

MOUND R1 AND THE PROBLEM
OF THE MINOR MOUNDS
AT MOUNDVILLE

by

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A THESIS

Submitted in partial fulfillment of the requirements
for the degree of Master of Arts in
the Department of Anthropology
in the Graduate School of
The University of Alabama

TUSCALOOSA, ALABAMA

2013

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ABSTRACT

This project reports recent excavations of Mound R1 at Moundville. Of the 32 mounds at Moundville, fifteen are flat-topped monuments which help define the plaza; however there are several small mounds, not part of this plaza group, that have been almost completely overlooked in the history of Moundville research. Mound R1 is one of these small mounds. Mound R1 is located approximately 40 meters west of Mound R on a narrow, isolated projection of a terrace bordered by ravines. Excavations were conducted in the fall of 2011 and the summer of 2012. These excavations reveal Mound R1 to be a multi-stage platform mound constructed of clay with evidence of perishable architecture on the mound during each major episode of construction. The stratigraphy and artifact analysis reveal the same construction chronology, structure, and function as the much larger plaza periphery mounds at Moundville. Moreover, the surrounding landform exhibits an occupation history comparable to that found in other areas at Moundville. I suggest that this landform was occupied by a distinct kin-based residential group.

ACKNOWLEDGEMENTS

This thesis could not have happened without the support and guidance of a number of people. I would like to especially thank my advisor, Dr. Vernon J. Knight Jr. for his patience and for always being available to talk. I would like to thank my committee members Keith P. Jacobi, Michael D. Murphy, and Amanda L. Regnier, for their comments and guidance on this project.

Of course, this project could not have happened without the people who helped excavate Mound R1. The members of the University of Alabama Honors Program field school worked very hard with great attitudes: Jessica Judge, Taylor Payne, and Kim Roy. The University of Alabama Anthropology Club voluntarily dedicated one of their free weekends to help me collect additional data: Dr. Ian Brown, Dr. Steve Kosiba, Jordan Bannister, Rachel Briggs, Johnna Dominguez, Paul Eubanks, Mike Goldstein, Dakota Park-Ozee, Erik Porth, and Jacob Walker. Special thanks to Erik for the idea, and for organizing everything. I would also like to thank Daniel Salberg and Lynn Funkhouser for helping to map Mound R1. Thanks to Joshua Shiers, who spent his entire summer voluntarily working in the worst heat imaginable. Thanks to Kristin Dudra, Emmalea Gomberg, Elizabeth Hunt, and Erin Phillips for being available for last minute digging or backfilling. Katie Whatley helped by answering all my photoshop and illustrator questions.

For their lab work and preliminary analysis, I would also like to thank the University of Alabama Ant-466, Laboratory Methods in Archaeology class: Jessica Morgan, Katherine Forester, Daniel Cardwell, Emmalea Gomberg, Elizabeth Hunt, Christopher Marrasso, Holly

Ogburn, Eugene Randall, Emily Sarvis-Hill, Alison Scribber, and Joshua Shiers. Holly Ogburn took most of the object photographs for this thesis. Emily Sarvis-Hill provided us with wonderful drawings of some of the pottery.

Without the support and encouragement of my parents, Karen Kelly-Livingston and Ray Livingston, and friends, this project had the potential of stopping dead in its tracks. Sarah Morrow, Maria Panakhyo, Allison Williams, and Stephen Palecek gave me the encouragement and strength I needed to keep going. Thanks, guys.

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CHAPTER 1

INTRODUCTION AND THEORETICAL BACKGROUND

The Mississippian societies of the Southeast (ca. AD 1050 – 1600) are known for their large civic-ceremonial centers that feature multiple earthen flat-topped mounds arranged around plazas. Among these, Moundville in west-central Alabama is the second largest with over 32 mounds (Knight 2010a:1). The reason there is some uncertainty regarding the precise number of mounds at Moundville is because there are a number of small mounds, the subject of this thesis, that may or may not be included in the total. Moundville occupies a 75 ha area on a flat Plio-Pleistocene terrace. It has been the subject of archaeological investigation since the mid-nineteenth century (Curren 1984:121; Steponaitis 1983). However, the small mounds at Moundville have been almost completely overlooked in the history of its research. Blitz (2008) has hypothesized that “some high places originally designated as mounds, such as U, W, and M1, are not constructed mounds at all but gradual accumulations of midden generated by dense concentrations of houses.” There are not enough data, however, to understand much about the chronology of these small mounds, their use, or how they fit into the spatial organization of Moundville.

The larger mounds at Moundville appear to be organized in a planned arrangement (Knight 1998; Peebles 1971). Fifteen of the 32 mounds at Moundville are flat-topped monuments positioned around a single large plaza (Figure 1). These large mounds which help define the plaza have been referred to as the *plaza-periphery group* (Knight 1998:47), and all have been excavated to some degree (Moore 1905, 1907; Knight 2010a). The largest mounds, A, B, and V,

form a north-south axis that divides the Moundville site in half. Within the plaza-periphery group, there is an alternating pattern of mounds with burials and mounds without burials (Knight 1998:49; Peebles 1971: 82). The size of the mounds, particularly the ones without burials, decreases the farther away they are from Mound B (Knight 1998:51). These patterns potentially relate to Moundville's social organization, in which individual mounds might have been sponsored by a variety of kinds of social forms such as lesser elites related to a paramount chief, autonomous corporate kin segments, coalesced towns, or religious sodalities (Hally 1996; Knight 2010b).

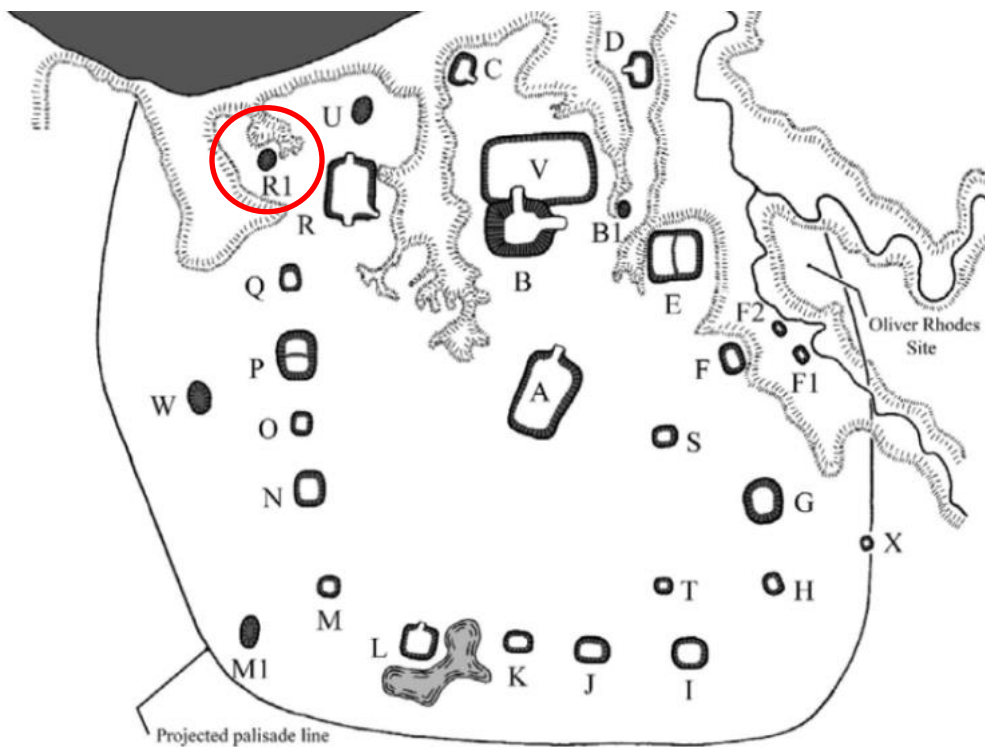


Figure 1. Map of Moundville, showing the location of Mound R1 in the northwest section (Knight and Steponaitis 1998:3).

The plaza-periphery mounds at Moundville share many attributes. They were built in stages, made of basket-loaded clay that completely covered the summit and flanks of earlier stages (Knight 2010a:348). Sometimes a thin layer of pure clay, called a *blanket mantle*, was applied to seal the previous construction stage (Knight 2010a:348). Construction fill contains few artifacts (Knight 2010a:349), making flank middens the main source of information about activities related to the mound summits. Activities on the mounds were diverse, and do not correlate well with the dichotomy between mounds with burials and mounds without. Examples of mound-related activities include mortuary ritual, decorative arts, lapidary crafting, woodworking, and stone tool manufacture (Knight 2010a:355-360). The summits of the mounds were covered with wooden pole-frame structures.

However, it is unclear how this patterned arrangement relates to the smaller mounds that lie outside the plaza-periphery. These smaller mounds would include Mounds B1, F1, F2, M1, R1, U, W, and X, along with additional mounds that appear on earlier maps but have not yet been verified or given a letter designation (Figure 2). The majority of these mounds have either never been excavated or were excavated prior to the development of modern methods that would include detailed stratigraphic or structural information.

This study investigates one of these small mounds, Mound R1, to help answer the question of how the smaller mounds fit into the larger order at Moundville. Mound R1 is located approximately 40 meters west of Mound R on a narrow, isolated projection of a terrace bordered by ravines. It was originally designated as Mound X on an unpublished list of mound volumes compiled by Walter B. Jones (Jones 1937). He records the mound volume as 140 y³ or 107 m³. The name was then lost, and Mound R1 was subsequently renamed by Knight and Steponaitis (1998:5).

The mound has become truncated by a power line disturbance and by many decades of plowing, so its original height is unknown. Likewise, the original margins of the mound are unknown, as the slight rise blends into the surrounding terrain. Today, the mound is approximately one meter high above the surrounding landform and appears to be about 22-24 meters in diameter. An excavation of the mound was completed with the help of a University of Alabama Honors Program field school, the University of Alabama Anthropology Club, and volunteers.

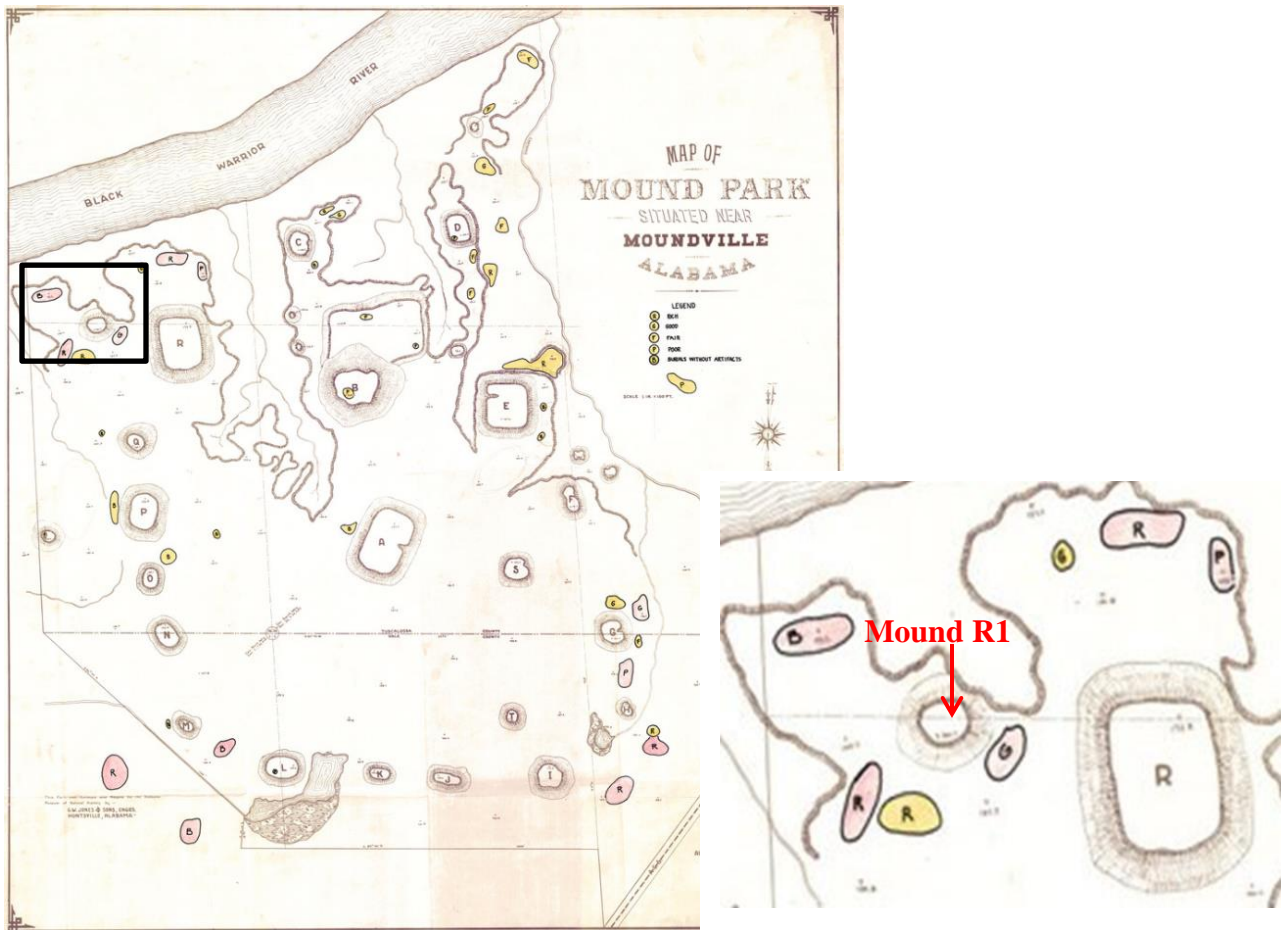


Figure 2. Map surveyed for the Alabama Museum of Natural History by G.W. Jones & Sons in March, 1930, with close-up of the Mound R1 area. R, G, and P refer to the quality of burials found (R for rich, G for good, and P for poor). Yellow represents 1930 and red represents 1931 excavations.

Moundville Ceramic Chronology and Developmental Stages

The chronology for Moundville has been divided into five phases, with all but the last being subdivided into early and late subphases: West Jefferson (AD 1020-1120), Moundville I (AD 1120-1260), Moundville II (AD 1260-1400), Moundville III (AD 1400-1520), and Moundville IV (AD 1520-1650) (Knight and Steponaitis 1998). These phases are based on the introduction of new pottery type-varieties throughout the sequence, and use terminus post quem (limit after which) reasoning in their formation. Since the phases are based on ceramic chronology, they do not exactly overlap with the developmental history of Moundville, which is based on major sociopolitical events. There are five developmental stages: intensification of local production, initial centralization, regional consolidation, entrenched paramountcy, and collapse and reorganization (Knight and Steponaitis 1998:10).

Intensification of local production occurred between AD 1020 and 1120 during the West Jefferson phase. This phase was marked by increased production of corn and by craft goods such as shell beads (Knight and Steponaitis 1998:11). Microlithic tools are commonly found at West Jefferson sites. The lack of the characteristic West Jefferson bell-shaped pits at the Moundville site means that Moundville was most likely not occupied before AD 1120 (Knight and Steponaitis 1998:12).

The initial centralization stage at Moundville begins in the early Moundville I phase (AD 1120-1200). This was when many of the traits that define Mississippian culture were introduced, including shell-tempered pottery, Mississippian vessel shapes, wall trench structures, and the intensification of corn agriculture. Mound X at Moundville and the Asphalt Plant mound (1Tu50), located 800 meters northeast of Moundville, are the only two mounds in the Black Warrior Valley known to date to this time. Using the Depression-era Roadway excavations,

Wilson (2008) determined that early Moundville I phase occupation is evident throughout the vicinity of the plaza-periphery mounds.

During the late Moundville I and early Moundville II phase, Moundville was made the paramount center of a regional chiefdom, in what is called the regional consolidation stage. The initial construction of the major plaza-periphery mounds dates to this stage. At this time, the plaza was artificially flattened and the palisade erected. The palisade had approximately six rebuildings, indicating use until about AD 1300 (Scarry 1998). The population grew, and most of the midden found at the site dates to this period. Corn agriculture and the acquisition of nonlocal goods intensified. During this stage, secondary mound centers were constructed in the Black Warrior Valley, which is a further indicator of political consolidation (Knight and Steponaitis 1998:16).

Following the regional consolidation stage, Moundville entered a stage in which its status as a political and ceremonial center was entrenched. This stage began in the late Moundville II phase and extended through early Moundville III. During this stage much of the residential population at Moundville emigrated to the hinterlands and Moundville became an empty ceremonial center, where people from elsewhere in the Black Warrior Valley traveled to bury their dead. Some of the most elaborate burials at Moundville date to this period. Late in the period there was a decline in long-distance exchange (Knight and Steponaitis 1998:19). The period is marked by a change in domestic architecture, away from flexed-pole structures, where the roof and walls were one connected entity, to rigid post structures having hipped roofs and daubed walls.

Finally, the collapse and reorganization stage correlates with the late Moundville III and Moundville IV phases, between AD 1450 and 1650. During this time, only Mounds B, P, and E

were occupied. Although people continued to bury their dead at Moundville, it was to a lesser extent as cemeteries were established at some of the secondary mound sites in the Black Warrior Valley. Most of these secondary mound sites in the valley were abandoned by the middle of the sixteenth century (Knight and Steponaitis 1998:22).

Previous Excavations in the Mound R1 Locality

Although Mound R1 has not been excavated previously, there have been excavations on the narrow, isolated terrace on which it sits. Clarence B. Moore spent several weeks digging at Moundville in 1905 and 1906. His general aim was to protect the artifacts from looters (Aten and Milanich 2003). Most of his focus at Moundville was on finding burials and collecting their grave goods. Features other than burials were not recorded, and the notes were not precise. At Moundville, Moore dug in most of the mounds and in several off-mound areas as well; however, the exact location of these excavations was not recorded. Near Mound R1, he dug two areas he designated the “field north of Mound R” and the “field west of Mound R.” The excavated ridge north of Mound R was in the low mound now designated as Mound U. The field west of Mound R is most likely within the isolated tract of land on which Mound R1 sits; however, it is unclear if Moore dug into the mound itself. Moore described the area as being a cultivated field with substantial slopes (Moore 1905:240). During two seasons Moore (1905, 1907) excavated 61 burials in the field west of Mound R. With these, he found grave goods that included a limonite disc, a stone palette, sheet copper, 103 jasper pebbles, “jasper” (heat-treated Tuscaloosa gravel chert) arrow points, a set of shell necklace beads, a set of shell wrist beads, two copper ear plugs and bone pins, and two smoking pipes (Moore 1905:240-241; 1907:344). Pottery vessels found

include Carthage Incised, *var. Fosters*, two fish effigy bowls, and painted bottles and bowls (Moore 1905:240-241; 1907:211-212).

During 1930 and 1931, the Alabama Museum of Natural History excavated 44 more burials in four groups on the same narrow terrace west of Mound R (Figure 2). In 1930, the Museum excavated only one of these burial groups south of Mound R1, and uncovered, in the judgment of the excavators, a large quantity of grave goods with them. The Museum went back in 1931 to excavate three other burial groups on the same landform. One group was excavated southwest of the mound, which also produced many artifacts with burials, and a second burial group was excavated west of the mound, in which some grave goods were encountered. The final burial area excavated was located closer to the river, to the west of the mound, where burials were found without artifacts.

At this time, the methods used by the Alabama Museum of Natural History were similar to those used earlier by Moore, where the main objective was finding burials and museum pieces (Peebles 1979). Twenty-five of the burials had no grave goods. According to Steponaitis's later analysis, pottery vessels found in those graves possessing grave goods included the type-varieties Moundville Engraved *vars. Hemphill* and *var. Taylorville*, Carthage Incised, *vars. Carthage* and *Arkon*, Walls Engraved, and Barton Incised (Peebles 1979:661-689; Steponaitis 1983:260-261). There was also one beaded rim bowl, two flaring-rim bowls, one high shouldered bottle, one hooded bottle, one duck effigy bowl, one frog effigy, and one human effigy (Steponaitis 1983:260-261). Other artifacts included a stone disc, an axe fragment, shell beads, fragments of hematite, 4 copper earplugs, and 6 bone awls. There was also an engraved stone disc that had been broken with pieces scattered in five separate graves (Peebles 1979:661-689).

David L. DeJarnette directed a field school on this peninsula of land in 1956 and 1957. Plan views drawn by students show that excavations took place on the west side of Mound R1, close to the river. The techniques used closely resembled modern archaeological methods, including the staking out of units and digging in horizontal levels (Knight 2013:78-79). The units were 5 ft squares, except for a 5 ½ by 4 ft trench along the baseline. The field school recorded features that included one midden filled pit, one hearth, two possible burials, and the walls of a single set post house structure with post holes measuring about 4 inches in diameter. Artifacts found in the excavations included pottery sherds, animal bone, flaked stone debitage, mica, fired clay, hematite, a stone scraper, and a black stone artifact with drilled holes, together indicating domestic occupation of the landform (UA Department Of Anthropology 1956).

In 1986 and 1987, a 3 m by 4 m block excavation was made on the north side of what is today an unpaved road that runs between Mound R and Mound R1, in order to investigate access to food in complex chiefdoms (Michals 1990:1). The block was excavated by a small crew from the University of Alabama and the University of California, Santa Barbara led by Lauren Michals (Michals 1990:3). The excavation was continued to approximately 45 cm below surface (Michals 1990:3). The deposits mostly consisted of undifferentiated midden. A hard clay surface was encountered in one section, and part of a wall trench in another, in addition to other features indicative of domestic occupation (Michals 1990:3). The ceramic evidence from this unit indicates a Moundville II phase date with possible mixing of Moundville I phase material (Michals 1990).

In March of 1993, Steponaitis, Davis, and Ward conducted a project which tested the efficiency of two different auger techniques at Moundville (Steponaitis et. al. 2009). In connection with this project, a one-inch Oakfield tube sampler was used to verify for the first

time that Mound R1 was indeed an artificial mound, composed of clay mound fill (V. P. Steponaitis, personal communication to V. J. Knight, March 1993).

Organization of the Study

The next chapter, Chapter 2, describes the field methods and presents a stratigraphic sequence of contexts encountered during the 2011 and 2012 excavations. Chapter 3 provides an artifact analysis including the dating of each of the stratigraphic contexts using diagnostic pottery. Chapter 4 interprets the artifacts and stratigraphy of the recent and older excavations on this landform, and discusses the occupational history of Mound R1. The final chapter, Chapter 5, provides conclusions regarding how Mound R1 relates to the problem of the smaller mounds at Moundville and how the occupation of this small landform relates to the broader occupational history of the site.

CHAPTER 2

FIELD METHODS AND STRATIGRAPHY

While a graduate assistant, excavations and mapping at Mound R1 began in August of 2011 using the University of Alabama class Honors Field Archaeology (UH-300/UH-400), under the general supervision of Dr. Vernon James Knight. The field school ended in December of 2011 when the semester ended. A contour map was made for Mound R1 with the help of University of Alabama graduate students Daniel Salberg and Lynn Funkhouser (Figure 3). During the 2011 fall field session, a horizontal datum consisting of a steel rebar stake driven

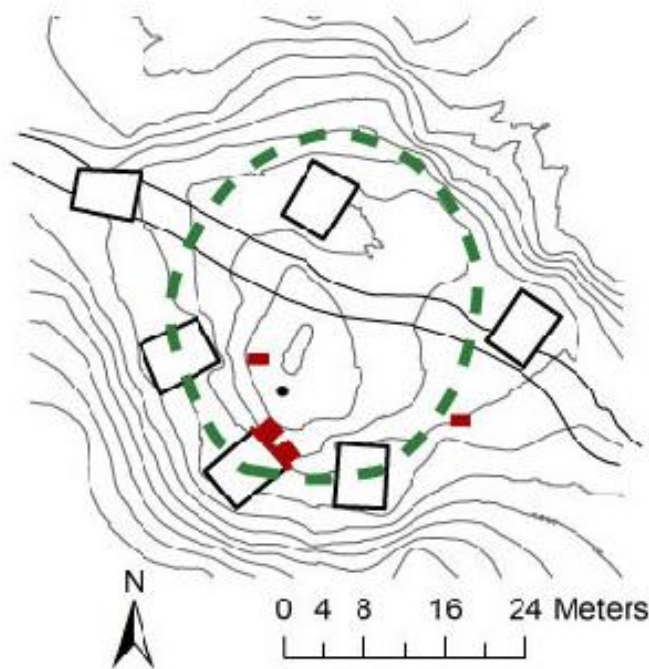


Figure 3. Contour Map of the Mound R1 area. Black rectangles are tent pads; red rectangles are excavation units; red line is the South Tent Pad outline with extension units; black dot is the horizontal datum; green dashed outline is the suspected extent of the mound. Contour interval is 25 cm.

into the ground was placed on the mound at N2200E700 on the Moundville site grid, and two temporary vertical datums consisting of large nails in trees were established at an elevation of 48.765 m above mean sea level. Subsequently, two 1 by 2 m units were laid out and excavated, designated Units A (N2205E699) and B (N2199E719). These units were placed on either side of a power line cut that had disturbed the center of the mound. Because the margins of the mound were then unknown, only one of the units, Unit A, encountered clay mound fill (Figure 4). The other unit, Unit B, completely missed the mound to the east and instead encountered a thick midden deposit. Unit B was completely excavated to the subsoil during the fall field session (Figure 5). During the fall 2011 field session, the excavation of Unit A was completed to the base of Cut 5 (155 cm below datum). The excavation of Unit A was resumed by the author in the summer of 2012 using volunteer labor until subsoil was reached.



Figure 4. Excavating Unit A, fall 2011. View from the southwest.



Figure 5. Excavating Unit B, fall 2011.

A third excavation was made on the south side of Mound R1. In the early 1980s, the isolated terrace where Mound R1 sits had been converted into a Primitive Campground used by the Boy Scouts. In building the now abandoned campground, they constructed a number of tent pads, which are leveled, sand-filled, cinder block-lined rectangles made for setting up tents. Because three of these tent pads intruded into the south side of the mound, it was decided that this was an opportunity to examine a profile on that side. During the fall 2011 season, the northern edge of the selected tent pad was straightened up to form a vertical profile approximately seven meters long (Figure 6). This profile was recorded, and it revealed multiple construction stages and features. During the summer 2012 field season, in order to completely excavate two large midden-filled pit features initially seen in the profile of the South Tent Pad, two additional 2 m by 2 m units were placed that extended northward from the profile cut. These 2 m by 2 m units were only superficially excavated to the base of the plow zone in order to see

and record the features intruding from the top of the mound. Of the large pit features originally seen in profile, only Feature 52 was excavated due to time constraints.



Figure 6. Excavation of the South Tent Pad profile, fall 2011. View from the south.

All soil from Units A, B, and South Tent Pad Feature 52 was dry screened through $\frac{1}{4}$ in mesh. No soil was screened when the South Tent Pad profile cut was excavated due to the disturbance caused by the tent pad. All vertical measurements were taken from the temporary vertical datums using line levels and folding rulers. From Unit A, charcoal was collected for radiocarbon samples which, as of 2013, have not been analyzed. Two flotation samples of 15 liters each were collected from midden in Cut 3 and Cut 4 in Unit B and were processed in the field using a SMAP-type flotation machine.

Stratigraphy

Based on all the evidence, Mound R1 is a small clay platform mound built in three main stages (labeled I, II, III), with evidence of summit use including pole-frame architecture on all

three summits. The mound was built over a prior use surface that includes post holes, and there is a thick midden contemporaneous with the latest summit occupation on the east side of the mound. The following detailed stratigraphy of the excavated area was observed during the fall and summer excavations.

Premound Occupation Surface

A pre-mound use surface could be seen in the Unit A stratigraphy (Figures 7 and 8). Near the base of excavation of Unit A, there was a thin basal humic layer that included evidence of human activity. The thinness of the layer indicates that the original A-horizon had been truncated. This is indicated by the absence of a normally developed A-horizon as described for the Choccolocco silt loam soil type indicated for the area which is described as commonly being 6 in (15.2 cm) deep (USDA, SCS 1981:16-17). In contrast, the humic layer found near the base of Unit A was only 6 cm deep at its thickest point (Figures 7, 8). The soil was yellowish brown with little charcoal or cultural material, and was excavated as Cut 8. The pre-mound layer was extremely thin and was excavated though in some places before it was recognized as a separate stratum. Seven post hole features, Features 37, 38, 39, 40, 41, 42, and 43, were found originating at this use surface and extending into the subsoil (Figure 9). They range from 6 to 10 cm in diameter and 4 to 30 cm in depth. The post holes do not have an obvious pattern that would indicate part of a structure.

Stage I

Found directly above the pre-mound layers was a 6 cm thick, uniform orange sandy fill layer, excavated as Cut 7 (Figure 7). Like Cut 8, Cut 7 was excavated through in some places before the layer was recognized. Above this thin fill was Stage I, the first of three major mound stages. When Stage I was complete, the mound stood approximately 60 cm high. The mound fill

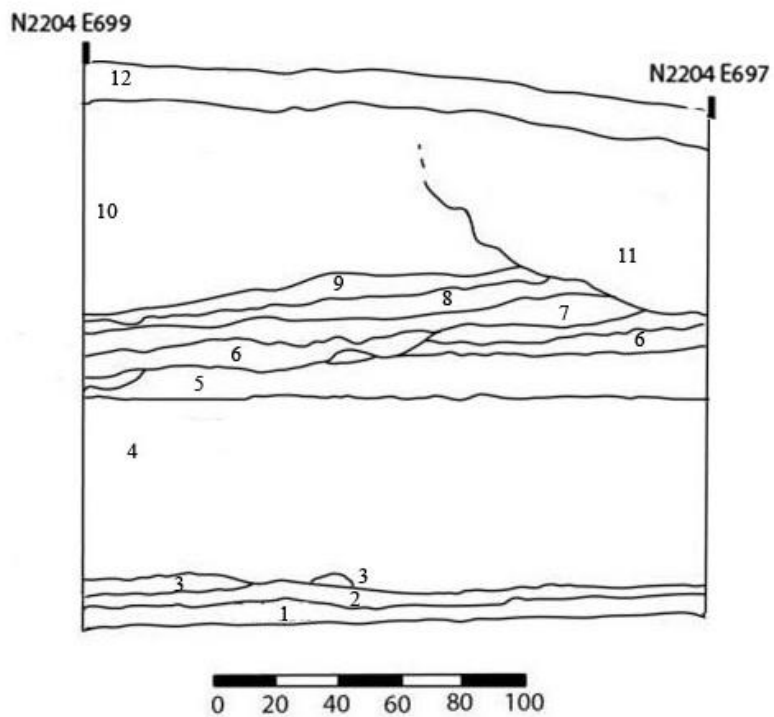


Figure 7. South Profile of Unit A, photograph and profile drawing. (1) Subsoil; (2) Humic layer; (3) Premound activity surface; (4) Stage 1A; (5) Stage IB laminated sand and silt; (6) Stage IB clay cap; (7) Stage IB midden; (8) Stage IC fill; (9) Stage IC midden; (10) Stage II; (11) Feature 5; (12) Plowzone

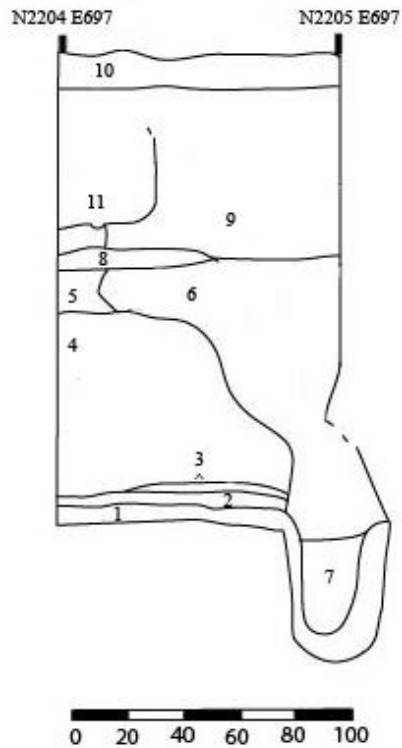


Figure 8. West profile of Unit A, showing sloping pit (Feature 36) leading to wall trench (Feature 46a) of Structure 1. (1) Subsoil; (2) Humic layer; (3) Premound activity surface; (4) Stage IA; (5) Stage IB laminated sand and silt; (6) Feature 36; (7) Feature 46a; (8) Stage IB clay cap; (9) Stage II; (10) Plowzone; (11) Feature 5.

consisted of uniform tan-brown sandy clay with occasional pure clay mottles (Figures 7 and 8). It was seen only in Unit A, and was excavated as Cut 6. Portions of two structures were found in association with the Stage 1 summit.

Beginning at the top of the Stage I fill and continuing down about 80 cm to just below the level of the original subsoil, a large rectilinear pit, excavated as Feature 36, was dug for a basin-floor structure, designated Structure 1 (Figures 8 and 9). Judging from the depth of this pit, it was a major structure, possibly dominating the summit of the mound at this time. The south wall of Structure 1, the only portion visible, was a wall trench designated Feature 46a that consisted of a dark yellowish brown soil stain 34 cm deep. The wall was oriented east and west. Four



Figure 9. Base of Unit A, showing excavated pre-mound post holes, Features 37, 38, 39, 40, 41, 42, and 43 and unexcavated wall trench, Feature 46a, of Structure 1, a basin-floor structure.

additional internal post holes associated with Structure 1, designated Features 44, 45, 48, and 49, were recorded in profile but were not excavated. Features 44 and 45 were located equally about 10 cm from the wall trench and were probably aligned with it. Features 48 and 49 were slightly farther away and were not aligned with the wall. An unknown amount of time later, the pit for Structure 1 (Feature 36) was filled in with a loose brown sandy loam, at which time the mound summit was raised about 20 cm higher than the original Stage I fill.

Erosion and Remodeling of the Stage I Summit

Following the filling of the pit for Structure 1, there was a major erosion episode indicated by water-deposited sand and silt labeled “Stage IB laminated sand and silt” in Figures 7 and 8 with a close-up in Figure 10. This erosion would have occurred near the southwest margin of the mound summit. The layer was fourteen centimeters thick at its deepest part, and

represents the marginal erosion of the loose soil used to fill the Structure 1 basin (Feature 36) and slightly raise the height of the mound, as noted above.

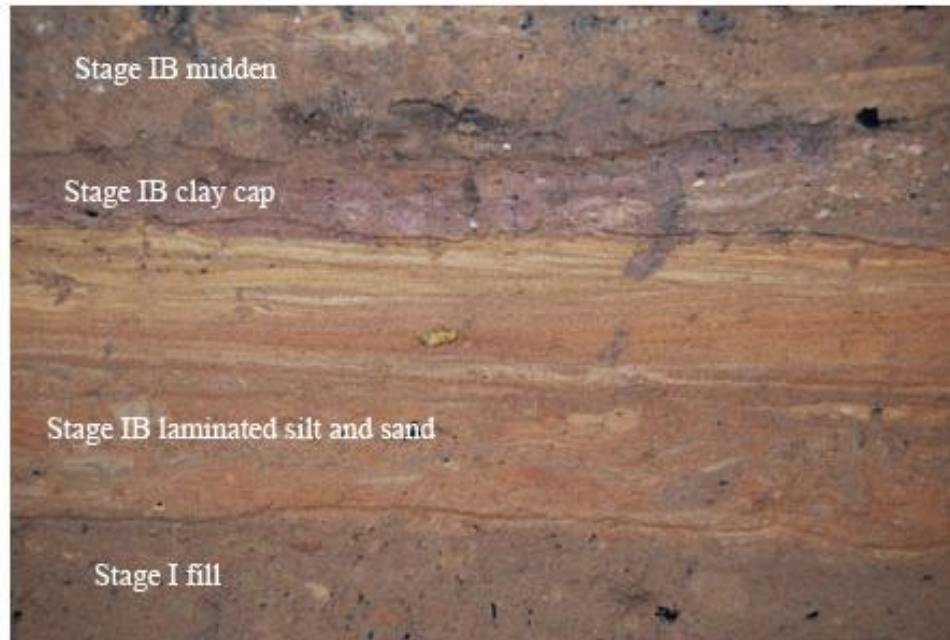


Figure 10. Close-up water washed sand and silt, labeled Stage IB in Figure 7, indicating an erosion episode on the Stage I summit. Figure also shows Stage I fill, Stage IB clay cap, and Stage IB midden.

With a new mound surface established just above the original Stage I fill, a new structure, indicated by a wall line designated Structure 2, was erected with the same east-west orientation as Structure 1, but with individually set post holes (Figure 11). This surface had a total of 21 possible post features (Features 14-35), some interior and some exterior to the Structure 2 wall line.

Once Structure 2 was dismantled, the surface, including the water-lain deposit, was then capped with a thin reddish-purple clay layer, designated “Stage IB clay cap.” Above the clay cap, in turn, was an irregular midden layer of dark yellowish-brown sandy soil containing a considerable amount of charcoal, pottery sherds, and animal bone. This was designated “Stage

IB midden.” A thin layer of reddish-brown mottled sandy fill, designated “Stage 1C fill,” followed next. Both the Stage IB fill and the Stage IC fill were excavated together as Cut 5 (Figure 7), with the Structure 2 post holes recognized at the base of Cut 5.

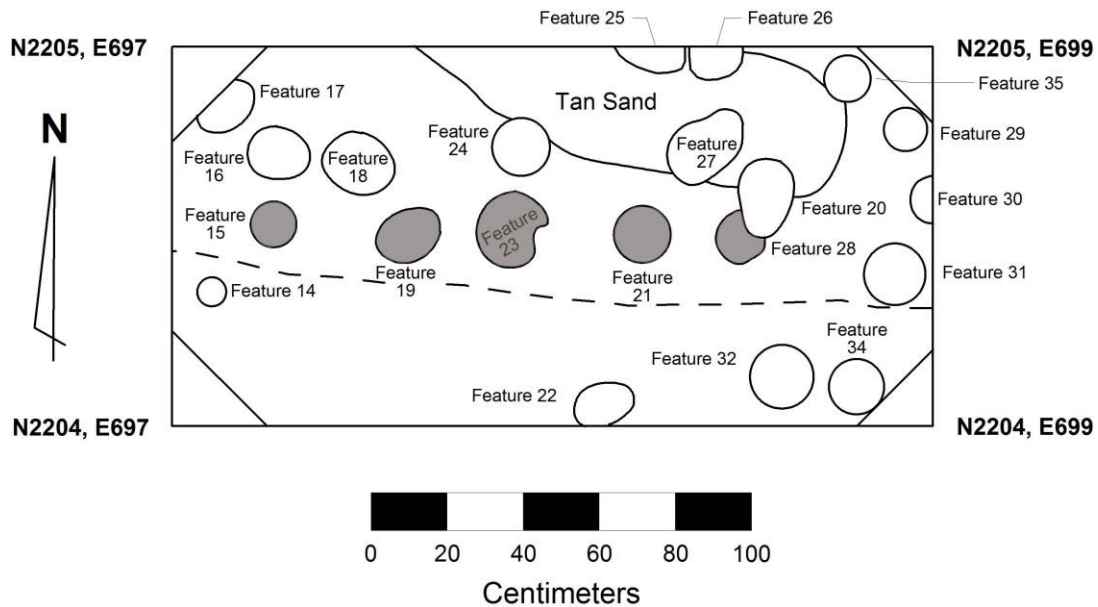


Figure 11. Base of Cut 6 in Unit A showing row of post holes of Structure 2. Gray color indicates post holes most likely part of a wall.

Above the Stage 1C fill was yet another irregular dark brown midden layer containing charcoal and patches of gray clay, designated “Stage IC midden,” which was excavated as Cut 4 (Figure 7). This alternating pattern of thin strata of clay fill and midden, all overlying a major erosional episode indicates minor remodeling of the Stage 1 summit at least twice following the removal of Structure 2 (Stages IB and IC), with associated accumulation of thin midden deposits.

Stage II

Stage II, the second major enlargement of the mound, as seen in Unit A consisted of yellow sandy mound fill mottled with darker soil disturbed in places by rodent burrows (Figures

7 and 8). Its maximum thickness in Unit A was 48 cm. The upper surface of Stage II had been eroded away or disturbed by the plow zone in Unit A. However, this summit surface could be seen in the South Tent Pad profile (Figure 12). In both Unit A and the South Tent Pad profile cut, large clumps of relatively pure purple and white clay were found within the westernmost portion of the Stage II fill. On the west end of the South Tent Pad profile cut, there were also two wedges of water-deposited sand and silt, representing episodes of heavy erosion on the margins of the Stage II mound summit, similar to that seen for Stage I in Unit A. These two erosional deposits were separated by a thin layer of mound fill (Figure 12). The difference in elevation between the Stage I summit and the Stage II summit is about 95 cm. A small clay-lined hearth basin containing ash and animal bone and two post hole features were recorded in profile as originating from this summit (Figure 12). These features, which are good evidence of summit activity similar to that seen on the Stage I summit, were not excavated and were not assigned feature numbers.

Stage III

Immediately overlying the Stage II fill and summit surface in the South Tent Pad profile was a thin yellow clay lens (Figure 12). In places the yellow clay layer was overlain in turn by a similar very thin layer of gray clay.

Although the upper portion of Mound R1 has been truncated and otherwise disturbed by a combination of agricultural activity, a power line cut, and tree roots, approximately eight centimeters of Stage III fill could still be seen in the South Tent Pad profile (Figure 12) overlying the thin yellow and gray clay layers. The dark mound fill contained red clay lumps, and was interrupted by several features intruding from the mound summit, including two large midden-filled pits. Above the truncated Stage III fill was a shallow plow zone 8 to 12 cm in thickness.

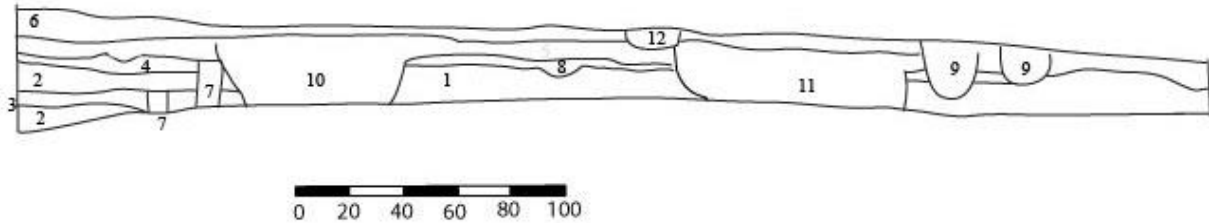


Figure 12. Photo mosaic and profile drawing of South Tent Pad profile. (1) Stage II; (2) water-deposited sand lenses; (3) mound fill; (4) yellow clay cap; (5) Stage III; (6) plow zone; (7) post hole feature; (8) hearth; (9) tree root disturbances; (10) Feature 52; (11) unlabeled pit feature; (12) shovel test.

Features Intruding from Top of the Mound

Of the features found that intruded from the top of the mound, only two were excavated: Feature 5 and Feature 52. Feature 5 was a large pit feature of irregular shape seen in Unit A (Figures 7, 8, and 13). It was 52 cm deep and filled with a dark yellowish brown soil. Feature 52 was originally seen in the South Tent Pad profile cut (Figure 11). It was almost completely excavated, excluding only a small portion that extended beyond the southwest profile of the unit (Figure 14). This was a large, roughly rectangular pit that was approximately 30 centimeters deep, with a dark yellowish brown fill containing much pottery, charcoal flecks, and eroded animal bone. There is some evidence that Feature 52 may have been originally a burial pit. At

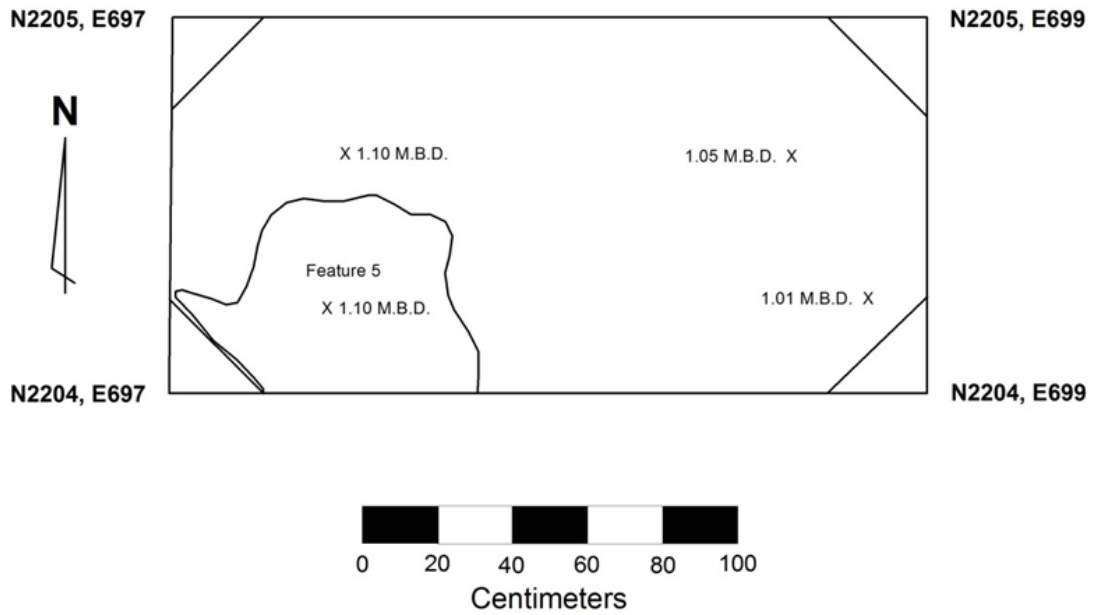


Figure 13. Feature 5, Unit A, plan view.



Figure 14. Excavation of Feature 52, within the west 2 x 2 m extension of the South Tent Pad, summer 2012.

the base of the pit two human bones, part of a femur and a right temporal bone, were found during excavation. Once recognized as human, these two bones were respectfully reburied in place. The presence of only these two human bones, plus the finding of a copper pendant also

near the base of the pit (to be described in the following chapter), suggests that the prior contents of the pit had been exhumed during prehistory. A similar example of a possible “emptied” burial pit has been documented in nearby Mound Q (Knight 2010a:98-99).

Other features were documented along the South Tent Pad profile, including a second large pit similar to Feature 52 (Figure 12). A 2 m by 2 m unit was extended northward from the profile cut to more closely examine this pit feature. When seen in plan view, it was found to be intermingled with a complex intrusion sequence of several other features found just below the plow zone, including a probable large posthole feature capped by clay, seen along the west wall (Figure 15). Due to time constraints, this collection of features was recorded in plan view but none were excavated. These were not assigned feature numbers.



Figure 15. East 2 x 2 m extension of the South Tent Pad, summer 2012. Base of the plow zone.

Midden on the East Side of the Mound

Additional evidence of an occupation contemporaneous with the terminal use of Mound R1 was found during excavation of Unit B, located just beyond the edge of the mound on the east side (Figure 3). Unlike Unit A, Unit B was dug in 10 centimeter arbitrary levels below the plow zone. This was done to observe any vertical distinctions in diagnostic artifacts; however, no such distinctions appeared. Beneath 25 cm of plow zone, Unit B revealed 80 cm of dark sandy clay midden (Figure 16). Although mostly homogeneous, there was a slight vertical difference in the coloration; however, it was not distinct enough to differentiate separate stratigraphic layers.

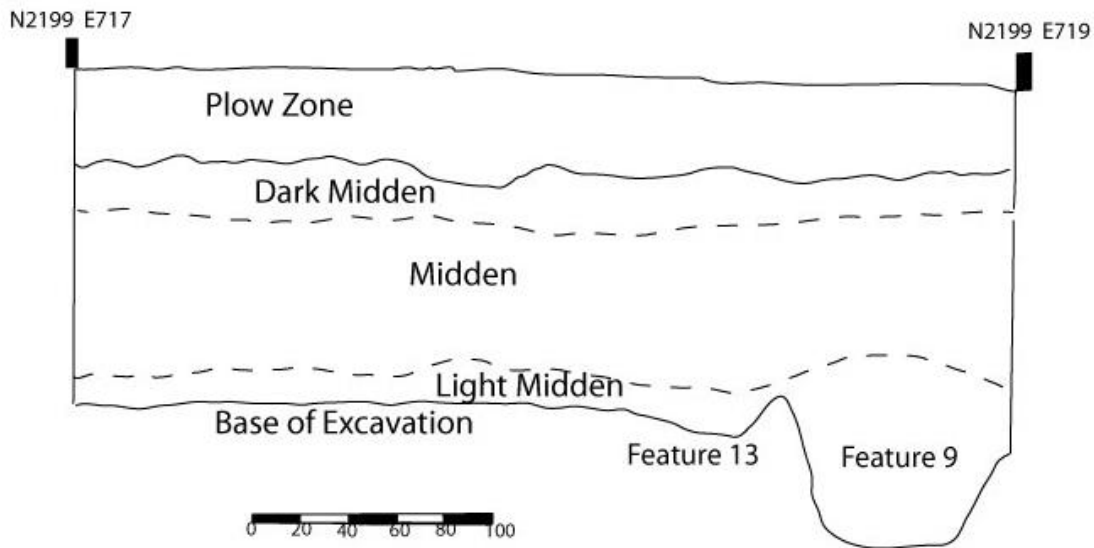


Figure 16. North profile of Unit B.

Most of the midden was a dark brown color, with the bottom section being lighter and more yellowish-red, while the top was a slightly darker brown. At the base of Unit B, there were four post holes, designated Features 8, 9, 11, and 12 (Figure 17). Features 11 and 12 were both

circular in plan and about 8 cm diameter; Feature 11 was 13 cm deep, and Feature 12 was 20 cm deep. Feature 8 was larger, mostly circular with a diameter of 24 cm and a depth of 37cm. Feature 9 extended beyond the northeast corner of the unit, so its exact shape is unknown. On its widest side it was 50 cm in diameter and it reached a depth of 38 cm. Two other features found at the base of the midden, Feature 10 and 13, consisted of a tree root and an irregular shallow depression respectively.



Figure 17. Base of Unit B, showing post features.

Stratigraphic Summary

Based on the combined stratigraphic information, Mound R1 is multi-stage platform mound constructed of clay. The excavation of Unit A and the South Tent Pad identified three mound stages with evidence of summit features, including post holes, pits, a hearth, and a wall trench. This evidence demonstrates the existence of perishable architecture on the mound during each major episode of construction. Although Stage III was eroded, evidence of mound activities can be seen in the features intruding from the top of the mound. Multiple, very thin, uniform fills, mostly of pure clay, were found covering the premound activity surface, and in association with both the Stage I and Stage II summits. Thin summit middens were found associated with Stage I. In sum, Mound R1 has a stratigraphic history similar to the all larger plaza-periphery mounds at Moundville but on a smaller scale (Knight 2010a).

The three stages added together give Mound R1 a minimum height of 1.72 m. It was probably originally not more than 50 cm higher than this figure, given the considerable depth of intrusion of pit features from the top of the mound.

CHAPTER 3

ARTIFACT ANALYSIS

All artifacts recovered from the excavations at Mound R1 were analyzed at the Department of Anthropology at the University of Alabama. All material was washed and sorted according to rough-sorting category. The artifacts were counted and weighed. Those from the Fall 2011 excavation were washed, sorted, and analyzed during the spring semester of 2012 with the assistance of the University of Alabama ANT 466, Laboratory Methods in Archaeology class (Morgan and Foster 2012).

Pottery Analysis

A total of 4,906 pottery sherds were recovered from the Mound R1 locus during the fall 2011 and summer 2012 excavations. Using the type-variety system developed by Steponaitis (1983) and revised by Knight (2010a) for Moundville, pottery sherds were sorted and typed according to temper, presence or absence of burnishing, and decorative features. Types are mutually exclusive categories that are further divided into different varieties. Certain diagnostic modes of decoration, including rim form, painted decoration, and shape also were examined. Modes independent of the typology can crosscut types because they are not mutually exclusive. Both type-varieties and modes can help determine a chronological placement for the deposits. The dating of contexts at Moundville uses terminus post quem logic (Knight 2010a:15).

A total of 171 sherds representing 27 residual pottery types were found at Mound R1. Potsherds were assigned to residual descriptive types based on temper and surface finish combinations that are outside the usual range of Moundville types, and which also could not be

easily assigned to published nonlocal types (Knight 2010a:42-43). One notable residual type found in the lower mound is shell-tempered and cord marked (Figure 19, h). This sherd may relate to one of any number of Early Mississippian shell-tempered cord marked types made elsewhere.

The two most common types found were Mississippi Plain and Bell Plain. Mississippi Plain is unburnished, coarse shell-tempered pottery that corresponds to utilitarian cooking ware at Moundville. It was used throughout the Moundville chronological sequence (West Jefferson phase through Moundville IV phase). Bell Plain refers to pottery that is shell tempered and has a burnished surface with no decoration. Bell Plain pottery was sorted according to Knight's (2010a) criteria as opposed to the slightly different original criteria of Steponaitis (1983). All burnished shell-tempered pottery sherds, regardless of temper size, were sorted as Bell Plain, although the vast majority was tempered with fine shell. This type corresponds to the service ware at Moundville. As such, it is usually thinner than the utilitarian cooking ware. Most Bell Plain pottery was fired in a reducing environment, which causes a black exterior.

In this chapter, pottery is presented according to the main stratigraphic categories detailed in the previous chapter: lower mound (Stage I-IC), upper mound (Stage II), Stage III features, midden east of the mound, South Tent Pad, and surface. Tables 1-3 present these data.

Lower Mound

Only six pottery sherds were associated with the premound occupation, and only two of them were chronologically diagnostic. The two folded-flattened jar rim sherds suggest a date of early Moundville I, but nothing definitive can be said with such a small sample. A total 525 sherds were found in the lower mound in Stages I through IC, Unit A. Diagnostic local type-varieties include Moundville Incised, *var. Moundville*, Moundville Engraved, *var. Elliot's Creek*,

Baytown Plain, *var. Roper*, and the grog-tempered type Alligator Incised (Figures 18 and 19). The presence of Moundville Engraved, *var. Elliot's Creek* (Figure 20) provides the lower mound a terminus post quem date of late Moundville I (Knight 2010:27-28). Moundville Incised, *var. Moundville* is compatible with a late Moundville I phase dating for the stage (Knight 2010a:26). Alligator Incised and Baytown Plain, *var. Roper* are coarse grog-tempered types (Knight 2010a:20-21) that date to the early Moundville I phase at Moundville.

Two nonlocal types, French Fork Incised, *var. Lafayette* and Wheeler Check Stamped, were found in the lower mound (Figure 19). French Fork Incised, *var. Lafayette* is a grog tempered type-variety with a jab and drag incised design that occurs in the coastal Louisiana area (Brown 2014). Wheeler Check Stamped is a grog tempered type covered by a stamped check or grid design, and is found in northern Mississippi (Phillips 1970:171; Phillips et al. 2003:87). Both are Late Woodland types.

Diagnostic decorative modes found in the lower mound include folded-flattened jar rims, hemagraving, and red filmed pottery (Figures 18 and 19). Hemagraved sherds support a terminus post quem date of late Moundville I. Folded-flattened rims are compatible with that dating. Red filming, although not a good chronological indicator, it is often found in elite contexts at Moundville (Knight 2010a:43; Steponaitis and Knight 2004). Both red filmed and white filmed pottery are found throughout the Moundville chronological sequence (Steponaitis 1983:129).

Taken together, these types and modes leave little doubt that the initial construction of Mound R1 was in the later part of the Moundville I phase, ca. AD 1200-1260. The late Moundville I diagnostic Moundville Engraved, *var. Elliot's Creek* is definitely present, but no type-varieties or diagnostic modes from the lower mound have beginning dates that postdate that

Table 1. Local and nonlocal pottery types

	Premound Context	Lower Mound	Upper Mound	Stage III Features	Midden East of Mound	South Tent Pad	Surface	Total
Mississippi Plain	2	313	441	464	1900	123	26	3269
Moundville Incised, <i>var. Carrollton</i>			2					2
Moundville Incised, <i>var. Moundville</i>			13	5	4			22
Moundville Incised, <i>var. Oliver</i>					1			1
Moundville Incised, <i>var. unspecified</i>		5	1	2	1			9
Bell Plain	4	170	253	80	694	36	10	1247
Carthage Incised, <i>var. Akron</i>			1	1	1			3
Carthage Incised, <i>var. Carthage</i>					2			2
Carthage Incised, <i>var. Fosters</i>				1	3			4
Carthage Incised, <i>var. Lupton</i>					1			1
Carthage Incised, <i>var. Moon Lake</i>			1					1
Carthage Incised, <i>var. unspecified</i>		1	2	8	16	4		31
Moundville Engraved, <i>var. Elliots Creek</i>		3	9			5		17
Moundville Engraved, <i>var. Havana</i>			1		1			2
Moundville Engraved, <i>var. Hemphill</i>					5	2		7
Moundville Engraved, <i>var. Middleton</i>					2	1		3
Moundville Engraved, <i>var. Stewart</i>			1					1
Moundville Engraved, <i>var. Taylorville</i>					2			2
Moundville Engraved, <i>var. Tuscaloosa</i>				1	2			3
Moundville Engraved, <i>var. unspecified</i>		8	16	1	26	3	1	55
Baytown Plain, <i>var. Roper</i>		14	22	2		4		42
Alligator Incised		2	1					3
Angel Negative Painted, <i>var. unspecified</i>			1					1
Avoyelles Punctated, <i>var. unspecified</i>			1		1			2
Cool Branch Incised			1					1
French Fork Incised, <i>var. Lafayette</i>		2						2
Pensacola Incised, <i>var. Holmes</i>					1			1
Wheeler Check Stamped, <i>var. unspecified</i>		1						1
<i>Totals</i>	6	519	767	565	2663	178	37	4735

Table 2. Residual pottery types

	Upper Mound	Lower Mound	Stage III Feature	Midden East of Mound	South Tent Pad	Surface	Total
shell-tempered plain		4	4	1			9
shell-tempered incised	3	1		13	1		18
shell-tempered burnished incised		1					1
shell-tempered engraved	1						1
shell-tempered cord marked		1					1
grog-tempered plain		7	3	10		1	21
grog-tempered burnished plain	4	7	1				12
fine grog-tempered plain	2		7		1		10
fine grog-tempered burnished plain					3		3
fine grog-tempered incised			1				1
fine grog-tempered engraved	1						1
fine grog and shell-tempered plain	1		2		4		7
fine grog and shell-tempered incised			1				1
fine grog and shell-tempered burnished		7					7
grog and shell-tempered plain	1	4					5
grog and shell-tempered burnished plain			3				3
grog and shell-tempered engraved				1	7		8
sand/grit tempered plain		3	4	2			9
sand/grit tempered burnished plain		1	1				2
sand and grog-tempered plain					1		1
grog and grit tempered plain	1						1
sand and shell-tempered plain			3		2		5
fine sand and shell-tempered plain		1	5	3	1		10
temperless plain	4	3	11	5			23
temperless burnished plain		4	2		1		7
temperless incised				1			1
temperless engraved	2	1					3
<i>Totals</i>	20	45	48	36	21	1	171

Table 3. Pottery modes

	Premound Context	Lower Mound	Upper Mound	Stage III Features	Midden East of Mound	South Tent Pad	Total
Beaded rim				1	13		14
Folded rim			3	1			4
Folded-flattened rim	2	3	8	1	2	1	17
Gadrooned					1		1
Hemagraved		5	8				13
Horizontal lug				1			1
Indented					2		2
Notched lip			1	1			2
Scalloped rim			1				1
Red filmed		5		3			8
White filmed				2			2
Flared-rim bowl			3	1	4		8
Pedestal base			1				1
Short-necked bowl				3	13		16
<i>Totals</i>	2	15	25	14	35	1	90

phase. It is probably significant that the grog-tempered type Baytown Plain pottery occurs frequently both in the lower mound and in the upper mound (see below). Although it is probably there due to mixture in secondary mound fill deposits, given that the type is associated with the Early Moundville I phase at Moundville, ca. AD 1120-1200, it presumably means that the initial occupation of the local landform dates to that period.

Upper Mound

The upper portion of Mound R1, consisting of the Stage II and plow zone deposits in Unit A, yielded a total of 767 sherds. Diagnostic pottery type-varieties are much the same as in the lower mound but are somewhat more diverse, including Moundville Incised, *var. Carrollton*, Moundville Incised, *var. Moundville*, Carthage Incised, *var. Akron*, Carthage Incised, *var. Moon*

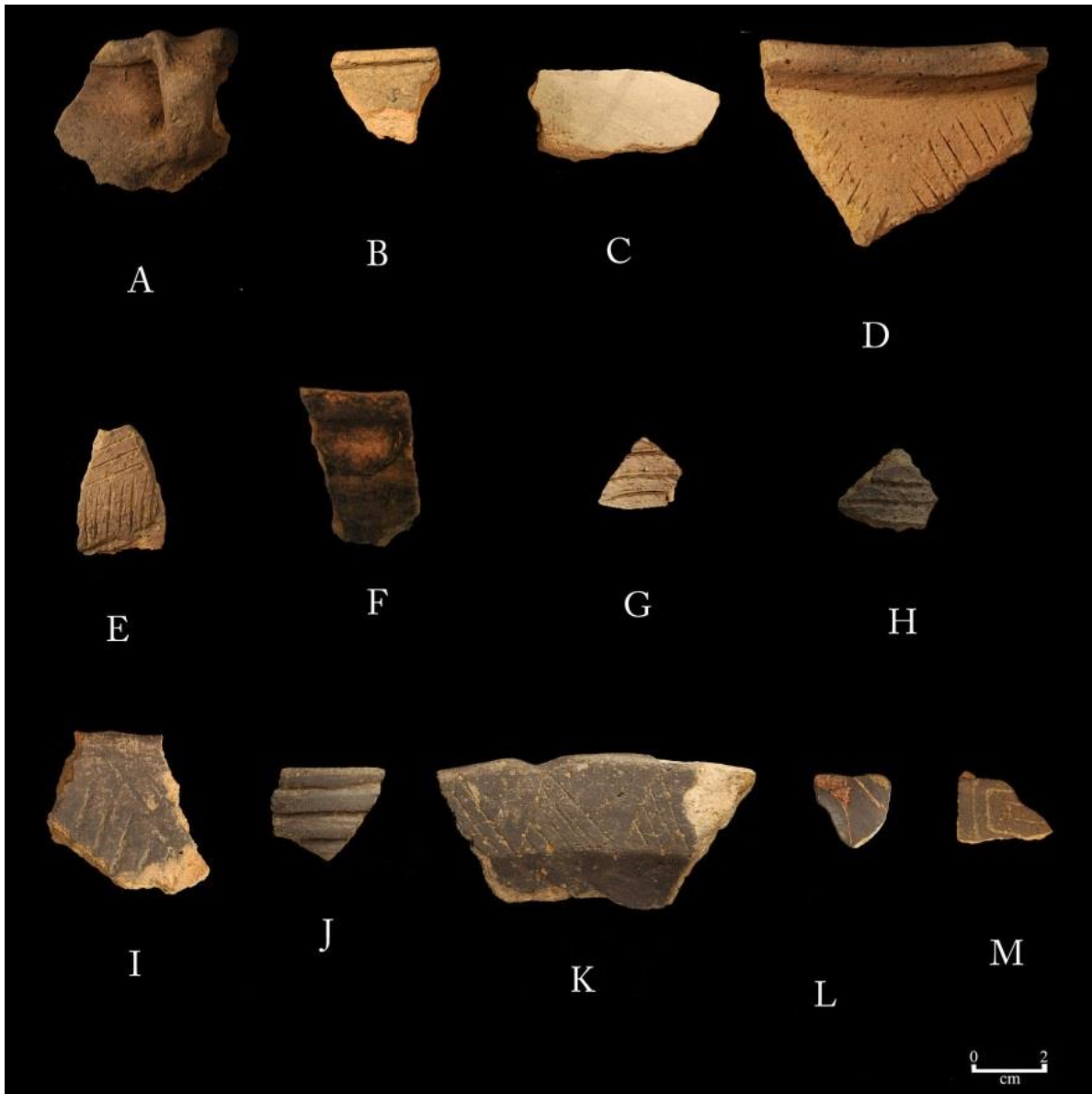


Figure 18. Unit A pottery. (a-b) Mississippi Plain, a is jar rim with noded handle, b has everted lip; (c) Bell Plain, negative painted, black on white; (d and e) Moundville Incised, *var. Moundville*, d is folded-flattened jar rim; (f) Moundville Incised, *var. unspecified*, folded-flattened jar rim; (g and h) Moundville Incised, *var. Carrollton*; (i) Carthage Incised, *var. Moon Lake*, flared-rim bowl; (j) Carthage Incised, *var. Akron*, cup-shaped bowl; (k) Moundville Engraved, *var. Stewart*, flared-rim bowl with notched lip; (l and m) Moundville Engraved, *var. Elliots Creek*, hemagraved.

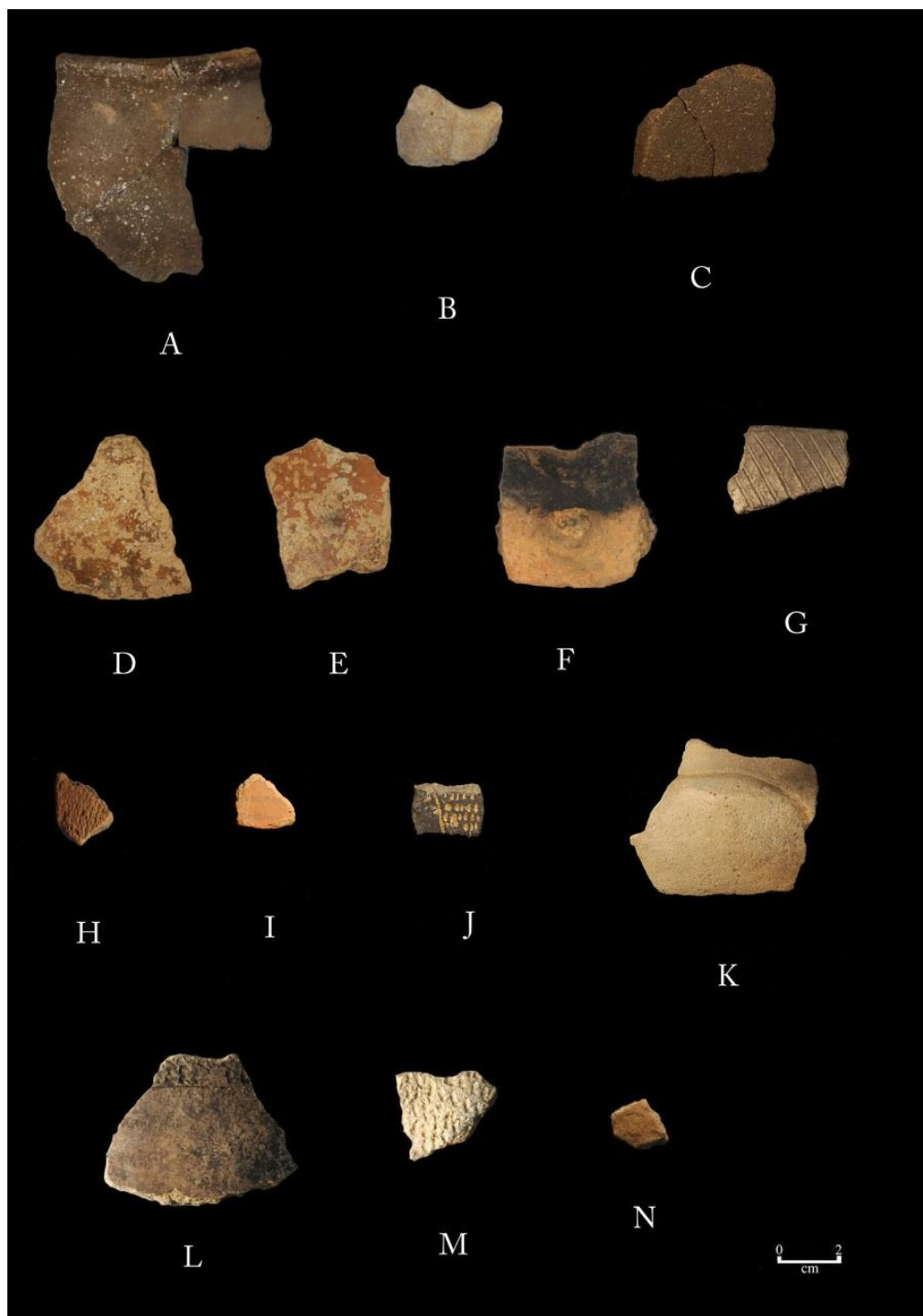
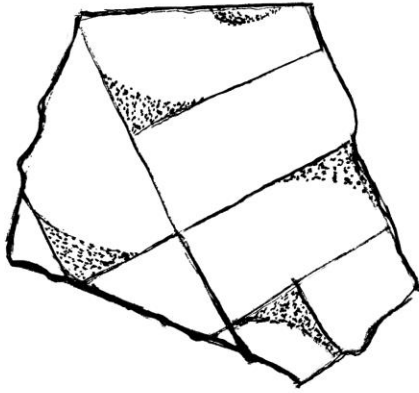
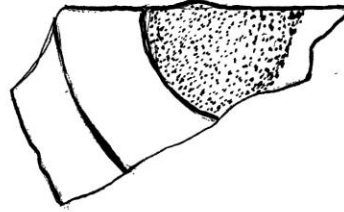


Figure 19. Unit A pottery. (a-e) Bell Plain, a is folded-flattened jar rim, b is hooded bottle, c is squared bottle base, d and e are red filmed; (f) Baytown Plain jar rim with welded handle scar; (g) Alligator Incised; (h) Residual shell-tempered cord marked; (i) Angel Negative Painted; (j) Avoyelles Punctated, *var. unspecified*; (k) Cool Branch Incised; (l and m) French Fork Incised, *var. Lafayette*; (n) Gainesville Complicated Stamped, *var. Unspecified*.

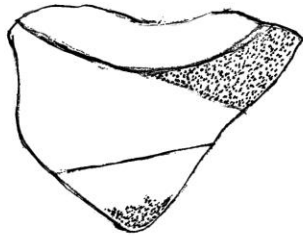
MDV-R1
LOT 42
MOUNDVILLE ENGRAVED, ELLIOT'S CREEK



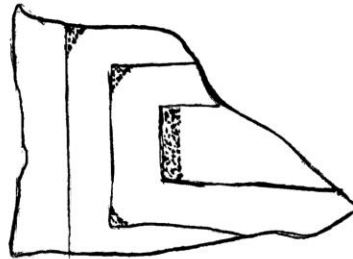
MDV-R1
LOT 19
MOUNDVILLE ENGRAVED ELLIOT'S CREEK



MDV-R1
LOT 7
MOUNDVILLE ENGRAVED, ELLIOT'S CREEK



MDV-R1
LOT 2
MOUNDVILLE ENGRAVED, ELLIOT'S CREEK



MDV-R1
LOT 14
MOUNDVILLE ENGRAVED, ELLIOT'S CREEK

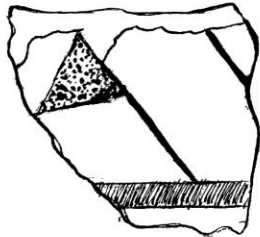


Figure 20. Designs from sherds of Moundville Engraved, var. Elliot's Creek.

Lake, Moundville Engraved, *var. Elliot's Creek*, Moundville Engraved, *var. Havana*, Moundville Engraved, *var. Stewart*, Baytown Plain, *var. Roper*, and Alligator Incised (Figures 18 and 19).

Of these, Moundville Engraved, *var. Elliot's Creek* (Figure 20), Moundville Engraved, *var. Havana*, Moundville Engraved, *var. Stewart*, Carthage Incised, *variety Akron*, and Carthage Incised, *var. Moon Lake* provide a terminus post quem of late Moundville I. The presence of Moundville Incised, *var. Carrollton* is compatible with a late Moundville I date for Stage II. Baytown Plain, *var. Roper* and Alligator Incised predate late Moundville I and are probably present due to mixture.

Several sherds of a hemagraved Moundville Engraved, *var. Elliot's Creek* bowl were found in the upper portion of the mound in Stage II deposits (Figures 21 and 22). The bowl was cup shaped with a flat base and vertical walls (see Taft 1996:36 for a definition of the shape class). Like all Moundville Engraved, *var. Elliot's Creek* vessels, the sherds have a geometric engraved design with intersecting lines and excised areas (Knight 2010a:27); however, the design is unique and resembles a spider web.

Three nonlocal types were found in the upper portion of the mound in Unit A: Angel Negative Painted, Avoyelles Punctated, *var. unspecified*, and Cool Branch Incised (Figure 19). The Angel Negative Painted, *variety unspecified* sherd has a red-orange slipped background and black resist decoration on the interior of thin, fine shell-tempered ware. It dates from the Early to Middle Mississippian period (Knight 2010a:38) and comes from the lower Ohio Valley (Hilgeman 1985:1). Cool Branch Incised is a grit-tempered type with incised semicircular arches on jar forms similar to the local type Moundville Incised (Blitz and Lorenz 2006:232-233). It is an Early Mississippian type that originates in the Chattahoochee River Valley in southern

Alabama and Georgia (Blitz and Lorenz 2006:64-70). Avoyelles Punctated, *var. unspecified* has zones of punctations bordered by incised lines (Philips 1970:41). It was defined in the lower

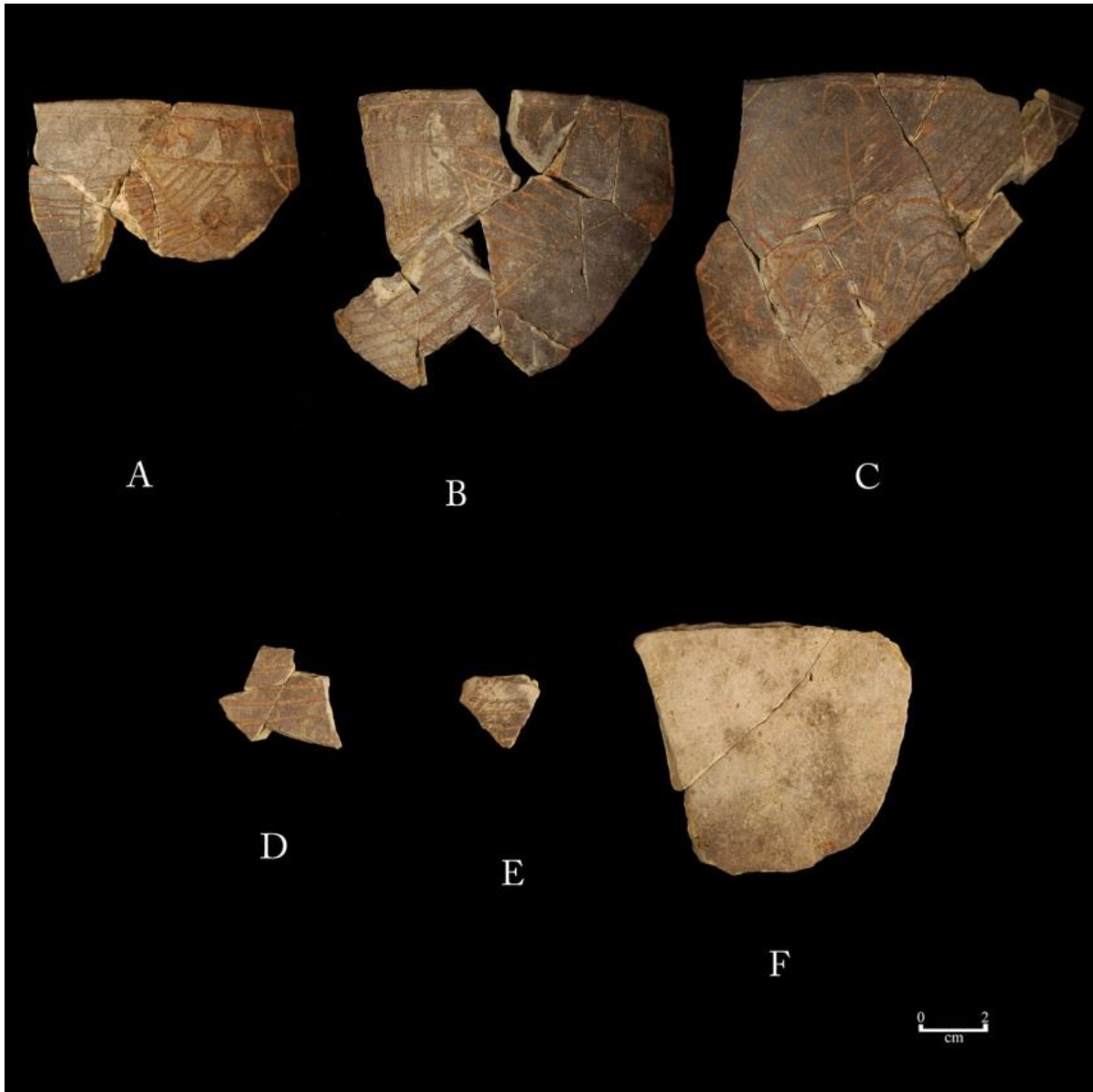


Figure 21. Moundville Engraved, *var Elliots Creek*, hemagraved cup-shaped bowl sherds from Unit A. (a-e) rim and body sherds; (f) portion of flat base.



Figure 22. Drawing of sherds labeled (b) and (c) in Figure 21.

Yazoo Basin of the Lower Mississippi Valley, and dates from the Late Woodland through the Early Mississippian period.

Decorative modes from the upper mound in Unit A include folded rims, folded-flattened rims, a notched lip, a scalloped rim, and hemagraved sherds (Figures 18 and 19). Hemagraving dates to the late Moundville I phase (Knight 2010a:46). Folded and folded-flattened jar rims are compatible with this phase date, as is the scalloped rim of a bowl. Although in Steponaitis's (1983:Table 33) original sample, the notched lip rim mode was only found in early Moundville III and possibly Moundville II phase samples, in the present instance the mode is found on a flared-rim bowl of the type Moundville Engraved, *var. Stewart*, which is a good late Moundville I phase diagnostic. Sherds from a flared-rim bowl and the pedestal base of a bowl or bottle were also found. Pedestal bases appear during the late Moundville I phase and provide yet another

terminus post quem (Knight 2010a:53). Flared-rim bowls occur throughout the sequence (Knight 2010a:52).

In sum, the upper mound pottery from Mound A, being from Stage II, is more diverse than that from the lower mound but still indicates a late Moundville I phase chronological placement, ca. AD 1200-1260. No type-varieties or chronologically diagnostic modes present definitely postdate that phase. Some earlier pottery, mostly Baytown Plain *var. Roper*, is present probably by way of mixture. Nonlocal pottery from the upper mound indicates long-distance contacts by the mound's residents with the Ohio, Chattahoochee, and Lower Mississippi Valleys.

Stage III Features

A total of 565 pottery sherds were found in pits that extended from the top of Mound R1, including Features 5 and 52. Diagnostic pottery included Moundville Incised, *var. Moundville*, Carthage Incised, *var. Akron*, Carthage Incised, *var. Fosters*, Moundville Engraved, *var. Tuscaloosa*, and Baytown Plain *var. Roper* (Figures 18, 23, and 24). The presence of Carthage Incised, *var. Fosters* provides a terminus post quem date of early Moundville III. Carthage Incised, *variety Akron* and Moundville Engraved, *var. Tuscaloosa* are compatible with a Moundville III phase date. Moundville Incised, *var. Moundville*, Baytown Plain, *var. Roper*, and Alligator Incised predate Moundville III and are likely present due to mixture. No nonlocal types were found in the Stage III features.

Diagnostic decorative modes include a folded rim, a folded-flattened rim, a notched lip, a beaded rim, a horizontal lug, red filming, and white filming (Figures 18, 23, and 24). Beaded rims on bowls are common and constitute a good marker for the later phase dates (Knight 2010a: 46-47). Notched lips and horizontal lugs are compatible with a Moundville III phase date. Folded

and folded-flattened jar rims predate the Moundville III phase and are probably present due to mixture. Both red filmed and white filmed pottery are found throughout the Moundville chronological sequence (Steponaitis 1983:129); they are often found in elite contexts at Moundville (Knight 2010a:43; Steponaitis and Knight 2004). Sherds from a flared-rim bowl and three short-necked bowls also were found. Short-necked bowls first appear during the Moundville III phase and support that date as a terminus post quem for the features.

In sum, although the type-varieties and diagnostic modes are few, the presence of Carthage Incised, *var. Fosters* and several sherds from short-necked bowls demonstrate a Moundville III phase date for the features intruding from the final mound summit. These diagnostics date no earlier than early Moundville III.

Midden East of the Mound

The midden from Unit B, just east of the mound base, yielded a total of 2,663 pottery sherds. Diagnostic pottery type-varieties included Moundville Incised, *var. Moundville*, Moundville Incised, *var. Oliver*, Carthage Incised, *var. Akron*, Carthage Incised, *var. Carthage*, Carthage Incised, *var. Fosters*, Carthage Incised, *var. Lupton*. Moundville Engraved, *var. Havana*, Moundville Engraved, *var. Hemphill*, Moundville Engraved, *var. Middleton*, Moundville Engraved, *var. Taylorville*, and Moundville Engraved, *var. Tuscaloosa* (Figures 25 and 26).

Of these, Carthage Incised, *variety Carthage*, Carthage Incised, *variety Fosters*, and Carthage Incised, *variety Lupton* provide a terminus post quem for the deposit of Moundville III. Moundville Engraved, *variety Hemphill*, with its engraved representational art depicting a variety of themes, is consistent with this dating. Of the known *Hemphill* themes, only the winged

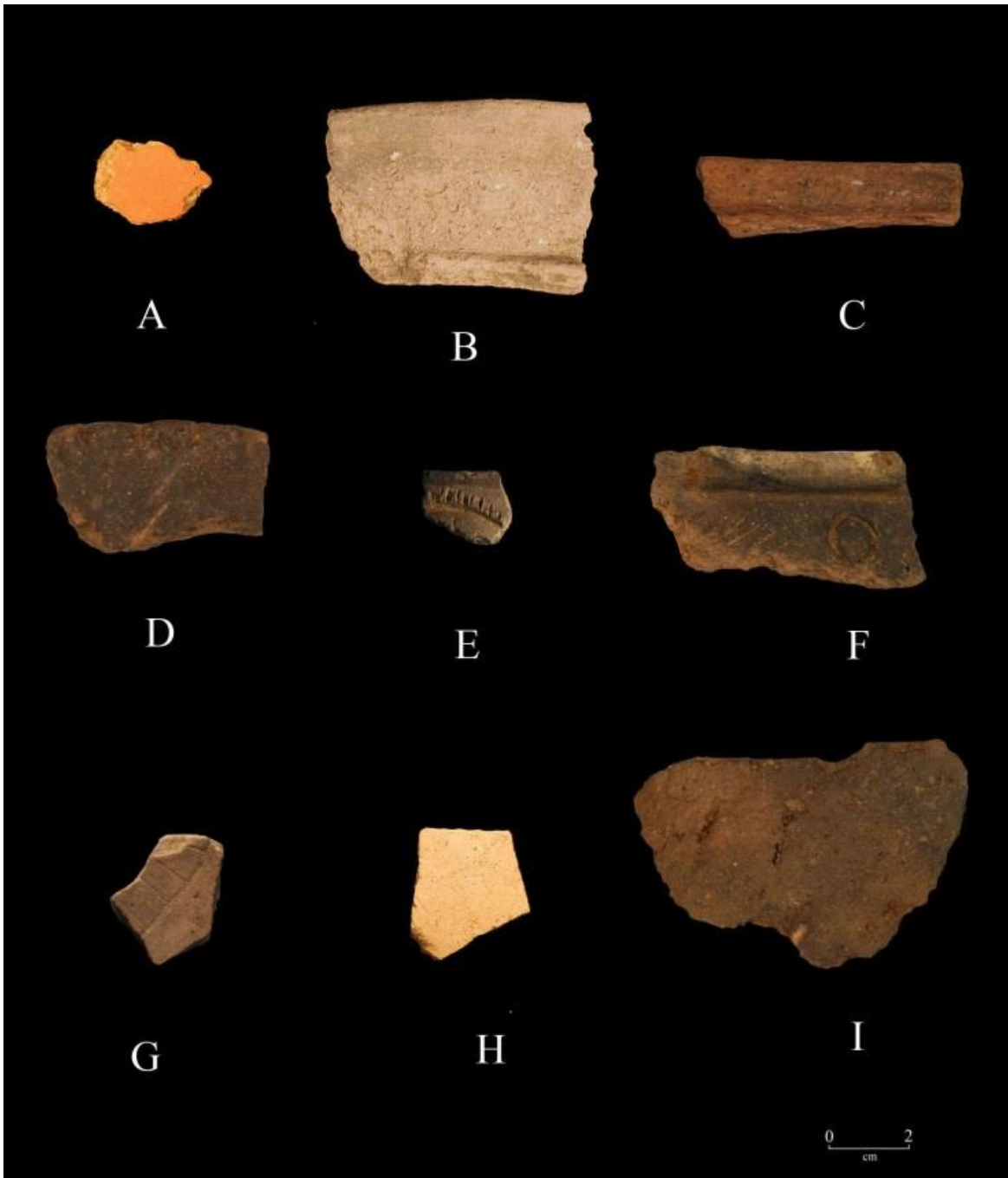


Figure 23. South Tent Pad pottery. (a-d) Mississippi Plain, a is red filmed, b is jar rim, c is folded-flattened jar rim, d has notched lip; (e and f) Moundville Incised, *var. Moundville*, e is folded-flattened jar rim, f is folded jar rim; (g) Moundville Engraved, *var. Middleton*; (h) Moundville Engraved, *var. Elliot's Creek*; (i) Residual coarse grog and shell tempered plain. Sherds d, e, f, and i are from Feature 52.

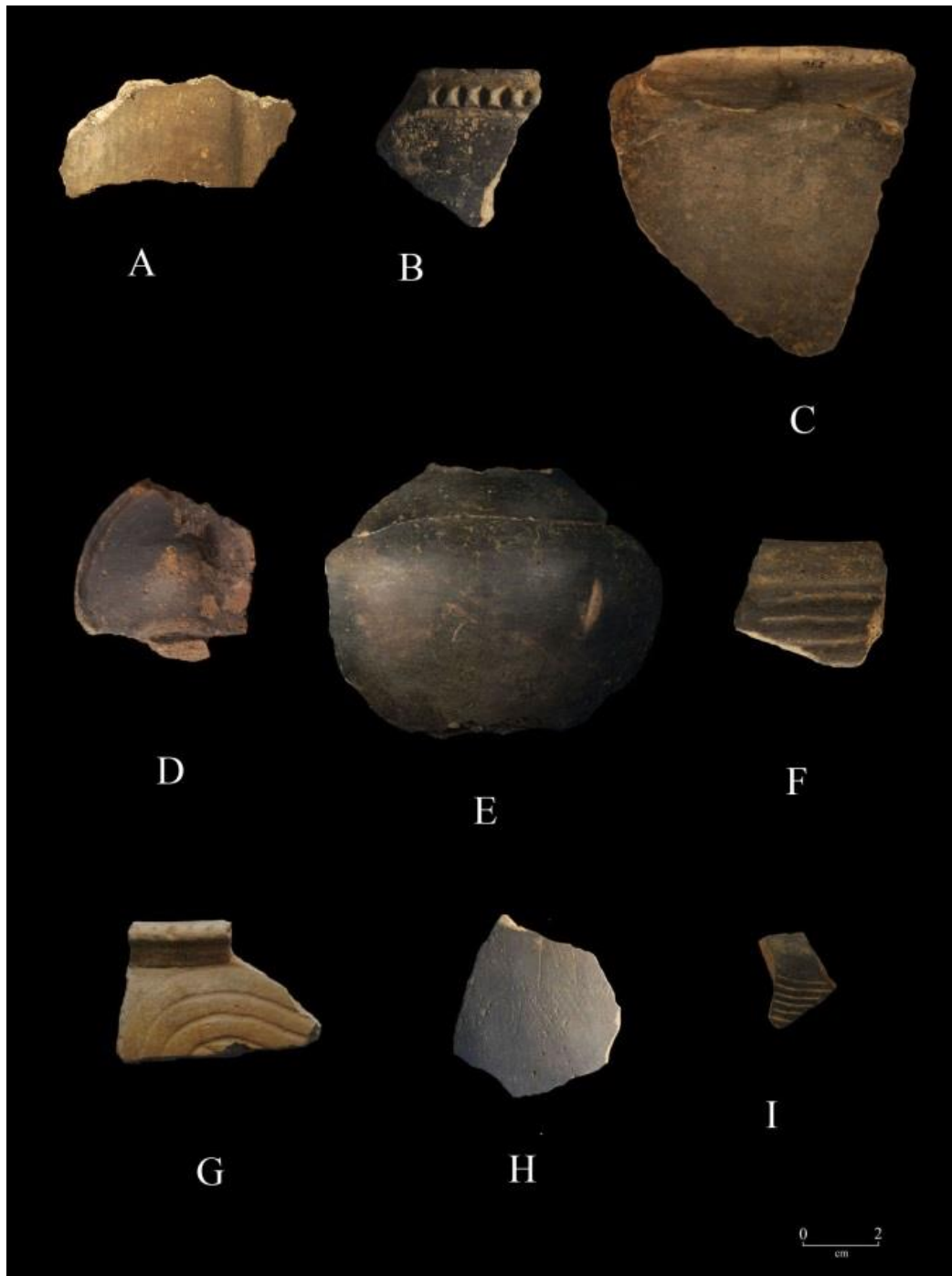


Figure 24. South Tent Pad pottery. (a-e) Bell Plain, a is gadrooned bottle, b is simple bowl with beaded rim, c is simple bowl with horizontal lug, d is crested bird head effigy rim adorno, e is subglobular bottle with simple base; (f) Carthage Incised, *var. Fosters*, short-necked bowl; (g) Carthage Incised, *var. Carthage*, short-necked bowl with notched lip; (h) Moundville Engraved, *var. Hemphill*, winged serpent; (i) Moundville Engraved, *var. Tuscaloosa*, with indentation. Sherds b, c, e, f, g, and h are from Feature 52.

serpent design was found at Mound R1. Moundville Engraved, *var. Middleton*, Moundville Engraved, *var. Taylorville*, and Moundville Engraved, *var. Tuscaloosa* are also consistent with the terminus post quem date for the deposit, as all were common during the Moundville III phase. In contrast, Moundville Incised, *var. Oliver* dates to the Moundville I phase and presumably is present due to mixture.

Two nonlocal types were found in the midden east of the Mound, Avoyelles Punctated, *var. unspecified* and Pensacola Incised, *var. Holmes* (Figure 26). As noted, Avoyelles Punctated, is found in the lower Yazoo Basin of the Lower Mississippi Valley region and is a Late Woodland through Early Mississippian type. The Pensacola Incised, *var. Holmes* sherd has incised circles with engraved cross-hatching. It occurs on the Gulf Coast in southern Alabama where it dates to the Late Mississippian period (AD 1400-1550) (Fuller 2003:38-55).

Decorative modes recorded for this midden include folded-flattened rims, numerous beaded rims, a gadrooned bottle sherd, and indentations (Figures 25 and 26). As stated earlier, beaded rims are a good marker for the later phase dates (Knight 2010a: 46-47). Indentations are also consistent with a Moundville III phase dating (Knight 2010a:47). Gadrooning, however, dates to the late Moundville I to early Moundville II phase (Knight 2010a:47), and may be present due to mixture, as would also apply to the folded-flattened jar rims. Sherds from flared-rim bowls and numerous short-necked bowl sherds also were found. The short-necked bowl sherds reinforce the terminus post quem date of Moundville III.

Taken together, the type-varieties and chronologically diagnostic modes from the midden east of the mound, as sampled in Unit B, reveal an excellent example of a Moundville III phase assemblage, ca. AD 1400-1520. Thus the midden is contemporaneous with the final use of the

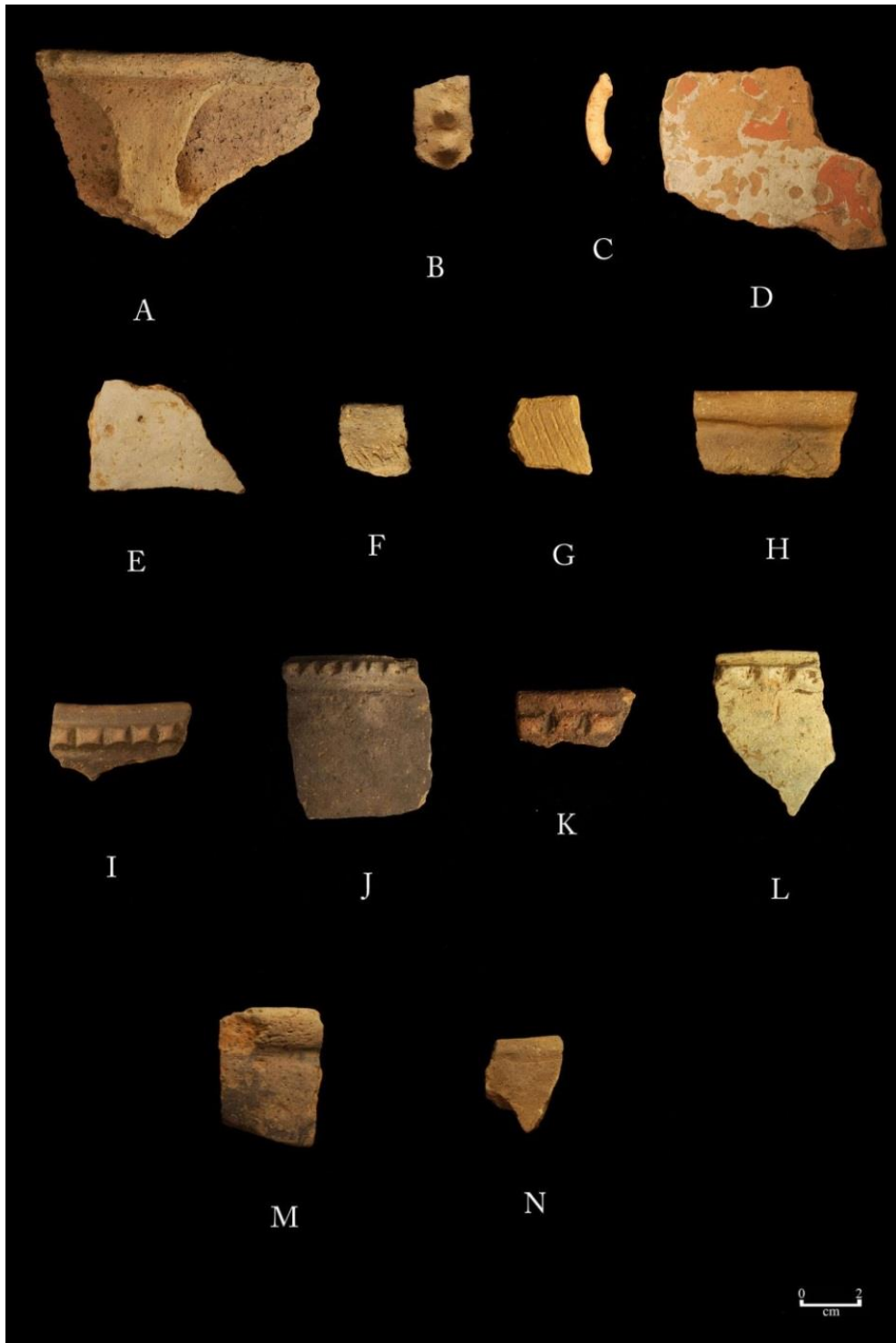


Figure 25. Unit B pottery. (a-e) Mississippi Plain, a is jar rim with strap handle, b is noded jar strap handle, c is small jar loop handle; d is red-on-white painted, e is white filmed; (f and g) Moundville Incised, *var. Moundville*; (h) Moundville Incised, *var. Oliver*, folded-flattened jar rim; (i-n) Bell Plain, i, j, k, and l are simple bowls with beaded rims, m and n are short-necked bowls.

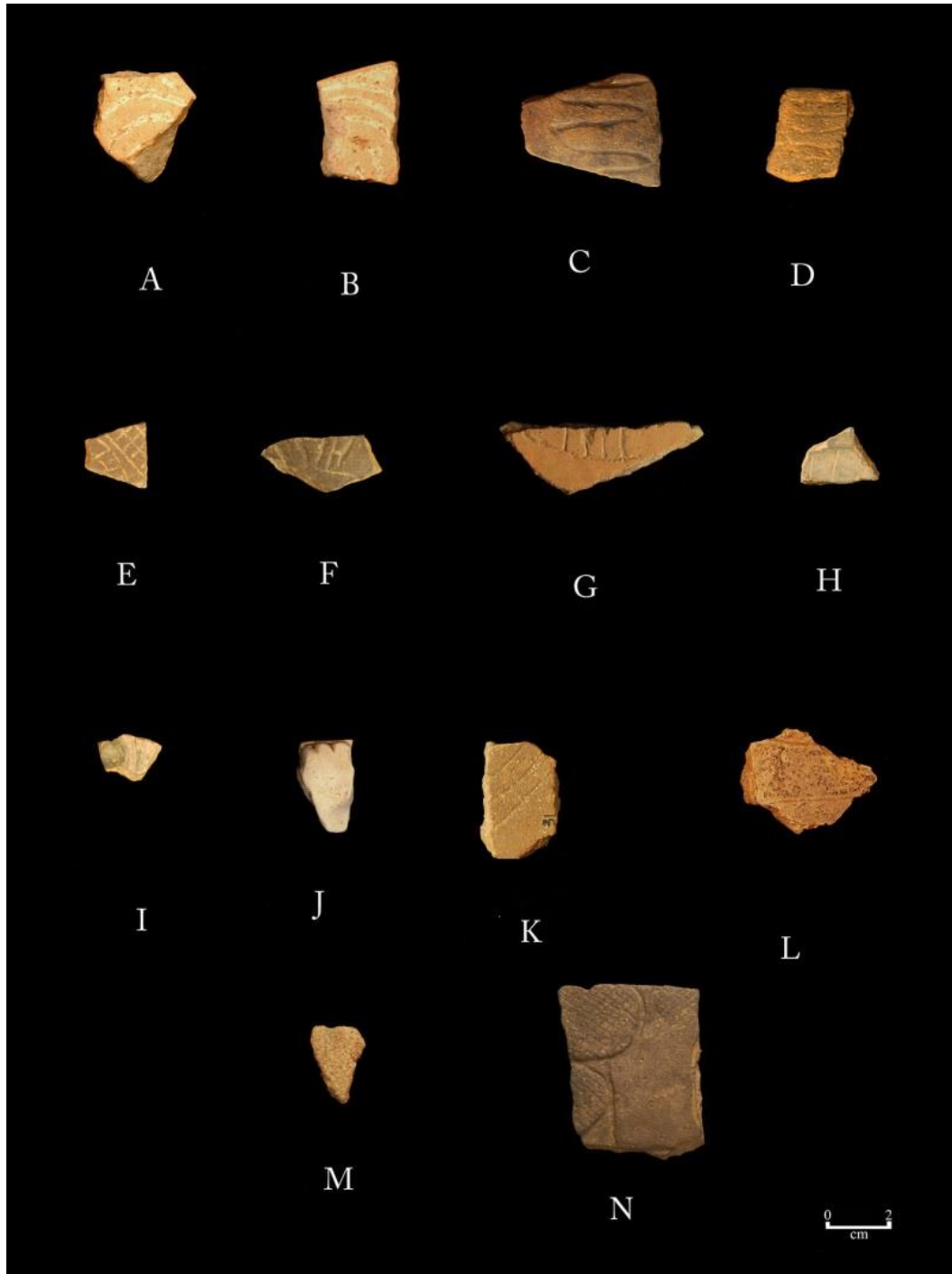


Figure 26. Unit B pottery. (a and b) Carthage Incised, *var. Carthage*, red on white painted; (c) Carthage Incised, *var. Fosters*; (d) Moundville Engraved, *var. Havana*; (e) Moundville Engraved, *var. Hemphill*, center symbols and bands; (f) Carthage Incised, *var. Lupton*; (g) Moundville Engraved, *var. Middleton*, shallow bowl or plate; (h and i) Moundville Engraved *var. unspecified*, i has indentation; (j) Residual temperless plain, simple bowl with beaded rim; (k) Residual fine-shell and grog tempered, interior engraved; (l) Avoyelles Punctated, *var. unspecified*; (m) Autauga Plain, *var. unspecified*; (n) Pensacola Incised, *var. Holmes*.

mound summit as revealed by pottery from features associated with Stage III. There is some evidence of earlier type-varieties and modes, but these are not concentrated at the base of the deposit. They can be attributed to mixing. Nonlocal pottery from the midden east of the mound indicates long-distance contacts by the mound's residents with southern Alabama and the Mississippi Valley.

South Tent Pad and Surface

A total of 178 sherds were found in the South Tent Pad profile cut and horizontal extensions from it, excluding Feature 52 as already discussed. Coming from a combination of a profile cleanup and plow zone excavations, this small collection is chronologically mixed. Chronologically diagnostic pottery type-varieties include Moundville Engraved, *variety Elliot's Creek*, Moundville Engraved, *var. Hemphill*, Moundville Engraved, *var. Middleton*, and Baytown Plain, *var. Roper* (Figures 23 and 24). Not surprisingly, these diagnostics date to the full chronological range of the locality. Regarding diagnostic modes, only a single folded-flattened rim was recovered from the South Tent Pad. Thirty-seven sherds were collected as part of a general surface collection during the field work. None were chronologically diagnostic.

Lithic Analysis

Lithic artifacts were divided into flaked stone, ground stone, and unmodified stone. Both weight and count were recorded for lithic material. Unlike the pottery, diagnostic lithics do not change readily enough to be of use in dating the contexts. Because there are so few lithics, and

because they cannot be used for dating, lithics are not discussed with regard to the stratigraphic sequence laid out in Chapter 2.

Flaked Stone

A total of only 60 artifacts of flaked stone were recovered from the Mound R1 excavations (Table 4). Although this number seems low, the Moundville site is known for its relative lack of flaked stone material. *Flakes* are pieces of fine-grained siliceous rock purposely removed by applying percussion or pressure, while *shatter* refers to more irregular pieces showing the removal of rock in an unexpected way (Andrefsky 1998). Most flakes and shatter were made from a local chert type, Tuscaloosa gravel (Table 5). Tuscaloosa gravel is the most readily available chert at Moundville; however, it has poor flaking quality. Heating Tuscaloosa gravel chert improves its flaking ability and gives it an easily perceived reddish color (Knight 2010a:54).

Other local flakes and shatter were of fine-grained tabular ferruginous sandstone and quartzite (Table 5). Nonlocal materials included blue-gray Fort Payne chert and Coastal Plain agate. Blue-gray Fort Payne chert is a high quality material that originates in the Tennessee River Valley. Coastal Plain agate is another high quality material imported from areas to the south of Moundville. Seven chert flakes and shatter of unidentified raw material were recovered. One blue-gray Fort Payne chert core fragment was found in the upper mound portion of Unit A

Two triangular arrow points of the Madison type common to Moundville, and the distal end of another finished biface were recovered (Figure 27a-c). All three were made of Tuscaloosa gravel, with the biface and one of the Madison points made from Tuscaloosa gravel that was heat treated. Madison points are a simple form that remained unchanged in the Black Warrior Valley

Table 4. Flaked Stone. Weight is expressed in grams.

	Lower Mound		Upper Mound		Stage III Features		Midden East of Mound		South Tent Pad		Surface		Total	
	Count	Weight	Count	Weight	Count	Weight	Count	Weight	Count	Weight	Count	Weight	Count	Weight
Flake	7	6.9	9	4.9	5	8.2	9	5.3	3	9.7	2	8.1	35	43.1
Shatter	2	15.1	5	12.6	5	12.3	7	17.2					19	57.2
Core fragment			1	12									1	12.0
Madison projectile point					1	0.9	1	2.3					2	3.2
Distal end of finished biface							1	0.3					1	0.3
Retouched flake			1	1.4									1	1.4
Hoe chip									1	4.5			1	4.5
<i>Totals</i>	9	22.0	16	30.9	16	29.6	18	25.1	4	14.2	2	8.1	60	121.7

Table 5. Flaked stone raw materials. Weight is expressed in grams.

	Premound Context		Lower Mound		Upper Mound		Stage III Features		Midden East of Mound		South Tent Pad		Surface		Total	
	Count	Weight	Count	Weight	Count	Weight	Count	Weight	Count	Weight	Count	Weight	Count	Weight	Count	Weight
Daub			15	92.4	8	10.8	75	549.9	79	376.4	7	174.3			184	1203.8
Hearth fragment			17	97.7	49	231.1	67	156.3	17	32.7	1	9.2			151	527.0
Clay wad			16	61.7	8	45.7	4	10.5	9	27.2					37	145.1
Clay ball with irregular surface			12	86.6	2	2.7	1	36.4	43	410.9					58	536.6
Unidentified	2	3.3	274	477.1	162	356.8	235	99.2	967	1005.1	8	31.6	5	13.6	1653	1986.7
<i>Totals</i>	2	3.3	334	815.5	229	647.1	382	852.3	1115	1852.3	16	215.1	5	13.6	2083	4399.2

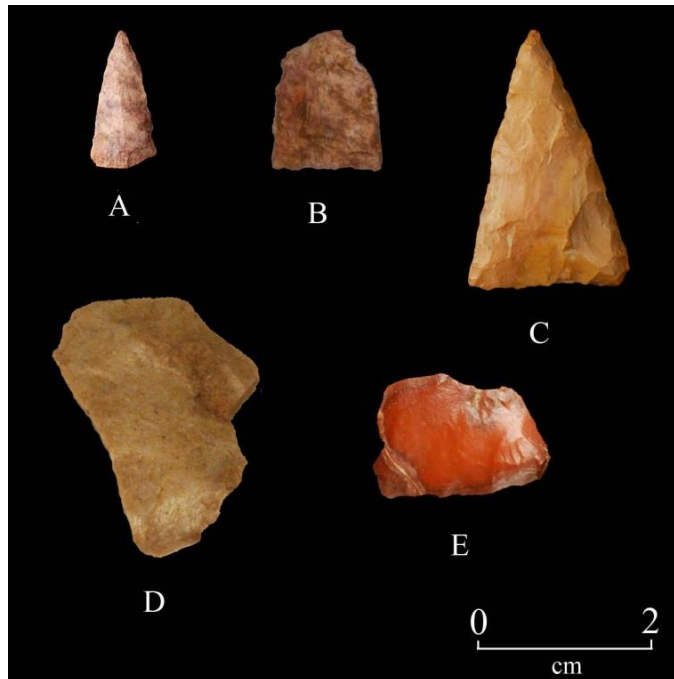


Figure 27. Flaked stone artifacts. (a) finished biface, distal end, heat-treated Tuscaloosa gravel; (b and c) Madison projectile point, Tuscaloosa gravel, b is heat-treated; (d) hoe chip, Mill Creek chert; (e) flake, heat-treated Tuscaloosa gravel.

from the Late Woodland through Protohistoric periods (Knight 2010a:55). One heat-treated Tuscaloosa gravel flake with retouched edges was used as an expedient tool (Figure 27e). A Mill Creek chert hoe chip was also recovered. Mill Creek is a tan colored chert from southern Illinois (Figure 27d). Hoe chips are identified by a shiny, polished surface created by contact with the silica in the soil.

Ground Stone

The majority of the ground stone material from the Mound R1 excavations was made of greenstone, a fine-grained schist from the Hillabee formation in east-central Alabama (Figure 28, Table 6). Moundville axe heads were made of greenstone, and were of a flower-petal shape, tapered with straight sides (Knight 2010a:59). Greenstone shatter, and pieces of polished

greenstone not large enough to identify definitely as a celt, also were found. One fragment of a celt was recycled as a hearth stone, evidenced by its reddish color, and a second celt fragment was reused as an anvil stone. It was common practice at Moundville for ground stone artifacts to be reused in this way (Knight 2010a:63).

Three ground stone artifacts of Pottsville sandstone were found (Figure 29a-e, Table 6). These included a muller, a grooved abrader, and an anvil stone. A muller is a handheld stone that shows evidence of grinding (Knight 2010a:63). A grooved abrader is a tabular object with one or more grooves on the surface. One other piece of ground Pottsville sandstone, too incomplete to classify any further, was found in the South Tent Pad excavation. A small rock crystal bead of white calcite also was found in a post hole from Structure 2 on the Stage IB summit (Figure 29). This may be the first report of a calcite bead from the Moundville site.

Unmodified Stone

Unmodified lithic material found in the Mound R1 excavations included sandstone, petrified wood, cobbles, and possible pigment-related minerals (Table 7). *Cobble* refers to river deposited unmodified stones larger than a thumbnail. Petrified wood is a common occurrence at archaeological sites in the Black Warrior Valley (Knight 2010a:71). Tabular ferruginous sandstone and siltstone are thin pieces of sedimentary rock cemented by iron oxides in groundwater (Knight 2010a:70). Ferruginous conglomerate is formed when iron minerals cement small pebbles into a mass, and is common at Moundville (Knight 2010a:70-71). Ferruginous concretions consist of very small iron concretions that have formed in the Plio-Pleistocene terrace soils (Knight 2010a:71). The Pottsville sandstone recovered comes from a geological formation found at the Fall Line in present-day Tuscaloosa, Alabama, and north of there. Gray micaceous Pottsville sandstone gets its color from a high carbon content (Knight 2010a:70). Red

and yellow pigment of tabular ferruginous sandstone (abbreviated TFS in Table 7) refers to stone of a quality that could have been used to extract pigment of those colors.

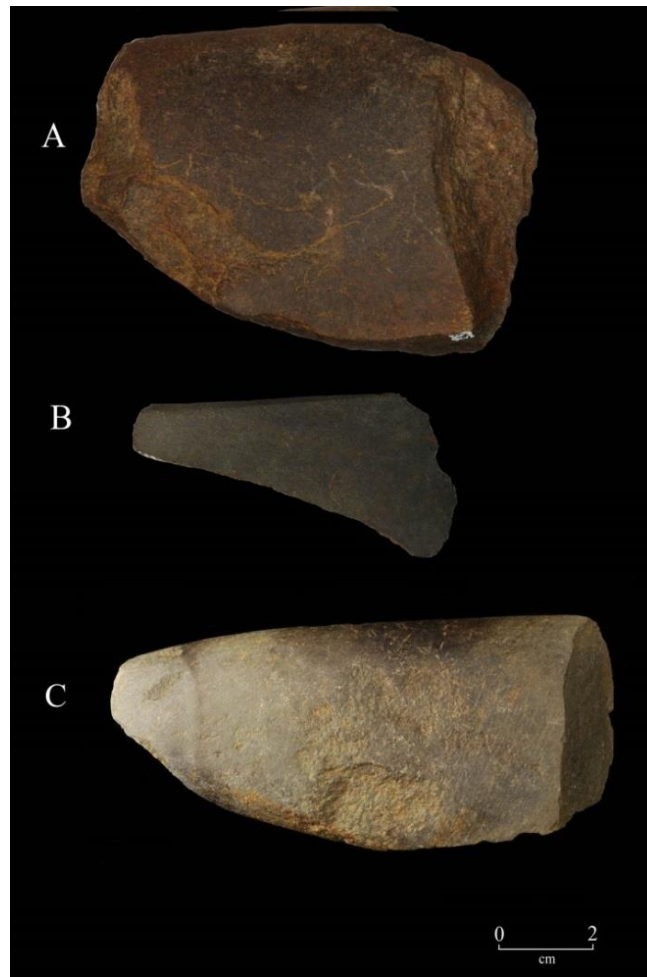


Figure 28. Greenstone celt fragments. (a) has been reused as hearth stone; (c) has been reused as anvil stone.

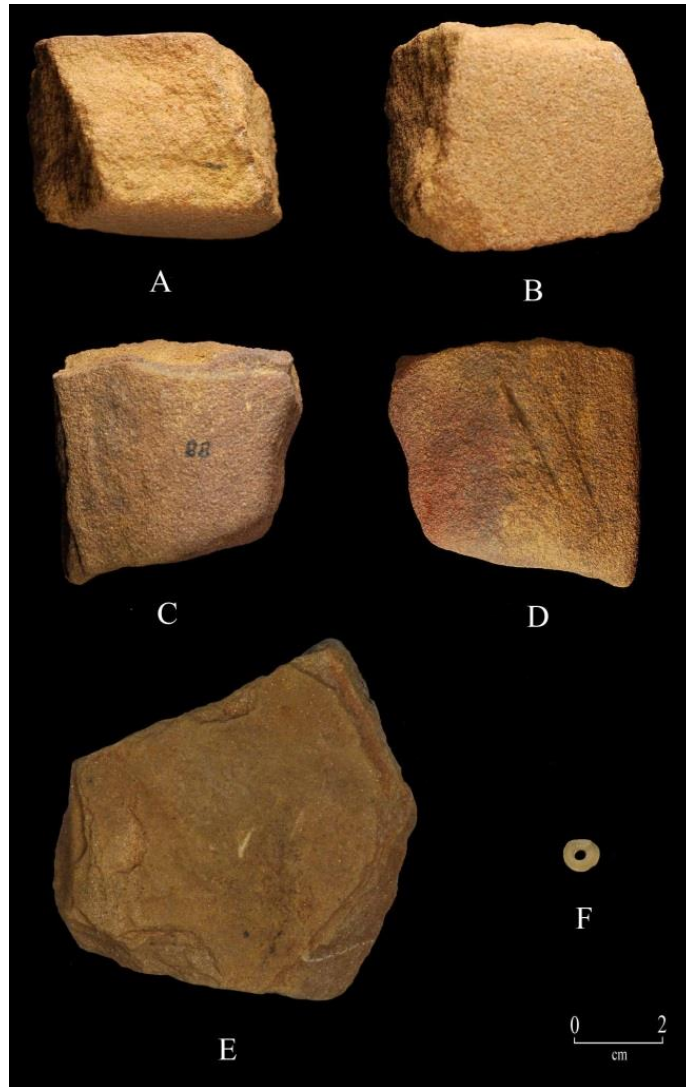


Figure 29. Ground stone artifacts. (a-b) muller, brown Pottsville sandstone; (c-d) Grooved abrader, tabular ferruginous sandstone; (e) anvil stone, gray micacious Pottsville sandstone; (f) bead, calcite.

Other unmodified lithic material was found that also could have been used in pigment or craft production. Hematite is a dark red material containing iron oxide. The closest geological source of hematite is the Red Mountain formation that outcrops as close to Moundville as Woodstock, Alabama (Knight 2010a:67). Glauconite is a potassium-iron silicate that was used for green pigment. Its closest source is a short distance to the northwest of Moundville (Knight

2010a:68). Schist and coal could have been used as a source of black pigment. Galena is a lead sulfide crystal, and at Moundville “tends to co-occur with rare and finely crafted goods that serve as markers of elite status” (Knight 2010a:68). The source of galena was most likely southeast Missouri, northwest Illinois, southwest Wisconsin, or northwest Iowa (Walthall 1981:55). Mica also could have been used in pigment manufacturing by adding a glittery aspect to paint. The nearest mica source is in the eastern Alabama Piedmont (Knight 2010a:69).

Fired Clay

Fired clay was divided into the following categories: daub, hearth fragments, clay wads, clay balls with irregular surfaces, and unidentified (Table 8). Daub consists of fired clay with cane, grass, or splint impressions (Figure 30a-d). The vast majority of daub by weight at Mound R1 was found in the midden east of the mound and in the Stage III features. Hearth fragments are generally flat with one darkened side and the other side a reddish color (Figure 30e-g). Clay wads are pieces of clay that seem to have been pinched and then thrown into a fire. Clay balls with an irregular surface were originally about the size of a baseball and had an untempered clay interior and a smoothed but irregular exterior (Figures 31a and b). This artifact category has not been previously recognized at Moundville. The function of the clay wads and the clay balls is unknown. Most fired clay fragments were unidentifiable.

Table 6. Ground stone. Weight is expressed in grams.

	Lower Mound		Upper Mound		Stage III Features		Midden East of Mound		South Tent Pad		Surface		Total	
	Count	Weight (g)	Count	Weight (g)	Count	Weight (g)	Count	Weight (g)	Count	Weight (g)	Count	Weight (g)	Count	Weight (g)
Polished greenstone							2	1.3					2	1.3
Greenstone shatter							3	11.1					3	11.1
Greenstone celt fragment							1	5.3	4	667.9			5	673.2
Ground Pottsville sandstone									2	137.4			2	137.4
Anvil stone					1	166.5							1	166.5
Muller			1	200.7									1	200.7
Grooved abrader											1	163.8	1	163.8
Calcite bead	1	0.4											1	0.4
<i>Totals</i>	1	0.4	1	200.7	1	166.5	6	17.7	6	805.3	1	163.8	16	1354.4

Table 7. Unmodified stone. Weight is expressed in grams.

	Premound Context		Lower Mound		Upper Mound		Stage III Features		Midden East of Mound		South Tent Pad		Surface		Total	
	Count	Weight (g)	Count	Weight (g)	Count	Weight (g)	Count	Weight (g)	Count	Weight (g)	Count	Weight (g)	Count	Weight (g)	Count	Weight (g)
Tabular ferruginous sandstone	1	0.4	42	189.1	43	77.8	9	16.1	43	223.1	2	20.7	1	3.2	141	530.4
Tabular ferruginous siltstone					2	4.5									2	4.5
Unidentified sandstone									11	31.4			1	17.2	12	48.6
Ferruginous conglomerate	1	1.9	2	0.3	2	3.8			4	19.3					9	25.3
Ferruginous concretion			12	16.8	2	0.9	4	3.8			1	7.8			19	29.3
Brown ferruginous Pottsville sandstone							1	8.5	20	378.4	1	18.5	2	1.2	24	406.6
Fine gray micaceous Pottsville sandstone					1	47			3	25.2					4	72.2
Quartzite cobble									1	3.3					1	3.3
Cobble fragment									1	5.6					1	5.6
Hematite					6	15.7			3	8.2					9	23.9
Galena					1	1.6									1	1.6
Schist			1	0.4											1	0.4
Mica			1	0.1	1	1.3	4	0.1	1	0.1	1	0.1			8	1.7
Glaucomite											1	2.5			1	2.5
TFS red pigment							1	1.4	16	27.6	1	30.0			18	59.0
TFS yellow pigment			6	13.6					3	9.5					9	23.1
Coal					1	0.2			1	0.6	1	4.3			3	5.1
Petrified wood									2	0.7	1	56.0			3	56.7
<i>Totals</i>	2	2.3	64	220.3	59	152.8	19	29.9	109	733	9	139.9	4	21.6	266	1299.8

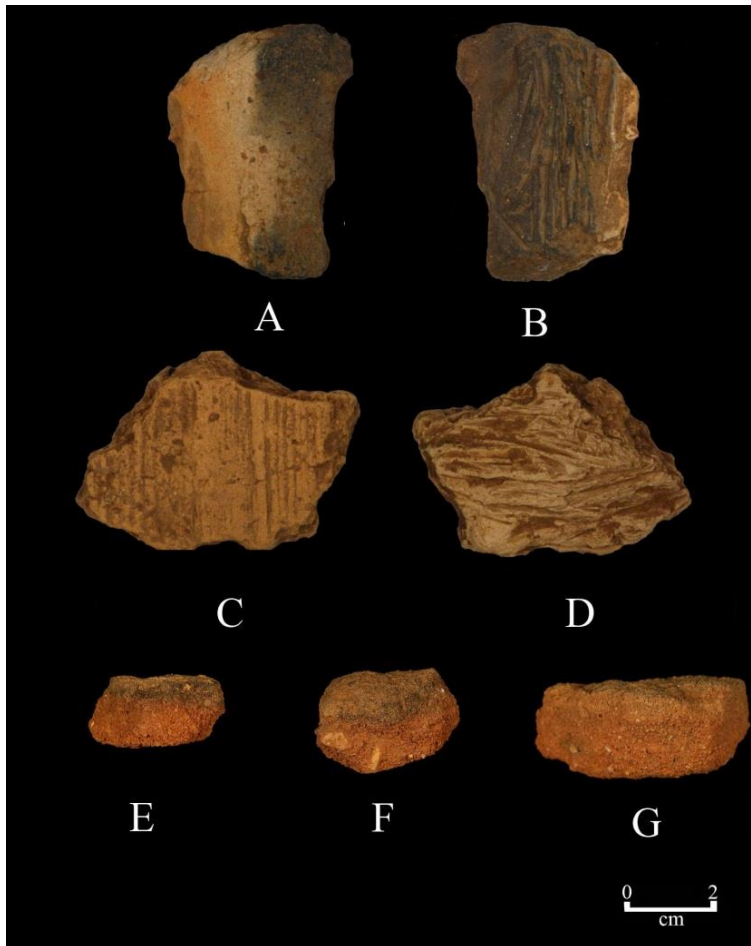


Figure 30. Fired clay artifacts. (a-b and c-d) daub, showing interior and exterior surfaces; (e-g) hearth fragments, cross-section view.

Table 8. Fired Clay. Weight is expressed in grams.

	Premound Context		Lower Mound		Upper Mound		Stage III Features		Midden East of Mound		South Tent Pad		Surface		Total	
	Count	Weight	Count	Weight	Count	Weight	Count	Weight	Count	Weight	Count	Weight	Count	Weight	Count	Weight
Daub			15	92.4	8	10.8	75	549.9	79	376.4	7	174.3			184	1203.8
Hearth fragment			17	97.7	49	231.1	67	156.3	17	32.7	1	9.2			151	527.0
Clay wad			16	61.7	8	45.7	4	10.5	9	27.2					37	145.1
Clay ball with irregular surface			12	86.6	2	2.7	1	36.4	43	410.9					58	536.6
Unidentified	2	3.3	274	477.1	162	356.8	235	99.2	967	1005.1	8	31.6	5	13.6	1651	1983.4
<i>Totals</i>	2	3.3	332	812.2	229	647.1	382	852.3	1115	1852.3	16	215.1	5	13.6	2081	4395.9

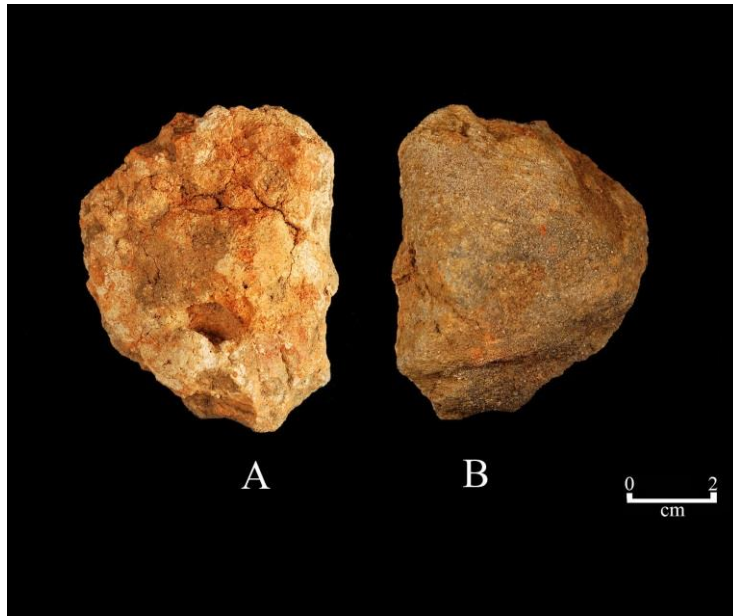


Figure 31. Clay ball with irregular surface. (a) interior; (b) exterior.

Faunal and Botanical Remains

Due to soil acidity, faunal and botanical remains were not well preserved. Only a preliminary examination of faunal and botanical remains was conducted on a portion of the material by Alison Scribbs, an undergraduate at the University of Alabama. The botanical remains were examined under a binocular microscope. A large unidentified seed, acorn shell, and hickory shell were identified from the midden east of the mound. Abundant wood charcoal was found in both the mound and east midden contexts. Larger bone fragments were identified as white tail deer (*Odocoileus virginianus*), unidentified large mammals, unidentified small mammals, and unidentified birds. Calcined bones and mussel shells also were identified among the faunal remains. Bone fragments smaller than 2 cm were not analyzed because they were too small to identify.

Copper Pendant

A sheet copper pendant was found in Feature 52 of the South Tent Pad excavation (Figure 32). Although it was damaged, it was possible to discern that the overall shape was oblong and that the fragmented top portion would have had a swirl cross. Pendants of this sort are made locally at Moundville and are generally found with human burials (Steponaitis and Knight 2004:176). The height of copper use at Moundville was in the Moundville II phase, with use continuing into Moundville III.



Figure 32. Copper pendant found in Feature 52.

Summary Dating of Contexts

Using the ceramic evidence specified in this chapter, it is possible to assign a phase date to each of the excavated contexts at Mound R1. Despite not having enough pottery to give a definitive date, it is possible to provisionally date the pre-mound occupation level and post holes to the early Moundville I phase, based on diagnostic sherds and stratigraphy. The two initial stages of the mound and their associated summit structures and features are datable to the late Moundville I phase (AD 1200-1260). The features intruding from Stage III, together with the midden east of the mound, date to the Moundville III phase (AD 1400-1520). Because of these associations, Stage III of the mound must have been raised sometime between the late Moundville I and the early Moundville III phase. The mixed South Tent Pad and Surface collections have diagnostic ceramics that range in date from the Late Moundville I to the Moundville III phase. In sum, Mound R1 appears to have been constructed primarily during the late Moundville I phase, with continued use of the summit and the development of a thick adjacent midden during the Moundville III phase.

CHAPTER 4

DISCUSSION

The 2011 and 2012 excavations of Mound R1 were performed in the hopes of understanding more about the chronology and function of one of the small mounds at Moundville. The recent excavation, together with the past investigations on the same small landform, provide an occupational history of the Mound R1 area. This occupational history of Mound R1 may be presented by referring back to Moundville's "development stages" as originally laid out by Knight and Steponaitis (1998) and as reviewed in Chapter 1. Moundville evidently was not occupied during the earliest of these stages, labeled "Intensification of Local Production" and corresponding to the West Jefferson phase of terminal Woodland culture (Knight and Steponaitis 1998:12).

Initial Centralization

The "Initial Centralization stage" corresponds with the early Moundville I phase (Knight and Steponaitis 1998:12-14). The Mound R1 landform has evidence of occupation during this stage. The premound occupation potentially dates to the early Moundville I phase, having diagnostic folded-flattened jar rims; however, very few artifacts were found in this context. Forty-two sherds of the grog-tempered type Baytown plain, found in varied contexts, are also probably related to an early Moundville I phase occupation of the landform. In David DeJarnette's 1956-1957 field school excavations, a single set post structure was found on the landform on which Mound R1 sits. This type of architecture was dominant in the early Moundville I phase, and declined in the late Moundville I phase (Lacquement 2007:63). In

combination, these clues suggest that the landform around Mound R1 was indeed first settled and domestically occupied during Moundville's Initial Centralization stage.

Elsewhere at Moundville, there is considerable evidence of early Moundville I phase occupation. Excavations along the Northwest Riverbank uncovered single set post structures and ceramics which date to both the early and late Moundville I phase (Scarry 1998:85-87). In 1939 and 1940, the Alabama Museum of Natural History excavated what now is the present-day Roadway. Wilson examined the Roadway data and found early Moundville I phase occupations throughout these excavations across the Moundville site (Wilson 2008:131).

Regional Consolidation

The "Regional Consolidation stage" corresponds to the late Moundville I to early Moundville II phase (Knight and Steponaitis 1998:14-17). It was during this time that Mound R1 was initially constructed, as two of the three known major mound construction stages can be dated to the late Moundville I phase. Mound R1 was constructed as a small, flat-topped mound of clay. At this time, the mound would have been approximately 22 m in diameter and 1.56 m in height. The third mound stage cannot conclusively be dated to a phase. The earliest construction stages of the plaza-periphery mounds date to this stage, including the initial constructions of nearby Mounds Q and R (Gage 2000: 108; Knight 2010:361). Other single mound sites were constructed in the Black Warrior during this stage.

Wall lines from two structures were found on the summit of Stage I of Mound R1. The earliest was a large basin-floor structure with wall trenches that dates to the late Moundville I phase. This type of structure is rare at Moundville, with only three other examples being so far

documented at the site: one intruding from the premound occupation at Mound E (Knight 2010:172-173), one in the Northwest Riverbank area (Scarry 1998:69), and one north of Mound R (Scarry 1980:5-6). The Big Sandy Farms site, 3 km north of Moundville, had another large basin-floor structure with wall trenches (Ensor 1993:32-36). The other structure found on the Mound R1 summit from this period was a single set post structure. As stated above, this type of architecture dates to the early Moundville I through the late Moundville I phase in the Black Warrior Valley (Lacquement 2007:63).

There is evidence of “blanket mantles” in the mound context of Mound R1, consisting of thin layers of clay designed to cover the previous construction. One possible blanket mantle covers the premound activity surface, and two cover the Stage I summit, with each associated with a thin midden. Two more cover the Stage II summit. Blankets mantles are found covering mound summits elsewhere at Moundville, including on Mounds E, Q, and P (Knight 2010:74-233; Porth 2011:29-46).

Artifacts that date to this stage resemble those found in artifact assemblages from the larger plaza-periphery mounds. Pottery found in the early stages of Mound R1 includes both domestic cooking pots and finewares such as negative-painted ware and fragments of hemagraved vessels classified as Moundville Engraved, *var. Elliots Creek*. Nonlocal pottery types from this time include type-varieties from Lower Mississippi Valley, the type Angel Negative Painted from Ohio Valley, and the type Cool Branch Incised from Lower Chattahoochee Valley. Exotic materials found include a galena cube imported from the Upper Mississippi Valley, a calcite bead, a hoe chip of Mill Creek chert from Illinois, blue-gray Fort Payne chert from the Tennessee Valley, and Coastal Plain agate from south of Moundville. Thus, at this time the occupants of Mound R1 had extensive extraregional connections pointing to all

four cardinal directions. Elsewhere at Moundville, the importation of nonlocal goods was generally intensified during this stage (Knight and Steponaitis 1998:16).

The landform on which Mound R1 sits has yielded additional evidence of being used for domestic occupation at this time. Michals (1990) found midden and wall-trench structures just to the east of Mound R1 that date to this stage. The local landform also was being used for burials during this stage, as three burials from the C. B. Moore and Alabama Museum of Natural History excavations have diagnostic pottery of the period (Steponaitis 1989). In general, Moundville was at its peak in population at this time, with most of the accumulated midden dating to this phase (Knight and Steponaitis 1998:15).

Entrenched Paramourncy

The “Entrenched Paramourncy stage” corresponds to the late Moundville II and early Moundville III phase (Steponaitis and Knight 1998:17-21). Mound R1 was still in use during this time, as told by the Stage III features. A large post hole found on the top of the mound in the South Tent Pad area and a large quantity of daub in Feature 52 indicate the presence of one or more daubed, rigid post structures on the Stage III summit. These structures would have had gabled roofs with large, widely spaced posts and with walls covered by daub plaster (Lacquement 2007:64-65). This kind of architecture first appeared in the Black Warrior Valley at the end of the Moundville II phase (Lacquement 2007:64-65).

The mound summit was possibly used for burial, as an “emptied” burial pit was found, similar to one found in Mound Q (Knight 2010:98-99). A sheet copper pendant was found associated with this possible burial pit. The pendant, oblong with a swirl cross on top, is the most

common form found at Moundville and was probably made locally (Steponaitis and Knight 2004:176). A total of 31 copper pendants or gorgets have been found at Moundville to date, circular in shape or oblong with a circular upper portion and triangular bottom. (Steponaitis and Knight 2004:176). One style, the oblong pendant with a swirl cross in the upper portion, is the most common (Steponaitis and Knight 2004:176), and that is the style of the Mound R1 specimen. A massive flank midden on the east side of the mound dating to this time was encountered in Unit B. It is similar to deep Moundville III phase flank middens found at other mounds at Moundville, such as Mounds G, P, and Q (Knight 2010:234-238; Erik Porth, personal communication 2012).

Pottery dating to this stage included both ordinary domestic cooking pots and finewares including much burnished, fine shell-tempered engraved pottery. Some of the finewares exhibited religious imagery, including the type-variety Moundville Engraved, *var. Hemphill* with the winged serpent theme, and sherds of Carthage Incised, *var. Fosters* with the hand and eye theme.

Nonlocal lithics from this time include greenstone celt fragments, blue-gray Ft. Payne chert, and Coastal Plain agate. Nonlocal pottery includes Pensacola Incised, *var. Holmes* from the Gulf Coast, and Avoyelles Punctated, *var. unspecified* from the Lower Mississippi Valley. This indicates a reduction in extent of nonlocal contacts relative to what was seen in the previous stage, in line with what was happening in the rest of the Moundville site. Greenstone celt fragments and other polished fragments were found in the east midden and in the Stage III features. Greenstone celts were not manufactured at Moundville, as evidenced by the observation that almost all greenstone debris found at the site has polished surfaces, indicating it was from a finished product (Wilson 2001). Greenstone celts are found throughout Moundville and other

contemporaneous sites in the Black Warrior Valley, and were used for woodworking (Wilson 2001). Greenstone was imported from the Piedmont physiographic province to the east of Moundville (Gall 1995: 22-23).

During this stage, cemeteries were established on flat ground of around Mound R1. A total of 106 burials have been excavated on portions of this small landform. Fifteen burials have sufficient diagnostics to date them to the Moundville III phase (Steponaitis 1989). Several of the mounds were abandoned as Moundville became a mostly unoccupied ceremonial center (Knight and Steponaitis 1998:20). Moundville continued to be used as a political center, however, and as a landscape reserved for mortuary practice.

Collapse and Reorganization

The “Collapse and Reorganization stage” corresponds to the late Moundville III and Moundville IV phases. There is no evidence of any further activity on Mound R1 or on the surrounding landform at this time, thus the landform appears to have been abandoned. This abandonment is comparable to what happened to the majority of the Moundville site during this stage. Only Mounds P, B, and E have signs of continued mound construction and occupation (Knight and Steponaitis 1998:21).

Summary

The occupational history of Mound R1 and its immediate surroundings is remarkably similar to the occupational history of much of the rest of the Moundville site. The area around Mound R1 was first used as for domestic purposes during the early Moundville I phase, as told

by diagnostic pottery, premound evidence, and house structures. The mound itself was built and lived on beginning in the late Moundville I phase. During this period the mound's inhabitants made use of engraved finewares and participated in extensive extraregional exchange. Off-mound areas continued to be used for domestic occupation during the Moundville II phase. The mound continued to be used through the early Moundville III phase, when an extensive midden formed on its eastern flank. During the Moundville III phase, the area around the mound was used extensively for burials. Finally the landform was abandoned, probably around the late fourteenth century given the absence of later pottery diagnostics.

CHAPTER 5

CONCLUSION

The previous chapter detailed the occupational history of Mound R1 and related activities that took place on the surrounding isolated landform, a narrow thumb of the Moundville terrace that is surrounded on three sides by ravines and the Black Warrior River. This chapter connects Mound R1 with the larger social order at Moundville by discussing residential groups, as defined by Gregory Wilson (2008), with the idea that the Mound R1 landform may have supported such a residential group. Also offered is a brief comparison of the construction histories of Mound R1 and the larger mounds at the Moundville site. Finally, in regard to the problem of the minor mounds at Moundville described in the first chapter, a summary of all the available information on these minor mounds follows.

Residential Groups

Using a GIS-generated map, Gregory Wilson (2008) was able to discover the existence of residential groups at Moundville. He used information from the 1939 -1940 excavation by the Alabama Museum of Natural History of a 50-foot wide area for the present Park roadway, which involved over 100,000 ft² of excavated trenches (Peebles 1971). A GIS map was created using the ESRI program ArcView (Wilson and Davis 2003). Using this program and DesignCAD to identify and label different feature types, structures and associated features could be isolated and assigned to layers on the map. With this method, Wilson (2008) was able to identify a total of 140 structures from the Roadway data.

Wilson calculated the density of structures per excavated area, and revealed that the structures and features were separated by areas of few or no features. The virtually empty space between residential groups varies from less than 20 meters to approximately 160 meters. Some of this variation could be an accident of the way the roadway was laid out, as it meanders in and out of the plaza. Ten distinct residential groups were identified from the Roadway excavations (Figure 33). Two additional excavated areas, the PA and ECB tracts from the Northwest Riverbank, revealed additional residential groups for a total of 12 identified to date. These groups generally possess 10 to 20 domestic structures. Larger public structures were associated with four of the identified residential groups. Wilson discovered that one or more smaller early Moundville I phase domestic structures can be found in almost every residential group. In addition, 279 burials were found from the Roadway excavation. All of these burials that show an intrusion sequence are superimposed over older structures, never the reverse. The same can be said of the burials from the ECB tract of the Riverbank excavations (Wilson 2008).

According to Wilson's study, most of the residential groups at Moundville have the same occupational history. It begins in the early Moundville I phase, with a scattering of single set post or "hybrid" structures. Hybrid structures were those that used small closely spaced poles to form one pair of opposite side walls, with the other two sides having wall trenches. In the late Moundville I phase, residential groups expanded in size. The households were larger, and larger public structures also were built. Structures were built in place, as opposed to relocating, and they became more tightly packed on the landscape. It is probably not a coincidence that the change in residential groups from the early Moundville I to the late Moundville I/Moundville II phases happened at the same time as the initial building of the mounds, erection of the palisade, and leveling of the plaza in the late Moundville I phase (Wilson 2008).

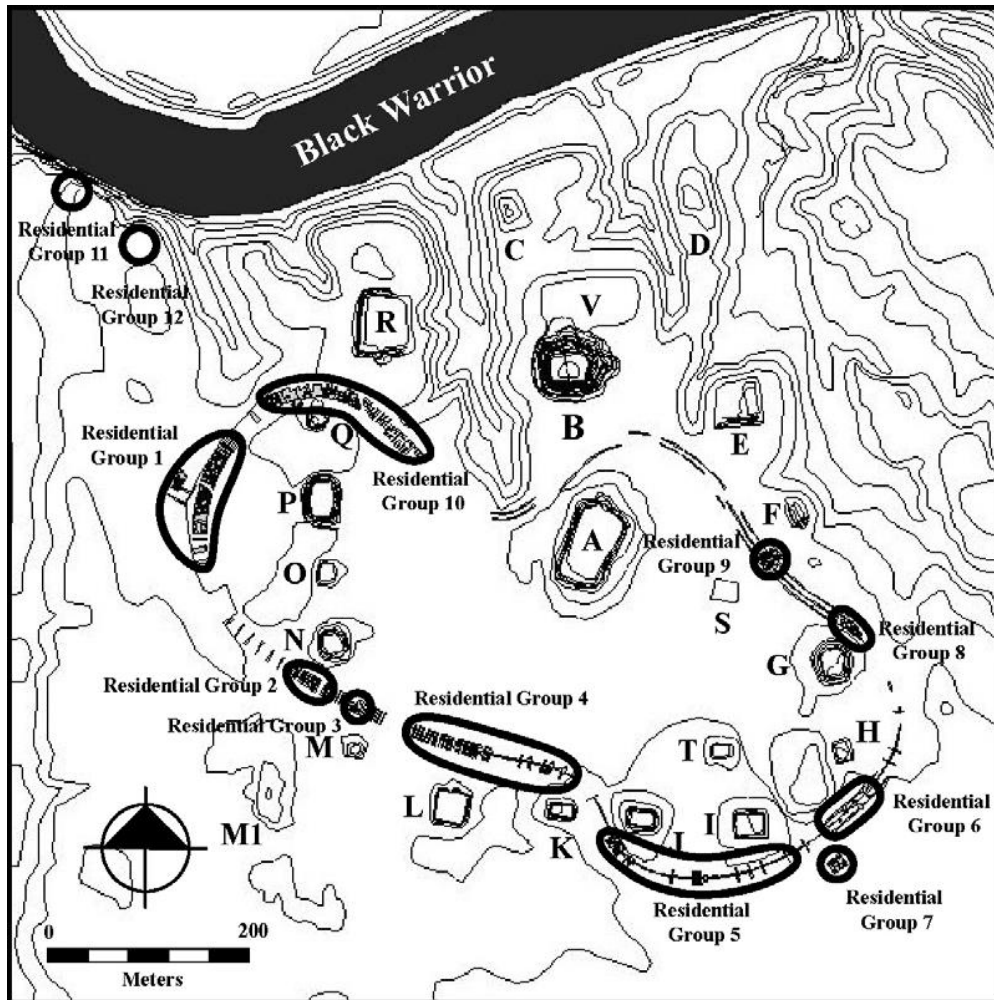


Figure 33. Map showing the location of the 12 known residential groups at Moundville (Wilson 2008:62).

In the Moundville III phase, Moundville changed from a residential area to a vacant ceremonial center, with the populace emigrating to the hinterlands. However, people in the Black Warrior Valley were still returning to Moundville to bury their dead (Knight and Steponaitis 1998). Of the 279 burials identified from the Roadway excavations (Wilson et al. 2010), most are arranged in small cemeteries. The core of each cemetery included a rectilinear cluster of burials, around which is empty space with associated burials on the perimeter being more dispersed (Wilson et al. 2010). The burial clusters range from 23 to 59 m² in size, with approximately 25-

57 people buried in each cemetery. These cemeteries are located directly on top of the abandoned residential groups, with very few burials found outside these residential areas. In other words, the placing of burials was done very deliberately. The rectangular pattern of burials central to these cemeteries could have been symbolic of the house structures that originally stood there, as a way of maintaining continuity with the origins of those buried there. By inference, the dead were buried by the same social group that had originally lived there decades before. In this way, people who were now occupants of Moundville's hinterlands were ceremonially embodying an earlier time (Wilson 2010:13).

The occupational history of Mound R1 and the surrounding landform was described in the previous chapter. That history, although not completely revealed, appears to be basically the same as that of the residential groups at Moundville as described by Wilson. The terrace west of Mound R seems to have supported a residential cluster with houses and middens in the early Moundville phases, and later became a place where the dead were buried in relatively large numbers during the Moundville III phase.

Mound R1 and the Major Mounds

Throughout the thesis, I have been comparing Mound R1 to the larger central and plaza-periphery mounds at the Moundville site in several ways. The following table showing documented phases of use, dates of initial construction, and terminal occupations, is adapted from Knight (2010:350), with information about Mound R1 added at the end (Table 9). The table documents what was claimed in previous chapters, that Mound R1 has comparable phases of use, initial construction, and terminal occupation as the larger central mounds and the plaza-periphery mounds.

Table 9. Summary of construction histories of central and plaza-periphery mounds at Moundville (Knight 2010:350), compared to those of Mound R1.

Mound	No. Identified Const. Stages	Phases of Use	Initial Construction	Terminal Occupation
A	4	MI, MII, MIII?	MI	MII or MIII
B	Unknown	MI, MII, MIII	probably MI	late MIII
E	3	MI, MII, MIII, MIV	late MI or early MII	MIV
F	3	MII	early MII	late MII
G	4	MII, MIII	late MI (plaza fill)	early MIII
H	2	MI, MII, MIII?	late MI	MII or MIII
I	4	MI, MII	late MI	early MII
J	2	MI, MII	late MI	early MII
K	3 or 4	MI, MII?	late MI	MII?
L	1	MI, MIII	late MI	MIII
M	2	MI, MII	late MI	late MII
P	Unknown	MI, MII, MIII, MIV	probably MI	MIV
Q	5	MI?, MII, MIII	probably MI	MIII
R	9	MI, MII, MIII	MI	early MIII
R1	3	MI, MII?, MIII	MI	MIII

Comparison of Mound R1 to Other Minor Mounds at Moundville

One of the goals of this thesis was to examine the issue of the mounds at Moundville that are not part of the plaza-periphery group. The currently named minor mounds include Mounds B1, F1, F2, M1, U, W, and X. There are also some unlabeled minor mounds shown on two early Depression-era map of Moundville made in March and April of 1930 (Jones 1930a and 1930b). Further, there are two unpublished lists by Walter B. Jones of mound volumes for 32 mounds at Moundville that includes mound names for mounds such as B', C', E', F', F'', X, Y, Z, and Z' (Jones 1937) that do not correspond directly to modern names (Figure 34). The two lists have almost the same information, the only difference being that the list shown on the right connects

some of the mound names, like Mound PP with Mound W. The list shown on the left seems to be a more neatly written version of the list shown on the right. No map has been found with the nomenclature shown on these lists to help verify the location of some of these mounds. However, the preliminary version of their names shown in the list on the right seems to connect the small mounds with the nearest larger mound, such as F' and F'' with larger Mound F.

The artifacts from the minor mounds are currently stored in two locations. Material from Moore's 1905 and 1906 excavations is curated at the Smithsonian's National Museum of the American Indian. More recently excavated material, including that from the 1930s, is curated in the Erskine Ramsey Archaeological Repository in Moundville, Alabama. A summary of information on the minor mounds follows.

Mound B1

Mound B1 is located east of Mound B on a narrow neck of land between two ravines (Figure 35). It is first seen, unlabeled, on the March 1930 map. On Jones's 1937 list, it is most likely designated Mound E', given its small size and location closest to Mound E. Thus it is not the mound labeled B' on the Jones lists. Jones (1937) gives the volume of Mound E' as being 72 y³ or 55 m³. The original name was then lost, and it was renamed Mound B1 by Knight and Steponaitis (1998:5). At the present time there are signs of a north-south trench that was dug sometime before World War II and not backfilled, although there is no corresponding documentation.

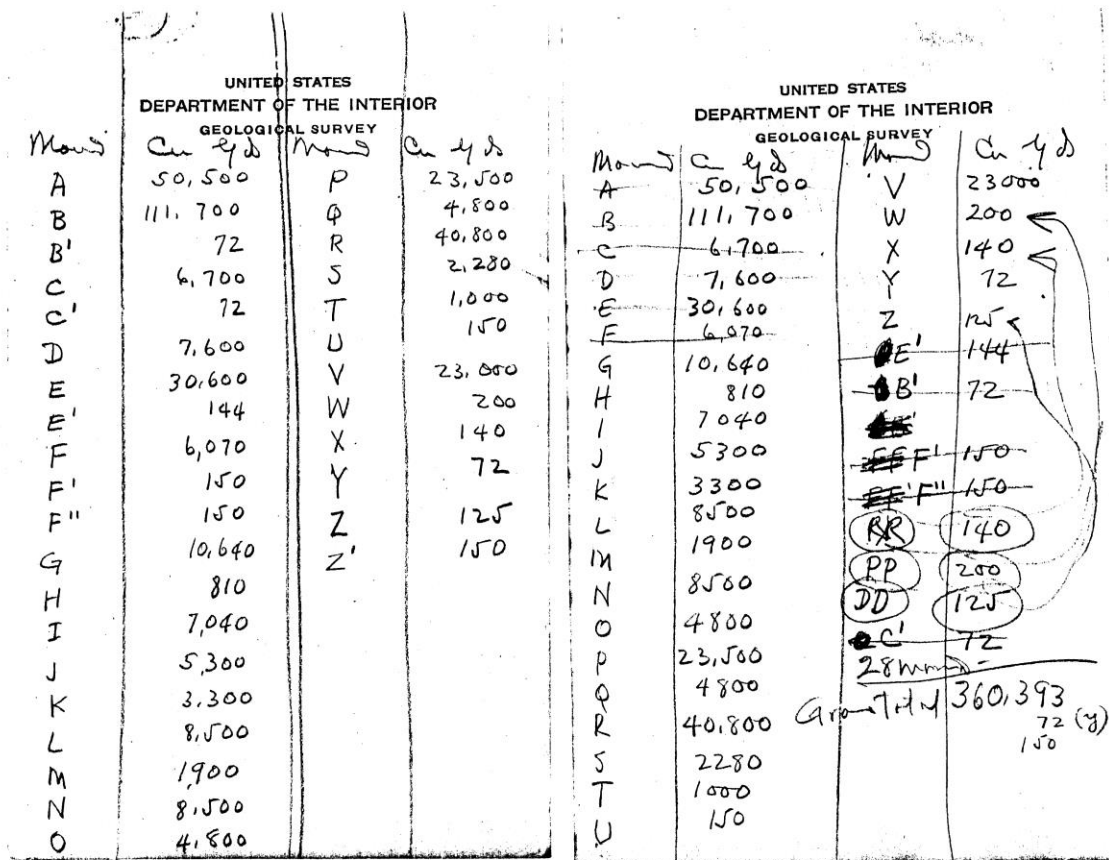


Figure 34. Walter B. Jones's two unpublished lists of Mound volumes for 32 mounds at Moundville. Volumes are listed in cubic yards (Jones 1937).

Mound B' and Mound C'

There are two partial mounds northwest of Mound B that first appear on the March 1930 map, and which are still visible today (Figure 35), although today they are almost entirely eroded into the adjacent ravine. Of the pair, Mound B' is most likely the one located to the south, closest to Mound B, whereas Mound C' is most likely the one located to the north, closer to Mound C. Thus, as noted above, Mound B' is not equivalent to the modern Mound B1. Neither Moore nor the Jones 1930 map has a mound labeled B' or C'. There is no known excavation or collection for either mound, nor do we have any confirmation that they are artificial constructions.

Mounds F1 and Mound F2

Mounds F1 and F2 are located northeast and east of Mound F. They both appear, unlabeled, on the March 1930 map. These mounds were designated Mounds F' and F'' on Jones's (1937) lists, with each having a reported mound volume of 150 y³ or 114.7 m³. There is no way to tell F' and F'' apart, as there is no map to accompany the Jones lists. They were first given their modern names in 1998 by Knight and Steponaitis (Knight and Steponaitis 1998:5). Most likely Mound F1, designated as "east of Mound F," was excavated in 1934 by the Alabama Museum of Natural History. It is more directly east of Mound F than is Mound F2. Six "field specimens" unassociated with burials and eleven burials were found in the "east of Mound F" excavation, that range in date from the Moundville I phase to Moundville III phase. Mound F2 apparently has not been investigated, although a large portion of its southwest side appears to be heavily disturbed.

Mound M1

Mound M1 is located almost 100 meters southwest of Mound M. Of the small mounds this mound has one of the more interesting history, as there have been debates if the mound was a midden mound or a constructed mound. It was not depicted on either Moore's map or the 1930 map. The area around Mound M1 was located on land not owned by the University of Alabama at that time, and that might be why the mound was not included.

For a short time between 1991 and 1998, the mound was labeled Mound Y as part of the 1992 mapping project (Partlow 1992), before it was renamed Mound M1 by Knight and Steponaitis (1998:5). However, some modern works still refer to it as Mound Y (Gage and Jones 2001; Thompsons 2011). The mound might correspond to the Mound Y on Jones's list (Jones 1937). There is a collection in the Moundville repository from 1937 for mound restoration work

on a Mound Y that uncovered six field specimens and no burials. It is unknown if this is Mound M1, but it might be, based on the volume given on Jones's list (Jones 1937) and the fact that Jones's Mound Y is otherwise not accounted for.

The area was excavated by Moore (1907:151) as "Field near Mound M." Moore describes it as "a conical mound of clay" (Moore 1907:151). Fifty-nine burials were found here by Moore, who described them as "none differing in form from those described as coming from the ground south of Mound D" (Moore 1907:151). The Alabama Museum of Natural History also dug in the area "Southwest of Mound M" in 1931, and as shown by the March, 1930 map this location is clearly equivalent to Mound M1 despite the lack of mention of any mound. Here they found 152 burials and 274 field specimens (AMNH n.d.). Pottery found as burial accompaniments in Mound M1 include vessels classified as Moundville Engraved, *vars. Havana, Hemphill, Northport, and Taylorville*; Carthage Incised, *var. Fosters*, and modes such as beaded rims, bird effigies, and pedestal bases (Steponaitis 1983:254-255). Most of these types and modes suggest use of the mound between early Moundville II and the early Moundville III phase. The other burial objects found include sheet copper, shell beads, a copper pendant, and a copper coated wooden disc (Moore 1907:210-212). Based on Moore's description, Peebles (1971:83) believed that Mound M1 was a burial mound where burials were first dug into the subsoil, and then a mound was constructed above them with more burials being dug into the completed mound.

In the late 1990s remote sensing and coring was done to five mounds in order to "identify the matrix of Mississippian mound structures by examining stratigraphic zonation" (Gage and Jones 2001:9). Ground penetrating radar was used on Mound M1 in 1998, with results that were mostly inconclusive (Gage and Jones 2001:84). There was very little differentiation between the

soil profiles. Four core samples were then taken from the mound (Gage and Jones 2001:84). Gage and Jones (2001:90) concluded that that Mound M1 was a deliberately constructed mound based on “ the presence of what appears to be a prepared surface beneath the tallest portion of the rise; the definite breaks in sediment stratigraphy; and the greater height of deposits in the central portion, as opposed to the northern and western lower portions.”

Shovel tests were excavated over the area around Mound M1 as part of the summer 2006 University of Alabama Museum Expedition (Thompson 2011:73-74). The shovel tests were approximately 30 x 30 cm wide and 50 cm deep, and the soil was screened through one quarter-inch screen (Thompson 2011:74). Density maps from the shovel test shows few artifacts recovered from the center of the mound but substantial amounts along the boundaries (Thompson 2011:87-92). Mound fill would be expected to contain few artifacts but flank middens, which are found along the slopes of many mounds, would have a higher concentration of midden. This artifact distribution could indicate that Mound M1 is an deliberately constructed mound and not a midden mound.

In 2010 magnetometer data was also collected over the area of Mound M1. In the imagery, an anomaly that likely represents a large square structure can be seen under Mound M1 (Walker and Blitz 2010). In contrast to Moore’s observation and Peebles’s reconstruction of events, Blitz (2008:51) believes Mound M1 to be an accretional midden mound. However, as noted, there is conflicting evidence.

Mound U

Mound U was first identified on Moore’s 1905 map, although he discussed his excavation of it under the heading “Ridge North of Mound R” (Moore 1905:118). The mound was not depicted on the March or April 1930 map. It was included on Jones’s later list as Mound U with

a volume of 150 y³ or 114.7 m³ (Jones 1937). The mound has continued to be labeled as Mound U on modern maps of Moundville.

Excavations on Mound U began with Moore in 1905. Moore dug 3 to 4.5 ft from the surface and still did not reach subsoil everywhere (Moore 1905:118). Moore describes the mound having “the usual midden refuse and other objects, including bits of mica, a number of rough discoidal stones, hammer-stones, pebbles, hones, pitted stones, and a great number of fragments of polished celts” (Moore 1905:119). Other artifacts found included sheet copper, a copper fishhook, the famous “duck bowl,” and a limestone panther effigy pipe. The mound was excavated again in 1930 and 1931 by the Alabama Museum of Natural History (Jones 1930). Between the Moore excavation and the Alabama Museum of Natural History excavations, a total of 116 burials have been found in or around Mound U. Most of these burials date to the Moundville III phase based on ceramic evidence (Steponaitis 1989). Knight and Steponaitis (1998:5), focusing on Moore’s account of the burials, suggested that Mound U might be a true “burial mound.” By this, they mean mounds that were built to commemorate the included burials (Knight 2010a:3). Blitz (2008:51), in contrast, focusing on Moore’s account of the deep midden, suggests that Mound U is an accretional midden mound.

Mound W

Mound W was located directly west of Mounds O and P. The mound was not given a letter designation by Moore, but was later identified as a mound in the 1930s (Knight and Steponaitis 1998:6; Peebles 1979:4; Walthall and Wimberly 1978:121-122). It was alternatively designated Mound PP, referring to nearby Mound P, on one of Jones’s two lists of mound volumes (Figure 34). Jones’s Mound W lists a volume of 200 y³ or 152.9 m³. The label Mound

W was first used in 1934 (Peebles 1979:29). It has continued to be labeled as such on modern maps, although the mound was completely excavated in the Depression era and no longer exists.

A small portion of the mound was excavated in the 1930. This excavation is labeled “B” on the 1930 map (Figure 35), which stands for “burials without artifacts.” In 1940, the remaining mound was completely excavated by Maurice Goldsmith, using a vertical slicing method (Peebles 1979:3). Although there are records of the soil profiles, there is no key, so there is no way to know if the soil was midden or mound fill. A total of 73 burials were recovered by these excavations. Christopher Peebles suggested that Mound W was a midden mound that accumulated on a natural rise (Walthall and Wimberly 1978:121). John A. Walthall and Steve B. Wimberly (Walthall and Wimberly 1978:122-123; Wimberly 1956) noted the possibility of Mound W’s relationship to the earliest occupations at Moundville, due the large amount of grog tempered pottery found there, which they associated with a Terminal Woodland occupation.

A total of 71 burials were documented in the mound (Johnson 2005:24). Based on Steponaitis’s grave lot seriation, Mound W was primarily used for burials during the Moundville I phase, with some later use in the early Moundville II through late Moundville III phases (Steponaitis 1983:133-161).

Later, Johnson (2005) examined the occupational history of Mound W using field drawings in connection with the burial seriation done by Steponaitis. Johnson (2005:48) interpreted the mound as indeed an accretional midden instead of a deliberately constructed mound, but found the mound was not raised over a naturally elevated surface. Barrier (2007) examined the storage jars of Mound W, and found that the mound had a similar ceramic assemblage as other residential areas of Moundville (Barrier 2007:67). Blitz also suggests that the mound is an accretional accumulation of midden (Blitz 2008:51).

Mound X

The modern Mound X, located near Mounds G and H, was a multistage platform mound of clay. The Mound X on Jones's list (1937) is not the same as the modern Mound X (see below). The modern Mound X was first discovered as a mound in 1983 by Joseph Vogel and Jean Allen from the University of Alabama when excavating a portion of Moundville's east palisade (Vogel and Allan 1985). In 2004, Blitz (2007:5) excavated Mound X to examine the stratigraphy and form of the mound and to recover artifacts to date the mound. Two palisade wall trenches, a midden-filled pit, and occupational surfaces were uncovered (Blitz 2007:15-16). Based on ceramic evidence, Mound X dates to the early Moundville I phase (A.D. 1120-1200), which predates the major mound group and the palisade (Blitz 2007).

As noted in Chapter 1, the Mound X given in Jones's (1937) unpublished lists of mound volumes is actually what is now known as Mound R1. We know this because of its alternative name on one of those lists, Mound RR, which refers to the nearest large mound. On these lists, it is assigned a volume of 140 y^3 or 109.3 m^3 .

Mound Z

Although there is no map with a mound labeled Mound Z, Jones's (1937) mound volume list gives a clue as to which one this could be. From the left side of one of the lists (Figure 34, right), there is a circle around "Mound DD" and an arrow pointing to Mound Z, indicating a redesignation. From this, it seems that Mound Z is located near Mound D. On Moore's (1905) map, he labeled an area northeast of Mound D with a W, although there was not a specific mound labeled in that area. On the March 1930 (Jones 1930) map, there is a mound depicted without a label in that same area northeast of Mound D. Moore's label W was dismissed, and

was later used for the mound west of Mound P. Thus the mound northeast of Mound D could be Jones's Mound Z. There is no collection or records of excavations for Mound Z.

Mound Z'

There is no map depicting a Mound Z', as the label only appears on Jones's (1937) lists. It is most likely located on the same landform as Mound Z, perhaps northeast of Mound D (see above), and is small, with a volume given as 150 y³ or 114.7 m³. There is no collection or record of excavation for Mound Z'.

Summary of the Minor Mounds

The information from the minor mounds is scarce and uneven, but what is available hints at their possible diversity. Unlike the other mounds, so far as is known, Mound X dates to the early Moundville I phase. Mounds U and W are possible midden mounds and were not deliberately constructed mounds of clay. Mound M1 was called a deliberately constructed mound by Moore, and core samplings from the mound have revealed mound fill. Other works refer to it as being an accumulation of midden. Mound R1 is an artificially constructed mound of clay similar in structure and artifact assemblage to the plaza-periphery mounds. The other minor mounds, B1, B', C', F1, F2, Z and Z', have little to no available information. It is impossible to tell whether they were accretional midden mounds, deliberately constructed platform mounds of clay, or dedicated mortuary mounds.

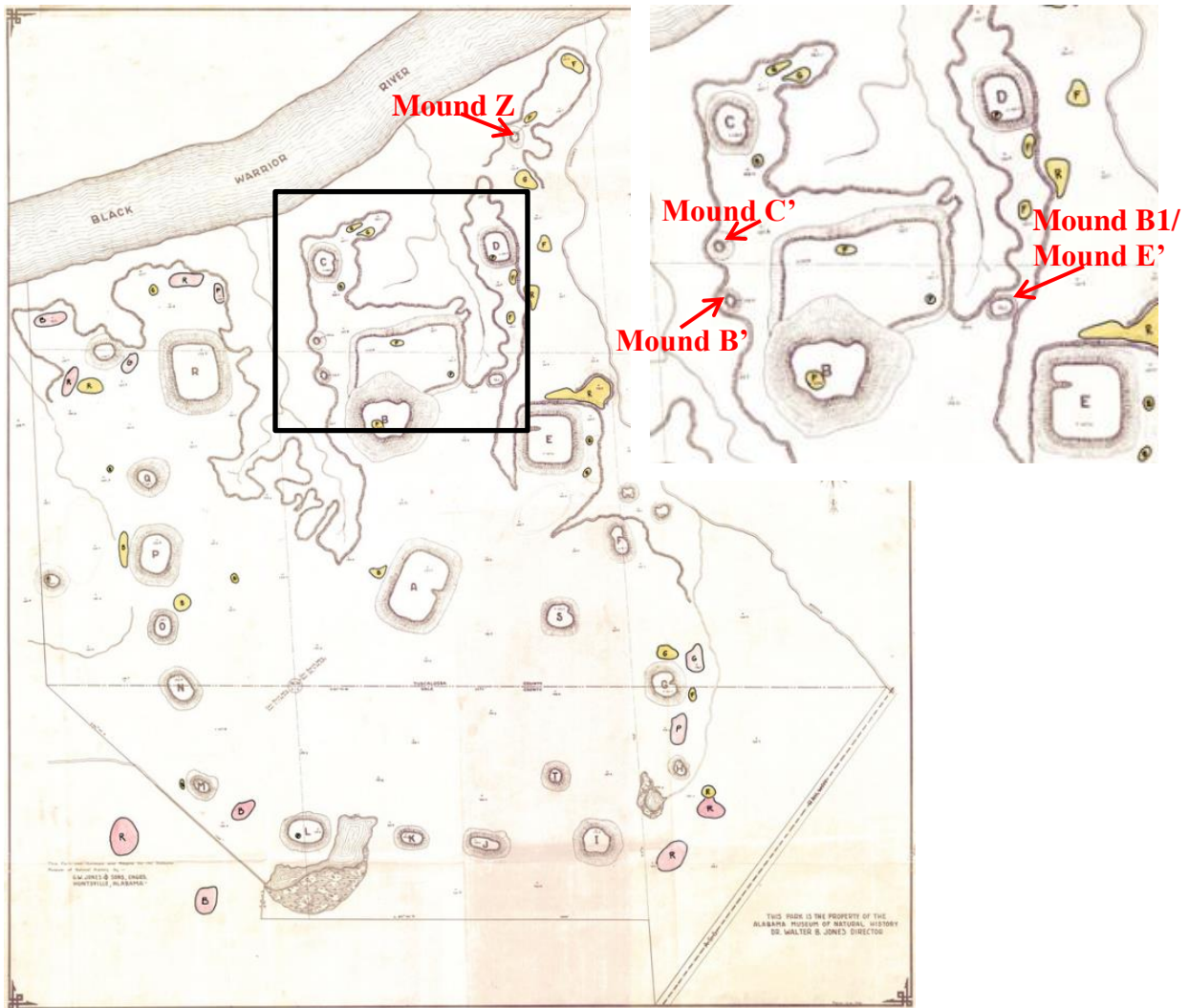


Figure 35. Map surveyed for the Alabama Museum of Natural History by G.W. Jones & Sons in April 1930, with close-up of the unnamed mounds located near Mounds B and C. R, G, and P refer to the quality of burials found (R for rich, G for good, and P for poor). Yellow represents 1930 and red represents 1931 excavations.

Conclusion

Recent excavations at Mound R1 have demonstrated that all minor mounds at the Moundville site cannot be grouped together in the same functional category. It has been hypothesized some minor mounds were accretional midden mounds, and were not purposefully constructed mounds. Although some of the minor mounds are apparently completely composed

of accumulated midden from dense residential occupation, Mound R1 is not. Mound R1 is a multi-stage platform mound constructed of clay, with evidence of perishable architecture on the mound during each major episode of construction. This study of the construction sequence and material remains from Mound R1 demonstrates that the history of such mounds and their surroundings can be quite complex, and highlights the need for preservation and further exploration of these small mounds. In addition, the small terrace around Mound R1 seems to have supported another residential group previously unrecognized at Moundville. The only difference between this residential group and the other known 12 at Moundville is that the one west of Mound R is associated with a small platform mound. The addition of the mound could say something about the nature of the residential groups, possibly that they have some sort of ranking. The relationship of the residential groups to these minor mounds requires further investigation.

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