Ceramic Analysis of Proto-Historic Domestic Structures from 1EE89: A Transitional Culture on the Coosa

by

Cameron Wallace Gill

A thesis submitted to the Graduate Faculty of
Auburn University
in partial fulfillment of the
requirements for the Degree of
Masters of Science

Auburn, Alabama
December 13, 2010

Keywords: archaeology, ceramic, creek,
Proto-Historic, anthropology

Approved by

John Cottier, Chair, Associate Professor of Anthropology
Craig Sheldon, Professor of Anthropology
Philip Chaney, Associate Professor of Geology and Geography

Abstract

Excavations at 1EE89, the Historic Creek town of Hickory Ground identified an extensive Proto-Historic occupation. This occupation is identified by evidence of 30 domestic structures and one public structure. The majority of the cultural material from this occupation consisted of ceramics recovered from these domestic structures. Excavations recovered ceramics representing two distinct cultural traditions. This evidence demonstrated a lack of cultural homogeneity for the Proto-Historic occupation, containing elements of Lamar and Moundville traditions. It is the goal of this research to provide relevant information not only to the cultural and temporal identity of this site, but also to add to the Proto-Historic research in the region.

Acknowledgments

With the completion of this thesis there are so many individuals that I am grateful for. Let me first thank my committee members Dr. John Cottier, Dr. Craig Sheldon, and Dr. Philip Chaney. I am grateful for their help and assistance throughout this project.

I am extremely grateful for my committee chair, Dr. John Cottier. Over the years he has been my professor, boss, and close friend. I also want to say thank you to Dr. Craig Sheldon, who along with Dr. Cottier has taught me everything I know about Archaeology. I would also like to thank my wife, Heather. She has always maintained faith in my ability to complete this project. Lastly I would like to thank my parents. Without them I would not be where I am today and for that I am forever grateful.

All data and illustrations are property of Auburn University and have been used here with permission. The archaeological materials analyzed for this thesis were recovered under a federal ARPA permit issued to Auburn University in conjunction with the Poarch Band of Creek Indians.

Table of Contents

List of Tables

List of Figures

CHAPTER 1:

Introduction

In 2007 a five year long excavation was completed of the Historic Creek town of Hickory Ground, site 1EE89, by a team of archaeologists from Auburn University. The location and importance of the Hickory Ground site was first recognized in 1960 and was later placed on the National Register of Historic Places in 1980. Cultural remains from the Archaic, Woodland, Mississippian, Proto-Historic, Historic Creek, and European traditions are all evident through archaeological excavations. The vast majority of the cultural evidence belongs to the Historic Creek Tallapoosa Phase occupation. While there has been a significant amount of cultural material recovered representing the Historic Creek occupation at Hickory Ground there is an earlier occupation that is of concern for this research, the Proto-Historic occupation. The majority of the cultural material present at Hickory Ground that represents this Proto-Historic occupation comes from the domestic structures that are tightly clustered at the northern end of the site (Figure 1).

Evidence of the Proto-Historic occupation includes the aforementioned domestic structures, household activity areas, storage pits, burials and a public structure. In general the northeast portion of the project area contained the highest concentration of Proto-Historic evidence. Additionally there were likely five domestic structures located near the bank of the Coosa River with two more located just to the east of the main area of

occupation. Evidence of these structures unfortunately only includes remains of the central fire hearths with no floor midden or post pattern identified.

Figure 1. Aerial View of 1EE89. Photo Taken in 1988.

Excavations at 1EE89 recovered extensive evidence of a Proto-Historic occupation at the site. Evidence of 30 domestic structures and one public structure, indicates a prolonged occupation with some degree of social complexity (Figure 2). Analysis of the ceramics associated with these structures clearly demonstrated two distinct ceramic traditions; one influenced from Moundville and the other from Lamar. Whereas the samples consist predominately of plain shell and plain sand tempered ceramics, the occurrence of both Moundville and Lamar pottery provides some insight into the lack of cultural homogeneity within the Proto-Historic period occupation at 1EE89.

Statistical analysis in the form of a simple seriation has been utilized to demonstrate patterns of relatedness between the domestic structures at 1EE89. Ceramic inventories of each structure have been compared with the other structures at the site to

decipher if these two ceramic traditions create a cultural division within the site. Ceramic traditions are generally introduced into a culture through the mechanisms of trade,

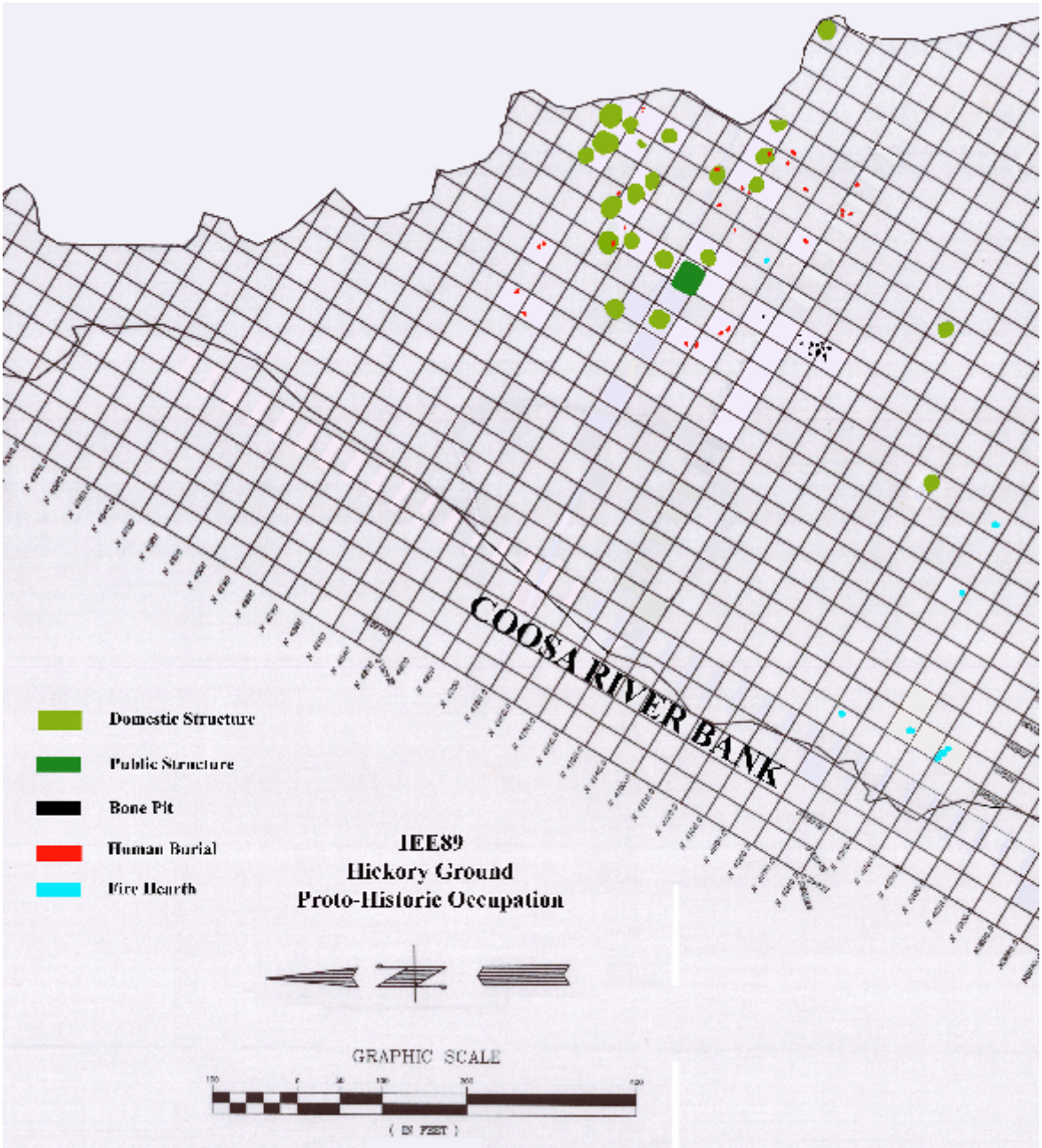


Figure 2. Map of the Proto-Historic Occupation at 1EE89.

diffusion, and conflict, or a combination of these factors. A logical conclusion to make would be that if the differences in ceramic traditions between the houses are not significant then this may indicate a gradual occupation between two distinct cultures blending together through diffusion. If there are significant differences between the ceramic inventories of the houses then we would look to the mechanism of conflict to possibly explain the shift in cultural traditions. The following chapters will include the aforementioned research as well as geographical and ethno-historical accounts of 1EE89.

CHAPTER 2:

Historical Framework: Regional

Generally Native American occupation within the state can be subdivided into five distinct yet continuous stages: Paleo-Indian, Archaic, Woodland, Mississippian, and historic (Walthall 1980). While this is generally agreed upon there is some dissension when it comes to the transitional periods between the Woodland and Mississippian as well as the Mississippian and historic. The former is known as the Gulf-formational phase which will not be discussed in this paper while the later, known as the Proto-Historic phase, represents the area of focus for this research (Table 1).

Historic **1700 A.D. - Present**
Proto-Historic **1500 A.D. - 1700 A.D.**
Mississippian **700 A.D. - 1500 A.D.**
Woodland **1,000 B.C. - 700 A.D.**
Archaic **8,000 - 1,000 B.C.**
Paleo-Indian **10,000 - 8,000 B.C.**

Table 1. Regional Cultural Chronology

The earliest stage in the cultural chronology in Alabama is known as the Paleo-Indian and represents an occupation dominated by bands of hunter gatherers who roamed the southeast until around 8000 B.C. (Walthall 1980). Dominant cultures which existed during the Paleo-Indian stage include the Clovis and Cumberland cultures. Material remains from the Paleo-Indian stage are limited at best. Lithic assemblages dominate the archaeological record and are the major indicators of these distinct cultures.

Clovis sites are generally located along the upper terraces along the Tennessee River. These sites were denoted by the presence of fluted points and all represented temporary open air campsites. Cumberland sites have been located in a much wider range of environmental zones than the earlier Clovis sites (Walthall 1980). In addition to sites located in the Tennessee River valley there have also been sites located in the uplands including a small rock shelter on Sand Mountain in Marshall County, Alabama (Clayton 1965). The Paleo-Indian peoples in Alabama were most likely represented by the band level of socio-political organization, as defined by Elman Service (1966). This is evidenced by their nomadic lifestyle and small sparsely scattered campsites .

The Archaic tradition in Alabama begins around 6000 to 8000 B.C (Walthall 1980). Important Archaic sites in Alabama include Russell Cave, excavated in the 1950s by Carl Miller (Miller 1956) and in the 1960s by John W. Griffin (Griffin 1974), and the Stanfield-Worley Bluff Shelter which was excavated by David DeJarnette in 1960 (DeJarnette, Kurjack, and Cambron 1962). Willey and Phillips define the Archaic occupation in Method and Theory in American Archaeology as:

> We may briefly define the Archaic as the stage of migratory hunting and gathering cultures continuing into environmental conditions approximating those of the present……there is now a dependence on smaller and perhaps more varied fauna. There is also an apparent increase in gathering; it is in this stage that sites

> begin to yield large numbers of stone implements and tools that are assumed to be connected with the preparation of wild vegetable foods…….Of primary interest as stage criteria are the heavy ground-stone woodworking tools generally regarded as prerequisite to the successful occupation of forest environments – axes, adzes, wedges, gouges, etc. (Willey and Phillips 1958:107-08)

The Archaic Period is a rather long cultural sequence that has been divided into three temporal groups: early, middle, and late. The Early Archaic Period (8000-6000 B.C.) according to Walthall (1980:38) is characterized by "notched and stemmed projectile points, uniface flake tools, and in northern Alabama, by a more intensive utilization of rock shelters as habitations sites." Walthall (1980:38) describes the Middle Archaic (6000-4000 B.C.) occupation as, "characterized by the appearance of ground and polished stone implements; a wide variety of bone tools; flexed burials, often accompanied by mortuary goods; and the first major occupation of riverine shell middens." The Late Archaic occupation dates from around 4000 B.C. until the first appearance of ceramic technology around 1000 B.C. This Terminal Archaic stage is characterized by Walthall (1980:40) as, "in late Archaic times there were many innovations, including the development of limited spectrum economies based upon a few high yield natural foods, and the earliest cultivation of native plants."

The Archaic tradition represented a successful transition in subsistence and adaptive strategies. Towards the end of the Archaic Period people began to adapt to a much more diversified subsistence strategy that included gathering of wild plants, fishing, and hunting smaller game (Hudson 1976). In addition to a more diverse subsistence strategy, the Archaic peoples began to create items of personal adornment which are often recovered from burials. The Archaic peoples placed a high degree of importance on the treatment of the deceased often placing red pigments, weapons, tools,

and dogs in burials (Hudson 1976). Sociopolitical organization was most likely represented at the band level of society due to the still relatively high degree of mobility and reliance on hunting and gathering subsistence.

Around 1000 B.C. a new tradition of native occupation began to take shape along the Mississippi and Ohio rivers which would continue in the southeast until around A.D. 700. Hudson (1976:55) states, "the Woodland tradition entailed both a change in the ideology of the Indians and a change in their subsistence pattern, but in both cases the changes appear to have gradually developed out of antecedents in the Archaic tradition." Some more notable aspects of Woodland culture include the invention of the bow and arrow, pottery, and large earthen works including effigy mounds. Some of the more prominent Woodland cultures include the Adena and the Hopewell civilizations in the Ohio River Valley.

This new culture was unlike anything that had existed in the Americas prior to its inception. Hudson states, "…in fact, it was probably the most distinctive, the most completely indigenous culture ever to exist in eastern North America"(Hudson 1976:55). One of the most distinct aspects of Woodland culture was earthen mounds. Many of the mounds were constructed to contain human bones or cremated remains, while others were used for other purposes besides internment of human remains. Some of the non-burial earthen works were simply dirt piled into linear mounds while others took the form of animals or were used as large enclosures. The enclosures often surround groups of burial mounds which would lead one to believe that they were acting as some form of fortification unit. However they were not typically very large or difficult to climb over so the function of these earthen works must lie elsewhere. The earthen works represented by

animal shapes are known as animal effigy mounds and their purpose remains unknown. Mounds such as the Serpent Mound in southern Ohio and the Rock Eagle mound in Georgia most likely served some sort of ceremonial function. However due to the lack of cultural remains recovered from these mound sites archaeologists cannot decipher their use (Hudson 1976).

During the Woodland Period we have our first evidence of large storage pits and relatively permanent house structures. Agriculture became increasingly important throughout the Woodland Period as residence patterns became more sedentary. This sedentary lifestyle coincided with the widespread use of pottery as well. Crops grown by Woodland agriculturalists include the bottle gourd, squash, and corn (Hudson 1976). In addition to the cultivated foods, Woodland peoples also relied heavily on gathered plant foods such as hickory nuts, acorns, persimmons, and blackberries (Hudson 1976). The pottery made during the Woodland Period was usually tempered with sand or grit but fiber tempering was also present early on. Surface decorations included but were not limited to cord-marking, fabric-marking, stamping, and incised.

Following the Woodland tradition we see an explosion of populations and culture in the manifestation of the Mississippian culture after 700 A.D. According to Walthall (1980:185) the Mississippian stage is, "marked by the appearance of distinctive forms of pottery, commonly shell-tempered, and by the construction, on or around a central plaza, of large earthen platforms that served as substructures for temples, elite residences, and council buildings." The Mississippian tradition also introduces the chiefdom level of society in native North America. This level of socio-political

organization is vastly more complex than the bands and tribes of the previous traditions (Service 1962:142).

Settlements during the Mississippian Period became increasingly more sedentary than during previous times. At the height of its duration, the Mississippian tradition represented the largest most complex cultures in North America (Hudson 1976). One of the most distinctive features of the Mississippian tradition was the construction of large flat topped earthen mounds. These mounds differed from the more conical mounds of the Woodland tradition in both form and function. These mounds were constructed as platforms for temples, mortuaries, and elite residences. Temple mounds such as these were often associated and overlooked a public plaza which served as a playing field, a ceremonial area, and a village commons (Hudson 1976).

Mississippian subsistence strategies relied heavily on maize agriculture. Mississippian settlements were generally constructed in areas adjacent to large riverine floodplains to take advantage of the fertile soils they provided. Walthall summarizes the typical Mississippian subsistence strategies and diet,

> Mississippian subsistence was based upon three major procurement systems: 1. cultivation of crops such as maize, squash, beans, pumpkins, and sunflower; 2. collection of native plant foods, especially nuts and fruits; and 3. exploitation of animal populations. Fields were tilled with digging sticks and hoes. Hunters used bow and arrow and made traps and snares. Fish were taken on hooks of bone and copper and in traps and weirs. Poisons, made from certain tree roots, were probably also employed in shallow pools to stupefy fish, a widespread custom in historic times. Shellfish were also gathered and backed, steamed, or added to stews (Walthall 1980:190-91).

This newfound dependence on agriculture afforded the creation of much larger and more permanent settlements. Achieving such a complex level of society would not have been possible prior to the advent of widespread maize agriculture (DeJarnette 1952).

Some notable Mississippian sites in the southeast include the paramount chiefdoms of Moundville and Cahokia as well as the complex chiefdoms at Macon and Etowah. Mississippian culture flourishes until around the time of European contact when it collapses. The descendants of those powerful chiefdoms would later resettle in the southeast during the brief but crucial Proto-Historic Period. Walthall describes the landscape surrounding the formation of the Proto-Historic Period in Alabama,

> in the Alabama area there was a major demographic shift as population density rose in the south and the east. Moundville and much of the Tennessee Valley were abandoned. Vigorous new cultures whose heritage appears in some cases to be directly linked to the old Moundville culture, developed along the coast and in the major river valleys of the Coastal Plain (Walthall 1980: 246).

Many scholars view the Proto-Historic Period as a time of cultural collapse (Dunnell 1991; Ramenofsky 1987, 1990; Sheldon 1974; M.T. Smith 1987, 1994). In the southeast this refers to the collapse of the Mississippian chiefdoms into smaller dispersed farmsteads and villages. Although this cultural collapse likely occurred for a variety of reasons many archaeologists view the number one culprit of Mississippian decline as being infectious European diseases contracted by the natives (Etheridge 2003). Natives of this time period are also viewed as being in a period of extreme cultural transition. Sociopolitical organization in the southeast changed from powerful chiefdoms to a more egalitarian society in most areas.

The Proto-Historic Period in the southeast was without a doubt influenced by the collapsed chiefdoms of the Mississippian Period (Walthall 1980). In central Alabama Proto-Historic cultures share traditions with the former paramount chiefdom of Moundville as well as traditions from Lamar cultures to the east. It is this crucial time between the collapse of the chiefdoms and the formation of the Historic Period tribes that

is the focus of this thesis. In the next chapter I will define the local cultures and traditions that may have influenced the Proto-Historic culture or cultures that once inhabited 1EE89.

Historical Framework: Local

Lamar

The Lamar Period began around 1350 A.D., relatively late during the Mississippian Period in the region. The period is named for John Basil Lamar, a civil war soldier who owned property containing earthen mounds which are now a portion of the Ocmulgee National Monument in Georgia (Williams and Shapiro 1990). The Lamar culture was original called the South Appalachian Group by William Henry Holmes (1903) but was changed (Williams and Shapiro 1990). The term Lamar, as used as a cultural identifier, was first used in 1935 when Arthur Kelly used it to define the inhabitants and their burial practices at the Macon Plateau site. (Williams and Shapiro 1990).

The term Lamar is used today as an all encompassing term to represent South Appalachian Mississippian Cultures that produced a distinct style of pottery. Williams and Shapiro provide a brief overview of Lamar ceramics as,

> The characteristics of early Lamar stamped pottery include specific stamped designs, such as the filfot stamp and figure nine motifs. Stamping is usually applied in what appears to us as a careless fashion, and the designs are often smoothed over and nearly obliterated. The rims of the pottery vessels are often embellished with strips of clay appliquéd around the rim or are folded outward to achieve the same effect of apparent thickening. These thickened rims are usually decorated with notches, pinches, or large punctuations. Later in the Lamar period, the Indians applied incised designs, the incised designs vary through time and from region to region, but some common incised motifs include running scrolls and nested lines separated by bull's eye designs (Williams and Shapiro 1990:4-6).

These and other observations about Lamar ceramics mostly resulted from excavations in and around the Macon, Georgia area. As many more excavations of Lamar sites were conducted throughout the southeast archaeologists began to realize the enormity of the Lamar influence on ceramic types in the region (Williams and Shapiro 1990).

The scope of influence of the Lamar ceramic tradition is very widespread covering five states that include Georgia, Florida, South Carolina, Tennessee, and Alabama. All of these areas of influence are centered around or near major river systems. While 1EE89 is located in the extreme western area of known Lamar influence there are three areas containing Lamar cultural chronologies that may have influenced the inhabitants of 1EE89. These three areas include the Middle Coosa River, the Upper Tallapoosa River, and the Lower Tallapoosa River (Williams and Shapiro 1990) (Figure 3).

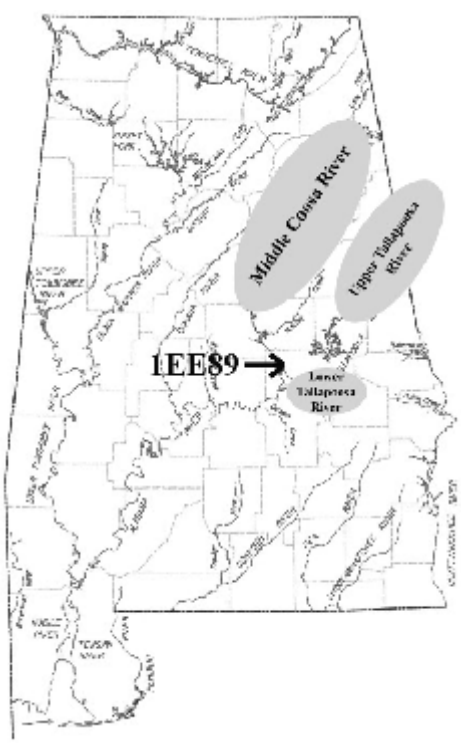


Figure 3. Lamar areas of occupation located near 1EE89.

The Middle Coosa River and the Lower Tallapoosa River areas are closer geographically to 1EE89 than the Upper Tallapoosa, but all three locations are considered in order to more completely define the Lamar cultural traditions in East Central Alabama.

Lamar ceramic traditions are represented by four phases in the Middle Coosa River area (Table 2). The dates of Mississippian occupation in this area are approximately A.D. 1100-1500 with two Lamar derived phases existing until around A.D. 1715 (Knight 1990: 46). Knight has suggested the overall number of Mississippian sites for this region demonstrates an initially small population which is experiences a gradual decline throughout their occupation (Knight 1990: 46). Phases included in the Middle Coosa River area include Etowah II-III (A.D. 1100-1250), Savannah/Wilbanks (A.D. 1250-1400), Kymulga (A.D. 1500-1650), and Woods Island (A.D. 1650-1715) (Knight 1990).

Middle Coosa River	
Woods Island	1650-1715
Kymulga	1500-1650
Savannah / Wilbanks	1250-1400
Etowah II-III	1100-1250

Table 2. Cultural chronology of the Middle Coosa River Area.

The Etowah II-III phase is represented by only a few small sites scattered mostly at the northern end of the Middle Coosa River Valley. All of the sites associated with the Etowah II-III phase have been recovered in floodplains. Etowah Complicated Stamped is the main diagnostic ceramic type for this phase. The Savannah/Wilbanks phase is very

limited in its existence with the majority of its recognition coming from only one site (Knight 1990). The main diagnostic ceramic type for this phase is Wilbanks Complicated Stamped. The Kymulga phase contains nine site components all located in Talladega County, Alabama. The ceramics resemble a mix of Lamar and late Dallas phase ceramics (Knight 1990:47-48). The Woods Island phase is marked by a disappearance of grit tempered pottery and complicated stamping. Pottery in this phase is almost exclusively shell and grog tempered (Knight 1990:48-49).

Lamar ceramic traditions are represented by four distinct phases in the Upper Tallapoosa River region. Phases included in the Upper Tallapoosa river area include Etowah II-III (A.D. 1100-1250), Avery (A.D. 1400-1600), Atasi (1600-1715), and Tallapoosa (A.D. 1715-1835) (Knight 1990) (Table 3). The Atasi and Tallapoosa phases are both considered to be "Lamar Derived" phases which are also represented in the Lower Tallapoosa River (Knight 1990:50). Their descriptions will be presented later in the description of the Lower Tallapoosa River area, while Etowah II-III phase ceramics and sites are described in the preceding section on the Middle Coosa River area (Knight 1990).

Upper Tallapoosa River	
Tallapoosa	1715-1835
Atasi	1600-1715
Avery	1400-1600
Etowah II-III	1100-1250

Table 3. Cultural chronology of the Upper Tallapoosa River area.

The Avery (A.D. 1400-1600) phase in the Upper Tallapoosa river area as a ceramic assemblage is dominated by plain sherds (Knight 1990). Rim treatments are not common on Avery ceramics but notched and nodded rims are present. The dominant incised motif that occurs on Lamar Bold Incised vessels is represented by curvilinear scrolls or the guilloche. Lamar Complicated Stamped occurs exclusively on bowls with obliterated curvilinear stamping. Rims of these vessels are usually pinched or have a pinched appliqué filet, however unmodified rims also occur. Check stamping is absent from Avery sites (Knight 1990: 49-50).

The final area of suggested Lamar influence for 1EE89 occurs on the Lower Tallapoosa River. This area of influence is represented by four distinct ceramic traditions. These phases include the Shine I (?-A.D. 1400), Shine II (A.D.1400-1550), Atasi (A.D. 1600-1715), and Tallapoosa (A.D. 1715- 1837) (Table 4).

Lower Tallapoosa River	
Tallapoosa	1715-1835
Atasi	1600-1715
Shine II	1400-1550
Shine I	? A.D.-1400

Table 4. Cultural chronology of the Lower Tallapoosa River area.

The point at which the Shine I Phase began in the Lower Tallapoosa river area is unknown at this time, and Knight gives no description of the ceramic tradition that it represents. The Shine II Phase begins in A.D. 1400 and is dominated in its ceramic inventory by plain sherds which accounts for around 85 percent of the entire sample

(Knight 1990:50-51). A small amount of shell tempering is present in the Shine II Phase; however, Lamar Complicated Stamped ceramics represent the most common decorated type with Lamar Bold Incising occurring less regularly. Check stamping is also present in the samples (Knight 1990: 51).

The Atasi and Tallapoosa phases in this region as well as in the Upper Tallapoosa regions are considered to be "Lamar Derived" phases. This just means that these ceramic traditions contain traits common to the preceding Lamar Phases and occur in the same area. The Atasi and Tallapoosa phases are also considered phases in the cultural chronology of the Historic Creek Indians. With the beginning of the Atasi Phase incised or burnished incised ceramics become the dominant decorated types with complicated stamped pottery diminishing overtime (Sheldon, personal communications 2010). Tempering is represented mainly by sand however shell and grit are also present. Flaring rim vessels are common during this phase with some cazuela bowls being present. The Tallapoosa Phase sees the diminished popularity of cob marking, and Chattahoochee Brushed becomes the dominant ceramic type. Incising becomes narrower in width than during previous phases and shell tempering all but disappears. Vessel forms are identical to those during the Tallapoosa phase (Knight 1990).

Moundville

The most prominent Mississippian culture in Alabama was the Moundville culture of west-central Alabama which existed from about A.D. 1050-1550. The majority of the sites from this culture are located in the valley of the Black Warrior River. The culture was named after the largest site in this culture, Moundville. During the height of Moundville's existence it was the second largest Mississippian community in eastern

North America. The site of Moundville contains at least 20 earthen mounds arranged around a rectangular plaza (Knight and Steponaitis 1998).

Regionally the Moundville sequence can be divided into five distinct phases (Table 5). These phases include the West Jefferson Phase (Late Woodland from A.D. 900-1050), Moundville I Phase (A.D. 1050-1250), Moundville II Phase (A.D. 1250-1400), Moundville III Phase (A.D. 1400-1550), and the Alabama River Phase (A.D. 1550-1700) (Steponaitis 1983). Little and Curren (1995) have defined a separate phase for Proto-Historic Moundville cultures called the Moundville IV Phase. This phase is contemporaneous with the Alabama River Phase (Little and Curren 1995). The following paragraphs will provide a brief description of each phase.

Moundville Cultural Chronology	
Alabama River / Moundville IV	1550-1700 A.D.
Moundville III	1400-1550 A.D.
Moundville II	1250-1400 A.D.
Moundville I	1050-1250 A.D.
West Jefferson	900-1050 A.D.

Table 5. Moundville cultural chronology.

The West Jefferson Phase is the terminal Woodland phase in the Black Warrior River Valley. It was originally recognized by Ned Jenkins by materials recovered from three sites on the Locust Fork of the Black Warrior River (Steponaitis 1983). The ceramic inventory consists almost entirely of plain grog tempered pottery, which is classified as Baytown Plain variety Roper. Cord-marking, incising, and punctations are also present as surface and design elements. There is also a small assemblage of shell tempered ceramics

associated with the West Jefferson Phase sites. This includes types such as Mississippi Plain, variety Warrior, and Moundville Incised, variety Carrollton (Steponaitis 1983). Evidence of the West Jefferson Phase at Moundville mainly includes ceramic sherds (Steponaitis 1983). It has been suggested that the West Jefferson Phase occupation at Moundville was a small village approximately .5-1.5 hectares in size (Walthall and Wimberly 1978:123).

The Moundville I Phase is the first phase of Mississippian occupation at Moundville. The ceramic types with the highest frequency for this phase are undecorated varieties such as Mississippi Plain, variety Warrior, and Bell Plain, variety Hale. Common decorated types include Carthage Incised varieties Akron, Moon Lake, and Summerville. Also common during the Moundville I Phase was a technique known as black filming or smudging. This was used frequently to darken the surface of burnished vessels (Steponaitis 1983: 100).

During the transition from the West Jefferson Phase to the Moundville I Phase archaeologists have demonstrated a new dependency on Maize agriculture. Wild foods such as nuts, seeds and fruits continued to be consumed and hunting continued in importance but the focus of their subsistence had shifted to maize agriculture (Ford 1974). Also the Moundville I Phase demonstrates the first construction of civic-ceremonial centers. These centers typically included at least one pyramidal mound and an associated mortuary area that would serve scattered farmsteads and villages in the adjacent areas (Smith 1978). According to Steponaitis (1983:166), "each of these centers and its surrounding population probably constituted a somewhat centralized, autonomous, polity, analogous to a simple chiefdom." Steponaitis (1983:167) goes on to state, "it is

interesting to note that all the known Moundville I centers were built on, or immediately adjacent to, the locations of earlier West Jefferson phase villages….This continuity in location through time is thoroughly consistent with the notion that the West Jefferson-Moundville I transition took place in the context of a stable, indigenous population."

The next phase in the Moundville ceramic chronology is the Moundville II Phase. According to Steponaitis this is the least well defined of the Moundville phases. He states that this is due to a lack of whole vessels and the fact that the majority of the material was not recovered in a pure context. This simply means that there was generally some mixing of Moundville II material with Moundville I and Moundville III materials. Again as with the previous phases undecorated sherds dominate the ceramic assemblages. Examples of these include Mississippi Plain variety Warrior, Bell Plain variety Hale, and Mississippi Plain, variety Hull Lake (Steponaitis 1983). Engraved and Incised ceramics are also present in Moundville II component sites. Carthage Incised is commonly found in Moundville II contexts and is represented primarily by the variety Akron. The varieties of Moon Lake and Carthage may also be present but due to the lack of a secure context they can not be included in the assemblage. Moundville Engraved occurs in the ceramic assemblage of Moundville II sites and is represented by varieties Havana, Northport, Taylorville, and Hemphill (Steponaitis 1983). Black Filming is the predominant treatment on burnished ceramics with some red filming and a small amount of white filming also present (Steponaitis 1983).

The site of Moundville underwent a dramatic change during the Moundville II Phase. By the end of the phase there were at a minimum five, and probably as many as 14 earthen mounds constructed at the site. This effectively defined the shape and size of the

plaza. Still no other village sized sites exhibiting the traits of Moundville II are known during this time period. Therefore the majority of the population in the region occupied small farmsteads and hamlets with Moundville serving as a regional ceremonial center (Steponaitis 1983).

The terminal Mississippian phase of the Moundville tradition is the Moundville III Phase. Yet again as with the previous ceramic assemblages, plain sherds dominate the collection. The types with the highest frequency are Mississippi Plain variety Warrior and Bell Plain variety Hale. Incising and engraving are the most common form of decorated sherds present during this phase. Engraved types include Moundville Engraved varieties Havana, Taylorville, Tuscaloosa, Hemphill, Wiggens, and Englewood, while incised sherds are represented by Carthage Incised varieties Akron, Moon Lake, Carthage, and Fosters (Steponaitis 1983). Much like in the previous phases black filming continues as a dominant treatment on burnished sherds. Red and White filming are also present (Steponaitis 1983).

It was during the Moundville III Phase that the site of Moundville reached its final form. At least six additional mounds were constructed during this time period to achieve the overall final total of 20 mounds. The degree of social ranking, as prescribed by the existence of a chiefdom level of society, reached its highest level of complexity during this time period (Steponaitis 1983). Moundville as a ceremonial center exhibited power and influence over a number of much smaller local centers who in turn controlled smaller farmsteads and hamlets. This three tiered settlement is a classic trait of the paramount chiefdom level of sociopolitical organization. The end of the Moundville III Phase is marked by the collapse of Moundville and the subsequent reduction of its

influences (Walthall 1980).

The final phase of the Moundville cultural chronology is the Proto-Historic Alabama River Phase or the Moundville IV Phase as it is known in the Black Warrior River Valley. The Burial Urn culture was first described by Clarence B. Moore in 1899 and was intensely studied during the 1920s and 1930s by amateur archaeologists (Walthall 1980). The Burial Urn culture is represented by distinct forms of mortuary treatment in which the bodies of deceased individuals were placed inside large ceramic vessels. These vessels were typically large sub-globular jars that were then often covered with a smaller bowl. The range of influence of this period can be seen in two separate river valley areas, the Alabama River and the Black Warrior. Keith Little and Caleb Curren (1995) have defined a separate phase for Burial Urn cultures found in the Black Warrior River Valley as the Moundville IV phase (Reigner 2006).

Craig Sheldon states the following about the formation of the Proto-Historic Alabama River Phase,

> Sometime between A.D. 1450 and 1550, a series of unknown events and processes brought to an end to the cultural florescence at Moundville, leaving in their wake a number of relatively impoverished cultural groups. The time span of these events is the so-called "Mississippian Decline," a concept easily recognized in the loss or degeneration of numerous archaeological traits, but poorly understood as to its precise timing and fundamental causes (Sheldon 1974:9).

The Alabama River Phase was undoubtedly a time of much social disruption and reorganization. Moundville, its associated influence, and settlement hierarchy had since collapsed an event which forced individuals to reorganize in smaller bands or villages throughout the river valleys.

Within the Alabama River Phase Cottier noted two distinct series of ceramic traditions, the Alabama River ceramics which were fine shell tempered and the Wilcox

ceramics which were fine sand tempered (Cottier 1970). Ceramic types recovered at Moundville associated with this time period include the plain wares of Mississippi Plain variety Warrior and Bell Plain variety Hale. Decorated sherds recovered from Moundville include Carthage Incised varieties Carthage, Poole, and Fosters, Barton Incised variety Demopolis, and Moundville Engraved. Common vessel forms include globular, simple bowls, flaring rim bowls, and short-neck bowls. Jars, unless plain, are usually adorned with strap handles (of varying quantity) and notched rims. Handles occur most commonly on jars, usually with at least four but commonly with more than four. Many jars lack functional handles, rather they are replaced by stylized appliqué fillets positioned perpendicular to the rim. Common forms of surface decoration include incised, appliqué, pinched, and filmed-incised (Walthall 1980).

Whereas a ceramic chronology is well defined for the Moundville Mississippian Moundville IV Phase, there is not yet a clearly defined ceramic assemblage for the Alabama River Phase (Reigner 2006: 123). Archaeologists who have worked in the Alabama River valley have used different typologies which have led to a lack of continuity throughout the regions with regards to an overall ceramic chronology for this time. Archaeologists in the Black Warrior River valley continue to use Moundville ceramic types to describe the ceramic assemblages found at those sites (Reigner 2006).

Recent work by Amanda Reigner may provide some clarity to the confusion surrounding the Proto-Historic phase following the collapse of the Mississippian chiefdoms at Moundville. Reigner offers three possibilities to the formation of Burial Urn cultures throughout the region. The first is that Burial Urn cultures arose independently in both the Black Warrior and Alabama River Valley. There existed in the Alabama River

valley two late Mississippian component phases, the Big Eddy and Furman phases. It is out of this component that the Burial Urn culture could have developed in the Alabama River Valley. The Burial Urn sites in the Black Warrior River valley would have developed directly from Moundville. The second possibility according to Reigner is that the Burial Urn culture as a whole developed out of the terminal Moundville III Phase. The third possibility is that the practice of urn burial arose in the Black Warrior River Valley. Subsequently the peoples of that region directly influenced already established local populations in the Alabama River Valley (Reigner 2006).

Reigner believes that two groups are still not enough to define the Burial Urn cultures throughout the Black Warrior and Alabama River valleys (2006). She states that this phase can be broken down into three distinct culture areas based upon ceramic traditions and technology (Figure 4). These include the Moundville IV Phase in the Black Warrior River valley and two separate locations associated with the Alabama River. The first consists of sites in Wilcox County south of the junction of the Cahaba and Alabama rivers while the second one consists of sites ranging. from Durant's Bend to the junction of the Coosa and Tallapoosa rivers. Reigner then concludes with the following statement,

> Based on the analysis of ceramic vessel forms, it appears each (urn clusters) arose independently in situ from each of their Mississippian antecedents. Each absorbed ceramic styles from the west into their decorative repertoires, with the populations of the Alabama River also incorporating stylistic traditions associated with influences from the more southerly Pensacola peoples.(2006:131)

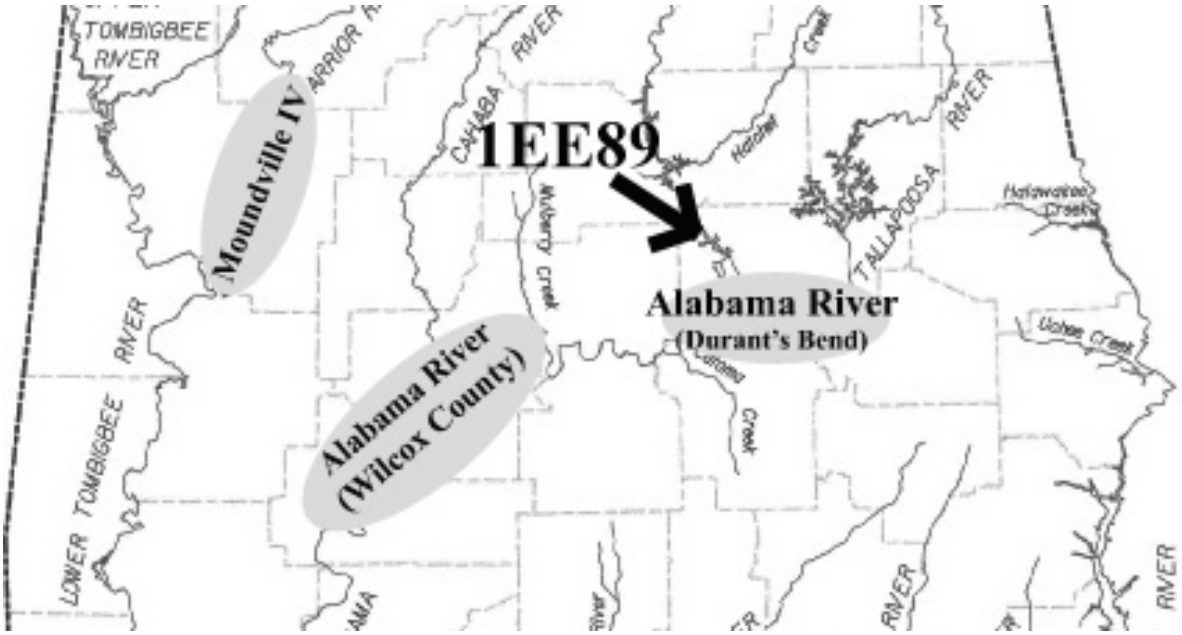


Figure 4. Map of three distinct Moundville Proto-Historic culture areas as defined by Reigner.

The subsequent cultural transition in Alabama may be even less defined than that of the transition from Mississippian to the Proto-Historic. It is the goal of the present research to offer some clarity the cultural chronology during the Proto-Historic Period in Central Alabama. Based upon the ceramic assemblage at 1EE89 I believe that populations influenced from traditions in the Alabama River Valley also absorbed ceramic traditions from the Lamar derived cultures to the east. The following chapters will present 1EE89 as an archaeological site and the ceramics associated with Proto-Historic domestic structures.

CHAPTER 3:

1EE89: Hickory Ground

Geography and Environment

The archaeological site of 1EE89, also known as Hickory Ground, is situated along a level area on a high bluff overlooking the Coosa River. Across the river are terraces that are around 30 to 40 feet lower in elevation. The last falls of the Coosa River are slightly over half a mile up river from the site and rapids and falls continue to extend from that point up river for numerous miles. The site area is contained on a level peninsular, having the Coosa River to the west and a small unnamed stream to the east. This stream flows along the eastern side of the peninsular and into the Coosa River just north of the site.

The exact physical location of the site is situated in the southeast ¼ of the southeast ¼, of the northeast ¼ of Section 24, Township 18N, Range 18E (Figure 5).

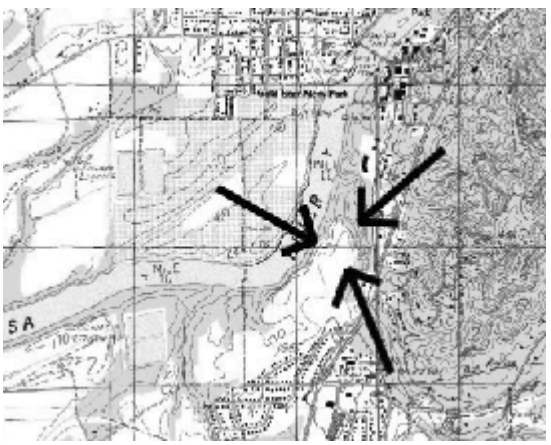


Figure 5. Location of 1EE89, taken from the Wetumpka, AL 7.5 minute topographic quadrangle.

Furthermore the site is 32 degrees, 31 minutes, and 41 seconds north of the equator and 86 degrees, 12 minutes, and 32 seconds west of the Prime Meridian. The site is located in the Fall Line Hills Physiographic District of the East Gulf Coastal Plain Physiographic Section. Characteristics of this portion of the state include a, "dissected upland with a few broad, flat ridges. Streams descend from resistant Paleozoic sedimentary and Piedmont crystalline rocks to the less resistant Cretaceous sand and clay of the Coastal Plain" (Anonymous 1981: 7). Furthermore the general topography, elevation, and relief are described as, "extending in a crescent-shaped belt across the entire breadth of the state, the Fall Line Hills district varies in width from 10 to 50 miles (16 to 80 kilometers). Overall, elevations vary within the district from about 250 feet (76 meters) to 700 feet (213 meters). Numerous ridges provide local relief of between 100 and 200 feet (30 and 61 meters)" (Anonymous 1981: 7). Elevations at the site are significantly lower than the range described above and vary from 58 meters near the southern portion of the project boundary to around 50 meters at the northern edge of the site.

Soils at 1EE89 are all strongly acidic and include five different series: Wickham Fine Sandy Loam (0-3% Slopes), Huckabee Loamy Sand (0-4% Slopes), Augusta Silt Loam (0-2% Slopes), Kalmia Sandy Loam (0-2% Slopes), and Wickham Altavista Clay Loams (0-10% Slopes)(Brackeen 1951). Wickham Fine Sandy Loam soils typically occupy nearly level to gently sloping relief along the Coosa, Tallapoosa, and Alabama rivers. A typical soil profile of Wickham Fine Sandy Loam includes 0-6 inches of reddish brown to brown friable sandy loam, 6-10 inches of reddish yellow friable fine sandy clay, and subsoil that is 10-40 inches of yellowish red firm clay containing small mica flakes (Brackeen et al1951: 88). Huckabee Loamy Sand occurs along streams of the Coastal

Plain region on terrace positions lying largely above areas of overflow. A typical soil profile for Huckabee Sandy Loam includes a surface layer from 0-7 inches of light gray to pale yellow loose loamy sand with a subsurface layer from 7-36 inches of yellow to pale yellow loose loamy sand (Brackeen et al 1951: 54-55). Augusta Silt Loam occurs in small to relatively large bodies on the stream terraces along the Tallapoosa and Coosa Rivers. A typical soil profile for Augusta Silt Loam includes a surface layer from 0-6 inches of dark grayish brown to brown friable silt loam. The subsoil is divided into two layers and includes 6-18 inches of yellowish brown to light yellowish brown friable silty clay loam and 18-30 inches of light yellowish brown firm heavy silty clay (Brackeen et al1951: 24). Kalmia Sandy Loam occupies terrace positions near streams in the Coastal Plain. A typical soil profile for Kalmia Sandy Loam includes a surface layer from 0-6 inches of dark grayish brown to light brownish gray friable sandy loam or loose loamy sand and 6-12 inches of light yellowish brown friable sandy loam. The subsoil is 12-50 inches of light yellowish brown or yellow friable sandy clay loam (Brackeen et al1951: 58-59). The final soil type found at 1EE89 is a complex of Wickham and Altavista clay loams, eroded sloping phases. The largest areas of this complex occur on the river terraces in the vicinity of the city of Wetumpka. This complex comprises extremely mixed areas of the sloping phases of Wickham clay loam and Altavista clay loam (Brackeen et al1951: 90). All of the soils at 1EE89 are strongly acidic and have undergone a massive amount of cultivation. The presence of manganese as well as mica in the soil is common throughout the site. Overall the soil types at 1EE89 are not highly suitable for aboriginal occupation.

Ethnohistory

1EE89 is the Historic Creek town of Hickory Ground and is also known as Ocheaupofau or Otciapofa (Wright 2003). Hickory Ground has a well documented history (Figure 6).

Figure 6. Location of 1EE89 (Hickory Ground) as shown on the 1802 ? map.

The location and importance of the Hickory Ground site was first recognized in 1960 and was later placed on the National Register of Historic Places in 1980 (Cottier 2006). Cultural remains from the Archaic, Woodland, Mississippian, Proto-Historic, Historic Creek, and Anglo-American traditions are all evident through archaeological excavations.

The vast majority of the cultural evidence belongs however to the Historic Creek Tallapoosa Phase occupation (Cottier 2006).

While there is substantial documented evidence for the existence of Hickory Ground we know little about the actual origins. According to Benjamin Hawkins the settlers of Hickory Ground migrated there from a neighboring town known to him as "Tallasu" (Foster 2003). "Tallasu" is also known in historical texts as "Little Tallasee" as well as "Little Tulsa" (Wright 2003). Swanton (1922) lends support to this migration describing Otciapofa as one of the most important towns descended from the Coosa. Swanton states that the inhabitants of Hickory Ground migrated there from a town known as "Little Tulsa", which was located on the east bank of the Coosa River some three miles upriver from the falls. He goes on to state that "Little Tulsa" was the home of the central Creek leader Alexander McGillivary (Swanton 1922), the son of a Creek woman from the Wind clan and an important Scottish trader (Etheridge 2003). Following McGillivary's death in 1793 the inhabitants of "Little Tulsa" gradually relocated to Hickory Ground (Swanton 1922).

Due to the importance of the site there are a number of ethno-historical accounts of Hickory Ground. The earliest historical evidence of the existence of Hickory Ground comes from William Bartram who traveled through the area between 1775 and 1777 and recorded a town called "Hiccory ground" on the Coosa River (Waselkov and Braund 1995). This would lead us to believe that migration from Little Tallasee to Hickory Ground had already been initiated in 1778, some 15 years prior to the death of Alexander McGillivary. Hickory Ground was also visited by Caleb Swan, deputy agent to the Creek Nation, in 1790. Swan noted the location of Hickory Ground and mentioned visits by

Alexander McGillivary to the site (Swan 1855). Shortly after McGillivary's death in 1793 Benjamin Hawkins describes the former residence of Alexander McGillivary and offers a brief statement on Hickory Ground.

> [from the site of Fort Toulouse] I continued on up to the Coosa, 3 miles to the hickory ground, the lands poor all the way and level, passing the Little Oakchoies on the way, a neat compact little town. Most of the lands cultivated by these 2 towns lie on the right bank of the river; just above the hickory ground the falls commence, they can be passed with canoes, the lands to the right are broken and mountainous & gravelly, not rich, the rock at the falls very different from those at the Tallapoosa Falls, here it is ragged. Continue on 4 miles farther to the remains of Old Tallassee, formerly the residence of Mr. McGillivray and his son the general, here I saw some large apple trees, 10 of them planted by the former, and a stone chimney, the remains of a house built by the latter, I saw half a mile below 8 or 10 apple trees planted by the general which were thriving. The hickory ground is inhabited by those who formerly lived at the Tallassee, and the old town is a desert," (Hawkins 1916: 44)

The preceding statement by Hawkins is significant in that it documents an approximate location of Hickory Ground as well as documenting the aforementioned migration of the inhabitants of Little Tallassee to Hickory Ground. Hawkins later gives a full statement of his observations while visiting Hickory Ground.

> O-che-au-po-fau: from Oche-ub, a hickory tree, and po-fau, in or among, called the traders, hickory ground. It is on the left bank of the Coosau, two miles above the fork of the river, and one mile below the falls, on a flat of poor land, just below a small stream; the fields are on the right side of the river, on rich flat land; and this flat extends back for two miles, with oak and hickory, then pine forest; the range out in this forest is fine for cattle; reed is abundant in all the branches. These people are, some of them, industrious. They have forty gunmen, nearly three hundred cattle, and some horses and hogs; the family of the general belong to this town; he left one son and two daughters; the son is in Scotland, with his grandfather, and the daughters with Sam Macnack..... The chiefs have requested the agent for Indian affairs to take charge of the property for the son, to prevent its being wasted by the sisters of the general or by their children. Mrs. Durant, the oldest sister has eight children. She is industrious, but has no economy or management. In possession of fourteen working negroes, she seldom makes bread enough, and they live poorly. She can spin and weave, and is making some feeble efforts to obtain clothing for her family. The other sister, Sehoi, has about thirty negroes, is extravagant and heedless, neither spins nor weaves, and has no government of her family. She has one son, David Tate who has been educated in

Philadelphia and Scotland (Swanton 1922: 242).

The historical importance of Hickory Ground comes to the forefront in 1802 when the location of the Creek National Council moved from Tukabatchi to Hickory Ground making it the last National Capital of the Creeks in Alabama (Cottier 2006). However the town of Hickory Ground does not play a major role in First Creek War of 1813-1814; however the town as well as others along the Coosa and Tallapoosa were burned at the end of the war (Cottier and Sheldon 2002). In April of 1814 Fooshatchee Mico of the Hickory Ground assembled a party and surrendered to the American forces. Shortly thereafter nearby Fort Jackson distributed provisions to 60 men, 73 women, and 67 children from the Hickory Ground (Cottier 2006).

The final historical account of Hickory Ground pertains to a person named Tallassee Fixico. Creeks who opposed the American cause during the first creek war were removed from their towns according to the Treaty of Fort Jackson. However individuals such as Tallassee Fixico, who had joined the pro-American faction during the Creek War were excluded from the treaty. Tallassee Fixico was described by Benjamin Hawkins (Cottier 2006) as "a distinguished chief and much to be relied on." Fixico received title to lands that included the former town of Hickory Ground in 1820 but later abandoned his claim on to the property around 1827 (Cottier 2006).

Recent Research at 1EE89

Recent research by Blankenship and Cottier (2007), Kennedy (2008), and Little (2008) have centered on aspects of the Proto-Historic occupation at 1EE89. A metal disc

gorget was recovered from Feature 398, a Proto-Historic adult male burial, at 1EE89. Associated funerary remains included large Alabama River phase ceramic sherds. The gorget was recovered below the remains of the skull and around the area of the neck. During the 16th and 17th centuries, disc-style gorgets, manufactured from first native copper and later, European copper alloys, were ubiquitously traded among native groups of the interior Southeast and mid-Atlantic region (Waselkov 1989). These gorgets are generally found archaeologically with high status burials (Blankenship and Cottier 2007).

In addition to the gorget there were two other European trade artifacts recovered in association with the Proto-Historic period at Hickory Ground. There were two early glass beads recovered in the fill of Feature 391, a Proto-Historic burial. These beads are not directly associated with the burial but were recovered in the pit fill. Similar beads have been previously discussed by Keith Little (2008) as having 16th century context in the upper Coosa River Valley. One of the beads is of blue glass with alternating red and white stripes. This bead is a very common type of the16th century late complex beads, dating from 1550 to 1600 (Little: Personal Communications 2007). The other is a three layered blue/white/blue striped bead that also dates to the same general time frame as the other bead (Little 2008).

Jason Kennedy (2008) recently completed a bio-cultural analysis of skeletal remains at 1EE89. He analyzed skeletal remains from both the Proto-Historic population and the Historic Creek occupation in order to identify any inferences that could be made about their diet and lifestyles. Unfortunately environmental processes have left the skeletal remains at 1EE89 in poor condition, limiting detailed observations. His focus therefore was on teeth, which resist decay and other factors much more so than bone.

Kennedy's examination of the teeth identified a number of paleo-pathological indicators; including hypoplasis, carious lesions, molar attrition scores, and periodontitis. His research demonstrated an overall decrease in the frequency of these indicators from the Proto-Historic to the Historic period (Kennedy 2008).

CHAPTER 4:

Excavations

The site of 1EE89, Hickory Ground, has been known to local residents of the Wetumpka area for a long period of time. According to Chase, residents described the fields at Hickory Ground as, "full of arrowheads" (Chase 1987). These fields would have been the target of amateur collectors following heavy rains or in the spring when the fields would be plowed. Based upon ceramic artifact recoveries from surface collections Chase tentatively identified the location of Hickory Ground in the late 1960s. The site was assigned the state archaeological site designation of 1EE73, which was later changed to 1EE89 due to a duplication of archaeological site numbers.

Prior to 1987 there was very limited archaeological excavation at 1EE89. David Chase visited 1EE89 in the late 1960s and collected artifacts in plowed fields to confirm the identity of the site. In January of 1979 Mac Brooms and James Parker performed surface and shovel test investigations at the site. David Chase returned to 1EE89 in December of 1979 with Craig Sheldon in order to perform a Phase I survey on the western end of the site area. This survey was conducted on behalf of Huff Associates for the planned construction of residential facilities for senior citizens. Two more subsequent surveys were conducted of the site. The first one was conducted in 1980 and was conducted by the University of Alabama while the second one was conducted by Silvia Fuller and Noel Read Stowe of the University of South Alabama in 1986 (Chase 1987).

The first intensive excavations of the site were conducted by David Chase in 1987. These investigations were conducted to assess the cultural content of 12.35 acres acquired by the Poarch Band of Creek Indians. Initial excavations were conducted by manually digging trenches however this method was later replaced by plow-zone removal with a tractor and box blade. These investigations resulted in the recovery of a number of ceramic types and intact features indicative of Historic Creek as well as prehistoric occupations (Chase 1987).

Subsequent excavations were again conducted in during the years of 1988 to 1992 (Cottier 2006). All of these investigations demonstrated clear evidence of late Historic Creek populations. Likewise cultural remains associated with the Archaic, Woodland, Late Mississippian, and Anglo-American occupations were also recognized in the archaeological investigations. In 2002 the Poarch Band of Creek Indians secured an ARPA permit for a Phase III archaeological investigation of a 10 acre tract of land and for an additional entrance way that was on privately owned land.

Excavations from May of 2003 to March of 2007, under an ARPA permit in conjunction with the Poarch Band of Creek Indians, investigated 881 units, 10 by 10 meters in size or 88,100 square meters. All excavations were conducted under the direct supervision of John Cottier and Craig Sheldon. While the initial proposal was for an estimated 10 acres, the scope of the project increased rapidly to encompass a much larger tract of land. This approximate 22 acre excavation represents one of the largest contiguous views of an archaeological site in this portion of Alabama (Cottier 2006).

A variety of archaeological field methods and techniques were implemented in order to mitigate 1EE89. Before excavations were conducted a grid system was re-

established based off of previous excavations of the site. This was initially accomplished using a total instrument station. Further grid demarcation was completed using an optical transit as well as a contracted survey company. Excavations were conducted using both light machinery equipment (Figure 7) as well as traditional archaeological

Figure 7. Photo showing archaeological field methods involving the use of light machinery.

hand tools. Tractors with attached box blades were utilized to remove the disturbed plow zone as well as to move and stockpile dirt at selected locations. Upon completion of plow-zone removal, field crews would then shovel skim an area of 10 meters square to identify and map possible features. Features such as corn cob pits and daub pits were scored with a trowel and marked with a white flag. Possible post holes were also scored

with a trowel and marked with a yellow flag. In many areas the entire 10 meter square could not be mitigated. This was due to a portion of the site that contained planted pine trees. Hand cutting tools such as saws and axes as well as small excavating machinery were used at times to mitigate as close to the pine trees as possible.

Once features were mapped, they were excavated and recovered soil was water screened accordingly through either ¼ inch course screen or through fine screen. All artifacts were stored in an archaeological laboratory on site with limited analysis being conducted on site (Figure 8). The majority of the artifact analysis has been conducted at the Auburn University Archaeological Laboratory with the exception of human remains which were investigated in the onsite laboratory.

Figure 8. Photo showing on site laboratory and storage facilities at 1EE89.

CHAPTER 5:

Ceramic Type Descriptions

Proto-Historic ceramic assemblages indicate a lack of cultural homogeneity, demonstrating influences from two distinct cultures. These influences can be attributed to two ceramic culture groups: Moundville and Lamar. The Proto-Historic ceramic assemblage from the domestic structures includes a mixture of both shell and sand tempered wares, with surface treatments including plain, incised, punctuate, appliqué, complicated stamped, and brushed. There are more than 18,000 sherds included in the ceramic assemblages from the Proto-Historic domestic structures. In analysis, type varieties were assigned to sherds when applicable. In all other cases descriptive types were assigned in an attempt to recognize the highest degree of ceramic diversity at the site. The following represents brief descriptions of ceramic types recovered from Proto-Historic domestic structures at 1EE89. I will illustrate the shell tempered wares first (Figure 9), followed by the sand tempered wares (Figure 10).

Shell Tempered Wares

Coarse Shell Plain

Characteristics of Coarse Shell Plain include a paste predominantly tempered with shell with a lack of decoration. Size of shell particles is approximately 1mm and larger. Sherds of this type are typically not burnished but have been smoothed. Common vessel types are jars and bowls. Coarse Shell plain is similar to both Mississippi Plain and Alabama River Plain.

Fine Shell Plain
Characteristics of Fine Shell plain ceramics are similar to those of coarse shell plain however the shell particles are much smaller (under 1mm). Also sherds of this type are often burnished. This type is most commonly represented in simple bowls.

Coarse Shell Incised
Characteristics of Coarse Shell Incised are identical with those of Alabama River Incised. However due to the lack of a defined Alabama River Phase component at this site a more broad designation was assigned. This type includes coarse shell tempered vessels that are decorated with incised scrolls or guilloches. The most common vessel form for this type is a globular jar.

Coarse Shell Appliqué
Characteristics of Coarse Shell Appliqué are identical to those of Coarse Shell Plain. The only difference is that instead of a plain rim treatment, these sherds contain at least four, and often many more, applied handles. The majority of these non-functional handles are appliqué fillet strips applied perpendicular to the rim. The most common vessel form for this type is the globular jar.

Coarse Shell Punctate
Coarse Shell Punctate has the same temper and paste as coarse shell plain. Surface decorations include small punctations. Do to a limited sample this type cannot be further defined.

Coarse Shell with Nicked Rim
The temper and paste of this type are consistent with Coarse Shell Plain. The only decorations on this type occur on the rims of small bowls. The rims are either flat or rounded with apparent fingernail nicking. The nicking occurs either perpendicular to the rim or at a slight angle.

Coarse Shell Cob Marked
The temper and paste of this type are consistent with Coarse Shell Plain. Surface decorations include marking with corn cobs in an inconsistent manner. Do to the small sample size vessel forms could not be identified.

Fine Shell Incised
Characteristics of Fine Shell Incised include a very fine shell tempered paste usually light tan in color. Incisions are narrow (less than one millimeter) and curvilinear in design. The most common vessel form for this type is the simple bowl.

Carthage Incised

For the Carthage Incised types I will use the previous descriptions given by Steponaitis. At 1EE89 Carthage Incised is primarily found on short-neck and flaring rim bowls. The following the description of Carthage Incised given by Steponaitis,

> Carthage Incised is defined to include shell-tempered vessels with a burnished surface that are decorated with broad, "trailed" incisions. Typically, these incisions are from 1.5-2mm wide and are U-Shaped in cross section, having been executed when the vessel was in a leather-hard state of dryness. The most common vessel forms in Carthage Incised are bottles and bowls, many of which are black filmed. (Steponaitis 1983:53)

Carthage Incised v. Carthage

"Vessels in this category are decorated with two to four line running scrolls. Common vessel forms include the sub-globular bottle with simple base, the short-neck bowl, and the flaring rim bowl" (Steponaitis 1983:53). The sub-globular bottle with simple base is absent from this ceramic assemblage.

Carthage Incised v. Moon Lake

"These vessels are decorated with zones of parallel (usually oblique) line segments, arranged in chevron-like patterns. Such designs are placed on the interior of flaring-rim bowls, or on the exterior shoulder of short-neck bowls" (Steponaitis 1983:54). In this ceramic sample this type occurs exclusively on short-neck bowls.

Carthage Incised v. Fosters

"This is characterized by free-standing representational motifs, usually depicting hands and forearm bones. Vessels of this variety are usually flaring rim bowls or short-neck bowls" (Steponaitis 1983:53-54). This type occurs exclusively on flaring rim bowls in this ceramic sample.

Carthage Incised v. Poole

"This variety is defined by a design that consists of step motifs enclosing (or alternating with) concentric rayed semicircles. It is only known to occur on short neck bowls"(Steponaitis 1983:54).

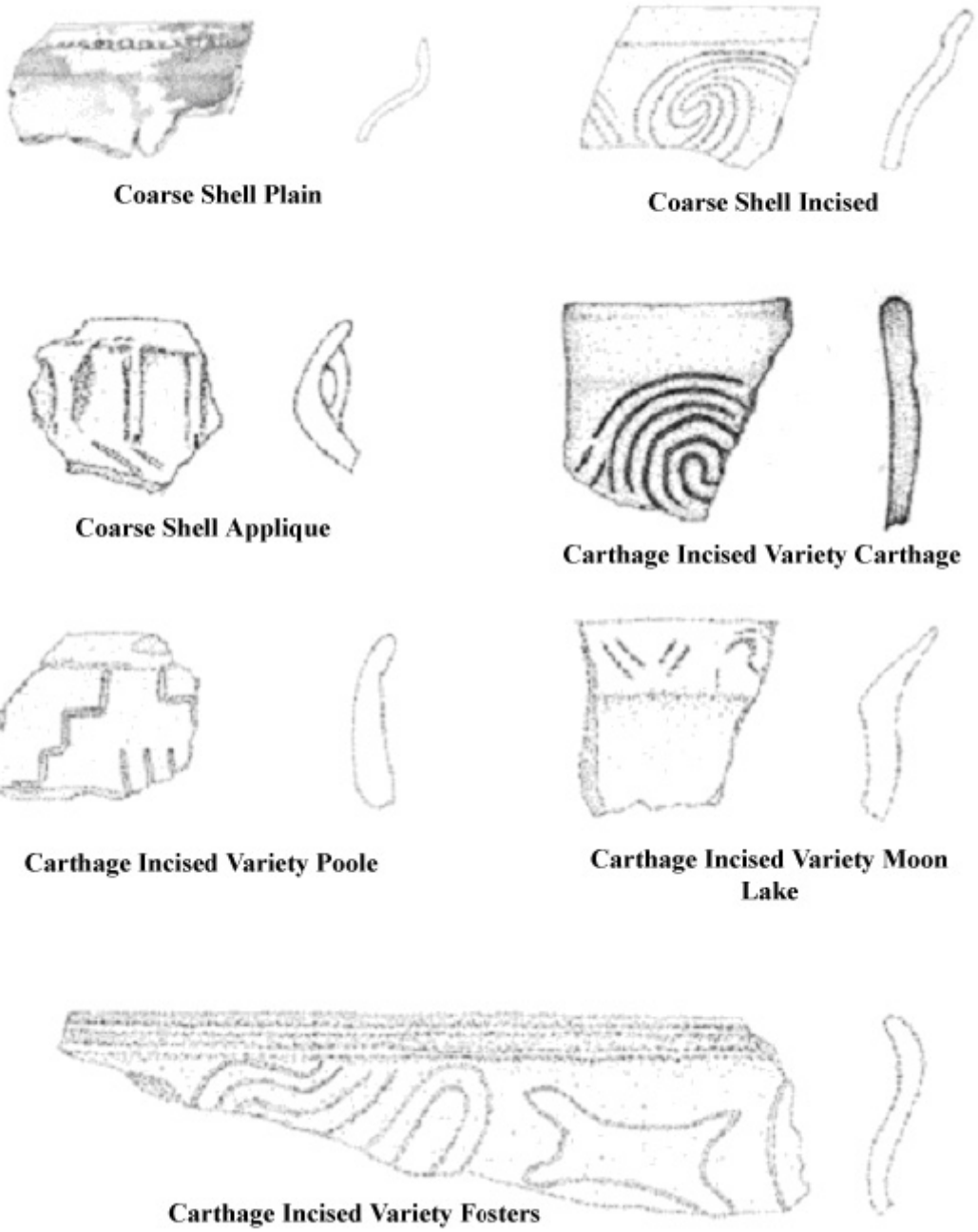


Figure 9. Illustrations of select shell tempered sherds recovered from Proto-Historic domestic structures at 1EE89. Illustrations are intended to show design elements and are not to scale.

Ceramic Descriptions: Sand Tempered Wares

Coarse Sand Plain
Characteristics of Coarse Sand Plain include a paste predominantly tempered with sand with a lack of tooled decoration. Grit is present as well in the paste but only appears in moderate amounts. Sherds of this type are typically burnished and or smoothed. Common vessel types are jars and bowls.

Fine Sand Plain
Characteristics of Fine Sand Plain include a paste predominantly tempered with fine sand with a lack of decoration. This paste is represented by a complete lack of grit in the sand tempering. Sherds of this type are typically burnished and or smoothed. Common vessel types are simple bowls.

Fine Sand Incised
Characteristics of Fine Sand Incised are consistent with Fine Sand Plain except they exhibit curvilinear incising as a surface treatment. Common vessel forms for this type include simple bowls.

Fine Sand Plain with Fingernail Notched Rim
Characteristics of Fine Sand Plain with Fingernail Notched Rim are consistent with Fine Sand Plain except they exhibit curvilinear fingernail notches along the top of the vessel's rim. The notches are made around a 60 degree angle from the rim of the vessel, which is rounded. Common vessel forms for this type include simple bowls.

Fine Sand Plain with Flat Notched Rim
Characteristics of Fine Sand Plain with Flat Notched Rim are consistent with Fine Sand Plain except they exhibit perpendicular notches along the top of the vessel's rim, which is flat. Common vessel forms for this type include simple bowls.

Fine Sand Plain with Appliqué Rim
Characteristics of Fine Sand Plain with Appliqué Rim are consistent with Fine Sand Plain except they exhibit applied nodes or handles along the top of the vessel's rim. Common vessel forms for this type include simple bowls.

Chattahoochee Plain (Bullen 1950)
Chattahoochee Plain is an undecorated ware that is typically found associated with Historic Creek. Rim treatments in this sample demonstrate an appliqué fillet just below the rim. Vessel forms in this sample are limited to globular jars. This type is distinguishable from Lamar Plain in that it contains only minor amounts of grit.

Chattahoochee Brushed (Bullen 1950)
Chattahoochee Brushed is a surface treatment ware that is extremely common among the Historic Creek. In this sample it is identical to Chattahoochee Plain in temper and form

with the only difference being the surface treatment. This consists of brushing performed on a leather hard paste using a corn cob or similar implement.

Lamar Plain (Kelly 1938)
Lamar Plain is an undecorated ware similar to Chattahoochee plain in both rim treatment and vessel form. The difference is in the temper and paste. The temper of Lamar Plain in this sample contains a considerably higher amount of grit than Chattahoochee Plain. This causes the temper to have the classic "salt and pepper" appearance characteristic of Lamar Plain. This type occurs on simple bowls, short-neck bowls, and globular jars.

Lamar Incised (Kelly 1938)
Characteristics of Lamar Incised are identical to those of Lamar Plain except it is decorated with incised scrolls. Incisions are typically sloppy. Design motifs are almost exclusively running scrolls of two or three parallel lines which also appear on Coarse Sand Incised and Carthage Incised at 1EE89. This type occurs on simple bowls, short-neck bowls, and globular jars .

Lamar Complicated Stamped (Kelly 1938)
Lamar Complicated Stamped pottery at 1EE89 is represented by curvilinear stamping. This type occurs on vessels whose temper and form are consistent with Lamar Plain. Design motifs are curvilinear buy indiscernible due to a high degree of erosion, poor stamping, or sherd size.

Lamar Appliqué (Kelly 1938)
Lamar Appliqué is identical to Lamar Plain except that it exhibits small applied nodes or handles near the rim. Forms are exclusively simple bowls.

Lamar Cord Marked (Kelly 1938)
Lamar Cord Marked is identified by the presence of Cord marking as a surface treatment. The temper and form of these vessels is consistent with Lamar Plain. Forms could not be established due to a limited sample size.

Lamar Bold Incised (Kelly 1938)
Lamar Bold Incised is identical to Lamar Incised in motifs, temper, and form. Incisions however are noticeably wider than those in Lamar Incised. Forms could not be established due to a limited sample size.

Lamar Bold Check Stamped (Kelly 1938)
Lamar Bold Check Stamped is identical to Lamar Plain in temper. Surface decoration is exhibited by bold check stamping with a wooden paddle while the paste was still fairly wet. Forms could not be established due to a limited sample size.

Lamar Cob Marked (Kelly 1938)
This type is consistent with Lamar Plain in temper and form. It features surface decorations created by stamping the wet paste with dried corn cobs.

Lamar Plain with Notched Rim (Kelly 1938)
This type is consistent with Lamar Plain except with regards to the rim treatment. Small notches are located on the top of the rim. These notches are executed in a manner so that they are perpendicular to the rim. Forms at 1EE89 are exclusively simple bowls.

Lamar Roughened (Kelly 1938)
This type is consistent with Lamar Plain except with regards to the surface treatment. The surface of the vessels was roughened while the paste was still wet. More than likely a corn cob was used for this decoration. Forms could not be established due to a limited sample size.

Coarse Sand Incised
Coarse Sand Incised is an unidentified decorated sand tempered ware. The paste is a grayish color and contains parallel incisions near the rim of the vessels. The incisions are similar in design to those found on Ocmulgee Fields Incised but are much wider and sloppier in execution. The most common vessel form for this type at 1EE89 is the cazuela bowl.

Coarse Sand Incised with Punctations
This type is identical to Coarse Sand Incised except it contains linear punctations at the inflection point on the cazuela vessel.

Ocmulgee Fields Incised (Mason 1963)
Ocmulgee Fields Incised is rare in Proto-Historic domestic structures and is probably intrusive in most cases. This type consists of a decorated sand tempered ware with fine incisions. This type is wildly common among Historic Creek occupations.

Fine Sand Plain Incised With Zone Punctate
This type is an un-burnished incised ware featuring zone punctations. The incisions are usually two or three sets of parallel lines forming a triangle with the punctations making up the interior portion of the triangle. Common vessel forms for this type include simple bowls. This type is similar to Tallapoosa Punctate.

Calloway Incised
Calloway Incised is a Woodland Period ceramic type that is certainly intrusive to the Proto-Historic domestic structures. It is characterized by a very distinct light brown colored paste with incisions as surface decoration. The sample size for this type is very limited at 1EE89 therefore vessel form and design motifs could not be recognized.

Fine Sand Red Filmed
This type is also extremely limited within the Proto-Historic domestic structures at 1EE89. It consists of a fine sand tempered vessel with red-filming on either the interior or exterior surface. This type may represent a form of Casita Red Filmed due to the overall cultural chronology.

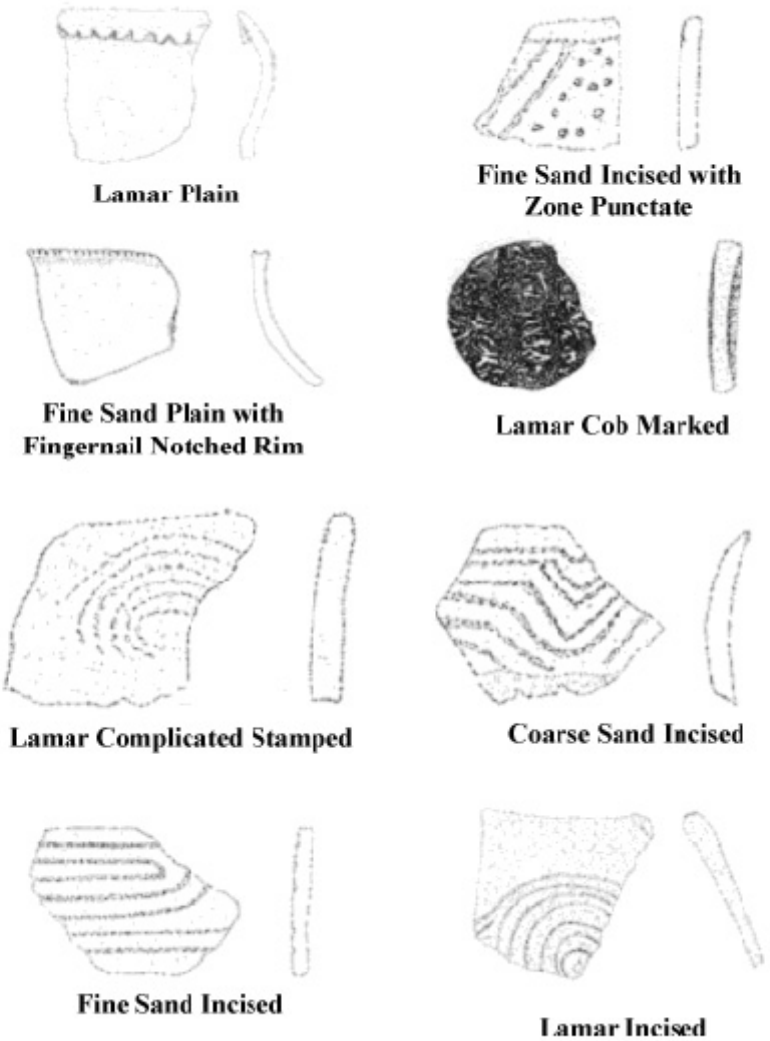


Figure 10. Illustrations of select sand tempered wares recovered from Proto-Historic domestic structures at 1EE89. Illustrations are intended to show design elements and are not to scale.

CHAPTER 6:

Domestic Structure Descriptions

The semi-subterranean Proto-Historic house structures at 1EE89 range in diameter from six to eight meters. Some of the earthen floors extend over 20 cm below the ground surface. They occur in a number of different forms including circular, square with rounded corners, and octagonal. Located at the center of each house structure, unless heavily disturbed, is a central fire hearth constructed of fired clay. Unless heavily damaged due to plowing and erosion, Proto-Historic domestic structures at 1EE89 exhibit a shallow floor midden filled with daub, rocks, and artifacts either left on the house floor or perhaps tossed in after the structure was abandoned. Along the outer edge of most structures is a set of wall posts, with a second set of interior posts just inside of those that represent support posts for benches or platforms. There is little evidence of repair with these structures and the only evidence of possible over lapping structures comes from a cluster of fire hearths near the Coosa River bank. In some houses support posts have been located in the center of the structure just around the hearth. At least five of the domestic structures demonstrate evidence of burning with preserved daub and charred timbers.

Proto-Historic domestic structures were excavated in a consistent and controlled process. The dominant field method of excavation at 1EE89 began with plow-zone removal. This was done with the use of a tractor and attached box blade. After the removal of plow-zone was complete areas 100 meters square were shovel skimmed to

identify features. As features were identified they were marked with a white pin flag (potential post holes were marked using a yellow flag) and outlined using a trowel. The 10 meter units were then mapped and excavated. Proto-Historic domestic structures were excavated (Figure 11) in one by one meter units with all samples subjected to ¼ inch

Figure 11. Photo of Proto-Historic domestic structure excavation.

screening with some samples subjected to fine screening. If any features were identified within the structures they were cross sectioned, photographed, and removed accordingly. Also Carbon 14 samples were taken during excavations from the floor middens and from any remains of structural timbers.

A public structure (Figure 12) associated with the Proto-Historic occupation was located at 1EE89 amidst the scattered domestic structures. This is a large semi-subterranean structure approximately ten meters long and nine and a half meters wide with rounded sides and sharply rounded corners. The flat sunken floor was covered with 2-4 cm of daub, charcoal, ceramics, and limited lithic debris. Aside from the architectural

remains there was only one feature located within the structure, a large clay lined central fire hearth. This structure is perhaps a precursor to the Historic Creek rotunda and served as an important meeting place for not only this village but for scattered farmsteads in the area. Furthermore the presence of this structure

Figure 12. Photo of the Proto-Historic Public Structure. The white paper plates represent the location of the large outer wall posts.

supports the idea of the Proto-Historic occupation as an egalitarian society. This structure would have created a sense of commonality among its inhabitants, stressing the whole and not the individual. This actual settlement was likely a small one, but its importance may be demonstrated by the effort and energy expended to create this public structure.

Evidence of 18 domestic structures with associated central fire hearths were recovered at 1Ee89. Three of the identified domestic structures located did not contain a hearth, These may represent arbors, open domestic structures, or activity areas. There were also nine additional hearths discovered that due to former agricultural activities

were not clearly associated with a structure (Table 6). It is believed these were once associated with domestic structures. The hearths demonstrated two forms: flat and rimmed (Figure 13). Of the 18 hearths identified with domestic structures three were heavily disturbed by former agricultural practices. The remaining 15 included 13 rimmed hearths and two flat.

1EE89 Proto-Historic Domestic Structures		
Feature	Unit	Hearth Type
27	4240N / 1611E	Rimmed
41	4115N / 1634E	Rimmed
278	4092N / 1585E	Rimmed
395	4199N / 1646E	Disturbed
403	4204N / 1655E	Rimmed
405	4206N / 1668E	Rimmed
485	4220N / 1580E	Disturbed
494	4202N / 1614E	Flat
495	4204N / 1603E	Rimmed
500	4214N / 1606E	Flat
505	4214N / 1601E	Rimmed
506	4226N / 1608E	Disturbed
509	4235N / 1600E	Rimmed
529	4233N / 1648E	None
533	4256N / 1642E	Rimmed
534	4233N / 1627E	Rimmed
536	4254N / 1631E	Rimmed
539	4258N / 1624E	Rimmed
540	4236N / 1620E	Rimmed
545	4243N / 1638E	None
546	4249N / 1641E	None
Unidentified	4206N / 1592E	None
Hearths With No Associated Structure		
Feature	Unit	Type
86	4182N / 1626E	Rimmed
157	4065N / 1563E	Rimmed
161	4062N / 1558E	Rimmed
188	4079N / 1497E	Rimmed
206	4038N / 1506E	Rimmed
216	4040N / 1502E	Rimmed
213	4040N / 1504E	Rimmed
222	4052N / 1511E	Rimmed
337	4206N / 1707E	Rimmed

Table 6. List of central fire hearths noting their location and size.

Figure 13. Photos of hearth forms in Proto-Historic domestic structures at 1EE89. The photo on the left demonstrates a rimmed hearth, while the photo on the right demonstrates a flat hearth.

The nine hearths that were discovered with no domestic association were all rimmed. The hearth form could likely be a temporal or cultural identifier, however that has yet to be demonstrated (Figure 14).

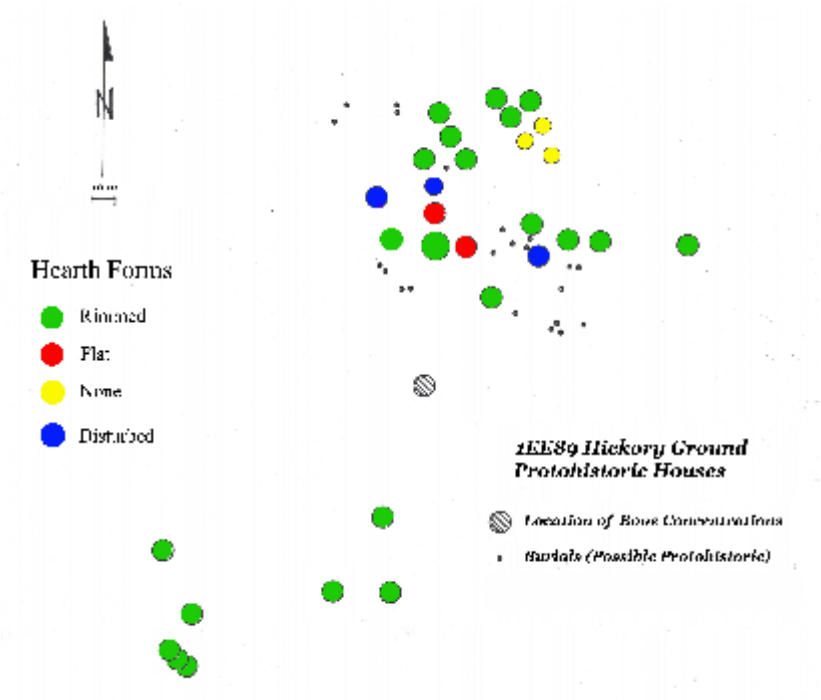


Figure 14. Map of Proto-Historic domestic structures showing hearth form. The small black dots represent human burials.

Furthermore the large public structure contained a rimmed hearth of much larger size than the hearths associated with the domestic structures.

Unfortunately, passageways into the house were not easily discernable due to the previous agricultural practices. Only one house demonstrated a clear entrance which consisted of two parallel wall trenches extending approximately three to four feet from the structure. Structures containing only hearths are not presented in the following descriptions due to a lack of an identified floor midden or posthole pattern. Maps of applicable structures containing excavated postholes and floor middens as well as ceramic distributions are presented in the appendix portion of this thesis. The following paragraphs contain detailed descriptions of each identifiable structure. Also ceramic assemblages, maps of postholes, and ceramic distribution maps for each applicable structure are presented in the appendix portion of this thesis.

Feature 27

Feature 27 is a semi-subterranean Proto-Historic domestic structure that measured 7.5 meters by 7 meters. The overall shape of the structure is square with rounded corners. Feature 27 was first discovered during previous excavations and was completed during the most recent excavations. A large pine tree disturbed the southern portion of the house pit. Feature 27 contained a rimmed central fire hearth that was designated feature 532. The rimmed hearth measured 62 cm in length and 58 cm in width with a depth of 25 cm. A total of 1057 sherds weighing 3107.4 grams were recovered from feature 27. Additionally there was one Lamar Plain globular jar recovered from the floor of this

structure. Pottery was heavily concentrated in the southern portion of the floor midden near the central fire hearth. This possibly indicates some degree of later dumping. An additional concentration of pottery was noted at the far northwest corner of the structure.

Feature 41

Feature 41 was a semi-subterranean Proto-Historic domestic structure measuring 6 meters by 5.7 meters. The overall shape of the structure was unidentified. Feature 41 contained a rimmed central fire hearth which was assigned the designation of feature 114. Feature 41 contained a total of 393 ceramic sherds weighing 932.8 grams. This structure contained no vessels. Feature 41 had a higher concentration of sherds towards the southern portion of the structure.

Feature 278

Feature 278 was a semi-subterranean Proto-Historic domestic structure measuring 6.2 meters by 5.67 meters. The overall shape of the structure was square with rounded corners. Feature 278 contained a rimmed central fire hearth which was assigned the designation of feature 283. To the west of the fire hearth was a large pottery concentration containing Carthage Incised and Coarse Shell Appliqué ceramics. Feature 278 contained a total of 575 sherds weighing 1207.7 grams. Six vessels were identified from associated with the structure including one coarse shell plain globular jar, four Coarse Shell Applique globular jars, and one Carthage Incised variety Fosters flaring rim bowl. Feature 278 demonstrated a high concentration of ceramics immediately to the east

of the central fire hearth and there is an additional ceramic concentration in the northern portion of the structure.

Feature 395

Feature 395 was a semi-subterranean Proto-Historic domestic structure measuring 6.5 meters by 6.3 meters. The overall shape of the structure was unidentified. Partially intact burned timbers were recovered from the floor of the house showing indication of the house being burned. Feature 395 contained a central fire hearth which was assigned the designation of feature 419. This hearth was heavily disturbed by bioturbation making the initial discovery difficult and its form unidentifiable. Feature 395 contained a total of 1667 sherds weighing 5293.8 grams. One Coarse Sand tempered Plain vessel was recovered. This vessel is in the shape of a small flaring rim bowl but was more than likely utilized as a cup. Ceramics are distributed evenly around the central fire hearth with one area of higher concentration to the immediate north of the hearth.

Feature 403

Feature 403 is a semi-subterranean Proto-Historic domestic structure measuring 8.6 meters by 7.4 meters. The overall shape of the structure is octagonal. Feature 403 contained a partially cremated burial (Feature 410) in the southeast quadrant of the structure. A causal relationship between the burial and the structure has yet to be established. Feature 403 also contained a rimmed central fire hearth which was assigned the designation of feature 418. This hearth contained a small amount of non human bone which was collected for C14 dating as well as a thin layer of ash in the bottom of the

hearth. The hearth measured was 47 cm by 44 cm with a depth of 15 cm. A total of 637 sherds weighing 1322 grams were recovered from feature 403. No vessels were recovered in this domestic structure. The highest concentrations of ceramics occur immediately to the west of the hearth.

Feature 405

Feature 405 is a semi-subterranean Proto-Historic domestic structure measuring 5.35 meters by 4.2 meters. The overall shape of the structure is octagonal. However this measurement only accounts for the excavated house pit area. Posthole patterns from the outer wall surrounding the house pit demonstrates a diameter of approximately 6.25 meters. Feature 405 contained a rimmed central fire hearth which was designated as feature 409. Feature 409 is a circular rimmed hearth exhibiting high amounts of bioturbation. The sides of the hearth were mostly intact however the floor of the hearth had been compromised due to excessive root disturbance. A total of 35 sherds weighing 103.7 grams were recovered from feature 405. No vessels were recovered from this structure.

Feature 485

Feature 485 is a semi-subterranean Proto-Historic domestic structure located on the upper portion of a down slope. Due to erosion the overall shape of the structure was unidentified, and no midden was associated with this house. There was a large pine tree growing in the approximate center of the house and although excavations were conducted as close to the tree as possible we were unable to identify a hearth. Based on identified

post holes the structure measured 6.8 meters by 6.4 meters. Due to the erosion on the slope, there were no ceramics associated with this structure.

Feature 494

Feature 494 is a semi-subterranean Proto-Historic domestic structure measuring 6.3 meters by 6.2 meters. The overall shape of the structure was unidentified. Feature 494 contained a flat central fire hearth. The hearth had a diameter of 59 centimeters and an approximate depth of 9 cm. A total of 252 sherds weighing 639.6 grams were recovered from feature 494. No vessels were recovered from this structure.

Feature 500

Feature 500 is a semi-subterranean Proto-Historic domestic structure measuring 7 meters by 7 meters. The overall shape of the structure was unidentified. Feature 500 contained excellent ceramic associations. Due to the high quantities of cultural material all but two 1x1 meter units were fine screened. Feature 500 contained a flat central fire hearth designated as feature 504. The hearth was constructed as to form a dish shape on the house floor; this is in contrast to the vast majority of houses at 1EE89 that demonstrate rimmed hearths. Just to the north of the hearth were remnants of a burned timber. C14 as well as wood samples were taken from this timber. A total of 1768 sherds weighing 5567.8 grams were recovered from feature 500. Additionally five vessels were also recovered including: a Lamar Plain globular jar, a Lamar Complicated Stamped globular jar, a Coarse Shell Plain globular jar, a Coarse Sand Plain simple bowl, and a Coarse Shell Incised simple bowl. There was a high concentration of ceramics recovered from a

unit adjacent to the western portion of the hearth and another concentration of ceramics was located two meters to the north of the hearth.

Feature 505

Feature 505 is a semi-subterranean Proto-Historic domestic structure that measured 4.9 meters by 4 meters. The overall shape of the structure was unidentified. Feature 505 contained a rimmed central fire hearth which was designated feature 520. The hearth measured 74 cm in length and 64 cm in width with an overall depth of 12 cm. A total of one sherd weighing 2.6 grams was recovered from feature 505. No vessels were recovered from this structure.

Feature 506

Feature 506 is a semi-subterranean Proto-Historic domestic structure that measured 4.8 meters by 5.5 meters. The overall shape of the structure was unidentified. A pine tree was growing near the center of the structure which more than likely destroyed evidence of a central fire hearth. A total of 531 sherds weighing 1493 grams were recovered from feature 506. No vessels were recovered from this structure. There was a high level of ceramic concentration in the center of the floor midden perhaps where the hearth was previously located.

Feature 509

Feature 509 is a semi-subterranean Proto-Historic domestic structure that measured 7 meters by 7 meters. The overall shape of the structure was square with rounded corners.

The feature was excavated in one by one meter units with almost all samples subjected to fine screening due to a high amount of cultural material initially recovered. Feature 509 contained excellent ceramic associations. Feature 509 also demonstrated extensive evidence of burning with charred remains of timbers as well as significant amounts of charcoal. Feature 509 contained a rimmed central fire hearth which was designated feature 513. This hearth measured 48 centimeters in length by 44 cm in width with a depth of 15 cm. The hearth's floor and portions of its walls were disturbed by an intrusive pit (feature 517). A total of 1776 sherds weighing 6738 grams were recovered from Feature 509. Additionally there were six intact ceramics recovered in feature 509 including: a Coarse Shell Incised restricted bowl, a Carthage Incised variety Carthage simple bowl, a Fine Sand Plain flaring rim bowl, a Carthage Incised variety Carthage flaring rim bowl, a Coarse Shell Plain cup, and a Carthage Incised variety Moon Lake simple bowl. Ceramics were distributed fairly evenly throughout the floor midden in Feature 509; however two small concentrations of ceramics were located to the north and south east of the central fire hearth.

Feature 529

Feature 529 is a semi-subterranean Proto-Historic domestic structure with an associated floor midden that measured 7.1 meters by 6.7 meters. The overall shape of the structure was unidentified. The midden was extremely shallow exhibiting evidence of erosion and disturbance. No central fire hearth was located; likewise cultural items were also very limited. A total of 175 sherds weighing 551.6 grams were recovered from feature 529. No vessels were recovered from this structure. Feature 529 demonstrated two concentrations

of ceramics near the center of the structure. Also there were high concentrations of ceramics near the southern edge of the floor midden, a distribution which may indicate later dumping.

Feature 533

Feature 533 is a semi-subterranean Proto-Historic domestic structure with a floor midden that measured 10 meters by 10.5 meters. The overall shape of the structure was unidentified. There is substantial evidence of burning as exhibited by charred structural elements. Feature 533 contained a central fire hearth which was designated feature 538. This rimmed hearth measured 63 cm in length and 61 cm in width with a depth of 15.1 cm. A total of 2318 sherds weighing 6773.2 grams were recovered from feature 533. Additionally four vessels were recovered including: a Coarse Shell Appliqué globular jar, two Coarse Shell Plain globular jars, and a Coarse Sand Incised cazuela. Ceramics in feature 533 were spread throughout the floor midden fairly evenly. There was a slightly denser degree of ceramic concentration to the northwest of the central fire hearth.

Feature 534

Feature 534 is a semi-subterranean Proto-Historic domestic structure measuring 6 meters by 6 meters. Due to erosion there was no floor midden remaining in the structure; however, postholes were identified that demonstrated an inner and outer ring of posts. The structure contained a well preserved rimmed central fire hearth which was designated feature 535. This fire hearth measured 75 cm in length and 72 cm in width with a depth of 4 cm. Located inside the hearth was evidence of structural burned timbers that

demonstrates the burning of the structure. There were no ceramics recovered from this structure.

Feature 536

Feature 536 is a semi-subterranean Proto-Historic domestic structure with a floor midden measuring 8.5 meters by 8 meters. The overall shape of the structure was unidentified. The structure contained a significant amount of ceramic material. The main structural posts contained grayish sand in their bases and an outer ring of posts were also identified. Feature 536 contained a rimmed central fire hearth that was designated as feature 543. The rimmed hearth measured 64 cm long by 58 cm wide with a depth of 14 cm. A total of 4004 sherds weighing 9015.2 grams were recovered from feature 536. Additionally two Carthage Incised variety Carthage simple bowls were recovered from this structure. Ceramic concentrations were located in the southwestern portion of this structure, with an additional smaller concentration located just south of the central fire hearth.

Feature 539

Feature 539 is a semi-subterranean Proto-Historic domestic structure that measured 6.25 meters by 6 meters. The structure contained no floor midden and postholes were shallow. Overall this structure demonstrates a significant amount of erosion. Feature 539 contained a rimmed central fire hearth that was designated as Feature 537. This fire hearth measured 53 cm in length and 49 cm in width with a depth of 7 cm. There were no ceramics recovered from feature 539.

Feature 540

Feature 540 is a semi-subterranean Proto-Historic domestic structure that measured 6 meters by 5.75 meters. The overall shape of the structure was square with rounded corners. The structure contained minimal floor midden; postholes were identified for both an outer and inner ring of support posts, with the outer posts containing a grayish sand concentration at their base. Feature 540 contained a rimmed central fire hearth that was designated as feature 542. Feature 542 was a poorly preserved fire hearth measuring 59 cm in width by 59 cm in length with a depth of 15 cm. The hearth shows evidence of *in situ* burning with small non human bone fragments and charcoal present on the floor of the hearth. A total of 50 sherds weighing 73.9 grams were recovered from feature 540. There were no vessels recovered from this structure.

Feature 545

Feature 545 is a semi-subterranean Proto-Historic domestic structure that contained minimal floor midden. The overall size and shape of the structure was unidentified. There was no central fire hearth located in the structure and likewise there was little to no cultural material identified during excavation. A total of 5 sherds weighing 16.3 grams were recovered from feature 545. There were no vessels recovered from this structure.

Feature 546

Feature 546 is a semi-subterranean Proto-Historic domestic structure. The floor midden within the structure measured 5.25 meters by 5 meters and contained very limited cultural remains. Post holes were located and excavated but little could be ascertained about the

actual size of the structure. This feature has experienced a high degree of bioturbation as well as being transected by an old farm field road. Feature 546 contained no evidence of a central fire hearth. A total of 340 sherds weighing 739.6 grams were recovered from feature 546.

Unidentified Structure

This structure was located just to the west of Feature 495, the public structure. It is a semi-subterranean Proto-Historic domestic structure that was square in shape with rounded corners. It has an overall size of approximately 8 meters square. There was no identifiable floor midden within this structure and, likewise there were no features, except posthole remains, present within this structure. No ceramics were recovered. The overall size and its location near the identified public structure suggest a possible structure that was associated with the public structure; however, its temporal identity relative to the public structure is unknown.

Feature 495

Feature 495 is a large semi subterranean square structure with sharply rounded corners. Feature 495 is believed to be a public structure due to its immense size relative to the other domestic structures at 1EE89. The flat sunken floor was covered with approximately two to four centimeters of scattered daub, charcoal and quartzite debris. The exterior posts in this structure are massive, with some measuring approximately 30 centimeters in width and 50 centimeters in depth. Due to their size these large exterior wall posts were excavated by digging a backhoe trench around the exterior periphery.

Shovels and trowels were then used to cross section each of the large posts. Aside from the architectural remains there was only one feature located within the structure, a large rimmed, clay lined central fire hearth. This hearth measured 85 centimeters in length and 86 centimeters in width with an overall depth of 14 centimeters. A total of 549 sherds weighing 1097.9 grams were recovered from feature 495. No vessels were recovered from this structure. Ceramics were generally spread evenly throughout the floor midden in the structure. Small concentrations of ceramics occur to the north and the south of the central fire hearth.

CHAPTER 7:

Statistical Analysis

The ceramic assemblage from the Proto-Historic domestic structures at 1EE89 demonstrates a clear lack of cultural homogeneity. This may be attributed to a number of reasons including warfare, diffusion, trade, ethnic diversity and so forth. The political climate during the Proto-Historic Period was a time of significant cultural changes due to numerous factors (Wesson and Rees 2002). 1EE89 is centrally located near two distinct ceramic traditions; those of Lamar and Moundville. This geographical location alone suggests diffusion as a main mechanism in changes of ceramic technology and design. If warfare were responsible for the ceramic dichotomy then one would expect a sharper division between households containing sand tempered Lamar ceramics those with shell tempered Moundville ceramics. And finally if trade were responsible for the dichotomy then we would suggest a smaller percentage of either Lamar or Moundville ceramics introduced over time. The following analysis will also be based on the assumption that the Lamar derived ceramics are chronologically later than the Moundville derived ceramics. This assumption is supported by the continued use of sand as the preferential tempering during the Late Lamar phases and Historic Creek phases while shell tempering all but disappears from ceramic technology during this time in Central Alabama.

Establishing a chronological order to a group of artifacts or sites allows for a better understanding of the evolutionary relationships of certain societies. A simple

seriation was employed to analyze the ceramic assemblages of each domestic structure at 1EE89. A comparison will be made between the proportion of sand tempered sherds in each house to the proportion of sand tempered sherds for the entire assemblage (Table 7) . In doing so I will be able to effectively group houses with similar ceramic assemblages and separate those houses with dissimilar ceramic assemblages. Sherd totals were calculated for every structure based upon temper, which is a cultural identifier in the region. Sand tempering is indicative of the Lamar derived ceramic tradition while shell tempering is indicative of the Moundville derived ceramic tradition. Using weight as the quantifier the ceramic assemblage from all Proto-Historic domestic structures consisted of 52.79% sand tempered ceramics and 47.21% shell tempered ceramics. Using sherd count as the quantifier the ceramic assemblage from all Proto-Historic domestic structures consisted of 64.18% sand tempered ceramics and 35.82% shell tempered ceramics. The discrepancy between these two ratios can be explained with two statements. Firstly, the shell tempered sherds at 1EE89 are very coarse and brittle which could lead to a higher degree of fragmentation. Secondly, sand tempered sherds typically are denser and weigh more than shell tempered sherds. Standard deviations of each structure will be further checked using count and weight as identifiers for this analysis.

The first analysis will demonstrate a seriation of the ceramic sherd count. Overall the ceramic assemblage for the entire population contained 52.79% sand tempered sherds. Comparing each structure with the population mean using standard deviations creates the following order of structures: 41, 546, 529, 506, 540, 545, 395, 533, 509, 494, 500, 495, 536, 403, 27, 278, and 405. The first structures in this sequence demonstrate a higher proportion of sand tempered sherds while the last structures in this

sequence demonstrate a higher proportion of shell tempered sherds (Table 8). This represents a continuum from sand tempering to shell tempering.

The second set of analysis will demonstrate the differences of each specific structure from the population mean with regards to sherd weight (grams). The population mean for all of the structures at 1EE89 is 64.18% sand tempered sherds by weight. Comparing each structure with the population mean using standard deviations creates the following order of structures: 545, 41, 546, 529, 540, 506, 395, 495, 509, 533, 500, 536, 494, 27, 403, 405, and 278. The first structures contain the greater proportion of sand tempered sherds by weight while the last structures in the sequence demonstrate a greater proportion of shell tempered sherds by weight (Table 9). The results of this analysis demonstrates a similar organization of the temporal distribution of the structures.

The proportions of sand and shell tempered sherds by both weight and count do not demonstrate a sharp break or transition in ceramic technology. Rather the assemblages of each structure clearly demonstrate a gradual shift from the Moundville derived shell tempered ceramics towards the Lamar derived sand tempered ceramics. This is a logical conclusion to derive given both the location of the site as well as the identification of the specific ceramic types present. There are minor discrepancies between the comparision of sherds by counts and weights. The largest discrepancy occurs with the placement of Feature 545 within the seriation. This can be explained due to a small sample size. The second discrepancy occurs with Feature 494. Feature 494 may also be explained due to a smaller sample size. While there are a few minor discrepancies within the two seriations the data shows a gradual shift among the structures from shell tempering to sand tempering. This ceramic data coupled with the architectural remains

possibly demonstrate an early stage in the evolution of Historic Creek towns.

	Sand		Sand %		Shell		Shell %		Totals	
Feature	ct.	wt. (g)	ct.	wt. (g)	ct.	wt. (g)	ct.	wt. (g)	ct.	wt. (g)
27	424	1433.8	40.11%	46.14%	633	1673.6	59.89%	53.86%	1057	3107.4
41	316	793.2	80.41%	87.86%	77	109.6	19.59%	12.14%	393	902.8
278	201	417.3	34.96%	34.55%	374	790.4	65.04%	65.45%	575	1207.7
395	993	3741.1	59.57%	70.67%	674	1552.7	40.43%	29.33%	1667	5293.8
403	289	590.4	45.37%	44.66%	348	731.6	54.63%	55.34%	637	1322
405	12	36.4	34.29%	35.10%	23	67.3	65.71%	64.90%	35	103.7
494	136	372.9	53.97%	58.30%	116	266.7	46.03%	41.70%	252	639.6
495	288	774.9	52.46%	70.58%	261	323	47.54%	29.42%	549	1097.9
500	943	3499.6	53.34%	62.85%	825	2068.2	46.66%	37.15%	1768	5567.8
505	0	0	0.00%	0.00%	1	2.6	100.00%	100.00%	1	2.6
506	327	1179.4	61.58%	79.00%	204	313.6	38.42%	21.00%	531	1493
509	991	4676.9	55.80%	69.41%	785	2061.1	44.20%	30.59%	1776	6738
512	1179	3306.1	51.73%	63.64%	1100	1888.6	48.27%	36.36%	2279	5194.7
529	114	446.2	65.14%	80.89%	61	105.4	34.86%	19.11%	175	551.6
533	1362	4522.1	58.76%	66.76%	956	2251.1	41.24%	33.24%	2318	6773.2
536	1878	5497.3	46.90%	60.98%	2126	3517.9	53.10%	39.02%	4004	9015.2
540	30	59.6	60.00%	80.65%	20	14.3	40.00%	19.35%	50	73.9
545	3	14.4	60.00%	88.34%	2	1.9	40.00%	11.66%	5	16.3
546	234	626.4	68.82%	84.69%	106	113.2	31.18%	15.31%	340	739.6
Tolals	9720	31988	52.79%	64.18%	8692	17852.8	47.21%	35.82%	18412	49840.8

Table 7. Table showing the count and weight of ceramics recovered from Proto-Historic domestic structures by temper.

Sand Ct. %			
Feature	ct.	ct.	Std. Dev.
41	316	80.41%	27.62%
546	234	68.82%	16.03%
529	114	65.14%	12.35%
506	327	61.58%	8.79%
540	30	60.00%	7.21%
545	3	60.00%	7.21%
395	993	59.57%	6.78
533	1362	58.76%	5.97%
509	991	55.80%	3.01%
494	136	53.97%	1.18%
500	943	53.34%	0.55%
495	288	52.46%	-0.33%
536	1878	46.90%	-5.89%
403	289	45.37%	-7.42%
27	424	40.11%	-12.68%
278	201	34.96%	-17.83
405	12	34.29%	-18.51%
Totals	8541	52.79%	

Table 8. Table showing the seriation of Proto-Historic domestic structures by ceramic temper type (count). Positive numbers represent proportionally larger amount of sand tempering. Negative numbers represent a larger amount of shell tempering.

Sand Wt. %			
Feature	wt. (g)	wt. (g)	Std. Dev.
545	14.4	88.34%	24.16%
41	793.2	87.86%	23.68%
546	626.4	84.69%	20.51%
529	446.2	80.89%	16.71%
540	59.6	80.65%	16.47%
506	1179.4	79.00%	14.81%
395	3741.1	70.67%	6.49%
495	774.9	70.58%	6.40%
509	4676.9	69.41%	5.23%
533	4522.1	66.76%	2.58%
500	3499.6	62.85%	-1.33%
536	5497.3	60.98%	-3.20%
494	372.9	58.30%	-5.88%
27	1433.8	46.14%	-18.04%
403	590.4	44.66%	-19.52%
405	36.4	35.10%	-29.08%
278	417.3	34.55%	-29.63%
Totals	28681.9	64.18%	

Table 9. Table showing the seriation of Proto-Historic domestic structures by ceramic temper type (Weight). Positive numbers represent proportionally larger amount of sand tempering. Negative numbers represent a larger amount of shell tempering.

CHAPTER 8:

Conclusions and Further Research

In 2007 a five year long excavation was completed of 1EE89, the Historic Creek town of Hickory Ground, by a team of archaeologists from Auburn University. Cultural remains from the Archaic, Woodland, Mississippian, Proto-Historic, Historic Creek, and Anglo-American traditions are all evident from these investigations. The vast majority of the cultural evidence belongs however to the Historic Creek Tallapoosa Phase occupation. While there has been a significant amount of cultural material recovered representing the Historic Creek occupation at Hickory Ground there is an earlier occupation that was of primary concern for this research, the Proto-Historic occupation. The majority of the cultural material present at Hickory Ground that represents this Proto-Historic occupation comes from the possible domestic structures that are generally clustered at the northern end of the site.

While carbon dating will allow archaeologists to further define this occupation it was unavailable at the time due to a lack of funding. Therefore at this time ceramics are the best temporal indicator of the Proto-Historic occupation at 1EE89. Through the analysis of the ceramics recovered from the Proto-Historic domestic structures I have attempted to better understand some of the confusion regarding the lack of cultural homogeneity. The ceramics clearly demonstrate a gradual shift from shell tempered Moundville derived ceramics towards sand tempered Lamar derived ceramics. The

location of Feature 495, the public structure, along the shell/sand tempering continuum indicates that Feature 495 was a later development in the site's occupation due to its higher proportion of sand tempered ceramics. This structure is possibly a precursor to the rotundas found at Historic Creek towns and may represent a phase of the architectural evolution of Historic Creek towns. Feature 495 is very similar in size and construction to the 17th century Atasi Phase public structures and domestic "winter" structures described by Waselkov, Cottier, and Sheldon (1990).

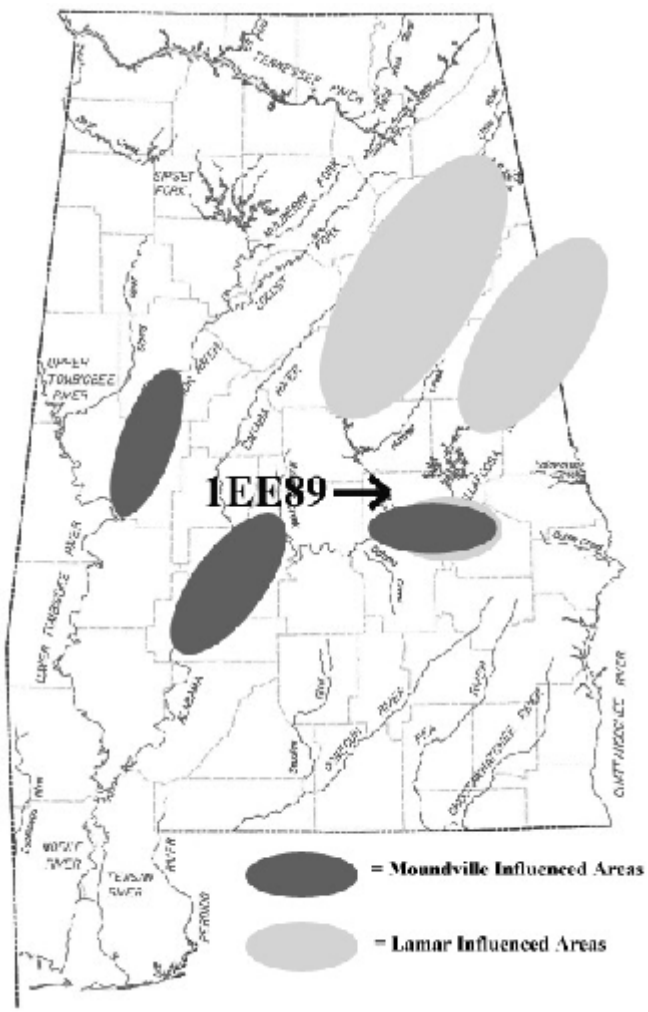


Figure 15. Map showing the location of 1EE89 with regards to the influential culture areas discussed in this thesis.

The Proto-Historic occupation at 1EE89 represents a transitional culture in the Coosa River Valley (Figure 16). The apparent lack of cultural homogeneity can be demonstrated by a gradual transition between ceramic technologies. The Proto-Historic domestic structures at 1EE89 demonstrate a transition between the shell tempered ceramics of the Moundville influenced tradition to the sand tempered ceramics of the Lamar influenced tradition. This site represents a period of cultural and technological change in the Coosa River Valley as demonstrated by the ceramics recovered from the domestic structures.

It is my belief based upon the recovered ceramics at 1EE89 that the Proto-Historic settlement began as a small farmstead initially occupied during the late 16th century. This belief is based upon not only the ceramic evidence but also the recovered European trade artifacts. Both the brass gorget and the beads represent the entire collection of European trade items associated with the Proto-Historic period at 1Ee89. This lack of additional cultural material suggests that direct contact with Europeans was never established and that indirect contact happened very early, sometime in the mid to late 16th century. This time frame is consistent with the association of both the Lamar and Moundville derived ceramic types recovered from the site.

This farmstead was occupied by peoples either descended from the Mississippian collapse or directly influenced by their ceramic traditions. Gradually, a new ceramic tradition was introduced from the east by Lamar derived populations which replaced the previous Moundville traditions before the site was abandoned before the turn of the 18th century. While further research is undoubtedly needed to clarify this transitional cultural development, it is clear that the Proto-Historic occupation at 1EE89

was undergoing a dynamic and exciting culture change.

References Cited

Adair, James
2005 *The History of the American Indians.* Holland KE, editor. Tuscaloosa: The University of Alabama Press.

Anderson, David G
1996 Fluctuations between Simple and Complex Chiefdoms: Cycling in the Late Prehistoric Southeast. In: Scarry J.F., editor. *Political Structure and Change in the Prehistoric Southeastern United States*. Gainseville: University Press of Florida.

Anonymous
1981 Environmental Data Inventory, State of Alabama. Prepared by the U.S. Army Corps of Engineers, Mobile District; and the State of Alabama Office of State Planning and Federal Programs, State Planning Division. Prepared by Soil Systems, Inc., Marietta, Georgia.

Bartram, William
1996 *Travels and Other Writings*. The Library of America, New York.

Blakely, Robert L (editor)
1988 *The King Site: Continuity and Contact in Sixteenth Century Georgia*. University of Georgia Press, Athens.

Blankenship, Sarah A and John W Cottier
2008 Elemental Analysis of a Protohistoric Disc Gorget from the Hickory Ground site, Elmore County, Alabama. Paper presented at the 2008 Southeastern Archaeological Conference.

Blitz, John H
1993 *Ancient Chiefdoms of the Tombigbee*. University of Alabama Press, Tuscaloosa.

Brackeen LG et al.
1955 *Soil Survey of Elmore County, Alabama*. Series 1939, No. 26.: United States Department of Agriculture.

Bullen, Ripley P
1950 An Archaeological Survey of the Chattahoochee River Valley in Florida. *Journal of the Washington Academy of Sciences*, Vol 40, Number 4.

Chase, David
1987 An Intensive Investigation of a Part of the Hickory Ground Last Capitol of the Upper Creek Nation. Report Submitted to the Alabama Historical Commission. On file at Moundville.

Clayton, Margaret V
1965 Bluff Shelter excavations on Sand Mountain. *Journal of Alabama Archaeology* 11:1-98.

Cottier, John W
1970 The Alabama River Phase: A brief description of a late phase in the prehistory of south-central Alabama. Manuscript on file at Mound State Monument.

2006 A Summary of the Phase III Archaeological Investigations of the Significant Cultural Resource of Hickory Ground, 1EE89, In Elmore County, Alabama. Prepared on Behalf of The Poarch Band of Creek Indians, Atmore, Alabama.

Cottier, John W and Craig T Sheldon Jr.
2002 A Proposal For Phase III Archaeological Investigations and Evaluations of the Significant Cultural Resource of Hickory Ground, 1EE89, In Elmore County, Alabama. Unpublished report prepared on behalf of the Poarch Band of Creek Indians, Atmore, Alabama.

DeJarnette, David L
1952 Alabama archaeology: A summary. In *Archeology of Eastern United States*, edited by J.B. Griffin. University of Chicago Press, Chicago.

DeJarnette, David L, Edward B Kurjack, and James W Cambron
1962 Stanfield-Worley bluff shelter excavations. Journal of Alabama Archaeology 8:1-11.

Dempsey, Paul and Martin Baumhoff
1963 The Statistical use of Artifact Distributions to Establish Chronological Sequence. *American Antiquity*. 28: 496-509.

Dunnell, Robert C
1991 Methodological Impacts of Catastrophic Depopulation on American Archaeology and Ethnology. In :*Columbian Consequences*, D.H. Thomas, ed., Vol. 3, pp. 561-580.

Ethridge, Robbie
2003 *Creek Country: The Creek Indians and Their World.* The University of North Carolina Press, Chapel Hill.

Fairbank, Charles H
1952 Creek and pre-Creek. In: *Archaeology of Eastern United States*, edited by J.B. Griffin. University of Chicago Press, Chicago.

Ford, Richard I.
1974 Northeastern archaeology: past and future directions. *Annual Review of Anthropology* 3: 385-413.

Foster, Thomas
2003 The *Collected Works of Benjamin Hawkins, 1796-1810*. University of Alabama Press, Tuscaloosa.

2007 *Archaeology of the Lower Muskogee Creek Indians, 1715-1836.* University of Alabama Press, Tuscaloosa.

Gage, Matthew
2003 Coosa: The Rise and Fall of a Southeastern Mississippian Chiefdom. *Southeastern Archaeology* 22 (1): 116-117.

Galloway, Patricia
1993 Ethnohistory. In: *The Development of Southeastern Archaeology*, edited by J.K. Johnson, pp. 78-108. University of Alabama Press, Tuscaloosa.

Griffin, James B
1967 Eastern North American archaeology: A summary. *Science* 156: 175-91.

Hally, David J
2002 As caves beneath the ground: Making Sense of Aboriginal House Form in the Proto-Historic and Historic Southeast. In: *Between Contacts and Colonies*, ed. by Cameron B. Wesson and Mark A. Rees. University of Alabama Press, Tuscaloosa.

2008 *King: The Social Archaeology of a late Mississippian Town in Northwestern Georgia*. University of Alabama Press, Tuscaloosa.

Hally, David J, Patrick H Garrow, and Wyman Trotti
1975 Preliminary Analysis of the King Site Settlement Plan. *Southeastern Archaeological Conference*, Bulletin 18: 5-62.

Hahn Steven C
2004 *The Invention of the Creek Nation, 1670-1763*. University of Nebraska Press, Lincoln.

Hatch, James W
1995 Lamar Period Upland Farmsteads of the Oconee River Valley, Georgia. In: *Mississippian Communities and Households*, ed. by J. Daniel Rogers and Bruce D. Smith. The University of Alabama Press, Tuscaloosa.

Hawkins, Benjamin
1848 *A Sketch of the Creek Country, in the Years 1798 and 1799*. *Collections of the Georgia Historical Society.* Vol. 3. Reprint, New York: Kraus, 1971.

1916 "Letters of Benjamin Hawkins, 1796-1806." *Collections of the Georgia Historical Society*. Vol. 2.

Hill, Mary C
1979 The Alabama River Phase: A Biological Synthesis and Interpretation. A thesis presented for the Master of Arts degree. The University of Tennessee, Knoxville.

Hudson, Charles
1976 *The Southeastern Indians*. The University of Tennessee Press, Knoxville.

Jenkins, Ned
2004 Tracing the Early Origins of the Creeks: The Moundville Connection. Unpublished report on file at Auburn University Archaeological Lab.

Kennedy, Jason M
2008 The Hickory Ground (1EE89) From the Ground Up. A Thesis submitted to the graduate faculty in partial fulfillment of the requirements for the degree of Master of Arts. University of Oklahoma Graduate College.

Kelly, Arthur R
1938 A Preliminary Report on Archaeological Exploration at Macon, Georgia. *Bureau of American Ethnology Bulletin*, no. 119. Smithsonian Institution, Washington D.C.

Knight, Vernon James, Jr.
1985 Tukabatchee: Archaeological Investigations at an Historic Creek Town in Elmore County, Alabama, 1984. Report of Investigations, 45. Office of Archaeological Research, Alabama State Museum of Natural History, University of Alabama, Tuscaloosa

1990 Social Organization and the Evolution of Hierarchy in Southeastern Chiefdoms. *Journal of Anthropological Research* 46: 1-23.

Knight, Vernon James, Jr. and Vincas P Steponaitis (editors)
1998 Archaeology of the Moundville Chiefdom. Smithsonian Institution Press, Washington , D.C.

Little, Keith J
2007 Personal communications via email regarding European trade beads recovered from a Proto-Historic context at 1EE89.

2008 European Artifact Chronology and Impacts of Spanish Contact in the Sixteenth Century. Dissertation. Department of Anthropology in the Graduate School of The University of Alabama. Tuscaloosa, Alabama.

Mason, Carol I
1963 Eighteenth Century Culture Change among the Lower Creeks. *Florida Anthropologist* 16 (3): 65-80.

Moore, John H
1994 Ethnoarchaeology of the Lamar Peoples. In Perspectives of the Southeast, Patricia B. Kwachka (editor), Southern Anthropological Society Proceedings, Number 27, University of Georgia Press, Athens.

Ramenofsky, Ann F
1987 *Vectors of Death: The Archaeology of European Contact*. University of New Mexico Press, Albuquerque.

1990 Loss of Innocence: Explanations of Differential Persistence in the Sixteenth Century Southeast. In D.H. Thomas, ed., *Columbian Consequences*, vol. 2, pp. 31-48.

Regnier, Amanda L
2006 A Stylistic Analysis of Burial Urns from the Protohistoric Period in Central Alabama. *Southeastern Archaeology* . 25: 121-134.

Saunt, Claudio
1999 *A New Order of Things: Property, Power, and the Transformation of the Creek Indians, 1733-1816*: Cambridge University Press.

Service, Elman R
1962 *Primitive social organization: An evolutionary perspective*. Random House, New York .

Sheldon, Craig T, Jr.
1974 The Mississippian-Historic transition in central Alabama. Unpublished Ph.D. dissertation, Department of Anthropology, University of Oregon, Eugene.

Sheldon Craig T, Jr., John W Cottier, and Gregory A Waselkov
1988 A Preliminary Report on the Subsurface Testing of a Portion of the Creek Indian Property at Hickory Ground. Unpublished Report prepared for the Poarch Band of Creek Indians.

Smith, Bruce D
1978 Variations in Mississippian Settlement Patterns. In *Mississippian Settlement Patterns*, edited by B.D. Smith. Academic Press, New York.

Smith, Marvin T
1987 *Archaeology of Aboriginal Culture Change in the Interior Southeast: Depopulation and the Early Historic Period*. University of Florida Press, Gainesville.

1994 Aboriginal Depopulation in the Postcontact Southeast. In C. Hudson and Tesser, eds., *Forgotten Centuries*, pp. 257-275. University of Georgia Press, Athens.

Steponaitis, Vincas P
1983 *Ceramics, Chronology, and Community Patterns: An Archaeological Study at Moundville*. Academic Press, New York.

Swan, Caleb
1855 "Position and State of Manners and Arts in the Creek, or Muscogee Nation in 1791." In Schoolcraft, Henry R., *Information Respecting the History, Condition and Prospects of the Indian Tribes of the United States*, v. 5, p. 251-283. Philadelphia, J. B. Lippincott & Company, 1855.

Swanton, John R
1922 Early History of the Creek Indians and Their Neighbors. Bureau of American Ethnology *Bulletin 73.* Washington, D.C.

1946 The Indians of the Southeastern United States. Bureau of American Ethnology *Bulletin 137*. Washington D.C.

Trigger, Bruce
1982 Ethnohistory: Problems and Prospects. *Ethnohistory* 29: 1-19.

1985 *Natives and Newcomers*. McGill-Queens University Press, Montreal.

1986 Ethnohistory: The Unfinished Edifice. *Ethnohistory* 33: 253-267.

Walthall, John A
1980 *Prehistoric Indians of the Southeast*. University of Alabama Press, Tuscaloosa.

Walthall, John A and Steven B Wimberly
1978 Mississippian chronology in the Black Warrior Valley: radiocarbon dates from Bessemer and Moundville. *Journal of Alabama Archaeology* 24(2): 118-124.

Waselkov, Gregory A
1989 Seventeenth Century Trade in the Colonial Southeast. *Southeastern Archaeology.* 8: 117-133.

Waselkov, Gregory A, John W. Cottier, and Criag T. Sheldon
1990 *Archaeological Investigations at the Early Historic Creek Indian Town of Fusihatchee (Phase I, 1988-1989).* Report to the National Science Foundation (Grant No. BNS-8718934). Manuscript on file, Department of Sociology and Anthropology, Auburn University, Montgomery.

Wesson, Cameron B
2002 Prestige Goods, Symbolic Capital, and Social Power in the Proto-Historic Southeast. In: *Between Contacts and Colonies*, ed. by Cameron B. Wesson and Mark A. Rees. The University of Alabama Press, Tuscaloosa.

Wesson, Cameron B, and Mark A Rees
2002 Protohistory and Archaeology: An Overview. In: *Between Contacts and Colonies*, ed. By Cameron B. Wesson and Mark A. Rees. The University of Alabama Press, Tuscaloosa.

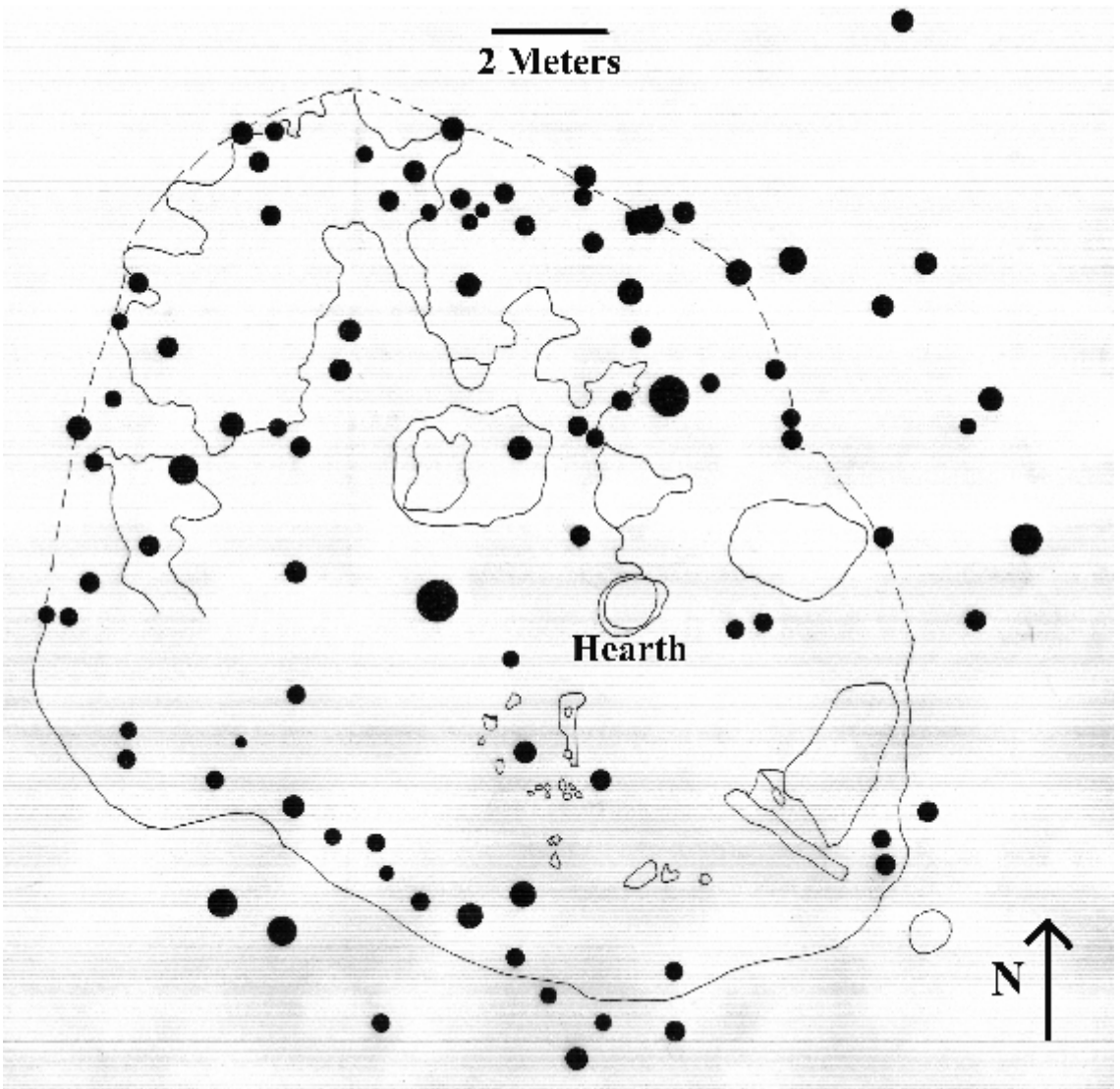
Webb, Clarence H
1940 House Types Among The Caddo Indians. Texas Archaeological and Paleontological Society Bulletin. Vol 12.

Willey, Gordon R, and Philip Phillips
1958 *Method and Theory in American Archaeology*. University of Chicago Press, Chicago.

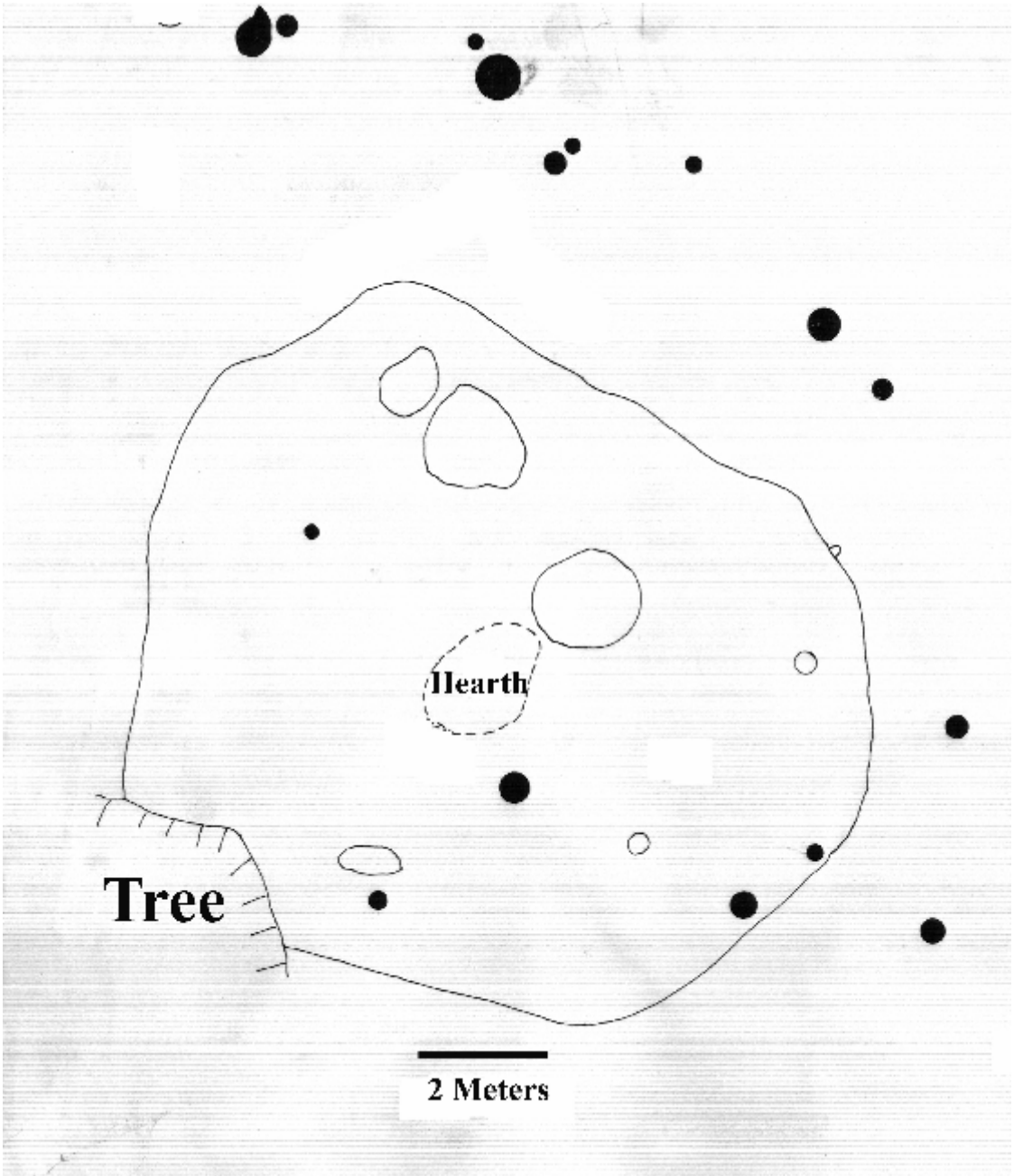
Williams, Mark and Gary Shapiro (editors)
1990 *Lamar Archaeology: Mississippian Chiefdoms in the Deep South*. University of Alabama Press, Tuscaloosa.

Wright, Amos J
2003 *Historic Indian Towns in Alabama, 1540-1838.* The University of Alabama Press, Tuscaloosa

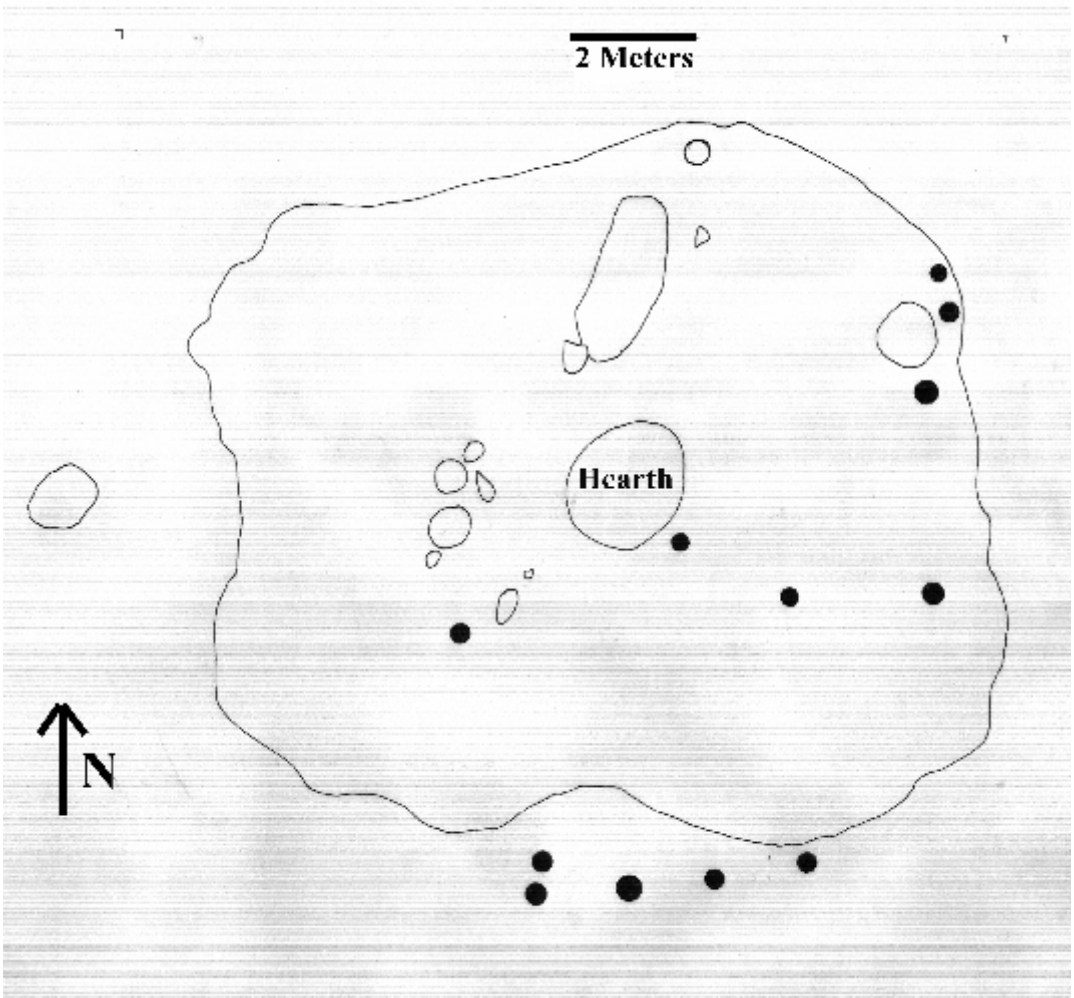
Appendix 1.1
Domestic Structure Maps



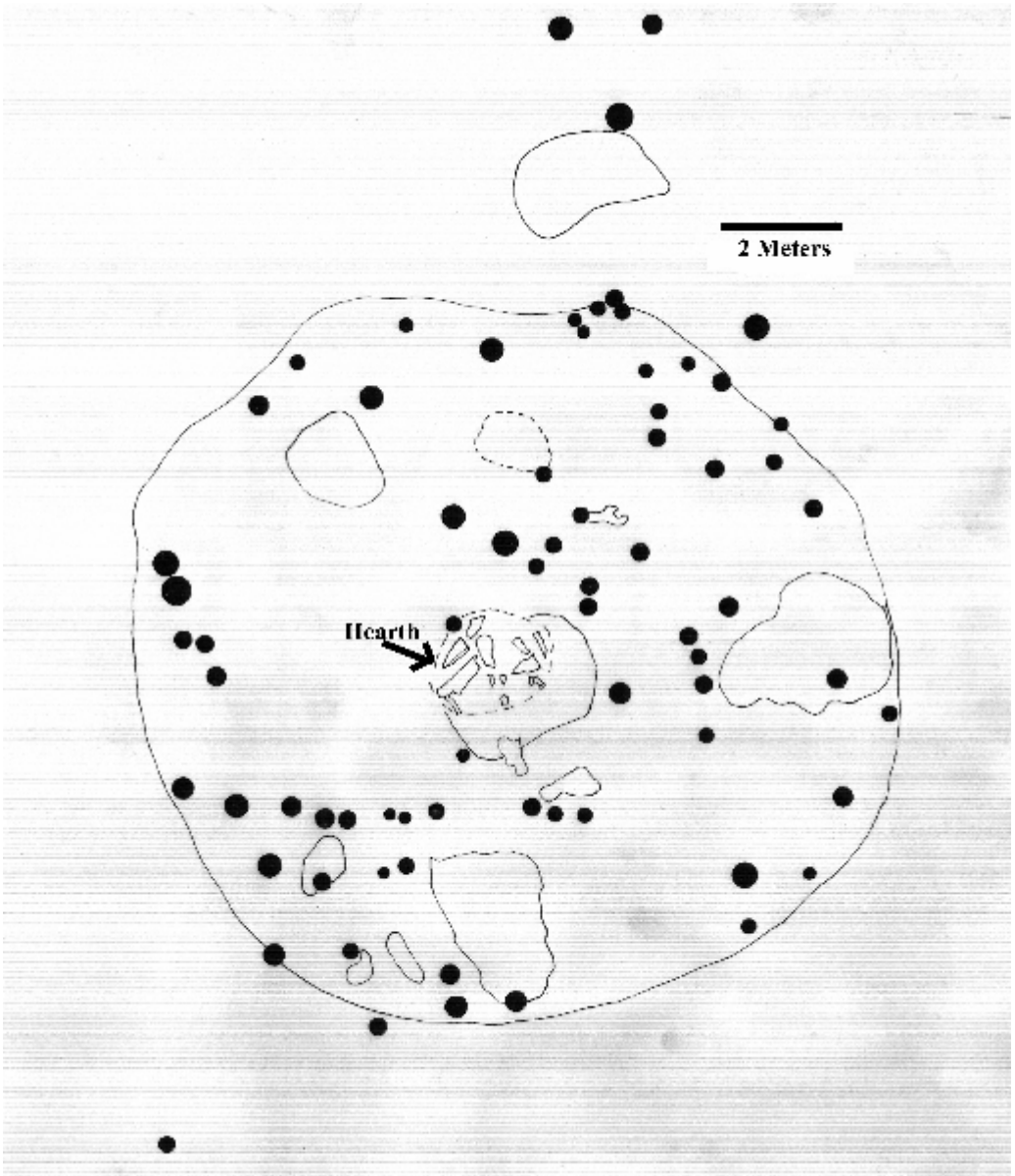
Feature 27



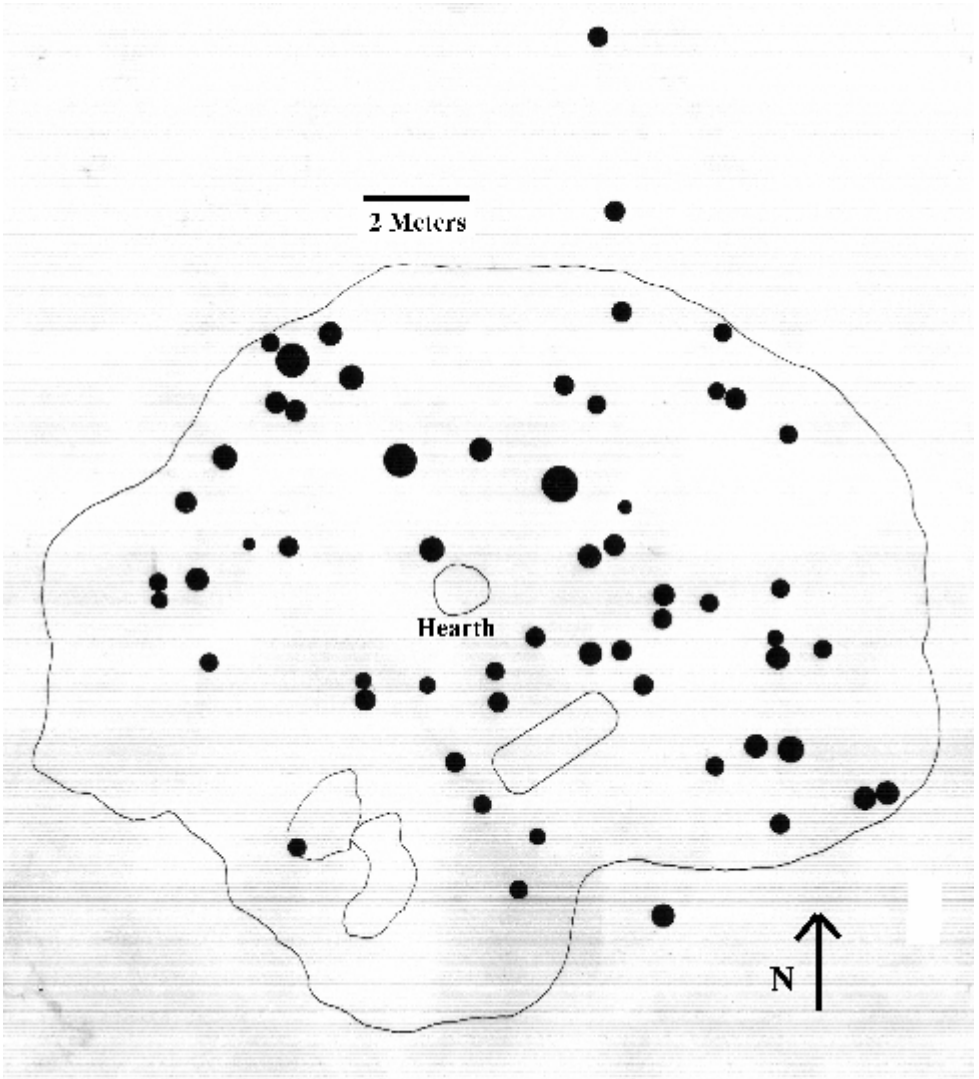
Feature 41



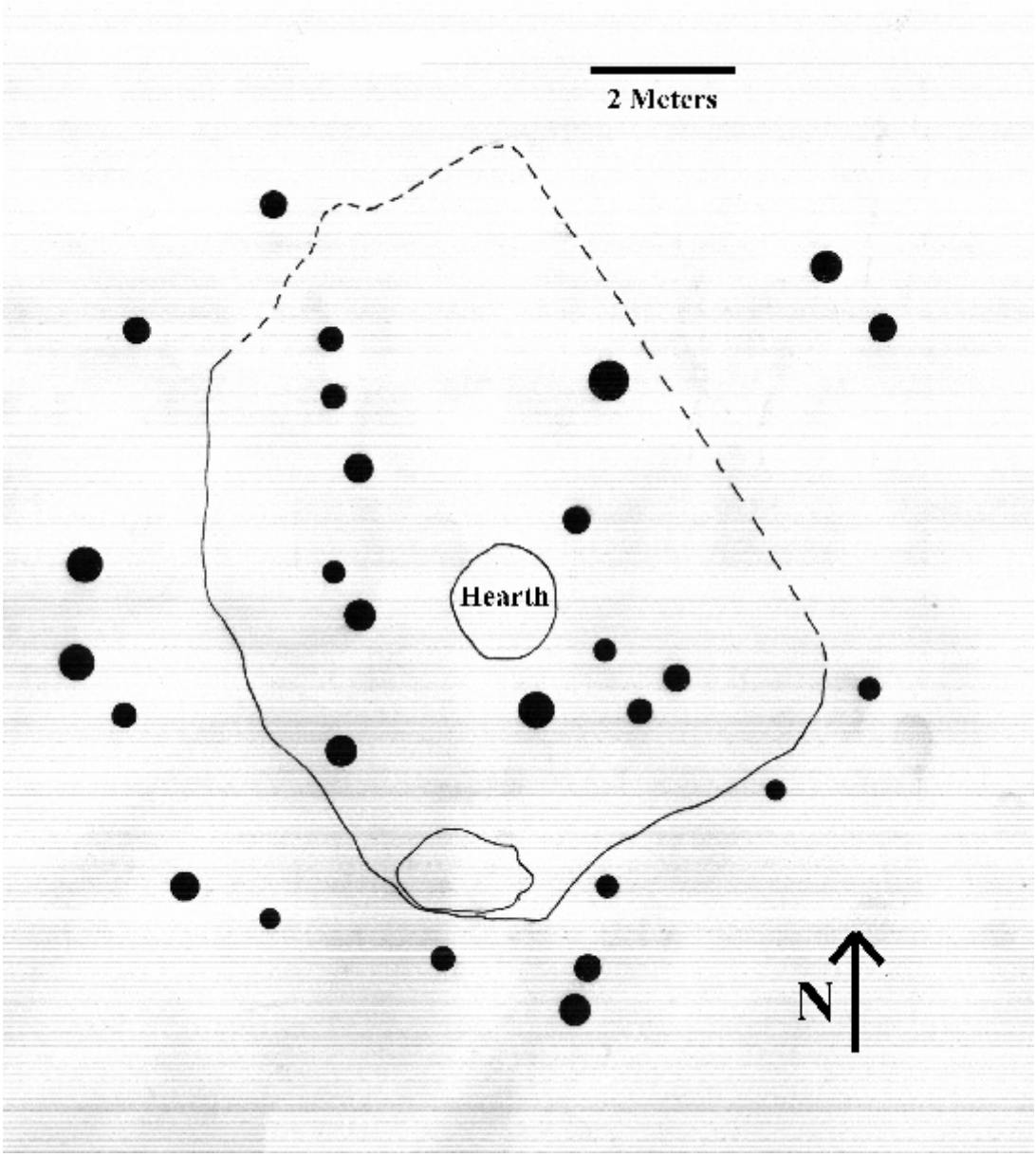
Feature 278



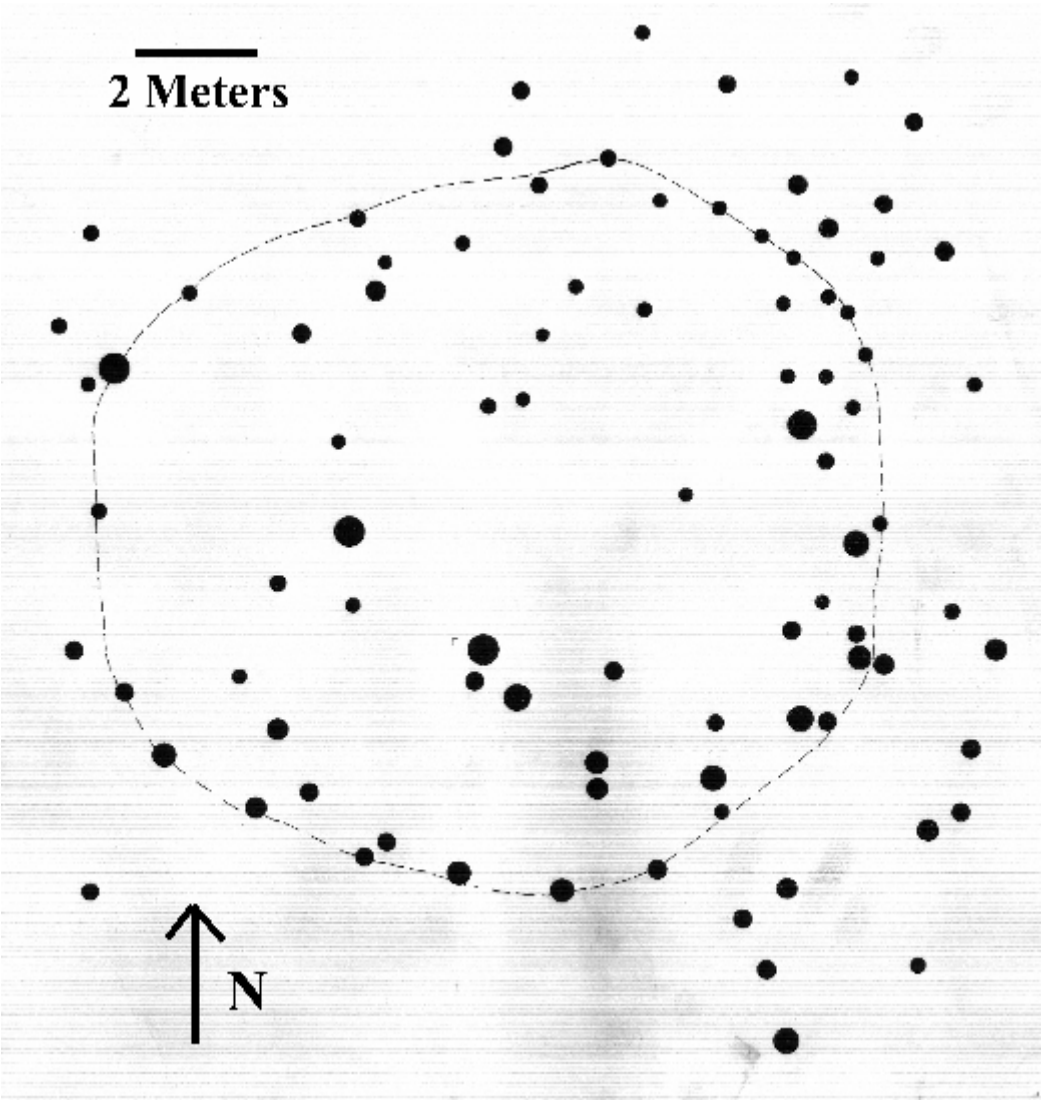
Feature 395



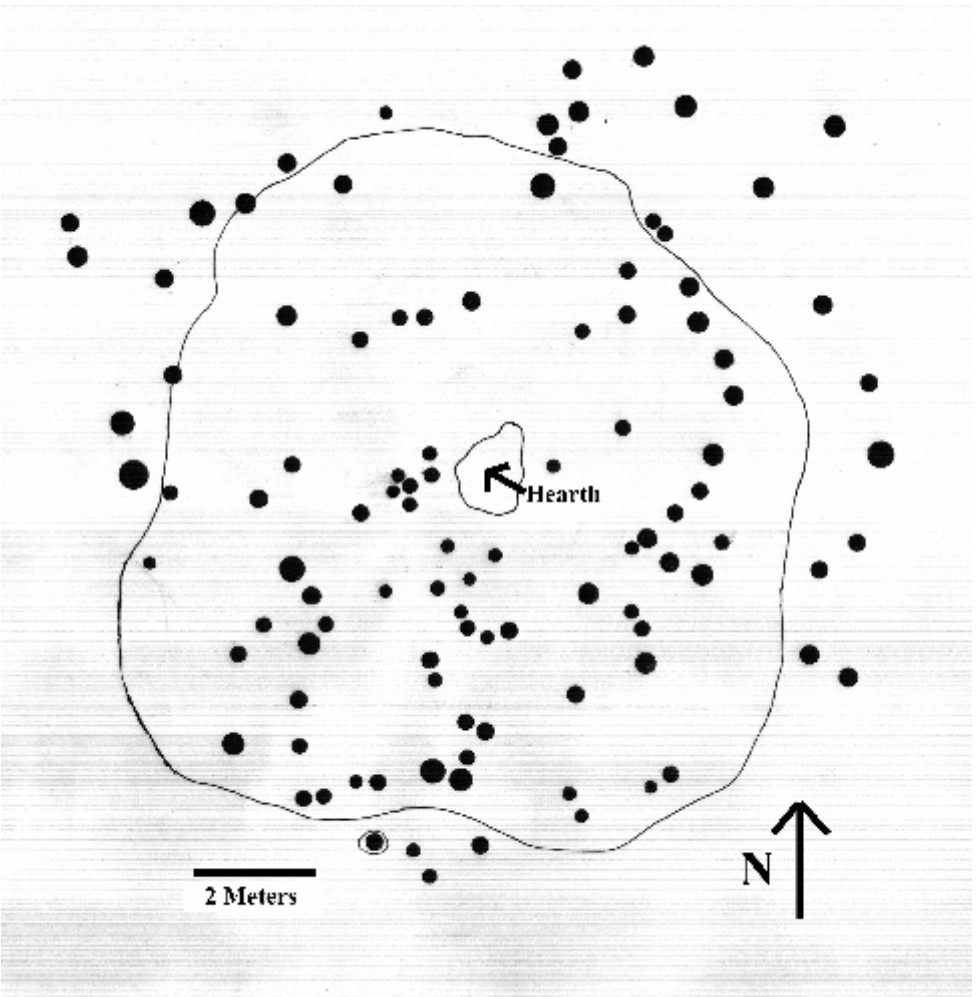
Feature 403



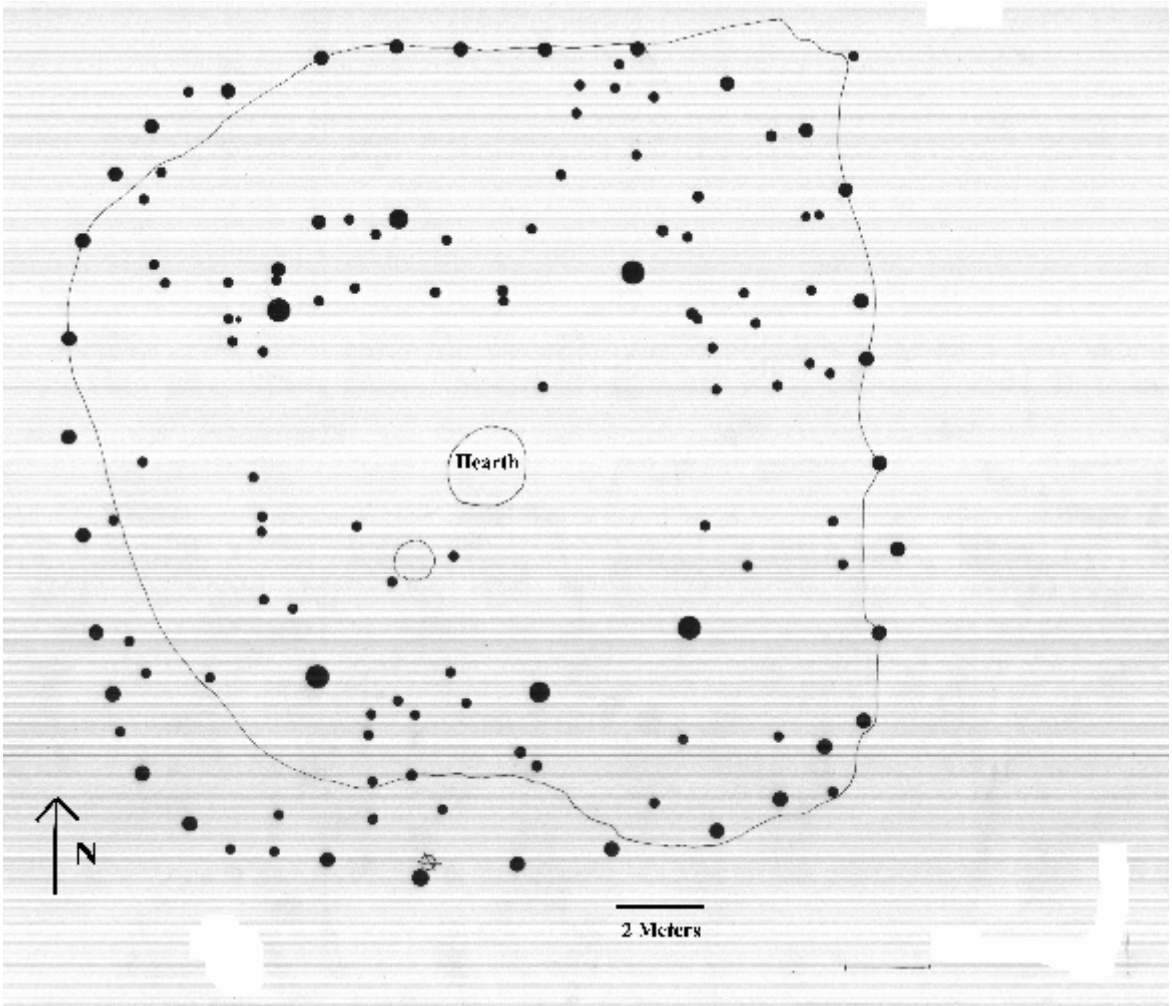
Feature 405



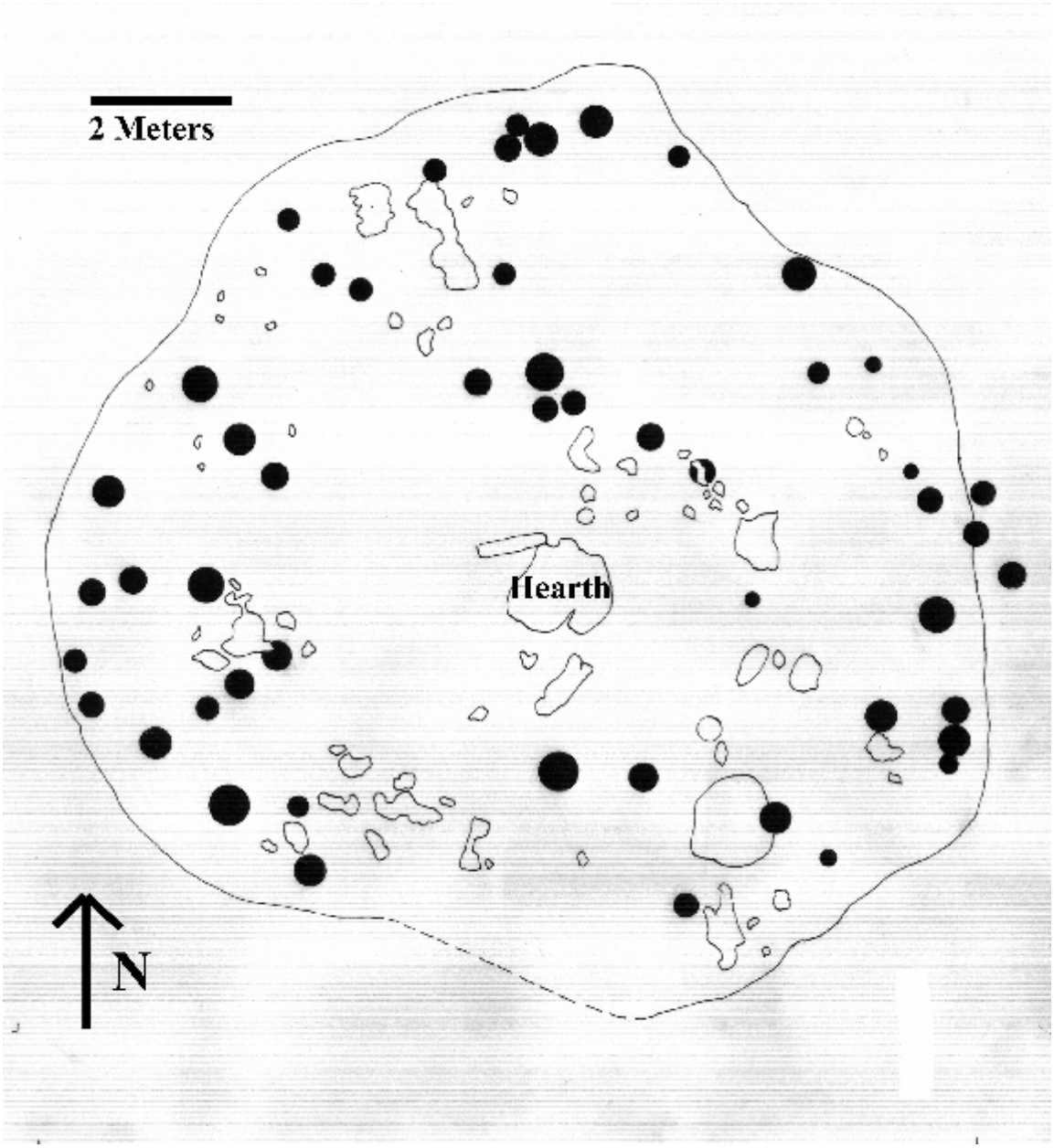
Feature 485



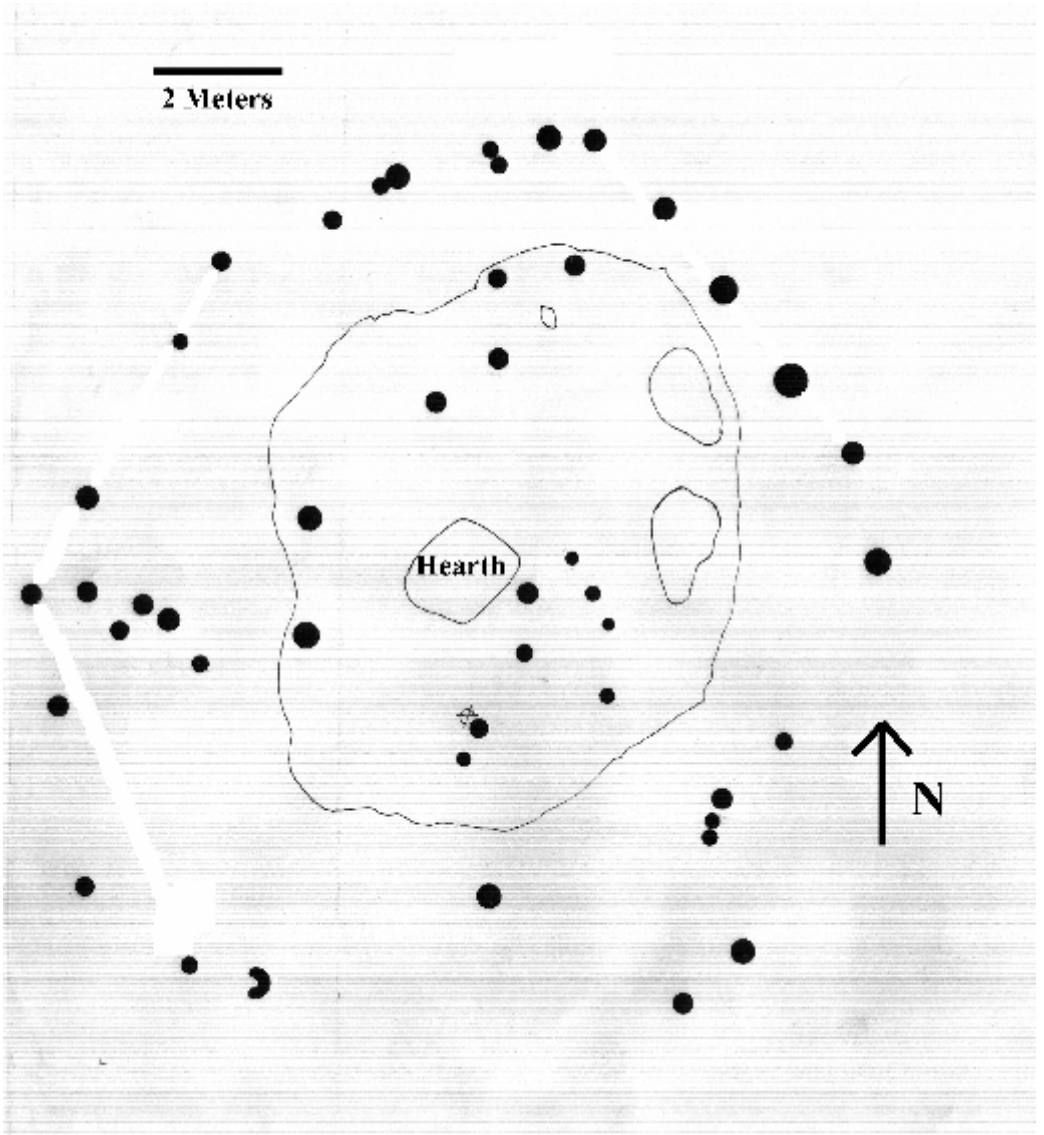
Feature 494



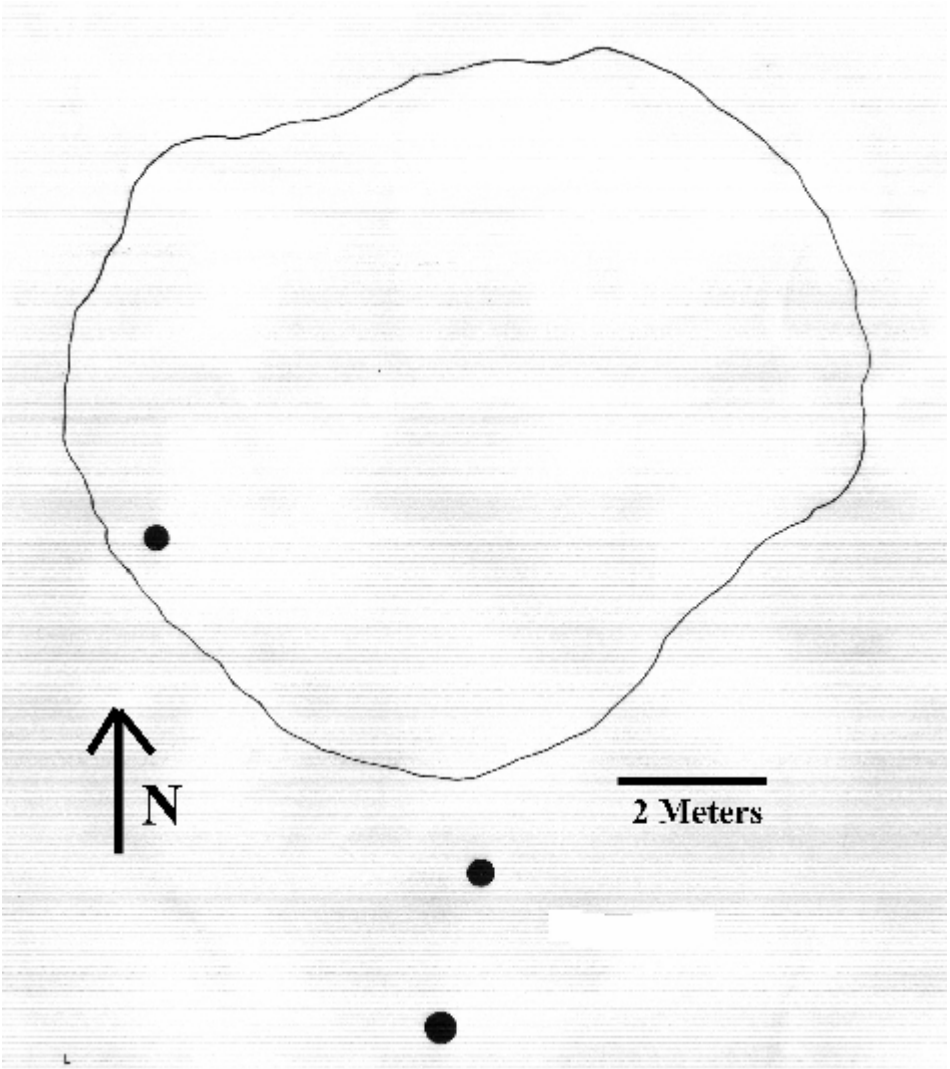
Feature 495



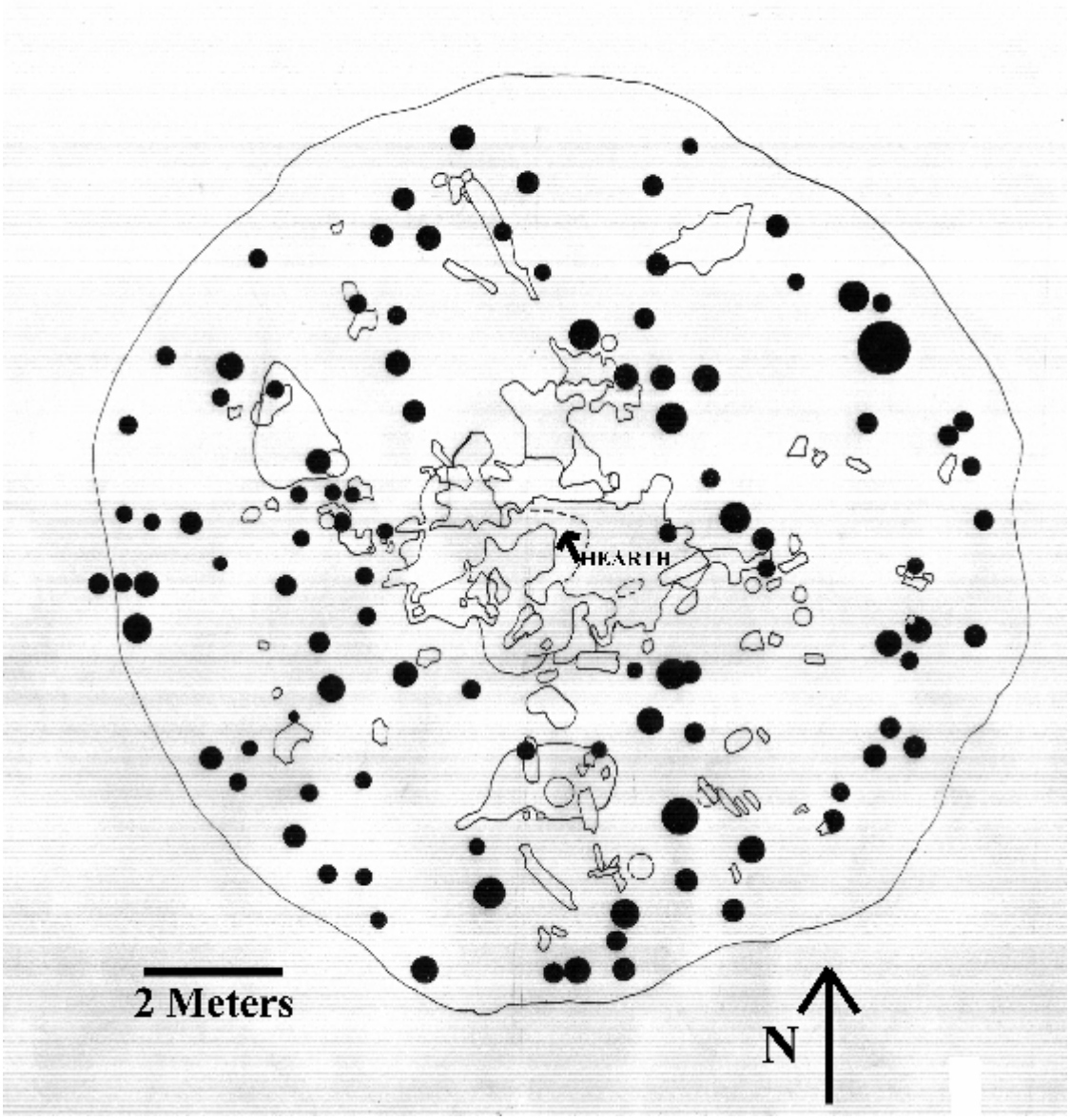
Feature 500



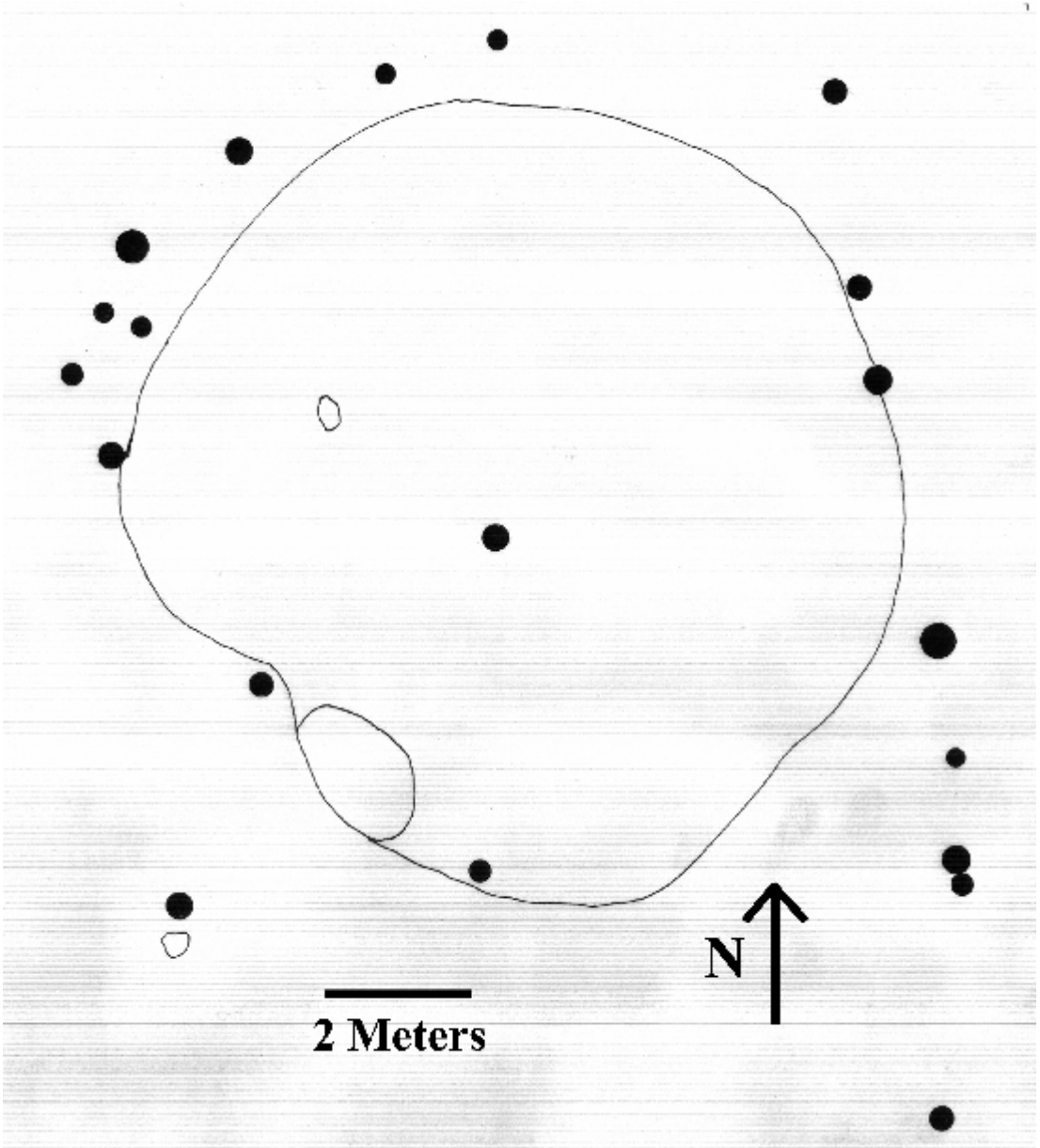
Feature 505



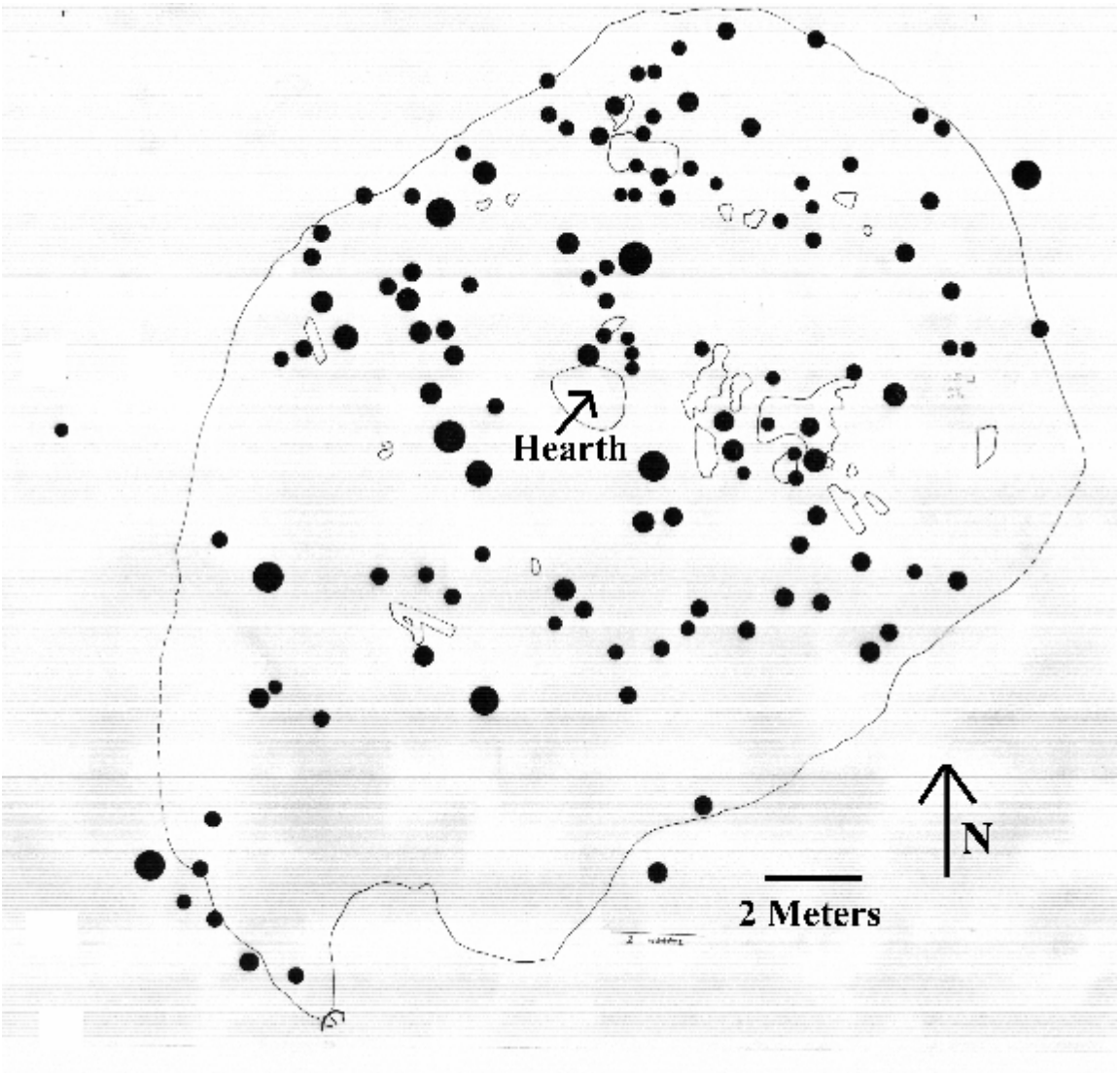
Feature 506



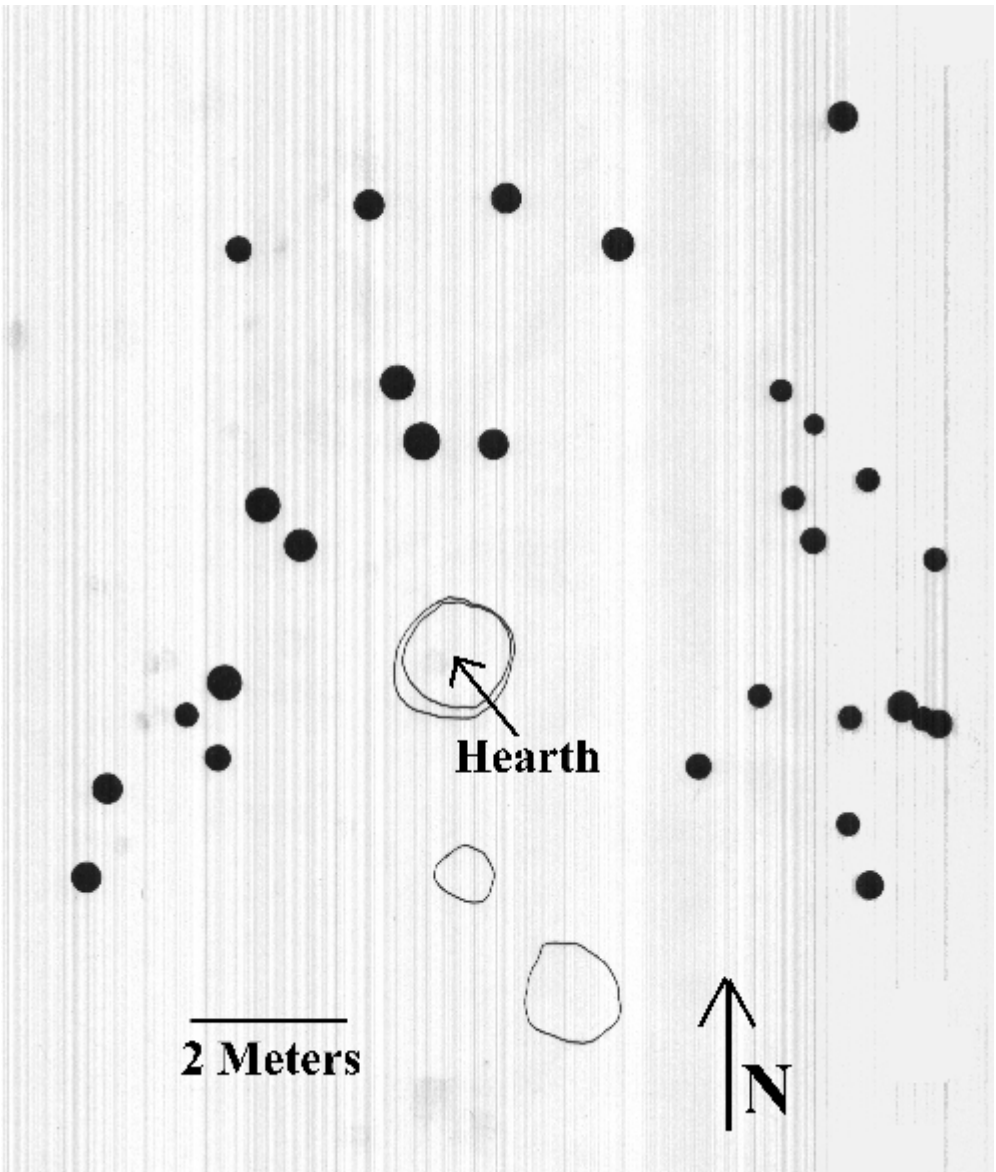
Feature 509



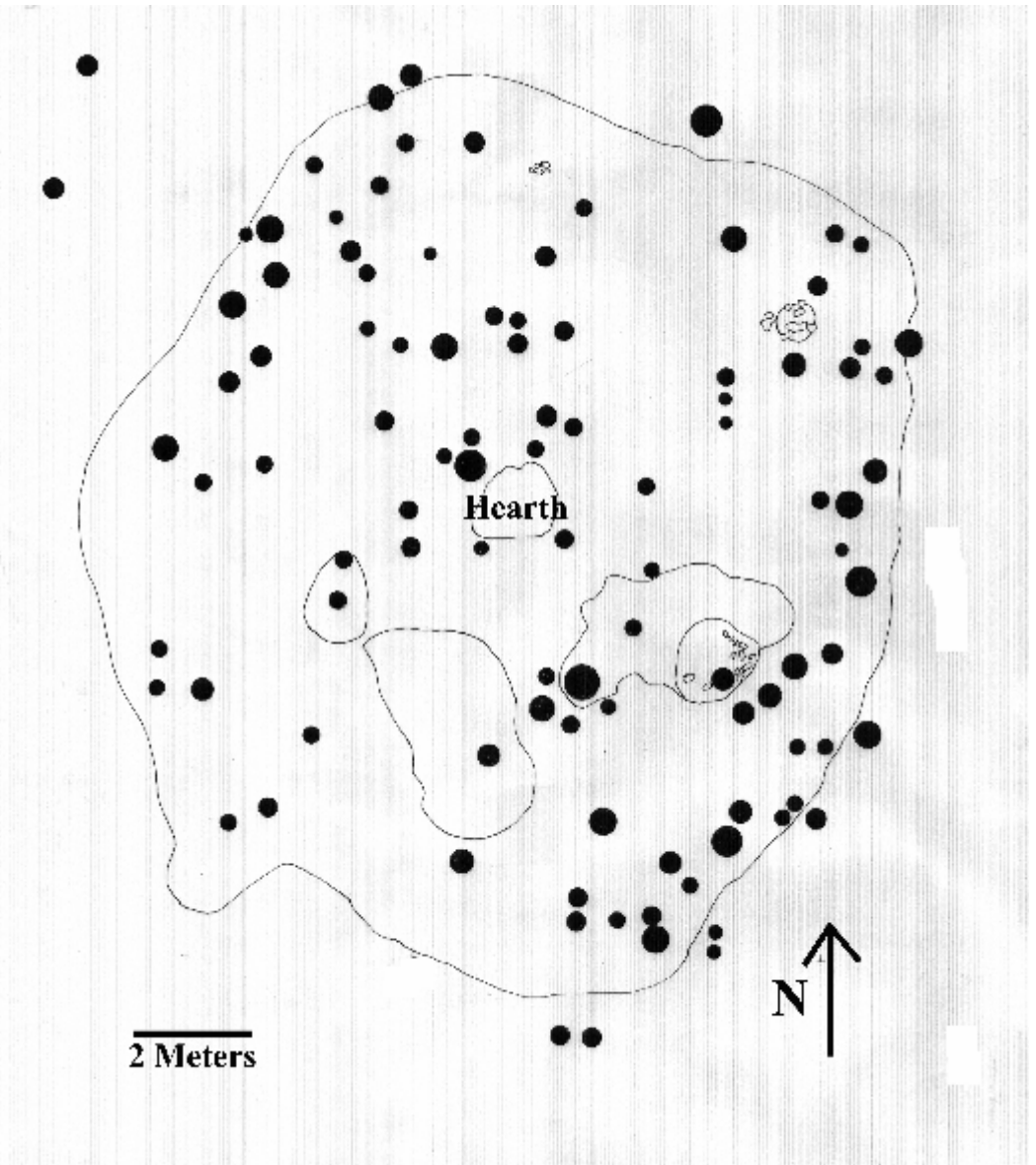
Feature 529



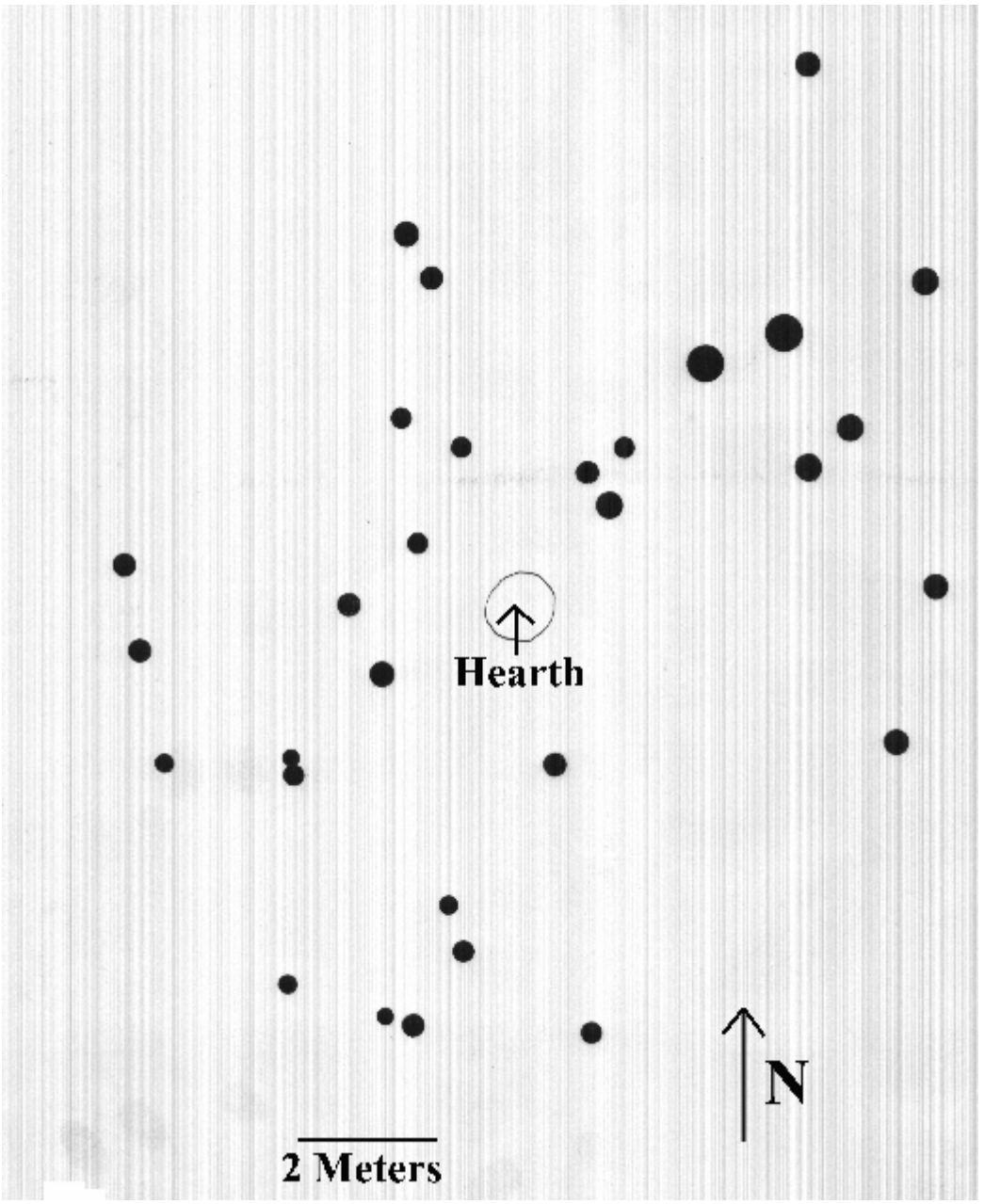
Feature 533



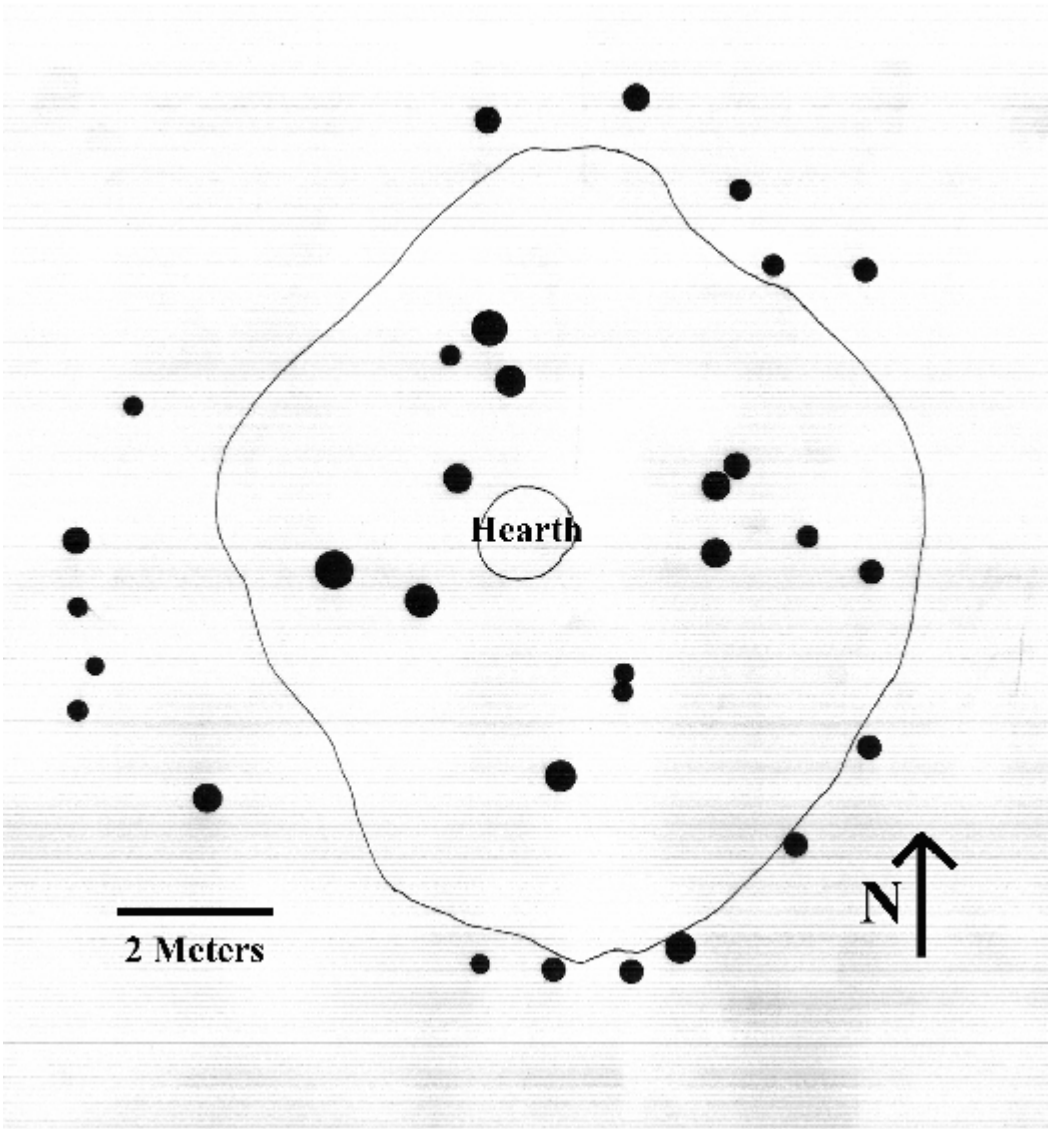
Feature 534



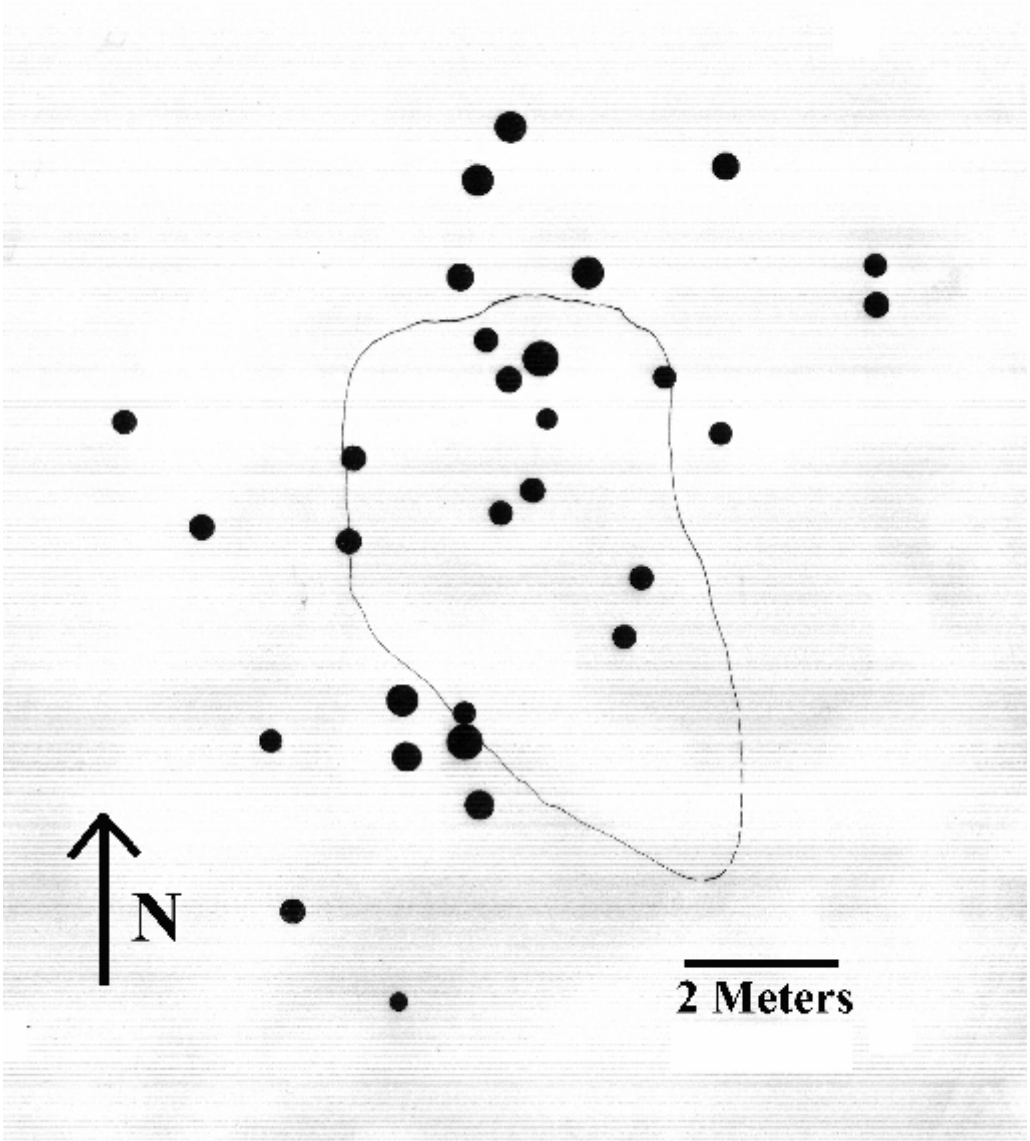
Feature 536



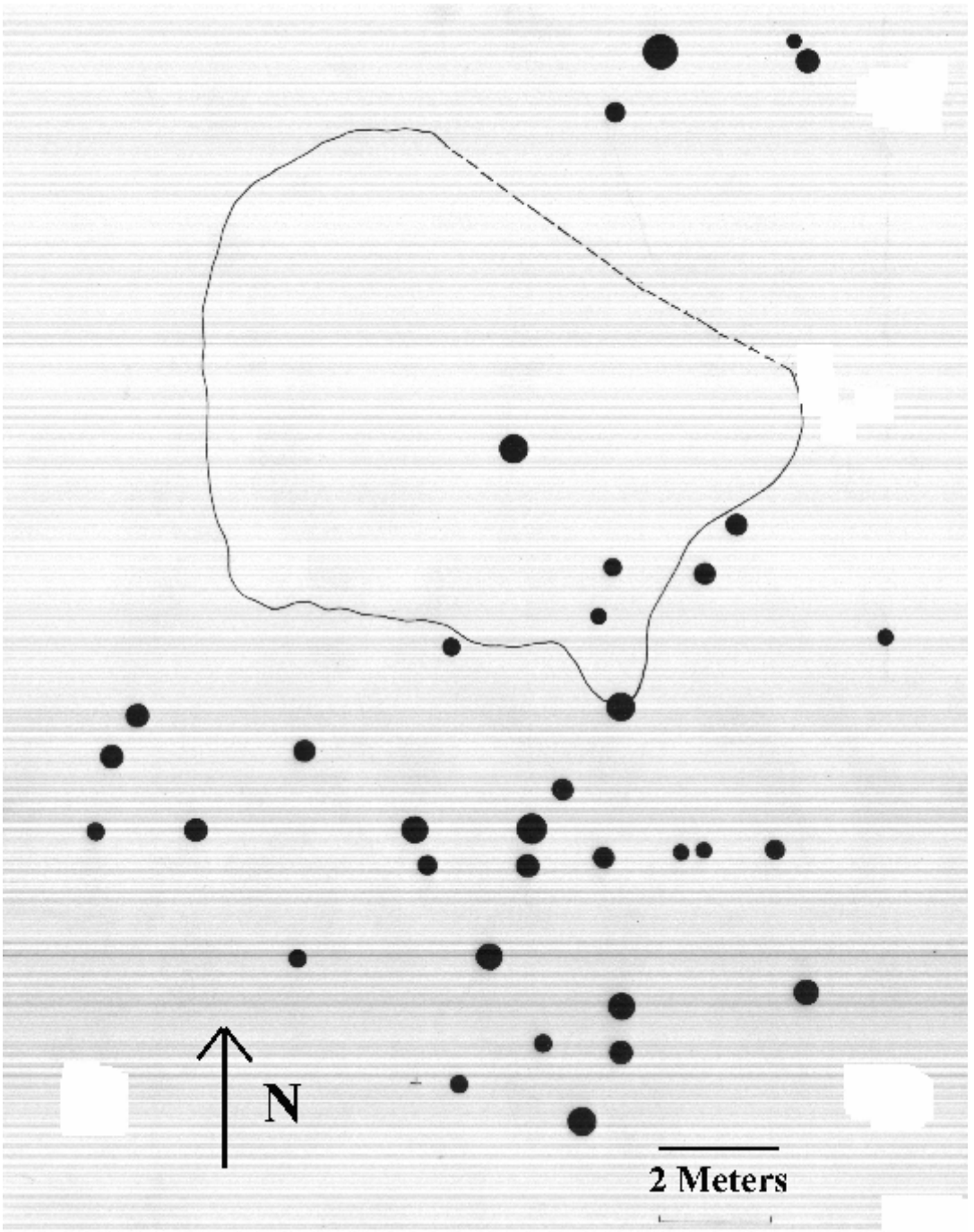
Feature 539



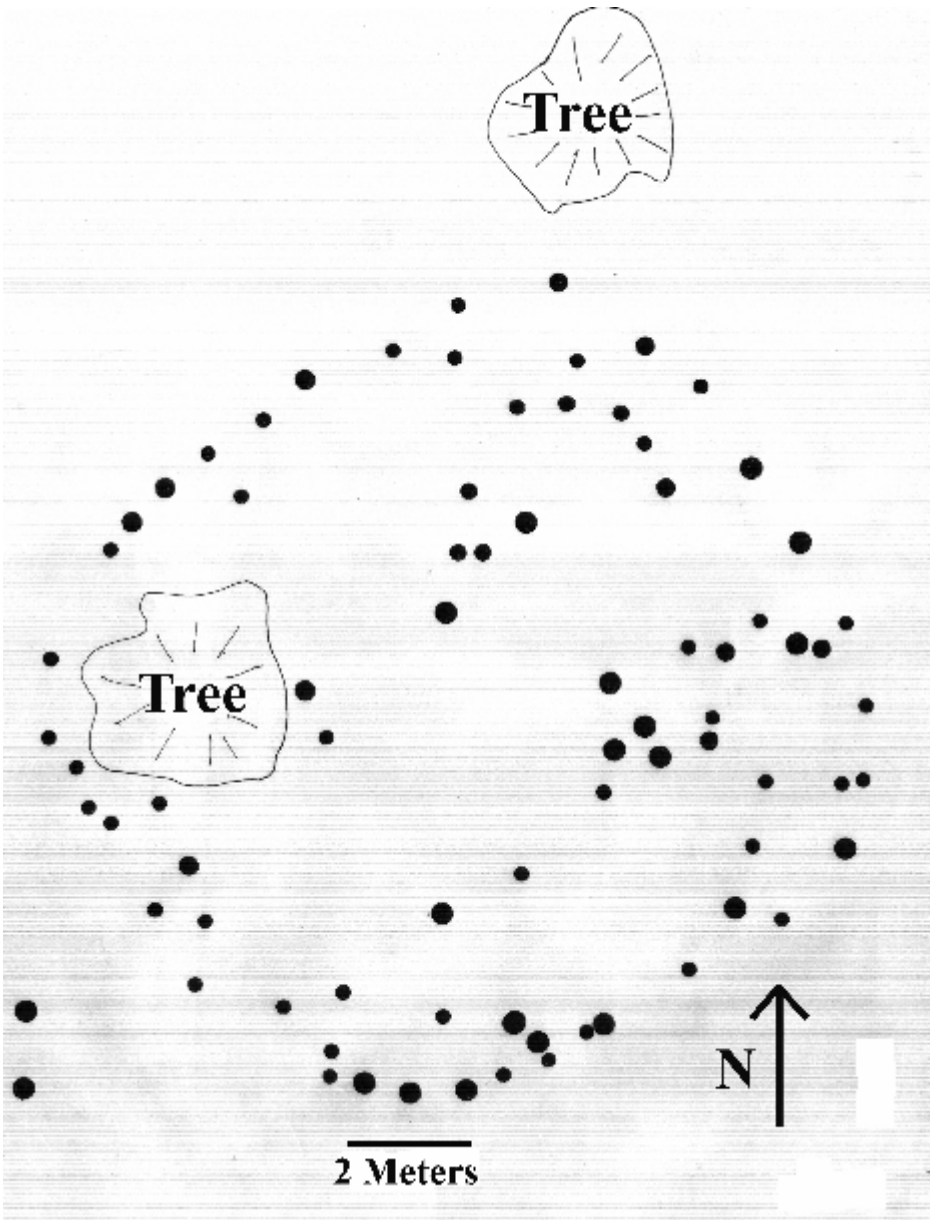
Feature 540



Feature 545



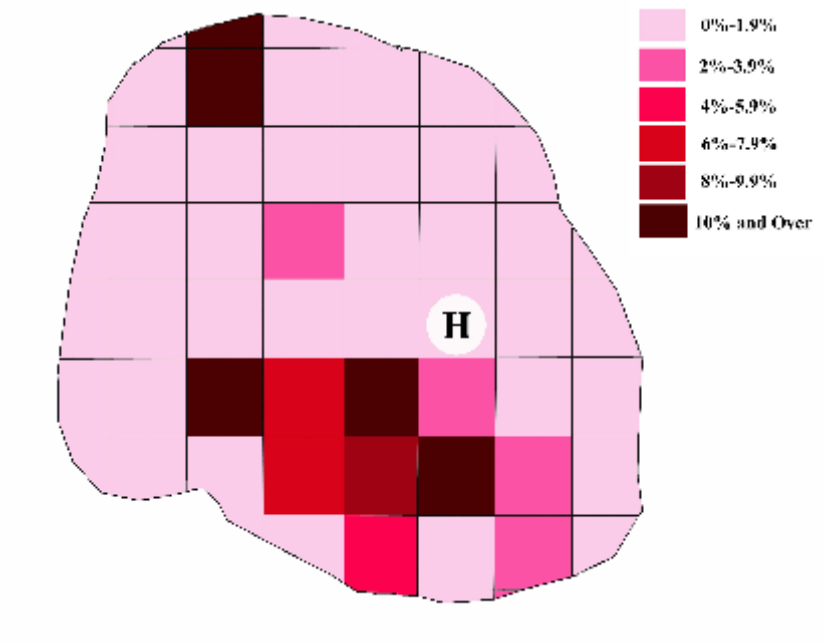
Feature 546



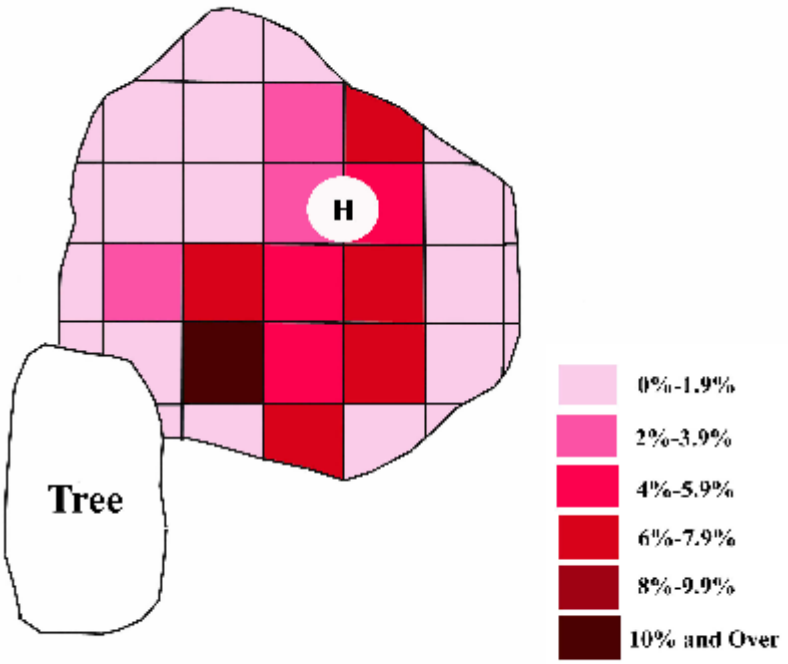
Unidentified Structure

Appendix 1.2

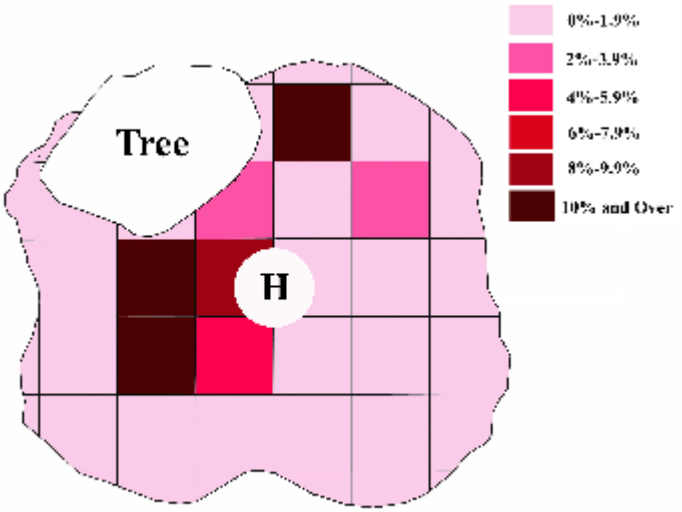
Ceramic Distributional Maps



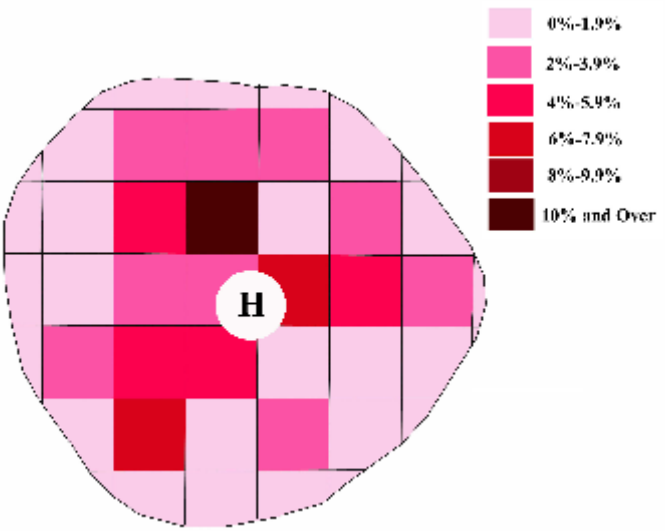
Feature 27



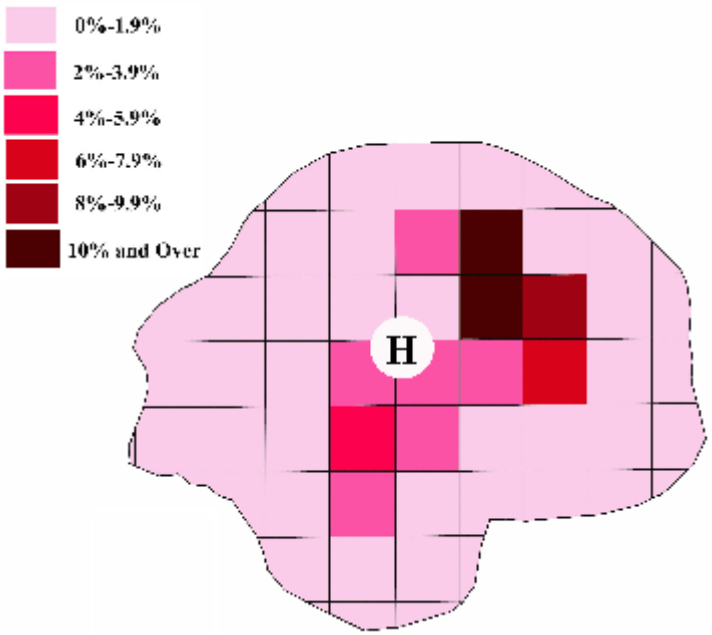
Feature 41



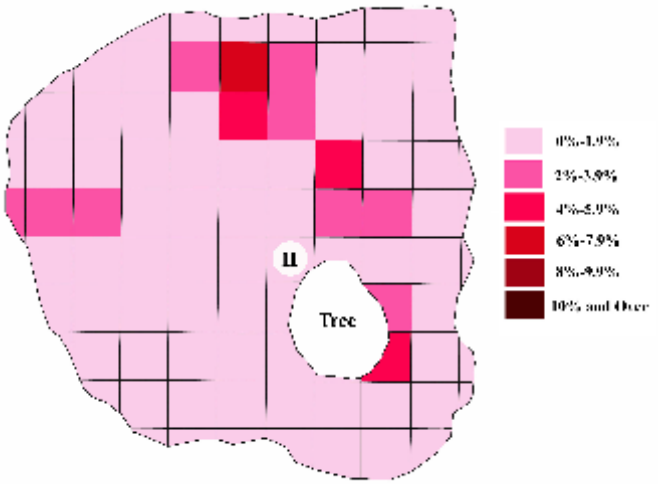
Feature 278



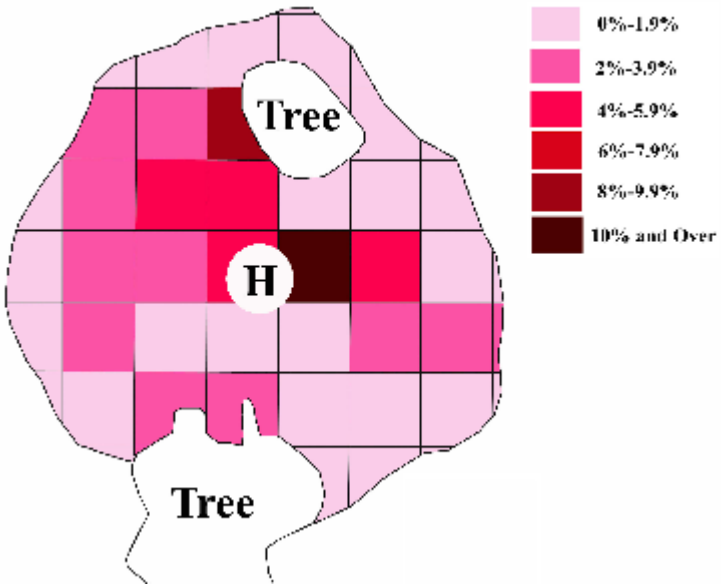
Feature 395



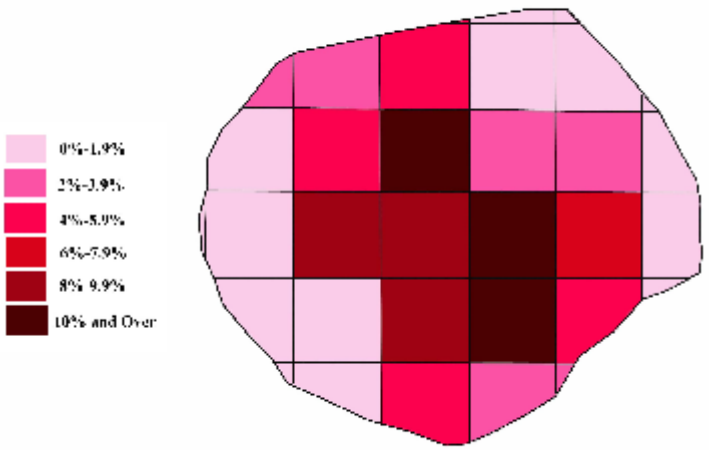
Feature 403



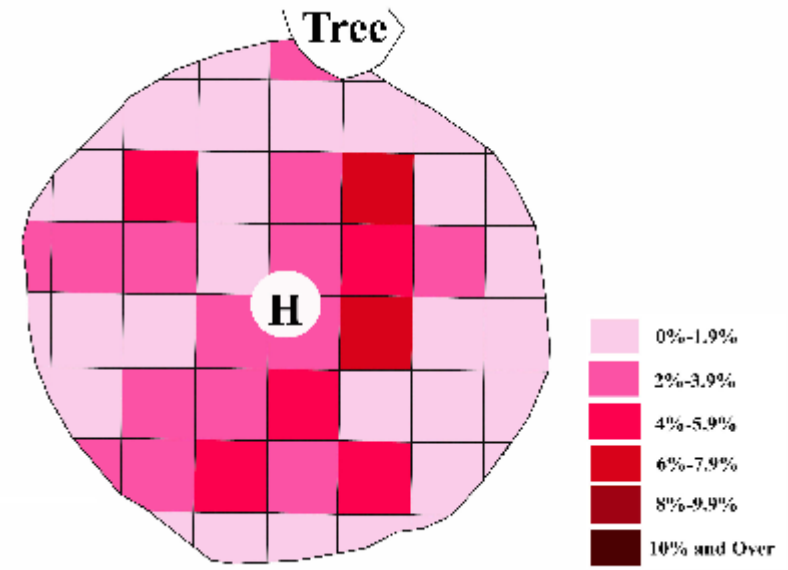
Feature 495



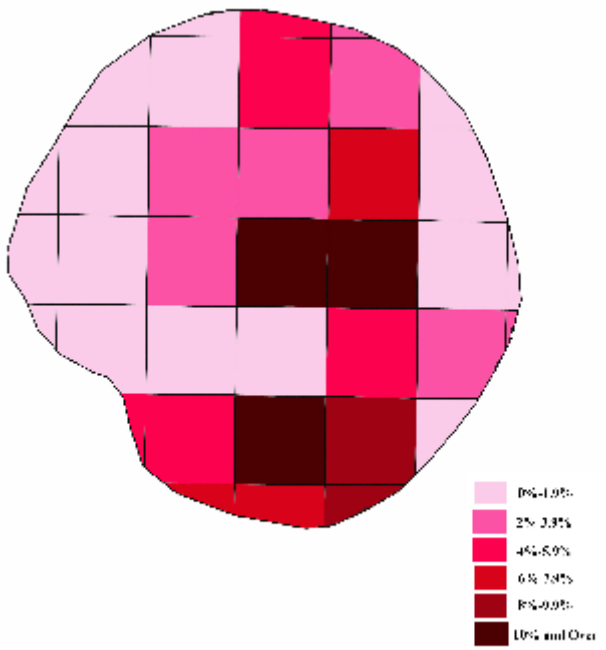
Feature 500



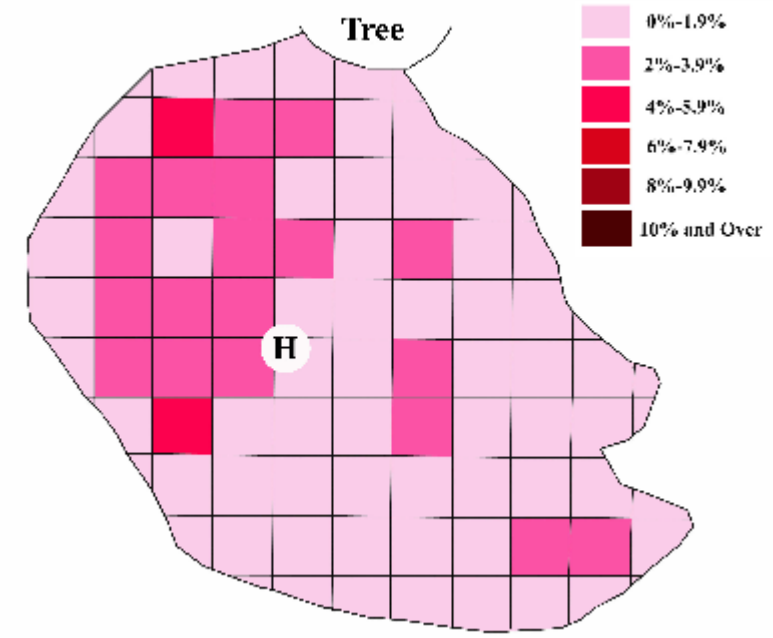
Feature 506



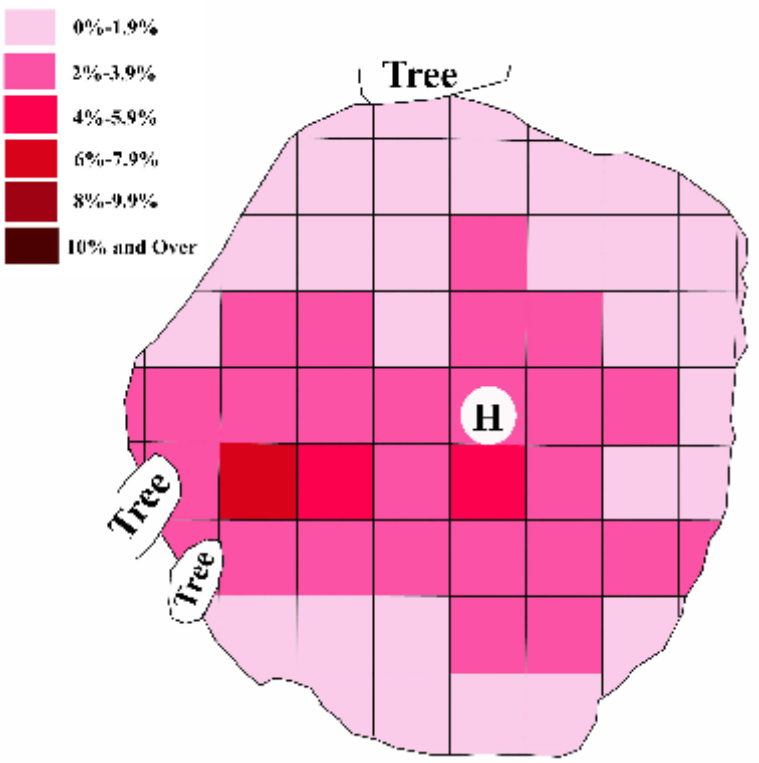
Feature 509



Feature 529



Feature 533



Feature 536

Appendix 1.3

Ceramic Analysis Forms

1EE89 PROTOHISTORIC CERAMIC FORM

	FEATURE:	27		F.S.	Totals					
Sand Tempered										
				BODY						
Type	0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Coarse Sand Plain	4	0.9	95	62	98	207.5	47	370.7	5	156.9
Fine Sand Plain	2	0.5	52	28.6	43	89.9	21	163	2	77.8
Fine Sand Incised					2	4.2				
FSP w/Applique Rim			1	0.6						
Chattahootchee Brushed					1	3.1				
Lamar Plain			3	2.2	8	28.8	2	22.8	2	73.7
Lamar Incised					4	8.7				
FS Incised w/ Zone Punctate					1	2.3				
Lamar Cob Marked					2	7.2			1	28.1
				RIM						
Type	0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Coarse Sand Plain			1	0.5	3	7.9				
Fine Sand Plain					1	1.5	1	17.6		
Fine Sand Incised					2	9.3				
FSP w/Fingernail Notched Rim					1	2.9	1	9		
FSP w/Flat Notched Rim					1	4.3				
Chattahootchee Plain					1	2.5	1	17.4		
Lamar Plain					4	11.2				
Lamar Incised					2	9.3				
FS Incised w/ Zone Punctate			1	0.2	1	0.7				

1EE89 PROTOHISTORIC CERAMIC FORM

	FEATURE:	27		F.S.	Totals					
Shell Tempered										
				BODY						
Type	0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Carthage Incised v Carthage					1	2.1	1	6.3		
Coarse Shell Incised					2	8.5				
Coarse Shell Applique			2	1	1	3.7				
Coarse Shell Plain	94	15.9	258	91.6	154	227.9	39	246.3	14	473.4
Fine Shell Plain	1	0.3	17	8.6	21	46.2	7	55.8	2	92.5
Fine Shell Incised					1	3				
				RIM						
Type	0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Carthage Incised v Carthage							1	15.3		
Coarse Shell Incised							1	14		
Coarse Shell Applique							1	9.6	1	38.7
Coarse Shell Punctate							1	13	2	129.8
Coarse Shell Plain					1	2.6	7	58.7	2	63.5
Fine Shell Plain									1	45.1

1EE89 PROTOHISTORIC CERAMIC FORM

	FEATURE.	41		F.3.	Totals					
Sand Tempered										
				BODY						
Type	0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Coarse Sand Plain			100	38.8	125	268.8	25	219.9		
Fine Sand Plain			13	4.4	16	32.6	4	47		
Chattahoochee Brushed					6	21.6	2	26.8	1	43.1
Lamar Plain			12	4.6	4	4.8	2	11.8		
Comulgee Fields Incised							1	18.4		
				RIM						
Type	0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Coarse Sand Plain			1	0.5	1	2.8	2	13.8		
Fine Sand Plain							1	13.5		

1EE89 PROTOHISTORIC CERAMIC FORM

	FRACTURE	41	FS		Totals					
Shell Tempered										
			BODY							
Type	0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Carthage Incised v. Carthage					1	5.8				
Coarse Shell Incised							1	2.7		
Coarse Shell Plain			33	10.5	37	62.4	4	24.2		
Fine Shell Plain					1	4				

1EE89 PROTOHISTORIC CERAMIC FORM

	FEATURE:	278		F.S.	Totals					
Sand Tempered										
				BODY						
Type	0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Coarse Sand Plain			79	28.5	88	207.7	8	74.5		
Fine Sand Plain			4	2.1	3	8.1				
FSP w/Applique Rim			1	0.6	6	3.2				
Chattahoochee Brushed					3	12.8				
Lamar Comb Stamp							1	9.2		
Ocmulgee Fields Incised							1	4.3		
Lamar Cob Marked									1	45.9
				RIM						
Type	0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Fine Sand Plain							1	5.8		

1EE89 PROTOHISTORIC CERAMIC FORM

FEATURE:	278		F.S	Totals					
Shell Tempered									
			BODY						
Type 0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Carthage Incised v. Carthage				1	2.3	1	8.1		
Coarse Shell Applique		10	31			1	12.7		
Coarse Shell Plain 43	4.6	131	354	99	123	47	256.2	9	208.9
Fine Shell Plain 2	0.4	3	6.1	9	15.4	3	35.6		
			RIM						
Type 0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Coarse Shell Applique						1	6.4	1	17.1
Coarse Shell Cob Marked				1	1.2				
Coarse Shell Plain						2	11.9		

1EE89 PROTOHISTORIC CERAMIC FORM

	FEATURE	395	F.S		Totals					
Sand Tempered										
				BODY						
Type	0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Coarse Sand Plain	5	1.5	234	147.8	301	744.1	88	877.9	10	308.9
Fine Sand Plain	4	0.6	78	37	106	159	33	269.1	1	26
Fine Sand Incised			3	1.7	8	21	2	24.6		
FSP w/Fingernail Notched Rim					1	1.8				
FSP w/Applique Rim					1	3.4				
Chattahoochee Brushed					5	9.9	4	44.3	1	32.1
Lamar Plain					21	77.5	3	36.1		
Lamar Incised			4	2.3	6	13.7	3	33.3		
Lamar Comb Stamp					7	23.2	13	126.2	2	163.8
Lamar Applique							1	14.7		
Lamar Cord Marked							1	10.5		
Lamar Bold Incised							2	79.3		
Coarse Sand Incised					2	9.1				
Ocmulgee Fields Incised					1	5.6	1	6.3	1	32.8
Tallapoosa Punctate					2	3.4				
Lamar Cob Marked										54.6
				RIM						
Type	0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Coarse Sand Plain			2	1.3	7	22.2	4	35.8		
Fine Sand Plain			3	2.4	5	14.3	3	21.7		
FSP w/Fingernail Notched Rim					3	5.6				
FSP w/Applique Rim					1	1				
Chattahoochee Plain					2	7.2	1	13		
Lamar Plain					3	13	2	20	2	51.1
Lamar Incised					1	3.9	2	8.3		
Lamar Comb Stamp									1	30.8
Coarse Sand Incised					1	6.2	1	4		
Ocmulgee Fields Incised							3	35.8		
Additional Ceramics										
woodland tetrapodal support							1	25.3		

1EE89 PROTOHISTORIC CERAMIC FORM

	FEATURE	395	F.3.		Totals					
Shell Tempered										
			BODY							
Type	0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Carthage Incised v. Carthage					11	22.2	10	64.7		
Coarse Shell Incised			2	3.4	6	16.8	3	36.9		
Coarse Shell Applique			3	1.1	1	2.1				
Coarse Shell Plain	16	2.5	229	91.5	170	262	55	375.9	3	48.7
Fine Shell Plain			34	23	65	137	29	144.9	1	15.6
Fine Shell Incised							1	13.5	1	33.7
			RIM							
Type	0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Carthage Incised v. Carthage							2	24.3		
Carthage Incised v. Poole									1	18.6
Coarse Shell Incised					3	7.3	1	7.7	1	37
Coarse Shell Applique					3	7.6	3	19.2	1	22
Coarse Shell Punctate					1	1.6	2	23.4		
Coarse Shell Nicked Rim									1	39.6
Coarse Shell Plain			2	1.2	3	3.8	2	24		
Fine Shell Plain			1	0.6	3	6.1	3	27.8		

1EE89 PROTOHISTORIC CERAMIC FORM

	FEATURE:	403	F.S.	tctals					
Sand Tempered									
			BODY						
Type	0>1/4	g :/4>1/2	g	1/2>:	g	1>2	g	2>4	g
Coarse Sand Plain		:04	59	82	160.3	8	61.7	1	35.4
Fine Sand Plain		34	15.4	27	47.0	3	18		
Fine Sand Incised				2	2.4	1	8		
Chattahoochee Brushed				3	7.1	1	14.7		
Lamar Plain				2	6.5				
Lamar Incised				:	3.2	2	14.4		
Lamar Comp Stamp		1	1.2	:	3.2				
			RIM						
Type	0>1/4	g :/4>1/2	g	1/2>:	g	1>2	g	2>4	g
Coarse Sand Plain	2	0.3 3	1.8	4	10.5				
Fine Sand Plain	1	0.4		2	3.7	2	52.7		
Lamar Incised						1	25.2	1	37.3

1EE89 PROTOHISTORIC CERAMIC FORM

Shell Tempered	FEATURE:	403		F.S.	totals					
				BODY						
Type	0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Carthage Incised v. Carthage					5	8.8	1	4.6		
Coarse Shell Incised			1	0.6	3	6.3			1	38.8
Coarse Shell Applique					2	2.6	1	6.3		
Coarse Shell Plain	8	1.4	134	44.4	116	166.1	41	272.3		
Fine Shell Plain			5	1.7	7	10.8	7	57.1		
				RIM						
Type	0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Carthage Incised v. Carthage					:	6.3			1	49.3
Coarse Shell Applique					:	2.2	1	6		
Coarse Shell Plain			3	2.3	:	2.9	3	19.6		
Fine Shell Plain							5	21.2		

1EE89 PROTOHISTORIC CERAMIC FORM

	FEATURE	403		F.S.	totals					
Sand Tempered										
				BODY						
Type	C>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Coarse Sand Plain			1	0.9	5	21.1	1	14		
Fine Sand Plain			.	0.4						

1EE89 PROTOHISTORIC CERAMIC FORM

	FEATURE:	405		F.S	Totals					
Shell Tempered										
				BODY						
Type	0>./4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Ccarse Shell Incised					1	2.3				
Ccarse Shell Plain	2	C.2	:1	33	5	8.2	1	8.2	1	43.4
Fine Shell Plair.					1	1.7				

1EE89 PROTOHISTORIC CERAMIC FORM

	FEATURE.	494		F.3.	Totals					
Sand Tempered										
				BODY						
Type	0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Coarse Sand Plain	1	0.1	27	19.3	44	90.8	9	67.6		
Fine Sand Plain			19	14.8	20	49.2	3	33.2		
Fine Sand Incised					1	2.5				
Chattahoochee Brushed					3	8.2				
Lamar Comb Stamp					1	4.2				
				RIM						
Type	0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Coarse Sand Plain					2	2.3				
Fine Sand Plain			1	0.4						
Fine Sand Incised			2	1.7			1	5.5		
Lamar Incised									1	42.8
Ocmulgee Fields Incised									1	30.3

1EE89 PROTOHISTORIC CERAMIC FORM

	FEATURE:	494		F.S.	totals					
Shell Tempered										
				BODY						
Type	0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Carthage Incised v. Carthage					2	6.4				
Coarse Shell Incised					1	0.7	1	4.6		
Coarse Shell Plain			36	13.3	53	78.2	12	93.2	1	37.3
Fine Shell Plain					7	20.7	1	9		
Fine Shell Incised					1	2.3				
				RIM						
Type	0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Coarse Shell Plain					1	1				

1EE89 PROTOHISTORIC CERAMIC FORM

	FEATURE	493		F.S.	totals					
Sand Tempered				**BODY**						
Type	<1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Coarse Sand Plain	5	0.9	85	46.1	104	253.1	17	237.4	1	26
Fine Sand Plain			30	15.3	15	31.6	4	27.4		
Fine Sand Incised					1	0.5				
Lamar Plain					2	9.8	1	9.1		
Lamar Incised			2	1.2	4	10.7				
Lamar Comp Stamp					2	8.7	2	38.9		
Lamar Applique							1	9.3		
Lamar Roughened					1	1.6				
Type	<1/4	g	1/4>1/2	**RIM** g	1/2>1	g	1>2	g	2>4	g
Coarse Sand Plain					1	3.3				
Fine Sand Plain			1	1.8	1	1				
Fine Sand Incised							1	4.6		
FSP w/Flat Notched Rim					1	4.4				
Lamar Plain					2	3.5				
Lamar Incised					1	1.5	1	9.4	1	36.8
Lamar Comp Stamp							1	11		

1EE89 PROTOHISTORIC CERAMIC FORM

	FEATURE:	495		F.S.	shell						
Shell Tempered											
				BODY							
Type	0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4		g
Coarse Shell Plain	15	1.8	116	35.9	101	128.3	23	90.1		1	19
Fine Shell Plain			1	0.6							
				RIM							
Type	0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4		g
Carthage Incised v. Carthage							1	14.2			
Coarse Shell Applique					1	10.5					
Coarse Shell Plain					1	0.8				1	21.8

1EE89 PROTOHISTORIC CERAMIC FORM

	FEATURE:	5 III		FS						
Sand Tempered										
				BASE						
Type	0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Fine Sand Plain									1	50
				BODY						
Type	0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Coarse Sand Plain	15	7.1	236	171.4	162	444	58	957.6	8	298.9
Fine Sand Plain	24	6.3	191	86.6	113	246.3	22	273.8	9	320.3
Fine Sand Incised					1	6.6				
FSP w/Fingernail Notched Rim					1	3.1				
Chattahoochee Plain					1	2.6				
Lamar Plain			2	7.6	6	22.6	2	15.7		
Lamar Incised			1	0.7			1	6.8		
Lamar Comp Stamp					2	14.5	3	55.7	1	57.7
Lamar Bold Check Stamp							1	14		
Lamar Cord Marked							1	7.2		
Coarse Sand Incised					1	4.4	1	12		
FS Incised w/ Zone Punctate							1	2.5		
Lamar Cob Marked					1	2.2				
				RIM						
Type	0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Coarse Sand Plain			4	6.7	3	6.9	2	15.8		
Fine Sand Plain			2	2	3	3.8				
Fine Sand Incised			1	0.9						
FSP w/Fingernail Notched Rim			1	1.5						
FSP w/Flat Notched Rim							1	19.6		
FSP w/Applique Rim							1	3.4		
Chattahoochee Plain			1	1.1	1	3.7	2	13.3	2	56.3
Lamar Plain					3	18.5	3	37.1		
Lamar Incised					1	3.1				
Lamar Comp Stamp							1	10	2	152
Coarse Sand Incised			1	1.2	2	6.3			1	28.3

1EE89 PROTOHISTORIC CERAMIC FORM

FEATURE:	500		F.S	totals					
Shell Tempered									
			BODY						
Type 0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Carthage Incised v. Carthage 1	1.6	10	10.3	11	40.5	7	80.9	4	128.7
Carthage Incised v. Moon L. 3	0.4	19	8.9	7	10.6				
Coarse Shell Incised		2	1.6	2	1.5	3	20.5		
Coarse Shell Applique 1	0.1	18	6.3	20	24.5				
Coarse Shell Cob Marked						1	13.6		
Coarse Shell Plain 71	10.8	225	83	174	263	61	346.7	7	162.7
Fine Shell Plain 12	3.9	67	35.2	32	80.9	13	187	2	55.7
Fine Shell Incised				1	1.6	1	3.5		
			RIM						
Type 0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Carthage Incised v. Carthage		1	0.6	1	3.1	2	21.7		
Carthage Incised v. Moon L.				12	27.6	2	15.7		
Coarse Shell Incised						2	13.1	1	27.6
Coarse Shell Applique				5	11.4	5	22.6	1	95.2
Coarse Shell Nicked Rim								1	32.9
Coarse Shell Plain		2	1	7	23.8	6	28.8	2	157.1

1EE89 PROTOHISTORIC CERAMIC FORM

	FEATURE	SC5	F.S.	totals					
Shell Tempered									
			BODY						
Type	0>1/4	g	1/4>1/2 g	1/2>1	g	1>2	g	2>4	g
Coarse Shell Plain				1	2.6				

1EE89 PROTOHISTORIC CERAMIC FORM

	FEATURE.	505		F.3.	totals					
Sand Tempered										
				BODY						
Type	0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Coarse Sand Plain			88	37	103	2063	26	3613	4	1482
Fine Sand Plain			23	109	21	422	9	576		
Fine Sand Incised					1	19	2	116		
Lamar Plain					1	22				
Lamar Incised			2	18	3	4	2	343		
Lamar Comp Stamp					1	48	2	278	1	261
Lamar Roughened							2	273		
Comulgee Fields Incised					1	29				
Fine Sand Red Filmed			1	03						
Lamar Cob Marked			5	14	1	24	1	56		
				RIM						
Type	0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Coarse Sand Plain			3	3						
Fine Sand Plain							1	72		
Fine Sand Incised							1	56		
FSP w/Fingernail Notched Rim					1	1				
Chattahoochee Plain							3	692		
Lamar Plain			2	08			2	139		
Lamar Incised					1	11	2	19		
Lamar Comp Stamp									1	407

1EE89 PROTOHISTORIC CERAMIC FORM

FEATURE:	506		F.S	totals					
Shell Tempered									
			BODY						
Type 0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Coarse Shell Incised				1	0.8			1	25
Coarse Shell Applique				1	0.7				
Coarse Shell Cob Marked				1	3	1	6.9		
Coarse Shell Plain 3	0.3	99	26.4	71	97.5	21	120.3	1	14.3
			RIM						
Type 0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Carthage Incised v. Carthage		1	0.5						
Coarse Shell Plain				1	1.5	1	10.5		
Fine Shell Incised				1	5.9				

1EE89 PROTOHISTORIC CERAMIC FORM

	FEATURE	509		F.S.	totals					
Sand Tempered										
				BASE						
Type	>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Coarse Sand Plain									2	196.4
Fine Sand Plain							1	27.2		
				BODY						
Type	>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Coarse Sand Plain	22	3	181	108.5	187	496	80	752.7	18	682
Fine Sand Plain	24	2.2	198	96.2	119	295.5	59	578.3	10	567.5
Fine Sand Incised			7	6.4	2	4	4	60	4	154.3
Chattahcotchee Brushed					1	2.2				
Lamar Plain					3	7.9	1	6.8		
Lamar Incised							3	42.7		
Lamar Comp Stamp			1	2.6	5	25.3	2	21.1		
FS Incised w/ Zone Punctate					1	4.5				
Calloway Incised					1	0.8	1	6.2		
				RIM						
Type	>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Coarse Sand Plain					5	13.4	2	10		
Fine Sand Plain			1	0.5	3	11.8	5	42.5	3	75.1
Fine Sand Incised					1	1.7				
FSP w/Fingernail Notched Rim			2	1.5	5	13.6				
FSP w/Flat Notched Rim					2	11.7	1	6.2		
Chattahcotchee Plain					1	7.8	2	19.6		
Lamar Plain					5	21.7	7	54	1	18.7
Lamar Incised			1	1.8	1	3.1	1	11.2	1	103.1
Lamar Comp Stamp							1	20.9		
FS Incised w/ Zone Punctate					1	2.7				

1EE89 PROTOHISTORIC CERAMIC FORM

	FEATURE:	505		F.S.	totals					
Shell Tempered										
				BODY						
Type	0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Carthage Incised v. Carthage			1	0.9	5	16	7	68	3	101.4
Carthage Incised v. Moor. L.					5	36	1	2.4		
Coarse Shell Incised			1	0.1	4	7.3	6	52.7		
Coarse Shell Applique			2	1.2	2	4.7				
Coarse Shell Plain	12	4.7	253	90.1	320	368.8	84	602.5	12	240
Fine Shell Plain	4	2.3	45	24.7	32	63.9	11	88.3	2	57.1
Fine Shell Incised	1	0.3	9	1.1	1	4				
				RIM						
Type	0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Carthage Incised v. Carthage							1	2.7	2	113.3
Carthage Incised v. Moor. L.					1	2.7				
Coarse Shell Applique			1	0.5	1	3.2	7	7.7	2	38.6
Coarse Shell Plain			5	3.1	2	4.1	3	19.8	1	51.6
Fine Shell Plain			1	0.6	1	1.3	3	11.8		
Fine Shell Incised	1	0.3								

1EE89 PROTOHISTORIC CERAMIC FORM

	FEATURE:	529	F.S.	tctals					
Sand Tempered									
			BODY						
Type	0>1/4	g :/4>1/2	g	1/2>:	g	1>2	g	2>4	g
Coarse Sand Plain		19	12.5	36	89.4	19	:67.2	2	72.9
Fine Sand Plain		13	5.7	16	29	1	14.7		
Lamar Incised				3	8.2				
			RIM						
Type	0>1/4	g :/4>1/2	g	1/2>:	g	1>2	g	2>4	g
Coarse Sand Plain						1	25.2		
Lamar P.air.				.	2.3				
Lamar Comp Stamp						1	14.1		
Coarse Sand Incised		1	0.7	:	3.3				

1EE89 PROTOHISTORIC CERAMIC FORM

	FRATTIR3	529		F S	tnca's					
Shell Tempered										
				BODY						
Type	0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Carthage Incised v Carthage							2	22.1		
Coarse Shell Incised							1	16.2		
Coarse Shell Plain			29	12.5	21	27.7				
Fine Shell Plain			1	0.2						
				RIM						
Type	0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Carthage Incised v Carthage							1	13.7		
Coarse Shell Plain					6	10.6				

1EE89 PROTOHISTORIC CERAMIC FORM

	FEATURE:	533		F.S.	totals					
Sand Tempered										
				BODY						
Type	0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Coarse Sand Plain	19	4.4	340	216	374	867.5	81	668.6	7	322.7
Fine Sand Plain	22	3.5	156	85.5	138	255.6	24	210.9	4	173.3
Fine Sand Incised			19	6.8	9	17.8	3	18.9	2	51.9
FSP w/Applique Rim			1	0.5	4	10.5	1	15.5		
Chattahoochee Plain					2	11.9				
Lamar Plain					1	1.1				
Lamar Incised			3	2.4	2	4.7	1	12.3		
Lamar Comp Stamp					21	87.8	49	593.2	7	308.8
FS Incised w/Zone Punctate					1	2.7				
				RIM						
Type	0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Coarse Sand Plain			1	0.5	8	19.7	4	37.2	1	33.3
Fine Sand Plain			2	2.4	8	18.3	3	23.2	1	26.3
Fine Sand Incised			2	2.1	3	5.5	1	5	4	40.6
FSP w/Fingernail Notched Rim					4	8.2	1	10.9		
FSP w/Flat Notched Rim					1	1.9	3	28.6		
FSP w/Applique Rim					1	3	1	14.7	1	62.6
Chattahoochee Plain			1	0.8	5	19.3	5	71.3		
Lamar Plain			1	0.6						
Lamar Incised					2	5.4	1	15.3		
Lamar Comp Stamp							2	27.3	1	31.9
Coarse Sand Incised									1	36.7
Cornudgee Fields Incised							1	11.6		
FS Incised w/Zone Punctate							1	3		

1EE89 PROTOHISTORIC CERAMIC FORM

	FEATURE	533	F.3.		Totals					
Shell Tempered										
			BODY							
Type	0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Carthage Incised v. Carthage			1	0.9	5	15.6	7	62.2		
Coarse Shell Incised			1	0.5	7	12.9	3	35.2		
Coarse Shell Applique					1	1.8	2	7.7		
Coarse Shell Cob Marked							1	10.4		
Coarse Shell Plain	25	4.3	317	131.1	295	463.9	101	685.4	16	315.9
Fine Shell Plain			33	15.1	57	111.2	27	83.7	28	21.9
Fine Shell Incised			2	1						
			RIM							
Type	0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Carthage Incised v. Carthage							1	15.3	1	18.2
Coarse Shell Incised			2	1.2	1	1.1	2	31.7		
Coarse Shell Applique									1	12.3
Coarse Shell Punctate					1	3				
Coarse Shell Plain					5	11.7	4	23.1	3	131.7
Fine Shell Plain					4	8.3				
Fine Shell Incised			1	0.1	1	0.7				

1EE89 PROTOHISTORIC CERAMIC FORM

	FEATURE:	536		F.S.	totals					
Sand Tempered										
				BODY						
Type	0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Coarse Sand Plain	20	4.7	492	280.2	427	972.8	118	1134	7	276.8
Fine Sand Plain	16	3.2	306	142.5	213	502.7	43	461.6	1	37.8
Fine Sand Incised			2	2	7	15.9	3	23.8		
Chattahoochee Brushed					2	9.9				
Lamar Plain	5	1.1	18	6.2	17	45.7	8	62.4		
Lamar Incised			1	1.2	21	48.5	13	105.8		
Lamar Comp Stamp					8	30.5	12	158.6	1	73.5
Lamar Cord Marked							1	8.3		
Coarse Sand Incised			1	1.1	4	12.4				
Cumulgee Fields Incised							2	22.2		
FS Incised w/Zone Punctate			1	0.8	2	3.5	2	23.7		
Additional Ceramics										
Alligator Effigy Fragment			1	0.4			1	12.1		
				RIM						
Type	0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Coarse Sand Plain			1	1.6	7	18.5			1	16.2
Fine Sand Plain			2	1.8	9	23.7	3	20.4		
Fine Sand Incised					3	9.3	4	30.6	1	46.6
FSP w/Fingernail Notched Rim					2	6.2	2	17.9	1	32.8
Chattahoochee Plain					3	10.8	1	5.6		
Lamar Plain					5	20.8	10	107.1		
Lamar Incised			1	0.6	5	13	7	49.7	7	291.3
Lamar Comp Stamp					1	1.9	2	44.4	2	167.8
Lamar Bold Check Stamp					1	2.5				
Coarse Sand Incised							2	26.5		
FS Incised w/Zone Punctate					8	19.9	1	3.9		

1EE89 PROTOHISTORIC CERAMIC FORM

	FEATURE:	536		F.S.	totals					
Shell Tempered										
				BODY						
Type	0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Carthage Incised v. Carthage					7	27.7	4	26.8		
Coarse Shell Incised			9	5.9	19	49.5	30	123.8		
Coarse Shell Applique					1	3.1				
Coarse Shell Punctate							1	11.6		
Coarse Shell Plain	117	17.6	956	327.1	677	928.7	177	944.8	9	330.6
Fine Shell Plain			34	17.9	61	109.8	14	158	1	89
Fine Shell Incised			1	0.5			1	3.4		
				RIM						
Type	0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Coarse Shell Incised			1	1.1	1	2.9	10	134.9	3	92.1
Coarse Shell Applique					2	7.9	1	15.3		
Coarse Shell Nicked Rim							1	6.6		
Coarse Shell Plain			2	1.6	6	15	4	32.9		
Fine Shell Plain			1	1.1	2	6.3	2	11.6		
Fine Shell Incised					1	2.8				

1EE89 PROTOHISTORIC CERAMIC FORM

Sand Tempered	FEATURE	>40		F.S.	totals					
				BODY						
Type	C>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Coarse Sand Plain			13	5.2	11	24.4	1	21.5		
Lamar Incised			1	1.1	1	2.5				
				RIM						
Type	C>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Fine Sand Plain					2	3.1				
Lamar Incised					1	1.5				

1EE89 PROTOHISTORIC CERAMIC FORM										
	FEATURE:	540		F.S.	totals					
Shell Tempered										
				BODY						
Type	0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Coarse Shell Plain	2	0.1	10	2.4	6	8.3				
Fine Shell Plain			1	0.6	1	1.9				

1EE89 PROTOHISTORIC CERAMIC FORM

	FEATURE:	545	F.S.	tctale					
Sand Tempered									
			BODY						
Type	0>1/4	g :/4>1/2	g	1/2>:	g	1>2	g	2>4	g
Coarse Sand Plain				2	3.7	1	10.7		

1EE89 PROTOHISTORIC CERAMIC FORM

FEATURE:		545		F.S	totals					
Shell Tempered										
				BODY						
Type	0>:/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Ccarse Shell Plain			1	03	1	1.6				

1EE89 PROTOHISTORIC CERAMIC FORM

	FEATURE	546		F.S.	totals					
Sand Tempered										
				BODY						
Type	0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Coarse Sand Plain			72	38.2	88	226.4	7	95.8	1	33.4
Fine Sand Plain	1	0.2	25	12.2	17	38.5	6	83.2		
Fine Sand Incised			3	2.7	1	3.9				
Lamar Plain							1	7.9		
Lamar Incised					2	4.4	1	10.3		
Lamar Comb Stamp					1	3.1				
				RIM						
Type	0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Coarse Sand Plain			1	0.8	1	1.5				
Fine Sand Incised					1	4.8				
Lamar Plain					1	5.4				
Lamar Incised					1	1.5	2	19.9	1	32

1EE89 PROTOHISTORIC CERAMIC FORM										
	FEATURE:	546		F.S.	totals					
Shell Tempered										
				BODY						
Type	0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Coarse Shell Applique					3	3.5				
Coarse Shell Plain	1	0.1	59	19.3	34	44.8	6	41.1		
Fine Shell Plain			3	2.5						
				RIM						
Type	0>1/4	g	1/4>1/2	g	1/2>1	g	1>2	g	2>4	g
Coarse Shell Applique			1	0.9						
Coarse Shell Plain			1	1						