

SECTION IV: The Mississippian Period in Tennessee

Chapter 12: The Middle Mississippian Period (AD 1100-1350)

By

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Introduction

The period A.D. 1100 to 1350 in Tennessee can be referred to as the Middle Mississippian period. By the beginning of this period (A.D. 1100) the changes taking place from the previous Early Mississippian period had become apparent. Shell tempered pottery dominated ceramic assemblages, platform mound construction was in full swing, and socio political changes at many sites were noticeably different than the Woodland period. Mississippian habitation sites were more numerous and larger in size and burial rites had become more elaborate. These are some of the hallmarks of the Mississippian period in Tennessee as well as the entire eastern Woodlands. The exact timing of each attribute varies slightly over the landscape.

By 1100 A.D. Native American towns dotted the landscape across the state of Tennessee. Most of these towns take on similar forms. Earthen burial and platform mounds surround a central plaza area. At most sites buildings were located on the edge of the plaza. These buildings probably functioned as communal buildings. Beyond the mounds and communal buildings were the houses of individuals living at the site. Corncribs, storage structures, storage pits, and other domestic features were typically associated with these houses. Fortified towns also occur during this period (Polhemus 1995:6). These fortifications consists of palisades, or wooden fence like enclosures, that encircled either parts of the village at sites like ? or all of the village at sites like ?.

Of the towns or villages excavated by archaeologists, most were located along natural terraces and bluffs in river valleys across the state. While this may be due to sampling bias imposed by archaeologists concentrating on large drainages, it may also be due to other factors. This work was done prior to the inundation of the numerous reservoirs that dot the landscape of the state today. The concentration on these locations, whether imposed by archaeologists or prehistoric inhabitants, represents the most documented archaeological examples of this time period. While these large villages represent an extreme in the continuum of site types, they provide a large amount of information on the lives of the prehistoric inhabitant of Tennessee. These riverine environments provided an ample source of aquatic resources and rich alluvial soils for agriculture. By the beginning of the middle Mississippian period in Tennessee maize agriculture had become one of, if not the single most important dietary staple. Additional foods included beans, squash, sunflowers, and other crops.

In this chapter we will attempt to examine the Middle Mississippian period across the state of Tennessee. The state is long and narrow and encompasses many different environmental zones within its boundaries. We will examine Mississippian during this period by dividing the state into east, central, and west regions.

East Tennessee

The east Tennessee region includes the Ridge and Valley as well Unaka/Blue Ridge physiographic provinces. This area is characterized by a series of northeast to southwest oriented mountains and valleys crosscut by numerous streams and rivers. One of the most well-known and extensively documented sites in east Tennessee during the middle Mississippian period is the Hiwassee Island site (40MG31). This site along with Hixon (40HA3), and early occupation at Toqua (40MR6) represent some of the large sites excavated in the Tennessee River valley.

On the other end of the site size continuum are the Kimberly-Clark and Davis-Noe sites.

Kimberly-Clark (40LD208) represents one of the best examples of a small hamlet in east Tennessee. The Davis-Noe site (40RE137) presents a rare glimpse into specialized resource utilization and possible resource extraction during this period.

Regional chronological sequence

Lewis and Kneberg (1946) presented the first Mississippian culture sequence for east Tennessee. Their culture history was also later refined (Lewis, Lewis, and Sullivan 1995) based on large-scale excavations in the Chickamauga Basin. In their sequence the Middle Mississippian period is represented by the Hiwassee Island phase. The dates assigned to this phase were A.D. 1000-1200. William S. Webb may have first recognized this division between Hiwassee Island and the later Dallas phase during his work in the Norris Basin. Webb (1938) differentiated between what he termed “small-log” and “large-log” houses. While there is a noticeable temporal division between construction types in the archaeological record, the formal designation of these two phases was carried out based on materials from the Chickamauga Basin. Similarities do exist between the Chickamauga and Norris basin sites, but detailed studies performed on the Chickamauga sites have yet to be carried out on the Norris sites. Sites in the Norris Basin may have less similarities to those on the Tennessee River and more in common with sites in southwest Virginia and southeast Kentucky (see Jefferies 2001).

Based on new ceramic data and a series of new radiocarbon dates Schroedl, Boyd, and Davis (1990) developed a slightly different cultural historical sequence for the late prehistoric period in eastern Tennessee. Their chronology for the region was supported by the research of Kimball and Baden (1985). This revised chronology included the earlier Martin Farm phase and extended the Hiwassee Island phase (Mississippian II) 100 more years until A.D. 1300. This cultural historical sequence from A.D. 1000 to 1300 is the current model for middle Mississippian in east Tennessee.

Settlement Patterning

Typical houses in east Tennessee during the Middle Mississippian period were rectangular or square. They were fashioned by either digging a trench and inserting long poles to be bent (flexed) or by digging individual holes for structure posts (rigid). Wall trench structures tend to be most common in the early portion of this period and are replaced by single set post construction. Evidence from sites in the area shows that both wall trenches and single set posts occurs simultaneously at some sites. Wall trench construction continues to be utilized until about A.D. 1300.

The best data on understanding prehistoric architecture in east Tennessee comes from Richard Polhemus’s master’s thesis (1985). While his work focuses on the Toqua site that is primarily a late Mississippian site, initial occupation at Toqua began during the Hiwassee Island phase around A.D. 1200. The earliest structures at Toqua (40MR6) were flexed construction. Flex construction is a method of placing long pieces of wood into the ground and bending or flexing them to form the walls and roof of the structure. Polhemus (1985:139) notes that the transition from flexed to rigid construction at Toqua occurs around A.D. 1250 to 1300. Polhemus divides the structures at Toqua into domestic and public based on size and content. Of the domestic structures identified, the largest tended to occur on the mound summit and nearest the plaza. This suggests that higher status social units may have occupied the innermost village area and prominent locations (Polhemus 1985:141).

At the small Kimberly-Clark site only three structures were present. Structures 1

and 2 were of the rectangular single post construction type. Structure 3 was heavily damaged and context and form is uncertain. Structure 1 was 4.8 meters wide by 5.8 meters long. A radiocarbon date of 895±70 (Chapman 1990:13) on one of the posts most likely from Structure 1 puts occupation of this site near the beginning of the Hiwassee Island phase (A.D. 1055). Structure 2 at Kimberly-Clark was located below structure 1 and was square/rectangular with single post construction. The dimensions of Structure 2 were 3.8 meters by 3.9 meters. Interior posts were present in these structures and probably represent supports, partitions, and/or benches (Chapman 1990:13). A round hearth (Feature 2) was located in the center of Structure 1 and a prepared clay fire basin (Feature 40) was located below Feature 2 associated with Structure 2. The absence of wall trench construction is an interesting departure from the expected early date acquired on Structure 1 and the peripheral spatial location on the landscape.

Unit 37 (the primary mound) at Hiwassee Island was constructed in at least eight separate episodes. These construction episodes were designated by Lewis and Kneberg (1946) alphabetically with level A as the latest, level G as the earliest, and two E levels (E1 and E2). Almost all of the buildings associated with these levels were of the wall trench construction. The buildings in the earliest levels were primarily rectangular. Square buildings become more numerous as construction episodes progress. Level F incorporates a series of steps to the eastern building and a ramp to the western building. The construction of round buildings becomes apparent in level E2. These round buildings are of the single set post construction. Most of the prepared clay hearths located in buildings at Hiwassee Island were round in the earliest levels with increasing proportions of square shaped hearths in the later levels.

Settlement organization

Habitation location undergoes a shift during the early portion of the Hiwassee Island phase in east Tennessee. This shift is from a focus on first alluvial terraces to second (and possibly older) terraces (Davis 1986:410). The Kimberly-Clark site (Chapman 1990) dates to the beginning of the Hiwassee Island phase and is situated on an old alluvial terrace in the Tennessee River valley.

Several different settlement types are represented in the archaeological record. Large mound complexes (civic-ceremonial centers), isolated farmsteads, hamlets, and specialized activity sites are present. In east Tennessee Hiwassee Island is the major mound and civic-ceremonial center. The upland Davis-Noe site (40RE137) is a stark contrast to Hiwassee Island. At Davis-Noe a unique artifact assemblage indicates specific resource acquisition. Artifacts and site location suggest seasonality (Hood 1977:99). Small amounts of lithics and faunal materials eliminate this site as a major hunting camp. Ceramics on the other hand were well represented and vessel sizes suggest large capacity processing forms. This lack of lithics and faunal materials coupled with ceramic data suggests that the salt spring at the site may have been the primary resource being exploited. Hood (1977) discusses the dietary needs of plant based exploitive strategies. These specialized sites while rarely present in the archaeological record would have been crucial in fulfilling specific needs during this time.

At Kimberly-Clark the few structures and features located above the first terrace may have served as a farming hamlet. While specialized activity sites and hamlets/farmsteads were certainly prevalent prehistorically they are rarely encountered in the archaeological record based on the peripheral nature of their location and their

inconspicuous nature on the landscape. Resource availability, diversity, and concentration appear to be the primary reasons for settlement organization.

Social Organization

Courtyards

Use of public and private spaces (households)

Comment [B1]: Need to fill in a bit here

Mortuary patterning

Like the preceding Martin Farm phase no village interments have been found directly associated with Hiwassee Island occupations. Likewise the construction stages of platform mounds associated with the Hiwassee Island phase have very few associated burials. For instance, the platform mound at the DeArmond is marked by a period of abandonment followed by a shift from Hiwassee Island architecture to the large-log Dallas-style architecture. Of all the burials found (N=92) only one burial could be associated with the lower level Hiwassee Island construction phases and even this burial appears to be intrusive from the later Dallas phase (Koerner 2003). Three conical burial mounds are also associated with the site. Unfortunately, better temporal control is needed for many of these sites in order to establish if these burial mounds such as the one at DeArmond were contemporaneous with Hiwassee Island occupations.

It appears that in most cases the difficulty distinguishing Martin Farm from Late Woodland interments holds true for many Hiwassee Island occupations. Once again the inclusion of Mississippian funerary objects is the only distinguishing marker. It is perhaps this difficulty in temporal control of Martin Farm and Hiwassee Island interments that led Lewis and Kneberg (1946:10) to speculate that the absence of Hiwassee Island interments could be explained through the use of charnel houses. Part of this argument was based on Moore's work at Bennett Place() which produced diagnostic Hiwassee Island artifacts. He describes two burned construction layers with burials associated with what appears to be both primary and secondary burials (Brain and Phillips 1996:233). Nonetheless, if Moore was truly describing evidence for charnel houses during the Hiwassee Island period this appears to be the exception rather than the norm. Subsequent excavations including large scale undertakings in the 70's of the Telico project and earlier excavations by Lewis and Kneberg (1946) failed to uncover any evidence charnel structures.

Perhaps our best insight into Hiwassee Island mortuary practices and the illustration of the transition from this Late Hiwassee Island (AD 1200-1300) component to the subsequent Early Dallas (AD1300-1400) phase comes from the exceptional temporal control based on the work of Sullivan and Humpf (2000) for the Hixon site.

The Hixon mound consists of a complex sequence of construction. Structures of the lower mound levels (stages B and C) were of wall trench construction. Some of these lower levels consisted of paired structures and some had raised clay platforms. A radiocarbon date obtained from the floor O of mound stage B produced a date of AD 1235 within the Hiwassee Island phase (Sullivan 2001a). Overlying stage B there is a thin layer of sand indicating an episode of abandonment (Sullivan and Humpf 2001). The subsequent stage consisted of single post construction, indicating a transition to Dallas-type architecture. Using the radiocarbon date as a reference, and an average of 15 to 20 years of use for mound summits (Hally 1999), it was estimated that construction of the mound began just before 1200 and was abandoned around the mid-fourteenth century (Sullivan 2001a).

Pertinent to this discussion is the occurrence of burials interred both before and after the period of abandonment. A total of 64 individuals was interred within the mound and 28 in the pre-mound deposit, consisting mostly of adults (n=42). Of sexable adults in the mound and pre-mound sample the distribution of sexes is virtually equal interred within the mound the majority of which fall into the middle adult category (30 to 50 years old) (Sullivan and Humpf 2001).

The importance of Hixon to our understanding of material culture change and its relation to interregional interactions cannot be underscored enough. While the inclusion of shell ornamentation was present with some earlier Mississippian burials it is the appearance of incised shell gorgets and copper ornamentation generally considered part of the large Southeastern Ceremonial Complex (SECC) that is of particular importance during this period. The Southeastern Ceremonial Complex (SECC) embodies a range of symbolic motifs (e.g., human figures, animals, geometric and abstract symbols) produced in an array of media. While, shell and copper are usually the dominant materials it is also found in pottery and stone including cave art (Muller 1989). While the roots of this symbolism may extend several centuries preceding this time period, the peak of its production appears to be around AD 1200-1300. Knight (1996) suggests that the concept of the SECC has long outlived its usefulness. The crux of his argument centers on the regional and temporal variation of these motifs thus rendering the concept of SECC as immaterial if not an outright hindrance to our understanding of regional interactions and temporal shifts in ideology. As will be illustrated in this discussion and the following chapter, these temporal and regional variations within the SECC are an important consideration in Tennessee Mississippian Iconography and a point we will return to.

Hixon's mortuary program is perhaps best known for the stratigraphic sequence of shell gorgets first published by Kneberg (1959) and later refined by Sullivan (2001a). What Muller (1989) identifies as the turkey cock motif is the most common gorget type interred within the mound and occurs throughout all of the building stages (7 of 16 gorgets in the Hixon mound have the turkey cock motif). Lankford (2004) suggests that this motif may be a Mississippian representation of the cosmos with the birds themselves representing the "above world". Although the Etowah site in northern Georgia has the highest number of this type of gorget, Hixon has greatest variety from all three of Brain and Phillips' (1996) distinguished groups: the naturalistic, slightly conventionalized, and highly conventionalized. Although some researchers suggest that the highly conventionalized were a later variant of this style (Cobb and King) it is interesting to note that both the naturalistic and stylistic occur in close association with one another, and in fact in one case occur together within the same burial (Sullivan 2001a)

Perhaps the most significant aspect of Hixon's mortuary pattern is a trend of increased elaboration of funerary treatment and an increase in SECC items, including the anthropomorphic gorgets through the mound stages to the upper levels, beginning with level L (Hatch 1974; Sullivan and Humpf 2001). Males also become more prominent during this period. According to Sullivan and Humpf (2001) females outnumber the males in the lower levels while male interments dominant the upper levels (57 percent of males are buried below Floor L/Stage B compared to 76 percent of females interred below this floor. In the lower floors most of the "preeminent" burials are females. For, examples in floor S only one individual was interred with more than one type of object: a 30 to 50 year old female with 1500 shell beads and some shell spoons, and on floors O

and P burials, with the most diverse array of artifacts were middle-aged females (Sullivan and Humpf 2001). This pattern changes during the later mound stages, starting with floor L, when preeminent burials are both males and females.

The timing of the change in level L within the mound (e.g., more preeminent male burials, the appearance of Hightower or classic Braden style gorgets and copper ornaments) is extremely pertinent to this discussion. Given the radiocarbon date for the preceding floor O, level L appears to be contemporaneous with the Early Wilbanks (1250-1300 AD) phase at Etowah, a large, multimound site located in Bartow County, Georgia, 80 miles from Hixon. Also of significance is Sullivan's (2001a) timing of the abandonment of Hixon that corresponds with the Late Willbanks phase burning and abandonment at Etowah. It has been previously proposed that based on the above evidence and the shared iconography, at that the Etowah and Hixon sites were involved in some form of regional alliance (Sullivan and Humpf 2001; Cobb and King 2006). The elaboration of burials during this period at Hixon may have served as a ritually symbolic means of asserting elite lineages' legitimacy vis-à-vis elites from other local centers within the alliance network. This is not to suggest that Etowah exerted wide wielding hegemonic control over smaller local centers such as Hixon. Rather, as King proposes (1993), these alliances were most likely not through force or domination but through cooperation and ceremonialism, and in which local centers exerted a high degree of autonomy.

Technology

Ceramics

The Middle Mississippian, or Hiwassee Island phase, in eastern Tennessee was defined from excavations at the Hiwassee Island site in the Chickamauga Basin and further defined from excavations in the Tellico Reservoir. This period came shortly after the Martin Farm phase and is recognized by a florescence of the Mississippian lifeway and more complex social structures than were in place before.

Larry Kimball (1985) developed a chronological framework for woodland and Mississippian pottery collections from the Tellico Reservoir based on tempering agent and surface treatment. Statistical tests on pottery composition from dated contexts at previously known sites were used to organize the data into chronologically distinct groups. The Mississippian II – Hiwassee Island Phase (AD 1000-1300) pottery was almost all shell-tempered and was found with plain (65-85%), cordmarked (1-15%), textile impressed (3-5%), and red filmed (1-3%) surfaces. Limestone tempered pottery was still found in small amounts during this time. The two most common vessels had either plain (5-11%) or cordmarked (3-6%) surfaces. This culture moved their settlements away from the river floodplain settings and up to higher ground, usually the second alluvial terrace. This may be due to annual river floods in the floodplain setting that did not facilitate stable and permanent villages. The floodplains would also have been ideal for planting crops to support the burgeoning populations.

The Hiwassee Island Site (40MG31)

The Hiwassee Island site was dug in the 1930s in the Chickamauga Basin by Lewis and Kneberg (1946). The excavators defined both a Hiwassee Island and Dallas phase component at the site. The early Hiwassee Island phase component consisted of 70,838 shell tempered sherds plus an additional 68 sand tempered sherds.

The village excavations (unit 37) did not enable good stratigraphic separation of the two components at the site, however, the large platform mound (unit 38) served as a basis for establishing the site chronology. The mound was not built from sterile soils, so the total amount of pottery studied was reduced by not including deposits that had ambiguous associations. In all, pottery from eleven stratigraphic units was considered to have reliable association with distinct mound occupations. The Hiwassee Island occupation of the site included the bottom four stages of the mound, the village level under the mound, and an old humus below the village level. With this accounting, the Hiwassee Island component consisted of 5,843 shell and 31 sand-tempered sherds.

The mound contained loop handles in abundance from all Hiwassee Island phase levels (n=140) but did not contain any strap handles or even lug handles. Handles were sometimes embellished with appliqué nodes or effigies on the upper portion of the handle. Jars were formed primarily with a flared rim (n=30). The flared rim jar with a short neck and loop handle is considered the standard vessel form for the Hiwassee Island phase. Although typical Dallas phase modeled forms were found only in the upper levels of the mound, a few instances of modeled effigy heads were already found in the Hiwassee Island component levels on red-filmed vessels.

One interesting aspect of pottery at Hiwassee Island is the co-occurrence of sand tempered complicated stamped pottery, probably imported from northern Georgia, and a shell-tempered, probably local, variant with the same stamped designs. Georgia stamped pottery was not new at this time, Napier stamped (Late-Middle Woodland) and Woodstock stamped (Late Woodland/Early Mississippian) wares have been found throughout eastern Tennessee.

Textile-impressed pottery allows for accurate description of the HI component fabric industry.

HI component sherds exhibited simple twining and twilled twining.

There are a conspicuous lack of any ceramic "gaming" disks.

Conclusions:

- 1- both coarse shell tempering and finely tempered ball clay vessels were produced. The ball clay paste was restricted to painted bowls and bottles.
- 2- Plain vessels were predominant throughout the period (but decrease in abundance over time) and are found primarily on large jars with loop handles, highly excurved rim jars, shallow bowls, blank-faced hooded bottles, and short neck bottles.
- 3- Cordmarking was found in minor quantities in the lower levels of the mound but steadily increased in proportion to plain surface vessels.
- 4- Textile impressed pans were a typical form.
- 5- Red filming with some effigy modeled forms on bowls and bottles was early.
- 6- Red on buff painting was found later in the series and increased in embellishment from simple lines to complex hachured triangles and crosshatched squares.
- 7- Complicated stamping on shell-tempered vessels was copied from extra-local Georgia sand-tempered stamped pottery (Etowah Complicated Stamped type).

The Hixon Site (40HA3)

The Hixon site was also dug in the 1930s in the Chickamauga Basin by Lewis and Kneberg (Lewis et al. 1995). The excavators defined both a Hiwassee Island and Dallas phase component at the site. The excavators defined all burials from the mound as intrusive from the Dallas phase occupation, however it is now known that these were all actually Hiwassee Island phase burials (Sullivan ??, research note) 9 burials from the mound were associated with pottery vessels. All pots were shell-tempered. Although the site has been published, there have not been any in-depth studies of the pottery. Based on mortuary accoutrements, there are, however, some interesting conclusions regarding pottery use at the site.

Five burials contained diagnostic vessels of what has been defined as the Dallas phase in eastern Tennessee.

Floor H, Burial 24 contained an effigy bowl.

Floor G, Burial 38 contained a negative painted bear effigy bottle.

Floor K, Burial 33 contained a peaked rim globular jar.

Floor L, Burial 71 contained a negative painted owl effigy bottle.

Floor R, Burial 45 contained a negative painted bottle.

Aside from the mortuary vessels, a total of 5,798 shell tempered sherds was recovered from the entire site. It is likely, but not necessary that there was a small Dallas phase occupation.

Like most Mississippian sites, plain shell-tempered vessels were the most abundant. A majority of these were jars (n=269). Jars with loop handles were predominant (n=25) while there were some strap handles present (n=6) and many lugs (n=49). Bowls were second in abundance (n=103) with a few lugs (n=7). Vessels with cordmarking were the second-most abundant treatment. A majority of these were jars (n=30) but with few rims. This is actually a common find in eastern Tennessee. Cordmarking is often found on jars below the shoulder area, while the neck and rim were left plain and smoothed.

The Hixon site, much like the Hiwassee Island site has both a Hiwassee Island and Dallas phase occupation. This makes separating out the two difficult, with most reliance on radiometric dates from the mound and related burial accompaniments.

Lewis and Kneberg defined the burials from the mound as being a part of the Dallas phase occupation, however recent study of the mortuary assemblage from the mound showed that all burials were of Hiwassee Island phase age (Sullivan ??, research note).

Therefore if the burial accoutrements are indicative of a truly Hiwassee Island phase culture in the Chickamauga Basin, serious consideration should be taken to re-study and date the Hiwassee Island site mound ceramic sequence. Several traits that are considered typical of the Dallas phase occupation of the Hiwassee Island mound are found in Hiwassee Island phase burials at the Hixon site. These characteristics include filleted bowl rims, negative painting, and full-figure effigy modeling. Peaked rim jars are only found in the uppermost levels of the Hiwassee Island mound but is found at Hixon in burial 33. Dates from the floor level of burial 33 range between AD 1235 and 1350 (Sullivan ??, research note). This period coincides with a possible hiatus in the Hiwassee Island mound between stages D and E-1. The only radiometric date so far from Hiwassee Island stage E-1 dates to AD 1235 (ref somewhere). The gap between Hiwassee Island

stage E-1 and D is currently unknown and may not represent as much time as previously thought.

The Kimberly-Clark site (40LD208)

The site is located on an older terrace remnant abutting the upland slopes of the Tennessee River. The settlement was located on a T-1 terrace that is relatively stable and overlooks the section of river. The Hiwassee Island phase occupation of the Kimberly-Clark site is ephemeral and probably represents a short occupation (Chapman 1990: 26) early in the Hiwassee Island phase. The one radiocarbon date from a post from structure 1 or 2 dates to AD 1055.

Artifactual remains were scarce, which also supports a short occupation or tidy residents. Ceramics from the farmstead include mostly eroded shell tempered sherds.

Shell Plain	6	
Shell Cordmarked	18	
Shell Plain eroded	180	
Loop handle	1	
Rim Node		1

The use of cordmarked pottery is consistent with Hiwassee Island ceramic use. The presence of plain and cordmarked pottery with one loop handle from a single feature at the site probably represents a single vessel. These were typically cordmarked below the shoulder area and then smoothed from the neck up to the rim.

Pottery is the most common artifact encountered on Mississippian sites and ground mussel shell is the preferred temper material of prehistoric peoples at this time. During the Middle Mississippian period the ceramic assemblage at most sites becomes much more diverse (Schroedl, Boyd and Davis 1990:185). The number of vessel forms and decoration types increases. These forms include bottles, bowls, jars, pans, and plates. While shell tempered plain is the most common ceramic type surface treatments include fabric-impressed and cordmarked. In east Tennessee red-filmed and red on buff painted ceramic types are one of the surface treatments relegated primarily to the Middle Mississippian period. Loop handles are also one of the major ceramic characteristics that exemplify this period. Ceramic artifacts other than pottery include pottery trowels, ceramic discs, and earplugs.

Lithics

When one thinks of late prehistoric artifact assemblages, lithics is not the first material class that springs to mind. This being said there remains much work to be done on Mississippian lithic assemblages. Projectile point types often lumped into the “Mississippian Triangular” form may exhibit much more variation than both temporally and geographically. While the full range of these points over time and in space throughout the Mississippian period is not well understood, some research on lithic materials during the early Mississippian has been performed (see Boyd 1982).

Lithics previously discussed from east Tennessee during the earlier Martin Farm components are very similar to those in the later Hiwassee Island components in east Tennessee. Boyd (1982:124) referring to the Martin Farm and Hiwassee Island components studied shadows this point:

“Based on the assumptions of adequate sample size and control of functional and spatial variability, the lithic analysis clearly indicates that there is no significant formal or technological variability between these temporally distinct populations.”

Utilized raw materials continue to be dominated by Knox and Knox variety cherts. Some of the additional forms of Knox chert include Knox Black, Knox Gray, Knox Light Gray, Knox Gray Banded, Knox Light Gray Banded, as well as similar categorizations based on appearance. During the Hiwassee Island component the amount of non-local materials utilized does increase, but never supplants locally available resources. Lithic tools present include drills, knives, projectile points, and scrapers.

Projectile points are most commonly the triangular Hamilton incurvate and Madison forms. Shell artifacts include freshwater mussel shells, marine shell cups, ear spools, and gorgets. Additional non-ceramic artifacts include wood and bone tools, the former of which rarely survives archaeologically.

Botanical

Chapman and Shea (1981)

Lower Little Tennessee River Valley located in a narrow floodplain within the ridge and valley province of eastern Tennessee, after emerging from the Blue Ridge mountains.

Area offers a long growing season of over 200 days in the valley portion and floods primarily in the three winter months (Chapman and Shea 1981: 62).

Surveys of Tellico River discovered over 350 sites and mitigated 25 of these sites dating from Archaic to Historic occupations. The Tellico Project spanned the formative era of “flotation revolution” (Chapman and Shea 1981: 62), however recovery techniques were not consistent from site to site.

Nut Remains:

Hickory (*Carya* sp.) and walnut (*Juglans nigra*) remains were the most abundant plant food remains recovered. Notable in its absence were chestnut remains (*Castanea dentata*) which may speak more about sampling error or aboriginal processing behavior than prehistoric diet. With the increased importance of cultivated plants in the Mississippian period, nuts as a percentage of food remains decreases dramatically from early to late Mississippian and Overhill Cherokee times.

Cultigens:

Goosefoot seeds (*Chenopodium* sp.) were relatively abundant during the Early Mississippian period and at Tomotley. The importance of this food source are also seen in the Normandy Reservoir. Knotweed seeds (*Polygonum* sp.) become abundant in Early Mississippian sites. Maygrass seeds (*Phalaris caroliniana*) are found at Early Mississippian sites but in no great numbers. The co-occurrence of goosefoot, knotweed, and maygrass in botanical samples is consistent with sites dating to the Banks Phase in the Normandy Reservoir. Squashes and Gourds (*Cucurbitaceae*) are consistently found in sites dating back to the Woodland period. Sunflower (*Helianthus annuus*) is found in most Mississippian contexts in the valley, except for Toqua, and exhibit a large increase

in seed size over that time. Sumpweed (*Iva annua*) seeds also exhibit an increase in seed size during the Mississippian period. A vessel at Toqua was found with the remains of these seeds along with many maize remains. Maize (*Zea mays*) is ubiquitous in Mississippian period sites. It is first seen in large amounts in Early Mississippian sites and is of the flint variety. Beans (*Phaseolus vulgaris*) were the last cultigen to be utilized in the Little Tennessee Valley and are not found in early Mississippian sites.

Wood and Charcoal:

The “Firewood Indifference Hypothesis” (Asch and Asch 1976; Asch and Asch 1985:346; Asch and Asch 1986) may relate to the use of wood for heating and cooking purposes. This hypothesis may account for the availability of nearby deadwood, thus reflecting the local forest composition of a site. It is noted that the number of genera utilized by occupants of sites increases steadily from Archaic on through the Historic Cherokee periods. May relate to the human impact on local forest composition. May also relate the increasing wood requirements on growing populations

Oaks and hickory remain the steadfast most abundant wood remains at sites but the presence of pine increases over time. Hickory nuts, acorns, and walnuts occur inversely with the consumption of cultivated foods such as maize, starting in the Early Mississippian period.

- 1- maize is first seen in Woodland period contexts in minor amounts but is a minor food source until the Early Mississippian period
- 2- beans do not appear in the archaeological record until the Late Mississippian period
- 3- human impacts on the local forest ecology is represented by the increasingly mixed wood charcoal use over time

Hiwassee Island (40MG31)

Bottomlands adjacent to streams were ideal locations for native agriculture. Fields would have been replenished annually from river overflow. Eight corn cob remains were recovered from the Hiwassee Island site. Based on the locations of these finds, six of the eight were from the Hiwassee Island component. These were either of the 8 or 10 row variety. No measurements of kernels or cupules was available from these specimens, but it is clear that this form of maize was a northern flint variety that typically occurred in 8 and 10 row cobs and found at sites in the Tennessee Valley after AD 1200 (Crites 1978).

HIXON SITE (40HA3)

Botanical information for the Hixon site is scanty, due party to excavation practices at the time. Fragments of acorn and maize were found in the Hiwassee Island phase occupation at the site. The corn (5 cobs) was either 8 or 10 row. Charred pine remains were also found at the site but it is not clear what contexts these came from. In addition, woven cane was found in a plaited pattern along with twilled textiles.

Kimberly-Clark (40LD208)

Botanical residue from the floor of structure 1 contained a relatively narrow range of

plant and cultigen foods. Maize was recovered from all contexts analyzed, including the structure floor. One specimen of domesticated beans was also recovered, although AMS dating of this sample returned a date of 45 +/- 55 B.P., well within historic context. This cultigen usually does not occur at sites in the region until the AD 1200s. The only wild food recovered was from hickory nut and walnut.

Central Tennessee

Central Tennessee includes the Cumberland Plateau, Eastern Highland Rim, Central Basin, and Western Highland Rim physiographic zones. Recent data for the middle Mississippian period in central Tennessee stems from excavations at French Lick/Sulphur Dell (40DV5), Brandywine Pointe (40DV247), and Sogom (40DV68).

Regional Chronology

Kevin Smith (1992) in his dissertation defined the Middle Cumberland area. In this work he develops a local chronology on the basis that the area “was a peripheral adoption and unique expression of Mississippian adaptation” (Smith 1992:401). This regional chronology was further developed using data from the Brandywine Pointe site by Moore and Smith (1993). A more recent summary of the Middle Cumberland area chronology can be found in Moore et al. 2006. The middle Mississippian phase developed by Smith (1992) is the Dowd phase. The date ranges for the Dowd phase are A.D. 1050 to 1250 (Moore et al. 2006; Smith 1992). These dates place the Dowd phase occupation in central Tennessee directly in the Middle Mississippian being discussed here.

Settlement Patterning

In central Tennessee, as was the case in east Tennessee, the Middle Mississippian period is a period in which small farmsteads or hamlets were dispersed about a larger centrally located mound center. As the period progresses a population increase and nucleation occurs. Examples of hamlets in central Tennessee much like Kimberly-Clark in east Tennessee include the Brandywine Pointe site (40DV247) and the Sogom site (40DV68).

Houses with ? were typical in central Tennessee during the Middle Mississippian period

inter- and intra-site settlement organization

Organization of features within sites

Social Organization

Regional exchange

Salt from French Lick

Use of public and private spaces (households)

Mortuary patterning

Best known for its mortuary complex and specifically the use of stone box graves the Middle Cumberland culture dates from the Middle Mississippian period to well into the late Mississippian period (AD 1100-1500) (Bass 1985). Many of the mortuary sites associated with the Middle Cumberland culture have long occupational histories and temporal control is often difficult to obtain. Due to this fact, most of our discussion of this culture will take place during this chapter with recognition that much of the same mortuary patterning extends into the Late Mississippian period.

Stone box graves refers to the pit graves lined and covered with stone such as limestone, slate, or shale sometimes with a prepared floor of pebbles or pottery (Dowd 1972). This use of this type of graves is part of the larger Mid-South pattern of Middle Tennessee, through Kentucky, Ohio, Indiana, and Illinois (Moore and Breitburg 1998). Evidence of reuse is fairly common. When reuse occurred, the primary burial was disarticulated and moved to the foot of the grave or placed along the side of the walls (Berryman 1981). Berryman (1981) suggests conjugal pairing among some of the burials by citing evidence of adult males and females interred within the side by side in similarly constructed boxes or within the same box. Unlike East Tennessee where flexed position was the dominant deposition, almost all of the interments are exclusively in extended position.

The small village site of Hooper (AD 1260) nicely demonstrates the arrangement of burials found at many of these sites. Fifty-three stone box graves were recovered from the site representing at least sixty-six individuals. Most of the graves were recovered from a central village cemetery for adults and adolescents. The majority of these remains were clustered on the east central access of the site. Young subadult remains were usually found located within house floors or adjacent to houses. Smith and Moore () also suggest small family plots located adjacent to residential structures.

Similar to the Hooper site, many of these Middle Cumberland stone box graves are located in village cemeteries or associated with mounds consisting predominantly adults and adolescents with subadults more likely to be interred beneath the floors of village structures (Brooster 1981; Berryman 1984; Moore and Breitburg 1998; Keumin-Drews 2000). In a study of fourteen Middle Cumberland sites a total of 61 percent of infants were interred within the village in contrast with only 2.3 percent of all other age groups interred in this location (Keumin-Drews 2000).

Many mortuary analyses for this region note the limited number of funerary objects and the near absence of elaborate artifacts and exotic materials (Berryman 1984; Brooster 1988; Moore and Breitburg 1998; Keumin-Drews 2000). A point echoed by the earlier excavations of C.B. Moore (quoted in Barryman 1981:16) who wrote "...as to the discovery of artifacts, as is usually the case with stone graves, we had our labor for our pains as the saying goes"

While grave inclusions may be a bit paltry to Moore's standard, the funerary object distribution of these sites can give us some insight into Middle Cumberland's mortuary program. At the Gordontown site, pottery was the most common inclusion. For the most part the pottery found associated with burials were similar in form to those found in domestic spheres only smaller in size (Moore and Breitburg 1998). This pattern has led to the suggestion that vessels in mortuary contexts are smaller reproductions of domestic vessels and may represent personal rather than communal containers. Ceramic burial inclusions were evenly distributed between subadults and adults. More elaborate effigy pots, however, were almost exclusively interred with subadults, a pattern that is repeated at Averbuch. In fact, Berryman (1981) notes that at Averbuch the most elaborate funerary items (e.g., effigy pots, shell ornaments, shell spoons) are associated with subadults. Although, the presence of artifacts by sex appears to be virtually equal for many Middle Cumberland sites (Keumin-Drews 2000), the gendered distribution of funerary inclusions is an issue that warrants future exploration.

While Barryman (1981) notes the paucity of elaborate funerary goods, objects

associated with the SECC are found in Middle Cumberland burial contexts. The most notable of these comes from the site of Castalian Springs.

Technology

Ceramics

Central Tennessee Mississippian culture is often referred to as the Middle Cumberland Culture (Smith 1992). The preponderance of stone box graves in this region has preserved a large number of whole ceramic vessels for study and classification.

The Dowd phase is a Middle Mississippian cultural phase dating between AD 900 and 1250. Common ceramic types present in the Middle Cumberland Culture included two varieties of plain, incising, fabric impressed, and painted wares:

Mississippi Plain/Neeley's Ferry Plain (Phillips 1970; PFG 1951) – subsumes much of the coarse shell-tempered plain wares.

Bell Plain (PFG 1951; Phillips 1970) – distinguishes the fine shell-tempered plain, burnished, and polished wares.

Mound Place Incised (PFG 1951: 147-148; Phillips 1970: 135-136) – decorative motif used on Bell Plain bowls with effigy heads where two or more broad incised lines circumscribe the area below the rim.

Kimmswick Fabric Impressed (Phillips 1970; Williams 1954) – represents all basins with textile/fabric impressions on the exterior.

Kimmswick Plain (Phillips 1970; Williams 1954) – represents basins that lack any exterior surface impressions but are constructed in the same way as their fabric impressed counterparts. These are difficult, in some instances, to distinguish from Mississippi Plain.

Matthews Incised (Phillips 1970) – Incised decorations applied to Mississippi Plain vessels and may occur in one of two varieties. Matthews has been hypothesized in the Central Mississippi Valley to be a late Middle Mississippian horizon marker (Morse and Morse 1990: 158), occurring between AD 1200 and 1400 and replaced by Barton Incised and Parkin Punctate decorations by AD 1400.

Variety Matthews occurs simply as incised arched lines on the body of standard jars.

Variety Manly-A occurs as a punctated arched line or multiple lines on jars.

Variety Manly-B occurs as a punctated and incised arched line or multiple lines.

Variety Beckwith occurs as an incised rectilinear guilloche, usually on the neck.

Nashville Negative Painted (PFG 1951: 174-175; Phillips 1970: 139-141) – these vessels are only found in mortuary contexts (Smith 1992: 81) and were constructed by coating the vessel in a slip wash or left buff and then covered with a wax resist. Then they would coat the vessel in a vegetal slip which would carbonize during firing, leaving a black color in these areas and a buff or slipped color in the areas applied with a resist (Hilgeman 2000). The common motif in this ware is a cross inside of a sun-circle and may include an open hand or hachuring.

As with most Mississippian ceramics in the Tennessee area, most of the vessel forms can be organized into four basic categories: jars, bowls, bottles, and basins.

Jars are the primary vessel form of the Middle Cumberland region. They occur in a globular to sub-globular body with a restriction at the neck and an orifice about 1/3 of the total diameter of the vessel. These vessels all have some sort of an appendage, but rarely

have more than two.

Bowls are also very common in the region. They occur in relatively shallow shapes lacking a neck and may have vertical, everted, or slightly inverted rims.

Bottles are less common in the region. They occur in globular to sub-globular bodies with a well-defined vertical neck 1/3 of the total height of the vessel and an orifice less than 3/4 of the total diameter. The hooded bottle is subsumed under this category with blank-faced and hunch back human varieties.

Basins are quite common in the region but are restricted to domestic contexts. These vessels are similar to bowls with a very shallow body and either flat or rounded bases. They may have either a highly thickened rim and slightly flared or a more direct and vertically oriented rim.

Effigy forms of vessels may occur in many forms: the structural animal or human form, a lug tail added to one side, a blank-faced hooded bottle form, a full-figured hooded bottle form, and human head medallions.

The Dowd phase ranges from AD 1050-1250 and is found at Brandywine Pointe and French Lick/Sulphur Dell sites. Characteristics of the Dowd Phase ceramics are cylindrical necked bottles and the blank-faced effigy bottle form. Bowls occur mainly in the simple form or slightly inverted form without any effigy forms or appliqué rim strips. Jars and basins are more evenly distributed through time, however there the proportion of textile impressed to plain basins decreases through time.

During the Mississippian period in central Tennessee there was a distinct aggregation of distant and unrelated family units into communities. This led to the establishment of a social network of centralized villages. In these locations, activities were not drastically different from dispersed hamlets but offered protection during times of instability.

Small autonomous political entities developed around AD 1000 in the western area of the Central Basin. This may have been a social response to the eastern Central Basin sites on the Harpeth River.

“This settlement pattern left a relatively large portion of the Inner Basin unoccupied. The result is a substantial area surrounded by a “shield” of palisaded mound centers, protecting what essentially can be defined as a unmodified hunting and gathering territory” (Smith 1992: 365).

Most settlements were located along tributary streams and were politically autonomous but still shared a material cultural affinity to other sites in the region.

The French Lick site (40DV5)

Sites: Walling, Steven Ruple, Shari Moore

French Lick/Sulphur Dell (DV5) consisted of a large mound and village complex but had been recently disturbed by nearby construction.

Ceramics: **Richard Walling**

The French Lick site ceramic assemblage totaled 6,701.

Mulberry Crk PL FL/SD
275

Barton Incised	1	
Bell Plain	4	
Kimmswick FI	286	
Kimmswick PL	0	
Matthews IN – Matt	2	
Matthews IN – Man	3	
Beckwith IN	6	
McKee Is. CM	8	
McKee Is. Brush	2	- only on flared rim jars, up to thickened lip
Mississippi PL	2985	
Mound Place IN	1	
O’Byam IN	0	
Old Town Red	0	
Appliqué	7	
Effigy (coarse)	7	
Effigy (fine)	0	
Decorated (all)	25	
DISKS	0	
EARPLUGS	0	
TROWELS	2	- 1 D-handle type

As with all sites in the Middle Cumberland Culture area, around 95% of the pottery is shell-tempered plain ware, while only the remaining 5% may be sorted by surface treatment. The ratio of Bell Plain to Mississippi Plain is often cited as evidence for temporal changes, but this is not sound practice. Thruston phase mortuary vessels are often made from Bell Plain paste, thus inflating the numbers of this paste type in later assemblages. The non-random preservation and recovery in favor of these burial vessels over Mississippi Plain vessels does not provide meaningful comparisons.

Plain Kimmswick basins at East Nashville Mounds may lend support to the idea that plain basins occur later than textile impressed basins. Textile impressed basins are found in higher numbers at French Lick, but may be a result from this site’s proximity to known salt springs. Whether the salt pans were used in salt processing or not, there were certainly other functions for these vessels as evidenced from its ubiquitous distribution in central and eastern Tennessee Mississippian sites. Four sorting criteria were allotted for the textile-impressed wares.

Bowls	FL/SD
Horizontal rim strips	3
Coarse temper	19
Fine temper	3
Jars	
Coarse temper	82
Handles	
Loops	9
Straps	12

Tabular Lugs	7
Bifurcate Lugs	1
Rim-Rider effigies	1

Brandywine Point site (40DV247)

Ceramics were predominantly shell-tempered with some that had grit inclusions. Plain vessels were formed in jar, bowl, bottle, and pan forms.

Jars (10 minimum number of vessels [MNV]) are mostly globular to sub-globular with rounded bases and constructed from paste mixed with coarsely crushed mussel shell temper. Double lug handle appendages were well represented, probably opposed double lugs, while only a single flattened loop handle was recovered.

Bowls (1 MNV) were constructed from fine shell temper with outslanting wall forms, characteristic of the early period in central TN Mississippian sequence (Smith 1992).

Basins (6 MNV) are characterized by fabric impressed surfaces and rough, unmodified surfaces and highly thickened lips with only a slightly curving rim profile, usually very shallow.

Bottles (1 MNV) were discerned from body sherds exhibiting finely crushed mussel shell that conforms to the bottle form, and possibly the hooded bottle form which occurs early in the area.

Few of the sherds at the site were recovered from the structure, but were mostly shell and shell/grit tempered plain sherds and some Bell Plain.

There is a distinct utilitarian nature of the settlement at Brandywine point. The pottery is mostly utilitarian cooking and storage wares without decorated surfaces. The pottery lacks many cordmarked sherds, which goes along with downward trend in use after AD 1150. Fabric impressed basins were found at the site but probably not used for salt processing, as their name implies. There is no saline spring within a reasonable radius of the site. The presence of domesticated plants (maize and cucurbita) occur without finding any hoeing instruments. Only celt of Dover chert was recovered at the site.

Lithics

At the French lick Site over 62 percent of the Mississippian Triangular points were subjected to heat-treating compared to only ten percent at the nearby East Nashville Mounds site that dates to the late Mississippian (387).

Uses of wood

Subsistence/Health

Mortality and Morbidity

Botanical

The Middle Cumberland area is composed largely from two major physiographic regions, the Nashville Basin and the Cumberland Plateau. The Cumberland River flows in a southwesterly direction through both regions, providing thick soils replenished by

periodic alluvial deposits from flooding. The Duck and Elk rivers also drain the region and eventually link up with the Tennessee River west of the Highland Rim. The Middle Cumberland area falls within the Temperate Deciduous Forest biome (ref), with a combination of mixed and western mesophytic forests capable of supporting diverse flora and fauna characteristic of the Carolinian Biotic Province (ref).

In general, there is not as much paleobotanical data available to infer prehistoric diet. Aboriginal subsistence may be broadly categorized as consisting of agriculture, horticulture, and collecting. Unlike the typical Mississippian subsistence base, peoples in the Middle Cumberland area may not have relied on agriculture for a majority of their dietary intake. However, the necessity to remain sedentary for agriculture must have prevailed as we see less collecting of wild foods over time.

Wood/Cane:

At the few sites in the region where botanical information is available, the ubiquity of cane, a bottomland resource, was likely related to its use in construction. Main structural elements were predominantly red cedar (*Juniperus virginianus*), while other bottomland woods that were easily accessible were recovered as wood charcoal from heating and cooking.

Plant Foods:

The most common nut food was hickory followed by acorn, black walnut, and butternut. The full list of utilized plants would be too long to list, and probably numbers over 500 (Hudson 1976: 287). Major constituents of the wild foods diet that were consistently used in Mississippian diet was knotweed, goosefoot, maygrass, sumpweed, sunflower, persimmon, and wild grape. The first five plants along with gourds and squashes attained cultigen status, meaning that these particular plants were encouraged to grow near settlements and may even have been sowed. Each of these plants were native to Tennessee and form the core of Mississippian subsistence. Smith (1992: 58) makes the connection that resident horticulture “set the stage for the ready adoption of the highly productive maize plant – an adoption that catalyzed processual changes already in progress.” Maize and beans were exotic to the region. Evidence of maize has not found earlier than AD 800 in the central Tennessee area. Beans arrived much later than this and are found in settlements dating after AD 1200.

Brandywine Point site (40DV247)

The site is located on a dissected upland zone overlooking the Cumberland River. The excavators uncovered remains of one Mississippian structure and related features. There were no storage or trash pits inside of the structure walls but there were the remains of a single infant burial in a stone lined grave.

Wood remains were dominated by Osage Orange for the interior along with some hickory. Cane was also found on the inside of the structure, probably as a lashing.

Nutshell was dominated by hickory in the associated storage pits outside of the structure along with persimmon and maize (*Zea mays*). Maize was also recovered inside of the structure along with some persimmon and cucurbit fragments. Maize was of the 8-10 row variety (cupule width avg. 7.8 mm and length avg. 2.0 mm). The presence of

domesticated plants (maize and cucurbita) occurs without finding any gardening instruments. Only one celt of Dover chert was recovered at the site.

Jefferson Street Bridge: French Lick (40DV5)

Analysis was conducted mostly on remains from general excavation contexts, lessening the significance of quantified results. General characteristics are presented here.

Hickory nutshell was by far the most common remain encountered along with black walnut. Oak, ash, and hickory wood were recovered from levels. Corn and squash remains were recovered. Numerous corn cupules and 1 kernel was recovered but no measurements were taken.

West Tennessee

The Western Valley, Coastal Plain, and Mississippian River Valley physiographic regions are included in west Tennessee. Some of the key sites for understanding middle Mississippian in the area include Chucalissa (40SY1) and Shiloh (40HR7).

Kentucky Lake stuff / Bass dissertation

Gray Farm (SW1) field notes

Link Farm (HS6) field notes

Regional Chronology

The regional chronology for western Tennessee during the middle Mississippian period includes at least two phases. The Mitchell phase (A.D. 1185-1250) includes all of the middle Mississippian discussed here for the Mississippi River Valley area and the Boxtown phase (A.D. 1250-1400) spans both middle and late Mississippian also in the Mississippi River Valley. Welch (2006) uses Shiloh phase for the interior area located in southeast western Tennessee. While exact dates and data for the Shiloh phase are not provided more data on the Shiloh site will be forthcoming (Anderson In Press). The greatest data for defining the Mitchell and Boxtown phases come from the Chucalissa site (Lumb and McNutt 1988). At Chucalissa

Settlement Patterning

While the Central Mississippi Valley of extreme western Tennessee is home to large mound centers, Mainfort (1994:18) notes “evidence for post-A.D. 1250 occupation in the west Tennessee interior is virtually nonexistent....”

The representative house structure for west Tennessee during the Middle Mississippian period was?

A hamlet site in west Tennessee comparable to the Kimberly-Clark, Brandywine Pointe, and Sogom from east and central Tennessee is 40SY488. Tennessee Division of Archaeology (TDOA) staff excavated this site in 1994. A single structure present at the site yielded an uncorrected radiocarbon date of 810 +/- 70 B.P. This date coupled with the ceramic assemblage suggests an occupation of the site during the 13th century (Barker 2005:15).

inter- and intra-site settlement organization

Organization of features within sites

Social Organization

Regional exchange

Use of public and private spaces (households)

Mortuary patterning

Rank and Health

Technology

Ceramics

The Boxtown Phase is primarily found at the Chucalissa and Walls sites. Its pottery assemblages are characterized by Neeley's Ferry and Boxtown Plain (55-75%) and much Bell Plain (20-35%), with few Parkin and Owens Punctate (1-5%) and Barton Incised (2-8%) (Smith 1990). Jars tended to have low, slightly everted rims with short necks and either loop or strap handles. Structures were made from open-corner wall trenches and were mostly square, ranging from 3 to 4.8 meters on a side. Dates for this phase place it between AD 1250 and 1400.

Chucalissa (40SY1)

Boxtown ceramic complex was defined below the Walls phase in Stratum III at Chucalissa. The characteristics of this phase are Neeley's Ferry Plain – 60-70%, Bell Plain – 20-25%, Barton Incised – 0-2%, Old Town Red – 0-2%, Fortune Noded – <1%. Beckwith Incised is found at the site but was probably traded in or local based on Neeley's Ferry paste.

Jars were slightly everted with a low rim and gentle shoulder angles. Appendages were loops, flat loops, or straps.

Bottles had tall necks and were in a globular form.

The latest occupation of the site is considered to be during the Walls Phase (AD 1450-1550). The site consists of a central plaza area devoid of cultural material with a large platform mound at the north and west sides. There is a ring of architectural midden surrounding the plaza and residential debris in outlying areas to the north and south of the mounds.

The ceramic complex at Chucalissa consists of:

Baytown Plain (medium to coarse clay temper, n=675, PFG 1951) A straight to slightly everted rim.

Mississippi Plain var. Chucalissa (abundant coarse shell, n=2879, Neeley's Ferry (PFG)) a straight to slightly everted form with few fully everted forms on jars, bottles, bowls with some effigy forms.

Mississippi Plain var. Boxtown (scarce coarse shell, n=987, Neeley's Ferry (PFG)) most forms are on straight to slightly everted rims with few fully everted forms.

Mississippi Plain var. Mitchell (mixed coarse clay and shell, n=100, new type?) most forms are on everted rims.

Parkin Punctate (n=898, PFG 1951: 110-114) occurs on all pastes but mainly chucalissa (66%) or Boxtown (25%). Forms are either straight to slightly everted on jars.

Barton Incised (n=109, PFG 1951: 114) occurs mainly on chucalissa paste with a cross-hatched incised design and hachured triangle on the shoulders of jars.

Bell Plain var. Bell (n=1000, Bell Plain (PFG 1951: 122-126)) a fine shell temper with few clay inclusions and often polished. Occurs on mostly straight to slightly everted rims. It is generally found on bowls and bottles and most effigy forms.

Bell Plain var. Nickel (n=2099, Bell Plain (PFG 1951)) fine shell temper with abundant clay inclusions and often polished. Most are slightly everted to straight in form with few

flared forms.

Burial Vessels from the North Village area:

Burial 18 had a compound bottle with 4 strap handles in Bell Plain paste (Adult Male).

Burial 28 had a Neeley's Ferry jar with an incised rim (Adult Female).

Burial 36 had one Bell Plain bowl with lugs and one Mississippi Plain everted jar.

Burial 37 had one Bell Plain bowl and one Bell Plain compound bottle with 4 straps.

The South village area has few straps and no loops but two arcaded forms (a late horizon) North village area has few loops and flat loops, but mostly straps and arcaded. Chucalissa Plain paste is most common (129/198) with few Bell Plain paste handles. Arcaded handles are typified by the presence of multiple strap handles in a line around neck. They also used ribbon forms and triangular handles that may be more like straps as defined elsewhere (Hilgeman, Schroedl).

Lug handles (n=62) occur in small quantities, mostly on Chucalissa pastes.

Disks (n=120) occur on a wide range of pastes and are between 3-5 cm diameter.

Three ceramic complexes can be identified based on the stratigraphic relations in the north village excavation.

Baytown paste with some Chucalissa paste in the basal level. A pristine assemblage from the north village area. Plain pottery dominates with no discernable decorated surfaces or handles. Ensley Phase (~ AD 1000).

Boxtown paste with some Boxtown var. Chucalissa in higher level. Lower levels in the north and south village areas. Includes Barton Incised, few Larto Red Filmed, Old Town Red, and rare amounts of Mulberry Creek Cordmarked. There were no lugs or other handles. Madison points, antler points, discoidals, celts, gorgets, and bone awls present. Structures were circular (F.48 in north village) and burials were of adults in extended position. Mitchell Phase (~ AD 1200).

Boxtown paste with some Mississippi Plain var. Chucalissa. Clearly defined in the middle levels in the north village but not at all in the south village area. Consisted mostly of polished treatments, Parkin Punctate, Barton Incised, Owens Punctate, and Old Town Red. Handles were present in flattened loop, and strap forms, and a few lugs. There were also a large quantity of ceramic disks. Burials were interred in the same manner, structures were open-corner wall trenches 13 to 15' square. Boxtown Phase (~AD 1350). Chucalissa – Bell I. Chucalissa and Bell pastes in upper levels divided 50-50. found in the upper levels of the north and lower midden in the south village areas. Chucalissa and Bell pastes occur in nearly equal quantities along with Parkin Punctate, Owens Incised, Rhodes Incised, Old Town Red, Avenue Polychrome, and some Barton Incised. Walls Engraved, Carson Red on Buff, and Nodena Red on White also present. Strap handles, intermediate loops, and arcaded handle forms consist mainly from Chucalissa paste. All varieties of lug handles were used in Chucalissa paste. There were numerous ceramic disks, thick discoidals first appeared. Structures were of semi-subterranean wall trench construction with burials in both the extended and flexed position. Early Walls Phase (~AD 1400).

Chucalissa – Bell II. Found in the topmost levels in the north village area and upper levels of the south village area. Bell Plain paste ceramics were more common than

Chucalissa paste ceramics (70:30). Parkin Punctate dominates decorated types. Fortune Noded, Manly Punctate, Kent Incised, Ranch Incised, Wallace Incised, Hollywood White Film, Carson Red on Buff, Nodena Red on White were in smaller proportions. Nodena projectile points became the minority type. Late Walls Phase (~AD 1500).

Radiocarbon dates point to a Boxtown phase component (AD 1250-1400) at the site dating to about AD 1340. A later Walls Phase (AD 1400-1540) component at the site dates to about AD 1420.

Lithics

In addition to triangular projectile point forms previously discussed other types possibly occurring in rare quantities in extreme west Tennessee include the Cahokia, Alba, and Morris projectile point types. The Cahokia point type is a side notched variant of the Madison sometime exhibiting one or more basal notches as well. The Alba and Morris point types are triangular in form with variable stem morphologies. Both types exhibit corner/side notching. The Morris has an additional basal notch which is absent in the Alba. Both of these points are most notably present early in the Mississippian period from Spiro, Angel and other major sites. Their presence in Tennessee is unknown but distribution in the state is likely. All three of these types were reported from early contexts and may even occur within the contexts of the early Mississippian in west Tennessee.

Uses of wood

Botanical

Chucalissa (40SY1)

A total of 36 maize cobs were recovered from the south village unit (Lumb and McNutt 1988).

10 row	12row	14row	16row
10	18	5	3

There was no 8-row corn identified at the site, based on whole cobs. No information available on cupules recovered from the site. Excavation methodology at the time may not have facilitated smaller botanical recovery. Aside from this, there was a small amount of persimmon and hickory nut along with 1 specimen each of sunflower and beans reported from the south unit excavation

Subsistence/Health

Conclusions

At the Cahokia site

Similar developments were occurring at the Moundville site in northern Alabama and the Etowah site in northern Georgia. At Moundville (tied to south-central Tennessee?)

At Etowah

Etowah may have had ties to some of the Mississippian peoples living in southeast Tennessee at sites like ?, ?, and ?.

The appearance of large towns across Tennessee is one of the most resonating changes in the archaeological record during the Middle Mississippian period. Native cultures flourished with the development of new shell tempered ceramic technology. Increases in trade and population growth are signs of the vitality. Socio-political development increases during this period as seen in the mortuary record and monumental architecture. Burial furnishings increase in type and amount as compared to previous periods. Earthen mound construction episodes as well as construction of large public buildings required a significant amount of labor investment.

By the end of the Middle Mississippian period (A.D. 1350) new changes were beginning to take place. While environmental conditions during most of this period were roughly similar to that of today, the end of the Middle Mississippian period was about to see new changes. The period A.D. 1000 to 1350 is referred to as the Medieval Warming period. This warming provided temperatures that were a few degrees warmer than their average. Tropical cultigens such as maize would have thrived under these ideal conditions. By the end of the Middle Mississippian period (after A.D. 1350) a major cold onset occurs. This cooling may be one of the first signs of the onset of the Little Ice Age. Around this time in Europe unusually wet and cool conditions led to what became known as the Great Famine of 1315-1317. A similar set of conditions could have caused failure of corn in the southeastern United States during this time. In Europe during the Great Famine failing grain crops had adverse effects on human and animal populations. Environmental changes (whether analogous or dissimilar) in the southeastern U.S. may be the causes of the changes seen in the archaeological record at this time.

Important developments across state

Comment [B2]: Do we want to summarize each chapter, the entire MS section, and/or both?

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