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Richard D. Davis**

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Cover: View of the Shrull Lime Kiln, Logan County.

PREFACE

Since its creation in 1966, the Kentucky Heritage Council has taken the lead in preserving and protecting Kentucky's cultural resources. To accomplish its legislative charge, the Heritage Council maintains three program areas: Site Development, Site Identification, and Site Protection and Archaeology. Site Development administers the state and federal Main Street programs, providing technical assistance in downtown revitalization to communities throughout the state. It also runs the Certified Local Government, Investment Tax Credit, and Restoration Grants-in-Aid programs.

The Site Identification staff maintains the inventory of historic buildings and is responsible for working with a Review Board, composed of professional historians, historic architects, archaeologists, and others interested in historic preservation, to nominate sites to the National Register of Historic Places. This program also is actively working to promote rural preservation and to protect Civil War sites.

The Site Protection and Archaeology Program staff works with a variety of federal and state agencies, local governments, and individuals to assist in their compliance with Section 106 of the National Historic Preservation Act of 1966 and to ensure that potential impacts to significant cultural resources are adequately addressed prior to the implementation of federally funded or licensed projects. They also are responsible for administering the Heritage Council's archaeological programs, which include the agency's state and federal archaeological grants; organizing this conference, including the editing and publication of selected papers; and the dissemination of educational materials, such as the Kentucky Before Boone poster. On occasion, the Site Protection and Archaeology Program staff undertakes field and research projects, such as emergency data recovery at threatened sites.

This volume contains papers presented at the Twenty-First Annual Kentucky Heritage Council Archaeological Conference, which was held at Cumberland Falls State Resort Park, Corbin, Kentucky. Heritage Council staff that assisted with conference proceedings included Site Protection Program Manager Thomas N. Sanders, as well as Staff Archaeologists David Pollack, Sarah E. Miller, and Charles D. Hockensmith, and administrative assistant Yvonne Sherrick.

Of the 25 papers presented at the Twenty-First Annual Heritage Council Archaeological Conference, seven are included in this volume. The eighth paper was contributed by Charles D. Hockensmith. As in years past, these papers provide a cross-section of archaeological research conducted in Kentucky. Some of the papers are the products of the research interests of the participants, such as those by Hockensmith, Hammerstedt, and Schroeder. Other papers were produced as part of Section 106 related compliance projects or state funded undertakings. These include papers by Pullins and O'Conner, Miller, Wetzel, Bergman et al. and Martin. Figure 1 illustrates the general locations of major sites and project areas discussed in this volume.

I would like to thank everyone that participated in the Twenty-First Heritage Council archaeological conference as well as other Heritage Council archaeological conferences. Without your continued support, these conferences would not have been as successful as they have been. Finally, I would like to thank E. Nicole Mills, Richard V. Williamson, and Richard D. Davis for agreeing to edit this volume. There efforts are greatly appreciated.

David Pollack,
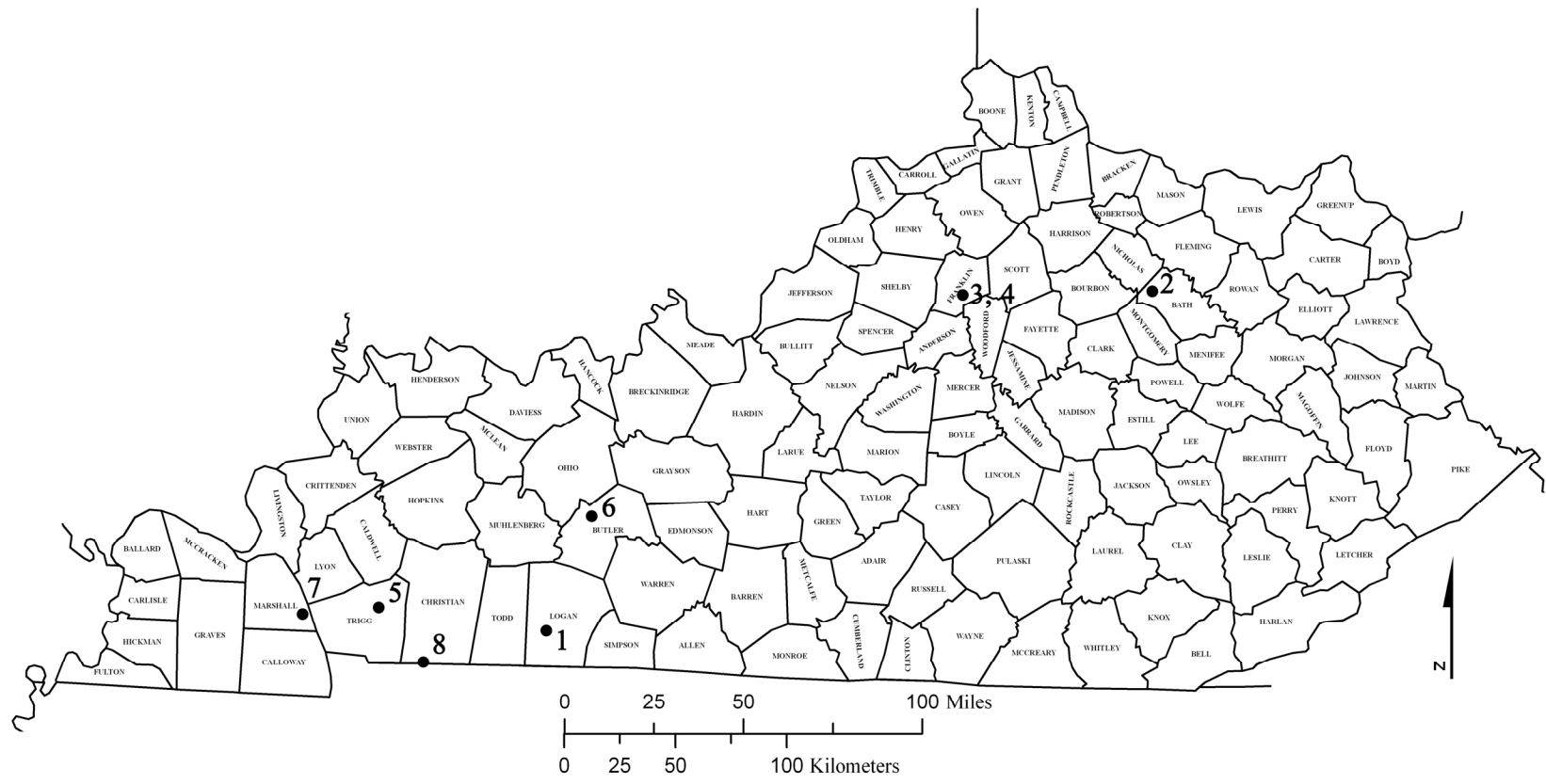Site Protection Program Manager
Kentucky Heritage Council

Figure 1. Location of Sites Discussed in this Volume: 1) Shrull Lime Kiln; 2) Duckworth Farm; 3 and 4) Old Frankfort Cemetery; 5)15Tr289; 6) Annis Village; 7) Jonathan Creek, and 8) Fort Campbell.

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MISSISSIPPIAN COMMUNITY AND CONSTRUCTION AT ANNIS VILLAGE

By

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ABSTRACT

Community layout and mound construction are commonly used to make inferences about the nature of Mississippian social organization. In this paper, I examine the construction of the Annis Village (15Bt2, 15Bt20, 15Bt21), a Mississippian mound center in western Kentucky, as understood through new fieldwork (2002-03) and WPA collections (1939-1940). The site underwent at least three expansions, as indicated by the construction of sequential palisades and enlargement of the earth mound. It is hypothesized that these construction episodes and variation in architecture reflect local changes in social organization.

INTRODUCTION

The study of the layout of past communities gives archaeologists important information that allows them to reconstruct the organization of the societies that constructed them. However, research on this topic is often limited by the lack of large-scale exposure of community plans because mound and village centers are rarely completely exposed. In this paper, I describe the sequential stages of construction and expansion of the Annis Village (15Bt2, 15Bt20), a single-mound site located along the Big Bend of the Green River in Butler County, Kentucky. This is possible because of a combination of large-scale Works Progress Administration (WPA) excavations and recent, more focused, Penn State work. I examine the overall layout of the site, how the use of space changed over time, and what can be said about social structure from the sites' features, their configuration, and their contents. Significant labor investment in the form of palisades, mounds, and structures is viewed as a marker for the presence of one or more individuals who wielded considerable influence.

MISSISSIPPIAN COMMUNITIES

Archaeologists have long recognized that Mississippian mound centers were built according to a plan (e.g., Sherrod and Rolingson 1987). Early European explorers noted the existence of plazas, mounds, palisades, and residential structures (both summit and non-summit) (e.g., Elvas 1993) and nineteenth-century investigators described and mapped the layouts of mound sites (e.g., Squier and Davis 1998; Stout and Lewis 1995).

At the largest Mississippian sites, such as Cahokia, Moundville, Etowah, and Kincaid, (among others), there is clear evidence for a planned community (e.g., Cole, et al. 1951; Fowler 1997; King 2003; Knight 1998; Knight and Steponaitis 1998; Lewis, et al. 1998; Milner 1990, 1998; Pauketat 1994). This evidence consists of an orderly arrangement of mounds, clear demarcation of plazas, and construction of palisades around part or all of the site.

At smaller but more numerous sites possessing few or no mounds, evidence for community planning is less obvious but still present. Stout and Lewis (1998; see also Lewis 1990, 1996) provide a detailed summary of site plans in Kentucky's Mississippi Valley region, focusing on the importance of mounds, plazas, and palisades. Sites such as Larson in Illinois (Harn 1994), Snodgrass in Missouri (O'Brien 2000; Price and Griffin 1979), Hiwassee Island in Tennessee (Lewis and Kneberg 1946), and Andalex, Jonathan Creek, and Morris in Kentucky (Niquette 1991; Rolingson and Schwartz 1966; Webb 1951) possess mounds, plazas, palisades, and structures, often laid out in an orderly fashion and showing growth over time. Likewise, some Mississippian sites, like King and Ledford Island, show clearly organized arrangements of houses and other features, although mounds are absent (Hally 1988; Sullivan 1987).

ELITIES AND LABOR

Central to any discussion of Mississippian community patterns is the role and status of the local elite and their interaction with the non-elite inhabitants. These elite individuals were likely those who directed the construction of the site in some form or another. Therefore, the elite (presumably a chief and close kin) enjoyed greater prestige and wielded some level of control over the labor of others. The degree to which this control conferred an economic (subsistence) advantage is not clear (e.g., Cobb 2003; Milner 1998; Muller 1997; Pauketat 1994) and is beyond the scope of this paper, although it is unlikely that the needs of the chief greatly interfered with the day-to-day life of the villagers.

While there are no ethnohistoric descriptions available that specifically deal with Kentucky, written accounts from elsewhere in the Southeast indicate that chiefs lived in large structures atop mounds and that temples or "council houses" were also often located on summits (e.g., Bartram 1996:165; Biedma 1993:239; du Pratz 1972:333; Elvas 1993:75, 95). Payne (1994, 2002), in a cross-cultural study of chiefdoms and Mississippian architecture, shows that the houses of chiefs are substantially larger than those of the commoners and that these houses are usually in a prominent location,

although this is not always the case (Hammerstedt 2005a). Regardless of whether or not summit structures were residences or ceremonial buildings, it is clear that summit architecture was emblematic of enhanced status and access was likely restricted to a small subset of the community (Lindauer and Blitz 1997).

Archaeologists working in the Southeast have used these accounts to inform their interpretations. Knight (1981, 1986; Schnell, et al. 1981:133, 137-145; see also Krause 1988), drawing on ethnohistoric documents and archaeological evidence from Cemochechobee, argues that mounds and the rituals performed upon them were central to Mississippian life. Black (1967) interprets the large structure on the primary mound summit at Angel Mound F as a temple and believes that the chief's dwelling was atop the largest mound, Mound A. Polhemus (1987) notes domestic refuse within summit buildings at Toqua and Hally (1996) uses summit architecture and mounds as evidence for chiefly succession and legitimacy in northern Georgia. Many more examples of summit architecture exist but merely confirm the pattern above.

The cost of labor required to build mounds and palisades was relatively high and was presumably directed by the chief or other individuals of high rank (see Milner 1998:150). Lafferty (1977:215) estimates that over 1.5 million person-hours were required to construct the mounds. Muller (1997:274) provides lower estimates of 15,000 person-hours (1 person-day per 1.25 m^3 of mound fill) and points out that the requirements would not have overly taxed the local residents (e.g., important subsistence tasks need not have been interrupted for construction). He argues that 1,250 people could have built the mounds at Kincaid in 100 years if each household of 5 people contributed only 4 days of labor per year. Further, Milner (1998; see also Hammerstedt 2005b) states that at Cahokia demands on households were not that great even during the peak of mound building.

The vast majority of Mississippian palisades were constructed using posts between 15 and 25 cm in diameter and were often accompanied by ditches or embankments for additional security (Milner 1999). Few estimates of palisade heights are in the literature, however Vogel and Allan (1985) estimate a height of 4 m for the Moundville palisade and Ritchie (1980) argues that the palisade at the Iroquoian Kelso site reached to a similar height of 4.5 m. Obviously, a considerable amount of labor would have been required to cut suitable posts with stone tools, to dig or twist the posts into the ground, and to maintain the walls as rot set in. Lafferty (1977:215) provides a figure of 7,000 person-hours for the construction of the palisade at Kincaid. Iseminger et al. (1990), estimate 130,000 to 190,000 person-hours for each Cahokia palisade while Milner (1998) argues that 500 people working for 10 days per year for 100 years would have been enough to construct each palisade.

Although the mound and palisade construction estimates listed above differ, the point as far as this paper is concerned remains the same. Building mounds and palisades was a time-consuming and expensive process but one which would have been easily accomplished with the population available (Hammerstedt 2005b). The individuals who were able to motivate and direct this construction likely wielded considerable influence

and enjoyed some degree of prestige. Keeping this discussion in mind, let us move on to a description of the growth and expansion of Annis Village and its local socio-political implications.

ANNIS VILLAGE

The most prominent features at Annis are a 3.7 m tall earthen platform mound measuring approximately 33.5 m on a side (Figure 1) and a surrounding fortified village that encompassed approximately 1.3 ha (Figure 2). An estimated additional 0.5 ha was eroded away by the river thus making the original area of the village about 1.8 ha, assuming the village extended to the river's edge.

Figure 1. The Annis Mound as it Appeared Before Excavation in 1939 (Courtesy William S. Webb Museum of Anthropology, University of Kentucky. UKMA 3250.)

PREVIOUS WORK

C. B. Moore made the first professional visit to Annis in 1915, and described it as the "largest mound seen or heard of by us on Green River." (Moore 1916:480) His observation about the size of the mound has been borne out by subsequent research—no other such mound has been found for over 50 km. Moore excavated a 3 m deep and 17.5 m^2 "trial hole" in the mound and a second in the nearby Annis Sand Mound (15Bt21) but did not find anything of interest to him (e.g., no fancy burial goods) and moved elsewhere.

Annis was revisited in 1939-1940 by a Works Progress Administration (WPA) crew under the supervision of Ralph D. Brown. Brown's crew excavated the entire platform

mound and much of the surrounding village, over 7,000 m^2. These excavations revealed three separate mound construction stages, termed the Sub-Primary, Primary, and Secondary mound (Figure 3); sixteen structures and numerous pits in the village area; two palisades; and over 30,000 artifacts (Figure 2)[1].
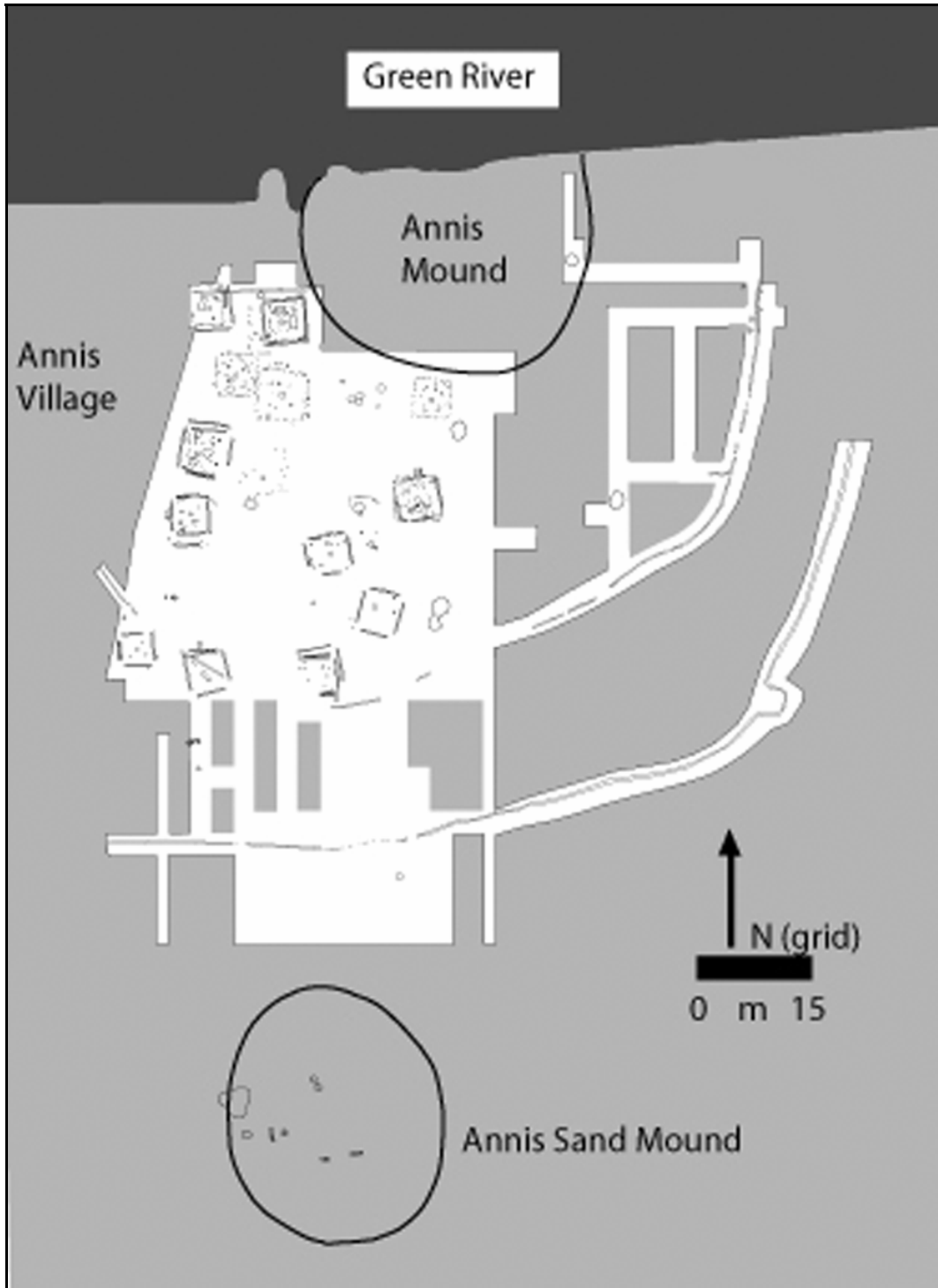

Figure 2. Annis Village Overall Site Plan.

Penn State began an active research program at Annis in 2001. Excavation of 144 m^2 in 2002 and 2003 revealed a previously unrecognized palisade, a structure and extended one of the WPA-excavated palisades to the river bank. The excellent documentation left behind by Brown permits us to take advantage of the strengths of old excavations that provide large-scale exposures with selective sampling of artifacts versus focused excavations with the collection of diverse cultural and biological materials (Milner, et al. 2003). This combination of excavations and strategies cover enough of the site area to document change over time at Annis.
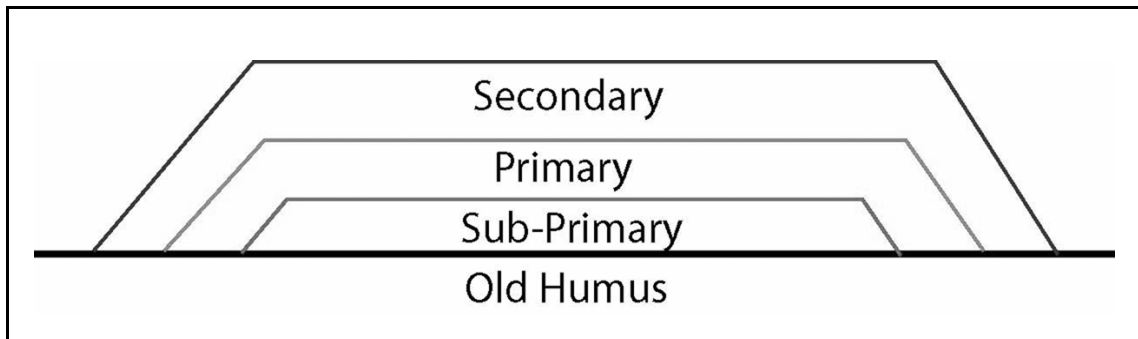
Figure 3. Schematic Diagram of Mound Construction Stages (not to scale).

CONSTURCTION AND EXPANSION OF ANNIS

The earliest recognizable Mississippian occupation at Annis is represented by the Old Humus (pre-mound) layer (Figure 4)[2]. This level consists of a number of postmolds that do not form any recognizable pattern. The exact date of occupation remains unclear, however the presence of a lone Ramey Incised sherd hints at a twelfth- to thirteenth-century occupation (Fowler and Hall 1972; Milner, et al. 1984).
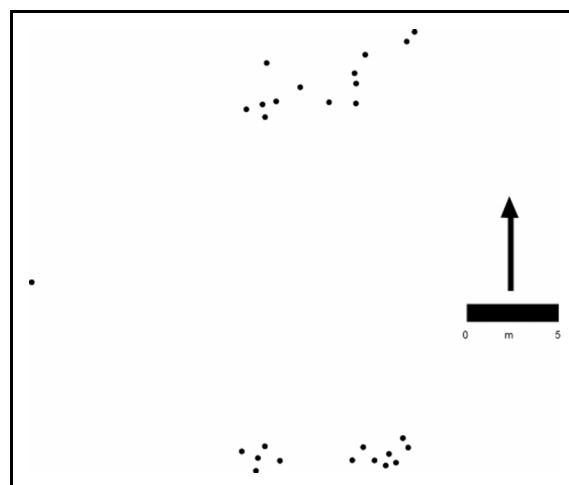
Figure 4. Old Humus Layer, Pre-Mound.

Phase 1

The first clear evidence for the Mississippian occupation of the site is referred to here as Phase 1. The initial construction of the mound occurred, referred to by the WPA excavators as the Sub-Primary mound. This mound stage reached a maximum height of 70 cm above the Old Humus level, and it was topped by a summit structure (Figure 5). This structure was constructed using single-set posts and was rebuilt at least once. The floor area encompassed by this structure is unclear due to erosion prior to excavation but it exceeded 89 m^2. Numerous hearths and trash-filled pits were excavated within this structure and two large flank middens were recorded on the east slope of the mound (Figure 6). These middens contained primarily animal bone (primarily white-tailed deer), but also some shell and pottery. A wide variety of skeletal elements are represented and many of the long bones seem to have been purposefully smashed. A few show evidence of pot polish (White 1992:120-128). Jars, bowls, and pans --both shell- and grog-tempered-- were the most common vessel forms in the Sub-Primary mound.
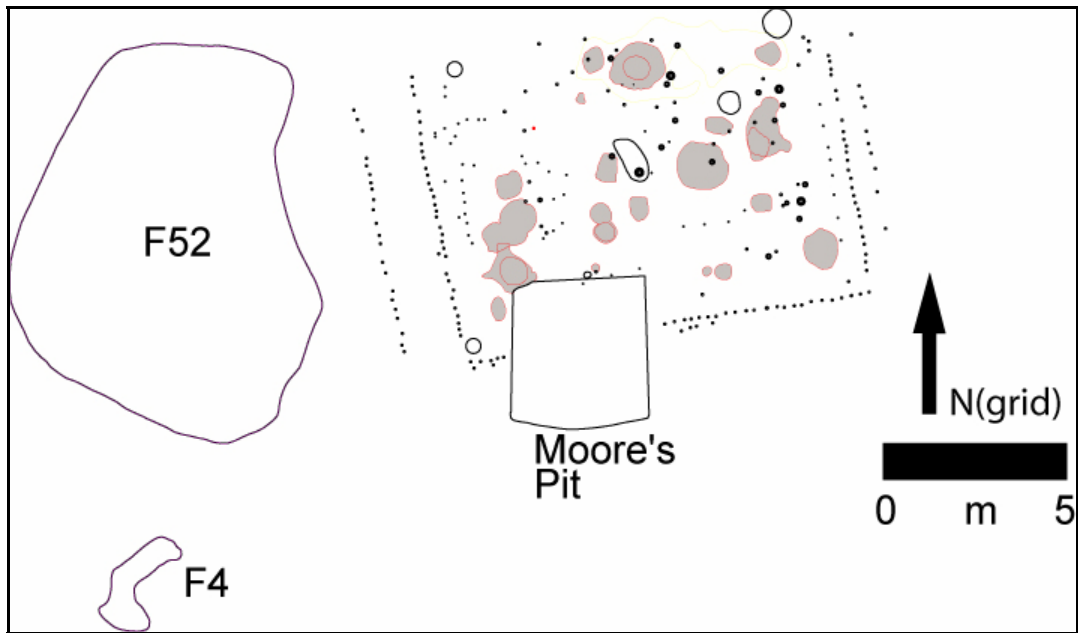
Figure 5. Sub-Primary Mound Structure, Part of Phase 1 Construction. Fire-Related Features are Gray; Pits are Open Circles.

About this time the first palisade was constructed (Figure 6). This was a deep trench with individual posts, some made of ash (*Fraxinus* sp.; Lee Newsom, personal communication 2003) set at approximately 20 cm intervals (Figure 7). This palisade was approximately 114 m long. Extrapolation based on this length and assuming 20 cm spacing between posts results in an estimate of 570 posts for the entire enclosure. It encloses an approximately 0.25 ha D-shaped area with the river forming one side. A 2-sigma calibrated radiocarbon range of AD 1285-1405 with multiple intercepts (Beta 181396, 181398, wood charcoal) was obtained from two samples from a charred post in

this palisade. The palisade wall superimposed an earlier wall-trench structure found during Penn State's 2003 excavation (Figure 5)[3]. The structure, located east[4] of the mound, would have been contemporaneous with, or slightly predated, the initial mound construction.
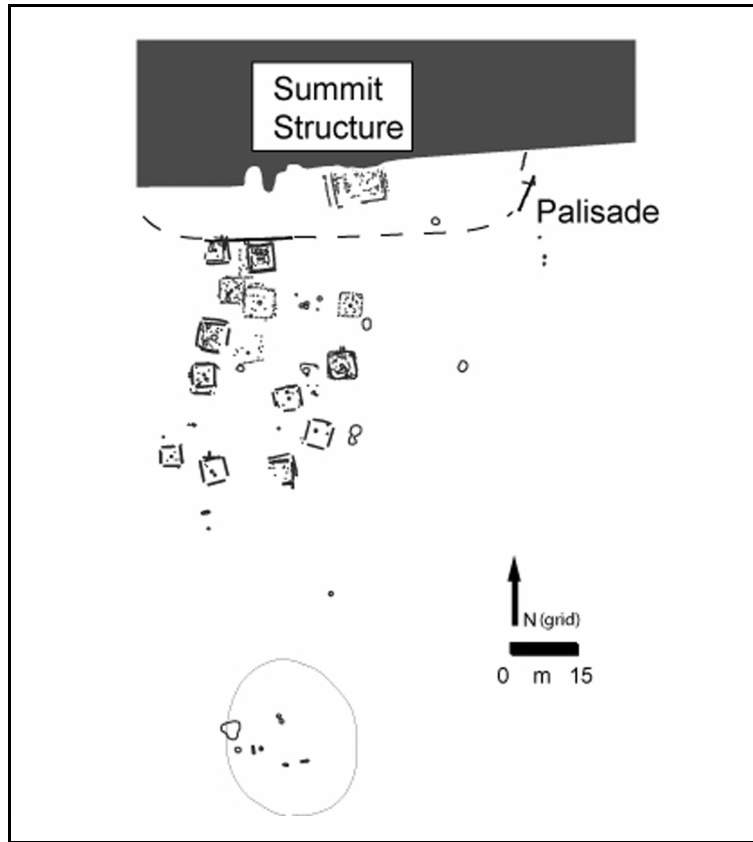
Figure 6. Phase 1 Palisade and Sub-Primary Mound Summit Structure. The Dashed Line Indicates the Presumed Path of the Palisade. A Pre-Phase 1 Structure is Superimposed by the Palisade to the Upper Right.
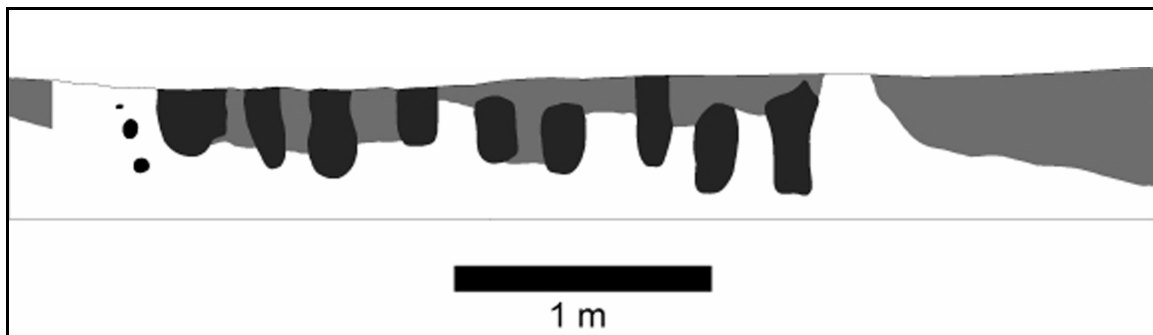
Figure 7. Profile of Phase 1 Palisade Showing Posts (black) and the Trench (gray). Facing Southeast.

The presence of a handful of Ramey Incised, Powell Plain, and Matthews Incised, *var. Manly* sherds[5] (Figure 8) in both mound fill and summit feature fill lend support to this radiocarbon assay. It is likely the mound and palisade wall were used at the same time.
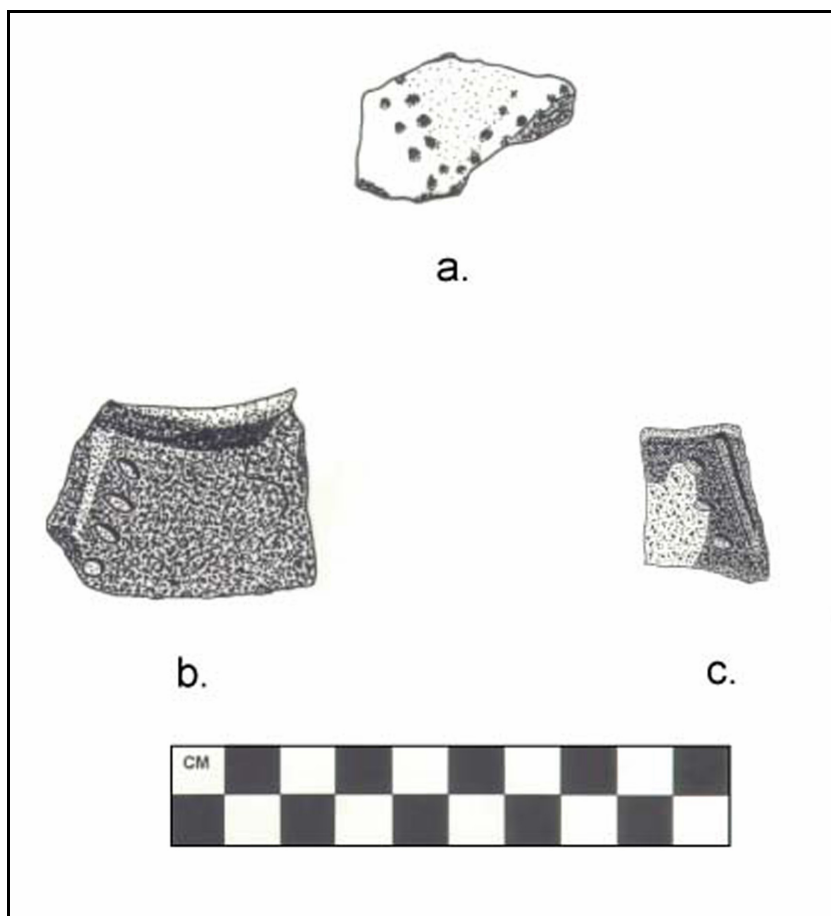
Figure 8. Decorated Sherds from Old Humus and Sub-Primary Feature and Mound Fill. a). Matthews Incised, *var. Manly* (Bt2-C381-5); b). Ramey Incised (Bt2-C169-1); c). Ramey Incised (Bt2-C96-112). Drawing Used Courtesy of Rich Burnette.

Phase 2

During the second phase of construction, referred to here as Phase 2, an additional 90 cm of soil was added to the mound. This level, termed the Primary mound, reached a maximum height of 1.6 m above the Old Humus. It expanded south far enough to cover part of the Phase 1 palisade, which by this time was abandoned. Again, the mound was topped by a structure (Figure 9); this one exhibited a combination of single-set post and wall trench construction techniques. The entire area delineated by the post molds

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encompassed at least 250 m^2, although it is unlikely that this entire area was roofed since no interior support posts exist. The post molds seen on the south and east sides likely formed an fence that blocked public view of an interior wall-trench structure of uncertain dimensions.
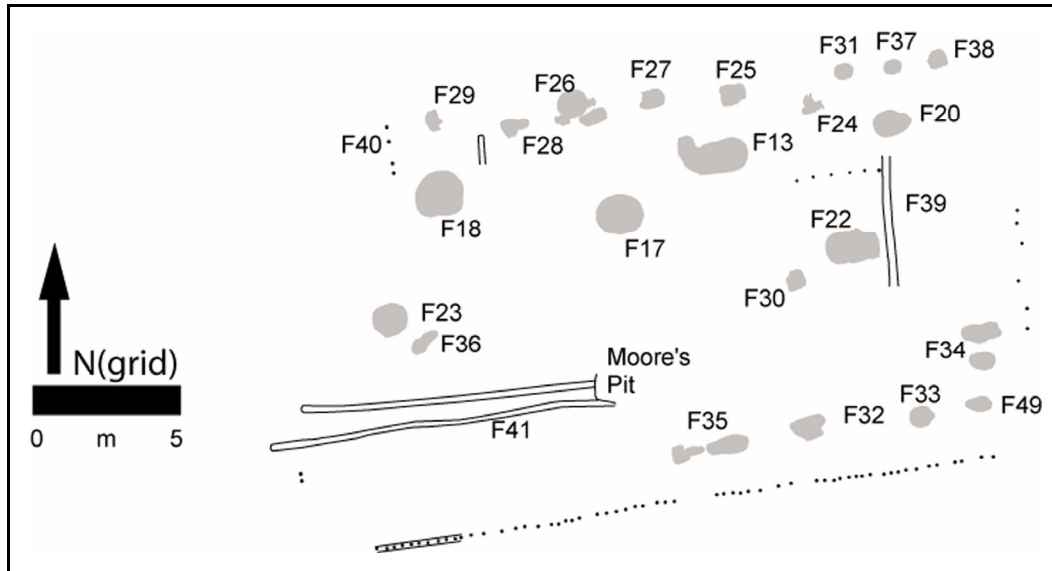
Figure 9. Primary Mound Structure, Part of Phase 2 Construction. Fire-Related Features are Gray.

It is unlikely that anyone resided on the mound during Phase 2. All of the non-architectural features atop this mound stage were fire-related--either hearths or surface fires--although no charcoal or burned daub was recorded. No clay platforms or seats such as those reported for parts of eastern and central Tennessee (e.g., Lewis and Kneberg 1946; Myer 1928; Webb 1938) were present. No trash-filled or storage pits were identified on this level and there was a near-absence of domestic debris --only two jar rims and one unknown vessel form, along with a handful of body sherds and stone, were recovered.

At or near the same time as the enlargement of the mound, a low embankment with a second palisade, also constructed by placing posts within a deep trench, was built to surround the now-larger village (Figure 10). Approximately 1025 posts were used in the construction of this 205 m long palisade. At this point, the settlement encompassed approximately 0.75 ha. A 2-sigma calibrated radiocarbon range of AD 1265-1300 with an intercept of AD 1285 (Beta 181397, wood charcoal) was obtained for the Phase 2 palisade.
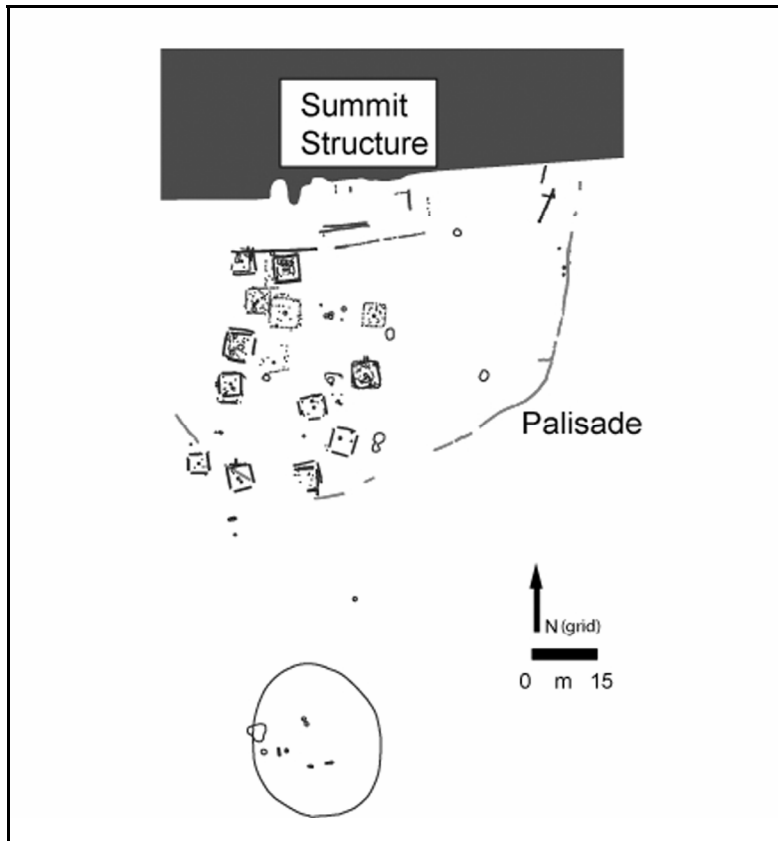
Figure 10. Phase 2 Palisade and Primary Mound Summit Structure.

Phase 3

The third and final stage of village construction saw the most significant labor investment. Over 2 meters of soil was added to the mound, termed the Secondary mound, bringing it to its final dimensions of 3.7 m high and 33.5 m on a side. A wall-trench structure with an estimated floor area of 105 m^2 was located on the Secondary mound summit (Figure 11). This building was the first with an identifiable entrance--two short wall trenches set at a right angle to the eastern wall. An internal partition may have also been present.

Refuse-filled and storage pits reappeared in this level; some were filled with charcoal. No prepared hearths are evident but other fire-related features, possibly surface fires, exist, particularly just outside the eastern wall. Jars, pans, and bowls are the most common vessel forms. Two plate rims were also recovered

A third, and final, palisade was also constructed at this time, presumably to encompass the village (Figure 12). This palisade, 277 meters in length, defined the final limits of the village at approximately 1.3-1.8 ha and is the only one of the three palisades with a bastion (Figure 13). No profiles exist for this palisade, although the plan maps are quite similar to the Phase 1 and 2 palisades. It is probable that it was constructed in the same manner and an estimated 1385 posts were used.
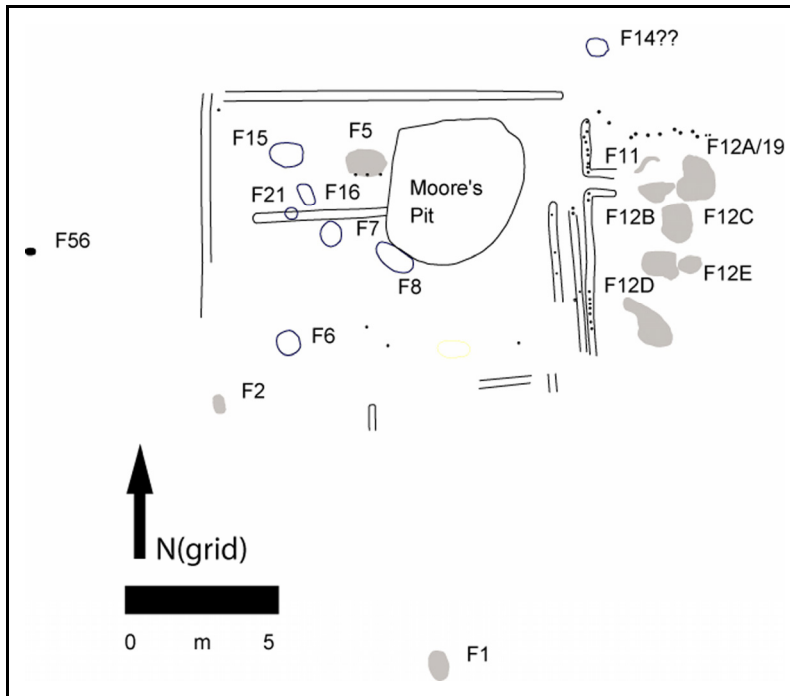
Figure 11. Secondary Mound Structure, Part of Phase 3 Construction. Fire-Related Features are Gray; Pits are Open Circles.
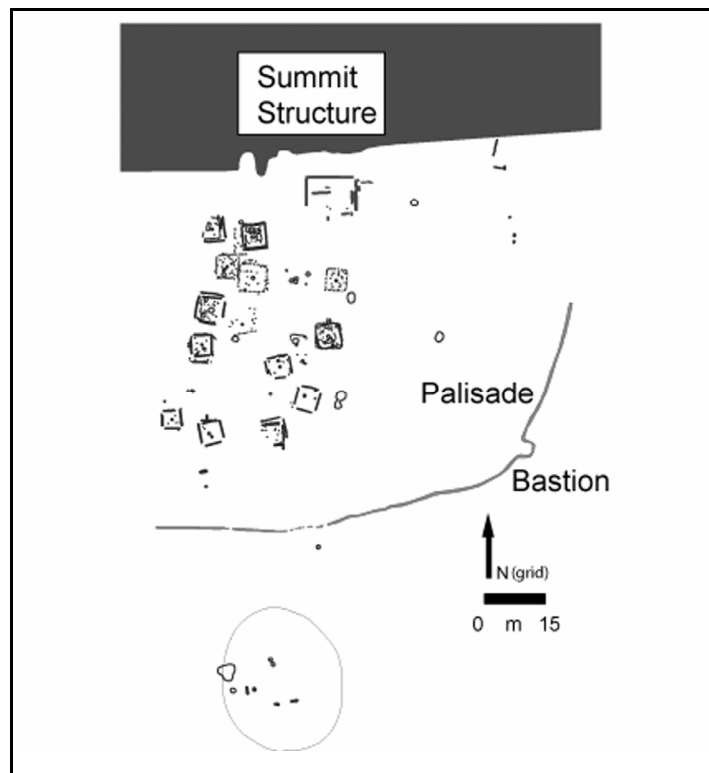
Figure 12. Phase 3 Palisade and Secondary Mound Summit Structure (Note Bastion on Eastern Section of Palisade).

Figure 13. Bastion After Excavation (Courtesy William S. Webb Museum of Anthropology, University of Kentucky. UKMA 4111).

Further evidence for village expansion can be seen in the village plan. Several wall-trench houses were built over the remains of the Phase 1 and 2 palisades. No radiocarbon dates are available for either the Secondary mound or the outer palisade, however the presence of strap handles in the Secondary mound fill points to a fourteenth- or fifteenth-century construction (Hilgeman 2000), a date that fits comfortably with the radiocarbon dates presented above.

Summary

To summarize, each phase of Annis' expansion saw an increase in the overall volume of the platform mound and the area circumscribed by the palisade. Interestingly, there is no evidence for a plaza—rather there appears to be a ring of houses around the mound (although it is possible that a plaza may have existed at one point only to have houses constructed within it during a later construction episode). The available data puts most construction between the 12th and 15th centuries.

SOCIAL ORGANIZATION AND COMMUNITY PATTERNS

The growth of the platform mound and the surrounding village provides important insights into the social situation at Annis and how it changed over time. No burials were present in the platform mound or within any of the village structures; therefore, this discussion focuses on structures, mound construction, and palisades. Detailed discussion of each construction phase can be found elsewhere (Hammerstedt 2005b)

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Phase 1

During Phase 1, mound construction began and the first palisade was constructed. The Sub-Primary summit structure was clearly domestic based on the presence of refuse-filled pits, hearths, and several large flank middens (Figure 5). These middens, which contained primarily animal bone, do not appear to be related to feasting since all parts of deer are heavily represented and many of the long bones were purposefully smashed to extract marrow. The construction of the initial palisade indicates a need for a social or defensive boundary surrounding the mound and at least some of the village (Figure 6).

It is likely that a particular individual or local kin group had risen to local prominence and took up residence on top of the mound. The construction of the Sub-Primary mound both literally and figuratively elevated these people above their neighbors.

The presence of Ramey Incised pottery, sometimes argued to have ideological value in the American Bottom (e.g., Pauketat and Emerson 1991), is unsurprising in these contexts. However, its importance was likely linked simply to the fact that it was a tradeware from a distant region and did not have the same ideological meaning to the residents of Annis as it did to people near Cahokia. Further, while plates are not well represented in the sample, a number of pans are present. Pans were not always used for the evaporation of brine in salt-making; the smaller examples could have been used for serving or food preparation. Usewear on one vessel from the Julien site in Illinois indicates that it was used for parching (Milner 1984); this is backed up by other archaeological and historic references (Adair 2005:399; Brown 1980:28-30; Lewis and Kneberg 1946:90; Lewis, et al. 1995:104; Milner 1984:153; Thruston 1890:159).

The construction of the initial palisade represented a need for local defense and perhaps a local social boundary. There is no evidence for bastions or ditches associated with this palisade, however, a significant amount of labor would have been required to cut the trees, transport them, and lift them into place. Perhaps more importantly, construction of the palisade would have pulled people away from important subsistence tasks.

Phase 2

The village and mound were enlarged during Phase 2. A second palisade was built, enlarging the enclosure to around 0.75 ha (Figure 10). The mound nearly doubled in size, covering the old Phase 1 palisade, and a substantial summit structure was constructed and surrounded by a fence (Figure 9). All available evidence points to a non-residential function for this structure: few artifacts, no pits, fire-related features only, and substantial architecture. It is unclear where the local elite, presumably a chief and his or her relatives, lived at this time. There are a number of structures located near the mound that are possibilities. One of these, Structure 10, was adjacent to the mound and contained a cache of marine shell beads and blanks covered by potsherds (Figure 14).
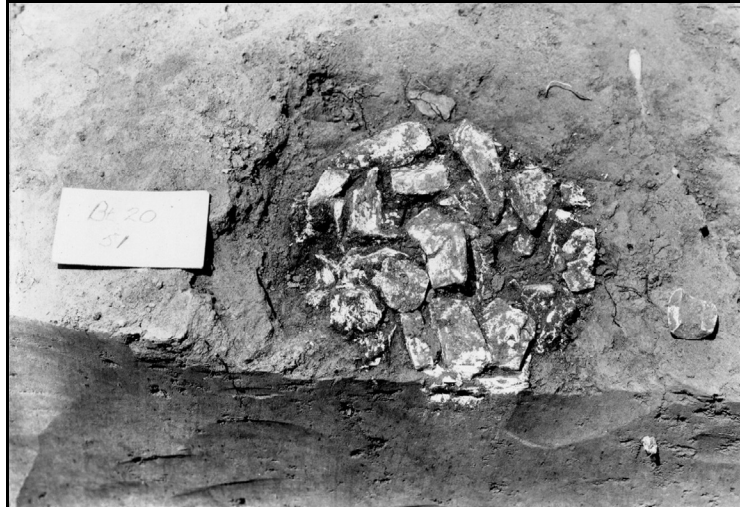
Figure 14a. Marine Shell Bead Cache in Situ (Courtesy William S. Webb Museum of Anthropology, University of Kentucky. UKMA 4064).

Figure 14b. A Sample of the Beads (top row) and Blanks (bottom row). (Bt20-FS152).

The summit structure at this stage was likely a building used for ritual activities, presumably by a limited number of the local population. The fence would have screened the activity taking place atop the mound from view. Similar fences on mound summits or slopes have been described by European explorers and found at several sites, including Angel, Bessemer, Cahokia, Etowah, Lake George, Towosaghy, and several in the Savannah River valley (Anderson 1994; Black 1967; DeJarnette and Wimberly 1941; Larson 1971; Price and Fox 1990; Smith 1969; Swanton 1911; Williams and Brain 1983).

These have generally been referred to as "temples" or "council houses" in the literature. However, as mentioned above, no burials or obvious internal features, such as prepared clay platforms or seats, were recorded. Nevertheless, this building likely served some unknown, but important, public or community function.

It is possible that at this time the people living at Annis chose a more group-oriented council form of leadership rather than relying on a single individual. Presumably local elites were still in residence, but they no longer lived on the mound summit. Their chief responsibility may have been to carry out ritual functions atop the mound.

Phase 3

The final expansion of the site is perhaps the most intriguing for several reasons. First, the mound increased in height by over 2 m above the Primary mound (Phase 2), and clear evidence for a domestic dwelling with more complex architecture (wall trenches, a doorway, and partitions) is present (Figure 11). Third, the surrounding village continued to grow and a third palisade with a single bastion was constructed (Figure 12).

It seems clear that at this time there was a return to a society in which a chief was given greater attention than the other residents. This perhaps could be a shift from the Phase 2 council-style form of leadership to one dominated by a powerful chief who took up residence atop the mound. Alternatively, another group took over possession of the site after a period of abandonment. The latter scenario has been suggested for the Mississippian occupation at Andalex in nearby Hopkins County (Clay in Niquette, et al. 1991) but is doubtful at Annis since the sequential palisades are neatly nested rather than overlapping.

Regardless, whoever was living on the mound wanted to make a clear statement of their authority. By recapping the mound, the chief established a purifying tie with the earth, an act believed to be a major symbolic aspect of Mississippian religion and ritual (Knight 1986). Further, by reestablishing a residence on the mound he/she placed themselves on a far different plane, both symbolically and literally, than the rest of the local villagers. The structure is also significantly larger than the average village structure (the Phase 3 summit structure covers 105 m^2 and the mean for village structures is 35 m^2) (Figure 15), thus indicating another attempt to distinguish the chief from the average villager.

The palisade again required a major labor investment. The village reached its largest area during Phase 3 and the presence of a bastion indicates that some degree of conflict existed in the area. However, one bastion alone would not provide sufficient protection against an attacking group; certainly not the same level of defense that would have been possible at other western Kentucky sites, such as Jonathan Creek (Webb 1951) and Morris (Rolingson and Schwartz 1966), that possessed palisades with evenly spaced bastions. The Annis Village bastion faces out into a wide, flat area and may have served as a fortified gate or as a watchtower to provide an early warning system to people working in the nearby fields as well as a line of defense.
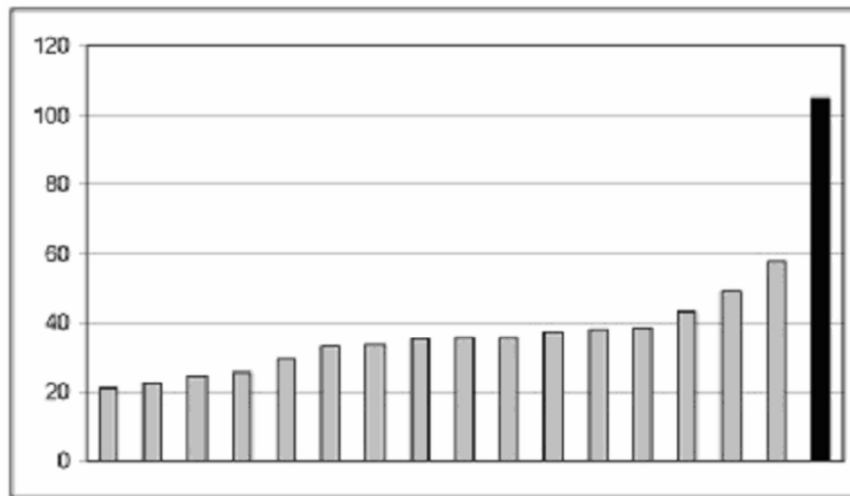
Figure 15.   Structure Area Comparison.   Individual Village Structures are Gray, Secondary Mound Structure is Black. Scale is in Square Meters.

<u>**Summary**</u>

To recap my interpretation of the shifting social situation at Annis, then, let me offer a few remarks. During Phase 1, we see a local leader with enough influence to have a low mound constructed and a substantial, if small, palisade built. During Phase 2, the use of the mound shifted to a non-domestic, presumably ritual, purpose. A large structure enclosed by a fence was built atop the mound and a second, larger palisade was built around the expanding village. Evidence for a local elite in residence is not clear, although they might have occupied adjoining houses, such as Structure 10 with its marine shell bead cache. Finally, during Phase 3 the mound was significantly enlarged and again served a domestic function. This may have been an attempt by a new, perhaps unrelated, leader to exert influence and legitimize their position by symbolically recapping the mound. The significantly enlarged palisade indicates some level of local stress, an additional attempt to illustrate the power of the chief, or both.

Each of these construction phases would have required the mobilization of a considerable amount of labor. The degree to which this labor would have interfered with daily subsistence tasks would have varied with the intensity of the construction. If a crisis required the palisade to be erected quickly the labor would be more focused, hurried, and disruptive. However, if circumstances permitted it to be constructed in a more leisurely fashion, the impact on the local population would have been lessened.

Mound construction would have had less of an impact than the palisade. Even if the various mound stages would have been raised fairly quickly, only a few days to a week of labor would have been required to complete the task with an similar amount of time required to construct the various forms of summit architecture.

ANNIS VILLAGE IN A REGIONAL PERSPECTIVE

A number of researchers have contributed to the understanding of the regional settlement dynamics of western Kentucky. Most of this work has taken place in the Ohio-Mississippi Confluence region (e.g., Clay 1997; Kreisa 1990, 1995; Wesler 2001 among others). Albeit with somewhat differing interpretations, these researchers have developed models for the interaction and integration of various mound sites in the region and their degree of independence from larger sites such as Kincaid and Angel.

Unfortunately, at this point it is difficult to place Annis Village into a more comprehensive regional perspective. This is partly because the Green River Mississippian is poorly known despite a significant (and growing) body of data. Sites within the Western Coalfields section of the Green River drainage include Eaton (Hanson 1959), Kirtley (Rolingson 1961), Morris (Rolingson and Schwartz 1966), and Martin Mound (Milner and Smith 1986). Kirtley and Morris are small sites that seem to date to AD 1000-1300 (Lewis 1990), somewhat earlier than the major occupation at Annis. The nearby Martin Mound (15Bt1), a stone box burial mound excavated by the WPA, promises to provide important information on burial treatment and chronology in the area and is the focus of an upcoming Penn State project.

Not including Martin, the nearest mound site is Andalex, located 56 km away (Figure 16). Closer to Annis, there are Mississippian houses scattered along the Green River, often superimposed on Archaic shell middens: areas of especially fertile soil. Until more work is done in this area, it is not possible to fully understand how Annis Village fits into a broader regional context or the processes that drove the sequence of cultural change at the site. It is perhaps part of broader patterns seen in this part of the mid-South and Midwest as suggested by the eventual abandonment of the site and the surrounding area.
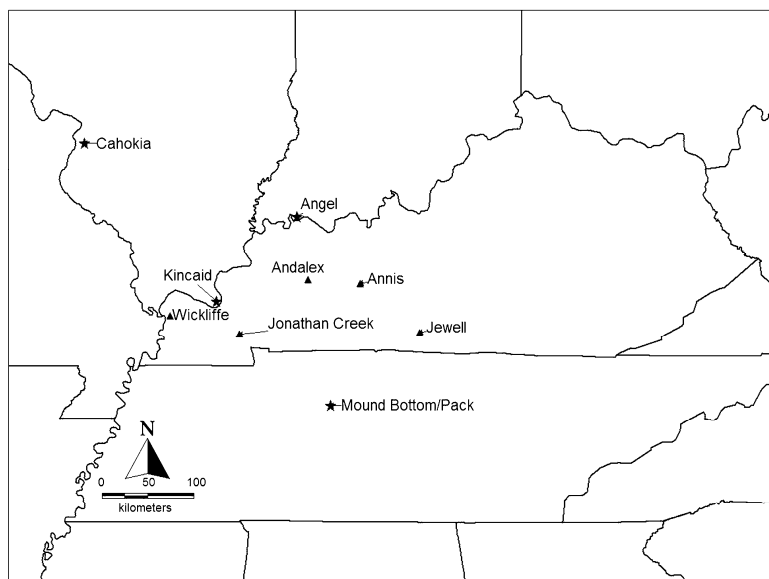
Figure 16. Location of Andalex and Selected Nearby Sites. Stars Represent Major Sites Triangles Represent Smaller Sites.

ACKNOWLEDGEMENTS

FOOTNOTES

[1]All of the WPA collections and documents are curated at the William S. Webb Museum of Anthropology at the University of Kentucky.

[2]I have described the mound stages and their contents in more detail elsewhere (Hammerstedt 2005a, b).

[3]It is not yet possible to sort out which village structures belong to each phase of site expansion. However, a number of them were in the same place for some time as indicated by rebuilding episodes at the exact same location.

[4]All directions used in this paper refer to grid orientation not magnetic orientation.

[5]The Ramey and Powell sherds from Annis are mentioned by Milner (1990:25) as UKMA collections from "along the lower Ohio River and its tributaries".

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ANGELLY PHASE MOUND CONSTRUCTION
AT JONATHAN CREEK

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ABSTRACT

The Mississippian-era mound and village site of Jonathan Creek was partially excavated from 1940 to 1942. On-going studies of the collections, maps, photographs, and notes are providing new insights into the life history of a small mound at the site. The events that occurred on the mound are reconstructed with reference to architecture, earth moving activities, mortuary activities, associated features, and an AMS radiocarbon date, and indicate a substantial Angelly Phase presence.

INTRODUCTION

Antiquarians and archaeologists working in the Eastern Woodlands of North American during the nineteenth- and early twentieth-century concentrated their interests and efforts on documenting visually prominent ancient earthworks, many of which subsequently were destroyed as a consequence of development and reservoir projects while others were preserved as part of our national heritage. Such eminent sites have lent their names to local phases and regional archaeological cultures, and some have even reached a level of prominence that extends beyond the disciplinary confines of anthropology. Today, the names of many of these sites, like Cahokia, Angel, and Wickliffe, are sprinkled across the pages of introductory archaeology textbooks, reverberate in lecture halls at college campuses across the country, and resonate among New Age adherents.

Early efforts to classify and describe these sites and their material culture led to the establishment of inferential frameworks that persist in popular publications and even scholarly reviews. But, in a number of cases, the original archaeological interpretations were based on impressions of the evidence or on analyses of small and often biased samples of artifacts, especially pottery. Even when more comprehensive analyses were conducted, they were carried out within the explanatory standards of the times, which emphasized classification and description, functionalism, culture history, and chronology building (Trigger 1989; Willey and Sabloff 1993). In particular, the short chronology that existed prior to the first applications of the radiocarbon technique led many

archaeologists to base their inferences about archaeological materials on analogies with living or ethnohistorically documented Native Americans with the result that regional similarities and differences in material culture traits often were explained by invoking relatively simplistic notions of migration and diffusion (e.g., Webb 1952; Kluckhohn 1936; Rouse 1958).

Today, we have many new methods of analysis, expanded typologies and classification systems, and fresh questions to apply to our investigations of ancient Mississippian societies. Inferential frameworks that involve a consideration of the diversity of chiefdoms, the nature of relations among potential rivals and allies, the actions of individual leaders, shifting landscapes of power, population movements, and the impact that all of these can have on the establishment of communities and their evolution over time have come to replace old normative and culture-historical models of chiefdoms, diffusion, and migration. Collections that would be impossible to duplicate today sit on the shelves of museums, universities, and research institutes. Over the past decade or more, many archaeologists have turned their attention to these old collections, often linking their efforts with new fieldwork targeted at acquiring specimens that were not routinely collected a century ago, expanding the coverage of old projects, and obtaining controlled samples of artifacts (e.g., Hammerstedt 2005; King 2003; Milner 1998; Schroeder 1997, 2005; Welch 2006). These reinvestigations are changing our perceptions of many of these prominent places, even though inferential ambiguities may still arise from the available evidence.

The Jonathan Creek site may not appear on the pages of introductory text books, but it is one of those places that has taken on iconic significance in the archaeology of the lower Tennessee, Cumberland, and Ohio valleys and the central Mississippi Valley, lending its name to an archaeological phase (Butler 1991; Clay 1979, 1997) and being referred to in most publications on the Mississippian Period in the Ohio Confluence region and western Kentucky (e.g., Butler 1991; Clay 1979, 1997; Cobb and Butler 2002; Lewis 1986, 1990, 1991, 1996; Moore 1915; Pollack 2004; Wesler 2001). My ongoing research on the collections, maps, notes, and photographs from this site is directed at refining the occupation history of the site and clarifying its role in the dynamic regional Mississippian sociopolitical landscape. In this paper, I focus on the events surrounding the construction, use, and abandonment of a small mound at Jonathan Creek. The ceramic assemblages from two major contexts -- mound fill and an associated trash pit -- and a radiocarbon date on charred wood that was part of the mound summit architecture provide some insights into the nature and timing of these activities.

HISTORY OF INVESTIGATIONS AT JONATHAN CREEK

Jonathan Creek was a prominent community along the lower Tennessee River in Mississippian times (*c.* A.D. 1000-1500). The site was first documented in the late nineteenth-century by a geologist, Robert Loughridge (1888:193), who identified six earthen mounds arranged around an open plaza, a layout similar to other town-and-mound centers in the Eastern Woodlands (Figure 1; Lewis and Stout 1998). A seventh

mound was identified in the floodplain of Jonathan Creek, but its relationship to the other mounds at the site is unclear. C. B. Moore also stopped at the site in the early twentieth-century, referring to it as the Henson Place, and reported that the mounds had been severely impacted at that time by more than a century of plowing (Moore 1915). When his test excavations failed to turn up any artifacts, he moved on.
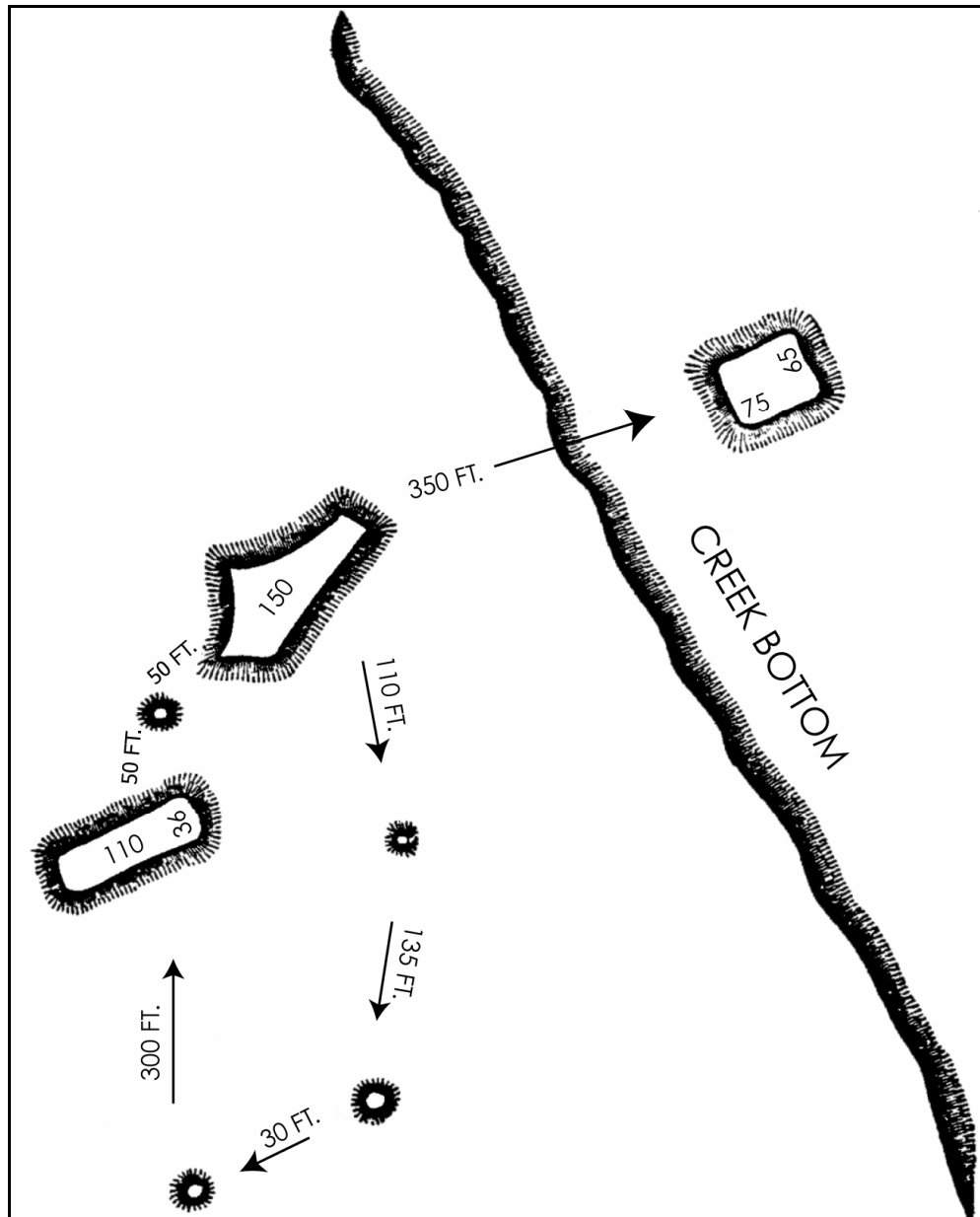

Figure 1. Loughridge's (1888) Map of the Jonathan Creek Site.

In the late 1930s, the federal government authorized the construction of a dam along the Tennessee River about 25 km north of Jonathan Creek that eventually submerged the site beneath the waters of Kentucky Lake. Mitigation excavation of the site began in the

fall of 1940, but the project was prematurely terminated in the spring of 1942 when the Civilian Conservation Corps (CCC) laborers and site supervisors were mobilized for World War II. The archaeologists involved with the project were able to excavate the mound in the floodplain and the southern portions of the site, encompassing the two small mounds that appear at the bottom of Loughridge's map (Figure 1). In addition to the mounds, the CCC excavations uncovered eight separate walls constructed around the ancient community and 89 structures built in a variety of architectural styles including single-post circular structures, single-post square or rectangular structures, wall-trench structures, and pithouses – basins with interior wall trenches (Figure 2). Elsewhere, I have suggested that the community of Jonathan Creek grew over time and, as the town expanded, a dramatic reorganization of space was undertaken (Schroeder 2005, 2006). This included a transformation of secular space into a sacred ritual precinct by the construction of a small mound that was the nucleus of mortuary ritual and other activities, a process that may be linked to the ascent and expansion of chiefly leadership strategies and power at Jonathan Creek.
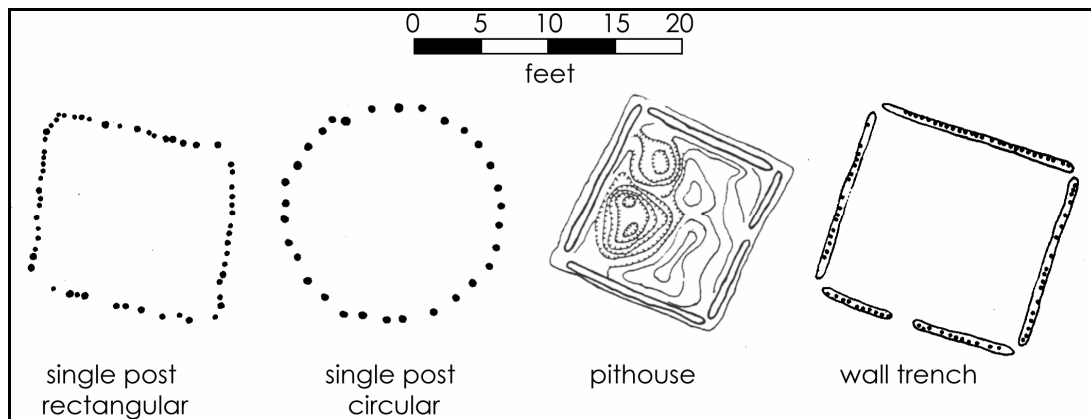
Figure 2. Structure Types at Jonathan Creek (adapted from Webb 1952:54, 57).

JONATHAN CREEK ARTIFACTS AND ARCHITECTURE

A brief report on Jonathan Creek was published in 1952 that has remained the definitive work on the site (Webb 1952). Unfortunately, the report is incomplete in its treatment of both features and artifacts. The material cultural analyses in the report are based on a very small fraction of the roughly 134 cubic feet of objects recovered during the excavation. Only 150 stone artifacts (Webb 1952:87) and 2,685 ceramic sherds and other items (Webb 1952:109) were tabulated in the report. Moreover, the contexts from which the inventoried objects came are not known, except that the ceramics did not come from the plowzone.

Attempts to determine the contexts of artifacts have been further complicated by the feature numbering system used in the field. Because of the large size of the site, it was divided into 5 separate excavation blocks, designated A-E (Figure 3). Only units A, B, and C are outlined on Figure 3. The excavations in Units D were conducted to the south

and the Unit E excavations encompassed the mound in the floodplain. Within each excavation block, feature numbers were assigned beginning with the number 1. This led to considerable duplication of feature numbers that has frustrated all the researchers who have tried to work with these materials (e.g., Wolforth 1987). Furthermore, catalog numbers, which were assigned to only a small proportion of the materials retained from the excavation, also were duplicated from one excavation unit to another. Rim sherds and other diagnostics were pulled from their original bags and curated separately, often without catalog numbers and sometimes without any designation of the excavation unit from which they were recovered. Finally, most of the artifacts from the excavation were not washed until the mid- to late-1990s. These circumstances complicated previous attempts to determine the spatial distribution of trash across the site and to use temporally distinctive ceramic types to tease apart the construction sequences at the site.
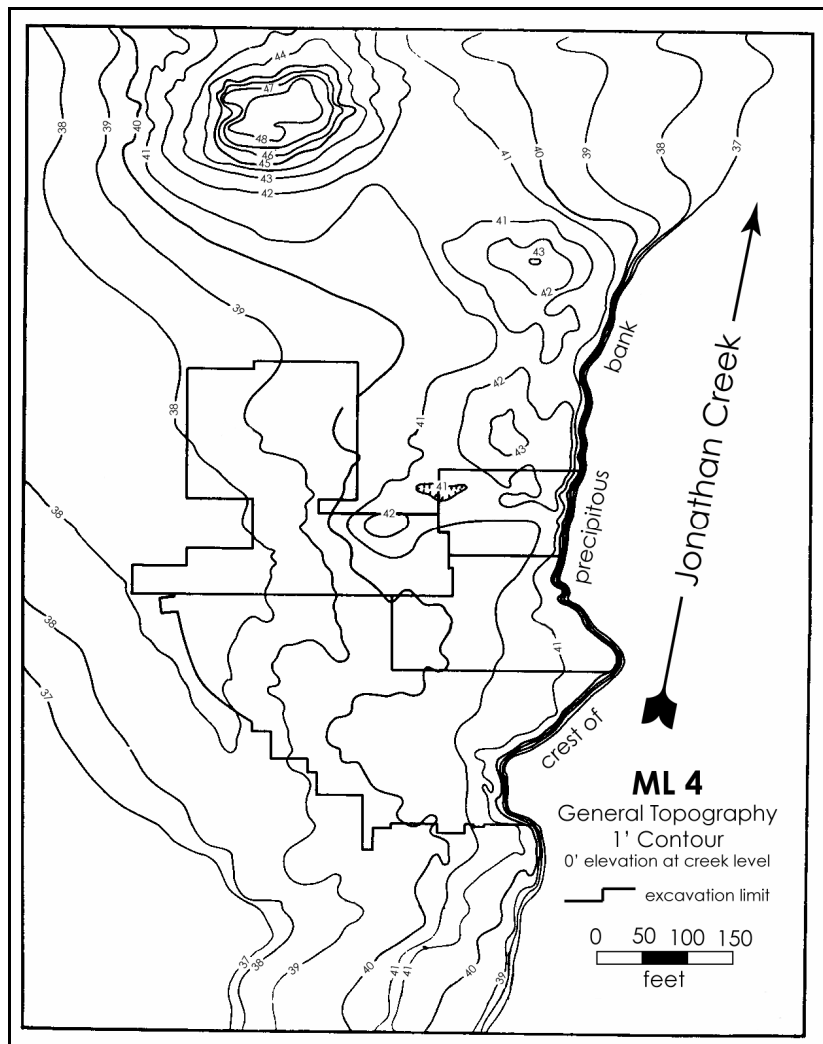

Figure 3. Topographic Map of the Jonathan Creek Site Showing Excavation Units (adapted from Webb 1952:11).

Because of the difficulties posed by the incomplete artifact inventory and the lack of stratigraphy at the site, previous researchers and I initially relied on architectural relationships to draw inferences about chronology at the site, and then supplemented this approach with analyses of samples of ceramics. According to Webb (1952:70-74), the first residents of the community lived in wall-trench structures and pit houses. Later, Webb suggested that a second occupation of the site started out small, by people who lived in the square single-post structures. However, I have found that Webb's characterization of wall trench houses as early and single post structures as late cannot be supported by the field notes and maps (Schroeder 2005), a point also made by Berle Clay more than 25 years ago (Clay 1979). Clay went on to suggest that the pithouses at the site might represent a second and much later occupation of the site. However, Lynne Wolforth (1987) was unable to confirm this proposition when she conducted a comparative study of ceramics associated with pithouses and structures made in other architectural styles. In short, the origins of structure architectural variability are ambiguous, but do not appear to be solely a consequence of time.

A CONVENTIAL VIEW OF THE CERAMIC CHRONOLOGY AT JONATHAN CREEK

Occupation histories of sites in the Eastern Woodlands have, more commonly, been accessed through reference to ceramic assemblages. For sites excavated prior to routine application of the radiocarbon dating technique in the 1950s, pottery generally is the only source of information that can be used to determine chronological placement. Building on the work of Phillips, Ford, and Griffin (1951) in the Lower Mississippi valley, R. Berle Clay developed a ceramic chronology for the Lower Tennessee and Ohio River confluence region (1963, 1979; also see Butler 1991; Muller 1986:183-185) that was based on his analysis of excavated assemblages from two distinct and stratigraphically separated deposits at the Tinsley Hill Site, which is situated along the Cumberland River at a distance of 26 km northeast from Jonathan Creek. Clay defined the Jonathan Creek Phase on the basis of the earlier assemblage and the Tinsley Hill Phase on the basis of the later assemblage. He noted a gap between the two phases, later designated as the Angelly Phase, which was characterized on the basis of excavated assemblages from three sites in the Black Bottom of the Ohio Valley (Riordan 1975). Clay and Brian Butler have since refined the associated dates (Butler 1991; Clay 1997). In the sequence presented by Butler (1991:266-267), the Late Woodland Douglas Phase spans A.D. 850-1000. Douglas Phase ceramic assemblages are dominated by plain sherds tempered with grog, with some cordmarked grog-tempered ceramics, and plain, polished, or slipped sherds tempered with grog and shell also occurring (Butler 1991: 266; Muller 1986:143-144). The Douglas Phase does not appear to be represented to any substantial degree in the assemblage from the Jonathan Creek Site. The first fully Mississippian phase defined in the sequence is the Jonathan Creek Phase, which Butler dates to *c.* A.D. 1000-1100/1150. The Angelly Phase is pretty securely dated to A.D. 1200-1300, although Clay (1979:19) has indicated that it probably starts somewhat earlier, *c.* A.D. 1150, closing the gap between it and the Jonathan Creek Phase in Butler's chronology. The Tinsley Hill Phase dates to A.D. 1300-1450. The final phase in the sequence, Caborn-Welborn, continues

into the early historic era and is spatially confined to the confluence of the Ohio and Wabash rivers (Pollack 2004). No distinctive Caborn-Welborn materials are present in the Jonathan Creek collection and so this phase is not discussed further.

Ceramic assemblages associated with each of the Mississippian phases relevant to the Jonathan Creek site (Jonathan Creek, Angelly, and Tinsley Hill) are dominated by shell-tempered pottery with plain surfaces (Mississippi Plain and Bell Plain types together account for 90%+ of all assemblages; Clay 1963; Wolforth 1987). In terms of other kinds of surface treatments, all phases have modest amounts of fabric impressed sherds (Kimmswick Fabric and Tolu Fabric) and small numbers of sherds with a red film on the surface (Old Town Red or Varney Red). Jonathan Creek Phase assemblages stand out as distinctly different from both Angelly and Tinsley Hill Phase assemblages because of the absence of other kinds of decoration, such as incising and painting. However, decorated sherds constitute less than 2% of the total ceramic assemblages for both Angelly and Tinsley Hill phases (Clay 1979:116; Pollack and Railey 1987:94; Wolforth 1987:103; see also Hilgeman 2000:222 for Angel; Wesler 2001:81-82 for Wickliffe). Notably, when assemblage size is small there is a good chance that decorated sherds will not be present, a point also made by Butler (1991) and Clay (1997). Consequently, decoration may not be the most appropriate attribute to rely on when trying to determine the phase, or phases, represented at a site, unless tens of thousands of sherds from contemporaneous contexts are available.

One ceramic attribute that archaeologists working in the region have found to be more temporally useful than surface treatment is handle form (Butler 1991; Clay 1963, 1979; Hilgeman 2000:125-163, 212, 214-215, 218; Orr 1951:331; Phillips, et al. 1951:152; Pollack and Railey 1987; Riordan 1975; Smith 1969; Wesler 1991). Loop handles are found on some jars associated with Early Mississippian Jonathan Creek Phase assemblages, while loop and strap handles occur in roughly equal numbers in Angelly Phase jar assemblages, and wide strap handles dominate Tinsley Hill Phase jar assemblages (Butler 1991:266; Hilgeman 2000; Phillips, et al. 1951; note: Hilgeman 2000:129, 215 associates loop handles [thickness:width = 0.75-1.0; Hilgeman 2000:129] with A.D. 1100-1200, strap handles [handle thickness:width = 0.1-0.38; Hilgeman 2000:129] with A.D. 1300-1450, and two types that are intermediate between loop and strap [handle thickness:width = 0.39-0.74] with A.D. 1200-1325 at the Angel Site in Indiana).

Furthermore, the presence of certain vessel types may also be helpful. Jars, bowls, and pans occur in all phases, while hooded water bottles are associated with Angelly Phase and, to a lesser extent, Tinsley Hill Phase assemblages. Plates are also found in Angelly Phase and Tinsley Hill Phase assemblages. Long- and short-neck bottles are found in Tinsley Hill Phase assemblages. Finally, the metrics of certain vessel types change over time as well (e.g., the width of plate rims increases over time, etc.) and may be useful for creating chronological sorting of assemblages.

Prior to my work with the collections, the largest number of sherds to be systematically examined from the Jonathan Creek Site is 2,758, of which 44 (1.6%) were

painted or incised (Wolforth 1987:103). In Clay's (1963) analysis of a smaller sample of 622 sherds from Jonathan Creek, he found no incised or painted sherds. In the assemblage analyzed by Webb (1952) only 0.2% of the sherds were incised or painted. These and other archaeologists, who have looked at the Jonathan Creek collections to draw an impressionistic assessment of the ceramic assemblage, have commented on the abundance of plain, shell-tempered sherds, which characterizes all Mississippian phases in the region, especially when small sample sizes are examined, and they have all concluded that the major occupation of the site occurred during the early Mississippian Jonathan Creek Phase (Butler 1991; Clay 1979, 1997; Wolforth 1987). The majority of the handles illustrated in Webb's report (1952:97, 101-102) are loop handles, also supporting the Early Mississippian characterization of the assemblage. However, everyone with an interest in the site also has noted that there was a later occupation (Clay 1979:117; 1997:23; Wolforth 1987:117), which is represented by small numbers of the incised sherds, slipped, painted, and negative painted sherds, hooded water bottles, bottles, and plates (see Webb 1952 for illustrations of some of these) that are considered characteristic of the Tinsley Hill Phase, although most of these attributes are also present in Angelly Phase assemblages.

In brief summary, the conventional view of the Jonathan Creek site has been that it was a substantial Early Mississippian, Jonathan Creek Phase, town, occupied sometime between A.D. 1000 and 1100/1150, deserted for a period of time, and then reoccupied after A.D. 1300, during the Tinsley Hill Phase, by a small group of people who abandoned the site by A.D. 1450 (Butler 1991; Clay 1979, 1997; Wolforth 1987).

A SHORT HISTORY OF A SMALL MOUND: AN ALTERNATIVE VIEW OF THE OCCUPATION HISTORY OF JONATHAN CREEK

THE SMALL MOUND

My recent analysis of materials from Jonathan Creek does not support the conventional view of the occupation history of the site and instead indicates a substantial presence during the Angelly Phase (Schroeder 2006, 2007). At this time, I cannot address the nature of the occupations at the site during the Jonathan Creek and Tinsley Hill phases, but as work on the collections progresses, the complex history of the site should become clearer. My inference of an Angelly Phase occupation is well demonstrated by the sequence of activities in an area of the site where a substantial amount of structure rebuilding and spatial reorganization occurred (Figure 4). In this part of the site, there was a small mound with three large, superimposed, and overlapping wall-trench structures on its summit (Features 30, 31, and 37), which archaeologists excavated in arbitrary levels. Two of these (Features 30 and 31) are the largest buildings excavated at the site. Grouped together nearby were more than a dozen burials, most with their heads oriented to the west. Based on Webb's (1952) report, it seems that he did not recognize the existence of this small mound, and may not have been familiar with the field notes, photographs, and profile maps produced during excavation of the site area that encompassed the mound.
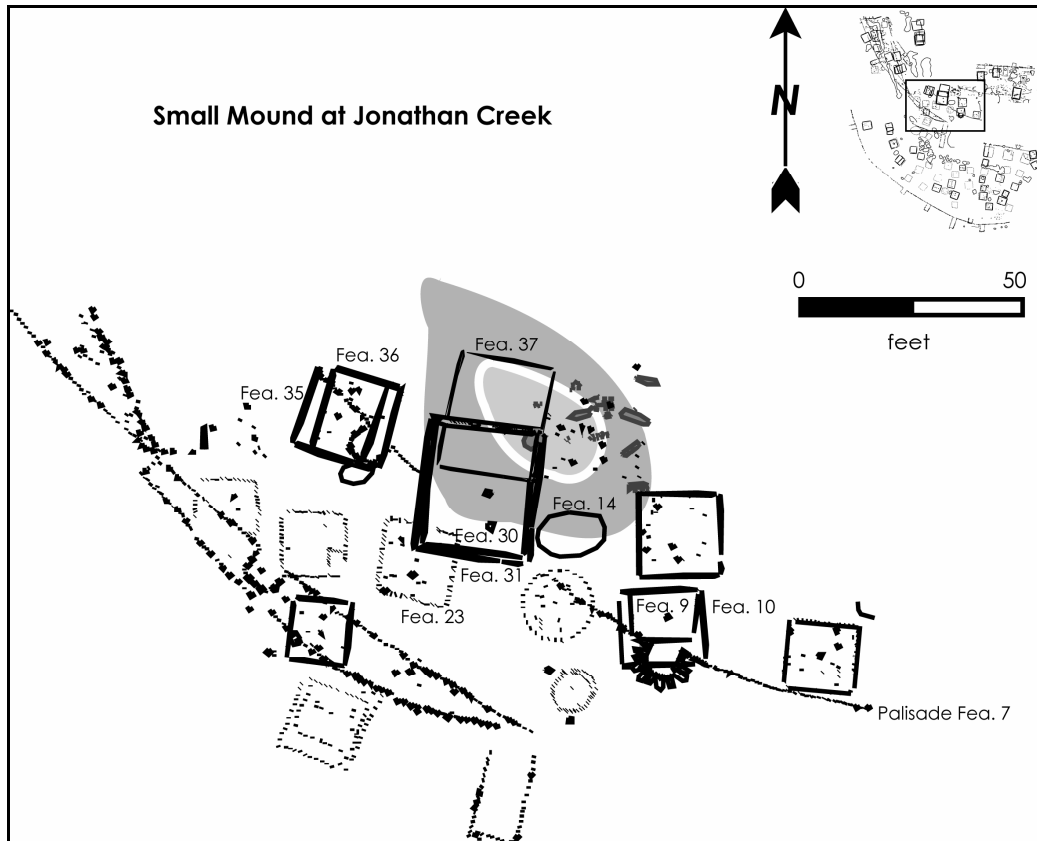
Figure 4. Map of Small Mound and Nearby Walls and Architectural Features.

Among the first structures built in this portion of the site were several wall trench houses (Features 9, 10, 35, and 36). After these houses had been dismantled, palisade Feature 7 was constructed across this area. A single post structure (Feature 23) also was built in this area, but how it relates in time to palisade Feature 7 and wall trench house Features 9, 10, 35, and 36 is unknown. It is clear, however, that sometime after Feature 23 was abandoned and after palisade Feature 7 had been dismantled, a low earthen mound was constructed in this area, covering over a burial of a single individual and a post-mold containing a fragment of a Ramey knife made of heat-treated Mill Creek chert. The burial of a single individual, deposition of the Ramey knife, and subsequent initiation of mound construction signal a dramatic change in the activities conducted in this part of the site from secular and domestic to ritual and sacred. The mound was topped by a wall-trench structure (Feature 37), which was used for a time, dismantled, and then replaced by a larger wall trench structure (Feature 30). This second wall-trench structure was destroyed by fire. It was replaced by a third wall-trench structure (Feature 31) that was constructed on the exact same spot, perhaps after adding a thin layer of earth to the mound. This third wall-trench structure also burned and was never again rebuilt. The fires that destroyed the two final structures built on top of this mound may have been accidents, or they may have been set intentionally after a decisive defeat in battle or upon the death of a particularly beloved leader as depicted in a sixteenth-century engraving of Timucua Indians mourning a dead chief (LeMoyne in Laudonniere, quoted in Fundaburk

1958:102). Or, the fires may have been set by enemies intent on destroying a symbol of leadership and desecrating the burial place of revered ancestors (see similar descriptions for Pacaha, Cofitachequi and Anilco in Varner and Varner 1951:292-293, 437-438, 493). Whatever the reasons for the destruction, and they are not entirely clear, the last conflagration signaled the end of the use-life of the mound and the possible beginnings of site abandonment.

AN ASSOCIATED MIDDEN PIT

On the south slope of the small mound, excavators encountered a large trash pit (Feature 14), described in the field notes as having layers of rubble, charcoal, ash, and red-fired streaks, but excavated as a single unit. The collections from Feature 14 are dominated by ceramics, but the field notes also describe large quantities of lithics and some animal bone, most of which were discarded in the field. At sites elsewhere in the Southeast, archaeologists have noted that large refuse pits associated with mounds may be the consequence of activities conducted on the mound and tend to have distinctive regional or site-specific patterns of location (Smith and Williams 1994). For example, at sites across the northern half of Georgia archaeologists found a consistent pattern of mound slope midden features on the northeastern side of mounds, which they have interpreted as the consequence of domestic, feasting, renewal events, other ritual activities conducted on the mound summit, or noted may relate to a desire to have fetid piles of waste downwind from mound-top residential structures or away from the plaza (Smith and Williams 1994:32-34).

CERAMICS

Six-thousand one-hundred and eighty-eight fragments of pottery, including 311 rim sherds (Table 1, Table 2), were recovered from the layers of mound fill, mound structures, and the large trash pit (Feature 14) on the south slope of the small mound. In terms of temper, coarse sized shell temper, associated with the Mississippi paste type, clearly dominates the assemblages (Figure 5). Bell paste, with fine fragments of shell, less than 1 mm in size (Phillips, et al. 1951:122), constitutes a smaller percentage of the assemblages. Other temper types, such as grit, grog, grit-grog, and temperless pastes, were recovered in small numbers from the mound fill and Feature 14. The ceramic assemblage from the mound stands out for having a higher percentage of fine shell temper and a lower percentage of coarse shell temper than the trash pit, and for having a higher diversity of temper types than the assemblage in the trash pit. Based on temper, the ceramic assemblages from the mound fill and trash pit resemble what would be expected in any Mississippian ceramic assemblage in the region, with a higher representation of fine wares in the mound fill.

When surface treatments between the two assemblages are compared, no significant differences are apparent -- the ceramics in the mound fill and trash pit Feature 14 are dominated by plain and eroded surfaces and other kinds of surface treatments, including red, brown, buff, and black slips, decorated sherds (incising with a plain, black, or eroded surface), negative painting, polished surfaces, fabric impressed, and modeled effigy

Table 1. Summary Data for Rim Sherds from the Small Mound and Associated Pit Feature 14.

FEA. 14 PIT RIMS

TEMPER	COUNT	WEIGHT (g)	RELATIVE ABUNDANCE (% COUNT)
Grog	-	-	-
Fine Shell[1]	26	233.1	12.15
Coarse Shell[1]	188	3756.1	87.85
TOTAL	214	3989.2	100.00

SURFACE	COUNT	WEIGHT (g)	RELATIVE ABUNDANCE (% COUNT)
Plain	129	1822.2	60.28
Red, Brown	3	61.5	1.40
Black	16	426.0	7.48
Eroded	20	214.8	9.34
Decorated	3	14.1	1.40
Fabric impressed	34	1332.2	15.89
Black and buff	1	13.5	0.47
Buff slip	-	-	-
Polished	4	51.7	1.87
Unknown	4	53.2	1.87
TOTAL	214	3989.2	100.00

VESSEL TYPE	COUNT	WEIGHT (g)	RELATIVE ABUNDANCE (% COUNT)
Mississippian Jar	138	2058.4	64.48
Bowl	16	283.4	7.48
Hooded Bottle	5	78.2	2.34
Pan	52	1557.9	24.30
Bottle	1	6.3	0.47
Plate	2	5.0	0.93
TOTAL	214	3989.2	100.00

MOUND RIMS

TEMPER	COUNT	WEIGHT (g)	RELATIVE ABUNDANCE (% COUNT)
Grog	1	4.2	1.03
Fine Shell[1]	28	159.7	28.87
Coarse Shell[1]	68	1388.3	70.10
TOTAL	97	1552.2	100.00

SURFACE	COUNT	WEIGHT (g)	RELATIVE ABUNDANCE (% COUNT)
Plain	66	1177.3	68.04
Red, Brown	1	53.3	1.03
Black	1	0.8	1.03
Eroded	21	146.6	21.65
Decorated	-	-	-
Fabric impressed	5	103.1	5.15
Black and buff	-	-	-
Buff slip	1	9.9	1.03
Polished	-	-	-
Unknown	2	61.2	2.06
TOTAL	97	1552.2	100.00

VESSEL TYPE	COUNT	WEIGHT (g)	RELATIVE ABUNDANCE (% COUNT)
Mississippian Jar	55	1075.6	56.70
Bowl	21	145.9	21.65
Hooded Bottle	4	151.2	4.12
Pan	9	156	9.28
Bottle	3	7.3	3.09
Plate	5	16.2	5.15
TOTAL	97	1552.2	100.00

[1] Both the Fine Shell and Coarse Shell categories include some sherds with grit or grog or grit-grog mixed in with the shell

Table 2. Summary Data for Body Sherds from Small Mound and Associated Pit Feature 14.

FEA. 14 PIT BODY SHERDS				MOUND BODY SHERDS			
TEMPER	**COUNT**	**WEIGHT (g)**	**RELATIVE ABUNDANCE (% COUNT)**	**TEMPER**	**COUNT**	**WEIGHT (g)**	**RELATIVE ABUNDANCE (% COUNT)**
Grit	-	-	-	Grit	2	20.3	0.10
Grog	11	26.4	0.28	Grog	29	112.6	1.45
Fine Shell[2]	411	1238.2	10.58	Fine Shell[2]	508	1956.8	25.48
Coarse Shell[2]	3460	18321.7	89.11	Coarse Shell[2]	1449	7650.6	72.67
Grit-Grog	1	1.9	0.03	Grit-Grog	4	15.1	0.20
No Temper	-	-	-	No Temper	1	1.4	0.05
	-	-	-	Woodland (grit)	1	5.1	0.05
TOTAL	3883	19588.2	100.00		1994	9761.9	100.00

SURFACE	**COUNT**	**WEIGHT (g)**	**RELATIVE ABUNDANCE (% COUNT)**	**SURFACE**	**COUNT**	**WEIGHT (g)**	**RELATIVE ABUNDANCE (% COUNT)**
Plain	2024	11236.5	52.12	Plain	917	5689	45.99
Red, Brown	17	154.6	0.44	Red, Brown	23	166.3	1.15
Black	233	2092.5	6.00	Black	91	616.6	4.56
Cordmarked	-	-	0.0	Cordmarked	1	9.1	0.05
Eroded	1388	3463.5	35.74	Eroded	824	2279.8	41.32
Decorated	29	212.0	0.75	Decorated	28	161.9	1.40
Negative Painted (Red on Black)	-	-	-	Negative Painted (Red on Black)	2	2.8	0.10
Red slip over cordmarked	10	96.2	0.26	Red slip over cordmarked	-	-	-
Fabric	166	2121.9	4.27	Fabric	48	423.6	2.41
Modelled effigy	-	-	0.0	Modelled effigy	6	44.7	0.30
Black and buff	3	41.4	0.08	Black and buff	2	51.4	0.10
Buff slip	2	45.1	0.05	Buff slip	17	146.4	0.85
Polished	8	42.4	0.21	Polished	31	160.8	1.55
Black and brown	-	-	0.0	Black and brown	3	4.4	0.15
Unknown	3	82.1	0.08	Unknown	-	-	-
	-	-	-	Woodland (eroded)	1	5.1	0.05
	3883	19588.2	100.00		1994	9761.9	100.00

[2] Both the Fine Shell and Coarse Shell categories include some sherds with grit or grog or grit-grog mixed in with the shell
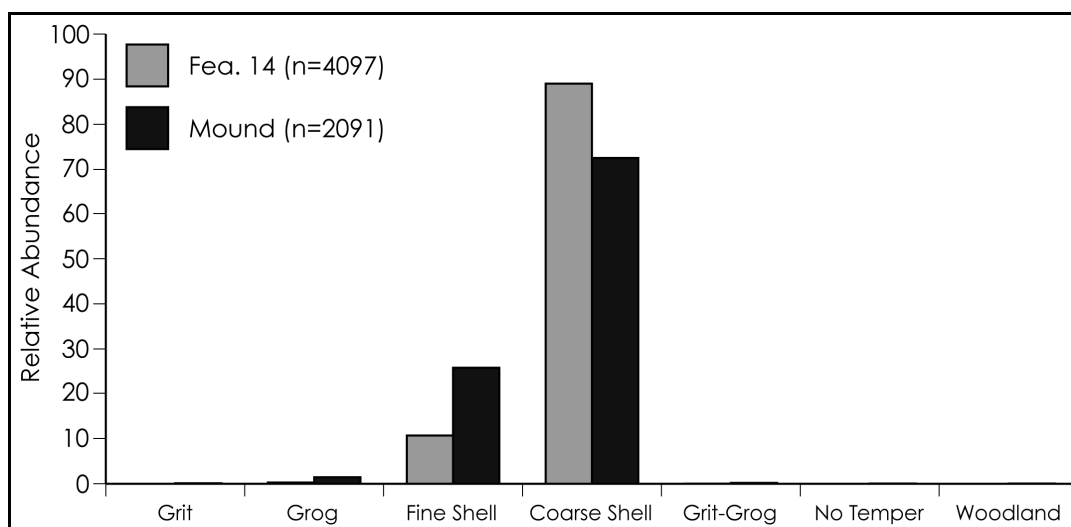
Figure 5. Bar Chart Comparison of Ceramic Temper Types for Fill From Small Mound and Feature 14.

vessels sherds, account for only roughly 13% of each assemblage (Figure 6). Decorated sherds, in particular, account for 0.78% of the Feature 14 assemblage and 1.34% of the small mound fill assemblage. This indicates that these two contexts <u>do not</u> conform to the pattern expected of a Jonathan Creek phase assemblage, in which decoration should be absent. However, the assemblages <u>do</u> match with what would be expected from an Angelly or Tinsley Hill Phase assemblage, with decorated sherds accounting for less than 2% of the assemblage.

The diversity of vessel types recovered from the mound fill and Feature 14 also fit well with the expectations for an Angelly or Tinsley Hill Phase assemblage, with jars, bowls, and pans, which are found in all Mississippian phases, as well as hooded water bottles, plates, and bottles, which are associated with Angelly or Tinsley Hill phase assemblages (Figure 7). Certain vessel types are more common in the mound fill than in the trash pit, particularly bowls, hooded water bottles, bottles, and plates, while typical domestic vessels, like jars and pans, are more common in the trash pit. The handles on jars vary through time in terms of the ratio of handle thickness to handle width. Eleven handles were intact enough to make these measurements and the ratios indicate that loop handles, narrow and wide intermediate handles, and strap handles are present (Table 3). These data are consistent with an assemblage that dates to the Angelly Phase, perhaps with some of the discarded sherds having originated in Jonathan Creek Phase contexts.

In short, the majority of the ceramic data from the small mound and associated trash pit indicate that these features post-date the Jonathan Creek Phase and probably are associated with the Angelly Phase. One final line of evidence lends further support to an interpretation that these features should be associated with the Angelly phase. Wood charcoal from one of the two burned wall-trench structures on top of the small mound was retained by the excavators and, perhaps because of the sudden termination of the

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project, it was never treated with any kind of preservative. An AMS radiocarbon date was obtained on a sample of the outer rings of one piece of charred wood. This date (Beta-180075, 780±40 BP) calibrates out to a calendrical 2-sigma range of A.D. 1190 - 1290 (1-sigma range of A.D. 1230-1280, intercept = A.D. 1260; Stuiver et al. 1998), spanning the Angelly Phase.
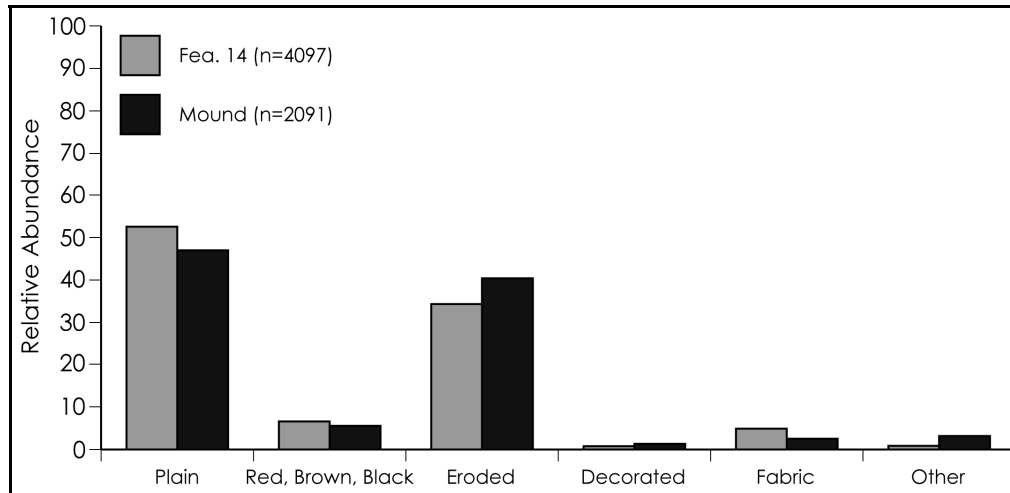

Figure 6. Bar Chart Comparison of Ceramic Surface Treatments for Fill of Small Mound and Feature 14.

The ceramic assemblages from the small mound and Feature 14 also differ in ways that are worth considering. The ceramics from Feature 14 are dominated by jars and pans. In contrast, the mound fill assemblage is dominated by bowls, plates, hooded bottles, and bottles. Fine-shell temper accounts for only 10.67% of the Feature 14 assemblage, while 25.63% of the small mound ceramic assemblage is composed of fine-shell temper. The assemblage from Feature 14 contains 0.78% decorated sherds. Although the numbers are small, the mound fill assemblage has nearly twice the abundance of decorated sherds, with 1.34% of the assemblage consisting of decorated types. Overall, the ceramic assemblage from the small mound is dominated by technological wares and vessel types that are commonly associated with serving and cooking, while wares and vessel types associated with cooking and storage are more abundant in the Feature 14 assemblage (cf. Blitz 1993; Hally 1986; Steponaitis 1983). Certainly, the assemblage from Feature 14 compares fairly well with the quotidian assemblages sampled by Wolforth (1987), who analyzed ceramics from domestic contexts at Jonathan Creek and found relative proportions of coarse-tempered Mississippi wares around 92%, and relative proportions of fine-tempered Bell wares around 7.8%. The ceramic contents of Feature 14 indicate that at least some of the activities that occurred on top of or near the small mound involved the deposition of domestic cooking and storage vessels down the slope of the mound into a large trash pit (note: elsewhere in the Southeast, such refuse pits are not associated with mortuary mounds [Smith and Williams 1994:30], indicating that the relationship between domestic, ritual, and mortuary activities at Jonathan Creek may not have been as clearly separated spatially as at other sites).
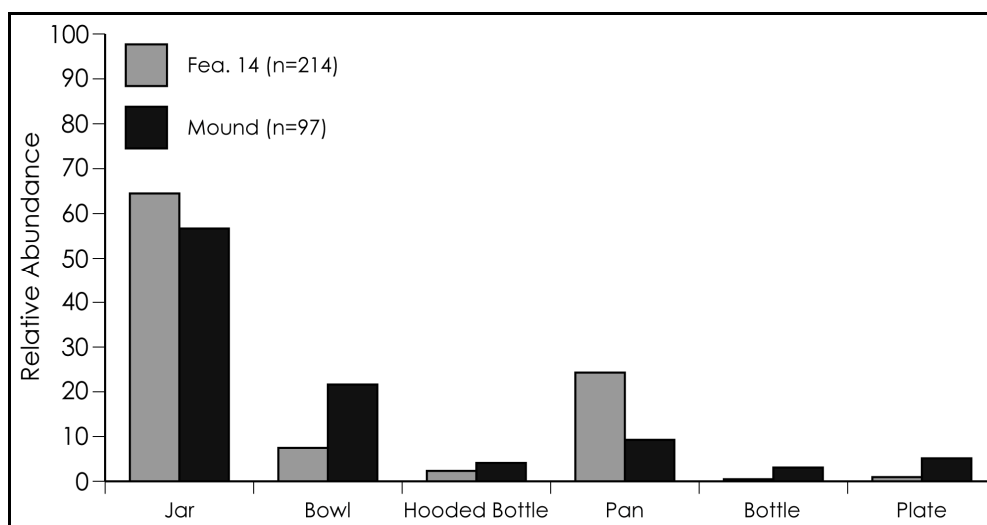
Figure 7. Bar Chart Comparison of Ceramic Vessel Diversity for Fill of Small Mound and Feature 14.

Table 3. Handle Ratios for Jars from Small Mound and Associated Pit Fea. 14

VESSEL NUMBER	HANDLE THICKNESS	HANDLE WIDTH	RATIO	HANDLE TYPE	CONTEXT
53	1.02	2.83	0.36	Strap	Mound
71	1.4	1.7	0.82	Loop	Mound
72	1.2	1.4	0.86	Loop	Mound
73	0.6	1.2	0.50	Wide Intermediate	Mound
74	0.9	1.1	0.82	Loop	Mound
94	0.93	1.14	0.82	Loop	Mound
102	-	1.66	0.00	Unknown	Fea. 14
111	0.75	1.47	0.51	Wide Intermediate	Fea. 14
161	0.8	1.2	0.67	Narrow Intermediate	Fea. 14
291	1.46	1.63	0.90	Loop	Fea. 14
292	1.03	2.7	0.38	Strap	Fea. 14
232	0.84	1.1	0.76	Loop	Fea. 14

SUMMATION

This research clearly demonstrates the potential of old collections to answer new questions and augment our understanding of one significant site in the archaeological literature on the Southeast. The construction, rebuilding, and final destruction of the small mound, its associated trash pit, and other nearby features provided several insights into the occupation history of the Jonathan Creek Site. Webb (1952) suggested that wall-trench houses were associated with an early occupation and single-post structures were part of a later occupation – a proposition that is not supported by my reanalysis of the data. The origins of structural variability at the site are ambiguous, but it is clear that the diversity of structure forms cannot be accounted for by change over time. However, it is

also clear that the configuration of the community did shift over time. The district where the low mound is located was, at one time, residential, and at another time it was on the very margins of the town. Later, it was transformed into a sacred space through the burial of an individual, subsequent construction of a mound, and burial of nearly a dozen individuals in the mound. Several stages of rebuilding occurred, at least one in the wake of a major conflagration on top of the mound that destroyed the summit architecture. At least some of the activities that were conducted on top of the mound led to the disposal of trash down the southeast side of the monument. The ceramic debris within the trash pit resembles domestic assemblages elsewhere on the site, while the pottery in the mound fill has more fine wares (Bell paste), a higher diversity of vessel types, and more bowls and plates than were found in the trash pit. The differences between these two assemblages may indicate that at least some of the activities conducted on the mound did not end up being represented in the associated trash pit. A final fire appears to mark the end of the use-life of the mound, and also may have portended the imminent demise and abandonment of the community. Based on the characteristics of the ceramic assemblages from the mound fill and trash pit, and a radiocarbon date from one of the burned structures on the mound summit, the events surrounding the construction and subsequent use of the mound occurred during the Angelly Phase. Jonathan Creek and Tinsley Hill Phase occupations may be present in other areas of the site but, in light of the data presented here, it is difficult to sustain the argument that the site was abandoned during the Angelly phase.

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