

ABSTRACT

Brian C. Choate. **STRATIGRAPHIC INVESTIGATIONS AT BARBER CREEK (31PT259): RECONSTRUCTING THE CULTURE-HISTORY OF A MULTICOMPONENT SITE IN THE NORTH CAROLINA COASTAL PLAIN.** (Under the direction of Dr. I. Randolph Daniel, Jr.) East Carolina University, Department of Anthropology, April 2011.

Barber Creek is a multicomponent stratified site situated atop a relict sand dune in eastern North Carolina. Previous research has put emphasis on site formation and occupation. The focus of this study was to reconstruct the cultural chronology of the west-central portion of Barber Creek and compare it to previous analyses from other portions of the site. This study resulted in the identification of three former occupation surfaces, or floors, buried in approximately one meter of aeolian sands. These occupation floors date to the Early Archaic, Middle to Late Archaic and Early to Middle Woodland periods. The stratified remains of three discrete occupation floors identified in this investigation are largely consistent with previous investigations at the site. The artifact backplots reconstructed here are the clearest evidence yet for a stratified sequence at Barber Creek. In fact, the results of this study provide the best evidence thus far for the presence of Early Archaic, Middle to Late Archaic, and Woodland components in stratified contexts in the Coastal Plain of North Carolina. Great potential exists at Barber Creek and other such stratified sites along the Tar River to answer questions concerning chronology and typology related to the prehistory of the North Carolina Coastal Plain.

**STRATIGRAPHIC INVESTIGATIONS AT BARBER CREEK (31PT259):
RECONSTRUCTING THE CULTURE-HISTORY OF A MULTICOMPONENT
SITE IN THE NORTH CAROLINA COASTAL PLAIN**

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**STRATIGRAPHIC INVESTIGATIONS AT BARBER CREEK (31PT259):
RECONSTRUCTING THE CULTURE-HISTORY OF A MULTICOMPONENT
SITE IN THE NORTH CAROLINA COASTAL PLAIN.**

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CHAPTER 1 - INTRODUCTION

The early culture-history of North Carolina's Coastal Plain is poorly understood and based largely upon chronologies and typologies borrowed from the Piedmont. However, Daniel (Daniel et. al. 2008), noted that the culture-history sequence of this region ultimately needs to be considered on its own terms and not those from the opposite side of the state. The Barber Creek (31PT259) site in the North Carolina Coastal Plain, near Greenville (Fig. 1.1), has occupations ranging from the Early Archaic to the Late Woodland Periods. In addition, it is the only known stratified site with artifacts dating to the Archaic Period in this region of the Coastal Plain and is providing data helping to refine the culture-history of the Coastal Plain (Daniel 2002). The initial model for the Coastal Plain's culture-history was proposed by Phelps (1983) with the qualification that further testing was needed. That further testing was initiated by Dr. Randolph Daniel, of East Carolina University. Daniel began excavations at Barber Creek in 2000, which continued until 2010. Several field seasons at the site suggest that suitable data exist to appropriately test Phelps' model (Daniel 2002, 2008; Seramur 2002; Martin 2004; Potts 2004; Moore 2009; McFadden 2009; and Roberts 2011).

Ward and Davis (1999: 226) recognize that even though the coastal region of North Carolina has received more funding than any other region in the state, it is still the least understood of all the state's major physiographic areas. This is largely due to the fragile and ever-changing environment that encompasses the Coastal Plain of North Carolina as well as a focus on salvage archaeology (Ward and Davis 1999:226). In short, Cultural Resources Management (CRM) mandates rather than research problems have driven the archaeology in the Coastal Plain. Under such circumstances, the development

of research designs to address regionally-specific questions and gaps in the archaeological record have been difficult to establish (Phelps 1983:12).

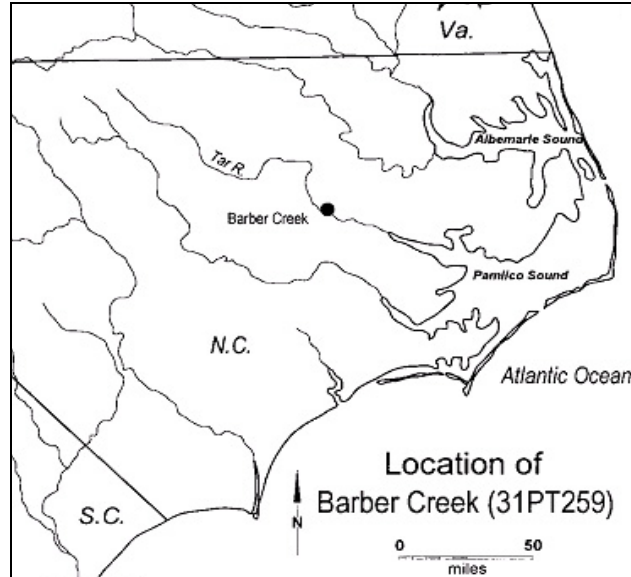


Figure 1.1. Location of Barber Creek (31PT259) Site (from Daniel 2002).

In order to understand how Barber Creek fits within the framework of North Carolina archaeology, it becomes necessary to have a background about the prehistory of the region. Relying heavily on the work of Ward and Davis (1999), I present an overview of the Paleoindian, Archaic, and Woodland periods in North Carolina. Additionally, I discuss the Barber Creek site, including site formation, previous archaeological work, and state my research questions.

North Carolina Prehistory

Rarely have buried archaeological sites been discovered in eastern North Carolina, and this dearth of intact stratified sites along the Coastal Plain of North Carolina has contributed to the poorly understood prehistory of the region. Without these early cultural deposits, the existing typology and chronologies of eastern North Carolina

have been borrowed from the Piedmont.

Paleoindian (9500 B.C. – 8000 B.C.)

According to Ward and Davis (1999:27), the fluted, lanceolate-shaped projectile points, a hallmark of the Paleoindian Period, can be attributed to the earliest inhabitants of the region, which dates to ca. 9500 B.C. and continues for around sixteen hundred years. During the course of the period, these bands of hunter-gatherers were highly mobile as evidenced by their tool kits and settlement patterns. Due to a lack of readily available knappable material of desired quality, the toolkit consisted of small tools and ones of capable of multiuse functions (Daniel 2007). Being very mobile, these late Pleistocene groups were able to quickly adapt to the rapidly changing environments as they moved across the landscape (Tankersley 1998).

Data from surface finds have greatly contributed to the research of the Paleoindian period (Daniel 2002, Daniel and Goodyear 2008). Numerous fluted points, a characteristic of these early Americans, have been located in North Carolina but none have been excavated from stratified sites. It is no surprise that the majority of Paleoindian artifacts have been found in the Piedmont since desirable rhyolite and other metavolcanic stone is readily abundant in that region (Daniel 1997). However, these early hunter-gatherers did not solely reside in locations with access to abundant high quality stone quarries. The distribution of fluted points found along major river valleys indicates that Paleoindians did make an effort to live in the coastal plain region, which greatly lacks stone types preferred by these groups (Daniel 1997). It should be noted that rising sea levels accompanied the Pleistocene-Holocene transition and as such, many of the earliest sites now lie inundated by the sounds and waters off the shore of North Carolina

(Goodyear, Michie, and Charles 1989:19; Phelps 1983:22-23).

Archaic (8000 B.C. – 1000 B.C.)

The hunter-gatherers of this period, due to their highly mobile lifeways based on a hunting economy, were able to adapt to the rapidly changing environments (Kelly 1992). Archaeological evidence suggests that people of the Early Archaic period lived in lightly constructed temporary settlements (Steponaitis 1986:371). This adaptability was vital to the success of these groups, especially during the Pleistocene-Holocene transition as the last ice age came to an abrupt close. This transition in the southeast coincides with that from the Paleoindian to Archaic period, which occurred around 8000 B.C. and continued to 1000 B.C. (Ellis et al 1998). As environments turned warmer and dryer during the Archaic Period, new strategies for procurement of food and raw materials became necessary. Humans were forced to adapt to climate change along with the other inhabitants of the continent. The extinction of 35 *genera* of large herbivores in the North America (Grayson and Meltzer 2002) denotes the importance and necessity of shifting settlement and subsistence patterns. This adaptation to the Pleistocene-Holocene transition would come to differentiate the Archaic period (Ward and Davis 1999).

A distinctive feature of this period was the adoption of a broad spectrum foraging strategy and more generalized hunting, which was necessitated by extinction of much of the big game that was hunted by Paleoindians (Anderson and Hanson 1988:262). Technological changes, as expected, would also accompany such shifts in subsistence and settlement patterns. The diagnostic points styles recognized in the Piedmont are duplicated in both coastal and Coastal Plain artifact collections (Phelps 1983:22). Archaic period projectile points, although very different from those of the Paleoindians,

characterize the era. The Early Archaic is represented by Palmer Corner Notched and Kirk Corner Notched points; Stanley Stemmed, Morrow Mountain Stemmed, lanceolate-shaped Guilford characterize the Middle Archaic; and lastly, Savannah River projectile points are synonymous with the technology of the Late Archaic (Ward and Davis 1999). Unlike the Piedmont, where excavations have placed the Archaic sequence in a stratified context, the coastal Archaic is primarily known from surface collections (Ward and Davis 1999:72-73).

Phelps (1981, 1983) identifies two types of sites: base camps and small, temporary, procurement sites. The latter outnumber the former roughly ten to one. Base camps tend to be near stream confluences, while temporary sites occur in a variety of locales, based around seasonality and availability of food resources. In addition, Ward and Davis (1999) note that Archaic period campsites in the Coastal Plain are widely scattered and can be found almost anywhere near water. Archaic sites in the Coastal Plain generally rise in number as time progresses, but they appear to peak during Middle Archaic. Furthermore, Middle Archaic spear points from northern and southern coastal sites appear more frequently than during the Late Archaic (Ward and Davis 1999:73). The northern and southern regions of the coastal area witness dramatically more Morrow Mountain projectile points than any other Middle Archaic types. The northern coastal region bears even greater witness to this phenomenon (Daniel and Davis 1996; Davis and Daniel 1990).

By the Late Archaic (3000 – 1000 B.C.), climatic conditions had stabilized. Subsequently, populations rose as a result. Groups became more sedentary as settlements commonly shifted from the banks of upland tributary streams to river deltas, but such

patterns still varied widely along the Coastal Plain during this period (Herbert 2002:311). The abundance of fish and shellfish led to larger and more sedentary camps where the rudiments of horticulture and pottery-making originated (Ward and Davis 1999:75).

Ward and Davis (1999:72) recognize that surface collection analyses have contributed to what is known about the Archaic Period of the Coastal Plain of North Carolina. Research conducted at the Barber Creek site, under the guidance of Daniel, has offered the only stratigraphic evidence of the Archaic Period of the Coastal Plain of North Carolina.

Woodland (1000 B.C. – A.D. 1600)

As the Archaic Period came to an end ca. 1000 B.C., groups became more sedentary. They settled into areas rich in raw materials and food resources for most, if not all, of the year (Ward and Davis 1999). With sedentism, plant domestication and pottery use appeared ubiquitously across the landscape. The earliest evidence of pottery in North America was located at Stallings Island, Georgia (Claflin 1931). This fiber tempered pottery tradition began as early as 2500 B.C. and continued until about 1000 B.C. (Stoltman 1974; Trinkley 1980, 1989). These early dates placed the origins of pottery-making well within the Late Archaic period. However, it was the rapid spread and adoption of pottery that marked the beginnings of the Woodland Period in North Carolina. By the beginning of the Woodland period, several ceramic traditions had been established throughout North Carolina. These ceramic traditions shared many attributes that reflect influences from the cradles of pottery-making to the north and south (Ward and Davis 1999:77).

According to Ward and Davis (1999:76), the Woodland Period is typified by three

characteristics: pottery making, sedentary villages, and horticulture. Increased social complexity is also evidenced in the long distance trade and mortuary practices of the period. New complexity also brought forth stockades around agricultural fields, food stores, and various ideologies (Ward and Davis 1999). Plant domestication intensified and diversified during this era. Based on archaeological evidence of small-grain crop foods, primarily charred seeds, food plots increased substantially at Early and Middle Woodland sites (Yarnell and Black 1985:Table 4; Smith 1992:14). It still appears probable that subsistence during this time was based around hunting and gathering of wild plant and food goods as it had been in the past (Steponaitis 1986:378). The arrival of Europeans on the shores of North Carolina effectively brought the end of the Woodland Period and the beginning of the Contact Period.

CHAPTER TWO – PREVIOUS ARCHAEOLOGY

The Barber Creek site (31PT259) is a stratified site that skirts the banks of Barber Creek, a Tar River tributary, in Greenville, North Carolina. It parallels the northern bank of the creek, some 2 kilometers southeast of the creek's confluence with the Tar River (Seramur 2002). The site borders the northern bank of the creek for some 100 meters near the confluence with the Tar River. The northwest trending landform measures some 50 meters across and 140 meters long (Daniel 2002). The site sits atop an elevated landform known as an aeolian (wind-borne) dune (Seramur 2002). This relict sand dune has a steep lee slope and a gentle stoss slope that rises some two meters above the Tar River floodplain on Barber Creek's northern bank (Moore 2009). The site was discovered in 1976 after East Carolina University performed a cultural resource survey; one historic and five prehistoric sites were located (Phelps 1977). Phelps (1977) argued that the site was eligible for placement on the National Register of Historical Places and recommended that Greenville Utilities avoid the location during its construction of an outfall line to the creek. His argument was based on four factors:

- 1) It was the only known intact, stratified site in this locale; 2) it had the potential to provide accurate dates for phase separation in the Woodland period; 3) the possible existence of features and structural evidence to clarify an internal settlement pattern of a small riverine habitation site; 4) the existence of preserved food remains that might permit a better understanding of cultural adaptation to the flood plain-levee ecotone in this location (Phelps 1977:15).

Further testing indicated at least two and possibly three cultural components were present at Barber Creek with the earliest dating to the Early Archaic (Phelps 1977). With the exception of a canal, the heavily wooded area remained virtually untouched by modern human disturbance (Daniel 2002). Despite the potential significance of the stratified site, no further work was performed until 2000.

In 2000, Daniel began extensive excavations at the site as part of the East Carolina University's summer field school. The first season was spent shovel testing to identify the boundaries and excavating a trench to investigate the stratigraphic integrity (Daniel 2002). The trench presented numerous ceramic and lithic artifacts dating back to the Early Archaic, with a possible older component identified by two end scrapers located below the Early Archaic horizon (Daniel 2002). Subsequent geoarchaeological work indicates that the dune began forming during the end of the Pleistocene (Moore 2009; McFadden 2009).

Keith Seramur's (2003) geoarchaeological research determined that the site was situated on a relict sand dune that had built up over time by aeolian transported sand. He accomplished this task by conducting sedimentological analyses and scanning electron microscopy of soil samples to identify the formation processes of the sand dune. These samples were then compared to samples taken from the floodplain and terrace adjacent to the Barber Creek site. The analysis showed that the ridge formation was largely due to aeolian sediments, while the floodplain and terrace consisted of fluvial sediments (Daniel et al 2008:6).

Tara Potts investigated the stone reduction activities and their spatial distribution across the site (Potts 2004). Using the 381 lithic remains recovered from 106 shovel tests, she determined that stone reduction activities associated with each component could be spatially separated. She identified two important patterns with regards to artifact distributions:

- 1) both high and low density areas are present across the site, with the highest density concentrations corresponding to the highest elevations of the site; 2) raw material distribution of non-local stone, such as chert and metavolcanic, are more spatially clustered across the site than local stone.

The investigation also revealed that Archaic period activities mostly took place on the northern portion of the ridge while the Woodland Period activities occurred on the southern part of the ridge (Potts 2004; Daniel et al 2008). Interestingly, with regards to both components, most tools were recovered from shovel tests not associated with high debitage concentrations, which may speak to some spatial distinction between tool use and stone reduction activities at the site (Potts 2004:64). Furthermore, debitage analysis from each component did not indicate a change, in terms of technology, over time (Potts 2004:51).

Martin (2004) refined the definition of Deep Creek ceramic types. He tested the Phelps' (1983) model for Deep Creek phases by using ceramics from two test units at Barber Creek and comparing them with sherds from the Parker site in Edgecomb county. He tested the three phase model using seriation, specifically focusing on surface treatment and temper as a means to identify types. His determination was consistent with the Phelps' Deep Creek series model. Looking at the available Deep Creek II ceramics and Deep Creek I series pottery, Martin validated the Phelps' Deep Creek series model, but he notes that more data are needed to further test the phases.

Moore's (2009) investigations at Barber Creek showed that sedimentology in conjunction with archaeological data could provide information about the processes behind the dune formation, which could be useful in determining the chronology of occupations. Simply stated, sedimentological investigations suggest that site formation processes can be sequenced chronologically by correlating grain size with archaeological data and absolute dates. His data reveals correlations between changes in mean grain size and artifact densities, which suggest distinctive phases of human occupation (Moore et al.

2008). During periods of long-term dune stability, the site was occupied and these occupations are vertically separated between early, middle and late Holocene archaeological components.

Paulette McFadden (2009) expanded upon Moore's research. She investigated how and when the sand dune formed as well as its relationship to the occupation and artifact deposition. She used multiple lines of evidence, including ground penetrating radar (GPR) and sand particle size analysis, which concluded that the aeolian sediments began to accumulate after 12,900 years ago, after which time Archaic groups occupied the dune. After 9,000 years ago, occupation declined as sedimentation increased. Site reoccupation occurred before 2,400 years ago, on the now stable sand dune, and remained intermittent until sometime after 1,000 years ago. To summarize, wind-borne sands began to accumulate at the site during the Younger Dryas, with humans occupying the site, from the Early Archaic, intermittently through the Late Woodland periods.

Research Problem

As discussed above, geoarchaeological investigations at Barber Creek have determined the site is situated on a relict dune that resulted from aeolian deposits beginning over 10,000 years ago. Moreover, recent research indicates that the archaeological remains at Barber Creek are stratigraphically intact and span the Early Archaic through the Early to Middle Woodland periods. However, that work has focused on a limited portion of the dune and additional areas of the site need to be explored to determine if the stratigraphic sequence is preserved elsewhere on the site. Specifically, excavation data from the west-central portion of the site collected during the 2006-2007 field seasons are used to address the following question.

What is the stratigraphic sequence at the west-central portion of the ridge and how does it compare to the sequence elsewhere on the site? Excavations elsewhere on the site have documented Early Archaic through Early Woodland components. Specifically, the stratigraphic sequence consists of a ca 1-m deposit of archaeological materials beginning with Early Archaic remains at 80 cm to 70cm below surface (Daniel 2002; Daniel et al. 2008; Moore 2009; McFadden 2009). These components are identified by the presence of projectile points, chronometric dates, and terminal Archaic artifacts, such as steatite bowl fragments. Subsequently, this investigation will allow some conclusions to be drawn as to the culture-history refinement of the Barber Creek site.

This existing sequence will be compared to the results of excavations carried out at two additional trenches (trenches east 429 and east 422) and a single unit (north 475 east 431) analyzed in this research. If the stratigraphic sequences are similar, it may suggest that site occupation and site formation were uniform across the site. If not, then other interpretations regarding site occupation would need to be formulated. In any case, new data regarding culture-history of the Coastal Plain will be generated.

Thesis organization

The remaining portion of this thesis is organized as follows. Chapter 2 will detail the methodology used as well as present data, such as features and artifacts. Chapter 3 will offer a detailed description and analysis of the evidence, and, in closing, Chapter 4 will summarize my interpretations and conclusions from the data in the preceding chapters.

Methodology

Data from two trenches were used in this study. The east 429 trench, consists of

six contiguous 2x2 meter units located on a north-south transect in the west-central part of the site. The east 424 trench consists of three contiguous 2x2 meter units, also on a north-south transect in the west-central part of the site. One additional unit, located north of the contiguous units in the east 429 trench, was added to the trench analysis (Figure 2.1). Standard archaeological methods were used during the excavations. Units were excavated in 2-meter squares subdivided into 1-meter squares. Units were designated by their southeast corner. Horizontal and vertical control was maintained by line levels and a total station. Excavation proceeded in arbitrary 10-cm levels using shovels and trowels. All fill was screened through 1/4" and 1/8" mesh hardware cloth. The artifacts were bagged separately by provenience. Diagnostic artifacts, such as projectile points, hammerstones, large cobbles, and clusters of pottery, were piece-plotted vertically and horizontally using a total station. Bone, large pieces of charcoal, and burned nutshell were separated into vials.

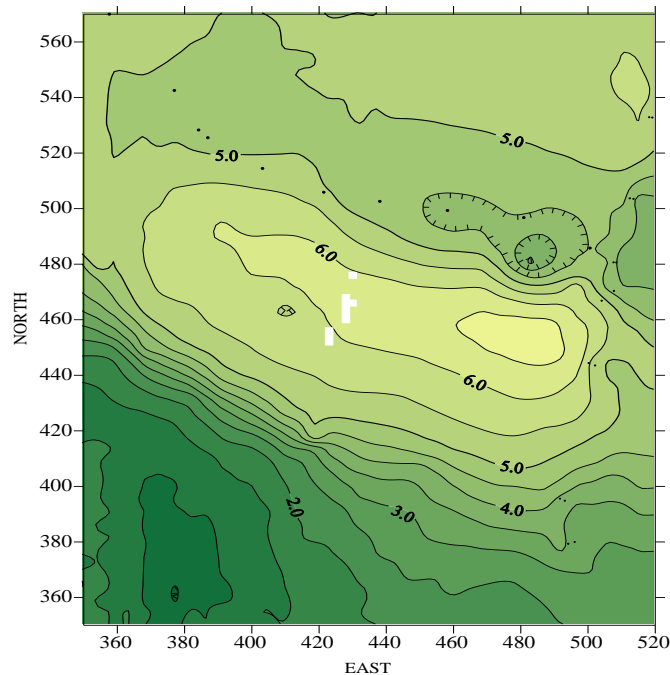


Figure 2.1. Topographic map showing the location of the excavated units.

CHAPTER 3 – ARTIFACTS

This chapter will detail the artifact analysis focusing on the lithic and ceramic artifacts recovered during the excavations.

Artifact Classification

Artifact classification followed the existing typology created for the Tar River sites (See Appendices A-C). A total of 1907 artifacts, including 623 lithics and 1287 ceramics, were recovered during the excavation (Fig. 3.1). All artifacts were analyzed in the Phelps Archaeology Laboratory at East Carolina University (Appendices A-C). The assemblage consists of two major artifact classes: lithics and ceramics. An additional category, *other remains*, includes historical artifacts and ecofacts, such as bone, charcoal, and charred nutshell. Both artifact classes will be analyzed following procedures from previous analyses (Martin 2004; Moore 2009; McFadden 2009; Phelps 1983; Roberts 2011).

Size class measurements can be seen in Table 3.1. Lithics and ceramics were initially sorted by size class (Tables 3.2 - 3.3). Examples of each size classification can be found in Figures 3.2 and 3.3. In addition to size class, lithics (Appendix D) were further categorized by raw material and morphological types (e.g., points, bifaces, cores, debitage, etc.). Ceramics were categorized according to existing pottery types for the Coastal Plain (Martin 2004; Phelps 1983; Roberts 2011). Once categorized, the artifacts were counted and the information was entered into a Microsoft Excel spreadsheet, then the data were recorded accordingly (Appendix D & E). Finally, lithic and ceramic databases were imported into a statistical package for social sciences (SPSS) for statistical analysis.

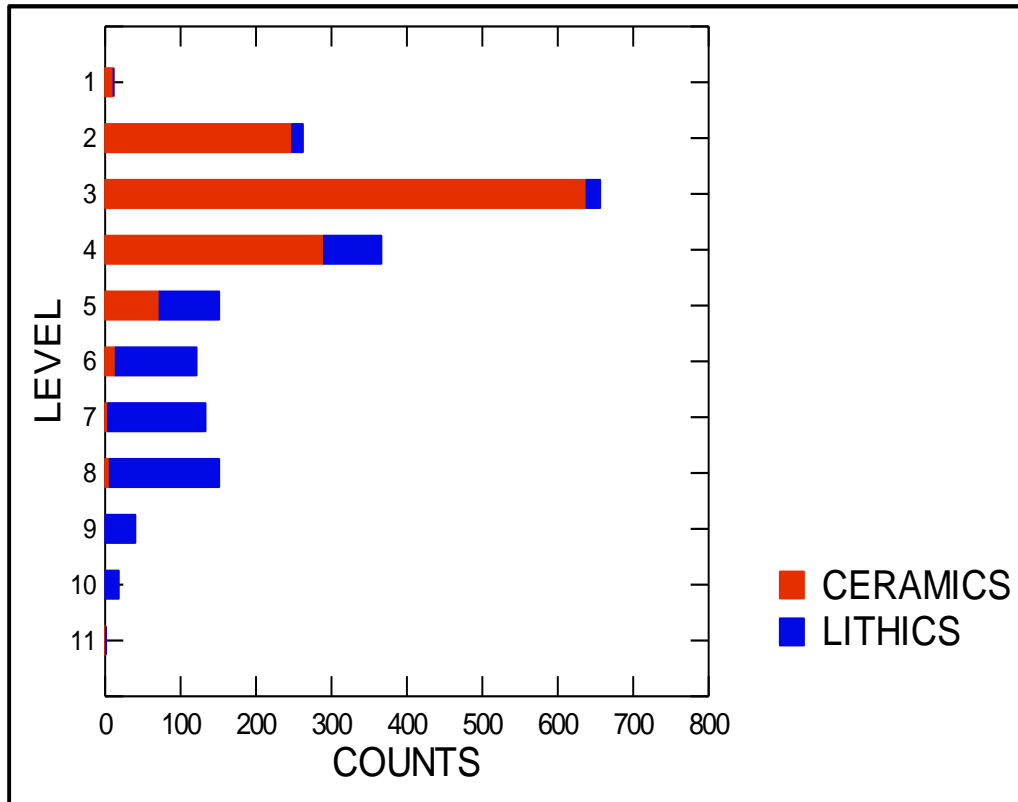


Figure 3.1. Artifact frequency by level.

Table 3.1. Size classes in mm.

Size Class	Mesh Size
1	25.0 mm
2	12.5mm
3	6.3 mm
4	2.8 mm

Table 3.2. Size class distribution of stone artifacts.

Size Class	Frequency	Percent
1	74	11.9
2	188	30.0
3	247	39.7
4	114	18.4
Total	623	100.0

Table 3.3. Size class distribution of ceramics.

Size Class	Frequency	Percent
1	192	15.0
2	753	58.5
3	339	26.3
4	3	0.2
Total	1287	100.0



Figure 3.2. Examples of Size Class 1, 2, 3, and 4 flakes.



Figure 3.3. Examples of size class 1, 2, 3, and 4 ceramics.

Raw Material

A total of 620 lithic artifacts were sorted into seven raw material categories (Table 3.4): chert, metavolcanic, miscellaneous fossils, orthoquartzite, quartz, quartzite, steatite, and syenite.

Table 3.4. Raw material distribution of stone artifacts.

Raw Material	Frequency	Percent
Chert	5	0.8
Fossil	1	0.1
Metavolcanic	284	45.3
Orthoquartzite	7	1.1
Quartz	128	20.7
Quartzite	185	30.0
Steatite	4	0.7
Syenite	7	1.3
Total	623	100.0

Chert. Chert is a highly siliceous cryptocrystalline rock that includes a greyish-colored chert (Phelps 1983) and a tan-colored form of unknown origin, which likely originated outside the state (Daniel 1998; Daniel et al. 2008). Tan-colored chert is found

in much smaller quantities at Barber Creek. Only 0.2% ($n=1$) of such material was present in the assemblage. Greyish-colored chert accounts for only 0.8% ($n=4$) of this assemblage.

Metavolcanic. The metavolcanic classification broadly contains metamorphosed igneous stone. This stone is likely quarried from outcrops in the Piedmont of North Carolina. River cobbles, providing a secondary source of metavolcanic stone, are available from some Coastal Plain rivers (Daniel et al. 2008; Steponaitis et al. 2006). This stone classification accounted for 45.3% ($n=284$) of the raw materials. Although rhyolites were lumped into the metavolcanic category, they were identified separately and account for 3.4% ($n=21$) of the assemblage. Rhyolite is a fine-grained metamorphic igneous rock found at quarries in Stanley and Montgomery counties in North Carolina. Rhyolite is made up primarily of quartz and feldspar with a high silica content which gives it a good conchoidal fracture.

Miscellaneous Fossils. A broken megalodon tooth was recovered during the excavation, but its identification as an artifact remains unclear. However, it is included in the analysis because it is highly improbable that any form of transportation, other than human hands, can account for the tooth's location atop the relict sand dune. Fossils account for 0.2% of the total assemblage ($n=1$). One other such megalodon tooth was recovered during previous excavations (McFadden 2002:40).

Orthoquartzite. Orthoquartzite contains small grains of quartz sand that have been cemented together with silica (Novick 1978; Upchurch 1984). This material, which makes up 1.1% ($n=7$) of the assemblage is found in both the Piedmont and along the Coastal Plain of North Carolina (Daniel 2001).

Quartz. Quartz accounted for 20.7% ($n=128$) of the assemblage. The stone is a variably milky white to clear, glassy stone that is readily available throughout the Coastal Plain of North Carolina. At the Barber Creek site, quartz was probably obtained from river cobbles (Daniel 1998; Daniel et al. 2008). Crystal quartz was lumped in with the quartz category but identified separately. It comprised 3.1% ($n=19$) of the lithics, produces much better conchoidal fractures as compared to the more crudely flaked milky variety quartz (Daniel 1998). In addition, four quartz crystals were analyzed as well but their function is not known at this time.

Quartzite. Quartzite is a very hard metamorphosed sandstone that contains a high percentage of quartz (Huggert 2007: 416). According to Daniel et al. (2008), this stone also has good conchoidal fracture and would have been easily accessible at the site in the form of river cobbles. Quartzite constitutes 30.0% ($n=185$) of the raw lithic material in this assemblage.

Steatite. Steatite, or soapstone, is an impure talcy rock, which occurs in many parts of the North Carolina piedmont and mountains. During the Late Archaic period, soapstone was a common raw material for carved stone bowls (Sassaman 1993:78). The stone was quarried from natural outcrops using stone chisels and axes. Afterwards, smaller stone or other tools would then be used to scrape out the bowl to create a finished product. This raw material accounts for 0.7% ($n=4$) of the assemblage. Four fragments were originally found; however, three of them were refits.

Syenite. This raw material is a granite-like crystalline rock that is absent of quartz or contains less than 5%. It is locally available. Syenite only comprises 0.3% ($n=7$) of the assemblage. Fenton and Fenton (2003) note that syenite is a durable material that is

resistant to heat and weathering. Additionally, it has a poor conchoidal fracture. Eight pieces of syenite were found in the assemblage. These tabular fragments may have been collected and used as stable working surfaces on the sandy soils of the Barber Creek site (Daniel 2010 personal communication).

Stone Artifact Types

The stone artifacts were classified primarily by morphology (Appendix A). The classification includes: bifaces, broken cobbles, cobble fragments, cobbles, flakes, flaked cobbles, flaked cobble fragments, hammerstones, hammerstone fragments, miscellaneous fossils, projectile points, steatite fragments, tabular fragments, uniface fragment, and utilized/retouched flakes. Projectile point bases and tips are categorized as projectile points.

Projectile Points. Three mostly intact projectile points, two point bases, and one tip fragment are present in the assemblage. The two intact points include a Palmer Corner-notched and a Morrow Mountain Stemmed. The two bases appear to be from some bifurcate point type. Lastly, one metavolcanic tip fragment completes the point assemblage.

An Early Archaic period metavolcanic Palmer Corner-notched point (Fig. 3.4a) was found in Level 4 at 39 cm. This point is out of place stratigraphically and will be discussed in greater detail in chapter 4. It measures 29 mm long, 18 mm at the rounded barbs, and 14 mm at the tang. Basal grinding is present (See Coe 1964). Blade serrations are pronounced and present from shoulder to broken tip, which exhibits an impact fracture.

One bifurcated base (Fig. 3.4b), found in Level 5 has a narrow shallow notch,

which results in a bi-lobed appearance reminiscent of a MacCorkle Stemmed or St. Albans point type (Coe 1964). It measures 9.5 mm long and 21 mm wide across the bi-lobed ears. Since the point length falls below the 40-mm minimum parameters for a MacCorkle type, it has been classified a St. Alban's, which dates to the Early Archaic period. This point type shares its namesake with St. Alban's, Virginia (Broyles 1971).

The second bifurcated base (Fig. 3.4c) has been identified as an eared Yadkin. It measures 20 mm in length and 32.5 mm in width. The width of the shoulders, one side of which is missing, also measures 20 mm. This base is only 3.5 mm at its thickest portion.

The metavolcanic point tip (Fig 3.4d), of an unidentified point type, was found in Level 7. It measures 10 mm long and 16 mm wide at the break.

One metavolcanic Thelma point was discovered in level 5 (Fig. 3.4e). It measures 37.5 mm long and 17 mm wide and weighs 5.2 grams. The blade is thick, long and narrow with slightly rounded sides.



Figure 3.4. Projectile points from the assemblage. a) Palmer corner-notched, b) St. Alban's, c)"Eared" Yadkin, d) metavolcanic point tip, and e) Thelma.

Biface. Bifaces are distinguished by flaking along both faces, which creates a sinuous edge while reducing the stone's thickness. Bifacial flaking results in a distinctive undulating radial pattern that is visible along the tool's edge.

One quartzite artifact appears to represent an early stage biface fragment. It exhibits cobble cortex on one face and a pattern of radial flaking around the edge of the second face. Although technically this artifact exhibits unifacial flaking, it almost certainly represents the tip end during the initial production of a biface (Fig. 3.5a). It measures 25 mm long and 30 mm wide at the break and 14 mm wide at the base. The weight is 10.5 grams.

A broken metavolcanic biface was excavated from Level 7 (Fig. 3.5b). This particular biface, with an elliptical cross section shape, measures 36 mm long and 14 mm wide and weighs 7.0 grams. The lower portion of the biface is absent, and an excurvate edge is present just above the broken section.

The third biface, measuring 22 mm long and 13.5 mm wide and weighing 2.3 grams, (Fig. 3.5c) is made from a metavolcanic raw material and is the edge of a biface fragment. The radial patterning is clearly evident and the appearance of pressure flaking suggests that this fragment is a portion of a finished product. However, half of the biface is missing, most likely broken from resharpening.

A bifacially worked quartz stone, (Fig. 3.5d), was identified as a biface fragment measuring 27.5 mm long by 23.5 mm wide with a weight of 12.4 grams. It is believed that this material was in the early stages of bifacing due to the chunkiness of the fragment. Bifacial flaking is present, but the radial patterning is only minimally noticeable.



Figure 3.5. Bifaces from the assemblage. a) Early biface, b) Broken biface, c) Edge of a biface fragment, and d) Biface fragment.

Uniface fragment. A uniface is distinguished by flaking along one face of the stone. One quartz uniface (Fig. 3.6) was identified in the assemblage, and it was excavated from base of level 6.



Figure 3.6. Uniface fragment.

Grinding Stone. Two grinding stones were recovered from the site, one comprised of quartz and the other a very fine-grained gneiss material. One of the more interesting discoveries of the assemblage (Fig. 3.7a/b) occurred in the southeast quadrant of unit N453 E424. A 501.5 gram hammerstone was uncovered *in situ* sitting atop a well-worn

319.0 gram grinding stone. The grinding stone measures 9.4 cm long and 8.7 cm wide, while the quartz hammerstone measures 8.9 cm long and 7.3 cm wide. The two artifacts together were found from 67-73 cmbs.



Figure 3.7a. Hammerstone resting atop a grinding stone.



Figure 3.7b. Grinding stone after removal of hammerstone.

Another grinding stone, made of quartz, measures 16 cm long and 11.3 cm wide, with a concave 9 mm depression in the center from utilization (Fig. 3.8a). It weighs 1261.5 grams. There is additional pitting on the obverse measuring 7.5 mm in depth. This pitting occurs in the thickest section of the stone (Fig 3.8b) and is directly opposite the

deepest part of the depression. The purpose of this seemingly intentional pitting is not currently known.



Figure 3.8a. Grinding Stone.



Figure 3.8b. Grinding stone with obverse pitting.

Hammerstone. Seven hammerstones, including with two broken hammerstones, were found in the assemblage. All hammerstones in the assemblage originated from cobbles. Various degrees of pitting and battering on the artifact surface identify them as

hammerstones. The degree of use-wear on the hammerstones varies from slight to heavy pitting. Sizes vary as well, from small walnut-size to softball-size stones (Fig. 3.9). The hammerstone fragments in the assemblage essentially represent broken cobbles with signs of battering.



Figure 3.9. Examples of hammerstones and hammerstone fragments.

Cobble/Broken Cobble. A cobble is any water-rounded stone larger than 25 mm in size that lacks any apparent signs of utilization. Nevertheless, their presence at the site was probably the result of human transport. Sixteen cobbles, including two broken cobbles, were found in the assemblage (Fig. 3.10).



Figure 3.10. Examples of cobbles from the assemblage.

Cobble fragment. A flaked cobble fragment (Fig 3.11) is a portion of a cobble with definite flaking but has not been fashioned into a tool. In most instances, such fragments have lost the distinctive rounded cobble appearance. Ten such fragments were excavated, seven of which are size class 1.



Figure 3.11. Examples of cobble fragments.

Flaked Cobble. A flaked cobble (Fig 3.12) is a virtually whole cobble, larger than 25 mm, that exhibits cobble cortex and has minimal flaking. These have not been fashioned into complete tools. Seventeen flaked cobbles were discovered in the assemblage.



Figure 3.12. Examples of flaked cobbles.

Fossil. One megalodon tooth (Fig. 3.13) was uncovered from Level 5 in unit 453N 424E. Other such miscellaneous fossils have been found at the site (McFadden 2009). Although the tooth's designation as an artifact is due to its likely transport to the site by anthropogenic means, the purpose or meaning of it is unclear.



Figure 3.13. Miscellaneous fossil (megalodon tooth)

Quartz crystals. These crystals are hexagonal and acicular (tall and thin) in size and shape. The faces of the crystals are striated horizontally and terminate in rhombohedra (pyramidal) shapes (Fig. 3.14). Four such crystals were found in the assemblage, two of which were excavated from level 9.



Figure 3.14. Example of a quartz crystal

Steatite fragments. Steatite is an impure talcy rock, which occurs in many parts of the North Carolina piedmont and mountains. It was commonly used as a raw material for carved stone bowls during the Late Archaic (e.g., Sassaman 1993:78-79). The Barber Creek assemblage includes, one three-piece refit (Fig 3.15) and one additional single piece that looks much like the refit, only thicker, and is possibly from the basal portion of the same bowl but may also have originated in an entirely different bowl.



Figure 3.15. Three-piece steatite bowl refit and one lone fragment.

Tabular Rock. A tabular rock, made of syenite, is a thin rock with minimum flaking (Fig. 3.16). The largest tabular fragment, at 379.0 grams, was recovered from Level 4. Similar fragments, seven in all, were recovered from other units as well. Previous Barber Creek investigations (McFadden 2009) also noted such tabular rocks found in Levels 4 and Level 6.



Figure 3.16. Syenite tabular fragments.

Ceramic Artifacts

The ceramic assemblage consists of 1287 sherds (Table 3.5), of which 1252 were classified into types. The remaining 35 sherds were either too small or eroded to confidently classify. Of those 1252 classified by known types (Table 3.6), some 20 (1.2%) exhibit an indeterminate surface treatment. The ceramics were classified according to the conventional typology of the region (Herbert and Mathis 1996; Herbert 2003; Martin 2004; Phelps 1983; Roberts 2011; South 1976).

Table 3.5. Distribution of ceramic series by level.

Level	Deep Creek	Hanover	Mount Pleasant	Indeterminate	Total
1	11	-	-	-	11
2	123	110	-	15	248
3	463	149	17	9	638
4	197	80	10	3	290
5	51	18	-	6	72
6	12	-	-	2	14
7	4	-	-	-	4
8	5	1	-	-	6
9	-	-	-	-	-
10	-	-	-	-	-
11	-	1	-	-	1
Total	866	359	27	35	1287

Table 3.6. Distribution of ceramics by series and surface treatment.

Series	Surface Treatment	Frequency	Percent
Deep Creek	Cord	741	58.2
Deep Creek	Fabric	44	3.1
Deep Creek	Incised	5	0.5
Deep Creek	Indeterminate	14	0.8
Deep Creek	Net	45	3.4
Deep Creek	Plain	8	0.6
Deep Creek	Stamped	12	0.9
Hanover	Cord	73	5.9
Hanover	Fabric	277	22.0
Hanover	Indeterminate	6	0.6
Hanover	Plain	1	0.1
Mount Pleasant	Cord	3	0.2
Mount Pleasant	Fabric	20	1.1
Mount Pleasant	Fabric with incising	3	0.1
Indeterminate	Indeterminate	35	2.5
Total		1287	100.0

Deep Creek Series

The Deep Creek series represents 67.5 ($n=869$) of the assemblage, making it the predominant ceramic type in this study. Six different surface treatments are present in the assemblage: cord-marked, fabric-impressed, incised, net-impressed, plain, stamped, and indeterminate. Sand temper particles sizes range from medium to pebble-size quartz, with incidental quantities of limonite, mica or shell, comprised in a fairly loose, sandy clay paste (Roberts 2011). Limonite and mica inclusions are not thought to be intentional, but may aid in the firing process (Daniel 1999:113).

Cord-marking accounted for 85.3% ($n=741$) of the Deep Creek series ceramic assemblage. This treatment is created by pressing a cord-wrapped paddle, prior to firing, into a vessel's wet clay surface. There are two basic varieties within the cord-marking: cross-cording (Fig. 3.17) and parallel (Fig. 3.18). Other studies (Ford and Griffin 1938; Martin 2004; Roberts 2011) have concluded that the impressions left often provide

enough detail to distinguish individual twines and direction of twine twists. Sherd thickness ranges from 3.6 mm to 17.5 mm. Rim treatments, 12 of which were recognized in the assemblage, are variations of indentations that sometimes carry into the interior of the vessel (Roberts 2011). Indentations appear to have been caused by both round and rectangular objects.



Figure 3.17. Example of Deep Creek cross-cord surface treatment.



Figure 3.18. Seven-piece Refit of Deep Creek cord-marked sherds.

Fabric-impressed sherds comprise 5.1% ($n=44$) of the *Deep Creek* series. This impression is created by wrapping a paddle in fabric and pressing it into wet clay before firing (Ford and Griffin 1938). The fabric type is a weft-faced textile. The *Deep Creek* fabric-impressed rims were analyzed and their treatments are simple or folded over (Roberts 2011). Three rims, all caused by a rounded object, are present.

Net-impressing accounts for 3.4% ($n=45$) of the *Deep Creek* series. This series is seriated by knot and cord size (Fig 3.19), resulting in overall mesh size. Sherds found in the Coastal Plain of North Carolina have often been separated based on knot size alone, such as open weave and closed weave. This is not suitable for the Barber Creek assemblage due to variable knot spacing occurring even on single sherds. This is not the result of over-stamping, such as multiple impressions on same area of vessels (Roberts 2011 personal communication).



Figure 3.19. *Deep Creek* net-impressed sherd

Simple-stamped sherds comprise 1.4% ($n=12$) of the *Deep Creek* series. The

entire simple-stamped assemblage was of the broad (>5mm) cross-stamped variety. Two rims, one made by a square object and the other rounded, are present as well.

Deep Creep Plain accounts for 0.9% ($n=8$) of the series. Plain sherds are have no visible surface treatment other than a smooth or semi-smooth appearance.

Indeterminate sherds comprise 1.2% ($n=10$) of the *Deep Creek* series. These were either too small or badly weathered to be classified by a recognizable surface treatment.

Hanover Series. South (1976) identified Hanover as the Middle Woodland series of the Southern Coastal Plain, while Phelps (1983) found it in northern Coastal Plain contexts as well. A total of 357 (27.8 %) sherds from the assemblage were classified as belonging to the Hanover series. Hanover sherds are defined as having a clay temper with lumps of clay and sand, ranging in size from medium to pebble in a compact sandy clay paste (Roberts 2011). The series types for Hanover include: Cord-marked, Fabric-impressed, Plain, and Indeterminate.

Hanover cord-marked sherds account for 20.4% ($n=73$) of the total series assemblage. The fabric-impressed surface treatment comprises 79.5% ($n=284$) of the Hanover series (Fig. 3.20). One sherd accounts for the sole representative of the plain category, while six were classified as having an indeterminate surface treatment.



Figure 3.20. Hanover fabric-impressed pottery

It appears that the Hanover series is a later addition to the ceramic assemblage as modest numbers appear in level 5 ($n=18$) and increases through Level 3 where it reaches its greatest density with 23.4% ($n=149$) of the pottery in that level. In addition, in Level 2, Hanover accounts for 44.4% ($n=110$) of the pottery in that level while Deep Creek comprises 49.6% ($n=123$) of the ceramics. This further suggests the Hanover series arrived later in the occupation than the Deep Creek series. Furthermore, this is to be expected when compared to the Phelp's (1983) model for ceramic typologies.

Mount Pleasant Series. The Mount Pleasant series is represented by 26 sherds or just 2.0% of the total ceramic assemblage. The paste for this series is a very fine, compact sandy clay in a uniform temper with large ($>4\text{mm}$) pebbles. The Barber Creek assemblage for this series is recognized in cord and fabric surface treatments. One particular sherd of note is a three-piece refit with fabric surface treatment with over incising (Figure 3.21). Fabric-impressing, including the over-incised treatment, makes up 88.5% ($n=23$) of the Mount Pleasant series. Cord-marked ceramics account for 11.5%

($n=3$) of this series.



Figure 3.21. Mount Pleasant Fabric-impressed with incising

Indeterminate. This category includes sherds that could not be classified due to their small size or weathered appearance. Some 52 sherds (4.0%) of the Barber Creek ceramic assemblage are represented in this category, of which 2.5% ($n=35$) could not be identified by either series or surface treatment. The remaining indeterminate sherds account for 1.5% ($n=20$) of the total count, of which a surface treatment could not be determined.

Ceramics Analysis

A total of 1287 sherds are present in the assemblage (Fig. 3.21). Five others were identified but lacked a provenience and are not included in the total analyzed assemblage. The following pottery analysis was classified according to the established typologies of the region (Herbert 2003; Herbert and Mathis 1996; Martin 2004; Phelps 1983; Roberts 2011; South 1976).

Deep Creek. The Deep Creek series is the best represented Woodland pottery at

the site and includes 67.7% ($n=869$) of the total ceramic assemblage. Several varieties of surface treatments were identified in the assemblage including cord-marked ($n=741$), fabric-impressed ($n=44$), net-impressed ($n=45$). Minor frequencies of simple-stamped ($n=12$), plain ($n=8$), and incised ($n=5$) were also identified.

Hanover. Hanover series pottery is the second most frequent type ($n=357$) accounting for 27.8% of the ceramic assemblage. The Hanover series is predominately fabric-impressed ($n=277$). Cord-marking accounts for another 73 sherds. A single plain sherd was found as well. Although seriation is difficult from the long-term stability of this component, it appears that the Hanover series is a later addition to the ceramic assemblage as modest numbers (Table 3.7) appear in Level 5 ($n=18$) and increase through Level 3, where it reaches its greatest density with 23.4% ($n=148$) of the pottery in that level. In addition, in Level 2, Hanover accounts for 44.4% ($n=110$) of the pottery in that level while Deep Creek comprises 49.6% ($n=123$) of the ceramics. This further suggests the Hanover series arrived later in the occupation than the Deep Creek series. Furthermore, this is to be expected when compared to the Phelps' (1983) model for ceramic typologies.

Mount Pleasant. The Mount Pleasant series comprised only 2.0% ($n=26$) of the pottery analyzed. Twenty sherds were found to be fabric impressed, while only three were cord-marked. Of interest is a three-piece refit of fabric-impressed pottery with incising over the fabric-impressing. No other sherds similar to these have been excavated from the Barber Creek site.

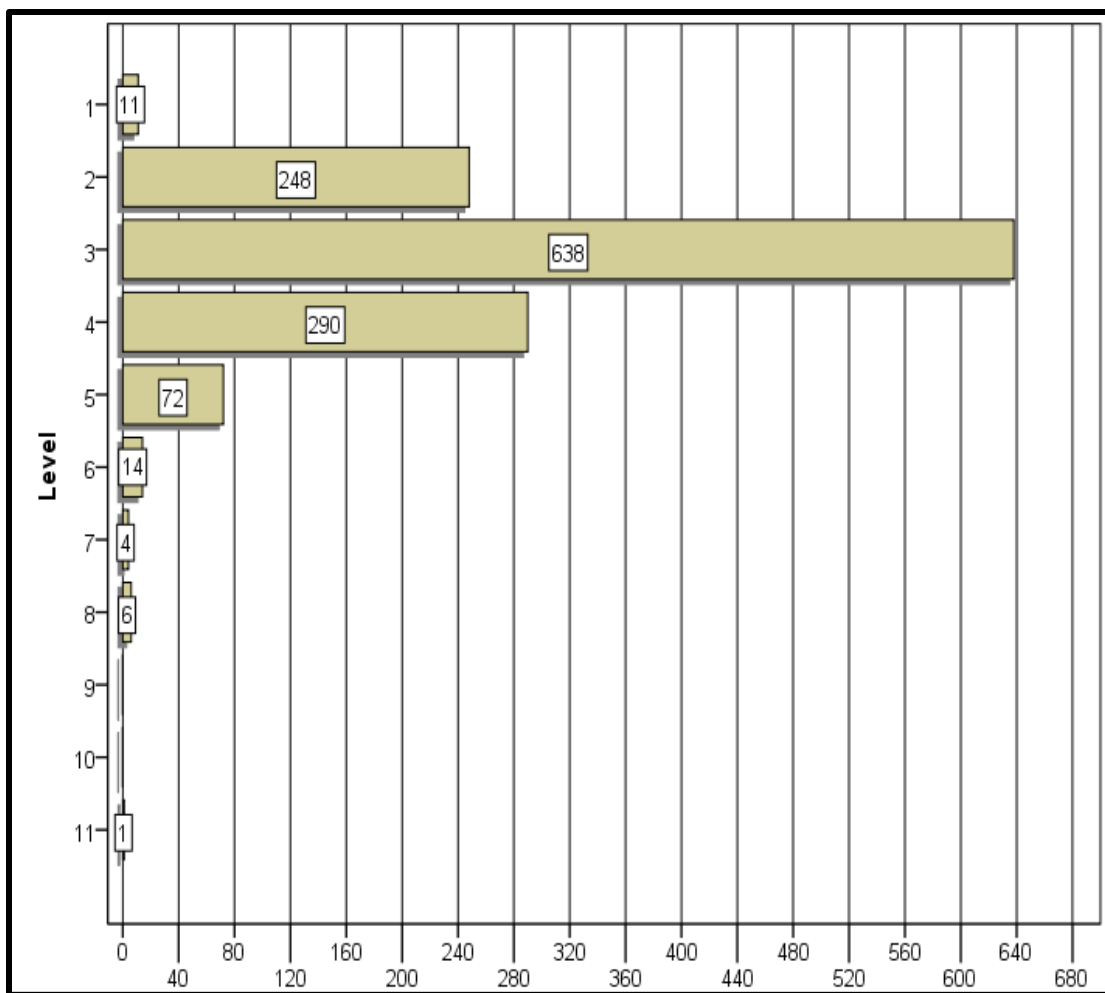


Figure 3.21. Ceramic frequencies by level.

Table 3.7. Distribution of ceramics by series, surface treatment, and level

Level	Deep Creek							Hanover				Indeterminate	Mount Pleasant		
	Cord Marked	Fabric Impressed	Incised	Ind	Net Impressed	Plain	Simple stamped	Cord Marked	Fabric Impressed	Ind	Plain	Ind	Cord	Fabric	Fabric w/ incising
1	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	109	6	-	3	4	1	-	39	68	2	1	15	-	-	-
3	389	32	5	1	23	7	5	13	135	-	-	9	-	13	3
4	161	6	-	4	18	-	7	21	58	1	-	3	3	7	-
5	52	-	-	-	-	-	-	-	15	3	-	6	-	-	-
6	10	-	-	6	-	-	-	-	-	-	-	2	-	-	-
7	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Total	741	44	5	14	45	8	12	73	277	6	1	35	3	20	3

Debitage

A flake, created during the process of stone reduction, is characterized by one or more attributes of flake morphology (e.g., striking platform, bulb of percussion, dorsal flake scars, etc.). As expected,debitage represents the bulk of the lithic assemblage excavated (Table 3.8). Although not diagnostic alone, flakes are byproducts of the tool-making process and are beneficial in identifying tool manufacture processes and maintenance activities at the site. Potts (2004) was able, in part, to spatially separate stone reduction activities at the site using flake remains. As previously mentioned, the lithics were analyzed by raw material, class size, and the presence or absence of cortex. Each of these attributes can be utilized to help identify site occupations, occupational activities, and movements of peoples across the landscape as they procure raw materials and maintain stone tools.

Table 3.8. Distribution of stone artifacts by level

Level	Debitage	Tools	Total
1	-	-	-
2	14	-	14
3	9	8	17
4	61	9	70
5	66	24	90
6	97	2	99
7	101	32	133
8	123	18	141
9	40	1	41
10	18	-	18
11	-	-	-
Total	529	94	623

Metavolcanic stone appears to have been the preferred material for tool manufacture from this investigation at Barber Creek (Table 3.9). Metavolcanic accounts

for 50.5% ($n=267$) of all debitage excavated in the 10 units. In all but two levels, it constitutes the highest frequency of raw material. Metavolcanic flakes account for 49.1% ($n=111$) of the assemblage from Levels 7 and 8 (Table 3.9). As will be discussed in Chapter four, Levels 7 and 8 are identified with the Early Archaic occupation. With the exception of Levels 6 and 7, metavolcanic remained the preferred material throughout the Early Archaic period. Quartzite is also utilized quite heavily and comprises 31.7% ($n=166$) of the flakes identified in the debitage assemblage. In Levels 6 and 7, quartzite accounts for some 56.0% ($n=93$) of all the quartzite debitage excavated from the ten units. These two levels are the only levels in which metavolcanic stone does not appear in greater quantities than other stone types. Quartzite is the second most readily available stone recovered with 31.7 % ($n=166$) of the total flake assemblage. Seven orthoquartzite flakes were recovered as well, with none being found above Level 4. All but one flake, found in Level 9, were discovered in Levels 4-6. Exotic raw materials, such as chert and rhyolite, are mostly confined to N465 E431. This unit contained 81.8% ($n=17$) of all exotic materials analyzed. Rhyolite ($n=17$) was lumped into the metavolcanic category but identified separately during analysis. Of note is that quartzite appears to be the preferred raw material of choice between the Early Archaic occupation and the later Woodland component.

Table 3.9. Distribution of flake raw materials by level.

Level	Chert	Meta	Ortho	Quartz	Quartzite	Total
1	-	-	-	-	-	-
2	-	11	-	2	1	14
3	-	8	-	1	-	9
4	-	33	2	11	15	61
5	1	32	3	7	23	66
6	-	37	1	11	48	97
7	1	43	-	11	45	101
8	3	67	-	30	23	123
9	-	27	1	8	4	40
10	-	8	-	3	7	18
Total	5	267	7	84	166	529

Debitage can also be helpful in determining stone tool production activities. The presence or absence of cortex on the flakes allows for recognition of lithic reduction activities. Of the 529 flakes analyzed, 172 (32.5 %) were determined to have intact cortex (Table 3.10). This suggests that while the site was used frequently for late stage stone tool reduction and maintenance activities, early stage reduction also played a major role in occupational activities. Of the 44 Size Class 1 flakes, 15 (34.1%) had the presence of cortex. Some 43.9% ($n=69$) of Size Class 2 flakes had cortex as well. The presence of cortex on these large flakes suggests that stone raw materials were being transported to the site prior to them being utilized in tool manufacture.

Table 3.10. Distribution of flakes with cortex.

Size Class	Cortex	No Cortex	Flakes
1	15	29	44
2	69	88	157
3	58	161	219
4	30	79	109
Total	172	357	529

Once the debitage is cross-referenced with corresponding provenience (Table 3.11), two units in particular stand out from the other eight. Forty-three percent ($n=228$) of the flakes were excavated from units N465 E431 and N475 E431. Looking at the raw materials that share the highest frequencies at the site, 32.3% ($n=86$) of the metavolcanic flakes in the assemblage were retrieved from those two units. Even more impressive, 64.2% ($n=106$) of the quartzite flakes came from those units as well. Additionally, all five chert flakes in the assemblage were discovered in unit N461 E431. Although rhyolite was lumped in with the metavolcanic, 82.4% ($n=14$) was excavated in those units, with thirteen of those flakes coming from N465 E431. With all of the chert and an overwhelming majority of the rhyolite excavated from one unit, this suggests the presence of some spatially discrete activity involving these exotic raw materials.

Table 3.11. Distribution of flakes by unit

Unit	Flakes	Percent
N451 E424	7	1.3
N453 E424	5	1.0
N455 E424	30	5.7
N459 E429	74	13.9
N461 E429	65	12.3
N463 E429	22	4.2
N465 E429	20	3.8
N467 E429	78	14.7
N461 E431	115	21.7
N475 E431	113	21.4
Total	529	100.0

In summary, 1907 stone and ceramic artifacts were analyzed for the investigation, of which 623 were lithics. The bulk of the lithic tools consisted of cobbles and cobble flakes and fragments. Four chronologically diagnostic projectile points were excavated as was four steatite bowl fragments. Debitage accounted for the majority of the lithic

assemblage, which is not surprising. However, it is surprising that about one-third of the flakes, including Size Classes 1 and 2, contain cortex. This has not been the case in prior excavations at the site, which will be explained in greater detail in Chapter 4. The presence of cortex suggests that some early stage reduction activities were occurring at the site, in addition to late stage reduction and tool maintenance. As for the ceramics, the Deep Creek series comprised the overwhelmingly majority of the assemblage, while the Hanover series appeared to be a later arrival to the site.

CHAPTER FOUR – STRATIGRAPHY AND CULTURAL CHRONOLOGY

This chapter presents the results of the stratigraphic analysis of the excavated trenches. In particular, this chapter will document the number and ages of the cultural sequences in the excavated trenches. Artifact backplots of diagnostic cultural materials and the frequency distribution of total artifact counts by level are used to correlate artifacts with occupation surfaces at the site.

Stratigraphy at Barber Creek

There exist three pedogenic soil zones at the Barber Creek site (Fig. 4.1). These zones are characterized by color and texture changes in the upper 140 centimeters of deposits that have been excavated (Fig. 4.1). Those changes, as identified with a Munsell soil color chart, range from very dark brown (10YR2/2) to brownish yellow (10YR6/6). Zone I extends to a maximum depth of 22 centimeters below surface and is typically a very dark to dark brown medium to fine sandy loam. Zone I includes an O/A horizon, with a heavy root mat comprising the O horizon underlain by an A horizon that includes the same soil color and texture as the upper part of Zone I but with diminished root activity. As discussed below, Woodland period artifacts are present in Zone I and increase in density toward the bottom of this zone. Zone II, consisting of dark brown to yellow brown soil and medium to fine sandy loam, extends from 22 centimeters to around 1 meter below surface but varies by unit by as much as fifteen centimeters. This level represents the lowest extent of the aeolian deposits on the relict dune (McFadden 2009; Moore 2009). Two cultural traditions are represented in Zone II. Cultural remains are most dense in this zone and date from the Woodland period to the Early Archaic period. Zone 3 extends down to the extent of the excavations, which ended, at most, in

level 14. The only artifacts found in this level were from one unit (N451 E424) that slopes sharply off the south end of the dune. However, in this particular unit, Zone 3 began in Level 8. Zone 3 was often accompanied by lamellae, which have been documented elsewhere on the site (McFadden 2009; Moore 2009). Lamellae are a pedogenic overprint of very thin, around 5 centimeters in thickness, alluvial packages (McFadden 2009).



Figure 4.1. Example of Pedogenic Soil Zones from 429E Trench Profile of Five Contiguous units.

Stratigraphic Analysis

In the absence of distinct changes in soil strata that might indicate cultural stratigraphy, emphasis was placed in the field on documenting changes in artifact frequency and type with depth that might reveal former occupation floors. As noted in the

excavation methods, digging in 10-cm levels along with the judgmental piece plotting (i.e., recording precise horizontal and vertical location) of particular artifacts allowed excavators to recognize potential occupation floors in the field. In particular, emphasis was placed on plotting temporally diagnostic and/or relatively large artifacts (ca. >2.5 cm). Temporally diagnostic artifacts provided chronological control and larger artifacts indicated buried surfaces since they were less likely to have been moved vertically by postdepositional process (Brooks and Sassaman 1990; Brooks et al. 1990; Brooks et al. 1996; Ferring 1986; Hughes and Lampert 1977; Moore 2009). Suspected occupational floors identified in the field were largely borne out by the data analyzed here.

Using large lithic artifacts to determine occupational boundaries, a multimodal distribution of artifacts becomes apparent. This suggests three periods of occupational stability at the Barber Creek site (Figure 4.2 - 4.5). Three periods of stability are readily evident across the assemblage, one dating to the Early Archaic, a second Middle/Late Archaic occupation, and a third identified during the Woodland period. There is a relative absence of diagnostic artifacts between these former occupation floors. In addition to the stone artifact backplots, a distribution of the diagnostic stone by type and unit (Table 4.1) reveals that unit 465N 431E contained the highest frequency of plotted and general level (Size Class 1 and 2) artifacts with 15 while 465N 429E had the least number of diagnostic artifacts with six. Piece-plotted artifacts, some forty-one in all, have been separated from the general level artifacts and can be viewed by individual type and unit in Table 4.2.

These former occupation floors are interpreted as periods of relative stability in dune formation, which provided surfaces suitable for human occupation. These three

floors are indicated on the artifact backplots (Figures 4.2 – 4.5).

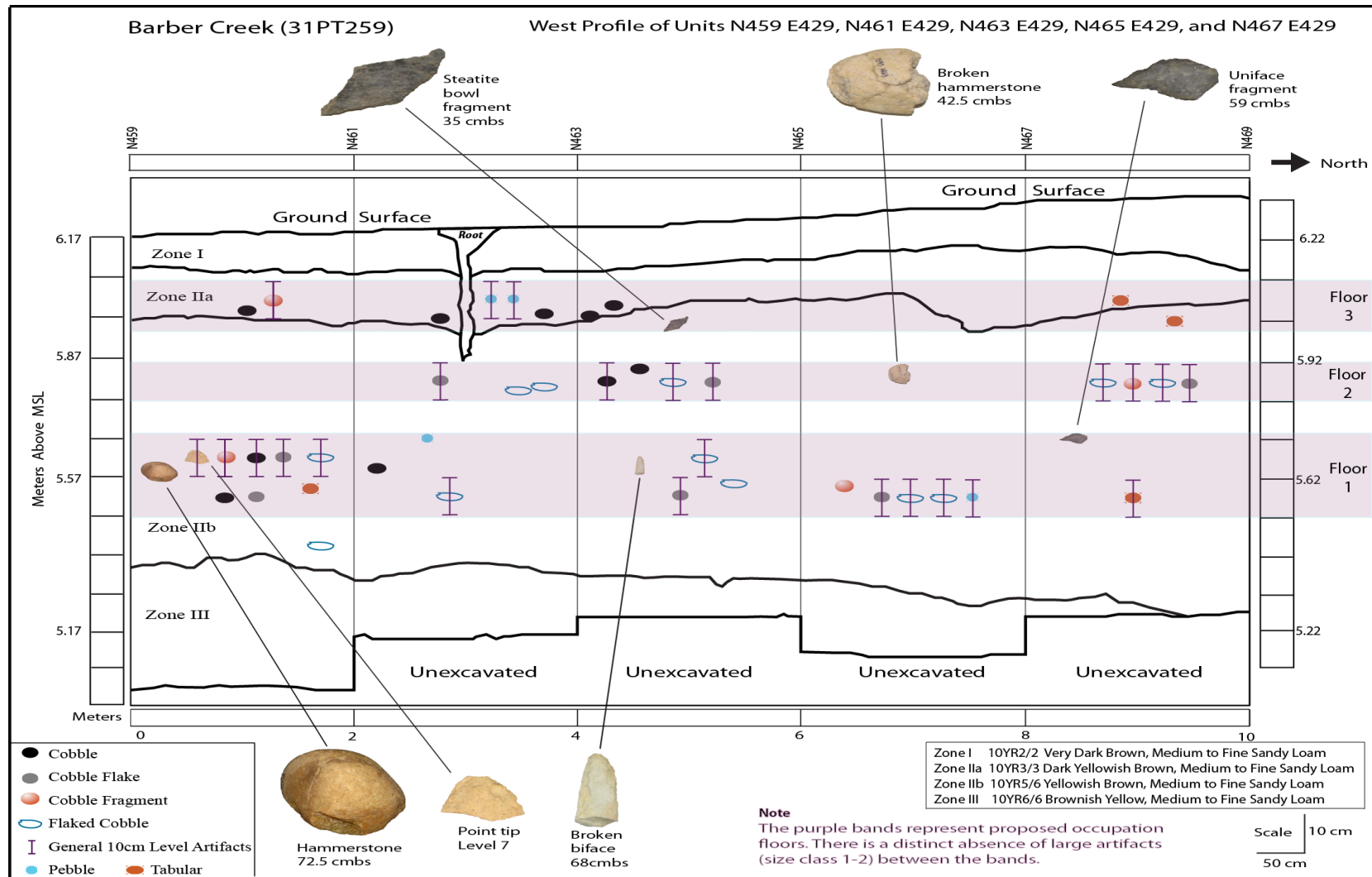


Figure 4.2. Artifact backplot of five contiguous units along E429 illustrating piece-plotted diagnostic artifacts and artifact frequency by level. Note: artifacts not to scale.

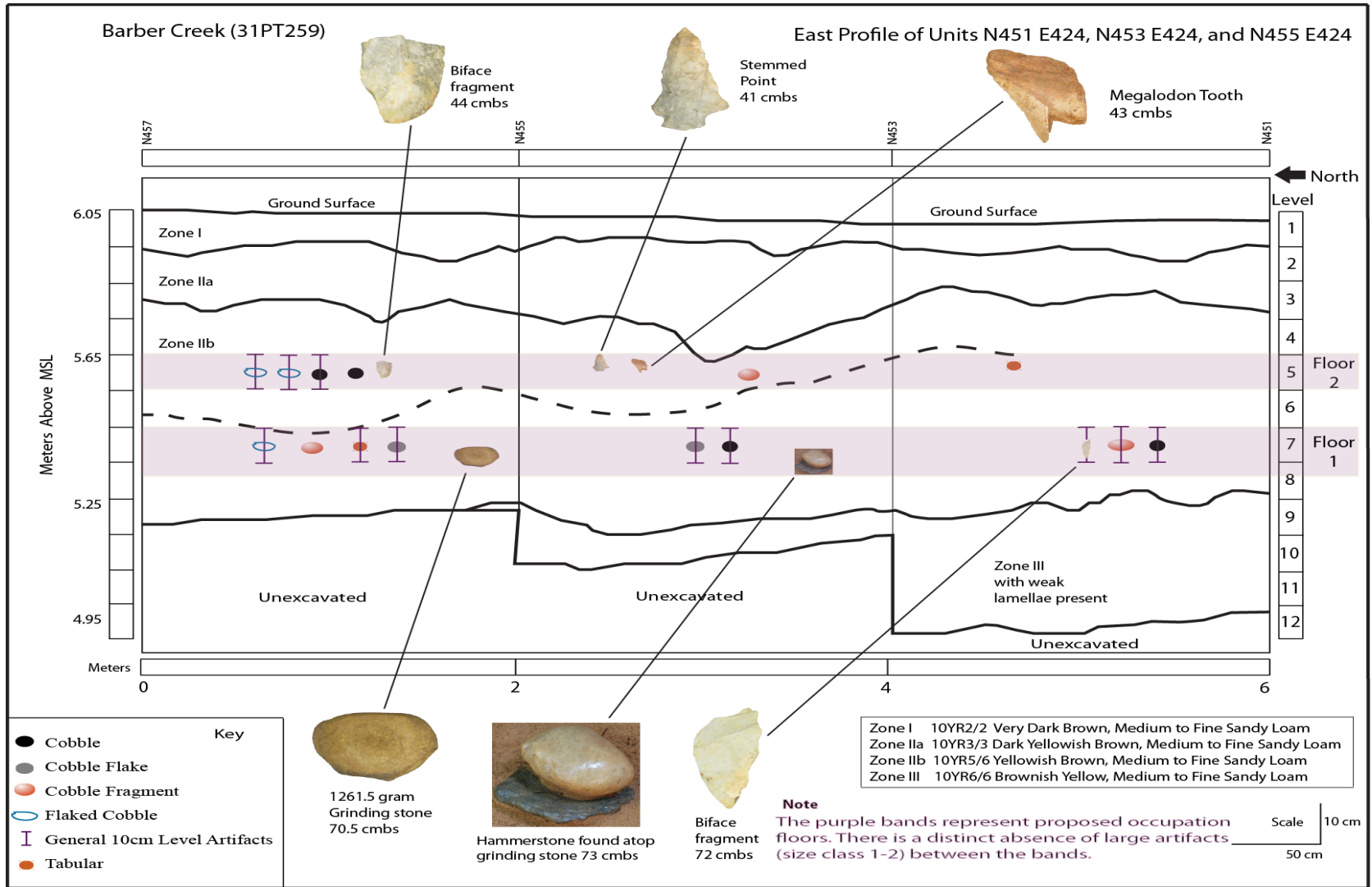


Figure 4.3. Artifact backplot of three contiguous units along E424 illustrating piece-plotted diagnostic artifacts and artifact frequency by level. Note: artifacts not to scale.

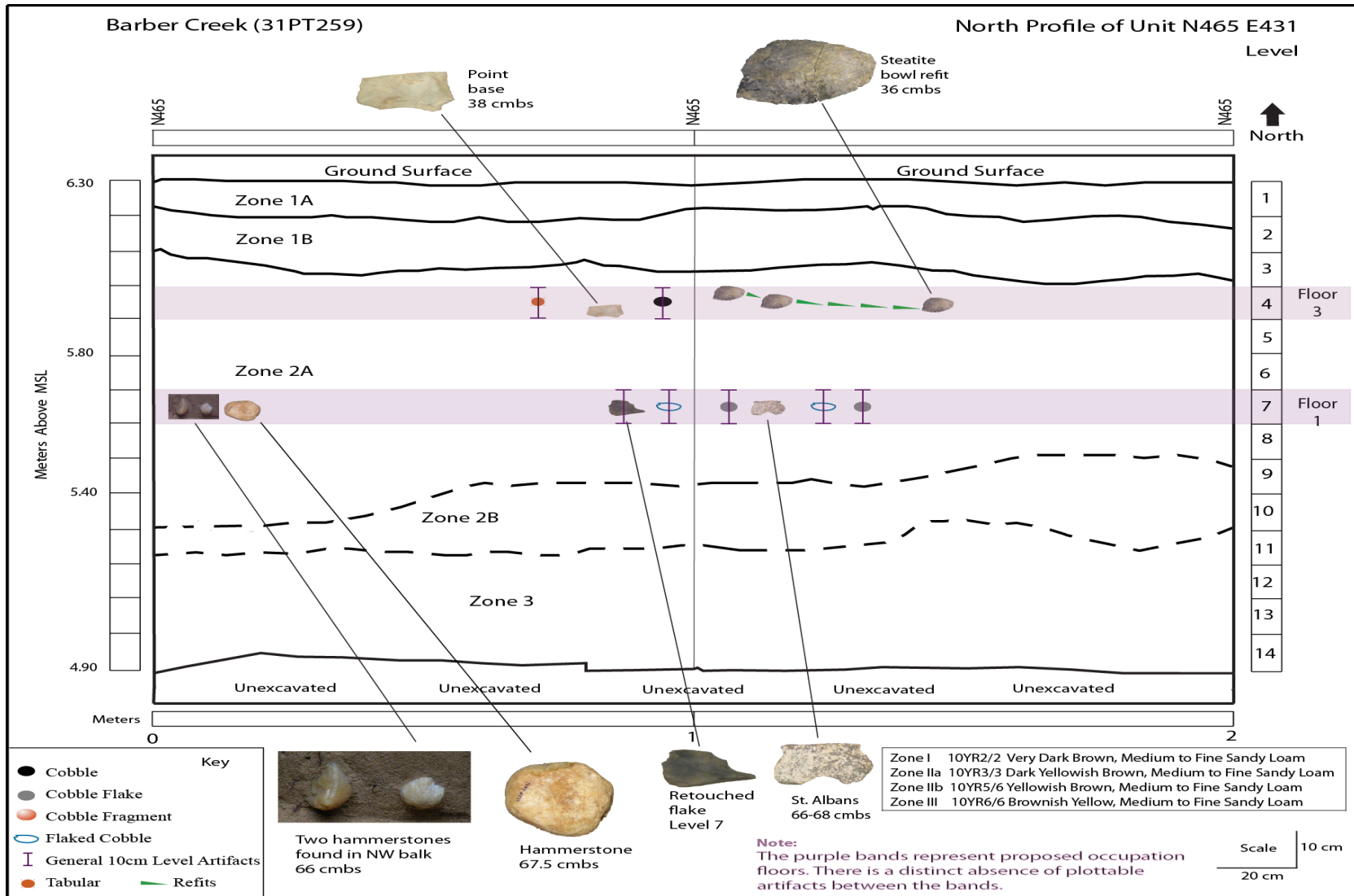


Figure 4.4. Artifact backplot of Unit 465N 431E illustrating piece-plotted diagnostic artifacts and artifact frequency by level. Note: artifacts not to scale.

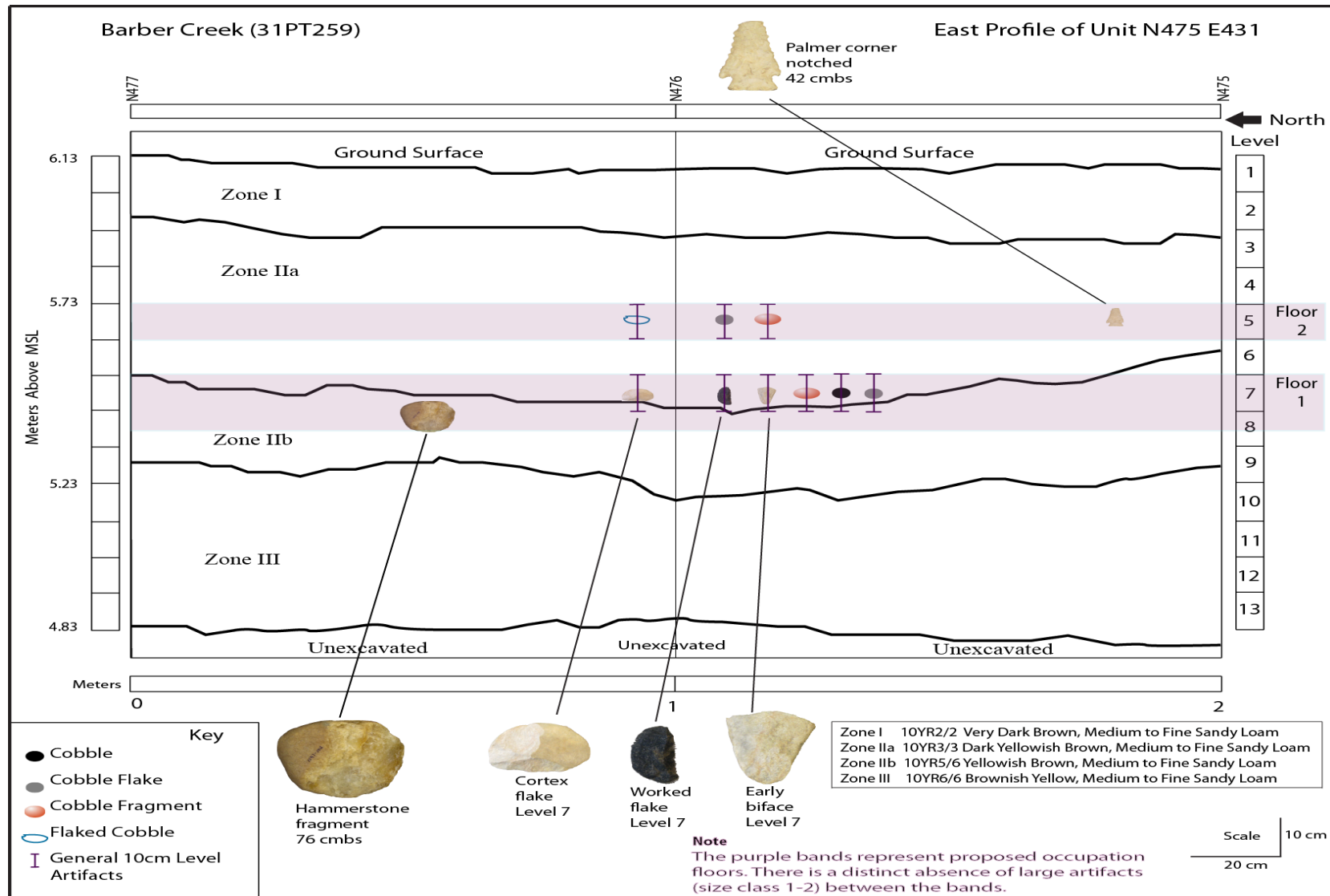


Figure 4.5. Artifact backplot of Unit 475N 431E illustrating piece-plotted diagnostic artifacts and artifact frequency by level. Note: artifacts not to scale.

Table 4.1. Distribution of large diagnostic lithic artifacts (plotted and general level) by type and unit

Artifacts	N451 E424	N453 E424	N455 E424	N459 E429	N461 E429	N463 E429	N465 E429	N467 E429	N465 E431	N475 E431	Total
Biface	1	-	1	-	-	1	-	-	-	1	4
Bowl fragment	-	-	-	-	-	1	-	-	3	-	4
Cobble	1	1	2	3	3	4	-	-	1	1	16
Cobble flake	-	1	1	2	1	2	1	1	2	2	13
Cobble fragment	1	1	1	2	-	-	1	1	-	2	9
Cortex flake	-	-	-	-	-	-	-	-	-	1	1
Flaked cobble	-	-	3	2	3	3	2	2	2	1	18
Grinding Stone	-	1	1	-	-	-	-	-	-	-	2
Hammerstone	-	1	-	1	-	-	1	-	3	1	7
Fossil	-	1	-	-	-	-	-	-	-	-	1
Pebble	-	-	-	-	3	-	1	-	-	-	4
Projectile point	-	1	-	1	-	-	-	-	2	1	5
Retouched flake	-	-	-	-	-	-	-	-	1	-	1
Tabular stone	1	-	1	1	-	-	-	3	1	-	7
Uniface	-	-	-	-	-	-	-	1	-	-	1
Worked flake	-	-	-	-	-	-	-	-	-	1	1
Total	4	7	10	12	10	11	6	8	15	11	94

Table 4.2. Distribution of piece-plotted diagnostic lithic artifacts by type and unit

Plotted Artifacts	N451 E424	N453 E424	N455 E424	N459 E429	N461 E429	N463 E429	N465 E429	N467 E429	N465 E431	N475 E431	Total
Biface	-	-	1	-	-	1	-	-	-	-	2
Bowl fragment	-	-	-	-	-	1	-	-	3	-	4
Cobble	-	-	1	2	3	3	-	-	-	-	9
Cobble flake	-	-	-	-	-	-	-	-	-	-	0
Cobble fragment	-	1	1	-	-	-	-	-	-	-	2
Cortex flake	-	-	-	-	-	-	-	-	-	-	0
Flaked cobble	-	-	-	1	2	1	1	-	-	-	5
Grinding Stone	-	1	1	-	-	-	-	-	-	-	2
Hammerstone	-	1	-	1	-	-	1	-	3	1	7
Fossil	-	1	-	-	-	-	-	-	-	-	1
Pebble	-	-	-	-	1	-	-	-	-	-	1
Projectile point	-	1	-	-	-	-	-	-	1	1	3
Retouched flake	-	-	-	-	-	-	-	-	-	-	-
Tabular stone	1	-	-	1	-	-	-	2	-	-	4
Uniface	-	-	-	-	-	-	-	1	-	-	1
Worked flake	-	-	-	-	-	-	-	-	-	-	0
Total	1	5	4	5	6	6	2	3	7	2	41

Occupation Floor 1

The earliest occupation surface dates to the Early Archaic, and was recognized between Levels 7 and 8 and appears in all ten units (Fig 4.2 – 4.5). Looking at the lithic artifact densities (Table 4.3), including stone tools and debitage, these illustrate that Occupation Floor 1 accounts for 43.9% ($n=274$) of the total lithic assemblage. The diagnostic stone tools recovered from this former surface ranged in depths from 66-76 cmbs. Of specific importance with regards to the cultural chronology of the site was a St. Alban's point base discovered from 66-68 cmbs. The St. Alban's is a member of the bifurcated point series that is diagnostically Early Archaic. Additionally, this point appears to be manufactured from Uhwarrie rhyolite, which can help identify raw material acquisition practices at the site. Two other such points have been found at Barber Creek, one from 60-69 cmbs in unit N443 E432 (McFadden 2009) and another from the N445 trench at 77 cmbs (Moore 2009). This particular point series dates to around 9,600 to 10,400 CALYBP (Moore 2009), and these dates are in line with the chronometric dates (Table 4.4) that were obtained from Level 8 during the 2000 field season (Daniel 2002) and OSL dates (Moore 2009) from 80 cmbs in unit 445N 430E (Table 4.5).

In addition to the 224 flakes recovered from Occupation Floor 1, 51 lithic tools were excavated, including two bifaces, one biface fragment, six cobbles, one large cortex flake, eight cobble flakes, eight cobble fragments, nine flaked cobble, two grinding stones, six hammerstones, two pebbles, one projectile point base, one projectile point tip, one retouched flake, one uniface, and one worked flake.

Looking more closely at this proposed occupational surface, piece-plotted stone tools are categorically clustered at the top of Level 8 and the bottom of Level 7. None of

the plotted stone tools from this floor were excavated from below 76 cmbs, and in fact, the majority was found within the first three centimeters of the boundary separating Levels 7 and 8.

Table 4.3. Distribution of stone artifacts by level

Level	Debitage	Tools	Total
1	-	-	-
2	14	-	14
3	9	8	17
4	61	9	70
5	66	24	90
6	97	2	99
7	101	32	133
8	123	18	141
9	40	1	41
10	18	-	18
11	-	-	-
Total	529	94	623

Table 4.4. Radiocarbon Dates from Barber Creek (31PT259).

Beta Number	Context	Material	Radiocarbon Age	¹ CALYBP	² CALYBP
166236	Level 5	wood charcoal ^a	1470 +/- 40 BP	1361 ± 33 BP	1352 ± 34 BP
188955	Level 6	wood charcoal ^a	8950 +/- 40 BP	10,079 ± 105 BP	10,142 ± 75 BP
166239	Level 7	hickory nut shell ^a	8440 +/- 50 BP	9472 ± 37 BP	9466 ± 37 BP
150188	Level 8	wood charcoal & hickory nutshell ^b	8940 +/- 70 BP	10,058 ± 116 BP	10,108 ± 119 BP
166237	Level 8	wood charcoal ^a	9280 +/- 60 BP	10,453 ± 98 BP	10,470 ± 92 BP
166238	Level 10	wood charcoal ^a	9860 +/- 60 BP	11,290 ± 57 BP	11,252 ± 48 BP
188956	Level 11	wood charcoal ^a	10,500 +/- 50 BP	12,436 ± 174 BP	12,450 ± 78 BP
150187	Feature 1	wood charcoal ^b	1630 +/- 60 BP	1523 ± 80 BP	1521 ± 70 BP
188954	Feature 24	wood charcoal ^a	4140 +/- 40 BP	4695 ± 92 BP	4682 ± 95 BP

Note: Level depths are 10 cm intervals (e.g., level 5 equals 40-50 cmbs)

^aAMS date

^bRadiometric date

¹ CalPal-2007Hulu (on-line calibration software)

² Fairbanks0107 calibration curve

Table 4.5 OSL dates from N445 E430

Sample Number	Context	OSL Age
UW1907	80 cmbs	9.1 +/- 0.7
UW1908	100 cmbs	12.9 +/- 0.9
UW1909	140 cmbs	16.4 +/- 1.3

Note: Single grain OSL dates from Moore 2009

One of the more interesting discoveries of the assemblage occurred in Occupation Floor 1 along the southeast quadrant of unit N453 E424 (Fig. 4.6). A large hammerstone was uncovered *in situ* sitting atop a well utilized grinding stone. The base of the grinding stone measured 73 cmbs, while the top of the hammerstone measured 67 cmbs.



Figure 4.6. Hammerstone resting atop a grinding stone.

Another artifact cluster, comprised of three hammerstones, was present in the northwest corner of unit 465N 4317. Two of these hammerstones were excavated from the unit's northwest balk at 66 cmbs (Fig.4.7). The other was removed from the same depth, prior to photographing, within five centimeters of the balk (Fig. 4.8). These three hammerstones and the aforementioned hammerstone found atop a grinding stone were excavated from essentially the same depth but some 12 meters apart. This lends further support to the interpretation of the presence of stable occupation surfaces as identified by these former floors. In the past, bioturbation has been offered as a primary means of burial along many upland sandy sites (Leigh 1998; Mitchie 1990). However, these two groupings of artifacts excavated in Occupational Floor 1 suggest that it is highly unlikely

that such clusters would have been moved to the same depths through bioturbation or by any other non-anthropogenic means.



Figure 4.7. Two *in situ* hammerstones. An associated third hammerstone was removed prior to photographing (See Figure 4.8).



Figure 4.8. Third hammerstone from the artifact cluster in Fig. 4.8.

The high frequency of debitage recovered from Levels 7 and 8 are consistent with the high density of stone tools from those same levels. The flakes at this depth account for 44.9% ($n=234$) of all flakes recovered from the excavations. While artifacts were present below Level 8, they were almost exclusively lithic debitage totaling 58 flakes-all of which were Size Class 3 or 4. Only one artifact, a Size Class 2 flaked cobble, was plotted in below Level 8. Two possible interpretations exist to account for the presence of artifacts in these levels. First, the marked decrease in artifact frequency in Levels 9 and 10 along with their small size is interpreted to reflect post-depositional vertical displacement from the slowly accreting occupation surface above. Alternatively, the presence of artifacts in these two lower levels could also represent the ephemeral presence of an occupation pre-dating the Early Archaic. Similar low artifact frequencies are present elsewhere on the site (e.g., McFadden 2009: 45-46). The first interpretation appears to be the most parsimonious explanation, but the second interpretation cannot be discounted.

Occupation Floor 2

The second proposed occupational surface appears between Levels 5 in nine of ten units (Fig 4.2 – 4.4). Based on diagnostic artifacts, this floor consists of Level 5. In addition to 170 flakes that were analyzed from these levels, 26 stone tools were identified between 40-cm and 50-cm. Together, the artifacts account for 31.7% ($n=196$) of the lithic assemblage. These stone tools include two bifaces, four cobbles, four cobble flakes, three cobble fragments, eight flaked cobbles, one fossil (megalodon tooth), one hammerstone, two projectile points, and one tabular fragment. Given that this occupation floor is stratigraphically between the Early Archaic component and the Woodland component (to

be discussed in the next section), then this proposed occupation is likely Middle to Late Archaic in age. However, it could also represent another Early Archaic occupation. Determining the exact age for this assemblage is difficult, however, because no chronologically diagnostic artifacts were recovered from this depth. Elsewhere on the site, Middle Archaic projectile points have been recovered, such as a Kirk Stemmed point that was excavated from 54 cmbs (Moore 2009) suggesting at least a Middle Archaic assignment for this occupation level.

Occupation Floor 3

The third occupation surface, observable in six of ten units, is identifiable between Levels 3 and 4 (Fig. 4.2 – 4.3; 4.5) and is temporally assigned to the Woodland component. Included in this floor are both ceramics and lithics. This surface includes some 87 lithics, of which 17 are stone tools, and 928 ceramics. Plotted and general level lithic artifacts include six cobbles, one cobble fragment, two pebbles, one projectile point base, four steatite bowl fragments, and three tabular pieces.

Of note is what appears to be an Eared Yadkin (4.9a) that was recovered from 38 cmbs. This projectile point is a sub-type of the Yadkin, which is part of a series that is diagnostically Woodland (Coe 1964). The eared Yadkin is also known as the Levanna type from Maryland north into New England (Ritchie 1961). Additionally, a Thelma projectile point (Fig. 4.9b) was excavated from Level 5 at 41 cmbs. This series of points may represent a transition type from stemmed Archaic projectile points to triangular arrowheads (South 2005).

Also of interest is the recovery of four steatite bowl fragments, three of which refit (Fig. 4.10). The three refits were recovered from 33 to 36 cmbs in unit 465N 431E.

The additional fragment was thicker and may possibly have come from a lower portion of the bowl or another vessel entirely. It was found at 35 cmbs in unit 463N 429E, approximately four meters horizontally from the refits. Steatite bowls have been used to distinguish the Late Archaic from the Early Archaic in other parts of North Carolina (Griffin 1952:355).



Figure 4.9. Terminal Archaic artifacts a) Eared Yadkin and b) Thelma Point.



Figure 4.10. Three-piece steatite bowl fragment refit.

With regards to the ceramics analyzed in this occupation surface, Woodland pottery occurs in great frequencies in Levels 3 and 4 (Fig. 4.11). Those two levels account for 72.3% ($n=928$) of the ceramic assemblage. Level 3 contains the highest frequency of pottery in the assemblage with 49.6% ($n=638$). Pottery continued to be excavated in small numbers, however, into Level 8, and even one Deep Creek sherd into Level 11, but bioturbation likely played a role in ceramics appearing in these deep levels. It must be noted that all the pottery below Level 5 appeared in one unit, 451N 424E, which suggests some localized bioturbation in that unit.

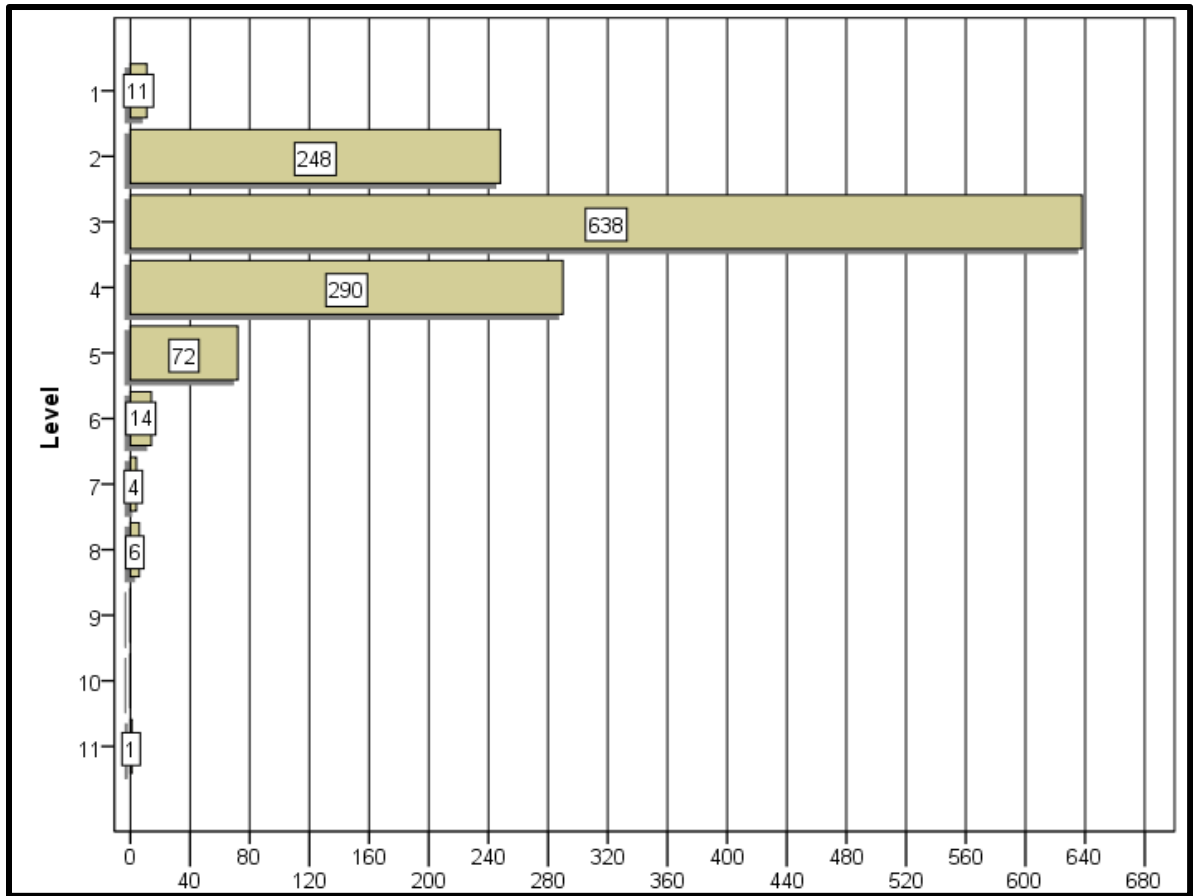


Figure 4.11. Ceramic frequencies by level.

Looking at the distribution of flakes by level (Fig. 4.12), the highest density occurs in Level 8, which has some 124 flakes. Debitage in Levels 7 and 8 is congruent with the highest density levels for stone tools. These levels clearly represent the earliest stable surface for human occupation, which were identified as Occupation Floor 1. The flakes in those levels account for 43.8% (n=234) of all flakes recovered from the excavations. The upper portion of Level 6 and most of Level 5 accounts for Occupational Floor 2. Although flakes recovered were not sorted beyond arbitrary 10 cm levels, all but one stone tool from Level 6 was in the upper half of the level. In Level 6, 97 flakes were analyzed, with another 63 coming from Level 5. These levels comprised 29.7% of the total flake assemblage. In Levels 5 and 6, quartzite was identified as the primary raw

material; metavolcanic is preferred in all other levels.

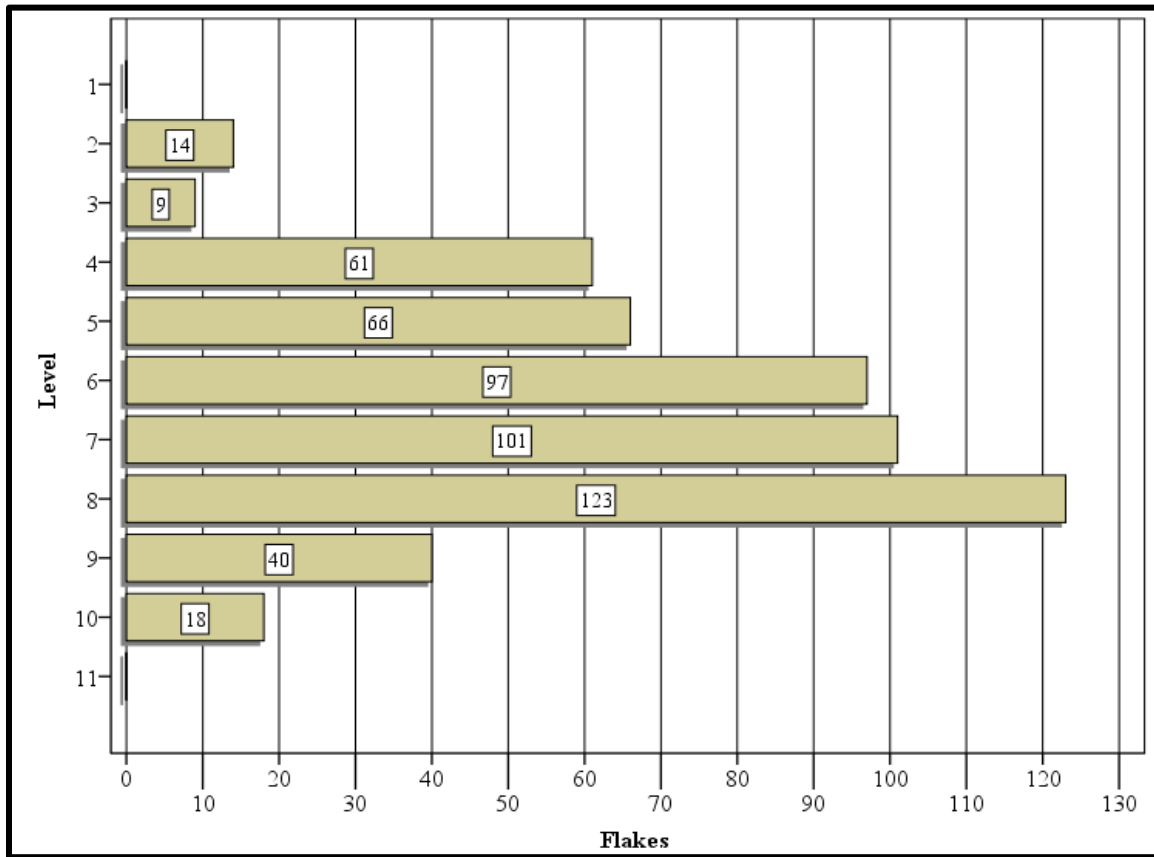


Figure 4.12. Distribution of flakes by level.

Of note is that an Early Archaic period metavolcanic Palmer Corner-notched point (refer back to Fig. 3.4a) was found in Level 4 at 39 cm. This point is clearly out of place stratigraphically. One possible explanation for the appearance of a temporally diagnostic Early Archaic point appearing much shallower is that it was recycled by the later occupants of floor 3. Bioturbation and vertical displacement could also account for its location well above the recognized Early Archaic occupation, although no indication or clear evidence of this was noted during the excavations in 2006 and 2007.

Summary

Stratigraphic analysis has identified three former occupation floors dating to the

Early Archaic, Middle/Late Archaic, and Early/Middle Woodland periods. These are relatively discrete surfaces identified by the presence of diagnostic and/or relatively large artifacts. Each floor is separated by a 4-10 cm absence of plotted artifacts. Occupation floors 1 and 3 have diagnostically temporal stone artifacts, including projectile points and steatite bowl fragments. While occupational floor 2 is absent of such temporal artifacts, others have been located at the Barber Creek site that can be assigned to the Middle to Late Archaic periods.

CHAPTER FIVE – CONCLUSIONS

In this chapter I return to the research question posed at the beginning of this thesis. Specifically, I summarize the results of my research and compare those results to the conclusions of McFadden (2009) and Moore (2009).

The research question posed in Chapter 1 was: *What is the stratigraphic sequence at the west-central portion of the ridge and how does it compare to the sequence elsewhere on the site?* The investigation of ten 2-by-2-m units, eight of which were excavated as trenches, has identified three former occupation floors in the west-central portion of the Barber Creek site. These occupation surfaces are buried in approximately one meter of aeolian sands previously identified by the geoarchaeological work of McFadden (2009) and Moore (2009). In brief, their work documented that the aeolian sands accumulated on a former elevated braid bar that was part of the Tar River braidplain prior to the end of the Pleistocene. Subsequent changes in the flow of the Tar River to a meandering channel left the elevated braid bar to begin accumulating wind-blown sand sometime after 12,900 years ago. Over the course of the next several millennia, the Barber Creek site experienced intermittent periods of sand accumulation and human occupation. Both McFadden (2009) and Moore (2009) identified three periods of relatively intense occupation at Barber Creek that correspond to the three periods of occupation reconstructed in this project. The significance of this work, however, is that the artifact backplots reconstructed here are the clearest evidence yet for the stratified sequence at Barber Creek.

The earliest widespread occupation of the site took place sometime during the Early Archaic. That component is present at about 70 cmbs. Interestingly, this depth

corresponds to the sedimentological data from about 60 – 80 cmbs that exhibits grain size changes characteristic of anthropogenically disturbed deposits (McFadden 2009:64-72). Diagnostically, a St. Alban's point base appears to date this component to the latter part of the Early Archaic period. At least two other St. Albans points have been recovered from elsewhere on the site (McFadden 2009: 41-42; Moore 2009: 109). In addition to the temporally diagnostic projectile point base, forty-one associated stone tools and 200 flakes appear to be part of the Early Archaic assemblage.

Following the Early Archaic occupation there appears to be a period of site abandonment. This is consistent with the previous geoarchaeological data that indicates several centimeters of aeolian deposits that exhibit no evidence of anthropogenic disturbance (McFadden 2009:93-96). This evidence combined with the drop in artifact density from ca. 50-60 cmbs suggests a period of sediment accumulation in the relative absence of human occupation. Subsequently, a second occupation floor appears at roughly 40 cmbs. This floor is seen in at least nine of the ten excavated units. Twenty-six stone tools are associated with this component. Unfortunately there were no diagnostic artifacts recovered with this level. Based on its stratigraphic position, however, this component likely dates to the Middle to Late Archaic periods. Elsewhere on the site, several types of stemmed points have been recovered that span the Middle to Late Archaic (Moore 2009: 109-111) making temporal assignment of this component unclear. It may be the case that this former surface was relatively stable for several millennia and was intermittently occupied throughout the Middle and Late Archaic periods making stratigraphic separation of these components virtually impossible. This interpretation is consistent with Moore's (2009:111) results elsewhere on the site. Additional data from

as yet unanalyzed fieldwork should help resolve this issue (Daniel 2011, personal communication 2011).

Another increase in artifact densities, including the presence of ceramics that were virtually absent in the lower levels indicates a third occupation floor is present at roughly 30 cmbs. The abundance of ceramics recovered from this level dates it to the Early to Middle Woodland periods. The preponderance of Deep Creek ceramics suggests a relatively dense Early Woodland occupation with lesser frequencies of Hanover and Mount Pleasant ceramics indicating a Middle Woodland presence as well. A broken Woodland point—tentatively identified as an Eared Yadkin point—was also associated with this occupation. In addition, a Thelma Stemmed point was also associated with this former occupation floor. Thelma points likely represent a point type transitional between the stemmed points of the Late Archaic Period and triangular points of the Woodland Period (South 1976). Interestingly, the recovery of four steatite sherds from 34-36 cmbs may reflect the presence of an ephemeral terminal Late Archaic presence at the site. In any case, little sediment accumulation occurs subsequent to the Early to Middle Woodland periods and the dune stabilizes to its current form as also indicated by McFadden (2009) and Moore's (2009) results.

The focus of this investigation was to reconstruct the cultural chronology of the west-central portion of the site and compare it to the results of previous analyses. The stratified remains of three relatively discrete occupation surfaces were identified in this study that were largely consistent with the results of McFadden (2009) and Moore's (2009) work. In fact, the results of this study provide the best evidence yet for the presence of Early Archaic, Middle to Late Archaic, and Woodland components in

stratified contexts in the Coastal Plain of North Carolina.

Future work should focus on studying the as yet unanalyzed collections from Barber Creek. Likewise, additional block excavations in the vicinity of the trenches examined here are warranted to recover additional data used to better characterize artifact assemblages from each component. Moreover, such data could also be used to investigate questions concerning site function. In short, great potential exists at Barber Creek and other such stratified sites along the Tar River to answer questions concerning chronology and typology related to the prehistory of the North Carolina Coastal Plain.

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Appendix A

Lithic Typology (Artifact Types)

Artifact Types (Caynor 2011)

- Cobble – Source stone size class 1 or above
 - Unmodified Cobble – Cobble that appears natural in origin
 - Broken Cobble – Cobble portion that has broken but has not been flaked
 - Flaked Cobble – Mostly complete cobble that has been flaked but not finished into a tool
 - Cobble Fragment – Cobble portion with definite flaking that has not been finished into a tool
- Pebble – Source stone below size class 1
 - Unmodified Pebble – Pebble that appears natural in origin
 - Abraded Pebble – Pebble that shows signs of use in grinding or scraping
 - Flaked Pebble – Pebble that has been flaked but not finished into a tool
 - Broken Pebble – Pebble portion that has broken but has not been flaked
- Crystal – Source stone of crystalline origin (i.e. Quartz crystal)
 - Unmodified Crystal – Crystal that appears natural in origin
 - Broken Crystal – Crystal portion that has broken but has not been flaked
 - Crystal Fragment – Crystal portion with definite flaking that has not been finished into a tool
- Tabular Stone – Source stone that is tabular in nature and is often of poor quality materials
 - Tabular Fragment – Portion of tabular rock with minimal or no evidence of flaking
- Core – A distinct stone nodule that shows the negative scars of removed flakes on multiple sides
 - Core Fragment – Non-cobble core chunk or fragment
- Flake – Intentional flake and shatter fragments from reduction
 - Utilized/Retouched Flake – Flake with signs of use-wear and/or retouched edge(s)

- Tool
 - Biface – Bifacially worked stone implement (i.e. flaked on two sides)
 - Biface Fragment – Fragment of a biface (non-projectile)
 - Point – A specific form of biface that is associated with a specific geographic region or cultural group
 - Diagnostic Point – Guilford, Morrow Mountain, Kirk, Palmer, etc
 - Indeterminate Point – Point whose identification is not definite
 - Point Fragment – Fragment of a finished projectile point
 - Point Tip – Fragment from the tip of a point
 - Point Base – Fragment from the base of a point
 - Point Ear/Shoulder – Fragment from the ear/shoulder of a point
 - Uniface – Unifacially worked stone implement (i.e. flaked on one side)
 - Uniface Fragment – Fragment of a uniface (non-projectile)
 - End Scraper – Formal type of unifacial scraper
 - Hammerstone – Pebble- or cobble-sized stone used in knapping
 - Broken Hammerstone – Fragment of a hammerstone that appears to have broken through use
 - Anvil/Grinding Stone – A stone used as a surface for grinding or knapping
 - Anvil/Grinding Stone Fragment – Broken section of stone with evidence for use as a grinding or knapping surface

Lithic Typology cont. (Raw Material Types)

Raw Material Types (Caynor 2011; Moore 2009)

Six different lithic raw material types were identified for archaeological sites along the Tar River and a seventh category is presented for indeterminate or unidentifiable stones. These definitions are taken directly from Moore 2009 and modified only minimally to fit the definitions used for this study. Sources cited in these definitions have been updated according to the Works Referenced used here and statements that relate primarily to data in Moore 2009 have been cited within the text.

- 1) Chert
- 2) Metavolcanic
- 3) Quartz
- 4) Quartzite
- 5) Orthoquartzite
- 6) Steatite
- 7) Syenite

- *Chert.* Chert is fine-grained microcrystalline or cryptocrystalline silica or quartz and often forms as a precipitate within carbonate deposits such as limestone or marl (American Geological Institute 1962; Novick 1978). Trace amounts of chert debitage were found at sites in the study area. Some of the chert identified is likely from small worked pieces of petrified wood. Chert artifacts found in North Carolina likely had their origin out of state. Several examples of worked pieces of

silicified or petrified wood have been found during excavations at the Barber Creek Site and were previously identified as chert (Moore 2009).

- *Metavolcanic stone.* Metavolcanic stone refers to a class of metamorphosed igneous rock that includes rhyolitic flows, rhyolitic tuffs, and greenstones (metabasalt) (Daniel 1998b:41). Metavolcanic stone occurs naturally in the Piedmont and may be found in cobble form within the bedload of Coastal Plain rivers or more commonly from large natural outcrops within the North Carolina Slate Belt (Daniel and Butler 1996; Steponaitis et al. 2006). Petrified wood in the collection may be misidentified as metavolcanic stone.
- *Quartz.* Vein quartz outcrops throughout the Piedmont as precipitated silica within the fracture planes of the underlying bedrock. This stone usually has a milky white or translucent appearance (Novick 1978:433). In the Piedmont and Coastal Plain stream rounded gravels of quartz also provided an easy and compact stone source (House and Wogaman 1978:53). Although relatively abundant, the flaking quality of quartz appears to be quite variable (Daniel 1998b:47). Both quartz and quartzite are present in cobble form along the Tar River.
- *Quartzite.* A metamorphic rock composed of at least 80 percent quartz and formed from interlocking quartz grains. Heat and pressure from metamorphism deforms the individual quartz grains and cements them together along grain boundaries (Novick 1978:431). Quartzite cobbles are abundant along sections of

the Tar River, particularly near Tarboro, North Carolina, where rounded stream-cobbles of quartzite line the riverbed. This material is the dominant lithic raw material used by both Archaic and Woodland hunter-gatherers within the study area of Pitt and Edgecombe Counties, North Carolina (Moore 2009). At sizes below class 2, quartz and quartzite may be mistaken for one another.

- *Orthoquartzite*. This variety of stone is composed of quartz and sand grains that have been cemented together by silica (Novick 1978:433; Upchurch 1984). Although, outcrops of orthoquartzite are known in South Carolina from the lower Santee River (Charles 1981:15; Anderson et al. 1982:120-122) and from within the Savannah River Valley (Goodyear and Charles 1984:116), no quarries are known to exist in North Carolina.
- *Steatite*. Steatite is an impure talcy rock, which occurs in many parts of the North Carolina piedmont and mountains. It was commonly used as a raw material for carved stone bowls during the Late Archaic (e.g., Sassaman 1993:78). The stone was quarried from natural outcrops using stone chisels and axes. Afterwards, smaller stone or other tools would then be used to scrape out the bowl to create a finished product.
- *Syenite*. Syenite is an igneous/plutonic rock that is similar mineralogically to granite but lacks quartz silica (Chesterman and Lowe 1978). Syenite is considered an intrusive rock and may be found associated with dikes or along the periphery

of large plutonic granite deposits (Chesterman and Lowe 1978). Although flaking quality of this rock is extremely poor, varieties of syenite are fairly common in archaeological assemblages along the Tar River with both debitage and some worked tool fragments and bifaces. Many examples of this material have a feldspar groundmass with some biotite, hornblende dark minerals and occasionally sporadic quartz phenocrysts.

Appendix B

Ceramic Typology (Herbert 2003; Martin 2004; Phelps 1983; Roberts 2011; South 1973, 1976)

Deep Creek Series Definition (Phelps 1983; Martin 2004; Roberts 2011)

- Series Name: Deep Creek
- Types: Cord-Marked, Fabric-Imprinted, Net-Imprinted, Plain, and Simple-Stamped
- Temper: Medium to Very Coarse Sand with occasionally (20%) larger elements.
- Paste: Slightly friable somewhat compact fine sandy clay.
- Temper Abundance: An average 10-20% of the paste with occasional sherds <10% and some 20-40%.
- Method of Construction: Coil built with wrapped paddle surface treatments for wall strengthening.
- Range: Southern Virginia to South Carolina's Coastal Regions.
- Texture: Sherds can be rough to somewhat smooth with varying levels of sandy feel.

Hanover Series Definition (Herbert 2003; Phelps 1983; Roberts 2011; South 1973, 1976)

- Series Name: Hanover
- Types: Cord-Marked, Fabric-Impressed, Plain, Incised, Punctuated
- Temper: Crushed sherds or clay pellets up to 6 mm
- Paste: Compact clay
- Temper Abundance: 25-50 % clay and up to 15% fine or medium sand
- Method of Construction: Coil built with wrapped paddle surface treatments for wall strengthening. Interior spaces may show evidence of scraping with a serrate-margin tool.
- Range: Southern coastal region of North Carolina; as far west as Robeson county and as far north as Pitt and Dare counties.
- Texture: Sherds are often lumpy with a smooth paste and potentially a chalky feel.

Mount Pleasant Series Definition (Herbert 2003; Phelps 1983)

- Series Name: Mount Pleasant
- Types: Fabric-Imprinted, Plain, Simple Stamped, Cord-Marked, Incised, Net-Imprinted
- Temper: Fine to medium sand with occasional granule and pebble inclusions
- Paste: Sandy compact clay
- Temper Abundance: Temper abundance varies, but the type is defined by the presence of granule or pebble-sized inclusions.
- Method of Construction: Coil built with wrapped paddle surface treatments for wall strengthening.
- Range: As far north as Currituck County, associated with coastal North Carolina and inland along the Cape Fear River drainage.
- Texture: Surfaces can be rough to somewhat smooth with varying levels of sandy feel.

Surface Treatments (Herbert 2003; Martin 2004; Phelps 1983; Roberts 2011)

- Cord-Marked: Cord-wrapped paddle used to form and strengthen the surface.
- Fabric-Imprinted: Fabric-wrapped paddle used to form and strengthen the surface.
- Incised: Surface decoration.
- Indeterminate: Unidentifiable surface treatment.
- Net-Imprinted: Net-wrapped paddle used to form and strengthen the surface.
- Plain: Surface shows evidence of having been smoothed prior to firing. Some sherds in this category may have surface treatments that were eroded beyond identification.
- Punctated: Surface decoration.
- Simple Stamped: Carved paddle used to form and strengthen the surface, also a form of surface decoration.

Appendix C

Additional Types

Additional Types

- Bone – Any biological material identifiable as bone
 - Burnt Bone – Any bone that shows signs of fire damage
- Shell – Any biological material identifiable as shell
- Fossil – Any fossilized biological material
- Petrified Wood – Petrified wood that shows no signs of flaking or use as a tool
- Charcoal – Any biological material that shows signs of fire damage
 - Burnt Nut – Any charcoal identifiable as a fragment of nut
- Ocher – Fragment of hematite not natural to the landform's composition
- Shell Casing – Spent casing from a firearm
- Unidentified Indeterminate – Any objects that do not fit within a standard category.
 - Miscellaneous Rock – Concretions and unidentified rocks
 - Unidentifiable Biological

Appendix D

Lithic Artifacts

Provenience	Level	Sub	Access.	FS#	Size Class	Type	Material	Cortex	No Cortex	Count	Wt. (g)	Initials
N465 E431	3		1597	2675	2	Tabular	Quartz	1		1		BCC
N465 E431	3		1597	2677	2	Flakes	Crystal Quartz		1	1		BCC
N465 E431	7		1597	2679	4	Flaked cobble	Rhyolite	1		1		BCC
N465 E431	4		1597	2679	1	Flakes	Metavolcanic		2	2		BCC
N465 E431	4		1597	2679	4	Flakes	Orthoquartzite	2		2		BCC
N465 E431	4		1597	2679	3	Flakes	Quartz		1	1		BCC
N467 E429	2		1597	2681	2	Flakes	Quartz		1	1		BCC
N465 E431	3		1597	2683	2	Point base	Metavolcanic	1		1	6.1g	BCC
N465 E431	4		1597	2684	1	Bowl frag	Steatite	1		1		BCC
N465 E431	4		1597	2688	1	Bowl frag	Steatite	1		1		BCC
N467 E429	2		1597	2689	2	Flakes	Quartzite	1		1		BCC
N467 E429	2		1597	2689	3	Flakes	Metavolcanic	1	1	2		BCC
N467 E429	3		1597	2690	1	Tabular	Syenite	1		1		BCC
N475 E431	2		1597	2696	2	Flakes	Quartz		1	1		BCC
N475 E431	3		1597	2696	3	Flakes	Metavolcanic		1	1		BCC
N465 E429	4		1597	2698	1	Bowl frag	Steatite	1		1		BCC
N475 E431	4		1597	2701	1	Flakes	Crystal Quartz		1	1		BCC
N475 E431	4		1597	2701	3	Flakes	Metavolcanic	3	5	8		BCC
N465 E431	5	A	1597	2702	4	Flakes	Metavolcanic	1		1		BCC
N465 E431	7		1597	2706	2	Point base	Rhyolite	1		1	1.0g	BCC
N465 E431	10	B	1597	2707	4	Flakes	Rhyolite		1	1		BCC
N475 E431	4		1597	2708	2	Flaked cobble frag	Quartzite	1		1		BCC
N475 E431	4		1597	2708	4	Flakes	Metavolcanic		2	2		BCC
N475 E431	4		1597	2708	2	Flakes	Quartz		2	2		BCC
N475 E431	4		1597	2708	2	Flakes	Quartzite	2	3	5		BCC
N475 E431	4		1597	2708	4	Flakes	Quartzite		4	4		BCC
N465 E431	5	C	1597	2713	3	Flakes	Metavolcanic	1	4	5		BCC
N465 E431	5	A	1597	2713	3	Flakes	Metavolcanic		3	3		BCC
N465 E431	5	B	1597	2713	2	Flakes	Quartz		2	2		BCC
N465 E431	5	B	1597	2713	4	Flakes	Quartz	1		1		BCC
N465 E431	5	C	1597	2713	4	Flakes	Quartzite	7	7	14		BCC
N465 E431	10	C	1597	2713	3	Flakes	Metavolcanic		1	1		BCC
N467 E429	4		1597	2715	2	Flakes	Metavolcanic	1		1		BCC
N467 E429	4		1597	2715	1	Flakes	Quartzite	2		2		BCC
N467 E429	4		1597	2716	1	Tabular	Syenite	1		1		BCC
N475 E431	5		1597	2717	2	Point	Metavolcanic	1		1	3.0g	BCC
N475 E431	5		1597	2718	2	Cobble flake	Quartzite	1		1		BCC
N475 E431	5		1597	2718	2	Cobble frag	Quartzite	1		1		BCC
N475 E431	5	B	1597	2718	2	Flakes	Metavolcanic		1	1		BCC

Provenance	Level	Sub	Access.	FS#	Size Class	Type	Material	Cortex	No Cortex	Count	Wt. (g)	Initials
N475 E431	5	B	1597	2718	4	Flakes	Quartzite		1	1		BCC
N475 E431	5		1597	2718	3	Flakes	Quartz	2		2		BCC
N475 E431	5	C	1597	2723	3	Flakes	Metavolcanic		2	2		BCC
N475 E431	5	C	1597	2723	4	Flakes	Quartz		1	1		BCC
N475 E431	5	B	1597	2723	3	Flakes	Quartzite		1	1		BCC
N475 E431	5	C	1597	2728	3	Flakes	Quartzite		2	2		BCC
N475 E431	5	C	1597	2734	3	Flakes	Quartzite		5	5		BCC
N475 E431	6	A	1597	2734	2	Flakes	Metavolcanic	2		2		BCC
N475 E431	6	B	1597	2734	2	Flakes	Metavolcanic	1		1		BCC
N475 E431	6	B	1597	2734	3	Flakes	Quartz	1		1		BCC
N475 E431	6	C	1597	2735	4	Flakes	Quartz		3	3		BCC
N475 E431	6	B	1597	2735	2	Flakes	Quartzite		1	1		BCC
N475 E431	6	B	1597	2735	3	Flakes	Quartzite		2	2		BCC
N475 E431	6	D	1597	2736	3	Flakes	Metavolcanic		3	3		BCC
N475 E431	6	D	1597	2736	4	Flakes	Metavolcanic		1	1		BCC
N475 E431	6	D	1597	2736	4	Flakes	Orthoquartzite		1	1		BCC
N475 E431	6	D	1597	2736	4	Flakes	Quartz		2	2		BCC
N475 E431	6	C	1597	2736	2	Flakes	Quartzite	2	11	13		BCC
N475 E431	6	C	1597	2736	3	Flakes	Metavolcanic	1	3	4		BCC
N467 E429	5		1597	2738	2	Flaked cobble	Quartz	1		1		BCC
N467 E429	5	A	1597	2738	2	Flaked cobble	Quartzite	1		1		BCC
N467 E429	5	A	1597	2738	2	Flaked cobble frag	Quartzite	2		2		BCC
N467 E429	5	A	1597	2738	2	Flaked cobble frag	Quartzite	1		1		BCC
N467 E429	5	A	1597	2738	2	Flakes	Quartz		1	1		BCC
N467 E429	5	A	1597	2738	3	Flakes	Quartz	1	1	2		BCC
N465 E431	5	D	1597	2742	3	Flakes	Chert	1		1		BCC
N465 E431	5	D	1597	2742	3	Flakes	Metavolcanic		2	2		BCC
N465 E431	5	D	1597	2747	3	Flakes	Metavolcanic		7	7		BCC
N465 E431	5	D	1597	2747	3	Flakes	Orthoquartzite	1		1		BCC
N475 E431	6	D	1597	2748	3	Flakes	Quartzite		4	4		BCC
N475 E431	7	B	1597	2748	2	Flakes	Metavolcanic		1	1		BCC
N475 E431	7	B	1597	2748	4	Flakes	Metavolcanic		1	1		BCC
N475 E431	7	B	1597	2748	3	Flakes	Quartzite			1		BCC
N475 E431	7	B	1597	2748	4	Flakes	Quartzite	2	2	4		BCC
N475 E431	7	D	1597	2751	3	cortex flake	Quartzite	1		1		BCC
N465 E431	5	D	1597	2751	2	Flakes	Quartzite		1	1		BCC
N465 E431	5	D	1597	2751	2	Flakes	Quartzite		4	4		BCC
N475 E431	7	C	1597	2752	2	Cobble flake	Quartzite	1		1		BCC
N475 E431	7	C	1597	2752	3	Flakes	Metavolcanic	1	2	3		BCC
N475 E431	7	C	1597	2752	3	Flakes	Quartz	1		1		BCC
N475 E431	7	B	1597	2752	2	Flakes	Quartzite		2	2		BCC
N475 E431	7	C	1597	2752	2	Pebble	Quartz	1		1		BCC
N465 E431	6	C	1597	2753	4	Flakes	Metavolcanic		1	1		BCC

Provenance	Level	Sub	Access.	FS#	Size Class	Type	Material	Cortex	No Cortex	Count	Wt. (g)	Initials
N465 E431	6	A	1597	2753	2	Flakes	Metavolcanic		2	2		BCC
N465 E431	6	B	1597	2753	4	Flakes	Metavolcanic		3	3		BCC
N465 E431	6	B	1597	2753	3	Flakes	Quartz	1		1		BCC
N465 E431	6	B	1597	2753	3	Flakes	Quartzite		1	1		BCC
N475 E431	7	B	1597	2754	2	Cobble fragment	Rhyolite	1		1		BCC
N465 E431	6	C	1597	2755	3	Flakes	Metavolcanic		2	2		BCC
N465 E431	6	C	1597	2755	4	Flakes	Metavolcanic		4	4		BCC
N465 E431	6	C	1597	2755	3	Flakes	Quartzite		2	2		BCC
N465 E431	6	C	1597	2755	4	Flakes	Quartzite	1	2	3		BCC
N475 E431	7	D	1597	2761	1	Biface	Quartzite	1		1	10.5g	BCC
N475 E431	7	C	1597	2761	2	Flakes	Quartz	1		1		BCC
N475 E431	7	C	1597	2761	3	Flakes	Quartzite	2	1	3		BCC
N475 E431	7	D	1597	2761	1	Flakes	Quartzite		2	2		BCC
N465 E431	6	D	1597	2764	2	Flakes	Metavolcanic		2	2		BCC
N465 E431	6	D	1597	2764	3	Flakes	Metavolcanic		4	4		BCC
N465 E431	6	D	1597	2764	1	Flakes	Quartzite		3	3		BCC
N467 E429	6	A	1597	2765	2	Flakes	Rhyolite	1		1		BCC
N467 E429	6	A	1597	2765	4	Flakes	Rhyolite	1		1		BCC
N467 E429	6	A	1597	2765	3	Flakes	Quartzite		2	2		BCC
N467 E429	6	A	1597	2766	1	Flakes	Metavolcanic		2	2		BCC
N467 E429	6	A	1597	2766	2	Flakes	Quartzite	1		1		BCC
N475 E431	8	B	1597	2769	3	Flakes	Quartz	1		1		BCC
N475 E431	8	B	1597	2769	1	Flakes	Quartzite	1	2	3		BCC
N475 E431	8	B	1597	2769	2	Flakes	Quartzite	1		1		BCC
N465 E431	6	D	1597	2770	1	Flakes	Quartzite		2	2		BCC
N465 E431	7	A	1597	2770	1	Hammerstone	Quartzite	1		1	371.0g	BCC
N467 E429	6	A	1597	2773	4	Flakes	Quartz	1		1		BCC
N467 E429	6	A	1597	2773	3	Flakes	Quartzite	1	4	5		BCC
N467 E429	6	A	1597	2773	3	Flakes	Quartzite		5	5		BCC
N467 E429	6	D	1597	2774	2	Flakes	Rhyolite	1	1	2		BCC
N467 E429	6	A	1597	2775	2	Uniface	Quartz	1		1		BCC
N465 E431	7	A	1597	2777	1	Hammerstone	Quartz	1		1	220.0g	BCC
N465 E431	7	A	1597	2778	1	Hammerstone	Quartz	1		1	344.5g	BCC
N467 E429	6	B	1597	2780	1	Flakes	Metavolcanic	1	1	2		BCC
N467 E429	6	B	1597	2780	3	Flakes	Quartzite	1	3	4		BCC
N467 E429	6	C	1597	2780	3	Flakes	Quartzite		2	2		BCC
N467 E429	6	C	1597	2780	4	Flakes	Quartzite		1	1		BCC
N467 E429	7	A	1597	2780	3	Flakes	Quartz		1	1		BCC
N475 E431	8	D	1597	2782	3	Flakes	Metavolcanic		3	3		BCC
N475 E431	8	C	1597	2782	3	Flakes	Quartzite		2	2		BCC
N465 E431	7	B	1597	2783	2	Cobble flake	Quartzite	1		1		BCC
N465 E431	7	B	1597	2783	2	Flakes	Rhyolite	1		1		BCC
N465 E431	7	A	1597	2783	3	Flakes	Rhyolite		1	1		BCC

Provenance	Level	Sub	Access.	FS#	Size Class	Type	Material	Cortex	No Cortex	Count	Wt. (g)	Initials
N467 E429	7	B	1597	2784	4	Flakes	Metavolcanic	1	1	2		BCC
N467 E429	7	A	1597	2784	2	Flakes	Quartz		1	1		BCC
N467 E429	7	A	1597	2784	1	Flakes	Quartzite		6	6		BCC
N467 E429	7	A	1597	2784	3	Flakes	Quartzite	2	1	3		BCC
N467 E429	7	A	1597	2784	2	Tabular	Syenite	1		1	79.0g	BCC
N467 E429	7	C	1597	2786	4	Flakes	Metavolcanic		1	1		BCC
N465 E429	6		1597	2787	4	Flakes	Rhyolite	1		1		BCC
N465 E429	6		1597	2787	4	Flakes	Metavolcanic	1		1		BCC
N465 E429	6		1597	2787	3	Flakes	Quartzite	1		1		BCC
N465 E431	7	D	1597	2788	2	Cobble flake	Quartzite	1		1		BCC
N465 E431	7	D	1597	2788	2	Flaked cobble frag	Quartz	1		1		BCC
N465 E431	7	D	1597	2788	2	Flakes	Rhyolite	1		1		BCC
N465 E431	7	D	1597	2788	2	Flakes	Quartzite	2	4	6		BCC
N465 E431	7	D	1597	2788	3	Flakes	Quartzite	1		1		BCC
N465 E431	7	D	1597	2788	2	Retouched flake	Rhyolite	1		1		BCC
N475 E431	8	D	1597	2789	3	Flakes	Quartzite		2	2		BCC
N475 E431	8	D	1597	2789	4	Flakes	Quartzite		2	2		BCC
N475 E431	9	A	1597	2789	4	Flakes	Metavolcanic		1	1		BCC
N465 E431	7	D	1597	2792	4	Flakes	Chert	1		1		BCC
N465 E431	7	D	1597	2792	2	Flakes	Metavolcanic		3	3		BCC
N465 E431	7	D	1597	2792	3	Flakes	Quartzite	1		1		BCC
N467 E429	7	D	1597	2794	3	Flakes	Metavolcanic	1	1	2		BCC
N467 E429	7	D	1597	2795	3	Flakes	Metavolcanic	1	2	3		BCC
N467 E429	8	A	1597	2795	4	Flakes	Metavolcanic		1	1		BCC
N467 E429	8	A	1597	2798	2	Flakes	Quartzite	1		1		BCC
N467 E429	8	C	1597	2798	4	Flakes	Quartzite		1	1		BCC
N475 E431	9	D	1597	2799	4	Flakes	Metavolcanic	1		1		BCC
N475 E431	2		1597	2800	4	Flakes	Metavolcanic	1		1		BCC
N465 E431	7	D	1597	2801	4	Flakes	Quartzite		4	4		BCC
N465 E431	8	B	1597	2801	2	Flakes	Rhyolite	1	1	2		BCC
N467 E429	8	D	1597	2804	3	Flakes	Metavolcanic	1		1		BCC
N467 E429	8	D	1597	2805	4	Flakes	Metavolcanic		6	6		BCC
N467 E429	9	B	1597	2805	3	Flakes	Quartz		1	1		BCC
N475 E431	2		1597	2806	4	Flakes	Metavolcanic		1	1		BCC
N465 E431	8	B	1597	2808	3	Flakes	Quartzite		1	1		BCC
N467 E429	9	C	1597	2814	4	Flakes	Quartz		1	1		BCC
N465 E431	8	C	1597	2815	3	Flakes	Chert	1	2	3		BCC
N465 E431	8	C	1597	2815	3	Flakes	Rhyolite	1		1		BCC
N465 E431	8	B	1597	2815	3	Flakes	Quartzite		1	1		BCC
N465 E431	9	A	1597	2820	4	Flakes	Rhyolite	2	1	3		BCC
N465 E431	9	C	1597	2820	3	Flakes	Metavolcanic		2	2		BCC
N465 E431	9	C	1597	2820	4	Flakes	Orthoquartzite		1	1		BCC
N465 E431	9	C	1597	2822	3	Flakes	Quartzite	1		1		BCC

Provenance	Level	Sub	Access.	FS#	Size Class	Type	Material	Cortex	No Cortex	Count	Wt. (g)	Initials
N467 E429	2		1597	2824	4	Flakes	Metavolcanic	2	3	5		BCC
N475 E431	10	A	1597	2825	4	Flakes	Quartzite		1	1		BCC
N467 E429	2		1597	2833	2	Flakes	Metavolcanic	1	1	2		BCC
N465 E429	8		1597	2843	3	Flaked cobble	Metavolcanic	1		1		BCC
N465 E429	8		1597	2851	2	Flaked cobble frag	Quartzite	1		1		BCC
N461 E429	3		1597	2853	3	Pebble	Quartzite	1		1		BCC
N461 E429	3		1597	2853	2	Pebble	Quartz	1		1		BCC
N459 E429	3		1597	2854	2	Pitted cobble	Quartzite	1		1		BCC
N463 E429	3		1597	2856	2	Flakes	Metavolcanic	1		1		BCC
N459 E429	3		1597	2857	2	Cobble fragment	Quartz	1		1		BCC
N459 E429	4		1597	2858	3	Flakes	Metavolcanic		2	2		BCC
N463 E429	4		1597	2860	1	Bowl frag	Steatite	1		1	68.3g	BCC
N463 E429	4		1597	2861	1	Cobble	Quartz	1		1		BCC
N463 E429	4		1597	2861	3	Flakes	Metavolcanic		2	2		BCC
N463 E429	4		1597	2861	3	Flakes	Metavolcanic	4	1	5		BCC
N463 E429	4		1597	2861	3	Flakes	Quartz	2	2	4		BCC
N463 E429	4		1597	2861	2	Quartz crystal frag	Quartz	2		2		BCC
N459 E429	6		1597	2862	3	Flakes	Metavolcanic		1	1		BCC
N459 E429	4		1597	2862	3	Point	Metavolcanic	1		1		BCC
N465 E429	5		1597	2863	1	Broken hammerstone	Quartzite	1		1	80.5g	BCC
N465 E429	8		1597	2868	2	Flakes	Metavolcanic	2		2		BCC
N461 E429	4		1597	2870	2	Flakes	Metavolcanic	2		2		BCC
N461 E429	4		1597	2870	2	Flakes	Crystal Quartz	1	1	2		BCC
N461 E429	4		1597	2870	2	Flakes	Metavolcanic		2	2		BCC
N461 E429	4		1597	2870	4	Flakes	Quartzite	2		2		BCC
N463 E429	5		1597	2873	1	Broken cobble	Quartz	1		1		BCC
N463 E429	5		1597	2873	2	Cobble frag	Quartz	1		1		BCC
N463 E429	5		1597	2873	3	Flaked cobble	Quartzite	1		1		BCC
N451 E424	4		1597	2874	1	Tabular	Syenite	3		1		BCC
N465 E429	6	C	1597	2877	3	Flakes	Metavolcanic		4	4		BCC
N465 E429	6	C	1597	2877	3	Flakes	Metavolcanic		4	4		BCC
N465 E429	6	C	1597	2877	3	Flakes	Metavolcanic		2	2		BCC
N451 E424	5		1597	2879	3	Flakes	Metavolcanic	1		1		BCC
N461 E429	5		1597	2881	1	Flaked cobble	Quartz	1		1		BCC
N461 E429	5		1597	2882	2	Quartz crystal frag	Quartz	1		1		BCC
N461 E429	5		1597	2882	2	Uniface	Quartz	1		1		BCC
N453 E424	3		1597	2886	1	Flakes	Metavolcanic	1	1	2		BCC
N453 E424	5		1597	2887	1	Megalodon tooth	Fossil	1		1		BCC
N451 E424	6		1597	2891	3	Flakes	Quartz		2	2		BCC
N465 E429	7		1597	2896	3	Cobble Flake	Quartzite	1		1		BCC
N461 E429	6		1597	2897	1	Flaked cobble frag	Metavolcanic	1		1		BCC
N453 E424	5		1597	2898	1	Point	Metavolcanic	1		1	5.2g	BCC
N453 E424	5		1597	2899	2	Cobble frag	Quartzite	1		1		BCC

Provenance	Level	Sub	Access.	FS#	Size Class	Type	Material	Cortex	No Cortex	Count	Wt. (g)	Initials
N455 E424	4		1597	2900	2	Flakes	Metavolcanic	2	1	3		BCC
N461 E429	6		1597	2901	2	Large pebble	Quartz	1		1		BCC
N459 E429	7		1597	2902	1	Broken cobble	Metavolcanic	1		1		BCC
N459 E429	7		1597	2902	2	Cobble flake	Quartzite	1		1		BCC
N459 E429	7		1597	2902	2	Cobble frag	Quartzite	2		2		BCC
N459 E429	7		1597	2902	2	Flaked cobble frag	Quartzite	1		1		BCC
N459 E429	7		1597	2902	1	Flakes	Metavolcanic	1	1	2		BCC
N459 E429	7		1597	2902	2	Flakes	Metavolcanic	2	1	3		BCC
N459 E429	7		1597	2902	2	Flakes	Metavolcanic	1	5	6		BCC
N459 E429	7		1597	2902	3	Flakes	Quartz	1	2	3		BCC
N459 E429	7		1597	2902	2	Flakes	Quartzite	1		1		BCC
N459 E429	7		1597	2902	2	Flakes	Quartzite		1	1		BCC
N459 E429	7		1597	2902	1	Point tip	Metavolcanic	1		1		BCC
N465 E429	8		1597	2903	2	Cobble frag	Metavolcanic	1		1		BCC
N465 E429	8		1597	2903	1	Flakes	Quartz	3		3		BCC
N465 E431	8		1597	2903	2	Flakes	Crystal Quartz	1		1		BCC
N465 E431	8		1597	2903	2	Flakes	Metavolcanic	1	1	2		BCC
N465 E429	8		1597	2903	2	Pebble	Quartzite	1		1		BCC
N455 E424	5		1597	2904	1	Broken cobble	Quartz	1		1		BCC
N451 E424	7		1597	2906	2	Biface frag	Metavolcanic	1		1		BCC
N455 E424	8		1597	2906	2	Cobble flake	Quartzite	1		1		BCC
N451 E424	7		1597	2906	2	Flaked cobble frag	Quartzite	1		1		BCC
N451 E424	7		1597	2906	2	Flakes	Quartzite	1	1	2		BCC
N455 E424	8		1597	2906	2	Flakes	Quartz	1		1		BCC
N455 E424	8		1597	2906	3	Flakes	Quartz	1		1		BCC
N463 E429	7		1597	2907	2	Flaked cobble frag	Quartz	1		1		BCC
N453 E424	6		1597	2911	3	Flakes	Metavolcanic	1		1		BCC
N459 E429	8		1597	2912	1	Hammerstone	Quartz	1		1	683.0g	BCC
N455 E424	5		1597	2913	2	Broken cobble	Quartz	1		1	23.5g	BCC
N455 E424	5		1597	2913	2	Flaked cobble frag	Quartz	2		2		BCC
N455 E424	5		1597	2913	2	Flakes	Crystal Quartz		1	1		BCC
N455 E424	5		1597	2913	3	Flakes	Metavolcanic	3		3		BCC
N455 E424	5		1597	2913	3	Flakes	Metavolcanic	1	2	3		BCC
N455 E424	5		1597	2913	3	Flakes	Metavolcanic		2	2		BCC
N455 E424	5		1597	2913	3	Flakes	Orthoquartzite		2	2		BCC
N455 E424	5		1597	2913	4	Flakes	Quartzite	1		1		BCC
N455 E424	5		1597	2913	4	Flakes	Metavolcanic	1	2	3		BCC
N463 E429	7		1597	2914	1	Flaked cobble	Quartz	1		1		BCC
N463 E429	7		1597	2915	2	Biface	Metavolcanic	1		1		BCC
N459 E429	8		1597	2918	1	Tabular	Syenite	1		1		BCC
N459 E429	8		1597	2921	3	Cobble flake	Quartzite	1		1		BCC
N459 E429	8		1597	2921	2	Flakes	Crystal Quartz		2	2		BCC
N459 E429	8		1597	2921	2	Flakes	Metavolcanic	2		2		BCC

Provenance	Level	Sub	Access.	FS#	Size Class	Type	Material	Cortex	No Cortex	Count	Wt. (g)	Initials
N459 E429	8		1597	2921	2	Pebble	???	1		1		BCC
N459 E429	8		1597	2921	2	Pitted cobble	Quartzite	1		1		BCC
N459 E429	8		1597	2926	3	Flakes	Crystal Quartz		2	2		BCC
N459 E429	8		1597	2926	2	Flakes	Metavolcanic	8	1	9		BCC
N459 E429	8		1597	2926	3	Flakes	Metavolcanic		10	10		BCC
N459 E429	8		1597	2926	4	Flakes	Metavolcanic	1	2	3		BCC
N459 E429	8		1597	2926	3	Flakes	Quartz		3	3		BCC
N459 E429	8		1597	2926	4	Flakes	Quartz	2	8	10		BCC
N459 E429	8		1597	2926	4	Flakes	Quartzite	1		1		BCC
N461 E429	8		1597	2930	1	Broken cobble	Quartzite	1		1		BCC
N453 E424	7		1597	2931	2	Cobble	Quartzite	1		1		BCC
N453 E424	7		1597	2931	2	Cobble flake	Quartzite	1		1		BCC
N453 E424	7		1597	2931	2	Flakes	Metavolcanic		1	1		BCC
N453 E424	7		1597	2931	2	Flakes	Quartzite	1		1		BCC
N459 E429	9		1597	2933	1	Flaked cobble	Quartz	1		1		BCC
N461 E429	8		1597	2934	1	Flakes	Crystal Quartz		1	1		BCC
N461 E429	8		1597	2934	2	Flakes	Metavolcanic	9	8	17		BCC
N461 E429	8		1597	2934	3	Flakes	Metavolcanic		2	2		BCC
N461 E429	8		1597	2934	3	Flakes	Metavolcanic	6	4	10		BCC
N461 E429	8		1597	2934	2	Flakes	Quartz	3	1	4		BCC
N461 E429	8		1597	2934	4	Flakes	Quartz	2		2		BCC
N461 E429	8		1597	2934	2	Flakes	Quartzite	3		3		BCC
N461 E429	8		1597	2934	3	Flakes	Quartzite	2		2		BCC
N461 E429	8		1597	2935	1	Flaked cobble frag	Quartz	1		1		BCC
N463 E429	8		1597	2936	2	Cobble flake	Quartz	1		1		BCC
N463 E429	7		1597	2936	2	Flakes	Quartzite	1		1		BCC
N463 E429	9		1597	2936	3	Flakes	Metavolcanic	1	2	3		BCC
N463 E429	9		1597	2936	4	Flakes	Crystal Quartz		2	2		BCC
N463 E429	9		1597	2936	4	Flakes	Metavolcanic		1	1		BCC
N463 E429	9		1597	2936	3	Flakes	Quartz		2	2		BCC
N463 E429	9		1597	2936	3	Flakes	Quartzite	1		1		BCC
N451 E424	8		1597	2938	2	Flakes	Crystal Quartz		1	1		BCC
N453 E424	7		1597	2940	1	Hammerstone	Quartz	1		1	501.5g	BCC
N453 E424	7		1597	2941	1	Grinding Stone	Gneiss	1		1	319.0g	BCC
N455 E424	7		1597	2949	3	Flaked cobble frag	Quartzite	1		1		BCC
N455 E424	7		1597	2949	3	Flakes	Quartz		1	1		BCC
N455 E424	7		1597	2949	2	Flakes	Metavolcanic		1	1		BCC
N455 E424	7		1597	2949	2	Flakes	Quartz	1		1		BCC
N455 E424	7		1597	2949	3	Flakes	Quartzite	1	4	5		BCC
N455 E424	7		1597	2949	1	Tabular	Syenite	1		1		BCC
N459 E429	10		1597	2950	2	Flakes	Metavolcanic	1	1	2		BCC
N459 E429	10		1597	2950	3	Flakes	Metavolcanic		2	2		BCC
N459 E429	10		1597	2950	4	Flakes	Quartz	1	1	2		BCC

Provenience	Level	Sub	Access.	FS#	Size Class	Type	Material	Cortex	No Cortex	Count	Wt. (g)	Initials
N463 E429	3		1597	2952	3	Cobble	Quartz	1		1		BCC
N461 E429	9		1597	2952	2	Flakes	Metavolcanic	3	6	9		BCC
N461 E429	9		1597	2952	3	Flakes	Metavolcanic		1	1		BCC
N461 E429	9		1597	2952	4	Flakes	Quartzite		3	3		BCC
N451 E424	8		1597	2955	3	Cobble	Quartz	2		2		BCC
N451 E424	8		1597	2955	3	Flakes	Metavolcanic		1	1		BCC
N455 E424	7		1597	2959	2	Cobble frag	Metavolcanic	1		1		BCC
N455 E424	8		1597	2968	1	Grinding Stone	Quartz	1		1	1261.5g	BCC
N455 E424	8		1597	2980	1	Flakes	Quartzite	3	1	4		BCC

Appendix E

Ceramic Artifacts

Provenance	Level	Sub	Access.	FS#	Size Class	Type	Surface Treatment	Rim/Base	Count	Comments	Initials
N465 E431	3		1597	2675	1	Deep Creek	Cord		8		BCC
N465 E431	3		1597	2675	1	Deep Creek	Cord		4		BCC
N465 E431	3		1597	2675	1	Hanover	Cord		1		BCC
N465 E431	3		1597	2675	1	Hanover	Fabric		3		BCC
N465 E431	3		1597	2675	1	Deep Creek	Net		4		BCC
N465 E431	3		1597	2675	1	Deep Creek	Net		1		BCC
N465 E431	3		1597	2675	2	Deep Creek	Cord	1 Rim	28		BCC
N465 E431	3		1597	2675	2	Deep Creek	Cord		1		BCC
N465 E431	3		1597	2675	2	Hanover	Fabric		4		BCC
N465 E431	3		1597	2675	2	Hanover	Fabric		2		BCC
N465 E431	3		1597	2675	2	Mt. Pleasant	Fabric		2		BCC
N465 E431	3		1597	2675	2	Deep Creek	Stamped		1		BCC
N465 E431	3		1597	2675	3	Deep Creek	Cord		5		BCC
N465 E431	4		1597	2679	1	Hanover	Fabric		6		BCC
N465 E431	4		1597	2679	2	Hanover	Fabric		6		BCC
N467 E429	2		1597	2681	3	Indeterminate	Indeterminate		2		BCC
N467 E429	3		1597	2689	1	Deep Creek	Cord		2		BCC
N467 E429	3		1597	2689	1	Deep Creek	Stamped		1		BCC
N467 E429	3		1597	2689	2	Deep Creek	Cord		19		BCC
N467 E429	3		1597	2689	2	Deep Creek	Incised		1		BCC
N467 E429	3		1597	2689	2	Deep Creek	Net		2		BCC
N467 E429	3		1597	2689	3	Deep Creek	Cord		12		BCC
N475 E431	1		1597	2691	3	Deep Creek	Cord		4		BCC
N475 E431	2		1597	2696	1	Deep Creek	Cord		3	1 - 3pc refit	BCC
N475 E431	2		1597	2696	1	Deep Creek	Cord		7	7pc refit bowl	BCC
N475 E431	2		1597	2696	2	Deep Creek	Cord		16		BCC
N475 E431	2		1597	2696	3	Deep Creek	Cord		3		BCC
N475 E431	2		1597	2696	3	Hanover	Indeterminate		2		BCC
N465 E431	2		1597	2699	1	Deep Creek	Fabric		1		BCC
N465 E431	2		1597	2699	2	Deep Creek	Cord		3		BCC
N465 E431	2		1597	2699	2	Deep Creek	Fabric		1		BCC
N465 E431	2		1597	2699	2	Deep Creek	Net		4		BCC
N465 E431	2		1597	2699	2	Deep Creek	Plain		1		BCC
N465 E431	2		1597	2699	3	Deep Creek	Cord		2		BCC
N475 E431	3		1597	2701	1	Deep Creek	Cord	1 Rim	3		BCC
N475 E431	3		1597	2701	2	Deep Creek	Cord		24		BCC
N465 E431	5	A	1597	2702	2	Deep Creek	Cord	1 Rim	1		BCC
N465 E431	5	A	1597	2702	2	Deep Creek	Cord		3		BCC
N475 E431	4		1597	2708	2	Deep Creek	Cord		1		BCC

Provenance	Level	Sub	Access.	FS#	Size Class	Type	Surface Treatment	Rim/Base	Count	Comments	Initials
N465 E431	5	D	1597	2713	3	Indeterminate	Indeterminate		1		BCC
N467 E429	4		1597	2715	1	Deep Creek	Cord		1		BCC
N467 E429	4		1597	2715	1	Deep Creek	Fabric		1		BCC
N467 E429	4		1597	2715	2	Deep Creek	Cord		30		BCC
N467 E429	2		1597	2715	3	Hanover	Cord		1		BCC
N467 E429	5		1597	2738	1	Deep Creek	Cord	1 Rim	1		BCC
N467 E429	5		1597	2738	1	Deep Creek	Cord	1 Rim	1		BCC
N467 E429	5		1597	2738	2	Deep Creek	Cord		1		BCC
N459 E429	1		1597	2779	2	Deep Creek	Cord		3		BCC
N459 E429	1		1597	2779	3	Deep Creek	Cord		4		BCC
N467 E429	root		1597	2780	2	Deep Creek	Cord		1		BCC
N467 E429	root		1597	2780	3	Deep Creek	Cord		2		BCC
N451 E424	11		1597	2829	3	Hanover	Fabric		1		BCC
N465 E431	wall		1597	2833	3	Deep Creek	Cord		1		BCC
N461 E429	2		1597	2845	1	Deep Creek	Cord		1		BCC
N461 E429	2		1597	2845	1	Hanover	Fabric		2		BCC
N461 E429	2		1597	2845	2	Deep Creek	Cord		3		BCC
N461 E429	2		1597	2845	2	Hanover	Cord		5		BCC
N461 E429	2		1597	2845	2	Hanover	Fabric		4		BCC
N461 E429	2		1597	2845	3	Hanover	Cord		10		BCC
N461 E429	2		1597	2845	3	Hanover	Fabric		4		BCC
N461 E429	2		1597	2845	3	Indeterminate	Indeterminate		3		BCC
N461 E429	3		1597	2846	1	Deep Creek	Cord		2		BCC
N461 E429	3		1597	2846	1	Deep Creek	Fabric		5		BCC
N461 E429	3		1597	2846	1	Deep Creek	Plain		1		BCC
N461 E429	3		1597	2846	2	Deep Creek	Cord		6		BCC
N461 E429	3		1597	2846	2	Deep Creek	Fabric		8		BCC
N461 E429	3		1597	2846	2	Hanover	Fabric		2	1 - 2pc refit	BCC
N461 E429	3		1597	2846	2	Hanover	Fabric		1		BCC
N461 E429	3		1597	2846	2	Deep Creek	Net		1		BCC
N461 E429	3		1597	2846	2	Deep Creek	Plain		1		BCC
N461 E429	3		1597	2846	3	Deep Creek	Cord		30		BCC
N461 E429	3		1597	2846	3	Indeterminate	Indeterminate		2		BCC
N459 E429	2		1597	2849	1	Deep Creek	Cord		1		BCC
N459 E429	2		1597	2849	2	Deep Creek	Cord		5		BCC
N459 E429	2		1597	2849	2	Hanover	Cord		1		BCC
N459 E429	2		1597	2849	3	Deep Creek	Cord		4		BCC
N459 E429	2		1597	2849	3	Hanover	Cord		6		BCC
N459 E429	2		1597	2849	3	Indeterminate	Indeterminate		4		BCC
N463 E429	2		1597	2850	1	Deep Creek	Cord		1		BCC
N463 E429	2		1597	2850	2	Deep Creek	Cord		5		BCC
N463 E429	2		1597	2850	2	Hanover	Cord		7		BCC
N463 E429	2		1597	2850	2	Hanover	Fabric		5		BCC

Provenance	Level	Sub	Access.	FS#	Size Class	Type	Surface Treatment	Rim/Base	Count	Comments	Initials
N463 E429	2		1597	2850	2	Hanover	Plain		1		BCC
N463 E429	2		1597	2850	3	Hanover	Fabric		9		BCC
N465 E429	2		1597	2851	1	Deep Creek	Cord		3		BCC
N465 E429	2		1597	2851	2	Deep Creek	Cord		15		BCC
N465 E429	2		1597	2851	2	Hanover	Cord		3		BCC
N465 E429	2		1597	2851	3	Deep Creek	Fabric		4		BCC
N465 E429	2		1597	2851	3	Hanover	Fabric		3		BCC
N465 E429	2		1597	2851	3	Indeterminate	Indeterminate		2		BCC
N465 E429	3		1597	2852	1	Deep Creek	Cord		4		BCC
N465 E429	3		1597	2852	2	Deep Creek	Cord		22		BCC
N465 E429	3		1597	2852	2	Indeterminate	Indeterminate		3		BCC
N463 E429	3		1597	2853	1	Deep Creek	Cord		4		BCC
N463 E429	3		1597	2853	1	Hanover	Cord		1	1 - 2pc refit	BCC
N463 E429	3		1597	2853	2	Deep Creek	Cord		7		BCC
N463 E429	3		1597	2853	2	Deep Creek	Fabric		9		BCC
N463 E429	3		1597	2853	2	Deep Creek	Plain		4	1 - 3pc refit	BCC
N459 E429	3		1597	2857	1	Deep Creek	Cord		3		BCC
N459 E429	3		1597	2857	1	Hanover	Fabric		1		BCC
N459 E429	3		1597	2857	1	Mt. Pleasant	Fabric		1	1 - 2pc. Refit	BCC
N459 E429	3		1597	2857	2	Deep Creek	Cord		7		BCC
N459 E429	3		1597	2857	2	Hanover	Fabric		16		BCC
N459 E429	3		1597	2857	3	Hanover	Cord		9		BCC
N459 E429	3		1597	2858	2	Hanover	Cord		1	feature 34	BCC
N465 E429	4		1597	2859	1	Deep Creek	Cord		3		BCC
N465 E429	4		1597	2859	1	Mt. Pleasant	Cord		1	1 - 2pc refit	BCC
N465 E429	4		1597	2859	2	Deep Creek	Cord		14		BCC
N465 E429	4		1597	2859	2	Deep Creek	Net		3		BCC
N465 E429	4		1597	2859	2	Deep Creek	Stamped		2		BCC
N463 E429	4		1597	2861	2	Deep Creek	Cord		10		BCC
N463 E429	4		1597	2861	2	Hanover	Cord		4		BCC
N463 E429	4		1597	2861	2	Deep Creek	Net		1		BCC
N463 E429	4		1597	2861	3	Deep Creek	Cord		2		BCC
N459 E429	4		1597	2862	1	Deep Creek	Cord		2		BCC
N459 E429	4		1597	2862	2	Deep Creek	Cord		6		BCC
N459 E429	4		1597	2862	2	Hanover	Cord		6		BCC
N459 E429	4		1597	2862	2	Hanover	Fabric		2		BCC
N451 E424	2		1597	2866	1	Hanover	Fabric		1		BCC
N451 E424	2		1597	2866	2	Deep Creek	Cord		10		BCC
N451 E424	2		1597	2866	2	Hanover	Fabric		10		BCC
N451 E424	2		1597	2866	3	Deep Creek	Cord		3		BCC
N451 E424	2		1597	2866	3	Hanover	Fabric		10		BCC
N459 E429	5		1597	2867	2	Deep Creek	Cord		3		BCC
N465 E429	5		1597	2868	1	Deep Creek	Cord		5		BCC

Provenance	Level	Sub	Access.	FS#	Size Class	Type	Surface Treatment	Rim/Base	Count	Comments	Initials
N465 E429	5		1597	2868	2	Deep Creek	Cord		12		BCC
N453 E424	2		1597	2869	1	Hanover	Fabric		1		BCC
N453 E424	2		1597	2869	2	Deep Creek	Cord		2		BCC
N453 E424	2		1597	2869	2	Hanover	Fabric		7		BCC
N453 E424	2		1597	2869	3	Deep Creek	Cord		10		BCC
N453 E424	2		1597	2869	3	Hanover	Fabric		3		BCC
N461 E429	4		1597	2870	1	Deep Creek	Cord		2		BCC
N461 E429	4		1597	2870	1	Mt. Pleasant	Cord		1	1 - 4pc refit	BCC
N461 E429	4		1597	2870	2	Deep Creek	Cord		10		BCC
N461 E429	4		1597	2870	2	Hanover	Cord		1		BCC
N461 E429	4		1597	2870	2	Hanover	Cord		2		BCC
N461 E429	4		1597	2870	2	Hanover	Fabric		3		BCC
N461 E429	4		1597	2870	3	Hanover	Cord		1		BCC
N461 E429	4		1597	2870	3	Hanover	Fabric		2		BCC
N461 E429	4		1597	2870	3	Hanover	Fabric		7		BCC
N461 E429	4		1597	2870	3	Indeterminate	Indeterminate		1		BCC
N461 E429	4		1597	2870	4	Indeterminate	Indeterminate		1		BCC
N451 E424	3		1597	2872	1	Deep Creek	Cord		8		BCC
N451 E424	3		1597	2872	1	Deep Creek	Net		2		BCC
N451 E424	3		1597	2872	2	Deep Creek	Cord	1 Rim	22		BCC
N451 E424	3		1597	2872	2	Hanover	Fabric		35		BCC
N451 E424	3		1597	2872	2	Mt. Pleasant	Fabric w/ incising		10	1-2pc/1-3pc refits	BCC
N451 E424	3		1597	2872	2	Deep Creek	Incised		2		BCC
N451 E424	3		1597	2872	3	Deep Creek	Cord		19		BCC
N451 E424	3		1597	2872	3	Hanover	Fabric	2 Rim	22		BCC
N451 E424	3		1597	2872	3	Indeterminate	Indeterminate		2		BCC
N451 E424	4		1597	2874	1	Deep Creek	Cord		9		BCC
N451 E424	4		1597	2874	1	Mt. Pleasant	Cord		1		BCC
N451 E424	4		1597	2874	1	Deep Creek	Net		1		BCC
N451 E424	4		1597	2874	2	Deep Creek	Cord		30		BCC
N451 E424	4		1597	2874	2	Hanover	Cord		1		BCC
N451 E424	4		1597	2874	2	Deep Creek	Fabric		1		BCC
N451 E424	4		1597	2874	2	Hanover	Fabric		14		BCC
N451 E424	4		1597	2874	2	Mt. Pleasant	Fabric		1		BCC
N451 E424	4		1597	2874	2	Deep Creek	Net		1		BCC
N451 E424	4		1597	2874	2	Deep Creek	Stamped		2		BCC
N451 E424	4		1597	2874	3	Deep Creek	Cord		6		BCC
N451 E424	4		1597	2874	3	Hanover	Cord		3		BCC
N451 E424	4		1597	2874	3	Hanover	Fabric		7		BCC
N451 E424	4		1597	2874	3	Mt. Pleasant	Fabric		6		BCC
N451 E424	4		1597	2874	3	Indeterminate	Indeterminate		1		BCC
N465 E429	6		1597	2877	3	Indeterminate	Indeterminate		2		BCC
N455 E424	2		1597	2878	1	Hanover	Fabric		1		BCC

Provenance	Level	Sub	Access.	FS#	Size Class	Type	Surface Treatment	Rim/Base	Count	Comments	Initials
N455 E424	2		1597	2878	2	Deep Creek	Cord		4		BCC
N455 E424	2		1597	2878	2	Hanover	Cord		4		BCC
N455 E424	2		1597	2878	2	Hanover	Fabric		5		BCC
N455 E424	2		1597	2878	3	Hanover	Fabric		3		BCC
N455 E424	2		1597	2878	3	Indeterminate	Indeterminate		4		BCC
N451 E424	5		1597	2879	1	Deep Creek	Cord		4		BCC
N451 E424	5		1597	2879	2	Deep Creek	Cord		2		BCC
N451 E424	5		1597	2879	2	Hanover	Fabric		2		BCC
N451 E424	5		1597	2879	3	Deep Creek	Cord		1		BCC
N451 E424	5		1597	2879	3	Hanover	Fabric		4		BCC
N451 E424	5		1597	2879	3	Hanover	Indeterminate		3		BCC
N451 E424	5		1597	2879	3	Indeterminate	Indeterminate		2		BCC
N453 E424	4		1597	2880	1	Deep Creek	Cord		3		BCC
N453 E424	4		1597	2880	1	Deep Creek	Net		2	1-2pc refit	BCC
N453 E424	4		1597	2880	2	Deep Creek	Cord		5		BCC
N453 E424	4		1597	2880	2	Deep Creek	Net		2		BCC
N453 E424	4		1597	2880	2	Hanover	Cord		3		BCC
N453 E424	4		1597	2880	2	Deep Creek	Stamped		1		BCC
N453 E424	4		1597	2880	3	Deep Creek	Cord		12		BCC
N453 E424	4		1597	2880	3	Deep Creek	Indeterminate		1		BCC
N453 E424	4		1597	2880	3	Hanover	Indeterminate		1		BCC
N453 E424	4		1597	2880	4	Deep Creek	Indeterminate		1		BCC
N455 E424	3		1597	2884	1	Deep Creek	Cord	1 Rim	10		BCC
N455 E424	3		1597	2884	1	Hanover	Cord		1		BCC
N455 E424	3		1597	2884	1	Hanover	Fabric	1 Rim	4		BCC
N455 E424	3		1597	2884	2	Deep Creek	Cord	1 Base	31		BCC
N455 E424	3		1597	2884	2	Deep Creek	Fabric		2		BCC
N455 E424	3		1597	2884	2	Hanover	Fabric		5		BCC
N455 E424	3		1597	2884	2	Mt. Pleasant	Fabric		2	1 - 2pc. Refit	BCC
N455 E424	3		1597	2884	2	Deep Creek	Net		2		BCC
N455 E424	3		1597	2884	3	Deep Creek	Cord		20		BCC
N455 E424	3		1597	2884	3	Mt. Pleasant	Fabric		2		BCC
N455 E424	3		1597	2884	3	Indeterminate	Indeterminate		2		BCC
N455 E424	3		1597	2884	3	Deep Creek	Plain		1		BCC
N453 E424	3		1597	2886	1	Deep Creek	Cord	1 Rim/1 Base	26		BCC
N453 E424	3		1597	2886	1	Deep Creek	Fabric		2		BCC
N453 E424	3		1597	2886	1	Hanover	Fabric		2	1 - 2pc refit	BCC
N453 E424	3		1597	2886	1	Deep Creek	Incised		2		BCC
N453 E424	3		1597	2886	1	Deep Creek	Net	1 Rim	7		BCC
N453 E424	3		1597	2886	2	Deep Creek	Cord	2 Rim	25	1 - 5pc refit	BCC
N453 E424	3		1597	2886	2	Deep Creek	Cord		31		BCC
N453 E424	3		1597	2886	2	Deep Creek	Fabric		7		BCC
N453 E424	3		1597	2886	2	Hanover	Fabric	4 Rims	23		BCC

Provenance	Level	Sub	Access.	FS#	Size Class	Type	Surface Treatment	Rim/Base	Count	Comments	Initials
N453 E424	3		1597	2886	2	Deep Creek	Net	1 Rim	4		BCC
N453 E424	3		1597	2886	2	Deep Creek	Stamped		3		BCC
N453 E424	3		1597	2886	3	Deep Creek	Cord		6		BCC
N453 E424	3		1597	2886	3	Hanover	Fabric		16		BCC
N453 E424	3		1597	2886	4	Deep Creek	Indeterminate		1		BCC
N453 E424	5		1597	2887	1	Deep Creek	Cord		1		BCC
N453 E424	5		1597	2887	2	Deep Creek	Cord		11		BCC
N453 E424	5		1597	2887	2	Hanover	Fabric		5		BCC
N451 E424	6		1597	2891	3	Deep Creek	Indeterminate		2		BCC
N453 E424	4		1597	2892	1	Deep Creek	Cord		1	backdirt pile	BCC
N453 E424	?		1597	2892	1	Deep Creek	Cord		1	backdirt pile	BCC
N455 E424	4		1597	2900	1	Deep Creek	Cord		2		BCC
N455 E424	4		1597	2900	1	Deep Creek	Cord		1		BCC
N455 E424	4		1597	2900	1	Deep Creek	Stamped		2		BCC
N455 E424	4		1597	2900	2	Deep Creek	Cord		12		BCC
N455 E424	4		1597	2900	2	Deep Creek	Fabric		4		BCC
N455 E424	4		1597	2900	2	Hanover	Fabric		2		BCC
N455 E424	4		1597	2900	2	Deep Creek	Net		8		BCC
N455 E424	4		1597	2900	3	Hanover	Fabric		9		BCC
N455 E424	4		1597	2900	3	Deep Creek	Indeterminate		2		BCC
N451 E424	7		1597	2906	3	Deep Creek	Cord		3		BCC
N453 E424	6		1597	2911	1	Deep Creek	Cord		1		BCC
N453 E424	6		1597	2911	2	Deep Creek	Cord		9		BCC
N455 E424	5		1597	2913	2	Hanover	Fabric	1 Rim	4		BCC
N455 E424	5		1597	2913	3	Deep Creek	Cord		5		BCC
N455 E424	7		1597	2949	2	Deep Creek	Cord		1		BCC
N451 E424	8		1597	2955	2	Hanover	Fabric		1		BCC
N467 E429	2		1597	2961	1	Deep Creek	Cord		1		BCC
N453 E424	8		1597	2961	1	Deep Creek	Cord		5	root stain	BCC
N467 E429	2		1597	2961	2	Deep Creek	Cord		7		BCC
N467 E429	2		1597	2961	2	Hanover	Cord		2		BCC
N467 E429	2		1597	2961	3	Deep Creek	Indeterminate		3		BCC