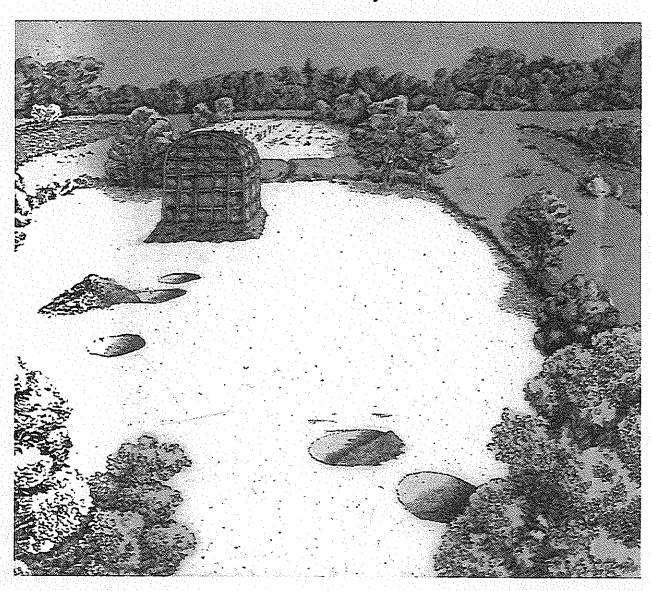
CHARACTERISTICS OF MISSISSIPPIAN SETTLEMENT IN THE BLACK WARRIOR VALLEY, ALABAMA

Final Report of Season II of the Black Warrior Valley Survey

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Characteristics of Mississippian Settlement in the Black Warrior Valley, Alabama

Final Report
Project Number: PT99-SP131

By

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Abstract

Mississippian research has tended to focus largely on sites possessing mounds. Recently, however, archaeologists, including those working within the Black Warrior Valley near Moundville, have realized the importance of also investigating smaller, non-mound sites in order to provide a more complete picture of prehistoric settlement. Although the occupations of Moundville and nearby single-mound sites are relatively well understood, little is known about other types of sites within the valley. A site survey has been undertaken in order to provide a more complete picture of the distribution and general characteristics of non-mound sites.

Chapter 1: Introduction

The University of Alabama's Black Warrior Valley (BWV) Survey was begun in the summer of 1999 in order to clarify our understanding of the settlement pattern of the Moundville chiefdom. Up until that time, little was known about Moundville-related farmsteads, the small Mississippian sites where the majority of the inhabitants of the Black Warrior River Valley are believed to have lived. Our goal, then, is to determine both the environmental characteristics and social characteristics that may have contributed to the locations of these sites. Some of the environmental characteristics to be examined are soil type, topographic setting, type of nearest water source, and distance to nearest water source. Social characteristics include the location of Mississippian farmsteads in relation to each other, to the single-mound sites located throughout the valley, and to the Moundville site itself. In addition to recording these types of sites within the survey area, the BWV survey also sought to record other settlements of prehistoric, as well as historic age.

The second field season of the Black Warrior Valley survey began on May 10, 2000 and ended on June 30, 2000. The subsequent artifact analysis was carried out from July 3, 2000 until July 21, 2000. A total of 2.62 square kilometers has been surveyed this season, with 2.59 square kilometers being surface collected and 0.3 square kilometers being shovel tested. As of the end of the 2000 field season, 11.4 percent of the project area had been surveyed. A total of 46 archaeological sites were newly recorded, and four previously recorded sites were revisited.

Geographic Setting. The Mississippian period Moundville chiefdom was located in the Black Warrior River Valley, extending approximately 25 kilometers north and south of the Moundville site (1Tu500) (Figure 1). The northern boundary of the chiefdom is at the fall line at present-day Tuscaloosa. 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 two major environmental zones of interest to this project are the terraces, which were generally formed during the Pleistocene epoch, and the more recent floodplain. The terrace zones are the high stream terraces above the Black Warrior River that avoid all but the most severe floods.

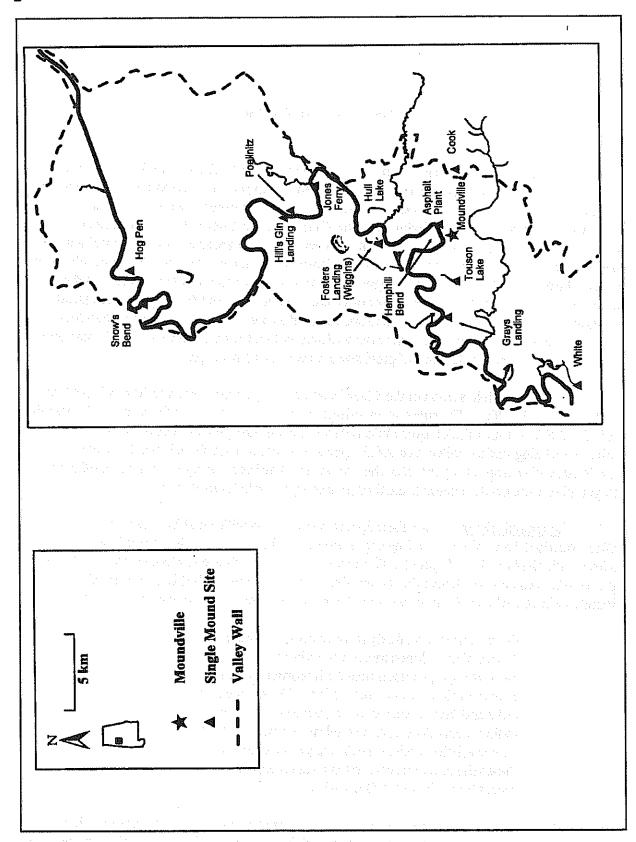


Figure 1. The Moundville Chiefdom.

The Moundville site itself 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 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, 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).

<u>Cultural Setting.</u> The Moundville chiefdom is a manifestation of the Mississippian period culture found throughout the Southeastern United States. While Moundville itself and the surrounding single-mound centers are relatively well understood, little is known about the occupation and settlement of the rest of the valley. Since the majority of the population of the Moundville chiefdom likely resided at sites other than mounds, our knowledge of a substantial segment of the local population remains sketchy at best.

Until relatively recently, any site possessing Mississippian period artifacts and not possessing a mound was considered to be a farmstead. Maxham (2000a, 2000b), however, points out that the use of the term farmstead for all non-mound sites obscures variation by lumping potentially different site forms together under the same category. Similarly, she points out that the competing definitions of nodal center in the American Bottom (e.g., Mehrer 1995; Mehrer and Collins 1995; Emerson 1997) interpret the nature of power and control exerted by residents of nodal points differently. This discrepancy makes extrapolations to other regions risky. Following her lead, we will refrain from using the term nodal in favor of community gathering place for small Moundville-related non-mound sites that appear not to have been used primarily for habitation purposes.

The lack of information on farmsteads has serious implications for the interpretation of Moundville's agricultural economy, as well as population estimates. The aim of this project, then, is to help provide more information on this important type of site. In order to do so, an archaeological site survey was undertaken to increase the number of known potential farmsteads and to collect important social and environmental data about these sites.

Chapter 2: Culture History

For the purposes of this overview and following the lead of Knight (1982), the cultural sequences of the central and upper Tombigbee region and the lower Black Warrior Valley (that portion of the valley below the fall line) have been grouped together since these regions show similarities (albeit with some local differences) in their developmental trajectories. The Tombigbee region, as a result of archaeological mitigation mandated by the construction of the Tennessee-Tombigbee Waterway, possesses a relatively well-defined sequence (see Jenkins 1981, 1982; Jenkins and Krause 1986). Little formal investigation of prehistoric settlement has taken place within the lower Black Warrior Valley with the notable exception of Mississippian mound sites.

However, similarities have been noted between the ceramic styles of the two regions, leading researchers working within the Black Warrior Valley to rely on the Tombigbee sequence when discussing pre-Mississippian Black Warrior Valley settlement (e.g., Knight 1982; Welch 1990). Future research within the Black Warrior Valley will determine if this grouping is valid. Based on the data we currently possess, pre-Mississippian settlement in the lower Black Warrior is best understood by making generalizations based on the Tombigbee data.

Paleoindian (12,000 to 10,000 B.P.). The earliest occupation in the Black Warrior Valley occurred during the Paleoindian stage. Little information is available in the region with the exception of isolated surface finds. Stone tool forms of the Paleoindian period consist of fluted projectile points, end and side scrapers, burins, flake-blade knives, drills, choppers, gravers, utilized blades, spokeshaves, and splintered wedges or *pieces esquilles* (Ensor 1982).

Paleoindian groups are believed to have depended on a hunting and gathering resource procurement strategy. Several models of Paleoindian settlement and subsistence have been proposed. The high-technology forager model (HTF) proposes that early populations focused primarily on key target species. This focus would have led to a need for great mobility and a specialized tool kit (Kelly and Todd 1988). A competing model (Meltzer 1988) states that Paleoindians were more likely generalists who utilized a wider range of species. An overdependence on a minimal number of species, it is argued, would leave these populations at greater risk in lean times while a broader dependence would allow for flexibility (e.g., Cable 1996:115).

Anderson (1990, 1996a) has proposed a settlement model for early Paleoindian settlers of North America. In his view, early Paleoindians entered North America through an ice-free corridor between 14,000 and 12,000 B.P. and moved through the northern plains to the Mississippi River Valley. From the Mississippi, rapid movement into the East could have occurred through three corridors: the Cumberland, Ohio, and Tennessee River valleys. These valleys contain some of the densest concentrations of Paleoindian artifacts in eastern North America. Anderson believes that portions of these valleys served as "staging areas" for exploration and the beginnings of population

aggregation. As populations within a particular staging area grew, groups fissioned and relocated to alleviate tensions (Anderson 1996a:51). These staging areas can be seen as relatively dense distributions of Paleoindian artifacts separated by 250 to 400 km of less-dense space (1996a:36-37).

The most extensive Paleoindian occupation in Alabama is found in the Tennessee River Valley. Futato (1996) notes that of 1,654 fluted points found in the state, 1,260 come from the Tennessee Valley, specifically the three northwestern most counties. In addition, Driskell (1994, 1996) reports Paleoindian deposits at the stratified Dust Cave site in Lauderdale County.

Within the Black Warrior Valley, Paleoindian occupation is suggested by isolated surface finds, however to date no Paleoindian artifacts have been recovered through excavation. Futato (1982, 1989) reports six fluted points from the central Tombigbee-Black Warrior drainage and Ensor (1982) describes possible Paleoindian-related horizons from the Gainesville Lake area. These finds indicate that there was a Paleoindian presence in west-central Alabama, although it was not nearly as dense as that in the Tennessee Valley to the north. Current data are not sufficient to establish any models of site types or settlement distribution for the lower Black Warrior Valley.

Early Archaic (10,000 to 8,000 B.P.). As with the Paleoindian period, several models for Early Archaic settlement in the southeastern United States have been proposed. Claggett and Cable (1982) argue that technological changes between the Paleoindian and Early Archaic were a response to post-glacial warming. This warming led to an increased mobility characterized by an artifact assemblage of expedient tools.

O'Steen (1983), working with data from the Wallace Reservoir in the upper Oconee River in Georgia, showed that Early Archaic site density was highest in areas that exhibited the highest resource diversity. Unlike Claggett and Cable (1982), she argued that the Early Archaic occupants of the upper Oconee were largely sedentary, occupied small territories, and were active in trade (particularly in the procurement of non-local lithic material) (1983:115-116).

A third model for Early Archaic settlement in the southeastern United States has been proposed by Anderson and Hanson (1988; Anderson 1996a). This model, termed the *biocultural* or *band-macroband* model, proposes two levels of settlement organization: the band level and the regional macroband level. Band-level organization consisted of aggregates of 50 to 150 people moving primarily within a single drainage basin. Macrobands, consisting of 500 to 1,500 people, are considered to be loose aggregates of bands joined by mating networks and information exchange (Anderson and Hanson 1988).

According to this model, there are four factors that affect Early Archaic adaptation: (a) environmental structure and its effect on variation in the availability of food and raw materials; (b) biological interaction (mating); (c) information exchange (resource regulation); and (d) demographic structure (population size and spacing). It is hypothesized that these four factors resulted in a riverine-focused settlement pattern characterized by fall/winter base camps complemented by foraging camps the remainder of the year (Anderson and Hanson 1988:280). Daniel (2001) however, argues that Early Archaic occupation was not limited exclusively to riverine settings but was much more flexible in order to maximize access to high-quality lithic resources.

Extensive Early Archaic deposits have been identified at several sites in northern Alabama, most notably at Quad, Stanfield-Worley, Dust Cave, and Russell Cave (see discussion in Futato 1996). Within the west-central Alabama region, specifically in the Gainesville Lake area, Dalton, Kirk, and Bifurcate components were found underlying Woodland and Mississippian occupations at sites 1Gr1x1 and 1Gr2 (Jenkins 1982). While these components were thin, nuts and seeds were recovered potentially indicating a late summer/early fall occupation for sites 1Gr1x1, 1Gr2, and 1Pi61 (Caddell 1981). Ensor (1985) also reports Dalton and Big Sandy components at the Joe Powell site in Pickens County.

Jenkins and Curren (1976), drawing on data from the Gainesville Lake area, noted that Early Archaic sites occur on the sandy loam soils of alluvial terraces and suggest that the settlement system consisted of small, mobile hunter-gatherer bands. This inference, however, is based on limited data. Further investigation is necessary in order to determine the model's validity.

Again however, Early Archaic occupation in the lower Black Warrior Valley is inferred solely from surface finds. Dalton, Big Sandy, Benton, Hardaway, Kirk, and Bifurcate points (Cambron and Hulse 1975) have all been noted within the Warrior Valley.

Middle Archaic (8,000 to 6,000 B.P.). The Middle Archaic is believed to be characterized by a trend towards sedentism, an increased usage of local resources, and a more complex social organization. Early Middle Archaic occupations seem to be characterized by short-term occupations that take advantage of a variety of resources on a seasonal basis (Jefferies 1995). By the late Middle Archaic, occupation becomes more focused on longer habitation of sites near food-rich areas. These sites are characterized by thick middens, year-round occupations, permanent structures, and a wide variety of activities (Jefferies 1995:76). It has been suggested by Brown (1985) that these sites represent "base camps" from which task groups could exploit a variety of resource areas. By the late Middle Archaic, groups were becoming increasingly sedentary and showing signs of social complexity such as "food storage, domestication of plants, multiregional exchange of valuables, cemeteries, intragroup ranking of individuals, and the elaboration of art in a social context" (Brown 1985). Jefferies (1995, 1996, 1997) summarizes evidence for long-distance exchange of copper, bone pins, and exotic chert between Middle Archaic sites in the Midwest and Southeast while Johnson and Brookes (1989) discuss the exchange of cache bifaces among Tennessee River Valley Middle Archaic groups.

Anderson (1996b), utilizing site file data for Archaic sites in the Southeast, shows that the densest concentrations of Middle Archaic sites occur in the Piedmont of North and South Carolina as well as in Georgia. Areas outside these sections of the Piedmont exhibit largely localized and restricted Middle Archaic occupations (Anderson 1996b:164). Within Alabama, the majority of Middle Archaic sites are along the major drainages: the Tennessee, Cahaba/Coosa, Tallapoosa, Tombigbee, and Alabama. Anderson (1996b:167) suggests that Middle Archaic occupation in Alabama was more extensive in the Piedmont region while occupation of the Coastal Plain region was less common and focused on the rivers.

Within the Tombigbee Valley, Vaughn and Demopolis point types are the most commonly found and Coastal Plain chert types seem to be preferred. Middle Archaic settlement in the central Tombigbee seemingly consists of short-term camps as no evidence for larger "base camps" was

noted during the Tenn-Tom Waterway investigations (Ensor 1982:44). Within the lower Black Warrior drainage, however, Middle Archaic occupation is poorly understood as no Middle Archaic site components have yet been defined.

Late Archaic (6,000 to 3,000 B.P.). The trend towards increasing complexity (long-distance exchange, sedentary settlement, and ceremonialism) in the Southeast continued in the Late Archaic. Along the Tennessee River, Late Archaic shell mounds (middens) have been found in abundance (see for example Claasen 1996; Walthall 1980; Webb and DeJarnette 1942). These shell mounds have traditionally been viewed as base camps occupied by several families at a time during late spring and summer (e.g., Walthall 1980:69; Milner and Jefferies 1998) although some have argued that cemeteries at these shell mounds were viewed as a way of marking one's territory as a means of claiming sole access to a limited resource such as freshwater bivalve species. Claasen (1996) presents evidence that indicates that bivalves may not have been a limited resource. She believes that the presence of formal cemeteries at these mounds suggests that they served a ceremonial purpose as well. If these cemeteries were in fact a means of laying claim to a resource, Claasen suggests that the resources in question were probably mates or a particular region.

The development of increased sedentism led to the development of a more varied material culture. Steatite and sandstone bowls, bone tools (awls and fishhooks), and a wider variety of chipped-stone tools have been recovered from shell mound Archaic sites (Walthall 1980:69-70). Jenkins (1974) believes that there were three major food procurement methods in the Tennessee Valley based on technological adaptations and seasonal availability: (a) shellfish collecting and fishing; (b) hunting; and (c) harvesting of plants.

Anderson (1996b), in his study of pan-southern Archaic settlement, notes that Late Archaic settlement in Alabama was more widespread than the Middle Archaic. The Piedmont and Tennessee Valley as well as the southern and eastern Coastal Plain were still heavily occupied. However, there is still little evidence for Late Archaic settlement along the coast (Anderson 1996b:167).

Late Archaic settlement in the Tombigbee Valley is inferred by the presence of diagnostic Little Bear Creek points (Ensor 1982). Recognized Late Archaic site components are relatively small and are located on first terraces or stream junctions (Knight 1982).

Black Warrior Valley Late Archaic settlement is again known primarily from surface finds of diagnostic projectile points. In general, Archaic sites in the valley seem to be located away from the current river channel along swamps, oxbows, or first order streams (Hammerstedt 2000:54-55), however no detailed analysis of Archaic sites has yet been undertaken.

Gulf Formational (3,000 to 1,900 B.P.). The Gulf Formational stage, first proposed by Walthall and Jenkins (1976), is an intermediate stage between the Archaic and Woodland for the southeastern Coastal Plain. The Gulf Formational stage is subdivided into three periods: Early, Middle, and Late. Early Gulf Formational is defined by the appearance of fiber-tempered pottery and primarily occurs along the Gulf coast. Middle Gulf Formational marks the diffusion of fiber-tempered pottery into the west-central Alabama region. By the Late Gulf Formational stage, fiber-tempering largely disappears and Tchefuncte, Alexander, and Deptford pottery spreads into the coastal plain (Jenkins 1982; Jenkins and Krause 1986; Jenkins and Meyer 1998).

The Gulf Formational stage is represented in the Tombigbee Valley by the Broken Pumpkin Creek and Henson Springs phases. Broken Pumpkin Creek assemblages are characterized by the presence of fiber-tempered Wheeler series ceramics and Wade cluster projectile points. All Broken Pumpkin Creek sites excavated in the Tombigbee valley (n=9) appear to be small campsites of limited duration. It has been suggested that the settlement system of the Broken Pumpkin Creek phase was a central-based wandering system of base camps and ephemeral, more transitory occupations (Jenkins and Krause 1986:41-42).

The Henson Springs phase follows the Broken Pumpkin Creek phase and is characterized by the disappearance of Wheeler series ceramics and the presence of sand-tempered Alexander series ceramics, usually plain, incised, pinched, or punctated (Jenkins 1981; Jenkins and Meyer 1998). The settlement system seems to conform to the central-based wandering system of the preceding Broken Pumpkin Creek phase (Jenkins and Krause 1986:43-47).

Jenkins (1982) did not extend these GulfFormational phases into the Black Warrior Valley but instead restricted them to the central and upper Tombigbee. However, a small number of Alexander and Wheeler ceramics have been recovered in surface collections from Tuscaloosa and Hale counties in the Black Warrior drainage (Knight 1982:33; Hammerstedt 2000:103). Despite the presence of Gulf Formational ceramics in the lower Black Warrior drainage, little is known to date about the extent of occupation in the area although it appears that site density is relatively low.

<u>Early Woodland (2950 to 2050 B.P.)</u>. Early Woodland manifestations mainly occur above the fall line and do not seem to be represented in the Coastal Plain. In the Coastal Plain, this time period is subsumed by the Gulf Formational discussed above, therefore no further discussion of the Early Woodland is necessary here.

Middle Woodland (2050 to 1350 B.P.). During the Middle Woodland, changes in settlement density, length of occupation, and evidence for ceremonial activity are first seen. In the Tombigbee, the Middle Woodland is represented by the Miller variants (Jenkins 1982; Jenkins and Krause 1986).

The Miller I phase (2050 to 1650 B.P.) is the earliest of the Miller complexes. Several lines of evidence indicate a cultural discontinuity between Miller populations and earlier Gulf Formational people. First, Alexander series pottery was replaced by sand-tempered Baldwin Plain, Saltillo Fabric-Marked, and Furrs Cord-Marked types (Jenkins 1981, 1982; Jenkins and Meyer 1998). Since Miller I ceramics are more closely related to traditions to the north, it is argued that Miller I represents an intrusion from elsewhere that displaced the local Alexander tradition (Jenkins 1982:68-69, 81-85). In addition, burial mounds became more common and Miller I people appear to have participated in interregional exchange and interaction based on the presence of exotic non-local goods in elaborate burials (Jenkins and Krause 1986).

Stone tool manufacturing also changed during the Miller I phase. An increase in use of locally available raw material and the use of heat-treating to make the stone more workable is noted. Dominant projectile point forms include lanceolate expanded hafts and spikes (Jenkins 1982:71).

Site types represented in the Miller I phase include seasonally occupied base camps, transitory camps, and ceremonial centers (one to six mounds and a base camp-sized occupation). Deer, hickory nuts, and acorn are the most common subsistence items recovered in archaeological contexts, although small mammals, turtles, fish, and birds have also been noted (Jenkins 1982:71-73).

The Miller II phase (1650 to 1350 B.P.) saw a continuation of Miller I developments. Over the course of the phase, Furrs Cord Marked increased in frequency while Saltillo Fabric Marked declined. By the end of the phase, grog-tempered wares (Baytown Plain, Mulberry Creek Cord Marked, Withers Fabric Marked) as well as limestone tempered wares (Mulberry Creek Plain) became common as well. Lithic technology does not appear to have changed, although Tombigbee Stemmed became the dominant point type (Jenkins 1981, 1982:85-90).

The settlement pattern of the Miller II phase also appears to have remained relatively consistent. Base camps and transitory camps were most common while ceremonial centers were used. However, the decline of elaborate burials and the relative lack of non-local exotic grave goods indicate that the emphasis on interregional exchange had lessened or ceased (Jenkins 1982). Deer remained the most abundant subsistence item recovered, although in slightly lower proportions than in the Miller I phase (Jenkins 1982:90-93).

Within the Black Warrior drainage, Miller I and II ceramics are encountered with relative frequency (Knight 1982; Hammerstedt 2000). However, since these are generally recovered in mixed-context surface assemblages, it is difficult to make any observations about local Middle Woodland manifestations in the Warrior. It is likely, however, that seasonal shifts in settlement may well have been in place in the Black Warrior region as well as the Tombigbee.

Late Woodland (1350 to 900 B.P.). The Late Woodland is represented in the Tombigbee-Black Warrior region by the Miller III and West Jefferson phases. Miller III develops ceramically out of the Miller II tradition. Grog-tempered ceramics increased in frequency at the expense of sand-tempered vessels over the course of the Miller III phase. Small triangular projectile points became more common in Miller III contexts but the remainder of the lithic assemblage remained largely the same as Miller II assemblages. Subsistence practices also remained similar. Ceremonial activity seems to be non-existent based on the lack of mound construction and paucity of burial accompaniments (Jenkins 1982:98-115).

It is often argued that the beginnings of the Moundville chiefdom can be seen in the Late Woodland Baytown-related 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 in the lower Black Warrior Valley seem to be represented by a wide variety of site sizes, from scatters of only several sherds to large concentrations of artifacts. No evidence of hierarchical social organization exists to date since the majority of West Jefferson sites are known only through surface collection. Grog-tempered pottery predominated, and there is evidence for an increase in agricultural production late in the phase (Knight and Steponaitis 1998; C. M. Scarry 1993; Welch 1990).

The influence of Late Woodland populations on the succeeding Mississippian stage is a subject of considerable debate among archaeologists. Some argue that Mississippian occupation in western Alabama came about through an influx of outside people or ideas (Mistovich 1988; Jenkins 1978; Seckinger and Jenkins 1980) while others argue for an *in situ* cultural evolution (Steponaitis 1983; Welch 1994). We will revisit this debate later in this report.

Mississippian (800 to 350 B.P.). The best-known stage in the Black Warrior Valley is the Mississippian stage. Mississippian groups, broadly defined, were:

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 (J. Scarry 1996:13).

The most visible site dating to the Mississippian stage in the Black Warrior Valley is the Moundville site, located on a Pleistocene terrace along the river at Hemphill Bend (Figure 1). Moundville consists of 29 earthen mounds arranged around a quadrilateral plaza and encompasses approximately 300 ha (Figure 2).

During the early Moundville I phase (ca. 1120-1200 A.D.) (Figure 3), 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 (1Tu50) 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 (1Tu44), Poelinitz (1Tu278), and Hog Pen (1Tu56) mounds elsewhere in the valley, indicates the probable emergence of a political hierarchy (Figure 4; 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 includes: (a) an increase of burials at Moundville; (b) a corresponding drop in sheet middens that postdate 1300 A.D.; and (c) the occupation of eight minor mound centers elsewhere in the valley (Knight and Steponaitis 1998; Steponaitis 1998; Welch 1998).

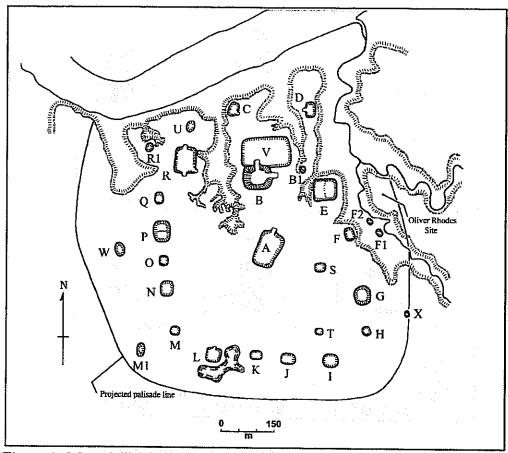


Figure 2. Moundville Site Plan (Knight and Steponaitis 1998, used by permission)

	CERAMIC PHASE	DEVELOPMENTAL STAGE	
1650 A.D.	MOUNDVILLE IV PHASE	Collapse and	٠
1520 A.D.	MOUNDVILLE III PHASE	Reorganization	
1400 A.D.	MOUNDVILLE II PHASE	The Paramountcy Entrenched	
1260 A.D.	MOUNDVILLE I PHASE	Initial Centralization	
1120 A.D.	WEST JEFFERSON	Intensification of	
1020 A.D.	PHASE	Local Production	٠٠,
After k	Knight and Steponaitis 1998;	Knight et al. 1999	

Figure 3. Black Warrior Valley Chronology (Knight and Steponaitis 1998; Knight et al. 1999)

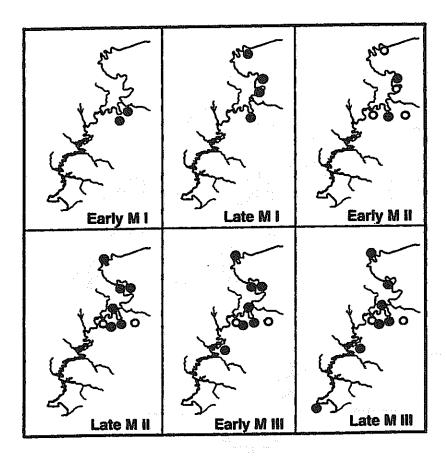


Figure 4. Mound occupation of the Black Warrior Valley. Closed circles indicate definite occupation; open circles indicate probable occupation (Welch 1998, used by permission).

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 [1Ha7]) and at non-mound sites (e.g., Powers [1Ha11]). 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). Most residents of the valley lived in nucleated villages and became less dependent on maize cultivation. Although Moundville I-III populations seem to be relatively healthy (Powell 1988, 1998), by the Moundville IV phase skeletal data indicate that the population had become reasonably unhealthy (Curren 1984; Hill-Clark 1981; Knight and Steponaitis 1998; Schoeninger and Schurr 1998). Schoeninger and Schurr (1998) argue that this decline in health was brought about by a depletion of soil productivity that then resulted in an increased pathogen load and malnutrition.

One of the defining characteristics of the Moundville IV phase (and other Protohistoric phases in central Alabama) is the unique form of burial practices. Bundle and urn burials were the most common form noted at this time, as opposed to the predominance of flexed, semi-flexed, and

extended burials found during the preceding Moundville phases. Adults and adolescents are most often found in bundle burials while children are often found in urn burials (Curren 1984:240).

During the Moundville IV phase, however, Moundville itself was not completely abandoned. Some of the most important mounds at Moundville bear evidence of a Protohistoric occupation (Knight and Steponaitis 1998:22) and outlying mound sites were also occupied, notably the Fosters Landing mound (Curren 1984). Interestingly, neither the 1999 nor 2000 surveys of the Black Warrior Valley recorded any Moundville IV occupations although several protohistoric components were noted in the Alabama State Site File (ASSF) and in collections housed at Moundville Archaeological Park (Hammerstedt 2000:46, 50-52).

There is still some debate regarding the political status of the Moundville area at the time of the de Soto expedition's visit to the Black Warrior Valley in 1540 (the end of the Moundville III phase). Peebles (1986, 1987b) argues that Moundville's decline occurred before the de Soto expedition and therefore could not have collapsed because of the Spanish visit. However, the reconstruction of the route of the Spanish by Hudson et al. (1990) suggests that the de Soto expedition encountered a unified (although unstable) polity in the Black Warrior Valley (named Apafalaya) and visited several of the mound sites in the area, including White, Grays Landing, Moundville, Fosters Landing, Hills Gin Landing, and Snow's Bend. Knight and Steponaitis (1998:22-24) state that while Moundville seems to have been in decline by the late Moundville III phase (before the arrival of the Spaniards), the presence of Moundville IV deposits at Moundville indicates that some importance was still attached to the site by the residents of the valley and that there was still likely some form of political centralization present, possibly in the form of a head-chief with little actual political power.

By the mid-seventeenth century, the Black Warrior Valley was largely abandoned and had become a buffer zone between the Muskogees to the east and the Choctaw/Chickasaw to the west. This area is referred to on early maps as *Potagahatchee*, "the river on the margin" (Knight 1982:48). As a result of the tension between these two groups, the Black Warrior region was largely abandoned until approximately 1800. Although no early maps show any Native American occupations in the Black Warrior valley, one Upper Creek site component (1Tu51) was identified in collections housed at Moundville (Hammerstedt 2000:94).

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The study of settlement patterns of the complex chiefdoms of the Mississippian period in the Southeastern United States was, for the most part, focused on multi-mound paramount centers and their related single-mound sites until the late 1970s (see Smith 1978:479). It was, and still is, generally accepted that the sites associated with each Mississippian chiefdom were hierarchically organized (Scarry 1999:70; Smith 1978; see also Milner and Schroeder 1999). By 1978, smaller Mississippian sites, or farmsteads, were beginning to be recognized. In the simple chiefdoms of the Southeast, a mound center controlled by a chief was surrounded by smaller, agriculturally-oriented, single-family sites known as farmsteads (Knight and Solis 1983). In the complex chiefdoms of the Southeast, the chief resided at a large, multi-mound center, while single-mound centers, inhabited most likely by an elite member of the chief's kin group, and their associated villages, inhabited by a group of commoners, were located in the surrounding area. These single-mound sites were, in turn, surrounded in varying fashions by farmsteads. The locations of these farmsteads is thought to have been chosen based on a combination of environmental and social factors.

Early settlement pattern analyses in the Black Warrior Valley were limited to the relationship between the paramount center, the surrounding single-mound sites, and large non-mound villages (see Steponaitis 1978 and Peebles 1978). Peebles's (1978: 410-412; see also Peebles 1987) preliminary characterization of the Moundville settlement system indicated three categories of site types within the valley: paramount center (the Moundville site), single-mound center (n=8), and village/hamlet (n=10). The locations of these sites, he argued, was based on a combination of environmental and social factors. Peebles' analysis is considered inaccurate today since only 10 non-mound sites were known in the Black Warrior Valley at the time. Also, Bozeman (1982) showed later that these village sites were in fact large Late Woodland sites with one or more restricted Mississippian occupations overlying them. Thus, the Mississippian sites were much smaller than originally believed. The village category was thus eliminated, except for those adjacent to mound centers (Bozeman 1982).

With the recognition of the farmstead site type as the primary unit of the agricultural economies of chiefdom-level societies in the late 1970s, this type of site was added to the picture of the Moundville settlement system (Blitz 1993:99; Smith 1978:489; Muller 1993:137; Knight and Solis 1983). In a 1983 paper, Knight and Solis called for a consensus on the Moundville settlement hierarchy, suggesting that it consisted of the Moundville site, small subsidiary chiefly villages with single mounds, and farmsteads.

A series of site surveys have been undertaken in the Black Warrior Valley resulting in the recording of a relatively large number of farmsteads (Alexander 1982; Bozeman 1982; Walthall and Coblentz 1977; Hammerstedt 2000; see also Hammerstedt and Myer 2001). Also, cultural resource management projects in the valley have yielded several more potential farmstead sites (Oakley and Jones 1999, for example).

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Survey Projects

In the 1930s, Walter B. Jones was the first archaeologist to undertake large-scale site survey in the Black Warrior Valley. This generally consisted of visiting site locations provided by local land-owners or other opportunistic methods. When sites were located, a collection of artifacts was made and a site form filled out. The most problematic aspect of Jones's survey work is that, at the time, it was assumed that Mississippian peoples inhabited either mound sites or large villages. Thus, small scatters of shell-tempered pottery, which are generally what farmsteads look like when surface collected, were generally not recorded. The survey was quite successful from a current perspective since some of the areas surveyed by Jones are now too badly disturbed to survey.

The next major survey in the Black Warrior Valley was not undertaken until the mid-1970s by the University of Alabama (Walthall and Coblentz 1977). The survey focused on a small area at the confluence of the Big Sandy Creek and the Black Warrior River. This survey, while limited in geographic area, resulted in the recording of a large number of small Mississippian "hamlets" in that area. This was significant because it showed that there were indeed small Moundville-related sites in the Black Warrior Valley and that they had not been noted before because of sampling biases (Bozeman 1982:27).

In the late 1970s, a major survey project was undertaken by the University of Michigan Museum of Anthropology (UMMA). This project was actually part of a larger research program organized by Christopher Peebles whose goal was to "significantly advance our understanding of the social and adaptive dimensions of the Mississippian societies which occupied the Warrior Valley" (Bozeman 1982:1). This research program involved four interrelated projects, heavily based on previous research at the Moundville site as well as original fieldwork throughout the valley. Two of these projects were focused on the subsistence base of the Moundville phase populations (cf. Scarry 1986). The third project, whose goal was to determine the chronology of the Moundville chiefdom, focused on the ceramic analysis of Moundville pottery (cf. Steponaitis 1983). The aim of the fourth project was to "measure the distribution, variety, and chronological position of the Mississippian communities in the Warrior Valley" (Bozeman 1982:2). This last project required two field seasons (1978-1979) of site survey and test excavations throughout the Black Warrior Valley. While the focus was on the single-mound centers within the valley, smaller, non-mound sites were also recorded. The principle goal of the UMMA surveys was to date the single-mound sites in the valley. Their investigations had begun to show that not all the Moundville-related mounds within the valley were occupied at the same time; in fact, several mounds emerged significantly later in time than others and well after the construction of Moundville (Knight and Steponaitis 1998, Welch 1998). This helped to clarify the relationship between the Moundville site and the single-mound centers. Fortunately, in doing so, a number of potential farmsteads were also recorded.

The last major survey prior to the BWV survey was undertaken in 1982 by the University of Alabama's Office of Archaeological Research. This was a Cultural Resource Management (CRM) phase I project conducted prior to the relocation of the Oliver Lock and Dam. This project was limited to a relatively small area of 1,100 acres west of Tuscaloosa. A large number of sites were recorded however, and as part of subsequent projects, two of these sites (1Tu265 and Tu459), considered to be farmsteads, were excavated (see below).

Farmstead Excavations

Despite the fact that over 100 potential farmsteads have been recorded in the Black Warrior Valley, including those recorded as a result of this project, only a handful have been excavated (Figure 5). The results of these few excavations, however, have shown what a previously assumed but not demonstrated farmstead looks like archaeologically. Additionally, these excavations have indicated that a good deal of variation exists among non-mound Mississippian sites.

Yarborough (22Cl814) 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. 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 (Solis and Walling 1982). Tibbee Creek, excavated by O'Hear et al. (1981), possessed a single rectangular wall-trench structure that dates to the equivalent of the late Moundville II or Moundville II phase (Mistovich 1995).

Mill Creek (1Tu265). The Mill Creek site, located near the confluence of Mill Creek and the Black Warrior River, consisted of a 75-cm deep midden, two possible structures, pits, and burials. 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 found 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 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 its 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 III/III diagnostic sherds such as beaded rims and Moundville Engraved, var. Hemphill. Four additional burials at the site having 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. 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 middenfilled 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).

Alexander (1982:163). Limited testing of the site was conducted during the Oliver Lock and Dam project in the mid-1980s by Tim Mistovich (1986). One pit (Feature 1), containing shell-tempered

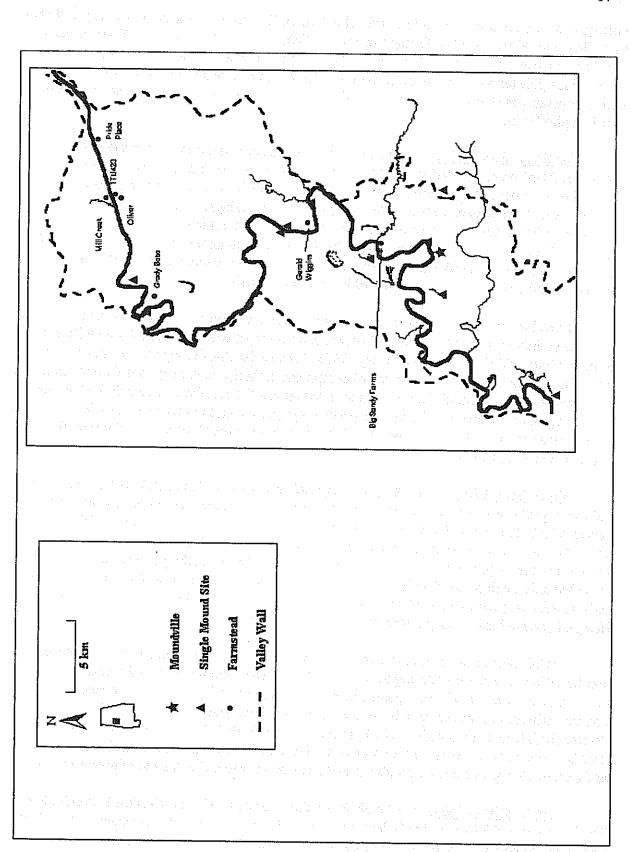


Figure 5. Excavated Farmsteads in the Black Warrior Valley.

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.

Big Sandy Farms (1Tu552). The Big Sandy Farms site was partially excavated along a gas pipeline right-of-way in 1990 (Ensor 1993). Four structures and assorted pits were excavated. Three of these structures were semi-subterranean, 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 an examination of the site's plan map does not reveal a clear structure pattern, making this questionable.

Few chronologically diagnostic artifacts were recovered during this excavation, making phase determination difficult. As semi-subterranean 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 (although Jenkins [personal communication 2000] believes that Big Sandy Farms is in fact a transitional West Jefferson-Moundville I occupation). 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 1998-99 to avoid disturbance by sewer construction (H. Johnson 1999). As a result, 243 features were excavated, including six burials and two structures. Small Gulf Formational and West Jefferson phase 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).

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.

Grady Bobo (1Tu66). The Grady Bobo site is located 19 km north of the Moundville site. The University of North Carolina's field school investigated this site in the summers of 1995, 1999 and 2000. Although much of the site has been heavily impacted by erosion (Hooks, personal communication, 2001), three features were found and excavated. Two of these were burials, while

the third was a shallow pit feature. The artifacts recovered from this feature proved quite interesting in that a large number of the serving vessel fragments, relative to cooking and storage vessel fragments, were found. Also found in the feature was a wide variety of faunal remains, especially those of small birds. Maxham (2001:4-5) interprets this feature as evidence of a ceremonial feast. Because of the presence of the two burials at the site, Maxham (2001:5) suggests that the feast may have been related to mortuary ritual. The Grady Bobo site, then, is clearly very different from the other non-mound Mississippian sites excavated in the Black Warrior Valley.

Gerald Wiggins (1Tu768). The Gerald Wiggins site is located 8.5 km north of the Moundville site. A small-scale excavation of approximately half of a large pit feature was carried out at this site (Maxham 2001). The artifacts recovered from this feature, especially hoe fragments, indicated an emphasis on farming at this site. While the majority of the ceramic material recovered is interpreted as cooking and storage vessel fragments, one fineware bowl, an apparent prestige item, was recovered. This is indicative of a social and ceremonial aspect to the activities carried out at the site (Maxham 2001:3).

Mill Creek, Oliver, 1Tu423, Big Sandy Farms, and Gerald Wiggins have been interpreted as farmsteads (Hammerstedt 2000; Mistovich 1986, 1987; Michals 1998; Welch 1998; Maxham 2001). Pride Place and Grady Bobo, on the other hand, have been interpreted as possible community gathering places or at the least not a typical farmstead (Johnson 1999; Maxham 2000a, 2000b, 2001).

These examples of excavated non-mound sites are not sufficient to indicate a pattern of farmstead dispersal, to estimate the number of farmsteads, or to determine if other types of outlying settlement may exist in the Black Warrior Valley. Maxham (2000a), 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 suggests that the pit feature at the Grady Bobo site (1Tu66) does not indicate residential activities; rather, it is inferred that elite or ceremonial activities may have taken place based on the higher ratio of serving to cooking vessels than has been noted at farmsteads in general.

It seems that these excavations have provided as many questions as they have answers as to the settlement pattern of the Moundville chiefdom. 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 undertaken. 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. It should be noted that many more of these types of sites need to be excavated before we can fully understand the settlement dynamics of the Moundville chiefdom.

Chapter 4: Project Design and Methods

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Field Methods

In order to focus this project on a bounded area, two three-mile wide transects located in southern Tuscaloosa County were selected for intensive survey (Figure 6). 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. The western boundary of both transects is the edge of the floodplain. The eastern boundary of the northern transect is the Great Southern Railroad tracks, while that of the southern transect is Highway 69. These boundaries were so placed because of the increase in modern disturbance to the east of them.

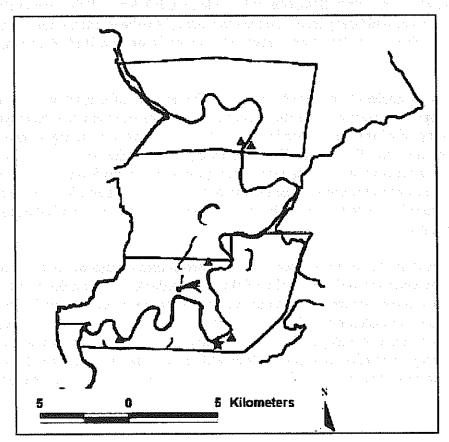


Figure 6. Survey Transects.

Another consideration in the placement of the transect boundaries was their inclusion of mound centers. The southern transect intersects the Moundville site (1Tu500), as well as the Gray's Landing mound (1Tu41), the Asphalt Plant mound (1Tu50), and the Foster's Landing (Wiggins)

mound (1Tu42). The northern transect intersects the Hill's Gin Landing mound (1Tu46) and the Poellnitz mound (1Tu278). In two areas, the survey extended past the original transect boundaries. 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. 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 majority of this season's fieldwork consisted of the surface collection of plowed fields. Fields were surveyed by spacing crew members approximately 5 meters apart. Any cultural materials encountered were temporarily marked using pin flags. The distribution of the pin flags as measured using a reel tape was then used to delineate site boundaries.

The last two weeks of the field season were spent surveying non-cultivated land, such as swamp and wooded areas. Thirty-five shovel tests were dug at 25 meter intervals either following landforms or using compass bearings. Shovel tests were approximately 40 cm in diameter and as deep as 100 cm. All soil excavated from each shovel test was screened through ¼-inch mesh hardware cloth. Although no cultural material was recovered in the shovel tested areas, all recovered artifacts from each test were to have been collected. Soil textures, color, and depth were recorded for each test.

When an archaeological site was encountered it was recorded on site forms. Site size, universal transverse mercator (UTM) coordinates, and general characteristics were noted and the site's location plotted on 7.5' USGS topographic maps. All artifacts from each site were collected and placed in bags labeled with appropriate site information. As noted above, site size in surface collected areas was determined by flagging artifacts in cultivated fields. Site size in shovel tested areas was to have been determined by placing shovel tests at 5 meter intervals north, south, east and west from each positive shovel test, until a negative test pit was encountered. Alabama State Site File forms were completed and submitted for each newly recorded site.

Laboratory and Analytical Methods

Following the completion of fieldwork, collections were analyzed so that each site could be placed within the chronological framework of the Black Warrior Valley. In addition to those collections obtained as a result of the 2000 fieldwork, those of the 1999 season, as well as the collections curated at Moundville Archaeological Park (MAP), which had been re-analyzed as an earlier phase of this project (Hammerstedt 2000) were compiled. Many of these collections had not been studied since they were obtained in the 1930s; therefore, artifact counts were often not available. Collections for a substantial number of previously recorded sites (n=41) could not be located in storage at MAP. As many of these sites were recorded either well over fifty years ago or by avocational archaeologists, it is likely that the relevant collections do not reside at MAP. In order to attempt a placement of these sites within the Moundville sequence, we relied on site file data and/ or on published artifact totals where available.

Once the artifacts had been washed, they were rough sorted and analyzed according to material (i.e., lithic, pottery, shell, bone). Artifact counts and in some cases weights were recorded on forms by site and material.

<u>Lithic Classification</u>. 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.

<u>Ceramic Classification</u>. 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's Tombigbee and Black Warrior drainages by Jenkins (1981) and Steponaitis (1983), respectively. 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 also possessing grog-tempered pottery may exist.

Despite earlier attempts to assign stage affiliation based on percentages of shell- or grog-tempered potsherds, it was decided that any site containing shell-tempered pottery would be considered to have a Mississippian component, even if it comprised less than 10 percent of the total ceramic collection. This seems to make more sense given the problems inherent in archaeological site survey, especially the differential preservation of shell-tempered pottery relative to grog-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 (e.g., Holstein and Little 1986:49; Milner 1998:54). Also, 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 (Hammerstedt 2000:43-44). 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 increasingly less likely that fragile sherds will survive, especially when they may have become somewhat brittle.

Geomorphology. The geomorphological aspect of this project consisted of the examination of several key site characteristics: 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 Alabama State Site File, USGS topographic maps (Coker, Tuscaloosa, Fosters, and Englewood 7.5' quadrangles), and the Tuscaloosa County, Alabama soil survey (K. Johnson 1981).

Other Variables. Site size was also considered. 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 Alabama State Site File. These figures should be treated with caution because these are rough estimates. Additionally, it is important to note that Mississippian site sizes are often inflated since many overlie larger Late Woodland villages. Nevertheless, since these figures are what we have to work with, they will be utilized for rough comparative purposes in this analysis.

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Through two field seasons nearly 6 km² of cultivated fields have been surveyed. A number of other small-scale surveys, primarily cultural resource management work, has covered an additional 12 km² within our chosen survey transects, bringing the total area surveyed to 18 km², or approximately 11.4 percent of the transects. Seventy-seven sites have been newly recorded by the Black Warrior Valley Survey project during the 1999 and 2000 seasons (see Appendix B). In addition, existing collections and site file data for previously recorded sites (excluding mounds) have been reexamined in order to determine stage affiliation. This brings the total number of sites in the database to 186 and provides coverage of areas away from the river thus making our sample somewhat more representative. The primary focus of this project is on the Mississippian occupation of the valley; however some comparison to Late Woodland occupation will be made. A total of 120 of these 186 sites possess a Late Woodland component (Figure 7) while 99 sites have a Mississippian component (Figure 8). Seventy-six of these 186 sites have both a Late Woodland and a Mississippian component.

Characteristics of Mississippian Sites

Mississippian components were examined for similarities in site size, topographic settings, nearest water source, and the distance to nearest water source. Site size was available for 59 of the 99 sites and ranged from 56 to 41,420 m² with a mean of 4,885 m². Well-drained, loamy soils of the Cahaba, Choccolocco, and Ellisville complexes were most common (Figure 9). Terraces and floodplains were the most common topographic settings represented, together with one site on a slope and two on the crest of a small hill (Figure 10). The Black Warrior River, first order streams, and swamps were the most common nearest water sources (Figure 11) with distances to water ranging from 1 to 788 m with a mean of 148 m. All Mississippian components are within 1 km of the Black Warrior River or Big Sandy Creek, indicating the importance of the river to the local settlement pattern.

It has been noted in the past that Mississippian sites tend to overlie earlier Late Woodland deposits, thus causing site size estimates to be inflated (e.g., Bozeman 1982; Hammerstedt 2000; Welch 1998). To test this idea, we selected out single-component Mississippian sites (n=19). As expected, the range of site sizes decreased, with the minimum size remaining 56 m² and the maximum dropping to 3,000 m² with a mean of 1,037 m², indicating that the size of multicomponent sites may be artificially inflated by the larger Late Woodland occupation. Late Woodland and Mississippian sites do tend to occupy similar topographic and environmental settings in the Black Warrior Valley, pointing to a continuity in land usage between the two stages (Hammerstedt 2000). Jenkins et al. (1975; Jenkins, personal communication 2000) have also noted this continuity in the neighboring Tombigbee River valley. Since these sites tend to occupy similar landforms in successive stages,

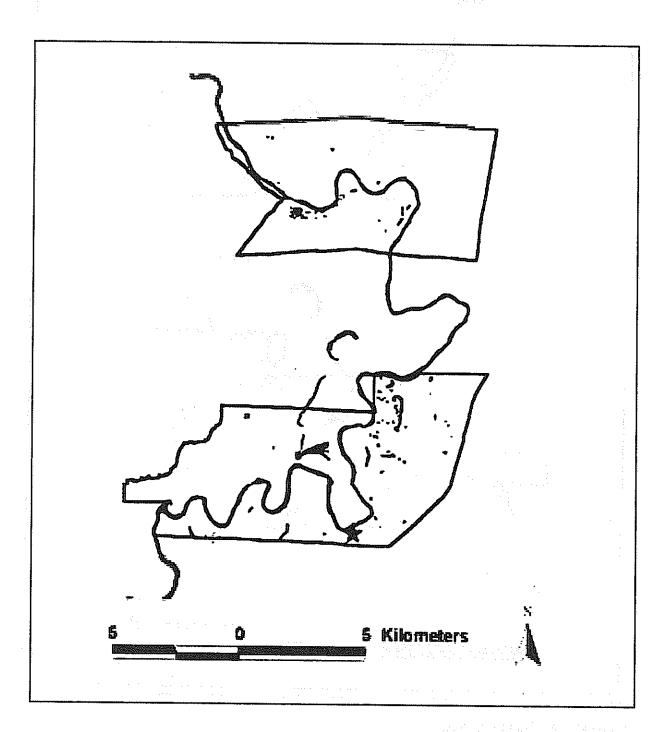


Figure 7. Late Woodland Sites.

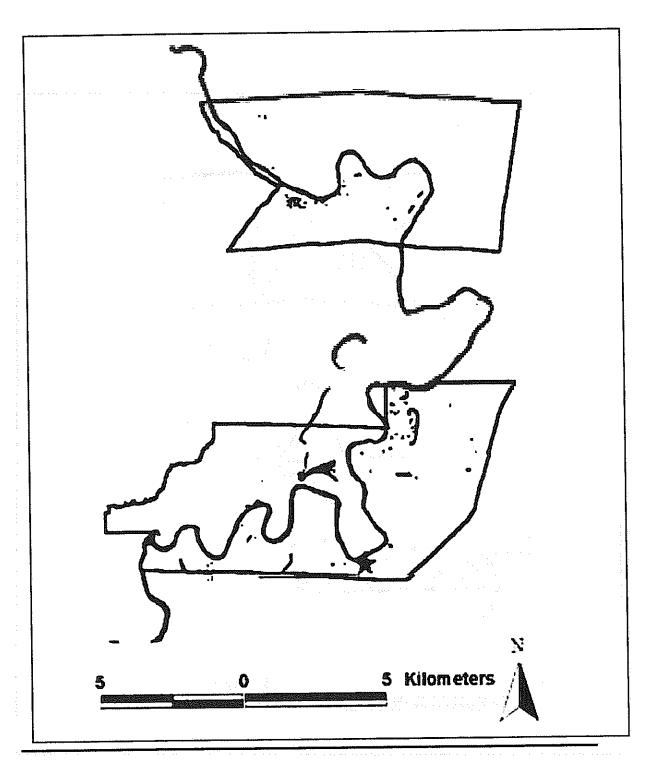


Figure 8. Mississippian Sites.

the problem of determining more accurate site sizes for each component will continue to crop up unless sites are gridded for controlled surface collection and/or excavated.

The Black Warrior Settlement Pattern

Now that we have presented the general characteristics of Mississippian components, we will examine the settlement pattern of the valley. We have identified three forms in which outlying Mississippian sites occur: (a) as clusters of small Mississippian sites around outlying mound centers; (b) as clusters of sites that are not within close proximity to a mound; and (c) as isolated sites. At this stage of our analysis, it appears that isolated sites occur on Cahaba, Ellisville, and Choccolocco soils and are close to the main channel of the Black Warrior River.

Mound-based clusters. Previous research has indicated that non-mound Mississippian sites in the Black Warrior Valley seem to cluster around outlying mound centers (Hammerstedt 2000). Thus far, we have identified clusters of small Mississippian sites around the Fosters Landing and Grays Landing mounds (Figure 12). The Fosters Landing cluster (Figure 13) consists of 18 sites along the interior of Hull Lake, an oxbow just east of the Black Warrior River that was likely part of the active river channel at the time of occupation (see Hammerstedt 2000:58). This area was surveyed by the University of Alabama in 1976 (Walthall and Coblentz 1977) and again by the Black Warrior Valley Survey in 1999 (Hammerstedt 2000). The majority of the sites in this area possess both a Late Woodland and a Mississippian component. The presence of diagnostic beaded rim bowl sherds on several sites indicates a Moundville II/III occupation and potential contemporaneity with the mound.

The Grays Landing cluster (Figure 12) was first recorded by Paul Welch in 1979 (Bozeman 1982; Welch 1998, field notes on file at Moundville Archaeological Park). This area was unplowed in 1999 and 2000; therefore we were unable to do any additional fieldwork. However, collections and field notes were located in storage, allowing us to plot the locations of the sites in question (Figure 14). Like the sites of the Fosters Landing cluster, the eleven small Grays Landing-area sites possess shell-tempered pottery, including beaded rim bowl sherds, thus indicating a potential Moundville II/III occupation. The Grays Landing mound itself dates to Moundville II/III with a possible Moundville I/early II occupation as well (Welch 1998; Bozeman 1982), making contemporaneity between the small clustered sites and the mound likely.

During the 2000 field season the existence of another cluster was suggested near the Hills Gin Landing mound (Figure 12). This mound dates to late Moundville II-early Moundville III based on radiocarbon dates, Carthage Incised, var. Carthage sherds, and hemispherical beaded rim bowl sherds (Welch 1998). We have identified two small sites just north of the mound (Figure 15). No diagnostics were recovered, but both sites possess shell-tempered pottery, indicating a Mississippian occupation. Interestingly, one of these sites, 1Tu880, produced a lithic debitage assemblage that is largely non-local chert. This could potentially provide support for an alternative to the current economic model (Welch 1991), namely that not all non-local stone first went to Moundville and was redistributed to outlying areas (although excavation will be necessary to explore this alternative). Our third field season will complete the survey around the mound to determine if this is a valid Mississippian site cluster.

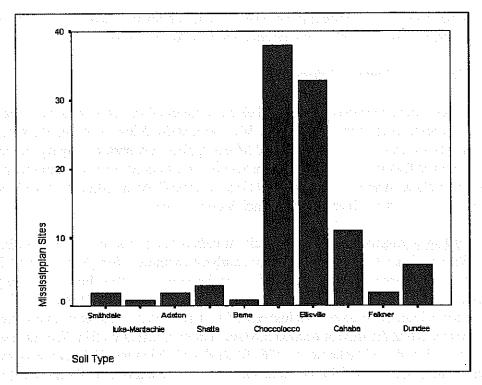


Figure 9. Number of Mississippian Sites Per Soil Type.

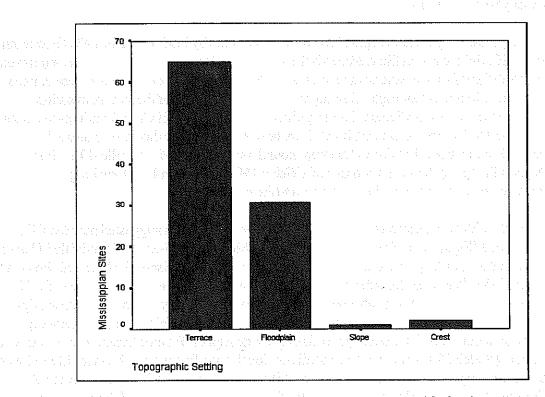


Figure 10. Numbe rof Mississippian Sites Per Topographic Setting.

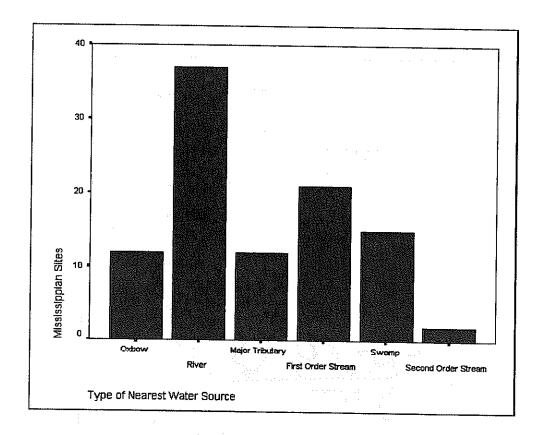


Figure 11. Number of Mississippian Sites Per Type of Nearest Water Source.

Non-mound-based clusters. The 2000 field season also identified a cluster of small Mississippian sites without a mound as a focal point. We have tentatively named this area the Braughton Field cluster after the landowner (Figure 12). The Braughton Field cluster consists of sixteen small sites bearing Late Woodland and Mississippian sherds (Figure 16). Diagnostic sherds were rare, but two of these sites produced Mississippi Plain, var. Warrior folded rims, a Moundville I attribute.

One site in the cluster, 1Tu904, is of particular interest (Figure 17). Surface collection of the site produced two small sandstone palette fragments, one polished and one unpolished greenstone fragment, and a greenstone celt preform fragment. Since there is little to no available evidence for Mississippian greenstone celt production or recycling outside of Moundville itself (see Welch 1991, 1996; Wilson 2000), Site 1Tu904 could provide valuable information upon excavation.

Additionally, this cluster (along with the Fosters Landing cluster) could shed light on the ongoing debate over the West Jefferson/Moundville transition. DeJarnette and Wimberly (1941) state that vessel forms were nearly identical for both grog- and shell-tempered wares at the Bessemer site and Welch (1994) shows that folded rims co-occur in some West Jefferson and Mississippian vessels at the Bessemer site. This has led researchers in two different directions. Some have interpreted this as evidence that Mississippian occupation in western Alabama came about through an influx of outside people or ideas (Mistovich 1988; Jenkins 1978; Seckinger and Jenkins 1980) while others interpret it as evidence for an *in situ* cultural evolution (Steponaitis 1983; Welch 1994). The majority of sites in the Braughton Field cluster possess both shell- and grog-tempered sherds and several possess Moundville I diagnostics. At this point we have come up with two possible

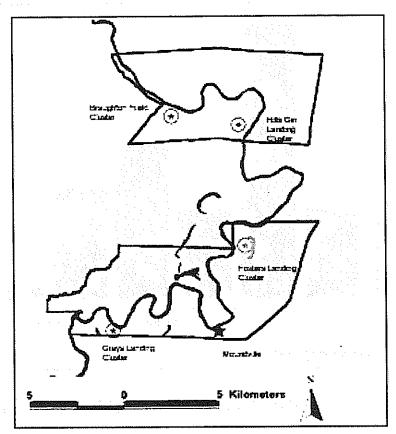


Figure 12. Mississippian Site Clusters.

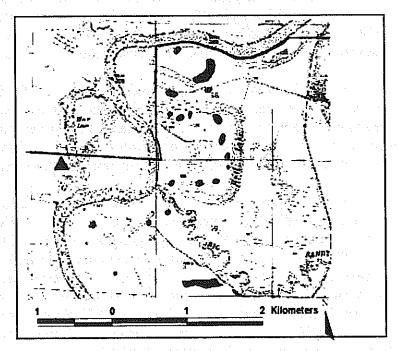


Figure 13. Fosters Landing Site Cluster.

interpretations of this cluster: (a) that it represents a transitional Terminal Woodland/Moundville I occupation; or (b) that there is a Late Woodland occupation followed by a later Moundville occupation.

However, as these sites have been investigated through surface collection only we cannot provide support for either interpretation. Excavation of these sites will provide new data from secure contexts and shed light on the debate over the Late Woodland/Mississippian transition in the Black Warrior Valley. Test excavation of sites in the Braughton Field cluster is planned for season four of the Black Warrior Valley Survey, scheduled for the summer of 2002.

<u>Conclusion</u>. Obviously, we have more variation in Mississippian settlement than previously thought. As noted by Welch (1998), Mississippian sites usually can be found on well-drained soil, within 0.5 km of water, and above the 3-5 year flood level. This generalization appears to remain valid.

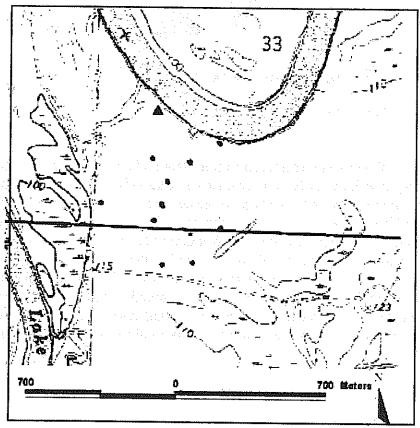


Figure 14. Grays Landing Site Cluster.

As a result of our fieldwork, mound-based clusters of small sites are evident in two (possibly three) areas (Figure 12). Mounds could presumably serve several functions within the Moundville settlement system. They could be the residence of a local chief, an administrative area for processing tribute and/or provisions, or a locus of community ritual activity. In this sense, then, non-mound sites would be clustered around the mound for economic, social, or political reasons.

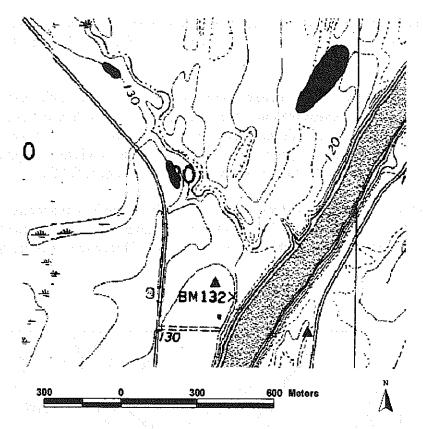


Figure 15. Hills Gin Landing Cluster.

What then, of the non-mound based cluster? It is unclear at this point whether any particular site in the Braughton Field can be considered to be a central focus of the cluster, although 1Tu904 exhibits the most potential based on the presence of sandstone palette and greenstone fragments. It is unlikely that this cluster would have been the residence of any sort of elite individual since the cluster seems to date primarily to Late Woodland/Moundville I times (before political centralization [Knight and Steponaitis 1998]). It is possible that a locally prominent individual was the focus of the cluster but it is not likely that this person possessed regional political influence at this early date. It is also possible that this site served as a community gathering place. At this point then, we must reluctantly conclude that we don't know what might be the cause of the settlement of this cluster. Only through excavation of several of these small sites can this question be addressed.

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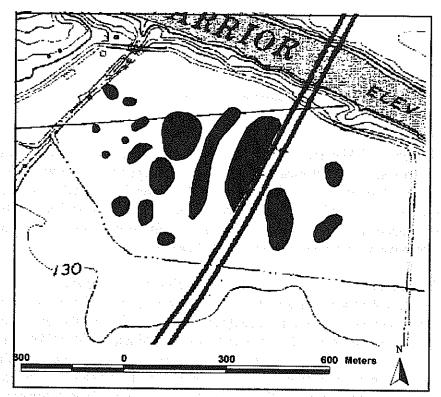


Figure 16. Braughton Field Cluster.

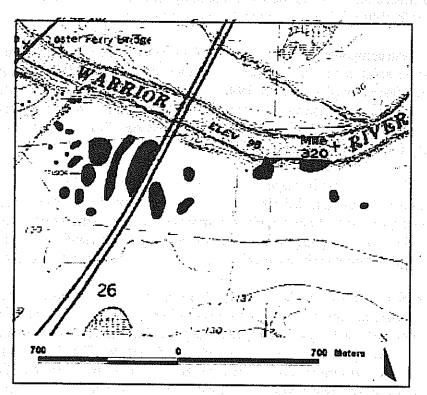


Figure 17. Location of Site 1Tu904.

Chapter 6: Conclusions

The University of Alabama's Black Warrior Valley (BWV) Survey was begun in the summer of 1999 in order to clarify our understanding of the settlement pattern and system of the Moundville chiefdom. Little was known about Moundville-related farmsteads, the small Mississippian sites where the majority of the inhabitants of the Black Warrior River Valley are believed to have lived. The goal of this season of survey has been to determine both the environmental and social characteristics that may have contributed to the locations of these sites.

The first two seasons of the BWV survey (as well as reexamination of previous survey results and previous collections) have resulted in the identification of 77 new sites for a total of 186 prehistoric archaeological sites within our study area transects. These 186 sites were examined to provide us with a view of the general characteristics of sites within the Black Warrior Valley. The focus of this project has been on Mississippian occupation, therefore that has been the major topic of discussion in this report. However, we have included a database of all sites within the project area that have been recorded in the ASSF (Appendix A). It is hoped that those readers who desire information on earlier site components will take advantage of these data. General site descriptions (Appendix B), artifact counts for sites newly recorded by the 2000 field season (Appendix C), and recommendations for future fieldwork (Appendix D) are also included.

Mississippian components within the Black Warrior Valley appear to occur most often on well-drained alluvial soils, an average of 148 m from water, and on terraces and floodplains. This generalization was first put forth by Welch (1998) and has been supported with data from the BWV survey. In addition, Late Woodland and Mississippian components tend to occur in similar settings, pointing to a continuity in settlement patterns through these stages. This pattern has also been noted in the neighboring Tombigbee valley (Jenkins et al. 1975).

Interpretation of site size by stage, however, remains a problem. In general, it seems that Late Woodland sites are larger than Mississippian sites (see Chapter 5). Mississippian occupations are often found overlying earlier Late Woodland components, thus making interpretation of site size by stage difficult since in the majority of cases we possess only general surface collections. Controlled surface collection followed by excavation will likely aid in the resolution of this problem.

These problems notwithstanding, it is possible to make some generalizations about the distribution of non-mound Mississippian sites across the local landscape. We have identified two definite (Fosters Landing and Grays Landing) and one possible (Hills Gin Landing) mound-based clusters of small Mississippian sites as well as one cluster (Braughton Field) that is not focused on a mound. Since these clusters are readily apparent and there are large sections of the Black Warrior floodplain that do not possess Mississippian occupation, we must conclude that these sites are clustered for social reasons.

As a result of our fieldwork, we have identified a number of sites that warrant further attention. These sites are listed in Appendix D along with a brief statement about their research potential. Three clusters of potential farmsteads have been listed as districts, the Grays Landing, Hull Lake, and Braughton Field clusters. It is believed that these sites demonstrate significant research potential under Criterion D and are potentially eligible for inclusion in the National Register of Historic Places. An additional nine sites are also deemed to have significant research potential but are not located within any of the above clusters. The majority of these sites indicate the potential to provide important information about the Late Woodland/Mississippian transition in the Black Warrior Valley.

Excavation of several of these small sites (both those within site clusters and isolated sites) is the logical next step in furthering our understanding of the Moundville-related settlement of the Black Warrior Valley. Through excavation, it may be possible to determine the nature of these sites, whether farmstead or community gathering place, and to answer important questions about the shift to the Mississippian culture in the Black Warrior Valley.

While we have now identified a number of outlying sites that could aid in our interpretation of the West Jefferson-Moundville transition, we still have not identified a significant number of outlying sites contemporaneous with the height of Moundville's power (late Moundville I through early Moundville III). Identification of these sites will help us to further refine our models of economic and social interactions between elites and commoners and will also provide us with a more complete diachronic picture of the Moundville chiefdom. It is hoped that seasons three (2001) and four (2002) of the BWV survey will contribute some of this information.

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Appendix A: Codebook and Database

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)
		ļ	3. Late Woodland/Mississippian
			(LW/M)
			4. Mississippian (M)
			5. Protohistoric (P)
1			6. Late Woodland/Mississippian/
	1		Protohistoric (LW/M/P)
			7. Late Woodland/Protohistoric
	1		(LW/P)
		-	8. Middle Woodland/Late Woodland
			(MW/LW)
ļ	:		9. Middle Woodland/Late Woodland/
	l:		Mississippian (MW/LW/M)
		1	10. Mississippian/Protohistoric
			(M/P)
			99. Unknown
8	Multistage?	MULTI	1. Yes
· ·	Widitiatage :	IVIOE II	2. No
			99. Unknown
9	Elevation (ft)	ELV	Continuous
	LIEV GUOIT (IL)		999. Unknown
10	Site Size (Square m)	SIZE	Continuous
1 10	One Size (Square III)	3,25	9999999. Unknown
11	Topographic Setting	ТОРО	1. Terrace
1 ''	r opograpnic Setting	1050	2. Base
			3. Floodplain
	•		4. Slope
			5. Crest
			3
			6. Upland
			7. Lowland
<u> </u>		10011505	99. Unknown
12	Type of Nearest	SOURCE	1. Oxbow
1	Water Source	:	2. River
]			3. Major Tributary
			4. First Order Stream
			5. Swamp
			Second Order Stream
			99, Unknown
13	Distance (m) to	DIST	Continuous
	Nearest Water Source		99999. Unknown

No.	Variable	Variable Name	Values
14	Soil Type	SOILTYPE	1. Smithdale
:			2. luka-Mantachie
			3. Adaton
			4. Shatta
			5. Bama
			6. Choccolocco
			7. Ellisville
			8. Cahaba
			9. Falkner
Windowski.		the state of the s	10. Ruston
		44. (1.1.)	11. Land
			12. Montevallo-Navoo
the first section			13. Dundee
			99. Unknown
15	Number of Mounds	MOUND	0. None
			1. One
			3. More than one

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66	66	2	66	3	2	2	2	66	4	3	3	3	2	3	33	3	2	66	66	66	66	2	4	66	66	66	3	2	2	2	2	3	3	3
2	2	2	2	2	2	2	2	2	2	2	2	2	2	7	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	7	2	2	2
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TU866	TU867	TU868	TU869	TU870	TU871	TU872	TU873	TU874	TU876	TU877	TU879	TU880	TU881	TU882	TU883	TU884	TU885	TU886	TU887	TU888	TU889	TU890	TU891	TU892	TU893	TU894	TU895	TU896	TU897	TU898	668NT	TU900	TU901	TU902

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TU903	TU904	TU905	TU906	TU907	TU908	TU909	TU910	TU911	TU912	TU913	TU914	TU915	TU916	TU917	TU920	TU921	TU922	TU923	TU924	TU925	TU926	TU927

Appendix B: Site Descriptions

Site 1TU876 is a 45 by 41 meter dense aboriginal artifact scatter. The site is located on a rise 140 meters north of the Black Warrior River on a river terrace. The soil type is Ellisville silt loam. Artifacts recovered were lithic debitage, a microlith, a polished greenstone fragment, a hammerstone, a ground Pottsville sandstone fragment (palette fragment??), shell-tempered potsherds (including Mississippi Plain, var. Warrior and Bell Plain), and a shell fragment.

Site 1TU877 is a 31 by 10 meter moderately dense aboriginal artifact scatter. The site is located on a rise 80 meters northeast of a second-order stream on a river terrace. The soil type is Ellisville silt loam. Artifacts recovered were lithic debitage, a residual projectile point fragment, a small beveled stone disk, grog-tempered potsherds, shell-tempered potsherds and daub.

Site 1TU878 is a 52 by 37 meter non-aboriginal, twentieth century artifact scatter. The site is located 200 meters south of a swamp on a river terrace. The soil type is Adaton silt loam. Recovered artifacts were ceramic, brick, and glass fragments, indicating a late nineteenth-early twentieth century occupation.

Site 1TU879 is a 59 by 31 meter moderately dense aboriginal artifact scatter. The site is located on a low rise in a plowed field, 30 meters south of a first-order stream. The soil type is Choccolocco silt loam. Artifacts recovered were lithic debitage and grog-tempered and shell-tempered potsherds.

Site 1TU880 is a 64 by 36 meter low-density aboriginal artifact scatter. The site is located 50 meters southwest of a first-order stream on a river terrace. The soil type is Choccolocco silt loam. Artifacts recovered were lithic debitage and grog-tempered and shell-tempered potsherds.

Site 1TU881 is a 37 by 2 meter low-density aboriginal artifact scatter. The site is located 100 meters north of a first-order stream on a river terrace. The soil type is Dundee silt loam. Artifacts recovered were lithic debitage and grog-tempered potsherds.

Site 1TU882 is a 202 by 50 meter moderately dense aboriginal artifact scatter. The site is located 60 meters north of a first-order stream on a river terrace. The soil type is Choccolocco silt loam. Lithic artifacts recovered were debitage and a projectile point preform. Ceramic artifacts recovered were grog-tempered (including Mulberry Creek Cord-Marked) and shell-tempered potsherds.

Site 1TU883 is a 95 by 40 meter moderately dense aboriginal artifact scatter. The site is located 70 meters north of a first-order stream on a river terrace. The soil type is Choccolocco silt loam. Artifacts recovered were a projectile point preform, grog-tempered potsherds and shell-tempered potsherds (including Moundville Engraved, var. Havana).

Site 1TU884 is an 84 by 73 meter moderately dense aboriginal artifact scatter. The site is located 200 meters south of the Black Warrior River on the river terrace. The soil type is Cahaba sandy loam. Artifacts recovered were lithic debitage and grog-tempered and shell-tempered potsherds. Site 1TU885 is a 37 by 15 meter moderately dense aboriginal artifact scatter. The site is located 160 meters south of the Black Warrior River on the river terrace. The soil type is Cahaba sandy loam. Artifacts recovered were grog-tempered potsherds.

Site 1TU886 is a 54 by 30 meter low-density aboriginal artifact scatter. The site is located 160 meters west of a second-order stream on a river terrace. The soil type is Dundee silt loam. Artifacts recovered were lithic debitage, utilized debitage, a biface and a small sandstone disk.

Site 1TU887 is a 68 by 65 meter low-density aboriginal and historic artifact scatter. The site is located on a low rise 40 meters west of a second-order stream on a river terrace. The soil type is Dundee silt loam. Aboriginal artifacts recovered were lithic debitage, a biface fragment, and utilized hematitic sandstone. Historic artifacts recovered were ceramic and glass fragments.

Site 1TU888 is a 24 by 10 meter low-density aboriginal artifact scatter. The site is located on a low rise 40 meters east of a first-order stream. The soil type is Dundee silt loam. Artifacts recovered were lithic debitage.

Site 1TU889 is a 43 by 15 meter low-density aboriginal artifact scatter. The site is located 40 meters west of a second-order stream on a river terrace. The soil type is Dundee silt loam. Artifacts recovered were lithic debitage, a corner-notched projectile point and a projectile point preform.

Site 1TU890 is a 40 by 33 meter moderately dense aboriginal artifact scatter. The site is located 160 meters south of the Black Warrior River on a river terrace. The soil type is Dundee silt loam. Artifacts recovered were lithic debitage, grog-tempered potsherds (including Mulberry Creek Cord-Marked), and shell-tempered potsherds.

Site 1TU891 is a 48 by 2 meter low-density aboriginal artifact scatter. Artifact visibility is poor is adjacent areas and thus, the site may extend into these areas although no artifacts were recovered there. The site is located 200 meters north of a first-order stream on a river terrace. The soil type is Dundee silt loam. Artifacts recovered were shell-tempered potsherds.

Site 1TU892 is a 165 by 46 meter moderately dense aboriginal artifact scatter. The site is located 60 meters west of a second-order stream on a river terrace. The soil type is Choccolocco silt loam. Artifacts recovered were lithic debitage, utilized debitage, 3 projectile points (including 1 Dalton point and 2 side-notched), and 2 projectile point fragments.

Site 1TU893 is a 15 by 15 meter low-density aboriginal artifact scatter. The site is located 30 meters south of a first-order stream on a river terrace. The soil type is Dundee silt loam. Artifacts recovered were lithic debitage (including 1 polished greenstone celt fragment).

Site 1TU894 is a 60 by 55 meter moderate to low-density aboriginal artifact scatter. The site is located on a low rise 10 meters south of a first-order stream. The soil type is Dundee silt loam. Artifacts recovered were lithic debitage and 2 biface fragments.

Site 1TU895 is a 276 by 115 meter dense aboriginal artifact scatter. The site is located 150 meters south of the Black Warrior River on a river terrace. The soil types are Choccolocco silt loam and Cahaba sandy loam. Lithic artifacts recovered were debitage, a residual side-notched projectile point, 3 projectile point fragments (including a Madison and a residual side-notched), 5 biface fragments, and a projectile point preform. Ceramic artifacts recovered were grog-tempered and

shell-tempered (including Bell Plain). Although the percentage of shell-to grog-tempered potsherds was relatively low (3.13% shell-tempered), the site was labeled multicomponent (Late Woodland and Mississippian) because of the presence of Bell Plain potsherds, which are diagnostic of Moundville (Steponaitis 1983). Daub was also recovered from this site.

Site 1TU896 is a 20 by 13 meter moderately dense aboriginal artifact scatter. The site is located 220 meters east of the Black Warrior River on a floodplain. The soil type is Ellisville silt loam. Artifacts recovered were lithic debitage and grog-tempered and shell-tempered potsherds

Site 1TU897 is a 20 by 10 meter moderately dense aboriginal artifact scatter. The site is located on a rise 300 meters east of the Black Warrior River on a floodplain. The soil type is Ellisville silt loam. Artifacts recovered were grog-tempered potsherds.

Site 1TU898 is a 28 by 23 meter moderately dense aboriginal artifact scatter. The site is located 100 meters east of the Black Warrior River on a floodplain. The soil type is Ellisville silt loam. Artifacts recovered were lithic debitage and grog-tempered potsherds.

Site 1TU899 is a 29 by 26 meter moderately dense aboriginal artifact scatter. The site is located 200 meters east of the Black Warrior River on a floodplain. The soil type is Ellisville silt loam. Artifacts recovered were lithic debitage, a stemmed projectile point fragment and grog-tempered potsherds.

Site 1TU900 is a 23 by 17 meter low-density aboriginal artifact scatter. The site is located 160 meters north of a first-order stream on a floodplain. The soil type is Ellisville silt loam. Artifacts recovered were lithic debitage, grog-tempered and shell-tempered potsherds.

Site 1TU901 is a 300 by 42 meter low-density aboriginal artifact scatter. This site is located 100 north of a first-order stream on a river terrace. The site may be part of 1TU895, however, the two are separated by a 40 meter low spot in the field. The soil type is Choccolocco silt loam. Artifacts recovered were lithic debitage, a sandstone abrader, grog-tempered potsherds, shell-tempered potsherds and daub.

Site 1TU902 is a 55 by 23 meter dense aboriginal artifact scatter. The site is located 40 meters north of a first-order stream on a river terrace. The soil type is Choccolocco silt loam. Artifacts recovered were lithic debitage, grog-tempered potsherds, shell-tempered potsherds, and daub.

Site 1TU903 is a 100 by 19 meter dense aboriginal artifact scatter. The site is located 100 meters north of a first-order stream on a river terrace. The soil type is Choccolocco silt loam. Artifacts recovered were lithic debitage, a biface, grog-tempered potsherds, and shell-tempered potsherds (including a Mississippi Plain var. Warrior folded rim).

Site 1TU904 is a 95 by 35 meter moderately dense aboriginal artifact scatter. The site is located 200 meters north of a first-order stream on a river terrace. The soil type is Choccolocco silt loam. Lithic artifacts recovered were lithic debitage, a Madison point, a Kirk Corner-Notched point fragment, a projectile point preform, greenstone fragments (2 of 3 were polished), a greenstone celt preform fragment, a muller, 2 sandstone palette fragments, 3 ground sandstone fragments, and a pigment-quality hematite fragment. Ceramic artifacts recovered were grog-tempered and shell-tempered potsherds.

Site 1TU905 is a 125 by 52 meter low-density aboriginal artifact scatter. The site is adjacent on the north side to the "new" Fosters Loop Road and may continue beneath it. The site is located 230 meters south of the Black Warrior River on a river terrace. The soil type is Choccolocco silt loam. Artifacts recovered were lithic debitage, a biface fragment, a ground sandstone fragment, grog-tempered potsherds, and shell-tempered potsherds.

Site 1TU906 is a 65 by 52 meter moderately dense aboriginal artifact scatter. The site is located 60 meters northeast of a first-order stream on a river terrace. The soil type is Choccolocco silt loam. Artifacts recovered were lithic debitage and grog-tempered and shell-tempered potsherds.

Site 1TU907 is a 36 by 30 meter moderately dense aboriginal artifact scatter. The site is located 180 meters northeast of a first-order stream on a river terrace. The soil type is Choccolocco silt loam. Artifacts recovered were lithic debitage and grog-tempered and shell-tempered potsherds.

Site 1TU908 is a 46 by 40 meter moderately dense aboriginal artifact scatter. The artifact scatter extends up to a grassy rise and continues on the other side of the rise. This unplowed rise may contain intact deposits. The site is located 80 meters east of the Black Warrior River on a river terrace. The soil type is Choccolocco silt loam. Artifacts recovered were lithic debitage (including small greenstone fragment), 2 Madison point fragments, grog-tempered potsherds and shell-tempered potsherds.

Site 1TU909 is a 58 by 36 meter low-density aboriginal artifact scatter. The artifact scatter extends up to a grassy rise and continues on the other side of the rise. This unplowed rise may contain intact deposits. The site is located 100 meters west of a first-order stream on a river terrace. The soil type is Choccolocco silt loam. Artifacts recovered were lithic debitage, 2 biface fragments, a projectile point preform, a utilized hematite fragment, and grog-tempered potsherds.

Site 1TU910 is a 107 by 32 meter low-density aboriginal artifact scatter. The site is located 80 meters east of the Black Warrior River on a river terrace. The soil type is Choccolocco silt loam. Artifacts recovered were lithic debitage, 1 utilized debitage fragment, a residual stemmed point fragment, a biface fragment, a projectile point preform, grog-tempered potsherds and shell-tempered potsherds (including a Mississippi Plain, var. Warrior folded rim).

Site 1TU911 is a 34 by 11 meter low-density aboriginal artifact scatter. The site is located 100 meters northeast of a first-order stream on a river terrace. The soil type is Choccolocco silt loam. Artifacts recovered were lithic debitage and shell-tempered potsherds.

Site 1TU912 is a 72 by 42 meter low-density aboriginal artifact scatter. The site is located 180 meters southeast of a first-order stream on a river terrace. The soil type is Choccolocco silt loam. Artifacts recovered were lithic debitage, a scraper, grog-tempered potsherds and shell-tempered potsherds.

Site 1TU913 is a 36 by 15 meter moderately dense aboriginal artifact scatter. The site is located 160 meters northeast of a first-order stream on a river terrace. The soil type is Choccolocco silt loam. Artifacts recovered were shell-tempered potsherds.

Site 1TU914 is a 34 by 14 meter moderately dense aboriginal artifact scatter. The site is located 100 meters southeast of a first-order stream on a river terrace. The soil type is Choccolocco silt loam. Artifacts recovered were lithic debitage, grog-tempered and shell-tempered potsherds.

Site 1TU915 is a 50 by 23 meter low-density aboriginal artifact scatter. The site is located 80 meters southeast of a first-order stream on a river terrace. The soil type is Choccolocco silt loam. Artifacts recovered were lithic debitage, 2 projectile point preforms, grog-tempered potsherds and shell-tempered potsherds.

Site 1TU916 is a 12 by 11 meter low-density aboriginal artifact scatter. The site is located 40 meters southeast of a first-order stream on a river terrace. The soil type is Dundee silt loam. Artifacts recovered were a ground Pottsville sandstone and shell-tempered potsherds.

Site 1TU917 is an 8 by 7 meter low-density aboriginal artifact scatter. The site is located 20 meters west of a second-order stream on a river terrace. The soil type is Choccolocco silt loam. Artifacts recovered were lithic debitage and a shell-tempered potsherd.

Site 1HA231 is a 24 by 22 meter low-density aboriginal artifact scatter. The site is located 160 meters west of a swamp on a river terrace. The soil type is Choccolocco silt loam. Artifacts recovered were lithic debitage and a projectile point preform.

Site 1HA232 is a 36 by 12 meter low-density aboriginal artifact scatter. The site is located on a low rise 90 meters west of a swamp on a river terrace. The soil type is Choccolocco silt loam. Artifacts recovered were lithic debitage.

Site 1 HA233 is a 71 by 25 meter moderately dense aboriginal and historic artifact scatter. The site is located on a slight rise 70 meters west of a swamp on a river terrace. Artifacts recovered were lithic debitage, a utilized debitage fragment, a residual projectile point fragment, a projectile point preform, and grog-tempered potsherds. No historic artifacts were collected.

Site 1HA234 is a 38 by 28 meter moderately dense aboriginal artifact scatter. The site is located 60 meters south of a swamp on a river terrace. The soil type is Choccolocco silt loam. Artifacts recovered were lithic debitage and grog-tempered potsherds.

Sites 1TU920-1TU927 and 1HA240-1HA242 were originally located by Paul Welch of the UMMA survey in the 1970s. The sites, however, were not recorded separately in the site file, but were mapped and collected separately in the field. Because these sites are discrete artifact scatters with separate collections, individual site forms were completed and site numbers assigned for each. No new collections were made as part of this project because the field in which the sites are located is no longer in cultivation. Site size varies between 10 by 10 meters and 25 by 25 meters. All sites are located between the Black Warrior River and a swamp on a river terrace. The sites are all located on Choccolocco silt loam soil. The collections from these sites indicate that 4 of the sites have purely Mississippian components, while 7 of the sites have both Late Woodland and Mississippian components.

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Appendix C: Artifact Totals by Site

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Site 1TU55: Artifact Inventory

Aboriginal Ceramics

Grog-tempered sherds

Death and Death	7
IBaytown Plain var Roner	ון פיל וו
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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

Grog- and Shell-tempered Plain	2
Non-tempered sherds	1
Total	3

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10000 !! !!	UIU 7 ,			
Touch (Luca			1	

Stone

Chipped Stone

	Tuscaloosa Gravel	Fort Payne	Quartz	Quartzite	Bangor	Total
debitage with cortex	12		4	3		19
debitage without cortex	4	4	3		2	13
shatter	3					3
Hamilton stemmed point	· · · · · · · · · · · · · · · · · · ·				1	1
Elora Point				2		
Residual Stemmed Point	1.	1	1			3
Residual Corner-Notched Point Fragment	1	· · · · · · · · · · · · · · · · · · ·				
Distal Distal	1					1
Preform I	2		1			3
Preform II	1		2	1		
Core	2		1	'		3
Scraper	1	<u> </u>				1
Total	28	5	12	6	3	54

Other Stone

Undifferentiated greenstone	2
Tabular Hematitic Sandstone	2
Petrified Wood	2
Anvilstone fragment	1
Unmodified Sandstone	2
Siltstone	1
Hematite	1
Unmodified Tuscaloosa Gravel cobbles	3
Unmodified Quartz cobble	1
Total	15

	 	
Shell	 4	

Site 1TU88: Artifact Inventory

Aboriginal Ceramics

Grog-tempered

Baytown Plain var. Roper	243
Baytown Plain var. Roper, rim	7
Mulberry Creek Cord-Marked	7
Total	257

Shell-tempered

· · · · · · · · · · · · · · · · · · ·	
Mississippi Plain var. Warrior	18

Chipped Stone

	Tuscaloosa	Fort	<u> </u>		:
	Gravel	Payne	Bangor	Quartz	Total
Debitage with cortex	29			8	37
Debitage without cortex	47	1	1	1	50
Utilized debitage	1				1
Madison point fragment	2				2
Residual Stemmed point fragment	1				11
Biface	2	1			3
Preform I	2				2
Preform II	1				1
Core fragment	1	1			2
Total	86	3	1	9	99

Other Stone

Greenstone (unpolished)	1
Tabular Hematitic Sandstone	5
Petrified Wood	1
Hematite	9
Pigment Quality Hematite	1
Total	17

Site 1TU96: Artifact Inventory

Aboriginal Ceramics

Grog-tempered

Baytown Plain var. Roper	 5

Shell-tempered

Mississippi Plain var. Warrior	1
Mississippi Plain var. Warrior, folded rim	1
Total	2

,	Tuscaloosa Gravel	Bangor	Quartz	Total
Debitage with cortex	1	2	11	14
Debitage without cortex	1	4	3	8
Core	1			. 1
Total	3	6	14	23

Site 1Tu97: Artifact Inventory

Aboriginal Ceramics

Grog-tempered

Baytown Plain var. Roper	183
Baytown Plain var. Roper, rim	1
Mulberry Creek Cord-Marked	5
Total	189

Shell-tempered

Mississippi Plain var. Warrior	60
Mississippi Plain var. Warrior,	
strap handle	1
Total	57

Sand-tempered

Baldwin	Plain var.	Lubbub	2

Other

Daub	15
	

Chipped Stone

	Tuscaloosa Gravel		Bangor	Quartzite	Quartz	Hematite/ Chert Conglomerate	Hematite	Total
Debitage with cortex	23		2	4	3	2	4	35
Debitage without cortex	25	4	i —	3	1			33
Residual point fragment		_		1.				33
Preform I		1		·				1
Core fragment	1							
Total	49	5	2	8	4	2	1	71

Other Stone

Hammerstone	1
Unground Pottsville sandstone	1
Tabular Hematitic Sandstone	7
Limonite	1
Unmodified sandstone	1
Tuscaloosa Gravel cobbles	2
Total	13

Site 1Tu876: Artifact inventory

Aboriginal Ceramics

Shell-tempered

Mississippi Plain var Warnor	14
Bell Plain	2
Total	16

Shell			

Chipped Stone

	Tuscaloosa Gravel	Fort Payne	Quartz	Total
Debitage with cortex	61	1	T	62
Debitage without cortex	33		1	34
Microlith	1			1
Total	95	1	1	97

Greenstone (polished)	1
Hammerstone	1
Ground Pottsville sandstone	· · · · · · · · · · · · · · · · · · ·
(possible palette fragment)	1 1
Tabular Hematitic Sandstone	2
Petrified Wood	2
Total	7

Site 1Tu877: Artifact Inventory

Aboriginal Ceramics

~	tomporod	

Baytown Plain var. Roper	3

Shell-tempered

Mississippi Plain var. Warrior	

Other	 	
Daub		1

	Tuscaloosa Gravel	Quartz	Total
Debitage with cortex		3	3
Debitage without cortex		1	1
Residual point fragment	1		1
Total	1	4	5

Οi	lhei	rS	to.	ne

Small stone disk (bevelled)	1
Petrified Wood	1
Total	2

Site 1Tu878: Artifact Inventory	Problem	magania minaj nd načan
Stoneware	16	and the second of the second o
Undecorated Whiteware and Ironstone	20	
Embossed Ironstone	1	(x,y) = (x,y) + (x,y) + (y,y) + (y,y
Embossed Whiteware	1	and the second s
Glazed Whiteware	1	
Hand-painted porcelain	1	
Redware	1	
Urknown	1	
Dark Blue Glass	5	
Melted Dark Blue Glass	11	
Green Glass	10	
Amethyst Glass	12	
Porcelain	2	
Brown Glass	2	
Milk Glass Mason Jar Lid Fragments	2	· · · · · · · · · · · · · · · · · · ·
Clear Glass	12	
Melted Clear Glass	1	
Brick Fragments	1 1	
Total	90	

Site 1Tu879: Artifact Inventory

Aboriginal Ceramics

Grog-tempered

Baytoum Digin yor Dones	
Baytown Plain var. Roper	f 5
	

Shell-tempered

Mississippi Plain var. Warrior	

Chipped Stone

	Tuscaloosa Gravel	Fort Payne	Bangor	Quartz	Total	
Debitage with cortex	8		1	1	9	1
Debitage without cortex	12	2	2		16	n negative ka
Shatter	1		 		1	1
Core fragment		1			1	the second secon
Total	21	3	2	1	27	
Other Stone			to a constant			
Greenstone (unpolished)	1					
Sandstone	1	•		e de la Santa	1 1 1 1 1 1 1	e e e esta de la companya de la comp

Greenstone (unpolished)	1
Sandstone	1
Total	2

Site 1Tu880: Artifact Inventory

Aboriginal Ceramics

Grog-tempered

Baytown Plain var.	D	
idaylown Plain var.	Koper	1 1
	· 1- F - 4-1	t t

Shell-tempered

Mississippi Plain var. Warrior	

Chipped Stone

	Tuscaloosa Gravel		Quartzite	Tallahatta Quartzite	Total
Debitage with cortex	1	1			2
Debitage without cortex	1	19	1	1	22
Total	2	20	1	1	24

Site 1Tu881: Artifact Inventory

Aboriginal Ceramics

Grog-tempered

Douglas Dieler von D	
Baytown Plain var, Roper	1 3

	Tuscaloosa
	Gravel
Debitage without cortex	2

Site 1Tu882: Artifact Inventory

Aboriginal Ceramics

Grog-tempered

Baytown Plain var. Roper	33
Mulberry Creek Cord-Marked	1
Total	34

Shell-tempered

Mississippi Plain var. Warrior	31

Other

Resi	dual Gr	og- and	fine	shell-tem	pered	plain	2	5. 1

Chipped Stone

and the second s	Tuscaloosa Gravel	Quartz	Total
Debitage with cortex	2	1	3
Debitage without cortex	3		3
Preform II	1		1
Total	6	1	7

Site 1Tu883: Artifact Inventory

Aboriginal Ceramics

Grog-tempered

Baytown Plain var. Roper	41

Shell-tempered

Mississippi Plain var. Warrior	21
Moundville Engraved var. Havana	1
Total	22

Chipped Stone

	Quartz
Preform II (possible microlith)	1

Site 1Tu884: Artifact Inventory

Aboriginal Ceramics

Grog-tempered

Baytown	Plain var. Roper	 26

Shell-tempered

Micciccinni Plain var	Warrior	7

	Tuscaloosa	
	Gravel	Total
Debitage with cortex	3	3
Debitage without cortex	4	4
Total	7	7

The contract with the contract of the

Site 1Tu885: Artifact Inventory

Aboriginal Ceramics

Grog-tempered

Baytown Plain var.	Roper	8

Site 1Tu886: Artifact Inventory

Chipped Stone

	Tuscaloosa Gravel	Bangor	Total
Debitage with cortex	1		1
Debitage without cortex	3		3
Utilized debitage	1		1
Biface	1	1	2
Total	6	1	7

Other Stone

		-
Small sandstone disk	1	1 1
	l l	

Site 1Tu887: Artifact Inventory

Chipped Stone

	Tuscaloosa Gravel	Quartz	Hematite/Chert Conglomerate	Total
Debitage with cortex	6	1		7
Debitage without cortex	5	1	1	7
Biface fragment	*1	15.5		<u>;</u>
Total	12	2	1	15

Other Stone

Utilized Hematitic sandstone	1
Sandstone	1
Total	2

Nonaboriginal Artifacts

Yellow-glazed whiteware	1 1
Lead-glazed whiteware	1
Manganese-glazed stoneware	1
Milk glass	1
Red glass (embossed)	1
Total	5

Site 1Tu888: Artifact Inventory

Chipped Stone

	Tuscaloosa	Hematite/Chert		
	Gravel	Conglomerate	Quartz	Total
Debitage without cortex	2	1	1	4

Site 1Tu889: Artifact Inventory

Chipped Stone

	Tuscaloosa Gravel	Quartzite	Total
Debitage with cortex	1	1	2
Residual Corner-Notched point fragment		1	1
Preform II	1		1
Total	2	2	4

Site 1Tu890: Artifact Inventory

Aboriginal Ceramics

Groq-tempered

Baytown Plain var. Roper	71
Mulberry Creek Cord-Marked	4
Total	75

Shell-tempered

Mississippi Plain var.	Warrior	3

Chipped Stone

	Tuscaloosa		
	Gravel	Quartz	Total
Debitage with cortex	3	1	4
Debitage without cortex	2	1	3
Total	5	2	7

Site 1Tu891: Artifact Inventory

Aboriginal Ceramics

Shell-tempered

	Mississippi Plain var. Warrior	6
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Site 1Tu892: Artifact Inventory

Chipped Stone

	Tuscaloosa	Fort			
	Gravel	Payne	Quartzite	Quartz	Total
Debitage with cortex	7		1 1	6	14
Debitage without cortex	1	1		4	- 6
Utilized debitage	1		1		1
Dalton point		1			- i -
Residual Side-Notched point			1	. 2	2
Residual Side-Notched point fragment	1	· · · · · · · · · · · · · · · · · · ·		1	1
Distal			<u> </u>	1	<u>i</u>
Total	9	2	1	14	26

Other Stone

Hammerstone		1
Tabular Hematitic Sandstone		4
Ground sandstone cobble		1
Limestone	1.4	. 1
Total		7

Site 1Tu893: Artifact Inventory

Chipped Stone

	Tuscaloosa Gravel	Quartz	Total
Debitage with cortex	2	1	3
Debitage without cortex		1	1
Total	2	2	4

Other Stone

Croopetana (astista)	
Greenstone (polished)	1 1
(2000)	, , ,

Site 1Tu894: Artifact Inventory

Chipped Stone

	Tuscaloosa Gravel	Bangor	Quartz	Total
Debitage with cortex	6		4	10
Debitage without cortex	3	1	4	8
Biface fragment	1		1	2
Total	10	1	9	20

Tabular Hematitic Sandstone	1
Sandstone	1
Total	2

Site 1Tu895 East 1/2: Artifact Inventory

Aboriginal Ceramics

Grog-tempered

Baytown Plain var. Roper	603
Baytown Plain var. Roper, rim	6
Total	609

Shell-tempered

Mississippi Plain var. Warrior	17
Bell Plain	8
Total	25

Other	
Daub	1

Chipped Stone

	Tuscaloosa	Fort		:	
	Gravel	Payne	Quartzite	Quartz	Total
Debitage with cortex	102		111	1	104
Debitage without cortex	75	4		:	79
Madison point fragment	1				1
Residual point fragment	1 .				1
Residual Side-Notched point	1				1
Biface fragment	2		:		2
Preform I	1				1
Core fragment	2				2
Total	185	4	1	1	1 91

Other Stone

Tabular Sandstone	3
Sandstone	15
Total	18

Site 1Tu895 West 1/2: Artifact Inventory

Aboriginal Ceramics

Grog-tempered

	<u> </u>	
Baytown	Plain var. Roper	226

Shell-tempered

ľ	Bell Plain		2

Chipped Stone

	Tuscaloosa	Fort	
	Gravel	Payne	Total
Debitage with cortex	23		23
Debitage without cortex	16	1	17
Distal	1		1
Biface fragment	3		3
Total	43	1	44

Tabular Hematitic Sandstone	3
Sandstone	3
Total	6

Site 1Tu896: Artifact Inventory

Aboriginal Ceramics

Grog-tempered

Baytown Plain var. Roper	-	10
7	i	, ,

Shell-tempered

IR #imminminmi	Plain var. War	

Chipped Stone

	Tuscaloosa	
	Gravel	Total
Debitage with cortex	2	2
Debitage without cortex	3	3
Total	- 5	5

Site 1Tu897: Artifact Inventory

Aboriginal Ceramics

Grog-tempered

Bostova Disinora Danas	4
Baytown Plain var. Roper	4
- The state of the	

Site 1Tu898: Artifact Inventory

Aboriginal Ceramics

Grog-tempered

Baytowr	ı Plain	var. Roper	 15

Chipped Stone

	Tuscaloosa Gravel Total	
Debitage with cortex	3	3
Debitage without cortex	5	5
Total	8	8

Other Stone

ITabular Hematitic	Sandstone	1

Site 1Tu899: Artifact Inventory

Aboriginal Ceramics

Grog-tempered

Baytown	Plain var.	Roper	7
, 101711	Trails Full.	((Opc)	

	Tuscaloosa Gravel	Total
Debitage with cortex	1	1
Stemmed point fragment	1 1	1
Total	2	2

Site 1Tu900: Artifact Inventory

Aboriginal Ceramics

Grog-tempered

Baytown Plain var.	Roper	2

Shell-tempered

Mississippi Plain var. Warrior	

Chipped Stone

	Tuscaloosa
	Gravel
Debitage with cortex	1

Site 1Tu901: Artifact Inventory

Aboriginal Ceramics

Groa-tempered

Baytown Plain var. Roper	26

Shell-tempered

Mississippi Plain var. Warrior	10

Other

Daub	1

Chipped Stone

	Tuscaloosa				
	Gravel	Bangor	Quartzite	Quartz	Total
Debitage with cortex	5	1		1	7
Debitage without cortex	5		4 5 5		5
Core fragment	4		1 .		5
Tota ¹	1.4	1	1	1	17

Other Stone

Sandstone abrader	1
Tabular Sandstone	1
Tota!	2

Site 1Tu902: Artifact Inventory

Aboriginal Ceramics

Grog tempered

Didgite inpered	
Baytown Plain var. Roper	47
Baytown Plain var. Roper, rim	3
Baytown Plain var. Tishomingo	3
Total	53

Shell-tempered

Mississippi	Plain var, Warrior	23

Other

Daub		

	Tuscaloosa Gravel
Debitage with cortex	1

Site 1Tu903: Artifact Inventory

Aboriginal Ceramics

Grog-tempered

Baytown Plair		

Shell-tempered

Mississippi Plain var. Warrior	12
Mississippi Plain var. Warrior, folded rim	1
Total	13

Chipped Stone

	Tuscaloosa Gravel	Quartz	Total
Debitage with cortex	6		6
Debitage without cortex	7	1	8
Biface		1	1
Total	13	2	15

Site 1Tu904: Artifact Inventory

Aboriginal Ceramics

Grog-tempered

The state of the s	
Baytown Plain var. Roper	24
baytown I fain var. Nopel	

Shell-tempered

Mississippi Plain var. Warrior	
nvississippi main var. vvarnor	_ ~
	∵

Chipped Stone

	Tuscaloosa Gravel	Quartz	Total
Debitage with cortex	10		10
Debitage without cortex	9		9
Madison point		1	- 1
Kirk Corner-Notched point fragment	1		1
Preform I	1		1
Total	21	1	22

Greenstone (polished)	2
Greenstone (unpolished)	1
Greenstone preform fragment	1
Muller	1
Sandstone palette fragment	2
Ground sandstone	3
Tabular Hematitic Sandstone	3
Pigment Quality Hematite	1
Total	14

Site 1Tu905: Artifact Inventory

Aboriginal Ceramics

Grog-temp	pered
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Bay	town Plain var. Roper	1	

Shell-tempered

Mississippi Plain var. Warrior		2

Other

Residual Grog- and	shell-tempered plain	1

Chipped Stone

	Tuscaloosa Gravel	Quartz	Total
Debitage with cortex	7	4	7
Debitage without cortex	9	1 ::	.10
Biface fragment	1		1
Total	17	1	18

Other Stone

Ground sandstone fragment	11
Hematite	1
Total	2

Site 1Tu906: Artifact Inventory

Aboriginal Ceramics

Grog-tempered

Baytown Plain var	: Roper	5

Shell-tempered

	9
Mississinni Plain var Warrior	3434

Chipped Stone

	Tuscaloosa Gravel	Total
Debitage with cortex	4	4
Debitage without cortex	2	2
Total	6	6

Tabular Hematitic Sandstone	1

Site 1Tu907: Artifact Inventory

Aboriginal Ceramics

Grog-tempered

Baytown	Plain var.	Roper	2

Shell-tempered

Mississippi Plain var	. Warrior sherdlets	16

Chipped Stone

	Tuscaloosa Gravel	Total
Debitage with cortex	1	1
Debitage without cortex	1	1
Core fragment	1	1
Total	3	3

Other Stone

11.1	
IHematitic sandstone	
i ioi i dado sal idatojie	
<u></u>	

Site 1Tu908: Artifact Inventory

Aboriginal Ceramics

Grog-tempered

	Plain var.		

Shell-tempered

Mississippi Plain var. Warrior	8

Chipped Stone

	Tuscaloosa Gravel		Bangor	Total
Debitage with cortex	3			3
Debitage without cortex	1	1	2	4
Madison point fragment	2			2
Total	6	1	2	9

Greenstone	(unpolished-very small)	1

Site 1Tu909: Artifact Inventory

Aboriginal Ceramics

Grog-tempered

Baytown		

Chipped Stone

	Tuscaloosa	Fort		Hematite/Chert	
	Gravel	Payne	Quartz	Conglomerate	Total
Debitage with cortex	1		1		2
Debitage without cortex	2			1	3
Biface fragment	1	1			2
Preform I	1 1				1
Total	5	1	1	1	8

Other Stone

Utilized hematite	1 1	

Site 1Tu910: Artifact Inventory

Aboriginal Ceramics

Grog-tempered

Ва	ytown	Plain var.	Roper		19

Shell-tempered

Mıssıssıppi Plain var. Warrior	4
Mıssıssıppi Plain var. Warrior, folded rim	1
Total	5

Chipped Stone

	Tuscaloosa		*** . * *
	Gravel	Quartz	Total
Debitage with cortex	10	1	11
Debitage without cortex	6		6
Utilized debitage	1		1
Residual Stemmed point fragment	1		1
Biface fragment	1		1
Preform II	1		1
Tota:	20	1 -	21

Site 1Tu911: Artifact Inventory

Abonginal Ceramics

Shell-tempered

Mississippi Plain var. Warrior sherdlets	5

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

Site 1Tu912: Artifact Inventory

Aboriginal Ceramics

Grog-tempered

D		
I MAWTOWN	Plain var. Roper	
00110111	Figura val. INODEL	4 1

Shell-tempered

Mississippi Plain var.	141	
HVBSSISSIONI PIAID VAL	Warrior	
Tithociocippi i luiti vai.	A A CI 11/01	
Name and Address of the Park o		

Chipped Stone

	 Tuscaloosa Gravel	Fort Payne	Total	Tariti de la Maria de Araba
Debitage with cortex	1		1	
Scraper		1	1	
Total	1	1	2	and a community of the contract of
				lander and the second of the s

Site 1Tu913: Artifact Inventory

Aboriginal Ceramics

Shell-tempered

Mississippi Plain var. Warrior sherdlets	

Site 1Tu914: Artifact Inventory

Aboriginal Ceramics

Grog-tempered

_	3p	
Ba	ytown Plain var. Roper	1

Shell-tempered

Mississippi Plain var. Warrior .	2
Mississippi Plain var. Warrior sherdlets	4
Total	6

	
	Tuscaloosa
	Gravel
Debitage without cortex	1 1

Site 1Tu915: Artifact Inventory

Aboriginal Ceramics

Grog-tempered

9173 117 1	
Baytown Plain var. Roper	2

Shell-tempered

Mississippi Plain var. Warrior	3

Chipped Stone

	Tuscaloosa	Fort		
	Gravel	Payne	Quartz	Total
Debitage with cortex	4			4
Debitage without cortex	8	1	1	10
Preform I	2			2
Total	14	1	1	16

Other Stone

Tabular Hematitic Sandstone	3

Site 1Tu916: Artifact Inventory

Aboriginal Ceramics

Shell-tempered

Marie de la companya	10/	2
Mississippi Plain var.	vvarrior	

Other Stone

Ground	Pottsville sandstone	1

Site 1Tu917: Artifact Inventory

Aboriginal Ceramics

Shell-tempered

Mississippi Plain var. Warrior sherdlet 1	

	Tuscaloosa	
_	Gravel	Total
Debitage with cortex	2	2
Core	1	1
Total	3	3

Site 1Ha231: Artifact Inventory

Chipped Stone

	Tuscaloosa Gravel	Total	
Debitage with cortex	6	6	
Debitage without cortex	1	.6111	
Preform I	1	1	
Total	8	8	

Site 1Ha232: Artifact Inventory

Chipped Stone

	Tuscaloosa Gravel	Quartzite	Total
Debitage with cortex	3		3
Debitage without cortex	1	1	2
Total	4	1	5

Site 1Ha233: Artifact Inventory

Aboriginal Ceramics

Grog-tempered

Baytown Plain var. Roper	13
Baytown Plain var. Roper, rim	1
Total	14

Chipped Stone

	Tuscaloosa Gravel	Fort Payne	Bangor	Quartzite	Hematite	Total
Debitage with cortex	2			1		3
Debitage without cortex	7	2	2	1	1	13
Utilized debitage		1	 			1
Residual point fragment	1		 			1
Preform I	1					1
Total	11	3	2	2	1 1	19

Other Stone

l abular Hematite	. 1 1

Site 1Ha234: Artifact Inventory

Aboriginal Ceramics

Grog-tempered

Baytown Plain var. Roper	14

	Tuscaloosa Gravel	Quartzite	Total
Debitage with cortex		1	1
Debitage without cortex	1		1
Total	1	1	2

Appendix D: Recommendations

	Primary Components	Comments
1Tu53	Unknown	Mound
1Tu96	Late Woodland Moundville I	Potential to provide information about outlying sites during the Late Woodland/Mississippian transition
1Tu97	Late Woodland Moundville I	Possible intact deposits, Potential to provide information about outlying sites during the Late Woodland/Mississippian transition
1Tu882	Late Woodland Mississippian	Potential Mississippian farmstead
1Tu883	Late Woodland Moundville I	Potential to provide information about outlying sites during the Late Woodland/Mississippian transition
1Tu884	Late Woodland Mississippian	Potential to provide information about outlying sites during the Late Woodland/Mississippian transition
1Tu892	Dalton	Potential to provide information about the Early Archaic
1Tu876	Mississippian	Possible Mississippian farmstead; possible intact deposits
1Tu877	Late Woodland Mississippian	Possible Mississippian farmstead

Site Number	Primary Components	Comments
1Tu329	Late Woodland Moundville II/III	Potential to provide information about outlying farmsteads at the height of Moundville's prominence
1Tu330	Early Woodland Late Woodland	Potential to provide information about outlying farmsteads at the height of Moundville's prominence
	early Moundville II through early Moundville III	
1Tu334	Late Woodland Moundville I through III	Potential to provide information about outlying farmsteads at t height of Moundville's prominence
1Tu335	Late Woodland Mississippian	Possible Mississippian farmstead
1Tu336	Late Woodland Moundville I through !!!	Potential to provide information about outlying farmsteads at t height of Moundville's prominence
1Tu337	Late Woodland Moundville I through III	Potential to provide information about outlying farmsteads at t height of Moundville's prominence
1Tu339	Late Woodland	Possible intact deposits
1Tu872	Late Woodland	Possible intact deposits
1Tu873	Late Woodland	Possible intact deposits

Broughton Field District

ite Number	Primary Components	Comments
Tu895/	Late Woodland	Possible Late Woodland village with an overlying Mississippian
Tu901	Mississippian	farmstead
Tu902	Late Woodland	Potential Mississippian farmstead
	Mississippian	
Tu903	Late Woodland	Potential to provide information about outlying farmsteads at the
in the second of the second	Moundville I	Late Woodland/Mississippian transition
Tu904	Late Woodland	Potential to provide information about outlying farmsteads at the
	Mississippian	Late Woodland/Mississippian transition;
		as well as on greenstone tool production
1Tu905	Late Woodland	Potential Mississippian farmstead
	Mississippian	
Tu906	Late Woodland	Potential Mississippian farmstead
	Mississippian	and the second of the second o
1Tu907	Late Woodland	Potential Mississippian farmstead
	Mississippian	
1Tu908	Late Woodland	Potential Mississippian farmstead
	Mississippian	
1Tu909	Late Woodland	
1Tu910	Late Woodland	Potential to provide information about outlying farmsteads at the
عيامات فالمعار	Moundville I	Late Woodland/Mississippian transition
1Tu911	Mississippian	Potential Mississippian farmstead
1Tu912	Late Woodland	Potential Mississippian farmstead
	Mississippian	
1Tu913	Mississippian	Potential Mississippian farmstead
1Tu914	Late Woodland	Potential Mississippian farmstead
	Mississippian	
1Tu915	Late Woodland	Potential Mississippian farmstead
	Mississippian	
1Tu916	Mississippian	Potential Mississippian farmstead
		• · · · · · · · · · · · · · · · · · · ·

Grays Landing District

Site Number	Primary Components	Comments
1Tu923	Late Woodland Mississippian	Potential Mississippian farmstead
1Tu922	Late Woodland Mississippian	Potential Mississippian farmstead
1Tu927	Late Woodland Mississippian	Potential Mississippian farmstead
1Tu926	Late Woodland Mississippian	Potential Mississippian farmstead
1Tu925	Late Woodland Mississippian	Potential Mississippian farmstead
1Tu41	Late Woodland Moundville I through III	Possible remnant of Grays Landing Mound (may have been destroyed by erosion)
1Tu920	Mississippian	Potential Mississippian farmstead
1Tu921	Mississippian	Potential Mississippian farmstead
1Ha242	Mississippian	Potential Mississippian farmstead
1Tu924	Mississippian	Potential Mississippian farmstead
1Ha241	Late Woodland Mississippian	Potential Mississippian farmstead
1Ha240	Late Woodland Moundville II/III	Potential Mississippian farmstead