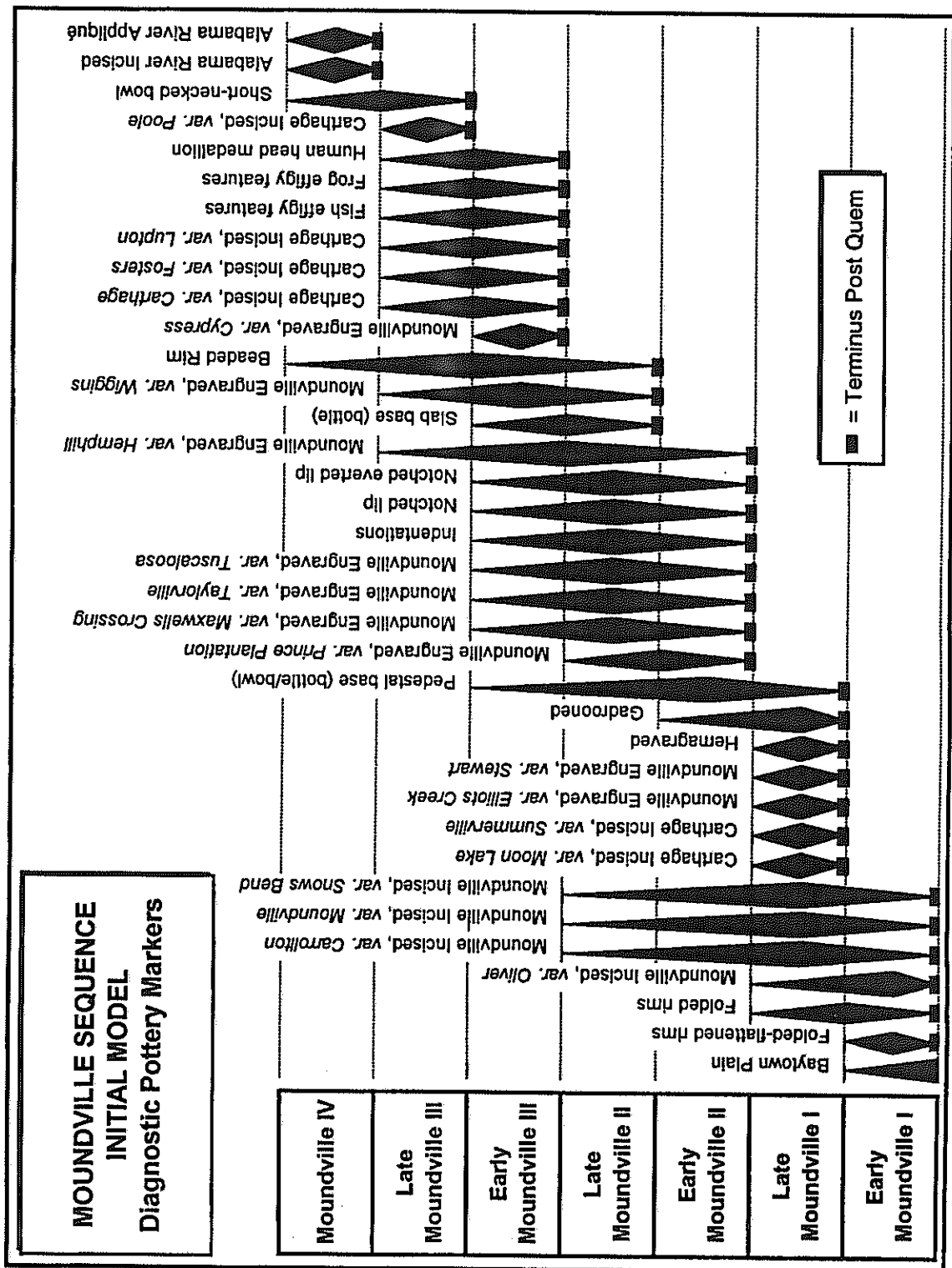


Figure 19. The Moundville Ceramic Sequence (Knight et al. 1999).

Taylorville (Moundville II/III), beaded rims (Moundville II/III), and *Carthage Incised*, *var. Carthage* (Moundville III).

Geomorphology. The geomorphological aspect of this project consisted of the examination of several key variables: topographic setting (type of landform), type of nearest water source, distance to nearest water source, and soil type. Determination of each was made by utilizing the ASASF, USGS topographic maps and the Tuscaloosa County, Alabama soil survey (K. Johnson 1981).

Topographic settings represented in the sample included terrace, floodplain, slope, and crest of hill. No attempt was made to distinguish between first, second, or third terraces because of the large size of the project area. The most commonly occurring topographic settings were terrace and floodplain environments (Figure 20).

Nearest sources of water represented in the sample included the Black Warrior River, oxbow lakes, major tributaries such as Big Sandy Creek, swamps, first order

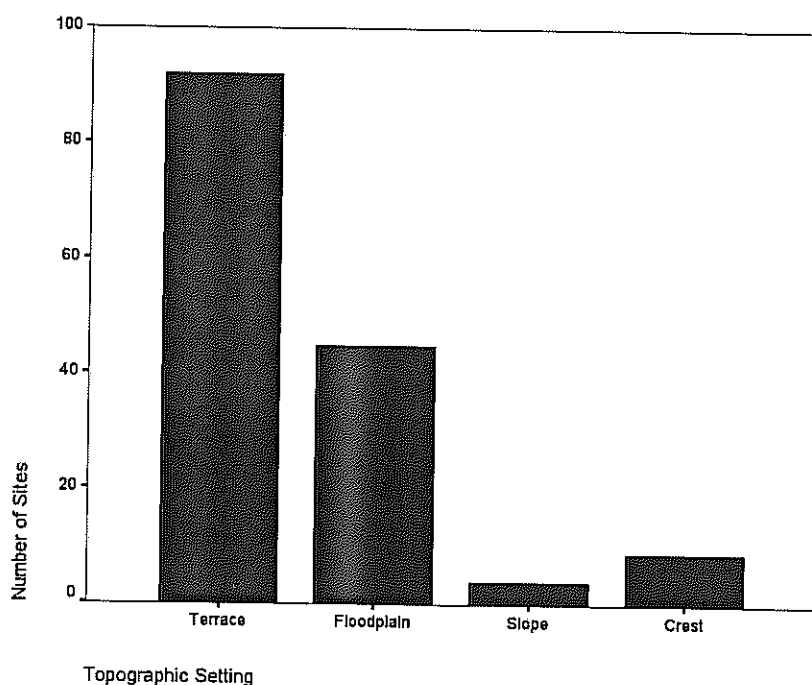


Figure 20. Total Number of Sites per Topographic Setting.

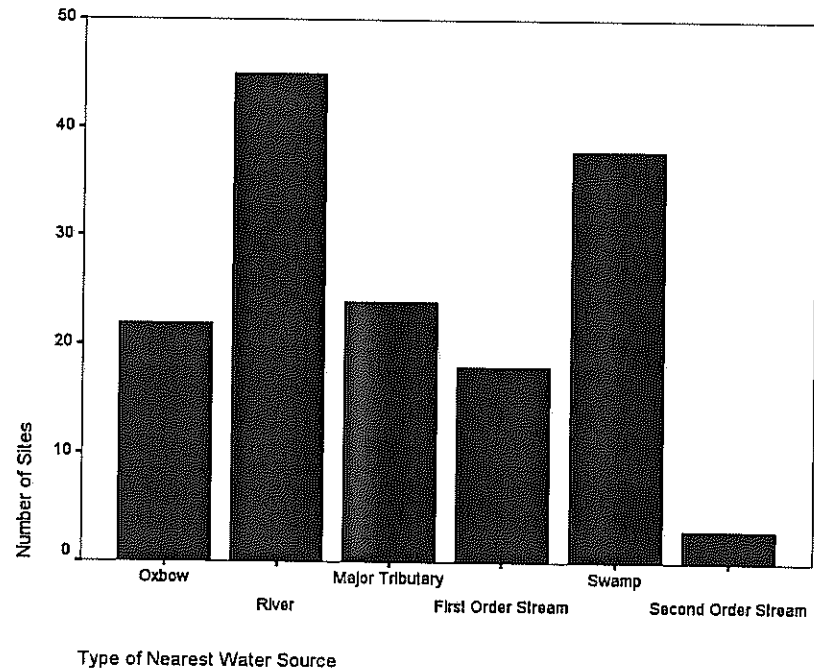


Figure 21. Total Number of Sites per Type of Nearest Water Source.

streams, and second order streams. The Black Warrior River was the most common nearest source, followed by swamps, Big Sandy Creek, and oxbows (Figure 21). Distance to the nearest water source was calculated in meters for each site. Distances ranged from 1 to 788 m with a mean of 182.25 m.

A wide range of soil types were represented in the survey area; however, Ellisville silt loam, Choccolocco silt loam, and Cahaba sandy loam were by far the most common for recorded sites (Figure 22). These soils are described as follows: Ellisville silt loam is a deep, well-drained, frequently flooded soil on floodplains and low stream terraces; Choccolocco silt loam is a deep, well-drained soil on high stream terraces above escarpment banks of the Black Warrior River; and Cahaba sandy loam is a deep, well-drained soil on terraces along large streams of the Coastal Plain (K. Johnson 1981). These are not particularly surprising results as it has often been noted that prehistoric settlement occurred in areas of well-drained soil (see for example Welch 1998:138).

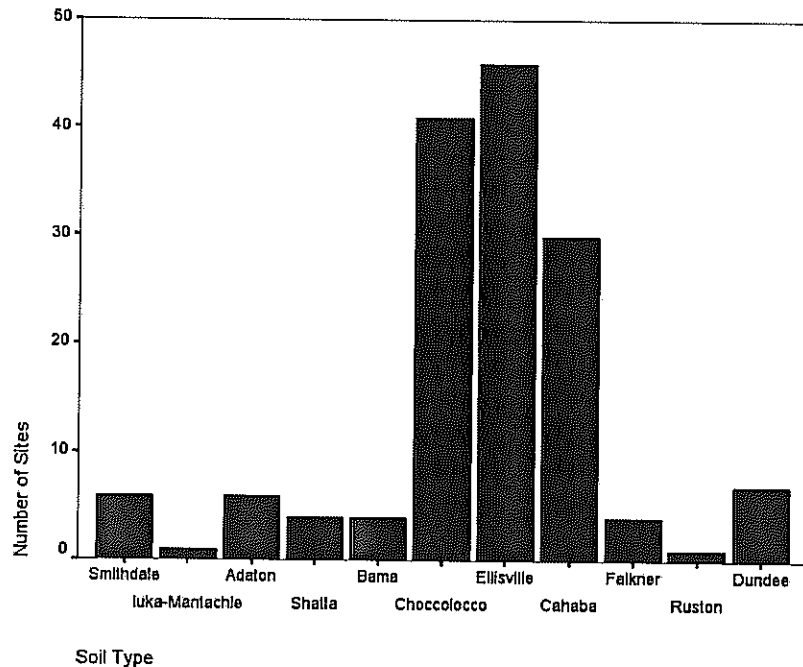


Figure 22. Total Number of Sites per Soil Type.

Other Variables. Site size was also considered. Site size ranged from 6 m² to 1,200,000 m² with a mean of 19,858 m² when mound sites were included and from 6 m² to 41,613 m² with a mean of 4,804 m² when they were excluded. A rough estimate of site size (in square meters) was obtained by multiplying the measurement of the long axis of the site by that of the short axis. In most cases, these measurements came directly from the ASASF. These figures should be treated with caution because these are rough estimates. In addition, because many of these sites were recorded some time ago and cannot always be relocated, we cannot be sure that these dimensions are accurate. Nevertheless, since these figures are what we have to work with, they will be utilized for rough comparative purposes in this analysis.

Chapter Four: Settlement Characteristics of Cultural Stages

The 1999 survey covered a total of 3 km² and resulted in the identification of twenty previously unrecorded and twelve previously recorded sites. Prior to the beginning of fieldwork, it was anticipated that clusters of Mississippian farmsteads would be readily apparent. However, not only were clusters not noted; none of the twenty newly recorded sites could safely be classified as a probable farmstead. Eight of these sites produced no pottery sherds, therefore precluding any attempt to place them within the Moundville chronology. Of the remaining twelve newly recorded sites, only seven shell-tempered sherds were recovered. No site produced more than two shell-tempered sherds; when shell-tempered sherds were present, there were over 100 corresponding grog-tempered sherds, indicating a likely West Jefferson phase occupation.

One potential explanation for the lack of Mississippian sites identified in 1999 is the possibility of differential preservation of shell-tempered pottery in the plowzone. The acidic nature of soil causes leaching of shell-tempering, making sherds brittle and less likely to withstand plow impacts and cold weather. For a graphic example of this problem, we need look no further than the Oliver site, described in Chapter 2 (see Figure 9). No Mississippian artifacts were noted on the surface; however, when the plowzone was stripped, features containing Moundville I ceramics were recorded in abundance. Similarly, Holstein and Little (1986:49) report a lack of shell-tempered pottery on the surface or in excavations other than in features at the Davis Farm complex in Calhoun County, Alabama (Figure 8). This fragility of shell-tempered pottery has also been noted in the American Bottom by Milner (1998:54).

Interviews with farmers in the Black Warrior area revealed that plowing practices have changed over the past twenty years from a deep, chisel plowing to a reliance on disking. Deep plowing results in the disturbance of features and the redeposition of freshly disturbed artifacts on the surface. Disking does not disturb features anew but churns the same soil over and over again, making it less likely that sherds will survive, especially when they may have become somewhat brittle.

Revisitation of several sites within the Big Sandy Creek area show the potential effects of this problem. The 1976 University of Alabama survey of the area revealed a high number of sites that have been discussed as potential farmsteads (Bozeman 1982; Walthall and Coblenz 1977; Welch 1998). However, revisitation of some of these same sites in 1999 produced very different results. One example of this can be seen at site 1Tu330, (Figure 23). The Walthall and Coblenz survey recovered 11 grog-tempered sherds and 45 shell-tempered sherds. Revisitation of this same site in 1999 produced 477 grog-tempered and 6 shell-tempered sherds (Hammerstedt 1999). The original collections were relocated in storage, confirming that much more shell-tempered pottery (including Moundville diagnostics) were present than was found in 1999. I now think that there are several possible explanations for this discrepancy: (a) destruction of shell-tempered sherds by plowing during the interceding twenty years; (b) a spatially restricted Mississippian component collected in 1976 but perhaps missed by us in 1999; or (c) a bias by the previous survey towards collecting shell-tempered pottery.

I believe that the first two possibilities (or a combination of the two) are the most likely scenarios. The purpose of the 1976 survey was to identify small Moundville-era outlying sites; however, grog-tempered sherds were collected (Bozeman 1982; Walthall and Coblenz 1977), thus probably eliminating the third scenario. As mentioned above, interviews with local farmers indicate a shift in plowing practices, thus likely reducing the impact to subsurface features but inflicting damage on artifacts within the plowzone. Also, the size of 1Tu330 was recorded as larger by the 1999 survey than the 1977 survey

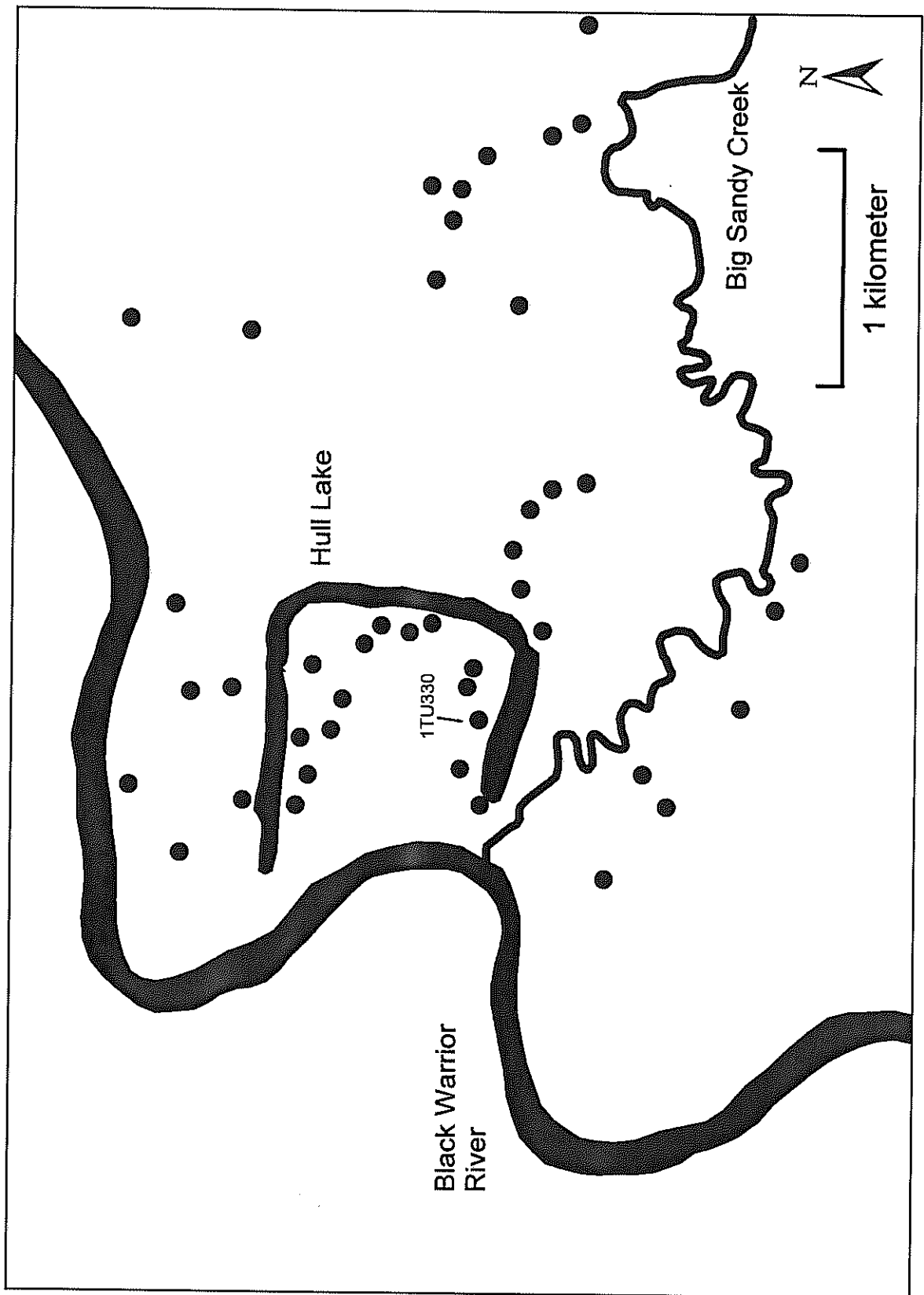


Figure 23. Location of Site 1Tu330.

and the site was plotted in 1976 as extending into the existing tree line, raising the possibility that an area surveyed in 1976 was not accessible to us and that any small Mississippian occupation was not noted.

As mentioned above, 150 sites (including mounds) have been recorded within the study area. When previously recorded sites were re-analyzed and combined with the 1999 results, 48 Late Woodland, 18 Mississippian, and 34 Late Woodland/Mississippian components were identified at 100 sites, along with a handful of sites with Middle Woodland, Late Woodland, and protohistoric components (or a combination of the above). The general characteristics of these will be discussed below.

The Black Warrior Settlement Pattern

Late Woodland. Forty-eight sites with a pure Late Woodland occupation were identified. Site size (available for 31 sites) ranged from 25 to 16,324 m² with a mean of 4,568 m². As noted above, the well-drained soils of the Cahaba, Choccolocco, and

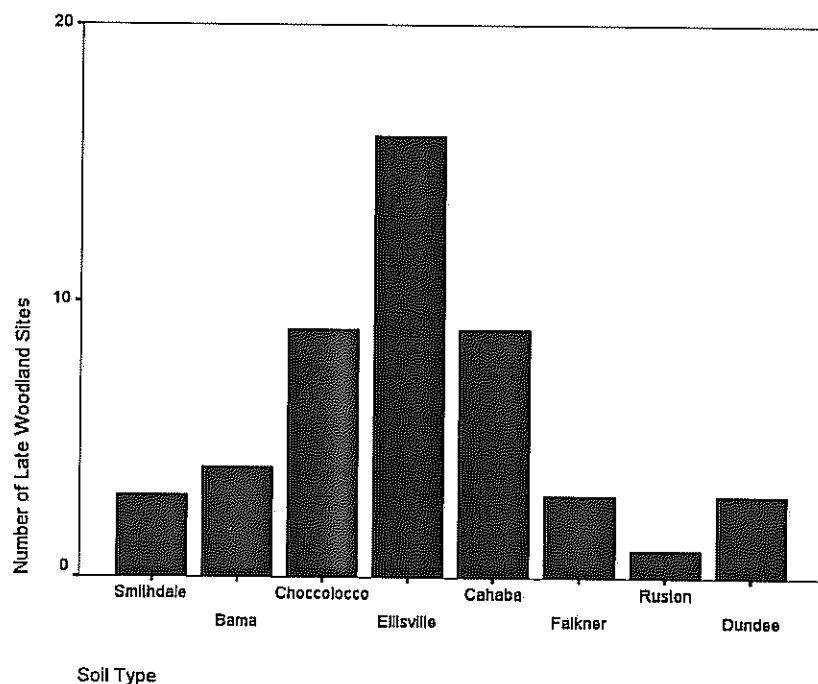


Figure 24. Number of Late Woodland Sites per Soil Type.

Ellisville complexes most commonly occurred (Figure 24). Terraces were the most common topographic setting occupied, followed by floodplains of the Black Warrior River and Big Sandy Creek (Figure 25). Swamps were the most common water source,

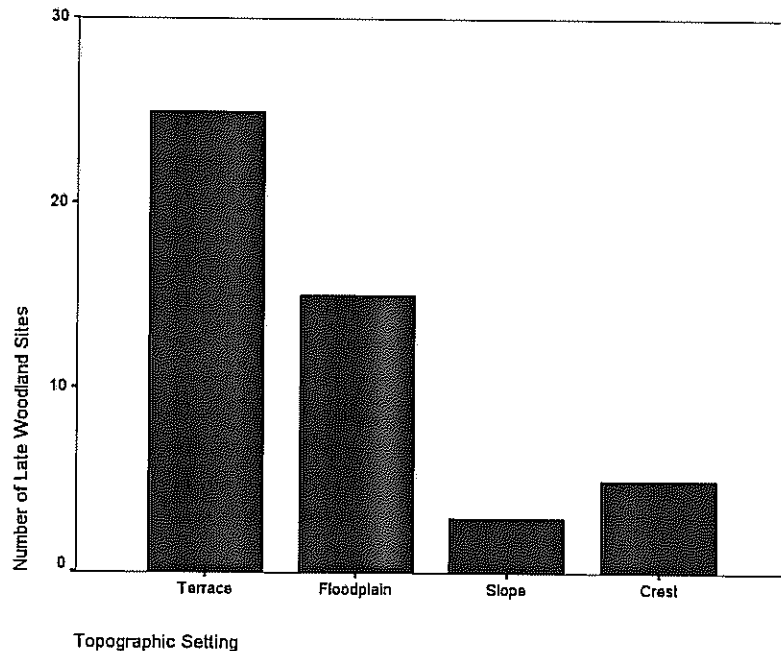


Figure 25. Number of Late Woodland Sites per Topographic Setting.

followed by the Black Warrior River, Big Sandy Creek, oxbows, and first order streams (Figure 26). Distance to water ranged from 1 to 788 m with a mean of 241 m.

Late Woodland/Mississippian. Thirty-four outlying sites with both a Late Woodland and a Mississippian occupation were recognized. Site size (available for only 14 sites) ranged from 79 to 41,420 m² with a mean of 6,831 m². Again, Ellisville, Choccolocco, and Cahaba soils were most common but not as overwhelmingly so (Figure 27). Terraces and floodplains were nearly equally represented with only one site located on a slope (Figure 28). The most common nearest water sources are the Black Warrior River, Big Sandy Creek, oxbow lakes, and swamps (Figure 29). Distances to water ranged from 5 to 515 m with a mean of 170 m.

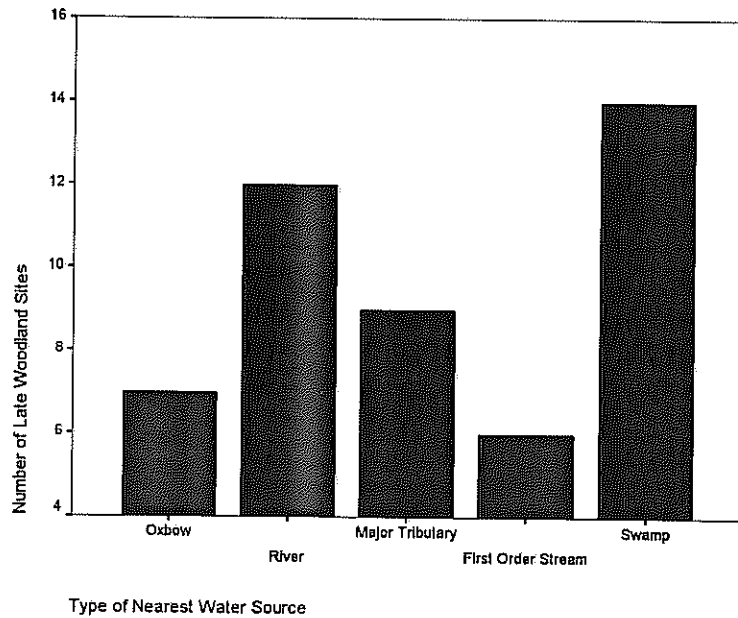


Figure 26. Number of Late Woodland Sites per Type of Nearest Water Source.

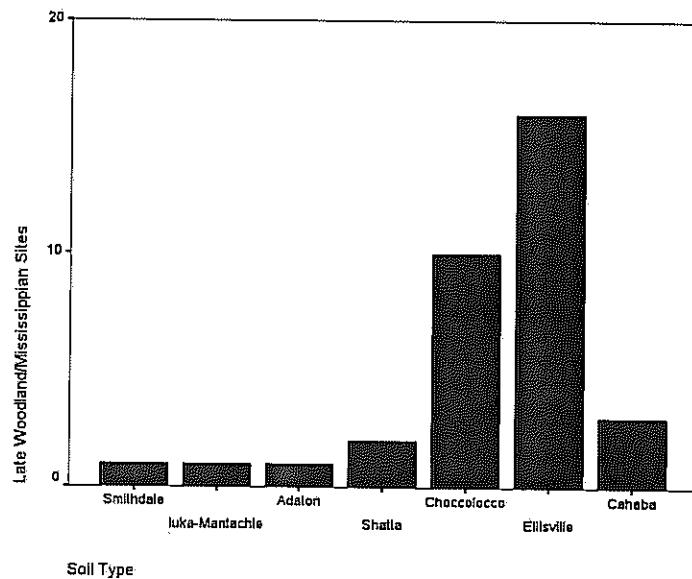


Figure 27. Number of Late Woodland/Mississippian Sites per Soil Type

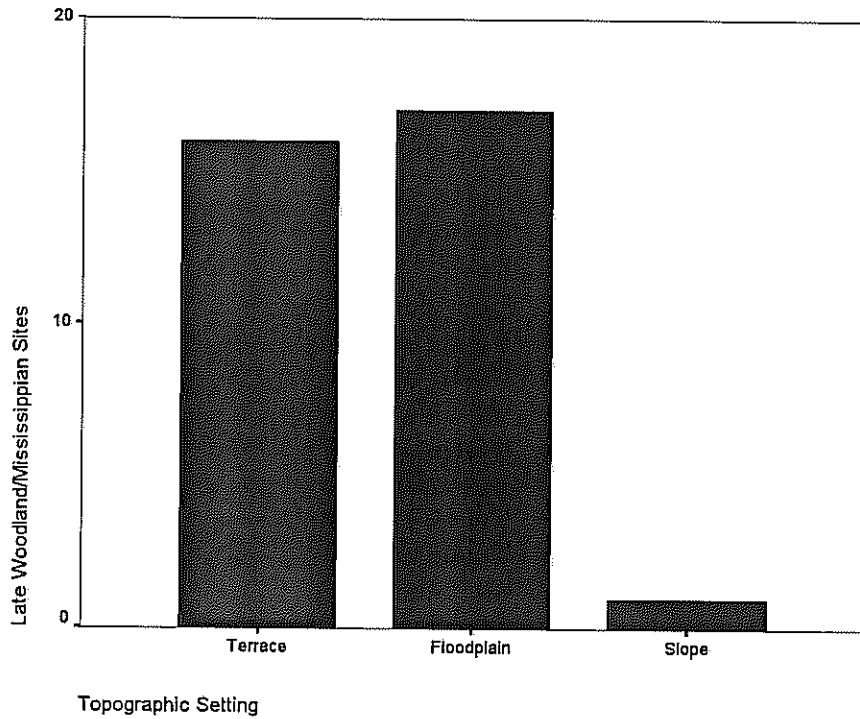


Figure 28. Number of Late Woodland/Mississippian Sites per Topographic Setting.

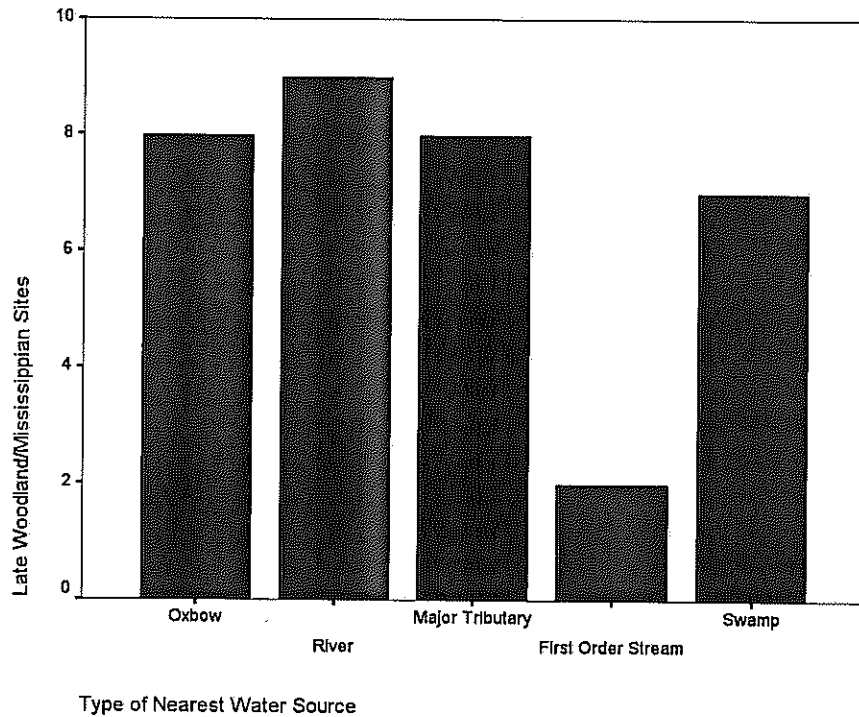


Figure 29. Number of Late Woodland/Mississippian Sites per Type of Nearest Water Source.

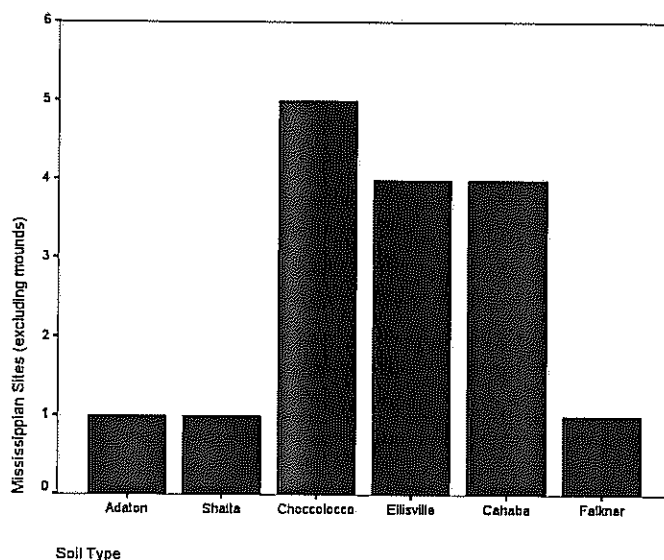


Figure 30. Number of Mississippian Sites per Soil Type (mounds excluded).

Mississippian. Sixteen outlying sites with a purely Mississippian assemblage were identified. Mound sites were excluded from this sample as their occupational histories are fairly well understood (Welch 1998). Site size was only available for five of these, but ranged from 400 to 3,000 m² with a mean of 1,799 m². Cahaba, Choccolocco, and Ellisville soils were most common (Figure 30). Terraces and floodplains were the only topographic settings represented with terraces overwhelmingly in the majority (Figure 31). The Black Warrior River and swamps were the most common nearest water source (Figure 32) with distances to water ranging from 1 to 300 m with a mean of 124 m.

Discussion. As noted above, the majority of the sites in the sample are Late Woodland (n=48) or multicomponent Late Woodland/Mississippian (n=34) sites. Mississippian (n=16), Protohistoric (n=2), Late Woodland/Mississippian/Protohistoric (n=3), Late Woodland/Protohistoric (n=2), Middle/Late Woodland (n=2), Middle Woodland/

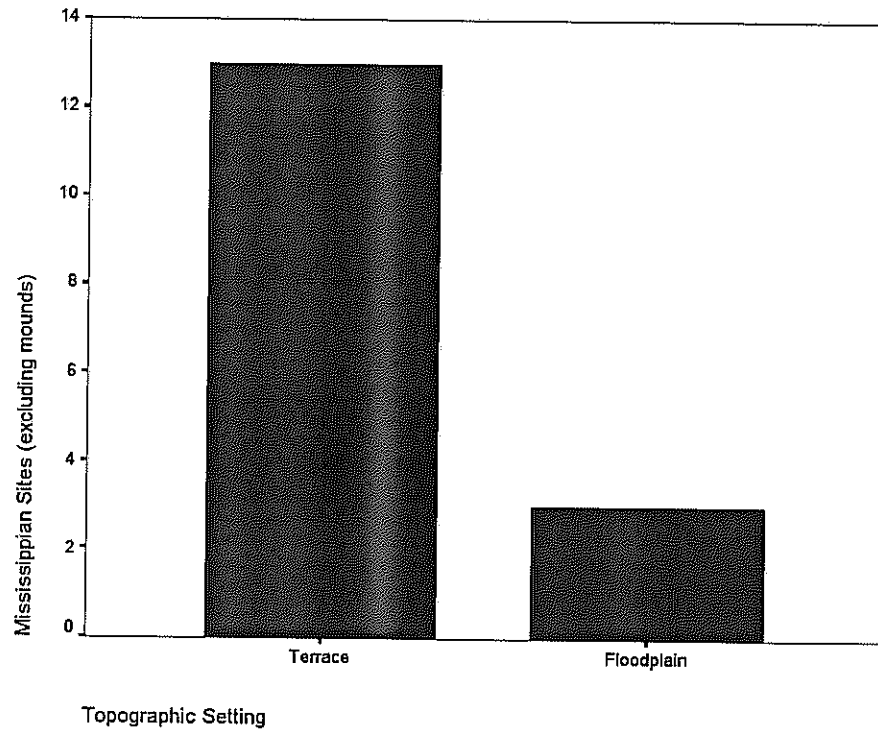


Figure 31. Number of Mississippian Sites per Topographic Setting (mounds excluded).

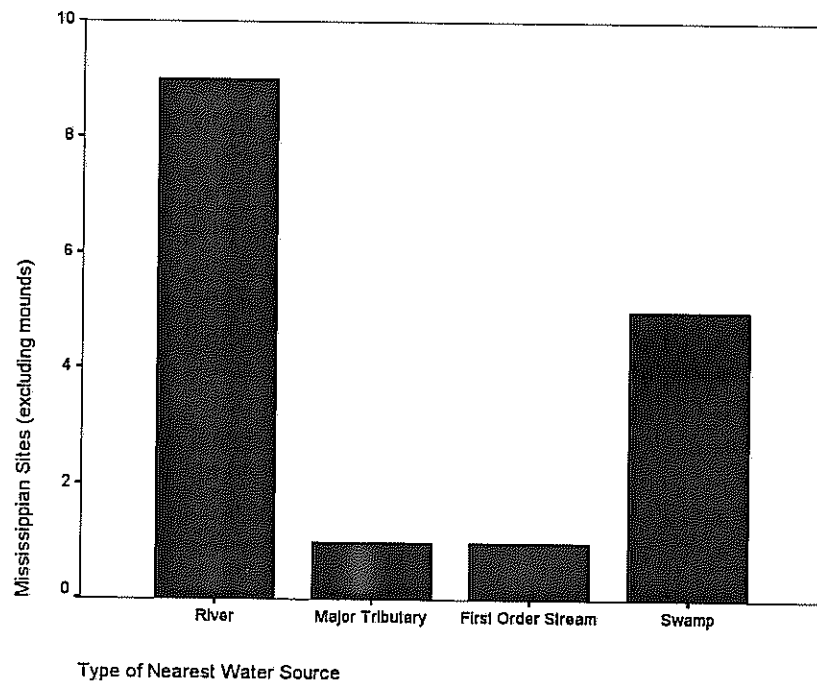


Figure 32. Number of Mississippian Sites per Nearest Water Source (mounds excluded).

Late Woodland/Mississippian (n=1), and Mississippian/Protohistoric (n=1) sites were also represented. Unknown (n=32) sites made up the remainder of the sample.

Statistical analyses were made in order to determine if there were any significant differences between stages of occupation and their environmental settings. The only stages considered for this part of the analysis were Late Woodland, Late Woodland/Mississippian, and Mississippian. In order to avoid chi-square cell count violations, some combining of categories was necessary. River and oxbows were combined into a single category and compared to all other water sources. This was done because it is possible that these oxbows were a part of the active river channel at the time of occupation. Soil types were also combined. The three soil types that most commonly occur in the sample, Cahaba, Choccolocco, and Ellisville, were combined and compared to all other types. This was done to determine if any one stage was better represented by a soil type other than the three main types. Finally, the floodplain was compared to all other topographic settings. This was done because all other topographic settings (terrace, slope, and crest of hill) were considered to be above the floodplain in elevation.

No significant statistical difference was found between stages and the type of nearest water source (Pearson Chi-Square=2.622, $df=2$, $p>.05$). However, when total percentages of water source by stage are compared, a trend towards a preference to the river/oxbows over time is evident (Table 2). No significant statistical difference was

	River/Oxbow	Other	Total
LW	19 (40%)	29 (60%)	48
LW/M	17 (50%)	17 (50%)	34
M	11 (61%)	7 (39%)	18
Total	47	53	100

Table 2. Percentages of Sites per Water Source (by stage). LW=Late Woodland; LW/M=Late Woodland/Mississippian; M=Mississippian.

	Cahaba/ Choccolocco/ Ellisville	Other	Total
LW	34 (71%)	14 (29%)	48
LW/M	29 (85%)	5 (15%)	34
M	14 (77%)	4 (23%)	18
Total	77	23	100

Table 3. Percentages of Sites per Soil Type (by stage). LW=Late Woodland; LW/M=Late Woodland/Mississippian; M=Mississippian.

found between stages and soil type (Pearson=2.358, $df=2$, $p>.05$). Similarly, the percentages show no change over time (Table 3).

When topographic setting was recoded, a significant difference was noted (Pearson=4.845, $df=2$, $p<.05$). Multicomponent Late Woodland/Mississippian sites show an even split between the floodplain and other settings while single component Late Woodland and Mississippian sites show a trend towards other settings, most often terraces near the river (Table 4).

	Floodplain	Others	Total
LW	15 (31%)	33 (69%)	48
LW/M	17 (50%)	17 (50%)	34
M	4 (22%)	14 (78%)	18
Total	36	64	100

Table 4. Percentages of Sites per Topographic Setting (by stage). LW=Late Woodland; LW/M=Late Woodland/Mississippian; M=Mississippian.

Analysis of variance (ANOVA) was used to compare distance to water for each stage. A significant difference was revealed between Late Woodland and Mississippian sites. In general, Mississippian sites are an average of 115.6 meters closer to water than

Late Woodland sites ($F=3.617$, $df=2$, $p<.05$). However, it is possible that this difference is simply because the Mississippian sites are closer in time to present day sources of water.

The lack of significant differences between site locations is interesting in that it points to a general continuity of land usage by Late Woodland and Mississippian inhabitants of the valley. This has been noted before, particularly by Bozeman (1982), whose surface collections indicated large, primarily Late Woodland, sites with smaller, overlying Mississippian occupations. However, Bozeman's analysis focused mainly on the larger "mound/village" sites. This study takes into account a wider variety of sites, many of which have not been previously discussed in print. It is interesting to note the possibility that Late Woodland and Mississippian residents of the valley preferred similar settings, especially given the small size of many of these sites.

To further explore the data, sites were lumped into post-Archaic ($n=116$) and pre-Woodland ($n=34$) groupings based on the presence/absence of pottery. Post-Archaic includes all sites that possess pottery and pre-Woodland sites are those that do not possess pottery. These categories include all sites in the database.

A significant difference between the two categories was noted with respect to topographic setting (Figure 33; Pearson's $\chi^2=12.178$, $df=1$, $p<.05$). Post-Archaic sites are represented on terraces, floodplains, slopes, and crests while the majority of pre-Woodland sites ($n=32$) are found on floodplains. Similarly, Post-Archaic sites are more likely to occur near the Black Warrior River, swamps, oxbows, and Big Sandy Creek (Pearson's $\chi^2=7.948$, $df=1$, $p<.05$). Pre-Woodland sites are more likely to be found near swamps and first-order streams, both smaller, more landlocked water sources (Figure 34). Infrared photos highlight numerous meander scars throughout the floodplain (Joo 1990). It is possible that these areas, now landlocked, are old river channels that were active at the time of occupation. In addition, it must be considered that erosional processes have destroyed some of these earlier sites.

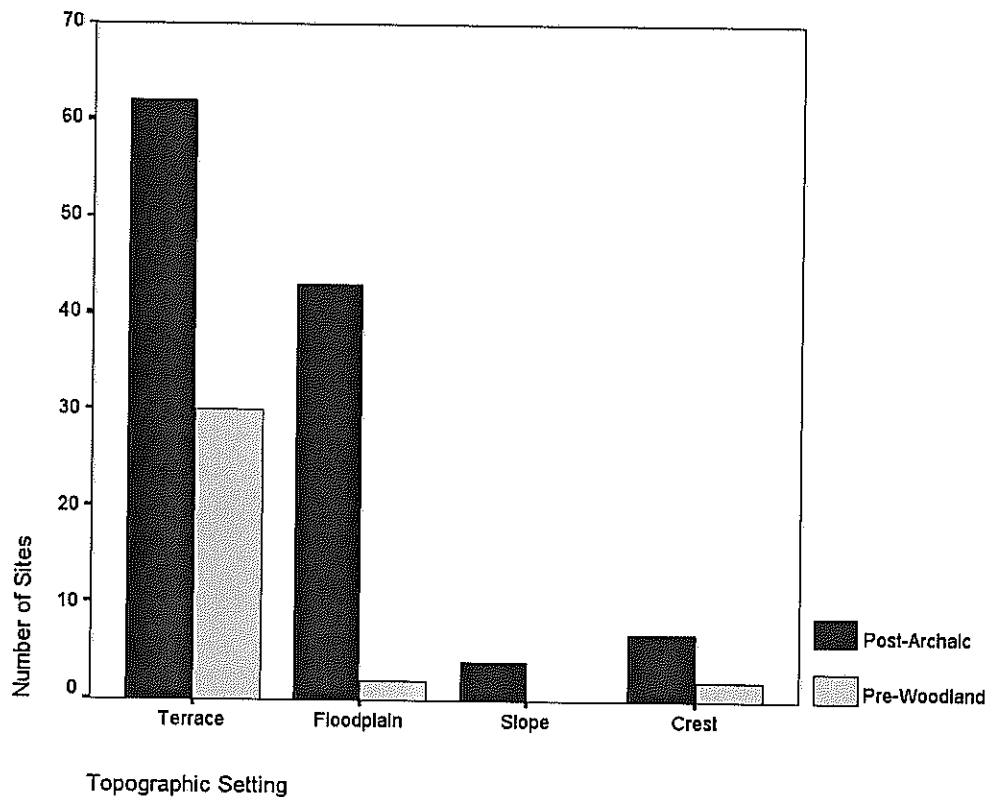


Figure 33. Number of post-Archaic Sites per Topographic Setting.

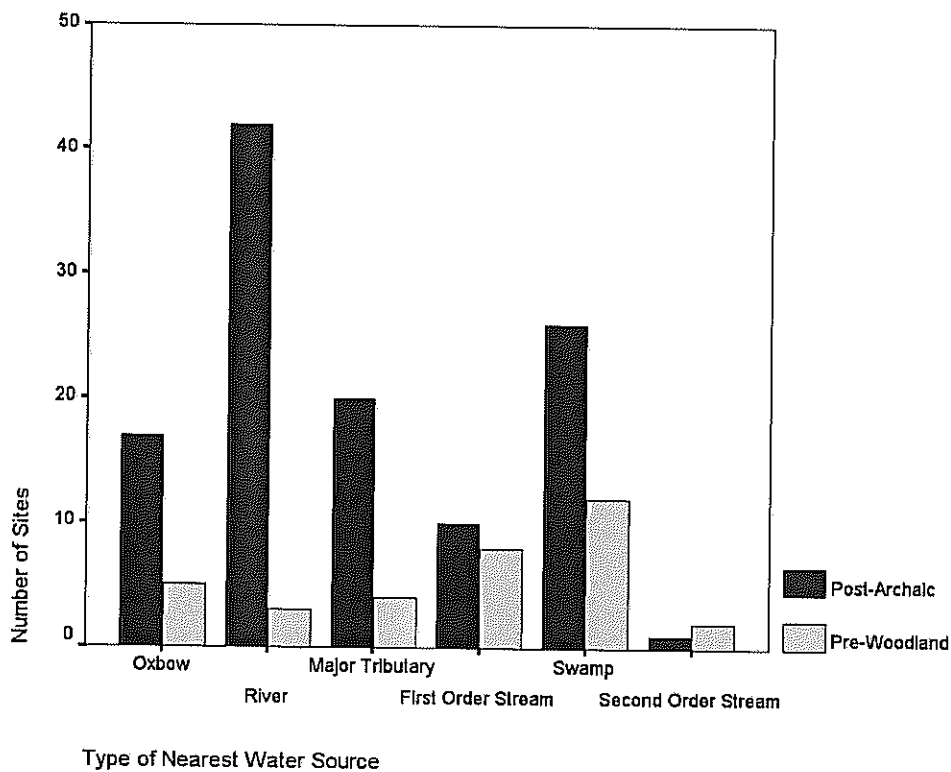


Figure 34. Number of post-Archaic Sites by Type of Nearest Water Source.

It should be noted that the overall sample, as it currently stands, is biased. A great number of the recorded sites in the Black Warrior Valley have been recorded through surface collection of plowed fields. These fields are located in areas of good, productive soil. As little work has been done in unplowed areas, we are missing data (both positive and negative) from other areas of more marginal soil. In addition, for this study sites within Hale County were not considered due to a lack of up-to-date soil information. As Moundville sits astride the Hale-Tuscaloosa county line this is an obvious weakness. Additional survey work in marginal areas of the survey transects and in northern Hale County is badly needed and will make our sample more representative and allow for a more concrete analysis.

Now that I have put forth a preliminary analysis of the Black Warrior Valley settlement pattern, I will now turn to a discussion of the Moundville settlement system. While the current data do not allow for a detailed diachronic analysis, several of the general models of Mississippian settlement can be reviewed and applied to the Moundville case.

Chapter Five: Black Warrior Valley Settlement

The Moundville Settlement Pattern

Based on this preliminary evidence, we can likely rule out two of the above general models of Mississippian settlement for the Moundville case. One model is that of an even distribution of sites across the floodplain. Large areas of the Black Warrior Valley do not possess Mississippian settlements, although, as mentioned above, there is a lack of systematic survey coverage. As has been previously noted by Welch (1998:138), farmsteads generally occur within 0.5 km of water, have easily tilled loamy soil, and are on terraces above the three to five year flood level. Areas without these characteristics have few, if any, farmsteads. The above examination of 16 Mississippian sites within a portion of the Black Warrior Valley indicates that 124 m is the mean distance to water and that 13 of the 16 sites are located on well-drained, loamy soils of the Choccolocco, Ellisville, or Cahaba complexes. Similarly, reviewing 33 Late Woodland/Mississippian sites reveals that 170 m is the mean distance to water and that the same soil complexes most commonly occur. This rules out the possibility of an even distribution of sites across the landscape (based on our current knowledge) and points to a continuity of land usage between the Late Woodland and Mississippian stages.

A second model, that of large, nucleated towns as the primary form of settlement, can also be rejected. Early analyses of Moundville phase settlement based on old site file data suggested the presence of large Mississippian villages (see Peebles 1978; Steponaitis 1978); however, upon further investigation, those investigated by Bozeman (1982) were shown to be large West Jefferson sites with one or more overlying, spatially restricted Mississippian components. As noted above, West Jefferson phase settlement is generally

believed to have a more nucleated settlement system, but this does not seem to be the case for Moundville-era occupation. This more dispersed settlement indicates a more stable socio-political situation presumably brought about by the rise of the paramount center.

This brings us to our third model of settlement: that of clusters of farmsteads loosely aggregated according to environmental and/or social variables. At this point in our knowledge, two clusters of small sites are evident: one near the Grays Landing mound (with 1HaM8¹ presumably representing the remnant of the mound site) (Figure 35) and one in the vicinity of the Fosters Landing (Wiggins) mound (Figure 36) (Bozeman 1982; Walthall and Coblenz 1977). The majority of these sites possess shell-tempered pottery; however, it is difficult to assign them to a specific phase since these collections largely lack diagnostics. Both of the mounds are believed to have been occupied during the Moundville II and III phases (Welch 1998). Beaded rims, primarily diagnostic of Moundville II/III (Figure 19), were recovered from several of the sites in each cluster, possibly indicating contemporaneous occupation. Since these collections do not possess many diagnostics, it is difficult to establish contemporaneity; however, this preliminary evidence indicates a possible cluster, presumably with the mound as a central focus.

In addition, it is likely that Hull Lake was the active river channel at the time of Mississippian settlement. Joo (1990) interprets oxbows characterized by an angular shape and a relatively low amount of siltation at the ends (like that of Hull Lake) to have been formed between 100 and 500 years ago. No meander loops are evident on the interior of Hull Lake, indicating that the cutoff would not likely have severely impacted the sites along the interior of the lake. This would mean that the Fosters Landing/Wiggins mound and the majority of Moundville-era residents living at nearby sites were likely on the same side of the river at the time of occupation, thus allowing interaction without requiring a river crossing.

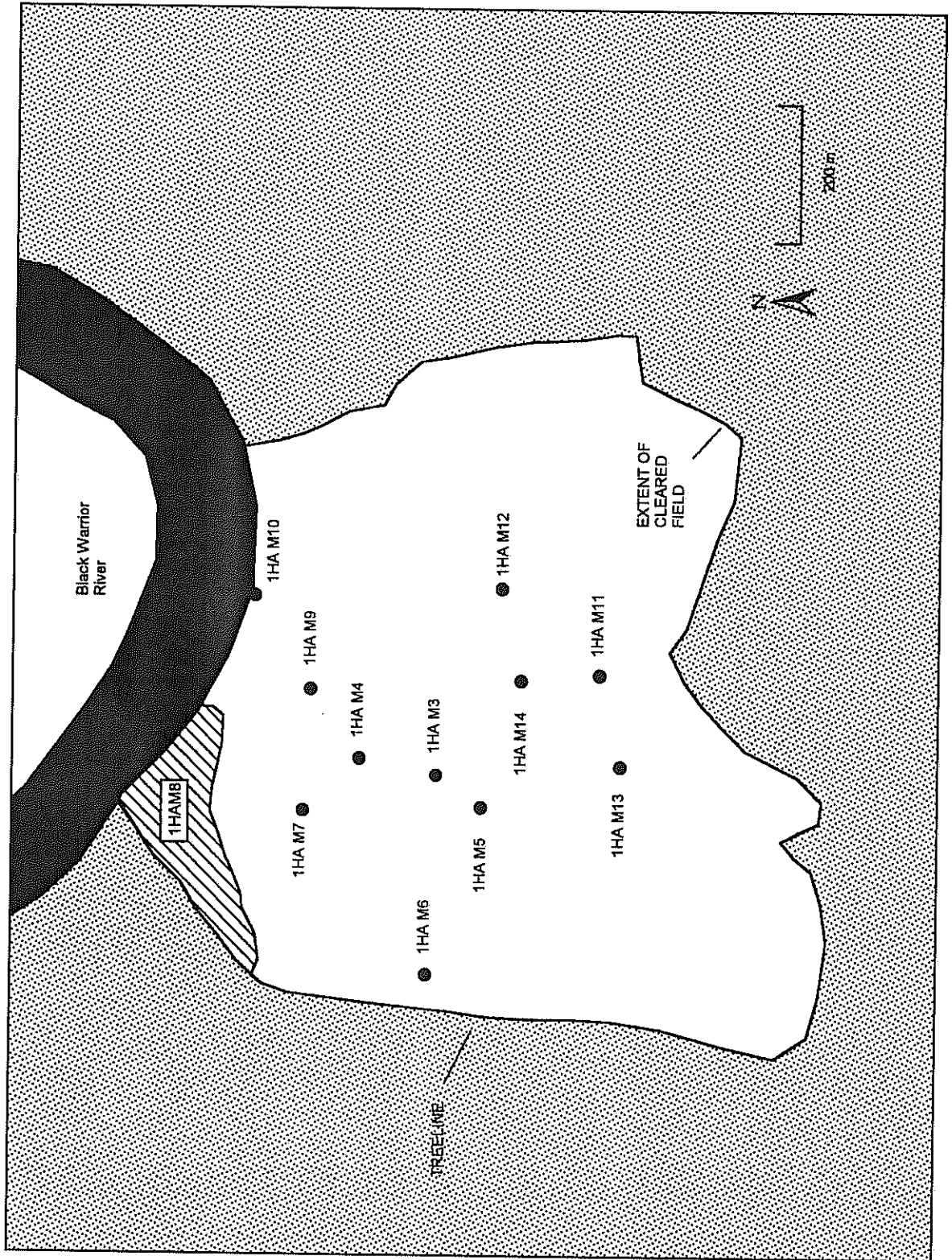


Figure 35. Grays Landing Site Cluster.

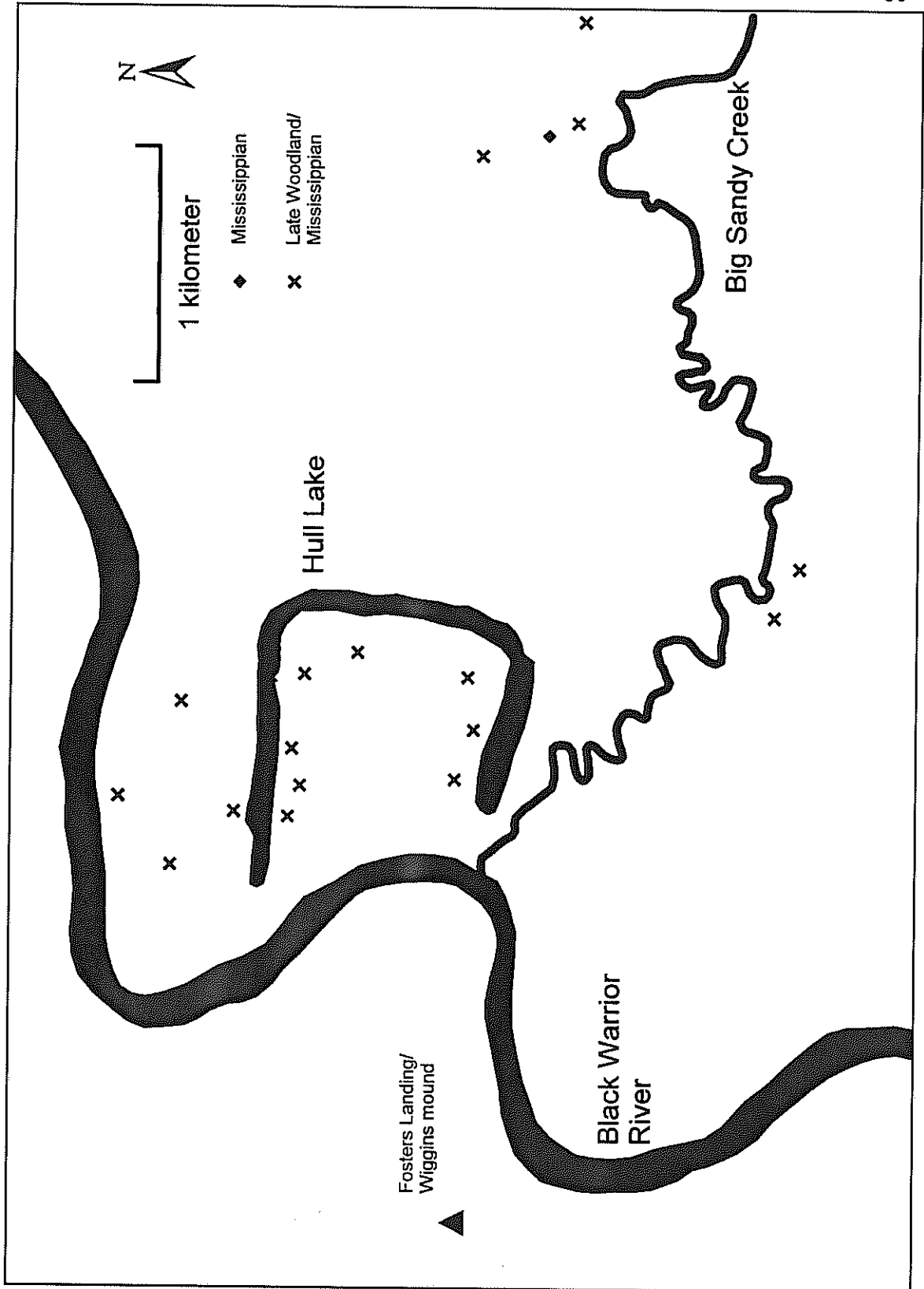


Figure 36. Fosters Landing/Wiggins Site Cluster.

Despite this hint of mound-based farmstead clusters, we do not yet have sufficient evidence from elsewhere to determine if this is the case everywhere in the valley (or even if this determination is in fact valid). It is possible that farmsteads may be concentrated in environmentally friendly areas, such as on terraces possessing well-drained soils near the river, or around non-mound nodal centers. Also, farmsteads may prove to be more thickly distributed near Moundville itself and less so to the north. However, based on the data we currently possess, mound-based clusters seem to be the most plausible model of settlement of the three reviewed above. These clusters would greatly facilitate interaction between residents of mound centers and residents of farmsteads.

The Moundville Settlement System

Mounds could presumably serve several functions within the Moundville settlement system. They could be the residence of a local chief, an administrative node for processing tribute and/or provisions, or a locus of community ritual activity. Presumably, a local chief would be in charge of processing tribute and/or provisions so that they could be passed up the line to Moundville. This local chief would administer a particular district or local community, which would conceivably consist of the residents of the mound area and the residents of the nearby farmsteads. The proximity of these farmsteads to the local center would facilitate control of the flow of tribute and/or provisions.

In a tributary economy, the residents of the local community would bring tribute to local chiefs who would either use it for their own purposes or pass it along to the presumably higher-ranking elites at Moundville. However, not all mounds were occupied at the same time, making it unlikely that they were optimally spaced for the sole purpose of channeling tribute. An alternative to the tributary model is that of mounds as a center for community events such as rituals and feasting. In the case of a ceremonial or celebratory occasion, residents of the nearby outlying farmsteads would presumably congregate at the local center. As noted above, it is possible that non-mound sites could

also serve as nodal centers; however, we do not currently possess sufficient data to indicate if this may be a viable alternative.

Another possible function of these outlying mounds could be as a sacred place; a monument representing a connection with the supernatural or the sacred. The death of an important person (presumably a chief) within the local community could conceivably require a renewal of this connection. This renewal could be represented by construction of new mound stages, likely directed by the successor to the deceased (Krause 1990). Burial may not occur in the mound itself, but rather in off-mound cemeteries both at the paramount center of Moundville from late Moundville I through early Moundville III (Knight and Steponaitis 1998) or at late Moundville III outlying sites, such as Snow's Bend and White, where cemeteries have been documented (DeJarnette and Peebles 1970; Welch 1991).

In this scenario, clusters of farmsteads may surround mounds in order for their inhabitants to be near this intersection of the ordinary and the supernatural and to participate in rituals and other ceremonial events at this important place. This type of system would not necessarily be a result of a tributary economy but instead a response to broader social issues.

Political Economy. Despite our relative lack of knowledge about outlying settlement, models have been suggested to explain the nature of elite-commoner relations, both within Moundville itself and between Moundville and outlying sites. It has been suggested that the elites living at Moundville both controlled aspects of craft production (Michals 1998; Welch 1991, 1996) and were provisioned to some degree by people living at outlying sites (Scarry and Steponaitis 1997; Welch and Scarry 1995). Both of these propositions will be examined below using the available evidence from excavations at Moundville, several of the outlying mound centers (Asphalt Plant and White), and farmsteads (Big Sandy Farms and Oliver).

Craft Production. Welch (1991, 1996) argues for control over certain aspects of craft production by the elite residents of Moundville. He uses evidence from excavations at Moundville, White, and surface collections from outlying sites to argue for, among other things, controlled production of greenstone axes.

Excavations by the University of Michigan north of Mound R (NR), primarily a late Moundville I deposit, revealed evidence of the manufacture of greenstone axes (Scarry 1986). Greenstone fragments from all stages of manufacture were recovered: unworked pieces, pieces broken during manufacture, and finished pieces. In addition, Welch (1991:165) notes that three greenstone “preforms” were found during the 1930s Roadway excavations at Moundville.

Welch compares these data with deposits at the White site and with surface collections made at outlying sites. In contrast to the NR deposits, the White site excavations produced only finished, but broken, pieces of greenstone and small, unworked chips that are interpreted as fragments of broken items (Welch 1991:165). Similarly, in surface collections within the floodplain, Bozeman (1982; Welch 1991) and the 1999 survey recovered only finished pieces. Welch interprets these data to indicate control over greenstone axe production by elite residents at Moundville (Welch 1991, 1996).

Control of these axes suggests that elites controlled a key economic resource. Greenstone axes, probably used to clear agricultural fields, would have been essential to the residents of outlying sites. Such control implies that Moundville’s elites indirectly controlled the domestic means of production. This would mean that residents of outlying sites were not fully self-sufficient, but instead depended on Moundville to provide critical tools to clear fields.

However, this model as it stands has a critical flaw. Since the model was created, our understanding of Moundville’s development has changed from that of a slow, progressive development of power, culminating with Moundville III to that of a quick rise of Moundville followed by a long, protracted decline (see above). Therefore, the model

compares data from contexts at Moundville that are contemporary with the height of Moundville's dominance (late Moundville I) to contexts from a late Moundville III outlying center that flourished during Moundville's decline (Welch 1998). These data are therefore not comparable since they are tied to different stages of Moundville's development. While Welch may be correct in his interpretation, excavation from contemporaneous deposits are necessary to support it. Currently, we do not have this information from outlying sites.

Michals (1998) compares data from the Oliver site, an early Moundville I farmstead, with data from the Asphalt Plant mound, an early Moundville I center. Her work indicates that restriction of non-local goods to residents of mound centers may have begun during the early Moundville I phase. However, as noted above, the early Moundville I phase was the beginning stage of political centralization. While this is an intriguing possibility, a comparison of outlying sites contemporaneous to Moundville at it's height may provide further evidence for this restriction.

Food Production and Provisioning. Evidence for the possible provisioning of the elite has been put forth using evidence from the Moundville, White, Oliver, and Big Sandy Farms sites. Scarry has analyzed plant remains from excavations at Moundville, Oliver, and Big Sandy Farms and proposed a model for the movement of foodstuffs from farmsteads to centers (Welch and Scarry 1995; Scarry and Steponaitis 1997). Evidence for a relative difference in the scale of processing of corn at farmsteads is indicated by an apparently higher relative quantity of corn cupules and cobs (byproducts of corn processing) at farmsteads than that in elite contexts at Moundville. It is inferred that some of this corn was being sent to Moundville either (a) for provisioning of elites; or (b) as a result of kin relationships and exchange between residents of outlying sites and residents of Moundville (Scarry and Steponaitis 1997). However, again we have a problem of contemporaneity, as acknowledged by these authors (Welch and Scarry 1995:402). Both Oliver and Big Sandy Farms were primarily occupied during the early Moundville I

phase (although Big Sandy Farms has a late Moundville III occupation as well). The Moundville contexts used for comparison date to late Moundville I. Therefore, the same problems affect these comparisons as affect the craft production model. While these conclusions may in fact ultimately be substantiated, at present we do not have the evidence necessary to support such a claim. We need excavation data from late Moundville I and Moundville II/early Moundville III farmsteads (when some are located) to compare with the mound and non-mound data from Moundville in order to better address the question of provisioning.

Assuming for the moment that food was in fact moving to Moundville, what evidence do we have for it? Scarry's (1996) analysis of plant remains from elite contexts at Mound Q shows a relative increase in the quantity of corn cupules during the Moundville II/III phase when compared with the quantity recovered from late Moundville I elite contexts north of Mound R. This would indicate a relative increase of food processing by elites as opposed to strictly consumption. This raises the possibility that large quantities of corn were not moving to Moundville during the Moundville II/III phase. This makes sense when the number of people living at Moundville over time is considered. During late Moundville I, construction of most of the site occurred, including all the major mounds and the palisade. This would require a greater number of people living at the site (approximately 1,000 by Steponaitis' [1998] figures), requiring the movement of much food into Moundville in order to feed them. If corn were being processed elsewhere we would expect to find a lower proportion of corn cupules to kernels at Moundville. Later in Moundville's history, the site's population dropped, leaving only the elite residents (Knight and Steponaitis 1998). With fewer people in residence, less large-scale movement of corn was required to feed them; therefore, processing may have occurred more frequently at Moundville, resulting in a relative increase in the proportion of cupules as seen at Mound Q.

More excavation data from late Moundville I through early Moundville III farmsteads, contemporaneous with the height of Moundville, is needed to provide us with a fuller, diachronic view of the settlement system and the relationships of people living at different sites within this system. It is possible that other types of non-mound sites, such as nodal centers, may have been in use. However, at this point, we do not yet know whether these other types of sites exist.

While general models of settlement, craft production, and food production have been proposed, these models each suffer from the same general flaw: lack of good, contemporaneous data. Further investigations into the distribution of outlying sites can provide a better indication of the Moundville settlement system and the variables that influence it. Identification and excavation of more outlying sites will undoubtedly provide new insights into the nature of the relationships between people, both elite and commoner, of the Moundville chiefdom.

Chapter Six: Conclusions

This thesis has been an exploration of what is known to date about outlying settlement in the Black Warrior Valley of west-central Alabama from the Late Woodland to Mississippian times. The combination of original fieldwork and the analysis of collections from previously recorded sites has resulted in a database of 150 sites (including mounds) within the selected survey area. A total of 48 Late Woodland, 18 Mississippian, and 34 Late Woodland/Mississippian components were identified at 100 sites, along with a handful of sites with Middle Woodland, Late Woodland, and protohistoric components (or a combination of the above). These sites occur overwhelmingly in association with well-drained soils of the Cahaba, Choccolocco, and Ellisville complexes although, as noted above, the sample is biased towards these soil types at the present time. Over time, a trend towards occupation near the Black Warrior River and oxbow lakes can be seen. In addition, Late Woodland occupations seem to favor a split between floodplain settings and those on higher ground while Mississippian occupations seem to favor terraces and other settings outside the floodplain. It is difficult to make any observations regarding differences in site size. Bozeman (1982) discerned small, spatially isolated, Mississippian occupations overlying larger Late Woodland sites. This, along with a general continuity of environmental site locations indicates a preference for the same settings over time.

While it is difficult to make secure projections of the patterns of Mississippian settlement in the Black Warrior Valley, the data currently indicate that farmsteads may occur in clusters around mound sites. The evidence presented above points to two potential clusters: one around the Grays Landing mound and one near the Fosters Landing/

Wiggins mound. An even dispersal of Mississippian non-mound sites throughout the valley and the presence of large, nucleated villages can, I believe, be safely ruled out as potential settlement patterns as a result of this study. However, it is far from certain that farmstead clusters are the only form of settlement that exist. It is considered likely that additional evidence will show the presence of farmsteads in other areas. Farmsteads may be clustered in association with productive soil along rarely-flooded river terraces, clustered around non-mound nodal centers that are yet to be discovered, or clustered around Moundville itself. It is interesting to note that, of the five excavated farmsteads within the Black Warrior Valley, four are located near the fall line and away from mounds.

This lack of knowledge of the Moundville settlement pattern hampers our interpretation of the Moundville settlement system--the relationship between sites within the Black Warrior Valley. A full diachronic picture of the valley is not available since our sample of excavated outlying sites were occupied during either the period before Moundville's rise (early Moundville I) or the period following its decline (late Moundville III). Therefore, our sample does not contain sites that are contemporaneous with Moundville's height: late Moundville I through early Moundville III.

Current models of the Black Warrior settlement system are lacking because they do not have this contemporaneous data. Models of elite control over greenstone axe production (Welch 1991) rely on an outdated model of Moundville's political development. This model cannot be supported because it compares data from the height of Moundville's growth with data from the period of Moundville's decline. Similarly, the model of elite provisioning by farmsteads compares data recovered from early Moundville I with data from late Moundville I. This presents a problem because of the establishment of political control marks the transition between early and late Moundville I. Since political control is thought to have been established during late Moundville I but not early Moundville I, these data are not comparable. Because of the reliance on data

from different stages of socio-political complexity, the data cannot support these models. Obtaining data from excavations at outlying sites dating to late Moundville I through early Moundville III (contemporaneous with the height of Moundville) is the only solution to this problem. Only when we possess these data can we begin to address these issues. Fortunately, this is a need that is recognized by the archaeological community. Currently, archaeological attention in general is becoming increasingly fixed on these outlying sites as a means of addressing questions of social complexity and interaction resulting in an attempt to obtain a much better understanding of the lifeways of rural residents.

It is hoped that this thesis has served as a starting point towards a better understanding of the settlement dynamics of the Black Warrior Valley. Further fieldwork will undoubtedly shed new light on the variety of settlement types and the relationships between sites within the valley.

Note

¹ These are temporary site numbers assigned by the UMMA. Permanent site numbers have never been assigned for the majority of these sites; therefore for this study I have adopted these temporary numbers. 1HaM8 has been described in print elsewhere as 1Ha107 and as 1Tu41.

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Appendix A: Codebook and Database

Codebook for Data Set

Variable No.	Variable Name	Abbreviation	Coded Values
1	Unknown	UNKNOWN	0. No 1. Yes
2	Post-Archaic	POSTARC	1. Present 2. Absent 99. Unknown
3	Middle Woodland	MW	1. Present 2. Absent 99. Unknown
4	Late Woodland	LW	1. Present 2. Absent 99. Unknown
5	Mississippian	MISS	1. Present 2. Absent 99. Unknown
6	Protohistoric	PROTO	1. Present 2. Absent 99. Unknown
7	Stage	STAGE	1. Middle Woodland (MW) 2. Late Woodland (LW) 3. Late Woodland/Mississippian (LW/M) 4. Mississippian (M) 5. Protohistoric (P) 6. Late Woodland/Mississippian/Protohistoric (LW/M/P) 7. Late Woodland/Protohistoric (LW/P) 8. Middle Woodland/Late Woodland (MW/LW) 9. Middle Woodland/Late Woodland/Mississippian (MW/LW/M) 10. Mississippian/Protohistoric (M/P) 99. Unknown
8	Multistage?	MULTI	1. Yes 2. No 99. Unknown
9	Elevation (ft)	ELV	Continuous 999. Unknown
10	Site Size (Square m)	SIZE	Continuous 9999999. Unknown

11	Topographic Setting	TOPO	1. Terrace 2. Base 3. Floodplain 4. Slope 5. Crest 6. Upland 7. Lowland 99. Unknown
12	Type of Nearest Water Source	SOURCE	1. Oxbow 2. River 3. Major Tributary 4. First Order Stream 5. Swamp 6. Second Order Stream 99. Unknown
13	Distance (m) to Nearest Water Source	DIST	Continuous 99999. Unknown
14	Soil Type	SOILTYPE	1. Smithdale 2. Iuka-Mantachie 3. Adaton 4. Shatta 5. Bama 6. Choccolocco 7. Ellisville 8. Cahaba 9. Falkner 10. Ruston 11. Land 12. Montevallo-Navoo 13. Dundee 99. Unknown
15	Number of Mounds	MOUND	0. None 1. One 3. More than one

Site No.	Unknown	Postarc	mw	lw	miss	proto	stage	multi	elv	size	topo	source	dist	soiltype	mound
TU7	0	1	2	2	2	2	99	2	125	41613	1	2	242	13	0
TU8	1	2	2	2	2	2	99	2	120	529	3	1	30	7	0
TU9	0	1	2	1	2	2	2	2	120	9017	3	1	61	7	0
TU34	0	1	2	1	2	2	2	2	125	756	3	2	152	7	0
TU35	0	1	2	1	1	2	3	1	125	41420	3	1	61	7	0
TU36	0	1	2	1	1	2	3	1	120	1245	3	1	61	7	0
TU42	0	1	2	2	1	1	10	1	120	864	1	1	15	8	1
TU46	0	1	2	2	1	2	4	2	125	1200	3	2	152	7	1
TU47	0	1	2	2	1	2	4	2	120	2460	3	4	75	7	0
TU48	0	1	2	1	2	2	2	2	130	12376	1	2	152	6	0
TU49	0	1	2	1	1	1	6	1	140	3721	1	2	130	6	0
TU50	0	1	2	2	1	2	4	2	150	121	5	2	121	1	1
TU51	0	1	2	1	1	2	3	1	170	14008	4	2	91	1	0
TU52	0	1	2	1	1	1	6	1	150	12376	5	2	91	1	0
TU53	1	2	2	2	2	2	99	2	120	441	1	4	61	13	1
TU54	1	2	2	2	2	2	99	2	120	225	1	1	91	13	1
TU55	0	1	2	1	1	2	3	1	110	6360	1	5	61	6	0
TU72	1	2	2	2	2	2	99	2	135	2025	1	5	152	3	0
TU73	0	1	2	1	2	2	2	2	135	1590	1	5	364	8	0
TU74	0	1	2	1	2	2	2	2	135	12692	1	5	300	9	0
TU75	0	1	2	1	2	2	2	2	120	4489	3	2	303	7	0
TU87	0	1	2	1	2	2	2	2	190	16324	4	2	424	10	0
TU88	1	1	2	2	2	2	99	2	120	19292	3	2	364	7	0
TU89	0	1	2	2	1	2	4	2	125	1035	3	2	1	7	0
TU90	1	1	2	2	2	2	99	2	125	450	3	2	1	7	0
TU91	1	1	2	2	2	2	99	2	120	5460	3	2	545	7	0
TU92	1	1	2	2	2	2	99	2	120	5624	3	4	200	7	0
TU96	1	2	2	2	2	2	99	2	130	17199	1	2	15	13	0
TU97	0	2	2	1	2	2	2	2	120	8736	1	2	1	13	0
TU98	0	1	2	1	1	2	2	1	120	3320	1	2	30	13	0
TU99	0	1	2	1	2	2	2	2	125	14550	3	2	212	7	0
TU100	0	1	2	1	2	2	2	2	125	3180	3	2	242	7	0
TU101	0	1	2	1	2	2	2	2	125	3180	3	2	424	7	0
TU104	1	2	2	2	2	2	99	2	120	9999999	1	2	1	3	0

TU235	0	1	2	2	2	2	2	1	5	2	140	9999999	1	3	364	4	0
TU236	0	1	2	1	1	2	1	2	3	1	120	5445	1	4	242	6	0
TU240	0	1	2	2	2	2	2	1	5	2	110	9999999	3	2	1	7	0
TU250	1	2	2	2	2	2	2	2	99	2	120	9999999	1	4	121	3	0
TU253	1	2	2	2	2	2	2	2	99	2	130	9999999	1	5	30	8	0
TU255	1	2	2	2	2	2	2	2	99	2	120	9999999	1	4	30	6	0
TU256	1	2	2	2	2	2	2	2	99	2	120	9999999	1	4	30	8	0
TU258	0	1	2	2	1	2	2	1	7	1	110	9999999	1	2	303	8	0
TU260	1	2	2	2	2	2	2	2	99	2	120	9999999	1	1	1	6	0
TU261	1	2	2	2	2	2	2	2	99	2	125	9999999	1	1	1	8	0
TU262	0	1	2	2	1	2	2	2	2	2	131	9999999	1	4	273	8	0
TU263	1	2	2	2	2	2	2	2	99	2	125	9999999	1	1	182	8	0
TU274	1	2	2	2	2	2	2	2	99	2	130	9999999	1	6	91	3	0
TU277	0	1	2	2	1	2	2	1	7	1	130	9999999	1	2	1	8	0
TU278	0	1	2	2	1	2	1	2	3	1	110	2000	3	2	364	7	1
TU279	0	1	2	2	1	2	2	2	2	2	115	9999999	1	4	15	13	0
TU291	0	1	2	2	2	2	1	2	4	2	115	400	1	2	242	6	0
TU303	0	1	2	2	1	2	2	2	2	2	150	9999999	5	2	500	1	0
TU304	0	1	1	1	1	2	2	2	8	1	120	9999999	1	3	91	6	0
TU312	0	1	2	1	1	2	2	2	2	2	130	9999999	1	4	424	8	0
TU313	1	1	2	2	2	2	2	2	99	2	125	9999999	1	6	303	8	0
TU317	0	1	2	2	1	2	1	2	3	1	120	9999999	1	3	61	8	0
TU318	0	1	2	2	1	2	2	2	2	2	120	9999999	1	3	394	6	0
TU319	0	1	2	2	1	2	2	2	2	2	120	9999999	1	3	303	6	0
TU320	0	1	2	2	2	2	2	2	99	2	130	9999999	1	3	121	6	0
TU321	0	1	2	2	1	2	1	2	3	1	130	9999999	1	3	121	8	0
TU322	0	2	2	2	1	2	1	2	3	1	120	9999999	1	3	152	6	0
TU323	1	2	2	2	2	2	2	2	99	2	120	9999999	1	5	1	6	0
TU324	0	1	2	2	1	2	2	2	2	2	120	9999999	1	5	91	6	0
TU325	1	2	2	2	2	2	2	2	99	2	120	9999999	1	5	91	6	0
TU326	1	2	2	2	2	2	2	2	99	2	120	9999999	1	5	61	6	0
TU327	1	2	2	2	2	2	2	2	99	2	120	9999999	1	5	15	6	0
TU328	0	1	2	2	1	2	2	2	2	2	120	9999999	3	3	150	7	0
TU329	0	1	2	2	1	2	1	2	3	1	120	9999999	3	3	303	7	0

TU330	0	1	1	1	1	1	1	1	2	2	9	1	120	99999999	3	1	364	7	0
TU331	0	1	2	1	1	1	1	1	2	2	3	1	120	99999999	3	1	182	7	0
TU332	0	1	2	1	1	1	1	1	2	2	3	1	130	99999999	3	1	152	7	0
TU333	0	1	2	1	1	2	1	2	2	2	2	2	130	99999999	3	1	121	7	0
TU334	0	1	2	1	1	1	1	1	2	2	3	1	130	99999999	3	5	30	7	0
TU335	0	1	2	1	1	1	1	1	2	2	3	1	130	99999999	3	1	152	7	0
TU336	0	1	2	1	1	1	1	1	2	2	3	1	130	99999999	3	1	61	7	0
TU337	0	1	2	1	1	1	1	1	2	2	3	1	130	99999999	1	1	242	3	0
TU338	0	1	2	1	1	2	1	2	2	2	2	2	130	99999999	3	1	303	7	0
TU339	0	1	2	1	1	2	1	2	2	2	2	2	130	99999999	3	1	61	7	0
TU340	0	1	2	1	1	1	1	1	2	2	3	1	130	99999999	3	5	212	7	0
TU341	0	1	2	1	1	1	1	1	2	2	3	1	130	99999999	3	2	91	7	0
TU342	0	1	2	1	1	1	1	1	2	2	3	1	140	99999999	3	3	152	2	0
TU343	0	1	2	2	1	1	1	1	2	2	4	2	140	99999999	1	3	242	4	0
TU344	0	1	2	1	1	1	1	1	2	2	3	1	150	99999999	1	3	515	4	0
TU345	0	1	2	1	1	2	1	2	2	2	2	2	190	99999999	5	2	788	5	0
TU347	1	2	2	2	2	2	2	2	2	2	99	2	120	99999999	1	3	697	6	0
TU348	1	2	2	2	2	2	2	2	2	2	99	2	140	99999999	1	3	667	8	0
TU349	0	1	2	1	1	2	1	2	2	2	2	2	150	99999999	1	3	775	9	0
TU350	0	1	2	1	1	2	1	2	2	2	2	2	150	99999999	1	3	636	9	0
TU351	0	1	2	1	1	1	1	1	2	2	3	1	140	99999999	1	3	409	4	0
TU352	0	1	2	1	1	2	1	2	2	2	2	2	150	99999999	4	3	700	1	0
TU389	0	1	2	2	2	1	2	1	2	2	4	2	120	99999999	1	2	15	3	0
TU390	0	1	2	99	1	1	1	1	2	2	4	99	120	99999999	1	2	61	8	0
TU391	0	1	2	99	1	1	1	1	2	2	4	99	120	99999999	1	2	212	8	0
TU392	0	1	2	99	1	1	1	1	2	2	4	99	120	99999999	1	5	61	8	0
TU393	0	1	2	99	1	1	1	1	2	2	4	99	120	99999999	1	5	61	8	0
TU493	0	1	2	1	1	2	1	2	2	2	2	2	210	99999999	5	5	300	5	0
TU500	0	1	2	1	1	1	1	1	1	1	6	1	170	1200000	1	2	1	6	2
TU516	0	1	2	1	1	1	1	1	2	2	3	1	120	99999999	3	3	30	7	0
TU517	1	2	2	2	2	2	2	2	2	2	99	2	120	2500	3	5	30	7	0
TU518	0	1	2	2	1	1	1	1	2	2	4	2	110	3000	3	5	35	7	0
TU519	0	1	2	1	1	1	1	1	2	2	3	1	110	600	3	2	30	7	0
TU521	0	1	2	2	2	1	1	1	2	2	3	2	100	400	3	4	250	7	0

S-6	0	1	2	1	2	2	2	1	2	2	2	1	120	5	3	1	80	7	0
N-10	0	1	2	1	2	2	2	1	2	2	2	1	130	1	1	5	380	8	0
N-11	0	1	2	1	2	2	2	1	2	2	2	1	130	1	1	5	200	8	0
HA M3	0	1	2	1	1	2	3	1	1	2	3	1	105	314	1	2	360	6	0
HA M4	0	1	2	1	1	2	3	1	1	2	3	1	105	79	1	2	260	6	0
HA M5	0	1	2	1	1	2	3	1	1	2	3	1	105	491	1	5	290	6	0
HA M6	0	1	2	1	1	2	3	1	1	2	3	1	105	9999999	1	5	60	6	0
HA M7	0	1	2	1	1	2	3	1	1	2	3	1	105	9999999	1	2	220	6	0
HA M8	0	1	2	1	1	2	3	1	1	2	3	1	105	9999999	1	2	10	6	0
HA M9	0	1	2	2	1	2	4	2	1	2	4	2	105	9999999	1	2	140	6	0
HA M10	0	1	2	2	1	2	4	2	1	2	4	2	105	9999999	1	2	20	6	0
HA M11	0	1	2	2	1	2	4	1	1	2	4	1	105	9999999	1	5	220	6	0
HA M12	0	1	2	2	1	2	4	1	1	2	4	1	105	9999999	1	5	300	6	0
HA M14	0	1	2	1	1	2	3	1	1	2	3	1	105	177	1	5	320	6	0

Appendix B: Artifact Totals by Site

*Site 1TU9: Artifact Inventory*Aboriginal Ceramics
Grog-tempered sherds

Baytown Plain var. Roper	3
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Other

Daub (Fired Clay)	3
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Stone

Chipped Stone

	Quartz
debitage with cortex	1

*Site 1TU34: Artifact Inventory*Aboriginal Ceramics
Grog-tempered sherds

Baytown Plain var. Roper	19
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*Site 1TU35: Artifact Inventory*Aboriginal Ceramics
Grog-tempered sherds

Baytown Plain var. Roper	13
Mulberry Creek Cord-Marked	4
Total	17

Shell-tempered sherds

Miss. Plain var. Warrior	2
Bell Plain	1
Total	3

*Site 1TU36: Artifact Inventory*Aboriginal Ceramics
Grog-tempered sherds

Baytown Plain var. Roper	9
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Shell-tempered sherds

Miss. Plain var. Warrior	1
Bell Plain, rounded rim	1
Total	2

Daub (Fired Clay)	13
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*Site 1TU41: Artifact Inventory*Aboriginal Ceramics
Grog-tempered sherds

Baytown Plain var. Roper	9
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Shell-tempered sherds

Mississippi Plain var. Warrior	31
Mississippi Plain var. Warrior, jar rim	1
Bell Plain var. Hale	2
Total	30

Other

Grog- and shell-tempered plain	3
Daub (Fired Clay)	3
Total	6

Stone

Petrified Wood	1
Unmodified cobble	1
Total	2

Site 1TU48: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	93
Baytown Plain var. Roper, handle fragment	1
Total	94

Other

Grog- and shell-tempered plain	2
Non-tempered plain	1
Total	3

Stone

	Tuscaloosa Gravel	Fort Payne	Quartz	Bangor	Total
debitage with cortex	9		1		10
debitage without cortex			1	2	3
utilized flake		1			1
Total	9	1	2	2	14

Site 1TU49: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	241
Baytown Plain var. Roper, strap handle	1
Baytown Plain var. Roper, loop handle	1
Mulberry Creek Cord-Marked	2
Total	245

Shell-tempered sherds

Mississippi Plain var. Warrior	36
Mississippi Plain var. Warrior, red filmed	2
Mississippi Plain var. Warrior, pinched rim	3
Moundville Engraved var. unspecified	3
Carthage Incised var. Carthage	3
Bell Plain var. Hale	8
Residual shell-tempered incised	4
Total	59

Other

Possible effigy	1
Daub (Fired Clay)	4
Total	5

Stone*Chipped Stone*

	Tuscaloosa Gravel	Fort Payne	Quartz	Quartzite	Total
debitage with cortex	4		1		5
debitage without cortex	3				3
shatter			1		1
microlith	1				1
Madison Point Fragment	1				1
Flint Creek Point		1		1	2
Nodena Point (?)	1				1
Residual Stemmed Point	1	1			2
Preform I	1				1
Preform II	3				3
Total	15	2	2	1	20

Other Stone

Ground Sandstone Discoidal	1
Ground Sandstone Discoidal Fragment	1
Undifferentiated greenstone	2
Hematitic Sandstone	3
Tabular Hematitic Sandstone	1
Anvilstone	3
Unmodified Cobble	5
Petrified Wood	1
Total	17

Shell	4
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Site 1TU51: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	145
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Shell-tempered sherds

Miss. Plain var. Warrior	16
Moundville Engraved var. unspecified	1
Bell Plain	2
Carthage Incised var. unspecified	1
Total	20

Sand-tempered sherds

Residual Sand tempered plain	2
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Other

Fine shell- and grog-tempered Plain	3
Non-tempered sherds	1
Historic Upper Creek Plain sherds	11
Historic Upper Creek sherds, decorated	7
Daub (Fired Clay)	3
Total	25

Stone*Chipped Stone*

	Tuscaloosa Gravel	Fort Payne	Quartz	Quartzite	Bangor	Total
debitage with cortex	9				1	3
debitage without cortex				1		1
Elora Point				1		1
Biface Fragment			1			1
Core	2	3				4
Core Fragment			1			1
Total	3	3	2	2	1	11

Other Stone

Greenstone	2
Tabular Hematitic Sandstone	2
Pigment Quality Hemalite	1
Hematite	1
Hammersstone	4
Petrified Wood	4
Galena	1
Schist	2
Unmodified Sandstone	1
Total	18

Site 1TU52: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	16
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Shell-tempered sherds

Miss. Plain var. Warrior	7
Moundville Engraved var. unspecified	1
Bell Plain	2
Total	10

Other

Non-tempered sherds	2
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Site 1TU53: Artifact Inventory

Shell	1
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Site 1TU54: Artifact Inventory**Stone***Chipped Stone*

	Quartz
debitage with cortex	1

Site 1TU55: Artifact Inventory

Aboriginal Ceramics

Grog-tempered sherds

Baytown Plain var. Roper	71
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Shell-tempered sherds

Miss. Plain var. Warrior	24
Miss. Plain var. Warrior, handle fragment	1
Bell Plain	5
Bell Plain, beaded rim	2
Bell Plain, rounded rim, polychrome	1
Total	33

Sand-tempered sherds

possible Alexander Incised	2
Baldwin Plain var. Lubbub	3
Total	5

Other

Greenstone	2
Non-tempered sherds	1
Total	3

Daub (Fired Clay)	1
-------------------	---

Stone

Chipped Stone

	Tuscaloosa Gravel	Fort Payne	Quartz	Quartzite	Bangor	Total
debitage with cortex	4		2	3		9
debitage without cortex	2	3	2		1	8
shatter	3					3
Hamilton stemmed point					1	1
Elora Point				2		2
Undifferentiated Stemmed Point	1	1	1			3
Preform I	2		1			3
Preform II	1			1		2
Core	2		1			3
Scraper	1					1
Total	16	4	7	6	2	35

Other Stone

Greenstone	2
Tabular Hematitic Sandstone	2
Petrified Wood	2
Anvilstone fragment	1
Unmodified Sandstone	2
Siltstone	1
Unmodified Tuscaloosa Gravel cobbles	3
Unmodified Quartz cobble	1
Total	14

Shell	4
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Site 1TU72: Artifact Inventory

Other Stone

Sandstone Discoidal	1
Sandstone Abrader	1
Sandstone Anvilstone	1
Total	3

Site 1TU73: Artifact Inventory

Aboriginal Ceramics

Grog-tempered sherds

Baytown Plain var. Roper	19
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Stone

Chipped Stone

	Tuscaloosa Gravel	Bangor	Total
debitage with cortex	6		6
debitage without cortex	5	1	6
Total	11	1	12

Site 1TU74: Artifact Inventory

Aboriginal Ceramics

Grog-tempered sherds

Baytown Plain var. Roper	63
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Shell-tempered sherds

Miss. Plain var. Warrior	1
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Daub (Fired Clay)	2
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Stone

Chipped Stone

	Tuscaloosa Gravel	Fort Payne	Quartz	Total
debitage with cortex	81		1	82
debitage without cortex	86	3		89
shatter	38			38
microlith	1			1
Madison Point distal	1			1
Distal	1			1
Residual Stemmed Point	1			1
Biface Fragment	2			2
Preform I	2			2
Preform II	3			3
Core Fragment	1		1	2
Total	217	3	2	222

Other Stone

Sandstone Discoidal	1
Undifferentiated greenstone	2
Tabular Hematitic Sandstone	6
Tabular Sandstone	2
Total	11

Site 1TU75: Artifact Inventory

Aboriginal Ceramics

Grog-tempered sherds

Baytown Plain var. Roper	358
Mulberry Creek Cord-Marked	3
Marksville Incised var. unspecified	2
Marksville Incised var. unspecified, rim	1
Grog-tempered podal support	1
Total	365

Stone

Chipped Stone

	Tuscaloosa Gravel	Fort Payne	Quartz	Quartzite	Unknown	Total
debitage with cortex	28		19			47
debitage without cortex	10	10	7			27
microlith	3					3
Madison Point distal	4					4
Distal	1					1
Proximal						
Flint River Point	1			1		2
Washington Point						
Residual Stemmed Point Fragment	1		1		1	3
Residual Side-Notched Point	1	1		1		3
Biface	13	1	1			15
Preform I	1	1	4			6
Preform II	4					4
Core Fragment	10					10
Total	77	13	32	2	1	125

Other Stone

Sandstone	3
Tabular Sandstone	2
Unmodified Tusc. Gravel cobble	1
Total	6

Site 1TU87: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	18
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Site 1TU89: Artifact Inventory**Aboriginal Ceramics***Shell-tempered sherds*

Miss. Plain var. Warrior	6
Moundville Incised var. Carrollton	2
Total	8

Site 1TU97: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	51
Mulberry Creek Cord-Marked	4
Total	55

Shell-tempered sherds

Miss. Plain var. Warrior	4
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Sand-tempered sherds

Baldwin Plain var. Lubbub	2
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Site 1TU98: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	56
Mulberry Creek Cord-Marked	7
Total	63

Shell-tempered sherds

Miss. Plain var. Warrior	5
Miss. Plain var. Warrior, folded rim	1
Belt Plain	1
Total	7

Other

Clay disk	1
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Stone*Chipped Stone*

	Tuscaloosa Gravel
Residual Stemmed Point	1
Core	1
Total	2

Shell	1
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Site 1TU99: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	106
Alligator Incised, var. Geiger	2
Total	108

Shell-tempered sherds

Miss. Plain var. Warrior	3
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Sand-tempered sherds

Baldwin Plain var. Lubbub	11
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Limestone-tempered sherds

Mulberry Creek Plain	3
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Stone*Chipped Stone*

	Tuscaloosa Gravel	Fort Payne	Quartz	Quartzite	Total
debitage with cortex	3	2	3		8
Residual Stemmed Point				1	1
Residual Corner-Notched Point	1				1
Biface Fragment	2				2
Preform II	3				3
Core	2				2
Core Fragment			1		1
Total	11	2	4	1	18

Other Stone

Schist hce	1
Schist	2
Petrified Wood	1
Total	4

Site 1TU100: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper (eroded)	44
Mulberry Creek Cord-Marked	1
Total	45

Shell-tempered sherds

Miss. Plain var. Warrior	3
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Stone*Chipped Stone*

	Tuscaloosa Gravel	Quartz	Total
debitage with cortex	1		1
Biface Fragment		1	1
Preform II	2		2
Total	3	1	4

Other Stone

Unmodified Tusc. Gravel cobble	1
Shell	4

Site 1TU101: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper (eroded)	20
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Stone*Chipped Stone*

Unknown chert	
Residual Stemmed Point	1

Site 1TU236: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	798
Mulberry Creek Cord-Marked	26
Yales Not-Impressed, var. Yales	1
Withers Fabric Marked	10
Gainesville Complicated-Stamped	4
Wheeler Check-Stamped, var. Catfish Bend	1
Total	840

Shell-tempered sherds

Miss. Plain var. Warrior	4
Bell Plain	19
Bell Plain, polychrome	1
Total	24

Stone*Chipped Stone*

	Tuscaloosa Gravel	Fort Payne	Quartz	Total
debitage with cortex	10		5	15
debitage without cortex	12		2	14
Residual Stemmed Point	1	1	1	3
Preform I	3		2	5
Core Fragment		1		1
Total	26	2	10	38

Site 1TU262: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	422
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Other

Sieatite Bowl Fragment	1
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Daub (Fired Clay)	1
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Stone*Chipped Stone*

	Tuscaloosa Gravel	Fort Payne	Quartz	Quartzite	Bangor	Total
debitage with cortex	50	5	12		3	70
debitage without cortex	36	15	5	1	14	71
Madison Point	1					1
Distal		1				1
Biface Fragment	5					5
Core Fragment	3					3
Total	95	21	17	1	17	151

Other Stone

Tabular Hematitic Sandstone	12
Sandstone/Chert conglomerate	1
Total	13

Site 1TU279: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	5
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Stone

Greenstone	1
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Site 1TU303: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	949
Baytown Plain var. Roper, loop handle	1
Baytown Plain var. Roper, rounded rim	16
Mulberry Creek Cord-Marked	63
Residual Grog-tempered Incised	1
Total	1030

Shell-tempered sherds

Miss. Plain var. Warrior	84
Bell Plain	7
Barton Incised var. Demopolis	1
Total	92

Other

Sand-Tempered Plain	1
Non-tempered sherds	1
Grog-tempered, cane-impressed, rounded rim	1
Total	3

Daub (Fired Clay)	5
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Stone*Chipped Stone*

	Tuscaloosa Gravel	Fort Payne	Quartz	Quartzite	Bangor	Total
debitage with cortex	175		38		4	217
debitage without cortex	130		23		1	154
microlith	6					6
Madison Point Fragment	2		1			3
Biface Fragment	7	1				8
Preform I	10					10
Preform II	6			1		7
Core Fragment	68		30			98
Total	404	1	92	1	5	503

Other Stone

Greenstone	1
Hematitic Sandstone Hoe	1
Hematitic Sandstone	3
Tabular Hematitic Sandstone	3
Pigment Quality Hematite	5
Pigment Quality Limonite	1
Ironstone	1
Ground Sandstone	2
Tabular Sandstone	4
Hematite	3
Hammerstone	6
Unmodified Sandstone	9
Unmodified Quartz	7
Total	46

Site 1TU304: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	327
Mulberry Creek Cord-Marked	4
Total	331

Shell-tempered sherds

Miss. Plain var. Warrior	2
Bell Plain, rounded rim	1
Total	3

Site 1TU312: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	1
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Stone*Chipped Stone*

	Tuscaloosa Gravel	St. Genevieve	Total
debitage without cortex	2	1	3
shatter	1		1
Total	3	1	4

Site 1TU316: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	26
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Site 1TU317: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	4
Mulberry Creek Cord-Marked	1
Total	5

Shell-tempered sherds

Miss. Plain var. Warrior	1
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Stone*Chipped Stone*

	Tuscaloosa Gravel	Quartz	Total
debitage with cortex		4	4
Biface Fragment	1		1
Core Fragment		1	1
Total	1	5	6

Other Stone

Pigment Quality Hematite	1
Unmodified Quartz	1
Unmodified chert cobble	2
Total	4

Site 1TU318: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	70
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Shell-tempered sherds

Miss. Plain var. Warrior	1
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Site 1TU319: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	41
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Site 1TU321: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	2
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Shell-tempered sherds

Miss. Plain var. Warrior	20
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Other

Steatite Bowl Fragment	1
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Stone*Chipped Stone*

	Fort Payne	Hematite/Chert conglomerate	Total
debitage without cortex		2	2
Preform I	1		1
Total	1	2	3

Site 1TU322: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	24
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Shell-tempered sherds

Miss. Plain var. Warrior	2
Bell Plain	2
Total	4

Site 1TU323: Artifact Inventory**Stone***Chipped Stone*

	Tuscaloosa Gravel	Fort Payne	Quartz	Total
debitage with cortex	2		1	3
debitage without cortex		2		2
Biface Fragment	1		1	2
Preform I	1			1
Preform II	1			1
Uniface	1			1
Total	4	2	2	8

Other Stone

Petrified Wood	1
Unmodified Tusc. Gravel Pebble frag.	1
Total	2

Site 1TU324: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	6
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Site 1TU325: Artifact Inventory**Stone***Chipped Stone*

	Tuscaloosa Gravel	Fort Payne	Quartz	Total
debitage with cortex	5	2	4	11
debitage without cortex			5	5
Biface Fragment	1			1
Preform I		1		1
Core	3		3	6
Total	9	3	12	24

Other Stone

Pigment Quality Hematite	1
Petrified Wood	1
Unmodified Cobble fragments	6
Unidentified Groundstone	1
Total	9

Site 1TU328: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	176
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Shell-tempered sherds

Miss. Plain var. Warrior	3
Bell Plain	3
Total	6

Stone*Chipped Stone*

	Tuscaloosa Gravel	Quartz	Total
debitage with cortex		2	2
Bradley Spike Point	1		1
Core	1	2	3
Total	2	4	6

Other Stone

Unmodified cobble	2*
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*one exhibits possible smoothing marks

Site 1TU329: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	28
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Shell-tempered sherds

Miss. Plain var. Warrior	25
Miss. Plain var. Warrior, rounded rim	1
Miss. Plain var. Warrior, lug	1
Bell Plain	1
Bell Plain, beaded rim	1
Bell Plain, rounded rim	1
Carthage Incised, var. Carthage	2
Total	32

Site 1TU330: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	482
Baytown Plain var. Tishomingo	1
Mulberry Creek Cord-Marked	1
Alligator Incised, var. Gainesville	1
Residual Grog-tempered Incised	2
Total	487

Shell-tempered sherds

Miss. Plain var. Warrior	46
Miss. Plain var. Warrior, jar collar	1
Miss. Plain var. Warrior, jar rim	1
Miss. Plain var. Warrior, rounded rim	3
Moundville Engraved var. Tuscaloosa	1
Bell Plain	4
Total	56

Sand-tempered sherds

Alexander Incised	1
Baldwin Plain var. Lubbub	23
Saltillo Fabric Marked	1
Total	25

Limestone-tempered sherds

Mulberry Creek Plain	1
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Site 1TU330--continued

Other

Sand- and Grog-Tempered Plain	1
Non-tempered sherds	2
shell tempered clay disk	1
Total	4

Daub (Fired Clay)	4
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Stone

Chipped Stone

	Tuscaloosa Gravel	Fort Payne	Quartz	Quartzite	Bangor	Total
debitage with cortex	28		3	1		32
debitage without cortex	34	4	5		1	44
Madison Point	1					1
Big Sandy Point	1					1
Bradley Spike Point	1					1
Residual Stemmed Point	1					1
Residual distal	1					1
Residual hafted biface	1					1
Preform I	3					3
Preform II	1					1
Bifacially worked pebble	1					1
Total	73	4	8	1	1	87

Other Stone

Discoidal	1
Greenstone	1
Greenstone axe	1
Greenstone celt	1
Tabular Hematitic Sandstone	14
chert cobble	1
Total	19

Site 1TU331: Artifact Inventory

Aboriginal Ceramics

Grog-tempered sherds

Baytown Plain var. Roper	66
Marksville Incised	1
Total	67

Shell-tempered sherds

Miss. Plain var. Warrior	5
Bell Plain, beaded rim	2
Total	7

Sand-tempered sherds

Baldwin Plain var. Lubbock	1
Saltillo Fabric Marked	1
Furns Cord-Marked	1
Total	3

Other

Residual Grit-tempered Plain, rounded rim	2
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Daub (Fired Clay)	1
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Site 1TU332: Artifact Inventory

Aboriginal Ceramics

Grog-tempered sherds

Baytown Plain var. Roper	11
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Shell-tempered sherds

Miss. Plain var. Warrior	3
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Stone

Chipped Stone

	Tuscaloosa Gravel	Quartz	Total
debitage with cortex	1	1	2
debitage without cortex		1	1
Core	1		1
Total	2	2	4

Other Stone

Sandstone (possible debitage)	2
Granite	1
Unmodified chert cobble	3
Total	6

*Site 1TU333: Artifact Inventory***Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	17
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Shell-tempered sherds

Miss. Plain var. Warrior	1
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Sand-tempered sherds

Residual Sand-tempered plain	2
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*Site 1TU334: Artifact Inventory***Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	12
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Shell-tempered sherds

Miss. Plain var. Warrior	52
Miss. Plain var. Warrior, rounded rim	5
Miss. Plain var. Warrior, base	1
Moundville Engraved var. Hemphill	1
Moundville Incised, var. Moundville	1
Bell Plain	6
Bell Plain, beaded rim	1
Bell Plain, lug handle	1
Total	68

Sand-tempered sherds

Residual Sand-tempered plain	2
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Other

sherdlets	20
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Daub (Fired Clay)	68
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*Site 1TU335: Artifact Inventory***Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	137
Mulberry Creek Cord-Marked	2
Total	139

Shell-tempered sherds

Miss. Plain var. Warrior	26
Bell Plain	10
Carthage Incised, var. unspecified	2
Total	38

Stone*Chipped Stone*

	Tuscaloosa Gravel	Quartz	Total
debitage with cortex		1	1
debitage without cortex	2	2	4
Total	2	3	5

Other Stone

Tabular Hematitic Sandstone	3
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Site 1TU336: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	503
Baytown Plain rounded rim	6
Mulberry Creek Cord-Marked	1
Marksville Incised	1
Total	511

Shell-tempered sherds

Miss. Plain var. Warrior	83
Miss. Plain var. Warrior, jar collar	1
Miss. Plain var. Warrior, rounded rim	1
Miss. Plain var. Warrior, folded rim	2
Bell Plain	1
Bell Plain, beaded rim	1
Bell Plain, rounded rim	2
Total	91

Other

Duck Effigy	1
Daub (Fired Clay)	15

Stone*Chipped Stone*

	Tuscaloosa Gravel	Fort Payne	Quartz	Bangor	Total
debitage with cortex	102		24		126
debitage without cortex	35		5	1	41
microlith	1				1
Biface Fragment	10				10
Preform I	4				4
Preform II	5				5
Core Fragment	49	4	18		71
Total	206	4	47	1	258

Other Stone

Sandstone Discoidal	1
Greenstone Discoidal	1
Greenstone	2
Greenstone celt	1
Tabular Hematitic Sandstone	13
Tabular Hematitic Sandstone (possible anvilstone)	1
Pigment Quality Hematite	3
Ground Sandstone	3
Tabular Sandstone	4
Sandstone	53
Hematite	2
Hammerstone	13
Unmodified Quartz	35
Unmodified Tuscaloosa Gravel	87
Total	219

Site 1TU337: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	20
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Shell-tempered sherds

Miss. Plain var. Warrior	62
Miss. Plain var. Warrior, red filmed	1
Miss. Plain var. Warrior, base	1
Bell Plain	6
Bell Plain, beaded rim	1
Bell Plain, folded rim	3
Moundville Incised, var. Moundville	1
Moundville Engraved, var. Hemphill	1
Moundville Engraved, var. unspecified	1
Total	77

Fired Clay	3
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Stone*Chipped Stone*

	Tuscaloosa Gravel	Total
debitage with cortex	1	1
debitage without cortex	1	1
Total	2	2

Site 1TU338: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain, var. Roper	1
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Stone*Chipped Stone*

	Tuscaloosa Gravel	Total
Residual Stemmed Point Fragment	1	1
Total	1	1

Site 1TU339: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	82
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Shell-tempered sherds

Miss. Plain, var. Warrior	4
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Daub (Fired Clay)	2
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Stone*Chipped Stone*

	Tuscaloosa Gravel	Total
debitage with cortex	2	2
debitage without cortex	6	6
Residual Stemmed Point (burned)	1	1
Core	2	2
Total	11	11

Other Stone

Grinding Stone, sandstone	1
Pigment Quality Hematite	1
Total	2

Shell	2
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Site 1TU340: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	6
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Shell-tempered sherds

Miss. Plain var. Warrior	11
Bell Plain	1
Bell Plain, handle fragment	1
Total	13

Site 1TU341: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	3
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Shell-tempered sherds

Miss. Plain var. Warrior	2
Bell Plain	2
Total	4

sherdlets	3
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Site 1TU342: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	1
Baytown Plain rounded rim	2
Total	3

Shell-tempered sherds

Miss. Plain var. Warrior	71
Miss. Plain var. Warrior, jar collar	1
Miss. Plain var. Warrior, rounded rim	3
Bell Plain	4
Bell Plain, beaded rim	1
Bell Plain, lug handle	1
Total	81

Stone*Chipped Stone*

	Tuscaloosa Gravel	Quartz	Total
debitage with cortex	5	1	6
Total	5	1	6

Unidentified Bone Fragment	1
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Site 1TU343: Artifact Inventory**Aboriginal Ceramics***Shell-tempered sherds*

Miss. Plain var. Warrior	22
Miss. Plain var. Warrior, white filmed	1
Bell Plain	5
Total	28

Daub (Fired Clay)	1
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Stone*Chipped Stone*

	Tuscaloosa Gravel
Biface Fragment	1

Other Stone

Greenstone	2
Chert pebble fragment	1
Total	3

Site 1TU344: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	4
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Shell-tempered sherds

Miss. Plain var. Warrior	1
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Site 1TU345: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	18
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Shell-tempered sherds

Miss. Plain var. Warrior	1
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Site 1TU348: Artifact Inventory**Stone***Chipped Stone*

	Tuscaloosa Gravel	Fort Payne	Quartz	Hematite
debitage with cortex	5	1	2	1
debitage without cortex	6	9		1
Preform I	1			
Total	12	10	2	2

Other Stone

Hematite/Chert conglomerate	1
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Site 1TU349: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	27
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Site 1TU350: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	2
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Sites 1TU351: Artifact Inventory**Aboriginal Ceramics***Shell-tempered sherds*

Miss. Plain var. Warrior	2
Bell Plain	1
Total	3

Other

sherdlets	5
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Stone*Chipped Stone*

	Fort Payne	Quartz	Bangor	Total
debitage with cortex		1		1
debitage without cortex			1	1
Possible Wade Point	1			1
Total	1	1	1	3

Sites 1TU390-393: Artifact Inventory

(from Bozeman (1982:214))

Aboriginal Ceramics*Grog-tempered sherds*

Baytown Plain var. Roper	34
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Shell-tempered sherds

Miss. Plain var. Warrior	71
Miss. Plain var. Warrior, rim	4
Bell Plain, rim	1
Barton Incised	2
Total	78

Sand-tempered sherds

Baldwin Plain	3
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Limestone-tempered sherds

Mulberry Creek Plain	1
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Site 1TU493: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	3
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Site 1TU516: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	30
Mulberry Creek Cord-Marked	1
Total	31

Shell-tempered sherds

Miss. Plain var. Warrior	25
Bell Plain	2
Bell Plain, rim	1
Total	28

Site 1TU517: Artifact Inventory**Stone**

Sandstone saw	1
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debitage (unsorted)

Site 1TU518: Artifact Inventory

Aboriginal Ceramics

Shell-tempered sherds

Miss. Plain var. Warrior	3
Bell Plain	1
Total	4

Other

sherdlets	5
Daub (Fired Clay)	3
Total	8

Site 1TU519: Artifact Inventory

Aboriginal Ceramics

Grog-tempered sherds

Baytown Plain var. Roper	2
Baytown Plain var. Roper, lug	1
Total	3

Shell-tempered sherds

Miss. Plain var. Warrior	1
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Other

Clay disk	1
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Site 1TU521: Artifact Inventory

Aboriginal Ceramics

Shell-tempered sherds

Miss. Plain var. Warrior, rounded rim	1
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Site 1TU522: Artifact Inventory

Aboriginal Ceramics

Grog-tempered sherds

Baytown Plain var. Roper	6
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Site 1TU530: Artifact Inventory

Aboriginal Ceramics

Grog-tempered sherds

Baytown Plain var. Roper	18
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Site 1TU542: Artifact Inventory

Aboriginal Ceramics

Grog-tempered sherds

Baytown Plain var. Roper	10
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Shell-tempered sherds

Miss. Plain var. Warrior	1
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Sand-tempered sherds

Baldwin Plain var. Lubbub	1
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Site 1TU544: Artifact Inventory

Aboriginal Ceramics

Grog-tempered sherds

Baytown Plain var. Roper	4
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Stone

Chipped Stone

	Quartz
Dalton Point	1

debitage not counted

Site 1TU545: Artifact Inventory

Aboriginal Ceramics

Grog-tempered sherds

Baytown Plain var. Roper	4
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Shell-tempered sherds

Miss. Plain var. Warrior	9
Bell Plain	1
Total	10

Other

Daub (Fired Clay)	3
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Site 1TU549: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	21
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Site 1TU562: Artifact Inventory**Stone***Chipped Stone*

	Tuscaloosa Gravel	Fort Payne	Quartz	Quartzite	Knox	Total
debitage with cortex	3					3
debitage without cortex	15	1	1	1	1	19
shatter	5					5
Utilized debitage	1					1
Kirk Corner-Notched		1				1
Decatur Point			1			1
Madison Point Fragment	1					1
Biface Fragment	1					1
Preform I	1					1
Preform II	1					1
Total	28	2	2	1	1	34

Site 1TU587: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	188
Baytown Plain var. Roper, rounded rim	13
Baytown Plain var. Roper, base	2
Mulberry Creek Cord-Marked	15
Gainesville Simple-Stamped	1
Salomon Brushed	3
Salomon Brushed, rounded rim	1
Unspecified Grog-tempered Incised	1
Residual Grog-tempered cane-punctated rim	1
Total	225

Sand-tempered sherds

Baldwin Plain var. Lubbub	1
Saltillo Fabric Marked	1
Saltillo Fabric Marked, rounded rim	1
Total	3

Site 1TU571: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	3
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Other

Residual Grit-tempered Plain	1
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Site 1TU842: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	5
Baytown Plain var. Roper, rim	1
Total	6

Site 1TU843: Artifact Inventory**Aboriginal Ceramics***Shell-tempered sherds*

Miss. Plain var. Warrior	4
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Sand-tempered sherds

Residual Sand-tempered plain	1
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Site 1TU858: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	268
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Shell-tempered sherds

Miss. Plain var. Warrior	1
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Stone*Chipped Stone*

	Tuscaloosa Gravel	Quartz	Quartzite	Total
debitage with cortex	67			67
debitage without cortex	83			83
Cylindrical Microlith	1			1
Unifacial Microlith	1			1
Madison Point	1			1
Flint Creek Point	1			1
Undifferentiated distal			1	1
Biface Fragment	6	1		7
Core Fragment	2			2
Total	162	1	1	164

Other Stone

Tabular Hematitic Sandstone	1
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Site 1TU859: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	4
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Stone*Chipped Stone*

	Tuscaloosa Gravel	Fort Payne	Quartz	Bangor	Total
debitage with cortex	34		6	2	42
debitage without cortex	61	1	9	5	76
Decatur Point	1				1
Madison Point Fragment	2				2
Preform I	2				2
Preform II	4				4
Core	2				2
Total	106	1	15	7	129

Site 1TU860: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	1
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Stone*Chipped Stone*

	Tuscaloosa Gravel	Fort Payne	Quartz	Total
debitage with cortex	3	1	3	7
debitage without cortex	1		1	2
Preform I	1			1
Total	5	1	4	10

Site 1TU861: Artifact Inventory**Stone***Chipped Stone*

	Tuscaloosa Gravel	Fort Payne	Total
debitage without cortex	1	1	2
Core with cortex	1		1
Total	2	1	3

Site 1TU862: Artifact Inventory**Stone***Chipped Stone*

	Tuscaloosa Gravel	Quartz	Total
debitage with cortex		1	1
debitage without cortex	2	1	3
Preform I	1		1
Core Fragment	1		1
Total	4	2	6

Site 1TU863: Artifact Inventory

Stone

Chipped Stone

	Tuscaloosa Gravel	Fort Payne	Quartz	Total
debitage with cortex	5		4	9
debitage without cortex	17	2	5	24
Residual Stemmed Point			1	1
Total	22	2	10	34

Site 1TU864: Artifact Inventory

Stone

Chipped Stone

	Tuscaloosa Gravel	Fort Payne	Quartz	blis Quartz	Knox	Total
debitage with cortex	9		2	1	1	13
debitage without cortex	21	2	5			28
Residual Side Notched Point			1			1
Total	30	2	8	1	1	42

Site 1TU865: Artifact Inventory

Aboriginal Ceramics

Grog-tempered sherds

Baytown Plain var. Roper	1
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Stone

Chipped Stone

	Tuscaloosa Gravel	Fort Payne	Quartz	Total
debitage with cortex	1			1
debitage without cortex	3	3	1	7
Total	4	3	1	8

Site 1TU866: Artifact Inventory

Stone

Chipped Stone

	Tuscaloosa Gravel	Fort Payne	Total
debitage without cortex	2	1	3
Total	2	1	3

Site 1TU867: Artifact Inventory

Stone

Chipped Stone

	Tuscaloosa Gravel	Total
debitage with cortex	3	3
debitage without cortex	6	6
Residual Corner Notched Point	1	1
Total	10	10

Site 1TU868: Artifact Inventory

Aboriginal Ceramics

Grog-tempered sherds

Baytown Plain var. Roper	1
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Stone

Chipped Stone

	Tuscaloosa Gravel	Fort Payne	Quartz	Knox	Total
debitage with cortex	5		9		14
debitage without cortex	7	2	8	1	18
Flint Creek Point Fragment		1			1
Residual Side Notched Point		1			1
Preform II	1				1
Core	1				1
Total	14	4	17	1	36

Other Stone

Tabular Hematitic Sandstone	1
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Site 1TU869: Artifact Inventory**Stone****Chipped Stone**

	Tuscaloosa Gravel	Quartz	Total
debitage without cortex	2	1	3
Total	2	1	3

Site 1TU870: Artifact Inventory**Aboriginal Ceramics****Grog-tempered sherds**

Baytown Plain var. Roper	1
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Shell-tempered sherds

Miss. Plain var. Warrior	1
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Stone**Chipped Stone**

	Tuscaloosa Gravel	Total
shatter	1	1
Total	1	1

Site 1TU871: Artifact Inventory**Aboriginal Ceramics****Grog-tempered sherds**

Baytown Plain var. Roper	104
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Stone**Chipped Stone**

	Tuscaloosa Gravel	Quartz	Initiated WI	Total
debitage with cortex	29	1		30
debitage without cortex	7			7
Distal	1			1
Preform I	1		1	2
Preform II	1			1
Total	39	1	1	41

Other Stone

Nutting Stone, sandstone	2
Tabular Hematitic Sandstone	5
Total	7

Site 1TU872: Artifact Inventory**Aboriginal Ceramics****Grog-tempered sherds**

Baytown Plain var. Roper	105
Larto Red Filled, var. unspecified	1
Total	106

Shell-tempered sherds

Miss. Plain var. Warrior	5
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Stone**Chipped Stone**

	Tuscaloosa Gravel	Quartz	Total
debitage without cortex	2	1	3
Total	2	1	3

Shell	8
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Site 1TU873: Artifact Inventory**Aboriginal Ceramics****Grog-tempered sherds**

Baytown Plain var. Roper	4
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Stone**Chipped Stone**

	Tuscaloosa Gravel	Total
debitage with cortex	1	1
Madison Point Fragment	1	1
Total	2	2

Shell	10
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Site 1TU874: Artifact Inventory**Stone****Chipped Stone**

	Tuscaloosa Gravel	Quartz	Quartzite	Differentiated	Total
debitage with cortex	1	3			4
debitage without cortex	10	5	1		16
Preform I	1	1		1	3
Bifacially Retouched Debitage	1				1
Total	13	9	1	1	24

Site S-6: Artifact Inventory**Aboriginal Ceramics****Grog-tempered sherds**

Baytown Plain var. Roper	2
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Site N-10: Artifact Inventory**Aboriginal Ceramics****Grog-tempered sherds**

Baytown Plain var. Roper	1
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Site N-11: Artifact Inventory**Aboriginal Ceramics****Grog-tempered sherds**

Baytown Plain var. Roper	1
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Site 1HAM3: Artifact Inventory**Aboriginal Ceramics****Grog-tempered sherds**

Baytown Plain var. Roper	1
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Shell-tempered sherds

Miss. Plain var. Warrior	3
Bell Plain	1
Total	4

Site 1HAM4: Artifact Inventory**Aboriginal Ceramics****Grog-tempered sherds**

Baytown Plain var. Roper	5
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Shell-tempered sherds

Miss. Plain var. Warrior	1
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Other

Daub (Fired Clay)	2
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Site 1HAM5: Artifact Inventory**Aboriginal Ceramics****Grog-tempered sherds**

Baytown Plain var. Roper	9
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Shell-tempered sherds

Miss. Plain var. Warrior	49
Miss. Plain var. Warrior, rim	3
Total	52

Site 1HAM6: Artifact Inventory**Aboriginal Ceramics****Grog-tempered sherds**

Baytown Plain var. Roper	15
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Shell-tempered sherds

Miss. Plain var. Warrior	7
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Site 1HAM7: Artifact Inventory**Aboriginal Ceramics****Grog-tempered sherds**

Baytown Plain var. Roper	2
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Shell-tempered sherds

Miss. Plain var. Warrior	19
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Site 1HAM8: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	161
Baytown Plain var Roper, rim	6
Mulberry Creek Cord-Marked	1
Salomon Brushed, var. Fairfield	1
Total	169

Shell-tempered sherds

Miss. Plain var. Warrior	325
Miss. Plain var. Warrior, rim	5
Moundville Incised var. Moundville	1
Carthage Incised var. unspecified	1
Moundville Engraved var. unspecified	1
Moundville Engraved var. Taylorville	1
Bell Plain	3
Bell Plain, beaded rim	2
Bell Plain, rim	4
Total	343

Site 1HAM9: Artifact Inventory**Aboriginal Ceramics***Shell-tempered sherds*

Miss. Plain var. Warrior	5
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Site 1HAM10: Artifact Inventory**Aboriginal Ceramics***Shell-tempered sherds*

Miss. Plain var. Warrior	9
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Site 1HAM11: Artifact Inventory**Aboriginal Ceramics***Shell-tempered sherds*

Miss. Plain var. Warrior	14
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Site 1HAM12: Artifact Inventory**Aboriginal Ceramics***Shell-tempered sherds*

Miss. Plain var. Warrior	43
Miss. Plain var. Warrior, rim	1
Bell Plain, rim	1
Total	45

Other

Daub (Fired Clay)	8
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Site 1HAM14: Artifact Inventory**Aboriginal Ceramics***Grog-tempered sherds*

Baytown Plain var. Roper	3
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Shell-tempered sherds

Miss. Plain var. Warrior	4
Bell Plain, beaded rim	1
Total	5