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EXCAVATIONS AT MOUND B, ETOWAH: 1954-1958

ADAM KING

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EXCAVATIONS AT MOUND B, ETOWAH: 1954-1958

By

Adam King
Savannah River Archaeological Research Program
South Carolina Institute of Archaeology and Anthropology
University of South Carolina

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CHAPTER 1

INTRODUCTION

The Etowah site is one of the best-known Mississippian period mound centers in the Southeast and one of the most impressive in the state of Georgia. Over a century of archaeological research has been conducted at the site, but unfortunately much of that work has never been fully analyzed or published. This volume presents the results of excavations conducted by Arthur R. Kelly on the west side of Etowah's Mound B. While other excavation projects conducted at Etowah may have been more extensive or investigated more intriguing features at the site, Kelly's work at Mound B produced important information for understanding the occupational history of Etowah and the use of one of the site's larger mounds.

In writing this report, I set out to accomplish two objectives. The first was to provide an account of the excavations conducted by Kelly. Although the work was completed in the 1950s, no final report was ever attempted. My second objective was to use the large pottery collections from deeply stratified deposits to date the construction history of Mound B and refine the cultural sequence for the Etowah site. While others had examined some of these pottery collections (see Hally and Langford 1988; Frank Schnell personal communication 1990), no extensive analysis of the collections has been reported.

It should be clear at the outset that this is not a complete description of what Kelly's crews did and it is not a complete record of what they recovered. In part, such an account would not be possible because the documentation from the excavations is clearly incomplete. Also, my primary object in completing this project was to date Mound B and refine the Etowah site sequence, so I did not analyze the many other classes of artifacts recovered. There is a great deal more to be learned from these excavations through the analysis of the faunal remains, human skeletal remains, and lithic artifacts recovered by Kelly's crews.

Site Description

The Etowah site is a large, multi-mound Mississippian period town located on the Etowah River in Bartow County, Georgia (Figure 1). There are a total of six known earth mounds at the site, designated Mounds A through F. Mound A is the largest measuring approximately 61 feet in height. It has a prominent ramp projecting from its eastern side as well as a lower terrace attached to its southern side. Mounds B and C are each large, flat-topped pyramidal mounds measuring 22 and 18 feet tall respectively. Of the two, only Mound C originally had a ramp, which also projected from its eastern flank. The smallest mounds at the site (D, E, and F) are rectangular to oblong platforms that each measure about 10 feet high. To the south, the site is bordered by the Etowah River, but on all other sides it is surrounded by a series of borrow pits connected a large ditch. According to Larson (1972), there was once a palisade with bastions just inside of it, indicating that the ditch and palisade served to fortify the site. This ditch encloses 21

hectares and apparently extended to the river on both sides before it was partially filled for agricultural purposes.

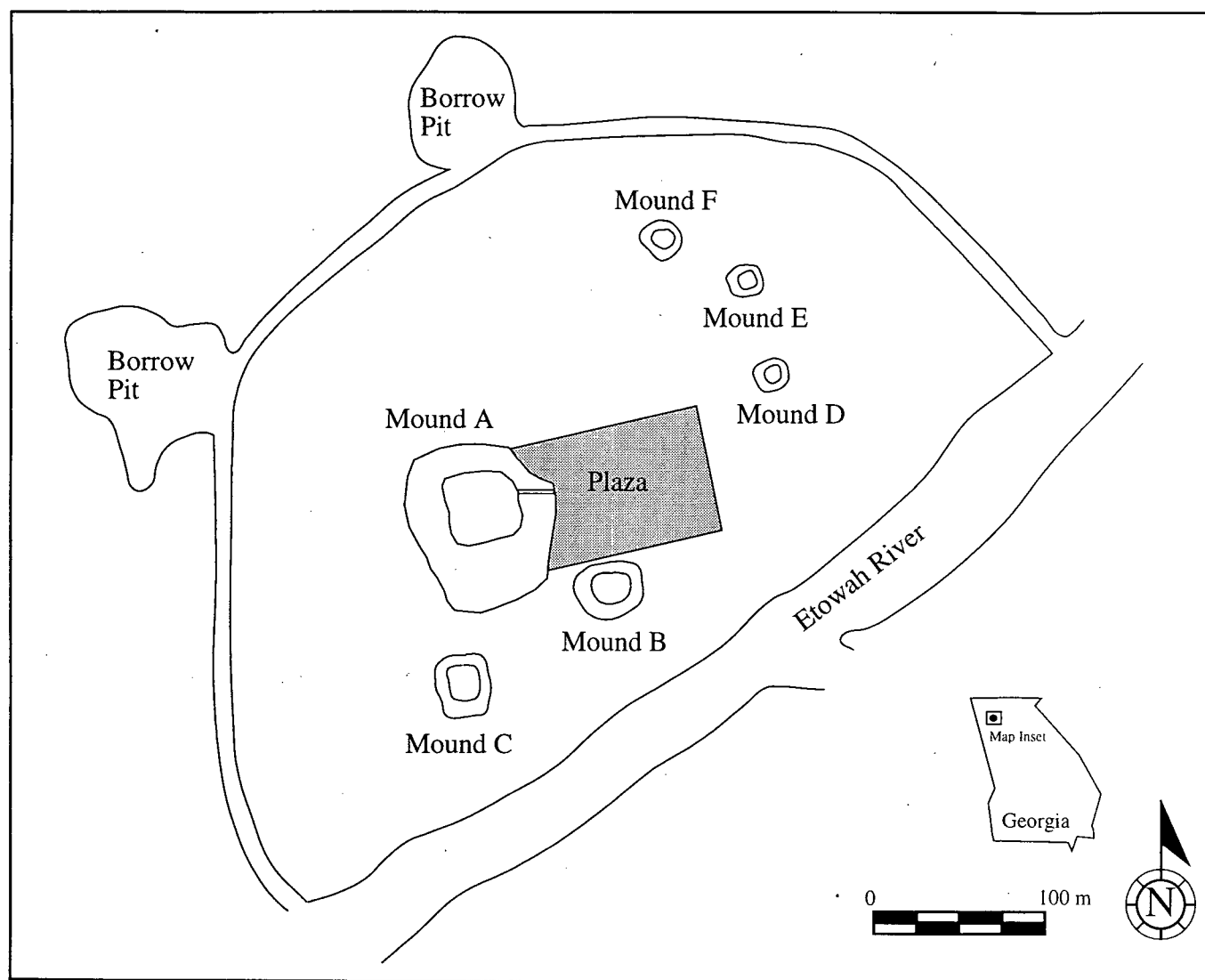


Figure 1. Plan Map of the Etowah Site

Environmental Setting

The Etowah site is located in the Ridge and Valley physiographic province of Georgia (Figure 2). This province consists of a series of long, parallel valleys separated by narrow ridges that run from northeastern Alabama up the eastern seaboard to New Jersey. Within the Ridge and Valley, Etowah is located in the Great Valley District. The Great Valley is a broad valley drained by the Upper Coosa drainage that includes the Conasauga, Coosawattee, Oostanuala, and Etowah

Rivers. The Great Valley lies on the eastern edge of the Ridge and Valley province, and is bordered to the east by the Piedmont and the Blue Ridge provinces, and to the south by the Piedmont. The valley floor is primarily open with only a few scattered ridges and hills (Clark and Zisa 1976), and is underlain by sedimentary deposits of Cambrian and Ordovician age such as shale, dolomite and limestone (Wharton 1978).

The vegetation of the Great Valley, prior to modern agriculture, was dominated by an oak-hickory climax forest (Wharton 1978). In these forests prehistoric people would have found a variety of oaks, chestnuts, hickories, and maples, as well as white-tailed deer, bear, turkeys, and numerous other small to medium-sized mammals. In addition, rivers and streams provided abundant aquatic wildlife such fish, turtles and shellfish. Prior to the construction of reservoirs, species of anadromous fish such as shad and sturgeon made seasonal migrations up streams.

The Great Valley is credited with having some of the most productive agricultural soils in the state, with the best being located along the alluvial bottoms of river valleys like the Etowah River valley (LaForge et al. 1925). The western half of the Great Valley is dominated by soils of the Montevallo-Klinesville-Rarden association, while the Christian-Clarksville-Fullerton association soils cover the eastern half. Along the Etowah River, Etowah loam is found on more elevated landforms, Etowah fine sandy loam on slightly lower land forms, and Huntingdon fine sandy loam in the floodplain (USDA 1926).

The climate of Bartow County is fairly mild, with long, hot summers and short winters (USDA 1926). On average there are about 200 frost-free days each year in the county, with killing frosts occurring as late as the middle of April and as early as the end of October. Snow is common in the winter although accumulations are rare. Rainfall is moderate, with an average annual total of about 50 inches, but this can vary significantly from year to year. Winter is the wettest season with an average of 5 inches of rain falling per month, and autumn is the driest with average just over 3 inches per month. Most of the rainfall comes in the form of summer thunderstorms, which are usually fairly localized, highly variable, and often severe.

Physical Location

As Larson (1971b) and Hally (1989) have observed, the Etowah site appears to be uniquely located to take advantage of the quality and variety of natural resources available in the immediate area of the site. Etowah is situated on the bank of the Etowah River 4 kilometers below where the river flows out of the Piedmont and into the Great Valley (Figure 2). Thus it is situated such that its inhabitants had access to resources in both the Piedmont and Ridge and Valley provinces.

One of the most important resources that the Great Valley provides is productive agricultural soil. Etowah is located on the first substantial expanse of alluvial bottomland below where the river flows out of the Piedmont and into the Ridge and Valley. The boundary between the Ridge and Valley and the Piedmont is formed by the Great Smoky or Cartersville Fault. This is an overthrust fault that was created when Piedmont rocks pushed westward over the folded rocks of

the Ridge and Valley (Hunt 1967; Hurst 1970). To the south and east of the fault, the topography is rougher and higher in elevation than that of the Great Valley. When the Etowah River flows

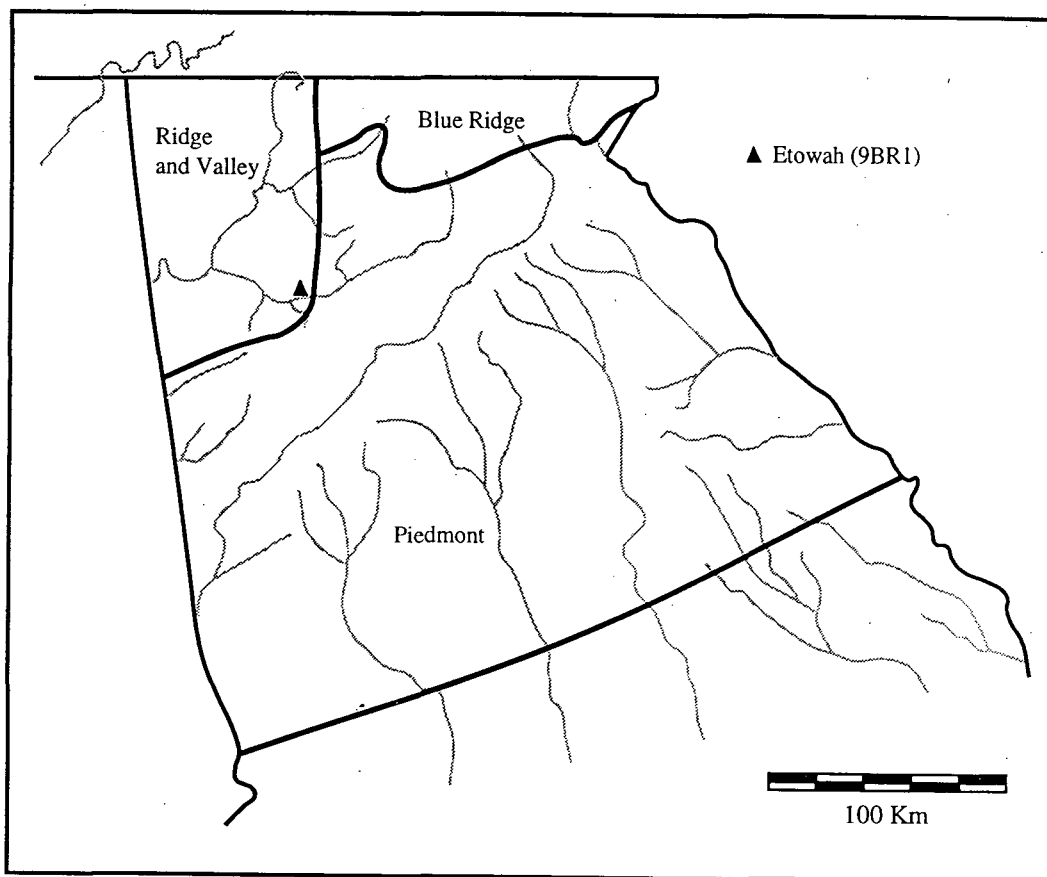


Figure 2. The Physiographic Setting of the Etowah River Valley

out of the Piedmont and into the Great Valley the gradient of the river decreases substantially and the width of the floodplain increases to 500 meters. Flooding is more common just below the fault and it is in this area that sediments exclusively derived from freshly weathered metamorphic rocks of the Piedmont are first deposited. Consequently, these are some of the most productive agricultural soils in the county (USDA 1926).

Just a few kilometers up the Etowah River from the Etowah site there are resources important to the prehistoric inhabitants of the area that were not available in the Great Valley. The rocks of the Ridge and Valley are sedimentary formations that include the cherts so heavily used for stone tool production (Goard 1979). In contrast, the rocks of the Piedmont are igneous and metamorphic formations, and from these come prehistorically important minerals like galena, ochre, mica, and graphite, as well as raw materials used to make ground stone tools such as granites and schists. Also, there is a 9-kilometer stretch of the Etowah River just east of the fault that was filled with islands and shoals before the construction of the Allatoona Reservoir.

Aquatic resources like fish and shellfish are abundant in areas of shoals, and as Shapiro (1990) has argued, these would have been productive resource areas heavily used by the inhabitants of the area.

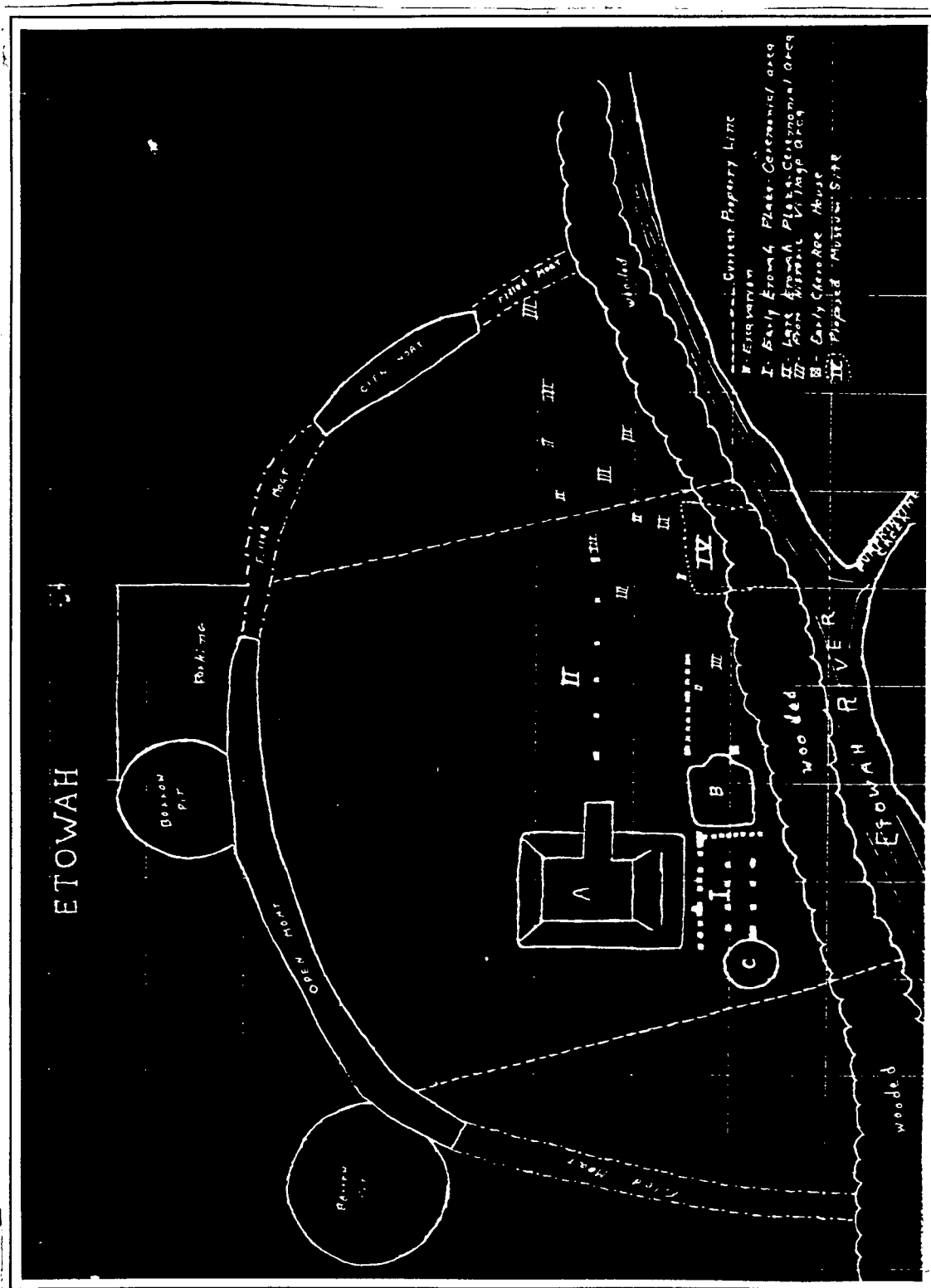
Previous Excavations at Etowah

Although amateur collecting and agricultural disturbance have taken place on the site since the early nineteenth century, professional archaeology did not begin until 1883. John Rogan, an employee of Cyrus Thomas of the Smithsonian Institution's Mounds Division of the Bureau of American Ethnology, was the first archaeologist to test Etowah (Thomas 1894:292-311). Rogan excavated a portion of the southern end of Mound C, a 12-foot square unit into the center of Mound B, and portions of three of the smaller mounds. He also excavated along the eastern side of the mounds and on the northern bank of the Etowah River. Rogan recovered burials containing copper and shell items from Mound C. He also found evidence for a house on a summit of Mound B, and briefly described stratigraphy for all excavations. Unfortunately, Rogan's excavations focused on finding burials and special artifacts; thus little attention was paid to stratigraphy or stratigraphic recovery of artifacts.

In 1925, Warren K. Moorehead, working for the Phillips Academy of Andover, Massachusetts, undertook extensive excavations at Etowah (Moorehead 1932). Moorehead's work included very extensive excavations of Mound C, auguring and testing of Mound B, and extensive trenching of village areas east and west of the mounds. He found burials with high status items in Mound C, more evidence of probable summit structures on Mound B, and numerous burials and possibly as many as six or more houses in the village areas. Again, the focus of these excavations was on burials and burial items, and digging was done unsystematically with little regard for stratigraphic controls.

While working on a survey of northern Georgia for the University of Georgia and the Works Progress Administration, Robert Wauchope (1948, 1966) performed limited testing at Etowah in 1939 or 1940. According to Wauchope (1966:266), the site was in cultivation, and the area he was given permission to test was described as "...only a few square yards at the down river end of the ravine, a spot not only poor in quantity of remains, but practically ruined from a stratigraphic point of view because of river overflows." Wauchope 1966: 255) chose four areas to be tested "...by carefully picking undisturbed sections, sometimes only a foot or two square." His purpose was to obtain a stratified ceramic collection that could be used to help characterize the ceramic sequence of the area. Because of the limited scale of these excavations, little new information beyond details of the Etowah site ceramic sequence was gathered.

In 1953 William H. Sears, working for the Georgia State Historical Commission and the University of Georgia, undertook the most systematic excavations performed at the site up to that date (Sears 1958a). His work included extensive testing in the area between Mounds B and C, and east and north of Mound B, starting from the base of Mound A (Figure 3). He produced a ceramic sequence for the site, identified an artificially built plaza north of Mound A, defined village areas between Mounds B and C and to the east of Mound B, and excavated a late Lamar



structure near the southeastern corner of Mound B. Unlike previous excavators, Sears maintained stratigraphic control of artifacts and emphasized understanding the site layout and chronology.

Beginning in 1954 Lewis H. Larson, working for the Georgia State Historical Commission, and Arthur R. Kelly, working for the University of Georgia, began extensive excavations at Etowah (Kelly and Larson 1957; King 1991; Larson 1971a). Larson concentrated on excavating the remains of Mound C, while Kelly worked adjacent to Mound B. Larson's work produced one of the most spectacular assortments of Southeastern Ceremonial Complex burial items in the Southeast (Larson 1971a). In addition, Larson uncovered evidence for one summit structure and four pre-mound buildings. The results of Kelly's excavations will be summarized in this report (see also King 1991).

While working for the Georgia State College and West Georgia College, Larson continued excavations at Etowah in 1962, 1964, 1965, 1972, and 1973. During that time, he concentrated on a 6 hectare Lamar village east of the mounds, the plaza area directly east of Mound A, and the surrounding ditch. Larson uncovered burials and domestic structures in the village area, and tested Mound D (Hally and Langford 1988:18; King 1996; Larson 1972). He also excavated a trench across the ditch that produced a recorded profile of the feature and evidence for a palisade with possible bastions immediately inside the area enclosed by the ditch (Larson 1972).

More recently, John R. Morgan (1980) tested an area north of the ditch in preparation for the construction of the current museum in 1980, while in 1987 Morgan R. Crook and students from Georgia State University conducted intensive surface collections between Mounds D, E, and F and the ditch. A crew from the Georgia Department of Natural Resources tested areas at the base and on the summit of both Mounds A and B in 1994 in preparation for the construction of new visitor access stairs (King 1995). In 1995 another DNR crew excavated a block at the northern edge of the ditch in preparation for replacing the bridge crossing the ditch.

The Etowah River Valley Ceramic Chronology

Since one of the main goals of this report is to refine the Etowah site chronology, the basis for that sequence is summarized below. The Etowah site phase sequence, first developed by Sears (1958a) and Kelly and Larson (1957), is by necessity based on the ceramic chronology formulated for the wider Etowah River valley (see Table 1). That phase sequence was developed largely through the efforts of Caldwell (1957), Sears (1958a, 1958b), and Wauchope (1948, 1950, 1966), and draws heavily on survey and excavations conducted in the Allatoona Reservoir area.

The Etowah period traditionally has been divided into four phases, with each of the four phases being dominated by Etowah Complicated Stamped and Etowah Plain types. Differences in the frequency of tempering agents, certain minority types, and complicated stamped motifs (Figure 4) help distinguish one phase from another.

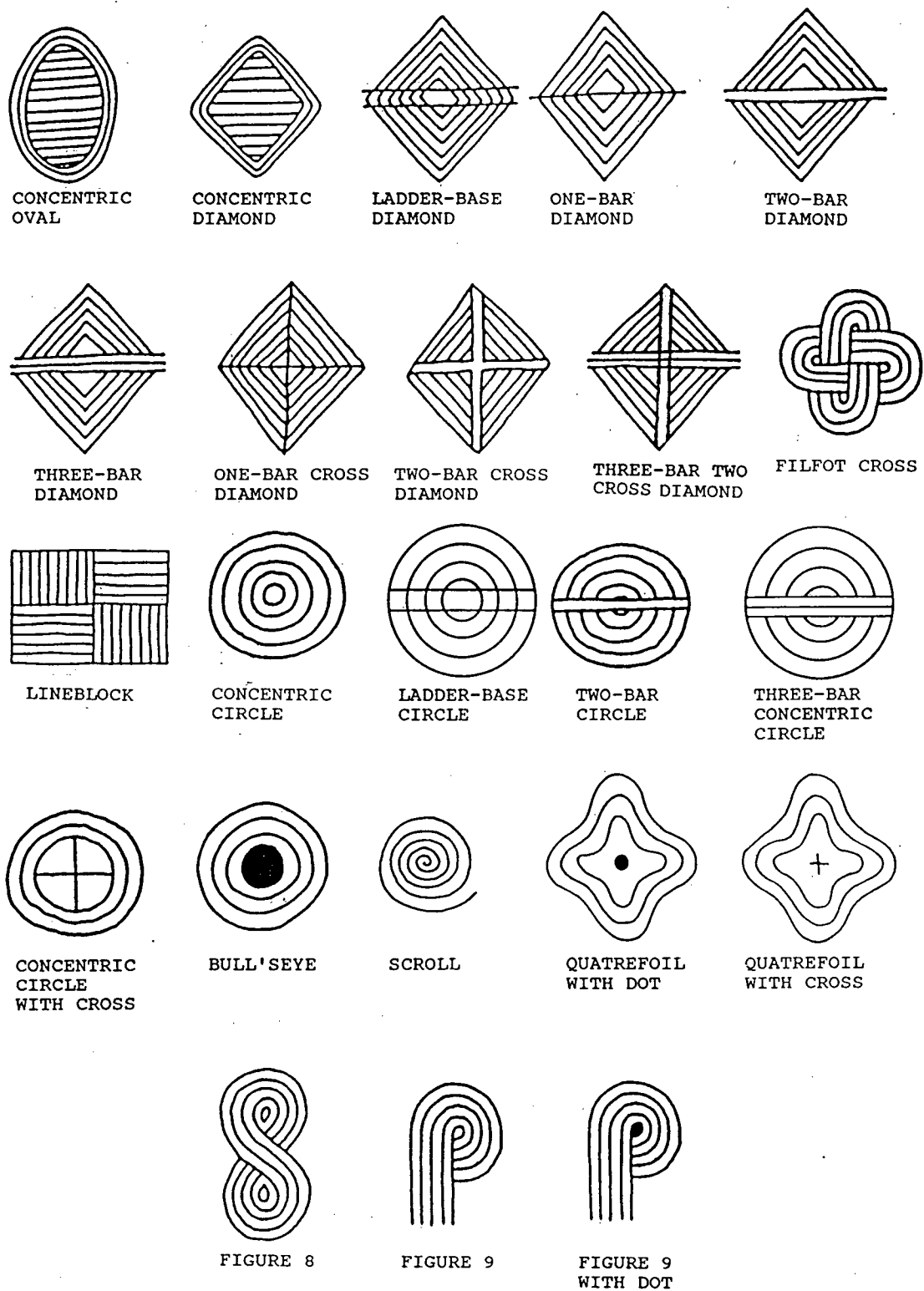


Figure 4. Complicated Stamped Motifs

TABLE 1

Etowah River Valley Phase Sequences

Period	Etowah (Sears 1958a)	Etowah (Kelly and Larson 1957)	Allatoona Reservoir (Ledbetter et al. 1987)
Late Mississippian	Pumpkinvine	Classic Lamar "Early Lamar"	Brewster Stamp Creek
Middle Mississippian	Wilbanks	Wilbanks	Savannah/Wilbanks
Early Mississippian	Etowah II-IV	Etowah II-IV	Etowah I-IV

The earliest of the Etowah period phases, Etowah I, actually was defined by Caldwell (1953, see also 1957: 326-331) using collections from the Buford Reservoir survey on the Chattahoochee River. This phase is dominated by Etowah Complicated Stamped and Etowah Plain pottery, with the ladder-base diamond and line-block motifs occurring exclusively on stamped vessels.

The Etowah II phase, defined by Sears (1958b:149-154) during his excavation of the Wilbanks site (9CK5), contains stamped motifs and pottery types not found in the preceding phase. During this phase, the two-bar diamond motif first appears, and occurs with the ladder-base diamond and line-block motifs. At the Wilbanks site, Sears found that shell tempering increased with the appearance of the shell-tempered variant of Etowah Complicated Stamped, Hiwassee Island Complicated Stamped, and a shell tempered variant of Etowah Plain that he called Sixes Plain. Etowah Burnished Plain, Etowah Polished Black, and Etowah Red Filmed also appear as minor types (Sears 1958b).

The Etowah III phase, as recognized at Wilbanks (Sears 1958b:154-160) and Stamp Creek (9Br139) (Caldwell 1957:334-340), includes all of the Etowah II characteristics, with a few additions. The two-bar diamond becomes the dominant stamped motif, line-block continues to be used, and the ladder-base diamond decreases in frequency. The filfot cross appears for the first time, as do crossbar diamonds. Also, Hiwassee Island Red on Buff and Etowah Incised appear. Shell tempering drops in frequency (Caldwell 1957:334), and limestone appears in small proportions (Caldwell 1957:335; Sears 1958:158).

In the Etowah IV phase, according to Caldwell (1957:341-342), Etowah Complicated Stamp motifs are limited almost exclusively to two and three-bar diamonds and the filfot cross, with the filfot cross being dominant. The pottery of this phase is thicker walled with larger stamping than

fillet cross being dominant. The pottery of this phase is thicker walled with larger stamping than in the earlier phases. Also, ceramics appear that exhibit the figure 8 and figure 9 motifs and are defined as Savannah Complicated Stamped. Shell tempering is absent except for Hiwassee Island Red on Buff, and some of the Savannah Complicated Stamped and Etowah Plain sherds are limestone tempered. Caldwell defined this phase using a collection from a single feature at the Woodstock Fort site (9Ck85), but he also recognized it at 9Co82.

In the following Savannah period, Caldwell (1957:343-352) and Sears (1958b) each recognized what they saw as two distinctive pottery complexes in the Etowah valley. Caldwell's Savannah period collections are dominated by Savannah Complicated Stamped and Savannah Plain pottery, while the most common stamped motifs are the figure 8, figure 9, concentric circle and other circle variants. Sears' (1958b:172-176) excavations at Wilbanks led to the definition of the Wilbanks period. The major types include Wilbanks Complicated Stamped, Wilbanks Plain, and Sixes Plain. Complicated stamped motifs include the bulls-eye, quatrefoil with dot, elongated u with crossbar, and scroll motifs.

The relationship between Caldwell's Savannah and Sears' Wilbanks is difficult to understand, and this is largely the result of similarities in the two phase definitions. Both phases are comprised of two main types of pottery, complicated stamped and plain. Sears does include a shell tempered plain pottery, Sixes Plain, in the Wilbanks phase. While there is no shell-tempered equivalent in Caldwell's Savannah phase, shell tempered plain pottery was found associated with Savannah collections at Stamp Creek (Caldwell 1957:348). Sears (1958b:174) also includes Wilbanks Red Filled in his Wilbanks phase, but he refers to it as "...very decidedly a minority ware."

The characteristics of complicated stamping in the Wilbanks and Savannah phases are very similar also. On Wilbanks Complicated Stamped sherds the stamping is "deep and definite, but with much over stamping" (Sears 1958b:193). On Savannah Complicated Stamped sherds some stamped designs were "massive, bold and very clear cut" while others were "fine and delicate," however "a considerable amount of over stamping is seen" (Caldwell 1957:25).

Because of the similarity in their definitions, some researchers have had difficulty distinguishing between Savannah and Wilbanks collections, leading to the designation Savannah/Wilbanks (Ledbetter et al. 1987). Just as complicated is the relationship between the Savannah period phases and the preceding phases of the Etowah period. There are marked differences in the pottery of the two periods. The Savannah assemblages emphasize curvilinear motifs that are large and boldly stamped, while the Etowah period motifs are predominantly rectilinear, narrower and finely executed. These differences were perceived to be so great that they lead Sears to postulate an intrusion of foreign people, an idea supported by Fairbanks (1950) as well.

In the Etowah River valley chronology, two phases have been recognized as belonging to the Lamar period, both defined by Caldwell (1957:33-35) in the Allatoona Reservoir. The early Lamar Stamp Creek phase is represented by collections from the Stamp Creek site (9Br139), and

assemblages assigned to this phase include Lamar Complicated Stamp pottery and Lamar Plain. Lamar Complicated Stamped is poorly executed, heavily over stamped, and occurs on flaring rim jars. Some of the jars exhibit a distinct shoulder break and long neck, while others have a short neck. Rims on the majority of jars are thickened and pinched, but some are peaked and noded. Lamar Plain occurs mainly as pinched rim jars and bowls. Both types are grit tempered.

The late Lamar Brewster phase (what Sears called Pumpkinvine) also was defined using collections from Stamp Creek, as well as pottery from the Chambers site (9CK23) (Caldwell 1957: 361-364). This phase is similar to the preceding Stamp Creek phase, except that Lamar Incised appears for the first time, pinched rims are wider, and long-necked jars are absent. Complicated stamped motifs are poorly executed, heavily over stamped, and occur on jars with thickened and pinched rims. Lamar Incised occurs primarily on carinated bowls and flaring rim bowls, while Lamar Plain vessels are mainly pinched rim jars and bowls. Grit is the dominant tempering agent.

Recent Revisions of the Existing Sequence

More recently, collections from Etowah and other sites in northern Georgia were re-analyzed as part of the preparation of two planning documents (Hally and Langford 1988; Rudolph and Hally 1986). Those collections examined from Etowah and other sites located in the Ridge and Valley province have lead Hally and co-authors to suggest some refinements to the Etowah valley phase sequence. For example, in the collections they analyzed, Hally and Langford (1988:44) found no convincing evidence for the existence of Etowah I or Etowah IV assemblages, which they considered to be vaguely defined and not well represented in the archaeological record. Instead they proposed that the Etowah period be divided into two phases: Early and Late Etowah.

The Early Etowah phase closely resembles Sears' Etowah II phase, but it is clear that in the Ridge and Valley these earliest Etowah period collections are dominated by shell-tempered and limestone-tempered types (Hiwassee Island). It is also apparent that the ladder-base diamond motif is the most common in Early Etowah phase collections. The Late Etowah phase matches Caldwell's definition of Etowah III. Shell-tempered types decrease in frequency, and the two-bar diamond motif becomes more common than the ladder-base diamond. Also, both the filfot cross and the type Etowah Incised make their first appearance.

Like Sears (1958b) and Fairbanks (1950), Hally and colleagues (Rudolph and Hally 1985:451; Hally and Rudolph 1986:53-57; Hally and Langford 1988:56-61) have noted the clear differences between Etowah and Savannah period pottery assemblages in the Etowah valley. Instead of invoking migration as the explanation, Hally and Rudolph (Hally and Rudolph 1986:53-57; Rudolph and Hally 1985:462) argue that Savannah period pottery types developed in situ out of Etowah period types throughout northern Georgia. They base their argument on early Savannah period phases such as the Beaverdam phase of the upper Savannah River and the Stillhouse phase of the Oconee River, which clearly contain ceramics transitional between Etowah and Savannah assemblages.

TABLE 2

Etowah Valley Phase Sequence after Hally and Langford (1988)

Date	Period	Phase
AD 1450 - 1575	Late Mississippian	Brewster
AD 1350 - 1450	Late Mississippian	Stamp Creek
AD 1300 - 1350	Middle Mississippian	Wilbanks
AD 1250 - 1300	Middle Mississippian	
AD 1100 - 1200	Early Mississippian	Late Etowah
AD 1000 - 1100	Early Mississippian	Early Etowah

The absence of a clearly defined and well represented phase in the Etowah valley, possibly similar to Caldwell's Etowah IV phase, suggest there is a gap in the occupation of the valley during the early Savannah period. In looking at pottery collections from the Ridge and Valley portion of the Etowah river valley, Hally and Langford (1988) found no evidence for early Lamar period occupations at any sites, including Etowah. This suggests that there was another gap in the sequence of the Etowah valley during the early Lamar period.

The work of Hally and colleagues suggests that the phase sequences for Etowah and the Etowah valley listed in Table 1 are in need of refinement. As Table 2 shows, those refinements would include the use of the Early and Late Etowah phase terminology. They would also include the recognition of a gap in the valley sequence both before and after the Wilbanks phase. Subsequent chapters of this report will evaluate the validity of these suggested revisions using Kelly's Mound B pottery collections.

CHAPTER 2

EXCAVATIONS, STRATIGRAPHY, AND FEATURES

Between 1954 and 1958, Arthur R. Kelly conducted excavations in and adjacent to Mound B at Etowah. Deeply stratified cultural deposits and a number of interesting architectural features were uncovered, but little information concerning them has appeared in print. In fact, only one paper has been published, a popular article (Kelly and Larson 1957) written before the final field season was completed. In this chapter I will describe and attempt to interpret the stratigraphy and cultural features uncovered by Kelly.

Unfortunately, description of the strata and features encountered in the Mound B excavations was made difficult by the incomplete nature of the field records. While I had access to notebooks from four of the five seasons, it is clear that I did not have the complete set of notes. By far the notes from the 1956 and 1958 seasons were the least complete. Much useful information came from the 110 maps and profiles in the document collection. Unfortunately, many were incomplete or redundant. Only three profiles cover distances greater than ten feet, and only a small percentage of the total excavated area was represented by plan maps. Also, a vertical datum was indicated on some of the profiles, but no absolute elevations were given, and I could not determine if the same elevation was represented in every case. The collection also contained 81 slides and 140 photographs, which were taken mainly during the 1954, 1956, and 1957 seasons. All of this information was supplemented by the notes and recollections provided by James A. Brown, Lewis H. Larson, Daniel F. Morse, Frank T. Schnell, and Philip E. Smith.

I found the most consistently available and detailed information about the provenience of artifact collections on the paper labels attached to artifact storage boxes or written on artifact bags. In the absence of complete field records, I relied heavily on these labels in determining the provenience and stratigraphic relationship of artifact collections and some features. Because of the general lack of provenience information, in many cases it was only possible to locate specific features and strata to the nearest five-foot square. More detailed information simply was lacking.

Summary of Excavations

Kelly's excavations began in the summer of 1954, a year after William H. Sears carried out extensive testing in the area between Mounds A, B, and C and the area east of Mounds A and B (Figures 5 and 6). According to Kelly's field notes, the objectives of the excavations were to determine the amount of erosion from Mound B, examine all habitation levels, and take representative collections of artifacts from each. Although Kelly did attempt to excavate into the mound during the 1954, 1955, and 1956 seasons, he expended very little effort on mound excavations in the later seasons. According to Kelly's assistant in 1957, James A. Brown (personal communication 1988), the initial attempts to explore the mound were abandoned because the profiles were getting dangerously high. Therefore, after 1956 the excavations were

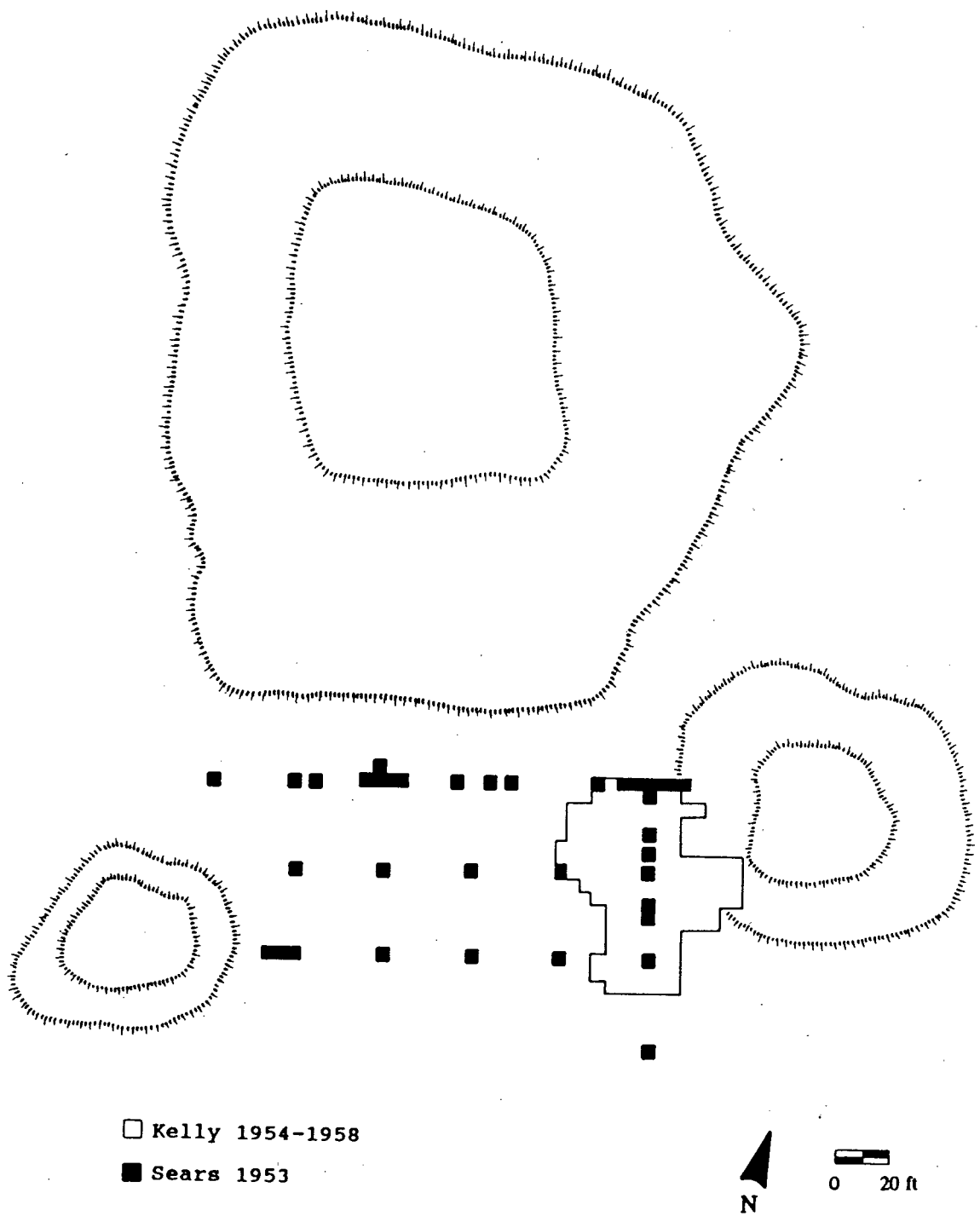


Figure 5. Location of the Excavations of Sears and Kelly

directed to the north where another attempt was to be made to explore the mound. The ground adjacent to Mound B was higher along the northwestern edge, and Kelly hoped to be able to safely excavate into it there. Most of the excavations in these later seasons, however, concentrated on investigating structural features and midden-filled pits uncovered west of the mound during earlier seasons. Figure 5 shows the extent of the excavations by the end of the 1958 season.



Figure 6. View of 1954 Excavations from the Summit of Mound B, Mound C Excavations in the Background

During each of the five seasons, Kelly's crew included an assistant and a small number of students. Excavation units consisted of five-foot squares or multiples of five-foot squares. Many large features extended over several adjacent squares and were excavated as single units. Most of the excavation was conducted in natural levels, while thick strata were dug in arbitrary levels. Workers did not use screens; all artifacts were trowel-recovered. Kelly did make a concerted effort to use natural stratigraphy in the collection of ceramic samples. It appears that Kelly and

his assistants took notes, while members of his crew and Larson's crew from Mound C helped in drawing maps and taking photographs.

Instead of establishing a new grid system, Kelly seems to have superimposed his grid over the one used by Sears the previous season (Figure 5). Specific grid points were identified using a central line and distances to the left or right of that central line. This line was a series of grid points that Sears began at the coordinates 00 and continued in a straight line 21 degrees south of west. Apparently Sears aligned the grid to the axes of the mounds rather than the cardinal directions. While Kelly used Sears' grid orientation, for some unknown reason, he did not use the same numbering system for the coordinates. The field notes do not mention the use of Sears' original datum point or any other datum point in establishing the grid for Kelly's Mound B excavations.

Stratigraphy

By the end of the 1958 season, Kelly's excavations had exposed an irregular area measuring, at its maximum, 75 feet east to west and 85 feet north to south (Figure 7). During the excavations, both mound and non-mound strata were exposed, but most of the area investigated was located away from the mound slope between Mounds B and C. The next section describes the mound and non-mound stratigraphy as they can be reconstructed from the available information.

Mound

Kelly's excavations did not enter the mound far enough to expose all of its construction stages, especially those of smaller, earlier mounds. They did however expose several of the last stages of the mound. Figure 8 is an east-west profile extending from the western edge of the mound out into the level area between Mounds B and C. Figures 9 and 10 are photographs taken of that profile in 1956. The uppermost stratum illustrated in this profile is the recent plowzone, humus, and root disturbed zone. Beneath it is a brown loam stratum that slopes down the side of the mound and extends out into the adjacent area. Kelly referred to it as the Brown Loam Midden because it contained large quantities of bone and pottery. It is underlain by six strata alternating between clay (or loam) and sand. In slides taken during the excavations the lowest sand stratum is laminated and appears to be water-lain. The upper two sand strata appeared to be basket-loaded within the mound, but become laminated at the point where each overlying clay layer terminated. The stratigraphically latest laminated sand layer extends across the entire area of excavations, but becomes thinner with increasing distance from the mound. A black midden layer is the deepest cultural deposit found. It extends under the exposed portion of the mound, and across the entire excavated area west of Mound B.

All available evidence suggests that the alternating layers of sand and clay are mound fill strata, representing three distinct stages of mound construction. Figure 11 presents an idealized profile of Mound B and the area immediately to the west. It is based on the profile illustrated in Figure 8, two less complete field profiles, and photographs of mound stratigraphy. A number of

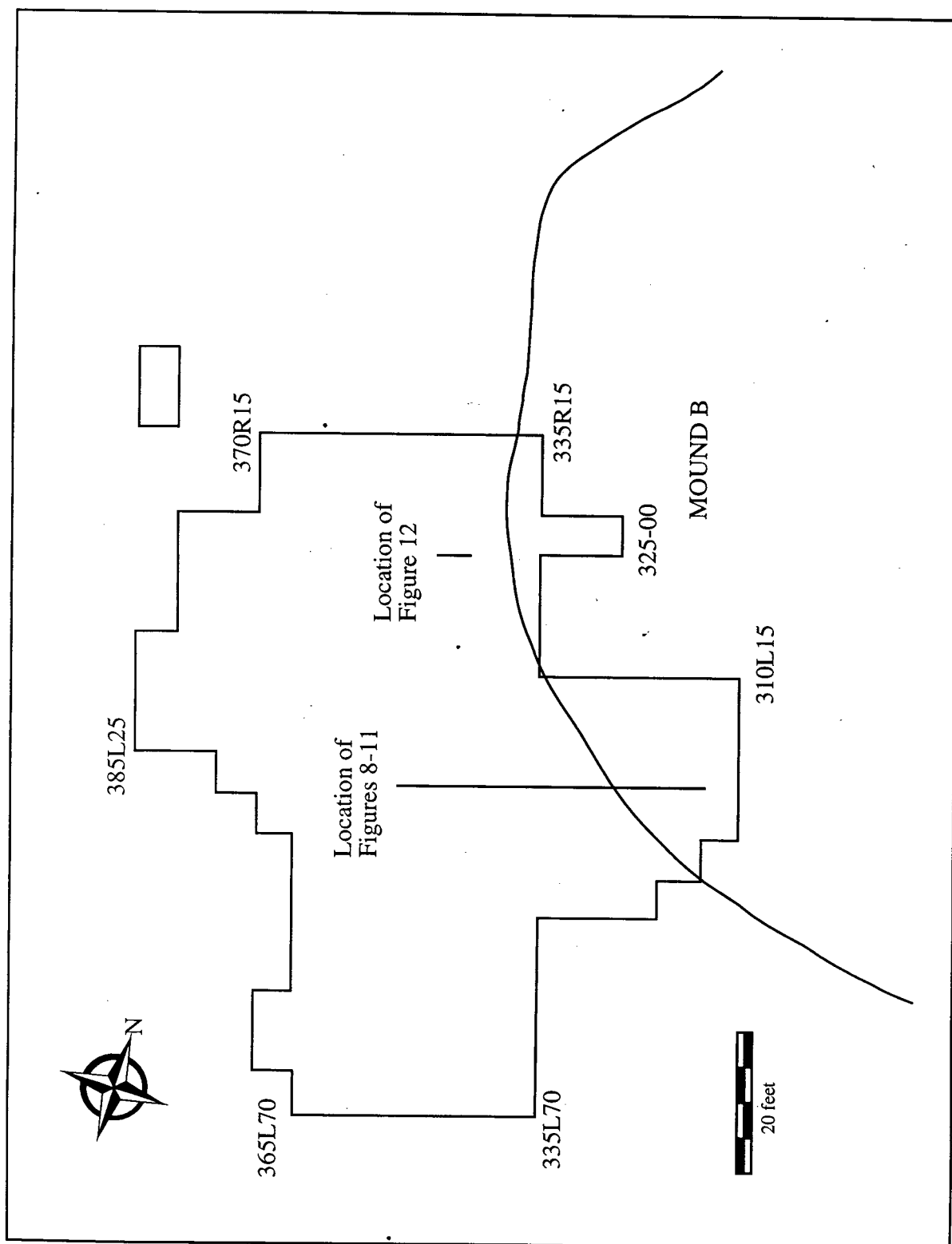


Figure 7. Limits of Kelly's Excavations by 1958

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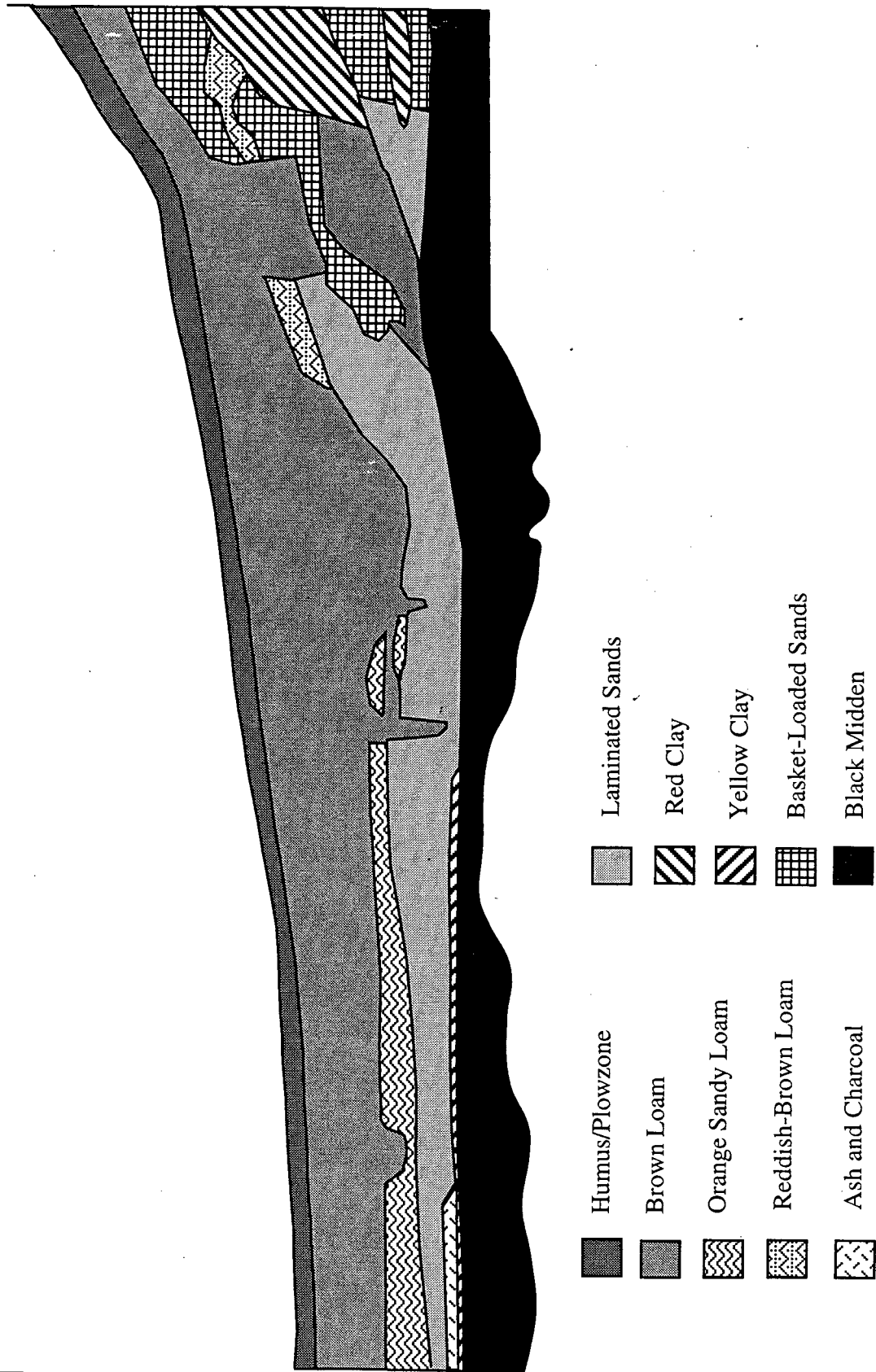


Figure 8. Profile Showing Mound and Non-mound Stratigraphy



Figure 9. Mound Profile at Stations 325L20 and 330L20, Feature 34 in Foreground



Figure 10. Mound Profile at Stations 325L20, 330L20, and 335L20; Feature 34 and Saucer 2 with Posts in Foreground

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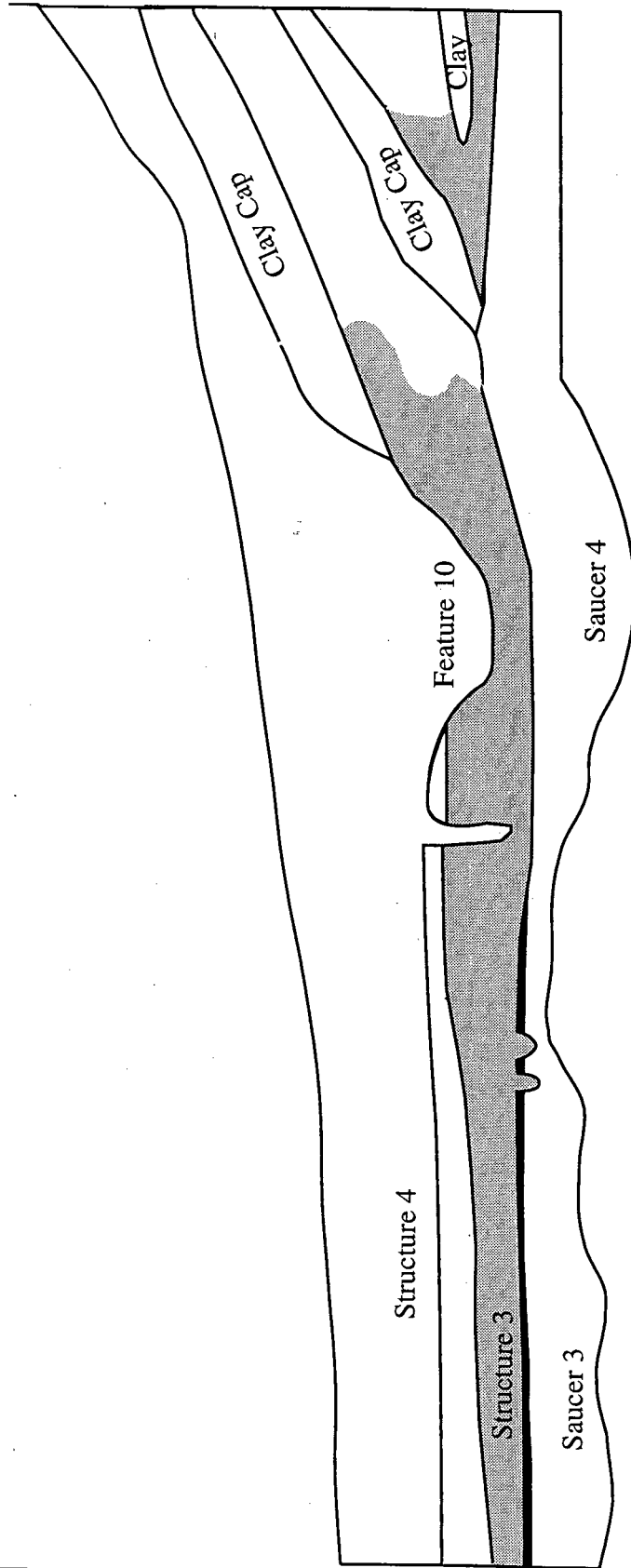


Figure 11. Idealized Mound and Non-mound Profile

Savannah period mounds in the Ridge and Valley and Piedmont of Georgia and the Piedmont of South Carolina have mound fill consisting of alternating levels of sand and clay. These include Chauga (Kelly and Neitzel 1961), Beaverdam Creek (Rudolph and Hally 1985:69-142), and Scull Shoals Mound B (Williams 1988:31-40). Whether the clay and sand strata each represent separate construction stages is unclear. Logically, exposed sand surfaces should be more vulnerable to erosion than clay surfaces. Therefore it is likely that the clay layers in Mound B represent the mound surface, and served as caps to keep the sand fill in place.

Above the three construction stages, profiles show Kelly's Brown Loam Midden. In some areas, however, the upper portion of this stratum was called the Lamar Horizon, because it contained Lamar diagnostics. As I discuss in Chapter 4, the Lamar Horizon actually contains pottery diagnostic of the Etowah, Wilbanks, and Lamar occupations mixed together, and therefore seems to be redeposited midden. While it is possible that this midden is part of a construction stage, I will argue more fully that it is more likely backfill from excavations conducted by Rogan and Moorehead on the summit of Mound B.

Non-Mound

Because of the existence of several architectural features, the non-mound stratigraphy differs from that of the mound (Figure 12). The Brown Loam Midden that overlies the mound flank extends into the adjacent area. Under this midden is a low platform constructed of 12 to 18 inches of orange sandy loam that Kelly called the Orange Layer. The Orange Layer measured approximately 60 feet north to south and 30 feet east to west, and abutted the final mound construction stage. In fact, it appears that the last clay cap and the Orange Layer are parts of a continuous surface later separated by Feature 10, a possible drainage ditch dug at the base of the mound (Figure 13). Low platforms built adjacent to the body of a mound are common features in Ridge and Valley province of Georgia and Tennessee. Similar constructions were found adjacent to Mound A at Little Egypt (Hally 1980:95), Mound A at Toqua (Polhemus 1987:76-80), and the mounds at Bell Field (Kelly 1972:56-57) and Sixtoe Field (Kelly et al. 1965:54,89,158).

Beneath the Orange Layer are two thin, charcoal-rich middens that are overlain and separated, to varying degrees, by laminated sands (Figure 12). Although possibly the result of flooding, it seems more likely that the laminated sands washed from Mound B. If those sands had been deposited by flooding, then they should overlap existing clay caps. Instead, Kelly's profiles show that they derive from the sandy fill underneath each clay cap and that they become thinner the further they are away from the mound base—as if they had washed from the mound. If, as I argue above, clay strata capped each mound stage, then the sandy fill could only have washed from the mound while it was under construction and before the clay cap was in place.

Kelly identified the two middens in Figure 12 as floors of a circular structure, designated Structure 3. Beneath these middens and sands is a yellow clay stratum described in the field notes as a hard-packed surface. A dark midden deposit, dubbed by Kelly the Black Midden, underlies this. It is present throughout the excavated area and continues under the mound.

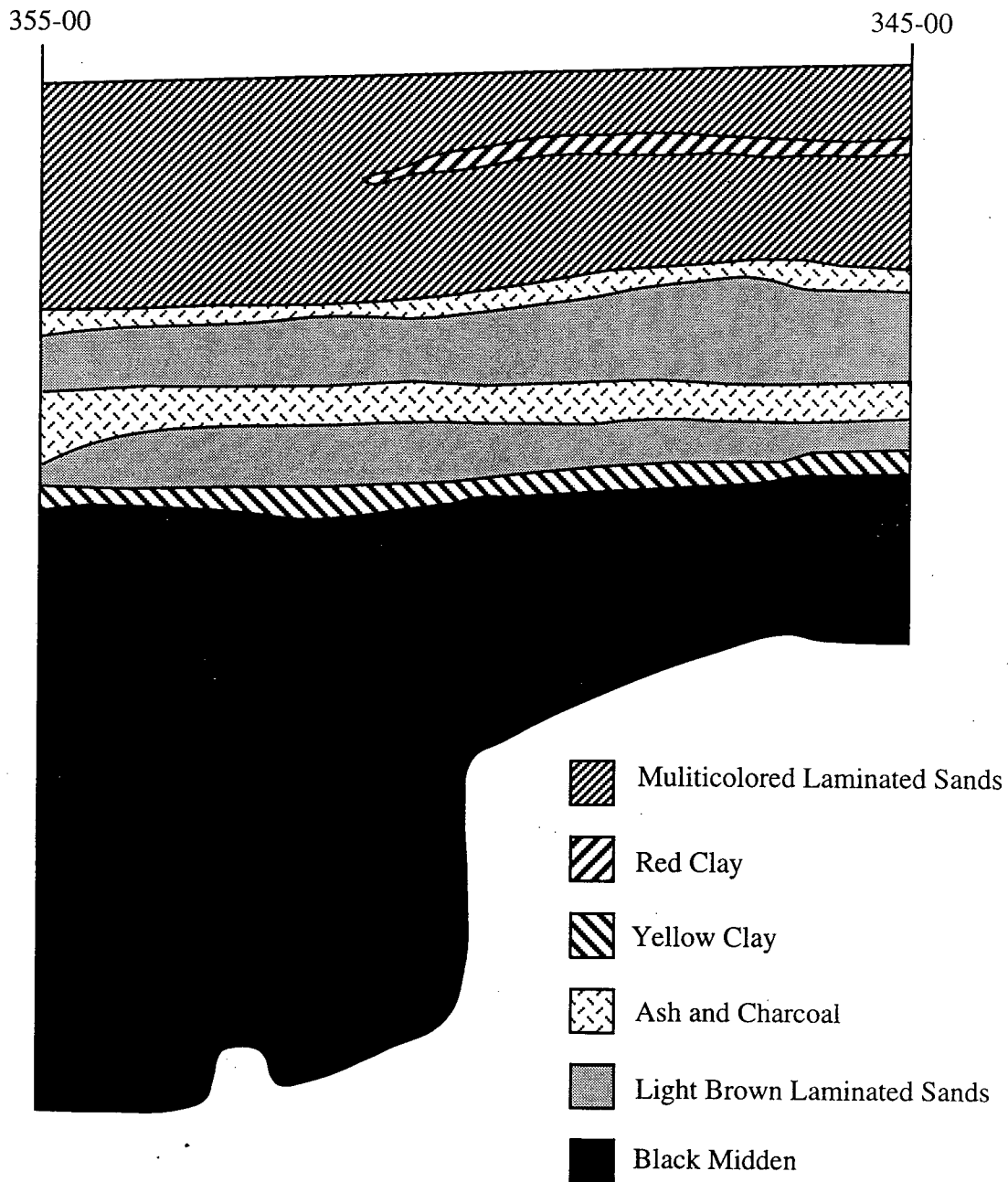


Figure 12. Profile Showing Non-mound Stratigraphy Below the Orange Layer



Figure 13. Excavation of Feature 10 in 1956

Several large midden-filled pits, which Kelly called saucers, originating in this midden intrude into the underlying sterile soil.

Architectural Features

The architectural features uncovered adjacent to Mound B indicate that the area was used fairly intensively. Although post molds were found adjacent to and in the fill of the saucers, most of the structural evidence was found in the later deposits. In those deposits, Kelly uncovered evidence for five buildings. Two of these existed as complete post patterns, while the other two existed only as partial patterns. In addition, Kelly found evidence for other structures that were never completely defined by his excavations.

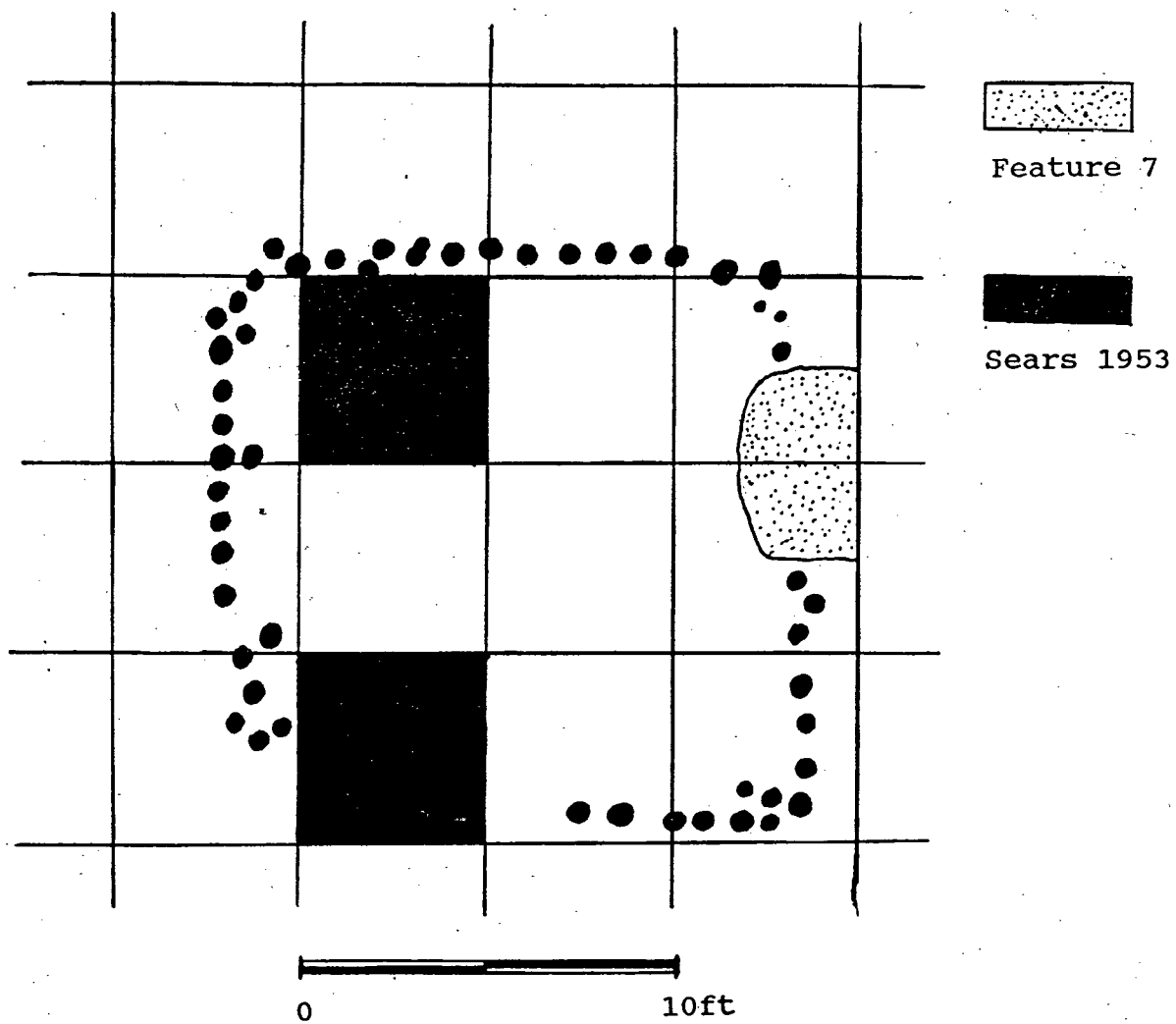


Figure 14. Plan Map of Structure 1.

Structure 1

Structure 1 (Figures 14, 15, and 16) was a square, single-set post house with rounded corners, measuring approximately 15 feet on a side. This structure was semi-subterranean, with the living surface set 10-12 inches below the contemporary ground level. It had a fired area, measuring approximately one foot in diameter, in the center of the structure, but no prepared floor surface was detected. A midden was reported to be present on the floor and just outside the walls. Whether the former represents floor debris dating to the occupation of Structure 1 is not clear. "Extra" posts appeared in the corners and along portions of the walls, possibly indicating rebuilding or repairing of the structure. No interior support posts were found.

Also, no entrance was noted, but a gap in the line of posts forming the northwestern wall may represent the entrance. An intrusive burial pit (Feature 7) destroyed posts near the southern end of the western wall, and a test pit excavated by Sears in 1953 destroyed most of the northeastern corner. The eastern wall, and possibly others, had a clay ridge along its base. Stratigraphically, Structure 1 was below the Orange Platform adjacent to the mound, possibly on the same level as the two charcoal-filled middens (Structure 3) located to the north.

Architecturally, Structure 1 is similar to Mississippian domestic buildings at Little Egypt (Hally 1980), Toqua (Polhemus 1987), the King site (Kelly 1988), and the Mouse Creek phase

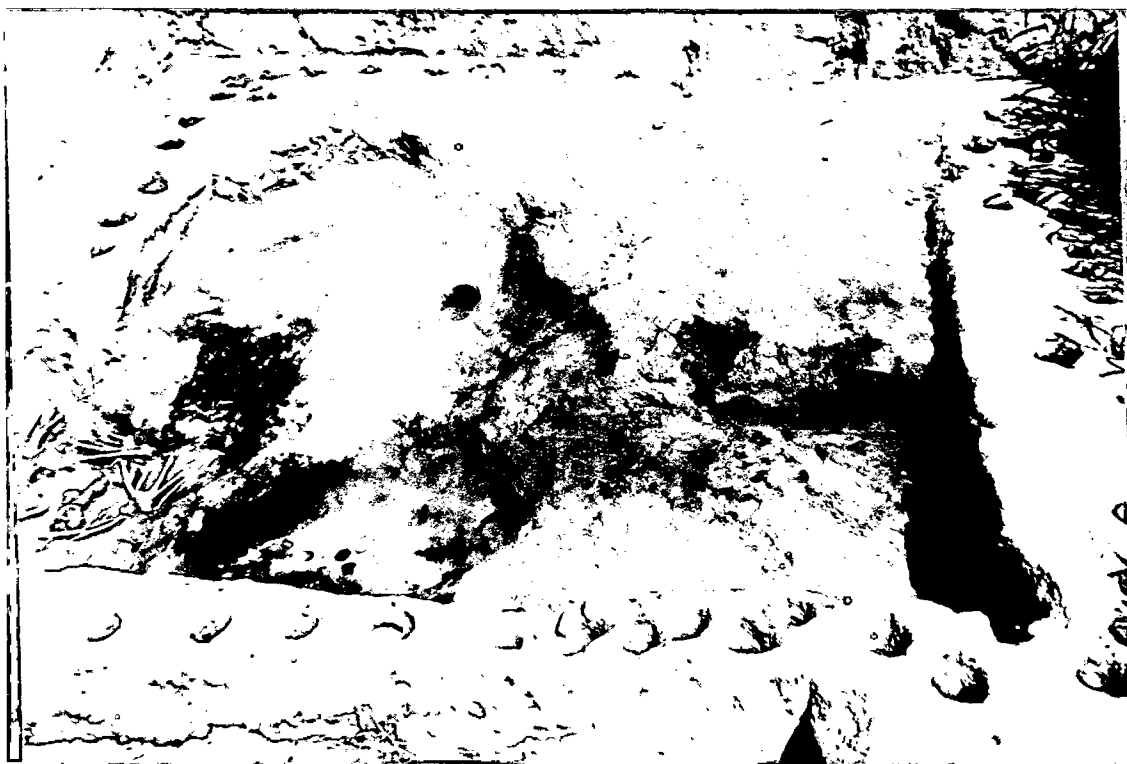


Figure 15. Post Pattern of Structure 1 after Excavation in 1954

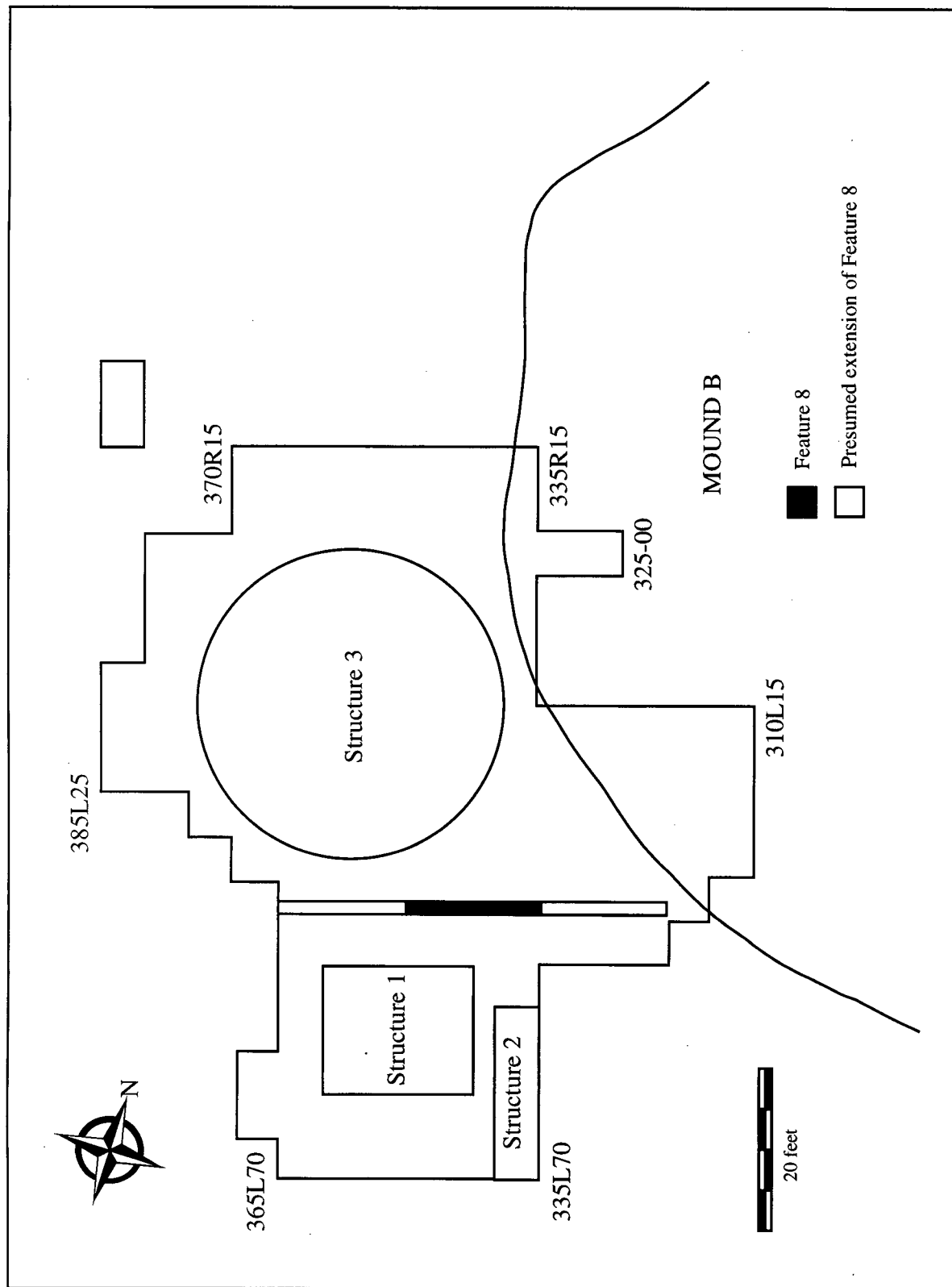


Figure 16. Location of Structures 1, 2, and 3

sites (Sullivan 1986). Despite those architectural similarities, I cannot be certain that Structure 1 was in fact a domestic building. Field notes and maps do not provide information about the range and distribution of artifacts recovered from the midden overlying the floor. Additionally, a statement was made in the field notes that the area called the hearth contained no evidence for use in cooking. Although it is quite possible that Structure 1 was domestic in nature, it is unlikely that this can be verified with the evidence available.

Structure 2

Structure 2 is represented by an incomplete post pattern located to the east of Structure 1 (Figure 16). This pattern consisted of 14 post molds, 8 of which formed a north-south line spanning a distance of 17 feet. A second intrusive burial pit reportedly destroyed the north end of this pattern. From the available evidence it appears that this was of the single-set post building that may have been approximately the same size as Structure 1. Immediately inside the posts forming the north wall of this structure was a dark midden layer that contained a large amount of pottery. The structure appears to lie on the same stratigraphic level as Structure 1.

Structure 3

Structure 3 appears to be a series of rebuilt buildings (Figures 17 and 18) that occupied a roughly circular area, and measured approximately 42 feet in diameter. A plan map made at the



Figure 17. View of Structure 3 from Summit of Mound B

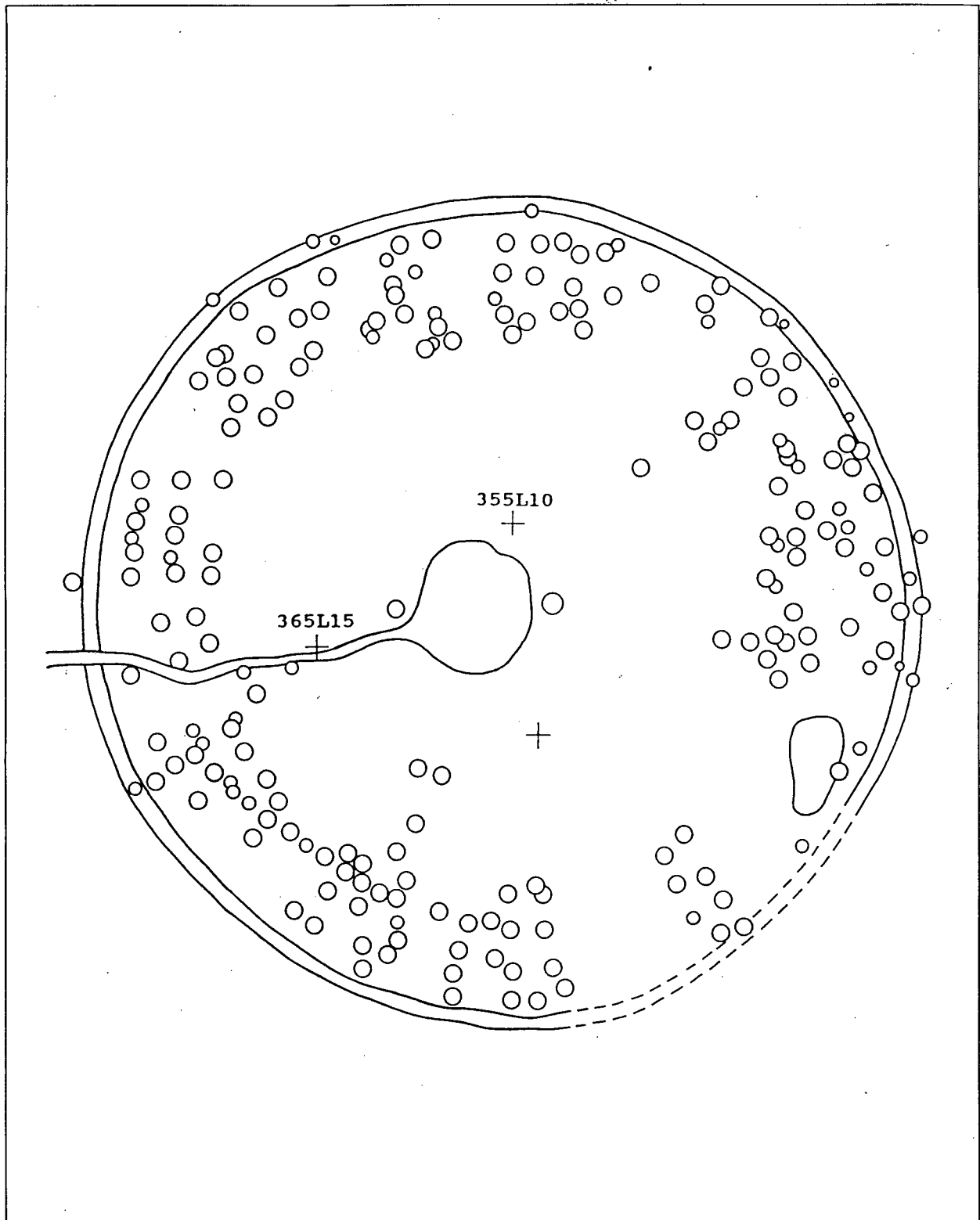


Figure 18. Plan Map of Structure 3.

yellow clay surface shows that a shallow ditch and a small embankment surrounded the building. Very few posts were located in the ditch and it appears that both the ditch and embankment were built to protect the building from mound slope runoff.

The majority of posts associated with Structure 3 were found in a ring just inside the shallow ditch, leaving much of the interior of the building free of posts. In his field notes, Kelly suggested that Structure 3 actually might have been a circular shed-like building with its central portion uncovered. Excavators noted that the central floor area of the building was noticeably softer and darker, possibly confirming the fact that it remained uncovered and exposed to rain water. The two charcoal filled middens that underlie the Orange Platform were confined to the area encompassed by the post molds identified as Structure 3, indicating that they represent sequential floors of this building.

The excavators found a fired area in the center of the structure that extended vertically through both middens to the hard-packed surface. A 6-inch wide, midden filled trench extended from this probable hearth due west and, reportedly, out of the structure entrance. Caldwell, McCann and Hulse (1941:14-15) found similar features in the structures on the summits of Mounds 5 and 6 at the Irene site. They suggested that these features functioned as a drain for the liquid used to extinguish the fires in the hearth. In the upper midden there were also several smaller fired areas that surrounded the central hearth. Workers reportedly found copper fragments, some perforated, on the floor of Structure 3.

The two charcoal-filled middens and the yellow clay surface under the Orange Platform appear to represent three superimposed living surfaces of the same structure. Each of the three surfaces occupies approximately the same location, and laminated sands surround and abut their periphery. In many locations these laminated sands, which appear to have washed from the mound slope, separate the three surfaces. Field notes and the plan map indicate that the trench encircling Structure 3 originated at the yellow clay stratum, but was filled partially with material forming the encircling clay embankment. This suggests that the trench was only used during the first occupation of Structure 3, and that it was later replaced by the embankment. The two living surfaces above this first one were filled with charcoal, suggesting that the structures associated with them may have been burned. The confusing post pattern presented by Structure 3 could be explained by periodic rebuilding necessitated by their apparent destruction.

The yellow clay surface on which Structure 3 was built extends to the edge of Mound B and probably represents a platform like the Orange Layer constructed above it. Kelly's field notes suggest that the yellow clay surface may have been surrounded by a palisade. Evidence for that palisade was found in the form of a wall trench feature positioned at the edge of the yellow clay surface (Feature 18, Figure 16). It appears that this yellow platform and Structure 3 were elements in a special area adjacent to Mound B defined by a palisade enclosure.

Kelly and crew found large quantities of Wilbanks pottery in association with Structure 3. In terms of architectural details, however, Structure 3 appears to be a departure from the usual Wilbanks architecture. According to Hally and Langford (1988:64), Wilbanks structures are

usually square or rectangular, semi-subterranean, and have single-set post walls. Unfortunately, very few Wilbanks structures have been excavated, so it is not known just how rare this structure is. Circular Mississippian buildings of sizes comparable to Structure 3 have been found, however, at Beaverdam Creek (Rudolph and Hally 1985), Rucker's Bottom (Anderson and Schuldenrein 1985), Hiwassee Island (Lewis and Kneberg 1946), Toqua (Polhemus 1987), Irene (Caldwell, McCann, and Hulse 1941), Cemochechobee (Schnell, Knight, and Schnell 1981), and several sites in Morgan and Putnam counties of Georgia (Hatch 1995).

At Rucker's Bottom two large circular buildings, Structures 7 and 14, of comparable sizes (43 and 46 feet) to Structure 3 at Etowah were found (Anderson and Schuldenrein 1985:539,491). Structure 7 was located in the Late Mississippian Rembert phase village and contained three separate rings of single-set posts possibly representing three episodes of occupation. Structure 14 was a single-set post building located in the Middle Mississippian Beaverdam phase village. Excavators found four burials in its floor. Both of these structures contained evidence for central support posts. Both structures were designated as public buildings because of their size, location on the edges of plazas, and architectural similarity to eighteenth century council houses (Anderson and Schuldenrein 1985:491).

The buildings found at Hiwassee Island date to the Early Mississippian Hiwassee Island component of the site. Two of these structures had wall trenches and one did not. All three lacked interior supports and were designated as bent-pole buildings. Buildings 13, 14, and 49 were all of comparable sizes (36, 49, and 35 feet in diameter) to Structure 3 at Etowah, and all were located on a summit of the large mound (Unit 37). Buildings 13 and 14 were two superimposed wall-trench structures located on Stage C, while building 49 was a single-set post structure located on stage E2. All three were associated with large, rectangular structures also on the mound summit (Lewis and Kneberg 1946:Plates 16 and 19).

At Toqua, Structure 6 was a large, circular, wall-trench building that lacked interior supports, and was designated as being of bent-pole construction. It was also a Hiwassee Island building, and was located in the pre-Mound B occupation. It was smaller than Structure 3 at Etowah, measuring 21 feet in diameter, and had an earth embankment that surrounded it (Polhemus 1987:262-264).

The circular building at Irene (Caldwell, McCann, and Hulse 1941) dates to the Late Mississippian Irene component of the site. This structure had a wall trench and interior support posts, indicating that it was not of the bent-pole construction. This structure, called the Rotunda by Caldwell, was probably built in at least two stages. The first consisted of three concentric wall-trench rings of posts, which formed a circle with a diameter of approximately 75 feet. The second added two more rings of posts and made a circle with a diameter of approximately 120 feet. The Rotunda was enclosed by a palisade that included a portion of Mound 8 and an open area between the mound and the structure. Unlike Kelly's Structure 3, the Rotunda's floor contained seven burials and evidence for 15 urn burials (Caldwell McCann, and Hulse 1941:30-31, Figure 13). As its name suggests, it was assumed to have a similar function to the eighteenth century Rotundas described by Bartram (Van Doren 1928:357-359).

Schnell, Knight, and Schnell (1981:63,95) found evidence for at least four circular Early Mississippian Rood phase structures at Cemochechobee, ranging in size from 20 to 29 feet in diameter. All of these lacked substantial interior support posts and were designated as bent-pole construction buildings. One of these was found on a summit of Mound B, while the other three were found in the pre-Mound B occupation. These three overlapping structures were located between a mortuary precinct and elite residences in an area designated as the Nuclear Zone. Schnell, Knight, and Schnell (1981:63-66) called these "hot houses" or council chambers; they inferred their function from their location in the Nuclear Zone and their similarity in shape to 18th century council houses.

James Hatch and a series of Pennsylvania State University field crews excavated several round structures ranging in size from 26 to 34 feet in diameter in Morgan and Putnam counties of Georgia (Hatch 1995). All of these structures dated to the Late Mississippian Lamar phases of the Oconee Valley. In each case Hatch identified these structures as domestic habitations located on sites designated as single-family homesteads.

Throughout the Mississippian period most circular buildings of sizes comparable to Structure 3 at Etowah appear to have had non-domestic rather than domestic functions. This also seems to be the case with Structure 3. Based on size and shape alone, Structure 3 is unlike most Savannah period domestic architecture. It is round rather than square or rectangular, may have had a partially open roof, and contains more square feet of space (1385 sq ft) than most similar domestic structures at the Toqua (Polhemus 1987:2226-228, 237) or King sites (Kelly 1988:58-65). The contents of the middens identified as occupations of Structure 3 also suggest that the structure served a non-domestic function. These middens contained copper artifacts, several hearth areas, and large quantities of ceramics with reportedly high frequencies of finely burnished and painted sherds. Finally, the proximity of Structure 3 to Mound B also suggests that it was associated with the public or high status functions of the mound.

Structure 4

Of the four structures discovered by Kelly, Structure 4 is the most poorly recorded. No complete post pattern map exists, so my reconstruction of the building's location and configuration are based on partial plan maps and field notes. Structure 4 was built using single set posts and was placed on the Orange Layer, directly over the former location of Structure 3. Its post pattern is somewhat confusing and likely represents more than one building or multiple building episodes. As recorded, Structure 4 had a northern wall, portions of eastern and western walls, and two more east to west oriented walls that bisect the structure. Each of the three outer walls consisted of several parallel rows of posts, suggesting rebuilding and slight repositioning of the walls. Crews found no interior support posts south of these east-west walls, and no southern wall.

The area covered by Structure 4 measured 25 by at least 40 feet (Figure 19). The building had a slightly depressed floor and, like Structures 1 and 3, a small clay embankment along its eastern wall. According to the field notes, there was midden on the floor of the structure that

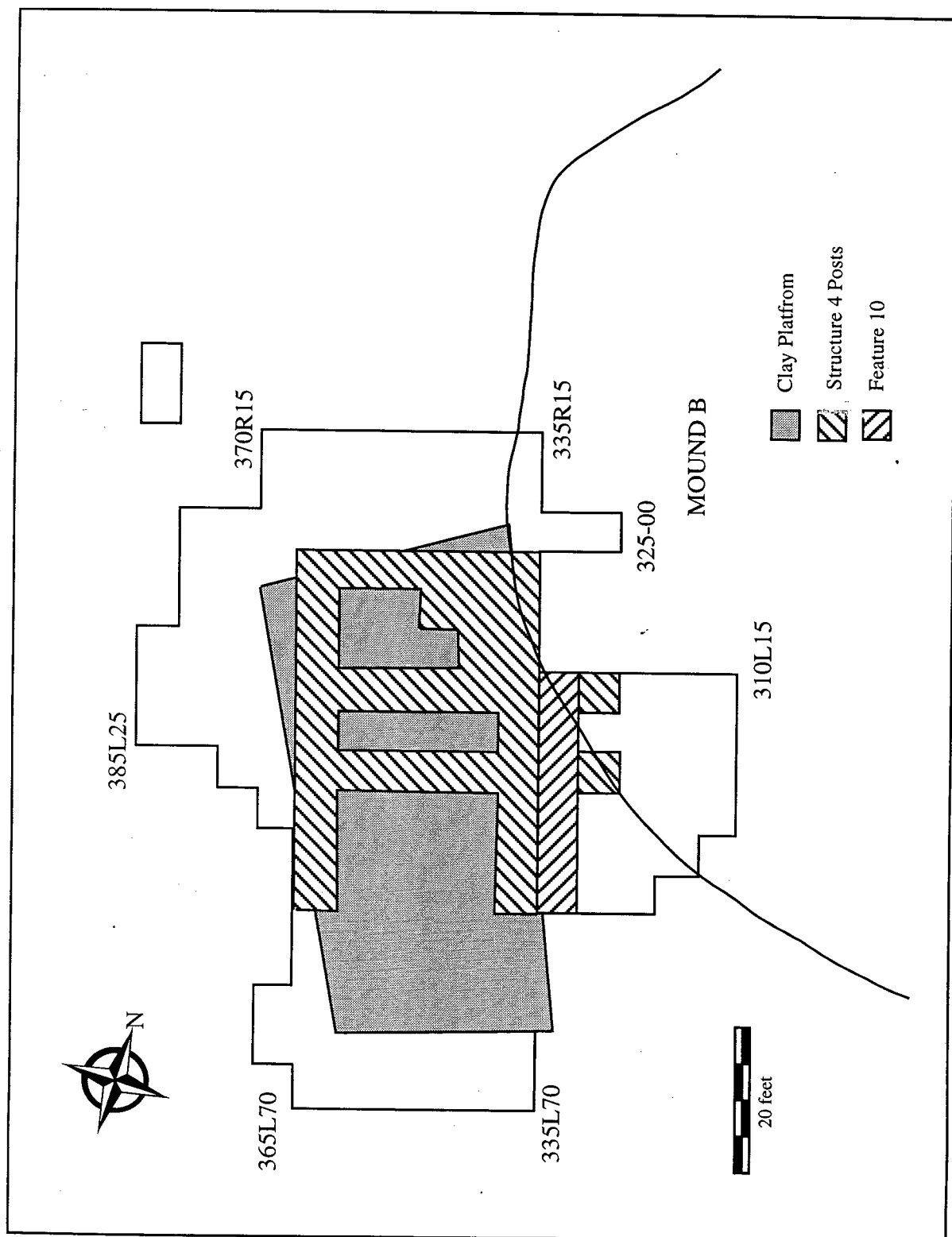


Figure 19. Location of Structure 4

contained faunal remains. Also, there were several small pits intruding into the Orange Layer surface that contained evidence for "domestic activity." Other material reportedly on the floor of this structure included cut mica, small chunky stones, ceramic animal figurines, parts of a copper plate, and negative painted sherds with suggestions of sun-symbol motifs. The field notes located the hearth near the northern wall. They also described a trough that extended from the hearth along the eastern portion of the north wall toward a clay lined "gutter" in the northeastern corner.

Just as platforms adjacent to mounds are a common feature of Mississippian mounds, so are structures located on those platforms. Such buildings were recorded in platforms at Toqua (Polhemus 1987:76-80), Little Egypt (Hally 1980:95), Bell Field (Kelly 1972:56,57), and Sixtoe Field (Kelly et al. 1965:54,89,158). Unfortunately, those recorded at Sixtoe Field and Bell Field were poorly described. Kelly (1972) did note the presence of domestic refuse on the floor of the building recorded at Bell Field. The platform buildings at Toqua and Little Egypt were both larger than non-mound residential buildings and contained evidence of food preparation, tool production, and distinct activity areas. Each was designated as domestic structures (Hally 1980:191-197; Polhemus 1987:259).

Unfortunately, the size and configuration of Structure 4 at Etowah is not well understood. Also, I am not certain that the floor deposits identified by Kelly are actually associated with activities carried out in Structure 4. It is possible that this building was a domestic structure like those found at other mounds sites in the area, but it also seems probable, given its location, that it had non-domestic significance as well.

Undefined Structures

Field notes identify several features that may belong to additional structures. These include a few scattered post molds, a portion of a clay ridge, a hearth, a midden zone, and two large concentrations of daub. All of these are confined to an area west of Structures 1 and 3. Field notes indicate that the excavation of the burial pit intrusive into Structure 1 may have destroyed some of the remains of another building. These features appear to be associated with a tan clay stratum that is stratigraphically earlier than the Orange Layer, and are therefore contemporary with Structures 1 and 3.

Midden-Filled Pits

Beneath the Black Midden that extended under Mound B, Kelly and crew recorded four large, midden- filled pits (Figure 20), which Kelly dubbed Saucers (Kelly and Larson 1957). Saucer 1 measured 20 feet in diameter, was approximately two feet deep, and was located under the southwestern corner of Structure 1. Saucer 2 was located beneath the western edge of the mound. It was 10 feet in diameter, 5 feet deep, and had eleven posts along its northern edge (Kelly and Larson 1957). Saucer 3, the largest excavated, was located directly under Structure 3. The field notes described it as consisting of at least four "lobes" connected by shallow ditches. Its total area was 30 to 35 feet in diameter and it ranged from 2.5 to 7 feet in depth. Saucer 4

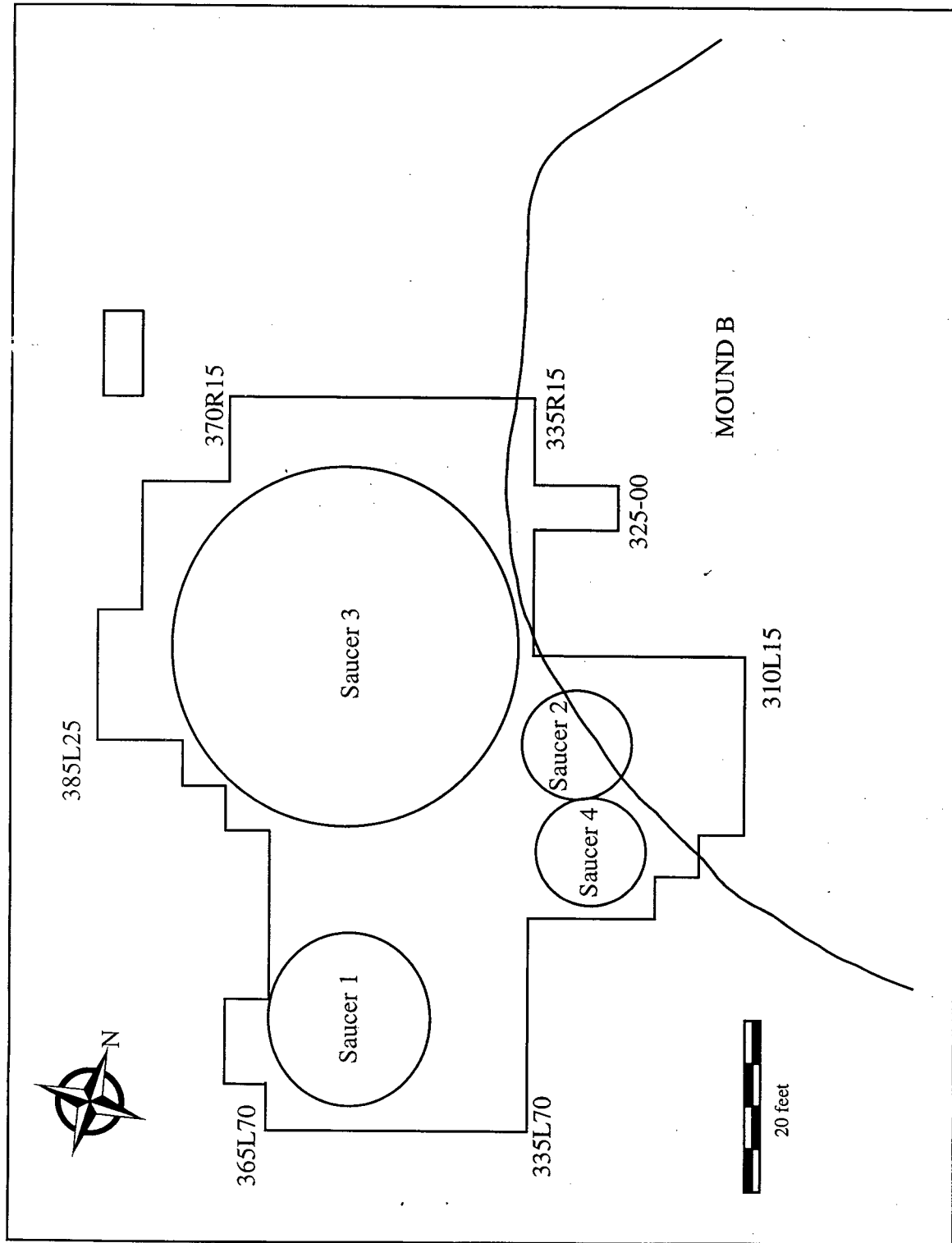


Figure 20. Location of Midden-Filled Pits

measured 12 feet in diameter, was 6 feet deep at its deepest point, and also had posts adjacent to it (Kelly and Larson 1957).

All of these features contained shell, pottery, human bone, animal bone, and botanical remains. Because no samples were screened or processed by flotation, the bone and botanical samples collected may not be representative of the contents of the Saucers. Some faunal remains were analyzed in the late 1950s, but there is no published report. Although a complete analysis of these materials is on going, it appears that the collection is heavily weighted towards larger elements and is dominated by deer, turkey, and aquatic turtle (Wayne Boyko, personal communication 2001). No doubt some of this is a reflection of the recovery techniques employed by Kelly. The human bone found in the Saucers consisted of both intentional burials and burned and charred fragments mixed in the midden.

Saucer 3 was completely excavated by the end of the 1958 season, and is well described in the notes from that year. Fill consisted of alternating lenses of mixed sand and ash, and midden. Scattered throughout this fill were pockets of a "greasy or sandy, purple substance"; fired areas, some of which were identified as hearths; and concentrations of charred plant remains. The floor of the basin was uneven with deeper pits and pockets filled with midden. In addition to the faunal remains previously described, the fill contained fins and spines of fish, and bones and claws of small birds and mammals. Also, some restorable vessels were present, including red painted wares. Several rim sherds with effigy adornos, bone tools, chunky stones, broken celts, shell hoes, and red and yellow ochre also appeared in the fill of Saucer 3. Included as part of the feature's contents were two burials. One of these intruded into the midden fill, while the other was excavated into the southwestern slope of the saucer prior to the accumulation of midden.

In a 1957 article, Kelly and Larson (1957) suggested that these large pits were constructed for communal cooking and feasting, which took place in the area adjacent to Mound B. Later, after his experience with similar features at Sixtoe Field (Kelly et al. 1965), Kelly suggested the saucers were in fact borrow pits for mound fill or house wall construction. This seems to be a more plausible inference, given the large size and uneven floors of these features. That the Saucers were subsequently filled with the remains of feasting seems reasonable given the large quantities of pottery and animal bone found in them.

Kelly and Larson (1957) also suggested that the saucers might have had roofs supported by vertical posts. Supporting this inference was the discovery of 11 post molds located around the northern periphery of Saucer 2 and a few posts scattered around the edge of Saucer 4. It seems more probable that these were screens, possibly erected to block the smoke from periodic fires lit in the features.

Burials

The Mound B documentation indicates that at least 21 human burials were excavated during the project (Figure 21). No master burial list occurs in the field notes and it is clear that several were excavated but never assigned burial numbers. At least two burials were excavated but never

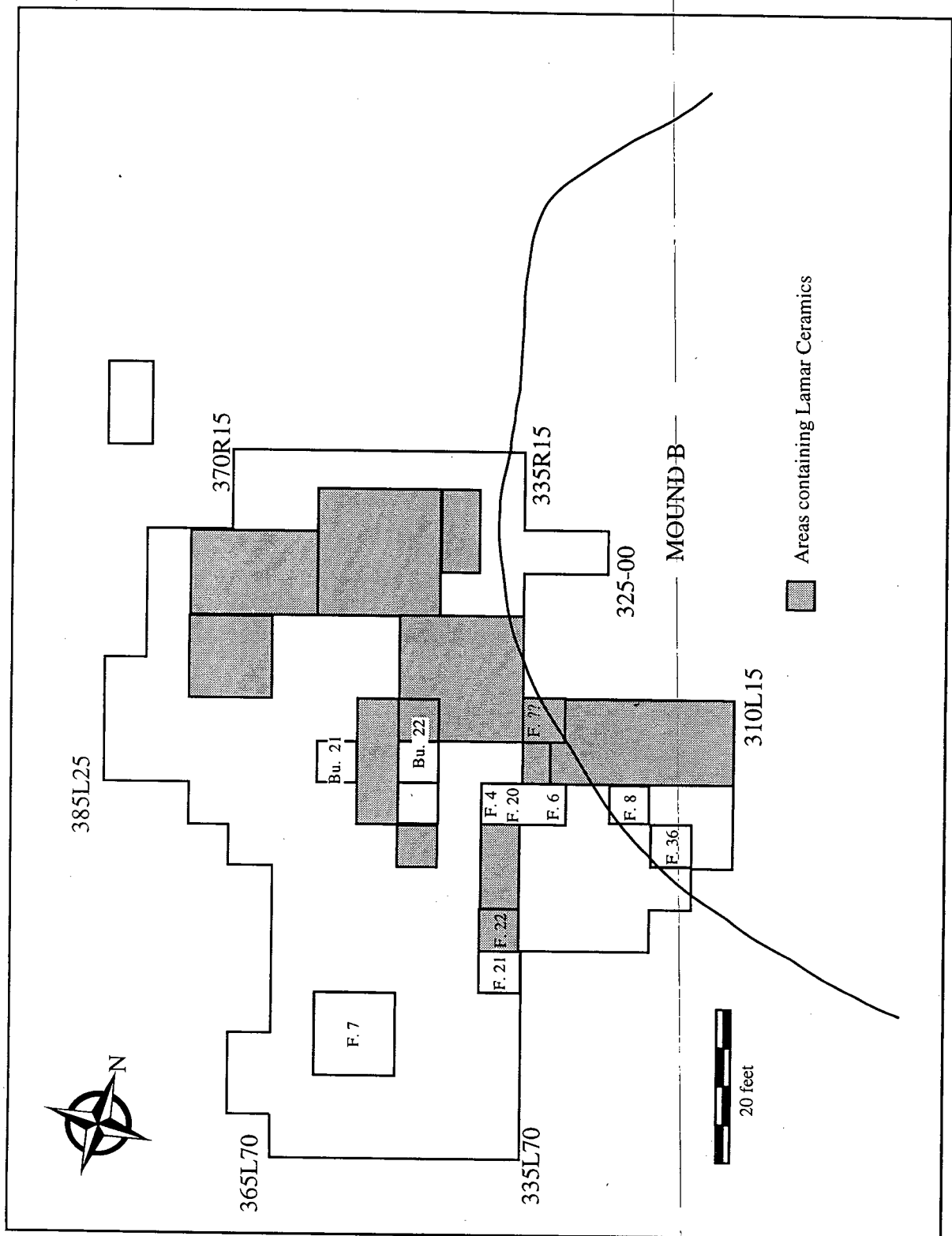


Figure 21. Location of Burials

assigned a burial or feature number. Due to the incompleteness of records, the information available on some of the burials is limited to horizontal location only. The burial forms suggest that Kelly, a physical anthropologist by training, may have analyzed the remains himself.

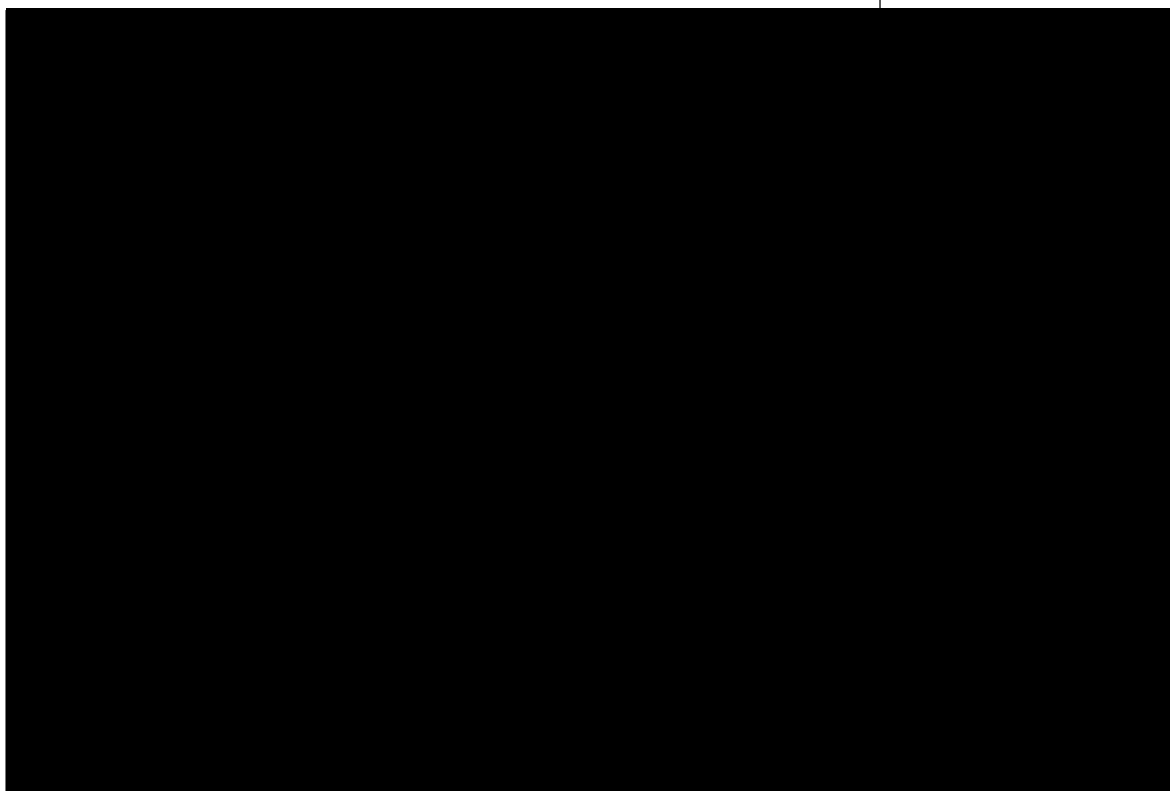


Figure 22. Feature 7 after Excavation in 1954

Feature 7, located in 1954, was a pit containing five flexed individuals (Figure 22). In 1954, only four of the five were excavated (Burials 1-4), with the fifth taken out in 1955. The pit originated under the plowzone, cut through Structure 1 and intruded into Saucer 1. All five individuals were on their right sides with their heads to the south. All were adults; one was a male, one a female (possibly Burial 1), and three were not sexed. Burial 1 had a bone comb and two chunky stones associated with it. Burial 2 had a small polished celt next to the skull and two beaver teeth next to the pelvis. The others had no artifacts associated with them.

Features 4 and 6 were pits located side by side. Burial 5 in Feature 4 and Burials 6 and 7 in Feature 6 were all adults in a very poor state of preservation. The burial forms suggested that they were bundle burials. Neither of the pits contained grave goods. Both originated from the Brown Loam Midden above the Orange Layer and cut through the laminated sands.

Features 21 and 22 contained one burial pit each and were located immediately adjacent to one another. Feature 21 contained three flexed burials with their heads to the south. All three

were poorly preserved, and had no associated grave goods. Feature 22 contained a single adolescent in the flexed position, with a burnished water bottle, a beaver tooth, a bone awl, a shell mask, and a shell hoe.

Feature 8 was a large pit containing four piles of cremated human remains associated with a large chert blade. The feature was located on the western flank of Mound B, where it may have originated in the plowzone and clearly intruded through the Brown Loam Midden.

Feature 20 was a flexed burial found 13 inches deep in the Black Midden above Saucer 2. Based on a field profile, it was not intrusive from strata above.



Figure 23. Feature 36 after Excavation

Feature 36 was a burial that was lined with four upright limestone slabs (Figure 23). This feature occurred within the perimeter of Mound B and may have been associated with an episode of mound construction. Little else is known about the stratigraphic context of Feature 36.

Feature 30 contained a young male and an old individual of undetermined sex. This pit intruded through the laminated sands, but lay on top of a large ditch (Feature 10) that was used during the occupation of Structure 4.

Burial 21 was located in a pit that appears to be excavated into the southwestern shoulder of Saucer 3 and covered with Saucer fill. This pit contained a female of advanced age with no grave goods.

Burial 22 was placed in a pit that intruded through the Black Midden into Saucer 3. It contained a flexed adult male, 35-40 years of age, lying on its side. Grave goods associated with this individual included a broad-faced, side notched point, and a bone awl. A red-filmed turkey effigy bottle and a deer antler cache were also found near this burial, but their association with it is not clear.

Summary

Between the 1954 and 1958 Kelly uncovered evidence for three construction stages of Mound B, including two that were associated with low platforms positioned adjacent to the mound. In the area next to the mound, Kelly recorded two complete buildings (Structures 1 and 3), two partial buildings (Structures 2 and 4), and evidence for an unknown number of undefined structures. Structure 3 was located on the first low platform next to the mound and may have been part of a special area enclosed by a palisade. It was roughly contemporary with Structures 1 and 2. Structure 4 was the latest building and it was located on the second low platform next to Mound B (Orange Layer). In addition to these structures, Kelly uncovered four large, basin-shaped pits that he called saucers. These features were filled with large quantities of refuse, including pottery, animal bone, human bone, and plant remains. Kelly also excavated 21 human burials adjacent to Mound B.

CHAPTER 3

CERAMICS AND CHRONOLGY

One of the most important products of Kelly's excavations is a series of large pottery collections recovered from the deeply stratified deposits in the area adjacent to Mound B. Although they were recovered without the aid of screens, these collections provide the data needed to date the features and strata encountered in the Mound B excavations. While portions of this collection have been examined before (Hally and Langford 1988), this chapter presents the results of the first attempt to examine collections from all of the major features and strata encountered by Kelly.

Sampling and Methods

Since the end of Kelly's excavations in 1958, the collection has been moved from one building to another on the University of Georgia campus and was only recently repacked from its original shoeboxes into archival quality bags and boxes. As a result of the collection's history, there has been a certain amount of provenience mixing and loss of artifacts. Despite these problems, the majority of the collection remains intact.

Of the approximately 1000 lots containing pottery from the Mound B excavations, I analyzed 97, or about 10%. In sampling these collections, I chose to examine stratified excavation units, measuring five feet or some multiple of five feet on a side. The majority of the area was excavated in natural levels, so most of the collections I analyzed came from natural levels. For strata that Kelly dug in arbitrary levels, I chose lots that formed a column through the deposit in the same five-foot excavation unit, or from units that were close together. The depth of these arbitrary levels varied from 3, 6, to 12 inches. I attempted to analyze at least 300 sherds from each natural stratum or arbitrary level.

My analysis entailed the classification of pottery into ceramic types established for Georgia and the Etowah River valley (see Hally and Langford 1988). I also recorded identifiable complicated stamped motifs and vessel shape modes, because research in Georgia has shown that both motifs and other elements of vessel form and decoration can be chronologically diagnostic. I use the relative frequency of identified ceramic types, motifs, and vessel shape modes to place Mound B pottery collections into one of the currently defined phases.

The Etowah Period

In characterizing the Etowah period assemblages from the Mound B area, I analyzed pottery samples from the Black Midden, and each of the four saucers. Tables 3, 4, and 5 show the frequencies of pottery types, motifs, and temper types found in these proveniences. I chose lots that would allow me to examine the possibility that the deposits in each provenience were

TABLE 3
Relative Frequency (%) of Pottery Types in the Etowah Proveniences

SAUCER 1		SAUCER 2		SAUCER 3					SAUCER 4		BLACK MIDDEN		
		TOP	BOTTOM	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	FLOOR	TOP	BOTTOM	LEVEL 1	LEVEL 2	LEVEL 3
ETOWAH COMPLICATED STAMPED HIWASSEE ISLAND COMPLICATED STAMPED WILBANKS COMPLICATED STAMPED WOODSTOCK COMPLICATED STAMPED	3.0	2.0	1.7	9.0	5.0	4.0	11.0	10.0	2.0	3.0	7.0	4.0	3.0
	6.0	13.0	13.2	4.0	6.0	9.0	2.0	1.0	5.0	1.0	4.0	6.0	6.0
	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GRIT TEMPERED PLAIN SHELL/LIMESTONE TEMPERED PLAIN BURNISHED PLAIN POLISHED BLACK	11.0	4.0	1.7	6.0	5.0	3.0	3.0	6.0	10.0	6.0	9.0	10.0	10.0
	42.0	28.0	25.8	25.0	23.0	28.0	25.0	17.0	30.0	42.0	16.0	10.0	15.0
	20.0	22.0	34.0	24.0	28.0	39.0	32.0	38.0	16.0	32.0	17.0	16.0	16.0
	0.0	9.0	7.4	5.0	5.0	5.0	2.0	3.0	6.0	4.0	5.0	8.0	9.0
ETOWAH INCISED ETOWAH RED FILMED HIWASSEE ISLAND RED FILMED HIWASSEE ISLAND RED ON BUFF ETOWAH RED ON BUFF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	1.0	0.2
	0.3	0.0	0.0	1.0	0.3	0.3	3.0	6.0	0.2	0.0	0.0	3.0	2.0
	0.2	1.0	0.4	1.0	0.5	0.3	2.0	2.0	0.0	1.0	0.0	0.3	0.0
	0.0	0.0	0.0	0.0	0.0	0.3	0.2	0.0	0.0	0.6	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CARTERSVILLE CHECK STAMPED DUNLAP FABRIC IMPRESSED NET IMPRESSED UNIDENTIFIED RECTILINEAR STAMPED UNIDENTIFIED CURVILINEAR STAMPED UNIDENTIFIED COMPLICATED STAMPED	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	9.0	17.0	12.2	20.0	19.0	9.0	16.0	12.0	23.0	7.0	25.0	29.0	26.0
ERODED TOTAL SHERDS	1.0	3.0	1.9	0.2	0.0	0.0	1.0	2.0	1.0	0.3	0.0	1.0	1.0
	682	332	476	478	402	332	556	128	455	302	377	300	461

TABLE 4
Relative Frequency (%) of Stamp Motifs in the Etowah Proveniences

	SAUCER 1		SAUCER 2		SAUCER 3				SAUCER 4		BLACK MIDDEN		
		TOP	BOTTOM	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	FLOOR	TOP	BOTTOM	LEVEL 1	LEVEL 2	LEVEL 3
LADDER-BASE DIAMOND	85	60	90	54	41	63	63	57	62	92	7	17	12
LINE-BLOCK	0	0	0	2	2	0	1	14	0	0	9	14	7
ONE-BAR DIAMOND	0	0	0	0	0	0	1	0	0	0	0	7	2
TWO-BAR DIAMOND	7	38	8	30	36	33	31	29	30	8	50	34	21
THREE-BAR DIAMOND	0	0	0	5	0	0	0	1	0	0	0	0	0
ONE-BAR CROSS DIAMOND	2	0	0	3	0	2	1	0	0	0	0	3	0
TWO-BAR CROSS DIAMOND	2	2	0	3	2	0	3	0	0	0	7	3	2
TWO-BAR TWO-CROSS DIAMOND	0	0	0	0	0	0	0	0	0	0	4	0	0
THREE-BAR TWO-CROSS DIAMOND	0	0	0	0	0	0	0	0	0	0	7	0	2
FILFOT CROSS	2	0	0	3	9	0	0	0	5	0	13	21	43
CONCENTRIC SQUARE	0	0	0	0	9	0	0	0	3	0	2	0	10
NESTED T	0	0	0	0	0	0	0	0	0	0	0	0	0
CONCENTRIC CIRCLE	0	0	0	0	0	0	0	0	0	0	2	0	0
BULL'S EYE	2	0	0	0	0	0	0	0	0	0	0	0	0
SCROLL	0	0	0	0	0	0	0	0	0	0	0	0	0
LADDER-BASE CIRCLE	0	0	0	0	0	0	0	0	0	0	0	0	0
CONCENTRIC OVAL	2	0	0	0	0	0	0	0	0	0	0	0	0
CONCENTRIC DIAMOND	0	0	2	0	0	0	0	0	0	0	0	0	0
TOTAL NUMBER IDENTIFIED	61	47	72	63	44	43	72	14	37	12	46	29	42

TABLE 5

Relative Frequency (%) of Temper Type in the Etowah Proveniences

TEMPER TYPE	SAUCER 1	SAUCER 2		SAUCER 3					SAUCER 4		BLACK MIDDEN		
		TOP	BOTTOM	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	FLOOR	TOP	BOTTOM	LEVEL 1	LEVEL 2	LEVEL 3
SHELL	64	41	38	43	44	66	63	63	22	80	17	15	20
GRIT	32	18	8	40	33	18	36	36	32	17	49	53	44
LIMESTONE	4	41	54	18	24	16	1	1	46	3	34	32	36
TOTAL	682	332	476	478	402	332	556	128	455	302	377	300	461

stratified, and could be used in sequence building. In the case of the Black Midden and Saucer 3, I attempted to choose lots that formed a stratigraphic column extending from the top to bottom of each deposit. The collections from Saucers 2 and 4 were taken from the top and bottom of the deposits only. The collections analyzed from Saucer 1 came from several units within the general provenience of Saucer 1.

Stratigraphically, the earliest Etowah period deposits include the four saucers, excavated by Kelly's crews. Based on the pottery assemblages found within those features, all were created no earlier than the Etowah II phase. Unlike Etowah I phase contexts, the saucers contain Etowah and Hiwassee Island Red Filmed, Burnished Plain and Polished Black types, as well as the two bar diamond motif. The Black Midden, which overlies the saucers, contains collections matching the Etowah III definition, and no collections were examined that could be identified as belonging to the Etowah IV phase. Therefore, following the argument of Hally and Langford (1988), I will replace the Etowah II and Etowah III phase names with Early and Late Etowah.

Of the four saucers, Saucer 1 is probably the earliest. This is based on the overwhelming predominance of ladder-base diamonds, and the high number of shell-tempered sherds (Tables 4 and 5). The cross-bar diamonds, filfot cross, and the Wilbanks Complicated Stamped sherds all appear in what seem to be lots from upper levels, and probably represent mixing from overlying strata (Table 4).

Saucers 2 and 4 appear to be roughly contemporaneous with Saucer 1. While the frequencies of motifs and temper types change from bottom to top, both still fit most closely the Early

Etowah phase definition (Tables 4 and 5). The two-bar diamond and the ladder-base diamond were the only motifs identified in the bottoms of these features. From lowest to highest levels, there is an increase in the percentage of two-bar diamonds as the ladder-base diamonds decrease, but the ladder-base remains the dominant motif. Overall, Saucer 2 has the highest percentage of limestone temper, but this decreases over time, as grit temper increases. In Saucer 4 shell tempering drops dramatically as limestone and grit increase, with limestone supplanting shell as the dominant temper type.

The filling of Saucer 2 may have started a little later than Saucers 1 and 4. This conclusion is based on the relatively high percentage of limestone tempering in Saucer 2 (Table 5). There is some evidence in this collection that limestone tempering increases through time. Also, at Sixtoe Field, which Hally and Langford (1988:48) suggest dates to a time of transition from the Early Etowah to Late Etowah phase, the pottery is predominantly limestone tempered. This implies that at some point during the transition from Early Etowah to Late Etowah in the Ridge and Valley province, limestone may be the dominant temper type.

Saucer 3 appears to be somewhat later than the other three saucers, although it still dates to the Early Etowah phase. I analyzed 5 levels as separate proveniences. Levels 3 and 4, and the floor are all very similar in terms of complicated stamped motifs (Table 4). The frequencies of temper types in these three levels are also similar, except that limestone increases as grit decreases from Level 4 to Level 3 (Table 5). The transition from Level 3 to Levels 2 and 1 shows a slight decrease in the frequency of ladder-base diamonds as the filfoot and the concentric square appear (Table 4). Both grit and limestone tempering increase as shell tempering decreases (Table 5).

The Black Midden, which is stratigraphically above the saucers, produced pottery assemblages most closely matching the Late Etowah phase. In many areas, the Black Midden was excavated in three arbitrary levels, and I examined collections from each. In general, the ladder-base diamond appears in its lowest frequency in the excavated samples, while the two-bar diamond is much more common. Also, the filfoot cross appears in its highest frequencies (Table 4). The temper types remain relatively constant, with shell being at its lowest, and grit being the dominant temper type (Table 5). Even in the highest levels of the Black Midden, there is no evidence of an Etowah IV component.

In the Etowah period collections from Mound B, there is a clear transition from the Early Etowah to Late Etowah phases. As expected given the definitions of the two phases, this is marked by the increase in two-bar diamond over the ladder-base diamond. In addition, the filfoot cross, concentric square, and cross bar diamonds also first appear (Table 4). The temper types change from predominantly shell in the Early Etowah to predominantly grit in the Late Etowah. The use of limestone increases through the Early Etowah and into the Late Etowah, and may at some point during the transition become the dominant temper type (Table 5).

In each of the four saucers, mixing of pottery from the Black Midden and overlying strata appears to have occurred in the highest levels. The upper levels of the saucers contain a mix of

Early and Late Etowah pottery. While the ladder-base diamond remains the dominant motif, later motifs such as the filfot cross, cross-bar diamonds, concentric squares, and scroll appear in these levels (Table 4). The effects of this mixing may be most apparent when the frequencies of complicated stamped motifs and temper types in levels 3, 4, and the floor of Saucer 3 are compared to those in levels 1 and 2.

The Black Midden, which overlies the saucers, appears to represent a midden accumulation that is continuous with the midden deposition that began during the Early Etowah phase. Given this, it is not surprising that the field notes and provenience information on artifact boxes indicate that the excavators had some difficulty distinguishing saucer fill from the overlying Black Midden. Therefore, the distinction they made between the tops of saucers and the bottom of the Black Midden was arbitrary and may not have been consistently determined from feature to feature. Under these circumstances, evidence for some mixing of Early and Late Etowah ceramics should be expected. Despite this mixing, the trends in the larger sherd sample match those expected given the definitions of the Early and Late Etowah phases, indicating that mixing has had only a negligible impact on the cultural stratigraphy of the saucers and Black Midden.

The Savannah Period

As Sears (1958a) and later Kelly and Larson (1957) observed, the Savannah period pottery recovered from the Mound B area matches the description of the Wilbanks phase. This conclusion was confirmed by Hally and Langford's (1988: 59) more recent analysis of a collection of pottery from a midden located above Kelly's Orange Layer. For this analysis, I expanded on this recent work by analyzing a larger number of sherds from a larger number of contexts. Tables 6 through 9 contain the frequencies of pottery types, identifiable motifs, temper types, and rim forms for all of the contexts sampled. I examined pottery collections from the upper two middens of Structure 3 (MID2, MID1) the midden associated with Structure 1 (STR1), and five middens above the Orange Platform (FLOOR, OVO, GREY, DC, LBB). One of these middens above the platform (FLOOR) may correspond to the floor of Structure 4. I chose ceramic samples ranging from 500 to 1000 sherds for analysis from different excavation units within each midden.

My results showed stratigraphic differences in the Wilbanks collections that warrant dividing the original phase into Early and Late variants. Unlike Etowah Complicated Stamped and Etowah Plain, the stamped motifs and temper types characteristic of Wilbanks Complicated Stamped and Wilbanks Plain apparently change very little from the Early to Late Wilbanks phases. Rather it is the frequencies of certain minority types and vessel shape modes that are chronologically sensitive. From the Early to Late Wilbanks, new minority types and vessel shape modes appear (Tables 6 and 9). Each of these is present in the middens above the Orange Platform (FLOOR, OO, GREY, DC, LBB), but not in the Wilbanks contexts below the platform (STR1, MID2, MID1).

Several minority types (Table 6) and vessel shape modes (Table 9) are represented in the Wilbanks collections from Etowah that were not described by Sears in his original definition of

TABLE 6
Relative Frequency (%) of Pottery Types in the Wilbanks Proveniences

	STR 1	MID2	MID1	FLOOR	OVO	GREY	DC	LBB
GRIT TEMPERED PLAIN	28.00	41.00	35.00	30.00	34.00	40.60	35.70	35.50
SHELL/LIMESTONE TEMPERED PLAIN	1.40	3.70	0.80	3.00	3.70	2.00	6.20	3.30
BURNISHED PLAIN	4.50	4.20	1.90	5.50	8.90	5.80	8.80	4.70
POLISHED BLACK	0.60	1.50	0.50	0.00	0.00	0.00	0.21	0.20
WILBANKS COMPLICATED STAMPED	5.00	1.00	1.30	3.50	1.80	1.10	2.10	2.30
ETOWAH COMPLICATED STAMPED	0.40	0.10	0.00	0.40	0.00	0.00	0.10	0.10
HIWASSEE ISLAND COMPLICATED STAMPED	0.40	0.30	0.30	0.10	0.00	0.00	0.00	0.30
ETOWAH RED FILMED	0.14	0.37	0.00	0.00	0.00	1.80	0.00	0.30
HIWASSEE ISLAND RED FILMED	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ETOWAH RED ON BUFF	0.00	1.30	0.00	0.00	0.00	0.00	0.00	0.10
HIWASSEE ISLAND RED ON BUFF	0.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00
NEGATIVE PAINTED	0.00	0.00	0.00	0.10	0.00	0.00	0.42	0.51
SHELL TEMPERED CORD-MARKED	0.00	0.00	0.15	0.04	0.48	1.70	1.00	0.40
GRIT TEMPERED CORD-MARKED	0.00	5.43	0.32	0.07	0.48	0.00	0.40	0.30
UNIDENTIFIED CHECK STAMPED	0.14	0.37	0.16	1.00	1.80	0.60	0.10	0.82
CORN-COB IMPRESSED	0.29	0.00	0.32	0.20	0.50	0.40	0.10	0.20
GRIT TEMPERED BRUSHED	0.00	0.46	0.00	0.00	0.00	0.00	0.10	0.61
RUDDER COMB INCISED	0.00	0.00	0.00	0.10	2.30	0.60	0.94	1.50
UNIDENTIFIED INCISED	0.14	0.09	0.00	0.30	0.33	0.18	1.00	0.10
UNIDENTIFIED STAMPED	17.00	15.00	20.00	19.00	17.40	13.90	15.80	20.30
UNIDENTIFIED RECTILINEAR STAMPED	12.00	6.80	9.70	8.60	7.00	7.70	5.00	7.65
UNIDENTIFIED CURVILINEAR STAMPED	29.00	17.00	29.40	26.00	18.40	22.40	20.00	19.60
UNIDENTIFIED SURFACE TREATMENT	0.14	0.00	0.16	0.00	0.00	0.00	0.00	0.00
TOTAL SHERDS	694	1085	629	971	615	531	953	981

TABLE 7

Relative Frequency (%) of Stamped Motifs in the Wilbanks Proveniences

	STR1	MID2	MID1	FLOOR	OVO	GREY	DC	LBB
CONCENTRIC CIRCLE	17.00	31.00	0.00	38.50	18.00	33.00	33.00	22.00
CONCENTRIC CIRCLE WITH CROSS	0.00	0.00	11.00	2.60	0.00	16.67	4.80	14.80
FIGURE 9	48.70	6.25	44.00	23.00	36.00	16.67	28.50	14.80
FIGURE 9 WITH DOT	12.00	25.00	11.00	10.00	36.00	16.67	9.50	18.50
QUATREFOIL WITH DOT	0.00	0.00	0.00	2.60	0.00	0.00	0.00	0.00
QUATREFOIL WITH CROSS	0.00	0.00	11.00	2.60	0.00	0.00	0.00	0.00
FIGURE 8	0.00	0.00	0.00	0.00	0.00	0.00	9.50	0.00
SCROLL	0.00	6.25	0.00	0.00	0.00	0.00	0.00	0.00
BULL'S EYE	7.00	6.25	0.00	7.70	9.00	16.67	9.50	3.70
FILFOT CROSS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.70
TWO-BAR CIRCLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.70
THREE-BAR CIRCLE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.70
ONE-BAR DIAMOND	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.70
TWO-BAR DIAMOND	2.40	0.00	0.00	2.60	0.00	0.00	0.00	0.00
LADDER-BASE DIAMOND	4.80	25.00	25.00	2.60	0.00	0.00	0.00	7.40
FILFOT CROSS	0.00	0.00	0.00	2.60	0.00	0.00	0.00	0.00
LINE-BLOCK	0.00	0.00	0.00	0.00	0.00	0.00	4.80	0.00
CROSS-BAR DIAMOND	7.00	0.00	0.00	2.60	0.00	0.00	0.00	0.00
TOTAL IDENTIFIABLE MOTIFS	41	16	9	38	11	6	21	27

TABLE 8

Relative Frequency (%) of Temper Types in the Wilbanks Proveniences

	STR1	MID2	MID1	FLOOR	OVO	GREY	DC	LBB	EARLY	LATE
SHELL	1.70	3.60	1.40	1.75	4.20	2.00	8.00	3.10	2.50	4.00
GRIT	97.00	95.00	98.00	96.00	95.00	95.50	91.60	95.00	96.30	94.50
LIME	1.30	1.40	0.60	2.25	0.80	0.50	1.40	1.90	1.20	1.50
TOTAL	694	629	1085	971	615	531	953	981	2408	4050

TABLE 9

Relative Frequency (#) of Rim Types and Modes in Wilbanks Proveniences

	STR1	MID2	MID1	FLOOR	OVO	GREY	DC	LBB
<u>TYPES</u>								
PLAIN	65	51	9	100	65	45	81	90
PINCHED	0	0	0	0	2	1	2	3
COLLARED	0	0	0	1	0	0	1	0
PUNCTATED	0	1	0	2	0	0	1	0
THICKENED	0	0	0	0	0	0	2	0
FILLETED	0	0	0	0	0	0	0	1
INCISED	0	1	0	0	0	0	1	0
PEAKED NODE	0	0	0	3	1	0	4	0
RIM WITH NODE	0	2	0	0	0	0	4	0
RIM WITH LUG	0	0	0	0	1	0	1	2
TOTAL	65	55	9	106	68	46	97	96
<u>MODES</u>								
NODE	0	0	0	0	0	2	2	0
PUNCT NODE	0	0	0	1	0	0	0	1

the Wilbanks phase. Some of these types are probably present due to mixing, some occur in both the Early and Late Wilbanks contexts, and some are diagnostic of the newly recognized Late Wilbanks phase.

Etowah Complicated Stamped sherds occurred in all Wilbanks contexts sampled, while Etowah Red Film, Etowah Red on Buff, Hiwassee Island Red Film, Hiwassee Island Red on Buff, and Etowah Polished Black all occurred in the stratigraphically earlier Wilbanks levels. It seems likely that most of these sherds are present in Wilbanks contexts because of mixing with earlier occupation levels.

Burnished sherds appear in all of the Wilbanks contexts sampled. Although the majority belongs to the Wilbanks occupation, based on similarities in paste and temper to Wilbanks Plain and Complicated Stamped, no attempt was made to distinguish them from Etowah Burnished sherds that may also be present in the collections. Burnished sherds appear in small percentages in roughly contemporaneous contexts at Plant Hammond on the Coosa River and Bell Field on the Coosawattee in the Ridge and Valley province (Hally and Langford 1988:59). They also appear in the Piedmont at Scull Shoals on the middle Oconee (Williams 1988:69) and at Beaverdam Creek on the middle Savannah River (Rudolph and Hally 1985:263).

Cordmarked sherds, both shell and grit tempered, appear in low frequencies throughout all of the Wilbanks contexts at Etowah (Figure 24). Cord impressions are closely spaced and generally

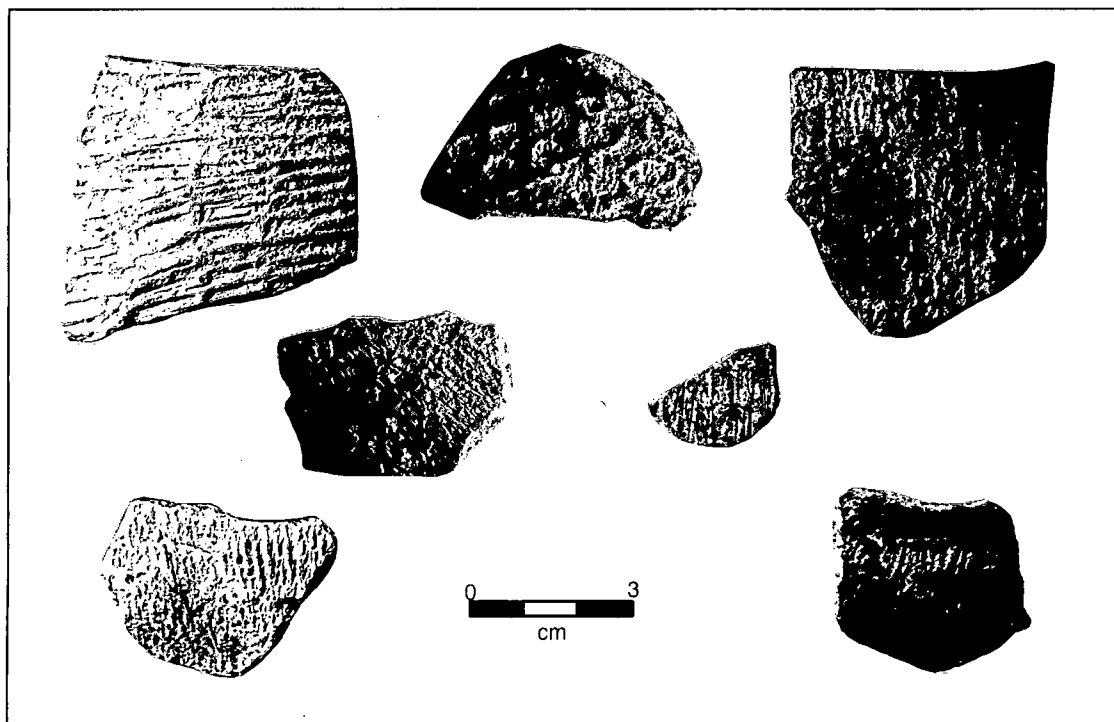


Figure 24. Top Row: Check Stamped; Middle Row (L to R): Corncob Impressed, Brushed. Bottom Row (L to R): Shell-Tempered Cordmarked, Grit-Tempered Cordmarked

parallel, although some are crossed. The size and heaviness of individual cord impressions varies. Cordmarking appears to be vertically oriented and is found both on the body and neck of jars. In some cases, necks and rims are smooth. Cordmarking is also found on vessels exhibiting peaked and noded rim forms. It is possible that the cordmarked sherds at Etowah are McKee Island Cordmarked, but I have opted to call them shell and grit-tempered cordmarked because my sample is small.

McKee Island Cordmarked is the type name used for shell tempered cordmarked pottery in the Guntersville Basin in Alabama (Heimlich 1952). According to Hally (1979:180) researchers in Tennessee have used this type for all shell tempered cordmarked pottery in Dallas contexts. It is an important type throughout Middle and Late Mississippian phases in those areas.

McKee Island Cordmarked is also a prominent type in the northern portion of the Ridge and Valley of Georgia. In the Savannah period pottery from Bell Field, McKee Island Cordmarked accounted for almost one quarter of the ceramics from those contexts (Hally and Langford 1988:59). At the Little Egypt site, Hally (1979:179,187) found a large percentage of shell-tempered cordmarked and a small percentage of grit-tempered cordmarked sherds in the site's early Lamar Little Egypt component of the site. Farther south in the Piedmont at Wilbanks, Sears (1958b:175) found a very small number of fine cordmarked sherds, but he did not mention whether they were shell or grit tempered.

All of the Wilbanks contexts contain check stamped sherds. Check stamping is a fairly common form of decoration in Savannah period pottery. It appears as a minority type at Wilbanks, Plant Hammond, and Bell Field in northwestern Georgia (Hally and Langford 1988:59). It also appears in ceramic phases from the Russell Reservoir, the middle Oconee River, and upper, middle and lower Savannah River (Rudolph and Hally 1985:447-462).

At Etowah, three different styles of check stamping occur (Figure 24). One consists of a relatively fine-lined stamp that produces a square to rectangular check. There are also a small number of check stamped sherds that have a heavy, octagonal or oval-shaped check that is smaller than the pattern produced with the more common style. The diamond-shaped checks described by Kelly and Neitzel (1961) from Chauga may be similar to these. There also is one sherd that has long, thin, rectangular shaped checks, resembling the impression of basketry.

Small percentages of corncob-impressed sherds were found throughout the Wilbanks strata as well (Figure 24). These sherds exhibited closed spaced vertical lines formed by impressing a corncob on the vessel surface. Corncob-impressed sherds are a common minority type on early Savannah period sites along the Piedmont of the Savannah River, but become less common to the west in the Piedmont and Ridge and Valley of Georgia. Corncob-impressed sherds have been found at Scull Shoals (Williams 1988:72) along the middle Oconee River, Stubbs Mound on the Ocmulgee (Williams 1975:85), and at Etowah in the Ridge and Valley.

A small number of grit-tempered, brushed sherds were found in two of the Wilbanks contexts examined (Figure 24). Brushing marks were closely spaced, straight, and parallel to one another. Rather than all being oriented vertically, brush strokes often crossed. Because of the small sample size, I have chosen to call these sherds grit tempered brushed.

McKee Island Brushed, a shell-tempered brushed type, was defined by Heimlich (1952) for the Guntersville Basin of northeastern Alabama, and appeared in Late Mississippian contexts. In the Ridge and Valley Province of northwestern Georgia, McKee Island Brushed, and grit-tempered brushed pottery were found at Bell Field in the Middle Mississippian contexts (Hally and Langford 1988:59). In the middle Oconee valley, a few grit-tempered brushed sherds were found at Scull Shoals in the Middle Mississippian Scull Shoals phase (Williams 1988:72). McKee Island Brushed was also found by Hally (1979:181) at Little Egypt as part of the early Lamar Little Egypt phase, as was a grit-tempered brushed sherd.

Rudder Comb Incised (Webb and Wilder 1951:255-267) is a minority type found only in the stratigraphically latest Wilbanks contexts at Etowah (Figure 25). These sherds exhibit decoration consisting of groups of closely spaced parallel lines made by either brushing or incising with a toothed implement. On the necks of vessels the incising is vertical and parallel, while the lines on the body are curved and form some type of interlocking scroll design.

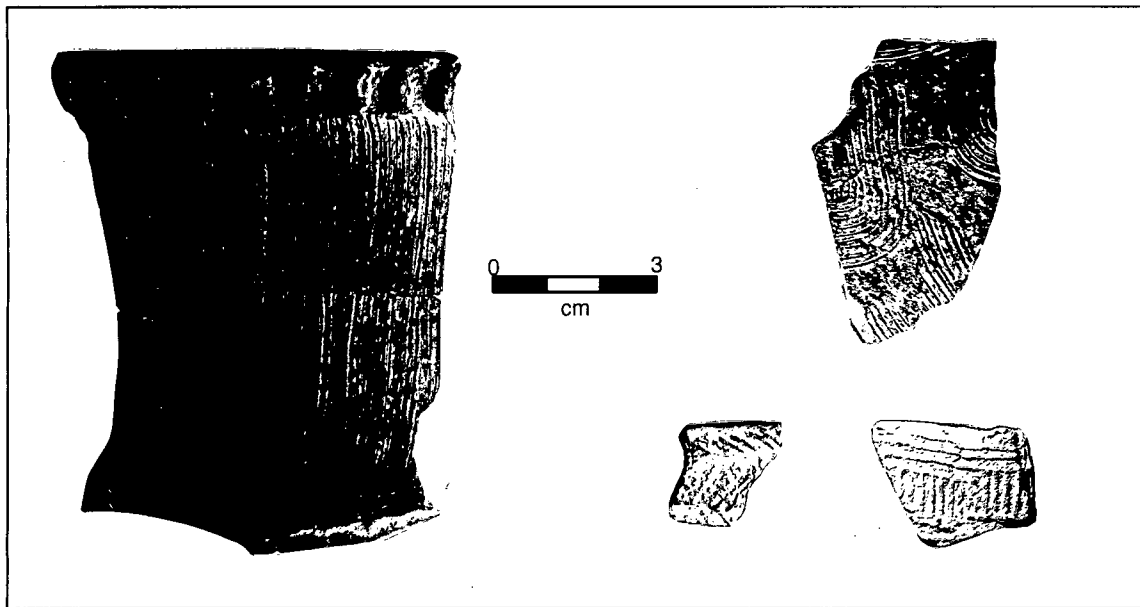


Figure 25. Left and Top Right: Rudder Comb Incised; Bottom Right: Pisgah-Like Complicated Stamped

This type also was defined in the Guntersville Basin using pottery occurring in burials at the Rudder site (Webb and Wilder 1951:255-267). One of the Rudder Comb Incised vessels was found in association with a Hardin Complicated Stamped vessel exhibiting a concentric circle motif that is characteristic of Wilbanks Complicated Stamped. Rudder Comb Incised sherds have

been found in early Lamar components at Stubbs Mound (Williams 1975:85) and the Lamar site (Williams 1975:86) in the Coastal Plain of Georgia, Stamp Creek (Caldwell 1957:359) in the Piedmont, and Little Egypt (Hally 1979:176) in the Ridge and Valley. At Park Mound (9Tp41) on the Chattahoochee River, the 26 sherds identified as Chattahoochee Brushed in the original report are probably Rudder Comb Incised sherds (see Plate IV, b and c in Hally and Oertel 1977). In addition to Etowah, Rudder Comb Incised sherds were also found in Middle Mississippian contexts at the Plant Hammond site (Hally and Langford 1988:59) and the Shinholser site (Williams 1990:67-132).

Although they are not listed as a distinct type in the Table 5, there are several sherds in the unidentified rectilinear stamped category, mainly from the stratigraphically later Wilbanks contexts, that resemble Pisgah Complicated Stamped (Figure 25). These exhibit motifs comprised of alternating groups of vertical, horizontal, or diagonal lines. The paste and temper of these sherds is finer and the content of mica is much higher than typical Wilbanks paste and temper. The Pisgah ceramic complex was defined by Dickens (1976:171-186) based on ceramic collections from sites in western North Carolina. Pisgah ceramics have also been found in northeastern Tennessee, northwestern South Carolina, and northeastern Georgia, and date from 1000 to 1450 A.D (Dickens 1976).

Table 10 shows the occurrence of identified Pisgah-like motifs in the Wilbanks contexts. One of these stamped sherds has an incised rim similar to those pictured by Dickens (1976:179, Plate 63). All but two of the ten sherds fit the Dickens' type description of Pisgah Rectilinear Complicated Stamped. The remaining two have a coarser paste and heavier grit more closely resembling the Wilbanks pottery.

TABLE 10

Number of Identified Pisgah-Like Complicated Stamped Motifs in the Wilbanks Proveniences

	STR1	MID2	MID1	FLOOR	OVO	GREY	DC	LBB
RECTILINEAR A	0	1	0	0	1	2	3	0
RECTILINEAR B	0	0	0	0	1	1	0	0
UNIDENTIFIED	0	0	0	0	0	0	1	0
TOTAL	0	1	0	0	2	3	4	0

In addition to the sherds resembling Pisgah Complicated Stamped with identifiable motifs, there are several sherds with a linear pattern similar to simple stamped. These, on the average, make up 8 percent of the unidentified rectilinear complicated stamped sherds. The majority has

heavily stamped, large lines running horizontally, or at an angle to the horizontal, and appears on sherds with Wilbanks paste and temper. These resemble sherd A from Plate 65 illustrated by Dickens (1976:187), which he simply calls Pisgah Rectilinear Complicated Stamped.

Three sherds, all from Late Wilbanks contexts, resemble the type Lake Jackson Decorated characteristic of the Rood phase on the lower Chattahoochee River (Schnell, Knight, Schnell 1981:159-188). As with the pottery resembling Pisgah ceramics, I have not formally assigned them a type. According to Schnell, Knight, and Schnell (1981:234) Lake Jackson Decorated was in use between A.D. 900 and 1400. All three of the sherds from Etowah resemble the variant Lake Jackson A (Figure 26). All three also exhibit the double-line incised collar mode (Schnell, Knight, Schnell:196, Figure 4.2 k). One of the sherds has a triple-ridge-noded handle, another has a handle identified as the opposed-tandem-nodes mode, and the third a triple-line-incised-at-top handle mode (Schnell, Knight, Schnell 1981:211, Plate 4.19 e and g; 213. 4.20 v).

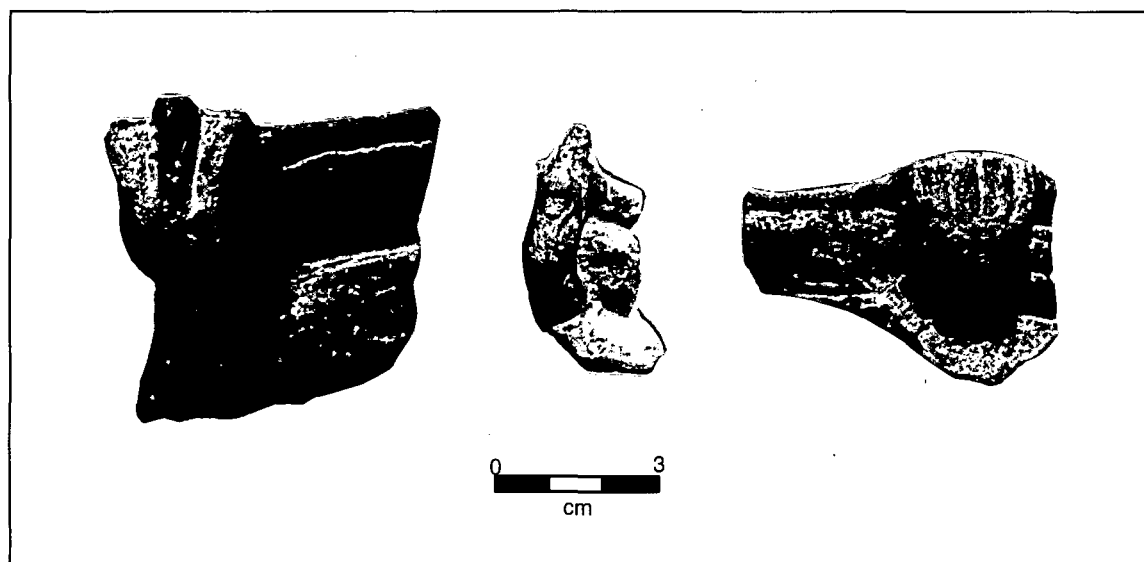


Figure 26. Lake Jackson-Like Decorated Rim Sherds

In addition to minority types, there are some previously undiscussed rim forms that appear only in the Late Wilbanks contexts (Table 9). The majority of rims on Early and Late Wilbanks pottery are plain, but some more elaborate forms do appear in the Late Wilbanks. These forms include collared rims, thickened rims, and early forms of pinched rims (Figure 27). The appearance of these forms illustrates the movement away from plain rims characteristic of Savannah period ceramics toward pinched and folded rims characteristic of Lamar pottery.

The early forms of pinched rims appear as rim strips that were individually sculpted to produce rows of vertical strips or nodes. Similar rims were found in the early Lamar Duvall phase assemblages from the Dyar site in the Wallace Reservoir (Smith 1983:80, Figure 3 second

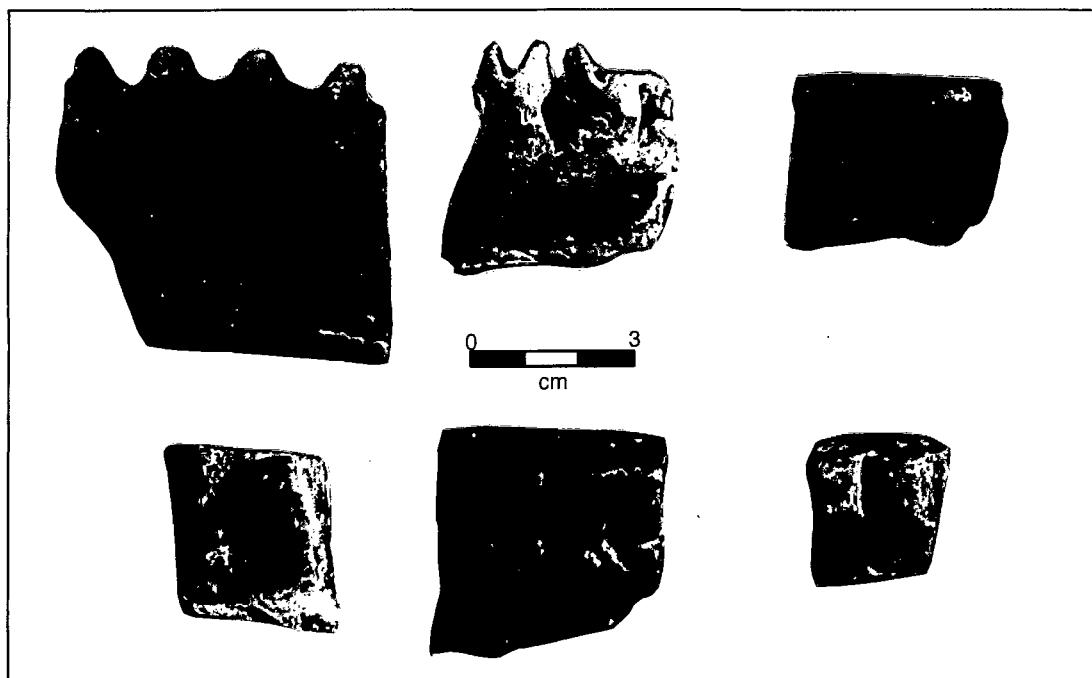


Figure 27. Top Row (L to R): Collared Rim, Collared Rim, Early form of Pinched Rim. Bottom Row (L to R): Early forms of Pinched Rims

row, third and fourth from the left; third row, fourth from the left). According to Smith (1981) all jars exhibit modified rims in the Duvall phase. At Etowah, only a small percentage of the jars have modified rims, suggesting that the material at Etowah is earlier than the Duvall ceramics.

Collared rims are most commonly found as part of the Pisgah pottery complex defined by Dickens (1976), which dates to roughly the same time as the Early through Late Mississippian periods in the Ridge and Valley of Georgia. Although alone the collared rims are not temporally sensitive, their presence in combination with early forms of pinched rims illustrates the tendency to begin altering rim forms. In Georgia, the altering of rim forms leads to the ubiquitous use of pinched and folded rims in the Lamar period.

Another rim form found in the later Wilbanks contexts is the peaked rim with nodes (Figure 28). These appear on plain, cord-marked, and Rudder Comb Incised vessels. A Rudder Comb Incised, peaked, noded vessel was found at the Rudder site in the Guntersville Basin in association with an apparent Middle Mississippian vessel (Caldwell 1957:359; Hally 1979:177). Peaked, noded rims were also found in the latest Dallas context of unit 37 at Hiwassee Island (Lewis and Kneberg 1946:99) and the Late Mississippian Dallas phase component at Toqua (Polhemus 1987). In Georgia, these rims are most common in early Lamar collections. Investigators found peaked and noded rims in the Stamp Creek phase on the Upper Etowah River (Caldwell 1957:359), at the Stubbs Mound (Williams 1975:110) on the Ocmulgee River, and at

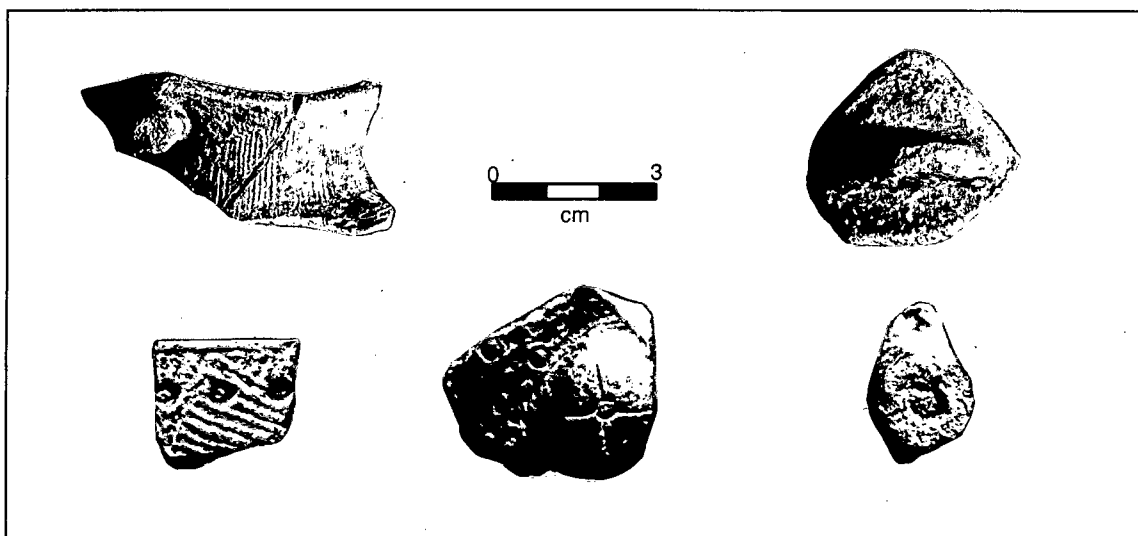


Figure 28. Top Row (L to R): Cordmarked and Plain Peaked and Noded Rims;
Bottom Row: Punctated Sherds

Park Mound on the Lower Chattahoochee River (Hally and Oertel 1977:Plate II, k). Wood et al. (1986:114) found a similar vessel in an early Lamar context at Simpson's Field (38An8) on the upper Savannah River of South Carolina. While peaked and noded rims may appear earlier in Alabama, they seem to be mainly an early Lamar manifestation in Georgia.

Plain rims with lugs, plain rims with nodes, nodes not definitely associated with rims or bodies, single punctated nodes, and rim sherds with single rows of cane punctations were also found in the Late Wilbanks collections from Etowah (Table 9; Figure 28). Lewis and Kneberg (1946:95) found plain nodes located just below the rim in the Dallas component of Hiwassee Island, and many appear in groups of two or three. At Etowah, although all of the examples occurred as single nodes, all could have been parts of sets. Hally (1979:161) found similar nodes in his early Lamar Little Egypt phase collections.

Large punctated nodes and rows of cane punctations are common features of pottery from the middle and lower Savannah River drainage. The large punctated nodes occur from the early Savannah Beaverdam phase through the early Lamar Rembert phase (Rudolph and Hally 1985:447-461). Sherds with closely spaced cane punctations on unfolded rims with widely spaced punctated nodes are found only in the Hollywood and Rembert phases (Rudolph and Hally 1985:456, 459). Outside the Savannah River drainage, cane punctated rims with punctated nodes occur only in Middle Mississippian contexts. Hally and Langford (1988:59) found identical rims at Plant Hammond in the Ridge and Valley.

In conclusion, the expanded analysis of pottery from Etowah has made it possible to divide the Wilbanks occupation into Early and Late Wilbanks phases (Tables 11 and 12). The criteria

TABLE 11

Relative Frequency (%) of Pottery Types in the Early and Late Wilbanks Proveniences

	EARLY	LATE
GRIT TEMPERED PLAIN	35.70	34.75
SHELL/LIMESTONE TEMPERED PLAIN	2.30	3.80
BURNISHED PLAIN	3.70	6.60
POLISHED BLACK	0.96	0.10
WILBANKS COMPLICATED STAMPED	2.30	2.30
ETOWAH COMPLICATED STAMPED	0.17	0.15
HIWASSEE ISLAND COMPLICATED STAMPED	0.37	0.10
ETOWAH RED FILMED	0.20	0.10
HIWASSEE ISLAND RED FILMED		
ETOWAH RED ON BUFF	0.60	0.03
HIWASSEE ISLAND RED ON BUFF	0.08	0.00
NEGATIVE PAINTED	0.00	0.25
SHELL TEMPERED CORD-MARKED	0.04	0.74
GRIT TEMPERED CORD-MARKED	2.50	0.42
UNIDENTIFIED CHECK STAMPED	0.25	0.80
CORN-COB IMPRESSED	0.17	0.25
GRIT TEMPERED BRUSHED	0.20	0.17
RUDDER COMB INCISED	0.00	1.00
UNIDENTIFIED INCISED	0.04	0.40
UNIDENTIFIED COMPLICATED STAMPED	17.00	17.75
UNIDENTIFIED RECTILINEAR STAMPED	9.00	7.26
UNIDENTIFIED CURVILINEAR STAMPED	23.80	21.50
UNIDENTIFIED SURFACE TREATMENT	0.08	0.00
TOTAL NUMBER OF SHERDS	2408	4050

TABLE 12

Relative Frequency (%) of Stamped Motifs in the Early and Late Wilbanks Proveniences

	EARLY	LATE
CONCENTRIC CIRCLE	17.9	31.0
CONCENTRIC CIRCLE WITH CROSS	1.5	6.8
FIGURE 9	37.0	23.3
FIGURE 9 WITH DOT	14.9	15.5
QUATREFOIL WITH DOT	1.5	1.0
QUATREFOIL WITH CROSS	1.5	1.0
FIGURE 8	0.0	1.9
SCROLL	1.5	0.0
BULL'S EYE	6.0	7.8
FILFOT CROSS	0.0	0.0
TWO-BAR CIRCLE	0.0	1.0
THREE-BAR CIRCLE	0.0	1.0
ONE-BAR DIAMOND	0.0	1.0
TWO-BAR DIAMOND	1.5	1.0
LADDER-BASE DIAMOND	11.9	2.9
FILFOT CROSS	0.0	1.9
LINE-BLOCK	0.0	0.0
CROSS-BAR DIAMOND	4.8	1.0
NUMBER OF IDENTIFIABLE MOTIFS	67	103

used to define the Late Wilbanks occupation include the occurrence of Rudder Comb Incised, Lake Jackson Decorated-like sherds, Pisgah-like rim modes and Pisgah-like complicated stamped sherds; peaked and noded rims; punctated nodes and rows of cane punctations; plain rims with lugs; and collared, thickened, and early forms of pinched rims. Each of these is present in the middens above the Orange Platform, but not in the Wilbanks contexts below the platform (Tables 6 and 9). Temper types (Table 8) and frequencies of complicated stamped motifs (Table 12) appear to change little between Early and Late Wilbanks, therefore only the minority types (Table 11) and new vessel shape modes are chronologically sensitive. There are no minority types that can be used to define the Early Wilbanks phase, because none of the minority types recognized occur exclusively in Early Wilbanks contexts.

In addition to the presence of new types and forms in the Late Wilbanks collections, there are some changes in complicated stamped motifs and the frequencies of types that occur with the transition from Early to Late Wilbanks (Table 12). With respect to stamped motifs, the figure 9 and dot 9 motifs (51.9%) dominate the early Wilbanks collections. The Late Wilbanks collections have almost the same frequency of concentric circle related motifs (46.7%) as figure 9 and dot nine motifs (40%). Because the Wilbanks stamped motifs are so large and often over stamped, I was able to identify very few in this small sample. Therefore, these trends may be as much the result of sampling error as true shifts in motif frequencies.

The frequencies of several of the minority types also change with the shift from Early to Late Wilbanks (Table 11). Shell-tempered cordmarked pottery increases while the grit-tempered cordmarked decreases. The relative frequency of the grit-tempered cordmarked in the Early Wilbanks is distorted by the presence of a large number of cordmarked sherds from one vessel in one of the proveniences (MID1). Therefore, the magnitude of the decrease is probably exaggerated. Also, corncob-impressed sherds and check stamped sherds increase.

The shift from Early Wilbanks to Late Wilbanks also entails a slight shift in the frequencies of temper types (Table 8). While limestone tempering remains at low frequencies, the shell tempering increases as the grit tempering decreases. These differences are very small.

Based on examination of the Wilbanks report (Sears 1958b), ceramically the Early Wilbanks phase at Etowah appears to be very similar to the pottery at the Wilbanks site. Therefore, the two pottery collections are probably contemporaneous. Of the areas in Georgia where Lamar ceramics have been identified, the sequence of Lamar phases in the Oconee Valley is the most detailed (Williams and Shapiro 1990:34). The Late Wilbanks pottery appears to be most similar to but earlier than the early Lamar Duvall phase in the Oconee Valley. If the Duvall phase begins around 1375 (Williams and Shapiro 1990:34), then the Late Wilbanks at Etowah probably dates from A.D. 1325 to 1375 and the early Wilbanks dates from A.D. 1250 to 1325.

The Lamar Period

Based on the sequences formulated by Sears (1958a), Kelly and Larson (1957), and Hally and Langford (1988), the only Lamar period occupation present at Etowah belongs to the

Brewster phase. In the Mound B excavations, Lamar period pottery was found only in the stratigraphically latest deposits, the plowzone and Brown Loam Midden. For this analysis, I examined pottery from three areas in the Brown Loam Midden (Figure 29). This stratum underlies the plowzone, and is distributed across the entire excavated area, including the flank of the mound. I chose particular collections because they were excavated in arbitrary levels and came from spatially separate areas of the midden. Only two of the three areas produced Lamar ceramics.

Tables 13, 14, and 15 show the pottery, temper and rim types found in each of the six-inch arbitrary levels from the areas containing Lamar ceramics. In general, these collections were small (n=636) and contained a mix of Brewster, Wilbanks, and Etowah pottery. Based on this sampling, it appears that the numbers of Lamar sherds in the Mound B excavations was small compared to those associated with earlier components. Because it is difficult to separate Lamar types from Wilbanks types, I did not attempt to distinguish Lamar Complicated Stamped and Lamar Plain from Wilbanks Plain, Sixes Plain, and Wilbanks Complicated Stamped.

In spite of the incomplete analysis, the Tables 13 through 15 do show a shift from predominantly Late Wilbanks ceramics in the lowest level of the midden to predominantly Brewster ceramics in the highest level. Minority types such as cordmarked, corncob impressed, and Rudder Comb Incised, which belong in the Late Wilbanks phase, drop in frequency from the lowest to highest level in the stratum (Table 13). The frequency of Lamar Incised, on the other hand, increases from zero in Level 3 to 2.9% in the Level 1. Early forms of pinched rims, thickened rims, and rims with lugs characteristic of the Late Wilbanks phase drop in frequency, as pinched and folded Lamar rims increase (Table 15). It is clear that Level 3 of the Brown Loam Midden contains Late Wilbanks pottery, Level 2 contains a mix of Late Wilbanks and Brewster sherds, and Level 1 contains Brewster phase pottery.

In addition to the collections from the Brown Loam Midden, I examined all proveniences in the Mound B collections that potentially contained Lamar ceramics. These proveniences included the plowzone and humus, isolated middens above the Brown Loam Midden, and the Brown Loam Midden. In most cases these collections were mixed Wilbanks and Brewster, and the natural strata were not excavated in arbitrary levels. Figure 29 shows the distribution of collections that contained Lamar markers such as pinched and folded rims and Lamar Incised sherds. I limited the analysis of these collections to identification of diagnostic Lamar sherds only.

Figure 29 also shows that some of the Brewster phase pottery was found on the slope of the mound. As discussed earlier, some of these deposits likely represent midden from the summit of Mound B that was tossed over the side of the mound during the excavations conducted by Rogan and Moorehead. It is also likely that some represent midden accumulations resulting from a Brewster phase use of Mound B and its vicinity.

TABLE 13

Relative Frequency (%) of Pottery Types in the Brown Loam Midden

	LEVEL 3	LEVEL 2	LEVEL 1
GRIT TEMPERED PLAIN	32.80	60.00	57.00
SHELL/LIMESTONE TEMPERED PLAIN	2.30	3.70	2.70
BURNISHED PLAIN	4.80	0.00	0.20
POLISHED BLACK	0.00	0.00	0.00
WILBANKS COMPLICATED STAMPED	2.00	0.50	0.67
ETOWAH COMPLICATED STAMPED	0.50	0.50	1.10
ETOWAH RED FILMED	0.50	0.00	0.00
HIWASSEE ISLAND RED FILMED	0.00	0.00	0.00
ETOWAH RED ON BUFF	0.00	0.00	0.00
HIWASSEE ISLAND RED ON BUFF	0.00	0.00	0.00
NEGATIVE PAINTED	0.90	0.00	0.00
SHELL TEMPERED CORD-MARKED	0.00	0.00	0.00
GRIT TEMPERED CORD-MARKED	0.20	0.00	1.00
UNIDENTIFIED CHECK STAMPED	0.50	0.00	0.50
CARTERSVILLE CHECK STAMPED	0.00	0.00	0.20
CORN-COB IMPRESSED	0.35	0.00	0.20
GRIT TEMPERED BRUSHED	0.20	0.00	0.00
RUDDER COMB INCISED	0.30	0.00	0.50
LAMAR INCISED	0.00	1.60	2.90
UNIDENTIFIED INCISED	0.00	1.40	0.00
UNIDENTIFIED COMPLICATED STAMPED	20.70	12.60	15.00
UNIDENTIFIED RECTILINEAR STAMPED	7.10	10.00	9.40
UNIDENTIFIED CURVILINEAR STAMPED	24.00	7.90	8.50
UNIDENTIFIED SURFACE TREATMENT	0.00	0.00	0.00
TOTAL SHERDS	564	191	445

TABLE 14

Relative Frequency (%) of Temper Types in the Brown Loam Midden

	LEVEL 3	LEVEL 2	LEVEL 1
SHELL	1.30	1.00	1.40
GRIT	97.30	94.80	95.00
LIME	1.40	4.20	3.60
TOTAL	564	191	445

TABLE 15

Relative Frequency (#) of Rim Types in the Brown Loam Midden

	LEVEL 3	LEVEL 2	LEVEL 1
PLAIN	59	12	25
PINCHED	2	0	0
FILLETED	0	1	0
NOTCHED	0	1	0
INCISED	0	1	0
RIM W/ NODE	0	1	1
RIM W/ LUG	2	0	0
INCISED L	0	0	1
PINCHED AND FOLDED	0	1	5
TOTAL	63	17	32

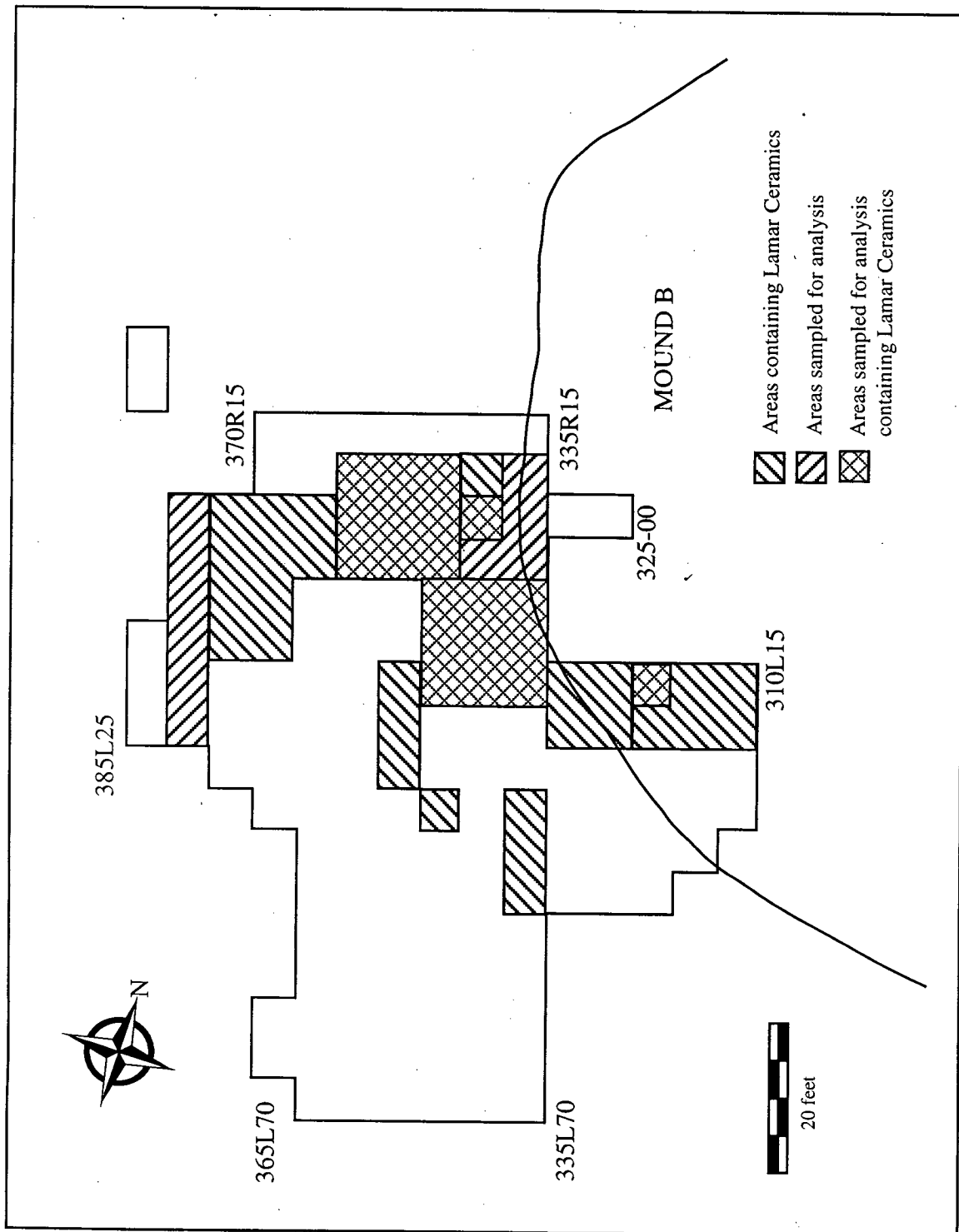


Figure 29. Location of Lamar Ceramics

CHAPTER 4

CERAMIC SEQUENCE REFINEMENTS

In addition to providing an opportunity to date the features and strata encountered by Kelly, the Mound B pottery collections also make it possible to address a series of issues relating to the occupational sequence of the Etowah site and the ceramic chronology of the Etowah River valley. In this chapter, I will use my Mound B ceramic analysis results to evaluate inferences made by Hally and Langford (1988) regarding valley ceramic chronologies. In addition, I will use recent radiocarbon dates to examine the absolute dating of some of the Mound B contexts. Combining these data, I will present a revised occupational sequence and ceramic chronology for the Etowah site.

The Etowah I and IV Phases

As defined by Sears (1958a, 1958b), the ceramic chronology for the Etowah site and the Allatoona Reservoir included four Etowah period phases, named Etowah I through IV (see Table 1). Upon examining the definitions for these phases and the numbers of sites assigned to each, Hally and Langford (1988:44) concluded that they were poorly defined and not well represented in the archaeological record. Instead, Hally and Langford argued for a two-part division of the Etowah period into Early and Late Etowah phases.

In the Etowah period deposits at Mound B, I found no evidence for assemblages dating to either the Etowah I or Etowah IV phase. The earliest features encountered, the saucers, contained pottery types that only occur after Etowah I, such as Etowah and Hiwassee Island Red Filmed, Burnished Plain, and Polished Black. Similarly, the pottery collections from the Black Midden, the latest Etowah context in the excavation, did not match the Etowah IV phase definition. These collections contained shell-tempered sherds, which are absent from Etowah IV assemblages, and did not include Savannah Complicated Stamped sherds expected in such collections. These data, along with the arguments presented by Hally and Langford (1988), suggest that the Early/Late Etowah phase distinction may be more appropriate for the Etowah site and probably also the Etowah valley.

The Etowah-Savannah Transition

It has long been recognized that there is a marked contrast between pottery of the Etowah and Savannah periods in the Etowah valley. Etowah period pottery is relatively thin, brown to buff in color and decorated with fine-lined stamping bearing largely rectilinear motifs. The Savannah period pottery is much thicker, ranges from orange to buff in color, and is decorated with bold and sloppy stamps bearing curvilinear motifs. These differences were conceived of as so drastic that an invasion of foreign people was hypothesized to explain them (Fairbanks 1950; Sears 1958b).

Recent excavations in northern Georgia have revealed ceramic assemblages that appear to bridge the gap between Etowah and Savannah ceramics. Pottery collections from the Beaverdam Creek site on the middle Savannah (Rudolph and Hally 1985), in the Oconee valley at Scull Shoals (Williams 1985), and at Sandy Hammock (Stephenson, King and Snow 1996) contain a mix of characteristics clearly showing that the Savannah pottery tradition developed from the preceding Etowah tradition. In particular, these assemblages contain Etowah Complicated Stamped pottery exhibiting barred diamond motifs and Savannah Complicated Stamped sherds decorated with barred concentric circles as important types.

No such transitional assemblages were identified in the Mound B collections. In some of the Late Etowah pottery samples from the Black Midden, I found a few nested diamond motifs that appeared to be more rounded than the majority of the diamonds (Figure 30). Also, in the Early Wilbanks collections from the area of Structure 1, I found a few examples of the cross-bar diamond motif on sherds exhibiting Wilbanks paste and temper (Figure 30). The presence of the rounded diamonds in Late Etowah contexts suggests the beginning of the shift in emphasis from the concentric diamond to concentric circle that accompanies the shift from Etowah to Savannah pottery. The presence, in low frequencies, of sherds with diamond motifs on Wilbanks paste shows the very end of the use of the rectilinear motifs in the Savannah period. The transitional phase that lies between these two extremes was not, however, found in the Mound B collections.

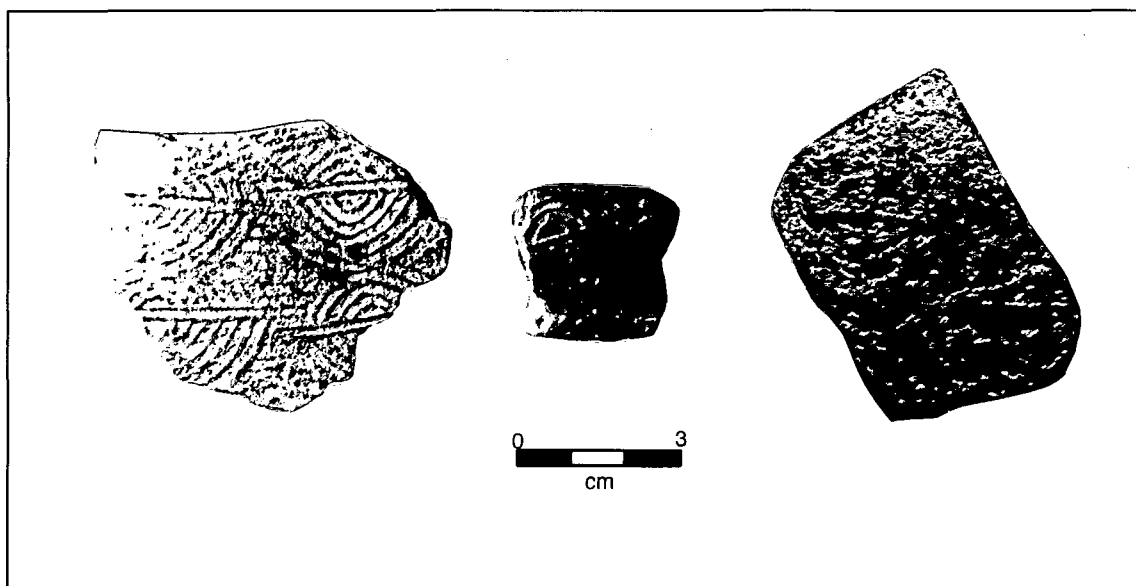


Figure 30. Left to Right: Rounded Diamond, Rounded Diamond, Cross-Bar Diamond on Wilbanks Sherds

The absence throughout the Etowah valley of assemblages transitional between Etowah and Wilbanks pottery has lead Hally to argue (Hally and Langford 1988:56; Hally and Rudolph 1986:53-57) that the valley may have been abandoned during the early Savannah period. The

fact that similar assemblages have not been recorded at Etowah suggests that it was also unoccupied at that time.

The Savannah-Wilbanks Confusion

During the late 1940s investigations were conducted in the Piedmont portion of the Etowah River valley in preparation for the inundation of the Allatoona Reservoir. As part of this work, excavations were conducted at the Stamp Creek site under the direction of Joseph Caldwell (1957) and at the Wilbanks site under the direction of William Sears (1958a). At each of these sites ceramic assemblages were recovered that appeared to be part of the Savannah ceramic tradition. However, Sears and Caldwell determined that the two assemblages were distinctly different. Caldwell's material from Stamp Creek was called Savannah, while Sears defined the Wilbanks period using pottery from Wilbanks.

While both researchers acknowledged that the two assemblages were similar and probably related, they also noted differences. According to Sears (1958b:173-174), the Savannah pottery lacked solid dots in the centers of concentric circles and figure 9s, as well as the elongate U motif commonly found at the Wilbanks site. In addition, Wilbanks stamped motifs were bolder and sloppier on average than the Savannah motifs. Because sloppy stamping was a trait commonly found with the later Lamar ceramics, Sears (1958b:176) believed that Wilbanks pottery post-dated the Savannah ceramics.

Out of this exchange emerged the belief that there were two similar but distinct Middle Mississippian ceramic assemblages in the Etowah River valley, with the Savannah ceramics being earlier than the Wilbanks ceramics (see Hally and Langford 1988). Unfortunately the descriptions left behind by each researcher are so similar that it has proven difficult to distinguish the two assemblages, and thus the term Savannah-Wilbanks often has been used to cover all Middle Mississippian assemblages in the Etowah River valley (Ledbetter et al. 1987).

The distinction between Early and Late Wilbanks phase assemblages made possible through analysis of Kelly's Mound B collections, I think, may help resolve this terminological problem. In order to see this, it is first worthwhile to reiterate the characteristics of the Early and Late Wilbanks phases.

The Early Wilbanks phase most closely conforms to Sears' original definition of the Wilbanks period, created using material from the Wilbanks site (Sears 1958b) and the Etowah site (Sears 1958a). Early Wilbanks assemblages contain plain, burnished, and complicated stamped pottery as major types, but cordmarked, check stamped, brushed, corncob impressed, red or orange filmed, and negative painted sherds also occur in low frequencies. Sherds are quite thick and range in color from orange to tan to dark brown, with most being the lighter colors. Stamped motifs are large, bold, and often over-stamped to the point that they are unrecognizable. Curvilinear motifs are predominant and consist mainly of variations of the figure 9 and concentric circle. Paste is coarse, giving the sherds a coarse look and sandy feel. Temper is usually heavy grit, although some limestone and shell also appears. Rims are always unmodified,

being either plain or slightly rolled, and vessel forms are restricted to straight-sided bowls and flaring rim jars.

In appearance and form, Late Wilbanks pottery is very similar to that of the Early Wilbanks. Most sherds are still quite thick, although some are noticeably thinner. Paste is still coarse, giving the sherds a coarse appearance and rough, sandy feel, and tempering remains heavy grit with small percentages of shell and limestone. Sherds range in color from orange to tan and brown like the Early Wilbanks, but in contrast, most are the darker colors. Curvilinear stamps are still the most common. Although some motifs remain large and bold, as in the Early Wilbanks, some become smaller with narrower lands and grooves (King 1997). Also many of the stamps are deeper and crisper with less over stamping than in the Early Wilbanks. To the list of minority types seen in the Early Wilbanks, Late Wilbanks assemblages add Rudder Comb Incised. At the Etowah site, Dallas Incised (see King 1996), Pisgah-like types, and Lake Jackson Decorated sherds all appear in this phase, but whether these non-local types occur at other smaller sites in the area is unclear.

In addition to these new types, several new vessel shapes and modes appear that anticipate many of the ceramic characteristics of the Lamar period. Forms commonly found in early Lamar contexts appear in this phase, including tall neck jars and vessels with peaked and noded rims. Also a very small minority of rims (3% of all rims) in the Late Wilbanks phase are modified. These rim modifications are reminiscent of classic Lamar pinched and folded rims but are quite different. They consist of individually sculpted and sometimes elaborate appliqués that often form a collar projecting above the vessel rim. Although they occur in the Early Wilbanks, nodes and punctations seem to become more common in this phase as well.

Turning to the Savannah-Wilbanks distinction, I (King 1996) recently reanalyzed the collections from Stamp Creek that Caldwell (1957) used to define his Savannah ceramic period. Although those collections are relatively small, they seem to exhibit assemblage characteristics expected of a Late Wilbanks collection. Compared to what is expected of Early Wilbanks material, sherds are somewhat thinner and many of the stamped motifs are quite crisp with narrow lands and grooves. In addition, the collection contains portions of a tall neck jar and a peaked and noded vessel. Both of these forms are markers of Late Wilbanks assemblages. Also, the vessels Caldwell (1957) found as mortuary offerings at Stamp Creek are similar to those found in burials associated with the Late Wilbanks stages of Etowah's Mound C. These vessels include a shell-tempered water bottle and small, shallow bowls with plain and complicated stamped surfaces.

When an Early Wilbanks collection from Etowah or the Wilbanks site is compared to this collection from Stamp Creek it is easy to see the differences that led Caldwell and Sears to make the Savannah-Wilbanks distinction. However, they were not able to see these collections in stratigraphic contexts, something Kelly's excavations west of Mound B at Etowah provided much later. As Sears and Caldwell agreed years ago, there are two Savannah period phases in the Etowah valley. One, the Early Wilbanks phase, corresponds to the material Sears used to define

his original Wilbanks period. The other is the Late Wilbanks phase, which corresponds to the pottery Caldwell examined from Stamp Creek.

An Early Lamar Occupation?

In their limited analyses of the Mound B collections, Hally and Langford (1988) found no evidence for an early Lamar period occupation of the site. In my more extensive analysis, I also found no evidence indicating an early Lamar use of the Mound B area. In the Mound B excavations, very few Lamar period ceramics, either early or late, were found at all. Only three pinched rims from the Lamar collections are narrow enough (8, 9, and 11 mm) to be considered as possible examples of early Lamar pottery (Smith 1981). These were found in collections containing the late Lamar Brewster phase ceramics, and probably fall within the range of variation of the width of late Lamar pinched rims.

Absolute Dating of the Etowah Sequence

Although Kelly's excavation techniques did not include screening soils or collecting flotation samples, organic material was collected that is suitable for radiocarbon dating. In this section, I use radiocarbon dating results from materials collected from Kelly's saucers and Black Midden to date the Etowah period phases of the Etowah valley sequence. I also use the dating of organic material collected from two features recovered on Kelly's Orange Layer to place the Early and Late Wilbanks phases in time. In both cases, the dates were obtained from Beta Analytic and have been calibrated using the software package CALIB 4.1.2. Funding for these dates was provided the Savannah River Archaeological Research Program, a division of the University of South Carolina's Institute of Archaeology and Anthropology.

Dating the Saucers and Black Midden

Table 16 presents the calibrated results of radiocarbon dating I conducted on soot removed from sherds excavated from Kelly's saucers. Despite the descriptions of burned areas and strata within the saucers, a surprisingly small number of sherds had soot adhering to their exterior surfaces. My ceramic analysis suggested that all four saucers dated to the Early Etowah phase. Because I had found evidence for some mixing that introduced Late Etowah diagnostics into the saucer fills, I attempted to draw samples from excavation lots that clearly contained Early Etowah assemblages. Where possible, I also attempted to draw samples from near the bottom and tops of each saucer. Unfortunately, this was not always possible. The results of the radiocarbon dating generally confirm the accepted dating of the Early Etowah phase, but also show that Late Etowah deposits are clearly mixed into the saucer fills.

Saucer 1 was not excavated in stratigraphic levels, so it was not possible to choose samples from the top and bottom of the feature. The two dates were run on samples taken from general feature collections. As Table 16 shows, the radiocarbon assays confirm the Early Etowah phase assignment made based on associated pottery. They also confirm my inference that Saucer 1 was the earliest feature in the Mound B excavations.

In contrast, the date from Saucer 2 falls within the range of the Late Etowah phase. The provenience information from the lot indicates that the sherds were collected from "Level 3 and below." Without knowing the thickness of the levels in this case, it is difficult to tell how deep in the feature these sherds were found. Also, given that Kelly's crew clearly had some difficulty in distinguishing the Late Etowah midden from the saucer fills stratigraphically, it is possible that this sample actually derives from a Late Etowah context or at least one containing both Early and Late Etowah diagnostics. The sherd from which the sample was drawn was of the type Etowah Complicated Stamped and had a ladder-base diamond motif stamped on it. Unfortunately, this sherd could have been found in either an Early or Late Etowah phase assemblage.

The dating results from Saucer 3 are only slightly more interpretable. One of the samples (Beta 145491) was recovered at the floor of the feature and it produced a date that falls somewhere between the end of the Early Etowah phase and the beginning of the Late Etowah phase. The second date (Beta 144164) falls beyond the range proposed for the Late Etowah and comes closer to what might be expected from an early Savannah period context. The assemblage from this lot contained what looked to be Early Etowah pottery, but the sherd containing soot was Etowah Complicated Stamped without a recognizable motif. The provenience was labeled as "Saucer 3, 4th 12 inch level." Again, it is difficult to tell where in the stratigraphic column that the excavators began assigning collections to Saucer 3, so it is possible that the sherd could have come from a Late Etowah context.

Both of these results might be worthy of suspicion and re-evaluation. Based on the analyses presented in the previous chapter, the assemblage recovered from the floor of Saucer 3 is little different from those taken from Saucer 1, which returned two much earlier dates. Collections from the higher levels in Saucer 3 are also quite similar to those from Saucer 1, except that they contain higher frequencies of limestone tempering. Given the similarity, it might be expected that my sample from somewhere in the middle of Saucer 3 would also return a date before AD 1100. Based on ceramic differences, I did suggest that Saucer 3 was somewhat later than the others, but its ceramic assemblage fits the Early Etowah phase description.

Unfortunately, the dates from Saucer 4 are even more perplexing. The sample supposedly deriving from a context near the top of the feature returned a very early Early Etowah date, while the sample from the floor of the saucer returned a Late Etowah date. Either localized mixing of the feature fill or confusion about proveniences are the most logical explanations for these results.

Overall, the radiocarbon dating of soot samples from the saucers confirms the Early Etowah dating of those features. It also highlights two important problems with Kelly's saucer collections. First, given the lack of detailed recording done during the excavations, it is difficult to understand clearly the provenience of those collections. More importantly, it seems clear that there is a fair amount of mixing in at least some of the saucers. While the use of each may have started during the Early Etowah phase, it seems possible that some continued to be used during the Late Etowah phase, causing some of the mixing apparent in the collections. Although it is

almost a cliché to say it, hopefully future dating efforts can help clarify some of the questions raised here.

Included in this dating effort was a single sample from Kelly's Black Midden (Table 16), which I assigned to the Late Etowah phase based on associated pottery collections. Although somewhat later than expected, that date still conforms to the general conception of the Etowah period sequence.

TABLE 16
Radiocarbon Dates from Kelly's Saucers and Black Midden

Sample	Context	Lot	Material	*Years BP	σ (yrs)	-1 σ	Calendar Date	+1 σ
Beta-144161	Saucer 1	5066	Soot	990	40	1003	1023	1148
Beta-145489	Saucer 1	5080	Soot	1000	40	1000	1021	1145
Beta-144162	Saucer 2	5557	Soot	830	40	1165	1218	1260
Beta-144164	Saucer 3	8702	Soot	810	40	1211	1224, 1231, 1239	1275
Beta-145491	Saucer 3	8715	Soot	900	40	1040	1160	1209
Beta-144163	Saucer 4	5580	Soot	850	40	1161	1212	1242
Beta-145490	Saucer 4	5576	Soot	1080	40	899	981	1015
Beta-144811	Black Midden	**358	Soot	820	40	1165	1221	1275

*Conventional dates

**Sample from Lot 358, recovered by Sears (1958a)

Radiocarbon dates, such as those in Table 16, are essentially means derived from samples taken from a larger population. As a convention, the means of several samples taken from the same population can themselves be averaged to produce a more precise estimate of the true population mean. Therefore, if several radiocarbon dates are, in statistical terms, samples from the same population, then it is desirable to average them to produce a single date. According to the chi square test (95% confidence level) included in the Calib 4.1.2 package, this series of dates can be divided into two statistically distinct sets. Because dates within each set are statistically the same, it is appropriate to average them.

Table 17 presents those two groups of dates arranged in chronological order, along with their calibrated averages. Ignoring provenience for the moment, the two groups and their averages

generally conform to expectations about the dating of the Early and Late Etowah phases, except that the later grouping of dates has an average somewhat later than anticipated.

If the earliest of the later dates (Beta 145491) is considered a grouping unto itself (notwithstanding statistical arguments), then a potentially interesting pattern emerges. The early set of dates, which conform to expectations about the Early Etowah phase, all come from contexts containing Early Etowah pottery assemblages. The single middle date falls within the range expected of the Late Etowah phase, but contained a pottery assemblage more closely fitting the Early Etowah phase. Based on details of Saucer 3's assemblage, however, I suggested it might be later than the saucers. The latest group of dates all fall just after AD 1200, later than expected for the Late Etowah phase. At least one of these contexts clearly contains Late Etowah pottery, and it is possible that the others do as well.

TABLE 17

Statistically Significant Date Groupings

Lab Number	Provenience	-1 σ	Calendar Date	+1 σ
Beta-145490	Saucer 4	899	981	1015
Beta-145489	Saucer 1	1000	1021	1145
Beta-144161	Saucer 1	1003	1023	1148
AVERAGE		997	1018	1022
Beta-145491	Saucer 3	1140	1160	1209
Beta-144163	Saucer 4	1161	1212	1242
Beta-144162	Saucer 2	1165	1218	1260
Beta-144164	Saucer 2	1211	1231	1275
Beta-144811	Black Midden	1165	1221	1275
AVERAGE		1188	1214	1221

In general, it appears that the dates from Kelly's saucers and Black Midden generally confirm the accepted dating of the Early and Late Etowah phases. However, while these data alone may not be strong enough to support this, it is possible that they suggest a need to revise somewhat the dating of the Etowah phases. It is possible that the Early Etowah phase begins around AD 1000, as originally proposed, but that it continues to as late as possibly AD 1175 or even AD 1200. The Late Etowah phase, which was originally placed before AD 1200 may actually start at about that time and continue into the first quarter of the thirteenth century. Given

the discussion above about the Etowah-Savannah period transition, I still accept that there is a gap in the occupation of Etowah during the early Savannah period. The saucer data suggest that such a gap might have occurred somewhat later in time. Given the potential problems caused by mixing and uncertainty about the exact provenience of collections, these potential changes to the Etowah valley chronology are best left as a hypothesis to be evaluated by future research.

Dating the Wilbanks Phases

As discussed in Chapter 3, in the 1957 season and Kelly and crew uncovered large portions of a prepared clay platform adjacent to Mound B. This stratum was called the Orange Layer, and on it were found several features, including the remains of a large rectangular building, Structure 4. Located outside of Structure 4 Kelly's crew recorded two features, 64A and 64B, that contained very dense concentrations of charred botanical remains, especially corn cobs. Stratigraphically, the Orange Layer was positioned in the middle of the Wilbanks deposits next to Mound B. Beneath the Orange Layer, only Early Wilbanks phase pottery was recovered, while the middens found on and above it contained only Late Wilbanks phase pottery. Therefore, Features 64A and 64B probably date to the Late Wilbanks phase, and possible near the beginning of the phase.

In 1957, both features were removed from the ground encased in chunks of the surrounding orange soil matrix. They remained in that state until I received funding in 1993 to process their contents for radiocarbon dating. Feature contents were separated from the surrounding matrix using flotation, and then submitted to Mary Theresa Bonhage-Freund for analysis. As Bonhage-Freund (1994) has presented elsewhere, both of the features contained mostly corncobs but charcoal from yellow pine, white pine, white oak, red oak, cane, and maypop was also present.

TABLE 18

Radiocarbon Dates from the Orange Layer.

Sample	F. #	Material	*Years BP	σ (yrs)	-1 σ	Calendar Date	+1 σ
Beta-67942	64A	Corn	740	70	1223	1280	1298
Beta-67943	64A	Wood	680	70	1278	1296	1390
Beta-67944	64B	Corn	560	50	1322	1403	1422
AVERAGE			636	36	1296	1303, 1369, 1383	1393

*Conventional dates

Table 18 presents the calibrated results of radiocarbon dates obtained from charred corn from each feature and wood charcoal from Feature 64A. According to the chi square test included in the Calib 4.1.2 package, the dates from Features 64A and B can be treated, with a 95% confidence level, as samples taken from the same population. Therefore, they can be averaged to create a more accurate estimate of the true date. That average, presented in Table 18, falls within the middle of the fourteenth century.

Using these dates and the cross-dating arguments discussed in the last chapter (and making some arbitrary breaks), I place the Late Wilbanks phase between approximately AD 1325 and AD 1375. Keeping in mind the absence of an early Savannah period occupation in the Etowah valley, I suggest that the Early Wilbanks phase dates between approximately AD 1250 and 1325. Given the data derived from dating the saucers, it is possible that these dates need to be moved forward in time, but only future dating efforts will determine the necessity for that shift.

A New Chronology for the Etowah Site

Using the pottery analysis results from Kelly's excavations, along with new radiocarbon dates, it is possible to propose a slightly refined occupational history and ceramic sequence for the Etowah site. That refined sequence is summarized in Table 19 and described in more detail below.

TABLE 19

Mississippian Period Ceramic Phase Sequence of the Etowah Site

Date	Mississippian Period	Regional Period	Phase
AD 1450-1550	Late Mississippian	Late Lamar	Brewster
AD 1375-1450	Late Mississippian	Early Lamar	Unoccupied
AD 1325-1375	Middle Mississippian	Late Savannah	Late Wilbanks
AD 1250-1325	Middle Mississippian	Late Savannah	Early Wilbanks
AD 1200-1250	Middle Mississippian	Early Savannah	Unoccupied
AD 1100-1200	Early Mississippian	Late Etowah	Late Etowah
AD 1000-1100	Early Mississippian	Early Etowah	Early Etowah

The Etowah Period A.D. 1000 to 1200

Rather than the four phases originally defined by Caldwell (1957), the Etowah period occupation of the Etowah site belongs to two phases: the Early Etowah phase and the Late Etowah phase. In general, Etowah ceramic assemblages consist primarily of complicated stamped, burnished, and plain pottery with minor amounts of incised and painted ceramic types. Complicated stamped designs are fine-lined and fairly well executed, and consist mainly of a variety of concentric diamonds, the filfot cross, and the lineblock motifs. Early Etowah is distinguished from Late Etowah collections based on differences in temper types, frequencies of complicated stamped motifs, and occurrence of certain minority types. In Early Etowah collections, the ladder-base diamond is the predominant motif and shell is the most common tempering agent. In Late Etowah collections two bar diamonds and grit tempering are more common, and the filfot cross motif, Etowah Incised, and Hiwassee Island Red on Buff all first appear.

The Savannah Period A.D. 1200 to 1375

There appears to be a gap in the occupation of Etowah between the end of the Late Etowah phase and the site's first occupation of the Savannah period. While components dating to this period have been found in other river valleys, neither the Etowah site nor the Etowah valley appear to have any early Savannah period occupations.

By about AD 1250, the Etowah site was reoccupied, beginning its Early and Late Wilbanks phase occupations. As noted above, Early and Late Wilbanks phase assemblages are dominated by plain and complicated stamped types. Compared to the earlier Etowah period ceramics, Wilbanks pottery is thicker, with bolder and sloppier complicated stamped designs. Those designs include the concentric circle, figure 9, figure 8, and quatrefoil. Also, a series of minority types occur in Wilbanks assemblages, including brushed, corncob impressed, cordmarked, and check stamped. Coarse grit is the predominant tempering agent.

Late Wilbanks assemblages are distinguished from those of the Early Wilbanks mainly by the presence of a series of minority types and vessel modes. Late Wilbanks assemblages contain Rudder Comb Incised, Dallas Incised, Pisgah-like types, and sherds resembling Lake Jackson Decorated. In addition, a small percentage of vessels are tall neck jars, have peaked and noded rims, or exhibit various forms of appliqués. Although not described in the Mound B analysis, a percentage of Late Wilbanks sherds appear to be thinner than their Early Wilbanks counterparts, and their stamped motifs have narrower and more clearly defined lands and grooves (King 1997).

The Lamar Period A.D. 1375 to 1550

The Lamar period occupation of Etowah is limited to the late Lamar Brewster phase. No evidence has yet been found indicating that the site was used during the early Lamar period (Stamp Creek and Mayes phases, see King 1997). The Brewster phase represents the Middle

Lamar occupation of the Etowah valley and contains all of the markers of classic Lamar assemblages. These are dominated by plain, complicated stamped, and incised types. Complicated stamped motifs are large, sloppy, and heavily over stamped. Coarse grit remains the predominant tempering agent. The rims of all jars and some bowls are modified with pinched and folded applied strips or notched fillet strips. Although not all recognized in the Mound B collections, cordmarking, check stamping and Dallas types are all present as minority wares in Etowah site assemblages (King 1997).

CHAPTER 5

SUMMARY OF THE MOUND B EXCAVATIONS

Between 1954 and 1958 Arthur R. Kelly and a series of University of Georgia field schools conducted excavations on the western flank of Mound B. During the course of the five seasons spent there, Kelly and his crews recorded the last three stages of Mound B and investigated a large area adjacent to the mound (Figure 31).

In the area adjacent to Mound B the earliest features encountered were four large, basin-shaped pits called the saucers. These features ranged in size from 10 to over 30 feet in diameter and from 2.5 to 7 feet deep. Feature fill consisted of alternating lenses of midden, and mixed sand and ash. In the midden, Kelly's crews found a wide variety of materials including, ceramics, flaked and ground stone tools, bone tools, human and animal bone, fresh water shell, and minerals such as yellow and red ochre. The ceramic collections found in these features indicate that they date to the Early Etowah phase. It seems likely that the saucers were actually borrow pits used as the source of fill for the first stages of Mound A, and that they were subsequently filled in with what appears to be the remains of feasting.

Above Kelly's saucers a thick black midden accumulated that dates to the Late Etowah phase. The mound construction stages exposed by Kelly's crews overlie this midden and therefore postdate it. On top of the Black Midden, the builders of Mound B placed a thin, compact, yellow clay surface. A stratum of brown sand washed over this yellow surface, and was eventually covered by a thin charcoal-rich midden. Eventually another stratum of brown sand washed over this midden as well. On this second stratum of sand a second charcoal-filled midden formed, and a stratum of multicolored, laminated sands covered it. Finally, this last set of sands was covered by a stratum of orange sandy loam (Orange Layer).

The compact yellow clay surface and the two charcoal-filled middens represent three living surfaces associated with a large, circular building designated as Structure 3. Ceramics recovered from these strata indicate that all three uses of this building occurred during the Early Wilbanks phase. Structure 3 measured approximately 42 feet in diameter and was surrounded by a shallow ditch and a small embankment. Both the ditch and embankment may have been built to protect the building from mound slope runoff. Structure 3 and the prepared surface on which it sat were surrounded by a palisade wall, suggesting the building and the area enclosed served a special purpose. The special nature of Structure 3 is supported by its unusual architecture and the presence of elite items on its floor.

The laminated sands that appear between the different occupations of Structure 3 and cover its final phase washed from the flanks of the mound. Each of the three construction stages recognized in the Mound B excavations consisted of sandy fill covered by a clay or loam cap. In the existing profiles, each stratum of sandy fill appears to be basket loaded within the mound but

355L25

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315L25

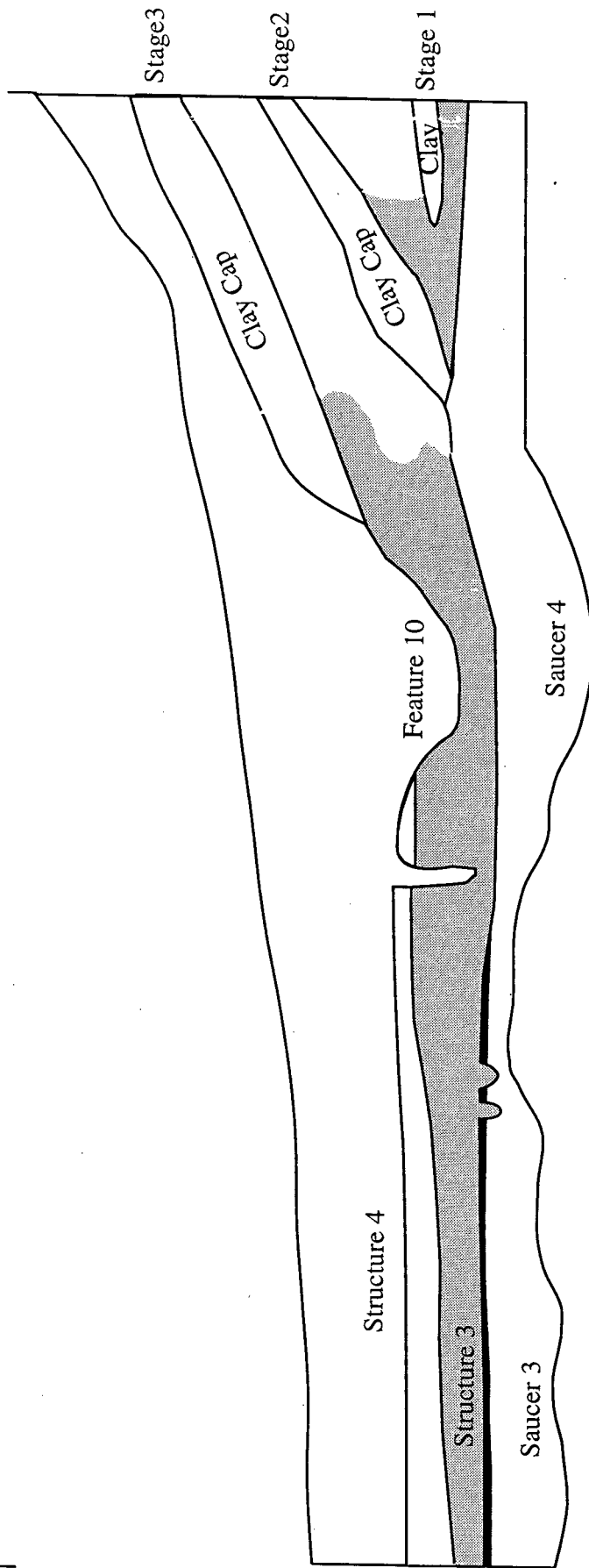


Figure 31. Idealized Profile of the Mound B Excavations

becomes laminated at the point where its clay cap ends. If these sands actually comprise the inner portions of a mound stage, then the only time they could be exposed is during the construction of each stage. Therefore, the laminated sands are wash from surfaces of the mound exposed during mound construction episodes.

Although existing profiles cannot confirm this, the three distinct episodes of wash associated with the three construction stages of Mound B almost certainly correspond to the wash episodes that covered each of the three phases of Structure 3. Also, it appears that the Orange Layer, the orange sandy loam stratum covering the final wash episode over Structure 3, is an extension of the cap covering Stage 3. Thus Structure 3 was destroyed and rebuilt with the addition of Stages 1 and 2, and destroyed and replaced by the extension of Stage 3 that formed a low terrace adjacent to the mound.

The possibility that Structure 3 was rebuilt with each new construction stage of Mound B is supported by archaeological and ethnohistoric evidence indicating that mound summit buildings were rebuilt with each new mound construction stage (Lewis and Kneberg 1946:33; Lorant 1946:115; Hudson 1976:332; Hally 1980:504; DePratter 1983:186; Rudolph and Hally 1985:81-83, 96; Williams 1988:38). Further, Polhemus argues that structures on the platform adjacent to Mound A at Toqua may have been rebuilt when new mound stages were added.

After the first occupation of Structure 3 was covered with washed sand, two additional buildings, Structures 1 and 2, were constructed to the south. Structure 1 was a square, single-set post building with rounded corners that measured 15 feet on a side. On its eastern side, this building also had a small embankment like the one associated with Structure 3. These features may have served to divert wash from the mound slopes during heavy rains. Structure 2 was represented by an incomplete post pattern. The remains uncovered by Kelly suggest that it was similar in size and shape to Structure 1. Both of these buildings resemble other known domestic structures in northern Georgia (Hally and Langford 1988:75-78), but their location adjacent to Mound B suggests that their inhabitants may have been of elevated status.

The Orange Layer was a prepared surface similar to the compact yellow clay surface of Structure 3. This platform measured 60 feet (north to south) by 30 feet (east to west) and was constructed of 12 to 18 inches of orange sandy loam. On it Kelly's crew found the remains of a large rectangular structure (Structure 4) that was apparently rebuilt at least once. A complete post pattern was never found, but the portions of the building that Kelly did uncover suggested that it measured approximately 25 by 40 feet. This was a single-set post building with a slightly depressed floor and a small embankment along its eastern wall. According to Kelly's field notes on the floor of this structure the crew found animal bone, cut mica, small chunky stones, ceramic animal figurines, parts of a copper plate, and negative painted pottery. Like Structure 3, Structure 4 may have had public or high status functions.

Above and directly on top of the Orange Layer Kelly's crew recorded a series of middens of various colors and textures. Each of these contained pottery dating to the Late Wilbanks phase. Because the Orange Layer is part of Stage 3 and has a Late Wilbanks midden directly on it,

Stage 3 must date to the Late Wilbanks phase. As noted earlier, the occupations of Structure 3 date to the Early Wilbanks phase. Since these occupations are separated by wash episodes associated with Stages 1 and 2, then these stages must also date to the Early Wilbanks phase. The fact that no wash episodes covered the floor of Structure 4 suggests that the construction of Mound B ended with the stage represented by the Orange Layer.

At the base of the mound, these Late Wilbanks middens were covered by a final Brown Loam Midden and the plowzone. The lower portions of the Brown Loam Midden contained Late Wilbanks phase pottery, while at the top of the stratum a small amount of Brewster phase material was also present. On the flank of the mound, that same Brown Loam Midden was covered by a stratum that contained a mix of Brewster and Wilbanks ceramics, but with a high percentage Etowah pottery as well. This appears to be re-deposited midden. I originally suggested (King 1991:29) that this re-deposited midden might have been part of a construction effort that took place during the Brewster phase. Larson found a similar deposit of the flanks of Mound C, which he argued was back dirt from excavations conducted by Rogan and Moorehead. I now think it is likely that the mixed middens overlying the Brown Loam Midden on the flank of Mound B also represent the backfill of Rogan and Moorehead.

There do appear to be intact Brewster phase deposits below this backdirt, however, and these quite likely derived from the summit of Mound B. More recent excavations conducted in 1994 (King 1995), recorded evidence for an intensive Brewster phase use of the last summit stage of Mound B. This evidence is noteworthy because it confirms the suggestion of Hally, Smith, and Langford (1990) that Etowah served as the capital of one of the constituent chiefdoms of the sixteenth century Coosa paramountcy described by De Soto.

In addition to the structures and midden-filled pits, Kelly's crews excavated 21 burials during their Mound B investigations. These were found at the base of the mound, on its flanks, and in the midden-filled pits. Most contained no artifacts, and information concerning stratum of origin was recorded unevenly. Table 20 presents their probable phase assignments based on associated artifacts or stratigraphic information. Probably the most notable trend in the burial data is that most of the Brewster and Brewster /Wilbanks graves (3 out of 5) contained more than one individual. Smith (1987:60-68) has argued that mass graves may indicate the effects of European epidemics. According to DePratter, Hudson, and Smith (1985:118) De Soto and his army stayed at Etowah for over a week, which is enough time to spread European diseases to village inhabitants. European items found at Etowah during Larson's excavations of the Lamar village support the idea that Desoto visited the site (Brain and Phillips 1996; King 1999; Smith 1976).

TABLE 20

Phase Assignments for Mound B Burials

Feature	Burial	Stratigraphic Origin	Burial Associations	Date
4	5	Brown Loam Midden	none	L. Wilbanks
6	6	Brown Loam Midden	none	L. Wilbanks
6	7	Brown Loam Midden	none	L. Wilbanks
8	-	Plowzone	chert blade	Brewster
7	1	under plowzone	bone comb, 2 chunky stones	Brewster
7	2	under plowzone	none	Brewster
7	3	under plowzone	none	Brewster
7	4	under plowzone	none	Brewster
7	5	under plowzone	none	Brewster
20	-	Black Midden	none	Late Etowah
21	-	Brown Loam Midden	none	Brewster
-	-	Brown Loam Midden	none	Brewster
-	-	Brown Loam Midden	none	Brewster
22	-	Brown Loam Midden	burnished water bottle, beaver tooth, bone awl, shell mask, shell hoe	Brewster
30	-	through laminated sand	none	Wilbanks/Brewster
-	-	through laminated sand	none	Wilbanks/Brewster
36		unknown	stone slabs	E./L. Wilbanks
-	21	within Saucer 2	none	Early Etowah
-	22	through Black Midden	projectile point, bone awl, effigy vessel, deer antler	E./L. Wilbanks
-	-	unknown	none	Unknown
-	-	unknown	none	Unknown

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APPENDIX 1

CERAMIC ARTIFACT DATA

LIST OF PROVENIENCES AND LOT NUMBERS

ETOWAH PROVENIENCES

<u>SAUCER 1</u>	<u>SAUCER 3</u>	<u>SAUCER 3</u>	<u>SAUCER 4</u>
5073	8581	8580.2	5577
5075	8718	8706	5580
5076	8579	8702	
5077	LEVEL 2	8710	<u>BLACK MIDDEN</u>
5080	8700	FLOOR	LEVEL 1
5081	8596	8707	5570
	8569	8715	5628
<u>SAUCER 2</u>	LEVEL 3	8719	LEVEL 2
TOP	8764	LEVEL 1 REDO	5625
5553	8779	7586	LEVEL 3
5554	8577		5608
BOTTOM	8582	<u>SAUCER 4</u>	5622
5231.1	8584	TOP	5618
5231.2	LEVEL 4	5584	LEVEL 1 REDO
5250.1	8782	5576	5508.1
5250.2	8580.1	BOTTOM	5508.2
LEVEL 1			

WILBANKS PROVENIENCES

<u>STRUCTURE 1</u>	<u>FLOOR</u>	<u>DARK CLAY</u>
5025	5708	5789
5035	5848	5790
5039	5850	5798
5048	5849	5856
<u>SECOND MIDDEN</u>	<u>OCCUPATION OVER ORANGE</u>	<u>LAMAR BONE BED</u>
5751	5422	7418
5752	4524	5640
5763	5426	5573
		LEVEL 3
<u>FIRST MIDDEN</u>	<u>GREY</u>	5850
5830	5688	5851
5837	5690	
5841		

LIST OF PROVENIENCES AND LOT NUMBERS (cont.)

LAMAR/WILBANKS PROVENIENCES

ETOWAH/WILBANKS/LAMAR

LAMAR BONE BED

LAMAR BONE BED

LEVEL 1

12 - 30"

5678

5426

5652

5637

5662

LEVEL 2

5679

5638

POTTERY TYPE COUNTS IN EACH PROVENIENCE

	Woodstock Comp. Stamped		Etowah Comp. Stamped		Hlawassee Island Comp. Stamped				Wilbanks Comp. Stamped				Burnished							
	Body	Rim	Body	Rim	S	L	Body	Rim	S	L	Body	Rim	S	L	Body	Rim				
SAUCER 1	5073	0	0	0	1	0	3	2	0	0	0	0	0	0	26	3	1	0	0	1
	5075	0	0	8	4	2	0	0	1	0	0	0	0	0	6	1	2	4	1	1
	5076	1	0	1	7	5	1	0	0	0	0	0	0	0	21	0	0	4	0	0
	5077	0	0	0	2	5	0	0	0	0	0	0	0	0	10	3	0	4	1	0
	5080	0	0	1	6	0	0	0	0	0	0	0	0	0	11	0	0	5	0	0
	5081	0	0	0	15	1	0	0	0	0	0	0	0	0	28	1	1	3	0	0
	5231.1	0	0	0	1	2	13	0	2	0	0	0	0	0	20	1	16	2	0	1
SAUCER 2	5231.2	1	0	0	1	0	0	10	0	4	0	0	0	0	7	0	14	3	0	4
	5250.1	0	0	0	1	0	0	6	1	0	0	0	0	0	15	0	14	3	0	3
	5250.2	0	0	2	3	4	19	2	0	0	0	0	0	0	29	1	25	1	0	3
	5553	0	0	0	1	9	11	0	1	0	0	0	0	0	15	5	14	3	1	3
	5554	0	0	0	4	3	17	0	1	0	0	0	0	0	11	7	12	0	0	3
	8581	0	0	1	15	0	6	0	0	0	0	0	0	0	16	5	7	1	1	0
	8718	0	0	3	16	4	7	0	1	0	0	0	0	0	39	8	5	4	1	0
SAUCER 3	8579	0	0	0	10	0	3	0	0	0	0	0	0	0	16	10	2	1	1	0
	8700	0	0	0	5	1	2	0	0	0	0	0	0	0	11	4	6	2	3	1
	8586	0	0	2	5	1	5	0	1	0	0	0	0	0	25	2	8	3	1	1
	8596	0	0	3	5	2	7	0	1	0	0	0	0	0	36	2	4	4	0	2
	8764	0	0	0	1	4	1	2	0	0	0	0	0	0	28	7	1	0	2	0
	8779	0	0	0	6	0	8	0	0	0	0	0	0	0	18	1	4	3	0	0
	8577	0	0	1	2	5	6	0	1	0	0	0	0	0	19	6	2	1	0	0
	8582	0	0	0	2	2	1	3	2	1	0	0	0	0	11	4	3	2	0	1
	8584	0	0	0	2	0	1	3	0	2	0	0	0	0	11	2	4	1	0	0
	8782	0	0	1	16	3	0	0	0	0	0	0	0	0	23	4	0	7	0	0
	8580.2	0	0	0	4	1	0	0	0	0	0	0	0	0	28	2	0	5	0	0
	8580.1	0	0	1	8	1	0	0	1	0	0	0	0	0	28	1	0	4	0	0
	8706	0	0	3	9	0	0	0	0	0	0	0	0	0	21	0	0	2	0	0
	8702	0	0	4	8	4	0	0	0	0	0	0	0	0	23	0	0	7	0	0
	8710	0	0	0	11	2	1	0	0	0	0	0	0	0	21	1	1	3	0	0
	8707	0	0	1	1	0	0	0	0	0	0	0	0	0	23	1	0	1	0	0
	8715	0	0	1	7	1	0	0	0	0	0	0	0	0	4	0	0	5	0	0
	8719	0	0	0	2	1	1	0	0	0	0	0	0	0	13	1	0	1	0	0
	7586	0	0	0	5	0	1	7	0	2	0	0	0	0	60	8	27	6	0	2
SAUCER 4	5577	0	0	0	3	0	1	1	0	0	0	0	0	0	27	3	0	2	0	0
	5580	0	0	4	2	1	0	0	0	0	0	0	0	0	57	0	1	7	1	0
	5584	0	0	1	6	1	7	0	0	0	0	0	0	0	5	5	13	0	1	2
	5576	0	0	0	5	0	0	14	0	3	0	0	0	0	14	5	27	1	0	1
BLACK MIDDEN	5570	0	0	2	15	0	3	0	0	0	0	0	0	0	11	14	13	0	2	0
	5688	0	0	1	10	2	11	0	1	0	0	0	0	0	3	10	7	1	0	2
	5685	0	0	4	8	2	13	0	2	0	0	0	0	0	9	15	17	0	2	3
	5608	0	0	0	12	2	6	0	0	0	0	0	0	0	6	16	8	0	2	1
	5622	0	0	0	2	4	7	0	0	0	0	0	0	0	15	2	8	0	1	0
	5618	0	0	0	0	2	6	0	1	0	0	0	0	0	2	7	4	0	1	0
	5508.1	0	0	0	12	0	1	14	0	1	0	0	0	0	6	15	7	0	2	0
5508.2	0	0	0	11	0	1	18	0	1	0	0	0	0	4	24	6	0	2	0	

		Plain						Polished Black						Etowah Red Filmed		Hlawassee Island Red Filmed													
		Body			Rim			Body			Rim			Body	Rim	Body			Rim										
		S	G	L	S	G	L	S	G	L	S	G	L			S	G	L	S	G	L								
SAUCER 1	5073	58	23	4	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5075	21	3	0	4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5076	56	20	0	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5077	35	10	2	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5080	23	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5081	58	10	3	4	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SAUCER 2	5231.1	26	5	13	0	0	1	4	2	2	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5231.2	13	0	3	2	0	1	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5250.1	13	0	8	0	0	0	1	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5250.2	21	2	19	1	1	2	4	1	1	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5553	33	5	17	2	0	1	4	2	2	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5554	28	7	9	2	1	1	4	1	1	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SAUCER 3	8581	29	5	4	3	2	0	0	0	6	3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8718	30	9	6	1	0	0	4	1	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	
	8579	37	12	7	2	0	0	2	3	3	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	
	8700	9	10	3	0	1	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8596	17	7	12	1	0	2	2	6	2	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	
	8596	38	2	8	2	0	0	1	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8764	16	3	2	2	1	0	4	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	
	8779	25	2	0	2	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8577	20	0	0	3	0	0	3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8582	11	2	1	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8584	6	3	2	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8782	20	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	
	8580.2	21	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	
	8580.1	21	2	0	4	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	
	8706	18	3	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	
	8702	22	3	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	
	8710	24	3	0	3	0	0	3	0	0	2	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	
	8707	12	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	
	8715	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8719	5	4	0	2	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7586	46	7	4	5	0	2	6	1	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SAUCER 4	5577	35	9	0	2	2	0	2	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5580	84	6	0	6	0	0	5	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5584	18	16	26	0	1	2	5	5	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	
	5576	37	26	51	1	1	1	1	10	6	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
BLACK MIDDEN	5570	27	19	12	4	2	2	3	6	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5698	1	12	16	0	0	0	0	6	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5695	15	26	10	1	4	2	1	17	4	4	0	0	2	1	0	0	0	0	8	2	0	0	0	0	0	0	0	
	5608	16	30	19	2	1	0	3	16	5	3	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	
	5622	21	5	2	0	2	1	1	0	3	3	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	
	5618	4	8	2	0	2	0	0	7	2	2	0	0	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	
	5508.1	15	14	27	1	0	3	1	4	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	
	5508.2	18	43	19	0	1	2	0	7	1	1	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	

[illegible]

Unidentified Comp. Stamped				Unidentified Treatment						Eroded						Total Number of Sherds		
Body			Rim	Body			Rim	Body			Rim	Body						
S	G	L		S	G	L		S	G	L		S	G	L				
SAUCER 1	5073	1	6	0	0	0	0	0	0	0	0	0	2	1	0	0	0	150
	5075	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	68	
	5076	1	5	0	0	1	0	0	0	0	0	0	0	1	0	0	146	
	5077	0	14	0	0	1	0	0	0	0	0	0	1	1	0	0	113	
	5080	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	58	
5081	0	5	0	0	0	2	0	0	0	0	0	0	1	1	0	0	152	
SAUCER 2	5231.1	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	138
	5231.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	72	
	5250.1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	71	
	5250.2	0	2	3	0	0	0	0	0	0	0	0	0	1	4	0	1	195
	5553	2	0	1	0	0	0	0	0	0	0	0	6	0	0	0	0	182
5554	1	2	0	0	0	0	0	0	0	0	0	0	0	3	0	0	150	
SAUCER 3	8581	0	5	2	0	0	2	0	0	0	0	0	0	0	0	0	0	141
	8718	0	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	179
	8579	3	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	158
	8700	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	95
	8596	1	3	2	0	5	0	0	0	0	0	0	0	0	0	0	0	134
	8596	0	2	5	0	1	0	0	0	0	0	0	0	0	0	0	0	171
	8764	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	80
	8779	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	80
	8577	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52
	8582	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46
	8584	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	91
	8782	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	83
	8580.2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	95
	8580.1	1	6	0	0	0	0	0	0	0	0	0	0	1	0	0	0	95
	8706	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	107
8702	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	53	
8710	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	28	
8707	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	47	
8715	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	234	
8719	0	2	0	0	0	0	0	0	0	0	0	0	1	1	0	0	105	
7586	2	5	0	0	0	0	0	0	0	0	0	0	0	1	1	0	197	
SAUCER 4	5577	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	188
	5580	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	267
	5584	1	6	7	0	1	0	0	0	0	0	0	0	1	0	0	0	208
5576	1	6	5	0	0	0	0	0	0	0	0	0	1	0	2	0	169	
BLACK MIDDEN	5570	0	7	3	0	1	0	0	0	0	0	0	0	0	0	0	0	300
	5688	4	14	18	0	0	0	0	0	0	0	0	0	0	0	0	0	268
	5685	3	16	9	0	1	2	0	0	0	0	0	1	2	0	0	0	100
	5608	1	5	13	1	1	0	0	0	0	0	0	0	1	0	0	0	93
	5622	0	3	5	0	1	0	0	0	0	0	0	0	0	0	0	0	171
	5618	2	2	7	0	0	0	0	0	0	0	0	0	1	3	1	0	237
	5508.1	1	3	0	0	0	0	1	0	0	0	0	0	0	2	1	0	
5508.2	0	10	3	0	0	1	0	0	0	0	0	0	1	5	4	0		

		Plain										Polished Black						Etowah Red Filmed		Hiwassee Island Red Filmed					
		Body					Rim					Body			Rim			Body		Rim		Body		Rim	
		S	G	L	S	L	S	G	L	S	G	L	S	G	L	S	G	L	S	G	L	S	G	L	
STRUCTURE 1	5025	3	43	0	0	0	6	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	
	5035	0	44	0	0	0	6	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	
	5039	4	58	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5048	2	66	1	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MID2	5751	3	169	2	1	1	8	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	
	5752	15	141	3	0	0	9	0	0	0	1	8	0	0	0	0	0	0	0	0	0	0	0	0	
	5763	12	113	2	0	0	8	2	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	
MID 1	5830	2	61	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	
	5837	1	103	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5841	2	48	0	0	0	3	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	
FLOOR	5708	2	59	1	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5848	3	72	0	2	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5850	0	67	7	1	1	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5849	3	58	9	1	1	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
OVO	5422	4	53	3	1	1	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5424	3	61	1	3	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5426	6	76	0	2	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
GREY	5688	0	77	1	0	0	3	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	
	5690	6	124	2	2	2	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
DC	5789	11	46	1	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5790	3	3	0	0	0	6	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	
	5798	20	134	9	4	4	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5856	9	89	2	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
LBB	7418	9	106	6	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5851	1	28	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5852	2	51	1	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5640	2	88	5	2	2	10	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	
	5573	3	45	2	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	
	5678	1	134	2	1	1	8	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	
	5852	1	27	2	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5637	1	44	2	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5662	0	32	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5679	0	57	2	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5638	2	49	1	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5426	28	61	25	1	1	7	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	

	Etowah Red on Buff				Hiwassee Island Red on Buff				Etowah Incised		Net Impressed				Cartersville Check Stamped	
	Body G	Rim G	Body S	L	S	Rim G	Body S	L	Body G	Rim G	S	L	Body G	Rim G	Body G	Rim G
STRUCTURE 1	5025	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5035	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5039	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5048	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MID2	5751	3	4	1	0	0	0	0	0	0	0	0	0	0	0	0
	5752	3	3	0	1	0	0	0	0	0	0	0	0	0	0	0
	5763	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MID 1	5830	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5837	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5841	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FLOOR	5708	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5848	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5850	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5849	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OVO	5422	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5424	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5426	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GREY	5688	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5690	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DC	5789	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5790	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5798	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5856	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LBB	7418	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5851	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5852	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5640	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5573	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5678	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5652	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	5637	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5662	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5679	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5638	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5426	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0

[illegible]

	Brushed			Negative Painted									Lamar Incised			Unidentified Check Stamped								
	Body		Rim	S	Body		L	S	Rim		L	Body	Rim	S	Body		L	S	Rim		L			
STRUCTURE 1	5025	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0			
	5035	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	5039	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	5048	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
MID2	5751	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	5752	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0			
	5763	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0			
MID 1	5830	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	5837	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0			
	5841	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
FLOOR	5708	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0			
	5848	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0			
	5850	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0			
	5849	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0			
OVO	5422	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0			
	5424	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0			
	5426	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0			
GREY	5688	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0			
	5690	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0			
DC	5789	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	5790	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	5798	1	0	0	0	4	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0			
	5856	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
LBB	7418	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	5851	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0			
	5852	0	0	0	0	5	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0			
	5640	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	5573	1	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0			
	5678	0	0	0	0	0	0	0	0	0	0	3	4	0	0	0	0	0	0	0	0			
	5652	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0			
	5637	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	5662	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0			
	5679	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0			
	5638	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0			
5426	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0				

Unidentified Incised										Unidentified Curvilinear Comp. Stamped										Unidentified Rectilinear Comp. Stamped									
Body					Rim					Body					Rim					Body					Rim				
S	G	L	S	G	L	S	G	L	S	G	L	S	G	L	S	G	L	S	G	L	S	G	L	S	G	L	S	G	L
STRUCTURE 1	5025	0	0	0	0	0	0	0	0	0	37	1	0	0	7	0	0	0	0	20	1	0	0	2	0	0	0	0	0
	5035	0	0	0	0	0	0	0	0	0	60	0	0	7	0	0	0	0	17	0	0	0	0	0	0	0	0	0	
	5039	0	0	0	0	0	0	0	0	0	61	0	0	0	5	0	0	0	32	0	0	0	2	0	0	0	0	0	
	5048	0	0	0	0	0	0	0	0	0	25	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	
MID2	5751	0	0	0	0	0	0	0	0	0	58	0	0	0	0	0	0	1	25	1	0	0	0	0	0	0	0	0	
	5752	0	0	0	0	0	0	0	0	0	92	0	0	0	0	0	0	1	27	0	0	0	0	0	0	0	0	0	
MID 1	5763	0	0	0	0	0	0	1	0	0	37	0	0	0	0	0	0	0	19	1	0	0	0	0	0	0	0	0	
	5830	0	0	0	0	0	0	0	0	0	48	0	0	0	1	0	0	0	24	0	0	0	0	0	0	0	0	0	
	5837	0	0	0	0	0	0	0	0	0	72	0	0	0	1	0	0	0	14	0	0	0	0	0	0	0	0	0	
FLOOR	5841	0	0	0	0	0	0	0	0	0	63	0	0	0	0	0	0	0	24	1	0	0	0	0	0	0	0	0	
	5708	0	0	0	0	0	0	0	0	0	54	0	0	0	3	0	0	0	21	1	0	0	1	0	0	0	0	0	
	5848	0	0	0	0	0	0	0	0	0	54	3	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	
	5850	0	1	0	0	0	0	0	0	0	74	0	0	0	9	0	0	0	26	1	0	0	2	0	0	0	0	0	
OVO	5849	0	0	0	0	0	0	2	0	0	47	1	0	0	9	0	0	0	20	0	0	0	3	0	0	0	0	0	
	5422	0	0	0	0	0	0	0	0	0	29	0	0	2	0	0	0	0	9	0	0	0	2	0	0	0	0	0	
	5424	0	0	0	0	0	0	0	0	0	26	0	0	6	0	0	0	0	13	0	0	0	0	0	0	0	0	0	
	5426	0	0	0	0	0	0	0	0	0	41	0	0	10	0	0	0	0	17	1	0	0	2	0	0	0	0	0	
GREY	5688	0	0	0	0	0	0	1	0	0	50	0	0	5	0	0	0	0	24	0	0	0	1	0	0	0	0	0	
	5690	0	0	0	0	0	0	0	0	0	56	0	0	8	0	0	0	1	15	0	0	0	0	0	0	0	0	0	
DC	5789	0	0	0	0	0	0	0	0	0	35	0	0	2	0	0	0	2	7	0	0	0	0	0	0	0	0	0	
	5790	0	0	0	0	0	0	0	0	0	24	0	0	5	0	0	0	0	9	0	0	0	1	0	0	0	0	0	
	5798	6	2	0	0	0	0	0	0	0	57	0	0	8	0	0	0	0	13	0	0	0	1	0	0	0	0	0	
	5856	0	1	0	0	0	0	0	0	0	54	0	0	9	0	0	0	0	16	0	0	0	1	0	0	0	0	0	
LBB	7418	0	1	0	0	0	0	0	0	0	21	0	0	5	0	0	0	0	20	1	0	0	2	0	0	0	0	0	
	5851	0	0	0	0	0	0	0	0	0	25	0	0	4	0	0	0	0	10	0	0	0	3	0	0	0	0	0	
	5852	0	0	0	0	0	0	0	0	0	59	0	0	6	0	0	0	0	14	0	0	0	1	0	0	0	0	0	
	5640	0	0	0	0	0	0	0	0	0	36	0	0	5	0	0	0	0	10	0	0	0	3	0	0	0	0	0	
	5573	0	0	0	0	0	0	0	0	0	28	0	0	3	0	0	0	0	11	0	0	0	1	0	0	0	0	0	
	5678	0	0	0	0	0	0	0	0	0	25	0	0	1	0	0	0	1	21	7	0	0	1	0	0	0	0	0	
	5652	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	
	5637	0	0	0	0	0	0	0	0	0	8	0	0	2	0	0	0	0	7	0	0	0	0	0	0	0	0	0	
	5662	0	0	0	0	0	0	0	0	0	3	0	0	1	0	0	0	0	5	0	0	0	1	0	0	0	0	0	
	5679	0	0	0	0	0	0	1	0	0	10	1	0	0	0	0	0	0	12	1	0	0	0	0	0	0	0	0	
	5638	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	6	1	0	0	0	0	0	0	0	0	
	5426	0	0	0	0	0	0	0	0	0	20	1	0	0	4	0	0	0	30	11	0	0	4	0	0	0	0	0	

		Unidentified Comp. Stamped						Unidentified Treatment						Eroded						Total Number of Shreds
		Body			Rim			Body			Rim			Body			Rim			
		S	G	L	S	G	L	S	G	L	S	G	L	S	G	L	S	G	L	
STRUCTURE 1	5025	0	28	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	172	
	5035	0	29	0	0	2	0	0	0	0	0	0	0	0	2	0	0	0	184	
	5039	0	32	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	233	
	5048	0	22	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	145	
MID2	5751	0	69	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	424	
	5752	1	60	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	400	
5763	0	33	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	259	
MID 1	5830	1	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	186	
	5837	0	45	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	247	
	5841	1	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	194	
FLOOR	5708	1	32	0	0	2	0	0	0	0	0	0	0	0	3	0	0	0	211	
	5848	0	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	240	
	5850	0	51	0	0	4	0	0	0	0	0	0	0	0	1	0	0	0	273	
	5849	0	42	0	0	0	8	0	0	0	0	0	0	0	0	1	0	0	240	
OVO	5422	0	30	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	176	
	5424	0	38	0	0	1	0	0	0	0	0	0	0	0	3	0	0	0	193	
	5426	1	37	0	0	2	0	0	0	0	0	0	0	0	6	0	0	0	246	
GREY	5688	0	35	0	0	6	0	0	0	0	0	0	0	0	9	0	0	0	249	
	5690	1	29	0	0	3	0	0	0	0	0	0	0	0	4	0	0	0	282	
DC	5789	0	21	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	150	
	5790	0	22	0	0	3	0	0	0	0	0	0	0	0	2	0	0	0	115	
	5798	0	55	0	0	2	1	0	0	0	0	0	0	0	6	0	0	0	379	
	5856	0	41	0	0	5	0	0	0	0	0	0	0	0	1	0	0	0	274	
LBB	7418	1	49	0	0	3	0	0	0	0	0	0	0	0	2	0	0	0	257	
	5851	0	23	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	110	
	5852	0	28	0	0	7	0	0	0	0	0	0	0	0	1	0	0	0	208	
	5640	0	51	0	0	6	0	0	0	0	0	0	0	0	4	0	0	0	246	
	5673	0	26	0	0	3	0	0	0	0	0	0	0	0	3	1	0	0	161	
	5678	0	33	1	0	3	0	0	0	0	0	0	0	0	5	0	0	0	253	
	5652	0	11	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	56	
	5637	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	78	
	5662	0	8	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	58	
	5679	0	13	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	108	
	5638	0	8	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	83	
	5426	0	32	3	0	2	0	0	0	0	0	0	0	0	5	1	0	0	276	

COMPLICATED STAMPED MOTIFS IN EACH PROVENIENCE

[illegible]

			Two-Bar Two-Cross Diamond						Unidentified Diamond						Fillot Cross					
			Body			Rim			Body			Rim			Body			Rim		
			S	G	L	S	G	L	S	G	L	S	G	L	S	G	L	S	G	L
SAUCER 1	5073		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
	5075		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	5076		0	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0
	5077		0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
	5080		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5081		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
SAUCER 2	5231.1		0	0	0	0	0	0	2	3	1	0	0	0	0	0	0	0	0	0
	5231.2		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	5250.1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5250.2		0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0
	5553		0	0	0	0	0	0	0	0	3	4	0	0	0	0	0	0	0	0
5554		0	0	0	0	0	0	0	0	4	1	0	0	0	0	0	0	0	0	0
SAUCER 3	8581		0	0	0	0	0	0	0	4	5	0	0	0	0	0	0	0	0	0
	8718		0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0
	8579		0	0	0	0	0	0	1	4	2	0	0	2	0	0	0	0	0	0
	8700		0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0
	8596		0	0	0	0	0	0	0	5	2	0	0	0	0	0	0	0	0	0
	8596		0	0	0	0	0	0	2	4	3	0	0	0	0	0	0	0	0	0
	8764		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
	8779		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8577		0	0	0	0	0	0	4	2	0	0	0	0	0	0	0	0	0	0
	8582		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	8584		0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0
	8782		0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
	8580.2		0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
	8580.1		0	0	0	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0
	8706		0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
	8702		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8710		0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	
8707		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8715		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	
8719		0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	
7586		0	0	0	0	0	0	0	2	6	2	0	0	0	0	0	0	0	0	0
SAUCER 4	5577		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5580		0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	5584		0	0	0	0	0	0	2	8	1	0	0	1	1	0	0	0	0	0
5576		0	0	0	0	0	0	0	0	1	6	0	0	0	0	0	0	0	0	0
BLACK MIDDEN	5570		0	2	0	0	0	0	3	12	6	0	0	0	0	0	0	0	0	0
	5688		0	0	0	0	0	0	2	2	2	0	0	0	0	0	0	0	0	0
	5685		0	0	0	0	0	0	5	21	13	1	1	2	2	0	0	0	0	0
	5608		0	0	0	0	0	0	1	10	8	0	0	1	2	0	0	0	0	0
	5622		0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0
	5618		0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
	5508.1		0	0	0	0	0	0	1	6	6	0	0	1	1	0	0	0	0	0
5508.2		0	0	0	0	0	0	0	0	8	7	0	0	1	1	0	0	0	0	

		Concentric Circle						Concentric Circle with Cross						Unidentified Circle					
		Body			Rim			Body			Rim			Body			Rim		
		S	G	L	S	G	L	S	G	L	S	G	L	S	G	L	S	G	L
SAUCER 1	5073	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5075	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5076	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5077	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5080	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5081	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SAUCER 2	5231.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5231.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5250.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5250.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5553	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5554	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SAUCER 3	8581	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8718	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8579	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8596	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8596	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8764	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8779	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8577	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8582	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8584	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8782	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8580.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8580.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8706	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8702	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8707	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8715	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8719	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7586	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SAUCER 4	5577	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5580	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5584	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5576	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BLACK MIDDEN	5570	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5688	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5685	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5608	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5622	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5618	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5508.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5508.2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

			Figure Eight						Scroll						Two-Bar Circle					
			Body			Rim			Body			Rim			Body			Rim		
	S	G	L	S	G	L	S	G	L	S	G	L	S	G	L	S	G	L		
SAUCER 1	5073	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5075	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5076	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5077	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5080	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5081	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
SAUCER 2	5231.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5231.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5250.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5250.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5553	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5554	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
SAUCER 3	8581	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8718	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8579	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8596	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8596	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8764	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8779	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8577	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8582	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8584	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8782	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8580.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8580.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
SAUCER 4	8706	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8702	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8707	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8715	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	8719	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
7586	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
SAUCER 4	5577	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5580	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5584	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
BLACK MIDDEN	5576	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5570	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5688	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5685	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5608	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	5622	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
5618	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
5508.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
5508.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			

	Three-Bar Circle							Total Number of Sherds
	Body			Rim				
	S	G	L	S	G	L		
SAUCER 1	5073	0	0	0	0	0	0	9
	5075	0	0	0	0	0	0	11
	5076	0	0	0	0	0	0	18
	5077	0	0	0	0	0	0	10
	5080	0	0	0	0	0	0	7
	5081	0	0	0	0	0	0	17
SAUCER 2	5231.1	0	0	0	0	0	0	25
	5231.2	0	0	0	0	0	0	18
	5250.1	0	0	0	0	0	0	8
	5250.2	0	0	0	0	0	0	35
	5553	0	0	0	0	0	0	30
	5554	0	0	0	0	0	0	30
SAUCER 3	8581	0	0	0	0	0	0	30
	8718	0	0	0	0	0	0	32
	8579	0	0	0	0	0	0	22
	8700	0	0	0	0	0	0	11
	8596	0	0	0	0	0	0	22
	8595	0	0	0	0	0	0	27
	8764	0	0	0	0	0	0	10
	8779	0	0	0	0	0	0	8
	8577	0	0	0	0	0	0	17
	8582	0	0	0	0	0	0	9
	8584	0	0	0	0	0	0	11
	8782	0	0	0	0	0	0	24
	8580.2	0	0	0	0	0	0	9
	8580.1	0	0	0	0	0	0	14
	8706	0	0	0	0	0	0	13
	8702	0	0	0	0	0	0	12
	8710	0	0	0	0	0	0	15
	8707	0	0	0	0	0	0	3
	8715	0	0	0	0	0	0	11
	8719	0	0	0	0	0	0	4
	7586	0	0	0	0	0	0	27
SAUCER 4	5577	0	0	0	0	0	0	5
	5580	0	0	0	0	0	0	8
	5584	0	0	0	0	0	0	28
	5576	0	0	0	0	0	0	29
BLACK MIDDEN	5570	0	0	0	0	0	0	46
	5688	0	0	0	0	0	0	31
	5685	0	0	0	0	0	0	75
	5608	0	0	0	0	0	0	46
	5622	0	0	0	0	0	0	17
	5618	0	0	0	0	0	0	10
	5508.1	0	0	0	0	0	0	44
5508.2	0	0	0	0	0	0	44	

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	Bull's Eye						Figure Nine						Figure Nine with Dot					
	Body			Rim			Body			Rim			Body			Rim		
	S	G	L	S	G	L	S	G	L	S	G	L	S	G	L	S	G	L
STRUCTURE 1	5025	0	1	0	0	1	0	0	1	0	0	0	0	1	0	0	0	0
	5035	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0
	5039	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	5048	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
MID2	5751	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	5752	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0
	5763	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
MID 1	5830	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5837	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5841	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FLOOR	5708	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5848	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	5850	0	1	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0
	5849	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0
OVO	5422	0	1	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0
	5424	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	5426	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0
GREY	5888	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	5690	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DC	5789	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	5790	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	5798	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5856	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
LBB	7418	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0
	5851	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5852	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	5840	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	5573	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
	5678	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	5652	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5637	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5662	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5679	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5638	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5426	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0

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