

The University of Southern Mississippi
The Aquila Digital Community

Honors Theses

Honors College

Spring 5-2014

**Religious and Ceremonial Microartifacts from the Winterville
Archaeological Site (22WS500)**

Caitlyn E. Burkes
University of Southern Mississippi

Follow this and additional works at: https://aquila.usm.edu/honors_theses



Part of the [Archaeological Anthropology Commons](#), and the [Other Religion Commons](#)

Recommended Citation

Burkes, Caitlyn E., "Religious and Ceremonial Microartifacts from the Winterville Archaeological Site (22WS500)" (2014). *Honors Theses*. 249.
https://aquila.usm.edu/honors_theses/249

This Honors College Thesis is brought to you for free and open access by the Honors College at The Aquila Digital Community. It has been accepted for inclusion in Honors Theses by an authorized administrator of The Aquila Digital Community. For more information, please contact Joshua.Cromwell@usm.edu.

The University of Southern Mississippi

Religious and Ceremonial Microartifacts from the Winterville Archaeological Site
(22WS500)

by

Caitlyn Burkes

A Thesis
Submitted to the Honors College of
The University of Southern Mississippi
in Partial Fulfillment
of the Requirements for the Degrees of
Bachelor of Arts
in the Department of Anthropology and Sociology
and the Department of Religion

May 2014

Approved by

H. Edwin Jackson, Ph.D., Thesis Adviser
Professor of Anthropology

Daniel Capper, Ph.D., Thesis Adviser
Professor of Religion

H. Edwin Jackson, Ph.D., Chair
Department of Anthropology and Sociology

David R. Davies, Ph.D., Dean
Honors College

Abstract

The Winterville Archaeological Site (22WS500), located near Greenville, Mississippi, served as a ceremonial center during the Mississippian Period (approximately 1000-1500 AD). Originally consisting of twenty-three or more mounds, Winterville was a significant social and religious gathering place and was home to the elite classes of the society. This study analyses microartifacts from two locations on the site, leading to comparisons and conclusions of the types of religious activities occurring at each. Mound C was home to an elite group while Mound B likely served as a temple or religiously significant mound. The findings indicate that elites and elite mounds played a special religious role in Winterville society and were more accessible to the masses than Mound B may have been. The study explores the role that elites may have taken in Mississippian religious practices by drawing comparisons with ethnographic research from other Native American groups.

Keywords: Winterville, Mississippian, religion, elites, mounds, ritual

Table of Contents

List of Figures.....	vi
Chapter 1: Introduction.....	1
Chapter 2: Literature Review.....	4
Mississippian Culture and Characteristics.....	4
Winterville.....	9
Microartifact Analysis.....	14
Research Strategies and Problems.....	15
Chapter 3: Methodology.....	17
Chapter 4: Results.....	21
Chapter 5: Discussion.....	24
References.....	30
Appendix A.....	34

List of Figures

Figure 1: Artist's reconstruction of Winterville.....	1
Figure 2: Map of Winterville showing the proximity of Mound B and Mound C.....	18
Figure 3: Clay floor from Mound B.....	19

Chapter One: Introduction

Mississippian cultures (approximately 1000 to 1500 AD) were highly complex, with multifaceted chiefdoms, highly organized mound centers, and elaborate ritual elements. For Mississippian groups that lived in present-day Mississippi, relatively little archaeological work has been done with regard to the ritual and ceremonial activities. This project focuses on analyzing artifacts and sifted particles from an archaeological mound site called Winterville (Figure 1), constructed as a ceremonial center between 1200 and 1250 AD (NPS 2013), to determine the location or extent of various ritual and ceremonial activities among these cultures, especially the elites. There is no evidence of large populations living on the site, but it thrived for about three hundred years as a large gathering place, where there were originally about twenty-three mounds (MDAH 2013). With several layers of construction, as a ceremonial center, Winterville has much to offer toward knowledge of Mississippian religious practices.

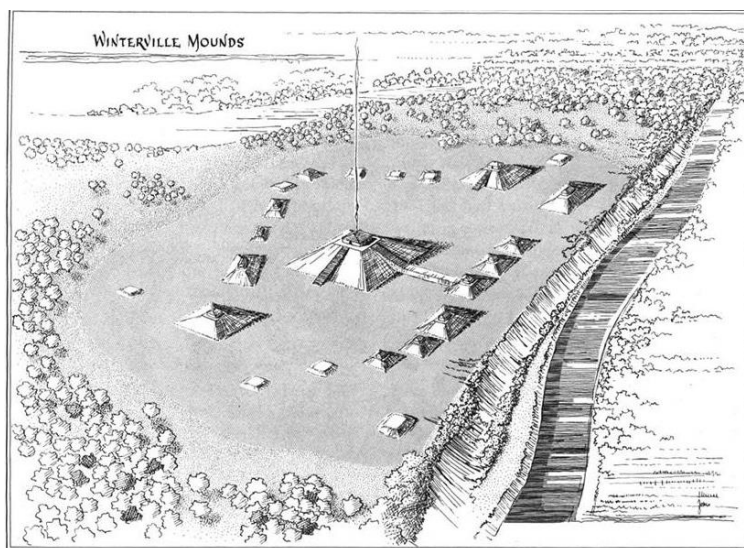


Figure 1 Artist's reconstruction of Winterville. From Brain 1989.

In brief, bags of small artifacts and residue from fill screened through window mesh from various promising excavation units were sampled and analyzed to determine the presence of items indicative of rituals, such as pigmentation,

animal bones, and any other extraordinary finds. Microartifact analysis is time-

consuming, but it can lead to results that could be missed otherwise if one focuses solely on the larger finds. With this extra layer of findings, this study aims to increase the very limited amount of information that is known about Winterville and the activities there. Because structures and objects were periodically destroyed, large remains are harder to find, and microartifacts may provide clues to things that would be missed otherwise.

The aim of this study is to contribute to the information and conclusions about the people who lived at and around the Winterville site. Better insight into their religious practices, including how they compare to contemporary groups of the time, will help to further the work being done on the site and our understanding of the culture that constructed, used, and lived near the mounds. In addition, this study highlights the importance of looking at site locations other than mounds that probably served a specific religious function for a fuller picture of religious activity at Mississippian sites. The literature on this site in particular is limited to Jeffrey Brain's initial report, two Master's theses, one Honors thesis, and several unpublished reports. Until now, most of the work has centered on chronology, faunal remains, or economic dimensions of the site. However, there is much to be gained by an analysis of this Mississippian ceremonial center.

By looking at the religious dimensions of this site, which was one of the main uses for any mound center, one can gain more insight into how prehistoric groups in Mississippi lived and how they understood the world around them. This research will help to determine if the elites on Mound C at Winterville, and people who would have been living near the mound, had any ritual activities that differed greatly from the activities practiced on Mound B, which was probably the location of the temple structure.

The location of elites puts them in a unique position. They most likely had their own household rituals, into which this study will provide insight, but the mounds were also places of communal, public ritual as well. With this in mind, a microartifactual analysis of the fill from various levels of the mound will expand knowledge of the entire Winterville culture.

Chapter Two: Literature Review

Mississippian Culture and Characteristics

This study focuses on the Mississippian cultural period, which, according to Charles Hudson (1978), lasted from between 700 and 900 AD to about the time of European contact in the fifteenth and sixteenth centuries. The tradition began at Cahokia, in present-day Illinois, and spread in all directions (Hudson 1978: 77). These groups are called *Mississippian* because they began in the Mississippi River Valley and spread throughout much of the eastern United States. John Swanton (1946: 654) argues that in most contact-period groups in this area, descent was matrilineal, and many tribes were divided into two “moieties,” which determined one’s marriage partner (because the groups were exogamous) and led to a functional division among each tribe (663-664). Mississippian people built homes made from logs, cane, and clay and used a combination of farming, hunting, and gathering for subsistence (King 2002). The houses were generally rectangular with walls placed within wall trenches (Hudson 1978: 91).

Mississippian groups are known for their earthen pyramids reflecting the development of hierarchical social-political systems (King 2002). These mounds of earth, created by carrying basketfuls of dirt, emptying them, and then stomping them down, could serve as platforms for “temples or mortuaries, chiefs’ houses, and other important buildings” (Hudson 1978: 78). The mounds grew because periodically the structures on top of them would be destroyed and a new layer of earth placed on top before constructing a new structure (Hudson 1978: 78). Further, mounds were generally arranged around a large plaza.

Mississippian culture reached its prime around 1200 AD, with ever-increasing territory and larger mound complexes (Hudson 1978: 84). There have been a striking number of similar artifacts from various sites, leading to the creation of the concept of the Southeastern Ceremonial Complex, which “impl[ies] a set of shared religious beliefs which were held by Mississippian people” (Hudson 1978: 86). In the artifacts, there appear to be similar costumes and symbolism, including, among others things, the feathered serpent and scalloped edge designs (Hudson 1978: 87-88).

Artistic artifacts also speak to the elaborate religious beliefs and practices. In fact, F. Kent Reilly and James Garber, when discussing the importance of Mississippian art and the recurring styles among various groups, argue, “This Mississippian Period artistic tradition consists of the artifacts, symbols, motifs, and architectural groupings that provide the physical evidence for the ritual activities practiced by the numerous ethnic groups comprising the demographic and cultural landscape of the Mississippian Period” (2007: 1). This recurrence shows that there was some degree of continuity between distinct and distant Mississippian groups.

In addition to archaeological artifacts, much of what is known about Mississippian religious practice comes from ethnographic sources during the beginning of European contact in the region. An important religious aspect in these sources was purity and the idea of balance in the universe. Negative aspects that would disrupt the balance, such as witchcraft, were a great fear of Native Americans (Hudson 1978). Because of notions such as these, Mississippian cultures were very ceremony-oriented in order to maintain that balance. In addition, Mississippian groups were shamanistic, with

a belief that many illnesses had supernatural causes (Swanton 1946: 782), emphasizing the importance of religion in everyday life.

Because of the artifact continuity between groups, many of the religious beliefs were likely very similar. George Lankford, in his essay about cosmological motifs, describes a layered understanding of the universe which extends into the Above World and down to the Beneath World, leading to reverence for the sun and some version of a great serpent that often occupies the Beneath World in Mississippian traditions (2007: 8-38). Maintaining balance through ceremony was key. Further, the idea of ritual purity was equally important. David Dye, in his discussion of Mississippian warfare (2007: 152-173), argues the importance of ritual purity before and after a battle, including the drinking of what is called black drink (made from yaupon holly). As illustrated by these cases, ritual activity was important in virtually every aspect of life, not just specifically “religious” contexts.

In studying a ceremonial center, it is important to understand what gathering at these places may have meant to the participants. As shown by many studies and excavations, Mississippian groups often depended on one another. For example, Pauketat and Alt (2004) studied a cache of axe-heads found at a site in Illinois called Cahokia. They wanted to see how making, trading, and burying the axes brought the groups together and created “cultural identities.” In fact, they conclude that “axe-head makers or possessors were involved in a series of production and distribution practices and commemorative rituals that... embodied a ‘coming-together’ process that created the centralized early-Cahokian polity and its agricultural landscape” (Pauketat and Alt 2004:

780). A similar phenomenon, but on a much smaller scale, may have been going on at Winterville, given its role as a ceremonial center.

Mississippian religions are also defined by their use of priests and were organized in a fairly strict manner. Knight, Jr. (1986) holds that there were three main cult institutions. He defines a cult institution as “a set of rituals all having the same general goal, all explicitly rationalized by a set of similar or related beliefs, and all supported by the same social group” (1986: 675). Knight, Jr. (1986) breaks these groups into the communal cult that emphasizes fertility and purification; the chiefly cult that, through practice, adds to their power and authority; and the priestly cult that acts as a mediator between the other two and handles death and ancestor worship. These cult groups were involved in various ritual activities.

Ritual feasting seems to have played an important role in Mississippian cultures. Pauketat et al. (2002), in their examination of a pit at Cahokia next to the Grand Plaza, concluded that the stratified layers of refuse were associated with large gatherings. Based on findings such as human remains, food residue, pots, and craft waste, they posit that public rites and festivals were held around the area of the pit. The presence of exotic goods and plants that were not used as food combined with the presence of commonplace pottery suggests that it was involved in some sort of gathering, possibly religious in nature (Pauketat et al. 2002).

One reason that religion became so uniform and prominent during this time was the strictly regulated social structure, namely complex chiefdoms. Chiefdoms are defined by anthropologist Robert Carneiro as “autonomous political units comprising a number of villages or communities under the permanent control of a paramount chief” (1981: 45).

Chiefs, by their very existence, contributed to the growth of religion and ritual practice, and the presence of these rituals served to build up the chiefs' power. As Blitz (1993: 81) states, "In any examination of how the temporary 'big man' role of intensifier and provider could become institutionalized as a formal office of chief, the social manipulation of surpluses within a ritual format is of critical importance." For example, the historical Natchez probably lived in much the same way as prehistoric Mississippians. The Natchez believed that their chiefs played a role in the supernatural world, even helping the sun to rise every morning (Capper 2012), and this crucial attribute illustrates the religious power that the elites were believed to hold. Further, Randolph Widmer, citing ethnographic evidence among the Calusa, argues that the chief and priest alone were thought to have special, esoteric religious knowledge that legitimized the chief's authority (1994: 147).

It was under the direction of the chiefs and elites that Mississippian groups were able to build numerous mound complexes. These were used variously for ceremonial, ritual, or even political use. Some studied sites show evidence of feasting, burial, or simply ways for elites to show off their power and prowess. Cobb (2003) says, "Ethnohistoric evidence reveals that the construction of mounds in successive stages evoked purification and renewal and simultaneously reconstituted authority for those individuals or lineages who occupied the top of a mound with each new addition of a mantle."

Worth noting, Knight, Jr. (2004) in his study of Moundville, differentiates acutely between elites who were essential because of their control of crafts (such as artisans and ritual leaders) and those who separated themselves from common people, showing the

varying and important roles that elites played. Given this important role, a study of elite religious activity is an enlightening exercise. While previous religious investigation of Mississippian people has centered on the activity of the priests and temple areas, the elites seem to have shaped Mississippian religion as well, through activities such as hosting feasts and controlling the production of certain objects.

An example will illustrate this point. In 1911, John Swanton of the Bureau of American Ethnology compiled a book of previous ethnographic accounts of Native Americans in the Lower Mississippi Valley. In his chapter about the Natchez, the section devoted to religion almost entirely consists of descriptions of temples and temple guardians (Swanton 1911). There is very little attention to other locations that may have played a religious role. Of course, the Native Americans of the contact period did not live exactly as their Mississippian ancestors, but this sort of ethnographic research set the tone for later research. Therefore, a study showing the differences in evidence of religious activity of a religiously significant mound versus an elite mound will show that there may have been more activity at the elite mound.

Winterville

The specific focus of this study is on a site in Washington County, Mississippi, called Winterville, located in the Yazoo Basin (Brain 1989: 11). It is strategically located between the Mississippi River and Deer Creek (Brain 1989: 14), which would have made it an important center to the smaller groups in the region. According to evidence from excavations done at the site, it was a village site that grew to become a mound center at the beginning of the thirteenth century (Jackson 2007b). The National Park Service says that the complex is about forty-three acres, and the tallest mound is fifty-five feet high.

There were originally at least twenty-three mounds, although a significant portion of the site was destroyed by modern-day farming in the area before it became a state park (NPS 2013). According to the Mississippi Department of Archives and History, Winterville was used by a complex civilization that thrived from around 1000 to 1450 AD (MDAH 2013).

There is also evidence that the common people lived outside of the mound area on farms throughout the Delta, with a small number of elite officials living on the mounds themselves (MDAH 2013). An important point that must be stressed, however, is that Winterville itself had a low population density, indicating its primary use as a ceremonial center, not a village that many people occupied (Brain 1989: 110). Dr. Ed Jackson has found through excavations that the mounds were inhabited by the elites who may have played a role in ritual activity (Jackson 2006).

Excavations have turned up intricately decorated ceramics and even human burials (Brain 1989). Wall trenches and postholes have also been uncovered, showing that many structures and houses were located on many if not all of the mounds. Winterville has its roots in a cultural tradition called Plaquemine, which Brain places as a short period between the Mississippian cultures that are known from the contact period and the earlier Coles Creek tradition (1989: 93). Jackson's excavations have shown that there was a large amount of shell-tempered ceramics being produced as early as 1200 AD, around the beginning of mound construction, leading to the conclusion that, by this time, the people at Winterville were diverging from these roots and evolving into a more Mississippian-aligned culture (2007b). Winterville is unique in many ways because it

contains a mix of artistic and cultural elements from other northern and southern groups (Brain 1989: 105).

In addition, the stratification of the mounds indicates many “occupational and constructional episodes” (Brain 1989: 95). This can create problems because fill was sometimes brought in from other places and already had other cultural material in it, which was then placed out of context in the new addition to the mound. In addition, differing wall trenches and postholes have been excavated and may illustrate different stages of construction (Jackson and Kowalski 2010).

One important find from Winterville included two large pit features close to two of the mounds, Mounds D and F. These pits were possibly trash pits from large feasts (Kowalski et al. 2009). One of the pits dated to the beginning of the period of intense mound construction, and the other dated to the end. This period of heavy construction was between 1200 and 1350 AD (Kowalski et al. 2009). One of the pits measured four meters in diameter. Jackson posits that this large size suggests that the dirt from it was used for constructing a nearby mound. Interestingly, the early pit has a stratigraphy that indicates that it began as an oven for cooking food, then, when preparation was over, it was used to hold the trash from meal preparation. Afterward, the refuse was covered with dirt, and the cycle was repeated (Kowalski et al. 2009). About these feasting activities, Kowalski et al. (2009) argue that the “capacity of emerging elites to muster the resources to feed their followers as they labored in mound construction was a prerequisite for their position on the plazas of polity centers.” The pits also contained cooking and serving vessels (Jackson 2007c). Further, Jackson says that the late pit contained protohistoric ceramics, confirmed with carbon dating. This shows that ritual activity at

Winterville occurred into the sixteenth century. In addition, and indicative of further feasting, “large deposits of weathered deer bone appear to have been left on the surface for a long time before being covered in the next construction phase” (Jackson 2007b). This kind of evidence points to the role that the elites on the mounds would have played in large gatherings.

This study will analyze material from the elite structures on Mound C. According to the report of the 2005 excavations at Winterville (Jackson 2006), little is known about the activities of the elite families that lived on top of the mound structures. However, these excavations turned up possibly religious artifacts such as stone disks and pieces of red ochre. Ed Jackson and Jessica Kowalski (2010) discuss a find from Mound C, a discoidal (stone disk often called a chunky stone, part of a ritual game similar in significance to ball games played among the Maya and Aztec) that was intentionally broken before it was discarded. This could indicate that the residents of Mound C played an important role in ritual life. Mound C also turned up animal head rim adornos that would have decorated special vessels of pottery, “point[ing] to either special function ware or high status vessels” (Jackson and Kowalski 2010). At Winterville, some non-local lithics and ceramics have been found (Jackson and Kowalski 2010), indicating the possibility of a strong trade network.

It has been posited that the people of Winterville practiced ritual burning of their structures in order to cleanse them and make way for new construction. Jackson (2008) found that in one instance, the charred remains of a burned structure were pushed into a storage pit. Evidence that it was disposed of immediately after destruction is that the plant material in the pit was burned by the still-hot refuse. This, to some degree, shows

the intentionality of destruction by fire; the residents were prepared for the fire and were able to quickly dispose of the remains before they had even cooled. Although Brain posited that a large fire led to the decline of the site, research such as Jackson's suggests that the fires were ritual in nature and not from a single burning event (Jackson, personal communication, 2014). Excavations show that the people were flourishing and continuing to perform ritual activities even after 1400 AD. Nonetheless, Winterville was mostly abandoned by about 1500. An examination of subsequent settlement patterns suggests that the Mississippian culture as a whole was becoming more fragmented at the time and far less centralized (Brain 1989).

During the summer of 2013, I attended Dr. Jackson's field school at Winterville where I was able to gain not only archaeological experience but also a better understanding of the site and its layout. The unit in which I worked was a fifty centimeter-wide trench across the top of Mound B, from which I drew many of the samples for this study. The goal of the trench was to build on previous excavations that contained evidence of a burned clay floor. In excavating a long, narrow trench (versus a square unit), the goal was to determine the extent of that clay floor to accurately gauge the size of the structure. Mound B was likely an important religious site at Winterville, based on Brain's finding of a large number of burials at the base of the mound (1989: 33-34). In these excavations, he found sixteen burials, half of which contained grave goods. Further, because of the lack of refuse and evidence of human occupation on and around these burials, Brain suggests that Mound B may have "had special significance and was therefore kept ceremonially clean" (Brain 1989: 37). For this reason, I will be comparing

samples from Mound B with samples from the elite structures on Mound C, discussed previously.

Microartifact Analysis

Microartifact analysis involves examining the tiny cultural remains that often are passed over in the research process. Artifacts that cannot be collected individually are usually ignored or stored away in the recesses of a lab. Despite this, “Small artifacts represent the single largest untapped data source available to archaeologists” (Dunnell and Stein 1989: 39). To understand what microartifacts are, it may be important to note Robert Dunnell and Julie Stein’s (1989) decision that microartifacts fall roughly within the range of 0.25 mm and 2 mm. Further, they say that microartifact analysis is not very widely used as a research strategy, although perhaps it should be. One advantage of this approach is that it uses very little equipment (Dunnell and Stein 1989) and is very cost effective. In addition, “transport agents” (occupants, artifact collectors, animals, etc.) are more apt to move larger artifacts while the microartifacts are left behind, giving a fuller picture of what was going on at the site (Dunnell and Stein 1989). Plowing, which has disturbed much of the Winterville site, has less of an effect on microartifacts laterally, although it can still disrupt the stratigraphy of a site (Dunnell and Stein 1989).

In her microartifactual study of two sites in the Middle East, Arlene Miller Rosen (1993) concluded that the microartifacts gave her a “fine-tuned perspective of daily-life activities” as well as “indicators of site formation processes... that [are] unattainable from the larger remains.” Further, she says that the pieces and fragments embedded in the floor layers are “an *in situ* record of room use through time” (Rosen 1993: 147). She posits that this gives the potential to compare uses between specific places on the site.

Research Strategies and Problems

Archaeological research can take many forms. A major problem with studies of Native American groups is that there tends to be a high degree of overgeneralization between them. With religious studies in particular, many people feel that religion is “inaccessible through material remains” (Brown 1997: 470). Critics feel that it is difficult to make religious assumption based on artifacts alone. Because of this, Brown (1997) argues that ethnography must play a role. He argues that, in order to learn about prehistory, researchers must use what is known about historic groups. Ethnographic analogy cannot be conclusive because there is no way to know if two groups from different times did the same things. However, Baltus and Baries (2011: 171) argue, “certain concepts, practices, and ways of life were so pervasive and widely dispersed at and after the time of European contact as to suggest deeper historical bases.” Many scholars accept this as a viable strategy for studying Native Americans.

Generally, artifacts and sherds are analyzed in the context of where they were found (i.e. at the mound versus at the village), as well as potential functions for such an artifact (Brown 1993: 83-84). This leads to conclusions about where certain activities were occurring and what areas of a site were important for which reasons. The presence of exotic materials can also show that the people were either traveling widely or trading with other groups. Similarly, animal remains can indicate locations of heavy feasting, which is often associated with ritual activity. For these reasons, I argue that ritual activity can and should be studied through material remains, especially among Native American groups that left behind a plethora of religious material culture.

In addition, there has been concern lately that the ways of understanding these groups are outdated and no longer useful. In the past, the whole of Mississippian art and style was encompassed under what is called the Southeastern Ceremonial Complex. Knight, Jr. (2006), however, argues that this way of looking at things causes researchers to see all Mississippian groups as one and the same, when this is simply not the case. He says that the old, overgeneralized list of artifact styles and motifs leaves researchers stuck within certain parameters and has ceased to be productive. In light of these concerns, it is necessary to study smaller ceremonial centers such as Winterville specifically to see how well they fit with the conclusions drawn about larger mound sites such as Cahokia and Moundville. Though Mississippian groups fit into the same cultural category, it is important to keep in mind that there may be differences between the individual groups from the areas around particular mound centers.

Chapter Three: Methodology

Dr. Ed Jackson of the University of Southern Mississippi leads a summer field school biannually, usually at Winterville, where students have the opportunity to participate in archaeological excavation. This study used material from these field schools. When the excavation pits are dug, the fill is first run through a screen with quarter-inch mesh and then through a fine (usually sixteenth-inch) screen. What remains after the dirt has been removed is bagged and labeled. This residue can include things such as tiny animal bones, pieces of daub from destroyed houses, and stone flakes. These microartifacts are usually passed by for reasons discussed above. This study, however, focuses on those microartifacts. Microartifacts offer information about everyday life as opposed to extraordinary events. The benefits of such an analysis have been outlined in the literature review. It is important to note that this study does not consider *macroartifacts* because the emphasis of this project (and thus the use of *microartifacts*) is on common acts done in and around homes that may have had religious significance. Microartifacts are a good source for information about common (versus rare or special) events.

There are, however, downsides to this methodology. First, it depends in part upon the habits of the people using the homes. If a certain structure was kept cleaner than others were, it may be difficult to find many microartifacts. I would argue, however, that even this fits well with the aim of this project in that the care that people took in maintaining a certain structure indicates that it was of special importance to them and thus of potential religious significance. A second potential problem, given the small nature of these objects, is that it may be difficult to determine the exact purpose.

However, by looking at the density of the objects and comparing them across excavation units, I feel that generalizations can be posited with a relative degree of reliability.

In particular, the study looks at the fill from places on the site that have been established as elite houses, houses that were constructed on or near the mounds themselves. Material was drawn from two distinct locations on the site. The majority of the sample came from Mound C and the surrounding area. This area had a dense concentration of elite houses from several construction phases. Both the 2009 and the 2011 field seasons included excavations at Mound C. The 2009 season included excavation units on top of the mound, on the east side, and on the north side (Jackson and Kowalski 2010). The 2011 season followed this line of research with additional units on the summit of Mound C.

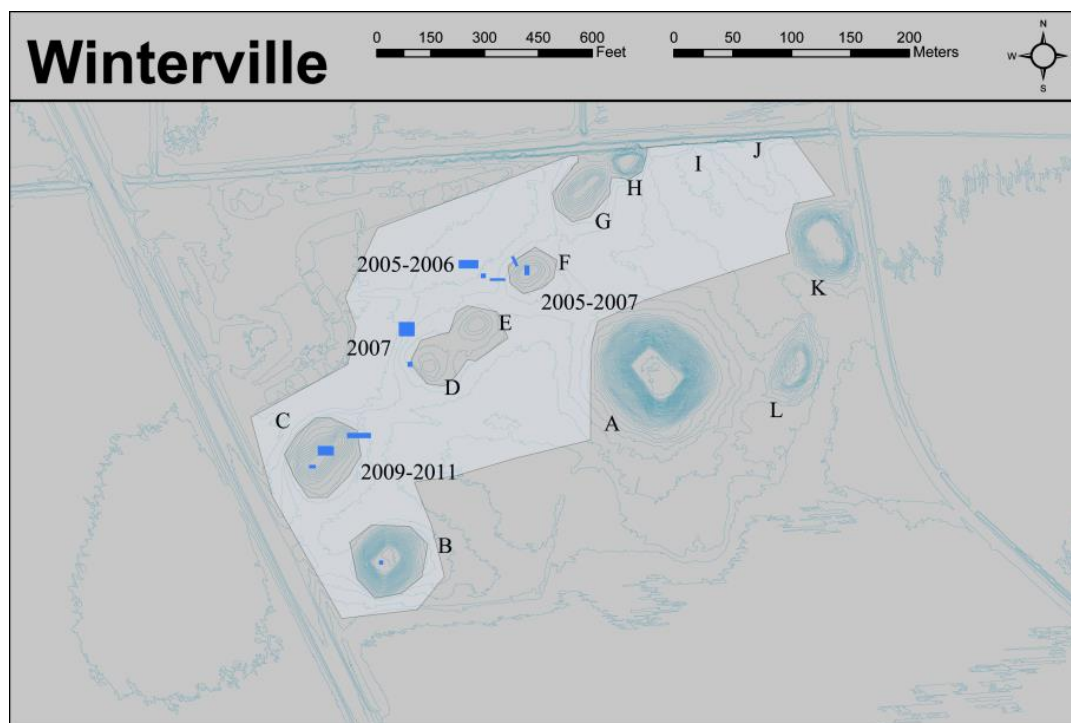


Figure 2 Map of Winterville showing the proximity of Mound B and Mound C. Created by Jackson.

A smaller sample was taken from Mound B, probably the temple mound. Mound B is located close to Mound C. Figure 2 shows the locations of the mounds and their proximity to one another. The samples from Mound B were used to provide a contrast between what microartifacts and their densities were deposited in the temple versus elite homes. Given that the focus is the homes and the temple was used for comparison, the sample from Mound C is larger.

Dr. Jackson has helped, through an examination of the field notes, to identify areas of excavation that may prove particularly fruitful. We picked excavation units and levels that were directly upon or around house floors. The floors were either made of baked clay or the clay was baked by the fire when the structures burned. Figure 3 shows the baked clay floor on the summit of Mound B. The matrix on top of these floors would have contained the microartifacts that were on the floor at the time of destruction or abandonment of the structure.



Figure 3 Clay floor from Mound B. Photo from Jackson's 2013 field season.

From the corresponding bags of fine screen-recovered material, a twenty-five percent sample was taken using a riffle sorter, which splits the sample into two equal parts in a

random manner that eliminates bias and increases accuracy. These samples were bagged and labeled with the provenience (archaeological term denoting specific place of origin) information. Each twenty-five percent sample was then analyzed on its own. An eighth-inch screen was used to separate the smallest parts of the sample, and then the remaining part was sorted according to material (such as bone/fish scales, clay and daub, charcoal, stone flakes, ochre, etc.). Each type of material was weighed and bagged separately, with careful attention to correct labeling. After sorting, the amounts of the various materials were compared to determine if there were areas of heavy use of a particular material.

Dr. Daniel Capper, professor of religion at the University of Southern Mississippi, assisted with locating the appropriate ethnographic sources to make the religious interpretations of the findings. Using ethnographic information, I was able to draw conclusions about various ritual activities. For example, areas with large amounts of animal bone could indicate places of ceremonial feasting, and high amounts of ochre and pigments used for making paint could indicate a wide array of ritual activity from performance using body paint to the painting of pottery.

Chapter Four: Results

In total, fifty-seven bags from Winterville were sampled. Ten came from the summit of Mound B, and forty-seven came from various locations on and around Mound C. For each bag sampled, the contents were separated by type of material. Before sorting, anything smaller than one-eighth of an inch was removed using a screen. The remaining materials included clay/daub, charcoal, bone, ceramics, lithics, ochre, and an occasional unique item such as quartz crystal, a turtle claw, and squirrel teeth. A table including the totals of each material type can be found in Appendix A. The total weights of the sample bags ranged from 24 grams to 539 grams. Given the large range of sizes, Appendix A includes percentages for comparison purposes.

The amount of objects that were less than one-eighth of an inch in size ranged from 36.46 percent to 58.65 percent by weight, and all of the samples seem to be fairly consistent with no values that stand out. From this point, the materials under study were separated and analyzed. The values of clay/daub were the highest comparatively owing to the fact that the locations for the study were house or structure floors, and the daub from the structures, which made up the walls and floor, was included in the matrix. The percentages of daub ranged from 30.02 to 61.88. The samples from Mound B contained a high amount of daub (all over 40 percent), while the Mound C samples ranged widely, most likely owing to the greater sample size from Mound C. The next most common material was charcoal. Most of the samples included less than one gram of charcoal, and the percentage of the total sample ranged from zero to 1.5. As organic matter, charcoal was the most fragile material analyzed, and it would have been the least likely of the

materials to survive until present-day. Virtually no charcoal was found in the Mound B samples.

The next material recorded was bone, generally small animal and fish bone, including fish scales. Larger remains would not have been included in the fine screen samples. The amount of bone ranged widely from zero to 30.5 grams, with the percentages ranging from zero to 12.74. Again, Mound B had very little bone. The largest concentrations of bone seem to have come from excavation units S93W8 and S91W8, which were located on the northeastern side of the Mound C summit. These two units stand out for having over ten percent bone in the samples. The ceramics in each sample ranged from zero to 2.78 percent, with Mound B having very small amounts. The amount of ceramics was small throughout the samples, however, with the largest amount being only 4.9 grams. The samples contained fewer lithics than ceramics, with a percentage range of zero to 1.56. Of the ten samples from Mound B, only three contained lithics while all but five of the forty-seven Mound C samples had lithics. The only units that stand out for lithic concentration are S93W10 and S91W8 on Mound C, but the small numbers from the entire sample are not conducive to any conclusions about these two units.

The last regular material, ochre, was only present in twenty-five of the fifty-seven samples, and the largest weight was only 0.3 grams. The largest amount in terms of grams and percentage came from Mound C. Overall, the presence of ochre was small. Mound B contained one type of material that Mound C did not, a pumice-like material made from the fusion of heated sand. Every unit from the Mound B sample contained this, and the highest percentage of a single sample was 6.28 percent. There were three

additional finds that were unique to certain samples. Mound C contained both a small turtle (probably snapping turtle) claw and a squirrel tooth, most likely left over from food consumption. One of the samples from Mound B, however, contained a small piece of yellow quartz crystal. From these results, though there were few extraordinary finds, conclusions can be drawn and will be discussed in the following chapter.

Chapter Five: Discussion

The findings of this study indicate the complexity of religious practice at Winterville. By comparing the materials on the floors of the elite home structures on Mound C with the materials in the temple structure atop Mound B, several disparities emerge. These differences lead to the conclusion that religious practices in the two locations were distinct, despite their close proximity. The elites living on Mound C seem to have played a different religious role in the community than did the temple priests and may have sponsored several religious events. For this reason, I argue that the elites may have been more religiously active and connected with the community than the priests of the temple.

The evidence on Mound B is marked by its scarcity. In addition, the samples from Mound B are much smaller compared to those from Mound C. This leads to the conclusion that the temple was kept relatively clean. Even ochre, a material that one would expect to find at a religious site, was barely present on Mound B. The comparative lack of ceramic, lithic, and bone debris indicates that Mound B was not commonly used for daily activities. The samples from Mound B also contained a small piece of quartz crystal, which would have come from a considerable distance. This type of stone is not native to the area and would have had to be transported to Winterville. In an analysis of quartz crystal at the Toltec Mounds in Arkansas, Hoffman (1998: 59) argues that the quartz crystal found there probably came from mountain sources and would have required more effort to obtain it compared to other, more local lithics. This is indicative of wealth and status, though it is difficult to draw conclusions based on such a small piece. The high concentrations of daub found on Mound B show that the structure

on top of it was moderately large. That, combined with the size of the mound itself (the second largest on the site), indicates the temple's important status on the site.

Further, every sample from Mound B contained the pumice-like material caused by high heat while none of the samples from Mound C did. This material was likely caused by the large fires that were used to destroy the temple structures periodically, probably in the context of ritual cleansing. Mary Beth Trubitt compares the destruction of important versus common buildings at a Caddo site in Southwest Arkansas. She points out that the non-mound buildings were less likely to have been burned than the structures on the mounds (Trubitt 2009). Further, she says that the burned mound structures were usually covered over with a layer of "clean fill." She posits that this stark contrast between how they handled non-mound versus mound structures indicates that there may have been a ritual reason for the difference. Even the modern Caddo groups, she concludes, use fire and smoke as a way of ritual cleansing (Trubitt 2009: 244).

In another comparison, Baltus and Baires discuss the role of fire at Cahokia (2012). Fire, they argue, "was considered to be the most beneficial of life-giving and sustaining forces" among many early groups in this area and was thought to have been a gift from supernatural beings (Baltus and Baires 2012: 172). The sacred fire had renewal properties and may have been symbolic of the sun. In taking Cahokia as a case study, they posit several reasons for intentional burning of structures. For buildings that were cleaned out prior to burning, the burning may have signified the decommissioning of the structure (Baltus and Baires 2012: 179-180). For other structures, however, they posit that the people were using fire to connect with otherworldly beings because of the inherently sacred nature of fire (2012: 181). For these reasons, and given the deep

spirituality involved in such an act, I argue that Mound B was a sacred location (compared to Mound C) frequented by privileged persons only and not available to the general public that visited Winterville.

Mound C and the surrounding area, however, seems to have been much more active and frequented by more people. The materials found from units in this area were much more varied and dense. The first major difference from Mound B is the large amount of animal bone. Because this study looked at microartifacts, the bone mainly included small rodent bones, fish bones, and fish scales. In addition, more detailed inspection revealed that many of the objects among the charcoal on Mound C were actually burned corn kernels. This adds to the conclusions that food consumption and food production were prominent activities on and near Mound C. Without more detailed analysis of the larger artifacts from this area, it is difficult to draw definite conclusions, but given that these were elite structures and that some areas exhibit comparatively heavy concentrations of bone and the presence of ceramic fragments, it is likely that there were feasting activities happening on and around Mound C.

In *Searching for the Bright Path*, James Carson argues that the Choctaw culture emerged out of the Mississippian groups that preceded it (1999: 9). Therefore, Choctaw cultural patterns might be a source of information about Mississippian ideas. Because of this relative continuity, an example of Choctaw feasting practices is appropriate. Carson says that upon the ripening of the corn, Mississippian groups as well as the Choctaws that developed later would gather for green corn ceremonies. This is a purification ritual in which houses are cleaned, old things are thrown out, and rituals are preformed to cleanse the group for the new year ahead (Carson 1999: 21). The people would gather early in

the morning, and the men would drink an herbal mixture intended to make them vomit and therefore, clean themselves out (Lewis and Jordan 2002: 163). Throughout the day, there would also be various games and dances. Young boys were also given new names at this ceremony, and old disputes were settled. Swanton writes that the ceremony may have lasted three or five days, although the details among various groups are unclear (Swanton 1931: 222). The ceremony then ends with a feast, in which everyone contributes (Swanton 2000). Swanton goes on to comment that other ethnographers have mentioned that the Choctaws held several feasts throughout the year, and they were always in conjunction with games and dances (1931: 224). The elites from Mound C at Winterville very likely hosted similar festivities involving communal dancing, games, and food consumption. Keeping in mind that Winterville was a ceremonial center with a low population living on the site proper, people from the surrounding farmlands would have left their homes to come to these festivities; therefore, it would have been necessary for the elites living at the site to serve as hosts during the several day span when the commoners were away from their own homes.

The samples from Mound C also had a large concentration of lithic material as compared to Mound B. This could indicate some sort of craft activity at Mound C, corroborating the idea that Mound C was more open to the public and frequented more often. Ochre was also present on Mound C. This material often played a religious role in Mississippian culture. The importance of pigmentation and coloring more generally can be seen in a comparison with the Choctaws of Mississippi. Carson describes the red and white clans of the Choctaws. The red clan was prominent in war time, and the white had more civic responsibilities; both clans had important religious functions as well. These

color distinctions may have also been important among Mississippian groups. John Blitz connects these clans with the abundant use of the colors red and white in Mississippian art, arguing that the clan distinction may have already been in use at this time (Carson 1999: 15). Given the presence of ochre on Mound C and the relative lack on Mound B, it appears that Mound C was more active than Mound B, at least in production of religious or possibly clan-affiliated objects and materials.

With these findings, the evidence indicates that elite mounds play a more important role in Mississippian religion than they have been given credit for. As I have argued, the abundance of material on Mound C shows that more people and activities were present in that area. This is not to say that Mound C was more significant; rather, it was more accessible. However, there probably were political and social reasons for this as well. For example, Knight, Jr. (2004), in his comparison of Mounds Q and G at Moundville, concludes that the activities on Mound Q, an elite mound, were aimed more at showcasing their status and their powerful position in the society. He compares this to Mound G, which has been interpreted as a temple mound; instead of an outward display of status, Mound G may represent a point of exclusion where the elites use special knowledge and practice special functions to which the commoners would not have had access. A similar dichotomy may have been played out on Mounds B and C at Winterville.

Given the sacred nature of Mound B, it may have been too sacred for common use on a regular basis. It was kept cleaner, and this lack of evidence is telling. One problem with this is that activities could have been going on at Mound B and that the people just took better care to keep it clean; this is a question that archaeology cannot answer.

However, as argued above, the cleanliness indicates restricted access. Mound C seems to have been a bustling area on the site, leading to the conclusion that religion was not purely the domain of the temple or larger mounds. For this reason, more archaeological research in the Southeast and among Mississippian culture should look beyond the temple mounds and large family mounds for religious activity.

References

- Baltus, Melissa R., and Sarah E. Baires
 2012 Elements of Ancient Power in the Cahokian World. *Journal of Social Archaeology* 12(2): 167-192.
- Blitz, John H.
 1993 Big Pots for Big Shots: Feasting and Storage in a Mississippian Community. *American Antiquity* 58(1): 80-96.
- Brain, Jeffrey P.
 1989 Winterville: Late Prehistoric Culture Contact in the Lower Mississippi Valley. Archaeological Report No. 23. Jackson: Mississippi Department of Archives and History.
- Brooks, Richard
 1965 The Feasibility of Micro-Analysis in Southwestern Archaeological Sites. *Memoirs of the Society for American Archaeology* 19: 182-185.
- Brown, James
 1997 The Archaeology of Ancient Religion in the Eastern Woodlands. *Annual Review of Anthropology* 26(1): 465-482.
- Capper, Daniel
 2012 Lecture notes. Native American Religions. REL 322 at the University of Southern Mississippi.
- Carneiro, Robert L.
 1981 The Chiefdom: Precursor of the State. *In* The Transition to Statehood in the New World. Grant D. Jones and Robert R. Kautz, eds. Pp. 37-79. New York: Cambridge University Press.
- Carson, James T.
 1999 Searching for the Bright Path: The Mississippi Choctaws from Prehistory to Removal. Lincoln: University of Nebraska Press.
- Cobb, Charles R.
 2003 Mississippian Chiefdoms: How Complex? *Annual Review of Anthropology* 32(1): 63-84.
- Dunnell, Robert C. and Julie K. Stein
 1989 Theoretical Issues in the Interpretations of Microartifacts. *Geoarchaeology: An International Journal* 4(1): 31-42.
- Dye, David

2007 Ritual, Medicine, and the War Trophy Iconographic Theme in the Mississippian Southeast. *In* *Ancient Objects and Sacred Realms: Interpretations of Mississippian Iconography*. Kent F Reilly III and James F. Garber, eds. Pp. 152-173. Austin: University of Texas Press.

Hoffman, Teresa L.

1998 The Lithic Assemblage. *In* *Toltec Mounds and Plum Bayou culture: Mound D excavations*. Martha Ann Rolingson, ed. Pp. 54-79. Fayetteville, Arkansas: Arkansas Archeological Survey.

Hudson, Charles

1978 *The Southeastern Indians*. Knoxville: University of Tennessee Press.

Jackson, H. Edwin

2006 The 2005 Excavations at Winterville Mounds (22WS500), Washington County, Mississippi. Report submitted to Mississippi Department of Archives and History.

2007a Interim Report: The 2006 Excavations at Winterville Mounds (22WS500), Washington County, Mississippi. Report submitted to Mississippi Department of Archives and History.

2007b The 2006 Excavation at the Winterville Mounds (22WS500), Washington County, Mississippi. Report submitted to the National Geographic Society Committee for Research and Exploration.

2007c Resituating the Winterville Chiefdom in the Mississippian Dynamics of the Lower Mississippi Valley. Paper presented at the 2007 Annual Meeting of the Society for American Archaeology.

2008 The Winterville Mounds Archaeological Project: Report on the 2007 Field Season at Winterville Mounds (22WS500), Washington County, Mississippi. Report submitted to the National Geographic Society Committee for Research and Exploration.

Jackson, H. Edwin, and Jessica Kowalski

2010 Chronology and Function of Mound C, at Winterville: A Report on the 2009 Season. Paper presented at the 2010 Joint Annual Meeting of the Louisiana Archaeological Society and the Mississippi Archaeological Society.

Kelly, John E.

2002 The Pulcher Tradition and the Ritualization of Cahokia: A Perspective from Cahokia's Southern Neighbor. *Southeastern Archaeology* 21(2): 136-149.

King, Adam

2002 Mississippian Period: Overview. *New Georgia Encyclopedia*.
<http://www.georgiaencyclopedia.org/nge/Article.jsp?id=h-707>

Knight, Jr., Vernon J.

1986 The Institutional Organization of Mississippian Religion. *American Antiquity* 51(4): 675-687.

- 2004 Characterizing Elite Midden Deposits at Moundville. *American Antiquity* 69(2): 304-321.
- 2006 Farewell to the Southeastern Ceremonial Complex. *Southeastern Archaeology* 25(1): 1-5.
- Kowalski, Jessica, H. Edwin Jackson, Diana Flossenier, and Peter Van Dyck
2009 The Refuse of Elite Ritual and Politics in the Winterville Chiefdom. Paper presented at the 2009 Society for American Archaeology meeting.
- Lankford, George
2007 Some Cosmological Motifs in the Southeastern Ceremonial Complex. *In Ancient Objects and Sacred Realms: Interpretations of Mississippian Iconography*. Kent F Reilly III and James F. Garber, eds. Pp. 8-38. Austin: University of Texas Press.
- Lewis, Jr., David, and Ann T. Jordan
2002 *Creek Indian Medicine Ways: The Enduring Power of Mvskoke Religion*. Albuquerque: University of New Mexico Press.
- Mississippi Department of Archives and History. 2013. "Winterville Mounds." Last modified March 20. <http://mdah.state.ms.us/hprop/winterville.php>
- National Park Service. 2011. "Indian Mounds of Mississippi." Accessed March 10, 2013. <http://www.nps.gov/nr/travel/mounds/win.htm>
- Pauketat, Timothy R., and Susan M. Alt
2004 The Making and Meaning of a Mississippian Axe-Head Cache. *Antiquity* 78(302): 779-797.
- Pauketat, Timothy R., Lucretia S. Kelly, Gayle J. Fritz, Neil H. Lopinot, Scott Elias, and Eve Hargrave
2002 The Residues of Feasting and Public Ritual at Early Cahokia. *American Antiquity* 67(2): 257-279.
- Reilly, III, Kent F, and James F. Garber, eds.
2007 *Ancient Objects and Sacred Realms: Interpretations of Mississippian Iconography*. Austin: University of Texas Press.
- Rosen, Arlene Miller
1993 Microartifacts as a Reflection of Cultural Factors in Site Formation. *In Formation Processes in Archaeological Context*. Paul Goldberg, David T. Nash, and Michael D. Petraglia, eds. Pp. 141-148. Madison: Prehistory Press.
- Swanton, John
1911 *Indian Tribes of the Lower Mississippi Valley and Adjacent Coast of the Gulf of Mexico*. Bureau of American Ethnology, Bulletin 43. Washington, D. C.: Smithsonian Institution Press.

1931 Source Material for the Social and Ceremonial Life of the Choctaw Indians.
Washington, D.C.: Government Printing Office.

1946 The Indians of the Southeastern United States. The Indians of North America,
Issue 137. Washington, D.C.: Smithsonian Institution Press.

2000[1928] Creek Religion and Medicine. Rev. edition. Lincoln: University of
Nebraska Press.

Thompson, Victor D.

2009 The Mississippian Production of Space Through Earthen Pyramids and Public
Buildings on the Georgia Coast, USA. *World Archaeology* 41(3): 445-470.

Trubitt, Mary Beth

2009 Burning and Burying Buildings: Exploring Variation in Caddo Architecture in
Southwest Arkansas. *Southeastern Archaeology* 28(2): 233-247.

Widmer, Randolph J.

1994 The Structure of Southeastern Chiefdoms. *In* *The Forgotten Centuries: Indians
and Europeans in the American South 1521-1704*. Charles Hudson and Carmen
Chaves Tesser, eds. Pp. 125-155. Athens: University of Georgia Press.

Yerkes, Richard W.

2005 Bone Chemistry, Body Parts, and Growth Marks: Evaluating Ohio Hopewell and
Cahokia Mississippian Seasonality, Subsistence, Ritual, and Feasting. *American
Antiquity* 70(2): 241-265.

Appendix A

Table of weights and percentages of sorted materials
All weights are in grams.

Mound	CATALOG #	> 1/8 in	%	Clay/Daut	%	Charcoal	%	Bone	%	Ceramics	%	Lithics	%	Ochre	%	Pumice	%	Total:
C	2661 (1 of 2)	144.4	56.32%	101.5	39.59%	0.8	0.31%	7.2	2.81%	1.8	0.70%	0.6	0.23%	0.1	0.04%			256.4
C	2661 (2 of 2)	84	52.53%	63.8	39.90%	0.5	0.31%	10.6	6.63%	0.8	0.50%	0.2	0.13%	0	0.00%			159.9
C	2663	68.9	52.04%	56.5	42.67%	0.4	0.30%	5.3	4.00%	0.9	0.68%	0.4	0.30%		0.00%			132.4
C	2664	13.6	56.67%	9.6	40.00%	0.1	0.42%	0.6	2.50%	0.1	0.42%		0.00%		0.00%			24
C	2668 (1 of 2)	107.1	50.02%	98.5	46.01%	0.3	0.14%	6.8	3.18%	1.1	0.51%	0.3	0.14%		0.00%			214.1
C	2668 (2 of 2)	191.7	43.88%	229.35	52.50%	0.26	0.06%	12.7	2.90%	2.18	0.50%	0.61	0.14%		0.00%		(turtle claw) 0.07	436.85
C	2677	188.9	53.09%	144.7	40.67%	0.8	0.22%	18.1	5.09%	3.3	0.93%		0.00%		0.00%			355.8
C	2685	78.7	53.32%	55.3	37.47%	1.1	0.75%	10.5	7.11%	1.6	1.08%	0.4	0.27%		0.00%			147.6
C	2686 (1 of 3)	57.6	62.20%	27.8	30.02%	0.7	0.76%	5.6	6.05%	0.9	0.97%		0.00%		0.00%			92.6
C	2686 (2 of 3)	67.5	47.84%	54.2	38.41%	1.4	0.99%	15.6	11.06%	2	1.42%	0.3	0.21%	0.1	0.07%			141.1
C	2736 (F# 246)	88.4	52.87%	70.4	42.11%	2.5	1.50%	4.5	2.69%	1.1	0.66%	0.2	0.12%	0.1	0.06%			167.2
C	2758 (F# 246)	90.1	45.62%	95.7	48.46%	1.7	0.86%	9	4.56%	0.7	0.35%	0.2	0.10%	0.1	0.05%			197.5
C	2772	81.8	53.60%	57.2	37.48%	1	0.66%	11.2	7.34%	1.3	0.85%	0.1	0.07%		0.00%			152.6
C	2818 (1 of 3)	63.5	42.31%	75.7	50.43%	0.2	0.13%	8.5	5.66%	1.8	1.20%	0.4	0.27%		0.00%			150.1
C	2818 (2 of 3)	17.77	40.00%	22.79	51.29%	0.07	0.16%	2.89	6.50%	0.18	0.41%	0.6	1.35%	0.13	0.29%			44.43
C	2818 (3 of 3)	73.3	39.73%	91.98	49.86%	0.64	0.35%	16.2	8.80%	2.05	1.11%	0.27	0.15%		0.00%			184.48
C	2820 (big bag)	55.5	45.16%	53.8	43.78%	0.2	0.16%	11.9	9.68%	1	0.81%	0.5	0.41%		0.00%			122.9
C	2820 (little bag)	57.67	39.17%	80.15	54.44%	0.51	0.35%	8.25	5.60%	0.44	0.30%	0.19	0.13%	0.02	0.01%			147.23

Appendix A, continued

Mound	CATALOG #	> 1/8 in	%	Clay/Dault	%	Charcoal	%	Bone	%	Ceramics	%	Lithics	%	Ochre	%	Pumice	%	Total:
C	2822 (1 of 2)	77	46.72%	74.9	45.45%	0.6	0.36%	10.6	6.43%	1.5	0.91%	0.2	0.12%		0.00%			164.8
C	2822 (2 of 2)	70.59	42.75%	79.36	48.06%	0.37	0.22%	10.8	6.55%	1.42	0.86%	2.58	1.56%		0.00%			165.14
C	2824 (1 of 2)	53.42	46.22%	52.06	45.05%	0.18	0.16%	8.58	7.42%	1	0.87%	0.33	0.29%		0.00%			115.57
C	2824 (2 of 2)	34.32	46.50%	33.57	45.49%	0.12	0.16%	4.72	6.40%	0.77	1.04%	0.3	0.41%		0.00%			73.8
C	2862	148.7	47.97%	142.3	45.90%	1.5	0.48%	14.3	4.61%	2.5	0.81%	0.4	0.13%	0.3	0.10%			310
C	2907	249.2	47.56%	253.8	48.44%	1.3	0.25%	17.6	3.36%	1.8	0.34%	0.1	0.02%	0.2	0.04%			524
C	2909	184.5	53.93%	139.4	40.75%	1.4	0.41%	12.7	3.71%	3.5	1.02%	0.4	0.12%	0.2	0.06%			342.1
C	2951	189.9	52.43%	136.1	37.58%	2.7	0.75%	30.5	8.42%	2.8	0.77%	0.2	0.06%		0.00%			362.2
C	2964 (F# 281)	23.4	58.65%	13.6	34.09%	0.2	0.50%	2.2	5.51%	0.4	1.00%	0.1	0.25%		0.00%			39.9
C	2995	169.5	47.59%	168	47.16%	1.1	0.31%	14.4	4.04%	2.9	0.81%	0.3	0.08%	0	0.00%			356.2
C	2997	112.3	48.59%	96.7	41.84%	1.6	0.69%	17.6	7.62%	2.3	1.00%	0.6	0.26%		0.00%			231.1
C	3041	180.5	56.92%	114	35.95%	1.5	0.47%	18.5	5.83%	2.4	0.76%	0.1	0.03%		0.00%		(squirrel teeth) 0.1	317.1
C	3043	107.8	43.70%	122.6	49.70%	0.8	0.32%	14	5.67%	1	0.41%	0.5	0.20%		0.00%			246.7
C	3061	60.8	48.41%	45.2	35.99%	0.7	0.56%	16	12.74%	2.6	2.07%	0.3	0.24%	0	0.00%			125.6
C	3065	81.7	42.24%	87.1	45.04%	0.5	0.26%	20.5	10.60%	2.9	1.50%	0.4	0.21%	0.3	0.16%			193.4
C	3067	79.8	56.48%	42.7	30.22%	0.6	0.42%	14.9	10.54%	3.1	2.19%	0.2	0.14%		0.00%			141.3
C	3069	136.4	62.23%	65.3	29.79%	1.6	0.73%	13.4	6.11%	2.1	0.96%	0.4	0.18%		0.00%			219.2
C	3071	73.8	48.27%	60.8	39.76%	1	0.65%	15	9.81%	2.1	1.37%	0.2	0.13%		0.00%			152.9
C	3073	73.2	57.37%	40.9	32.05%	0.7	0.55%	10.5	8.23%	2	1.57%	0.2	0.16%	0.1	0.08%			127.6

Appendix A, continued

Mound	CATALOG #	> 1/8 in	%	Clay/Daub	%	Charcoal	%	Bone	%	Ceramics	%	Lithics	%	Ochre	%	Pumice	%	Total:
C	3127	120.2	43.32%	146.3	52.72%	0.4	0.14%	8.4	3.03%	1.7	0.61%	0.2	0.07%	0.3	0.11%			277.5
C	3138	72.6	51.38%	59.3	41.97%	0.2	0.14%	7.7	5.45%	1.3	0.92%	0.1	0.07%	0.1	0.07%			141.3
C	3140	79.7	58.30%	48.9	35.77%	0.5	0.37%	6.1	4.46%	1	0.73%	0.3	0.22%	0.2	0.15%			136.7
C	3158 (Ash area)	13.9	44.98%	15.8	51.13%	0	0.00%	0.8	2.59%	0.3	0.97%	0.1	0.32%		0.00%			30.9
C	3158 (F# 320)	70	49.19%	70.8	49.75%	0.2	0.14%	1.2	0.84%	0.1	0.07%		0.00%		0.00%			142.3
C	3172	229.2	56.03%	152.3	37.23%	2	0.49%	23	5.62%	2	0.49%	0.6	0.15%	0	0.00%			409.1
C	3174 (1 of 2)	196.8	36.46%	333.98	61.88%	0.55	0.10%	7.57	1.40%	0.41	0.08%	0.34	0.06%	0.06	0.01%			539.7
C	3174 (2 of 2)	106.2	55.43%	81.59	42.59%	0.27	0.14%	3.04	1.59%	0.48	0.25%		0.00%		0.00%			191.58
C	3229 (1 of 2)	194.6	49.48%	169	42.97%	0.8	0.20%	23.3	5.92%	4.9	1.25%	0.7	0.18%	0	0.00%			393.3
C	3305	108.1	50.49%	91.8	42.88%	1	0.47%	10.1	4.72%	3	1.40%	0.1	0.05%	0	0.00%			214.1
B	3544	7	40.94%	9.7	56.73%		0.00%	0	0.00%		0.00%		0.00%		0.00%	0.4	2.34%	17.1
B	3548	5.8	53.70%	4.4	40.74%		0.00%	0.2	1.85%	0.3	2.78%		0.00%		0.00%	0.1	0.93%	10.8
B	3550	45.4	49.03%	44.6	48.16%	0	0.00%	1.3	1.40%	0.1	0.11%	0	0.00%	0.1	0.11%	1.1	1.19%	92.6
B	3556	76.7	42.00%	93.9	51.42%	0.2	0.11%	1.6	0.88%	0.1	0.05%	0.2	0.11%	0	0.00%	9.9	5.42%	182.6
B	3568	88.5	40.82%	118	54.43%	0.3	0.14%	0.6	0.28%		0.00%		0.00%	0.1	0.05%	9.3	4.29%	216.8
B	3572	29	44.89%	33.6	52.01%	0	0.00%	0.2	0.31%	0	0.00%		0.00%		0.00%	1.8	2.79% (quartz crystal)	64.6
B	3584	236.2	46.36%	240.2	47.14%	0.1	0.02%	0.8	0.16%	0.2	0.04%		0.00%		0.00%	32	6.28%	509.5
B	3598	11.1	38.41%	16.8	58.13%		0.00%	0.3	1.04%		0.00%		0.00%		0.00%	0.7	2.42%	28.9
B	3610	37.7	41.89%	49.7	55.22%	0	0.00%	0.4	0.44%		0.00%		0.00%	0	0.00%	2.2	2.44%	90
B	3626	66.6	48.37%	62.7	45.53%	0	0.00%	0.3	0.22%	0.2	0.15%	0.1	0.07%		0.00%	7.8	5.66%	137.7