

RAISED GROUND, RAZED STRUCTURE: CERAMIC CHRONOLOGY,
OCCUPATION AND CHIEFLY AUTHORITY
ON MOUND P AT MOUNDVILLE

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ABSTRACT

Mound P is the largest mound on the western plaza periphery at Moundville in west-central Alabama. Excavations on the western mound flank revealed at least two mound construction episodes and a large amount of modern disturbance. Excavations on the mound summit intersected a large burnt daub structure that was previously indicated by a magnetometer survey. Moundville was depopulated around A.D. 1400 and the occupation of mound summits after this time indicates that leadership positions in the region were still important. Mounds were used as symbols of authority that leaders could co-opt to legitimize their position. A ceramic chronology was developed based on the site's type-variety system for the mound to determine the date of terminal occupation on the summit of the mound. This revealed that the mound was used lightly during the Moundville IV (A.D. 1520-1650) ceramic phase. Other artifacts from the mound suggest that the pigment complex was in use on the summit but a stone manufacturing industry was not. It is suggested that Mound P was occupied late in Moundville's history but abandoned prior to the Protohistoric period and the Spanish intrusion into the Southeastern United States.

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CHAPTER 1 RAISED GROUND

Moundville is a large, multi-mound center located on a high bluff that overlooks the Black Warrior River in west-central Alabama. This large prehistoric center was densely occupied from A.D. 1200 to around A.D. 1400, when a large portion of the population left the town prior to the Protohistoric period (Knight and Steponaitis 1998). Even though the population levels decreased at Moundville, there is archaeological evidence for the continued use of the site into the protohistoric Alabama River phase (A.D. 1520-1650), the time of initial European contact in the Southeast. The continued use of Moundville after a large depopulation is important because it indicates that the place, or the people that remained at the place, were still important to some degree. Another reason that a large depopulation of the Moundville center after A.D. 1400 is important is because similar depopulation or abandonment of large Mississippian centers was widespread across the Southeast before the Europeans began to explore the continent (Blitz and Lorenz 2006; Hudson et al 1985; Hudson and Tesser 1994; Smith 1987).

Moundville contains at least 29 earthen mounds which are organized around a large, open plaza in a diagrammatic arrangement (Figure 1.1) (Blitz 2008; Knight 1998). The largest mounds are located on the northern periphery of the plaza and the size of the mounds decreases around the periphery north to south. At Moundville as elsewhere in the Mississippian world, the largest earthen mounds are interpreted as elite residences occupied by hereditary leaders who legitimized their authority within the community by manipulating connections to the past and the esoteric.

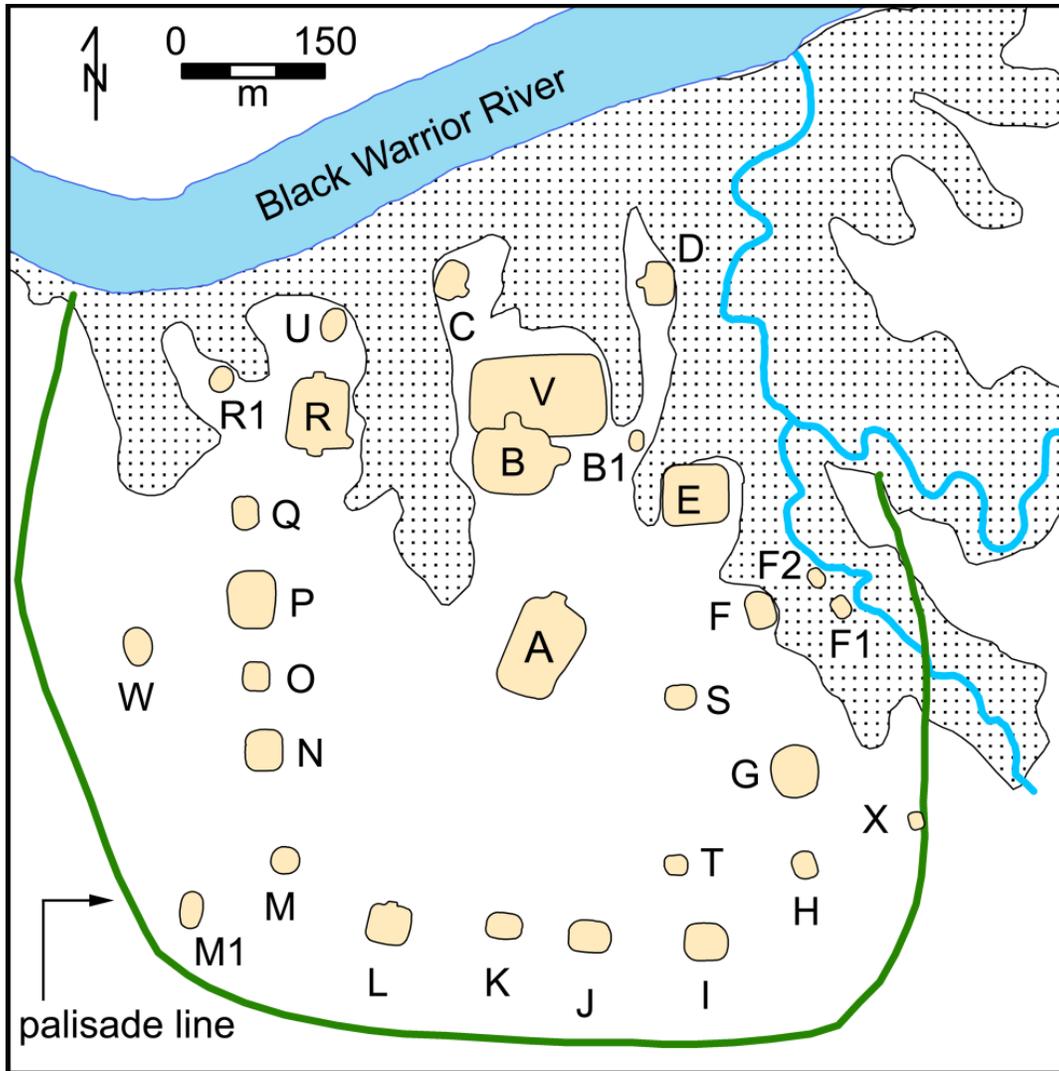


Figure 1.1. Map of Moundville in west-central Alabama. Copyright John H. Blitz 2009. Used with permission.

Mound P is a large, two-tiered platform mound located on the western plaza periphery that exhibits evidence for use during the Protohistoric period through the presence of diagnostic Alabama River phase ceramic sherds (Knight 2010:234-8). While other mounds at the site have been subject to extensive archaeological excavations, Mound P has seen relatively little modern work performed into the flank or the summit. C.B. Moore excavated trial holes into the summit of the mound in 1905 to no avail and the Civilian Conservation Corps (CCC) cleaned up the

mound surface in the 1930s, producing a small amount of material (Knight 2010). In 1988, Dr. Boyce N. Driskell of the University of Alabama, Office of Archaeological Research (OAR), conducted excavations into the eastern flank of the mound but no more work was done on the mound until 2009 (Courington 1989; Knight 2010). As a part of the Jones Archaeological Museum renovations, a set of stair steps and a viewing platform were planned as an extension of the museum deck (this platform has yet to be completed as of the writing of this thesis). In the summer of 2009, prior to the placement of this planned, intrusive structure, the University of Alabama, Office of Archaeological Research conducted test excavations on the western flank base of the mound, close to the museum. The same summer, Dr. Chester Walker of Archaeo-Geophysical Consultants, LLC conducted a magnetometer survey on the summit of Mound P and the surrounding areas in order to assess the extent of subsurface deposits in these areas. The subsurface anomalies that he detected were then tested by the University of Alabama, Department of Anthropology annual field school by conducting excavations on the southeastern summit in the fall of 2009.

The presence of Alabama River phase diagnostic ceramic sherds at a large site that was extensively depopulated before the Protohistoric period raises questions about the prolonged position of the elite groups or individuals co-opting the platform mounds for their own legitimization and authority. This thesis is the result of the analysis of all of the excavated materials from Mound P during the 2009 OAR and fall field school excavations. Understanding how long the office of the chief was important at Moundville is central to this thesis and its three objectives. First, a ceramic chronology is constructed from the decorated pottery present in the ceramic assemblage to provide further insight into the occupational history of the mound. Second, the artifacts that were recovered from the 2009 excavations are assessed to determine

the cultural activities that were occurring on the summit of the mound to see if they were characteristically elite. Finally, the excavations and artifacts from Mound P are compared to other mound excavations from Moundville to place the mound within a larger intrasite context. If the ceramic chronology of Mound P indicates that the platform mound was being used into the late prehistoric or protohistoric periods, then the position of the elite was still important at Moundville.

Chapter 2 presents the research question, frames the question within a larger theoretical perspective and discusses the history of excavations on Mound P. Chapter 3 discusses the 2009 field excavations and methods. Chapter 4 analyzes the artifacts that were recovered from the flank and summit excavations. Chapter 5 presents the results and interpretations of the 2009 excavations and artifacts and how these two lines of evidence answer the three research objectives. Chapter 6 concludes the thesis with a brief summation of the 2009 Mound P excavations, what was excavated, and what can be done in the future to answer further questions.

CHAPTER 2 RESEARCH QUESTION, THEORETICAL PERSPECTIVE AND RESEARCH BACKGROUND

With the major occupation of Moundville in steep decline after A.D. 1400, the human presence at the site became increasingly non-living: Moundville had become a necropolis where the deceased from the Black Warrior Valley were being buried (Knight 2010; Knight and Steponaitis 1998; Wilson 2008; Wilson 2010). Not all of the people who occupied the mound center were deceased, however, as there is evidence for the occupation of some platform mounds at Moundville from ceramic sherds that are diagnostic of the Protohistoric period (A.D. 1540-1650). Mounds B, E, P and V have all yielded diagnostically late sherds, and exhibit evidence for large burnt structures that sat upon their summits during their terminal occupation. Since the occupation at Moundville was not as concentrated during this time, the presence of people at a place that could have been associated with negative connotations (Knight 2010; Knight and Steponaitis 1998) holds implications for the continued importance of the mound center as a seat of political organization, the position of the chiefly authority and power, as well as platform mounds as symbols and locations for elite activities.

This thesis analyzes the excavated materials and field notes from the 2009 University of Alabama OAR and fall field school Mound P archaeological excavations, of which I volunteered some of my time to the latter. These excavations targeted the lower western flank and the summit of this large platform mound to mitigate the potential impact of the Walter B. Jones Archaeological Museum renovations. The aim of this thesis is to determine how long the office of the chief was important at Moundville by accomplishing three research objectives: (1) a

chronology for the terminal use of Mound P, (2) identification of some of the cultural activities that took place on the summit that may have made Mound P a special and important place tied to chiefly authority, and (3) a comparison of the archaeological remains from the final use of Mound P to remains found on contemporaneous mounds at Moundville. Archaeological excavations on the summit of the mound are an ideal location to answer a question about terminal occupation. It is hypothesized that the terminal occupation of Mound P continued into the Moundville IV phase. An answer to this question has important implications for the history of the Moundville site as well as the archaeology of the region.

Since many mounds in the plaza periphery were abandoned by around A.D. 1400 (Knight and Steponaitis 1998), and there are very few mounds at Moundville known to be occupied into a later date, refining the chronology of Mound P is important in order to determine if use of this mound continued into the Late Mississippian (A.D. 1400-1520) and Protohistoric (A.D. 1520-1650) periods. A significant use of the mound summit beyond Moundville's fifteenth-century depopulation would indicate that a corporate group or important individuals continued to have access to the associated activities and meanings of Mound P. If Mound P was occupied during this later time span, it could indicate that chiefly authority did not completely decline with the population, and that Moundville continued to be the central place of a chiefdom or similar polity.

This chapter begins by presenting the ceramic and developmental phases of the Moundville polity that are used throughout this study and continues with a discussion of Southeastern platform mounds as political symbols and sacred entities. Archaeologists have established that the duration of platform mound use is related to the length of chiefly leadership and the mound-center polity itself. The chapter continues with a discussion about duration of use

and the some of the activities on Mississippian mounds that reinforced the legitimization process. Chapter 2 concludes with a brief overview of the history of excavations on Mound P.

Moundville Ceramic and Developmental Phases

The first thesis research objective is to construct a ceramic chronology for Mound P. The ceramic chronology at Moundville is based upon Phillips' (1970:28) introduction of ceramic type-variety classification to the Southeast and Steponaitis' (1983) application of type-variety classification to Moundville and grave lot seriation. This was achieved by using whole vessels and associated stratigraphy to define three phases: Moundville I, Moundville II and Moundville III (Steponaitis 1983:2-3) which were then split into early and late subphases (Knight and Steponaitis 1998). At the end of this three phase sequence, Curren (1984) added a fourth Moundville IV phase, previously called the Alabama River phase. Since the classification system relies heavily on the time a specific ceramic type or variety was introduced into the corpus of Moundville pottery types, this ceramic phase system does not rely upon frequency seriation, but relies instead on *terminus post quem* and *terminus ad quem* reasoning (Knight 2010:14-15). It should be noted however that these phases are merely ceramic phases based upon the introduction of types, varieties, decorative modes and vessel form and are not indicative of the social changes that were occurring at Moundville during its occupation (Knight 2010:15). The calendar years for the ceramic phases at Moundville are determined by using calibrated radiocarbon dates: West Jefferson (A.D. 1020-1120); Moundville I (A.D. 1120-1260); Moundville II (A.D. 1260-1400); Moundville III (A.D. 1400-1520); Moundville IV (A.D. 1520-1650) (Knight 2010:15).

The social development at Moundville is marked by a rapid reorganization of the social order as seen through the constructed landscape at the site. When local production began to intensify (A.D. 1020-1120), microlithic tools are associated with an increase in shell bead production for domestic use as ornaments (Knight and Steponaitis 1998:10-2). Beginning around A.D. 1120 and continuing to around A.D. 1200, the first Mississippian characteristics begin to appear at Moundville and in the Black Warrior Valley. During this time, the Black Warrior Valley witnessed the intensification of maize agriculture, limited construction of earthen platform mounds (Asphalt Plant and Mound X) and an increase in the amount of predominately shell tempered pottery (Blitz 2007; Knight and Steponaitis 1998; Steponaitis 1992). The Asphalt Plant site consists of a single platform mound located about a half mile northeast of Moundville, and Mound X was located east of Mound G, but was subsequently destroyed and decommissioned before the palisade line was constructed (Blitz 2007; Steponaitis 1992). The location of two early platform mounds and a dense concentration of early diagnostic ceramics on the bluff top indicate that this may have been an important location as early as A.D. 1120-1200 (Knight and Steponaitis 1998).

Following the “Initial Centralization” in the area around Moundville, the planned arrangement of the Moundville plaza periphery was in place and “Regional Consolidation” had been achieved (Knight 1998; Knight and Steponaitis 1998:14-7; Knight 2010). The large earthen mounds were quickly constructed over a one hundred year time span (A.D. 1200-1300) and portions of the plaza were leveled and artificially filled in (Lacquement 2009). An attempt by local elites to centralize power in the valley may have begun from A.D. 1120-1200 by utilizing the ritual properties of mound construction and the manipulation of exotic items, but by the time of regional consolidation, this process was in full swing. The full scale nature of political

consolidation in the Black Warrior Valley is indicated by major landscape modification and organization through the construction of earthen mounds, plaza leveling, palisade construction and household clusters, as well as the construction of secondary mound centers in the Black Warrior Valley. Intensive maize agriculture and the mobilization of exotic, non-local materials, such as mica, greenstone and non-local chert, is more evidence that the polity had become a strong regional center (Knight and Steponaitis 1998).

From A.D. 1300-1450, the position of the elite at Moundville was “Entrenched” (Knight and Steponaitis 1998:17). The social distance between leaders and commoners residing within the polity is manifested in the ever increasing presence of cult symbolism and burials with larger quantities of marine shell beads, copper ornaments, copper-bladed axes, decorated sandstone palettes, mineral pigments and galena crystals (Knight and Steponaitis 1998). Archaeologically, there are very few middens that date to this time (late Moundville II-Moundville III), suggesting that the greater population was vacating the center (Knight and Steponaitis 1998; but see Thompson 2011). The mounds were occupied from the northern periphery, to the southern periphery and abandoned in the opposite order, from south to north (Knight 1998). This could have been the result of an increased, forced distance between the elite and non-elite (Beck 2003), local raw resource exhaustion, the passing of a warfare threat, therefore alleviating the need for centralized protection (Knight and Steponaitis 1998:18-9), or fissioning due to political disputes (Blitz 1999, 2008). Around A.D. 1400-1450, Moundville became a place that was remembered and returned to in order to bury the dead (Knight and Steponaitis 1998; Knight 2010; Wilson 2008; Wilson 2010).

After the collapse there was a period of “Reorganization” in the Black Warrior Valley from A.D. 1450-1650. Only mounds B, E, P and V in the northern portion of the site remained in

use at Moundville, but there is archaeological evidence for the continued use and construction of platform mounds at single-mound secondary mound centers Snows Bend and the White site (Knight 2009; Knight and Steponaitis 1998; Mirarchi 2009; Sherard 2009; Welch 1991).

Nucleated settlements were established and cemeteries were dedicated in the valley with a final abandonment by A.D. 1600. Moundville's developmental history is marked by a rapid consolidation of power, a quick abandonment of the center, and a slower reorganization of the social order throughout the polity.

The final abandonment of Moundville occurred at the beginning of the Protohistoric period (A.D. 1540-1650), around the same time as Hernando de Soto's entrance into west-central Alabama in late A.D. 1540, making the degree to which Moundville was still in use difficult to interpret (Curren 1984; Hudson 1976, 1994; Hudson et al 1985; Hudson et al 1990; Knight and Steponaitis 1998; Smith 1987). Marvin T. Smith (1987:55) and Caleb Curren (1984:243) note that the epidemic diseases brought to North America from Europe preceded the de Soto expedition throughout the Southeast. The quick and deadly spread of small pox and other diseases and the destruction of towns and crops across the region would have brought an end to Mississippian political, religious and social organization by the time de Soto reached the valley (Curren 1984; Hudson 1976; Smith 1987). While these external pressures could have provided change in the social structure of Mississippian lives, internal pressures that occurred before European contact are also possible (Hudson et al 1990; Schoeninger and Schurr 1998). Archaeologists have already noted the instability of Mississippian chiefdoms and the effect this process could have on the cohesiveness of the community, which could have contributed to the depopulation of Moundville prior to Spanish contact (Anderson 1994; Blitz 1999, 2008). This

could have also been due to a loss of soil productivity in the Black Warrior Valley, suggesting an internal, rather than external, catalyst for depopulation (Schoeninger and Schurr 1998).

Platform Mounds as Symbolic and Sacred Entities

Some of the first platform mounds were constructed and used in the Black Warrior Valley at the Asphalt Plant site and in the area of Mound X from A.D. 1120-1200. As previously mentioned, these mounds were the centers of initial attempts at the centralization of power in the valley through the ritual process of mound construction and utilization of exotic goods. Platform mounds are “a form of monumental architecture, constructed eminences on which activities were conducted or buildings were placed” (Lindauer and Blitz 1997:170). These pyramidal earthen mounds consist of a flat top (summit) and flat, truncated sides (flanks) that were built by adding multiple construction stages of soil to the exterior of the mound (Hudson 1976). The death of a chief, or the succession of the chiefly office, is one of the strongest ethnographic examples that archaeologists have for the new building episodes that would signal the beginning of a new authority; the termination of mound construction would indicate the end of the chiefly line (Anderson 1994; Blitz and Lorenz 2006; Hally 1996; Hudson 1976).

I have already introduced the terms power and authority within this text, but it is important to make a distinction between the two when discussing pre-state political formation like Moundville. Rakita (2009:63) defines *power* as “the ability to make something happen or compel someone to do something;” conversely, he recognizes *authority* as “the public perception that an individual has right to, or is lawful in their exercise of, power.” The authority that individuals would have over decisions and labor was due to their social position. They were individuals who had the esoteric knowledge of both this world and the supernatural order and

were able to control materials and organize labor (King 2003). Power and authority is gained through ascribed status, but also through control or manipulation of representative art and architecture, two commonly shared ideological symbols that contribute to the integration of authority within a community (Cobb and King 2005).

Mississippian platform mounds are integrated into the beliefs of a society by relying on “the most fundamental core symbols and metaphors of the society at large” (Knight 1986:680). These core symbols and belief structures could have been reinforced by special items, such as anthropomorphic statues and human skeletal remains, which were stored in the temples or charnel houses that existed on some mound summits (Hally 1996:94; Hudson 1976). Knight (1986) argues that earthen mounds should be understood as a type of representational art because no matter what form they take, their function takes on a singular meaning of understood importance and the symbolic act of a beginning and a termination event. The act of adding new layers to a platform mound after the death of an important leader was a symbolic burying of the mound, but the labor that went into this ritualized activity was enough to create a feeling of stability and social cohesion among the non-elite and further integrated the degree of social differentiation (Blitz and Lorenz 2006; Knight 1986). Thus people were involved in the process of burying the chief and identifying a new one, keeping the community in tune with what had happened in the past and what was going to happen in the near future (Cobb and King 2005:174).

The construction of mounds, as well as their subsequent building phases, could be evidence for a controlled labor force that helped to reinforce and naturalize the position of the elite corporate group or individual that lived on the summit of the mound (Blitz and Livingood 2004; Blitz and Lorenz 2006; Lindauer and Blitz 1997; Pauketat 2000). The process of

naturalization would also be reinforced through a local validation of mobilized labor to engage in these constant repetitive acts of mound re-covering (Cobb and Garrow 1996).

A common ethnohistoric example that is utilized in order to place a context on the ritual covering of mounds is the Green Corn ceremony (busk); the annual sweeping of homes and the plaza combined with an extinguishing of fires (Hudson 1976; Knight 1986; Lindauer and Blitz 1997; Wesson 1998). The sacred fire that burns at the ceremonial center and ignites all of the hearths in the community is extinguished and rekindled during this ceremony, giving a renewed life to the people (Wesson 1998). The reason this is often cited is because the impure ground is covered (rejuvenated) by something pure, which has been argued is the reason why platform mounds were ritually covered following the death of a chief (Knight 1986). The death of the leader would be a traumatic public event and new layers of earth would be added to the previous mound surface, therefore covering a polluted space (Blitz and Lorenz 2006; Hally 1996; Knight 1986; Lindauer and Blitz 1997; Wesson 1998).

At the Etowah mound site, “genealogical and mythical conceptions of time” shaped this site’s history by what could have been multiple interpretations of iconography and monumental architecture over time (Cobb and King 2005:175). Ancestor worship in the Southeast was the recognized origin of sacred authority and the control of the sacred spaces identified with ancestors or past chiefs would validate the position of the chiefly office; certain elites could appropriate or co-opt these sacred symbols to reinforce their authority and then restrict, or monitor, access to zones on the summits (Hudson 1976; Lindauer and Blitz 1997). These individuals may have had access to special knowledge, belonged to certain descent groups and were able to influence, validate, and maintain their power in an uncertain political landscape (Lindauer and Blitz 1997). Drawing on these well-established links between platform mounds

and chiefly leadership, it seems reasonable to conclude that the legitimization of chiefly authority was achieved through the manipulation, alteration, and use of the mound as a powerful cultural symbol.

Platform Mound Activities

Besides the constructed landscape, another way for archaeologists to determine what cultural activities were occurring at sites is through the material remains that were left behind. The activities on platform mounds in the Southeast also served to include or exclude a segment of the non-elite population, over time creating natural social differentiations (Knight 2004; Lindauer and Blitz 1997). As discussed above, the ideology of the dominant group is materialized through portable objects and constructed monumental landscapes (Earle 1997). Self-aggrandizers might control the production of certain valued materials and prestige goods, which would help legitimize and naturalize their position (Earle 1997; King 2003; Muller 1987; Steponaitis 1986). Some of these portable objects would have taken the form of prestige items that represented aspects of the dominant group's ideology, reflected some commonly held beliefs of this larger group and would be devoid of a common understanding (Welch 1996). A higher concentration of nonlocal materials and prestige items have been excavated from the summits of late platform mounds, indicating that these items are tied to the changing ways in which people thought about the mounds themselves.

Earle (1997) notes that one of the traits of a chiefdom is the leader's ability to manipulate the dominant ideology by linking a physical object to the symbolic meaning that object carries with it. It has been argued that although culture exists in the minds of individuals and is not explicitly understood, the culture is reflected in the material that a culture produces (Earle 1997).

If it can be understood that the items that influential individuals use can be used to validate their authority and these individuals lived on the summits of mounds, then it is important to understand some of the materials that are found on mound summits and what these objects were used for. Socially inclusive activities that would integrate the society into the activities and knowledge located on a mound may be indicated by mound assemblages yielding evidence of crafting.

Platform mounds in the Southeast take on different functions. Earthen mounds also served to house the remains of the dead, which are included within the mound itself as well as in mound summit charnel houses (Hudson 1976). Flank and summit excavations from the platform mounds at Moundville indicate that a variety of activities were occurring at the site (Blitz 2008; Gall and Steponaitis 2001; Knight 2010; Knight and Steponaitis 1998; Peebles and Kus 1977; Welch 1991; Wilson 2001, 2008). The activities that occurred on the summits of these mounds could have been exclusionary to a large portion of the population, making these activities private and protected from view by architecture and curtain walls that would divide visible space (Cobb and King 2005; Knight 2010; Lindauer and Blitz 1997). However, the existence of mounds does not indicate the existence of identical activities occurring on the mounds. While the final goal of producing special items that would help to reinforce the corporate group or individual's claim on authority would be the same, recent excavations by Knight (2010) reveal that there were different activities happening on the summits of the mounds at Moundville.

Mound P Excavations

Mound P has been the subject of limited archaeological excavations. Clarence B. Moore briefly investigated the summit of the mound and the Civilian Conservation Corps cleaned up the

summit and the flanks of many of the mounds at the site, including Mound P, in order to prepare it to be a public space. The University of Alabama Office of Archaeological Research excavated test units into the western flank and two University of Alabama fall field schools were conducted at Mound P twenty-one years apart.

Clarence B. Moore Excavations. Gentleman archaeologist C. B. Moore excavated at Moundville in 1905 and 1906. During his time at the site, Moore was concerned with finding human burials from mound and off-mound contexts (Knight 1996). In order to determine if mounds contained burials, Moore would excavate straight walled trial holes to a depth of four feet below ground surface (Knight 1996:7). He excavated twenty such holes into the summit of Mound P and finding no burials, moved on to other mounds (Knight 2010). These are the only recorded excavations into the summit of Mound P before the fall of 2009. Unlike other summit excavations at Moundville (Knight 2010), Moore's trial holes were not encountered during the field school due to the concentrated location of the 2009 excavation units on the southeast corner of the mound summit.

Depression-Era Ceramics and Daub. In his volume, *Mound Excavations at Moundville*, Knight (2010) discusses a small collection from the 1930s that is curated by the Alabama Museum of Natural History. Since there are no related excavation records, Knight (2010:235) concludes that this small assemblage was the result of the mound-clearing the CCC conducted while working at the site. While some mounds at Moundville were extensively refurbished by adding fill to the sides and summit, Mound P was not included among this group. The Depression-Era materials include chronologically diagnostic sherds (Alabama River Appliqué) that indicate a Moundville IV occupation and a large quantity of daub (Knight 2010:235). These

materials are curated at the Alabama Museum of Natural History but were not analyzed as a part of this research.

1988 Fall Field School. The University of Alabama, Department of Anthropology fall field school conducted eastern flank excavations in 1988 under the direction of Dr. Boyce N. Driskell. The excavation notes and materials are curated the Alabama Museum of Natural History. The eastern flank units were excavated in three contiguous 1-x-2 meter units on an east-west grid located at the base of the mound near the southeastern corner. These were excavated in 10 centimeter arbitrary levels to a maximum depth of one meter and screened through one-quarter inch hardware mesh (Knight 2010:236). Driskell identified four stratigraphic zones, none of which were distinctly midden fill. One of the intriguing things about Driskell's 1988 stepped flank unit is its location directly downslope from the 2009 fall field school summit excavations. Knight notes that Zone 2, the second layer from the ground surface, contained such a high amount of daub that it was "undoubtedly correlated with a burned building on the upper summit terrace" (2010:236). These excavations from the base of the flank provided a small amount of ceramic evidence (Alabama River Incised) for continuous occupation, or use, into the Protohistoric period, just as the AMNH collection indicates (Courington 1989; Knight 2010). These materials are curated at the Alabama Museum of Natural History but were not analyzed as a part of this research.

2009 Office of Archaeological Research Excavations. The University of Alabama, Office of Archaeological Research (OAR) conducted excavations under the direction of Dr. Robert Clouse in preparation for the construction of a mound summit viewing platform, planned as part of the Walter B. Jones Archaeological Museum renovation. In the summer of 2009, OAR placed two 1-x-1 meter test units along the southern portion of the mound in the western flank. The

Walter B. Jones Archaeological Museum renovation included the construction of a large, concrete observation deck along its eastern wall. This deck gives museum visitors a view of the park looking over the pond and eastward, beyond the silhouettes of Mounds O and P, to the plaza. The viewing platform was planned to continue via steps from the observation deck to the summit of Mound P. This was designed with minimum impact to the cultural resources that exist on both the flank and summit of the mound. The two test units that were excavated by OAR are at the base of Mound P closest to the observation deck. These units yielded a large amount of material, including prehistoric ceramic, worked and unworked stone, animal bone and historic items. The analysis of these flank excavations and materials is part of this thesis and will be discussed in subsequent chapters.

2009 Fall Field School. The University of Alabama, Department of Anthropology annual fall field school conducted summit excavations in 2009 under the direction of Dr. John H. Blitz and graduate teaching assistant Jeremy R. Davis. The summit excavations were part of the same Walter B. Jones Archaeological Museum renovation plan as the western flank excavations conducted by OAR. The summit of Mound P was the focus of investigations because the proposed walkway and stairs from the museum were planned to terminate there. Any cultural materials that existed on the summit of the mound might be destroyed or altered by the footprint of the planned viewing platform. Dr. Chester Walker of Archaeo-Geophysical Consultants, LLC conducted a magnetometer survey on the summit of Mound P to locate possible structures and other subsurface anomalies prior to excavations and construction. The field school's task in the fall of 2009 was to ground truth Walker's data, which indicated a large, subsurface anomaly on the southern half of the mound summit. The new excavations revealed a number of post holes and features containing concentrations of burnt daub and charcoal, as well as ceramics, lithic and

faunal remains. Like the western flank excavations, the analysis of these summit excavations and materials is presented in subsequent chapters.

Summary

Moundville was a place of great importance from A.D. 1200 at least into the 1400s, but many aspects of the site's later history remain unclear. The development of the social order over time led to the rapid rise of a built, sacred landscape and organized arrangement of mounds from A.D. 1200-1300. Moundville then experienced a quick decline of the mounds and domestic population starting around A.D. 1400. The town then became a necropolis, but there is archaeological evidence for the occupation of mounds B, E, P and V into the Protohistoric period (A.D. 1540-1650). This indicates that the importance of chiefs and mounds as symbols of authority continued past the population decline at the town. The symbol of the platform mound was manipulated by elite aggrandizers in order to legitimize their authority and if mounds at Moundville were still occupied after the center was depopulated, then the people living on the summits were still important to some degree (Knight and Steponaitis 1998:24).

The aim of this thesis is to determine how long the office of the chief was important at Moundville by using data collected during the 2009 University of Alabama archaeological investigations. Three thesis objectives will help to answer this question and place the mound in an intrasite context. First, a ceramic chronology is constructed to determine the final occupation date for the mound. The excavations from the summit of the mound were shallow, broad horizontal expanses that are on an ideal surface to answer a question about the terminal occupation of a platform mound. The excavation units on the flank base of Mound P provided vertical profiles and diagnostic sherds from deep within the mound. The ceramic chronology

uses temporally diagnostic sherds that are present in the Mound P ceramic assemblage to reach this goal. The second research objective is to determine the kind of cultural activities that were occurring on the summit of the mound. This is accomplished through the analysis of modified stone artifacts, the presence of the pigment complex, and a large quantity of daub from a burnt wattle-and-daub structure. The activities and mound building stages that were analyzed will then be compared to other archaeological investigations at Moundville, specifically contemporaneous mounds at the site and within the Black Warrior Valley.

CHAPTER 3 MOUND P FLANK AND SUMMIT EXCAVATIONS

During the Jones Archaeological Museum expansion and renovation, a staircase was planned to join the newly constructed viewing patio on the east side of the museum with a viewing platform on the summit of Mound P. This platform would give museum guests an immediately accessible and dramatic overview of the plaza. In order to mitigate the impact that a stair case foundation would have upon the mound itself, OAR excavated two 1-x-1 meter test units in the southwest corner of the mound flank (which is closest to the museum) during the summer of 2009 (Figure 3.1a). Using Dr. Chester Walker's magnetometer data, The University of Alabama, Department of Anthropology 2009 annual fall field school placed nine, 1-x-2 meter units on the southeast corner of the Mound P summit (Figure 3.1b). These were located on the portion of the summit that is located directly above Dr. Boyce N. Driskell's 1988 eastern flank excavations (Figure 3.1c). While the patio adjacent to the east side of the museum is currently complete, the viewing platform on the summit has not been put into place as of the completion of this thesis.

The goal of this thesis research is to determine how long the office of the chief was important at Moundville. The mound flank and mound summit excavations accomplish this goal in two ways. First, excavation units on the flank of the mound provide deep stratigraphic profiles that reveal building stages and contain ceramics diagnostic of Moundville's temporal phases. This provides useful information regarding the Mound P occupational timeline. Second, excavation units on the summit of the mound provide a glimpse into the last activity that

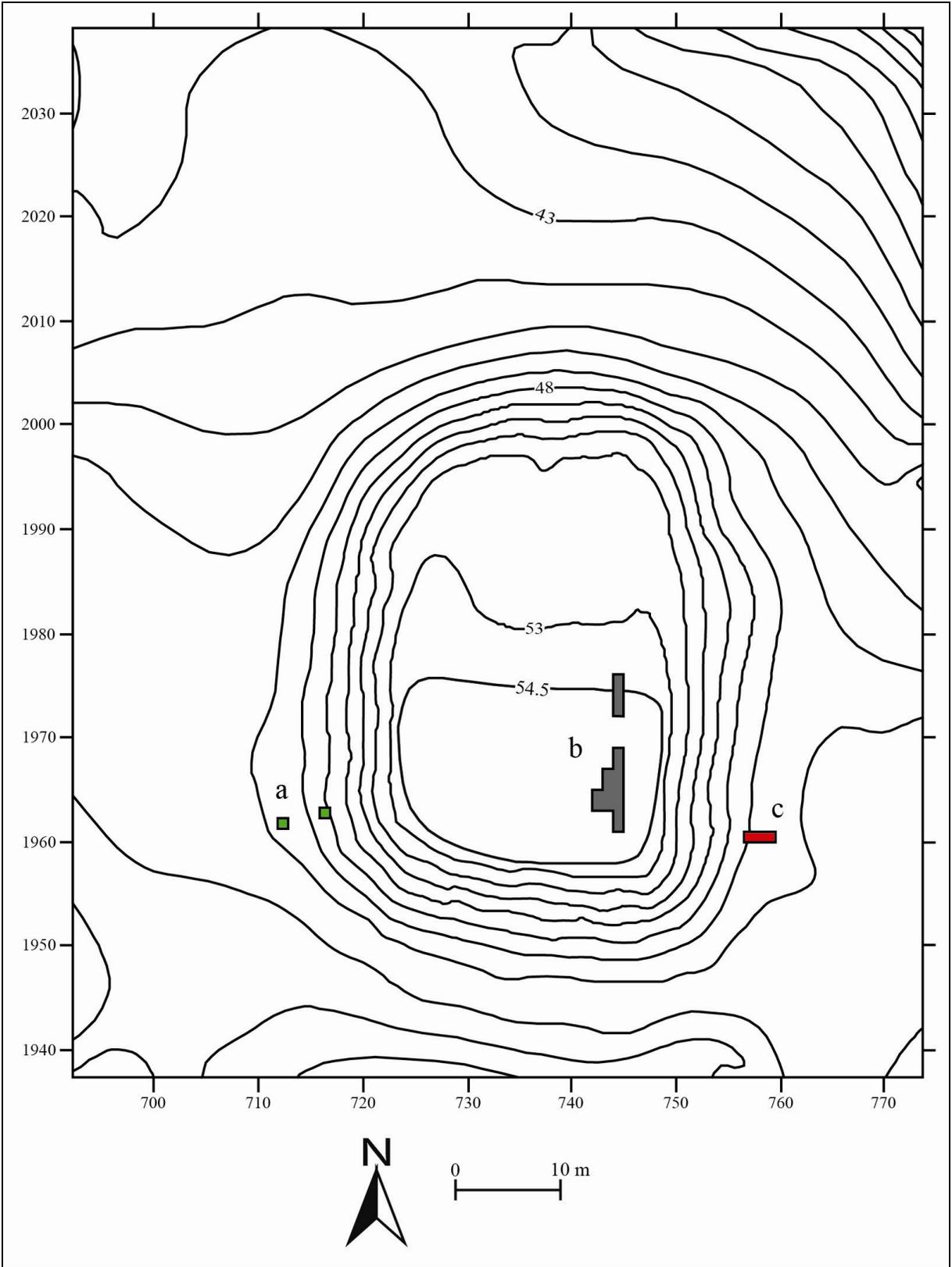


Figure 3.1. Mound P topographic map: (a) 2009 OAR western flank excavations; (b) 2009 summit excavations; (c) 1988 Driskall eastern flank excavations.

occurred at this location. The descriptions of each unit include details about unit depth and excavation method, soil color and texture, and a summary of the materials found within each of the levels. The excavated materials are discussed in depth in Chapter 4.

Excavation Methods

The 2009 OAR flank excavations on the west side of Mound P were conducted under the direction of Dr. Robert Clouse, Director of the University of Alabama, Museum of Natural History. While the excavation forms on file at OAR provide unit profile and plan view drawings, Dr. Clouse's field notes give additional insight into the excavation methods, level depths and soil descriptions from the excavation units (Appendix B). Test Unit 1 (referred to herein as Flank Unit 1) was located on the southwest portion of the flank and was excavated to a depth of about two meters below ground surface. Test Unit 2 (referred herein as Flank Unit 2) was located near the base of the mound, three meters to the west and one meter to the south of Unit 1 and was excavated to a depth of about one meter below ground surface. These test units were not placed on the Moundville site grid but are still visible by a distinct vegetation discoloration. While Unit 1 was placed on the flank proper, Unit 2 was located closer to the base of Mound P. Unit 2 was placed three meters west and offset one meter to the south of Unit 1. In other words, the north profile wall of Unit 2 and the south profile wall of Unit 1 are along the same easting coordinate set three meters apart east to west.

Unit level depths below surface were recorded using a transit and stadia rod. I calculated the excavation level depths from the raw rod readings in Dr. Clouse's field notes using the formula:

$$(BM + BS) - \text{raw rod reading} = \text{level elevation below ground surface}$$

where BM is the bench mark, or the reference elevation point, which was measured at 48.76 meters above sea level (MASL) and was based on the floor of the museum. The back sight (BS) would change from day to day, but is the reading from the transit to the number on the stadia rod when the latter is placed at the base measurement. Subtracting the raw rod reading would provide the level elevation below ground surface (Robert Clouse, personal communication 2011). In order to identify which excavation levels were associated with which strata, it was imperative to know the depths of each excavation level. The test units were exploratory in nature and therefore the excavation levels were dug in arbitrary levels that cross-cut natural mound strata. No previous modern excavations had been conducted on the western flank that would have established natural mound strata in this location, limiting the ability to excavate in natural soil layers. The excavation levels were originally planned to be removed in 10 centimeter increments, but this varied in both units due to artifact density and soil texture. All soil was dry screened through one-quarter inch hardware mesh except for flotation samples from Level 14 in Unit 1 and Feature 4 in Unit 2.

The recovered material from Unit 1 includes a large amount of prehistoric plain and decorated ceramic, modified and unmodified lithic, daub or fired clay, fauna remains, shell, charcoal and modern material. No carbon samples were recovered from Unit 1. All material is stored at OAR under Alabama Museum of Natural History (AMNH) accession numbers 2009.54.1 through 2009.54.32. The recovered material from Unit 2 includes a large amount of prehistoric plain and decorated ceramic, modified and unmodified lithic, daub or fired clay, fauna remains, shell, charcoal and modern material. No carbon samples were taken from Unit 2. All of this material is stored at OAR under AMNH accession numbers 2009.54.33 through 2009.54.53.

The Mound P summit excavations were planned to avoid major impact of a viewing platform on the summit of the mound. The viewing platform would affect the southern mound summit which is higher than the northern portion, creating the two-tiered summit profile that is still evident to this day. In anticipation of these excavations, Dr. Chester Walker of Archaeo-Geophysical Consultants, LLC conducted a magnetometer survey in 2009 on Mound P and the surrounding area to locate potential structures and other subsurface anomalies. His data indicated a large, rectangular subsurface anomaly that spanned the entire raised, southern portion of the mound (Figure 3.2). This has been interpreted as a possible large rectangular structure. Other possible structures were indicated on the lower northern half of the mound summit as well (Figure 3.3). Without archaeological excavations to ground-truth the data, the age and depth of the possible building cannot be understood. Based on Walker's survey, Dr. John Blitz developed a research design to ground-truth the large rectangular anomaly. If the anomaly was a large, burned structure, then excavation units in this location might intersect a portion of the building remains. A burned structure on the summit of Mound P would be the final occupation of the mound itself; therefore, a goal of the project was to obtain as much material and some carbon samples from the summit as possible in order to date the final occupation of the mound.

Archaeological investigation on the summit of the mound began in early September of 2009. Jeremy R. Davis, graduate teaching assistant for the 2009 fall field school, produced a contoured representative map of Mound P and the surrounding area with a total station, which Figure 3.1 is based on. The mapping that was conducted by Davis was able to graphically distinguish the two-tiered summit of the mound as well as a possible ramp on the plaza-facing eastern flank. A north-south trench aligned to the Moundville site grid was established on the

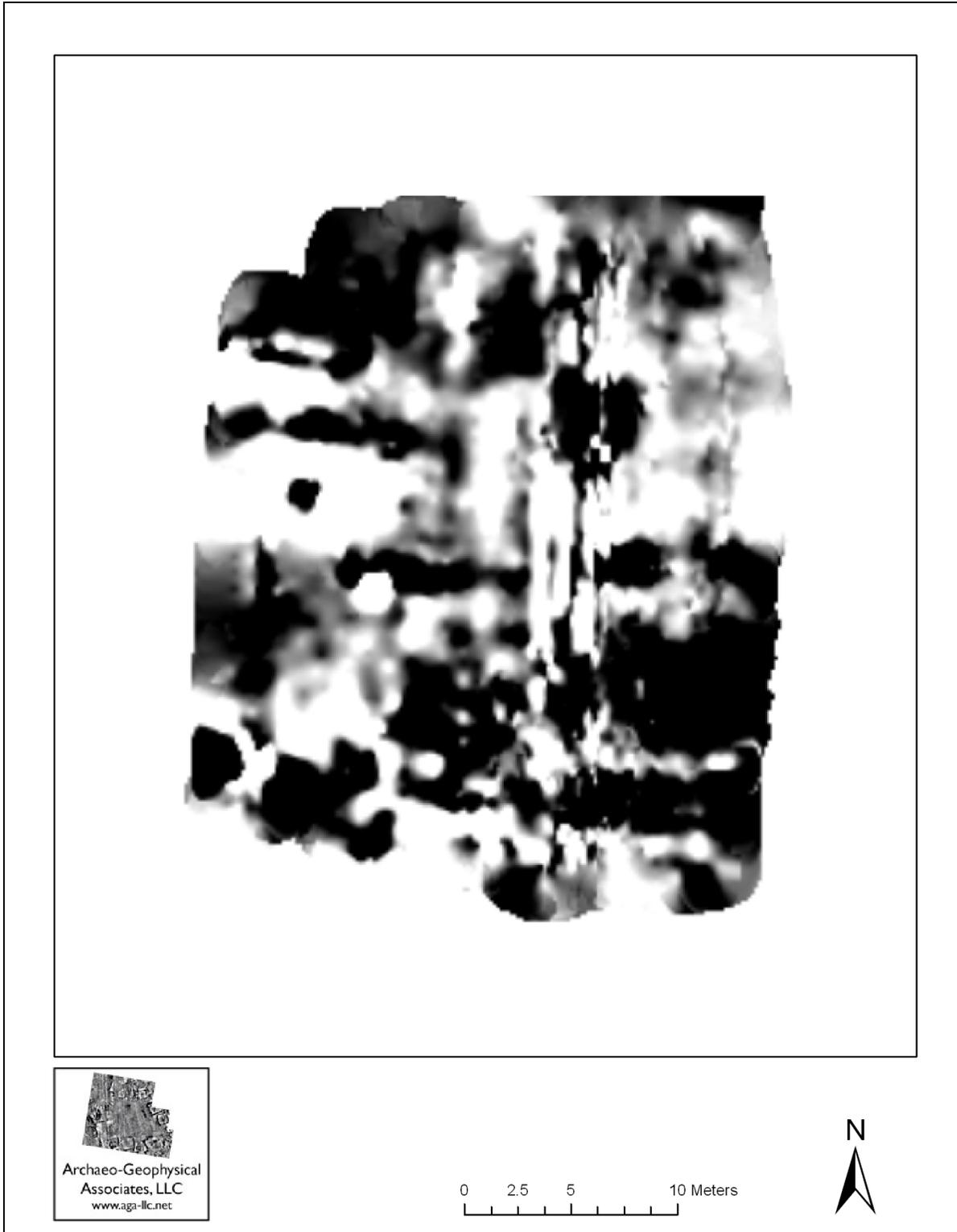


Figure 3.2. Magnetometer survey data. Summit, Mound P.

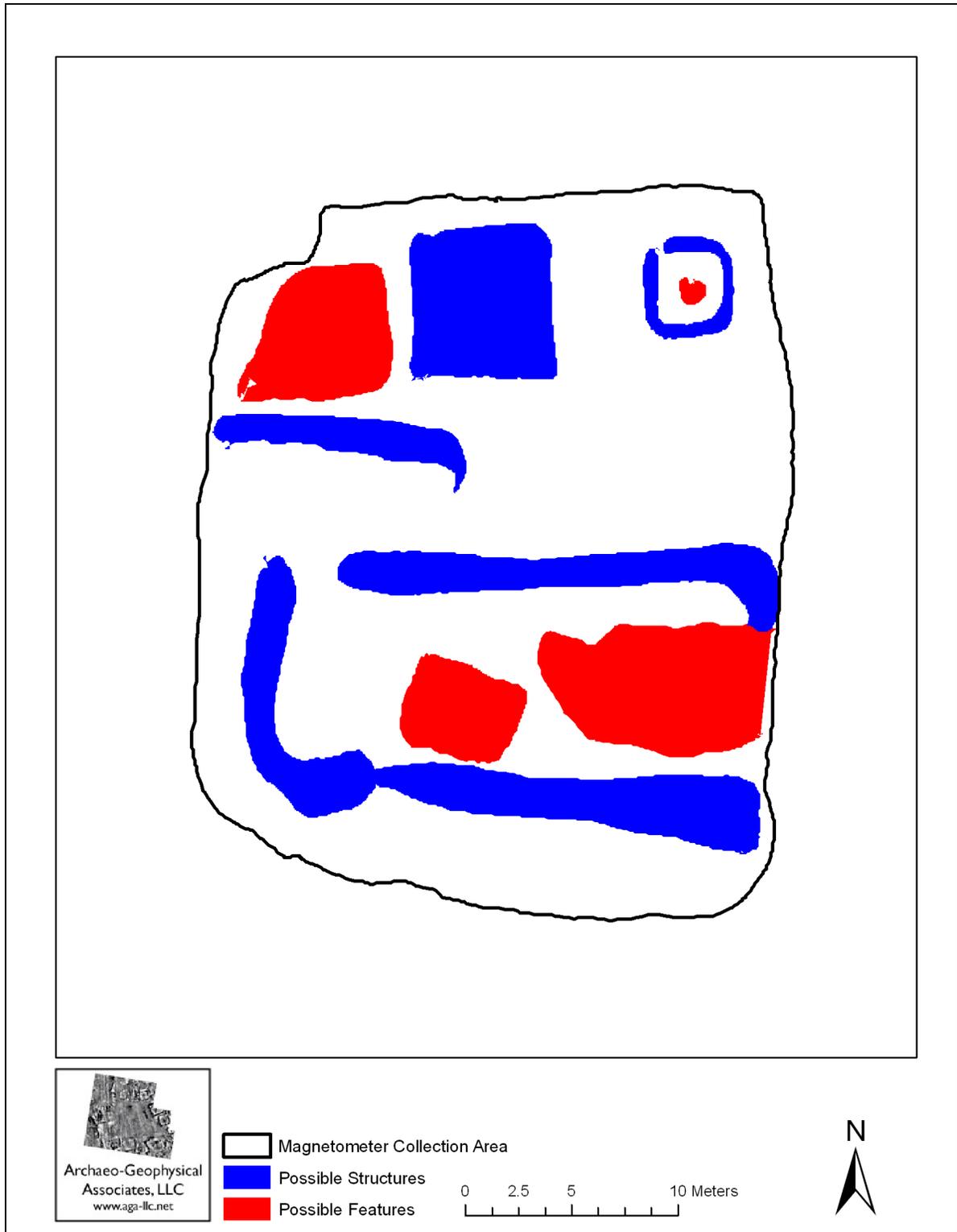


Figure 3.3. Walker's magnetometer survey interpretation. Ssummit, Mound P.

southeastern portion of the mound summit (see Figure 3.1b). As work continued, the excavations expanded horizontally to the west. A total of nine, 1-x-2 meter units were excavated in two blocks. I have assigned the excavation units a lettered shorthand name system in order to discuss them in a more efficient way: all field notes and AMNH accession numbers are organized by northing and easting coordinate. Block 1 includes: Unit A (N1961 E744); Unit B (N1963 E744); Unit C (N1963 E743); Unit D (N1963 E744); Unit E (N1965 E743); Unit F (N1965 E744); and Unit G (N1967 E744). This block was placed on the southeastern corner of the mound in an attempt to intersect any architecture that was indicated by the magnetometer survey. Block 2 is offset to the north by three meters from Block 1. Block 2 includes Unit H (N1972 E744) and Unit I (N1974 E744). These two units were placed on the slope between the southern, higher mound summit surface and the northern, lower mound summit surface.

The excavation strategy of these nine units was to remove the potentially disturbed top twenty centimeters of soil (classified in the field as plowzone) to expose the horizontal extent of features. This goal was met in all nine units within three centimeters below ground surface. Since units H and I were placed on a slope, the depths were recorded from the southwest corner of the units, which was higher in elevation. There was some disturbance on the summit of the mound that may have occurred during any mound clean up that may have occurred by the Civilian Conservation Corps in the late 1930s. This is indicated by modern materials from the plowzone in the form of a fragmented plastic comb and coins from the late 1930s to the early 1950s and other modern items. Unlike the deep vertical flank units excavated by the University of Alabama fall field school in 1988 and the OAR excavations in 2009, the shallow, horizontal mound summit excavations did not produce useful profiles because the excavation units were dug no deeper than 20 centimeters below ground surface.

A total of 62 features were recorded on unit plan views in the field, but only 30 of these were excavated due to time constraints. All features were recorded and excavated within Block 1 (Appendix A). While most features were recorded on the unit plan views, a plan or profile drawing was not produced for all excavated features. The materials were excavated from the Mound P summit features using trowel and spoon, screened through one-quarter inch mesh, and include: decorated and plain prehistoric ceramic; modified and unmodified stone; daub or fired clay; faunal remains; shell; botanical and carbon samples. All fifteen carbon samples were taken from features.

All of the material from the Mound P summit units was dry or wet screened through one-quarter inch mesh. No soil samples were recovered, but a total of 15 carbon samples were removed from summit features. The excavated materials from the Mound P summit excavation units include: decorated and plain prehistoric ceramic; modified and unmodified stone; faunal remains; shell; charcoal; daub or fired clay; and modern items. All materials from the 2009 fall field school excavations on the summit of Mound P are stored at OAR under AMNH accession numbers 2009.102.1 through 2009.102.47.

2009 OAR West Flank Excavations

Flank Unit 1

Flank Unit 1 is located on the southwest portion of the flank of Mound P. It was excavated to a depth of 210 centimeters below ground surface along the eastern portion of the unit and to a depth of 167 to 183 centimeters below ground surface along the western portion of the unit. The difference in excavation depths was due to the slope of the ground surface on the flank of the mound, thus arbitrary levels cross-cut some of the observed mound strata. The strata

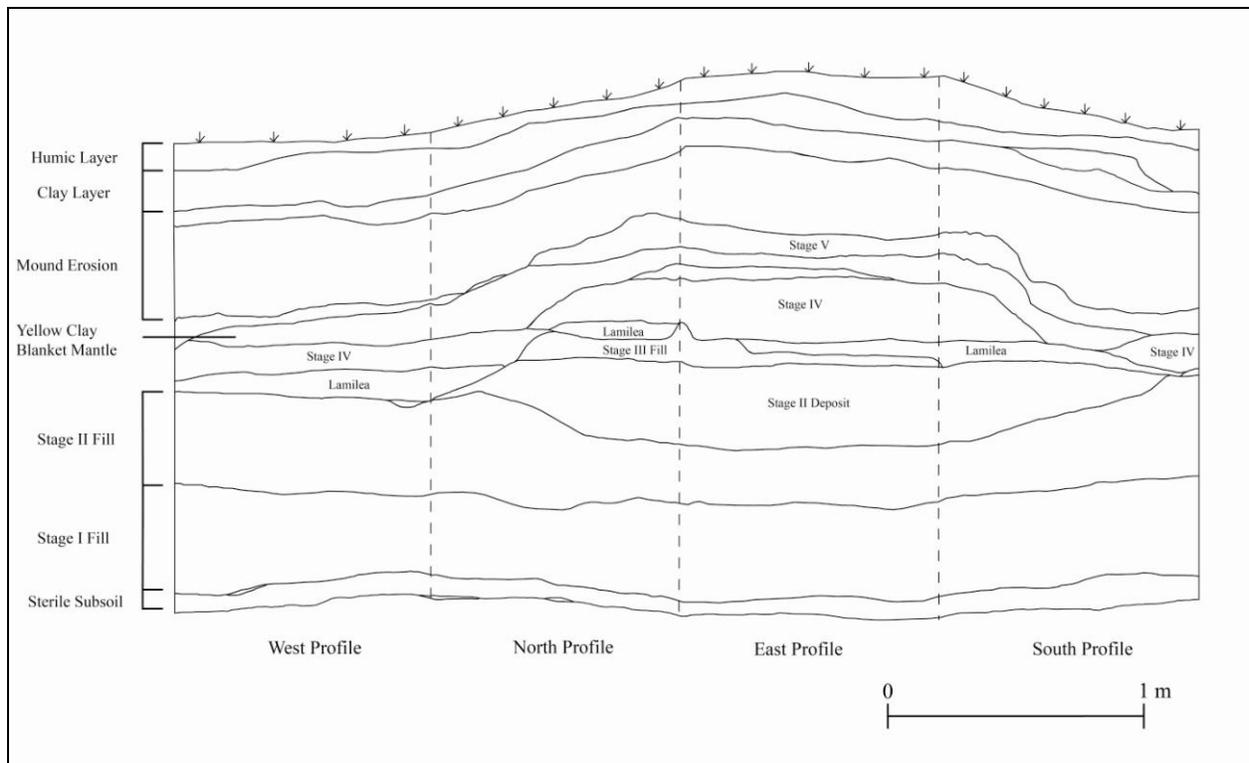


Figure 3.4. Natural mound strata. Flank Unit 1, Mound P.

layers were grouped into depositional zones on the basis of soil texture and artifact density to interpret the sequence of mound construction: *Humic Layer*, *Clay Layer*, *Mound Erosion*, *Stage V*, *Yellow Clay Blanket Mantle*, *Stage IV*, *Lamilea*, *Stage III Fill*, *Stage II Fill and Deposit*, *Stage I Fill* and *Sterile Subsoil* (Figure 3.4). The arbitrary excavation levels that cross-cut the mound strata were planned, 10 centimeter levels, but some of them differed based on soil differences and artifact density (Figure 3.5): Levels 1-7 and 17-20 are 10 cm thick levels, levels 8-13 and 16 are 5 cm thick levels, Level 14 is a 30 cm thick level and Level 15 is 20 cm thick. The only disturbances to the soil in Unit 1 occurred near the surface at a depth of about 20 centimeters below ground surface, evidenced by the presence of a 1936 United States penny within the Level 2 fill.

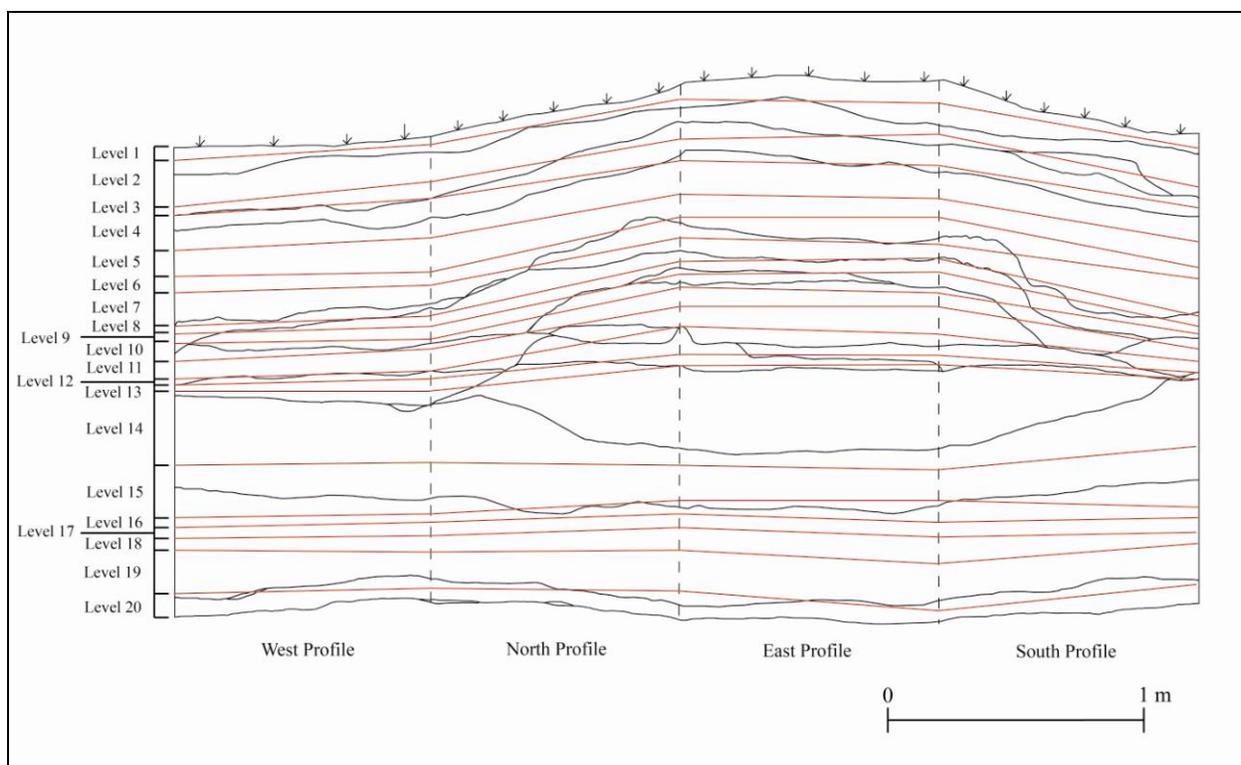


Figure 3.5. Flank Unit 1 with excavation levels overlaying natural mound strata, Mound P.

Clay Layer and Humic Layer. A thin humic layer overlays all of the soil zones for Unit 1. It extends to a depth of 5-17 centimeters below ground surface and the soil was black loam. Excavation levels 1 and 2 cross-cut this soil zone. The clay layer is 6-12 centimeters thick and the top of the layer is between 5-17 centimeters below the ground surface. The soil was dark grayish brown sandy clay mottled with reddish yellow, white, orange and red clay. The material from the clay layer of soil was excavated within excavation Level 2, which included prehistoric ceramic, unmodified and modified stone, faunal remains and fired clay. The presence of one Carthage Incised, *variety Fosters* flaring-rim bowl rim sherd indicates that the layer dates from the early Moundville III to Moundville IV ceramic phases, but this association may not be secure: a 1936 penny was also found within the soil zone fill, suggesting that this layer is mixed. Based on the mound stratigraphy and the cross-cutting nature of the excavation levels, it is

possible that the penny was recovered from the top portion of Level 2 (bottom of humic layer) and the Carthage Incised, *variety Fosters* sherd was found within Level 2, but this is cannot be confirmed. These soil zones overlay the mound erosion event and the interpretation of it has proved elusive. There is no mention in the field notes of loam, which would be expected for a layer of soil that overlays sandy loam and is underneath humus.

Mound Erosion. Sequences of mound erosion are present between 20-64 centimeters below ground surface and were up to 46 centimeters thick. The layer that was closer to the ground surface was very dark brown sandy loam with pottery and clay inclusions. This layer was cross-cut by excavation levels 3 and 4 and did not produce any diagnostic pottery. The deeper of the two layers is brown sandy loam and is cross-cut by excavation levels 3, 4, 5, 6, 7, 8 and 9. There was only one diagnostic ceramic sherd that was recovered from Level 8: Moundville Incised, *variety Moundville* standard jar rim. The entire zone contained prehistoric ceramic, modified and unmodified stone, faunal remains, shell and fired clay.

Feature 1 was recognized within excavation levels 2 and 3 as an irregular, brownish yellow area that included chunks of yellowish red clay within the dark brown sandy loam soil matrix that was present throughout the rest of the unit. The soil description does not conform to that of either mound erosion zone, the soil layers that Level 2 cross-cuts. It is possible that the yellowish red clay was the bottom of an anomalous clay layer that was located above it.

Stage V. Stage V is a thin deposit of mottled dark grayish brown and dark yellowish brown sandy clay with prehistoric ceramic, faunal remains, charcoal and shell inclusions. It is 3-11 centimeters thick and shows some evidence for erosion along the northern profile and the top of the layer is located 53-68 centimeters below ground surface. The arbitrary excavation levels

that contained the materials that were associated with this layer are 5, 6, 7, 8, 9 and 10. The only diagnostic prehistoric ceramic type that was present in the material assemblages from these levels was Moundville Engraved, *variety Havana*.

Yellow Clay Blanket Mantle. A layer of very dark brown sandy clay and yellow clay caps the previous stages across the entire unit. The layer of clay is 4-15 centimeters thick and the top of the layer begins about 66 centimeters below ground surface along the eastern profile wall. The layer corresponds to excavation levels 7, 8, 9, 10 and 11.

Stage IV. Mound Stage IV is present in all four of the Unit 1 profiles. This layer is a thick (8-23 cm) wedge of brown sandy clay with evidence of mound slope erosion indicated by discontinuity in the soil layers in the north and south profile. The top of the layer is 80 centimeters below ground surface. The materials that were excavated from this depositional layer were removed in portions of levels 9, 10, 11 and 12.

Lamilea. This stratum represents an intermediate layer of soil in the mound, where Stage III soils and Stage IV soils mixed due to erosion. The layer is found on all four profile walls and overlays Stage II and Stage III. The soil is described as mottled brown and brownish yellow “lamilea.” Artifacts were recovered from this layer in excavation layers 11, 12, 13 and 14. This layer contained prehistoric ceramic, modified and unmodified stone, fauna, fired clay and shell, but no chronologically diagnostic artifacts.

Stage III Fill. The Stage III Fill zone is present in the north and east profile walls. It is a thin (4-16 cm), dark brown sandy clay layer of soil with fauna, charcoal and shell inclusions. The top of the layer is 97 centimeters below ground surface on along the north profile and 108 centimeters below ground surface along the eastern profile wall. Stage III materials were

recovered within excavation Levels 11, 12 and 13. This layer contained prehistoric ceramic, modified and unmodified stone, fauna, fired clay and shell. No diagnostic artifacts could confidently be assigned to this soil layer.

Stage II Fill and Deposit. The Stage II Fill and Deposit overlay Stage I and are a thick deposit of mound fill. The upper layer (Stage II Deposit) is 1-32 centimeters thick and the top of the depositional layer is 104 centimeters below ground surface along the northwest profile corner and 111 centimeters below ground surface along the eastern profile. This soil layer is not present in the western profile. The lower layer (Stage II Fill) is 23-38 centimeters thick and the top of the layer is 104 centimeters below ground surface along the western profile and 143 centimeters thick along the eastern profile of the unit. The soil from this fill was dark grayish-brown sandy clay with inclusions of charcoal flecks and a high quantity of artifacts throughout the fill.

Stage II was excavated within excavation levels 12, 13, 14 and 15. While other excavation levels were between 5-10 centimeters thick, these two levels were much thicker: Level 14 was between 35-42 centimeters thick and Level 15 was between 10-20 centimeters thick. Level 14 was not recognized as a separate depositional episode until later; it was initially recorded as Feature 2. This soil change was recorded within Level 13 of Unit 1 as a 63-x-61 centimeter area in the northeast quadrant of the unit. The soil was described as a very dark brown sandy loam midden fill. After further excavation of the floor of the Level 13, it was revealed that the dark brown soil discoloration was not a feature but a stratum of mound construction that was uncovered across the entire floor of the unit and became excavation Level 14. Once this was recognized, archaeologists excavated Level 14 as a single stratum, saving two soil samples for flotation and screening the rest of the material.

Stage I Fill. This layer is 18-40 centimeters thick and the top of this depositional layer is at 140 cm below ground surface along the western profile of the wall and 166 cm below ground surface along the eastern profile of the unit. The soil from Stage I was brownish-yellow sand. Stage I soil was removed within excavation Levels 15, 16, 17, 18 and 19. The material assemblage from these excavation levels contained plain prehistoric ceramic, modified and unmodified stone, faunal remains and fired clay. Since Stage I is located deep within Unit 1, it represents an initial mound building stage above the sterile subsoil. Compared to Stage II, Stage I contained a noticeably smaller quantity of artifacts and materials than Stage II.

Sterile Subsoil. A thin layer of sterile subsoil was located at the base of Unit 1 at a final depth of 161 cm below ground surface along the western profile of the unit and 204 cm below ground surface along the eastern profile of the unit. Soils within this layer were yellow to reddish-yellow sandy clays. Five-to-ten centimeters of this soil layer was removed by excavation Level 20 and contained no artifacts.

Unit 1 Summation. Unit 1 was a deep test unit placed on the southwestern portion of Mound P's flank closest to the museum. It was excavated to a depth of 210 centimeters and yielded a large amount of cultural materials. The soil zones in Unit 1 were deposited in this order: *Sterile subsoil; Stage I; Stage II Fill and Deposit; Stage III Fill; Lamilea; Stage IV Deposit; Yellow Clay Blanket Mantle; Stage V Fill, Mound Erosion, Clay Layer and Humic Layer.* The three mound construction events (Stages I, II and III) were deposited on top of sterile subsoil. There was a brief period of erosion from an exposed surface (Lamilea) followed by another mound fill layer. At this point, the mound appears to have been capped by a yellow, clay blanket mantle that is commonly found within other mound stratigraphy at Moundville (Knight 2010). There was another mound construction event (Stage V) which is overlain by a zone of

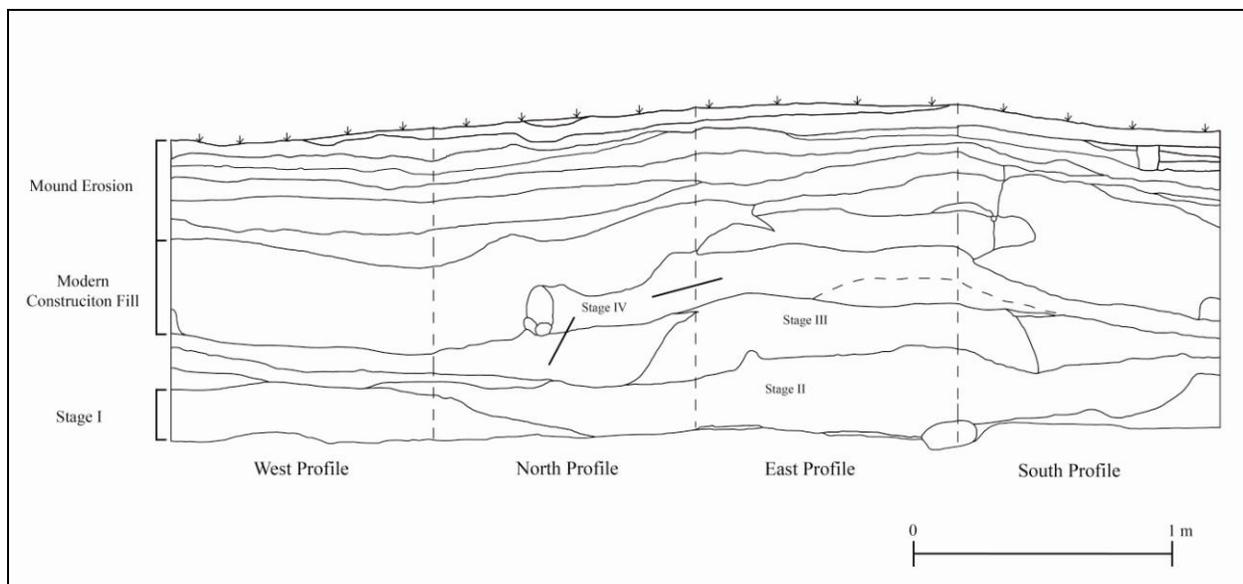


Figure 3.6. Natural mound strata. Flank Unit 2, Mound P.

mound slump, or erosion. Overlaying this mound erosion event is a clay layer and a humic layer, which are also very likely to be the result of mound flank erosion.

Flank Unit 2

Unit 2 was excavated to a depth of one meter below ground surface. Since the ground surface at this location is more level than that of the ground surface for Unit 1, there was not the large discrepancy in excavation depths below ground surface that there was with Unit 1 (see above). The excavation strategy for Unit 2 was to excavate the unit using contoured, ten centimeter arbitrary levels, the identical strategy that was used for Unit 1.

The disturbance to the soil of Unit 2 was greater than that of Unit 1. Whereas Unit 1 showed signs of soil disturbance to a depth of 15-20 centimeters, the disturbance to the soils of Unit 2 was indicated to a depth of 65 centimeters below ground surface by the continued

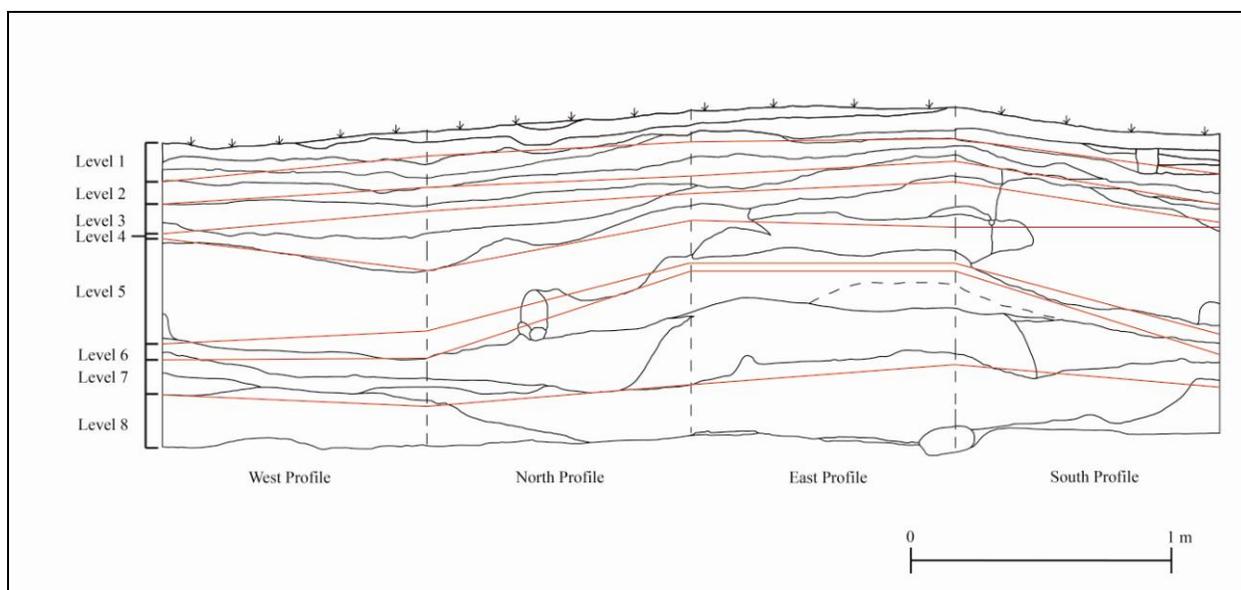


Figure 3.7. Flank Unit 2 with excavation levels overlaying natural mound stratigraphy, Mound P.

presence of rusted, ferrous metal, cinders, slag and a broken modern boot heel. The mound strata layers were grouped into depositional zones on the basis of soil texture and artifact density to interpret the sequence of mound construction: *Mound Erosion*; *Modern Construction Fill*; *Stage III*; *Stage II*; and *Stage I* (Figure 3.6). It should be noted that these stages could not be directly matched to the soil zones from Unit 1. The excavation levels within Unit 2 varied in depth and thickness based on the density of artifacts and some natural soil changes (Figure 3.7). Levels 1-3 were 10 centimeters thick, but Level 4 was 2-18 centimeters thick. Level 5 was 20-40 centimeters thick and Level 6 was between 5-10 centimeters thick. Level 7 was 10-40 centimeters thick and Level 8 was 20 centimeters thick.

Mound Erosion. There are seven soil layers that are subsumed under the soil zone “Mound Erosion.” This zone extends from the ground surface to 36-45 centimeters in depth below ground surface. These thin bands of sandy loam or loam are wash from the flank of the mound. Excavation levels 1-4 contain the material from this zone. There were no diagnostics

contained in the material assemblage from these layers. The excavation notes did not indicate the presence of a humic layer, but it is possible that an unlabeled soil layer directly underneath the ground surface could have been humus.

Modern Construction Fill. This soil zone is a thick layer of clay with reddish and white mottles. It is between 19-45 centimeters thick with the top of the layer located 22-45 centimeters below ground surface: the base of the level is 66-84 centimeters below ground surface. Excavation levels 4, 5 and 6 all contain materials from this zone and include a brick fragment, a boot heel, as well as slag and rusted ferrous metal nails. The unit's location close to the museum could mean that this area was disturbed during the CCC years. The presence of modern construction material to a depth of up to 84 centimeters below ground surface is indicative of the amount of disturbance that occurred in this location during the late 1930s. All of the soil layers above this depth are considered disturbed since the first half of the twentieth century.

Stage IV. Stage IV is a layer of very dark brown sandy clay with a small area of dark brown clay laminated with lighter clay and dark brown bands, the latter found in the southern profile and representing a possible erosion event. This layer is 23-36 centimeters thick and the top of the layer is located 55 centimeters below ground surface. Like Stage III and a portion of Stage II, Stage IV is included in excavation Level 7, as well as a portion of excavation Level 6.

Stage III. This layer is a concentrated wedge of very dark brown clay that is located primarily in the eastern wall profile of Unit 2. The top of the layer is located 78 centimeters below ground surface and the layer is 16-25 centimeters thick. The entirety of this layer is subsumed within excavation Level 7, which also cross-cuts through, or includes, other soil

layers. Level 7 included one diagnostic ceramic sherd: Moundville Incised, *variety Moundville*, which is the only diagnostic sherd from the non-disturbed soil layers.

Stage II. This soil zone is thickest in the eastern portion of the unit, but becomes a thin band as it is traced west until it tapers and disappears in the west profile. The top of this layer rests 95-104 centimeters below the ground surface and has a variable thickness of up to 28 centimeters. The soil is described as grayish brown clay with very fine gravel included in the fill. Excavation Level 8 recovered the majority of the artifacts from Stage II, but the bottom portion of Level 7 also cross-cuts the boundary between this layer and Stages III and IV. At its thickest, Level 7 is just over 40 centimeters thick and therefore consumes a large amount of the depositional layers of Unit 2. The material from Level 8 included plain prehistoric ceramic, modified and unmodified stone, faunal remains and fired clay. There were no diagnostic ceramics identified within this layer.

Stage I. This yellowish brown clay zone is located at the base of Unit 2. It is evident primarily in the western profile and tapers in the north and south profiles, becoming barely visible in the eastern profile. The top of the layer is approximately 91 centimeters below ground surface and is up to 20 centimeters thick. The soil was described as yellowish brown clay. The materials that were removed from this layer were part of excavation Level 8, which also contains the materials from Stage II.

There were two features that were recorded within Unit 2. Feature 3 was identified within Level 4 as a thin, trench-like soil change that was 72 centimeters in width north-south and 20 centimeters in width east-west. The soil was described as brown loam. This feature may have been a recent trench that was cut into this area as it intrudes into Level 5. Feature 4 was

recognized and recorded within Level 7. It was first identified as a distinct area of very dark brown clay, but as further excavation was conducted, the feature turned into a natural layer of soil. This natural layer of soil became Level 8. Some of the material from what was Feature 4 was saved in the field and floated in the OAR laboratory.

Unit 2 Summation. Unit 2 was not as deep as Unit 1, but did reveal some important stratigraphy which was deposited in this order: *Stage I, Stage II; Stage III; Stage IV; Mound Construction Fill; Mound Erosion.* Based on the presence of modern materials throughout the top 65-84 centimeters of the unit, Stage IV is the first soil layer that shows no evidence for disturbance. The thin bands of brown to dark brown soils that are present from the ground surface to a maximum of 57 centimeters in depth most likely represent erosion events (wash or slump) off of the southwestern flank since the late 1930s, since they cap the construction fill, which is disturbed soil that may have been deposited here during this time, as the boot heel is found within this soil matrix. One Moundville Incised, *variety Moundville* diagnostic ceramic sherd was present in the lower, undisturbed soil layers of Unit 2.

2009 Field School Summit Excavations

Mound P Summit Features

The goal of the 2009 fall field school was to remove the top 20 centimeters from the nine 1-x-2 meter excavation units in order to expose the underlying features and determine their spatial relationships (Figure 3.8). In order to determine the relationships of different features from the summit of Mound P, features were categorized by characteristics such as horizontal and vertical dimensions and content. Four categories of features were identified: *Depressions; Post*

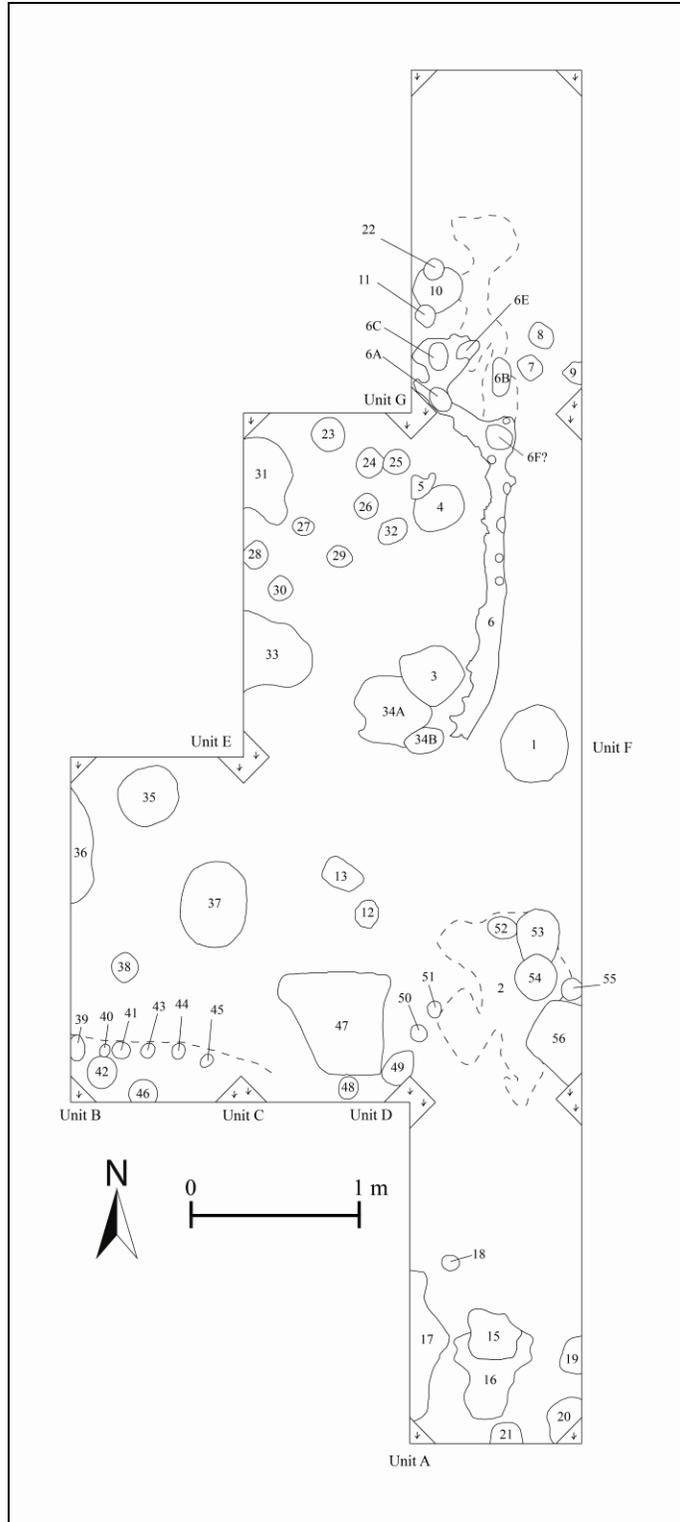


Figure 3.8. Summit Block 1, Mound P.

Holes; Bioturbation and finally a *Residual* category. Residual features did not fit into a category or were unexcavated, but based on shape and association with other features, were tentatively classified as *Soil Discoloration* or *Post Hole*. The bioturbation category represents rodent burrows. A full list of features excavated from the summit, as well as their description with plan and profile views, is available in Appendix A.

Depressions. Depressions were located throughout Block 1. They varied in size and content, but I have divided this category into two separate yet distinct types: daub-filled depressions and shallow depressions. Daub-filled depressions (n = 6) are characterized as small to large diameter (18-68 cm), shallow depth (13-20 cm) features that tend to contain a higher quantity of artifacts than shallow depressions. These features were possibly filled in with daub when the final building was razed or burned. Shallow depressions (n = 6) are identified as small to large diameter (7-90 cm), shallow depth (5-23 cm) features that tend to contain a lower quantity of artifacts than daub-filled depressions. The criterion that distinguishes daub-filled depressions from shallow depressions is the quantity of recovered daub or fired clay. While shallow depressions all have less than 500 grams of daub or fired clay, daub-filled depressions all have greater than 500 grams of daub or fired clay. Neither daub-filled depressions nor shallow depressions form any sort of discernable pattern or concentration in the summit unit plan view. Residual soil discolorations (n = 13) are present throughout the summit unit plan view. They are distinct from residual post holes due to shape and associations with other features.

Post Holes. While the depressions did not form any sort of recognizable spatial pattern, there were some patterns present in the spatial distribution of post holes. Post holes are present across the entire excavation base of the 2009 units. I have divided post holes into three types: small-shallow; small-deep; and large-deep. Small-shallow post holes (n = 3) were less than 30

centimeters in diameter and 20 centimeters or less in depth. Small-deep post holes (n = 8) were less than 30 centimeters in diameter, but 21 centimeters or more in depth. Large-deep post holes (n = 2) were greater than 30 centimeters in diameter and more than 20 centimeters in depth. Residual post-holes (n = 16) were identified and recorded in the field, but not excavated. I have included these features in this category due to their spatial relationships with other features and their dimensions and shapes.

Features 35 and 37 were both identified as large-deep post holes. Feature 35 was 32-x-35 centimeters in diameter and excavated to a depth of 34 centimeters. It is located in the northern portion of Unit B. Feature 37 was located on the border of Unit B and Unit C. It was 40-x-52 centimeters in diameter and was excavated to a depth of 59 centimeters. Excavation did not continue deeper in order to avoid intrusion into other layers or possible features. Feature 37 was first identified in the field as a daub concentration but once excavation began, it became evident that it was a post hole. The soil was loose sandy loam and there was a dark, circular stain located in the middle of the feature until the terminal depth.

While analyzing the summit unit plan view, two sets of post hole patterns are evident. The first is located in the northern half of Unit E and is comprised of features 24-30. Of these post holes, features 26, 28, 29 and 30 were excavated and contained very little material: features 24, 25 and 27 were not excavated. These features form two linear patterns that follow a southwest to northeast trajectory. This pattern may be associated with Feature 6 and its associated post holes (discussed below). A second pattern that appears consists of residual post holes in a linear pattern of small, dark reddish brown sandy loam soil stains that are oriented in an east-west pattern along the southern profile wall of Unit B. This line of residual post holes comprises of features 40, 41, 43, 44 and 45 which were all located within a distinct area of soil

that was only delineated with a dashed line on the plan view. This line of small, residual posts could have been a thin partition wall that functioned to separate space on the interior of a building, but exact function remains unknown.

Feature 6. Feature 6 was a long, shallow linear concentration of daub and dark brown silty loam that ran roughly north-south through Unit F and terminated in Unit G. It was more than 2 meters in length and varied between 8-20 centimeters in width. The presence of post holes was indicated in the field notes and photos (there are no field notes for these or marked associated materials). Final photographs indicate that there are four or five small, excavated features in the northern portion of the feature. In the southern portion of Unit G, a broad area was considered part of Feature 6. Once this area was cleaned with a trowel, more features were recognized (6A, 6B, 6C and 6E). Feature 34B, a small-deep post hole, was also recognized below the southern extent of Feature 6 after cleaning the unit base surface. This pattern of post holes associated with a shallow line of daub filled soil is the strongest indication of architecture that was excavated during the field school. It may be a partition screen or the support for what would have functioned as a bench or sleeping platform.

Summit Excavation Summation. The 2009 fall field school excavated nine, 1-x-2 meter units in the southeastern portion of Mound P's summit to a depth of 20 centimeters below ground surface to expose features. This was done in order to intersect the corner of a large, sub-surface anomaly that extends across the entire southern portion of the summit, as indicated by Dr. Chester Walker's magnetometer data. While it is not clear from the spatial distribution of the depressions and post holes if this sub-surface anomaly was encountered, it is clear that the 2009 fall field school uncovered three patterns of post holes and a scatter of depressions that contained

daub and other artifacts. In total 62 features were recorded in the field, 30 of which were excavated.

Mound P Excavation Summary

The 2009 excavations into the flank of Mound P by OAR and on the summit by the Department of Anthropology marked the most extensive modern archaeological excavations on the mound. Dr. Boyce N. Driskell's eastern flank excavations in 1988 gave an early indication into the mound stratigraphy on that side of the mound. The 1988 field school encountered a large amount of daub within Zone 2, Moundville III diagnostic ceramics (Carthage Incised, *variety Fosters* and short-neck bowl rims) as well as a single Alabama River Incised sherd (Knight 2010:236). The presence of a large quantity of daub located on the flank below the 2009 summit excavations is not surprising, as a large, burnt-daub structure existed on the terminal occupation layer of the summit, just as Knight (2010) had suspected. Further, Dr. Cameron H. Lacquement's plaza test unit to the east of Mound P revealed that there was little to no artificial fill near the mound, but there was evidence of mound wash (2009). The two test units on the western flank indicate that there was both a great deal of erosion and modern construction activity that has occurred at the base of Mound P. They also are good indicators of some possible mound building events. Unit 1 indicates at least two mound building events: Stage II Fill and Deposit and Stage IV. There is no indication of a mound building event from Unit 2, as this unit is heavily disturbed and located on the base of the mound.

The summit units did not encounter any of C.B. Moore's 1905 trial holes, but did uncover a large expanse of features in the southeastern corner of the mound summit. This was done in order to determine the nature of a large sub-surface anomaly that was indicated by a

magnetometer. There were three patterns of post holes that were uncovered on the summit, but they did not form a discernable pattern that could confidently be identified as architecture. The architecture that is present on the summit of the mound is present in the large quantity of daub that was excavated in 2009. The soil from the 2009 Mound P excavations yielded a large amount of decorated and plain prehistoric ceramic, non-vessel ceramic, modified and unmodified stone, daub and fired clay, faunal remains, shell, charcoal and carbon samples, as well as modern material. These materials are discussed in depth in Chapter 4.

CHAPTER 4 ANALYSIS OF EXCAVATED MATERIALS FROM MOUND P

This chapter presents the classificatory descriptions of excavated materials from the 2009 University of Alabama, Mound P excavations described in Chapter 3. The 2009 OAR and fall field school excavations uncovered a large quantity of material, including prehistoric ceramic, modified and unmodified lithics, fauna, daub and some modern items. The purpose of this thesis is to determine how long the office of the chief was important at Moundville. Three thesis objectives were presented in the introduction: first, a chronology must be established based on diagnostic ceramic types and varieties to understand the occupational time line of Mound P; second, the activities that were occurring on the summit of the mound can be indicated from the material that was recovered from the excavations; and finally, the archaeological excavations from Mound P will be compared to other mound excavations at Moundville to place the mound within an intrasite context. This chapter will present the excavated materials that will be used to address these three thesis objectives in Chapter 5.

Laboratory Methods

All items were quantified by count and weight (in grams), recorded on standardized data collection sheets (Appendix D) and then entered into Microsoft Excel. The flank material that was excavated by OAR had previously been sorted and catalogued in accordance with their curation standards under AMNH accession number 2009.54 by OAR staff (Bade et al 2009). All of the materials from the summit were sorted, catalogued and accessioned (2009.102) by the

author following the same standards. I analyzed all of these materials at the Office of Archaeological Research at Moundville State Park and on the campus of the University of Alabama, Department of Anthropology in 2010 and 2011.

The ceramic assemblage that was recovered from the flank of Mound P was sorted and bagged into categories by employees at the OAR in the summer of 2009, regardless of size. In order to begin my own analysis of the ceramics from the flank, three steps had to be conducted to keep this data collection consistent with the recording of the summit material. First, the ceramics were separated by size: ceramic sherds less than one-half-inch were weighed but not counted. Second, ceramics were sorted into burnished and unburnished categories, following the sorting guide set forth by Steponaitis (1983:51). Finally, ceramic sherds within the burnished and unburnished categories were identified to type and variety, counted, and weighed. The sorting protocol for the summit materials followed the same lines as the above analysis, with an additional step being added to the beginning of the sequence; since all of the materials were not sorted by category, all ceramics were separated from non-ceramic material. Analysis steps one through four from above then commenced.

In order to classify the stone that was found within the Mound P assemblage, I referred to Knight (2010), Scarry (1995) and the comparative collection at The University of Alabama, Office of Archaeological Research at Moundville. The stone material excavated from the flank of Mound P was sorted and bagged by employees at OAR in the summer of 2009, regardless of size. In order to begin my own analysis of the stone from the flank, three steps had to be conducted. First, the stone was sorted by size: stone material less than one-half-inch was weighed but not counted. Second, stone was separated into flaked, ground and unmodified categories. Finally, stone within these categories was identified, counted and weighed (in grams).

The stone excavated from the summit was weighed and counted in the laboratory at OAR. The sorting protocol followed the same guidelines as above, with an additional step being added to the sequence. First, since not all of the materials were sorted by type, all modified and unmodified stone was separated from non-lithic material. Second, all lithic materials that were smaller than one-half-inch were weighed but not counted following the research design protocol. Third, stone materials were sorted into flaked, ground and unmodified categories. Finally, stone within these categories was identified, counted and weighed (in grams).

An unfortunate bias exists when the archaeologist considers faunal remains: the use of one-quarter inch screen creates a bias towards larger animals, as smaller rodent, bird, reptile and fish bones fall through the screen during recovery in the field (Peres 2010). If faunal and botanical remains are present, the use of flotation, column sampling, water screening or a smaller sized screen is necessary for the inclusion of these animals in any zooarchaeological assemblage (Peres 2010:22). Only a small portion of the flank material, from Unit 1, Level 14, was floated, which provided a more complete representation of faunal material from the mound.

The laboratory methods in identifying bone and shell deviated slightly from what was done for the ceramics and the lithic material. While the bone and shell from the summit were separated by one-half inch along with the other materials, care was taken to gather the maximum amount of material that was identified as bone as possible from the geologic sieve. Recovery of all fauna from the larger body of less than one-half inch fired clay, ceramics and lithic was not perfect however, and an in depth analysis of fauna from Mound P will have to distinguish all bone from this collection.

Bone and shell from the flank excavations were processed and separated by OAR staff. All bone and shell, regardless of size, were weighed and counted from Units 1 and 2. The bone counts presented are conservative due to the highly fragmentary nature of poorly preserved and fragile animal bone. The data recovery of vertebrate and invertebrate remains from the analytical units is regrettably not perfect: the difference in a more thorough analysis of the fauna will lie in taxon identification and count, since no identifications were made in the lab. The overall weight of the assemblage is expected to differ minimally.

Other materials that were analyzed as part of the Mound P material assemblage were daub, or fired clay, modern material and all material that was less than one-half inch in size. Daub larger than one-half inch was weighed in grams, but not counted, due to the volume and fragmentary nature of the fired clay. All modern material was counted, weighed (in grams) and identified. The ceramic, lithic and daub material categories make up the bulk of the less than one-half inch category. All of this material from the flank was separated using geologic sieves, weighed and bagged with larger items of the same category. All material from the summit that was less than one-half inch was weighed in grams and bagged together.

Ceramic Type-Varieties and Modes

The sorting protocol that is used for Moundville ceramics separates what could be an overwhelming mix of broken vessels into an ordered system of variable paste consistencies, finishes and decorative technique, the characteristics that identify a ceramic *type* (Steponaitis 1983:50). A type is a combination of attributes that cannot be separated without defining another type (Rice 1987:276). A variation (*variety*) of a ceramic type is defined as sherds within a type

that vary slightly by paste composition or have been decorated in a different way (Steponaitis 1983).

The first contributing attribute to a type is the paste consistency and temper. The clays that make up the corpus of Moundville ceramics are mineralogically all very similar (Steponaitis 1983:20-1). Temper is a substance that is added to the clay that a vessel is produced from and changes the properties of the clay at any point during production (Rice 1987:407). It should be noted that tempers are not inclusions, which naturally occur in clay (Rice 1987:409-10). The most common temper that is found within Moundville pottery is crushed shell (Steponaitis 1983:20). Shell temper allows for a slower expansion of a cooking vessel, leading to less breakage while the vessel is heated (Rice 1987:410). Grog (crushed pottery) is another common temper that is found at Moundville (Steponaitis 1983).

There are two decorative techniques that define types within the Moundville ceramic sequence: burnished and unburnished pottery. *Burnishing* is achieved through the compaction and smoothing of the vessel wall with a smooth object, such as a river pebble or bone (Rice 1987:138). At Moundville, burnished vessels were smoothed when the clay was in a relatively dry state, leaving the vessel with a glossy and smooth appearance (Steponaitis 1983:23-4). *Unburnished* vessels at Moundville, usually jars, are smoothed when the paste contains more moisture and are smoothed over with an object that is not as firm as one used on burnished vessels (Steponaitis 1983:23). These decorative finishes contribute to the definition of the major Moundville ceramic types. Moundville Incised and Alabama River phase types are unburnished; Moundville Engraved and Carthage Incised types are burnished.

The manner in which vessels are decorated is also a contributing factor in the definition of a type. Decorative techniques that define type at Moundville are incising and engraving. *Incised* decoration is achieved through simple carving by a pointed implement or stylus through the clay while it is in a plastic or leather-hard consistency (Rice 1987; Steponaitis 1983). Incising designs into plastic clay leave “burred margins and pushed-up heels” on the tail end of the incised lines, as seen in Moundville Incised and some non-local types (Steponaitis 1983:28). Incisions drawn in leather-hard paste create the U-shaped, “compact trough and clean edges” that are present on Carthage Incised decorations (Steponaitis 1983:28-9). *Engraving* is a decorative finish that is conducted with a stylus after the clay of the vessel is very dry or it has already been fired (Steponaitis 1983:29). This has a different decorative effect than incisions, as the lines “tend to be relatively narrow, and often exhibit chipping along the margins and in the trough” of the engraved design (Steponaitis 1983:29).

Vessel Form

There are three categories of vessels that are present at Moundville, all in standard shapes: bottles, bowls and jars. Plates are another vessel form that may be present, but identification of a plate rim may be difficult due to its similarity to shallow-flaring rim bowls (Knight 2010). There are also certain vessel forms that are important chronologically. While a more complete description of vessel form is available elsewhere (Knight 2010; Knight and Steponaitis 1998; Steponaitis 1983; Taft 1996), the discussion of vessel form here will focus on what was found from the Mound P excavations. Within the Mound P ceramic assemblage, bottles, bowls and jars were identifiable, whereas there were no identifiable plates. Vessel forms were identified in the lab through the contour of a larger vessel sherd or from the rim profile.

Bottles are distinguished by a clear distinction between the body and the neck (Taft 1996:18). There were no identifiable bottle forms within the ceramic assemblage except for a subglobular bottle slab base. Subglobular bottles are globular, ellipsoidal and may have a wide, ovoid body (Steponaitis 1983:66). Steponaitis (1983:66-8) identifies subglobular by base form. Slab based subglobular bottles date to the late Moundville II to early Moundville III ceramic phases (Steponaitis 1983).

Bowls rarely have a neck, but when they do, it is a “short vertical neck, everted lip, or diagonally flaring rim” (Steponaitis 1983:68). Bowl rims were the dominate rim form that was identified in the ceramic assemblage from Mound P which included: cylindrical; terraced rim (eccentric); flaring-rim; outslanting; restricted; short-neck; simple and unidentified bowl forms. Cylindrical bowls commonly have relatively straight walls and typically exhibit a rounded bottom (Steponaitis 1983). This bowl form is diagnostic of early to late Moundville II through early Moundville III (Steponaitis 1983). Terraced rim or eccentric bowls are distinguished from the rest of the vessel forms by a square to rectanguloid body shape a stepped (castellated) or cutout rim, with one of the sides being lower than the rest (Knight 2010; Steponaitis 1983; Taft 1996). Terraced rim, or eccentric bowls date to the Moundville II phase (Steponaitis 1983).

Flaring-rim bowls have a hemispherical bottom with an outflaring rim. There are two subcategories to flaring-rim bowls: shallow and deep. Shallow flaring-rim bowls date from Moundville I through Moundville III. Deep flaring-rim bowls are diagnostic of late Moundville III (Steponaitis 1983). Outslanting bowls have a rounded base and relatively straight walls that slant outwards in the upper one half to two-thirds of the bowl. Outslanting bowls are uncommon during the Moundville II phase (Steponaitis 1983). Restricted bowls look like subglobular jars, but instead of a neck, they exhibit an orifice that is less than three fourths of the diameter of the

body. Restricted bowls are present in the Moundville I through Moundville III phases (Steponaitis 1983).

The short-neck bowl form at Moundville “exhibits a subglobular body, a restricted orifice, and a short, vertical neck” (Steponaitis 1983:68). Short-neck bowls are diagnostic of late Moundville III and continue into Moundville IV (Vernon James Knight, Jr., personal communication 2011; Steponaitis 1983). Simple bowls have no inflection points, have relatively straight sides and are present from the Moundville I through the Moundville III phases (Steponaitis 1983). Bowl rims that were too small or fragmentary, but could not be any other vessel form, were classified as unidentified bowl rims.

Jars have a globular body, a wide, constricted neck that is narrow in profile and large vessel orifice (Steponaitis 1983:69; Taft 1996:25). Jars have at least two handles that bridge the neck. Jars have two forms and one finish classification: neckless, standard and burnished. Standard jars are recognized by an outslanting neck: handles increase in frequency the later in date the ceramic sequence progresses. Jars have two handles during Moundville I; two-to-four during Moundville II into early Moundville III, with jars of eight or more handles becoming common during the late Moundville III phase (Steponaitis 1983). Handles also become thinner during the later part of the ceramic chronology, possibly becoming less functional and more decorative. Jar handles were counted and weighed when they were not attached to any other portion of the vessel (Knight 2010:51). Jar collars were counted and weighed when there was a collar present with a clear inflection point or the presence of a handle scar (Knight 2010:51).

Types and Varieties

Table 4.1. List of present ceramic types, Mound P.

	West Flank Excavations (2009)	Summit Excavations (2009)	Totals
Mississippi Plain	2,244	1,307	3,551
Moundville Incised, <i>var. Carrollton</i>	1		1
Moundville Incised, <i>var. Moundville</i>	4		4
Moundville Incised, <i>var. unspecified</i>	19	16	35
Bell Plain	534	435	969
Carthage Incised, <i>var. Akron</i>	3		3
Carthage Incised, <i>var. Carthage</i>		2	2
Carthage Incised, <i>var. Fosters</i>	1	1	2
Carthage Incised, <i>var. Lupton</i>	1	3	4
Carthage Incised, <i>var. Moon Lake</i>	1		1
Carthage Incised, <i>var. Poole</i>	1		1
Carthage Incised, <i>var. unspecified</i>	29	16	45
Moundville Engraved, <i>var. Havana</i>	4		4
Moundville Engraved, <i>var. Hemphill</i>	8		8
Moundville Engraved, <i>var. Jones</i>	1		1
Moundville Engraved, <i>var. Tuscaloosa</i>	2	1	3
Moundville Engraved, <i>var. unspecified</i>	53	21	74
Alabama River Appliqué		1	1
Baytown Plain	2		2
Barton Incised, <i>var. Barton</i>	1		1
Residual types	50	22	72
<i>Totals</i>	2,959	1,825	4,784

The type-variety system that is present at Moundville defines types by temper, finish and decorative technique. Variations within types are separated from other varieties based on decorative style. The finish of the vessel is not only important to define a type for the purpose of archaeological inquiry, but also because it indicates the function of the vessel. There are two kinds of finish that are commonly recorded at Moundville; burnished and unburnished. Burnished vessels were most likely used as serving ware, whereas unburnished vessels most likely functioned as cooking or storage ware (Knight 2010; Knight and Steponaitis 1998; Steponaitis 1983). A brief description of the types and varieties present from the 2009 Mound P excavations follows below, but the quantities of excavated ceramic types is presented in Table 4.1.

Bell Plain is a burnished and fine-shell tempered pottery that was present in large quantities from both the flank and the summit excavation units. The type is common at Moundville during the majority of the site's chronological sequence. Identification of Bell Plain ceramic sherds followed Knight's (2010) criteria, which dropped the two varieties (Steponaitis 1983) due to the possibility for observer subjectivity. Therefore, all burnished ceramic sherds without decoration are considered Bell Plain.

Carthage Incised is a burnished and fine shell tempered pottery that was present in both the flank and the summit excavation units. The vessels are decorated with a shallow, U-shaped stylus into leather-hard clay (Steponaitis 1983:53). The most common vessels that this decorative technique occurs on are bottles and bowls (Steponaitis 1983). Knight (2010) identifies seven named varieties of this type, six of which were present in the flank and summit excavations: varieties *Akron*, *Carthage*, *Fosters*, *Lupton*, *Moon Lake* and *Poole* (Figure 4.1). Ceramic sherds that exhibited broad, U-shaped incisions that either do not have a corresponding variety, or more likely, the sherd is of a size that is not sufficiently large enough to confidently identify the decorative qualities, fall under *variety unspecified*.

Carthage Incised, *variety Akron* was recovered from the flank (Figure 4.1c and f). It is identified by the existence of incised lines located directly below a bowl lip that run into pendant loops. This variety is not identified without the lip of the vessel. Carthage Incised, *variety Akron* is present from the late Moundville I through early Moundville III phases (Knight 2010; Steponaitis 1983).

Carthage Incised, *variety Carthage* was identified from other sherds of this type by its running scrolls and present in the summit excavations. This variety is often found on the exterior

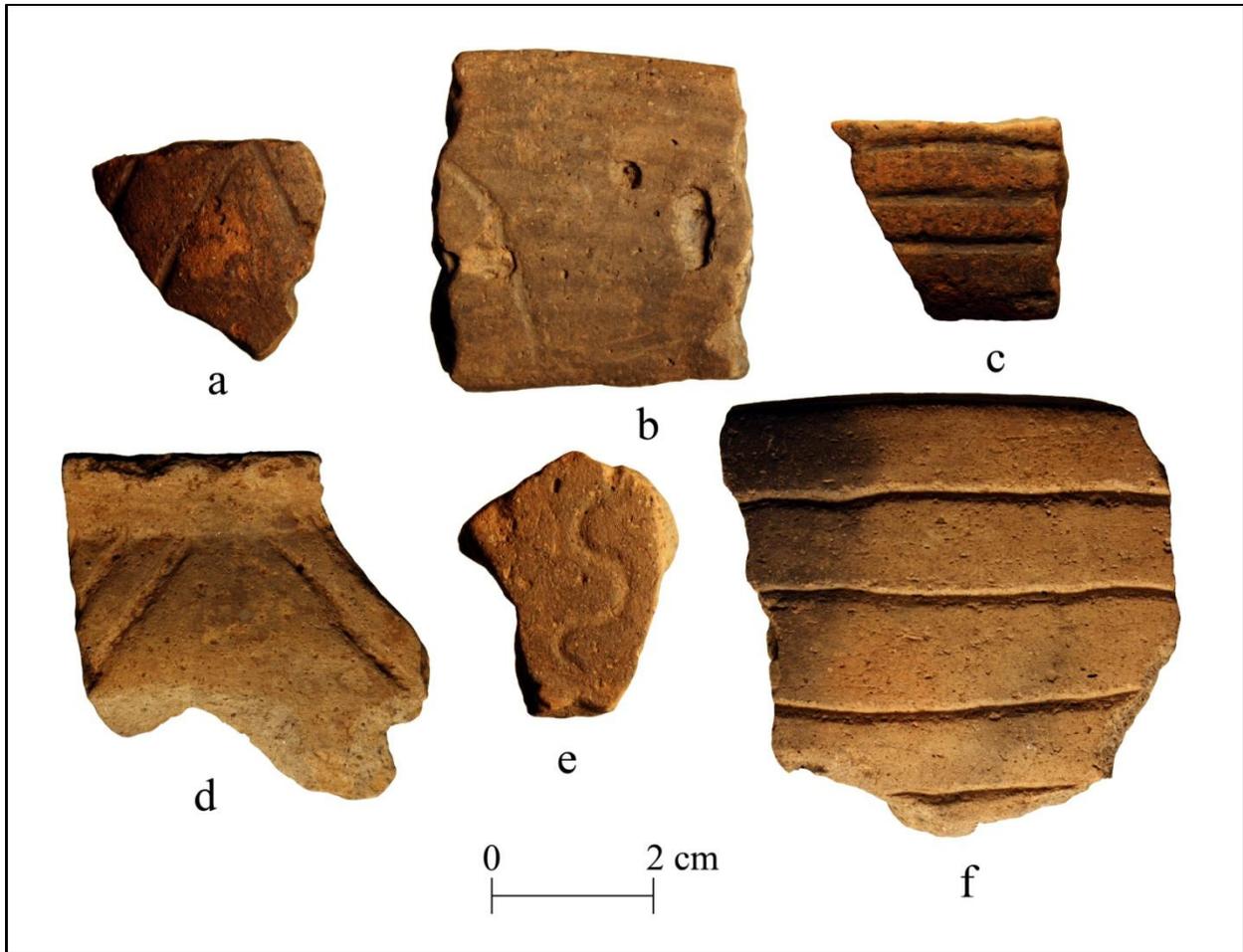


Figure 4.1. Carthage Incised: (a and d) *variety Lupton*; (b and e) *variety Fosters*; (c and f) *variety Akron*. Multiple proveniences, Mound P.

of cup-shaped bowls or bottles, or on the interior rim of flaring-rim bowls. Carthage Incised, *variety Carthage* dates from early to late Moundville III (Knight 2010; Steponaitis 1983).

Carthage Incised, *variety Fosters* was recovered from the flank and the summit (Figure 4.1b and e). The hand and forearm representational art that are associated with *variety Fosters* is most commonly found on the interior rim of flaring-rim bowls and the exterior of short-neck bowls. Carthage Incised, *variety Fosters* is diagnostic of early to late Moundville III and Moundville IV (Knight 2010; Steponaitis 1983).

Carthage Incised, *variety Lupton* was recovered from the flank and summit excavations (Figure 4.1a and d). It was identified by its chevron design. Knight (2010) splits *variety Lupton* from Carthage Incised, *variety Moon Lake* based on the former's occurrence on the the exterior of short-neck bowls and is diagnostic of early to late Moundville III (Knight 2010).

Carthage Incised, *variety Moon Lake* was recovered from the flank. This variety has the same chevron design as variety Lupton, but it occurs only on the interior rim of flaring-rim bowls. Carthage Incised, *variety Moon Lake* dates to the late Moundville I phase and may continue into the early Moundville II phase (Knight 2010; Steponaitis 1983).

Carthage Incised, *variety Poole* was excavated from the Unit 1 profile wall clean-up and therefore holds little chronological value besides its presence. This variety is found exclusively on short-neck bowls and is diagnostic of early to late Moundville III to Moundville IV the phase (Knight 2010; Steponaitis 1983). It has a Moundville Engraved counterpart, discussed below.

Moundville Engraved is another type that is burnished and is identified by its fine shell temper. It is distinguished from Carthage Incised by the decoration technique. Whereas Carthage Incised has shallow, U-shaped lines that were incised in leather-hard paste, the Moundville Engraved decorative technique is conducted when the paste of the vessel is very hard, usually before the firing process (Knight 2010; Steponaitis 1983). The engraved lines are thin and usually found on bottles and bowls (Steponaitis 1983:54). There are eleven named varieties of Moundville Engraved present at Moundville, three of which were present in the flank and summit excavations: *Havana*, *Hemphill* and *Tuscaloosa* (Figure 4.2). Moundville Engraved, *variety unspecified* sherds were either too small to classify to a variety, or do not have a

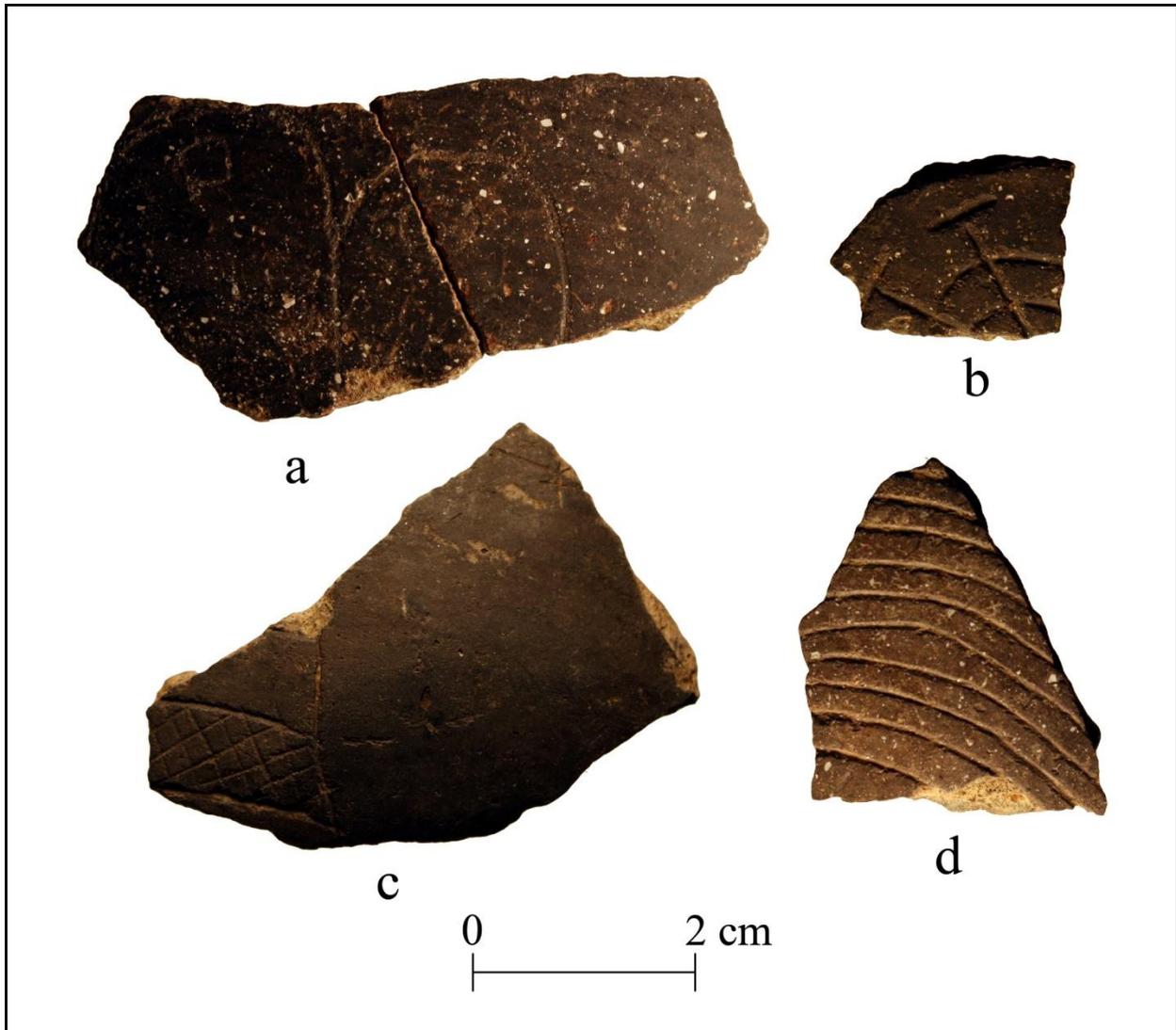


Figure 4.2. Moundville Engraved: (a-c) *variety Hemphill*; (d) *variety Tuscaloosa*. Multiple proveniences, Mound P.

corresponding variety. Also, I have added one new variety, Moundville Engraved, *variety Jones*, to the roster.

Moundville Engraved, *variety Havana* was excavated from the flank and is the engraved counterpart to Carthage Incised, *variety Akron*. Knight (2010) notes that *variety Havana* can be identified by 3 to 15 engraved lines running under the rim of hemispherical or cup-shaped bowls. Like Carthage Incised, *variety Akron*, the lip of the vessel is needed to identify the type.



Figure 4.3. Moundville Engraved, *variety Jones*, short-neck bowl (University of Alabama, Department of Anthropology).

Moundville Engraved, *variety Havana* dates from late Moundville I to early Moundville III (Knight 2010).

Moundville Engraved, *variety Hemphill* was recorded from the flank and is easily recognized by its busy engraving patterns and representational art (Figure 4.2a-c). There were three separate identifiable representational motifs that were present in the ceramic assemblage: a center symbol, radial fingers and a bird tail. Moundville Engraved, *variety Hemphill* is diagnostic of early Moundville II to early Moundville III, and maybe into late Moundville III (Knight 2010; Steponaitis 1983).

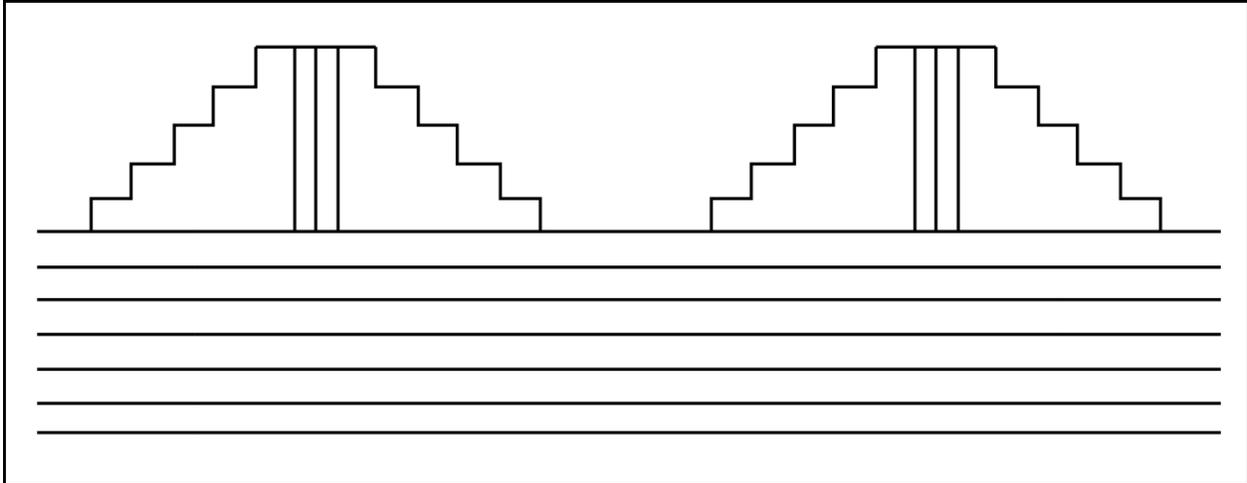


Figure 4.4. Moundville Engraved, *variety Jones*.

Moundville Engraved, *variety Tuscaloosa* was excavated from both the flank and the summit units (Figure 4.2d). It is distinguished from other varieties with many scrolling lines by having at least six running scrolls on the exterior of a bottle. Moundville Engraved, *variety Tuscaloosa* dates from early Moundville II to early Moundville III (Knight 2010; Steponaitis 1983).

Moundville Engraved, *variety Jones* has been added to the roster of varieties within this type (Figure 4.3). As discussed above during the Carthage Incised, *variety Poole* discussion, this variety was previously unnamed, but it does occur in Moundville contexts (Vernon James Knight, Jr., personal communication 2011). After discussing the naming possibilities of this variety with Dr. Knight and determining that all place names were taken, I decided that *variety Jones* was an appropriate name because the 2009 Mound P excavations were conducted in conjunction with the Walter B. Jones Archaeological Museum renovations. Moundville Engraved, *variety Jones*' design consists of a step motif, or divided terrace, over a band of multiple engraved lines that encircle the vessel and run parallel to the lip (Figure 4.4). From the sherds present in the University of Alabama, Department of Anthropology type collection, and

based on the sherd from Unit 1, this variety can at least be found on short-neck bowls. The presence of this design on short-neck bowls indicates that this is a late variety, dating to early to late Moundville III and into Moundville IV (Knight 2010; Steponaitis 1983).

Mississippi Plain ceramic sherds were identified as unburnished sherds that usually exhibited a large amount of shell leaching, giving to a pockmarked appearance to the pottery. Mississippi Plain sherds are tempered with coarse shell and small amounts of grog (Knight 2010; Steponaitis 1983). This ceramic type was recovered in large quantities from both the flank and the summit. While Steponaitis (1983) defines two varieties of the Mississippi Plain type, Knight (2010) combines both of these varieties into a singular type due to the possible subjectivity of identification. This analysis follows Knight's classification of Mississippi Plain (Knight 2010).

Alabama River Appliqué was recovered from the summit and is a Moundville IV diagnostic rim mode (Figure 4.5). This rim mode shows up on unburnished jars and is defined by appliqué strips oriented obliquely to the lip or in a chevron pattern (Curren 1984; Knight 2010; Steponaitis 1983). The applied filets show up in the Moundville IV phase may be a stylistic continuation of multiple (more than eight) jar handles that are present on late Moundville III standard, unburnished jars (Steponaitis 1983:118). While only one Alabama River Appliqué sherd was excavated from the summit in 2009, three sherds were present from the 1930's AMNH Collection (Knight 2010:234). There was also the presence of Alabama River Incised, a contemporaneous Moundville IV type. This is important for the overall ceramic chronology of the mound.

Moundville Incised is identified by arches that are incised in wet paste on unburnished jars (Steponaitis 1983). There are five named varieties that are present at Moundville, two of

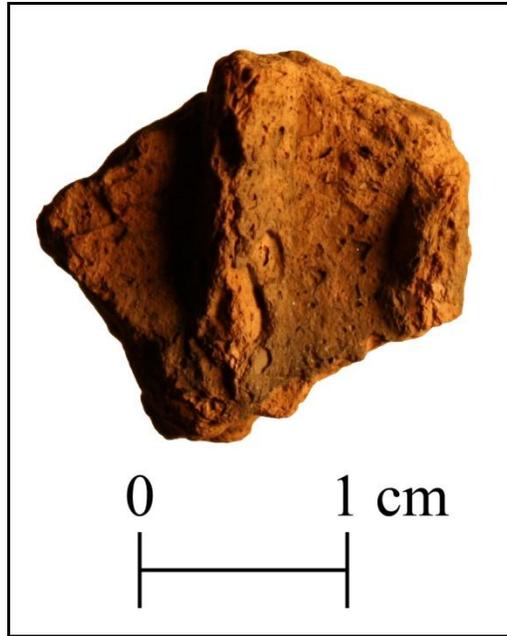


Figure 4.5. Alabama River Appliqué.

which are present from the flank and summit excavations: *Carrollton* and *Moundville*. Sherds that exhibited incisions on unburnished pottery but were unidentifiable to a specific variety due to small sherd size were classified as *variety unspecified*.

Moundville Incised, *variety Carrollton* was excavated from the flank. The variety is marked by at least one incised arch and no incised lines or punctations (Steponaitis 1983). Moundville Incised, *variety Carrollton* is commonly found on jar shoulders as and is diagnostic of early Moundville I through late Moundville II phases (Knight 2010; Steponaitis 1983).

Moundville Incised, *variety Moundville* was excavated from the flank. This variety is distinguished by its rayed lines, or eyelashes, above an incised arch on two to four handled jar shoulders. It dates from early Moundville I through late Moundville II phases (Knight 2010; Steponaitis 1983).

Nonlocal Types

Nonlocal types at Moundville were identified by Steponaitis (1983:49) on the basis of macroscopic, visual characteristics and defined by the region from whence they came. These sherds and vessels fall outside of the range of expected decoration, shape and paste. Below are the two types that were identifiable in the Mound P ceramic assemblage.

Barton Incised, *variety Barton* was excavated from the flank. This type was one of the few examples from the Mound P excavations that was identified as nonlocal. It dates to the late Mississippian period and originates in the Lower Mississippi Valley (Knight 2010).

Baytown Plain is a predominately grog tempered and undecorated plain ware (Phillips 1970; Steponaitis 1983). It was found in small amounts within the Mound P ceramic assemblage.

Residual Types

Residual type ceramics were excavated from both the flank and the summit excavations. Residual ceramic sherds have a finish or temper that do not fit within the type-variety system that has already been established for Moundville or any non-local types (Knight 2010:42-3). One of the major residual types that was present in the Mound P assemblage was temperless, very fine grained and plain. Another common residual type from within the Mound P assemblage was grit-tempered, plain ceramic sherds.

Modes of Decoration

Ceramic modes were identified as “Secondary Shape Features” and “Painted Decoration” by Steponaitis (1983) and solely as “Modes of Decoration” by Knight (2010), where he combined painted decoration in with secondary shape features. The data that was collected from Mound P followed Knight’s categorical system and included painted sherds with other modes.

Ceramic modes can be defined as “parts or aspects of vessels” that can combine to cross-cut the type-variety classification system (Phillips 1970:28). These attributes of design need to be considered separate from types because they are not contingent on temper or vessel finish. They can be used in various combinations that would have had some meaning to the people that were producing the pottery, a meaning that is emic, and the archaeologist cannot get at (Knight 2010:43). While there are a number of ceramic decorative modes present at Moundville, only a few were present in the Mound P ceramic assemblage: *beaded rims*, *effigy features*, *folded-flattened rims*, *nodes*, *notched lips*, *painted decoration* and *scalloped rims* (Figure 4.6).

Beaded rims (Figure 4.6a, c and e) are a common, late decorative mode that was found from both the flank and the summit. Beaded rims are a decorative mode that is commonly found on simple bowls and burnished jars. This is identified as a horizontal appliqué strip that is notched and encircles the circumference of the vessel just below the lip. Beaded rims date from late Moundville II to Moundville IV (Knight 2010; Steponaitis 1983).

Effigy Features may be comprised of multiple modes on a single vessel. Steponaitis (1983:74-8) lists the wide variety of criteria that identifies reptiles, mammals, birds, fish, invertebrates and humans that are found on Moundville effigy vessels, but only one creature is of importance within this discussion: the frog. Frogs are a common animal that is depicted within the range of Moundville effigy vessels (Steponaitis 1983). There was the unmistakable dimple of a frog’s rear end present in the mound flank assemblage (Figure 4.6f). Frogs are an early to late Moundville III diagnostic effigy feature (Knight 2010).

Folded-flattened rims appear on standard and neckless jars. This mode is recognizable by the coil of clay that thickens the exterior of the jar lip: the clay coil is folded over to the exterior

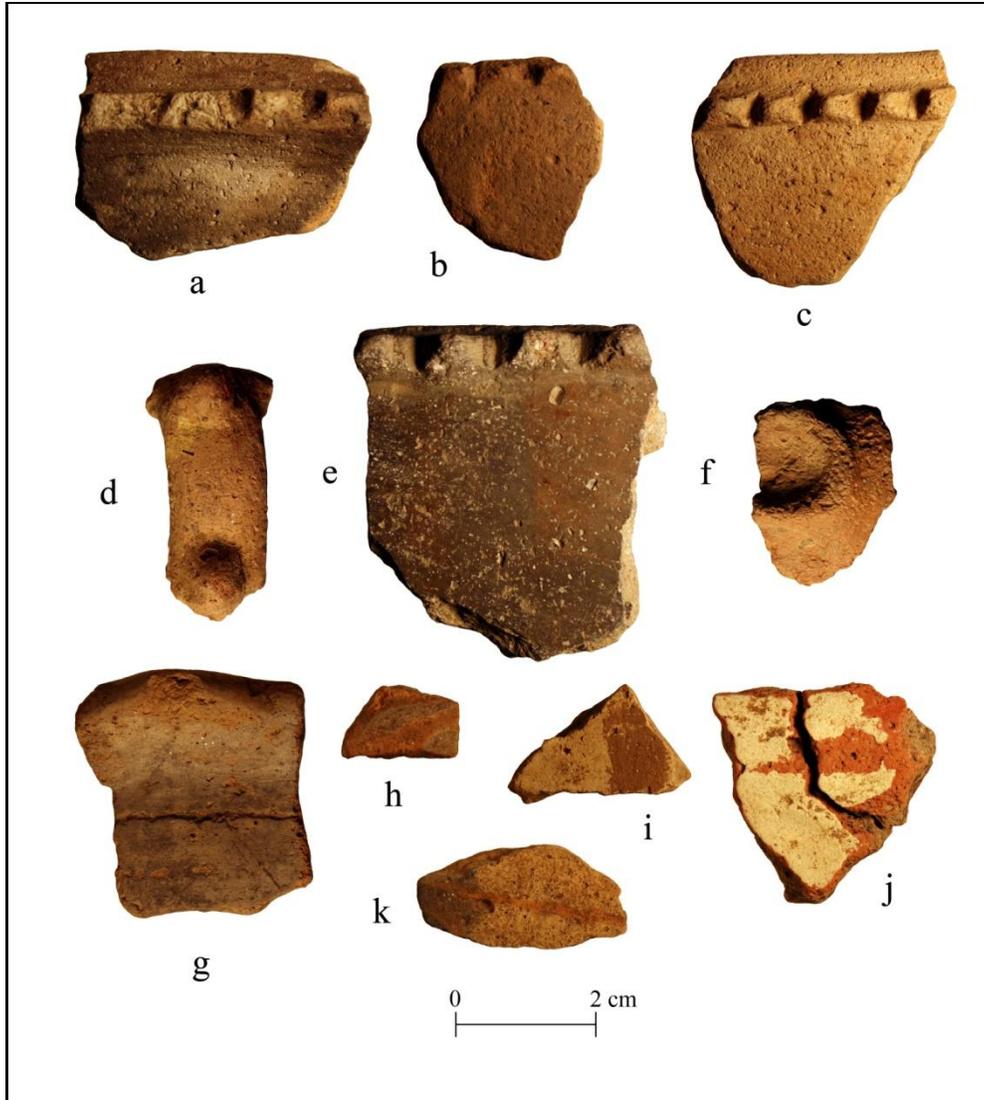


Figure 4.6. Decorative ceramic modes: (a, c and e) beaded rim; (b) notched lip; (d) jar handle with nodes; (f) frog effigy feature; (g) scalloped rim; (h and j) white filmed; (i and k) red-on-white filmed. Multiple proveniences, Mound P.

of the vessel and the lip is flattened horizontally. This mode was present in the flank and dates from early to late Moundville I (Knight 2010; Steponaitis 1983).

Nodes are present on jars, jar handles, simple bowls and restricted bowls (Steponaitis 1983). Nodes are small, conical bumps that are formed from appliqué pieces of clay. While Steponaitis (1983) lists these modes as separate secondary features on whole vessels, Knight

(2010:46) notes that their decorative pattern is difficult to identify in sherd material. Nodes were recorded from sherd material in the Mound P assemblage, but the only part of a vessel that they could be identified on was jar handles (Figure 4.6d).

Notched lips were recovered from the summit and are typically found on simple bowls and flaring rim bowls (Figure 4.6b). The name of this mode describes how it is recognized in the ceramic assemblage: the lip of the vessel has been notched with an implement. They may be present in during the Moundville II phase, but are definitely within the Moundville ceramic sequence by early Moundville III (Knight 2010:47-8).

Painted decoration on ceramic sherds are present from the majority of proveniences in the flank and summit assemblages. Painted decoration from Mound P includes red filmed exterior vessels, red filmed interior and exterior filming, red-on-white filming (Figure 4.6i and k) and white interior and exterior filming (Figure 4.6h and j). Painted decoration is not a useful chronological marker, since it is present during every ceramic phase (Knight 2010:43). Where this mode will lend itself is in a discussion of mound summit activities, as it is found in elite contexts (Knight 2010; Steponaitis 1983).

Scalloped rims (Figure 4.6g) are present on flaring-rim bowls and are identifiable as “a continuous series of round projections” (Steponaitis 1983:73). This mode dates to late Moundville I and may continue to early Moundville II (Knight 2010).

Non-Vessel Ceramic

Objects manufactured from tempered clay, such as ceramic disks, ornaments and other ceramic objects, were also present in the Mound P material assemblage (Table 4.2). Ceramic disks of various sizes were excavated from both the flank units and summit units. These small

Table 4.2. List of non-vessel ceramic artifacts, Mound P.

Context	Artifact	Quantity	Weight (g)	Comments
Summit Plowzone; Block 1	Ornament	1	0.8	Crescent shaped with rounded convex and concave planes.
Summit Plowzone; Block 1	Pipe bowl fragment	1	8.4	Shell and grog tempered, outflaring rim.
Summit Plowzone; Block 1	Cylindrical object	2	26.3	Barrel shaped and hollow with scar on exterior; refit.
Summit Plowzone; Block 1	Small disk	1	5.4	Unburnished; ~ 3.1 cm in diameter
Unit 1, Level 2	Large disk	1	14.4	
Unit 1, Level 5	Ornament	1	2	Crescent shaped with rounded convex and concave planes.
Unit 1, Level 6	Small disk	1	6.6	Unburnished; 2.6 cm in diameter
Unit 1, Level 9	Small disk	1	5.9	Unburnished; 2.5 cm in diameter
Unit1, Level 12	Small disk	1	1.5	Burnished; 1.8 cm in diameter
Unit 1, Level 14	Small disk	1	22.4	Burnished; 4.1 cm in diameter
Unit 1, Level 14	Pendant fragment	1	2.7	Burnished; distal portion
Unit 1, Level 14	Pendant fragment	1	0.8	Burnished and engraved; distal portion
Unit 2, Level 4	Cylindrical object	1	11.4	Plug-shaped cylinder
Unit 2, Level 7	Pipe bowl fragment	1	6.8	Corner of pipe bowl. Non-local incising.
Unit 2, Level 8	Pipe stem fragment	1	6.9	Unburnished
<i>Totals</i>		16	122.3	

objects are made from burnished and unburnished ceramic pot sherds and ground along the edges to create a smooth or beveled edge, of which the latter form is not present in the assemblage (Figure 4.7). There were also no disks that exhibited any decoration. Ceramic disks are not diagnostic to a particular chronological phase (Knight 2010).

Ceramic pendant fragments or ornaments were also found in both flank and summit contexts (Figure 4.8). A ceramic pipe bowl fragment was excavated from the summit: it is shell and grog tempered, burnished black on the exterior and interior of the bowl and it has the shape of an up-turned bell (Figure 4.9). A ceramic pipe stem was excavated from the flank and is predominately course-shell tempered. Unidentified ceramic objects were also present in the flank and summit material assemblages, but were unable to be classified in the lab to a specific mode or vessel shape. One of these objects, a refit, was excavated from the summit. It was fine grained with no temper and when the two ceramic sherds were refit together, the interior of the object was barrel-shaped as if it was formed around a cylindrical object (Figure 4.10). Initially I thought that it was a pipe stem fragment, but without the rest of the object and due to its irregular exterior

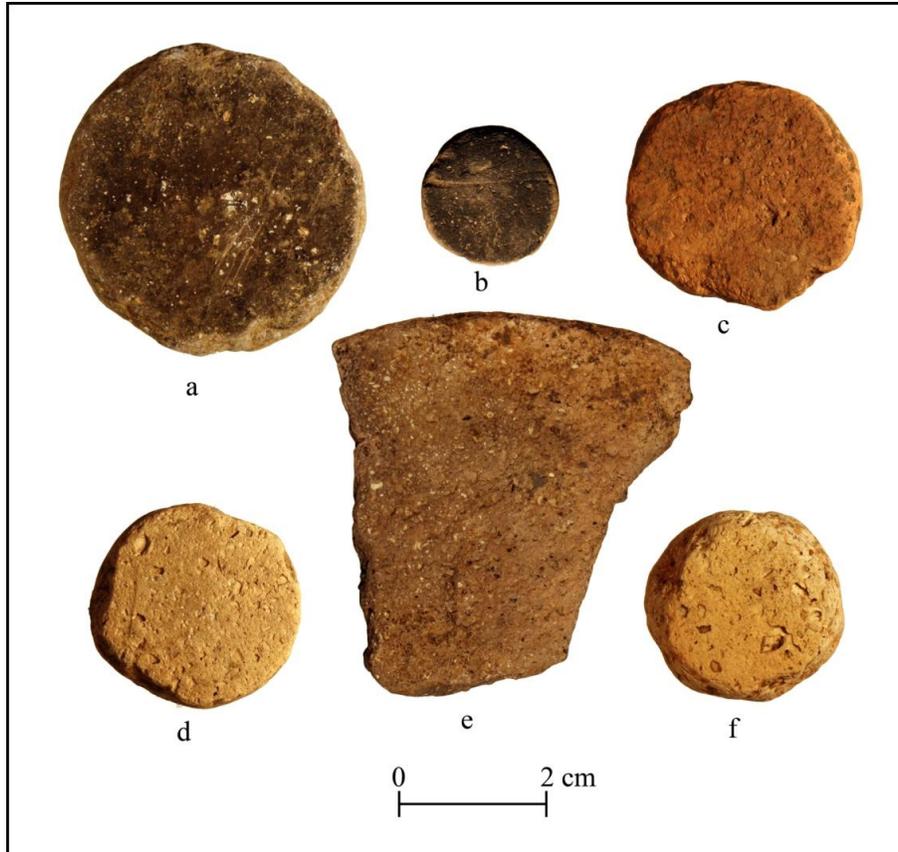


Figure 4.7. Ceramic disks: (a-b) burnished; (c, d and f) unburnished; (e) large disk sherd. Multiple proveniences, Mound P.

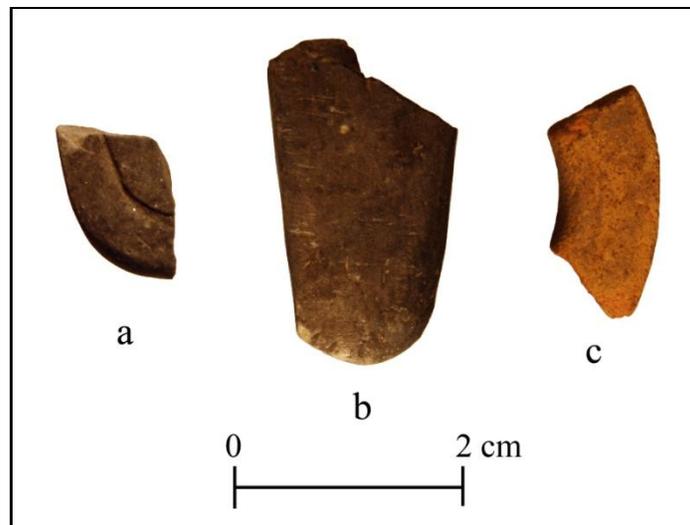


Figure 4.8. Non-vessel ceramic: (a) decorated pendant fragment; (b) burnished pendant fragment; (c) ceramic ornament. Multiple proveniences, Mound P.

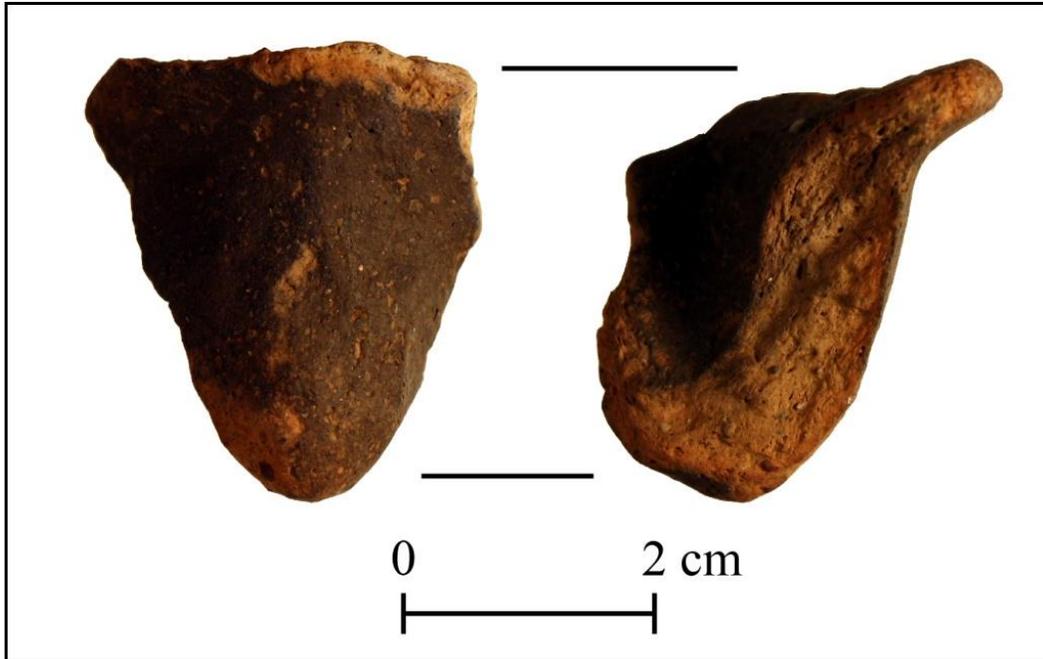


Figure 4.9. Two views of a ceramic pipe bowl fragment: left, exterior view; right, profile and interior view. Mound P.

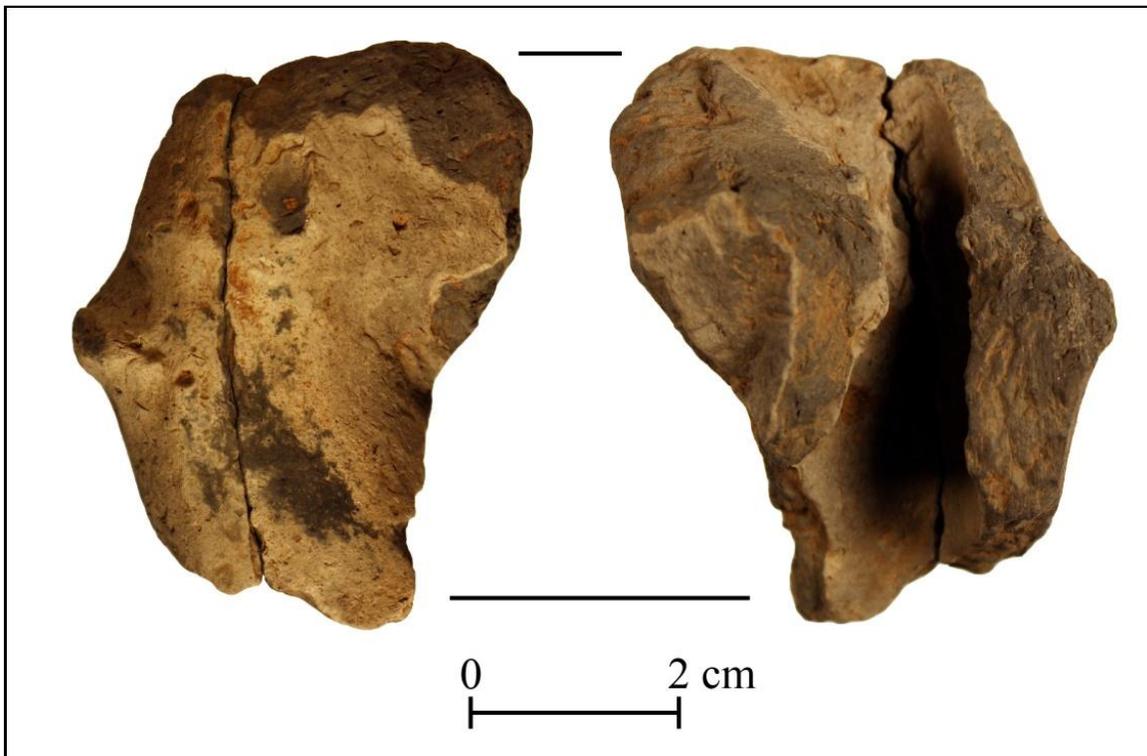


Figure 4.10. Two views of a cylindrical object: left, exterior with scar to the left; right, interior with scar to the right. Mound P.

make-up, I abandoned this hasty identification and decided to classify this as an unidentified object.

Stone and Mineral Assemblage

Flaked Lithic

The flaked stone at Moundville is characterized by an estimated twenty-one local and non-local materials (Knight 2010:54; Scarry 1995). Five of these lithic types were identified from the Mound P assemblage. *Tuscaloosa gravel chert* is one of the most abundant local chert types found at Moundville. In its raw form, the workable quality of Tuscaloosa gravel chert is not particularly efficient, but altering the stone through a firing process tends to improve this problem and the color of this chert changes from yellowish-brown to a brilliant red to dark red (Knight 2010; Scarry 1995). Knight (2010:54-55) notes that due to the smaller size of the pebbles or cobbles of Tuscaloosa gravel chert, the range of items that can be made from this material is restricted. Within the same deposits that Tuscaloosa gravel chert is found in, cobbles and pebbles of *quartzite* are also present (Scarry 1995). *Blue-gray Fort Payne chert* is from an outcrop in the Tennessee Valley of northern Alabama and has a distinctive gray base with blue swirls (Knight 2010; Scarry 1995). *Bangor chert*, also from north Alabama, is a darker chert that exists in a range of colors (Knight 2010:55; Scarry 1995:66). *White chert* is a creamy-white chert that Scarry (1995) notes may originate from the coastal plain.

The analysis of the Mound P materials was done in order to identify some of the activities that may have been occurring on the summit during the terminal occupation of the mound. The classification of flaked stone into general categories is sufficient enough to meet this goal and follows the criteria set forth by Scarry (1995:69). *Tested cobbles* are chert or quartz nodules that

are larger than a thumbnail, whereas *tested pebbles* are chert or quartzite nodules that are smaller than a thumbnail, which may have been tested for durability or their ability to serve as cores for flaking. A *core* is identified as a piece of stone that exhibits evidence for the removal of flakes or blades. *Shatter* was identified in the Mound P assemblage as flakes of stone that do not have a striking platform or any other indication that it was deliberately flaked (Scarry 1995:69).

Flakes were considered pieces of stone that exhibited signs of being intentionally removed from a chert or quartzite cobble or core (Scarry 1995:69). These appeared in the lithic assemblage as Tuscaloosa gravel chert, blue-gray Fort Payne chert, quartzite and Bangor chert. *Primary decortication flakes* are flakes that still have the entire dorsal surface of the flake covered with cortex. Primary flakes were excavated from both the summit and the flank units. *Secondary decortication flakes* are flakes that are removed from the core, but after the primary flakes; therefore, secondary flakes will exhibit a limited amount of cortex that remains on the flake (Scarry 1995:72). A *biface thinning flake* was recovered from summit and was identified as a small flake that was the result of manufacture, but did not have any cortex remaining on the dorsal side of the flake (Scarry 1995:72). There are most likely more biface thinning flakes in the overall assemblage, but because these are small they were probably separated when the lithic was passed through one-half inch mesh.

Expedient tools that were within the Mound P flaked lithic assemblage included blade-like flakes and utilized flakes (Figure 4.11). *Blade-like flakes* were identified as stone flakes that were about twice as long as wide with parallel edges running the length of the flake (Scarry 1995:72). *Utilized flakes* are stone flakes that have an edge that has been chipped as a result of being used by someone in the past (Scarry 1995:72). These expedient tools may have been handheld and used for brief periods of time and are possibly associated with higher status craft

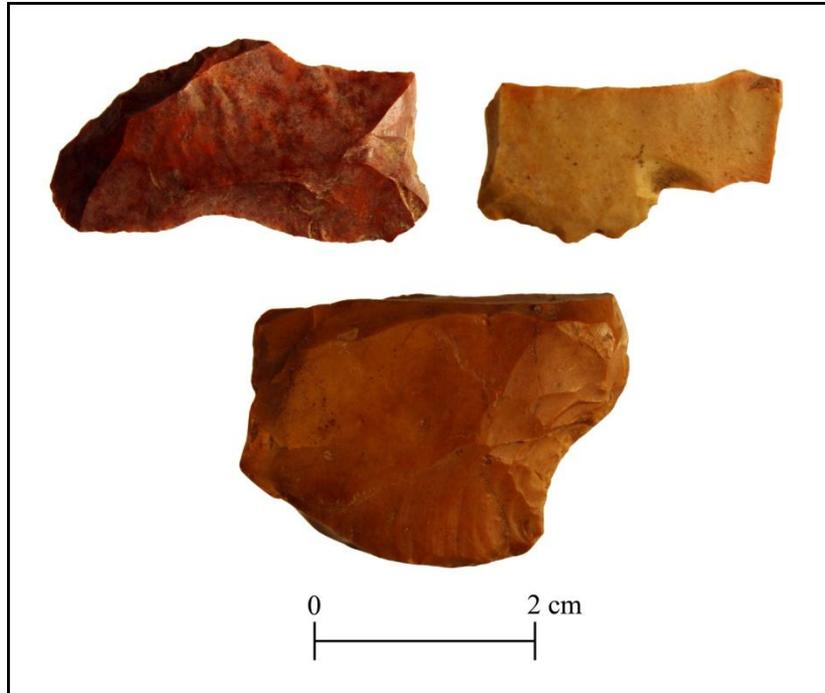


Figure 4.11. Expedient flaked tools, Mound P.

projectile points, as well as finished tools that could have been used for drilling, cutting, scraping, etc” (Figure 4.11).

Some of the most recognizable artifacts that are present within prehistoric lithic assemblages are *projectile points* (Figure 4.12). Projectile points are hafted onto carved, wooden shafts to make tools such as spears, arrows and knives (Knight 2010; Scarry 1995). Thus, they are not all classified as “arrow heads”; however, examples of projectile points that were excavated from Mound P are most likely arrow points. These small triangular points take one form at Moundville, defined as Madison points. There is one stemmed projectile point that was crafted out of heat treated Tuscaloosa gravel chert, a type that dates to pre-Mississippian dates (Figure 4.12e) (Knight 2010; Scarry 1995). A complete listing of the recovered projectile points from Mound P is presented in Table 4.3.

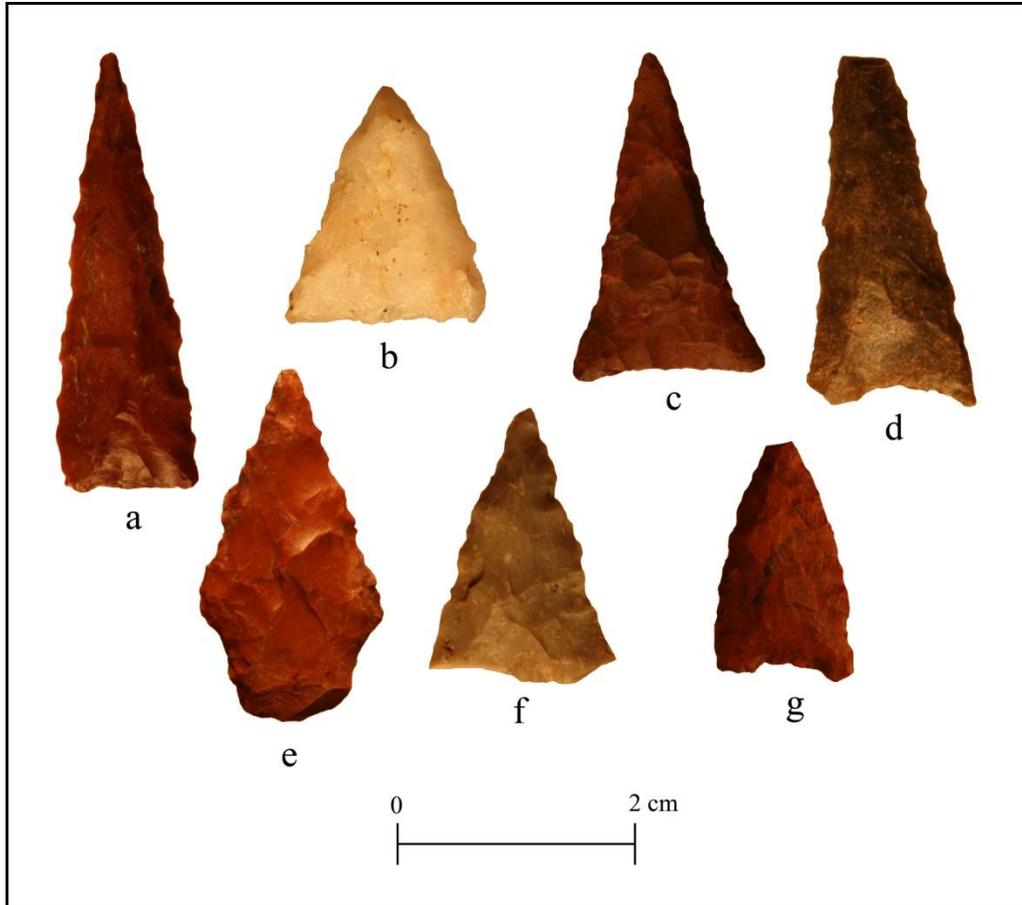


Figure 4.12. Projectile points: (a, c, e, and g) heat treated Tuscaloosa gravel chert; (b) quartzite; (d) Bangor chert; (f) blue-grey Fort Payne chert. Multiple proveniences, Mound P.

Table 4.3. List of projectile points, Mound P.

Context	Raw Material	Base Form	Length (mm)	Basal Width (mm)	Comments
Unit 1; Mound Erosion	heated Tuscaloosa gravel chert	Incurvate	27.47	16.48	
Unit 1; Mound Erosion	Bangor chert	Incurvate		14.52	distal tip missing
Unit 1; Stage II Fill and Deposit	Quartzite	Straight	19.5	17	
Unit 1; Stage II Fill and Deposit	heated Tuscaloosa gravel chert	Straight	37.29	11.55	
Unit 1; Stage II Fill and Deposit	blue-gray Fort Payne				base missing
Unit 2; Mound Erosion	heated Tuscaloosa gravel chert	Stemmed	9.88	29.85	
Summit; Plow Zone	heated Tuscaloosa gravel chert	Incurvate		13.03	distal tip missing

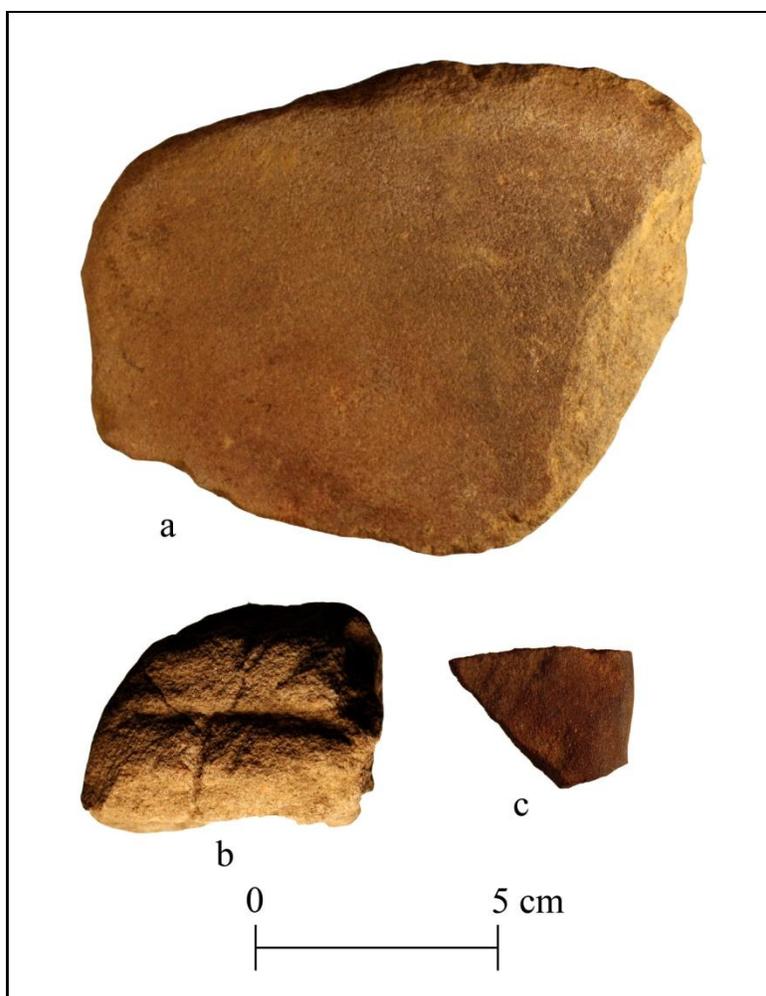


Figure 4.13. Ground lithic. (a) sandstone tablet; (b) sandstone abrader; (c) ferruginous sandstone saw. Multiple proveniences, Mound P.

Ground Lithic

Flaked stone artifacts were not the only stone artifacts excavated from Mound P contexts. There were also artifacts of ground stone (Figure 4.13). Raw materials such as greenstone, sandstone, ferruginous sandstone, fine gray micaceous sandstone and minerals were utilized by the community to manufacture items of various functions. The analysis accounted for stone that was ground and polished and may have been used as a saw or an abrader. Sandstone was

excavated from the flanks and the summit in both unmodified (quantified by weight) and modified forms, which were quantified by both count and weight.

Greenstone is an abundant material found in both domestic and higher status contexts at Moundville. This hard and dense, greenish gray to dark gray igneous schist was brought into the Black Warrior Valley from no more than 150 kilometers from the Hillabee Metavolcanic Complex in east-central Alabama (Gall and Steponaitis 2001; Knight 2010; Wilson 2001). Hillabee greenstone was primarily used to make celts, or flower-petal shaped, ax heads, as well as saws, pendants, small discs and hammerstones: when celts were broken due to frequent use, the axe head and fragments were recycled to make formal items or expedient tools (Gall and Steponaitis 2001; Knight 2010; Wilson 2001). Pieces of flaked greenstone commonly have a ground or polished surface, which is further indication of recycling.

Ferruginous sandstone occurs naturally in tabular formations in the Black Warrior Valley. Ground ferruginous sandstone was excavated from both the flank and summit contexts. A single ferruginous sandstone saw fragment was recovered from summit Unit C (Figure 4.13c). Saws of this material may have been used in lapidary work to place grooves along the edges of sandstone palettes (Knight 2010), although they may have been used for other purposes as well (Davis 2008). Pottsville and Hartsville sandstone artifacts took the form of ground sandstone and abraders (Figure 4.13b). These grooved abraders were identified by the existence of U or V-shaped grooves running across the surface of the stone. One of these abraders was a large stone with two U-shaped grooves and small, cupped-shaped pit. On the reverse side of the stone, there were two additional U-shaped grooves, indicating that the stone was reused many times for a similar purpose (Figure 4.14).

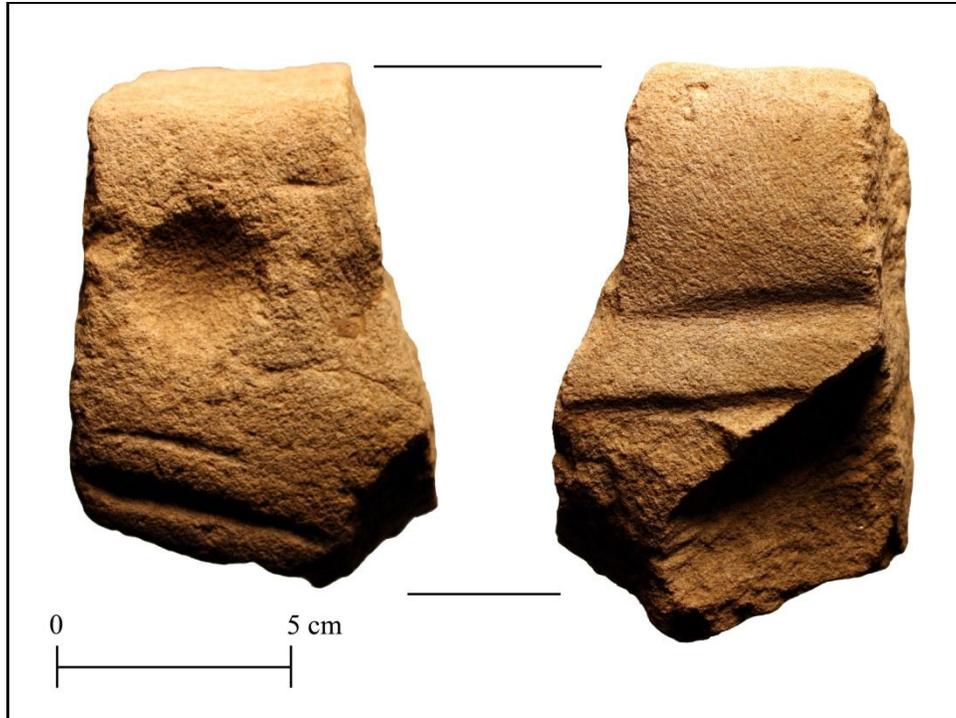


Figure 4.14. Two views of a pitted anvil stone with grooves: left, pitted anvil with two grooves; right, two grooves. Mound P.

There was also the presence of pigment quality minerals in the flank and summit excavations (Figure 4.15a-b). This is an orangish-red to dark red iron oxide mineral that is soft and associated with elite activities (Knight 2004, 2010; Peebles and Kus 1977). While green, white and yellow pigments also occur at Moundville, these were not present on Mound P. Also present within the Mound P excavations was coal from the summit of the mound, another substance that could have been used for the production of pigments (Knight 2010:68).

The closest source of muscovite (mica) is found in eastern Alabama and this material occurred in both the summit and the flank excavations of Mound P (Figure 4.15d). A single galena crystal was recovered from the summit (Figure 4.15c). Galena may have been used for the production of pigments and originates in the Mississippi Valley from present-day Wisconsin to around Memphis, Tennessee (Knight 2010; Scarry 1995). Both of these materials would have

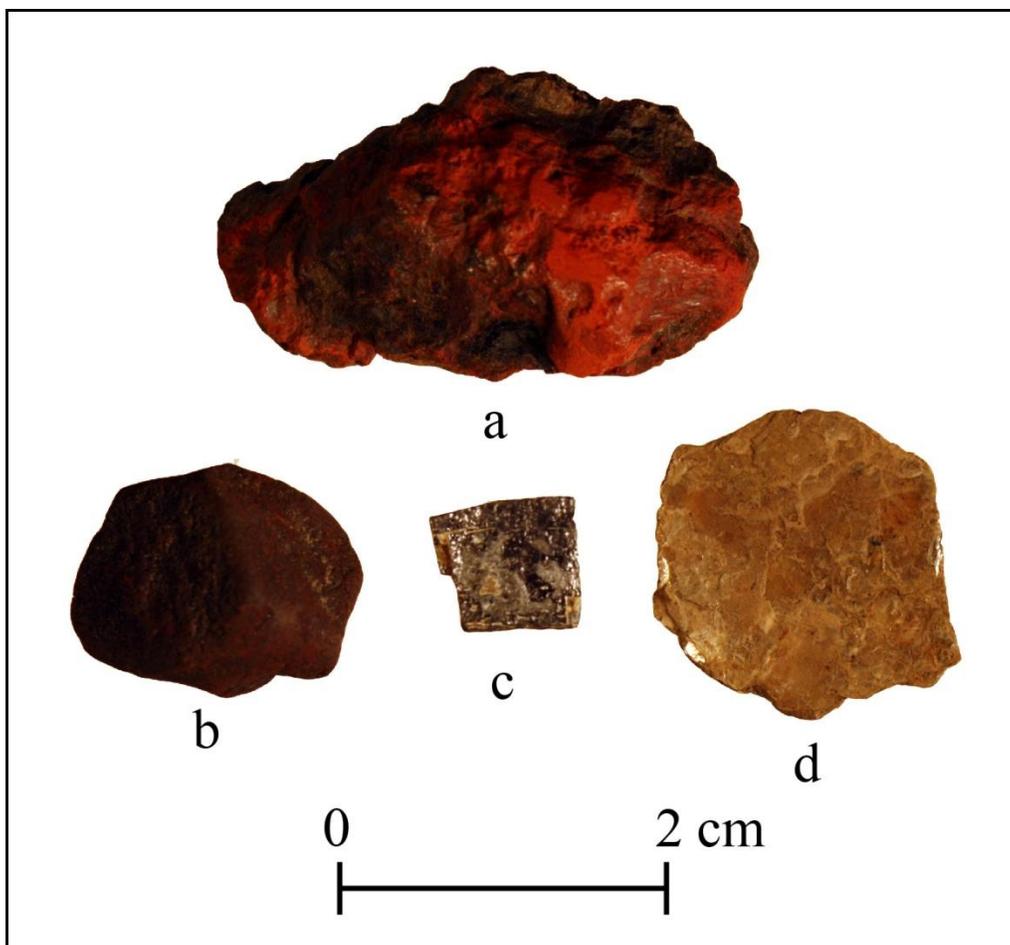


Figure 4.15. (a-b) mineral pigments; (c) galena cube; (d) muscovite (mica). Multiple proveniences, Mound P.

provided a shiny, shimmery quality to whatever object they were applied to or paint they were mixed with.

Unmodified Lithic

Unmodified stone material was present within the Mound P lithic assemblage that could have been used as heating rocks or for other domestic uses (Knight 2010:70). These unmodified lithics included sandstone, ferruginous sandstone, limestone, quartz or chert pebbles and cobbles and petrified wood (Table 4.4).

Table 4.4. List of unmodified stone, Mound P.

	Unit 1	Unit 2	Summit Block 1	Summit Block 2	Summit Features	Total (g)
Coal		0.7	4.7	0.6		6
Cobble	112.5		344	74.3	44.7	575.5
Conglomerate	20	94.2		11.5		125.7
Ferruginous sandstone	996.5	12.9	97.9		9.7	1117
Fine gray micaceous sandstone	58.3					58.3
Limestone	3.5	1				4.5
Pebble	227.3	23.4	482.2	87	84.5	904.4
Petrified wood	3.1		12.9			16
Pigment quality hematite	35.5	2	64.9	7	22.3	131.7
Quartzite					0.4	0.4
Sandstone	2796	676.4	1070.8	206.1	210.6	4959.9
Siltstone	26	4.5				30.5
Unidentified metamorphic			83.4			83.4
White chert			4.2			4.2
<i>Totals</i>	<i>4278.7</i>	<i>815.1</i>	<i>2165</i>	<i>386.5</i>	<i>372.2</i>	<i>8017.5</i>

Sandstone was identified as light gray stone that occasionally contained rose colored swirls or surface. There was a small amount of Pottsville sandstone present within the Mound P lithic assemblage, as well as disintegrated, yellowish sandstone that crumbled quite easily. Ferruginous sandstone is a common local stone that has a high limonitic content and occurs in thin plates near the site (Knight 2010:70). Fine gray micaceous sandstone is very fine grained and due to the micaceous inclusions, has a shiny luster to it. Petrified wood is common at the site and is from local sources (Knight 2010:71). There was also a small amount of limestone present in flank Unit 1 of Mound P at a depth that was too deep to be road gravel. Quartz or chert pebbles were identified as smaller than a thumbnail and only weighed: cobbles of the same material were larger than a thumbnail and likewise only weighed.

Daub

The daub that is preserved in archaeological contexts is usually the result of wattle-and-daub structures that have burned, baking the clay walls of the building as it collapsed into a smoldering pile of rubble. Daub was weighed but not counted. While this larger quantity from the summit units could have been the result of sample bias due to differences in excavated volumes, a higher proportion of daub from the summit was expected because the magnetometer survey detected the probable remains of a large burned structure on Mound P. The relatively large amounts of daub from all units suggests that after the final structure located on top of the mound burned, some of this daub was re-deposited down slope from the summit and recovered in the flank units. The daub that was excavated from the summit of Mound P exhibits what Sherard (2009:35) classifies as single and double whole cane impressions (Figure 4.16), with some evidence for gritty plaster exteriors and no red or white plaster (Figure 4.17).

Vertebrate, Invertebrate and Botanical Remains

One of the thesis goals is to determine some of the cultural activities that were occurring on the summit of the mound. The organic remains from the mound are an important source of information that can indicate the kind of activities that occurred there. A complete analysis of these materials was beyond the scope of this study. However I include a brief discussion of the vertebrae, invertebrate and botanical remains found on the mound (Table 4.5). If concentrations of bone or shell in the stratigraphy can be correlated with ceramic and lithic concentrations within the same levels, then these remains could provide further insight to the human actions on the summit of Mound P during the occupation of the summit.

The remains of vertebrate animals were separated first by any indication of heat

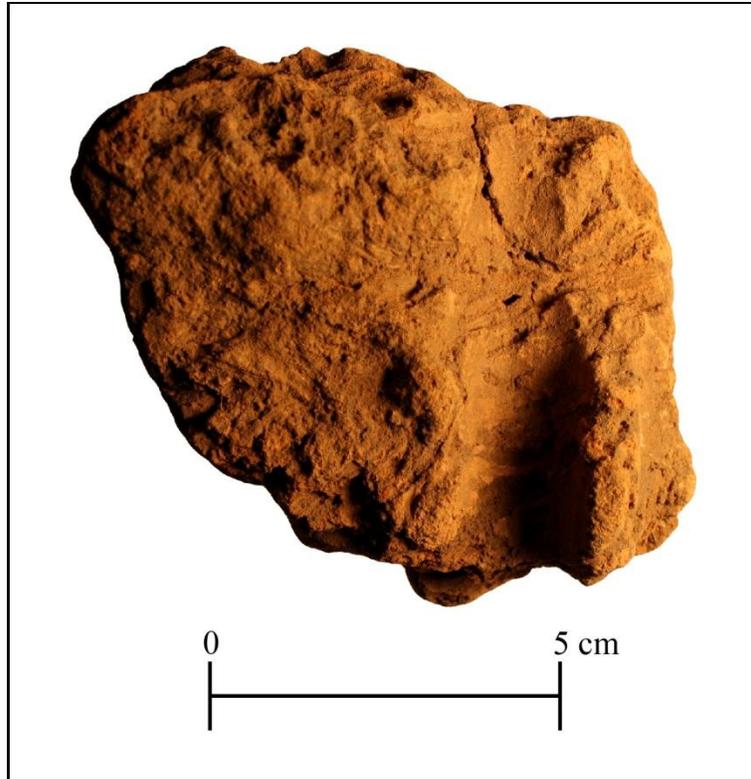


Figure 4.16. Single whole cane impressed daub, Mound P.

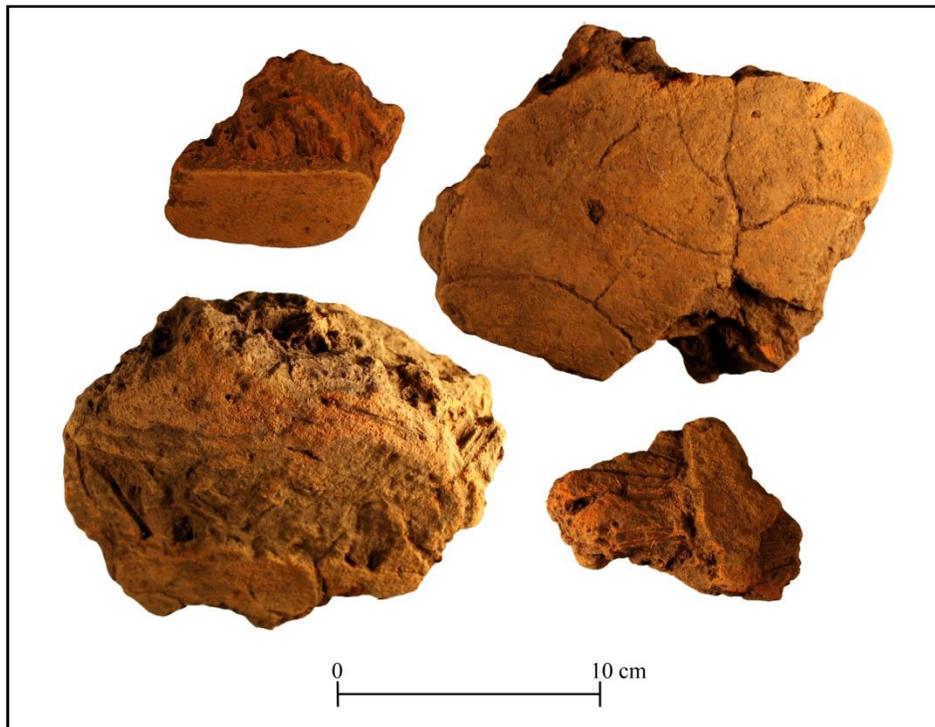


Figure 4.17. Plastered daub, Mound P.

Table 4.5. List of vertebrate, invertebrate and botanical remains by weight, Mound P.

	Unit 1	Unit 2	Summit Block 1	Summit Block 2	Summit Features	Total (g)
Vertebrate, unidentified	1296.9	155.7	16.9	2.5	9.3	1481.3
Vertebrate, unidentified; heat altered	98.3	12.5	42.3	0.9	5.9	159.9
Invertebrate, unidentified	256.6					256.6
Botanical, charcoal	9.2	2.1	0.4		4.5	16.2
<i>Totals</i>	<i>1661</i>	<i>170.3</i>	<i>59.6</i>	<i>3.4</i>	<i>19.7</i>	<i>1914</i>

alteration, creating two categories: *vertebrate, unidentified* and *vertebrate, unidentified; heat altered*. The classification “heat altered” is used here instead of “treated,” “fired” or “cooked” to avoid assumptions about human activity. With the presence of a large burned structure on the summit of the mound, some animal bone that was not previously heated may have been altered during the building razing event instead of during a food cooking event. The faunal assemblage from Unit 1, Level 14 included twenty-six small, delicate bones (tentatively identified as Osteichthyes) which were bagged separately by the staff of OAR. These were left separate within the curation box, but included within the *vertebrate, unidentified* classification.

Invertebrate remains were also quantified by count and weight, but classified as *invertebrate, unidentified*. Any charcoal remains that were present in the assemblage that were not saved for the purposes of obtaining a carbon date were classified as *botanical, charcoal*.

Bone Artifacts

Three animal bone artifacts were classified as something other than unidentified faunal bone. Two polished bone needles were recovered from flank Unit 1 and from the summit there was also a small bone flake that had been polished and carved (Figure 4.18).

Modern Material

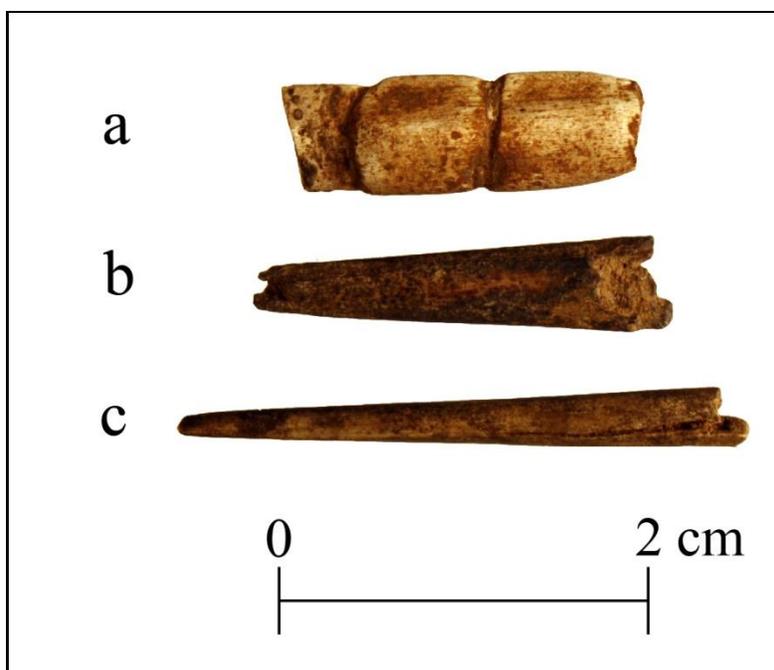


Figure 4.18. Bone artifacts; (a) carved bone; (b-c) bone needles. Mound P.

While the inclusion of an inventory of modern material may seem odd in a thesis about the prehistoric occupation of a platform mound (Table 4.6), it is warranted on a single premise: chronology. As will be discussed in the next chapter, the chronology of the mound based on the previously discussed diagnostic ceramics is the primary way in which the occupation of Mound P will be dated. Due to the amount of activity that has occurred at the site since European-Americans began to explore it in the early nineteenth century, a certain quantity of modern materials are expected to be found at Moundville. The proximity of Mound P to the Jones Archaeological Museum and its associated original construction, as well as the actions of the Civilian Conservation Corps in the 1930s cleaning the flanks and summit of Mound P have left modern artifacts within the soil matrix of the mound. These artifacts are important to the interpretation of the stratigraphic layers of the mound in order to determine which layers may have been disturbed and which ones were originally deposited. There are a few types of modern

Table 4.6. List of modern materials, Mound P.

	1935 U.S. penny	1936 U.S. penny	1952 U.S. penny	1942 U.S. quarter	Glass shard	Concrete	Brick	Ferrous Metal Nail	Rusted Metal	Slag/cinders	Plastic Hair Comb	Pencil Eraser	Bottle Cap	Road Gravel	Boot heel
Unit 1															
Humic Layer		1				2		1							
Unit 2															
Mound Erosion					6	4	2	9	4	161.5				3	
Modern Construction															
Fill						2	1	23		419.7					1
Summit															
Plowzone	1		1	1				6.6			1	1	1		
Feature 6F									1.5						
*bold is in grams															

material that were found within the Mound P material assemblage: coins, glass, metal wire, brick, mixed concrete, rusted ferrous metal and a boot fragment. The discussion of how they fit in with the overall chronology will be developed in the following chapter.

Summary

The Moundville ceramic type-variety system is based on Phillips' (1970) criteria and Steponaitis' (1983) application of this criteria to Moundville to create a chronology based on grave lot seriation. Types are defined by their temper, exterior finish and decorative technique and varieties of types are defined by the decoration. Many of these decorative varieties are temporally diagnostic to ceramic phases at Moundville. In order to determine the date for the terminal occupation of Mound P, the ceramic assemblage from the 2009 excavations was sorted by type and variety. Temporally diagnostic types, decorative modes and vessel forms are considered in Chapter 5 during the construction of the Mound P ceramic chronology. The modified and unmodified stone and mineral pigments from the 2009 Mound P excavations are

not chronologically diagnostic, but do have implications about the activities that were occurring on the summit of the mound. The large amount of daub that was excavated from the summit is also an indicator of mound summit activities, specifically that there was a large wattle-and-daub structure present on the summit during the terminal occupation. These lines of evidence will be used to answer the second research objective, which is to determine what cultural activities were occurring on the summit of the mound. The third research objective, comparison of the Mound P excavations to other mound excavations at Moundville, will be possible by combining the ceramic chronology and cultural activities of Mound P. Chapter 5 will answer all three research objectives by using the information presented in this chapter.

CHAPTER 5 RESULTS AND DISCUSSION

The goal of this thesis is to determine how long the office of the chief was important at Moundville. Knowing how long the chief was a symbol of authority is important because Moundville was largely depopulated around A.D. 1400, but archaeological evidence from mounds B, E, P and V all suggest that they continued to be used until around A.D. 1550. This extended use of platform mounds at a large Mississippian ceremonial center could indicate that the importance of the chief, or mounds as a symbol of their authority continued to be important to some degree past the center's collapse. In the introduction, I outlined three objectives that would help me achieve the goal of this thesis: this chapter will satisfy all three thesis objectives. First, a chronology for the terminal use of Mound P will be constructed by using diagnostic artifacts that were found within analytical provenience units. The second thesis objective is to describe the cultural activities that were occurring on the summit of the mound, as indicated through the excavated materials. This objective will consider the worked stone artifacts, pigment complex materials and daub. The final objective of this thesis is to compare the artifacts and features from Mound P to those of other mounds at Moundville. This will place Mound P within a larger intrasite context by discussing the similarities between it and two-tiered mounds that were present in the Black Warrior Valley during the late prehistoric period. This chapter presents the results from the field excavations, laboratory analysis and then discusses them within a broader perspective.

Objective One: Building a Ceramic Chronology

This objective is to build a ceramic chronology based on temporally diagnostic ceramic varieties from Mound P. Temporally diagnostic varieties are considered following *terminus post quem* logic for the vertical flank stratum and the horizontal summit excavations in order to determine the terminal phase of Mound P. The two flank units that were excavated by OAR in 2009 were exploratory in nature and intended to be excavated using 10-centimeter, contoured, arbitrary levels. Analytical provenience units are created from excavation levels that correspond well (with minimal cross-cutting) to soil layers and were temporally similar, based on the presence of diagnostic ceramic sherds. In order to understand the ceramic chronology of Mound P, I have constructed these analytical provenience units to correlate strata with associated artifacts.

Unit 1

Flank Unit 1 contained temporally diagnostic ceramic varieties from the Moundville I to Moundville III ceramics phases (Table 5.1) as well as diagnostic ceramic modes from the same time periods (Table 5.2). The first analytical provenience unit encompassed excavation levels 1-5 (Figure 5.1). The top 50 centimeters of the excavated area is marked by mound flank erosion and secondary deposition therefore, the prehistoric ceramic sherds that originate in these disturbed contexts are considered mixed and will only account for the presence of the material. One Carthage Incised, *variety Fosters* sherd (early-late Moundville III-Moundville IV) was present within the top 25-30 centimeters of the ground surface, within excavation Level 2, which cross-cut the Humic and Clay layers, plus the top portion of Mound Erosion. Also located within these disturbed layers were: one flattened rim (early-late Moundville I); a scalloped rim (late Moundville I); and three short-neck bowl rims (early-late Moundville III-Moundville IV). These

Table 5.1. List of ceramic types. Flank Unit 1, Mound P.

Excavation level	1	2	3	4	5	6	7	8	9	10	11	12	13	F1	14	15	16	17	18	19	PC	Total
Mississippi Plain	13	72	96	223	123	68	246	201	160	57	53	73	21	33	385	71	9	3	1	8	13	1929
Bell Plain	8	20	26	36	22	24	60	37	29	21	24	23	8	16	83	7	5	5	1	2	4	461
Carthage Incised, <i>variety Akron</i>															1	2						3
Carthage Incised, <i>variety Fosters</i>		1																				1
Carthage Incised, <i>variety Moon Lake</i>																1						1
Carthage Incised, <i>variety Poole</i>																					1	1
Carthage Incised, <i>variety unspecified</i>	1	2	4	2	2		4	3		2		1			2	2						25
Moundville Engraved, <i>variety Havana</i>										3												3
Moundville Engraved, <i>variety Hemphill</i>															6	2						8
Moundville Engraved, <i>variety Jones</i>										1												1
Moundville Engraved, <i>variety Tuscaloosa</i>																2						2
Moundville Engraved, <i>variety unspecified</i>				6	3		1	2	1	2	3	3			27	2						50
Moundville Incised, <i>variety Carrollton</i>															1							1
Moundville Incised, <i>variety Moundville</i>									1													1
Moundville Incised, <i>variety unspecified</i>		1	4				2	1							3							11
Barton Incised, <i>variety Barton</i>											1											1
Baytown Plain	1								1													2
Other types		3	3	5	3	3	2	2	4	2		1	1	1	5	2			2	1		40
<i>Totals</i>	23	99	133	272	153	95	315	247	199	84	81	101	30	50	513	91	14	8	4	11	18	2541

Table 5.2. List of diagnostic decorative modes and vessel forms. Flank Unit 1, Mound P.

Excavation level	1	2	3	4	5	6	7	8	9	10	11	12	13	F1	14	15	16	PC	Total
Beaded rim							1	1	1	1		1			1				6
Cylindrical bowl								1											1
Eccentric bowl															1				1
Flaring-rim bowl					1		2	2	2	1	1	1			9	1			20
Flattened rim			1												1				2
Frog effigy feature											1								1
Node								1											1
Notched lip															1				1
Outslanting bowl														1					1
Oversized jar																2			2
Restricted bowl												2							2
Scalloped rim					1			1											2
Shallow flaring-rim bowl								1											1
Short-neck bowl		1	1		1				2		1							1	7
Simple bowl	1		1	3		1	2	5	4	1	1	2	1		11	4			35
Slab base			1																1
Standard jar		5	4	12	6	2	24	9	6	1	4	4	1	4	18	8	2		110
<i>Total</i>	<i>1</i>	<i>6</i>	<i>8</i>	<i>15</i>	<i>9</i>	<i>3</i>	<i>29</i>	<i>21</i>	<i>15</i>	<i>4</i>	<i>8</i>	<i>10</i>	<i>2</i>	<i>5</i>	<i>42</i>	<i>15</i>	<i>2</i>	<i>1</i>	<i>194</i>

diagnostic ceramic sherds are within a mixed context and cannot be used to accurately provide a date for the terminal occupation at Mound P. This analytical provenience unit stops at the bottom of excavation Level 5, where there is a decline in the quantity of plain ceramics into Level 6; there were no diagnostic types or modes within Level 6.

The second analytical provenience unit that was created for flank Unit 1 encompassed excavation levels 7 to 12. These levels corresponded to a rather busy stratigraphic segment of the Unit 1 profile, which included; Stage III Fill, Lamilea, Stage IV, Yellow Clay Blanket Mantle and Stage V. The beginning portion of the Moundville ceramic chronology is nailed down by the presence of three Moundville Engraved, *variety Havana* sherds (late Moundville I-early Moundville II) and one Moundville Incised, *variety Moundville* sherd (early Moundville I-late Moundville II). A cylindrical bowl rim (early-late Moundville II-early Moundville III), as well as

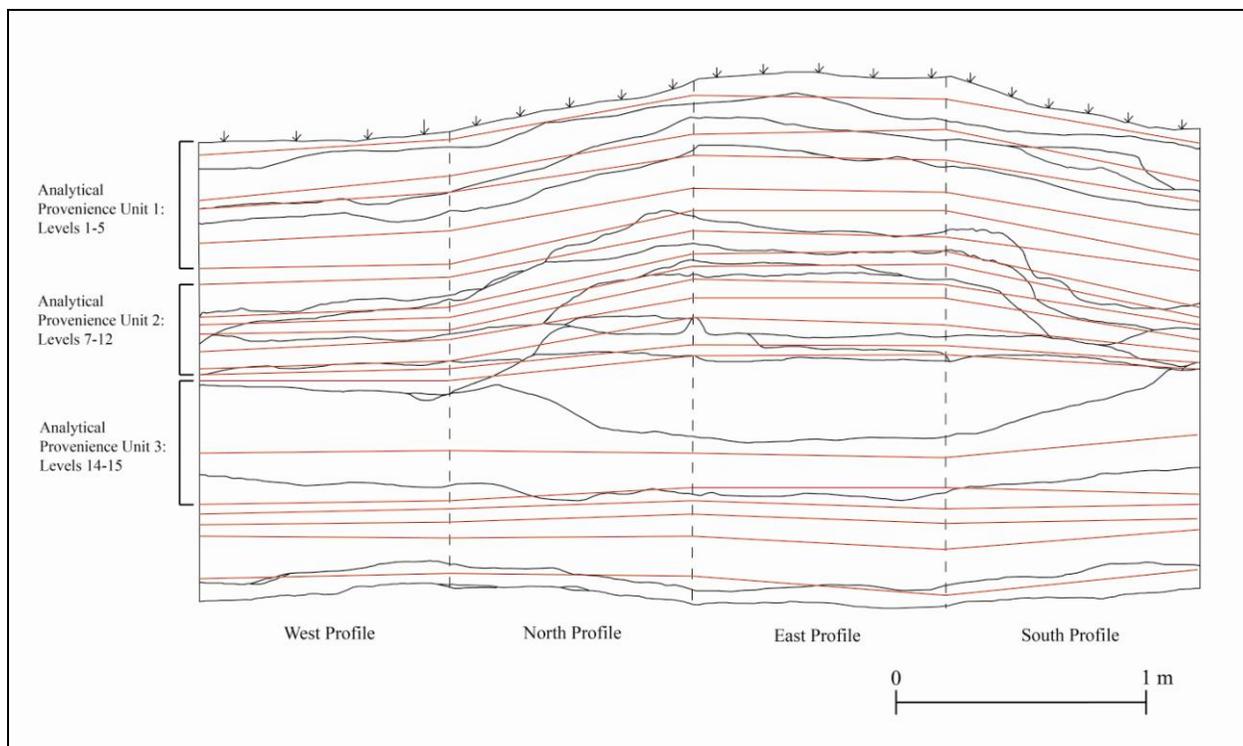


Figure 5.1. Flank Unit 1 with analytical units overlaying natural mound strata, Mound P.

four beaded rim simple bowl rim sherds (late Moundville II-Moundville IV) are ceramic modes and vessel forms that start in the middle of the Moundville sequence and are also present in this analytical unit. There is also the presence of a frog effigy feature (early-late Moundville III) within this analytical unit. The later portion of the Moundville ceramic chronology (early-late Moundville III-Moundville IV) is established by the presence of Moundville Engraved, *variety Jones*, as well as the presence of three short-neck bowl rim sherds.

The deepest analytical provenience unit present in flank Unit 1 contained excavation levels 14 and 15. These two excavation levels correspond very well to Stage II Fill and Deposit. Earlier diagnostic prehistoric ceramic sherds within this analytical unit include: one Moundville Incised, *variety Carrollton* sherd (early Moundville I-late Moundville II); Carthage Incised, *variety Moon Lake* (late Moundville I); and one flattened rim (early-late Moundville I). The

middle portion of the Moundville chronology is anchored here by the presence of diagnostic modes and types. One beaded rim, one eccentric bowl rim (Moundville II) and one notched lip (Moundville II-early Moundville III) are the diagnostic modes that are present: two Moundville Engraved, *variety Tuscaloosa* sherds and eight Moundville Engraved, *variety Hemphill* sherds (both varieties early Moundville II-early Moundville III) are diagnostic of the middle of the Moundville ceramic chronology.

Flank Unit 1 contained three fairly distinct analytical provenience units. The first one was located in the upper portion of the excavation unit and included the mound flank erosion. The diagnostic ceramic sherds that were located in this context were recognized as present, but discounted from the overall mound chronology due to the mixed deposits in which they were located. The second analytical unit was located in the center of the unit in a place where the stratigraphy is complex. This area shows evidence for quick construction and dates to the early Moundville III phase based on the presence of short-neck bowls and Moundville Engraved, *variety Jones*. The final analytical provenience unit that was present in Unit 1 was located deep within the unit. It corresponded well with Stage II Fill and Deposit and dates to the early Moundville II phase based on the presence of a beaded rim, Moundville Engraved, *variety Hemphill* and Moundville Engraved, *variety Tuscaloosa*. This is the earliest date that exists for Mound P, since no diagnostic artifacts were present below this point.

Unit 2

Flank Unit 2 was heavily disturbed. The top 67 centimeters of soil within the excavation unit were disturbed by a construction event in the 1930s, with layers of subsequent mound erosion overlaying this event. The first analytical provenience unit that was created for Unit 2

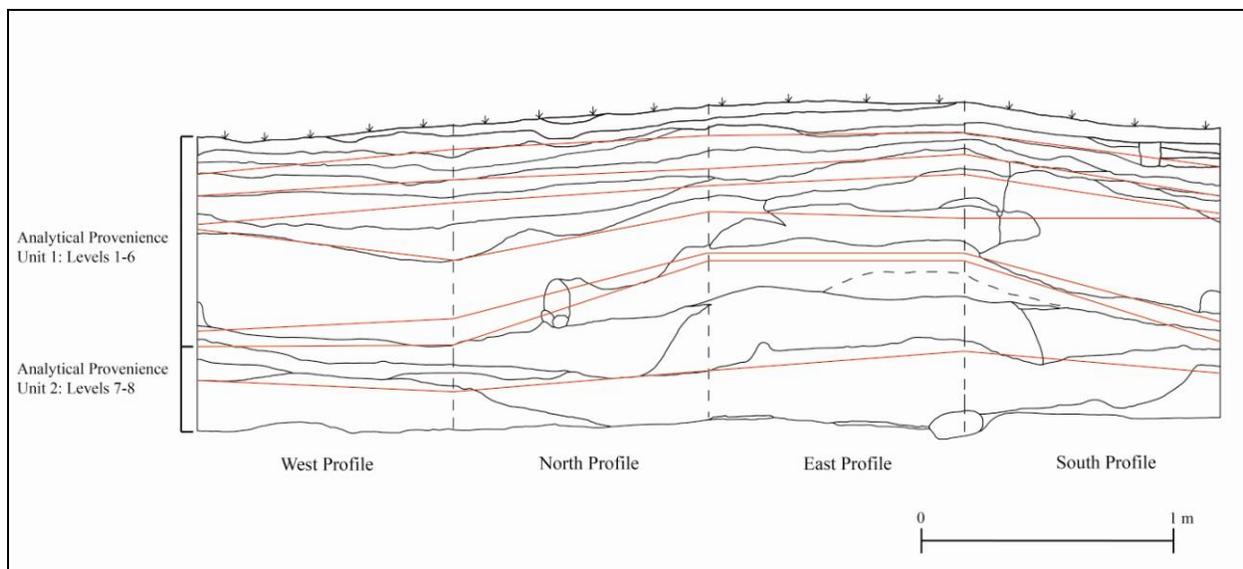


Figure 5.2. Flank Unit 2 with analytical units overlaying natural mound strata, Mound P.

encompassed excavation levels 1-6 (Figure 5.2). There is a lower quantity of prehistoric ceramic sherds that are found within this area of secondary deposition (Tables 5.3 and 5.4). Two Moundville Incised, *variety Moundville* sherds, (early Moundville I-late Moundville II) and one Moundville Engraved, *variety Havana* sherds, (late Moundville I-early Moundville III) are present in the Modern Construction Fill and Mound Erosion zones. There are also temporally diagnostic modes that are present within these zones: notched lips date from early Moundville II to early Moundville III and folded rims are diagnostic of early to late Moundville I. While all of these types or modes are present within Unit 2, they can only be used as a marker for the types and modes that are present. They are within a mixed context and therefore cannot be considered for the overall mound chronology. The presence of a brick fragment, rusted metal nails and a boot heel in soil that *underlay* these prehistoric diagnostic sherds provides the evidence needed to exclude them from consideration. The bottom portion of flank Unit 2 shows no evidence for recent disturbance. One Moundville Incised, *variety Moundville* (early Moundville I-late Moundville II) sherd is present within excavation Level 7, which cross-cuts the top of stages II

Table 5.3. List of ceramic types. Flank Unit 2, Mound P.

Excavation level	1	2	3	4	5	6	7	8	F3	F4	PC	Total
Mississippi Plain	9	14	33	30	13	10	66	68	20	48	3	314
Bell Plain	8	8	4	11		6	17	9	2	5	3	73
Carthage Incised, <i>variety unspecified</i>	2	1	1	1								5
Moundville Engraved, <i>variety Havana</i>					1							1
Moundville Engraved, <i>variety unspecified</i>				1	1	1						3
Moundville Incised, <i>variety Moundville</i>				2				1				3
Moundville Incised, <i>variety unspecified</i>			1	1					1		4	7
Other types	2	2			3	1					1	9
<i>Totals</i>	<i>21</i>	<i>25</i>	<i>39</i>	<i>46</i>	<i>18</i>	<i>18</i>	<i>84</i>	<i>78</i>	<i>22</i>	<i>58</i>	<i>6</i>	<i>415</i>

Table 5.4. List of diagnostic decorative modes and vessel forms. Flank Unit 2, Mound P.

Excavation level	2	3	4	5	6	7	8	F3	F4	PC	Total
Flaring-rim bowl	1	1		1						1	4
Folded rim				1		2					3
Node								1	1		2
Notched lip				1							1
Outslanting jar						1					1
Oversized jar							2				2
Simple bowl			1						1		2
Standard jar	1	5			1	2	4	1	3	1	18
<i>Totals</i>	<i>1</i>	<i>6</i>	<i>2</i>	<i>1</i>	<i>3</i>	<i>3</i>	<i>8</i>	<i>2</i>	<i>5</i>	<i>2</i>	<i>33</i>

III and IV. There is also the presence of two folded rims in excavation Level 8, a diagnostic ceramic mode that dates from early to late Moundville I. Level 8 includes materials that were present in Stage I and Stage II and was the last level that was excavated in Unit 2.

The disturbed portion of flank Unit 2 includes prehistoric ceramics that date from early Moundville I to early Moundville III. The soils that are associated with this area are mound erosion from higher up on the flank and secondary modern construction fill. The undisturbed portion of flank Unit 2 dates to the early Moundville I phase based upon the presence of these three diagnostic sherds.

Table 5.5. List of ceramic types. Summit plowzone, Mound P.

	Block 1		Block 2		Features		Total	
	#	G	#	g	#	g	#	G
Mississippi Plain	1018	2454.4	135	296	154	468.7	1307	3219.7
Bell Plain	323	902.9	35	89.4	77	276.9	435	1269.2
Carthage Incised, <i>variety Carthage</i>	2	7.9					2	7.9
Carthage Incised, <i>variety Fosters</i>			1	4.8			1	4.8
Carthage Incised, <i>variety Lupton</i>	3	18.5					3	18.5
Carthage Incised, <i>variety unspecified</i>	11	29.2	4	8.1	1	6.1	16	43.4
Moundville Engraved, <i>variety Tuscaloosa</i>	1	6.6					1	6.6
Moundville Engraved, <i>variety unspecified</i>	13	23.4	1	1.6	7	26.6	21	51.6
Moundville Incised, <i>variety unspecified</i>	11	24	3	6.1	2	6.8	16	36.9
Alabama River Appliqué	1	1.1					1	1.1
Other types	18	60.5	3	6.4	1	1	22	67.9
<i>Totals</i>	<i>1401</i>	<i>3528.5</i>	<i>182</i>	<i>412.4</i>	<i>242</i>	<i>786.1</i>	<i>1825</i>	<i>4727.6</i>

Table 5.6. List of diagnostic decorative modes and vessel forms. Flank Unit 2, Mound P.

	Block 1		Block 2		Features		Total	
	Count	%	count	%	count	%	count	%
Beaded rim	3	3					4	36
Flaring-rim bowl	11	10	1	1	1	1	13	12
Folded-flattened					1	1	1	1
Node			1	1	1	1	1	1
Notched lip	3	3	1	1			3	3
Short-neck bowl	8	7					8	7
Simple bowl	9	8	3	2	28	25	40	36
Slab base			1	1			1	1
Standard jar	36	32			3	3	39	35
<i>Totals</i>	<i>70</i>	<i>63</i>	<i>7</i>	<i>6</i>	<i>34</i>	<i>0.31</i>	<i>111</i>	<i>100</i>

Summit Plowzone

The Mound P summit plowzone yielded a large number of chronologically diagnostic ceramic varieties (Table 5.5) as well as diagnostic decorative modes and vessel forms (Table 5.6). These are important for the first thesis objective; determining the terminal occupation of Mound P. These are the sherds that would have been present on the summit of the mound during its final occupation or use. The analytical units that will be used for the summit have already

been presented in Chapter 2: Block 1, Block 2 and Features. The excavations on the summit of Mound P were not deep enough (20 cm) to provide any noticeable mound strata. The interpretations of the diagnostic ceramic sherds must rely on associations with other materials, such as modern items.

The more expansive horizontal excavations define Block 1. This group includes Units A-G and all of the excavated features. While the earliest diagnostic variety from this block is Moundville Engraved, *variety Tuscaloosa* (early Moundville II-early Moundville III), there is better evidence for a more solid Moundville III occupation on the summit of Mound P. This is due to the presence of varieties and modes that correspond relatively well within the same time span. Three sherds of Carthage Incised, *variety Lupton* and two sherds of Carthage Incised, *variety Carthage*, plus the presence of three beaded rims and three notched lips place a large amount of the diagnostic sherds within the Moundville III phase. Within Block 1 there was also the presence of eight short-neck bowl rim sherds (early-late Moundville III-Moundville IV) and a single Alabama River Appliqué jar collar sherd (Moundville IV). The diagnostic ceramic sherds that were present within the mound summit plowzone were found in association with modern items, however: units A, D and G all contained modern material within the top 20 centimeters of the excavation units. The presence of a single Alabama River Appliqué jar collar sherd within the plowzone of Block 1 should date the occupation to the Moundville IV phase, but it is the only ceramic sherd from the summit of Mound P that dates to this time and is within a mixed context. Block 1 is a disturbed context with a higher proportion of Moundville III diagnostic sherds, a single Moundville IV sherd and some modern items.

Block 2 contained a lower quantity of excavated materials, a trend that was also reflected in the ceramic assemblage from this analytical unit. A single notched lip (Moundville II-III) and

one bottle slab base (late Moundville II-Moundville III), as well as a single Carthage Incised, *variety Fosters* sherd (early-late Moundville III-Moundville IV) were the three diagnostic sherds from this context. These diagnostic ceramic sherds date Block 2 to the Moundville III ceramic phase. There were no modern items recovered from the plowzone of Block 2. The only diagnostic ceramic sherd from any feature (Feature 3) was a folded-flattened rim (early-late Moundville I). This folded-flattened rim is clearly out of context compared to the rest of the ceramic assemblage and must be the result of a later re-deposit. Other features contained small amounts of unspecified varieties and plain sherds.

The summit of Mound P contained diagnostic ceramics that help to directly answer the research question. The ceramic assemblage from the top of the mound has a strong Moundville III occupation with an ephemeral Moundville IV component. However, since there is the presence of modern items within the plowzone, this conclusion is tentative as the soils could have been disturbed. When the Alabama River Phase ceramics from the 1988 Boyce Driskell eastern flank excavations are combined with the 2009 excavations, there are a total of five Moundville IV diagnostic sherds from Mound P. The diagnostic sherds from the 1988 excavations could not be identified to stratigraphic layers due to the cross-cutting nature of the exploratory excavations (Knight 2010:236).

Objective Two: Analyze Artifacts for Determination of Cultural Activities

The second objective of this thesis is to determine what cultural activities were occurring on the summit of Mound P during its occupation. Platform mounds were monumental places that were occupied by a group that could legitimize their authority through the use of the mound by engaging in certain activities that were tied to existential forces and by living on the summit of

the mound itself. An analysis of the activities that were occurring on the summit of Mound P will help to determine the degree to which these activities were occurring at this place. In order to get at this determination, modified lithic materials will be able to indicate whether or not lapidary work was occurring on the summit. There is also evidence for the production of the pigment complex on the summit of Mound P from the presence of mineral pigments, galena, mica and a tablet fragment. Finally, the analysis of daub is important in assessing the location of the summit structure that was razed before the final abandonment.

Unit 1

The flaked stone that was present in flank Unit 1 was present in the top, disturbed portion of the unit and within the central, quickly deposited soil layers that make up the second analytical unit (Table 5.7). Excluding projectile points, there were a total of ten artifacts (35.1 g) of flaked Tuscaloosa gravel chert and two pieces (2.3 g) of flaked quartzite found within the mound erosion soil zone. A blade-like flake (1.4 g) produced from fine-gray micaceous sandstone was also present in the disturbed soil zone. This represents 81 percent of the flaked stone that was present in flank Unit 1. The remaining 19 percent of the flaked stone from Unit 1 was found within the second analytical unit, which corresponds to rapid increases of soil over time and dates to the early Moundville III phase.

There were eleven (225.1 g) pieces of ground stone that were not recognizable to a specific function, such as an abrader or tablet (Table 5.8). Sandstone and ferruginous sandstone made up 91 percent of the ground stone present, with one piece of fine gray micaceous sandstone coming from the unit profile clean-up. The pattern of ground stone within the excavation unit roughly matches the pattern of flaked stone that was present. The ground stone present in the

Table 5.7. List of flaked lithic. Flank Unit 1, Mound P.

	TG		Q		BGFP		Total	
	n	g	n	G	n	g	N	g
Level 1	2	4					2	4
Level 2	3	7.4	2	2.3			5	9.7
Level 3					1	1.4	1	1.4
Level 4	3	7.3					3	7.3
Level 5	2	16.4					2	16.4
Level 10	1	0.9					1	0.9
Level 11	1	0.4					1	0.4
Level 12	1	2.1					1	2.1
<i>Totals</i>	<i>13</i>	<i>38.5</i>	<i>2</i>	<i>2.3</i>	<i>1</i>	<i>1.4</i>	<i>16</i>	<i>42.2</i>

TG-Tuscaloosa gravel chert; Q-quartzite; BGFP-blue-gray Fort Payne chert.

***bold** is a blade-like flake

Table 5.8. List of ground lithic. Flank Unit 1, Mound P.

	SS		FS		FGMS		Total		
	n	g	n	g	n	G	n	g	
Level 1			1	13.6			1	13.6	
Level 5			2	16.4			2	16.4	
Level 6		3	61.7	1	3.1		4	64.8	
Level 7		1	82				1	82	
Level 8			1	3.7			1	3.7	
Level 9		1	42.2				1	42.2	
Profile Clean-up					1	2.3	1	2.3	
<i>Totals</i>		<i>5</i>	<i>186</i>	<i>5</i>	<i>36.8</i>	<i>1</i>	<i>2.3</i>	<i>11</i>	<i>225.1</i>

SS-sandstone; FS-ferruginous sandstone; FGMS-fine-gray micaceous sandstone.

Table 5.9. List of ground tools. Flank Unit 1, Mound P.

Accession Number	Provenience	Raw Material	Tool	Count	Weight (g)	Comments
2009.54.7-8	Unit 1, Level 7	Sandstone	Abrader	1	29	
2009.54.9	Unit 1, Level 8	Sandstone	Abrader	1	416.2	Pitted anvil stone and abrader
2009.54.17-23	Unit 1, Level 14	Sandstone	Abrader	1	117.8	
2009.54.24-25	Unit 1, Level 15	FGMS	Tablet	1	356.9	Red pigment on ground side

Table 5.10. List of all modified lithic. Flank Unit 2, Mound P.

Accession Number	Provenience	Material	N	g	Comment
2009.54.35	Unit 2, Level 3	Mill Creek chert	1	3.5	hoe fragment
2009.54.36-37	Unit 2, Level 3	blue-gray Fort Payne chert	1	0.4	Flaked
2009.54.38-39	Unit 2, Level 5	Tuscaloosa gravel chert	1	3.4	Flaked
2009.54.44	Unit 2, Level 8	Bangor chert	1	13.5	Core
2009.54.44	Unit 2, Level 8	Bangor chert	1	0.7	Flaked
2009.54.44	Unit 2, Level 8	Sandstone	1	162.5	Ground
2009.54.47	Unit 2, Feature 3	Sandstone	1	2.9	Ground

mound erosion was 64 percent of the assemblage, whereas 27 percent were within the second analytical unit. Two ground, sandstone abraders were recovered from the second analytical unit: one of these was a large (416.2 g), ground, multi-purpose stone (Table 5.9). Two more ground stone tools were present in the Unit 1 assemblage, but they were located in the bottom analytical unit that dates to early Moundville II. Another ground, sandstone abrader (117.8 g) and a large (356.9 g), fine gray micaceous sandstone tablet fragment were located within this soil zone. This tablet had one, mildly depressed ground surface which had red pigment still present in the center. The other side was not formally manufactured.

The pattern of flaked stone in flank Unit 1 indicates that expedient tools were not used extensively prior to the Moundville III phase, as they were not recovered below the second analytical unit. There was no pattern to the vertical distribution of ground lithic and ground tools within Unit 1, but a sandstone abrader and the sandstone tablet were present within analytical unit three, which dates to early Moundville II.

Unit 2

Flank Unit 2 produced a total of seven (186.9 g) modified stone artifacts: three (7.7 g) of these flaked stone artifacts are from levels 3 and 5, within the disturbed soil zones (Table 5.10).

Table 5.11. Summit plowzone and summit feature feature flaked lithic, Mound P.

	TG	%	BGFP	%	QZ	%	Other	%	Total	%
<i>Summit Block 1</i>										
Cores	2	66	1	33					3	100
Shatter	2	66			1	33			3	100
Flakes	10	77	1	7	2	15			13	100
Subtotal	14	73	2	1	3	15			19	100
<i>Summit Block 2</i>										
Cores			1	1					1	100
Shatter							1	1	1	100
Flakes	2	5	1	25	1	25			4	100
Subtotal	2	33	2	33	1	16	1	16	6	100
<i>Summit Features</i>										
Cores			1	5			1	5	2	100
Flakes	5	1							5	100
Subtotal	5	71	1	14			1	14	7	100
<i>Total</i>	<i>21</i>	<i>65</i>	<i>5</i>	<i>15</i>	<i>4</i>	<i>12</i>	<i>2</i>	<i>6</i>	<i>32</i>	<i>100</i>

TG = Tuscaloosa gravel chert; BGFP = blue-grey Fort Payne chert;
 QZ = quartzite

One of these was a Mill Creek chert hoe fragment (3.5 g). The closest source for this stone is in southern Illinois. The remaining flaked and ground stone artifacts (n = 4; 179.2 g) from this unit come from the bottom 15-20 centimeters of soil (Stages I-II), which is below the second analytical provenience unit for Unit 2. The flaked Bangor chert and ground sandstone that were present in the second analytical unit date to Moundville I based on diagnostic pottery.

Summit

Compared with the stone assemblages from the two flank units, the summit units yielded a higher quantity of flaked stone, expedient tools and ground stone (Table 5.11). Summit Block 1 contained the majority (59 percent) of the flaked stone from the top of Mound P, which would be expected for excavations that were more expansive. A large amount of this flaked stone was Tuscaloosa gravel chert (73.6 percent) but there was some blue-gray Fort Payne chert and quartzite. Summit Block 2 contained only six pieces of flaked stone and the total amount of flaked stone from the features was seven pieces, or 22 percent of the mound summit modified

Table 5.12. List of expedient flaked stone tools. Summit, Mound P.

Accession Number	Provenience	Artifact	Raw Material	Comments
<i>Block 1</i>				
2009.102.2	Summit plowzone	utilized flake	Tuscaloosa gravel chert	
2009.102.2	Summit plowzone	utilized flake	Tuscaloosa gravel chert	bifacial flaking
2009.102.6	Summit plowzone	utilized flake	Tuscaloosa gravel chert	bifacial flaking
2009.102.11	Summit plowzone	utilized flake	blue-gray Fort Payne chert	
2009.102.11	Summit plowzone	blade-like flake	blue-gray Fort Payne chert	bifacial flaking
2009.102.13	Summit plowzone	utilized flake	Tuscaloosa gravel chert	
<i>Block 2</i>				
2009.102.14	Summit plowzone	blade-like flake	Tuscaloosa gravel chert	
<i>Features</i>				
2009.102.22	Feature 6E	utilized flake	blue-gray Fort Payne chert	
2009.102.44	Feature 53	utilized flake	Tuscaloosa gravel chert	heat treated

Table 5.13. Ground stone tools. Summit, Mound P.

	Sandstone			Ferruginous sandstone			FGRM			Totals		
	N	g	%	n	g	%	n	g	%	n	g	%
<i>Block 1</i>												
Ground	10	39.9	15	8	17.4	6	2	15.4	5	20	72.7	26
Saw				1	6.5	2				1	6.5	2
Abrader	1	2.7	1							1	2.7	1
<i>Block 2</i>												
Ground	1	36	13	4	99.1	36				5	135.1	49
<i>Features</i>												
Ground	1	51.5	19	1	1.5	0.5				2	53	19.5
Totals	14	130.1	48	14	124.5	46	2	15.4	5	30	270	100

FGMS-fine-gray micaceous sandstone

lithic assemblage. Within Block 2 and the features, Tuscaloosa gravel chert composed 12 percent and 31 percent of the total assemblage, respectively.

Expedient flaked tools from the summit of Mound P were mainly concentrated in Block 1 (55 percent), with four Tuscaloosa gravel chert utilized flakes, one utilized and one blade-like flake of blue-gray Fort Payne chert. Block 2 and the total from the features yielded the remainder to the expedient tools from the summit of Mound P (Table 5.12).

The ground stone tool assemblage from the summit of the mound was made up of sandstone (46 percent), ferruginous sandstone (46 percent) and fine gray micaceous sandstone (.06 percent). From this assemblage, there was one ferruginous sandstone saw (6.5 g) and one sandstone abrader (2.7 g) that originated in Block 1 (Table 5.13).

The higher concentrations of modified stone artifacts on the summit of Mound P were located within Block 1, an area that is on the raised, southern portion of the mound. This shows that there was a higher amount of activity and stone manufacture occurring in or around a large burned structure that was located in this area during the terminal occupation of the mound.

The presence of modified stone from the flank and summit of Mound P demonstrates some of the elite activities that were occurring on the summit of the mound during the Moundville III phase. The presence of a ferruginous sandstone saw with a straight, convex worked edge (see Figure 4.13c) indicates that decorative stone items associated with Southeastern Ceremonial Cult symbolism may have been prepared on the summit of the mound (Knight 2004:309), although no pendants or formal sandstone paint palettes were recovered from the 2009 excavations, leading this declaration to be tentative. Grooved sandstone abraders may have been a tool used to sharpen bone awls used in leather working and cutting and scraping would have been accomplished with flaked, expedient tools (Knight 2004:309). Expedient flaked stone tools were in use during the Moundville III phase, as indicated by their presence of these artifacts in the second analytical unit of Unit 1. They are present in the first analytical unit of Unit 1, but this is disturbed. The ground sandstone tablet fragment from the third analytical unit in Unit 1 exhibited a slightly concave, pigment covered surface would be included within the pigment complex as a surface in which paint was produced (Davis 2008; Knight 2004, 2010).

This was present in the undisturbed portion of the unit, but was not found in context with any pigment quality hematite (see below).

Greenstone

Hillabee greenstone was used at Moundville to make ax heads, but when these celts would break, the pieces were recycled and used as other tools such as saws, pendants, tabular items and hammerstones (Gall and Steponaitis 2001; Knight 2010; Wilson 2001). The Mound P excavations did not yield proper, finished celts, but chipped, ground and polished greenstone flakes were excavated from both the flank and the summit (Table 5.14). There were a total of 25 greenstone artifacts that were recovered during the 2009 excavations. The greenstone that was recovered from the flank and summit all indicate that there was some degree of expedient artifact recycling occurring on the summit of Mound P (Knight 2010; Wilson 2001). There was one celt fragment that was recovered from within Stage I or II in flank Unit 2. This piece of greenstone exhibits one U-shaped groove on the polished, exterior surface and a second, shallower U-shaped groove on the opposite side of the celt fragment. These sawn incisions indicate that the object was in the process of being recycled and formed into another object, but the process was not completed.

The relative absence of greenstone debris from manufacturing at Moundville and in the Black Warrior Valley suggests that utilitarian items were produced near the Hillabee outcrop or arrived at Moundville as late-stage performs. Utilitarian greenstone objects were found in large quantities in domestic midden deposits through the Black Warrior Valley, indicating that the community members had widespread access to them (Wilson 2001:125).

Table 5.14. List of greenstone, Mound P.

	Flank Unit 1		Flank Unit 2		Summit Plowzone		Total	
	n	%	n	%	n	%	n	%
Ground	8	57			6	43	14	100
Polished	1	50			1	50	2	100
Chipped	1	12.5	1	13	6	75	8	100
Celt/fragment			1	100			1	100
<i>Total</i>	10	40	2	8	13	52	25	100

Greenstone celts and the other objects that were fashioned from this stone were once thought to have been a material that was controlled by the elite. Through the control of nonlocal material and prestige items, elites could legitimize their authority and attach themselves to esoteric knowledge that non-elites would not have access to (Earle 1997; Muller 1997; Wilson 2001). While greenstone is a nonlocal resource (Gall and Steponaitis 2001), the higher frequency of utilitarian, woodworking celts in domestic contexts further indicates that the Moundville elite did not have centralized control over greenstone itself, but the strategic advantage may have been more in the control of the wood or wooden items (Wilson 2001:125).

Pigment Complex

Materials that are recognized as being connected to elite activity at Moundville include mineral pigments and possibly muscovite (mica), coal and galena (Knight 2004, 2010; Peebles 1974; Peebles and Kus 1977). While these materials are present in elite burials (Peebles 1974) they are also present within a platform mound context (Knight 2004, 2010). The materials that represented the pigment complex (excluding the aforementioned sandstone tablet and ferruginous sandstone saw) from Mound P were present in both the flank excavation units and on the summit (Table 5.15).

The materials that make up the pigment complex that were present within flank Unit 1

Table 5.15. Materials recognized as a part of the pigment complex, Mound P.

	Flank Unit 1		Flank Unit 2		Summit Plowzone		Summit Features		Totals	
	Count	Weight (g)	Count	Weight (g)	Count	Weight (g)	Count	Weight (g)	Count	Weight (g)
Coal					11	4.4			11	4.4
Galena					1	0.9			1	0.9
Hematite, pigment quality	11	35.5	1	2	21	71.9	22	22.3	55	131.7
Muscovite (mica)	1	0			1	0.3			2	0.3
<i>Totals</i>	<i>12</i>	<i>35.5</i>	<i>1</i>	<i>2</i>	<i>34</i>	<i>77.5</i>	<i>22</i>	<i>22.3</i>	<i>69</i>	<i>137.3</i>

were limited in variety, but did show a slight concentration pattern. Muscovite was noted as present as a single occurrence (0.0 g) within the second analytical unit (Level 11), but a more noticeable pattern was present for the pigment quality hematite. Out of a total of eleven pieces of the mineral (35.5 g), just over 41 percent (14.8 g) of the total weight from Unit 1 was located in the first, disturbed analytical unit: forty-six percent (16.3 g) was excavated from Level 7 at the top of the second analytical unit. The only other occurrence of mineral pigment (n = 1; 4.4 g) from flank Unit 1 was recovered from Level 15, within the third and deepest analytical unit. The pattern that emerges is that just under half of the materials that comprise of the pigment complex are located within the disturbed, or mixed, soil zone.

In flank Unit 2, there was a single occurrence of a mineral pigment that was recovered from Level 4, which is in the first analytical unit and is also a mixed context. There was more variation present in the pigment complex assemblage from the summit plowzone, as coal, galena, hematite and mica were all present. Once again however, the materials that were recovered from the summit plowzone were also found within a mixed context since modern materials were present within the excavation unit fill of units A, D and G. The summit features yielded less than 24 percent of the total pigment quality hematite weight from the summit. The excavated features were largely undisturbed and may provide one of the only *in situ* contexts for pigment complex materials from the 2009 Mound P excavations.

The presence of pigment complex materials within the mound flank erosion and the mound summit is not unique to Mound P, but it does indicate that elite activities associated with the pigment complex were occurring on the summit of the mound. Peebles (1974:130) notes that at Moundville different colored paints, or pigments, were one of many different artifact classes that he included in the grave good group Cluster I, which also includes copper ear spools, copper axes or celts, and copper gorgets (Peebles 1974:130). Burials that contain Cluster I grave inclusions are less in number and concentrated along the north, northwestern and western periphery of Moundville's plaza, often being located closer to the large open area (Peebles 1974:131). The inclusion of mineral pigments in elite burials connects individuals of higher status with a certain artifact type (Knight 2010:67; Peebles 1974:140). The presence of raw, pigment quality rocks on the summit of Mound P further ties the production of paints to people with higher status and would have been used to produce paint that would have been applied to the surfaces of wood, pottery, architecture and possibly humans (Knight 2004:309-10). Further, the ferruginous sandstone saw and the sandstone tablet fragment with red pigment residue remaining on the ground surface from flank Unit 1 (see above) are a part of the pigment complex (Knight 2004:309), as the ground tablet surface was possibly the surface that paints were ground and prepared upon.

Daub

The main indicator of a large, burnt wattle-and-daub structure on the summit of Mound P is the presence of a large amount of daub from the summit and flank excavations. Within flank Unit 1, the highest concentration of daub (62 percent) is within the second analytical provenience unit, which is a series of quickly deposited soil layers that dates to early Moundville III, whereas 16 percent of the excavated daub is from disturbed contexts and 21 percent originated from the

Table 5.16. Flank Unit 1, daub by excavation level, Mound P.

Unit 1	Weight (g)	Percent
Level 1	14.4	0.3
Level 2	131.8	3
Level 4	213	5
Level 5	311	7
Level 6	70.1	2
Level 7	396.6	9
Level 8	493.9	11
Level 9	1295.9	29
Level 10	358	0.8
Level 11	106.8	2
Level 12	142.3	3
Level 13	81.9	2
Feature 1	14.3	0.3
Level 14	558.7	13
Level 15	101.8	2
Level 18	12.4	.02
Level 19	11.9	.02
Profile Clean-up	160.5	4
<i>Total</i>	<i>4475.3</i>	<i>100</i>

Table 5.17. Flank Unit 2, daub by excavation level, Mound P.

	Weight (g)	Percent
Level 1	10.8	4
Level 2	8.4	3
Level 3	44.8	15
Level 4	27.1	10
Level 5	11.6	4
Level 6	12.2	4
Level 7	71.3	25
Level 8	71.3	25
Feature 3	21.1	7
Feature 4	3.4	1
Profile Clean-up	3.5	1
<i>Total</i>	<i>285.5</i>	<i>100</i>

Table 5.18. Summit, excavated daub, Mound P.

	Weight (g)	Percent
<i>Block 1</i>		
Unit A	1012.2	1
Unit B	1880.8	3
Unit C	2316.4	4
Unit D	5998.9	10
Unit E	18425	3
Unit F	10445.4	2
Unit G	4874.2	8
Features	15879.8	26
Subtotal	60832.7	99
<i>Block 2</i>		
Unit H	362.9	0.06
Unit I	391.8	0.06
Subtotal	754.7	1
<i>Totals</i>	<i>61195.6</i>	<i>100</i>

lowest provenience unit (Table 5.16). Within flank Unit 2, just over half of the daub originated from the bottom of the unit, which is underneath the disturbed area (Table 5.17). Within this assemblage, there were no pieces of fired clay that had any reed or fiber impressions.

The daub that was excavated from the summit of the mound was extensive (Table 5.18). In total, there were 61 kilograms of daub or fired clay that were excavated from the top of Mound P. The majority (60.8 kg, or 99.4 percent) of this came from Block 1 summit plowzone and the features combined: features 33, 47, 53, 56 each all contained over 2,000 grams of daub. The daub that came from the summit of the mound shows signs of exterior surface treatment, whole cane impressions and thin strip binding, as defined by Sherard (2009:34-5) as well as Terrel and Marland III (1983:444-5). The amount of daub on the southern, or raised portion of the summit, is 81 percent higher than the amount of daub found in Block 2, located on the summit slope. This suggests that the 2009 fall field school intersected a portion of the large rectangular anomaly that Dr. Walker's magnetometer survey indicated; it confirms that this

anomaly is most likely a very large, burnt daub structure that was present on the summit of the mound during the final occupation of Mound P.

Nabokov and Easton (1989:93-4) describe the changes in architecture that the de Soto expedition encountered as they moved from Florida into the interior Southeast. The two platform mounds that the expedition first encountered at Ucita (near present day Tampa) each supported a wattle-and-daub structure. The walls of these rigid pole, gabled roof structures were constructed using a cane lath (wattle) which was woven between single set support posts and then covered with a mud and fiber mixed plaster (daub) (Carley 1994:20; Lacquement 2007; Nabokov and Easton 1989:94). The roofs of these buildings were covered with palmetto in the south and as the expedition moved north, the coverings switched to cane or cane matting (Nabokov and Easton 1989:94). The interior of the buildings contained raised sleeping platforms, erected above a clean, “puddle and plastered” floor (Nabokov and Easton 1989:94). A hearth was placed within this packed floor in the center of the structure.

While these descriptions of houses were recorded by Europeans at the beginning of the Protohistoric period, the manifestations of prehistoric structures in the Southeast are visible to archaeologists today through postholes, post molds, wall trenches, charred timbers and heavy daub concentrations. The placement of the chief’s house on the summit of a symbolically important place would further legitimize that person’s claim to the importance of the mound. In west-central Alabama, Lacquement (2007) has defined five different floor plan types that are chronologically important (Lacquement 2007:66). Floor plan Types I-III are present in the Black Warrior Valley from Moundville I-II, but Types IV and V are diagnostic of the Moundville III and IV phases based on associated ceramics (Lacquement 2007:60-6). The Type IV floor pattern, “Large Individually Set Post Form”, is recognized in plan view by “large, widely spaced,

individually set wall posts,” marked internal roof supports for a hipped or gabled roof, and is associated with large amounts of daub (Lacquement 2007:64-5). This type of structure floor plan was not present in west-central Alabama until after A.D. 1400, which marks the end of the Moundville II phase, and becomes the predominant architecture type in the region during the Moundville III and IV phases (Lacquement 2007:65). The Type V floor pattern, “Amorphous Post Daubed Form”, is characterized by large, widely scattered, individually set posts organized into no identifiable pattern (Lacquement 2007:65). This type of structure is also associated with large amounts of daub, but is indicative of the Protohistoric period (Lacquement 2007:65).

The pattern of uncovered features from the summit of Mound P does not match the architectural pattern that Lacquement (2007:61) defines for the early Moundville phases. There were no discernable wall trenches with individually set posts and there was not a straight line of posts evident in the overall plan view of Block 1 (see Figure 3.8). The pattern that does emerge from the overall plan view of Block 1 is three scattered concentrations of smaller post holes, with two large postholes being located on the interior of the possible wall. The scattered nature of the postholes, plus the large quantity of daub and Moundville III and IV diagnostic ceramics indicates that this is most likely a Type IV, Large Individually Set Post Form structure, following Lacquement’s definition. However, further lateral excavations are needed on the summit of Mound P in order to determine the exact nature of architectural elements to one another.

The location and presence of a large, rigid pole structure on the summit of Mound P during the Moundville III period indicates that the symbol of the mound as the manifestation of the chief’s authority was still important late into Moundville’s history. Lacquement’s (2007) Type IV floor plan is not present in the Black Warrior Valley before A.D. 1400, around the time that the political center was undergoing a social and political reorganization (Knight and

Steponaitis 1998) but it is present on the terminal occupation surface of Mound P. The diagnostically late architecture combined with the presence of short-neck bowl rims, Carthage Incised, vars. *Foster* and *Poole* as well as the presence of Alabama River Appliqué sherds from the summit and the flank indicates that the position of the chief was in fact still important throughout the Moundville III phase and at the dawn of the Moundville IV phase.

Objective Three: Comparison of Mound P to other Mounds in the Black Warrior Valley

The comparison of Mound P to other mounds within the Black Warrior Valley is essential in order to place the mound within an intrasite and regional context. Three contemporaneous mounds from Moundville, mounds B, E and V, as well as the White and Minter Creek sites from the Black Warrior Valley, will be used to compare the similarities in artifacts and architecture to the excavations from Mound P. Any differences between the artifact assemblages of these mounds and Mound P will not be discussed because of sampling bias. The excavations on the different mounds differ in depth, breadth and placement, therefore any artifacts that are present on other mounds, may or may not be uncovered on Mound P with further excavation.

Mound B is the largest mound at Moundville and is positioned in the north-central area of the site. There has been little field work conducted on Mound B, and therefore what archaeologists know about the mound comes from collections from the 1930s (Knight 2010:313-17). While there is not that much known about Mound B, it does hold some similarities to Mound P: both are large, multi-tiered mounds with some evidence for burned, daub architecture on the summit and Moundville III or later diagnostic ceramic sherds or vessels. The southwestern corner of Mound B is raised above the level of the remainder of the summit and the

Alabama Museum of Natural History excavated six whole vessels from the raised summit area in 1930 (Knight 2010:313). These vessels are characteristic of the late Moundville III phase based upon the presence of a Carthage Incised, *variety Carthage* bottle that is similar to late Mound E contexts and two large, red filmed jars that “featured 75 or more very small handles” (Knight 2010:314). Numerous small jar handles are a late Moundville III diagnostic decorative mode (Knight 2010:314). While there is no stratigraphic information for Mound B, the terminal occupation on the summit may be associated with at least one razed daub structure, as noted by Thomas Maxwell after he excavated into the summit in 1840 (Knight 2010:313).

Mound E at Moundville rests along the northern periphery of the plaza, just east of Mound B. This mound is a large, multi-tiered mound, with the two raised tiers being located on the eastern portion of the summit. Knight (2010; but see Ryba 1997) located three summit structures, one of which, Structure I, is comparable to what was found on the summit of Mound P. Mounds E and P also share similarities in the overall artifact assemblages: expedient tools, flaked stone, bone needles, greenstone, ceramic disks and materials from the pigment complex are present from both mounds (Knight 2010). What are of interest in this discussion are the similarities in diagnostic ceramics and architecture.

The ceramic sherds that were excavated from Stage III Fill and Stage III Midden on the summit of Mound E date to the early Moundville III phase, and Stage IIIA dates to the Moundville IV phase, with evidence of a period of mound summit abandonment between the former and latter stages (Knight 2010:206-8). The diagnostic sherds that were present in the Stage III midden were Carthage Incised, *variety Carthage*, Carthage Incised, *variety Foster* and Carthage Incised, *variety Poole*, as well as “fish, human, and frog effigy features” all diagnostic of the Moundville III phase (Knight 2010:201). Within the Mound E ceramic assemblage from

Stage III midden, there was the presence of a single Alabama River Appliqué sherd, but Knight (2010:201) uses caution when applying *terminus post quem* logic to the overall assemblage based on a single Moundville IV sherd being present in a large assemblage. Within Stage IIIA, which was intrusive into the lower layer and associated with Structure I, there were also Moundville III diagnostic sherds, as well as another Alabama River Appliqué sherd, (Knight 2010:206). The Mound E ceramic assemblage is similar to that of Mound P: there are Moundville III diagnostic sherds on the final building stages of the mound, with a slight presence of a Moundville IV component, associated with mound summit architecture.

Structure I on Mound E was located in the southeastern corner of the summit and represents the terminal occupation of the mound (Knight 2010:196). This structure was documented as having an amorphous floor plan and wall post arrangement, with some heavy concentrations of daub (Knight 2010). As previously mentioned, amorphous floor plans are common in the Black Warrior Valley during the Moundville III phase and into the Moundville IV phase (Knight 2010:196; Lacquement 2007). Structure I was built on top of the summit midden, which dates to the early Moundville III phase, but the structure is also associated with later diagnostics: a single Alabama River Appliqué sherd is present in this context (Knight 2010:196). Knight (2010) was as cautious with the dating of Structure I based on a single Moundville IV sherd as he was with the determination of the age of Stage III midden. Structure I was similar to the architecture that was found on the summit of Mound P: both had large concentrations of daub with an amorphous floor plan and no definable exterior wall postholes.

Mound V is the final mound at Moundville that will be discussed that shows evidence for a Moundville IV occupation or use (Knight 2009, 2010; Mirarchi 2009). Mound V is a low, broad mound located directly north of Mound B and connected to the latter mound's northern

ramp (Knight 2009, 2010). Archaeological excavations that were conducted on the summit of Mound V from 1999-2002 uncovered two structures that yielded a large amount of whole cane impressed and exterior smoothed daub (Knight 2009:24-6). The posthole arrangement is recognized in plan view as representing an earth lodge, the only structure of its type that has been recorded thus far in Alabama (Knight 2009). The amount of daub on the interior of the wall indicates that the daub fell inwards as the building burned during its abandonment (Knight 2009:24-6).

Radiocarbon dates for Mound V suggest that the structure was likely built in the early fifteenth century and then covered with yellow clay after the razing event (Knight 2009:27). The deposits that overlay the burnt structures contained “Alabama River Applique and certain other Protohistoric diagnostics” (Knight 2009:27) such as the non-local Alabama River Painted, *variety Cork* (Mirarchi 2009:34). The presence of these Moundville IV diagnostic ceramic sherds indicates that the terminal occupation at Mound V most likely occurred early in the Sixteenth century (Knight 2009:27). Mound V is comparable to Mound P through: the presence of whole cane, exterior smoothed daub; a large amount of daub from near surface deposits; and late Moundville III-Moundville IV diagnostic ceramics.

Two mound sites that are located in the Black Warrior Valley are also comparable to Mound P in form and diagnostic ceramic assemblages. The platform mound at the White site (1Ha7/8) was two-tiered and was built in two episodes, the first of which dates to the Moundville III phase (Welch 1998). While there are Alabama River Phase diagnostic ceramics that intrude into the summit of the mound, these may not be reflective of a permanent Moundville IV occupation at the White site. The Minter Creek site (1Gr76) also has a two-tiered summit profile and was built in at least two construction phases (Welch 1998). The Moundville IV diagnostic

ceramics from the summit of the Minter Creek site suggest that there was an ephemeral use of the mound during the protohistoric (Welch 1998:160). The mounds at these sites are similar to what was found on the summit of Mound P. Mound P has a two-tiered summit and a few Moundville IV diagnostic sherds, suggesting an ephemeral use of the summit during the Protohistoric period.

Summation

The 2009 Mound P excavations uncovered a large quantity of material that supports the three thesis objectives that will answer the question of this thesis: how long was the office of the chief important at Moundville? These three objectives are: 1) construct a ceramic chronology; 2) determine some of the mound cultural activities; and 3) compare Mound P to other mounds in the Black Warrior Valley. All three of these thesis objectives have been met.

The ceramic chronology for Mound P was constructed by using analytical provenience units within the deep flank excavations and the broad excavations on the summit. Based on the deep flank excavations, the ceramic chronology at Moundville begins during the early Moundville II phase, a time that corresponds to Stage II Fill and Deposit within flank Unit 1. Stage III through V soil layers are an area of quick deposition that date to the early Moundville III phase. The summit of the mound has a solid Moundville III component, with some ephemeral use during the Moundville IV phase.

The activities that were occurring on the summit of the mound were also assessed. While modified stone is present, there is a low amount of it present from the flanks and the summit of Mound P. This could indicate that there was little manufacturing of flaked stone occurring on the summit of this mound. There is also the presence of the pigment complex on the summit of

Mound P through red mineral pigments, galena, mica, coal, a tablet fragment, a sandstone saw and sandstone abraders. All of these materials are associated with the elite controlled pigment complex that was used for painting ceramic vessels and decorating ornaments and possibly human bodies (Knight 2004). A large amount of daub was present in the southeastern corner of the mound, indicating that there was a large, razed structure on the summit during the terminal occupation. Some of the daub from this structure exhibits evidence of whole cane impressions and exterior smoothing. There was not a discernable pattern of postholes, suggesting that the floor pattern of the structure dates to the Moundville III phase. The date for the floor pattern is further supported by the presence of Moundville III to Moundville IV diagnostic ceramics that are in association with the large amounts of burnt daub. A structure on the summit of one of the largest mounds at Moundville that dates to the Moundville III phase, and is also associated with the late Moundville III phase diagnostic short-neck bowl, suggests that a group of people who held higher status in the community still had access to the mound during this time. This group continued to co-opt the mound as a symbol in order to legitimize their authority through the early Sixteenth century.

A comparison to other mounds at Moundville and within the Black Warrior Valley showed some similarities between them and Mound P. Some of these mounds had evidence for the pigment complex (Mound E), large, burnt structures (Mounds B, E and V) and a two-tiered profile. While broad horizontal excavations would provide further evidence for the extent of architecture on the summit of Mound P, the 2009 fall field school excavations were not dug to a depth that was able to determine if there was an earthen berm, as was present on Mound V, it is more likely is that the structure is a rigid pole structure similar to Structure 1 from Mound E. All of the mounds discussed above show evidence for occupation during the Moundville III phase,

with indications that this occupation was present during late Moundville III with some ephemeral use into the Moundville IV phase. Mound E shows evidence for a brief abandonment for the late Moundville III phase and reoccupation during the Moundville IV phase (Knight 2010:207). The excavations on the summit of Mound P were not deep enough to provide the stratigraphic evidence needed to determine if the summit of the mound was continually used throughout the Moundville III phase and into the Moundville IV phase, or if there was a temporary break in summit occupation on Mound P.

CHAPTER 6 RAZED STRUCTURE

The goal of this research was to determine how long the office of the chief was important at Moundville. The Mound P ceramic assemblage of from the 1930s and archaeological excavations from 1988 indicate that there was some use of the mound during the Moundville IV phase (A.D. 1520-1650). The 2009 University of Alabama, OAR and Department of Anthropology archaeological excavations were conducted in order to mitigate the impact of the Walter B. Jones Archaeological Museum renovations. These excavations were conducted on the western flank base and the southeastern portion of the summit. The placement of the excavation units on the southeastern summit was done in order to intersect a large subsurface anomaly that was indicated by Dr. Chester Walker's 2009 magnetometer survey. To answer a question about the terminal occupation of a platform mound and how it relates to chiefly authority, archaeological excavation units on the summit of the mound are an ideal place to obtain data about its final use.

In order to achieve the goal of this thesis, three objectives were outlined at the beginning of this study. First, a ceramic chronology was constructed using diagnostic ceramic sherds from the 2009 excavations. This research objective was met by creating analytical provenience units for the west flank base and summit units. In flank Unit 1, rapid mound building phases were capped by an early Moundville II wedge shaped deposit. This was followed by slower depositional episodes and a yellow clay cap during the Moundville III phase. Soil layers above this analytical provenience unit provided a presence of late Moundville III diagnostic sherds

from further up the flank that were part of the mound erosion that has been occurring for the last 450 years. In flank Unit 2, the lower 35 centimeters were undisturbed and show evidence for the Moundville I phase. The top 65-80 centimeters of the test unit were marked by a modern construction fill event from the 1930s and subsequent mound erosion since that time. The excavation units on the summit yielded a large amount of Moundville III diagnostic sherds, with a lone Alabama River Appliqué sherd representing the Moundville IV phase. This represents the date of the final use of Mound P, but answering the research question requires that the terminal occupation is determined for the summit of the mound. Therefore the hypothesis is not supported. Since there is only one sherd from the summit, and a total of four additional Alabama River phase diagnostic sherds from the CCC and 1988 eastern flank excavations, there was an ephemeral use to the mound, but the terminal occupation of the mound dates to the late Moundville III phase.

The second research objective was to determine some of the cultural activities that were occurring on the summit of the mound through the analysis of the modified stone assemblage, the presence of mineral pigments and the large quantity of daub. There was a low quantity of modified stone from the summit and flank of the mound. This indicates that the flaked stone industry was not important at Mound P but evidence does exist for the recycling of greenstone celts on Mound P. There are ground sandstone abraders, a ferruginous sandstone saw, mineral pigments, galena, muscovite and a sandstone tablet fragment that shows that the pigment complex that is associated with ceremonial regalia was in use on Mound P. The large amount of daub from the summit of the mound suggests that the 2009 fall field school excavations intersected the large subsurface anomaly indicated on the magnetometer survey. This also indicates that the terminal occupation event on the summit of Mound P was the burning and

razing of a large wattle-and-daub structure during the late Moundville III phase. The second research objective was therefore satisfied.

The final research objective was to compare the archaeology of Mound P to what has been found on other contemporaneous mounds in the Black Warrior Valley. Mounds B, E, P and V at Moundville, as well as the Minter Creek and White site's mounds all share a distinctive characteristic: a two-tiered, terraced summit profile. All of these platform mounds were occupied or used during the late Moundville III to Moundville IV phases. Further archaeological excavations at two-tiered mounds in the Black Warrior Valley revealing deposited mound strata and their associated diagnostic materials would provide the necessary evidence needed to determine if this was a mound building pattern during the late Moundville III and Moundville IV phases. The similarity of the architecture on the summits of Mounds E and V further suggests that the structure on the summit of Mound P is in fact a late architectural type that is not found in the Black Warrior Valley before A.D. 1400.

Archaeological excavations in the future can expand upon some of the issues raised here. The eastern flank excavations from 1988 and the western flank excavations from 2009 were both conducted on the southern portion of the mound. Systematic testing of the mound flank needs to be conducted in order to better understand the complexity of the building stages on this large mound. The 2009 summit excavations were placed on the southeastern portion of the summit. To further understand how elites used the materials associated with legitimization of authority, broad horizontal excavations on both tiers of the summit and across the intermediary slope should be dug. This will provide a better understanding of the complexity of architecture and provide a larger material assemblage for the summit of the mound. Another line for further work

on Mound P may be to excavate a large, deep shaft on the summit to document the last building phases of the mound.

Mound P was an important part of the sacred landscape at Moundville for 300 years. This raised ground platform was utilized by aggrandizing elites to position themselves in the social and possibly cosmological order of the Mississippian world. The hypothesis that the terminal occupation of Mound P continued into the Moundville IV phase is not supported, as there is stronger evidence for the terminal occupation occurring during the late Moundville III phase. After the population decline at Moundville in the early fifteenth century, Mound P continued to be an important elite residence and activity area based on diagnostic ceramic sherds and late prehistoric west-central Alabama architecture. The final occupation and use of Mound P is marked by a large, burned, razed structure followed by a final, ephemeral use of the earthen platform mound during the sixteenth century.

REFERENCES CITED

- Anderson, David G.
1994 *The Savannah River Chiefdoms: Political Change in the Late Prehistoric Southeast*. The University of Alabama Press, Tuscaloosa, Alabama
- Bade, Mary, Eugene Futato and Erin Harney (editors)
2009 *Archaeological Collections Curation Processing Manual*. University of Alabama Museums. Tuscaloosa, Alabama.
- Beck, Robin A., Jr.
2003 Consolidation and Hierarchy: Chiefdom Variability in the Mississippian Southeast. *American Antiquity* 68(4):641-661.
- Blitz, John H.
1999 Mississippian Chiefdoms and the Fission-Fusion Process. *American Antiquity* 64(4):577-592.

2007 *Test Excavations at Mound X, Moundville (1TU500), 2004*. Early Moundville Archaeological Project. The Department of Anthropology, University of Alabama. Manuscript on file.

2008 *Moundville*. The University of Alabama Press. Tuscaloosa, Alabama.
- Blitz, John H. and Patrick Livingood
2004 Sociopolitical Implications of Mississippian Mound Volume. *American Antiquity* 69(2):291-301.
- Blitz, John H. and Karl G. Lorenz
2006 *The Chattahoochee Chiefdoms*. The University of Alabama Press. Tuscaloosa, Alabama.
- Carley, Rachel
1994 *The Visual Dictionary of American Domestic Architecture*. Henry Holt and Company, New York.
- Cobb, Charles R. and Patrick H. Garrow
1996 Woodstock Culture and the Question of Mississippian Emergence. *American Antiquity* 61(1):21-37.

- Cobb, Charles R. and Adam King
2005 Re-Inventing Mississippian Tradition at Etowah, Georgia. *Journal of Archaeological Method and Theory* 12(3):167-192.
- Courington, David S.
1989 *Preliminary Excavations at Mound P, Moundville, Al.* Manuscript on file, The Department of Anthropology, University of Alabama, Tuscaloosa, Alabama.
- Curren, Caleb B.
1984 *The Protohistoric Period in Central Alabama.* Alabama-Tombigbee Regional Commission, Camden, Alabama.
- Davis, Jeremy R.
2008 *Crafting in the Countryside: A Comparison of Three Late Prehistoric Nonmound Sites in the Black Warrior River Valley.* Master's thesis, Department of Anthropology, University of Alabama, Tuscaloosa, Alabama.
- Earle, Timothy
1997 *How Chiefs Come to Power: The Political Economy in Prehistory.* Stanford University Press. Stanford, California.
- Gall, Daniel G. and Vincas P. Steponaitis
2001 Composition and Provenance of Greenstone Artifacts from Moundville. *Southeastern Archaeology* 20:99-117.
- Hally, David J.
1996 Platform-Mound Construction and the Instability of Mississippian Chiefdoms. In *Political Structure and Change in the Prehistoric Southeastern United States*, edited by J.F. Scarry, pp. 92-127. University Press of Florida, Gainesville, Florida.
- Hudson, Charles
1976 *The Southeastern Indians.* University of Tennessee Press. Knoxville, Tennessee.
- Hudson, Charles and Carmen Chaves Tesser (editors)
1994 *The Forgotten Centuries: Indians and Europeans in the American South 1521-1704.* The University of Georgia Press. Athens, Georgia.
- Hudson, Charles, Marvin T. Smith, and Chester DePratter
1990 The Hernando de Soto Expedition: From Mabila to the Mississippi River. In *Towns and Temples Along the Mississippi*, edited by David H. Dye and Cheryl Anne Cox, pp. 181-207. The University of Alabama Press, Tuscaloosa, Alabama.
- Hudson, Charles, Marvin Smith, David Hally, Richard Polhemus and Chester DePratter.
1985 Coosa: A Chiefdom in the Sixteenth-Century Southeastern United States. *American Antiquity* 50(4):723-737.

King, Adam

2003 *Etowah: The Political History of a Chiefdom Capital*. The University of Alabama Press. Tuscaloosa, Alabama.

Knight, Vernon James Jr.

1986 The Institutional Organization of Mississippian Religion. *American Antiquity* 51(4):675-687.

1996 Introduction: The Expeditions of Clarence B. Moore to Moundville in 1905 and 1906. In *Moundville Expeditions of Clarence Bloomfield Moore*, edited by Vernon James Knight, Jr., pp. 1-20. The University of Alabama Press, Tuscaloosa, Alabama.

1998 Moundville as a Diagrammatic Ceremonial Center. In *Archaeology of the Moundville Chiefdom*, Eds. Vernon James Knight, Jr. and Vincas P. Steponaitis, pp. 44-62. The University of Alabama Press, Tuscaloosa, Alabama.

2004 Characterizing Elite Midden Deposits at Moundville. *American Antiquity* 69(2):304-321.

2009 *Discovery and Excavation of the Moundville Earth Lodge*. Alabama Museum of Natural History. Bulletin 27. Tuscaloosa, Alabama.

2010 *Mound Excavations at Moundville: Architecture, Elites and Social Order*. The University of Alabama Press. Tuscaloosa, Alabama.

Knight, Vernon James Jr. and Vincas P. Steponaitis

1998 A New History of Moundville. In *Archaeology of the Moundville Chiefdom*, Eds. Vernon James Knight, Jr. and Vincas P. Steponaitis. The University of Alabama Press, Tuscaloosa, Alabama.

Lacquement, Cameron H.

2004 *How to Build a Mississippian House: A Study of Domestic Architecture in West-Central Alabama*. Unpublished Master's thesis, Department of Anthropology, The University of Alabama, Tuscaloosa, Alabama.

2007 Typology, Chronology, and Technological Changes in Mississippian Domestic Architecture in West-Central Alabama. In *Architectural Variability in the Southeast*, edited by Cameron H. Lacquement, pp 49-72. The University of Alabama Press, Tuscaloosa, Alabama.

2009 *Landscape Modification at Moundville: An Energetics Assessment of a Mississippian Polity*. Unpublished Ph.D. dissertation. Department of Anthropology. University of Alabama.

Lindauer, Owen and John H. Blitz

1997 Higher Ground: The Archaeology of North American Platform Mounds. *Journal of*

Archaeological Research 5(2):169-207.

Mirarchi, Matthew J.

2009 *Beneath the Earthen Contenance: the Architecture and Artifacts of the Moundville Earth Lodge Complex*. Unpublished Master's Thesis. Department of Anthropology, University of North Carolina, Chapel Hill, North Carolina.

Muller, Jon

1997 *Mississippian Political Economy*. Plenum Press, New York.

Nabokov, Peter and Robert Easton

1989 *Native American Architecture*. Oxford University Press, New York.

Pauketat, Timothy R.

2000 The Tragedy of the Commoners. In *Agency in Archaeology*, Eds. Marica-Anne Dobres and John E. Robb, pp. 113-129. Routledge. New York.

Peebles, Christopher S.

1974 *Moundville: The Organization of a Prehistoric Community and Culture*. Unpublished Ph.D. dissertation, Department of Anthropology, University of California, Santa Barbara.

Peebles, Christopher S. and Susan M. Kus

1977 Some Archaeological Correlates of Ranked Societies. *American Antiquity* 42(3):421-448.

Peres, Tanya M.

2010 Methodological Issues in Zooarchaeology. In *Integrating Zooarchaeology and Paleoethnobotany: A Consideration of Issues, Methods, and Cases*. Springer Press. New York.

Phillips, Philip

1970 *Archaeological Survey in the Lower Yazoo Basin, Mississippi, 1949-1955*. Papers of the Peabody Museum of Archaeology and Ethnology Vol. 60. Peabody Museum, Cambridge, Massachusetts.

Rakita, Gordon F.M.

2009 *Ancestors and Elites: Emergent Complexity and Ritual Practices in the Casas Grandes Polity*. AltaMira Press. Lanham, Maryland.

Rice, Prudence M.

1987 *Pottery Analysis: A Sourcebook*. The University of Chicago Press, Chicago.

Ryba, Elizabeth Anne

1997 *Summit Architecture on Mound E at Moundville*. Unpublished Master's thesis, Department of Anthropology, University of Alabama, Tuscaloosa, Alabama.

Scarry, C. Margaret

1995 *Excavations on the Northwest Riverbank at Moundville: Investigations of a Moundville I Residual Area*. Report of Investigations No. 72. Office of Archaeological Services, The University of Alabama Museums, Moundville.

Schoeninger, Margaret J. and Mark R. Schurr

1998 Human Subsistence at Moundville: The Stable-Isotope Data. In *Archaeology of the Moundville Chiefdom*, Eds. Vernon James Knight, Jr. and Vincas P. Steponaitis, pp. 120-132. The University of Alabama Press, Tuscaloosa, Alabama.

Sherard, Jeffery L.

2009 *Analysis of Daub from Mound v, Moundville: Its Role as an Architectural Indicator*. Alabama Museum of Natural History. Bulletin 27. Tuscaloosa, Alabama.

Smith, Marvin T.

1987 *Archaeology of Aboriginal Culture Change in the Interior Southeast: Depopulation During the Early Historic Period*. University of Florida Press. The Florida State Museum, Gainesville, Florida.

Steponaitis, Vincas P.

1983 *Ceramics, Chronology, and Community Patterns: An Archaeological Study of Moundville*. The University of Alabama Press. Tuscaloosa, Alabama.

1986 *Prehistoric Archaeology in the Southeastern United States, 1970-1985*. Annual Review of Anthropology 15:363-404.

1992 *Excavations at 1Tu50, An Early Mississippian Center Near Moundville*. Southeastern Archaeology 11(1):1-13.

Taft, Kristi E.

1996 *Functionally Relevant Classes of Pottery at Moundville*. Unpublished Master's thesis, Department of Anthropology, University of Alabama, Tuscaloosa, Alabama.

Terrel, John E. and Sidney P. Marland, III

1983 Notes on Architectural Detail Derived from Analysis of Impressions in the Daub. In *Excavations at the Lake George Site, Yazoo County, Mississippi 1958-1960*, by Stephen Williams and Jeffery P. Brain, pp. 443-448. Papers of the Peabody Museum of Archaeology and Ethnology Vol. 74. Peabody Museum, Cambridge, Massachusetts.

Thompson, Claire N.

2011 *Ritual and Power: Examining the Economy of Moundville's Residential Population*. Unpublished Ph.D. dissertation, Department of Anthropology, University of Alabama, Tuscaloosa, Alabama.

Welch, Paul D.

1991 *Moundville's Economy*. The University of Alabama Press. Tuscaloosa, Alabama.

1996 Control over Goods and the Political Stability of the Moundville Chiefdom. In *Political Structure and Change in the Prehistoric Southeastern United States*, edited by J.F. Scarry, pp. 69-91. University Press of Florida, Gainesville, Florida.

1998 Outlying Sites in the Moundville Chiefdom. In *Archaeology of the Moundville Chiefdom*, edited by V.J. Knight Jr. and V.P. Steponaitis, pp. 113-166. Smithsonian Institution Press, Washington, D.C.

Wesson, Cameron B.

1998 Mississippian Sacred Landscapes: The View from Alabama. In *Mississippian Towns and Sacred Spaces: Searching for an Architectural Grammar*, Eds. R. Barry Lewis and Charles Stout. The University of Alabama Press, Tuscaloosa, Alabama.

Wilson, Gregory D.

2001 Crafting Control and the Control of Crafts: Rethinking the Moundville Greenstone Industry. *Southeastern Archaeology* 20:118-128.

2008 *The Archaeology of Everyday Life at Moundville*. The University of Alabama Press, Tuscaloosa, Alabama.

2010 Community, Identity, and Social Memory at Moundville. *American Antiquity* 75(1):3-18.

APPENDIX A
LIST OF FEATURE TYPES AND DESCRIPTIONS
WITH PLAN AND PROFILE VIEWS.

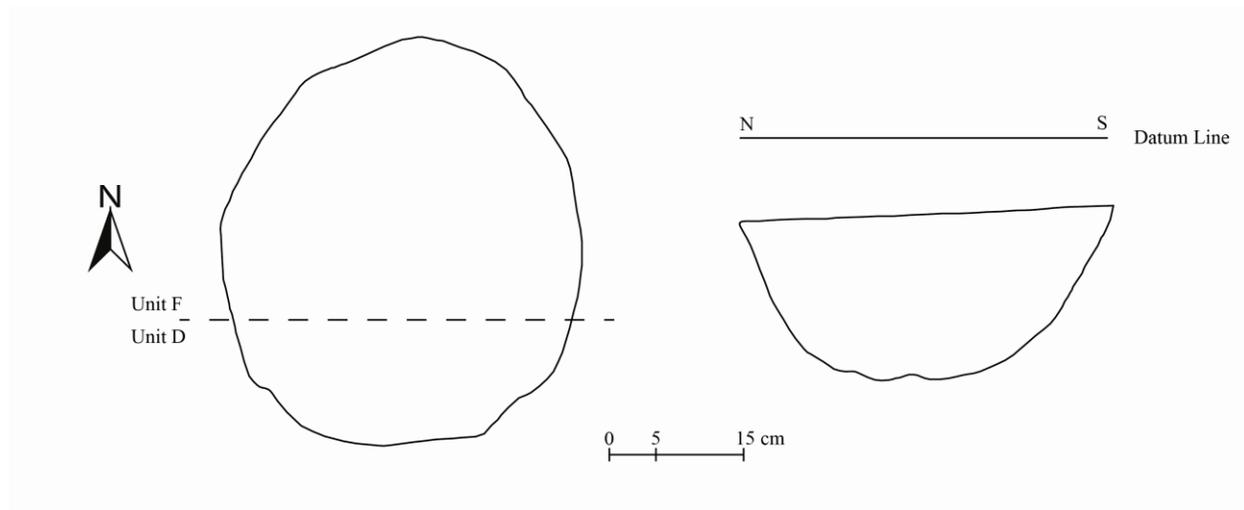
List of Mound P Feature Types.

FEATURE NUMBER	TYPE	WIDTH (cm)	DEPTH (cm)	CARBON SAMPLE
Feature 1	Daub-Filled Depression	42-x-41 cm	20 cm	1
Feature 2		95-x-100cm	N/A	
Feature 3	Daub-Filled Depression	18-x-17.5 cm	18 cm	
Feature 4	Residual-Soil Discoloration	31-x-28 cm	N/A	
Feature 5	Residual-Soil Discoloration	14-x-13 cm	N/A	
Feature 6	Residual-Linear	200-x-10-18 cm	N/A	3
Feature 6A	Small-deep post hole	15-x-13 cm	52 cm	
Feature 6B	Residual-Post Hole	17-x-28 cm	N/A	1
Feature 6C	Small-deep post hole	15-x-17 cm	40 cm	1
Feature 6E	Small-deep post hole	20-x-14 cm	24 cm	1
Feature 6F		N/A	N/A	1
Feature 7	Small-deep post hole	13-x-14 cm	35 cm	
Feature 8	Shallow Depression	15-x-17 cm	8 cm	
Feature 9	Bioturbation	16-x-7 cm	11 cm	
Feature 10		28-x-24 cm	N/A	1
Feature 11	Small-deep post hole	12-x-10 cm	44 cm	
Feature 12	Residual-Soil Discoloration	13-x-17 cm	N/A	
Feature 13	Residual-Soil Discoloration	17-x-24 cm	N/A	
Feature 14	Feature 37	33-x-70 cm	N/A	
Feature 15	Shallow Depression	32.5-x-27 cm	24 cm	
Feature 16	Shallow Depression	35-x-27.5 cm	22.5 cm	
Feature 17	Shallow Depression	90-x-22 cm	10 cm	
Feature 18	Residual-Post Hole	10-x-9 cm	N/A	
Feature 19	Residual-Soil Discoloration	22-x-13 cm	N/A	
Feature 20	Residual-Soil Discoloration	20-x-27 cm	N/A	
Feature 21	Residual-Soil Discoloration	18-x-12 cm	N/A	
Feature 22	Small-deep post hole	14-x-13 cm	33 cm	
Feature 23	Bioturbation	22-x-14 cm	20 cm	
Feature 24	Residual-Post Hole	18-X-15 cm	N/A	
Feature 25	Residual-Post Hole	15-x-16 cm	N/A	
Feature 26	Small-shallow post hole	14-x-13 cm	12 cm	
Feature 27		13-x-11 cm	N/A	
Feature 28	Small-deep post hole	13-x-13 cm	30 cm	1
Feature 29	Small-shallow post hole	16-x-15 cm	5 cm	
Feature 30	Small-shallow post hole	13-x-24 cm	12 cm	
Feature 31	Residual-Soil Discoloration	30-x-40 cm	N/A	
Feature 32	Shallow Depression	12-x-12 cm	14 cm	
Feature 33	Daub-Filled Depression	42-x-40 cm	12 cm	
Feature 34A	Shallow Depression	40-x-35 cm	5 cm	
Feature 34B	Small-deep post hole	20-x-14 cm	24 cm	
Feature 35	Large-deep post hole	35-x-32 cm	34 cm	
Feature 36	Residual-Soil Discoloration	68-x-14 cm	N/A	
Feature 37	Large-deep post hole	40-x-52 cm	59 cm	4
Feature 38	Residual-Soil Discoloration	16-x-17 cm	N/A	
Feature 39	Residual-Post Hole	15-x-8 cm	N/A	
Feature 40	Residual-Post Hole	8-x-6 cm	N/A	
Feature 41	Residual-Post Hole	11-x-9 cm	N/A	
Feature 42	Residual-Post Hole	19-x-17 cm	N/A	
Feature 43	Residual-Post Hole	8-x-9 cm	N/A	
Feature 44	Residual-Post Hole	8-x-9 cm	N/A	
Feature 45	Residual-Post Hole	8-x-8 cm	N/A	
Feature 46	Residual-Post Hole	13-x-16 cm	N/A	
Feature 47	Daub-Filled Depression	68-x-62 cm	20 cm	1
Feature 48	Residual-Post Hole	11-x-18 cm	N/A	

Feature 49	Residual-Soil Discoloration	20-x-18 cm	N/A
Feature 50	Residual-Post Hole	10-x-10 cm	N/A
Feature 51	Residual-Post Hole	12-x-7 cm	N/A
Feature 52	Residual-Soil Discoloration	18-x-13 cm	N/A
Feature 53	Daub-Filled Depression	30-x-35 cm	N/A
Feature 54	Residual-Soil Discoloration	27-x-25 cm	N/A
Feature 55	Residual-Post Hole	26-x-25 cm	N/A
Feature 56	Daub-Filled Depression	45-x-32.5 cm	13 cm

Mound P Descriptions with recorded plan and profile views.

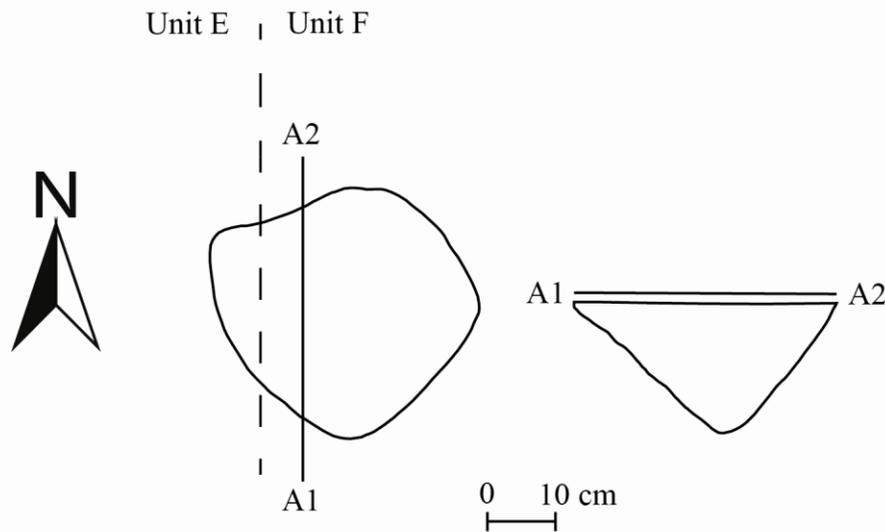
Feature 1 (Unit D, N1963 E744) was excavated by trowel and some of the soil was saved for floatation. The soil description at the base of the unit was a very dark brown (7.5YR 2.5/2) silty loam. The soil matrix is described as midden-like fill with daub and charcoal inclusions. Some of these clay inclusions were reddish yellow (7.5YR 6/8) and “fist-sized.” The feature contained decorated and undecorated ceramic, modified and unmodified lithics, and daub. Feature type: Daub-filled depression.



Feature 1 plan and profile views.

Feature 2 (Unit D, N1963 E744) was noted on the unit plan view and was excavated, but there are no corresponding field notes. The soil description at the unit base is a dark brown, very fine silty loam. Artifacts include daub and plain ceramic sherds. Feature type: unknown.

Feature 3 (Unit E, N1965 E743 and Unit F, N1965 E744) and has field notes, however, it is not present on the unit form. Feature 3 was identified before “Feature 34” was assigned to the same area. The soil was described at the unit base as a dark reddish brown (5YR 2.5/2) silty, sandy loam. Three ceramic sherds were excavated from the feature along with daub. Feature type: Daub-filled depression.



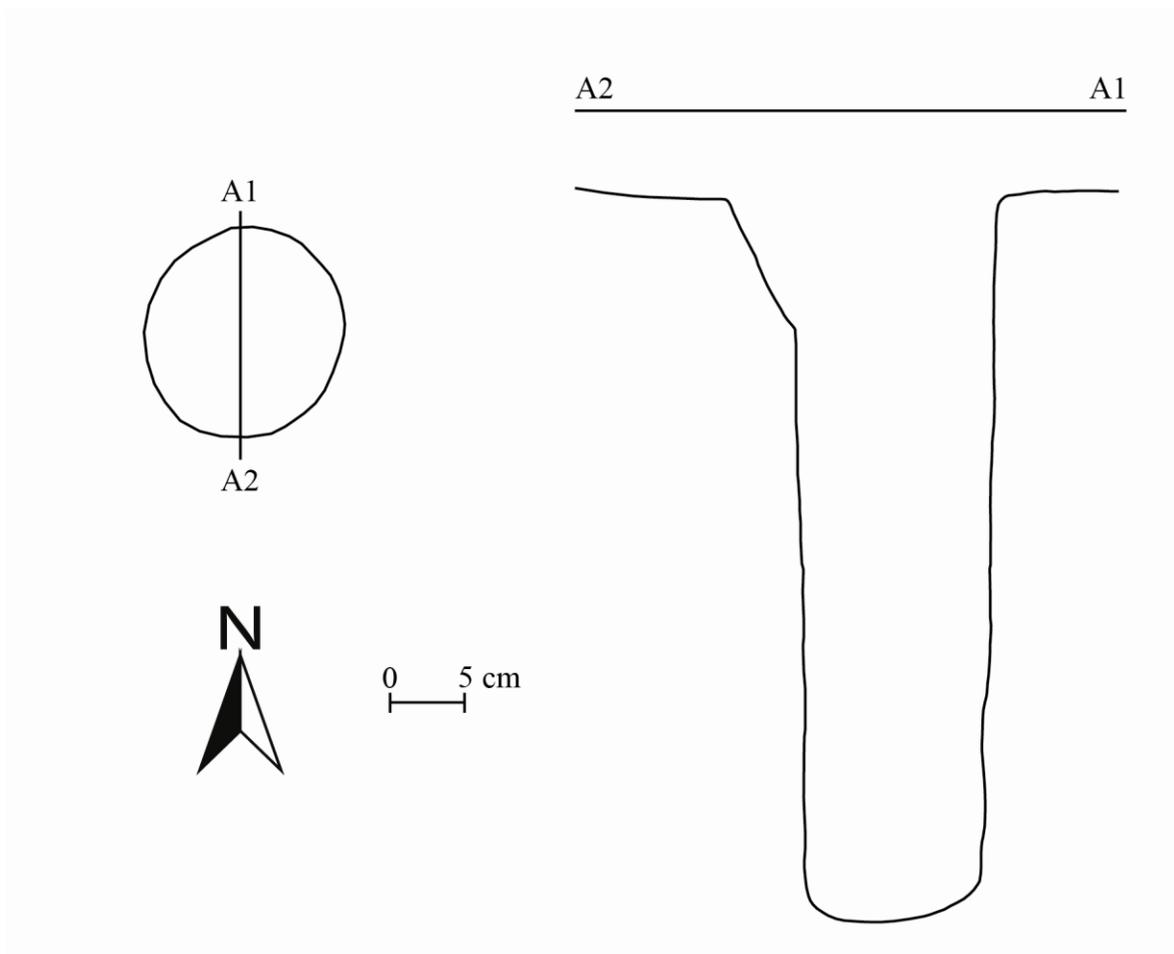
Feature 3 plan and profile views.

Feature 4 (Unit F, N1965 E744) was noted on the unit plan view, but was not excavated. The soil description at the unit base is a dark yellowish brown (10YR 3/3) silty loam. It is connected to Feature 32 in Unit E. Feature type: Residual-soil discoloration.

Feature 5 (Unit E, N1965 E743 and Unit F, N1965 E744) was noted on the unit plan view, but was not excavated. The soil description at the unit base is a very dark grayish brown (10YR 3/2) silty loam. It is possibly related to Feature 4 and Feature 32. Feature type: Residual-soil discoloration.

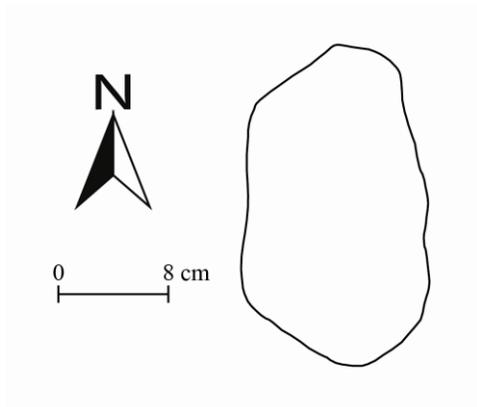
Feature 6 (Unit F, N1965 E744 and Unit G, N1967 E744) was a shallow, linear feature that runs north-south. The soil was described as a dark brown (10YR 3/3) silty loam. In the northern portion of the feature, after a change in direction to the northwest, the feature exhibits a lower concentration of daub and charcoal flecks. The feature is described as a complex line of posts or stakes. The materials that were excavated from this feature include prehistoric ceramic, stone, daub, and bone. Feature type: Residual-linear.

Feature 6A (Unit G, N1967 E744) was recognized within Feature 6 and is a possible post-hole. The soil description at the unit base is described as a dark brown (7.5YR 3/2) silty loam. There were very few materials that were excavated from the feature. It was excavated with a trowel and spoon. Feature type: Small-deep post hole.



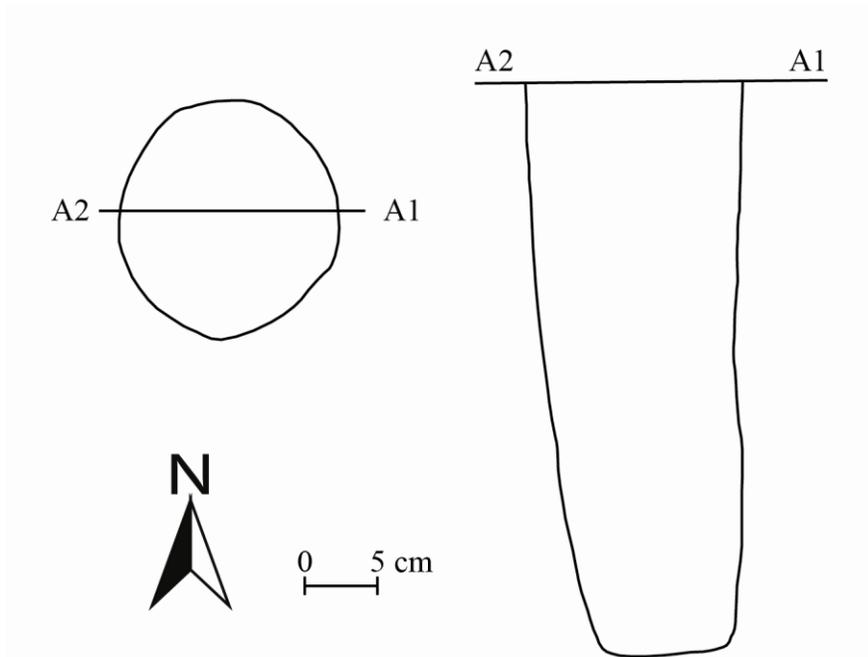
Feature 6A plan (A) and profile (B) views.

Feature 6B (Unit G, N1967 E744) was recognized after a unit base cleaning and excavated with a spoon. The soil description was a dark reddish brown silty loam and a possible post hole. There is a plan view for this feature, but no profile or ending depth. There were very few artifacts associated with this feature. Feature type: Residual-post hole.



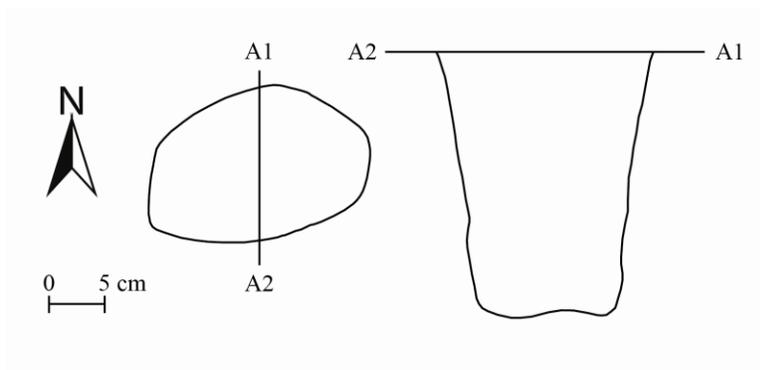
Feature 6B plan view.

Feature 6C (Unit G, N1967 E744) was excavated with a trowel and spoon and was a posthole. There are plan and profiles for the feature, but the feature is not included on the unit form. Based on the photos that were taken of the feature in the field, Feature 6C was located directly north of Feature 6A, and possibly connected. There are a lot of ceramics that were excavated from the feature. Feature type: Small-deep post hole.



Feature 6C plan and profile views.

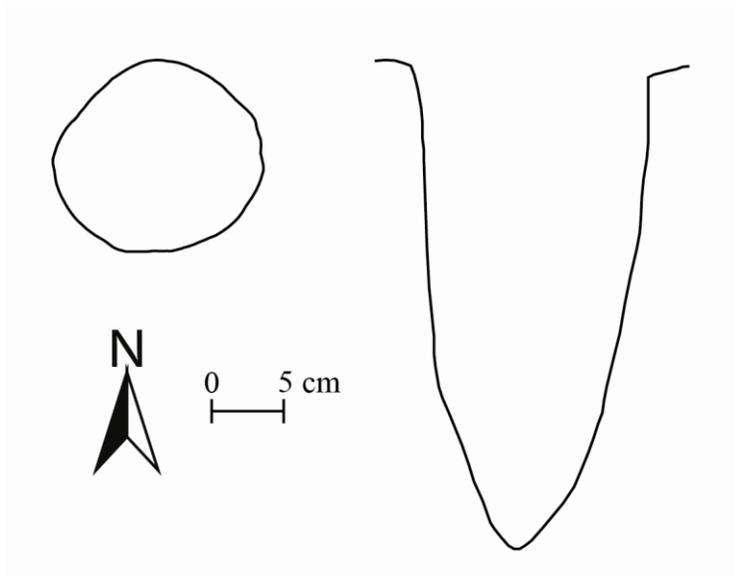
Feature 6E (Unit G, N1967 E744) intruded into Feature 6 and the soil was described as a dark reddish brown (2.5YR 2.5/3) silty loam with some clay intrusions. The soil was also fine to medium grained and “moist.” The field notes recognized this feature as a possible post hole that included charcoal and some daub. There were few artifacts associated with this feature. Feature type: Small-deep post hole.



Feature 6E plan and profile views.

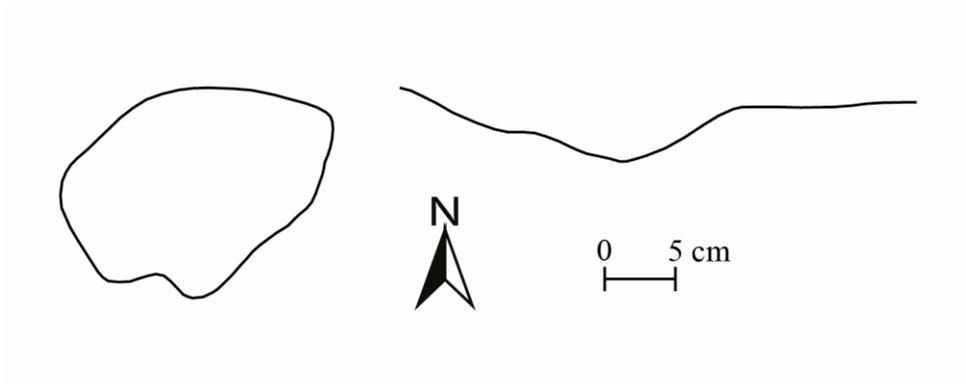
Feature 6F (Unit F, N1965 E744?) was noted on a feature form, but not the unit form. There is no indication about its location or associated features. The materials that are associated with this feature include prehistoric ceramic, a radiocarbon sample and some rusted metal. There are no plan or profile maps for this feature. Feature type: unknown.

Feature 7 (Unit G, N1967 E744) was described as a possible posthole with a soil description of dark brown (7.5YR 3/2) silty loam. It was excavated by coring it out and a few materials are associated with it. Feature type: Small-deep post hole.



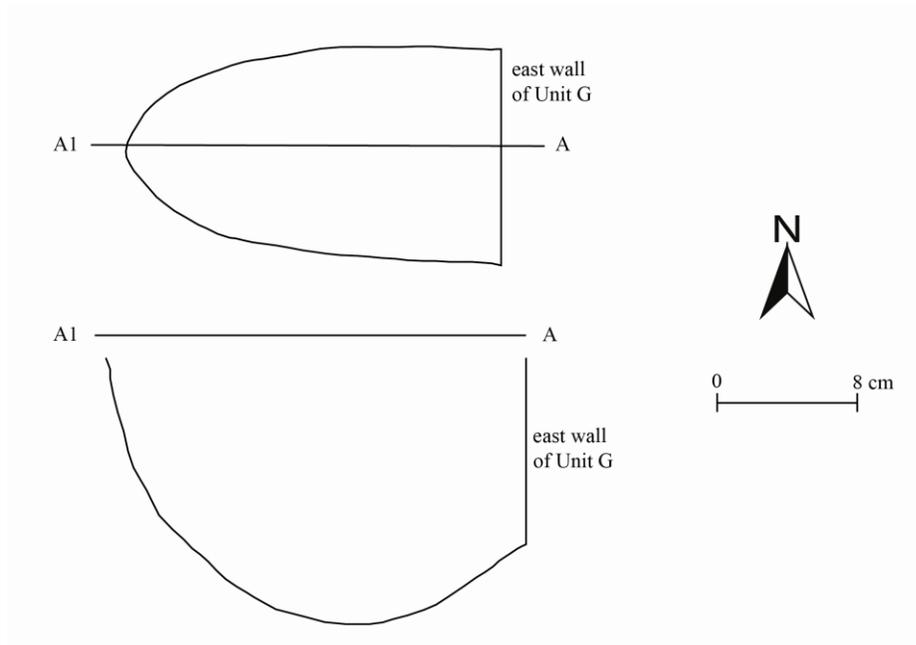
Feature 7 plan and profile views.

Feature 8 (Unit G, N1967 E744) was described as a shallow, daub filled depression. It has one pot sherd associated with the feature. The soil description at the unit base was described as dark yellowish brown (10YR 3/6) silty loam. Feature type: Shallow depression.



Feature 8 plan and profile views.

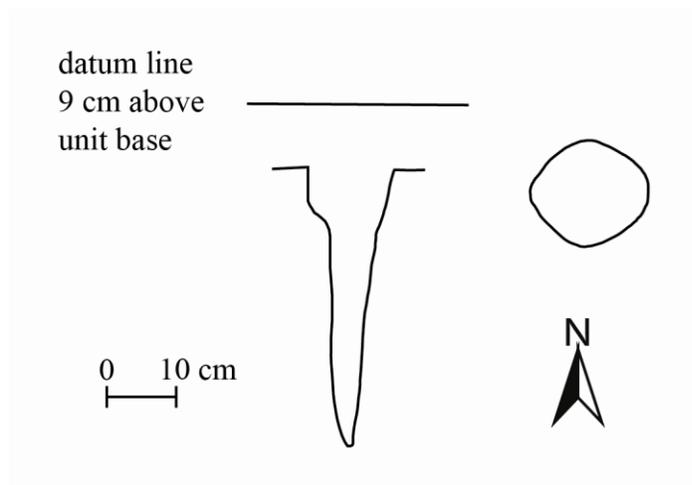
Feature 9 (Unit G, N1967 E744) was excavated with a trowel and a spoon and may be disturbance that was present in the soil. The field notes indicate that it may be a root stain or rodent burrow and may have been excavated to a depth beyond actual feature fill. The soil description of this feature was a dark brown (7.5YR 3/3) silty loam. There was a small amount of material associated with this feature. Feature type: Bioturbation.



Feature 9 plan (top) and profile (bottom) views.

Feature 10 (Unit G, N1967 E744) was excavated with a trowel and spoon but does not have corresponding plan or profile maps. The soil at unit base was described as a dark brown (10YR 3/3) silty loam. The edges of the feature were determined after the area in Unit G labeled as Feature 6 was clean-troweled. It has minimal artifacts associated with it. Feature type: unknown.

Feature 11 (Unit G, N1967 E744) was intrusive into Feature 10. The soil at unit base was described as a dark brown (10YR 3/3) silty loam. There are minimal artifacts associated with this feature. Feature type: Small-deep post hole.



Feature 11 profile and plan views.

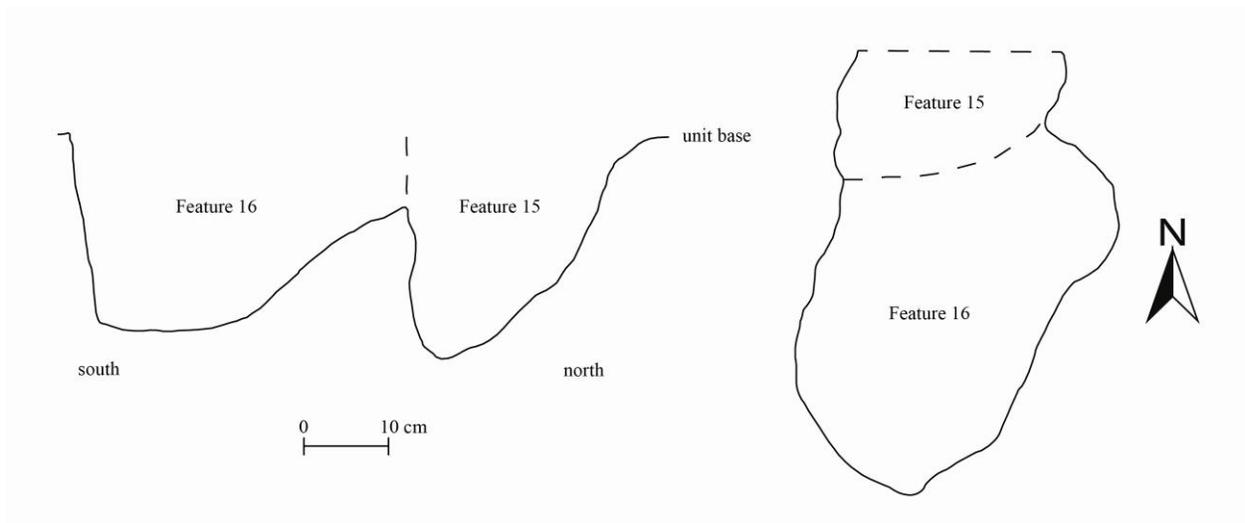
Feature 12 (Unit C, N1963 E743) was noted on the unit plan view, but was not excavated. The soil description at the unit base is a dark brown (10YR 2/2) very fine soil. Residual-soil discoloration.

Feature 13 (Unit C, N1963 E743) was noted on the unit plan view, but was not excavated. The soil description at the unit base is a dark brown (10YR 3/3) very fine soil. Residual-soil discoloration.

Feature 14 was noted on the unit plan view, but was not excavated. The soil description at the unit base is a dark brown (7.5YR 3/2) very fine soil. This feature was later renamed Feature 37.

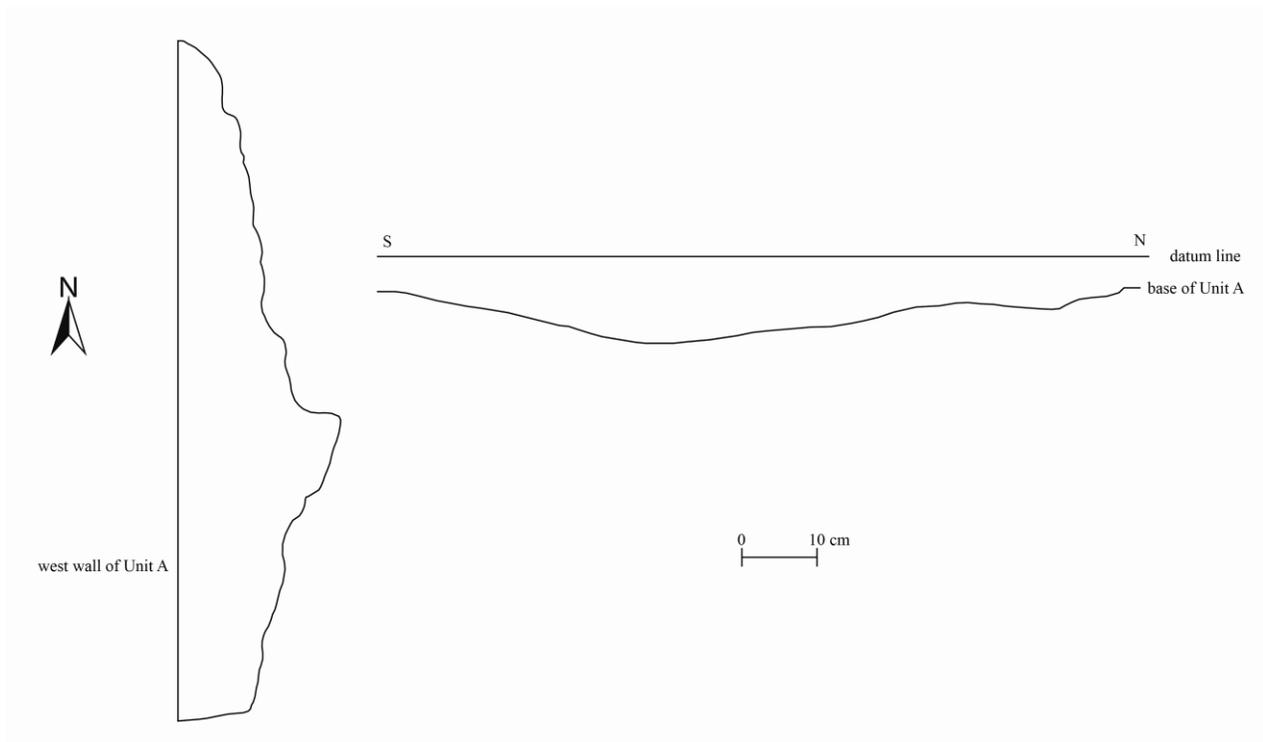
Feature 15 (Unit A, N1961 E744) was excavated with a trowel by hand and intruded into Feature 16. It included a possible painted ceramic sherd and a small piece of fauna bone. The soil description at the unit base is a reddish brown (2.5YR 4/4) silty loam. Feature type: Shallow depression.

Feature 16 (Unit A, N1961 E744) was a shallow, daub filled impression that was intruded by Feature 15. The soil description at the unit base is a reddish brown (2.5YR 4/4) silty loam. Daub only. Feature type: Shallow depression.



Features 15 and 16 profile and plan views.

Feature 17 (Unit A, N1961 E744) was a shallow, daub filled depression with some daub fragments, and Mississippi Plain sherds. The soil description of Feature 17 is a dusky red (10R 3/4) clay loam. Feature type: Shallow depression.



Feature 17 plan and profile views.

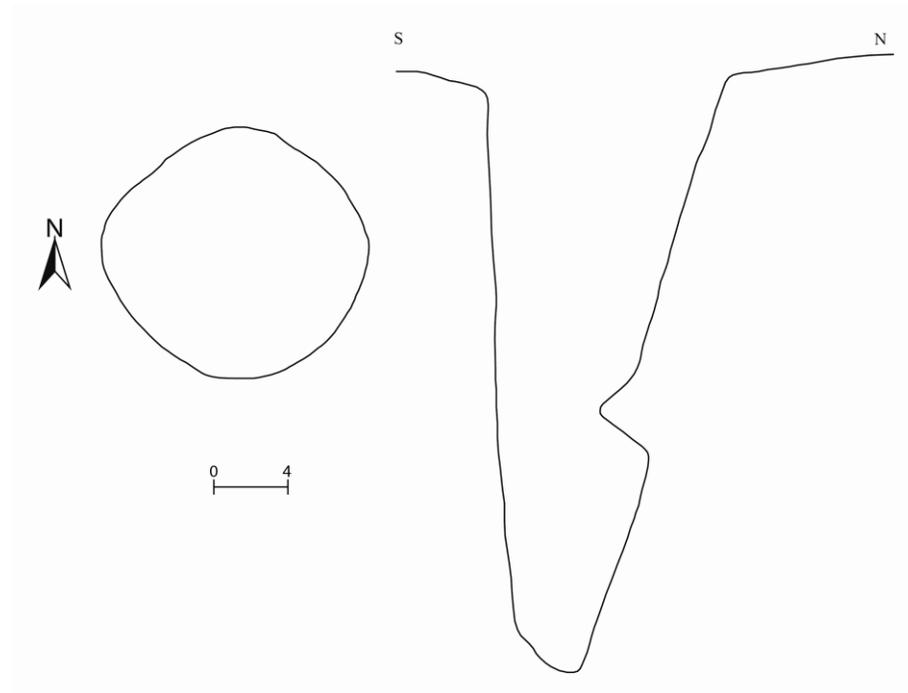
Feature 18 (Unit A, N1961 E744) was noted on the unit plan view, but was not excavated. The soil description at the unit base is a reddish brown (10.5YR 5/3) silty loam. Feature type: Residual-post hole.

Feature 19 (Unit A, N1961 E744) was noted on the unit plan view, but was not excavated. The soil description at the unit base is a dark reddish brown (2.5YR 3/3) clay loam. Feature type: Residual-soil discoloration.

Feature 20 (Unit A, N1961 E744) was noted on the unit plan view, but was not excavated. The soil description at the unit base is a dark reddish brown (2.5YR 3/4) sand loam. Feature type: Residual-soil discoloration.

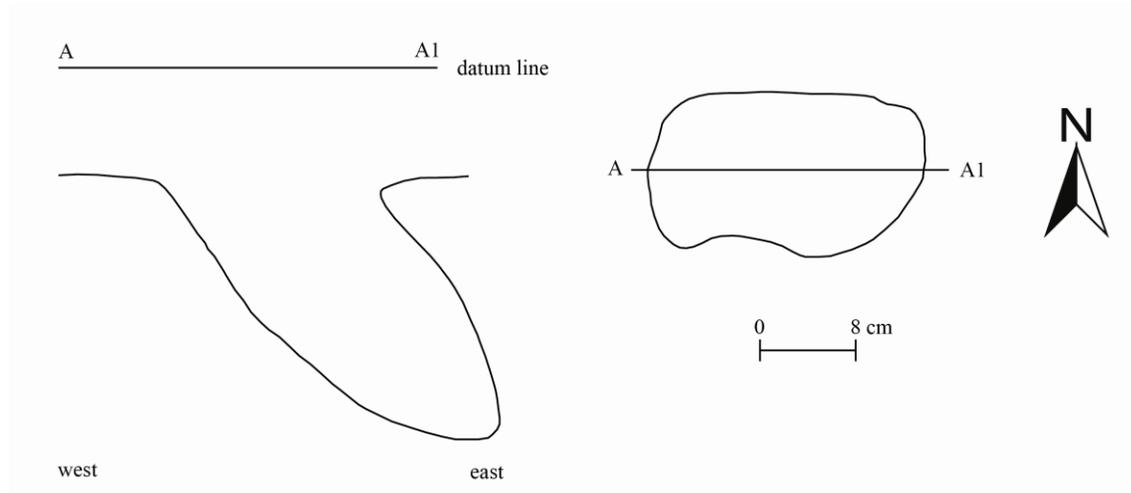
Feature 21 (Unit A, N1961 E744) was noted on the unit plan view, but was not excavated. The soil description at the unit base is a dusty red (2.5YR 3/2) clay loam. Feature type: Residual-soil discoloration.

Feature 22 (Unit G, N1967 E744) was intrusive into Feature 10 as well. The soil at unit base is described as a dark brown (7.5YR 3/3) silty loam. This feature has some prehistoric artifacts and daub associated with it. Feature type: Small-deep post hole.



Feature 22 plan and profile views.

Feature 23 (Unit E, N1965 E743) was excavated and is a possible rodent barrow. The soil description at the unit base was a dark brown (7.5 3/2) soil. There was a small amount of material excavated from this feature. Feature type: Bioturbation.

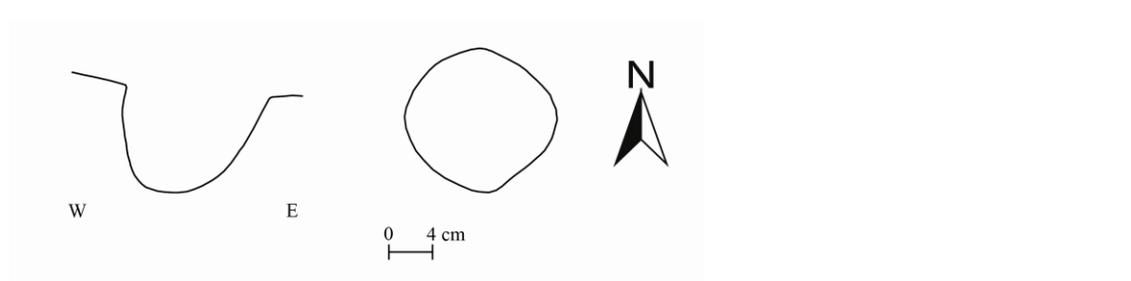


Feature 23 profile and plan views.

Feature 24 (Unit E, N1965 E743) was noted on the unit plan view, but was not excavated. The soil description at the unit base is a very dark grayish brown (2.5Y 3/2) soil. Feature type: Residual-post hole.

Feature 25 (Unit E, N1965 E743) was noted on the unit plan view, but was not excavated. The soil description at the unit base is a very dark brown (7.5YR 2.5/2) soil. Feature type: Residual-post hole.

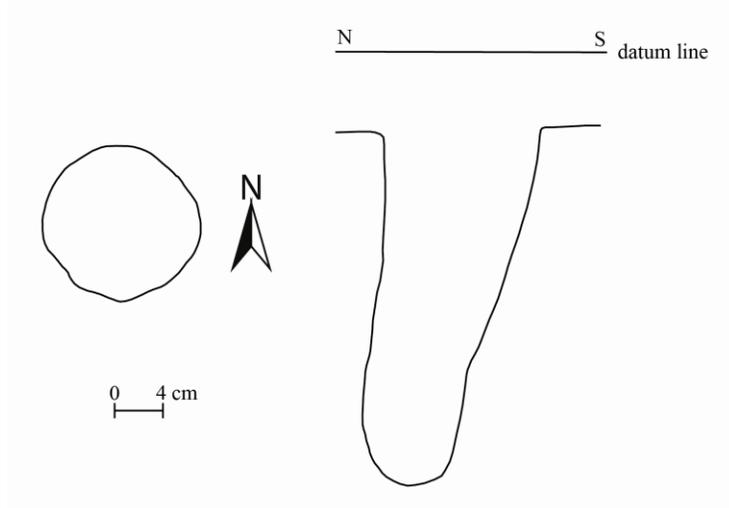
Feature 26 (Unit E, N1965 E743) was identified at a depth of 20 centimeters below surface and was excavated with a spoon and a trowel. The soil description at the unit base was a very dark brown (7.5YR 2.5/2) soil. Some faunal material was present in this possible post hole. Feature type: Small-shallow post hole.



Feature 26 profile and plan views.

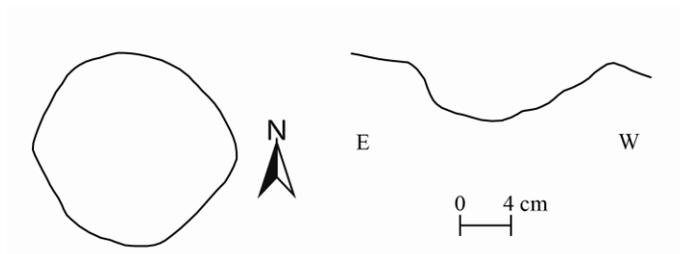
Feature 27 (Unit E, N1965 E743) was a possible post hole that included a small amount of daub and a sherd. It was excavated with a spoon and a trowel. The soil matrix was a very dark grayish brown (10YR 3/2) silty loam. There are not plan or profile views for this feature. Although the field notes indicate that there is some material associated with this feature, there were no corresponding materials in the lab. Feature type: unknown.

Feature 28 (Unit E, N1965 E743) was a possible post hole. The soil description at the unit base was a very dark brown (10YR 2/2) loam. There is a small amount of material associated with this feature. Feature type: Small-deep post hole.



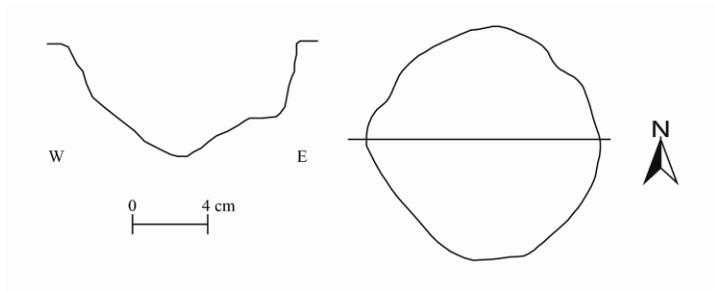
Feature 28 plan and profile views.

Feature 29 (Unit E, N1965 E743) was excavated with a spoon and a trowel, but there are no profile or plan views for the feature. The soil is described as a dark brown (10YR 3/3) silty loam. There is almost no material associated with this feature. Feature type: Small-shallow post hole.



Feature 29 plan and profile views.

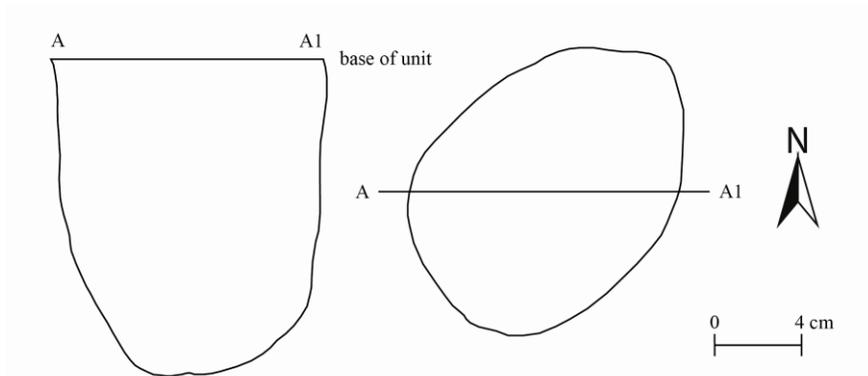
Feature 30 (Unit E, N1965 E743) was excavated with a spoon and trowel. The bottom of the feature is noted as having an uneven bottom. The feature may be a root system. The soil is described as a dark brown (10YR 3/3) loam at the unit base and the soil fill is described as being a midden-like fill. There is very little material associated with this feature. Feature type: Small-shallow post hole.



Feature 30 profile and plan views.

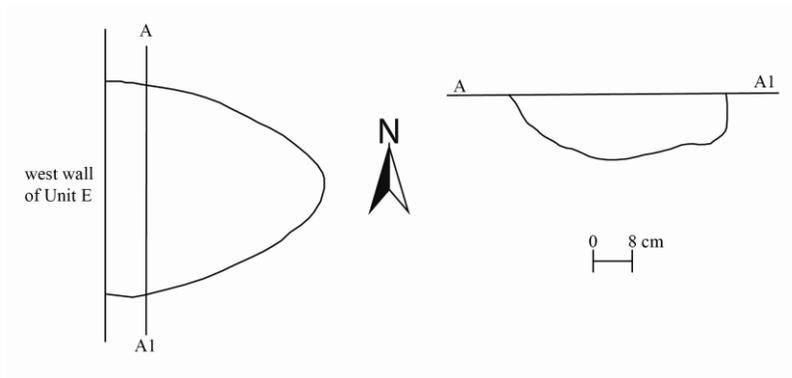
Feature 31 (Unit E, N1965 E743) is described as a dark brown (10YR 3/1) silty, sandy loam at the unit base. It was excavated with a spoon and trowel and is described as a circular shaped feature. There are no profile or plan drawings for this feature. There are also no materials associated with it. Feature type: Residual-soil discoloration.

Feature 32 (Unit E, N1965 E743) is described as being excavated by coring it out and that the feature is a post mold. The soil matrix is described as being a clayey loam and a very dark brown (10YR 2/2) soil at the unit base. Three pot sherds were excavated from the feature. Feature type: Shallow depression.



Feature 32 profile and plan views.

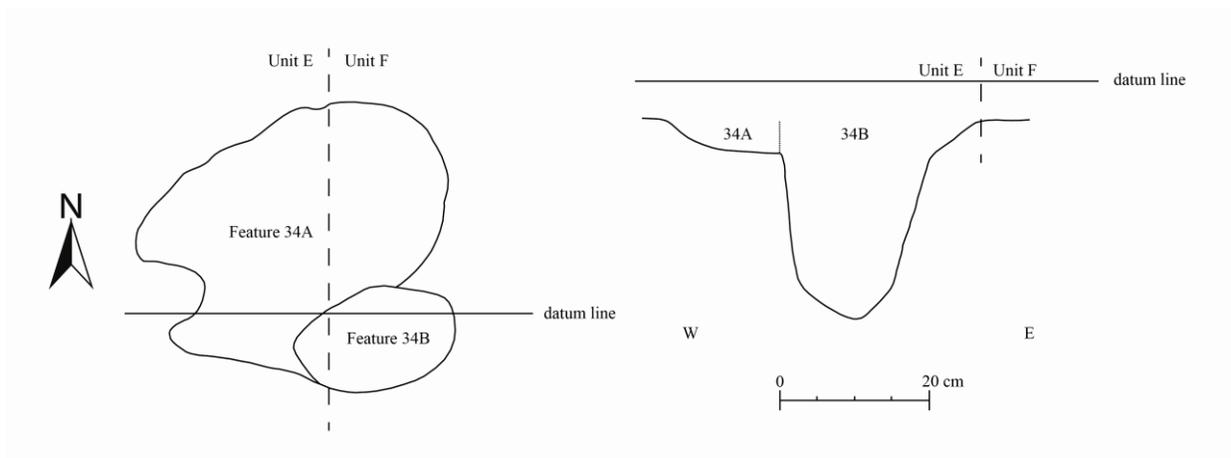
Feature 33 (Unit E, N1965 E743) was excavated with a trowel and is described as a small, daub filled patch, or small daub filled depression. The soil is described as a dark brown (7.5 3/2) silty loam at the unit base. Ceramics and some fauna were also excavated with this feature. Feature type: Daub-filled depression.



Feature 33 plan and profile views.

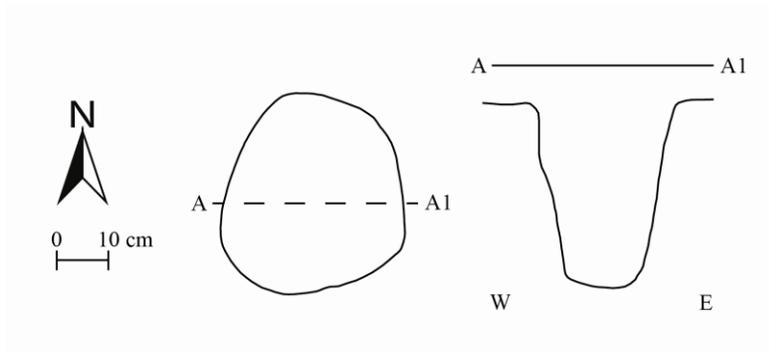
Feature 34A (Unit E, N1965 E743 and Unit F, N1965 E744) was excavated by trowel and spoon and is described as a very shallow, daub filled impression that includes daub and charcoal flecks. This feature was located at the southern intersection of Units E and F. The soil is described as a dark brown (7.5YR 3/2) soil. Feature 34A includes some stone, daub and a single, plain pot sherd. Feature type: Shallow depression.

Feature 34B (Unit F, N1965 E744) was excavated by trowel and spoon and is described as intruding into Feature 6 and Feature 34A. It could be related to both of these features. This feature is a possible post-hole and there is no soil description for the feature. Excavation of the feature was terminated at a depth of about 25 centimeters below the unit base in order to avoid intrusion into lower levels. Materials that were excavated from the feature are ceramics, stone, daub and some fauna. Feature type: Small-deep post hole.



Features 34 A and B plan and profile views.

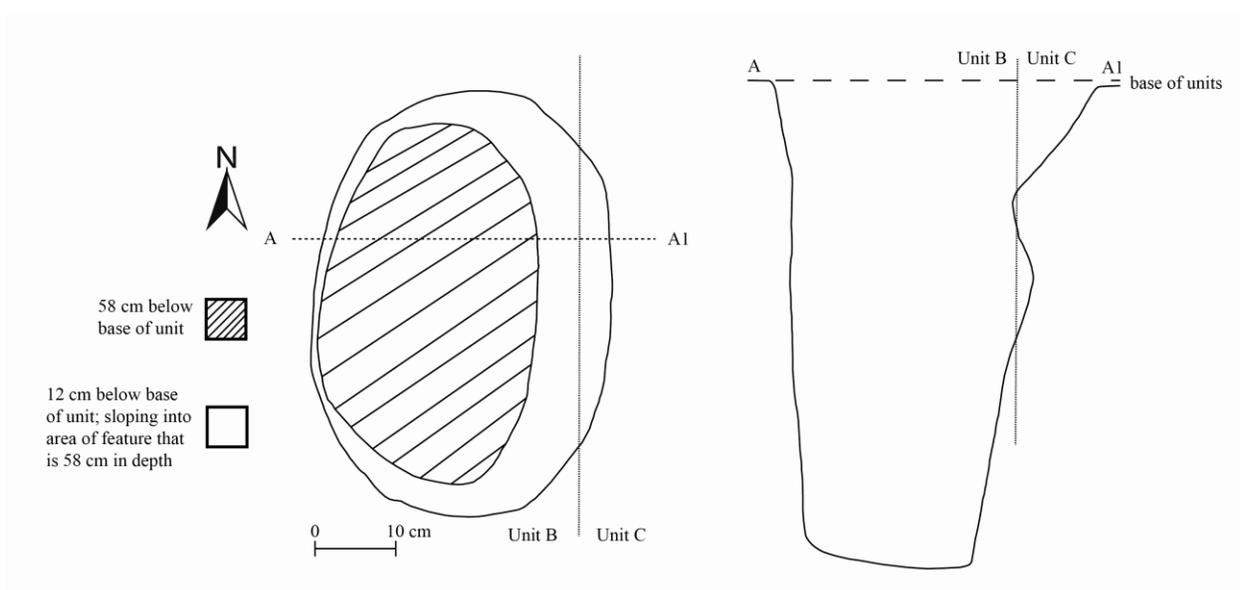
Feature 35 (Unit B, N1963 E742) was excavated with a spoon and a trowel. It is noted that this feature contained clay within the feature with a few possible burns marks on the soil and possible unfired daub. The soil description at the unit base is a very dark brown (7.5YR 2.5/2) silty loam. Material included daub, plain ceramic, unmodified lithic and fauna. Feature type: Large-deep post hole.



Feature 35 plan and profile views.

Feature 36 (Unit B, N1963 E742) was noted on the unit plan view, but was not excavated. The soil description at the unit base is a dark brown (10YR 3/3) silty sandy loam. Feature type: Residual-Soil discoloration.

Feature 37 (Unit B, N1963 E742) was excavated with a trowel and spoon. It was a deep posthole with very loose fill marked by a dark, circular stain in the center of the excavated feature at around 58 centimeters below unit floor. Excavation was terminated at a depth of 58 centimeters below the unit floor in order to avoid intrusion into other layers or possible features. The soil description at the unit base is a dark brown (10YR 3/3) silty sandy loam. Materials from Feature 37 were plain and decorated ceramic, modified and unmodified lithic, fauna and a radiocarbon sample. Feature type: Large-deep post hole.



Feature 37 plan and profile views.

Feature 38 (Unit B, N1963 E742) was noted on the unit plan view, but was not excavated. The soil description at the unit base is a yellowish brown (10YR 3/4) sandy loam. Feature type: Residual-soil discoloration.

Feature 39 (Unit B, N1963 E742) was noted on the unit plan view, but was not excavated. The soil description at the unit base is a very dark brown (7.5YR 2.5/2) silty loam. Feature type: Residual-post hole.

Feature 40 (Unit B, N1963 E742) was noted on the unit plan view, but was not excavated. The soil description at the unit base is a dark reddish brown (5YR 2.5/2) sandy loam. Feature type: Residual-post hole.

Feature 41 (Unit B, N1963 E742) was noted on the unit plan view, but was not excavated. The soil description at the unit base is a dark reddish brown (5YR 2.5/2) sandy loam. Feature type: Residual-post hole.

Feature 42 (Unit B, N1963 E742) was noted on the unit plan view, but was not excavated. The soil description at the unit base is a dark brown (10 YR 3/3) silty sandy loam. Feature type: Residual-post hole.

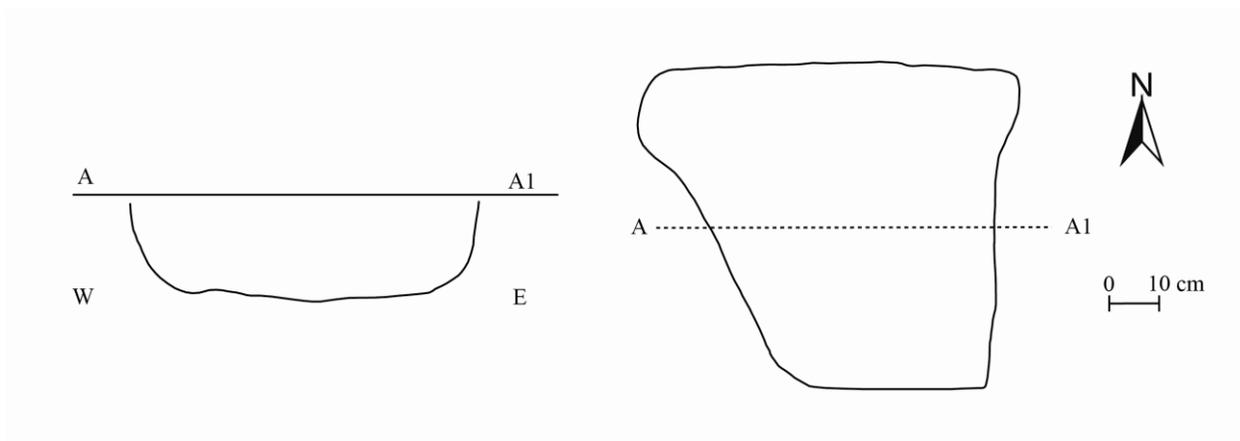
Feature 43 (Unit B, N1963 E742) was noted on the unit plan view, but was not excavated. The soil description at the unit base is a dark reddish brown (5YR 2.5/2) sandy loam. Feature type: Residual-post hole.

Feature 44 (Unit B, N1963 E742) was noted on the unit plan view, but was not excavated. The soil description at the unit base is a dark reddish brown (5YR 2.5/2) sandy loam. Feature type: Residual-post hole.

Feature 45 (Unit B, N1963 E742) was noted on the unit plan view, but was not excavated. The soil description at the unit base is a dark reddish brown (5YR 2.5/2) sandy loam. Feature type: Residual-post hole.

Feature 46 (Unit B, N1963 E742) was noted on the unit plan view, but was not excavated. The soil description at the unit base is a dark brown (10YR 3/3) silty sandy loam. Feature type: Residual-post hole.

Feature 47 (Unit C, N1963 E743) was a large, daub filled, pit feature and was excavated by trowel. The soil description at the unit base is a dark brown (10YR 3/3) silty loam. Materials that were excavated from this feature included plain ceramic, fauna, modified and unmodified lithic. Feature 47 also included the carved and polished bone. Feature type: Daub-filled depression.



Feature 47 profile and plan views.

Feature 48 (Unit C, N1963 E743) was noted on the unit plan view, but was not excavated. The soil description at the unit base is a dark yellowish brown (10YR 3/6) silty loam. Feature type: Residual-post hole.

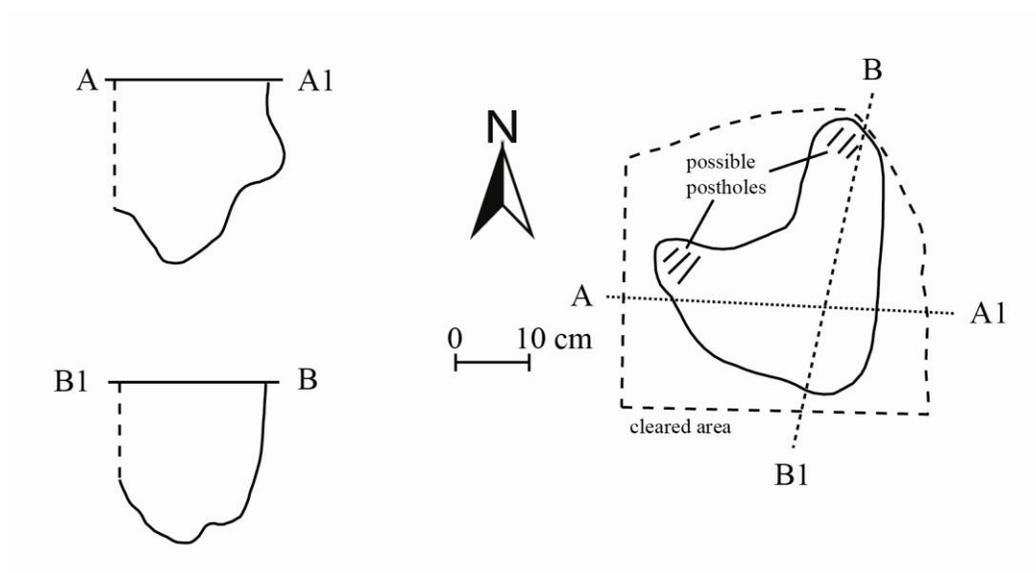
Feature 49 (Unit C, N1963 E743) was noted on the unit plan view, but was not excavated. The soil description at the unit base is a dark brown (10YR 3/3) silty loam. The soil at the surface of Feature 49 is less compact than the soil of Feature 47 and contains fewer inclusions. Feature type: Residual-soil discoloration.

Feature 50 (Unit D, N1963 E744) was noted on the unit plan view, but was not excavated. The soil description at the unit base is a dark yellowish brown (10YR 3/4) silty loam. Feature type: Residual-post hole.

Feature 51 (Unit D, N1963 E744) was noted on the unit plan view, but was not excavated. The soil description at the unit base is a dark yellowish brown (10YR 3/4) silty loam. Feature type: Residual-post hole.

Feature 52 (Unit D, N1963 E744) was noted on the unit plan view, but was not excavated. The soil description at the unit base is a dark yellowish brown (10YR 3/4) silty loam. Feature type: Residual-soil discoloration.

Feature 53 (Unit D, N1963 E744) was excavated by trowel and wet screened with ¼" mesh. The soil description at the unit base is described as a dark yellowish brown (10YR 3/4) silty loam. This feature contained some possible postholes at the bottom of the unit, but the excavation could not be finished due to time constraints. The upper portion of the feature contained a heavy amount of daub material. Materials excavated from this feature include plain and decorated ceramic, modified and unmodified lithic, and daub. Feature type: Daub-filled depression.

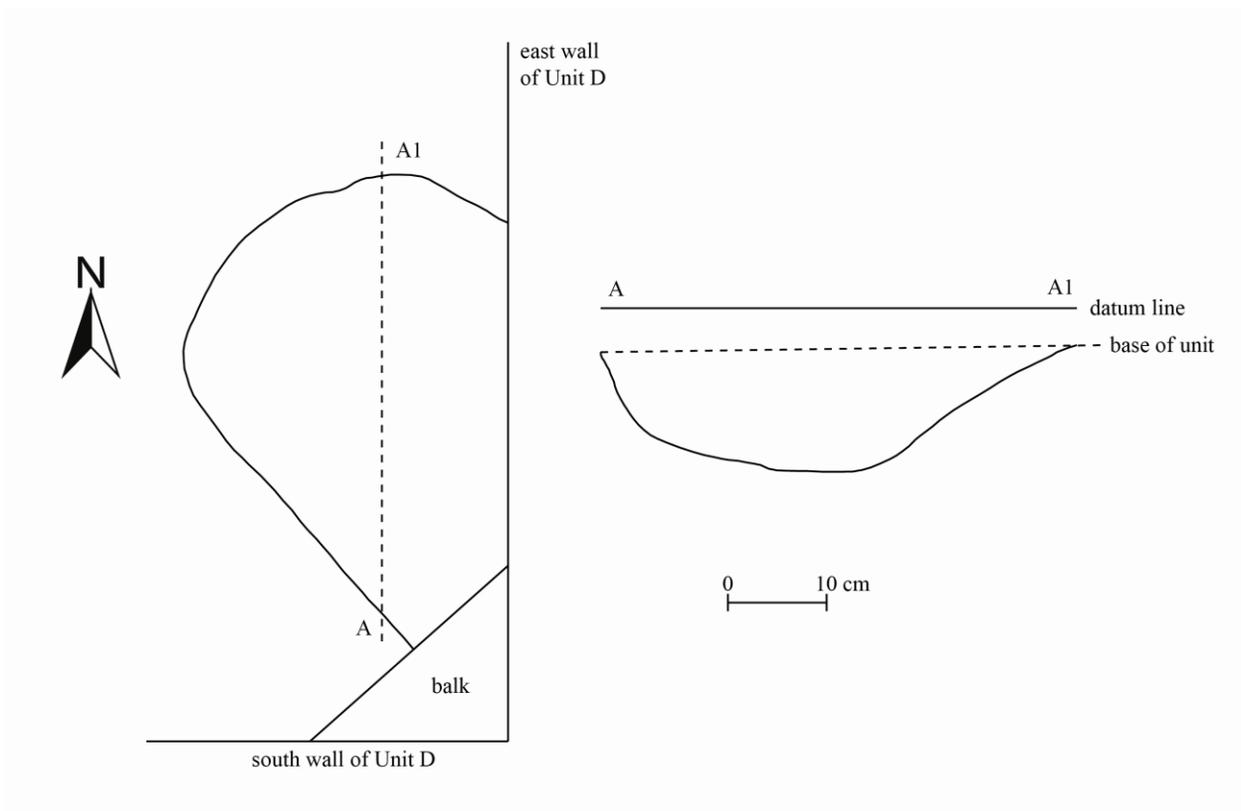


Feature 53 plan and profile views.

Feature 54 (Unit D, N1963 E744) was noted on the unit plan view, but was not excavated. The soil description at the unit base is a dark yellowish brown (10YR 3/4) silty loam. Feature type: Residual-soil discoloration.

Feature 55 (Unit D, N1963 E744) was noted on the unit plan view, but was not excavated. The soil description at the unit base is a dark yellowish brown (10YR 3/4) silty loam. Residual-post hole.

Feature 56 (Unit D, N1963 E744) was excavated with a spoon and a trowel and the material was dry screened through ¼" mesh. The soil description at the unit base is a dark yellowish brown (10YR 3/4) silty loam. There were large pieces of daub and undecorated ceramic. It is a shallow (13 cm below unit floor surface) pit that was approximately 48 centimeters in diameter. There was one ceramic sherd excavated from this feature, along with a minimal amount of stone and fauna. The daub that was excavated from the unit was substantial however. Feature type: Daub-filled depression.



Feature 56 plan and profile views.

APPENDIX B
ROBERT CLOUSE'S FIELD NOTES

Dr. Robert Clouse's field notes are transcribed verbatim in this appendix, with permission. They are included to provide the rod readings and Munsell soil descriptions for the Mound P flank test units. The original text is on file at the University of Alabama, Office of Archaeological Research.

BM-Finished Floor 48.76 masl
1Tu500 Mound P Stairs
Test Unit 1 on slope at base of stairs and base of mound
7/10/09

Excavators are beginning using contoured 10 cm arbitrary levels

Surface: BS 1.23 + BM 48.76 = 49.99 m
NW (1.43)
NE (1.22)
SW (1.46)
SE (1.205)
C (1.32)

(xx) = raw rod readings
-0-10 cm BS

Level: very dark brown (7.5YR 2.5/2) sandy clay loam; 1" ribbon – soil consistent throughout.
Lots of sherds & daub with some historic artifacts.

Top Level 2: BS 1.23 + BM 48.76 = 49.99 m
NW (1.47)
NE (1.28)
SW (1.51)
SE (1.30)

Level 2 – color the same as Level 1 with lens clay in matrix overall but clay lensing and mottling appearing at lower (west) elevations in unit.

*Photo says Level 3 Feature ___ it should read Level 2 Feature 1

Level 3 – soil beneath Level 2 and Feature 1 is same as Level 1; very dark brown (7.5YR 2.5/2) sandy clay loam.

Top Level 3: BS 0.79 + BM 48.76 = 49.55
NW (1.18)
NE (1.00)
SW (1.23)
SE (0.98)
C (0.99)

7/15/09 Unit 1
Top of Level 4: BS 1.10 + BM 48.76 = 49.86 HI
NW (1.55)
NE (1.40)

SW (1.40)
SE (1.60)
C (1.50)

TU-1 7/15/09

Top of Level 5: BS 1.00 + BM 48.76 = HI 49.76

NW (1.61)
NE (1.42)
SW (1.43)
SE (1.63)
C (1.50)

Dark yellowish brown (10YR 4/4) sandy loam

7/16/09

Top of Level 6: BS 0.61 + BM 48.76 = HI 49.37

NW (1.31)
NE (1.13)
SW (1.33)
SE (1.12)
C (1.20)

Level 6 soils dark yellowish brown (10YR 4/4) sandy loam

Top of Level 7: BS 0.61 + BM 48.76 = HI 49.37

NW (1.41)
NE (1.19)
SW (1.39)
SE (1.22)
C (1.28)

Dark yellowish brown (10YR 4/6) sandy loam

7/17/09

Soil change occurring in Level 7. Also much larger ceramic sherds. Soil change beginning to appear at top of Level 8.

Top of Level 8: BS 1.00 + BM 48.76 = 49.76

NW (1.92)
NE (1.68)
SW (1.94)
SE (1.68)
C (1.81)

Dark brown (10YR 3/3) sandy clay and strong brown (7.5YR 4/6) clay loam – seems more clay is coming up. Because of the density of pottery & probable daub chunks decided to shift to 5cm levels in Level 8. Top of Level 9 is almost 75cm bs. Incisor & 2 molars found on screen from Level 8. Called Brandon (Thompson) to evaluate bone visible at top of Level 9. Not human.

Top of Level 9 (5 cm level): BS 1.00 + BM 48.76 = 49.76

NW (1.95)
NE (1.74)
SW (1.98)
SE (1.73)
C (1.86)

Considerable clay concentrations in Level 9. Some bone in level but none identifiable as human.

Top of Level 10 (5cm level): BS 1.00 + BM 48.76 = 49.76

NW (2.03)
NE (1.78)
SW (2.02)
SE (1.80)
C (1.90)

Top of Level 10 (80 cm bs) clay with pockets of clay and daub. Color is dark brown (10YR 3/3). Clay color reddish yellow (7.5YR 6/8). Considerable animal bone.

Top of Level 11: BS 1.00 + BM 48.76 = 49.76

NW (2.07)
NE (1.83)
SW (1.85)
SE (2.08)
C (1.99)

Mixed sandy clay & clay dark yellowish brown (10YR 3/6) Considerable bone

Top of Level 12: BS 0.86 + BM 48.76 = 49.62

NW (2.00)
NE (1.80)
SW (2.00)
SE (1.81)
C (1) *Clouse's notes scratch out a number, making the 'center' reading unreadable.

East ½ of unit is dark brown (10YR 3/3) and west ½ of unit is dark yellowish brown (10YR 3/6) sand. Level 12 will be excavated by cultural levels removing the top darker layer rather than following arbitrary levels. Considerable bone on surface of Level 12, including a verte-foral (?). *See excavation notes for sketch of Level 12 showing the east/west division of soils and depths at dividing line. Look to be the same as Top of Level 12 raw rod readings, just measured at a different place.

N/C (1.94)
C (1.92)
 S/C (1.92)
 SE (1.81)

Unit 1

Feature 2 visible at (Top of) Level 13: BS 0.86 + BM 48.76 = 49.62

*Plan view sketch is not oriented north

NW (2.03)
NE (1.91)
SW (2.03)
SE (1.89)
C (1.96)
Feature 2 (1.95)
N/C (1.96)

7/20/09 (Joel's Notes, 2:30pm)

Unit 1

Basically Level 13 has now been removed (yellow sandy zone) not he area originally thought to be Feature 2 is now referred to as Level 14, since it spreads across entire floor rather than just in the corner of the unit. Now commencing to take out this level as single stratum – gathering 2 float bags of the level – screening the rest of it.

Top of Level 14:

NW (2.06)
NE (1.95)
SW (2.07)
SE (1.93)
C (1.99)

As noted above – 2 bags removed for float – rest will be screened.

7/23/09

Feature 2 turned out to be Level 14. 14 is very deep & not subdivided until about 20cm left in the level that is now subdivided into Level 15.

Top of Level 15: HI 49.73

NW (2.43)
NE (2.44)
SE (2.43)
SW (2.45)
C (2.43)

7/24/09

Soil changing to lighter color at this depth. Stopping Level 15 and creating Level 16.

Top of Level 16: BS 0.98 + BM 48.76 = 49.74

NW (2.67)
NE (2.60)
SE (2.59)
SW (2.65)
C (2.64)

Level 16 dark yellowish brown (10YR 4/4) clay – bone and sherd visible on surface of level.
5cm level.

7/27/09

Top of Level 17: HI 49.73

NW (2.68)
NE (2.64)
SW (2.69)
SE (2.64)
C (2.68)

Top of Level 17 shows considerably lighter colored soil and Level 16 produced relatively few artifacts. Strong brown (7.5YR 5/6) fine sandy clay.

Top of Level 18: HI 49.73

NW (2.75)
NE (2.73)
SE (2.74)
SW (2.76)
C (2.75)

Yellowish brown (10YR 5/4) clay – mottled with iron concretions, charred material, some light clay mottling.

Top of Level 19: HI 49.57

NW (2.64)
NE (2.65)
SW (2.64)
SE (2.68)
C (2.65)

Level 19 dark yellowish brown (10YR 4/4) very fine sandy clay; lots of fine mottling with sherd and charcoal appearing at surface of level.

Top of Level 20: HI 49.61

NW (2.82)

NE (2.86)
SE (2.86)
SW (2.84)
C (2.86)

8/3/09

Terminus, Top of Level 21: BS 0.80 + BM 48.76 = 49.56

NW (2.81)
NE (2.87)
SE (2.90)
SW (2.87)
C (2.87)

Base is at 46.69 masl. Yellowish brown (10YR 5/8) fine sandy clay mottled with gray, white & reddish splotches. No artifacts in Level 20. Level line established at 48.00 masl (*for profile mapping*).

Profile not finished on 8/3/09. Our 8/5/09 BS is 1.00m + BM 48.76 = HI 49.76

1Tu500 Unit 2

7/17/09

Set up unit and took photo of surface & elevations at surface.

Surface: HI 49.76
NW (1.74)
NE (1.67)
SE (1.69)
SW (1.78)
C (1.74)

Level 1 includes wire nails, rebar tie wires, concrete & non-native gravels. Soil in Level 1 dark brownish yellow (10YR 4/4) sandy loam. Top of Level 1 is very gravelly. Extremely compact soils.

7/20/09

Top of Level 2: HI 49.62

NW (1.70)
NE (1.65)
SE (1.68)
SW (1.76)
C (1.69)

Very gravelly, dark brown (7.5YR 3/4) gravelly sand – 10cm level.

Top of Level 3: HI 49.62

NW (1.82)
NE (1.76)
SE (1.76)
SW (1.86)
C (1.79)

Dark brown (7.5YR 3/4) sandy loam – 10cm level.

7/20/09 (Joel's Notes)

Unit 2

Just finished Level 3 – majority of unit is comprised of mottled clay – all disturbed overburden it seems. Small area in SE corner along eastern wall darker in color.

Top of Level 4:

NE (1.84)
NW (1.91)
SW (1.96)
SE (1.84) – contour of feature
C (1.89)

Now starting on Level 4 – going to pedestal feature along eastern wall and work rest of unit down further. Level 3 yielded very little material, mostly small sherds.

7/21/09

Level 4 dark loamy soil overlies a very mottled yellow/red clay later except for what appears to be a disturbance along east wall. Now following natural levels rather than arbitrary levels.

Top of Level 5: BS 0.95 + BM 48.76 = HI 49.71

NW (2.21)
NE (2.02)
SE (2.12)
SW (2.06)
C (2.03)

Level 5 is mottled clay that was cut through on eastern end by Feature 3. Soil is red (2.5YR 4/6), yellowish brown (10YR 5/8) and (Gley 2 7/5 PB) clay; also see Feature 3 plan for elevations on top of Level 5. Level 5 has a very irregular upper surface. Redeposited construction fill.

7/23/09

Top of Level 6: BS 0.97 + BM 48.76 = 49.73

NW (2.45)
NE (2.21)
SE (2.26)
SW (2.50)
C (2.34)

Level 6 is a brown sand. It overlies a dark brown to almost black loam in NE & E edge of unit. This black soil is classified as Level 7. See Level form for drawing of these 2 levels. Level 6 is brown (7.5YR 4/4) sandy clay.

Top of Level 7: HI 49.73

NW (2.58)
NE (2.22)
SE (2.27)
SW (2.56)
C (2.53)

Elevations for top of Level 7, steeply sloping down from east to west. (7.5YR 4/2) sandy clay, irregular surface possibly distributed from construction.

7/24/09

Level 8 was identified as Feature 4 lies under Level 7.

Top of Level 8: HI 49.74

NW (2.72)
NE (2.67)
SE (2.66)
SW (2.70)
C (2.75)

10YR 3/2 clay comprises Level 8. Level 8 is very dark & ending on a yellowish brown sand.
7/27/09

Terminus, Top of Level 9: BS 0.81 + BM 48.76 = HI 49.57

NW (2.75)
NE (2.72)
SE (2.78)
SW (2.76)
C (2.75)

-terminus raw rod readings

NW (46.82 masl)
NE (46.85 masl)
SE (46.79 masl)
SW (46.81 masl)
C (46.82 masl)

$$\text{BS } 0.85 + \text{BM } 48.76 = 49.61 \quad \text{HI} - 1.81 = 47.80$$

Profile drawings of Unit 2. Level line set at 47.80 masl.

APPENDIX C
ACCESSION NUMBERS OF ILLUSTRATED ARTIFACTS

List of AMNH accession numbers for illustrated artifacts.

FIGURE	ACCESSION NUMBER	FIGURE	ACCESSION NUMBER
Figure 4.1a.	2009.102.11	Figure 4.8c.	2009.102.2
Figure 4.1b.	2009.54.2	Figure 4.9.	2009.102.2
Figure 4.1c.	2009.102.1	Figure 4.10.	2009.102.10
Figure 4.1d.	2009.102.2	Figure 4.11. (top left)	2009.102.44
Figure 4.1e.	2009.102.14	Figure 4.11. (top right)	2009.102.6
Figure 4.1f.	2009.54.23	Figure 4.11. (bottom)	2009.102.2
Figure 4.2a.	2009.54.22	Figure 4.12a.	2009.54.21
Figure 4.2b.	2009.54.25	Figure 4.12b.	2009.54.18
Figure 4.2c.	2009.54.23	Figure 4.12c.	2009.54.4
Figure 4.2d.	2009.54.23	Figure 4.12d.	2009.54.4
Figure 4.5.	2009.102.47	Figure 4.12e.	2009.54.36
Figure 4.6a.	2009.54.8	Figure 4.12f.	2009.54.22
Figure 4.6b.	2009.102.2	Figure 4.12g.	2009.102.14
Figure 4.6c.	2009.102.1	Figure 4.13a.	2009.54.24
Figure 4.6d.	2009.54.22	Figure 4.13b.	2009.54.23
Figure 4.6e.	2009.54.21	Figure 4.13c.	2009.102.5
Figure 4.6f.	2009.54.12	Figure 4.14.	2009.54.9
Figure 4.6g.	2009.54.5	Figure 4.15a.	2009.54.8
Figure 4.6h.	2009.54.1	Figure 4.15b.	2009.54.8
Figure 4.6i.	2009.102.2	Figure 4.15c.	2009.102.11
Figure 4.6j.	2009.54.8	Figure 4.15d.	2009.102.13
Figure 4.6k.	2009.54.1	Figure 4.16.	2009.102.8
Figure 4.7a.	2009.54.21	Figure 4.17 (top left)	2009.102.11
Figure 4.7b.	2009.54.13	Figure 4.17. (top right)	2009.102.8
Figure 4.7c.	2009.102.13	Figure 4.17. (bottom left)	2009.102.38
Figure 4.7d.	2009.54.10	Figure 4.17. (bottom right)	2009.102.18
Figure 4.7e.	2009.54.2	Figure 4.18a.	2009.102.43
Figure 4.7f.	2009.54.6	Figure 4.18b.	2009.102.22
Figure 4.8a.	2009.54.21	Figure 4.18c.	2009.102.22
Figure 4.8b.	2009.54.22		

APPENDIX D
DATA COLLECTION FORMS

CERAMIC TYPE VARIETY DATA COLLECTION SHEET

ACCESSION 2009.____.____

TEST UNIT: ____ ; LEVEL: ____ ; FEATURE: ____

ANALYZED BY: ESP

DATE: _____

TYPE	RIM	BODY	WEIGHT (g)	TYPE	RIM	BODY	WEIGHT (g)
Mississippi Plain	-			Carthage Inc/unspecified			
Mississippi Plain		-		Mdville Eng/Havana			
Bell Plain	-			Mdville Eng/Hemphill			
Bell Plain		-		Mdville Eng/Maxwell's Crossing			
Mdville Inc/Snows Bend				Mdville Eng/Middleton			
Mdville Inc/Carrollton				Mdville Eng/Prince Plantation			
Mdville Inc/Oliver				Mdville Eng/Stewart			
Mdville Inc/Moundville				Mdville Eng/Taylorville			
Mdville Inc/unspecified				Mdville Eng/Tuscaloosa			
Carthage Inc/Fosters				Mdville Eng/Wiggins			
Carthage Inc/Lupton				Mdville Eng/Elliots Creek			
Carthage Inc/Moon Lake				Mdville Eng/Cypress			
Carthage Inc/ Poole				Mdville Eng/unspecified			
Carthage Inc/Summerville				Shell-tempered Inc/unspecified			
Carthage Inc/Akron				Alabama River Appliqué			
Carthage Inc/Carthage				Alabama River Incised			
Shell tempered				Mulberry Creek Cord Marked			
Grog tempered				Baytown Plain			
Sand/grit tempered							
Other							

Total Shell-tempered sherds: ____

Total Decorated sherds: ____

Total Grog-tempered sherds: ____

Total Plain sherds: ____

Total Sherds: ____

CERAMIC MODES DATA COLLECTION SHEET

ACCESSION 2009.____.____

TEST UNIT: ____ ; LEVEL: ____ ; FEATURE: ____

ANALYZED BY: ESP
DATE: _____

SHAPE	Count	Weight (g)	Comments
Collar, Jar			
Handle, Jar			
<i>TOTAL JAR</i>			
Rim, Flaring-rim Bowl			
Rim, Short-neck Bowl			
Rim, Plate			
Rim, Eccentric Bowl			
Other bowl			
<i>TOTAL BOWL</i>			
Corner Point, Bottle			
Pedestal Base, Bottle			
Slab Base, Bottle			
Neck, Bottle			
<i>TOTAL BOTTLE</i>			
EMBELLISHMENT	Count	Weight (g)	Comments
Beaded Rim			
Beaded Shoulder			
Cutout Rim			
Folded Rim			
Folded-Flattened Rim			
Gadrooned			
Horizontal Lug			
Indentated			
Notched Lip			
Notched Everted Lip			
Scalloped Rim			
Vertical Lug			
Frog Effigy Features			
Fish Effigy Features			
Human Head Medallions			
Other Effigy Features			
PAINTED	Count	Weight (g)	Comments
Red Filmed Exterior			
Red Filmed Interior			
White Filmed			
Red on White			
White on Red			
Red on Buff			
Negative Painted			
Hemagraved			

FLAKED AND WORKED LITHIC DATA COLLECTION SHEET

ACCESSION 2009.____.____

TEST UNIT: ____ ; LEVEL: ____ ; FEATURE: ____

ANALYZED BY: ESP

DATE: _____

FLAKED LITHIC	MATERIAL CODE	COUNT	WEIGHT (g)	MATERIAL CODE	COUNT	WEIGHT (g)
Primary Decort. Flake						
Secondary Decort. Flake						
Biface Thinning Flake						
Blade-like Flake						
Utilized Flake						
Shatter						
Core/Fragment						
Tested Pebble						
Tested Cobble						
Drill/Perforator						
Microlith/Drill						
Hoe						
Madison Arrow Point						
Arrow Point Preform						
Biface/Fragment						
Chipped/Flaked						

GROUND LITHIC	MATERIAL CODE	COUNT	WEIGHT(g)	MATERIAL CODE	COUNT	WEIGHT (g)
Abrader						
Ground						
Sawn						
Saw						
Polished Chip						
Celt/fragment						
Pallet/fragment						
Discoidal						
Hammerstone						

LITHIC MATERIAL CODE: Tuscaloosa Gravel Chert (T); Quartzite (Q); Fort Payne Chert (FP); Dover Chert (D); Mill Creek Chert (MC); Coastal Plain Agate (A); Coastal Plain Chalcedony (CPC); Tallahatta Quartzite (TQ); White Chert (WC); Greenstone (GS); Hematitic sandstone (HS); Sandstone (SS); Ferruginous sandstone (FR); Fine Gray micaceous sandstone (FS); Unidentified (U).

UNMODIFIED STONE AND MISCELLANEOUS DATA COLLECTION SHEET

ACCESSION 2009.____.____

ANALYZED BY: ESP

TEST UNIT: ____ ; LEVEL: ____ ; FEATURE: ____

DATE: _____

UNMODIFIED STONE	COUNT	WEIGHT (g)	COMMENTS
Pebble (quartz/chert/limestone – P)	-		
Cobble (quartz/chert/limestone – CB)	-		
Cobble fragment (quartz/chert – CF)			
Sandstone (SS)			
Sandstone, fine grey micaceous (FS)			
Sandstone, hematitic (HS)			
Sandstone, ferruginous (FR)			
Hematite (pigment quality – H)			
Limonite (L)			
Petrified Wood (PW)			
Coal (CL)			
Muscovite (M)			
Galena (G)			
Greenstone (GS)			
Caulk (C)			
Fossil (F)			
Slate (S)			
Metamorphic (MT)			
Limestone (LM)			
Sedimentary (SD)			
Conglomerate (CG)			

MATERIAL	COUNT	WEIGHT (g)	COMMENTS
Daub/Fired Clay	-		
< ½ inch material*	-		
Botanical			
Human Bone**			
Radiocarbon**		-	
FAUNAL	COUNT	WEIGHT (g)	COMMENTS (species)
Vertebrate			
Vertebrate, heat altered			
Invertebrate			
NON-VESSEL CERAMIC	COUNT	WEIGHT (g)	COMMENTS

