A Comparison of Artifacts and Activities among Mound Area Contexts at Town Creek, A Mississippian Site in Piedmont North Carolina

by

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May 2012

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Mississippian chiefdoms of the southeastern United States have commonly been characterized by the presence of large towns, a dependence upon maize-agriculture, and the presence of large platform mounds. Research regarding the role of platform mounds within these societies has been particularly intensive, and interpretations regarding the use of these mounds have varied. The major premise of this thesis is to determine variation among mound contexts at Town Creek by utilizing comparative indices. These comparisons found important differences in the activities represented in a premound midden, two mound-flank middens, and contexts associated with mound-summit structures. Also, a radiocarbon date of A.D. 1285-1400 was obtained for one of the flank middens, which is consistent with a previous interpretation of when mound construction began at the site. This date will help refine the site's existing mound-construction chronology.

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Chapter 1: Introduction and Background

Mississippian chiefdoms of the southeastern United States have commonly been characterized by the presence of large towns, a dependence upon maize-agriculture, and the presence of large platform mounds (Cobb 2003:63; Griffin 1967:189). Research regarding the role of platform mounds within these societies has been particularly intensive, and interpretations regarding the use of these mounds have varied. Typically, these mounds are thought to represent a distinctive type of public architecture on which buildings were constructed. In some cases, these buildings were residences, and in some they were not. Some mounds are also believed to represent ceremonial precincts within a community on which specialized activities occurred and to which access was oftentimes restricted (Blitz and Livingood 2004:292; Cobb 2003:65; Griffin 1967:190; Lindauer and Blitz 1997:169).

In a paper exploring mound interpretations across the Southeast and Southwest, Lindauer and Blitz (1997) outlined four activites that commonly occur on mound summits. These functions include their use as elite or chiefly residences; as temple or mortuary shrines; as nonresidential buildings that served as meeting places or council houses; and as unroofed areas that functioned as ceremonial stages open to public view. Lindauer and Blitz (1997:176) state that the evolving rearrangement of a sacred precinct,

punctuated by the repetitive addition of new stages is a common unifying theme among late platform mounds in the Southeast.

Access to mound summits is believed to have been restricted. While these exclusive elements may indicate social differentiation, they also may involve more inclusive, integrative elements. This inclusive feeling is generated through integration, and can be represented by activities such as feasting and crafting, or through the construction of monumental architecture (Lindauer and Blitz 1997:170; see also Costin 2005; Jackson and Scott 2004; Knight 2004, 2010; Pauketat et al. 2002; Wilson 2001). These events can give important insights into the social organization of past societies.

The Town Creek site in central North Carolina presents itself as an excellent case study for some of the current theories regarding crafting, feasting, and mound construction associated with a Mississippian mound site. The site of Town Creek has been a landmark of North Carolinian archaeology for the past 80 years. Although full-time excavations ended in the 1980's, Town Creek still lures prospective graduate students and researchers with a seemingly endless array of testable questions. The objectives of the research presented in this thesis include discovering what activities might have been occurring within mound contexts by comparing non-ceramic artifact frequencies and faunal assemblages found among these contexts. Current interpretations of the social dynamics of Town Creek vary from those at larger Mississippian sites, such as Cahokia in Illinois, Moundville in Alabama, and Etowah in Georgia. Instead of the mound representing a seat of power under the central authority of a chief or

housing elite domestic structures, Town Creek's mound housed architecture and activities that represent more communal aspects of governance (Boudreaux 2005, 2007; Cobb 2003; Cobb and King 2005; Knight 2004, 2010).

In terms of interpreting functions and activities, Blitz (1993:90) demonstrated that by utilizing multiple lines of evidence, a broader and more complete interpretation of a site could be made. In my research, I have also tried to use multiple lines of evidence, in addition to the analytic techniques put forth by Knight (2004,2010) and the interpretations of Town Creek by Boudreaux (2005,2007), it is hoped that the use of the mound at Town Creek can be presented more clearly. The contexts I analyzed for this research include Level A, a sub-mound occupation layer; and Structure 23a, a sub-mound, earth-embanked structure. Two mound-flank middens identified as Level X, one on the northwestern side of the mound and another on the southern side of the mound, and the material associated with the "1st Habitation Level," an occupation level on the mound summit, were also analyzed. It is hoped that by comparing these mound contexts, a diachronic view of mound use at Town Creek can be determined. In addition to discovering any possible activities represented within these contexts, a second objective is to further define both Level X-North and Level X-South. These deposits have been described as mound-flank middens, but their associations still remain unclear. Within this research, these flank middens are spatially and temporally defined and any ambiguities about these contexts are resolved.

Previous Research

Town Creek is located in the piedmont of North Carolina, in Montgomery County (Figure 1.1). The site is situated on the western bank of the Little River near the fall line, marking the border between the piedmont and the coastal plain. Town Creek also represents the northeastern-most extent of the Mississippian cultural sphere (see Boudreaux 2007:Figure 1.1). Professional excavation of Town Creek began in 1937 under the direction of Joffre Coe, at the time an undergraduate at the University of North Carolina (Ward & Davis 1999:122). Coe (1964:124) labeled the inhabitants of Town Creek the Pee Dee and first described them as "invaders from the south" due to the marked differences between Pee Dee and the Piedmont Village Tradition assemblages (Ward & Davis 1999:124-125). Today, researchers recognize the Pee Dee as being part of the South Appalachian Mississippian regional variant due to similarities shared among cultures in Georgia, South Carolina, and North Carolina (Boudreaux 2007; Ward & Davis 1999).

In 1967, Jefferson Reid outlined the ceramic attributes of the Pee Dee using material from the mound at Town Creek. In Reid's (1967:80-84) concluding statements, he notes the differences in the surface finish and vessel forms from the earlier to later inhabitants, but gives no interpretation for their change or their function. Billy Oliver (1992) set out to establish a ceramic chronology for Pee Dee ceramics using radiocarbon dates and ceramics from the Leak, Town Creek, and Teal sites in his dissertation.

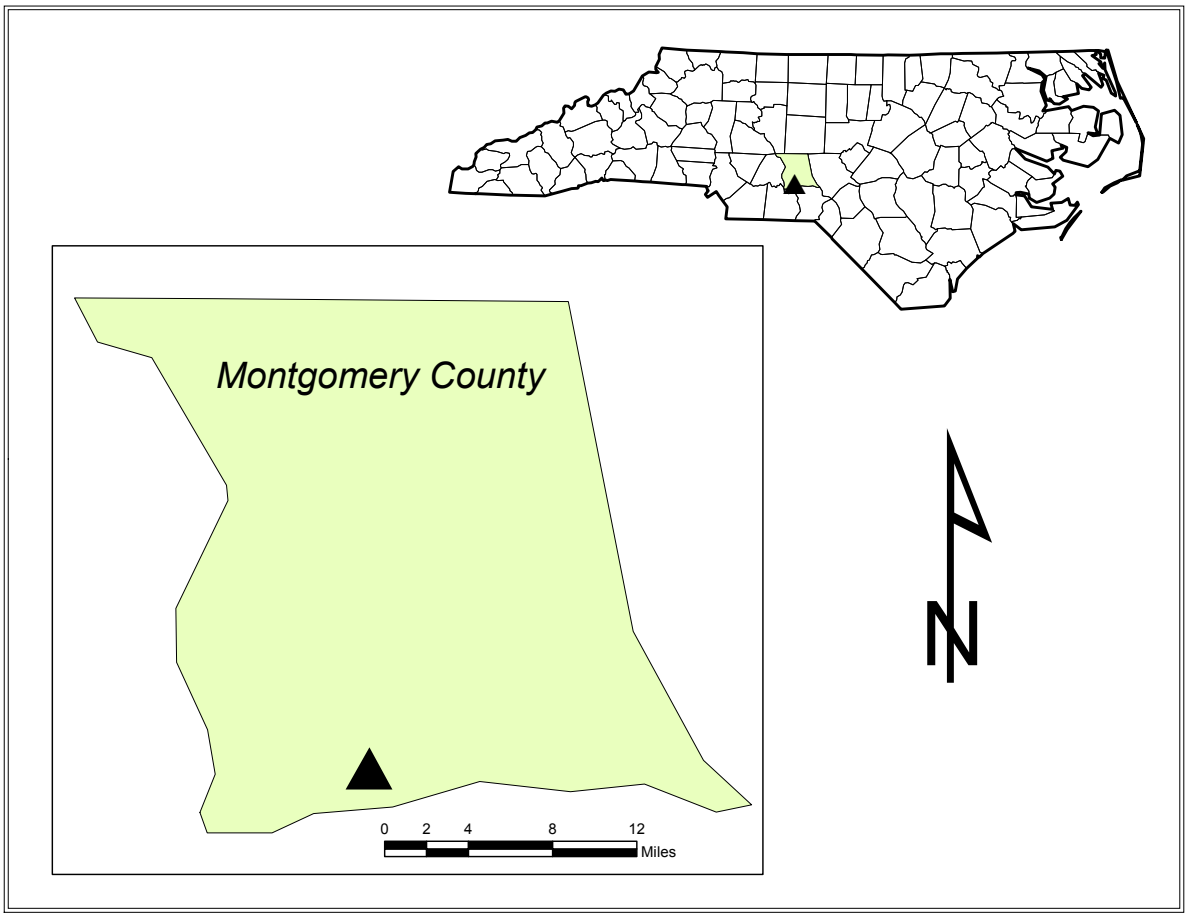

Figure 1.1. Location of Town Creek.

In 2005, Edmond Boudreaux provided a more detailed and diachronic look at Town Creek. His dissertation (2005) and subsequent publications (2007,2010) expanded upon previous research and used the archaeological data of Town Creek to distinguish between different phases of the site's occupation and to test assumptions related to Mississippian sites. Boudreaux (2005:59) utilized some of Reid and Oliver's work, but he refined a large part of the ceramic analysis by seriating the ceramics from multiple sites into one assemblage. These assemblages were then analyzed using functional attributes to determine activity areas across the site and the spatial layout across time (Boudreaux 2007:95-104). Ceramic attributes, in conjunction with the architectural and burial analysis conducted within his research, allowed Boudreaux to conclude that the original hypothesis of mounds representing centralized authority in Mississippian settlements did not always hold true. Town Creek displayed no evidence of an authority figure exhibiting control over the settlement and the structures atop the mound did not appear to have been domestic buildings, lending support to a lack of centralized authority (Boudreaux 2005:398-408). This then raises the question of how the mound was being used.

Current Objectives

Working within the present interpretation of Town Creek, my goal is to determine the types of activities that are associated within mound contexts by looking at different artifact class frequencies and faunal assemblages. At

Moundville and Cahokia, hypotheses for activities that occurred in mound contexts range from elite crafting and feasting episodes to possibly the use of mounds as temples or shrines for the dead (Astin 1996; Knight 2010; Lindauer and Blitz 1997; Pauketat et al. 2002). Cobb and King (2005) discuss the occupational cycles at Etowah in terms of asserting ties to the past in order to lay claim to the site's past. In describing feasting and storage events at Lubbub Creek, Blitz (1993:90) discusses how the role of additional artifact class analysis can reinforce hypotheses derived from ceramic analysis. Based on vessel size and shape, Boudreaux (2005, 2007) was able to determine that large groups were gathering in mound contexts at Town Creek.

I will be looking at the non-pottery assemblages, and draw from recent analysis by Susan Scott (2012) of faunal assemblages. The use of faunal analysis has proven to be highly beneficial in determining differential access to certain foods between the Mississippian "elite" and "commoners" (Jackson and Scott 2003:553). Faunal analysis can also contribute to the understanding of "the processes that led to deposition (e.g., feasting *versus* domestic consumption), the nature of human diet within the context of mound use, and seasonality of deposition" (Whyte 2011:54). By using multiple lines of evidence, the research presented here can contribute to a greater understanding of the mound's use at Town Creek.

Chapter Summary

In summary, this research will include the analysis of lithic artifacts and other non-pottery artifacts, as well as the associated faunal assemblages, contained within five contexts of the mound at Town Creek. These contexts are stratigraphically distinct and should provide the means for assessing the function of the mound diachronically. Two researchers, Joffre Coe (1937,1995) and John Swart (1940a,1940b,1940c), excavated the majority of the mound. While their interpretations and data have been the primary source for the understanding of mound stratigraphy, I will also be considering Boudreaux's reinterpretation of some of the construction sequences (Boudreaux 2007,2005:26-33; Coe 1937,1995:61-84; Swart 1950a-c).

This research is organized so as to present the data that were used and then discuss my interpretations of the mound contexts at Town Creek. Chapter 2 defines the contexts to be analyzed. Chapter 3 then describes the artifact types that were encountered, and it defines the artifact classes that were analyzed. Chapter 4 discusses the comparative techniques that were employed to make comparisons among contexts. In chapter 5, I discuss and interpret the results as they relate to prior research at Town Creek and other Mississippian sites across the Southeast. Conclusions will be presented in Chapter 6.

Chapter 2: Contexts

Within this chapter, I describe the mound's stratigraphic sequence and Town Creek's site layout throughout the early Town Creek (A.D.1150-1250) and early Leak phases (A.D. 1300-1400). This description of the construction and occupational sequence seeks to provide greater clarity in depicting what was occurring in mound contexts at Town Creek. As a part of these descriptions, the mound contexts considered within this research will be defined and preliminary relationships between contexts will also be drawn. Another aspect of this research was the acquisition of an additional radiocarbon date to help assess the time span of the mound's construction. This date will be presented within the following discussion as well.

Mound Stratigraphic Sequence and Contexts

The mound at Town Creek is located on the western side of the village (Figure 2.1). This area is representative of an intensive Mississippian occupation at Town Creek that predates the construction of the mound. As such, there is a complex arrangement of overlapping features and structures located underneath the mound. Boudreaux (2005:119) notes that the mound area of Town Creek was excavated during the first two seasons of fieldwork, and that the field notes and documentation were not as thorough as later work. For example, notes from Swart (1940a-c) during the last few months of his work at Town Creek are

absent. The only records, other than the artifacts recovered, for the excavation of some of these contexts are from profile drawings, shown in figure 2.2, and the work log used to keep track of hours and progress.

Level A was a premound midden that extended beneath most of the mound. This level was located beneath the premound embankment and Structures 23a and 23c. A radiocarbon date and ceramics indicate that Level A was most likely deposited during the early Town Creek Phase (A.D. 1150-1250) (Boudreaux 2005:59-72; Reid 1967:62). This midden, therefore, represents some of the earliest Mississippian activity occurring at Town Creek.

The last of these pre-mound structures has been referred to as Structure C, Structure 23a, or "The Earth Lodge" (Figure 2.3) (Boudreaux 2005:126; Coe 1995:65; Swart 1940a). Structure 23a paired with Structure 23c. These structures were rectilinear, and were joined together by an entrance trench. Structure 23a was the smaller of the two and was encompassed by an earth embankment (Boudreaux 2005:126). This earth embankment was approximately four to six feet thick at the base.

The interior of Structure 23a contained four large, deep-set roof supports arranged in a square, and a large hearth was located within this space (Boudreaux 2005:128). Coe (1995:80) reported that there was no prepared floor

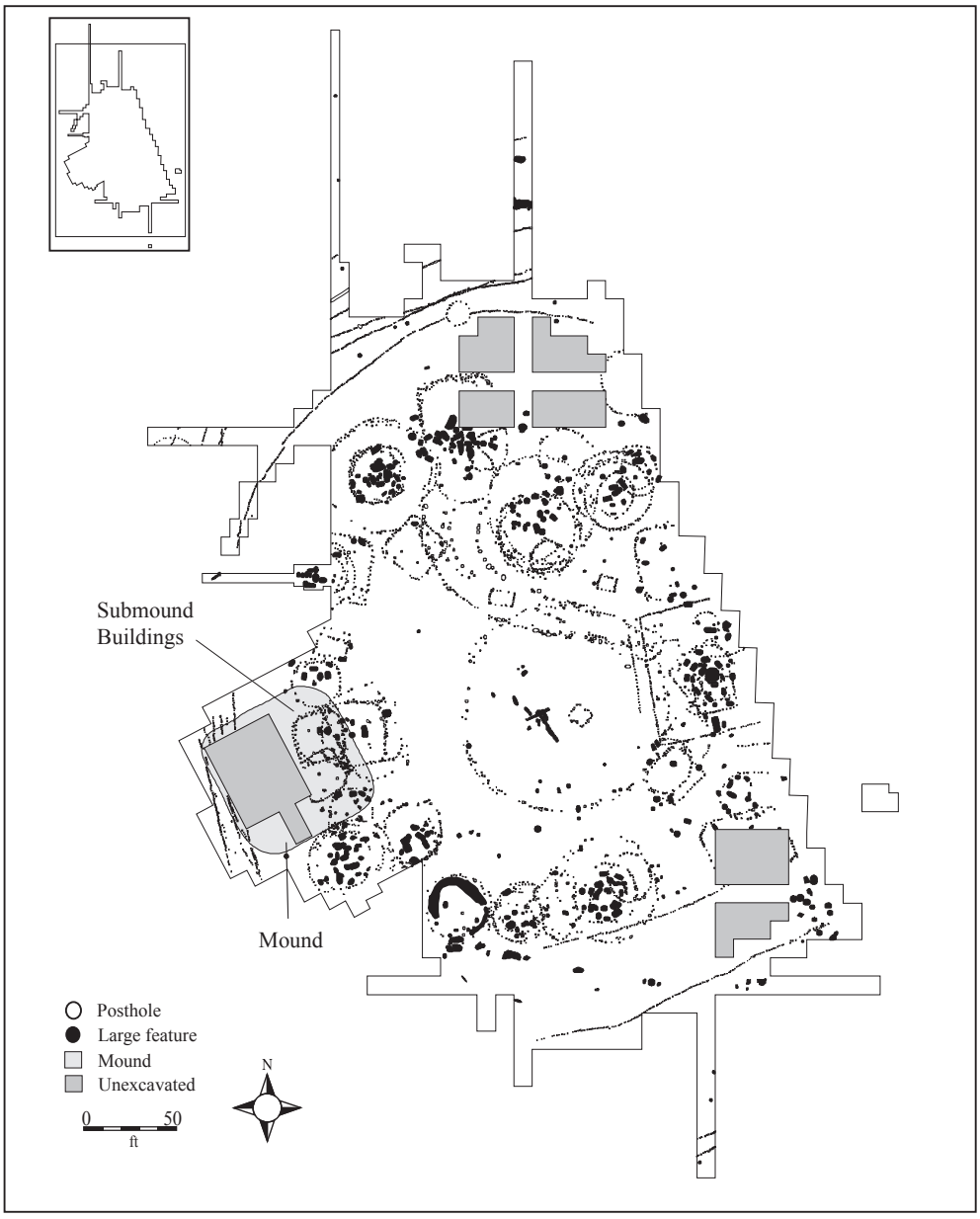

Figure 2.1. Town Creek site layout (adapted from Boudreaux 2005:Figure 3.15).

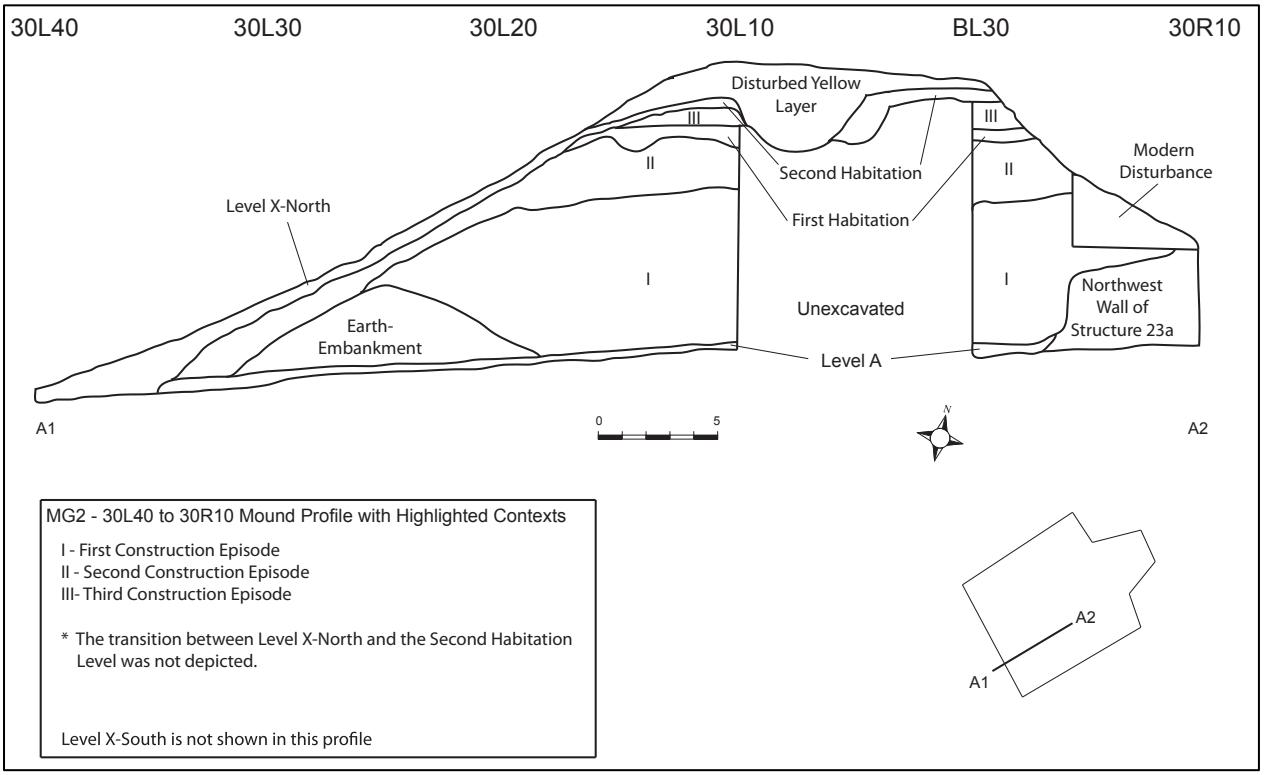

Figure 2.2. Town Creek Mound Profile (adapted from Boudreaux 2005:Figure 3.31).

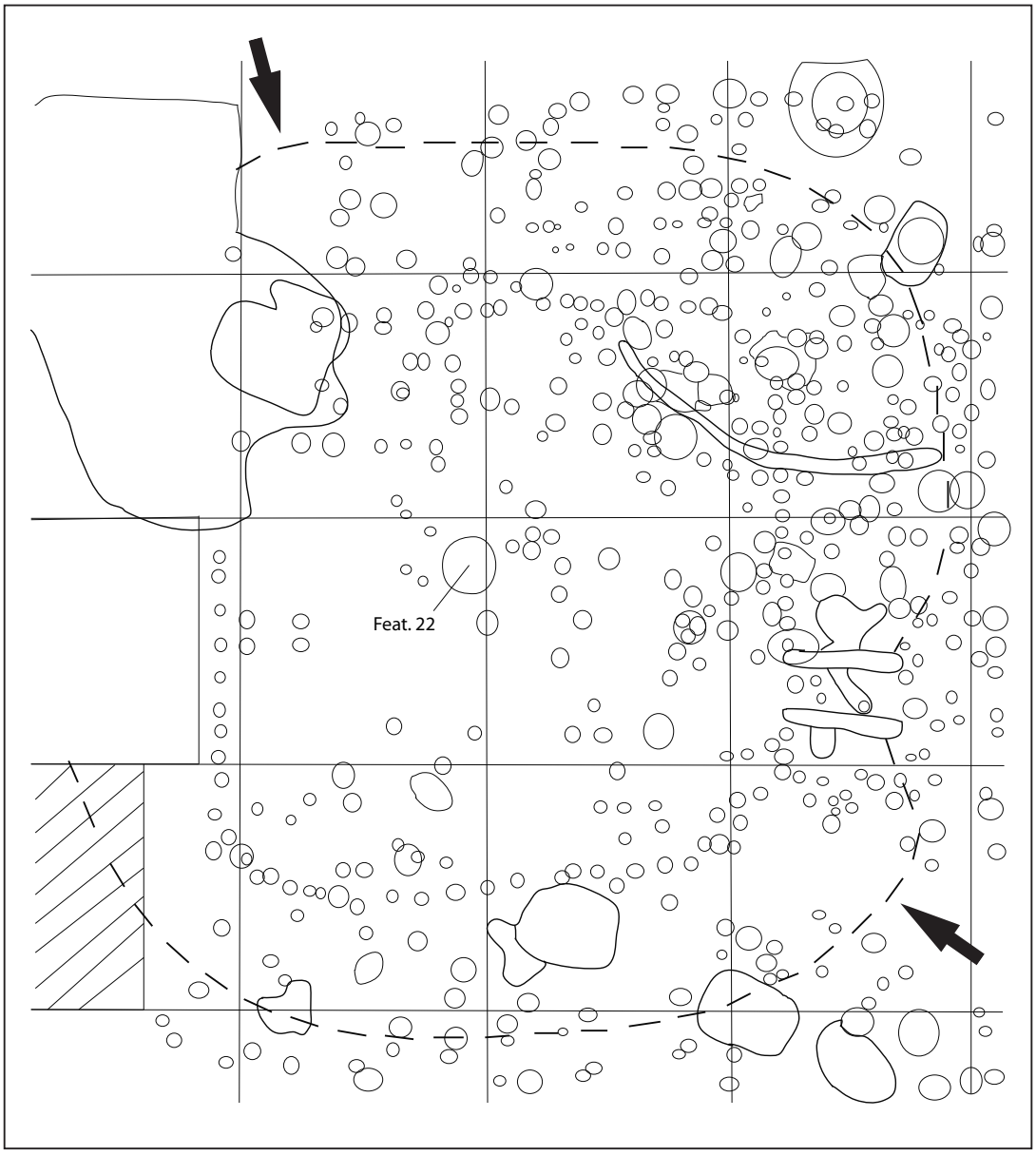

Figure 2.3. Structure 23a with arrows denoting earth embanked wall (adapted from Boudreaux 2005: Figure 3.25).

surface in the structure, and that the builders used the natural ground surface. He also inferred the presence of a small bench anchored in the ground along the west wall opposite the entrance trench. Boudreaux (2005:131) states that there was a cluster of infant burials within Structure 23a and explains that, based on ethnohistoric accounts, there may have been some type of ceremonialism involving infants. Towards the end of this structure's use-life, the residents of Town Creek burned it and incorporated its northeastern wall into the mound's fill (Boudreaux 2005:126; Coe 1995:80). This structure has never been directly dated.

Afterwards, an embankment was constructed forming a square roughly 75 feet on each side. The earth-embankment served as a container in which fill could be incorporated and stacked for mound construction (Boudreaux 2005:136; Coe 1995:81). This embankment was constructed from clay about 3 to 4 feet high and filled in approximately a foot higher than the embankment itself. Boudreaux (2005:136) has recognized this level as being the end of the first mound-construction stage, and he speculates that it may have contained public buildings on its summit. Unfortunately, mound excavations did not reach this surface because a large block was left unexcavated in the center of the mound (Boudreaux 2005:136).

What appears to be clear is that the mound summit of the first construction level was used because Level X-South is a mound deposit associated with this first construction stage (Boudreaux 2005,2007). Coe (1995:62) first wrote of discovering Level X-South in 1937 in a test trench located on the southern side of

the mound, calling it a “debris layer.” As noted by Boudreaux (2005: 227), there seems to be a particular problem in what the original excavators were defining as Level X. In Swart’s (1940a-c) notes, Level X seems to have been encountered in multiple contexts across the mound’s flanks. The original discovery by Coe in the first test trench is what others consistently refer to as being Level X, but interpretations of artifacts are sometimes based on both contexts (Coe 1995; Reid 1967).

Level X-South is a small isolated deposit that, based upon artifacts analyzed within this research, is contained within three excavation units (Figure 2.4). In September of 1940, Swart (1940c) noted that he had to return to Square 10 in order to remove some of Level X that was left from the original 1937 excavation, but Coe excavated most of this context. Based on the profile of the first trench by Coe (1937), Level X-South occurs stratigraphically above the first mound-construction stage (Figure 2.5). According to this profile, Level X was superimposed by the second mound-construction stage. A few unlabeled strata are located within the middle of this profile, intersecting the second mound-construction stage and Level X-South. Because stratigraphy from the second mound-construction stage superimposes and is intruded upon by these strata, I speculate that this represents some type of animal disturbance and not a cultural deposit. One objective of my research was to resolve any confusion regarding the contexts identified as Level X. I have done this by dividing these contexts into two contexts based on their spatial and stratigraphical deposition. Level X-North was stratigraphically associated with the second or third mound-

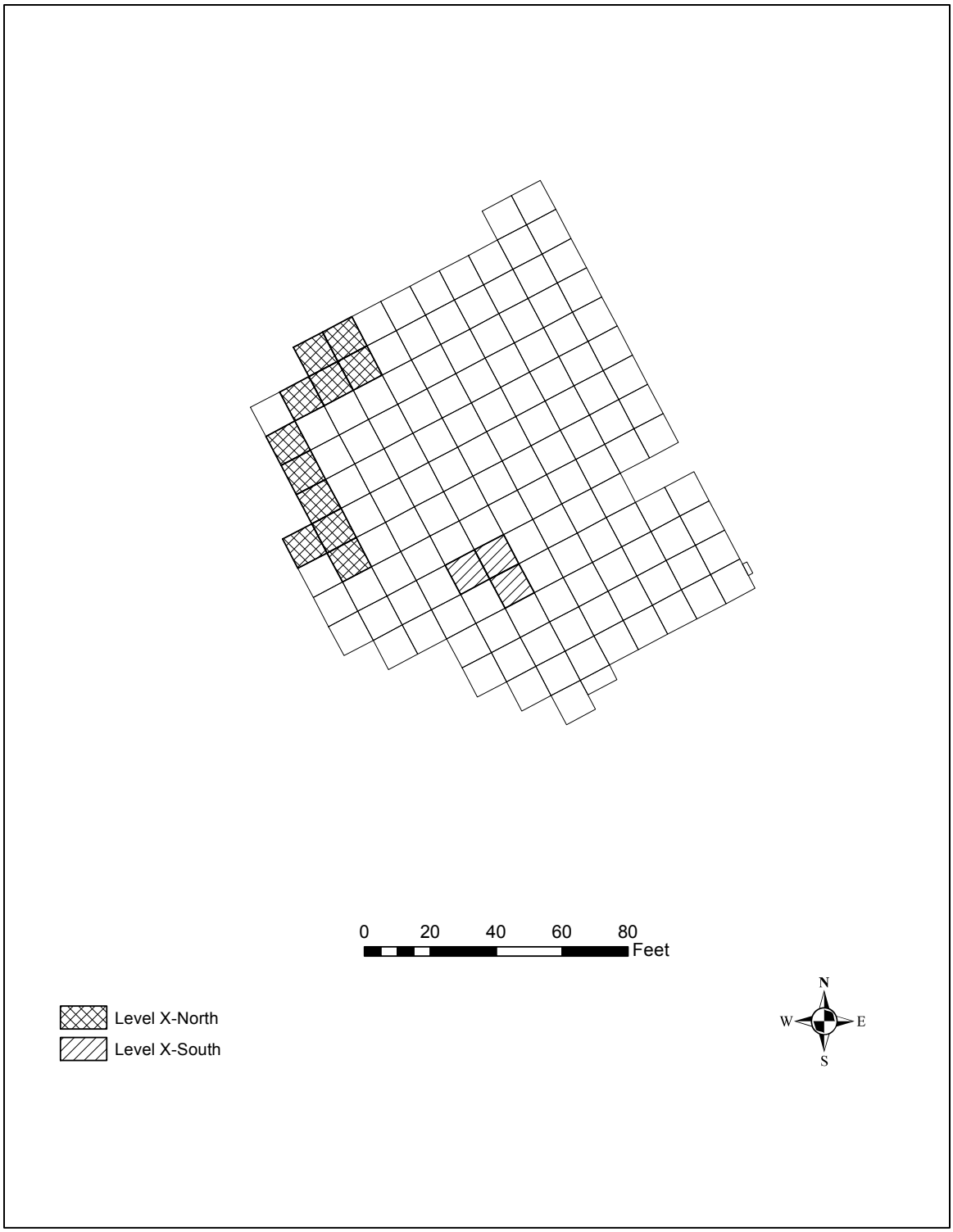

Figure 2.4. Locations of mound flank middens.

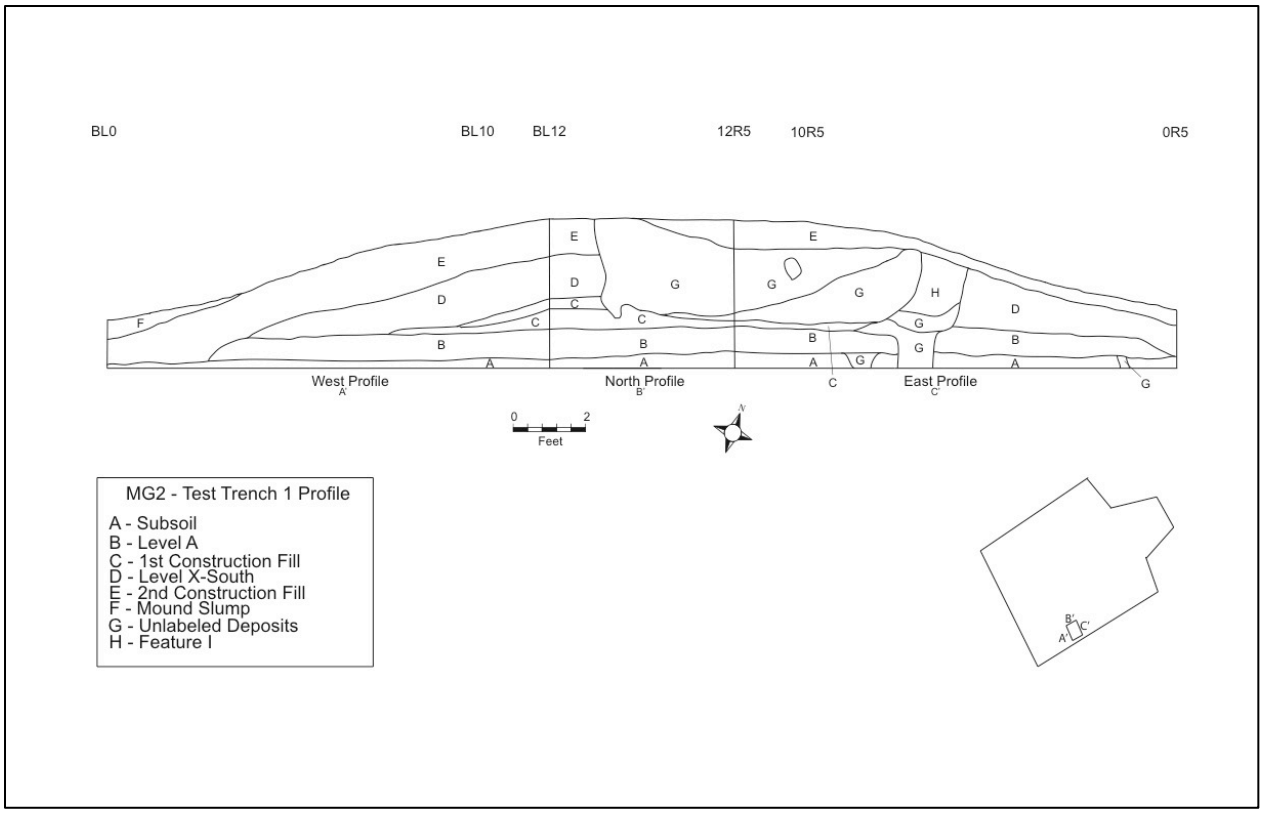

Figure 2.5. Profile Drawing of Coe's 1937 Test Trench 1 showing the stratigraphic location of Level X-South.

construction stages on the north side of the mound, and Level X-South was associated with the first mound-construction stage on the south side of the mound (Boudreaux 2005:156).

Boudreaux (2005:156) has assigned Level X-South to the late Town Creek phase (A.D. 1250-1300) based on ceramic attributes. Prior to the research for this thesis, this context had not been directly dated. An objective of this research was to directly date Level X-South, but there was little to no datable material. The only dateable material that appeared to be suitable was bone. Taylor (1987:54) explains that the dating of bone was seen as unreliable during the early development of radiocarbon dating. With the advent of accelerator mass spectrometry (AMS) and new collagen extraction methods, however, dating bone has become increasingly more reliable (Taylor 1987:53-61; see also Batten et al. 1986; Pettit 2005). In addition to the more reliable testing methods, this deposit was discrete and appeared to have little chance of being disturbed or contaminated. The bone sample used for AMS-dating came from a white tailed deer from Square 10R10 of Level X-South. This specimen received an alkali pretreatment in order to extract any collagen within the bone before undergoing the AMS process. In order to produce an accurate date, materials typically have an isotopic fractionation variable around -20, this specimen's $^{13}C/^{12}C$ ratio was -21.9 (Ron Hatfield, personal communication 2012).

The uncalibrated radiocarbon age produced for this sample (Beta-317712) was 630±30 B.P., with the calibrated two-sigma date being A.D. 1285-1400 (Bronk Ramsey 2001). The early end of this date range places it slightly later

than Boudreaux's (2005:156) speculation of ca. A.D. 1250 for the initiation of mound construction at Town Creek, but this date is still within the late Town Creek to early Leak phase (A.D. 1250-1350). The date obtained within this research is also bracketed by dates previously reported from other Town Creek mound contexts (Table 2.1), lending credibility to the date derived from this sample. Figure 2.6 is a graphical representation of the calibrated, two-sigma date ranges from Town Creek based on the Oxcal calibration software (Bronk Ramsey 2001).

The second mound-construction stage was much smaller than the first. It raised the mound's height 2 to 3 feet. The western part of the mound summit contained two buildings, Structure 45a and Structure 45b, called "Townhouse I" or "Temple I" by Coe (1995) (Figure 2.7). This context was dated, and it appears to have been in use between A.D. 1300-1400 (Boudreaux 2005:Table 2.15). A 3-6 inch layer of dark soil, called the "1st Habitation Layer," later superimposed these structures (Boudreaux 2005:136; Coe 1995:77). Boudreaux (2005:136) speculates that the "1st Habitation" layer may represent a mound-summit midden.

Level X-North is possibly temporally associated with the second mound-construction stage. Level X-North is located on the northwest corner of the mound. Based upon Swart's (1940b) notes, it was not until July of 1940 that workers began fully excavating left of the baseline of the mound, and they did not reach what Swart called Level X until September. Swart (1940c) notes that they were screening Level X-North initially due to the presence of trade beads in

Table 2.1. Radiocarbon dates from mound contexts.

Sample Code	Context	Age (B.P.)	Standard Deviation	Uncalibrated Intercept	Uncalibrated 1-Sigma	Calibrated 1-Sigma	Calibrated 2-Sigma	Phase Association	Source
Beta-317712	Level X-South	630	30	1320	1290-1350	1290-1320 1350-1390	1285-1400	Late Town Creek-Early Leak	Armour, this thesis
Beta-184061	Sq. 170L40/Pit	300	60	1650	1590-1710	1465-1651	1445-1955	Late Leak	Boudreaux 2005
FSU-185/FSU-175	Townhouse I	595	50	1355	1305-1405	1305-1405	1290-1420	Early Leak	Reid 1967
FSU-186/FSU-176	Townhouse II	670	40	1280	1240-1320	1279-1386	1270-1395	Early Leak	Reid 1967
FSU-145/FSU-154	Townhouse II	600	140	1350	1210-1490	1262-1448	1060-1640	Early Leak	Reid 1967
Beta-201468	St. 4a	820	40	1130	1090-1170	1187-1261	1045-1265	Early Town Creek	Boudreaux 2005
FSU-184/FSU-174	Level A	745	140	1205	1065-1345	1155-131397	1015-1440	Early Town Creek	Reid 1967

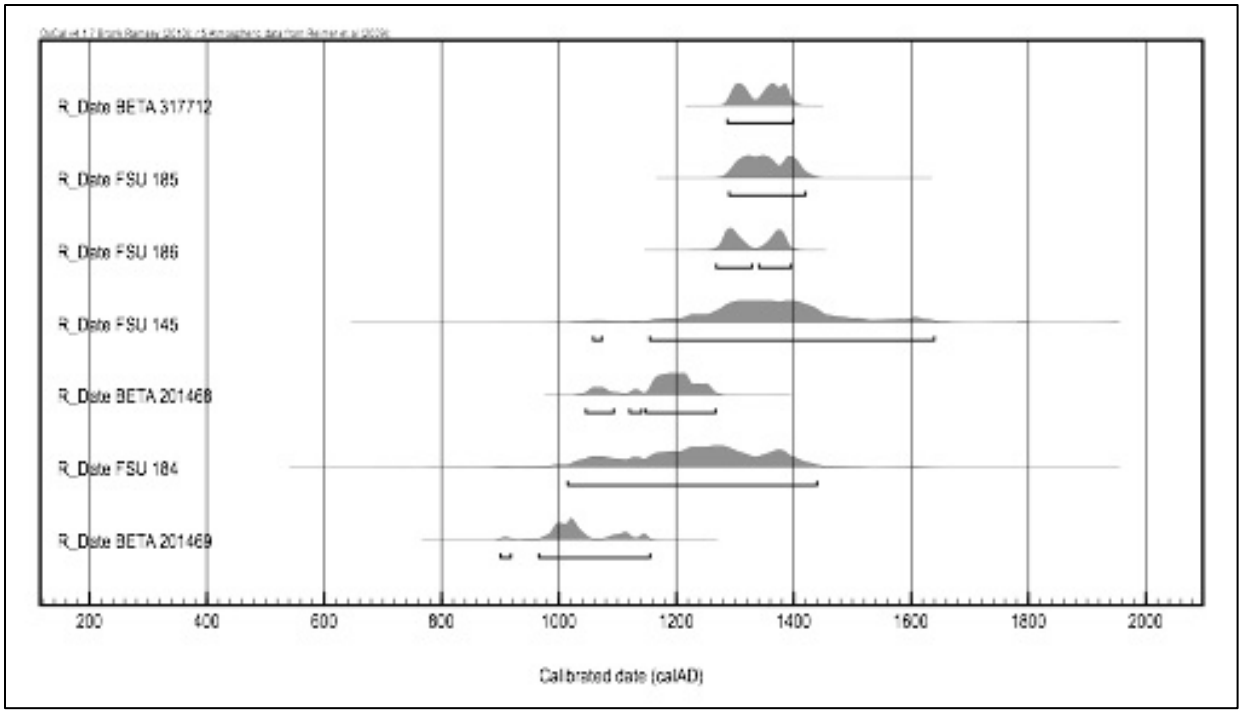

Figure 2.6. Calibrated two-sigma date ranges (Bronk Ramsey 2001).

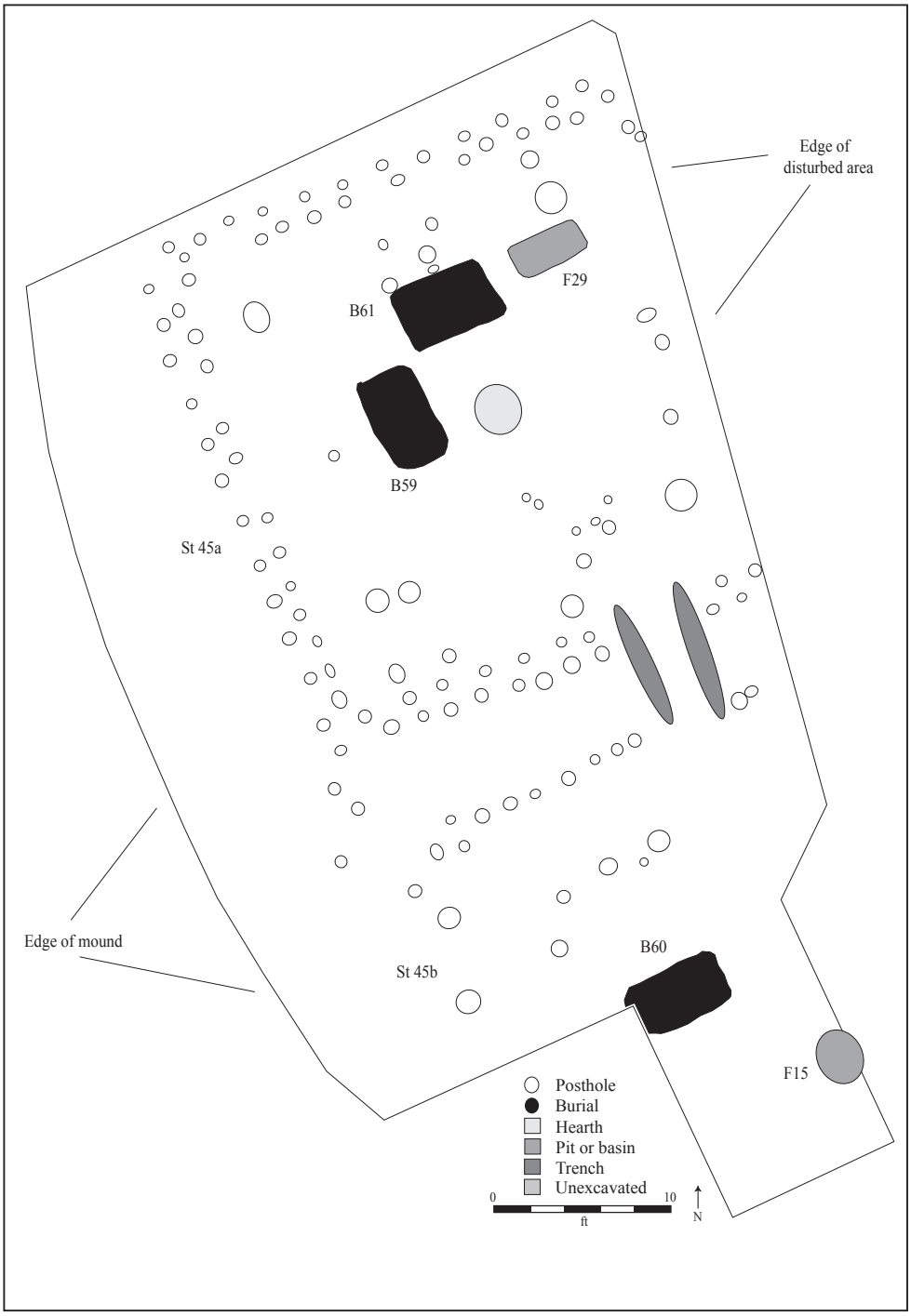

Figure 2.7. Structure 45a and Structure 45b (adapted from Boudreaux 2005:Figure 3.33).

Square 80, but afterwards in Square 80L10, they stopped screening the material because there were not as many beads being found. Unfortunately, until the next site supervisor took over in 1941, notes were either not taken or are missing. The only record for the remainder of Level X-North is from the work log and the artifact bags.

The main evidence for determining where Level X-North is and what this flank-midden may represent comes from Swart's (1940b) mound profiles (refer to Figure 2.2). According to this profile, Swart identified what he was calling Level X as being a part of the mound's western face. This places the flank-midden as being one of the last depositional events of the mound's use.

The third mound-construction stage was different from the earlier stages. While the previous construction stages encapsulated the whole mound, the third construction episode only raised the mound from a couple of inches to about one foot, just on the mound summit. The summit of the third stage contained two buildings, Structure 46a and Structure 46b, which were arranged identically to the mound-summit structures of the second stage. These structures were called "Townhouse II" or "Temple II" and two radiocarbon dates were acquired from these structures (Boudreaux 2005:Figure 2.15).

A thin, dark layer called the "Mound Topsoil" then covered this stage. This "Mound Topsoil" was covered by 6 to 18 inches of a yellow moundfill. Boudreaux (2005:139-140) suggests this dark layer may represent a mound-summit midden and the yellow layer may be a fourth mound-construction stage. In the Town Creek excavation notes, Swart (1940a) hypothesizes that the dark layer was the

final mound-summit level and explains the yellow layer as being back-dirt piles left by looters, but excavator's noted disturbed and undisturbed portions of this fill.

Occupational History

The occupational history of Town Creek was more intensive than previously described by Coe (1995), Oliver (1993), or Reid (1967). Using a series of radiocarbon dates, ceramic seriations, and GIS software, Boudreaux (2005) has distinguished six different occupational episodes at the site. The phases involving the major Mississippian occupation, the early Town Creek through the early Leak Phase, are of the most concern within this thesis.

The early Town Creek phase (A.D. 1150-1250) occupation consists of a ring of at least 10 small circular structures surrounding the plaza (Figure 2.8) (Boudreaux 2005:Figure4.2, 2007:Figure 3.3). Small circular structures are considered by Boudreaux (2005:230) to be domestic in nature. On the western edge of this ring, five superimposed rectilinear structures were built. These structures included the earth-embanked structures, Structure 23a and Structure 23c, of which Structure 23a is inferred to be the last structure used during this phase due to the inclusion of its eastern wall in mound construction (Boudreaux 2005:239). Boudreaux (2005:231) defines these structures as being public in nature in that their purpose served to draw resources from individual families and

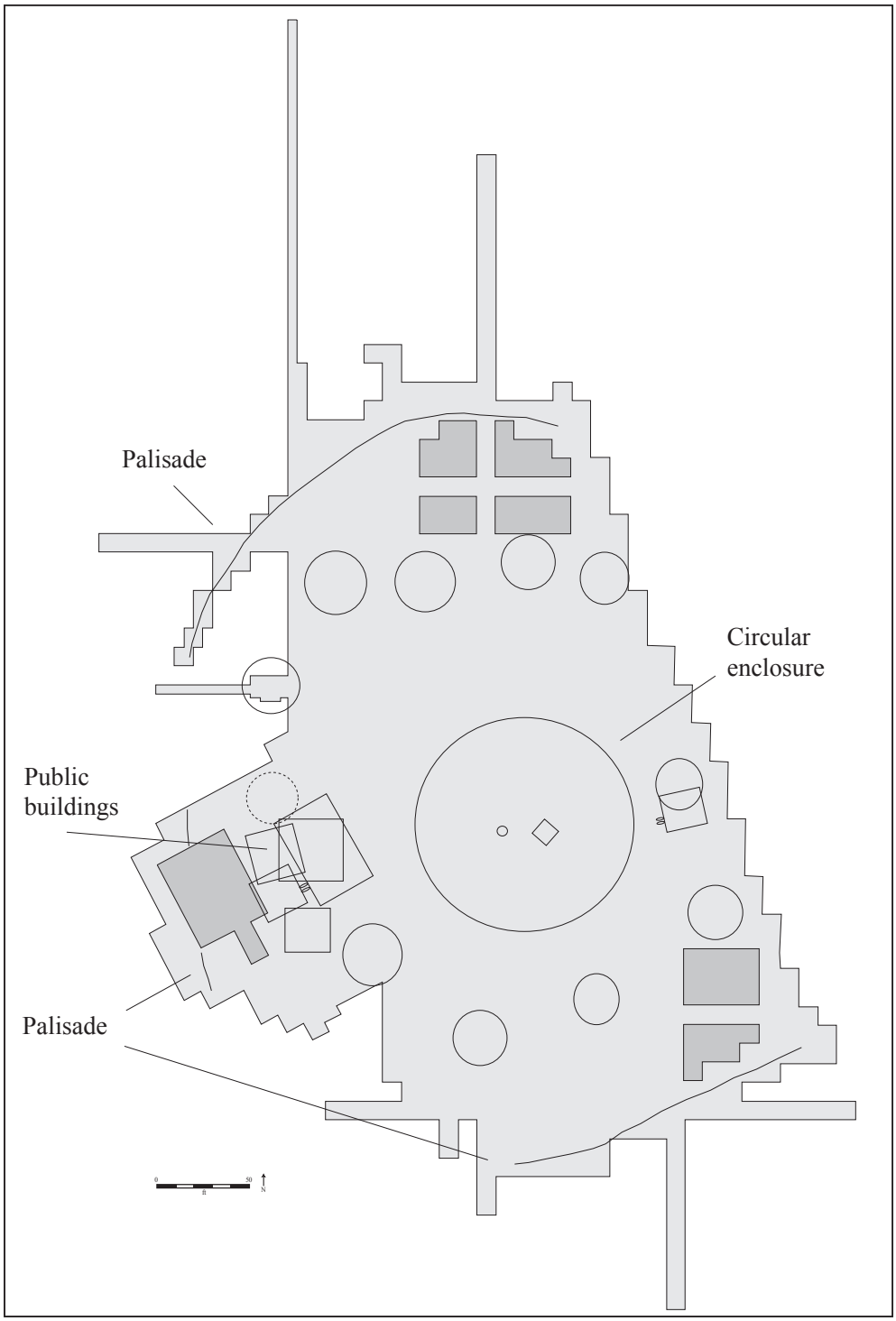

Figure 2.8. Early Town Creek phase (A.D. 1150-1250) (adapted from Boudreaux 2007:Figure 3.3).

people to fill public roles and functions within the community. Based on this snapshot of Town Creek's occupational history, there is a predominance of domestic architecture within Town Creek, with the public structures facilitating some subset of these domestic groups, directly before the mound was built.

The late Town Creek phase (A.D. 1250-1300) was marked by the construction of the platform mound on the western edge of the plaza, over the area that had been occupied by public buildings during the early Town Creek phase (Figure 2.9). The mound would have consisted of the finished first construction stage and it may have contained summit architecture (Boudreaux 2005:245). The deposition of Level X-South would have occurred during this time. During the early Leak phase (A.D. 1300-1350), at least two, and possibly three, additional mound stages were added. The deposition of Level X-North would have most likely occurred during this time.

During the late Town Creek and early Leak Phases, after mound construction, site layout changed from a ring of circular, domestic structures to a ring of paired rectangular and circular structures (Boudreaux 2005:Figure 4.9, 2007:Figure 3.6). Boudreaux (2005:255) hypothesizes that each pair of structures was a functional unit. According to him:

> One structure would have served as a cemetery in which most group members were buried while the other structure served as a place for the entire group to meet and as a place where a select portion of the group could be buried (Boudreaux 2005:255).

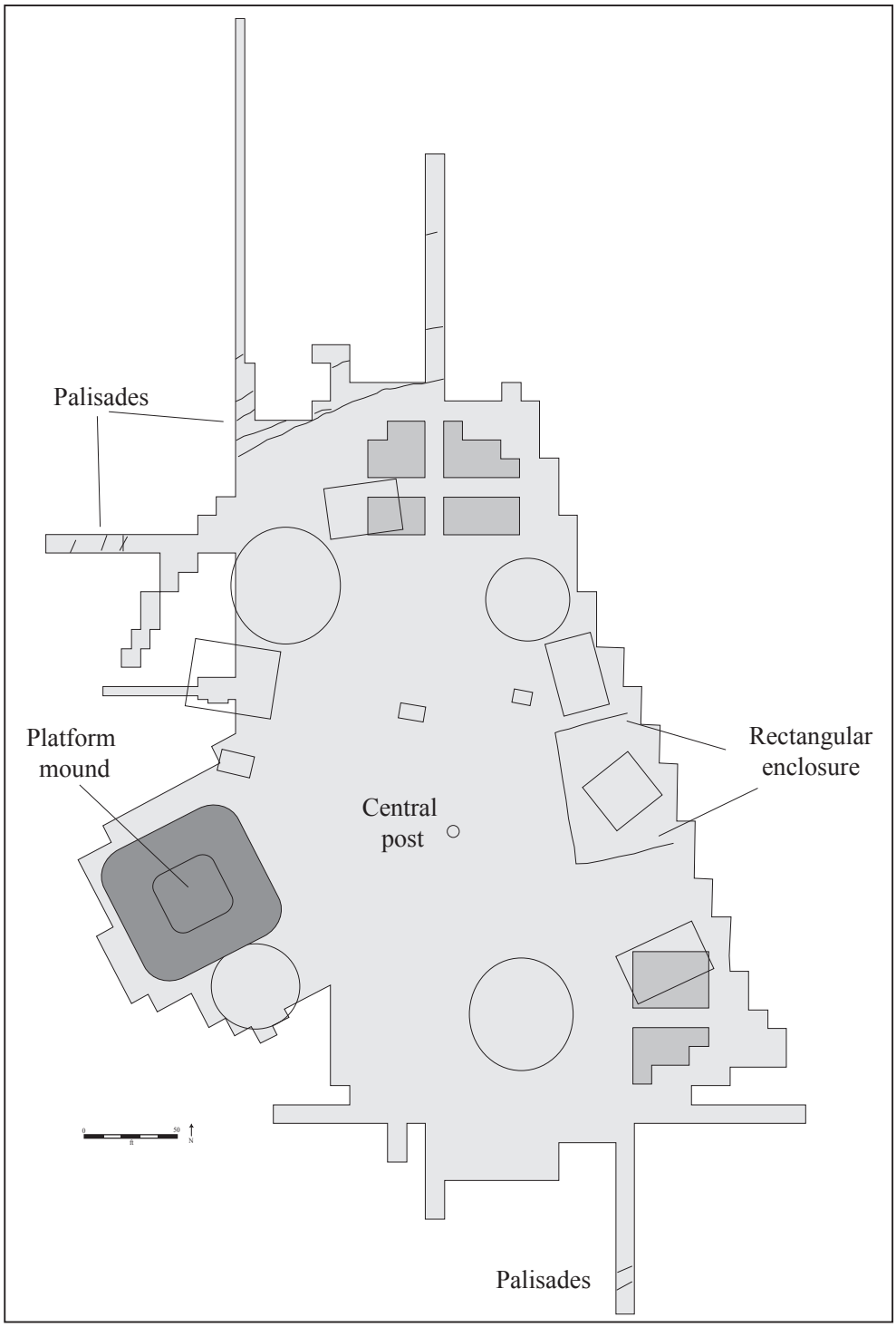

Figure 2.9. Late Town Creek-Early Leak Phase (A.D. 1250-1350) (adapted from Boudreaux 2007:Figure 3.6).

Boudreaux (2005:255) hypothesizes that the mound may have been analogous to the large rectangular structures, serving as a focal point for the entire community as opposed to a subset of a family group. There is also hypothesized to have been a shift in Town Creek's function to a more ceremonial focus with a smaller resident population (Boudreaux 2005:403-405). This represents a major shift from the earlier Town Creek phase in which small domestic structures made up the majority of structural types. A shift to a more depopulated and ceremonial orientation should have implications for the types of activities occurring within mound contexts.

Chapter Summary

This chapter has focused on providing a detailed description of the mound's construction sequences. Within this chapter, I defined Level X-South and Level X-North as being spatially and temporally distinct, adding to the previous interpretation of Level X by Boudreaux (2005:156,384). The AMS date from Level X-South of A.D. 1285-1400 has important implications for research at Town Creek because it will allow for greater clarity between mound activities across space and time. I have also described the contexts that produced the artifacts I will be analyzing in the remainder of this research. These contexts are Level A, Structure 23a, Level X-South, Level X-North, and the First Habitation Level.

The mound construction and occupational history summaries should help

provide a good orientation of the contexts in order to now move on to the artifact descriptions and analysis presented in Chapter 3. By analyzing the artifact and faunal assemblages within mound contexts, I will be able to differentiate any possible activity patterns throughout the mound's use-life. It is important to consider these differences between mound contexts because they should relate to known changes within the rest of Town Creek. In order to make comparisons across contexts, the artifact classes, described in Chapter 3, will need to be standardized using a reliable and tested method, which will be described in Chapter 4. These data will then be put into perspective and interpreted within Chapter 5.

Chapter 3: Artifact Descriptions

In order to interpret the variety of artifacts I encountered during this research, I grouped items based on morphological and functional attributes. The morphological attributes include size and shape. Function was inferred from the morphological traits of the artifacts. While function does not always follow form, I believe this method provided the best means of interpreting activities that may have been represented by the presence of these tools. The work of other scientists on tool function is also used to corroborate my interpretations. I believe that this approach will provide the best analytical perspective for interpretation and comparisons among mound contexts. The major categories I defined are tools and non-tools. These categories are further subdivided into additional groups where needed. Table 3.1 shows the presence and frequencies of all artifacts analyzed within this research.

Tools.

The tool group consists of artifacts that are presumed to have been intended to be used out of utility or for production. Most of these artifacts are classified as objective pieces, or stone items that have been flaked or modified in some way for the intended fulfillment of some goal (Andrefsky 2005:718). The tool group also includes flake tools, expedient artifacts that were derived during the manufacturing of other tools (Andrefsky 2005:718).

Table 3.1. Artifact frequencies.

	Level A	Structure 23a	Level X, North	Level X, South	1st Habitation	Class Totals
Tools						
Projectile Points						
Triangular	12	2	27	3	7	51
Peedee Pentagonal	-	1	8	-	3	12
Peedee Triangular	-	-	5	-	-	5
Guilford	1	-	-	-	-	1
Morrow Mountain II	-	-	1	-	-	1
Kirk	1	-	2	-	-	3
Pre-form	2	-	3	-	1	6
Unclassified	-	-	6	-	-	6
Fragments	16	-	39	3	4	62
Sub-Total	*30*	*3*	*92*	*6*	*16*	*147*
Biface						
Knife	2	-	2	-	-	4
Unidentified	5	-	27	2	4	38
Unfinished	-	-	5	-	1	6
Core	-	-	1	-	-	1
Sub-Total	*7*	-	*35*	*2*	*5*	*49*
Production Tools						
Small Stone Tools						
Bit-Tool	6	-	20	4	6	36
Scraper	3	-	8	1	-	12
Flake Tools	6	-	25	-	7	38
Large Stone Tools		-				
Celt	2	-	-	1	-	3
Chopper	-	-	1	-	-	1
Tool Production						
Abrader	-	-	-	1	2	3
Hammerstone	-	-	2	-	-	2
Debitage	40	-	201	11	48	300
Small Bone Tools						
Awl	-	1	-	-	-	1
Needle	-	1	-	-	-	1
Sub-Total	*57*	*2*	*257*	*18*	*63*	*397*
Non-Tools						
Ornaments						
Pendant	-	1	-	-	-	1
Bead	-	1	-	-	-	1
Ear Spool	-	1	-	-	-	1
Copper	-	1	-	2	-	3
Pigment	-	1	-	-	-	1
Sub-Total	-	*5*	-	*2*	-	*7*
Discs						
Ceramic Disc	1	-	9	3	1	14
Groundstone Disc	1	1	-	-	-	2
Sub-Total	*2*	*1*	*9*	*3*	*1*	*16*
Pipe						
Pipe Fragment	-	1	4	3	1	9
Sub-Total	-	*1*	*4*	*3*	*1*	*9*
Other Artifacts						
Engraved Slate	-	-	-	1	-	1
Sub-Total	-	-	-	*1*	-	*1*
Total	96	12	397	35	86	626

Projectile Points

The majority of points analyzed during this research were located within Level X-North (*n*=92). The primary point type was of the triangular tradition. A significant proportion of these points were too fragmented to assign to a type (*n*=61). Some (*n*=5) Archaic and Woodland points types were also recovered in mound contexts, but it is not known if they were from general mound fill or if the Mississippian occupants of Town Creek reused them. I am in agreement with Knight's (2010:55) statement that these artifacts can most likely be viewed as "found objects" and could have been used as a form of expedient tool or core.

Unclassified Triangular Points. The majority of projectile points within the mound contexts I analyzed were unclassified triangular. These points (*n*=51) tended to be symmetrical and have slightly concave bases (Figure 3.1a). The triangular points I analyzed during this research tended to blend together in a gradient that may have been due to the use-life of the tool. As such, instead of trying to differentiate between minute differences, I decided to classify any point as unclassified triangular unless clear morphological differences could be seen.

Pee Dee Pentagonal. Pee Dee Pentagonal Points (*n*=12) were classified based on their unique pentagonal and asymmetrical shape. Coe (1964:49) originally described the manufacturing of this point as being of "minimal effort," but some of the points I analyzed, as Coe also noted, do have a more careful and symmetrical shape (Figure 3.1b).

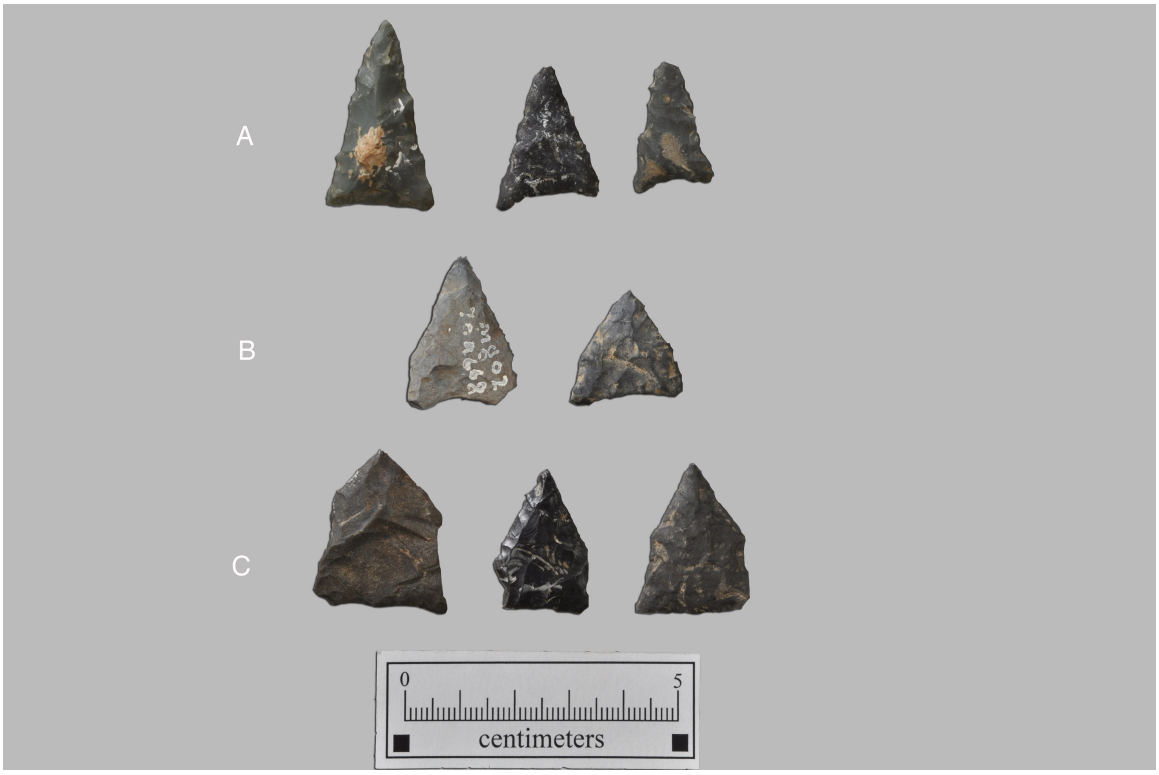

Figure 3.1. Triangular projectile points. A) Unclassified Triangular, B) Peedee Triangular, C) Peedee Pentagonal

Pee Dee Triangular. Pee Dee Triangular points (*n*=5) tended to be difficult to distinguish, but the points I placed within this category exhibited small, parallel, lateral margins, or outside edges, at the very base of the blade (Figure 3.1c).

Guilford Points. Coe (1964:43) describes the Guilford as "a long, slender, but thick blade with [a] straight, rounded, or concave base." Guilford points are a Middle Archaic phenomenon, dating between 4,000-3,000 B.C. (Coe 1964:44; Justice 1987:141). Only one specimen was analyzed during this research, and it was recovered from Level A. The point was made out of milky quartz, and it had a lanceolate or teardrop shape. The tip was broken so the length of the point was not taken, but the width fit within Coe's (1964:43) range at 22.75 mm. Also, this point was rather thick compared to the Late Woodland and Mississippian points (Figure 3.2a).

Morrow Mountain II Points. A Morrow Mountain II point was recovered from Level X-North. It was made out of a rhyolite that was heavily weathered. The Morrow Mountain complex dates to the Middle Archaic, between 5,000 - 4,000 B.C. (Justice 1987:105). This point looked similar to the Guilford except it flared outward toward the base creating shoulders and the base of the point narrowed, very similar to how Coe (1964:37) described it as being "a long narrow blade with a long tapered stem." The heavy patina on this artifact suggests to me that it may have been transported during mound construction. The point was broken at the tip, and was a little smaller than Coe's (1964:37) width range at

15.58 mm. It had a similar thickness-to-width ratio as the Guilford at .46 mm (Figure 3.2b).

Kirk Points. The Kirk points I analyzed were all corner-notched specimens (*n*=3). They are defined as having "large triangular blade[s] with a straight base, corner-notches, and serrated edges" (Coe 1964: 69). These points have been assigned to the Middle Archaic, from 6,000-5,000 B.C., by Coe (1964:70), and the Early Archaic, between 7,500-6,900 B.C. by Justice (1989:71). Although the points represented in this analysis were not serrated, each had a broad, stemmed base. Two of these points had a very slight bifurcation at the base of their stem. One specimen from Level X-North exhibits reworking along the stem and one lateral margin, possibly into a scraper (Figure 3.2c). Whether this was done by Mississippian people or not is unclear.

Unfinished Points. There were very few projectile points that could definitively be classified as being unfinished (Figure 3.3). The determination of whether a projectile point was finished or not was based on whether or not the artifact had been thinned and shaped, whether its lateral margins were straight, if it exhibited retouch, and whether cortex was present (Andrefsky 2005: 742-744). Due to the small number of unfinished specimens (*n*=6), I decided not to subdivide unfinished points based on a more nuanced approach to preform stage classification.

Unclassified Projectile Points. Unclassified projectile points (*n*=6) are those that could not be confidently classified according to an existing type. The first was an elongated point made out of aphyric rhyolite with a flute-like scar

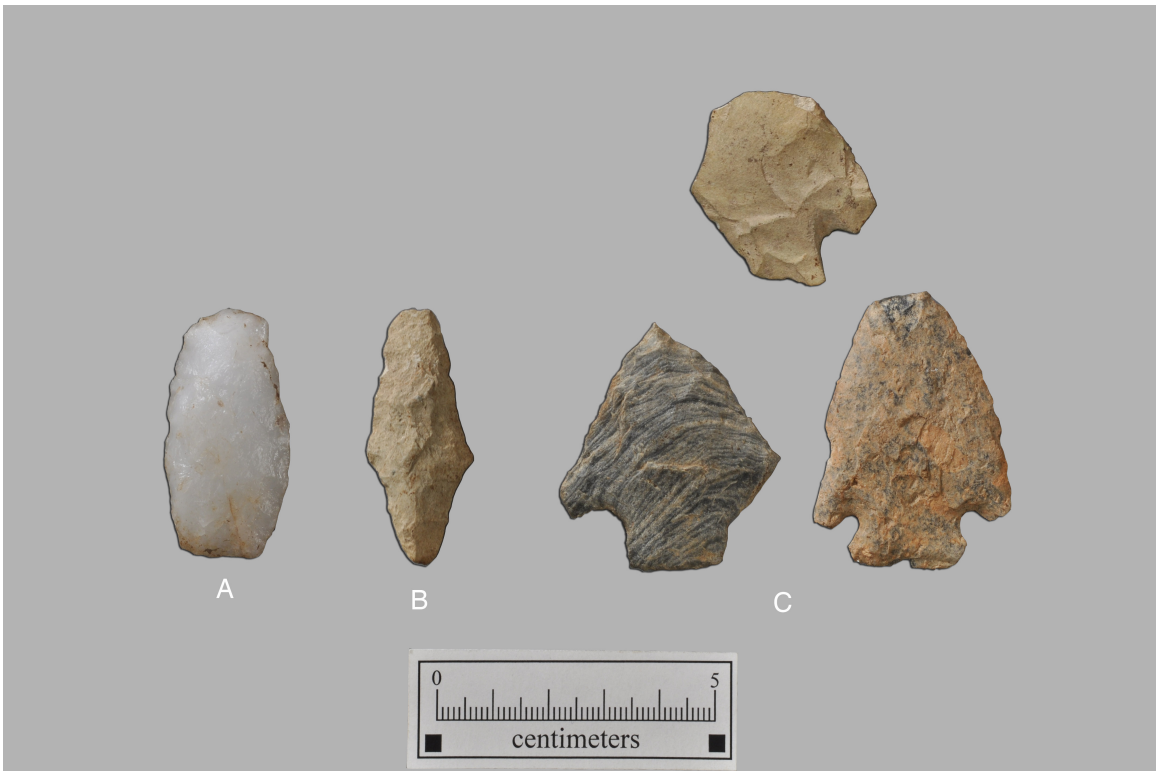

Figure 3.2. Archaic projectile points. A) Guilford, B) Morrow Mountain II, C) Kirk.

Figure 3.3. Unfinished projectile points.

(Figure 3.4a). This artifact was fairly short at 47.04 mm and its width was in the same range as most triangular points at 19.19 mm. The second point, which was possibly Middle Woodland in origin, was a stemmed specimen made from aphyric rhyolite that was broken at the mid-section and looks unfinished (Figure 3.4b). The third specimen very much resembled a Hardaway point, but, due to one lower quadrant being broken, this artifact could not be definitively classed (Figure 3.4c). The fourth artifact was a heavily weathered, side-notched, serrated, and bifurcated-based point that closely resembled a Big Sandy or a St. Albans point (Figure 3.4d). A fifth point was small and had a squared base. This point may represent an unfinished projectile point or a broken point, but its heavy patina made it difficult to assess (Figure 3.4e). The last, and perhaps the most interesting, of this unclassified group is a small leaf-shaped point. This point was made from aphyric rhyolite and comes to a point at each end (Figure 3.4f). The point is very thin at 3.73 mm. Its length and width are within the ranges of most triangular points. This point may be representative of a late stage preform due to the absence of pressure flaking around the blade edge.

Bifaces

Bifaces are defined by the presence of a flaking pattern intended to cover both faces of the artifact in order to reduce its thickness and sometimes to produce a sinuous working edge (Daniel 1998:50). Andrefsky (2005:721)

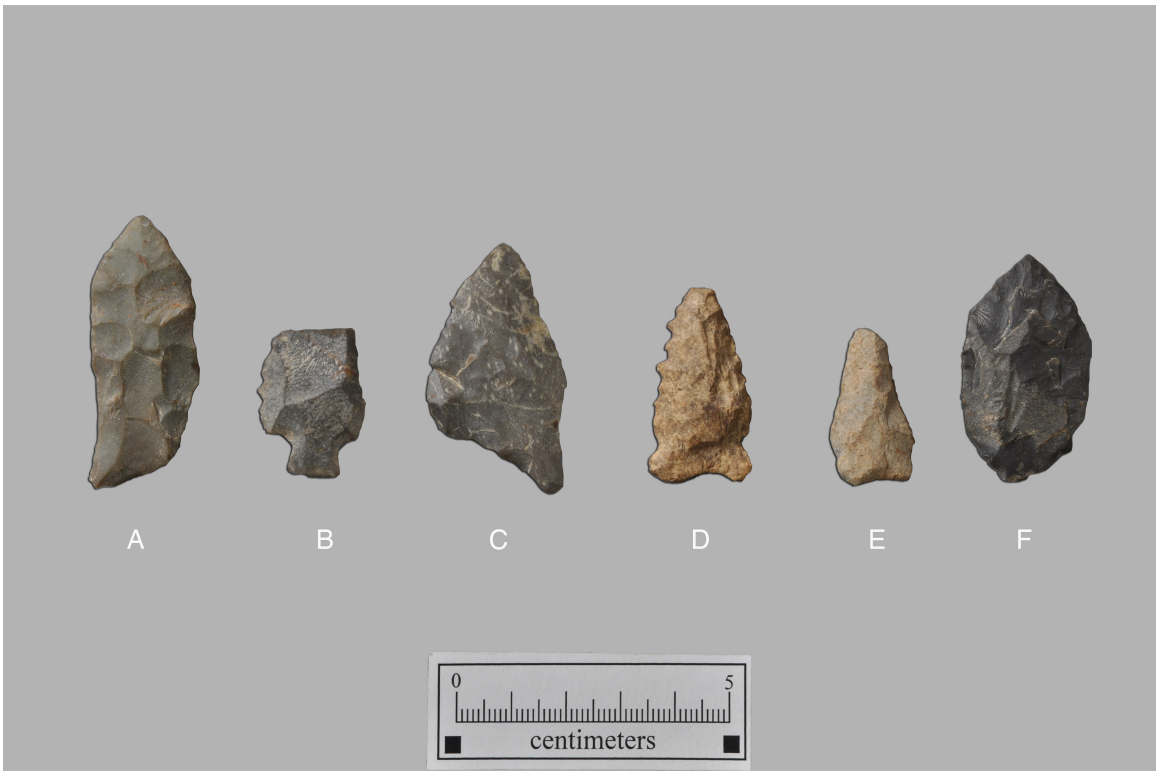

Figure 3.4. Unclassified projectile points.

explains that the biface is the most common objective piece found within archaeological sites, and they tend to have specialized names according to their shape and location. I differentiated biface classes largely based on size and perceived function.

Following the definitions of Daniel (1998:50) and Andrefsky (2005:721), I defined bifaces as having the ability to be used in a wide array of tasks, whereas specialized tool forms generally may have been used for specific tasks such as hide scraping or as projectiles. Within the contexts I analyzed at Town Creek, bifaces were the second largest category (*n*=49) of chipped stone tools behind projectile points. These artifacts were grouped into the four categories of knives, unfinished bifaces, bifacial cores, and unclassified.

Knives. Four specimens were classified as knives based upon their asymmetrical morphology. Each of these was heavily patinated. Two of these specimens were located in Level A, and they could very well date to any time from the Archaic to the Mississippian periods. The other two knives were located in Level X-North. All four knives were broken, but I was able to separate them from the fragmented bifaces because of their size and their curved working edge. Based on the tool's width and on the location of the break, it is evident that these specimens would have been much larger than the analyzed projectile points (Figure 3.5a).

Unfinished Bifaces. Due to the very small sample of unfinished bifaces (*n*=6), I did not venture to distinguish between different stages of production. The unfinished bifaces from Town Creek were often classified as "quarry

blanks/blades" or "roughly chipped blades" according to the catalog entries. The unfinished bifaces all exhibited similar features such as irregular lateral margins, thick bodies with jagged protrusions, and no signs of thinning or re-touch. They also tended to have a thickness-to-width ratio of greater than .38 mm, giving them a rather thick appearance (Figure 3.5b).

Bifacial Core. One artifact was classified as a core. This core was located in Level X-North (Figure 3.6). Andrefsky (2005:729) defines a core as a mass of homogeneous lithic material that has had flakes removed from its surface. These detached pieces could then be used for the production of various tools. This specimen was very large in comparison to other tools, and it exhibited a multidirectional, or bifacial, reduction technique. The edge of the bifacial core was used as a striking platform, and pieces were clearly detached from either surface. The flake scars spread progressively wider from the proximal end to the dorsal end (see Andrefsky 2005:735). These flakes would have been large enough to be used as informal tools or turned into formal pieces. The edges of this core did not exhibit any signs of use, but that does not exclude the possibility that cores may have been used as tools themselves.

Other Bifaces. Unfortunately, the majority of bifaces were broken (76.5%), and very little could be determined about their shape. These artifacts are listed as unclassified bifaces. The unclassified bifaces are distinguished from all other groups because they could not be confidently classified by any other morphological or functional trait besides the presence of two worked edges.

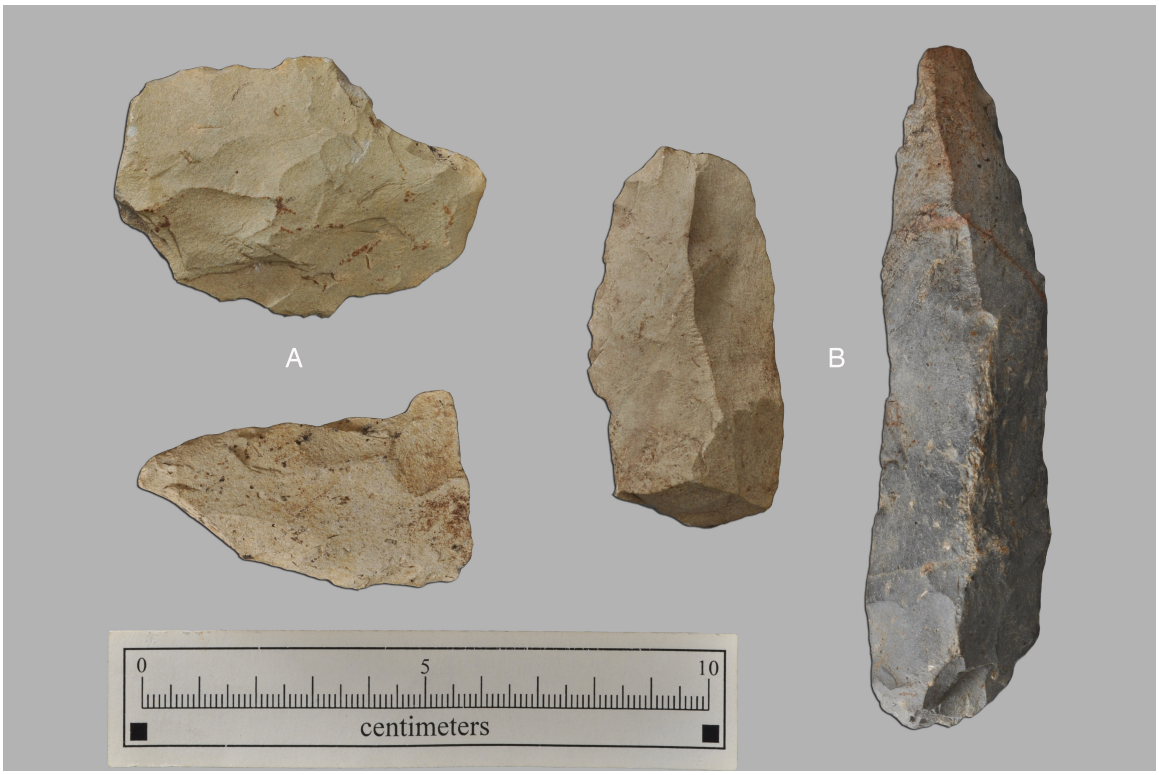

Figure 3.5. Bifaces. A) bifacial knives, B) unfinished bifaces.

Figure 3.6. Bifacial core.

Small Stone Tools

Small stone tools (*n*=86) were grouped primarily based on their size, typically being less than five centimeters in length. The classes subsumed within this group include bit-tools, scrapers, and flake-tools. Many of these tools are hypothesized to have been used in light woodworking tasks (Daniel 1998:104; Knight 2010:57-58).

Bit-tools

The bit-tools at Town Creek are commonly made out of flakes or from reworked projectile points. They exhibit a rod-like projection or long pointed bit that was created through bifacial or unifacial retouch (Daniel 1998:104; Knight 2010:58). Bit-tools were likely used for drilling or puncturing into wood, hides, and a wide range of materials. This group consisted of 36 artifacts that have been subdivided into perforators and drills, but that is not to say that these tools could not have been used for a variety of tasks.

Perforators. I classified as perforators those tools with a broad bit that usually was worked unifacially along one lateral margin (Figure 3.7a). Seventeen perforators were identified, with the majority being made from flakes (*n*=14). A few of these tools exhibited similar characteristics as small gravers. These perforators may have had a dual purpose, and I speculate these tools may have been used for finer woodworking crafts.

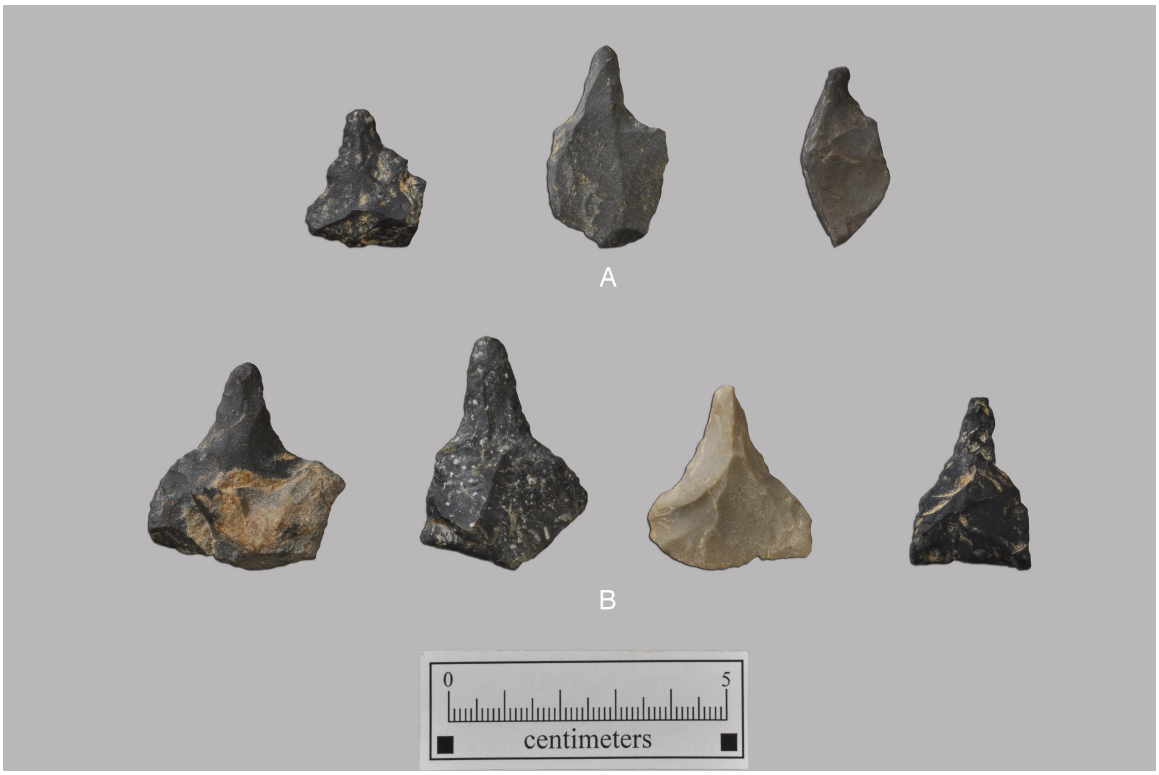

Figure 3.7. Bit-Tools. A) perforators, B) drills.

Drills. Drills (*n*=19) were characterized by a long, rod-like shaped projecting bit. In this study, the materials analyzed for all of the drills, with one exception, were made from reworked projectile points. The only exception was made from a flake. Most of the bits on these tools were relatively long and narrow, but there were a few whose bits were broader and shorter (Figure 3.7b). Daniel (1998:104) suggests these tools may have been used to work more dense materials.

Scrapers

Scrapers are defined as tools with a steep working edge along one or more of their lateral margins. These tools tend to be unifacial, but there are some instances where a bifacially worked stone tool was used as a scraper. Functionally, these tools have been described as hide scrapers or draw-knifes based on the steepness of the bit (Coe 1995:208-209; Daniel 1998:78,100). Coe (1995:209) explains that these tools were used for a variety of applications, but they were utilized with a pushing, or pulling, scraping motion rather than a sawing motion. A total of 12 scrapers were found throughout the three contexts. I sub-divided these artifacts into three groups based on the characteristics of their working edges.

End-Scrapers. End-scrapers (*n*=4) had a steep, working edge along one side of the tool that tended to be perpendicular to the longest axis of the tool (Figure 3.8a) (Daniel 1998: 66). The end-scrapers I identified tended to fit Coe's

(1995:209) description of these tools as being teardrop in shape with the bit being located on the thickest end of the tool.

Side-Scrapers. Side-scrapers (*n*=5) typically had a working edge that ran along the longest axis of the tool (Figure 3.8b) (Daniel 1998:83).

Unclassified Scrapers. The remaining three scrapers are identified as unclassified scrapers. They appear to have been utilized across all of their margins but do not necessarily have an oval appearance. Two seemed to have been originally exhausted bifacial cores (Figure 3.8c).

Flake Tools

Detached pieces of stone that showed signs of a utilized edge were classified as being flake tools. These tools were probably chosen from other lithic manufacturing debris based on characteristics that would have been useful to their makers. Most of these expedient tools were probably used for a wide range of cutting and scraping tasks, probably for more day-to-day, or routine, manufacturing tasks (Knight 2010:56).

Out of the 38 flake tools analyzed during this research, 17 flake tools were variable in form (Figure 3.9a). Twelve of these tools had parallel-sided, lateral margins and were blade-like in shape, suggesting the use of unidirectional cores (Figure 3.9b). Andrefsky (2005:735) notes that differences in the form of flake tools may have important implications for the style and function of the flake tools

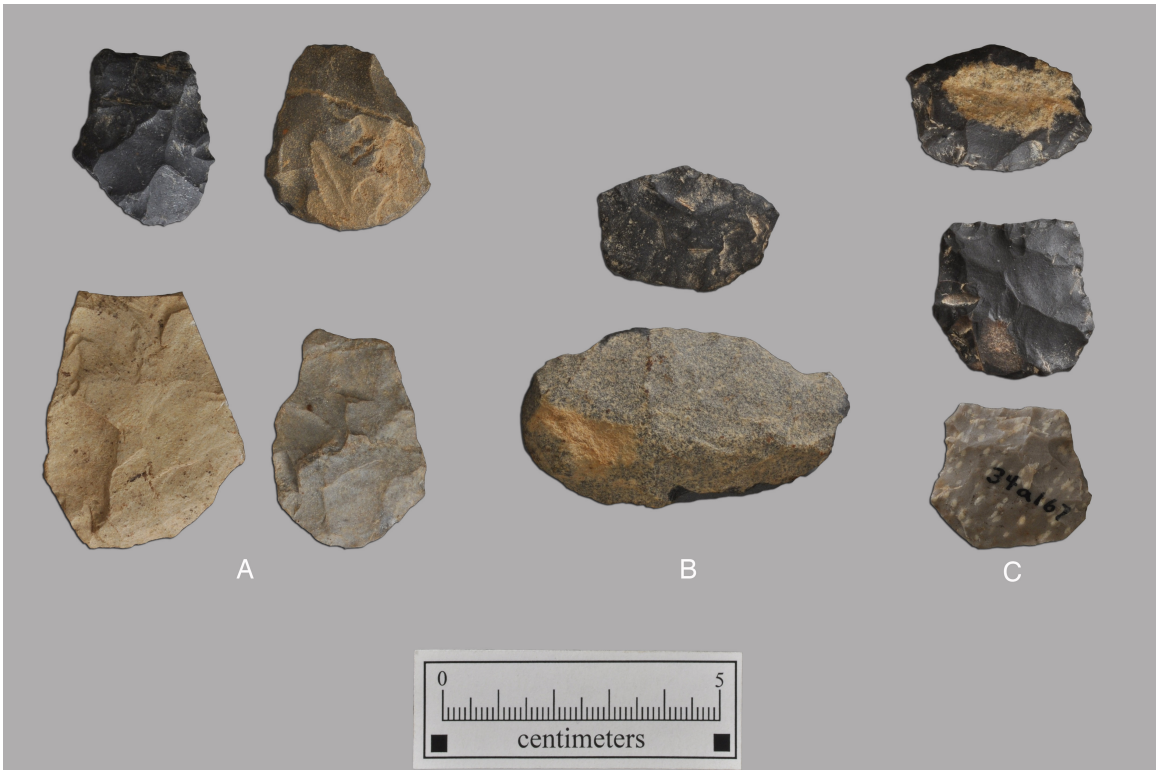

Figure 3.8. Scrapers. A) end-scrapers, B) side-scrapers, C) unclassified scrapers.

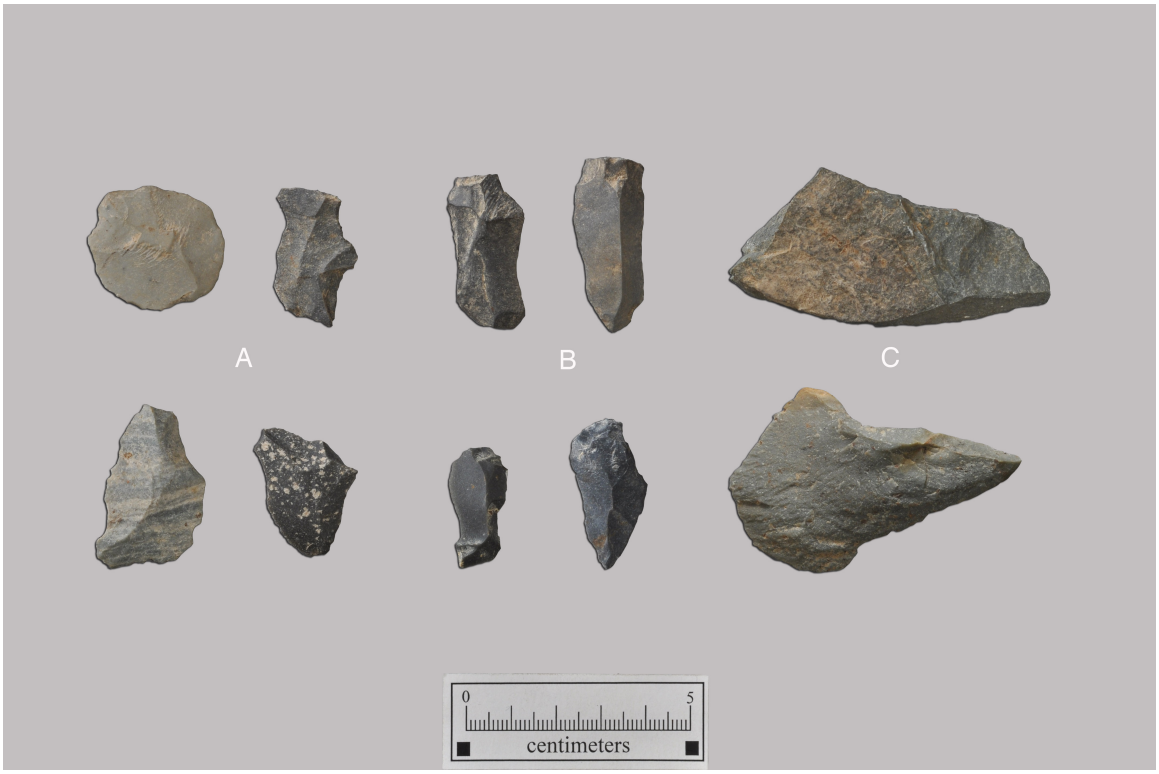

Figure 3.9. Flake tools. A) variable flakes, B) blade-like flakes, C) greenstone flakes.

produced. In his work at Moundville, Knight (2010:57) suggests that these blade-like flakes may have been associated with elite craft working on mounds.

A total of nine greenstone flakes were found in the contexts analyzed (Figure 3.9c). Greenstone was commonly used for the manufacture of celts (Wilson 2001). The greenstone flakes at Town Creek may be expedient tools that were produced from broken celts. The majority of these flakes were recovered from Level A (*n*=6) while the rest were all located within the first habitation level. No flakes were recovered from the Level X contexts. Wilson (2001:125) explains that these flakes may have been used as expedient tools and would have been used for a wide variety of small-scale cutting and scraping tasks. More formal greenstone tools, such as celts and chisels, would have been used for more heavy-duty woodworking.

Large Stone Tools

Within this research, large stone tools are those that are larger than five centimeters (*n*=4). These tools are thought to have been used for more heavy-duty or coarse woodworking tasks, although the chopper could have been used for more of a food production type task, such as carcass processing (Daniel 1998:105-106).

Greenstone Celts

Three greenstone celts were present in the mound assemblages. Two of these were recovered from Level A and the other was from Level X-South (Figure 3.10). Each specimen exhibited some form of polish. One celt, from Level A, was heavily polished across its entirety. This specimen is broken, and it consists only of the mid-section. The poll and the bit are missing, and they presumably were broken during use (Figure 3.10a). There also is some heavy pitting on both sides of this object, perhaps suggesting a secondary use. Some flakes appear to have been removed from the broken ends of this celt.

The other celt from Level A is missing the bit. It consists of the poll and most of the mid-section. This specimen has some polishing running along one of its edges, but its entire surface is rough (Figure 3.10b). Assuming the final product was intended to be fully polished, as Wilson (2001:119-125) explains, this tool may not have been fully complete. The specimen from Level X-South is a small poll fragment that exhibits very faint polishing. It is not as pitted as the other two celts from Level A (Figure 3.10c).

Chopper

A single chopper was found within Level X-North (Figure 3.11). The artifact was roughly 5.4 cm in both length and width, it was oval in shape, and had one unifacially worked edge. This object was most likely intended for heavy-

Figure 3.10. Greenstone celts.

Figure 3.11. Chopper.

duty chopping activities, possibly animal-carcass processing or woodworking (Daniel 1998:105-106).

Tool Production

Artifacts within this group are thought to have been tools that were used in the production of other tools. The tool production group (*n*=300) consists of hammerstones, debitage, abraders, and a sandstone saw.

Hammerstones

Hammerstones were used as percussion tools and, typically, are further defined based on the patterns of wear exhibited on the artifact's surface. The two hammerstones analyzed here were both recovered from Level X-North. Both are quartzite cobbles, and both have pitting along their edges. Both specimens also have some pitting along their center, suggesting that they also were used as anvils (Figure 3.12a). These tools could have been used in the processing of meat, bone, nuts, or in core-reduction (Daniel 1998:116).

Debitage

Andrefsky (2005:719) describes debitage as being discarded, detached pieces that are by-products of stone-tool production or core reduction. The

debitage I analyzed consisted of flakes and shatter from a wide variety of raw material types. Level X-North contained the majority of debitage at 67 percent. All raw materials appear to be local and were identified based upon Daniel (1998:41-48) and Daniel and Butler's (1996) survey of lithic raw material quarries around the Uwharrie Mountains. The raw materials that were analyzed within mound contexts were, in descending order based on quantity: aphyric rhyolite, unknown metavolcanic, porphyritic rhyolite, quartz crystal, milky quartz, greenstone, rhyolitic tuft, breccia, and green metasiltstone (Table 3.2).

Abrader

One grooved sandstone abrader was recovered from Level X-South. This abrader was worked on both sides, and it has three, U-shaped grooves running the length of each surface. Two pairs of parallel grooves are present on one side of the artifact, and a single groove is present on the opposite side. This abrader may have been used in the creation of awls or other objects. Another abrading stone was recovered from the First Habitation Level. Unlike the specimen from Level X, this specimen did not have any grooves. This abrading stone's entire surface may have been used to grind, or polish, an object (Figure 3.12b).

Table 3.2. Debitage raw material counts.

	Level A	Structure 23a	Level X, North	Level X, South	1st Habitation	Material Totals	Percentages
Raw Material Type							
Aphyric Rhyolite	22	-	88	5	37	152	50.67
Porphorytic Rhyolite	3	-	21	3	4	31	10.33
Crystal Quartz	1	-	15	1	1	18	6
Milky Quartz	2	-	10	1	-	13	4.33
Rhyolitic Tuft	-	-	1	1	-	2	0.67
Breccia	-	-	1	-	-	1	0.33
Chert	-	-	-	-	-	-	
Greenstone	4	-	-	-	3	7	2.33
Unknown Metavolcanic	7	-	62	-	3	72	24
Unidentifiable	-	-	3	-	-	3	1
Green Metasiltsone	1	-	-	-	-	1	0.33
Level Totals	40	-	201	11	48	300	100

Sandstone Saw

A sandstone saw was also recovered from the First Habitation Level (Figure 3.12c). This object is relatively small and triangular in shape. Similar artifacts have been recovered from Moundville and exhibit the same characteristics (Knight 2010:63). Wilson (2001:121) has attributed the use of sandstone saws to the cutting of greenstone slabs in the creation of celts and chisels.

Small Bone Tools

While a great number of bone tools were recovered at Town Creek, only two were found in the contexts analyzed for this research. These bone implements were both recovered from the same unit within Structure 23a. These tools are thought to have been used in the perforation or sewing of animal hide or for weaving.

One has been classified as an awl due to its relative size and girth. It is 10.4 cm long, and it was made from a turkey tarsometatarsus (Scott 2012). This artifact is from the distal end of a long bone, and it was sharpened into a point along the shaft (Figure 3.13a). The other artifact was classified as a needle or pin that was made from a raccoon fibula (Scott 2012). It is relatively thin compared to the awl, and is 7.1 cm long (Figure 3.13b).

Figure 3.12. Tool production. A) hammerstones, B) abrading stones, C) sandstone saw.

Figure 3.13. Small bone tools. A) awl, B) needle.

Non-Tools.

I classified as non-tools those artifacts that do not appear to have been utilitarian in function. The artifact classes represented as non-tools include ornaments, discs, smoking pipes, and a piece of engraved slate. The last artifact has been included as a non-tool because of its unknown function.

Ornaments

I grouped all objects that are presumed to have been worn on the person as ornamental objects (see Knight 2010:66). Only a few of these items were present in mound contexts at Town Creek. This category includes artifacts made of clay and stone.

Clay Ear Spool. This object was recorded as a fired clay object, but I classified it as a small ear spool due to its general shape. This artifact is a small, expanding cylinder of clay that is concave along its center (Figure 3.14a). The ear spool is roughly 1 cm long and less than a centimeter in thickness. This artifact was recovered from within Structure 23a.

Stone Pendant. A single stone pendant came from Feature 22, a hearth, located within Structure 23a (Figure 3.14b). This object is roughly triangular in shape. A perforation in the narrower portion of the artifact was started, but it did not go all the way through the artifact. This pendant may have been broken during manufacture, based on the presence of a roughly snapped edge.

Figure 3.14. Ornaments. A) ear spool, B) broken pendant, C) clay bead, D) graphite, E) copper fragments.

Clay Bead. One fired clay bead was recovered from inside of Structure 23a (Figure 3.14c). This object is roughly 1.8 cm in length and 1.3 cm in width. It is perforated along its length.

Pigment. A single piece of pigment was recovered from Structure 23a (Figure 3.14d). The specimen is a piece of graphite that is approximately 2 cm in length. The graphite appears to have been ground.

Copper. Three pieces of copper were present in the mound contexts I analyzed (Figure 3.14e). Two of these specimens came from Level X-South. Both were rectangular and had parallel sides. One of these appears to be perforated. Both are around 1.1 cm wide, but the longest one is around 3.2 cm long. The copper fragment that appears to be perforated is about 1.5 cm long. The third, and smallest, piece of copper was found on the west wall of Structure 23a. This specimen was too small to determine any shape characteristics, but it does appear to have some straight sides.

Discs

Discs were classified based on their circular form. These objects were larger in diameter than they were in thickness. Within this category, I combined discs of both ceramic and ground stone based on morphological similarities. Knight (2010:63) saw stone and ceramic discs as having the same function with the only difference being raw material. I analyzed 16 stone and ceramic discs, 14 of which were made from ceramics, most discs came from Level X-North

(*n*=9) (Figure 3.15a). These discs ranged in diameter from roughly 2.2 cm to 4 cm. They varied in thickness from about .5 cm to 1.6 cm. The stone discs tended to be thicker, but some ceramic discs were upwards of 1.1 cm to 1.4 cm thick. Of the two stone discs, one was of a black material that was polished while the other was a white material, possibly a calcite (Figure 3.15b).

Smoking Pipes

There were originally 689 fragments or whole smoking pipes recovered from Town Creek by Coe (1995:223), but only a handful came from mound contexts (*n*=9). All of these were fragments of some sort, either bowl (*n*=6) or stem fragments (*n*=3), made of ceramic (Figure 3.16). Two of these bowls were listed in the site catalog as being whole and having been recovered from Level X-South. Unfortunately, these artifacts are missing. The stem fragments were all small pieces from the tip, or mouthpiece, of the stem. Half of the bowl fragments were plain while the others exhibited minor embellishments such as nodes below the rim. One had a figure-eight design across the body. These fragments were not large enough for me to comment on the form of the whole pipe.

Engraved Slate Object

One of the most peculiar artifacts analyzed was a piece of what Coe (1964:53) describes as being "engraved slate." On one side of this artifact is a

Figure 3.15. Discs. A) ceramic discs, B) groundstone discs.

Figure 3.16. Clay pipe fragments.

Figure 3.17. Engraved slate object.

series of engraved lines. These are evenly spaced, parallel and perpendicular lines that form a checkerboard pattern. Fainter incisions are present on the other side of the object, but these lines are not as regular in spacing (Figure 3.17).

Coe (1964:53) explains that these items may represent a cutting board used to cut leather or any other material that would require a solid backing. Similar objects were also discovered at the Doerschuk and Hardaway sites in the North Carolina piedmont. Both Coe (1964:53) and Daniel (1998:119) note that these tabular objects are not very widespread across the piedmont. The object analyzed within this research was recovered from Level X-South.

Chapter Summary

This chapter served to define the artifacts analyzed for my research at Town Creek. Artifacts were broken into two main groups, tools and non-tools. These groups were further divided into subgroups and classes based upon the artifact's morphological characteristics. Based upon the perceived functions of each artifact class, Chapter 4 will describe the comparative indices used in order to appropriately compare mound contexts.

Chapter 4: Comparing Contexts

In order to identify any diachronic changes, an important aspect of this thesis is to make comparisons among five different mound contexts at Town Creek; Level A, Structure 23a, Level X-South, Level X-North, and the 1st Habitation Level. In order to make comparisons among contexts, several indices, based on artifact classes described in Chapter 3, were used to discover differences in the activities associated with each context.

In order to appropriately compare artifact frequencies between mound contexts, a way to standardize these frequencies was needed. Instead of trying to standardize counts by using the fill volume of each context, which would have been difficult to determine due to a variety of factors, I looked at using abundance indices similar to those created by Knight (2004:315; 2010:352-355). By using these indices, the data could then be utilized in a comparative method to determine the relative importance of activities represented in mound contexts based upon artifact ratios (Astin 1996:6). I will also consider the faunal assemblages from the mound, analyzed by Susan Scott (2012), to aid in my interpretation of the activities represented in mound contexts at Town Creek.

Comparative Indices

Knight (2004; 2010) demonstrated that by using comparative indices, researchers are able to consider the relative importance of different activities

among contexts. These indices were then compared against a pooled value in order to determine whether the artifact class was over or under-represented. The first task was to standardize each artifact class. Ceramics and debitage were used to standardize artifact frequencies based on the assumption that they represent background activity that was relatively consistent across contexts. The debitage was used in the standardization of lithic artifacts, while ceramics were used to standardize the non-tool classes. I feel that their usage with artifacts of similar types justifies the use of the two classes for standardization. It should be noted that the ceramic data utilized for standardization were derived from Boudreaux (2005) and are presented in Table 4.1. The standardized value is referred to as the observed value, and it is calculated by dividing the artifact class counts by the background class counts. This is expressed in the formula O=CAC/CBC, where O = the observed value, CAC = context artifact counts, and CBC = context background counts.

The second task was to calculate a pooled value, which provided a baseline against which to compare the values observed within each context. This pooled value represents the sum of an artifact class across every context divided by the sum of the background artifact class across every context. The pooled value denotes an averaged value that should be expected within each context. This is expressed in the formula P=TAC/TBC, where P = the pooled value, TAC = total artifact class, and TBC = total background class.

After the pooled values had been calculated, the final task was to determine the deviation between the observed and the pooled values. Following

Table 4.1. Ceramics from mound contexts analyzed by Boudreaux (2005).

Mound Contexts	Small Check Stamped	Large Check St.	Curv. Comp. St.	Rect. Comp. St.	Fine Cordmarked	Fabric Marked	Plain	Burnished Plain	Small Simple St.	Textile Stamped	Textile Impressed	Unidentified	Total
First Habitation Level													
Feat. 57	-	-	6	2	-	-	2	-	-	-	-	-	10
Sq. 20	1	-	2	2	-	-	2	-	-	2	-	2	11
Sq. 30	-	-	7	2	-	-	5	-	-	1	-	1	16
Sq. 30L10	1	-	16	5	-	-	10	-	-	3	1	3	39
Sq. 40	-	-	14	7	-	1	10	-	-	4	1	2	39
Sq. 40 & 50	-	-	1	1	-	-	-	-	-	1	-	-	3
Sq. 40-50L0-10	-	-	6	-	-	-	4	-	-	2	-	1	13
Sq. 40L10	-	-	5	2	-	-	3	-	-	-	-	-	10
Sq. 60	-	-	7	-	-	-	-	-	-	-	-	-	7
Sq. 60L10	-	-	-	-	-	-	5	-	-	1	-	-	6
Sub-total	*2*	*0*	*64*	*21*	*0*	*1*	*41*	*0*	*0*	*14*	*2*	*9*	*154*
Level X, South													
Sq. 10	-	-	21	1	-	-	3	1	-	1	2	-	29
Sub-total	*0*	*0*	*21*	*1*	*0*	*0*	*3*	*1*	*0*	*1*	*2*	*0*	*29*
Level X, North													
Sq. 40-70L30-40	-	-	-	-	-	-	2	-	-	-	-	-	2
Sq. 40L30	-	-	4	1	-	-	1	-	-	-	-	-	6
Sq. 50L30	-	-	1	1	-	-	-	-	-	-	-	-	2
Sq. 60L30	-	-	1	-	-	-	-	-	-	-	-	-	1
Sq. 70L30	-	-	-	-	-	-	1	-	-	-	-	-	1
Sq. 80	-	-	33	9	-	-	30	1	-	6	5	-	84
Sq. 80L10	-	1	6	2	2	-	1	2	1	1	-	3	19
Sq. 90	-	-	14	11	-	-	42	2	-	5	3	8	85
Sq. 90L10	-	-	15	1	-	-	18	-	1	9	3	3	50
Sub-total	*0*	*1*	*74*	*25*	*2*	*0*	*95*	*5*	*2*	*21*	*11*	*14*	*250*
Level A													
Feat. XXII	-	-	1	-	-	-	-	-	-	-	-	-	1
Sq. 10R10	-	-	-	-	-	-	-	-	-	-	1	-	1
Sq. 30L10	-	-	28	12	-	4	19	-	-	11	-	11	85
Sq. 30R40	-	-	3	-	-	-	2	1	-	-	-	-	6
Sq. 40R30	-	-	1	-	-	-	-	-	-	-	-	-	1
Sq. 80	-	-	22	9	-	-	10	-	-	6	1	1	49
Sq. 80L10	-	-	42	16	2	-	21	-	-	11	6	5	103
Sq. BL0	-	-	15	2	-	-	12	-	-	1	3	-	33
Sq. BL10	-	-	1	1	-	-	-	-	-	-	-	1	3
Sub-total	*0*	*0*	*113*	*40*	*2*	*4*	*64*	*1*	*0*	*29*	*11*	*18*	*282*
Inside Structure C													
30R20, West Wall	-	-	-	-	-	-	-	2	-	-	-	-	2
30R40	1	-	39	7	-	-	41	-	-	19	-	1	108
30R40, North Wall	-	-	8	1	-	-	4	-	-	2	-	1	16
30R40, Northeast Corner	-	-	6	-	-	-	1	-	-	1	-	1	9
Sub-total	*1*	*0*	*53*	*8*	*0*	*0*	*46*	*2*	*0*	*22*	*0*	*3*	*135*
Second Temple													
Sq. 60L10	-	-	3	1	-	-	-	-	-	-	1	-	5
Sub-total	*0*	*0*	*3*	*1*	*0*	*0*	*0*	*0*	*0*	*0*	*1*	*0*	*5*
Total	3	1	328	96	4	5	249	9	2	87	27	44	855

the work of Knight (2010:353), I identified as being over-represented, any class whose observed value deviated by 50 percent or more from the pooled value. Also following Knight (2010), I refer to any value that is over-represented by 50 percent or more as being a salient value. Any value under 50 percent was not considered to be salient. The deviation between the observed and pooled values was determined by dividing the observed value by the pooled value and subtracting one, or D=(O/P)-1.

I used eight indices in an attempt to identify activity patterns within each context. These indices were then used to create an overall picture of what was occurring throughout the mound's use. In order to make the resulting values easier to interpret, the pooled values for each index were multiplied by either 100 or 1000. In the future, these indices also may help give a broader perspective on what was occurring within the village at Town Creek as well. Table 4.2 shows the artifact values that were used in determining the pooled and observed values, and the salient values are presented in Table 4.3.

Projectile Point Index

This index takes into account all projectile points that were analyzed within each context. The projectile point index was generated by taking the total number of projectile points from each context, dividing it by the total amount of debitage located within that particular context, and then multiplying it by 100. Its inclusion helped to determine if activities related to hunting, or even warfare, may

be represented in some contexts. While hunting is an activity that would have occurred everywhere, and at all times, its relation to mound contexts may be telling as to what the mound was used for or to what type of people may have utilized the mound summits.

Small Stone Tool Index

Small stone tools include bit-tools, scrapers, and flake tools. These tools are all believed to have been employed in light or fine wood working activities, and they may have been used in craft production. This index was generated by dividing the total number of all bit-tools, scrapers, and flake tools by the total amount of debitage and multiplying it by 100.

Large Stone Tool Index

The large stone tool class was made up of the greenstone celts and the chopper. These tools would have been employed in a wide range of domestic activities that are hypothesized to include coarse woodworking and possibly butchery, in the case of the chopper. This index was generated by dividing the total number of large stone tools by the total amount of debitage and then multiplying it by 100.

Table 4.2. Artifact values used for calculations.

	Level A	Structure 23a	Level X, North	Level X, South	1st Habitation	Totals
Projectile Points	30	3	92	6	16	147
Small Stone Tools	15	-	53	5	13	86
Large Stone Tools	2	-	1	1	-	4
Tool Creation	-	-	2	1	2	5
Small Bone Tools	-	2	-	-	-	2
Ornaments	-	5	-	2	-	7
Discs	2	1	9	3	1	16
Pipe	-	1	4	1	1	7
Debitage	40	-	201	11	48	300
Sherds	282	135	250	29	154	850
Total	371	147	612	59	235	1424

Table 4.3. Index values.

	Level A		Structure 23a		Level X, North		Level X, South		1st Habitation		
	Observed	Deviation	Observed	Deviation	Observed	Deviation	Observed	Deviation	Observed	Deviation	*Pooled Value*
Tools											
Projectile Point	**75**	0.53	**100**	1.04	45.7	-0.06	54.5	0.11	33.3	-0.31	49
Small Stone Tools	37.5	0.32	-	-	25.8	-0.08	**45.4**	0.6	27.08	-0.04	28.3
Large Stone Tools	**5**	2.75	-	-	0.4	-0.62	**9**	5.81	-	-	1.3
Tool Creation	-	-	-	-	0.9	-0.4	**9**	4.45	**4.1**	1.5	1.6
Debitage	25.97	-0.26	-	-	**80.4**	1.27	37.93	0.07	11.51	-0.67	35.29
Non-Tools											
Ornaments	-	-	**3.7**	3.49	-	-	**68**	7.37	-	-	8.23
Discs	7	-0.62	7.4	-0.6	**36**	0.91	**103**	4.49	6.4	-0.65	18.8
Pipe Fragment	-	-	7.4	-0.3	**16**	0.51	**103.4**	8.77	6.4	-0.38	10.5

Items in Bold are identified as being salient

Tool Production Index

This index is used as an indicator of the production of other tools. This index is made up of abraders and hammerstones. The abraders were possibly used to make bone awls and needles. The hammerstones would have been employed in lithic reduction (Daniel 1998:116; Knight 2004:309). This index was generated by dividing the total number of abraders plus hammerstones by the total amount of debitage and multiplying the result by 100.

Ornaments Index

The ornaments class represents a non-utilitarian artifact class in which there may have been more of an emphasis on symbolic versus utilitarian tasks. Ornaments have been interpreted as being expressive adornments intended for display and sometimes displayed in communal ceremonies (Knight 2004:317; Spielmann 2002:198). This class includes the pendant, bead, ear spool, copper fragments, and pigment. These objects would have functioned primarily as body adornments. The index values were generated by dividing the total number of ornamental objects by the total number of sherds and multiplying by 1000.

Discs

This index was used to determine if any activity associated with groundstone or ceramic discs could be observed within the specified contexts. These discs are hypothesized to be gaming pieces, but their exact function is still unclear (Coe 1995:227; Knight 2010:63). This index value was generated by dividing the total number of discs by the total number of sherds and multiplying by 1000.

Pipe Index

The pipe index is assumed to be representative of ceremonial use or have some type of social significance associated with smoking. Hudson (1976:314,318) notes the use of tobacco in the greeting of travelers and during ceremonies, such as the Green Corn Ceremony. Likewise, Knight (2004:307) explains that tobacco was rare among sites around Moundville and suggests its use in non-secular activities. The saliency of this index could be important in assessing significance within the observed contexts because the smoking of tobacco is believed to not have been a common occurrence. The pipe index value was generated by dividing the total number of pipe fragments by the total number of sherds and multiplying by 1000.

Debitage Index

The debitage index is a measure of lithic tool manufacture within the analyzed contexts at Town Creek. Coe (1995:194) hypothesized that no major lithic manufacturing occurred at Town Creek. While this hypothesis may be correct, this index is used to determine whether any lithic tool manufacture or rejuvenation occurred. The index value was generated by dividing the total amount of debitage by the total number of sherds and multiplying by 100.

Faunal Analysis

The faunal assemblages from four mound contexts were analyzed by Susan Scott (2012, Appendix 1). The Level X-North flank midden did not contain any faunal remains. I will use data from Scott's (2012) analysis in combination with the comparative indices to make inferences about the activities represented in each context. Zooarchaeology has proven to be very insightful when considering many aspects of past societies. Specifically, the analysis of faunal assemblages can aid archaeologists in determining status distinctions and political inequalities as well as the types of activities responsible for an assemblage's deposition (deFrance 2009:134).

In regards to feasting events in Mississippian societies, Jackson and Scott (2003:555) explain that high proportions of large animal remains, rather than more diverse assemblages, should reflect feasting episodes. Aside from just

determining if large amounts of meat have been consumed, the analysis of faunal assemblages can also identify ritual behavior. DeFrance (2009:134) states that in all societies, animals and the food they provide have ideological, symbolic, and social meaning beyond their economic uses. These ceremonies often include feasting, and they serve to reinforce the power and position of those in control, create group identity, or create social distinctions between groups. These events are performed to bring about social and ideological goals (deFrance 2009:134).

The faunal assemblages represented in the analyzed contexts of the mound at Town Creek are largely made up of whitetail deer remains. The second most prominent is of turkey with very little representation of fish. This low representation of fish species may be attributable to a lack of screening during the original excavations of the mound. Among the more unusual species, passenger pigeon and what has been identified as a large bird, most likely representing passenger pigeon, and a large fox squirrel were present. When considered by context, more interesting patterns appear (Table 4.4). While every context contained similar species, the unusual species were located within two specific contexts, Structure 23a and the First Habitation Level, which consisted of Structures 45a and 45b.

Table 4.4. Faunal elements within contexts (from Scott 2012).

	Level A	Structure 23a	Level X-South	Structures 45a and 45b	Total
Number of Individual Specimens					
Whitetail Deer	7	34	24	1	66
Turkey	3	7	13	-	23
Passenger Pigeon	-	4	-	1	5
Longnose Gar	-	2	-	-	2
Fox-Squirrel	-	1	-	-	1
Racoon	-	1	-	-	1
Unidentified Large Mammal	-	4	4	22	30
Unidentified Small Mammal/Bird	-	-	-	27	27
Unidentified Large Bird	-	2	-	3	5
Unidentified Fish	-	-	-	1	1
Total	10	55	41	55	161

Results

The following is a presentation of my interpretations of the comparative indices and faunal analysis. I used the faunal assemblages, the saliencies derived from the indices (Figure 4.1), and artifact presence/absence data (Figure 4.2) to develop ideas about the activities represented within each context. These artifact data will be used to develop interpretations of the mound's use through time in Chapter 5.

Before moving on, I wish to note that certain artifact classes are complementary to each other. For example, the small stone tools, large stone tools, production tools, and small bone tools are all types of production tools. The tool production index and the debitage index both depict the manufacturing or rejuvenation of tools. All of the artifacts analyzed within this research have been interpreted by others as being evidence for production, accumulation, and consumption (Astin 1996; Costin 2005; Knight 2004, 2010; Lindauer and Blitz 1994:182; Wilson 2001).

Level A

Based on material recovered in Level A, the premound midden may contain residual activities from earlier occupations, an observation similar to Reid's (1967:56) interpretation when he analyzed ceramics from this context. Some of the artifacts may have come from the preceding Teal (A.D. 1000-1150)

and Late Woodland (A.D. 800-1000) occupations. Archaic Kirk and Guilford projectile points indicate even earlier occupations.

John Swart (1940b) excavated most of the artifacts I have analyzed for this research in the later part of 1940 during his time as field supervisor at Town Creek. It is clear from the notes that field methods varied. Swart (1940a) writes of some cases where soil was screened, and he notes others where excavators simply picked up the artifacts they saw while digging with a shovel and mattock. Unfortunately, no detailed records were kept during this particular period of Swart's tenure at Town Creek.

Level A had a fairly similar artifact profile as the other mound contexts analyzed during this research. There were 30 projectile points, 7 bifaces, 15 small stone tools, two large stone tools, a ceramic disc and a white groundstone disc. Of particular importance were the large stone tools and projectile points. Both of these artifact classes were over-represented when standardized and compared among all five mound contexts. In other words, the large stone tools and projectile points had a deviation greater than 50 percent when compared against the pooled values taken from all contexts. The projectile points being salient may be a result of Level A being representative of activities from a much wider temporal span. The large stone tools also registered as being salient in this context. Two celts were located in this level. As previously stated in Chapter 3, these large stone tools are representative of more coarse wood working activities.

Table 4.5. Salient artifact classes by context.

	Level A	Structure 23a	Level X, North	Level X, South	1st Habitation
Tools					
Projectile Points	X	X			
Biface					
Production Tools					
Small Stone Tools				X	
Large Stone Tools	X			X	
Tool Creation				X	X
Small Bone Tools		X			
Debitage			X		
Non-Tools					
Ornaments		X		X	
Discs			X	X	
Pipe			X	X	

Table 4.6. Present artifact classes by context.

	Level A	Structure 23a	Level X, North	Level X, South	1st Habitation
Tools					
Projectile Points	X	X	X	X	X
Biface	X		X	X	X
Production Tools					
Small Stone Tools	X		X	X	X
Large Stone Tools	X		X	X	
Tool Creation			X	X	X
Small Bone Tools		X			
Debitage	X		X	X	X
Non-Tools					
Ornaments		X		X	
Discs					
Ceramic Disc	X		X	X	X
Groundstone Disc	X	X			
Pipe		X	X	X	X
Engraved Slate				X	

Although the small stone tool index value was not highlighted as being overly represented for Level A, the presence of a variety of these tools suggests that light or fine woodworking crafts may have been occurring within Level A. Light woodworking may not have been as intensively practiced as were the activities indicated by the comparative indices. There were also 40 pieces of debitage, suggesting that some stone tool reworking or manufacturing was occurring, although in small amounts.

The faunal assemblage from Level A was made up of 70 percent whitetail deer (n=7) with the remainder being turkey (n=3). The minimum number of individuals (MNI) indicates that these could have come from a single deer and a single turkey. There were no exotic or rare species identified within this context.

Structure 23a

The artifacts within this structure are particularly interesting. Only three projectile points were found in this structure, two triangular points and one Pee Dee Pentagonal. Structure 23a had the only occurrences of small bone tools. There was a bone awl and a bone needle that may represent some type of crafting behavior. These tools may have been used in the sewing of hides or possibly weaving.

There also was a wide range of ornamental artifacts associated with this structure. A broken stone pendant, a ceramic bead, an ear spool, a fragment of copper, and a piece of graphite that may have been used for pigment were all

found within this structure. One of the only polished groundstone discs and a pipe bowl fragment analyzed within this research were also recovered from this structure. All of these non-tool artifacts are particularly important. I interpreted these non-tool artifacts as being of social significance. These artifacts were intended for display or to be used in the company of others, possibly attesting to the significance of Structure 23a to the premound inhabitants of Town Creek. These observations complement Boudreaux's (2005, 2007) interpretation of Structure 23a as being of a public nature, probably being used for the performance of rituals or conducting political affairs by an exclusive subset of the population.

The Structure 23a faunal assemblage was also made up predominately of whitetail deer, followed by turkey. This structure also had a large mammal and a large bird that were not identifiable at the species level. Unusual species consisted of the remains of at least 2 passenger pigeons, a large fox squirrel, and the dentary of a longnose gar. There was also a needle made from a raccoon fibula and an awl from a turkey tarsometatarsus.

Based on the faunal remains, this structure appears to have been more exclusive in nature. Passenger pigeon has commonly been found in similar, exclusive settings at other Mississippian sites and has been reported as a delicacy (Jackson and Scott 2003: 554). There are other artifact associations suggesting the exclusive nature of Structure 23a as well. The dentary of the longnose gar in combination with the graphite could represent some type of tattooing complex (Coe 1995:238-240; Hudson 1976:380). The giant fox squirrel

may also have had some type of ceremonial significance. In combination with infant burials, it is my interpretation that Structure 23a was ceremonial in nature and access within this context would have been exclusive to a specific subset of inhabitants at Town Creek.

Level X-South

Level X-South contained only a fraction of the artifacts analyzed for this research, at 5.2%. There were a total of six projectile points, two bifaces, five small stone tools, one large stone tool, one tool used for tool production, two fragments of copper, three ceramic discs, one pipe fragment, 11 pieces of debitage, and an engraved piece of slate. Surprisingly, after standardization, small stone tools, large stone tools, production tools, and all of the non-tool artifact classes were all overly represented.

Artifacts were standardized based on the total number of sherds and debitage to account for any background activity that may have also been associated with these contexts. In Level X-South, there were only 29 sherds and 11 pieces of debitage. In contrast, Level X-North, had a total of 250 sherds and 201 pieces of debitage. In Boudreaux's (2007:101) analysis, the ceramic attributes of Level X-South also were unique. There were no small serving or cooking vessels found within this context. Instead, only large cooking and serving vessels were present. This suggests that there was more of an emphasis on serving larger groups rather than individuals.

Similar to Structure 23a, Level X-South had a large amount of whitetail deer followed by turkey (Scott 2012). This level contained no unusual species. It did contain at least three individual deer, one of which was no more than seven months old. It also contained four individual turkeys, one of which was a poult. The fawn and the poult are important because they act as seasonal markers. The age of the fawn indicates that it died during winter while the poult indicates a summer harvest (Scott 2012). This may indicate that Level X-South contains materials from multiple events. There are no indications in the notes of any lenses or zones within Level X-South to substantiate this statement. However, this is not implausible. Depositional processes in the sub-mound 51 borrow pit at Cahokia have been observed and demonstrate the use of one midden for several different events throughout several seasons (Pauketat et al. 2002).

In conjunction with Boudreaux's ceramic observations, the artifact and faunal assemblages within Level X-South also appears to represent some type of large social event. The general lack of diversity within the faunal assemblage makes it more probable that the activity responsible for Level X-South's deposition was a feasting event. Production on all scales, either utilitarian or display, also appears to coincide with the gathering of people.

Level X-North

The artifact assemblage contained within Level X-North is diverse. This context had artifacts in almost every artifact class except ornaments and small

bone tools. Level X-North was the only context that did not contain any faunal remains. There were a total of 92 projectile points, 35 bifaces, 53 small stone tools, one large stone tool, two tool production tools, nine ceramic discs, four pipe fragments, and 201 pieces of debitage. Level X-North makes up 60% of the total number of artifacts analyzed during this research, and it contains 67% of the debitage. The diversity in artifact classes present within this context suggests that a lot of different activities are represented. These activities include production in all forms, coarse and fine woodworking, tool production, and possibly ceremonial activity.

While everything appears to have been occurring within Level X-North, the only activities that stand out were lithic tool manufacture or rejuvenation, as is evident from the debitage, and some form of social activity that is represented by the amount of ceramic discs and pipes. This does not rule out that other activities were taking place. The fact that the debitage and non-tool classes are overly represented suggests that these activities were particularly intensive. The evidence for the production or maintenance of lithic tools may have been based on the need to generate new tools for crafting. The sheer number of artifacts within this midden may also be representative of the fact that Level X-North was not a discrete deposit, a hypothesis that will be described further in the following chapter.

1st Habitation

Artifacts associated with the 1st Habitation Level included 16 projectile points, five bifaces, 12 small stone tools, two production tools used in the manufacturing of other lithic tools, one ceramic disc, and one pipe fragment. After standardization, the only class that was salient based on artifact indices was tool production. This class consisted of an abrader and a sandstone saw. Similar saws at the Moundville site in Alabama have been demonstrated by Wilson (2011:119) to have been used during the manufacturing of greenstone artifacts such as celts and chisels, either for cutting or polishing purposes. It is likely that this artifact was used for similar activities at Town Creek.

The 1st Habitation Level makes up only 13% of the artifacts, including debitage, analyzed within this research. It is my opinion that the activity associated with the deposition of this material may have been a small, exclusive gathering event that was similar to that of Structure 23a. The pipe fragment and ceramic disc may be suggestive of some type of social event, but the overlying activity may have leaned more towards production.

Within Structures 45a and 45b, the faunal assemblage was equally as large as Structure 23a, but the former's assemblage was primarily made up of unidentified mammals and birds. The majority of faunal remains from Structures 45a and 45b were recovered from a hearth feature, and, consequently, were calcined. The only two anatomical elements that were not burned were from a passenger pigeon and an unidentified large bird, that presumably was a

passenger pigeon. The faunal assemblage of the 1st Temple structures may be representative of exclusive, ceremonial contexts. It also may suggest a more limited use of this particular mound summit.

Chapter Summary

This chapter followed the comparative techniques utilized by Knight (2004,2010) in order to develop a basis for interpreting the use of the mound at Town Creek through time. Faunal assemblages contained within mound contexts were also examined in order to aid in the interpretation of the types of events that occurred. Through the analysis of the comparative indices and faunal assemblages, a better glimpse of what was occurring within each context in the mound at Town Creek could be determined. Chapter 5 will build upon these interpretations in more detail, and compare these findings to research from other Mississippian sites across the Southeast.

Chapter 5: Discussion and Interpretation

Boudreaux (2005) has discussed aspects of social differentiation at Town Creek by looking at intra-site patterns to distinguish between domestic and public architecture, providing ceramic data relating to vessel function to aid in interpretation of structures and associated events, and by analyzing mortuary data. What he determined is that there appears to be more of a horizontal, or heterarchical, social organization among individuals at Town Creek (Boudreaux 2007, 2010). While there may have been some vertical social differences among individuals, and these individuals may have had different roles within society, their day-to-day lives would have been no different than anyone else (Boudreaux 2005:408).

This is important when considering some of the theories presented in Chapter 1 and the role my interpretation has when considering construction, feasting, and crafting events within and around public buildings. In order to address the role of these activities within mound contexts at Town Creek, the following discussion will focus on what was occurring within each specified mound context, how it relates to the current interpretations of Town Creek, and how it compares with other Mississippian sites in the Southeast.

Mound Area Contexts

Previous work has developed an exceptional picture of what was occurring during different periods of Town Creek's existence (Boudreaux 2005,2007). In a broad sense, the major Mississippian occupation of Town Creek began with the establishment of a town during the early Town Creek phase (A.D. 1150-1250). During this phase, the site layout was established around a public axis running southwest to northeast through a central plaza, and this plaza was surrounded by a ring of circular domestic structures. On the western edge of this axis, multiple sets of rectilinear public structures existed on the site that would eventually contain a mound.

These premound public buildings are thought to have served a small subset of the resident's political or ceremonial needs. Archaeological evidence lends credence to this view in that the small premound public buildings have the highest percentage of small cooking and serving vessels, suggesting that they were utilized by a small group of individuals (Boudreaux 2005:392). Premound structures tended to be paired, with a larger, more ephemeral building located closer to the plaza, and a smaller, earth-embanked structure with an entrance trench located away from the plaza. Access would have been restricted to this smaller structure, creating an exclusive atmosphere away from the rest of the village.

Structure 23a was an earth-embanked structure that was paired with a larger rectilinear building, Structure 23c (Boudreaux 2005:239). Based on the

faunal and artifact assemblages within Structure 23a, this structure supports the view that the smaller premound public buildings were exclusive in nature. It contained a large amount of ornamental goods, unusual faunal species, possible representations of tattooing, and infant burials that may have been related to some type of ceremonialism. Structure 23a was located away from the plaza and was more difficult to access due to the presence of an entrance trench.

When Structure 23a was destroyed, residents of Town Creek built a mound in its stead. Summit architecture is hypothesized to have existed on top of this summit. The activities practiced on this summit may have been responsible for the deposition of Level X-South (Boudreaux 2005:245). In contrast to Structure 23a, the artifact and faunal assemblages of Level X-South are more representative of an inclusive, communal event.

Based on ceramic attributes, Boudreaux (2005: 384, 2007:101) explains that the mound-flank midden Level X-South had the lowest percentage of large jars, the highest percentage of large bowls, and no individual serving vessels. Boudreaux's conclusion that Level X-South represented a feasting event is corroborated by the research presented in this thesis. The presence in Level X-South of large amounts of faunal remains that exhibit little species diversity is very different from the diverse assemblages associated with residential refuse from mound contexts at Moundville (Jackson and Scott 2003:568). This research has also provided evidence for a crafting event within Level X-South based on the over-representation of small stone tools.

During the early Leak phase (A.D. 1300), a set of structures (Structures 45a and 45b), were built on the mound summit. These structures were similar to those of the premound public structures with a small rectangular structure paired with a large ephemeral building. The First Temple Structures were located on the west side of the mound, away from the plaza, similar to Structure 23a. The First Temple also contained some of the same animal remains as Structure 23a, most importantly that of passenger pigeon. This is also similar to mound-summit contexts at Moundville (Jackson and Scott 2003:566). This suggests more of an exclusive nature for Structure 23a because passenger pigeon is believed to have been a delicacy enjoyed only by a subset of individuals in Mississippian societies (Jackson and Scott 2003:554; see also Knight 2004).

Few activities are represented by the artifacts found within the structures, but it is likely that the floors of these buildings were swept clean and the debris was tossed over the mound's edge. This debris may have partially formed the mound-flank midden, Level X-North. It is possible that on the eastern, missing side of this second summit a large, ephemeral rectangular building may have been present. This building would have faced the plaza and would have been open to the public (Boudreaux 2005:247). This structure may have been the setting of crafting or social events, and the activities associated with it could have contributed to the deposition of Level X-North as well. This mound-flank midden contained a large assortment of debris, but it did not contain any faunal remains. Whether this suggests only crafting type activities were being practiced on this side of the mound summit or not is unclear, but the lack of faunal remains in

Level X-North shows a clear distinction from Level X-South. Along these lines, we can go back to Level A, a sub-mound midden. Structure 23a had relatively little artifact remains as well, and, as previously speculated for the First Temple Structures, the floors were most likely swept clean. When considering this, Level A, although possibly representative of a much wider and older set of activities, may have also been associated with activities represented within Structure 23a.

The second construction stage was superimposed by a third stage. The structures built on this stage mirrored Structures 45a and 45b in layout. Unlike the previous constructions, the mound flanks were not covered by this construction episode, so it is very likely that Level X-North could have also contained artifacts deposited from activities related to the second occupational layer and summit structures. My analysis did not look at any of the artifacts related to these later structures because no artifacts were clearly associated with them, but based on structural similarities revealed by Boudreaux (2005:142-146), it is likely that similar types of events were occurring.

Discussion

So what does this research say about Town Creek and how does it fit into the existing knowledge of the site? The activities represented within each context indicate what was occurring within mound contexts during specific time periods within Town Creek's history. Based on the faunal and artifact analyses, two of the contexts seem to have served very similar functions. Structure 23a

and the “First Habitation” Level have smaller artifact assemblages, similar associated faunal remains, and both were small buildings interpreted as public structures. These public structures housed activities relating to ceremonies and political decision-making, and both are hypothesized to be socially exclusive due to their positioning away from the plaza with restricted entrances (Boudreaux 2005:30,34). The diverse array of artifacts in Level X-North and Level A is, more than likely, suggestive of them being secondary deposits. Based on their stratigraphic association, Level X-North and Level A would not have been discrete deposits. Both, more than likely, contain the remnants of activities that could have been associated with multiple contexts and times, and they probably contained debris from Structure 23a or Structures 45a and 45b.

Something very different appears to be occurring in Level X-South. This flank midden is discrete, in that it is stratigraphically confined and, as such, can be viewed as containing the refuse from one event. This event was inclusive in nature and most likely represents an integrative activity, possibly being associated with the first construction episode, involving feasting and crafting. Costin (2005:1035) has described crafting as an act of materialization, being any transformational process involving skill, aesthetics, and cultural meaning. These crafts are created within exclusive settings, commonly found within mound-summit architecture. When these materials are found within non-burial or non-residential contexts, however, it is thought that this may indicate ceremonies associated with communal integration (Lindauer and Blitz 1997:182).

The evidence for feasting consists of the concentration, with a low diversity, of food remains and ceramic assemblages with distinct size and functional attributes (Boudreaux 2005; Jackson and Scott 2004; Lindauer and Blitz 1997: 186; Pauketat et al. 2002:263-265). These events are linked to the economic and ideological realms of society (deFrance 2009:134). Feasting is a ceremonial performance and can serve to reinforce the power and position of those in control, create group identity, or create social distinctions between groups (deFrance 2009:134).

The artifact and faunal assemblages I analyzed complement Boudreaux's (2005) interpretations, based on ceramic data, that the small public structures, Structure 23a and the "First Temple" Structures, were utilized by an exclusive set of people and focused on small groups. These data also support the idea that Level X-South represents a feasting episode thought to be integrative in nature. The following section is an interpretation based upon the findings of my research that seeks to incorporate current theories and views of Town Creek (Boudreaux 2005,2007) and other Mississippian sites. The main focus is on the possible cause of mound construction and its relationship with other social and village changes.

Interpretation

During the Late Town Creek phase (A.D. 1250), the first episode of mound construction occurred and there was also a shift in the overall site layout. Aside from being a descriptive and exploratory account of the mound, one question that this research brings up is the functioning of the mound's first construction episode in regards to this change in site layout. What role did the activities associated with Level X-South play within the development of Town Creek?

Boudreaux (2005:401) presents a hypothesis, based upon other South Appalachian sites, that the structures located upon the first mound-construction stage would have been similar to those before and after it. One or two small rectangular structures, possibly earth-embanked, would have been on the western side of the mound away from the plaza, and a larger, more ephemeral building would have been on the eastern side closer to the plaza. From his analysis of vessel attributes, Boudreaux concluded that a large integrative event had occurred. I come to a similar conclusion. Furthermore, I hypothesize that, regardless of whether structures existed or not, the first mound summit would have probably been used for a relatively short period of time. This summit was possibly used more as a ceremonial stage for public viewing and participation (Lindauer and Blitz 1997). Based on the large amount of production and crafting tools, and faunal evidence depicting undiversified animal remains within Level X-South, this observation appears to hold true. The summit seems to have been intended for more inclusive activities such as feasting.

But what is my reasoning behind this interpretation? Based on the locations and exclusive nature of other public structures within mound contexts, a picture appears consisting of small, enclosed structures being built away from the plaza. Ceremonial or political activities are believed to have occurred within these structures, and evidence derived from Structure 23a and Structures 45a and 45b appear to agree with this interpretation. Restricted access to particular spaces and their exclusive use by groups of people are topics discussed at other sites. Site layout has been shown to provide a sense of formalized space that promotes exclusion at Etowah (Cobb and King 2005:180). At Moundville, mound-summit structures have been shown to be exclusive in nature, being utilized for elite residences, based upon their associated artifacts (Jackson and Scott 2003; Knight 2010).

Based on Level X-South, the opposite seems to have been occurring and the represented inclusive activities are occurring in similar locations as the exclusive events in Structure 23a and the First Habitation Structures. In other words, the Level X-South midden shows evidence for inclusive, large-scale activities occurring adjacent to the plaza, and, speculatively, across the summit's entire surface, whereas the artifacts from the analyzed structures exhibit exclusive activities away from the plaza with more open, inclusive areas closer to the plaza. This suggests to me that the first-construction stage's summit had a different purpose than the premound and later summit structures. The first summit served as the stage for an integrative event for social cohesion. It may have been a renewal ceremony, such as the Green Corn Ceremony (Hudson

1976:365), or even an event celebrating the completion of the first stage in mound construction. Similar interpretations have been presented at Cahokia regarding the representation of social events from midden deposits (Pauketat et al. 2002).

A submound borrow pit at Cahokia is representative of an annual gathering of people involved in integrative events. Pauketat et al (2002: 276) states, "The events of its creation may encapsulate the processes whereby people accepted or accommodated a Cahokian organization, identity, and way of life." Similar to Town Creek, this pit's deposition occurred during the period of the beginning of monumental architecture in the American Bottom (Pauketat et al 2002:263). At Town Creek, I hypothesize a similar event may be reflected from the archaeological material from Level X-South. Although the scale of the event is nowhere near as large as the events at Cahokia, Level X-South represents an integrative event that may have facilitated in the social cohesion of residents at Town Creek.

Unlike at Cahokia and Moundville, mound-building events do not appear to have been associated with the same degree of social change. As Boudreaux (2005:408) has already demonstrated, there was no clear-cut, hierarchical status differentiation among people. Ideas regarding elite versus commoner, or high and low statuses, at Town Creek are hard to verify. Based upon site architecture, and the recurrent structural layout and use of public structures within the mound area, more of an emphasis seems to have been placed upon

domestic or household representation at public or council buildings as opposed to elite representation (Boudreaux 2005:317-347).

The household has been expressed by Hendon (1996:47) as being of critical importance, economically and politically, because it is not separable from the relationships and processes that make up the public domain. This is a particularly important view when thinking about the activities represented within the contexts of my research. By thinking in terms of elite economic and political control, one is ignoring the involvement of the individual and community in ritual participation and performance (Speilmann 2002:195). While, of course, there was probably some manipulation of power by those who had privileged access to exclusive settings, power should be viewed as having an experiential quality. It is something that is acted out, reproduced, contested and transformed in the daily interactions of actors (Cobb 2003:65).

For the early Town Creek occupants, those who had access to exclusive structures or settings were most likely the heads of households or lineages. During the late Town Creek phase, however, something changed that affected village layout, spurred mound construction, and shifted from older individuals to younger individuals within public contexts (Boudreaux 2010:224). Whether this change represented a shift in power and status seen at other Mississippian sites or not, its important to remember that such changes occurred because the inhabitants at Town Creek allowed it.

Level X-South represents an event that was associated with this change in village layout and shifts in power. The feasting, crafting, and construction

activities that went hand-in-hand with this event only occurred because of domestic and community labor. Food preparation and craft production were possible because household members reallocated time and other responsibilities to accomplish these tasks (Hendon 1996:58). At Town Creek, the mound summits served as communal stages. Instead of displaying the power of elites, like Cahokia, Moundville, and Etowah (Cobb 2003; Cobb and King 2005; Knight 2010), these summits were used for the communal sponsoring of feasting and crafting events as well as political decision-making.

Chapter 6: Conclusion

This research at Town Creek had a main objective of determining what activities may have been associated with the mound by looking at five different contexts: Level A, Structure 23a, Level X-North, Level X-South, and the First Habitation Level. These contexts were differentiated stratigraphically and spatially, and, it was hoped that a diachronic view of activities associated with mound contexts could be determined. Another objective was to define Level X by developing a more detailed description of its spatial and stratigraphic location within the mound. In order to compare these contexts, comparative indices were adapted from Knight (2004, 2010) in which artifact classes were utilized so that each class was standardized by ceramic sherds and debitage.

Another objective was to define each context. Level A was a sub-mound midden that most likely represented activities from the early Town Creek Phase (A.D. 1150-1250) up to the point of mound construction (ca. A.D. 1280). Structure 23a was an earth-embanked public structure that was used by a select subset of inhabitants for political or ceremonial activities. The “First Habitation” Level was associated with the second mound summit. Like Structure 23a, this structure was a rectilinear public structure that most likely functioned as a council house for political or ceremonial purposes, again being utilized by an exclusive group.

Until this point, Level X had never been fully analyzed and defined. Coe (1937) originally discovered this midden within the first test trench placed on the

mound. From his profile, this midden was clearly superimposed by the second mound-construction episode, associating it with events taking place on the first mound summit. When Swart (1940) began supervision of mound excavations in 1940, multiple contexts across the mound's flanks were being called Level X. From his profiles, it is evident that he was defining Level X as a layer associated with the later stages of mound use. The flank midden that Swart (1940b,1940c) had encountered superimposed the second mound summit's flanks, associating it with the second and third mound-summit structures. This evidence suggests that two deposits from different events comprise the context described as Level X. Level X-South was associated with activity from the first mound summit while Level X-North could have been associated with the second or third mound summits. It is possible that it contains artifacts from both.

Comparative indices and the faunal assemblages associated with each context were utilized to consider the activities represented. While the saliencies for each artifact class aided in interpretation, it was a combination of the indices, artifact presence/absence data, and faunal analysis that allowed for an interpretation of the activities that were represented.

Structure 23a and the structures associated with the First Habitation Level, Structures 45a and 45b, represented small public buildings. Both of these contexts showed evidence for small-scale production. They had similar faunal assemblages as well. Each contained passenger pigeon, a species that has been associated with exclusive settings at Moundville (Jackson and Scott 2003; Knight 2004). These structures contained relatively little debris, suggesting that

they were regularly cleaned and debris was disposed outside of the structures. Level A and Level X-North are thought to contain this debris. Level A was an extensive midden deposit, and only a small amount of its artifacts were analyzed for this research. Level X-North, on the other hand, was completely analyzed, and it contained the largest percentage of artifacts from this research. Even with such a large sample of artifacts, few activities were determined to be salient. I hypothesize that this is a result of this mound-flank midden's association with multiple contexts.

Level X-South, however, was a discrete deposit that included a wide range of overly represented activities associated with craft production. Its faunal assemblage is also indicative of a large feasting event. This event appears to have been inclusive in nature, and the activities responsible for its deposition probably served as an integrative mechanism for the residents of Town Creek.

While only a broad explanation of activities could be interpreted from this analysis, what is clear is that Level X-South functioned differently from the rest of the contexts. The activities represented from Structure 23a and the First Habitation Level represent exclusive events that would have only been accessible to a subset of Town Creek's inhabitants. Level X-South, though, represents a large, inclusive episode that would have been accessible to a larger portion of Town Creek's inhabitants. Clearly, this mound summit served a different purpose than those before and after it.

I hypothesized that Level X-South functioned similarly to events taking place at Cahokia during the beginning of its episode of extensive mound

construction (Pauketat et al. 2002). The activities responsible for the deposition of Level X-South represent an integrative event that may have facilitated social cohesion at Town Creek. The main difference between this change at Town Creek and the changes at Cahokia, Moundville, and Etowah after mound construction seem to be related to issues of social differentiation and scale. At Town Creek, domestic or household representation in public settings remained an important aspect of political and ceremonial activity. Why there was a switch from domestic to elite representation of the community at other Mississippian sites is debatable, but is most likely a result of what Cobb and King (2005) described as a site's *mos maiorum*, or ancestral cultural traditions. The changes and differences we see between aspects of "Mississippianism" were built off of a society's concepts of time and memory, and they were established from older, regional traditions playing off of the newly introduced Mississippian traditions (Cobb and King 2005:185-187). The idea of a *mos maiorum* stresses the concept of agency in shaping the trajectory of a culture by maintaining ties to its past.

The fact that the submound public buildings and the second and third mound-summit buildings were built in the same locations, involved repeating patterns in architecture, as well as the exclusive use of public structures by a subset of inhabitants representing family or clan lineages is suggestive of such an ancestral custom. The role that Level X-South fulfilled served to reinforce this custom among the inhabitants of Town Creek, entailing a cyclical notion of community-wide involvement in ceremonial and political events.

While the interpretations presented within this research consider only the events occurring within mound contexts at Town Creek, important questions can be brought up concerning the village and domestic structures. My interpretations are based on the assumption of domestic importance at Town Creek. As described earlier, Hendon (1996:47) explains that the household is inseparable from the relationships and processes that make up the public domain.

Future research could be aimed at the examination of domestic structures within Town Creek in order to determine what variation may exist between households. This knowledge might modify the hypotheses brought up in this research. Also, more of a focus upon artifact analysis within public structures, both in pre- and post-mound contexts, could give additional insights regarding the functioning of these buildings. Wherever this research leads, there are still ample amounts of research potential at Town Creek. It is hoped that this research will attest to the applicability of the use of comparative indices and faunal analysis in the comparison and interpretation of contexts within sites.

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Appendix 1. Faunal materials analyzed by Scott (2012).

Provenience	ID	Element	NISP	Char	Grams	Side	Size	Portion	Fusion	Comments	Context 1
34b178	Whitetail deer	Lumb vert	3	0	54.4		Complete		fused	articulate	Structure C
34b178	Whitetail deer	Sacrum	1	0	20.6		1/4-1/2	Ant	fusing		Structure C
34b178	Whitetail deer	Thor vert	2	0	26.3		Complete		fused	articulate	Structure C
34b178	Whitetail deer	Lumb vert	1	0	18.2		Complete		fused		Structure C
34b178	Whitetail deer	Lumb vert	4	0	56.4		Complete		unfused		Structure C
34b178	Whitetail deer	Scapula	1	0	28.9	L	1/2-3/4	Distal			Structure C
34b178	Whitetail deer	Scapula	1	0	14.4	L	1/4-1/2	Distal			Structure C
34b178	Whitetail deer	Humerus	1	0	36.9	R	1/2-3/4	Distal	fused	articulates w/ rad	Structure C
34b178	Whitetail deer	Radius	1	0	14.1	R	1/4-1/2	Prox	fused	articulates w/ hum	Structure C
34b178	Whitetail deer	Ulna	1	0	15.1	R	1/2-3/4	Prox	fused		Structure C
34b178	Whitetail deer	Ulna	2	0	24.3	L	1/2-3/4	Prox	indet/n/a		Structure C
34b178	Whitetail deer	Innominate	1	0	26.7	R	1/2-3/4	Shaft	fused	female	Structure C
34b178	Whitetail deer	Innominate	1	0	23.7	R	1/2-3/4	Shaft	fused	female	Structure C
34b178	Whitetail deer	Innominate	1	0	21.3	L	1/2-3/4	Shaft	fused	female	Structure C
34b178	Whitetail deer	Ischium	1	0	7.2	R	1/2-3/4	Shaft	indet/n/a		Structure C
34b178	Whitetail deer	Femur	1	0	61.6	R	1/2-3/4	Prox	fused	Large	Structure C
34b178	Whitetail deer	Femur	1	0	26.4	R	1/2-3/4	Shaft	indet/n/a	Small	Structure C
34b178	Whitetail deer	Tibia	1	0	44.8	L	1/4-1/2	Prox	fused	Large	Structure C
34b178	Lg mammal	Indet	4	0	7.5	i		shaft		Recent breaks	Structure C
34b178	Turkey	Humerus	1	0	15.2	R	3/4-C				Structure C
34b178	Turkey	Humerus	1	0	7	R	3/4-C			female	Structure C
34b178	Turkey	Tibiotarsus	1	0	3.7	R	< 1/4	Distal		female	Structure C
34b178	Turkey	Coracoid	1	0	3.7	R	3/4-C	Distal		female	Structure C
34b178	Lg bird	Longbone	2	0	0.2	i					Structure C
34b178	Passenger pigeon	Carpometacarpus	1	0	0.1	L	1/2-3/4	Distal			Structure C
34b178	Passenger pigeon	Tibiotarsus	1	0	0.1	R	3/4-C	Distal			Structure C
34b178	Passenger pigeon	Tibiotarsus	1	0	0.4	L	3/4-C	Distal			Structure C
34b178	Passenger pigeon	Tibiotarsus	1	0	0.2	L	3/4-C	Dist shaft			Structure C
34b94	Whitetail deer	Thor vert	3	0	21.5		3/4-C		unfused		Level X, south
34b94	Whitetail deer	Thor vert	1	0	8.4		3/4-C		fused		Level X, south
34b94	Whitetail deer	Lumb vert	1	0	23.7		Complete		fused		Level X, south
34b94	Whitetail deer	Scapula	1	0	47.5	R	3/4-C	Distal	fused		Level X, south
34b94	Whitetail deer	Scapula	1	0	6	L	1/4-1/2	Distal	unfused	6-7 months old	Level X, south
34b94	Whitetail deer	Humerus	1	0	14	R	< 1/4	Prox	fused	Very large	Level X, south
34b94	Whitetail deer	Humerus	1	0	44.9	L	1/2-3/4	Distal	fused	Small	Level X, south
34b94	Whitetail deer	Radius	1	0	24.1	R	1/4-1/2	Prox	fused		Level X, south
34b94	Whitetail deer	Radius	1	0	20.8	R	1/2-3/4	Distal	fused		Level X, south
34b94	Whitetail deer	Radius	1	0	19.4	L	1/4-1/2	Dist shaft	unfused		Level X, south
34b94	Whitetail deer	Ulna	1	0	10.6	L	1/2-3/4	Prox	fused		Level X, south
34b94	Whitetail deer	Metacarpal	1	0	13.1	L	< 1/4	Prox	fused		Level X, south
34b94	Whitetail deer	Metacarpal	1	0	8.5	i	< 1/4	Dist shaft	unfused		Level X, south
34b94	Whitetail deer	Metacarpal	1	0	9.1	i	< 1/4	Distal	fused		Level X, south
34b94	Whitetail deer	Femur	1	0	37.1	L	1/2-3/4	Prox shaft	unfused		Level X, south
34b94	Lg mammal	Rib	3	0	10	i	1/4-1/2		indet/n/a		Level X, south
34b94	Lg mammal	Indet	1	0	0.3	i	< 1/4		indet/n/a		Level X, south
34b94	Whitetail deer	Phalanx 2	2	0	5.1	i	Complete	Shaft	fused		Level X, south
34b94	Turkey	Humerus	1	0	13.9	R	3/4-C	Distal		male	Level X, south
34b94	Turkey	Ulna	1	0	11	L	3/4-C	Shaft		male	Level X, south
34b94	Turkey	Coracoid	1	0	8	R	3/4-C	Prox		male	Level X, south
34b94	Turkey	Scapula	1	0	5.1	L	1/2-3/4	Distal		male	Level X, south
34b94	Turkey	Femur	1	0	9.3	R	3/4-C	Shaft		male	Level X, south
34b94	Turkey	Tibiotarsus	1	0	11.6	R	1/2-3/4	Shaft		male	Level X, south
34b94	Turkey	Tibiotarsus	1	1	4.5	R	3/4-C	Shaft		female	Level X, south
34b94	Turkey	Humerus	1	0	3.1	R				poult (summer)	Level X, south
34b107	Whitetail deer	Humerus	1	0	64.2	R	1/2-3/4	Distal	fused		Level X, south
34b107	Whitetail deer	Calcaneum	1	0	14.1	R	3/4-C	Prox	fused		Level X, south
34b107	Whitetail deer	Calcaneum	1	0	14.6	R	Complete		fusing		Level X, south
34b107	Whitetail deer	Phalanx 1	1	0	5	i	Complete		fused		Level X, south
34b107	Whitetail deer	Phalanx 3	1	0	2.7	i	Complete				Level X, south
34b107	Turkey	Humerus	1	0	25.1	L	3/4-C	Shaft		male	Level X, south
34b107	Turkey	Scapula	1	0	5.3	L	3/4-C	Prox		male	Level X, south
34b107	Turkey	Coracoid	1	0	14.2	L	3/4-C			large male	Level X, south
34b107	Turkey	Carpometacarpus	1	0	5.1	L	3/4-C			large male	Level X, south
34b107	Turkey	Femur	1	0	7.1	L	1/4-1/2	Distal		large male	Level X, south
34b164	Whitetail deer	Radius	1	0	23.2	R	1/4-1/2	Distal	fused		Level A
34b164	Whitetail deer	Metacarpal	1	0	27.9	R	1/2-3/4	Prox	indet/n/a		Level A
34b164	Whitetail deer	Femur	1	0	29.4	R	1/4-1/2	Prox	fused		Level A
34b164	Whitetail deer	Femur	1	0	36.4	L	1/4-1/2	Dist shaft	indet/n/a		Level A
34b164	Whitetail deer	Calcaneum	1	0	15.8	R	3/4-C	Distal	unfused		Level A
34b164	Whitetail deer	Astragalus	2	0	26.7	R	Complete				Level A
34b164	Turkey	Cerv vert	2	0	4.9	i	Complete				Level A
34b164	Turkey	Femur	1	0	7.7	L	1/2-3/4	Prox		male	Level A
34b228	Whitetail deer	Cerv vert	1	0	15.5	i	3/4-C	R1/2	indet/n/a	articulate	Structure C
34b228	Whitetail deer	Metatarsal	1	0	15.6	L	< 1/4	Prox	indet/n/a		Structure C
34b228	Whitetail deer	Metatarsal	1	0	17.9	L	1/4-1/2	Prox	indet/n/a		Structure C
34b228	Whitetail deer	Phalanx 1	1	0	7.1	i	Complete		fused		Structure C

Provenience	ID	Element	NISP	Char	Grams	Side	Size	Portion	Fusion	Comments	Context 1
34b228	Whitetail deer	Mandible	1	0	11.7	L	< 1/4	Cheek			Structure C
34b218(F22)	Longnose gar	Dentary	1	0	6.4	L	Complete			same ind 60-70SL	Structure C
34b218(F22)	Longnose gar	Dentary	1	0	5	R	3/4-C			same ind 60-70SL	Structure C
34b218(F22)	Whitetail deer	Metacarpal	1	0	10.4	L	< 1/4	Prox	indet/n/a		Structure C
34b218(F22)	Whitetail deer	Tibia	1	0	18.6	R	< 1/4	Shaft	indet/n/a		Structure C
34b317	Whitetail deer	Scapula	1	0	15.6	L	1/4-1/2	Distal	fused		Structure C
34b317	Whitetail deer	Astragalus	1	0	12.6	L	Complete				Structure C
34b317	Fox squirrel	Humerus	1	0	1.7	R	Complete		fused	huge!	Structure C
34b317	Turkey	Humerus	1	0	11.5	L	Complete				Structure C
34b317	Turkey	Hind Phalanx 1	1	0	1.7	i	Complete			male	Structure C
314b104	Lg mammal	Longbone	1	1	1.2					calcined	2nd Temple, 6" Sub-plaster Level
34a223	Turkey	Tarsometatarsus	1	0	7.9	L	1/2-3/4	Prox		AWL, male	Structure C
34a226	Raccoon	Fibula	1	0	1	R	3/4-C	Shaft	indet/n/a	AWL	Structure C
314b77	Whitetail deer	Ulna	1	1	1	R	< 1/4	Prox shaft	indet/n/a	calcined	1st Temple, Around Fea. 67
314b77	Lg mammal	Indet	6	6	1.4					calcined	1st Temple, Around Fea. 67
314b77	Lg mammal	Rib/spine	11	11	1.7					calcined	1st Temple, Around Fea. 67
314b77	Lg mammal	Longbone	5	5	4.4					calcined	1st Temple, Around Fea. 67
314b77	Passenger pigeon	Humerus	1	0	0.4	L	Complete			NOTE...NOT CHAR	1st Temple, Around Fea. 67
314b77	Lg bird	Longbone	2	2	0.9					calcined	1st Temple, Around Fea. 67
314b77	Lg bird	Ud Vert	1	0	0.2					NOTE...NOT CHAR	1st Temple, Around Fea. 67
314b77	Sm Mam/Bird	Indet	15	15	0.9					calcined	1st Temple, Around Fea. 67
314b77	Sm Mam/Bird	Longbone	12	12	1.1					calcined	1st Temple, Around Fea. 67
314b77	Unid fish	Ud Vert	1	1	0.1					4mm diameter	1st Temple, Around Fea. 67

Appendix 2. Analyzed Data.

Access	Spec. No.	Site	Field Designated Provenience I	Analytical Provenience	Artifact Class	Type I	Type II	Type III	Material	Length	Width	Thickness	Thickness/Weight	Count
314	a72	Mg2	Sq. 40-50L0-10	1st Habitation	Chipped Stone	Debitage	Flake		Stone					1
314	a72	Mg2	Sq. 40-50L0-10	1st Habitation	Chipped Stone	Tool	Projectile Point	fragment	Stone					1
314	a72	Mg2	Sq. 40-50L0-10	1st Habitation	Chipped Stone	Tool	Projectile Point	fragment	Stone					1
314	a72	Mg2	Sq. 40-50L0-10	1st Habitation	Chipped Stone	Tool	Projectile Point	Triangular fragment	Stone					1
314	a72	Mg2	Sq. 40-50L0-10	1st Habitation	Chipped Stone	Tool	Biface	fragment	Stone					1
314	a72	Mg2	Sq. 40-50L0-10	1st Habitation	Chipped Stone	Tool	Biface	fragment	Stone					1
314	a72	Mg2	Sq. 40-50L0-10	1st Habitation	Chipped Stone	Tool	Projectile Point	pre-form	Stone	32.22	17.25	3.73	0.2162	1
314	a72	Mg2	Sq. 40-50L0-10	1st Habitation	Chipped Stone	Tool	Biface		Stone					1
314	a72	Mg2	Sq. 40-50L0-10	1st Habitation	Chipped Stone	Tool	Bit-tool	perforator	Stone	32.04	14.59	6.4	0.4387	1
314	a72	Mg2	Sq. 40-50L0-10	1st Habitation	Chipped Stone	Tool	Projectile Point	Triangular	Stone	34.28		5.08		1
314	a72	Mg2	Sq. 40-50L0-10	1st Habitation	Chipped Stone	Tool	Projectile Point	Triangular fragment	Stone					1
314	a73	Mg2	Sq. 40-50L0-10	1st Habitation	Ceramic	Pipe	Bowl fragment		Clay					1
314	a150	Mg2	Sq. 40 & 50	1st Habitation	Ceramic	Pottery	Disc		Clay			7.71		1
70	a879	Mg2	Sq. 60	1st Habitation	Chipped Stone	Tool	Projectile Point	fragment	Stone					1
70	a856	Mg2	Sq. 20	1st Habitation	Chipped Stone	Tool	Projectile Point	Triangular fragment	Stone					1
70	a856	Mg2	Sq. 20	1st Habitation	Chipped Stone	Tool	Projectile Point	Triangular fragment	Stone					1
70	a856	Mg2	Sq. 20	1st Habitation	Chipped Stone	Tool	Projectile Point	Triangular fragment	Stone					1
70	a863	Mg2	Sq. 40	1st Habitation	Chipped Stone	Tool	Biface	Blank	Stone	58.96	24.64	9.46	0.3839	1
70	a868	Mg2	Sq. 40L10	1st Habitation	Chipped Stone	Tool	Projectile Point	Pee-Dee Pentagonal	Stone	32.95	23.94	6.11	0.2552	1
70	a858	Mg2	Sq. 30	1st Habitation	Chipped Stone	Tool	Projectile Point	Triangular	Stone		17.9	4.51	0.252	1
70	a860	Mg2	Sq. 30L10	1st Habitation	Chipped Stone	Tool	Bit-tool	Drill	Stone		11.42	4.72	0.4133	1
70	a860	Mg2	Sq. 30L10	1st Habitation	Chipped Stone	Tool	Projectile Point	Triangular	Stone		21.74	10.01	0.4604	1
70	a883	Mg2	Sq. 60L10	1st Habitation	Ground Stone	Tool	abrader		Stone					1
70	a858	Mg2	Sq. 30	1st Habitation	Chipped Stone	Tool	Projectile Point	Pee-dee Pentagonal	Stone	14.91	13.7	1.56	0.1139	1
70	a848	Mg2	Feat. 57	1st Habitation	Chipped Stone	Tool	Projectile Point	Pee-dee Pentagonal	Stone	21.85	14.48	3.14	0.2169	1
70	a848	Mg2	Feat. 57	1st Habitation	Chipped Stone	Tool	Bit-tool	perforatorfragment	Stone					1
70	a848	Mg2	Feat. 57	1st Habitation	Chipped Stone	Tool	Biface	fragment	Stone		20.57	5.8	0.282	1
70	a849	Mg2	Feat. 57	1st Habitation	Chipped Stone	Flake Tool	Bit-tool	Drill	Stone					1
34	a112	Mg2	Sq. 10R10	Level A	Ground Stone	Celt			Greenstone	93.2	48	32.7	0.6813	1
34	a34	Mg2	Sq. BL10	Level A	Ground Stone	Celt			Greenstone	83.6	53.3	33.6	0.6304	1
34	a168	Mg2	Sq. 30L10	Level A	Ceramic	Clay Fragment			Clay	13.7	13.36	6.94	0.5195	1
34	a35	Mg2	Sq. BL0	Level A	Chipped Stone	Tool	Projectile Point	Savannah/hafted	Stone	44.92	32.56	7.62	0.234	1
34	a35	Mg2	Sq. BL0	Level A	Chipped Stone	Tool	Projectile Point	Triangular	Stone	33.53		3.36		1
34	a167	Mg2	Sq. 30L10	Level A	Chipped Stone	Tool	Biface	scraper	Stone					1
34	a165	Mg2	Sq. 30L10	Level A	Chipped Stone	Tool	Projectile Point	fragment(?)	Stone					1
34	a165	Mg2	Sq. 30L10	Level A	Chipped Stone	Tool	Projectile Point	fragment	Stone					1
34	a165	Mg2	Sq. 30L10	Level A	Chipped Stone	Tool	Projectile Point	Triangular	Stone					1
34	a165	Mg2	Sq. 30L10	Level A	Chipped Stone	Tool	Bit-tool	Triangular-drill	Stone		10.71	3.86	0.3604	1
34	a165	Mg2	Sq. 30L10	Level A	Chipped Stone	Tool	Projectile Point	Triangular	Stone		9.83	3.52	0.3581	1
70	a840	Mg2	Sq. 80L10	Level A	Chipped Stone	Tool	Biface	Knife/Blank	Stone		28.57	8.4	0.294	1
70	a840	Mg2	Sq. 80L10	Level A	Chipped Stone	Tool	Biface	fragment	Stone					1
70	a826	Mg2	Sq. 80	Level A	Chipped Stone	Tool	Biface	Knife fragment	Stone		29.49	6.91	0.2343	1
70	a826	Mg2	Sq. 80	Level A	Chipped Stone	Tool	Projectile Point	Triangular pre-form	Stone	33.79	13.11	7.15	0.5454	1
70	a826	Mg2	Sq. 80	Level A	Chipped Stone	Tool	Projectile Point	fragment	Stone					1
70	a826	Mg2	Sq. 80	Level A	Chipped Stone	Tool	Projectile Point	tip-fragment	Stone					1
70	a826	Mg2	Sq. 80	Level A	Chipped Stone	Tool	Projectile Point	base fragment	Stone					1
70	a826	Mg2	Sq. 80	Level A	Chipped Stone	Tool	Flake	scraper	Stone					1
70	a843	Mg2	Sq. 80L10	Level A	Chipped Stone	Tool	Projectile Point	fragment	Stone					1
70	a843	Mg2	Sq. 80L10	Level A	Chipped Stone	Tool	Projectile Point	Triangular pre-form	Stone	35.05	17.98	6.75	0.3754	1
70	a843	Mg2	Sq. 80L10	Level A	Chipped Stone	Tool	Bit-tool	fragment	Stone					1
70	a843	Mg2	Sq. 80L10	Level A	Chipped Stone	Tool	Projectile Point	fragment	Stone		17.01	6.7	0.3939	1
70	a843	Mg2	Sq. 80L10	Level A	Chipped Stone	Tool	Biface	fragment	Stone					1
70	a843	Mg2	Sq. 80L10	Level A	Chipped Stone	Tool	Projectile Point/Biface	Triangular fragment	Stone					1
70	a843	Mg2	Sq. 80L10	Level A	Chipped Stone	Tool	Projectile Point	fragment	Stone					1
70	a843	Mg2	Sq. 80L10	Level A	Chipped Stone	Tool	Projectile Point	fragment	Stone					1
70	a843	Mg2	Sq. 80L10	Level A	Chipped Stone	Tool	Projectile Point	fragment	Stone					1
70	a843	Mg2	Sq. 80L10	Level A	Chipped Stone	Tool	Projectile Point	fragment	Stone					1
70	a832	Mg2	Sq. 80L10	Level A	Chipped Stone	Tool	Bit-tool	perforator	Stone					1
70	a832	Mg2	Sq. 80L10	Level A	Chipped Stone	Tool	Projectile Point	Triangular	Stone		14.15	5.1	0.3604	1
70	a832	Mg2	Sq. 80L10	Level A	Chipped Stone	Tool	Projectile Point	Triangular fragment	Stone					1
70	a832	Mg2	Sq. 80L10	Level A	Chipped Stone	Tool	Projectile Point	Triangular	Stone		15.36	4.94	0.3216	1
70	a832	Mg2	Sq. 80L10	Level A	Chipped Stone	Tool	Projectile Point	fragment	Stone					1
70	a832	Mg2	Sq. 80L10	Level A	Chipped Stone	Tool	Projectile Point	fragment	Stone					1
70	a832	Mg2	Sq. 80L10	Level A	Chipped Stone	Tool	Projectile Point	fragment	Stone					1
70	a832	Mg2	Sq. 80L10	Level A	Chipped Stone	Tool	Projectile Point	fragment	Stone					1
70	a832	Mg2	Sq. 80L10	Level A	Chipped Stone	Tool	Projectile Point	fragment	Stone					1
70	a832	Mg2	Sq. 80L10	Level A	Chipped Stone	Tool	Biface	fragment	Stone					1
70	a832	Mg2	Sq. 80L10	Level A	Chipped Stone	Tool	Biface	fragment	Stone					1
70	a832	Mg2	Sq. 80L10	Level A	Chipped Stone	Tool	Biface	fragment	Stone					1
70	a846	Mg2	Sq. 80L10	Level A	Ceramic	Pottery	Disc		Clay	40.52		4.79		1
70	a844	Mg2	Sq. 80L10	Level A	Chipped Stone	Tool	Bit-tool	Drill	Stone	29.51	18.67	4.33	0.2319	1
70	a841	Mg2	Sq. 80L10	Level A	Chipped Stone	Tool	Biface	end-scraper	Stone					1
70	a732	Mg2	Sq. 80L10	Level A	Chipped Stone	Tool	Biface	side-scraper	Stone		28.77	9.69	0.3368	1
34	a64	Mg2	Feat. VI (Sq. 0R	Level A	Chipped Stone	Tool	Projectile Point	Guilford	Stone		22.75	10.68	0.4695	1
34	a64	Mg2	Feat. VI (Sq. 0R	Level A	Chipped Stone	Tool	Projectile Point		Stone		13.8	4.11	0.2978	1
34	a64	Mg2	Feat. VI (Sq. 0R	Level A	Chipped Stone	Tool	Projectile Point	Triangular	Stone		12.23	2.76	0.2257	1
70	a708	Mg2	Sq. 80	Level X-North	Chipped Stone	Tool	Biface	side-scraper	Stone	24	18.26	6.76	0.3702	1
70	a708	Mg2	Sq. 80	Level X-North	Chipped Stone	Tool	Biface	fragment	Stone					1
70	a708	Mg2	Sq. 80	Level X-North	Chipped Stone	Tool	Biface	fragment	Stone					1
70	a708	Mg2	Sq. 80	Level X-North	Chipped Stone	Tool	Biface	fragment	Stone					1
70	a708	Mg2	Sq. 80	Level X-North	Chipped Stone	Tool	Biface	fragment	Stone					1
70	a708	Mg2	Sq. 80	Level X-North	Chipped Stone	Tool	Projectile Point	fragment	Stone			4.2		1
70	a708	Mg2	Sq. 80	Level X-North	Chipped Stone	Tool	Projectile Point	fragment	Stone					1
70	a708	Mg2	Sq. 80	Level X-North	Chipped Stone	Tool	Projectile Point	fragment	Stone					1
70	a708	Mg2	Sq. 80	Level X-North	Chipped Stone	Tool	Projectile Point	fragment	Stone					1
70	a708	Mg2	Sq. 80	Level X-North	Chipped Stone	Tool	Projectile Point	fragment	Stone					1
70	a708	Mg2	Sq. 80	Level X-North	Chipped Stone	Tool	Projectile Point	fragment	Stone					1
70	a749	Mg2	Sq. 40L30	Level X-North	Chipped Stone	Tool	Biface	Blank	Stone		35.42	15.36	0.4337	1
70	a749	Mg2	Sq. 40L30	Level X-North	Chipped Stone	Tool	Biface	pre-form	Stone		40.65	11.43	0.2812	1
70	a720	Mg2	Sq. 80L20	Level X-North	Chipped Stone	Tool	Projectile Point	Triangular	Stone		12.17	3.66	0.3007	1
70	a720	Mg2	Sq. 80L20	Level X-North	Chipped Stone	Tool	Biface	fragment	Stone		39.17	11.66	0.2977	1
70	a804	Mg2	Sq. 70L30	Level X-North	Chipped Stone	Tool	bit-tool	perforator fragment	Stone					1
70	a804	Mg2	Sq. 70L30	Level X-North	Chipped Stone	Tool	projectile Point	fragment	Stone					1
70	a804	Mg2	Sq. 70L30	Level X-North	Chipped Stone	Tool	projectile Point	fragment	Stone					1
70	a804	Mg2	Sq. 70L30	Level X-North	Chipped Stone	Tool	undetermined		Stone					1
70	a851	Mg2	Sq. 40-70L30-4	Level X-North	Chipped Stone	Tool	Projectile Point	Triangular	Stone	23.49	14.31	4.75	0.3319	1
70	a743	Mg2	Sq. 80	Level X-North	Chipped Stone	Tool	Biface	Blank	Stone	117.6	28.28	24.42	0.8635	1

Access	Spec. No.	Site	Field Designated Provenience I	Analytical Provenience	Artifact Class	Type I	Type II	Type III	Material	Length	Width	Thickness	Thickness/Weight	Count
70	a659	Mg2	Sq. 90	Level X-North	Chipped Stone	Tool	Biface		Stone			8.91		1
70	a659	Mg2	Sq. 90	Level X-North	Chipped Stone	Tool	Biface		Stone			8.84		1
70	a659	Mg2	Sq. 90	Level X-North	Chipped Stone	Tool	Biface	Blank	Stone	65.3	30.14	18.05	0.5989	1
70	a658	Mg2	Sq. 90	Level X-North	Chipped Stone	Tool	Projectile Point	base fragment	Stone					1
70	a658	Mg2	Sq. 90	Level X-North	Chipped Stone	Tool	Projectile Point	fragment	Stone		21.83	4.15	0.1901	1
70	a658	Mg2	Sq. 90	Level X-North	Chipped Stone	Tool	Projectile Point	Triangular pre-form(?)	Stone	30.25	13.32	6.42	0.482	1
70	a658	Mg2	Sq. 90	Level X-North	Chipped Stone	Tool	Projectile Point	Triangular	Stone	24.45	11.85	3.33	0.281	1
70	a658	Mg2	Sq. 90	Level X-North	Chipped Stone	Tool	Projectile Point	Pee-dee Pentagonal	Stone	26.12	13.78	4.11	0.2983	1
70	a658	Mg2	Sq. 90	Level X-North	Chipped Stone	Tool	Projectile Point	Triangular fragment	Stone					1
70	a658	Mg2	Sq. 90	Level X-North	Chipped Stone	Tool	Projectile Point	Triangular fragment	Stone					1
70	a658	Mg2	Sq. 90	Level X-North	Chipped Stone	Tool	Projectile Point	Triangular fragment	Stone					1
70	a658	Mg2	Sq. 90	Level X-North	Chipped Stone	Tool	Projectile Point	fragment	Stone					1
70	a658	Mg2	Sq. 90	Level X-North	Chipped Stone	Tool	Biface	Knife	Stone		40.29	11.76	0.2919	1
70	a658	Mg2	Sq. 90	Level X-North	Chipped Stone	Tool	Biface	fragment	stone					1
70	a668	Mg2	Sq. 90L10	Level X-North	Chipped Stone	Tool	Projectile Point	base fragment	Stone					1
70	a668	Mg2	Sq. 90L10	Level X-North	Chipped Stone	Tool	Projectile Point	Triangular fragment	Stone		13.68	3.81	0.2785	1
70	a668	Mg2	Sq. 90L10	Level X-North	Chipped Stone	Tool	Projectile Point	Pee-dee Pentagonal T	Stone	24.69	15.12	4.02	0.2659	1
70	a668	Mg2	Sq. 90L10	Level X-North	Chipped Stone	Tool	Projectile Point	Triangular fragment	Stone			3.68		1
70	a668	Mg2	Sq. 90L10	Level X-North	Chipped Stone	Tool	Projectile Point	Triangular fragment	Stone					1
70	a668	Mg2	Sq. 90L10	Level X-North	Chipped Stone	Tool	Projectile Point	Triangular fragment	Stone					1
70	a668	Mg2	Sq. 90L10	Level X-North	Chipped Stone	Tool	Projectile Point	fragment	Stone					1
70	a668	Mg2	Sq. 90L10	Level X-North	Chipped Stone	Tool	Projectile Point	fragment	Stone					1
70	a793	Mg2	Sq. 70L30	Level X-North	Chipped Stone	Tool	Projectile Point	Kirk/scraper	stone	37.28		3.94		1
70	a793	Mg2	Sq. 70L30	Level X-North	Chipped Stone	Tool	Biface	Blank	stone	51.64	29.44	12.06	0.4096	1
70	a793	Mg2	Sq. 70L30	Level X-North	Chipped Stone	Tool	Biface	end-scraper	Stone					1
70	a793	Mg2	Sq. 70L30	Level X-North	Chipped Stone	Tool	Projectile Point	Triangular fragment	Stone		16.37	4.41	0.2694	1
70	a793	Mg2	Sq. 70L30	Level X-North	Chipped Stone	Tool	Biface	fragment	Stone		23.91	6.05	0.253	1
70	a793	Mg2	Sq. 70L30	Level X-North	Chipped Stone	Tool	Projectile Point	Triangular fragment	Stone		15.72	3.44	0.2188	1
70	a793	Mg2	Sq. 70L30	Level X-North	Chipped Stone	Tool	Projectile Point	fragment	Stone		15.81	4.5	0.2846	1
70	a793	Mg2	Sq. 70L30	Level X-North	Chipped Stone	Tool	Projectile Point	fragment	Stone					1
70	a793	Mg2	Sq. 70L30	Level X-North	Chipped Stone	Tool	Projectile Point	fragment	Stone					1
70	a742	Mg2	Sq. 80	Level X-North	Chipped Stone	Tool	Projectile Point	Triangular	Stone		14.19	3.47	0.2445	1
70	a742	Mg2	Sq. 80	Level X-North	Chipped Stone	Tool	Projectile Point	fragment	Stone			3.8		1
70	a798	Mg2	Sq. 30L30	Level X-North	Chipped Stone	Tool	Biface	end-scraper	Stone					1
70	a798	Mg2	Sq. 30L30	Level X-North	Chipped Stone	Tool	Projectile Point	Triangular	Stone	25.95	13.86	3.76	0.2713	1
70	a798	Mg2	Sq. 30L30	Level X-North	Chipped Stone	Tool	Projectile Point	Triangular fragment	Stone					1
70	a796	Mg2	Sq. 40L30	Level X-North	Chipped Stone	Tool	Projectile Point	pre-form	Stone	33.02	11.84	7.93	0.6698	1
70	a796	Mg2	Sq. 40L30	Level X-North	Chipped Stone	Tool	Projectile Point	base fragment	Stone					1
70	a796	Mg2	Sq. 40L30	Level X-North	Chipped Stone	Tool	Biface	fragment	Stone					1
70	a796	Mg2	Sq. 40L30	Level X-North	Chipped Stone	Tool	Biface	fragment	Stone					1
70	a800	Mg2	Sq. 40L30	Level X-North	Chipped Stone	Tool	Biface		Stone					1
70	a800	Mg2	Sq. 40L30	Level X-North	Chipped Stone	Tool	Biface	fragment	Stone					1
70	a735	Mg2	Sq. 30L30	Level X-North	Chipped Stone	Tool	Projectile Point	Triangular fragment	Stone		21.2	4.48	0.2113	1
70	a735	Mg2	Sq. 30L30	Level X-North	Chipped Stone	Tool	Projectile Point	Triangular fragment	Stone			3.72		1
70	a735	Mg2	Sq. 30L30	Level X-North	Chipped Stone	Tool	Projectile Point	Triangular fragment	Stone					1
70	a788	Mg2	Sq. 60L30	Level X-North	Chipped Stone	Tool	Projectile Point	fragment	Stone					1
70	a788	Mg2	Sq. 60L30	Level X-North	Chipped Stone	Tool	Projectile Point	Triangular fragment	Stone					1
70	a788	Mg2	Sq. 60L30	Level X-North	Chipped Stone	Tool	Projectile Point	fragment	Stone					1
70	a788	Mg2	Sq. 60L30	Level X-North	Chipped Stone	Tool	Projectile Point	fragment	Stone		29.03	6.15	0.2118	1
70	a788	Mg2	Sq. 60L30	Level X-North	Chipped Stone	Tool	Biface	oval-scraper(?)	Stone	32.16	24.22	6.7	0.2766	1
70	a788	Mg2	Sq. 60L30	Level X-North	Chipped Stone	Tool	Biface	side-scraper(?)	Stone	35.6	20.51	5.49	0.2677	1
70	a788	Mg2	Sq. 60L30	Level X-North	Chipped Stone	Tool	Biface	tip-fragment	Stone		20.17	6.81	0.3376	1
70	a788	Mg2	Sq. 60L30	Level X-North	Chipped Stone	Tool	Biface	fragment	Stone		30.21	10.15	0.336	1
70	a788	Mg2	Sq. 60L30	Level X-North	Chipped Stone	undetermined								1
70	a753	Mg2	Sq. 50L30	Level X-North	Chipped Stone	Tool	Projectile Point	pre-form	Stone	46.5	24.44	7.54	0.3085	1
70	a753	Mg2	Sq. 50L30	Level X-North	Chipped Stone	Tool	Biface	fragment	Stone			5.21		1
70	a753	Mg2	Sq. 50L30	Level X-North	Chipped Stone	Tool	Biface	fragment	Stone		35.48	17.23	0.4856	1
70	a753	Mg2	Sq. 50L30	Level X-North	Chipped Stone	Tool	Projectile Point	fragment	Stone		23.01	6.52	0.2834	1
70	a753	Mg2	Sq. 50L30	Level X-North	Chipped Stone	Tool	Biface	fragment	Stone					1
70	a753	Mg2	Sq. 50L30	Level X-North	Chipped Stone	Tool	Projectile Point	fragment	Stone					1
70	a753	Mg2	Sq. 50L30	Level X-North	Chipped Stone	Tool	Projectile Point	fragment	Stone					1
70	a753	Mg2	Sq. 50L30	Level X-North	Chipped Stone	Tool	Projectile Point	fragment	Stone					1
70	a753	Mg2	Sq. 50L30	Level X-North	Chipped Stone	Tool	Projectile Point	fragment	Stone					1
70	a753	Mg2	Sq. 50L30	Level X-North	Chipped Stone	Tool	Projectile Point	fragment	Stone					1
70	a753	Mg2	Sq. 50L30	Level X-North	Chipped Stone	Tool	Projectile Point	fragment	Stone					1
70	a753	Mg2	Sq. 50L30	Level X-North	Chipped Stone	Tool	Projectile Point	fragment	Stone					1
70	a753	Mg2	Sq. 50L30	Level X-North	Chipped Stone	Tool	Biface	fragment	Stone					1
70	a753	Mg2	Sq. 50L30	Level X-North	Chipped Stone	Tool	Biface	Scraper(?)	Stone					1
70	a753	Mg2	Sq. 50L30	Level X-North	Chipped Stone	Tool	Biface	fragment	Stone					1
70	a753	Mg2	Sq. 50L30	Level X-North	Chipped Stone	Tool	Biface(?)	side-scraper	Stone					1
70	a718	Mg2	Sq. 80L10	Level X-North	Chipped Stone	Tool	Biface	Knife	Stone			6.61		1
70	a718	Mg2	Sq. 80L10	Level X-North	Chipped Stone	Tool	Biface	fragment	Stone			5.28		1
70	a718	Mg2	Sq. 80L10	Level X-North	Chipped Stone	Tool	Biface	fragment	Stone		28.3	10.17	0.3594	1
70	a718	Mg2	Sq. 80L10	Level X-North	Chipped Stone	Tool	Bit-tool	fragment	Stone		9.21	3.02	0.3279	1
70	a718	Mg2	Sq. 80L10	Level X-North	Chipped Stone	Tool	Projectile Point	Triangular fragment	Stone					1
70	a718	Mg2	Sq. 80L10	Level X-North	Chipped Stone	Tool	Biface	scraper fragment	Stone		26.25	5.39	0.2053	1
70	a718	Mg2	Sq. 80L10	Level X-North	Chipped Stone	Tool	Biface	fragment	Stone					1
70	a718	Mg2	Sq. 80L10	Level X-North	Chipped Stone	Tool	Projectile Point	fragment	Stone					1
70	a718	Mg2	Sq. 80L10	Level X-North	Chipped Stone	Tool	Bit-tool	fragment	Stone					1
70	a718	Mg2	Sq. 80L10	Level X-North	Chipped Stone	Tool	Projectile Point	fragment	Stone					1
70	a718	Mg2	Sq. 80L10	Level X-North	Chipped Stone	Tool	Projectile Point	fragment	Stone					1
70	a724	Mg2	Sq. 40L30	Level X-North	Chipped Stone	Tool	Projectile Point	Pee-dee Pentagonal	Stone	25.49	11.32	4.69	0.4143	1
70	a724	Mg2	Sq. 40L30	Level X-North	Chipped Stone	Tool	Projectile Point	Triangular	Stone	20.76	11.27	1.5	0.1331	1
70	a724	Mg2	Sq. 40L30	Level X-North	Chipped Stone	Tool	Projectile Point	Triangular fragment	Stone		18.36	5.04	0.2745	1
70	a724	Mg2	Sq. 40L30	Level X-North	Chipped Stone	Tool	Projectile Point	fragment	Stone					1
70	a724	Mg2	Sq. 40L30	Level X-North	Chipped Stone	Tool	Projectile Point	fragment	Stone					1
70	a724	Mg2	Sq. 40L30	Level X-North	Chipped Stone	Tool	Projectile Point	fragment	Stone		19.65	3.67	0.1868	1
70	a724	Mg2	Sq. 40L30	Level X-North	Chipped Stone	Tool	Projectile Point	fragment	Stone		17.43	5.04	0.2892	1
70	a724	Mg2	Sq. 40L30	Level X-North	Chipped Stone	Tool	Bit-tool	fragment	Stone		15.53	5.15	0.3316	1
70	a724	Mg2	Sq. 40L30	Level X-North	Chipped Stone	Tool	Projectile Point	fragment	Stone					1
70	a724	Mg2	Sq. 40L30	Level X-North	Chipped Stone	Tool	Projectile Point	Triangular	Stone		19.06	6.74	0.3536	1
70	a728	Mg2	Sq. 40L30	Level X-North	Chipped Stone	Tool	Chopper		Stone	54.15	46.37	25.88	0.5581	1
70	a737	Mg2	Sq. 30L30	Level X-North	Groundstone	Tool	Hammerstone		Stone					1
70	a663	Mg2	Sq. 90	Level X-North	Groundstone	Tool	Hammerstone		Stone					1
70	a707	Mg2	Sq. 80	Level X-North	Ceramic	Pottery	Disc		Clay	36.05		7.57		1
70	a763	Mg2	Sq. 50L30	Level X-North	Ceramic	Pottery	Disc		Clay	24.81		6.92		1
70	a667	Mg2	Sq. 90L10	Level X-North	Ceramic	Pottery	Disc		Clay	36.1		8.96		1

Access	Spec. No.	Site	Field Designated Provenience I	Analytical Provenience	Artifact Class	Type I	Type II	Type III	Material	Length	Width	Thickness	Thickness/Weight	Count
70	a667	Mg2	Sq. 90L10	Level X-North	Ceramic	Pottery	Disc		Clay	35.64		14.33		1
70	a661	Mg2	Sq. 90	Level X-North	Ceramic	Pottery	Disc		Clay	37.82		8.69		1
70	a661	Mg2	Sq. 90	Level X-North	Ceramic	Pottery	Disc		Clay	32.63		7.37		1
70	a661	Mg2	Sq. 90	Level X-North	Ceramic	Pottery	Disc		Clay	22.02		10.16		1
70	a801	Mg2	Sq. 40L30	Level X-North	Ceramic	Pottery	Coil		Clay					1
70	a725	Mg2	Sq. 40L30	Level X-North	Ceramic	Pottery	Pipe	stem fragment	Clay					1
70	a725	Mg2	Sq. 40L30	Level X-North	Ceramic	Pottery	Pipe	stem fragment	Clay					1
70	a725	Mg2	Sq. 40L30	Level X-North	Ceramic	Pottery	Pipe	bowl fragment	Clay					1
70	a666	Mg2	Sq. 90	Level X-North	Ceramic	Pottery	Coil		Clay					1
70	a708	Mg2	Sq. 80	Level X-North	Chipped Stone	Tool	Projectile Point	fragment	Stone		26.74	3.73	0.1395	1
70	a708	Mg2	Sq. 80	Level X-North	Chipped Stone	Tool	Projectile Point	Pee-dee Pentagonal	Stone	20.53	16.36	3.16	0.1932	1
70	a708	Mg2	Sq. 80	Level X-North	Chipped Stone	Tool	Projectile Point	Pee-dee	Stone		21.91	3.91	0.1785	1
70	a708	Mg2	Sq. 80	Level X-North	Chipped Stone	Tool	Projectile Point	Pee-dee Pentagonal	Stone	20.17	18.71	4.48	0.2394	1
70	a708	Mg2	Sq. 80	Level X-North	Chipped Stone	Tool	Projectile Point	preform (?)	Stone		17.36	7.76	0.447	1
70	a753	Mg2	Sq. 50L30	Level X-North	Chipped Stone	Tool	Projectile Point	Triangular	Stone	20.1		3.82		1
70	a753	Mg2	Sq. 50L30	Level X-North	Chipped Stone	Tool	Projectile Point	Triangular	Stone	24.13	17.24	3.6	0.2088	1
70	a753	Mg2	Sq. 50L30	Level X-North	Chipped Stone	Tool	Bit-tool	Drill	Stone	29.03	16.59	3.57	0.2152	1
70	a753	Mg2	Sq. 50L30	Level X-North	Chipped Stone	Tool	unidentified	fragment	Stone					1
70	a753	Mg2	Sq. 50L30	Level X-North	Chipped Stone	Tool	Projectile Point	Big Sandy Serrated	Stone		16.19	7.06	0.4361	1
70	a753	Mg2	Sq. 50L30	Level X-North	Chipped Stone	Tool	Projectile Point	Archaic	Stone		11.28	4.08	0.3617	1
70	a658	Mg2	Sq. 90	Level X-North	Chipped Stone	Tool	Projectile Point	Knife	Stone	47.04	19.19	6.59	0.3434	1
70	a658	Mg2	Sq. 90	Level X-North	Chipped Stone	Tool	Projectile Point	Pee-dee Pentagonal	Stone	25.02	15.82	3.2	0.2023	1
70	a658	Mg2	Sq. 90	Level X-North	Chipped Stone	Tool	Projectile Point	Pee-Dee Pentagonal	Stone	18.73	16.82	3.28	0.195	1
70	a658	Mg2	Sq. 90	Level X-North	Chipped Stone	Tool	Projectile Point	Pee-dee Pentagonal	Stone	27.2	17.11	3.6	0.2104	1
70	a658	Mg2	Sq. 90	Level X-North	Chipped Stone	Tool	Projectile Point	Pee-dee Pentagonal	Stone	24.23	16.23	3.75	0.2311	1
70	a658	Mg2	Sq. 90	Level X-North	Chipped Stone	Tool	Projectile Point	Hardaway(?)	Stone			6.25		1
70	a658	Mg2	Sq. 90	Level X-North	Chipped Stone	Tool	Projectile Point	unidentifiable	Stone		17.73	5	0.282	1
70	a724	Mg2	Sq. 40L30	Level X-North	Chipped Stone	Tool	Projectile Point	Yadkin	Stone	26.24	11.11	3.18	0.2862	1
70	a724	Mg2	Sq. 40L30	Level X-North	Chipped Stone	Tool	Projectile Point	Morrow Mountain II	Stone		15.58	7.24	0.4647	1
70	a724	Mg2	Sq. 40L30	Level X-North	Chipped Stone	Tool	Bit-tool/Projectile Point	Triangular Drill	Stone		9.22	3.26	0.3536	1
70	a724	Mg2	Sq. 40L30	Level X-North	Chipped Stone	Tool	Bit-tool/Projectile Point	Yadkin Drill	Stone		8.63	2.99	0.3465	1
70	a735	Mg2	Sq. 30L30	Level X-North	Chipped Stone	Tool	Projectile Point	Kirk Corner-nothced	Stone		30.8	7.37	0.2393	1
70	a735	Mg2	Sq. 30L30	Level X-North	Chipped Stone	Tool	Projectile Point	Triangular	Stone	20.79	7.83	3.06	0.3908	1
70	a735	Mg2	Sq. 30L30	Level X-North	Chipped Stone	Tool	Bit-tool	perforator/drill	Stone	21.97	19.55	4	0.2046	1
70	a735	Mg2	Sq. 30L30	Level X-North	Chipped Stone	Tool	Projectile Point	Pee-dee Pentagonal	Stone	19.92	15.26	3.59	0.2353	1
70	a750	Mg2	Sq. 40L30	Level X-North	Chipped Stone	Tool	Bit-tool	Perforator	Stone			8.4		1
70	a733	Mg2	Sq. 30L30	Level X-North	Chipped Stone	Tool	Bit-tool	Drill	Stone		11.11	5.68	0.5113	1
70	a718	Mg2	Sq. 80L10	Level X-North	Chipped Stone	Tool	Projectile Point	Pee-dee Pentagonal	Stone	23.08	17.34	3.07	0.177	1
70	a718	Mg2	Sq. 80L10	Level X-North	Chipped Stone	Tool	Bit-tool/Projectile Point	Triangular	Stone	23.39	8.13	3.14	0.3862	1
70	a794	Mg2	Sq. 70L30	Level X-North	Chipped Stone	Tool	Bit-tool	Perforator	Stone	35.31	8.03	4.26	0.5305	1
70	a660	Mg2	Sq. 90	Level X-North	Chipped Stone	Tool	Bit-tool	Drill	Stone	25.92	11.48	6.15	0.5357	1
70	a660	Mg2	Sq. 90	Level X-North	Chipped Stone	Tool	Bit-tool	Drill	Stone		11.25	5.71	0.5076	1
70	a751	Mg2	Sq. 40L30	Level X-North	Chipped Stone	Tool	Projectile Point	unidentifiable	Stone	43.42	22.95	4.84	0.2109	1
70	a784	Mg2	Sq. 60L30	Level X-North	Chipped Stone	Tool	Bit-tool	Drill	Stone	28.81	9.54	3.6	0.3774	1
70	a734	Mg2	Sq. 30L30	Level X-North	Ceramic	Pottery	Disc		Clay	30.62		7.41		1
70	a734	Mg2	Sq. 30L30	Level X-North	Ceramic	Pottery	Disc		Clay	27.92		11.12		1
70	a736	Mg2	Sq. 30L30	Level X-North	Ceramic	Pipe	Bowl fragment		Clay					1
70	a665	Mg2	Sq. 90	Level X-North	Chipped Stone	Tool	Biface	Blank/Core	Stone		69.7	38.12		1
34	a105	Mg2	Sq. 10R10	Level X-South	Ground Stone	Celt			Greenstone	39.1	40	20.5	0.5125	1
34	a101	Mg2	Sq. BL10	Level X-South	Ground Stone	Abrader	Grooved		Sandstone					1
34	a99	Mg2	Sq. BL10	Level X-South	Ground Stone	tabular	cutting board		slate (?)			15		1
34	a98	Mg2	Sq. BL10	Level X-South	Ceramic	Pipe	Stem fragment		Clay					1
34	a100	Mg2	Sq. BL10	Level X-South	Ceramic	Disc	Disc		Clay					2
34	a14	Mg2	Sq. 0R10	Level X-South	Chipped Stone	Tool	Bit-tool	Drill	Stone		8.62	4.77	0.5534	1
34	a97	Mg2	Sq. BL10	Level X-South	Chipped Stone	Tool	Biface	end-scraper	Stone					1
34	a97	Mg2	Sq. BL10	Level X-South	Chipped Stone	Tool	Projectile Point	Triangular fragment	Stone					1
34	a97	Mg2	Sq. BL10	Level X-South	Chipped Stone	Tool	Projectile Point	Triangular	Stone	32.89	12.86	6.93	0.5389	1
34	a97	Mg2	Sq. BL10	Level X-South	Chipped Stone	Tool	Projectile Point	Triangular	Stone		9.51	3.42	0.3596	1
34	a97	Mg2	Sq. BL10	Level X-South	Chipped Stone	Tool	Projectile Point	fragment	Stone			4.74		1
34	a97	Mg2	Sq. BL10	Level X-South	Chipped Stone	Tool	Biface	fragment	Stone					1
70	a642	Mg2	Sq. 10	Level X-South	Chipped Stone	Tool	Bit-tool	Drill	Stone					1
70	a642	Mg2	Sq. 10	Level X-South	Chipped Stone	Tool	Bit-tool	Drill	Stone					1
70	a642	Mg2	Sq. 10	Level X-South	Chipped Stone	Tool	Projectile Point		Stone					1
70	a642	Mg2	Sq. 10	Level X-South	Chipped Stone	Tool	Projectile Point		Stone					1
70	a642	Mg2	Sq. 10	Level X-South	Chipped Stone	Tool	Biface	fragment	Stone					1
34	a2	Mg2	Sq. 0R10	Level X-South	Sheet Copper	Fragment			Copper					2
70	a641	Mg2	Sq. 10	Level X-South	Ceramic	Pottery	Disc		Clay	34.33		7.9		1
34	a32	Mg2	Sq. 0R10	Level X-South	Ground Stone	Disc	Disc		Stone	31.83	30.44	16.05	0.5273	1
34	a216	Mg2	Feat. XXII	Structure 23a	Ground Stone	Pendant	unfinished	ornament	unknown	69.26	21.16	4.1	0.1938	1
34	a222	Mg2	Sq. 30R40	Structure 23a	Ground Stone	Pigment	decorative		Graphite					1
34	a221	Mg2	Sq. 30R40	Structure 23a	Ground Stone	Disc	Disc Fragment		Stone					1
34	a171	Mg2	Sq. 30L10	Structure 23a	Ceramic	Bead			clay	18.38	12.96			1
34	a226	Mg2	Sq. 30R40	Structure 23a	Bone	Needle			Bone	71.34		4		1
34	a223	Mg2	Sq. 30R40	Structure 23a	Bone	Awl			Bone	104.61		8.54		1
34	a224	Mg2	Sq. 30R40	Structure 23a	Chipped Stone	Tool	Projectile Point	Pee-dee Pentagonal	Stone	28.14	20.16	5.33	0.2644	1
34	a224	Mg2	Sq. 30R40	Structure 23a	Chipped Stone	Tool	Projectile Point	Triangular	Stone	27.01	13.88	3.72	0.268	1
34	a285	Mg2	Sq. 40R30	Structure 23a	Ceramic	Pipe	Bowl fragment		Clay					1
34	a177	Mg2	Sq. 30R20	Structure 23a	Sheet Copper	Fragment			Copper					1
34	a176	Mg2	Sq. 30R20	Structure 23a	Chipped Stone	Tool	Projectile Point	Triangular	Stone	23.07	11.58	3.56	0.3074	1
70	a1190	Mg2	Feat. 44 FS#70-43		Chipped Stone	Tool	Projectile Point	Triangular	Stone		13.66	4.04	0.2958	1