Pierce Mounds Complex
An Ancient Capital in Northwest Florida

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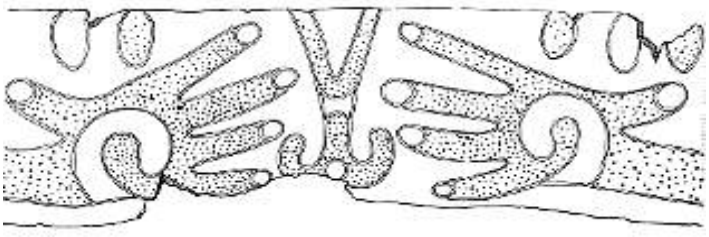

Final Report to George J. Mahr, Apalachicola, Florida
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ABSTRACT

The Pierce site (8Fr14), near the mouth of the Apalachicola River in Franklin County, northwest Florida, was a major prehistoric mound center during the late Early and Middle Woodland (about A.D. 200-700) and Mississippian (about A.D. 1000-1500) periods. People lived there probably continuously during at least the last 2000 years (until right before the European invasion of Florida in the sixteenth century) and took advantage of the strategic location commanding the river and bay, as well as the abundant terrestrial and aquatic resources. Besides constructing several mounds for burial of the dead and probably support of important structures, native peoples left long midden (refuse) ridges of shells, animal bones, artifacts and blackened sandy soils, which built up a large and very significant archaeological site.

Early Europeans and Americans who settled in the town of Apalachicola recognized the archaeological importance of Pierce and collected artifacts. But since the site and its spectacular findings were published by C.B. Moore in 1902, much information has been lost or misunderstood. Recent investigations by the University of South Florida were commissioned by the property owner to research and evaluate the significance of the site. There is evidence for an Early Woodland (Deptford) occupation and mound building, possibly as early as A.D. 200. Seven of the mounds form an oval, with the Middle Woodland burial mounds on the west side. At least one temple mound, on the northeast side, centers the thick late prehistoric Fort Walton occupation, now radiocarbon-dated to A.D. 1270. Other mounds such as Singer (8Fr16) to the west, and the Cemetery Mound (8Fr21), Mound near Apalachicola (8Fr20A), Shell Mound near Mound Near Apalachicola (8Fr20B), and Cool Spring Mound (8Fr19), to the east, were apparently all part of this original complex of 13 mounds. Jackson Mound (8Fr15), 1.5 km to the west-northwest along the riverbank, was a related locale. Material evidence of widespread economic, social, and probably even spiritual power includes elaborate pottery, shell, and stone artifacts, as well as exotic materials such as copper and silver. This prehistoric political and religious center must have controlled interaction on both a north-south axis up and down the river and an east-west axis along the Gulf for perhaps two millennia.

Cover photo: *Weeden Island Incised red-painted ceramic cup from Pierce Mound A Burial 2 and 4 group (NMAI #174076.000; photo courtesy of the National Museum of the American Indian, Smithsonian Institution; photo by NMAI Photo Services Staff); drawing (adapted from Moore 1902:223, Fig. 159) shows its design of two human hands and other symbols (an upside-down person?).*

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LIST OF ABBREVIATIONS USED IN THIS REPORT

INSTITUTIONS:

BAR	Bureau of Archaeological Research, Florida Department of State
DAHRM	Division of Archives, History, and Records Management, Florida Department of State (today Division of Historical Resources)
DHR	Division of Historical Resources, Florida Department of State
FLMNH	Florida Museum of Natural History (formerly FSM)
FSM	Florida State Museum (today FLMNH)
USF	University of South Florida

EXCAVATION TYPES, CERAMICS, and OTHER ARTIFACT TYPES (as listed on tables):

#	catalog number
2nd ary	secondary (chert flake from later stage of manufacture, no cortex)
cat	catalog [number]
ch-st	check-stamped
comp-st	complicated-stamped (complex pattern stamped into clay with carved paddle)
decort	chert decortication flake, primary (½ exterior=cortex) or 2nd ary (<½ cortex)
frag	fragment
FW	Fort Walton
inc	incised
indet	indeterminate
L	Level (in an excavation unit)
lg	large
L J	Lake Jackson (ceramic type name)
lst	limestone
pl	plain (no surface decoration)
poss	possible
prob	probably
punc	punctated (tiny indentations punched into surface)
sm	small
Sw Cr	Swift Creek (ceramic type name)
-st or st	stamped
ST	shovel test, usually 50 cm square
-t	tempered (materials added to clay to make pottery)
TU	test unit, at least 1 m square
unident	unidentified/unidentifiable
vert	vertebra/ae
WI	Weeden Island (ceramic type names)

INTRODUCTION, RESEARCH GOALS, AND ACKNOWLEDGEMENTS

In northwest Florida, the great Apalachicola River system is formed from the confluence of the Flint River, which originates near Atlanta, and the Chattahoochee River, which flows out of the Blue Ridge mountains of north Georgia. The Apalachicola runs over 100 miles to the Gulf of Mexico (Figure 1). It is Florida's largest river in terms of flow, and the only one containing snowmelt. Its valley is home to several kinds of rare plants and animals and more reptile and amphibian species than anywhere else north of Mexico, amid an exceedingly rich biotic system.

Where the river flows into Apalachicola Bay, the abundant life possible in estuarine systems provides the shrimp, oysters, and other seafood for which this region is famous today. The bays and sounds are protected by beautiful barrier islands with white sugar-sand beaches. At the mouth of the river sits the small town of Apalachicola, today known for oysters and picturesque old houses from its historic past. But for about 2000 years of prehistoric time, this location was an important Native American capital centered around the Pierce mounds.

Figure 1. *Location of Pierce at the bottom of the Apalachicola delta, northwest Florida (adapted from Google Earth).*

The Pierce site consists of a long shell midden ridge, a large village area, and 13 mounds, constructed and inhabited over a period of time estimated to extend from perhaps 500 B.C. until around A.D. 1400. Its archaeological evidence indicates day-to-day occupation by indigenous peoples who fished, gathered, and hunted, leaving their food garbage and discarded artifacts piled along the riverbank. The evidence shows other aspects of their lives as well, in the construction of burial mounds and inclusion of elaborate ritual artifacts for the honored dead, expressions of ancient beliefs and probably spirituality. The archaeological cultures represented at Pierce are summarized in Table 1.

Table 1. *Archaeological time periods in northwest Florida represented at Pierce mounds complex.*

Time period	***Archaeological culture***	***Approx. Dates***	***Characteristics***
Early Woodland	Deptford	500 B.C. - A.D. 300	1st burial mounds built, wild foods
Middle Woodland	Swift Creek-early Weeden Island	300-700	height of burial mound ceremonialism, wild foods
Late Woodland	late Weeden Island	A.D. 700 - 1000	mound building declines, maize agriculture begins inland
Mississippian	Fort Walton	A.D. 1000 – 1400?	temple mounds, farm villages inland; still wild food collection on coast

The earliest burial mound construction, on the west side of the site, is associated with unmistakably Deptford ceramics from Early Woodland times. By the time of elaborate mound-building ceremonialism in the Middle Woodland, the mounds include a multitude of diverse grave types and exotic metal, shell, bone, and stone artifacts and pottery of both Swift Creek and early Weeden Island types. It is assumed that a Late Woodland occupation continued at Pierce, though this is harder to detect because the diagnostic artifacts of this period are so generic. But there is clearly a large village during the succeeding Fort Walton times, with a probable temple mound at its center, on the east side of the site.

Though Pierce was a major capital, interestingly, its archaeological record does not yet indicate the shift to agricultural life seen around A.D. 1000 in typical late prehistoric Fort Walton Mississippian sites inland. By this time native peoples upriver were settled into towns anchored by temple mounds and plazas and politically organized into what anthropologists have called chiefdoms, supported by maize agriculture but also still a lot of hunting, gathering, and fishing. However, on the coast the resources of the river and other streams, bays, and Gulf may have been so abundant that the (usually harder) work of producing food through cultivation may not have been needed.

Pierce is one of the most famous sites in southeastern U.S. archaeology, but in reality we have known very little about it. Artifacts and other materials from the site are known to have been collected as early as the mid-nineteenth century, and probably such finds were routinely made far earlier by whoever settled nearby. The first published record was produced well over century ago by Clarence Bloomfield Moore (1902:217-229; Brose and White 1999:219-231), a wealthy Philadelphian whose digs into Indian mounds all over the South are well known because he did describe them in journal articles. Moore's excavations into two of the mounds at Pierce unearthed elegant ceramic vessels, stone spear and arrow points and plummets, freshwater pearls, copper and silver ornaments, shell beads and drinking cups, and even a bison-bone ornament, associated with many burials of the honored dead, 99 of whom he unearthed from Mound A. Moore noted five mounds, and also described other mound sites nearby (named after the landowners or geographic features), such as the Cemetery Mound, Mound near Apalachicola, and Cool Springs and Singer Mounds, all of which are now thought to make up the whole Pierce complex.

Since Moore's time, Pierce has not ben well described, and mistakes in its interpretation by later archaeologists have been compounded over the decades. As part of the University of South Florida's ongoing archaeological research in this region, I have been researching the site for many years, trying to correct the problems and compile the known information while obtaining more data to characterize the site as a whole and each of the mounds individually. This report results from the request by the site's owner, George J. Mahr, to do additional fieldwork during summer 2011 and provide a comprehensive report describing Pierce as thoroughly as possible in advance of either development or conservation.

Many have aided this research over a long time. As an instructor at the University of West Florida (UWF) in Pensacola conducting survey with field partner Mike Burt, I was pleased to be taken to Pierce for the first time in 1983 by local residents Mark and Ken Elliott. I returned over the years with students from my field school classes at the University of South Florida (USF) in Tampa and friends from Franklin County who were concerned about the site. Meanwhile the late, great American archaeologist Gordon Willey met with me in his Harvard office to encourage me to research the site (while my little kid played on his library ladder).

When the site was up for sale in 1994, valiant students Brian Parker, Terry Simpson and Lorna Weill and offspring Tony White crashed through the thick forest with me to discover mounds unknown since Moore's time. Grad students Jeff Du Vernay and Dan Tyler helped survey the cemetery area in 2006, and Du Vernay supervised the 2007 test excavations and made a lidar map for the 2011 work. Grad students Chris Hunt and Deena Woodward made up the field crew for the 2011 season. Ryan Harke compiled handwritten catalog forms into a database, and Hunt continued to process data in the lab and produced another lidar map. Archaeologist Craig Dengel first gave me the original sketch map of the site from Moore's unpublished notes. Archaeologist Frank Schnell alerted me to plans for the site's sale in the early 1990s. The city manager of Apalachicola, John Meyer, gave permission for investigation in the cemetery. Journalist-entomologist Lois Swoboda and area historian Dale Cox provided information on local mound lore. Apalachicola National Estuarine Research Reserve personnel Jimmy Moses, Pat Millender, Lee Edmiston, and Roy Ogles, as well as archaeologists Keith Ashley, Dave Dickel, Susan Harp, Calvin Jones, Dan Penton, Marie Prentice, Donna Ruhl, Louis Tesar, and Michael Wisenbaker helped considerably with the research. Jim Hamill at the British Museum arranged collections research, and Rich Weinstein and Sally Morehead helped this work in London. Lee Hutchinson did both archival and field research for many years to assist the project, and she and Du Vernay, Harke, and Hunt reviewed the draft of this report.

A 2006 grant from the USF Humanities Institute paid for the radiocarbon date, and the 2007 testing was supported by a faculty grant from USF's Research Council and a donation by USF anthropology alumna Dorothy Ward. Landowner George Coleman granted permission for the 1994 investigations. Present owner George Mahr requested and supported the 1995 work, permitted us to return many times, and provided lodging, funding (and insect head-nets!) for the 2011 work, great dinners and entertainment, and boundless enthusiasm.

LOCATION AND ENVIRONMENTAL BACKGROUND

Natural Environment

The Pierce mound complex is located on the west side of the city of Apalachicola, along the former bank of the Apalachicola River near its mouth. The river has, over ancient geological time, built up a large delta that protrudes into the Gulf of Mexico, around the edge of which a chain of barrier islands has formed, enclosing and sheltering Apalachicola Bay (Figure 2). The great Apalachicola-Chattahoochee-Flint River system originates many hundreds of miles inland in the mountains of north Georgia and brings down sediment to build up the delta and empty into Apalachicola Bay (see Figure 1). The Apalachicola River has been continually moving eastward over its history, propelled by rising sea level since the end of the Pleistocene (Ice Age) as glaciers melted, beginning some 10,000 years ago. Thus the riverbank location of Pierce is an old bank, left behind as the river moved at some as-yet-indeterminate time in the past.

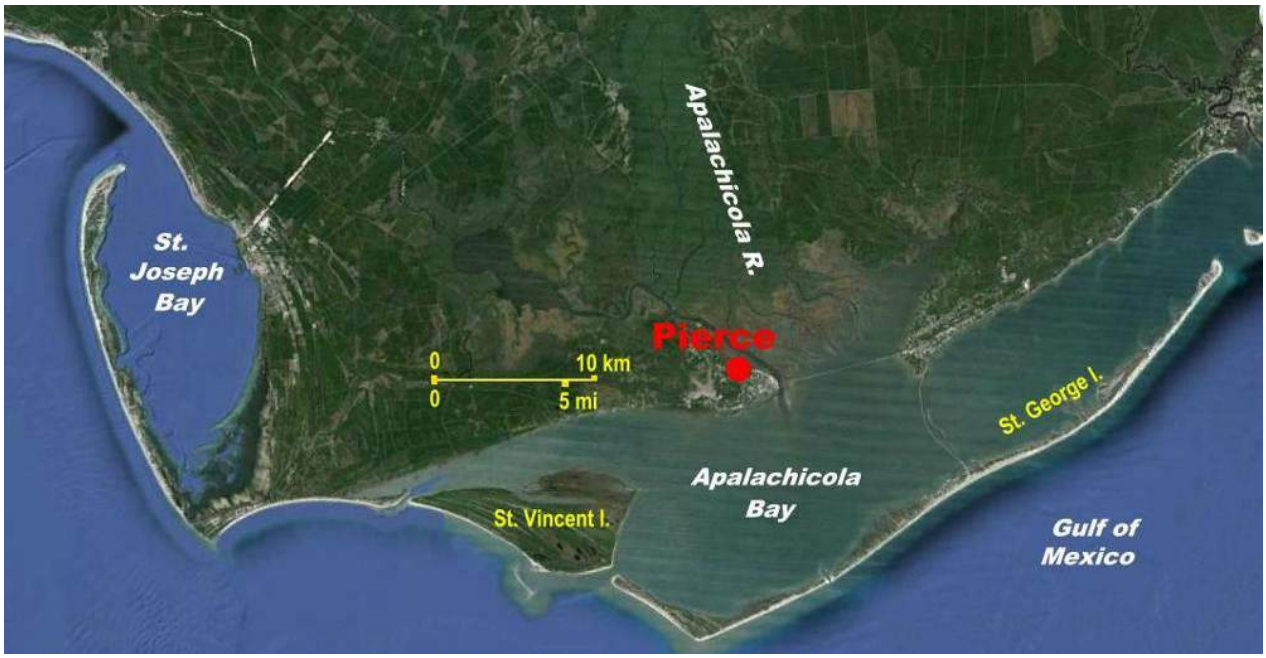


***Figure 2**. Location of Pierce site in the Apalachicola lower delta region (adapted from Google Earth).*

Pierce may have been on the active riverbank during part or all of its human occupation, but today the river is about a kilometer (.6 mile) northeast of the site. Adjacent to the site, the river's old channels now form the swamp, marshland, and open water patches known as Turtle Harbor (Figure 3). In that marsh grow wild hibiscus with red flowers as big as a human hand (Figure 4), though much of the wetland is now cleared for a view of the water. From Turtle Harbor flow several little creeks that feed into the larger Scipio Creek, which empties into the river and today has lengthy marina areas along its lower reaches.

***Figure 3**. Location of Pierce complex (within pink dots) on old bank of Apalachicola River; note current river channel to the northeast, small tributary Scipio Creek and open water/marsh of Turtle Harbor, as well as river distributary channels to the northeast and even old airfield west of town (adapted from Google Earth image of March 2006).*

The location of the Pierce site is optimal for obtaining all the resources prehistoric people needed. Upland animal species would have included deer, many small mammals, turtles and other reptiles and amphibians. There would also have been abundant wetland wildlife in the marsh, and fish and aquatic species, including the molluscs whose shells are so abundant at the site, in the river, creeks, and bay. Hardwood bottomland trees such as oaks and magnolia, stands of pine, and wetland cypress and tupelo would have produced food from fruits to nuts and acorns. Given the thick forests, prehistoric peoples most likely made the majority of their material culture from wood and other plant materials. What we see in the archaeological record – stone, ceramic, shell artifacts and ecofacts that have been preserved – is probably just a very small part of what people made and used.

Economic and Sociopolitical Setting

In addition to the bounty of its natural environment, the location of the Pierce site is also a great strategic position, with easy access to movement not only east-west along the Gulf, but also north-south on the river system hundreds of miles into the interior. In prehistoric times the only way to go anywhere was to walk or take a boat; water travel was much more efficient. Thus, Pierce was ideally situated not only for obtaining and moving resources, but also for the flow of information and of people, for social, economic, and political interaction.

Figure 4. *View looking north in 2007, from just east of Pierce temple mound (Mound H) toward wetlands of Turtle Harbor and the Apalachicola River, with marsh grasses, lone pine, and blooming wild red hibiscus.*

A reason to suspect that the original occupation was directly on the main river channel is that the site includes a large shell midden ridge running along what would have been the old natural levee of the bank. Shells of *Rangia* or marsh clam, which would have been available in the river mouth, and of oyster, easily available in the bay, form a near-continuous ridge of refuse (midden) along the northern boundary of the site. The shell was also used as a building material or for special deposits in some of the mounds.

Where the midden is less disturbed there is a large amount of fish and other animal bone among the shells, testifying to the really good living people could make here. This evidence brings up an interesting socioeconomic research question: Was this environment so

rich in easily-available wild foods that later prehistoric peoples did not ever have to settle down and *produce food*? Or did they cultivate crops, as we know their inland relatives did? A comparison of coastal vs. inland subsistence, including the idea of agricultural vs. foraging adaptations during late prehistoric Mississippian times (known in this region as the Fort Walton period) is the subject of a much recent archaeological debate (e.g., Ashley and White 2012). How they made a living has implications for the social and political systems of different native groups along Florida's coasts, even for the nature of settlement (whether seasonal or permanent). The picture is complicated by the fact that even agriculturalists far upriver continued to hunt, gather wild plants, and fish, even as they grew maize, beans, and squash.

Given the mostly mild climate of the Gulf Coast region, the Pierce site environment must have been extremely attractive to aboriginal peoples. Its location is also protected from the worst part of many hurricanes and other storms because it is shielded somewhat by the bay and barrier island formations. As the islands and bay were forming some 4000 years ago and present landforms were taking shape, human occupation probably began as soon as the river reached this location (though that exact time is not currently known). We do have archaeological evidence, Deptford-period pottery, indicating people were at Pierce at least as early as 2000 to 3000 years ago. They may have begun mound building at that early time too.

Even though the social and political systems changed over time, presumably becoming more complex by the Fort Walton period, when the site must have been a chiefly center with its platform mound and large village, subsistence did not seem to change. Based on the faunal remains from the site, it appears that prehistoric peoples were making a living in the same way their ancestors did one or two millennia earlier: fishing and shellfishing in the rich streams and bays, supplemented by gathering and hunting on land.

Such a stable subsistence system supported other enormously complex economic activities at Pierce. Especially for the late Early Woodland and Middle Woodland peoples who built the burial mounds, accumulation of wealth items was very important and probably linked with spiritual beliefs. Elaborate artifacts, either from distant sources or locally crafted in fancy styles, were a significant part of life and markers probably of social, political, and religious status. Some materials were imported from as far as the Appalachian mountains, as the river provided a major highway for the exchange of materials and ideas. However, these expensive possessions were interred with the dead, along with some strikingly plain everyday items, and evidence of burning and other ritual accompanying burial. So, the ultimate goal was not the mere accumulation of such wealth, but the use of it as (apparently) offerings for the afterlife. Taking these goods out of circulation by retiring them in the ground instead of passing them on to living heirs also must have heightened demand for more. Thus, a second-tier economic system with built-in stimulation of production and exchange of non-subsistence goods was made possible by the rich environment and diverse local ecosystems that guaranteed a basic living for everyone.

HISTORY OF ARCHAEOLOGICAL INVESTIGATION

Little-Known Early History

The Pierce mound complex must have been searched for artifacts by hundreds, if not thousands of people over the last couple centuries. Probably the later prehistoric peoples themselves made good use of surface artifacts left by their ancestors and others who came centuries before them at the site (though, unlike modern relic-hunters, they probably would not have dug in the burial mounds, which must have been sacred ancestral places). We do not know what might have happened to the site between about A.D. 1450, near the end of the latest prehistoric occupation, and the early nineteenth century, but after then records indicate people were obtaining artifacts from it.

The city of Apalachicola was not established upon any colonial settlement. It was built from scratch to emerge as an important port and mercantile center by the early 1800s. Cotton, lumber, and other products moved hundreds of miles downriver for export to the Northeast or overseas. White settlers and black slaves came from Atlantic states, and overseas visitors from Britain. As the town expanded westward, residents were clearly aware of mounds. A reference in a poem was sent to me by Augusta West, Research & Education Director of the Apalachicola Maritime Museum. The poem was in the January 1, 1844 edition (Vol. 2, No. 1, p.3) of the *Commercial Advertiser*, a local newspaper; the author is given simply as "LUCY":

TO A SOLITARY FLOWER,
Plucked from an Indian Mound, near Apalachi-
cola, 22nd December, 1843.
Sweet, simple flower! and thou didst wave
Above the mound: -- the Indian's grave? –
I found thee there to-day;
Where Chattahoochee's waters lave,
Thou bloomed; -- where sleeps many a brave
Whose souls have fled away….

Four more verses follow, in the same romantic style. The tone and words indicate not only general common knowledge of mounds but speculation on their origins or past history.

The major commercial connection for the city of Apalachicola in the early 1800s was with New York. Historian Lee Willis (2003) has documented how this was even reflected in the architectural styles of many houses, not to mention much of the mercantile activity. Thus it is no surprise that some archaeological materials from the Apalachicola area ended up at the New York Historical Society, as described by famous geographer/ethnographer Henry Schoolcraft (1847). The Society had received various collections of American aboriginal pottery over the years and kept them on display or in cabinets.

Schoolcraft summarized some of the specimens from north of Mexico in order to compare them. He was especially interested in the collection of James R. Hitchcock of Florida, who had obtained much of the pottery in March, 1841 from "one of the minor species of mounds on the Appalachicola bay" (Schoolcraft 1847:127). The mounds in this area were not huge, "generally from thirty to fifty feet in diameter and from twelve to eighteen feet in height," containing burials (Hitchcock had also presented sand-filled skulls to the Society!). Huge live oaks on top some of the mounds were evidence to Hitchcock of the great antiquity of the mounds. The ceramics illustrated by Schoolcraft from Hitchcock's collection included those with incised patterns of typical late prehistoric vessels, three animal effigy appendages, a pipe, and a curious vessel that might have been in a stirrup-spout shape more typical of prehistoric South American pottery (White 2011a). Schoolcraft's opinion was that the Florida specimens were esthetically superior to those from elsewhere in the U.S. Whether the source of this collection was the Pierce Mounds complex or somewhere else in or near the town of Apalachicola is unknown (we do know many mounds and shell ridges were cleared in the building of the town, and many other mounds line the whole bay).

Ironically, the earliest written (but unpublished) records *specific* to the Pierce site are not from an American source, but from the British Museum in London. Whether or not they collected the specimens themselves, dealers in antiquities and natural history "curiosities" obtained artifacts and sold them to museum curators. The British Museum collections contain at least four artifacts (a clay pipe and four ground-stone items), obtained in 1869 from what is called the Turtle Harbor area of Apalachicola; this can be no other than Pierce. Additional items in the British Museum collections (stone and shell tools, pottery) are from a probable mound or mounds near or at "Appalachicola" and were acquired in 1875.

Another collection, more locally obtained, in the late 1800s, was accumulated by H. L. Grady of Apalachicola and made its way eventually to the Florida State Museum (now Florida Museum of Natural History) in Gainesville. The Grady materials included a pipe and shell beads. All these items are described later in the chapter on collections; they show that a great deal of artifact-hunting was going on at the site long before the locale was ever recorded as the Pierce mounds and the information published and made available for scholars.

By the late 1800s the Magnolia Cemetery at the west end of Apalachicola, on the north side of Bluff Road, on the east side of Pierce, was established. The oldest grave is believed to be dated originally to 1897, and even earlier graves apparently were moved from a prior location on the eroding coastline of town (Swoboda 2010). The oldest part of Magnolia Cemetery contained at least one mound (later named the Cemetery Mound), that was being demolished for its sand and shells to use as fill dirt by 1902, when C. B. Moore arrived to conduct and record archaeological investigations. The cemetery area contained other mounds as well.

Moore's Mounds: Which is Which?

Clarence Bloomfield Moore was a wealthy Philadelphian who became the first to produce published and relatively widely-available documentation of prehistoric mounds and other Native American sites all over the southeastern U.S. He traveled in the late 1800s and early 1900s along major southern rivers in his steamboat *Gopher*, seeking beautiful pottery and other artifacts, transporting his laborers (usually an African-American crew from Sopchoppy) and assistants with him for several winter months out of each year. Though his methods were not up to modern standards, he did record information fairly carefully and also published his results in the *Journal of the Academy of Natural Sciences of Philadelphia* (Brose and White 1999). Much of modern southeastern archaeology has been concerned with not only relocating and studying Moore's sites but also trying to figure out exactly what he did and found at them.

Pierce mounds were named and investigated by Moore (1902:217-229) in mostly typical fashion. But he uncharacteristically did not give a map of the site and only labeled five of the mounds (A through E). He also described five other mounds nearby (to the northwest and southeast of Pierce) that later seemed to be related to the Pierce complex: Cool Spring Mound, Mound Near Apalachicola, Cemetery Mound, Singer Mound, and Jackson Mound (Moore 1902:216-17, 229-234). All these sites were shown on his map of the whole coastal area he was investigating that year by tiny X marks around the vicinity of the town of Apalachicola (Figure 5). Hints of other mounds in his writing are given when he refers to large "shell heaps" but does not give them names.

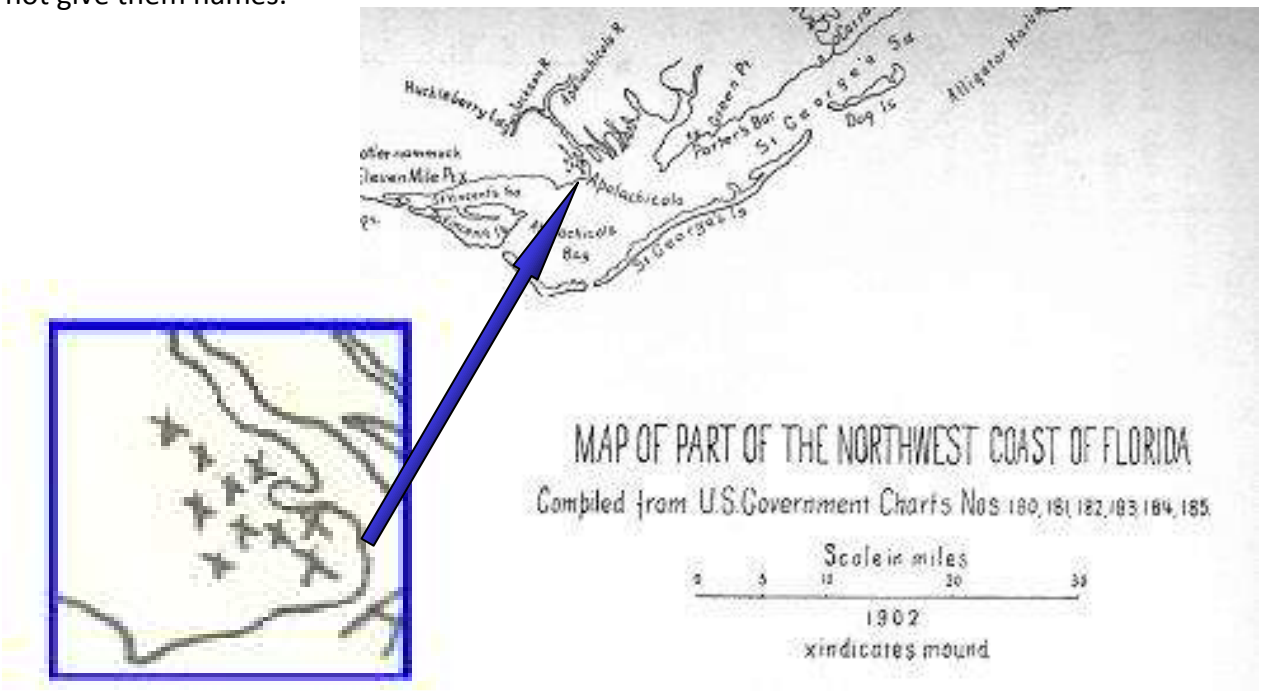


Figure 5. *Excerpt from Moore's (1902:127) map (magnified at left) showing locations of his mounds, with ten (including Pierce) on the peninsula of Apalachicola, too tiny to be useful.*

This small area map has been useless in understanding Pierce, and the lack of a site map has been the major cause of much confusion among professional archaeologists, including myself, ever since. Moore did sometimes name the landowners of different sites, and these clues helped during my research into old land ownership records at the Franklin County courthouse in Apalachicola several years ago. (The records were then nice big dusty handwritten books in the basement, as opposed to the microfilmed type now available in many Florida courthouses).

Because of Moore's vagueness in his descriptions, some researchers since Moore have made mistakes on the names, natures, and locations of some of the mounds. Through time these mistakes were continued or complicated in new ways. Moore's original names for some mounds have been bestowed upon other mounds, and previously-known sites encountered by new fieldworkers have been recorded as additional, newly discovered sites. The official Master Site File in the Bureau of Archaeological Research (BAR), Division of Historical Resources (DHR), Florida Department of State, Tallahassee, has a lot of conflicting records I have worked to sort out. I hope this report, which presents the results of huge amount of both fieldwork and detective work over many years, clears up the picture for this crucially important archaeological site. I will send a copy of this report with updated site forms to the Site File to assist any future research or other work on the land.

Before documenting all the mistakes through the years it is important to show what happened to allow them all to be corrected: the discovery of a sketch map of Pierce (Figure 6) in Moore's original notes. He did keep pretty good field notes for his time, in small notebooks later copied into larger notebooks that he used for his published articles. The small notebooks often have details not seen in the publications, however. Why he did not publish his map of Pierce mounds remains a mystery.

All Moore's notebooks were curated at the Huntington Free Library in the Bronx, New York, where I saw them briefly in 1980. At that time I also saw many of the artifacts that Moore recovered, at the Museum of the American Indian in New York, which in 1989 moved to Washington, D.C. to become the National Museum of the American Indian (NMAI), part of the Smithsonian Institution. At that time I was a student working in the upper Apalachicola River Valley in Jackson County, and I did not realize that Moore's publications contained far less than his notes. Furthermore, the articles he wrote and published in the *Journal of the Academy of Natural Sciences* were out of print and hard to get other than by photocopying library editions. This situation is now remedied because the University of Alabama Press has reissued all Moore's works, which cover the entire Southeast, with introductions by regional specialists (e.g., Brose and White 1999).

In 2004 Moore's notebooks, as well as microfilms of them, were transferred to Cornell University in Ithaca, in west central New York state. The microfilms were to be available on interlibrary loan to researchers, though my request in 2010 was "unable to be granted" for unknown reasons (the USF librarian working on it said Cornell had inadequate funding for staff

at their library). Meanwhile, colleague Craig Dengel, archaeologist at Tyndall Air Force Base (just west of Franklin County), was collaborating with National Park Service archaeologists working there looking for other mounds first recorded by Moore. Dengel graciously sent me in August 2011 a copy of Moore's original Pierce map from his 1902 small notebook. He had been able (also after much difficulty and many months of requests) to borrow the microfilms and inquired if I had seen this map. I do not believe any archaeologists writing about or conducting research at Pierce had seen or even knew of it. Later (October 2011), with much difficulty, my longstanding request was granted and I was finally able to borrow from Cornell the microfilms of the notebooks from Moore's work. Of course all this information came *after* we had finished the field season at Pierce; nonetheless it was priceless.

Coupled with the published descriptions of Mounds A through E, the map, with distances, directions, and other, unnamed mounds, gives a clearer picture of the roughly oval layout of seven mounds and an outlier, Mound D, to the northwest, with another outlier, a separately named mound, Singer, to the southwest of D. The upper part of Figure 6 shows the original sketch map with these nine mounds. South is at the top, as Moore must have realized later and corrected, since the N and S for the two directions are overwritten and reversed. The asterisk-like thing within an oval in the center of the map must be a datum point from which Moore made measurements; though it could represent another mound, there is no evidence in the notes or on the ground for this.

The dotted line outlining much of a rectangle in the southeast corner (upper left) is a mystery; it may show a fence line his notes mention within the discussion of mound E as being nearby. What later archaeologists referred to as the temple mound (or, mistakenly, Mound C) is not even named in Moore's sketch but labeled "large shell heap" in the lower left corner. Mound B is also labeled "md with palmettoes," as Moore (1902:228) noted in his published description. Mound A, where Moore recovered the most burials and spectacular artifacts, is labeled "md with Burials." His published record combined with these unpublished notes then describe a total of 13 mounds that may all be part of a prehistoric complex of major monuments.

In the bottom half of Figure 6, I reversed the map so that north is at the top, to permit comparison with other maps in this report and see the orientation of the site along the old shoreline. I colored the mounds and labeled them up to E with Moore's assignations, then continued the sequence, naming F and G on either side of E (north and south, respectively) and the flat-topped platform or temple mound as H (these must be the three [of the total 13 mounds] that Moore does not picture with an X on his little map). Naming all the mounds on a map is the first step in clarifying the record and adjusting proveniences (locations and associations) of recovered materials, so that we know better where everything came from. Readers may compare Figure 6 with other maps of the site given throughout this report.

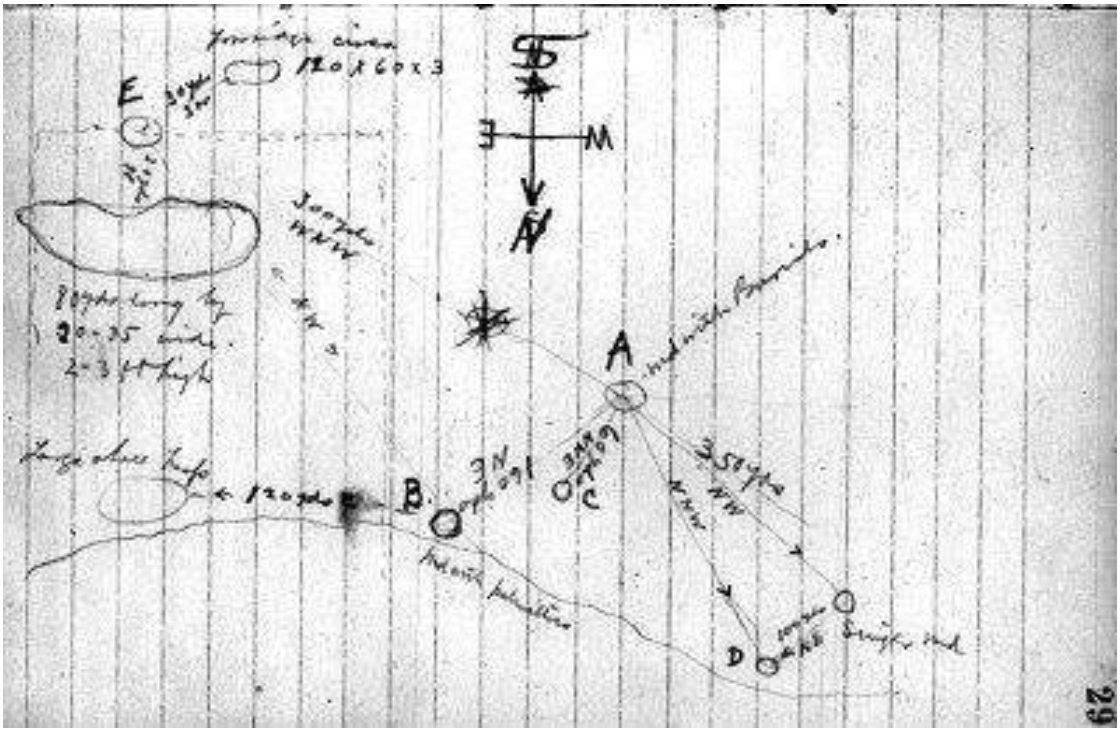
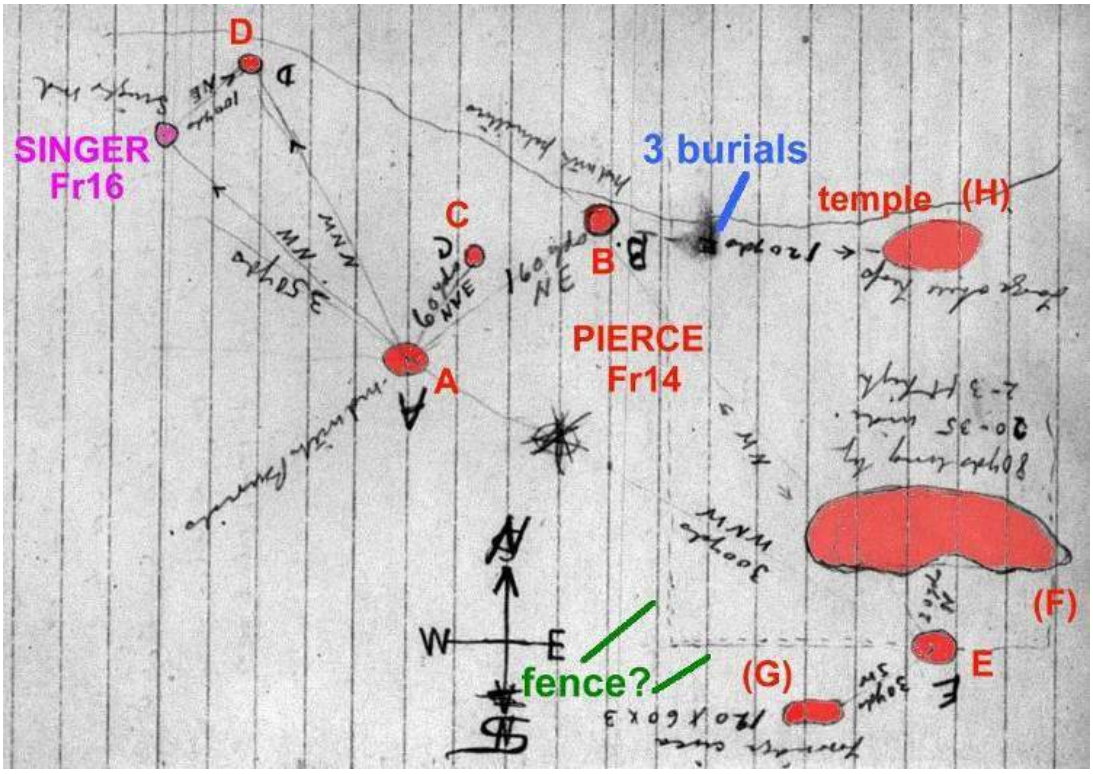


Figure 6. *C. B. Moore's original sketch map of Pierce and Singer Mounds:* above*, from his unpublished small notebook of 1902 (p. 29; on file at Cornell University Library), with north at the bottom;* below*, the same map turned to have north at the top, with mounds colored and labeled, continuing Moore's sequence of letters for the three he did not name (in parentheses), and modern site numbers.*



Having names for all the mounds and other areas is crucial at a site that spans at least 1000 and perhaps 2000 years, with the oldest portion at the west side and younger deposits to the east. Further complicating the picture is the association of additional mounds that are separately named, but close, and probably all part of the original Pierce prehistoric complex as a major mound center. Many decades ago the U. S. National Museum (Smithsonian) and later the Florida Master Site File assigned the official number 8Fr14 to Pierce (8 is Florida in alphabetical order of all the states; Fr signifies Franklin County, 14 means it was the 14th site officially numbered in Franklin County). Singer mound (8Fr16) is shown on Moore's original map at the far western edge. Other mounds are to the southeast off the map in the Magnolia Cemetery and beyond. Jackson mound (8Fr15) is the only one far enough away (about 1.5 km northwest of Pierce) to be considered on its own and not part of the Pierce complex. All these mounds are discussed individually later in this report (site numbers sometimes have the "8" left off for brevity).

Moore dug into several of the Pierce mounds, uncovering burials and recovering artifacts that were to make the place widely known in archaeological circles. He did not illustrate all the fancy ceramics and other artifacts he recovered, but he did publish drawings and photographs of some of them and describe several more; he also included in his article a map of the burials he excavated from Mound A. The exotic artifacts included red-painted and unusually shaped and decorated pottery and items of shell, copper, even silver and bison bone. All were interpreted by later archaeologists as being from the Middle Woodland period, the time of the most elaborate burial mound construction, about 1500 years ago. Even today many archaeologists do not realize, and it is not able to be gleaned from Moore's descriptions, that the site also had a late prehistoric Fort Walton component, dating to about 800 years ago. In addition, it is also now clear that there is an Early Woodland component as well, and that Pierce provides documentation for mound building during this earlier time.

So, understanding the history of work at Pierce requires the realization that some pieces of the puzzle have been missing for over a century, and also that landscapes change over time, become overgrown, damaged, and unrecognizable. Moore (1902:228) noted how even before his visit, shell from the site was "used for the streets of the town." Archaeological sites all over Florida -- whether shell mounds and middens or sandy hills – are often mined for road fill and other uses, so those investigating them must piece together their records from what is left.

Later History of the Land

Alton Pierce of Apalachicola had owned 100 acres of the land when Moore got there in 1902, described (on p. 13 of the 1901 tax roll book in the Franklin County courthouse) as Lot 3 and the W ½ of Lot 2, Block 16, and (on p. 46), Lot 29 in Sections 2 and 36, T9S, R8W. Other landowners Moore mentioned (whom I also looked up in courthouse records) were (at that time, the late) Joseph Singer, who had 20 acres in the W ½ of the E ½ of Section 35; Scipio Jackson, who had 140 acres in a fractional part of the W ½ of Section 35; and the state of Florida, which had 150 acres in Section 36.

Soon after Moore's investigations, the Apalachicola Northern Railroad was built, incorporated in 1903 by promoters who wanted to connect Apalachicola with Chattahoochee, the easternmost point of the Louisville and Nashville Railroad since 1882 (Pettengill 1952:116-120). Completed in 1907, the 100-mile Apalachicola Northern served oyster, shrimp, and fish canneries as well as sawmills and turpentine stills. In 1910, it was extended to Port St. Joe, a deepwater port that could accommodate ocean-going vessels. When the St. Joe Paper Company opened their mill in 1938, its pulpwood was transported by rail, and the mill owners purchased the Apalachicola Northern in the 1940s (Hill and Pledger 1939:A2; Turner 2002:91).

Construction of the railroad where it crossed the Pierce mounds site must have been planned to have it run right along the old riverbank on the highest elevation before the dropoff to the river swamp. It would not be surprising if the builders deliberately included the high, dry, hard-textured shell midden ridge running along the north side of Pierce. They would have gotten good elevation and also the shell, commonly used in building roads, parking lots, and other facilities, made a good hard railroad bed, perhaps making less necessary the importation of gravel and larger rock from somewhere north. To engineer the flat bed path, which measures about 3 m wide, meant cutting into the mounds that sat along the bank edge. This apparently resulted in the demolition of Mound D and major damage to Mound B and especially the temple mound (H), if not all the mounds.

The old maps also suggest that the due north-south ditch today running from the railroad bed southward, on the west side of Mound B and between Mounds A and C, was not an original stream but was excavated after Moore was there, possibly as part of some drainage system of the railroad. The stream bed today running through the center of the oval of mounds is also not shown by Moore, and was possibly altered by railroad construction, as well. Finally, the railroad building either took out or remodeled nearly all of the shell midden ridge that had existed along the old riverbank. The prehistoric natives had used their own garbage piles, midden sands and shells, to build mounds; similarly the early twentieth-century engineers found the shell midden quite a suitable material to form the railroad bed.

The railroad was discontinued after a few decades and the track ripped up and removed. The bed remains, solid and white, full of shell midden and artifacts pushed from their original contexts. Courthouse records in Apalachicola show that the land purchased by the railroad from Alton and Belle Pierce was sold in 1978 to the First National Bank of San Diego, Trustee under the last will and testament of Virginia C. Crabtree, and David M. Miller and Alice K. Miller, also of San Diego, and Curtis Coleman Company, a California firm with a principal office in San Diego (Warranty Deed, Book 152 page 272, Franklin County). I have been unable to learn how or why this sale was made to such distant parties; probably it was just a general investment. Several individuals representing Curtis Coleman Company were still the owners in the early 1990s when they decided to sell the land (which they possibly had never seen).

Meanwhile, since (and probably even during) its use for railroad transportation, Pierce has remained a well known area locally. The thick forest grew up after being cleared for a while

in the early twentieth century. Doubtless there have been thousands of undocumented instances of residents and visitors collecting artifacts, and we will never know about most of them. Many people have told me that the area around the mounds has long been a teen hangout place and source of ghost stories (Swoboda 2010:2), not to mention a great place to find artifacts. Some professional archaeologists paid attention to it as well, but never for more than a day or a few days.

Early Professional Archaeology

Gordon R. Willey (1949:278-82), working for the Smithsonian in 1940, was apparently the first archaeologist after Moore to visit Pierce. He could find only two mounds of Moore's five. One he assumed (correctly) was the high, prominent Mound B, and the other was the temple mound, which he mistakenly suggested, based on its dimensions, was Moore's Mound C. Of course, by this time, the temple mound was severely diminished, with its north side cut off by the railroad bed. Willey made three surface collections:

- From the cleared (bulldozed?) field east of the cemetery, really Moore's Mound Near Apalachicola (8Fr20), 135 sherds;
- Around, on, and south of the temple mound (Mound H), 92 sherds
- Around, on, and up to 75 m south of Mound B, 38 sherds

From all three areas Willey got ceramics of both Middle Woodland (early and late Weeden Island as well as Swift Creek types) and Fort Walton periods. He recognized there was village midden from both time periods, and noted two other Middle Woodland artifacts from the site in the R. S. Peabody Foundation collections in Andover, Massachusetts (all described later in this report).

William Sears was the next professional archaeologist known to visit Pierce, during his investigations of the coastal plain in the late 1950s. His National Science Foundation grant report (Sears 1959:23-26) has a confusing and rudimentary sketch map (Figure 7). He indicated the temple mound by its rectangular shape and placed it correctly just west of the cemetery. But he mislabeled Mound B as C, and indicated Mound A in a place far to the east of where it really is. He also indicated a long oval mound, possibly the large platform now labeled F (see Figure 5), but labeled it as a shell mound and put it in the cemetery, far from the real location of F (it may also be the Cemetery Mound). He did get mound E somewhat more correct just south of F, but it seems also to be in the cemetery and so is too far to the east of its real location.

Sears's (1959:25-26) description of the (presumably surface) artifact collections he made at Pierce adds more to the confusion. He labeled the areas from which he collected as "Mound C-Central and western Area," "Mound C Temple mound area," "North Mound-Weeden Island Burial Mound," and "Mound A Southeastern Area." There are several problems with these labels, the biggest of which is that they do not correspond with locations on the sketch

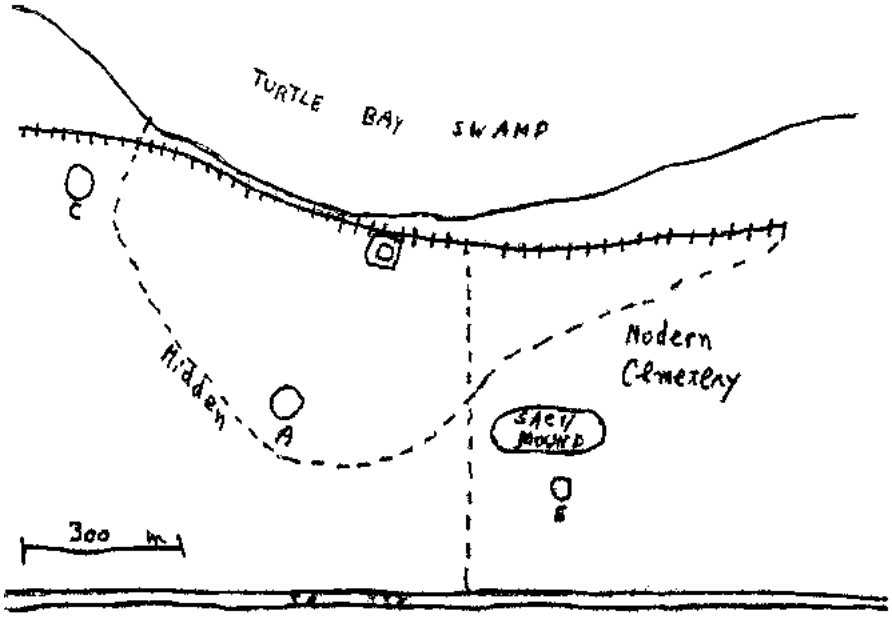


Figure 7. *Sketch map of Pierce by Sears (1959:24), showing some correct and incorrect features.*

map. He listed the artifacts he found, all sherds of Woodland and Fort Walton types. He later used his information from Pierce and many other such sites to promote his ideas on Middle Woodland burial mound-building cultures in the deep South, which were never really accepted by the archaeological community, because they were so full of basic errors (Knight and Schnell 2004; Sears 1992). Sears's artifacts from Pierce are still housed in the collections at the Florida Museum of Natural History, listed according to four even more confusing proveniences, as discussed in the later chapter on collections.

Dan Penton, then of the Florida Division of Archives, History, and Records Management (now the Division of Historical Resources, DHR), was apparently the next professional after Sears to record data on Pierce. He spent a half-day (21 March1972) of survey there apparently to update state records. Of note is his statement that "a portion of the site was used in building the causeway for the Apalachicola bridge" (Penton 1972a:1); we later learned that what Moore called the Mound Near Apalachicola (8Fr20), recorded separately from Pierce but now seen as part of the whole complex, as well as a shell mound just east of it, were demolished for fill used in bridge construction and other projects (such as Battery Park) starting as early as the 1930s.

Penton designated six different areas from which he collected surface artifacts, which have now been correlated with specific locations within the complex. Artifacts he obtained were studied in the DHR collections and are discussed below within the sections for those locations, and his complete collection is detailed in the comprehensive catalog in the Appendix. He compiled his information and completed the nomination of the Pierce site to the National Register of Historic Places (Penton 1972b). In this work, following Willey's, the biggest mistake was that the temple mound was called Mound C.

Robert S. Carr, an archaeologist now known for his work in south peninsular Florida, was contracted in 1975 for the firm of Architect Willoughby Marshall, Inc. by the Florida

Division of Archives, History, and Records Management (now DHR) to survey the entire city of Apalachicola. He worked for a month and examined both historic and prehistoric sites (but not standing historic structures, of which there are many, and which received their own site numbers and survey by someone else). He did not dig but inspected surface and disturbed ground wherever he could and obtained information from knowledgeable local people. He found that sand and shells from mounds and middens were constantly taken for building roads and other facilities, even to build roads *to* the mounds to make mining them easier (!). He learned that a shell midden ridge shown on a 1915 map as extending around the south part of town from Battery park (at the west end of the bridge) was taken out, as well as parts of Pierce mound group. This left a lot of secondarily deposited shell midden all over town. (We learned of one example of this: removal of the Mound Near Apalachicola for fill, discussed below).

Carr (1975:14-17) said the midden ridge along the bank at Pierce was about 1.2 miles (2 km) long and heavily disturbed, between 20 and 50 m wide, all the way to Cool Springs Creek on the east, and to the city dump on the west. He estimated only 50% to 25% of the midden was left, composed predominantly of *Rangia* (marsh clam) shells with lesser amounts of oyster and "conch (Busycon)" by which he certainly meant lightning whelk. He thought dense oblong lenses of shell might represent dwelling sites. He only relocated Mound B and the temple mound, but expanded the confusion about the latter, still calling it Mound C, assuming previous archaeologists were correct. The captions of his photos seem to be mixed up but apparently his first figure is a photo of the temple mound and second of what may be the Mound Near Apalachicola in Magnolia Cemetery. His third photo (Carr 1975: page between 20-21) is apparently a section of midden ridge with a house on it, possibly at the west end of the site. He also located a possible spot where the Cemetery Mound might have been, indicated by pottery and loose human bone on the surface.

In an appendix at the end of his report Carr (1975:38) quotes from a local memoirist, Dwight Marshall, whose manuscript must still have been in the possession of his family (Ida Maude Marshall of Apalachicola), concerning Pierce. Marshall said the railroad construction cut through "some of the Indian mounds near the cemetery. They dug up skeletons of Indians that were a foot taller than the average man of today and also other items of pottery. The Smithsonian Institute sent some men here on the Steamer Gopher..." There are many inaccuracies in this memoir, some easy to correct. The Smithsonian's correct name is "Institution" but it was not the sponsor of Moore's investigations or the *Gopher*; his sponsor had been the Academy of Natural Sciences of Philadelphia, as Carr realized. However, the railroad did not come through until after 1903, and Moore was at Pierce in 1902. There is no mention in any of Moore's writings about the railroad. I suspect Pierce was already so heavily disturbed for fill shell and sand for construction of roads and other things taking place *before* the railroad that this was how Moore heard of it in the first place.

Carr (1975:31) may have been the first to realize that Pierce was a complex of mounds, many of which had different names and numbers. He also recommended that the site, the most intact portion of which was beyond city limits, be not only protected but considered in planning

and ideally preserved as an archaeological park. Later workers continued making mistakes in naming mounds. The first comprehensive summary of Florida archaeology since Willey's (1949) masterpiece, *Archaeology of the Florida Gulf Coast,* recognized the importance of the site but showed it on a map on the wrong side of the river (Milanich and Fairbanks 1980:67, Fig.14), a mistake perpetuated in the latest synthesis of Florida archaeology, *Archaeology of Precolumbian Florida* (Milanich 1994:121).

Recent Investigations

Hearing the land was up for sale in 1994, the Department of State tried to buy it and prepared a last-minute acquisition proposal, thinking Pierce not only would be a great addition to public lands in general, but also would fit within the mission of the Apalachicola National Estuarine Research Reserve (ANERR), a combined state and federal natural sanctuary area, whose main office was not far east of Pierce along Scipio Creek at the time. This purchase attempt ultimately failed; the money could not be made available quickly enough through state government processes. As part of this attempt, however, Calvin Jones and Louis Tesar of the DHR Bureau of Archaeological Research (BAR) did some fieldwork at Pierce, including surface collection and shovel testing. They surface-collected and dug one shovel test (which I have named ST94TJ) west of the temple mound but east of the creek/ditch. My students and I inspected the artifacts they recovered, which are also listed in the Appendix catalog and the tables in this report. These artifacts are curated at the BAR in Tallahassee. Tesar told me most artifacts they recovered were in yellow sand, and they stopped digging when they hit what they thought were postmolds 20 cm in diameter. They, too, had mistaken ideas about the identity of several mounds, and Jones thought that the Fort Walton artifacts looked very late prehistoric.

Thus, from the 1970s through the 1990s, the documents, artifacts, and photos in DHR collections, the most official and trusted archaeological records in the state, have had for Pierce mislabeled mounds and other mistaken notions. This report and updated site forms for all the parts of the site will be submitted to the Site File so that the record can be corrected. Michael Wisenbaker at the DHR is probably the person who continues to be the most knowledgeable about Pierce and to hope for its preservation and even purchase by the state.

Meanwhile, world-famous archaeologist Gordon Willey, whose work in North and South America is still the foundation for New World archaeology, returned attention in an unusual way to the region of his first major prehistoric cultural synthesis (Willey 1949). By the 1990s he was retired but maintaining a Harvard office and writing, among other things, mystery novels. His first one was named *Selena* (Figure 8), and featured an elderly archaeologist involved in murder and even sex hijinks in the Florida panhandle region; he fictionalized the town names and the Pierce archaeological site location under the name "Bull mounds" (Willey 1993:13,20).

In 1994 I obtained permission from George Coleman, one of the owners trying to sell the Pierce land, to investigate the archaeology briefly, and in 1996 new landowner George Mahr contacted me to assess the possibility of constructing a housing development there. Both

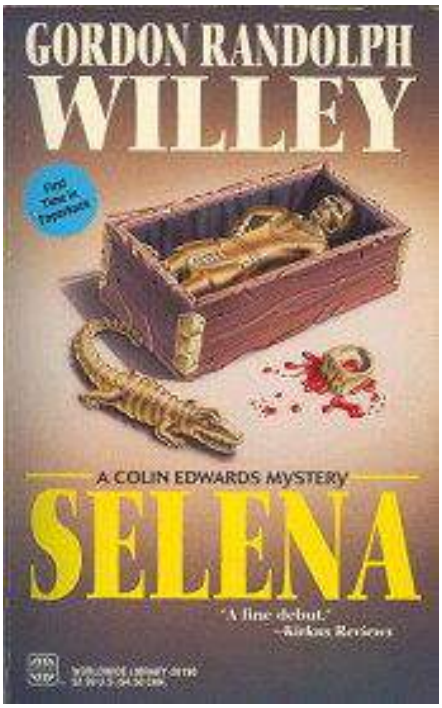


Figure 8. *Paperback cover of archaeologist Gordon Willey's mystery novel set in a fictional version of the town of Apalachicola and featuring Indian mounds modeled after Pierce.*

times the students and I crashed through the forest seeking mounds and pacing distances for a sketch map (with no gps or Google-Earth yet). We dug shovel tests and cores, and I prepared a brief report noting the possibilities of human remains in many places throughout the site and more mounds that were thought to exist. Details of this work are given in the next chapter.

In 1996, Mahr contracted with Dan Penton, by then an archaeologist with Post, Buckley, Schuh & Jernigan, Inc., to determine the archaeological sensitivity within a proposed roadway through the site that would be part of its development. At that time also a topographic map had been done by a land surveying company, and the proposed road was plotted on it, with Penton's shovel tests shown within (and a few outside) it (Figure 9).The road would be 60 feet wide and a total of 3200 feet long, with a connection at the south end to Bluff Road, and two branches into the east and west sides of the property.

During four days of fieldwork, Penton dug 52 shovel tests at 110-foot (30.5-meter) intervals. His tests averaged 19" (50 cm) square and up to 36" (1 m) deep, or shallower if he hit water or hardpan. Table 2 summarizes these shovel tests, based on his report (location of the artifacts recovered is unknown). He screened all soils through ¼" mesh. Penton estimated that, of the 39 tests that produced about 600 artifacts, only 15 had significant cultural deposits, accounting for 83% of those artifacts. His areas A, B, and C conform to the west-central, and east sides of the site as they are discussed later in this report. He did not work on any mounds. Penton's (1996) report (which I did not obtain until 2011) said that his shovel tests that did produce artifacts did not have materials deeper than 24" (60 cm) and that impact mitigation would be relatively simple. However, my later work recovered evidence elsewhere at the site showing cultural deposits as deep as a meter, and even Moore recovered burials from areas *outside* mounds. So impact mitigation could be complicated.

Several times over the years I returned with students to monitor the site. In 2007 and 2011 we did larger excavations with the permission and invitation of the landowner. All these excavation units are shown on Figure 9, based on the topographic map in Penton's 1996 report, and my work is further detailed in the next chapter. The work of all the archaeologists who visited Pierce has added valuable new data through the decades, but has also replicated some of the mistaken mound identifications, which carried on also into my work. Only with better maps, more subsurface testing, and of course Moore's notes, all of which became available only very recently, is it possible to correct misunderstandings and see the bigger picture of this important archaeological site. Thus, I am happy to report within these pages the tiny details of all the research and data, as well as a comprehensive description and analysis of what must have been a major population center and capital town for many prehistoric centuries.

Table 2. *Summary of Penton's 1996 Shovel Tests at Pierce (Mahr property).*

#	*Location*	*Stratigraphy (depths in cm)*	*Cultural Materials*
1	S central	0-15 very dark gray, humic sand 15-74 dark gray sand (wet) 74 water table	none
2	S central	0-38 dark gray sand 31-71 dark brownish-tan hardpan 71 medium chocolate brown hardpan	none
3	S central	0-61 light gray sand 61-89 dark gray sand (wet) 89 water table	none
4	S central	0-23 light gray sand 23-61 dark gray sand (wet) 61-86 dark gray compact sand (wet) 86 water table	none
5	S central	0-20 light gray sand 20-51 dark gray sand (damp) 51-74 dark gray sand (wet; artifact at -61) 74 water table	1 chert decortication flake/pebble, possibly retouched, -61 cm
6	central	0-13 light gray sand 13-56 dark gray sand (damp) 56-63 dark gray compact sand (wet) 63 water table	none
7	central	0-20 dark gray humic sand 20-61 very dark gray sand (wet) 61 water table	none
8	central	0-23 very humic dark gray sand 23-53 tan/gray sand (damp; artifacts) 53-74 dark gray sand (wet) 74 water table	12 secondary flakes 1 chert biface tool frag
9	central	0-30 light gray sand 30-64 yellow/tan sand (artifact zone) 64-99 light yellow/tan sand	4 check-stamped 1 complicated- stamped 6 sand-tempered plain (2 burnished) 1 decortication flake, 2 secondary flakes 1 fish otolith

#	Location	Stratigraphy (depths in cm)	Cultural Materials
10	W central	0-56 light gray sand 56-81 mottled tan/orange sand (artifact zone) 81-97 light tan silty sand	1 sand-tempered plain
11	W central	0-41 light gray sand 41-71 mottled yellow/tan sand (sherd at -61) 71-99 light tan silty sand	1 sand-tempered plain
12	W central	0-53 light gray sand 53-84 dark brown compact sand 84-92 light tan sand	none
13	W	0-41 light gray sand 41-61 dark brown compact sand (sherd at -49) 61-97 light tan sand	1 complicated-stamped (rectilinear)
14	W	0-61 light gray sand (artifact zone) 61-76 dark brown compact sand 76-95 light tan sand	4 check-stamped (1 flattened lip) 7 sand-tempered plain
15	W	0-58 oyster/Rangia shell w/dark gray sand (sherd at -58) 58-99 light gray sand 99-112 dark brown compact sand	1 sand-tempered plain 1 fish bone (species unident) *Rangia* and oyster shell sample
16	W	0-61 light gray sand w/shell (artifact zone) 61-89 dark brown compact soil zone (“hardpan”) 89-97 light tan sand	1 indet punctated 4 sand-tempered plain
17	NW	0-58 light gray sand w/shell (artifact zone) 58-97 dark brown compact sand 97-102 light tan sand	2 check-stamped (1 rim) 2 sand-tempered plain (friable surface)
18	NW	0-58 light gray sand w/shell (sherds at -25-41) 58-84 light brown compact sand 84-97 light tan sand	1 Gulf Check-Stamped rim (scalloped) 5 check-stamped (1 base with cross hatching) 1 complicated-stamped (rectilinear or simple-st)
19	NW	0-66 light gray sand (sherds in top 30 cm) 66-94 dark brown compact sand 94-99 light tan sand	2 sand-tempered plain (burnished)
20	NW	0-58 light gray sand 58-79 dark gray compact sand 79-97 light tan sand (wet)	none
21	SE	0-43 modern fill 43-79 tan sand 79-94 dark brown hardpan	none
22	SE	0-79 light gray sand (sherd at – 51 cm) 79-97 dark gray compact sand (wet)	1 sand-tempered plain
23	SE	0-25 medium gray midden (artifact zone) 25-66 medium gray mottled sand 66-99 light gray sand (wet) 99 water table	1 check-stamped 1 fine line punctate (Ft. Walton Inc) 7 sand/grit tempered plain 1 whiteware plate rim
24	SE	0-43 black dirt midden w/*Rangia* (artifact zone) 43-71 light gray sand 71-97 dark gray compact sand	3 Ft. Walton Incised (1 rim) 24 sand-tempered plain 2 animal bone (species unident)
25	SE	0-43 black dirt midden w/*Rangia*, oyster (artifact zone)	14 Ft. Walton Incised (many rims) Lake Jackson loop handle frags

#	Location	Stratigraphy (depths in cm)	Cultural Materials
		43-56 light gray mottled sand 56-69 dark reddish/brown compact sand w/concretions 69-102 medium brownish-tan sand	79 sand/grit tempered plain 1 ground stone (sedimentary?) frag 1 limonite rock frag (yellow) animal bone (alligator, gar fish and catfish)
26	E central	0-58 black dirt midden w/*Rangia*, oyster (artifact zone) 58-79 dark gray sand 79-91 dark brown compact sand w/concretions 91-102 light brownish-tan sand	1 Lake Jackson loop handle frag 7 Ft. Walton Incised (3 rims) 8 check-stamped (1 rim, burnished) 50 sand-tempered plain (4 rims 4 animal bone (alligator, turtle, fish)
27	E central	0-41 medium gray sand (artifact zone) 41-81 light gray sand (damp) 81-107 dark gray sand (wet) 107 water table	4 Ft. Walton Incised 27 sand/grit-tempered plain 1 chert pebble frag. 1 alligator dermal scute (calcined)
28	E central	0-58 medium gray sand (artifact zone) 58-127 light gray sand	2 check-stamped 3 sand-tempered plain
29	E central	0-46 medium gray sand (artifact zone) 46-66 mottled medium gray sand 66-117 light gray sand 117-124 dark gray compact sand (wet) 124 water table	2 check-stamped
30	E central	0-8 humus sand/root mat 8-20 dark gray /black sand (damp) 20-46 medium gray sand (wet) 46 standing water	none
31	central	0-8 dark gray humus zone 8-64 dark gray sand (wet) 64 water table	none
32	central	0-58 light gray sand (historic materials) 58-89 mottled dark brownish-gray sand (damp) 89-104 light brownish-tan sand (wet) 104 water table	1 ironstone frag. 2 machine cut square nails 1 button (4-hole, porcelain)
33	E central	0-46 medium gray sand w/shell (artifact zone) 46-94 light gray sand 94-109 medium gray sand	19 sand-tempered plain 1 ironstone pebble (worked) 1 button (4-hole, brown “bakelite”) 1 alligator dermal scute
34	E	0-51 medium/dark gray shell midden (artifact zone) 51-104 light gray sand 104 medium gray sand	2 Ft. Walton Incised 34 sand-tempered plain (3 rims) 1 bone (species unident)
35	E	0-43 medium/dark gray shell midden (artifact zone) 43-66 mottled medium gray sand 66-94 medium tan sand	16 Ft. Walton Incised (4 rims) 68 sand-tempered plain
36	SE	0-28 dark gray shell midden (artifact zone) 28-51 light gray sand 51-71 medium/dark brown hardpan 71-97 light tan sand	1 Ft. Walton Incised 18 sand-tempered plain 1 alligator dermal scute (frag.)
37	SE	0-28 medium gray shell midden (artifact zone) 28-66 light gray sand	1 check-stamped 22 sand/grit-tempered plain

#	Location	Stratigraphy (depths in cm)	Cultural Materials
		66-102 medium gray sand (wet) 102 water table	1 chert fragment (non-cortical) 2 bone frags. (species unident)
38	SE	0-31 light/medium gray sand 31-56 light gray sand 56-76 medium to dark gray sand (damp) 76-104 dark gray sand (wet)	none
39	E central	0-58 medium gray sand w/shell (sherd at -41) 58-79 light tan/gray sand 79-109 light gray sand	1 check-stamped
40	W cen	0-31 light gray shell midden (artifact zone) 31-56 light gray sand 56-102 medium tan/gray sand (damp) 102-107 medium gray sand (wet)	1 check-stamped 5 sand/grit tempered plain 1 secondary chert flake 15 bone frags. (species unident)
41	W cen	0-38 light gray sand 38-61 orange/tan sand (artifact zone) 61-109 tan sand	7 check-stamped (2 rims) 5 sand-tempered plain
42	NW	0-56 light gray sand w/shell (artifact zone) 56-107 light tan sand	4 check-stamped 7 dentate stamped (1 rim) 1 complicated-stamped rim, curvilinear 14 sand-tempered plain (1 rim) 4 bone (2 fish, 2 species unident)
43	NW	0-58 light gray sand (artifact zone) 58-79 medium brownish-tan sand 79-102 light tan sand	2 sand-tempered plain (rims, fitting)
44	NW	0-48 light gray sand (6 sherds) 48-99 light tan sand	4 check-stamped (1 rim) 2 sand-tempered plain
45	NW	0-56 light gray sand (artifact zone) 56-84 medium brown compact sand 84-104 light/medium tan sand	5 sand-tempered plain (4 burnished, thin) 1 secondary flake
46	NW	0-58 light gray sand (artifact zone) 58-89 medium brown compact sand 89-104 medium tan sand	1 check-stamped 2 sand-tempered plain 1 secondary flake
47	NW	0-38 light gray sand (2 sherds) 38-53 mottled medium tan sand 53-102 light tan sand	2 sand-tempered plain
48	NW central	0-46 light tan sand (3 sherds) 46-61 medium brown sand 61-97 medium tan sand	1 check-stamped 2 sand-tempered plain
49	NW, SW of rd	0-51 light gray sand (6 sherds) 51 dark brown compact sand (only the cultural zone excavated)	2 check-stamped 4 sand-tempered plain
50	NW, SW of rd	0-58 light gray sand 58 dark brownish-gray hardpan	None – unit abandoned
51	NW, SW of rd	0-61 light gray sand (9 fitting sherds) 61 dark brownish-gray hardpan (only the cultural zone excavated)	1 check-stamped (9 pieces broken)
52	NW, SW of rd	0-61 light gray sand (artifacts in the upper 16”) 61-69 dark brown compact sand (only the cultural zone excavated)	3 check-stamped 1 sand-tempered plain 1 secondary flake

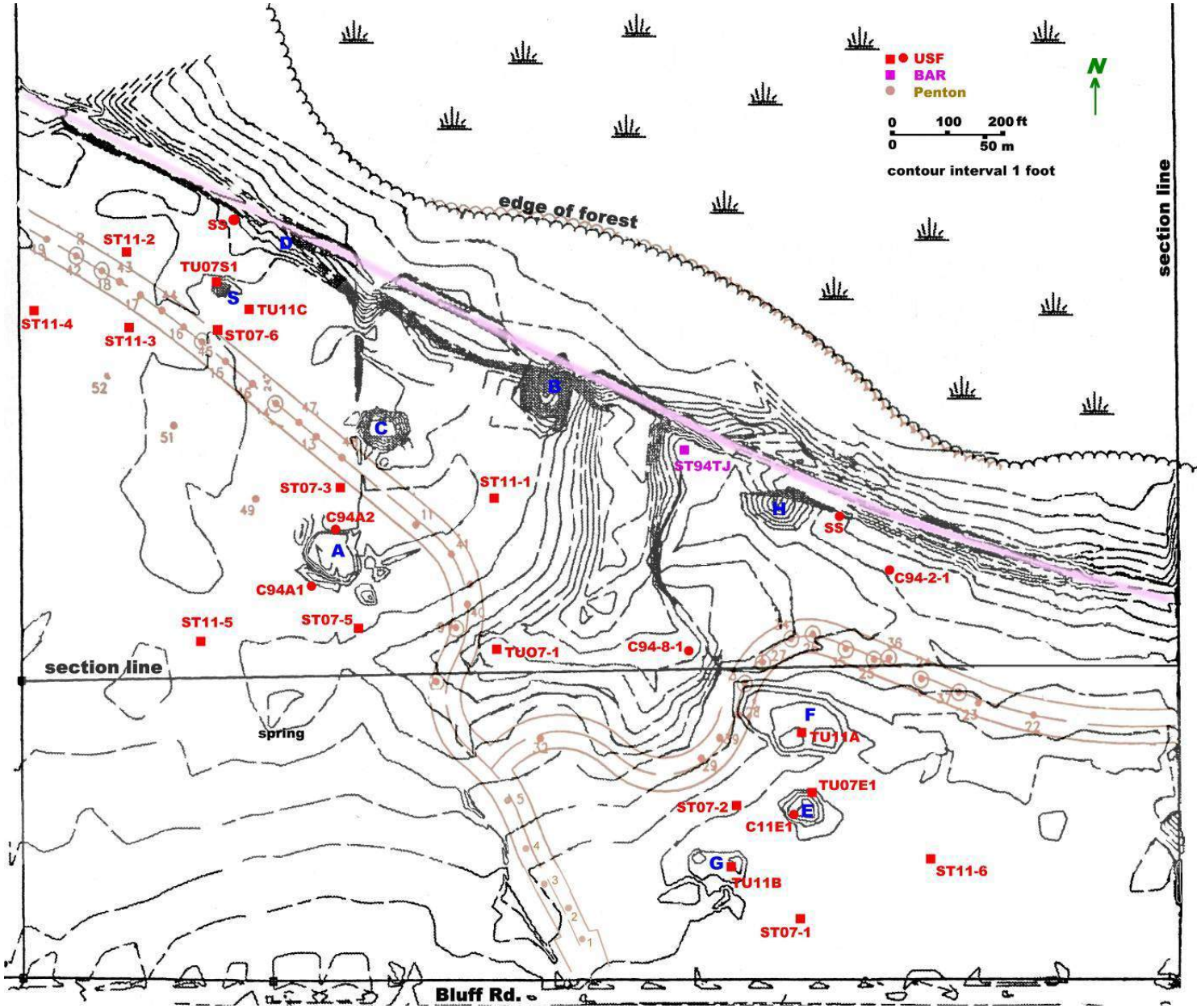


Figure 9.
Topography of Mahr property at Pierce, showing mounds (blue labels), and excavations by DHR (purple), USF (red), and Penton (1996; brown, within proposed road, with tests having cultural materials circled); pink line marks riverbank dropoff to marsh.

UNIVERSITY OF SOUTH FLORIDA INVESTIGATIONS

History of Work

I first saw Pierce in the summer of 1983, during a small survey covering the entire Apalachicola valley. Local collectors took me and my survey partner Mike Burt to the temple mound (now named Mound H). It was built of shell, shrouded in thick vegetation, and guarded by killer yellowflies (Figure 10). As USF's program in northwest Florida archaeology became established in the early 80s, my field crews and I occasionally returned to the site. It was easy to walk to the temple mound and what was called the big mound, Moore's Mound B, because these two were along the old railroad bed that had become a cleared path when the track was removed in the early twentieth century.

Figure 10. *Pierce temple mound (Mound H) with archaeologist Mike Burt in summer 1983.*

In 1994, learning that the long-distance owners (Miller, Coleman, and others) in California had a death in the family and wanted to sell the land, I secured permission from George Coleman, Sr., of San Diego, to conduct surface inspection and core at the site. The land was covered in incredibly thick secondary forest, but my intrepid crew plunged through the tangles of greenbriar vines and were able to locate two more mounds on the southwest side, which corresponded fairly well with Moore's mounds A and C. People who grew up in the area played in the woods on the mounds as kids, and it was also a teen hangout spot (occasional finds of blankets and rotting underwear supported this oral history!). Some collectors shared their information and allowed us to photograph their artifacts. On top of Mound A, in the surface soil disturbed by a burrowing gopher tortoise, we found human bone (rib and cranium) fragments. In accordance with state law protecting unmarked human graves, these were submitted to the state archaeologist (then Jim Miller) and are curated with the BAR collections.

Amazingly enough, in 1994 we also got permission from the city of Apalachicola to investigate in the Magnolia Cemetery east of Pierce, where Moore had recorded the Cemetery Mound (now numbered 8Fr21) being dismantled even as he was visiting. We cored and shovel-tested in the woods north of the graves and in roads and paths between the graves. Louis Tesar of the BAR joined us, having earlier surveyed the site and dug one shovel test with colleague Calvin Jones. We talked with Joe Zingarelli, manager of the cemetery, and others to see where mounds might once have been.

Gordon Willey encouraged me to research Pierce in his letters in the early 1990s, feeling that there was a lot there he had been unable to discover in his short time 50 years earlier. New owner George Mahr hired me and a few students in 1995 to investigate further and give him a rough map and evaluation of the site to see where burials and other features might prohibit construction. We again crashed through the thick forest, covering a wider area of the site, surveying and also recording another small mound farther to the northwest, just off the railroad bed path. Since it had a big pothole in the middle, we informally labeled it the doughnut mound. It later became apparent that this mound fit the description of Moore's Singer Mound, 8Fr16. Shortly afterward, Mahr had the entire property bush-hogged. This removal of smaller trees and brush, luckily without disturbing the soil, enhanced visibility incredibly, and three more mounds popped out, all low platforms on the southeast side (Mounds E, F, G).

Meanwhile in 1996 additional fieldwork was done by Penton (described in the previous chapter); his shovel testing in the proposed road areas was in many places close to (but not identical to) areas tested by USF later. Also, a topographic map was included in his report, providing more precise data from which to determine the site layout. This map had been made by a surveying company and accurately showed elevations. An oval of seven mound became clear, but it was unknown which was which of Moore's original designations.

For various reasons (students dropping out, concentration on other projects, university obligations), the USF research was put on hold for several years, except for quick visits to walk around the site. The vegetation grew back, was cut again, and grew back. By the middle 2000s, USF crews began more work, mapping the Magnolia Cemetery and the area to the east of it that the city was continually bulldozing, in part to enlarge the cemetery. Somewhere east of Pierce and east of the Cemetery Mound we knew Moore had recorded two more mounds, Cool Spring Mound (8Fr19) and Mound Near Apalachicola (8Fr20). East-northeast of the latter he (Moore 1902:217) had mentioned in passing a shell field where there was apparently another mound (of shell) that he did not name and in which he was apparently not very interested. Somewhere to the west was Jackson Mound, 8Fr15. But limited information was available on all these, and much of it, I found out later, was wrong.

In 2007, with Mahr's permission, I brought an archaeological field school to test mounds that had just been exposed (Singer, Mound E) and the areas around them. In spring of 2011 Mahr asked for more subsurface testing, provided a copy of Penton's 1996 report (which I had

not seen), and requested the work that let to this comprehensive report. With graduate students I could work faster, testing other mounds of unknown content and village areas in between, so as to cover the entire site. It has all turned into one of the biggest research projects of my archaeological career, and while I regret taking so long to finish this report, I hope it is obvious that time was needed to process such a mountain of data and materials.

Field and Laboratory Methods, Strategies, and Research Questions

For all the fieldwork conducted by USF teams, standard archaeological practices and state and federal professional standards have been maintained. Cores were taken with a 4" bucket hand auger, as deep as possible (until water or impenetrable soils were reached). Shovel tests were 50-cm square, excavated at least a meter deep or until water or culturally sterile soils were encountered. More formal test units ranged from 1 x 1 meter to 1 x 2 meters in area, dug just as deep. All excavated soils were screened through ¼" mesh except for 9-liter samples from the southwest corner of each level of each test unit and from other special places around the site, which were bagged and returned to the Tampa lab for more careful processing by flotation. Also, one-liter soil samples were saved for curation in perpetuity and/or any further research. Flotation of soil samples was done in a standard archaeological flotation barrel that was filled with water and held graduated screens into which the soils were poured and agitated by the flowing shower head in the bottom of the barrel. Screen sizes for capturing remains by flotation were as follows: A-fraction=¼" (63 mm) mesh; B-fraction=.034" (8.6 mm; geological screen #20); C-fraction=.0116" (2.9 mm; geological screen #50).

Placement of all excavations, from cores to test units, was judgmental; I tried to find areas near the oldest trees or other characteristics that would mean the prehistoric cultural deposits were less disturbed. I also looked to fill in gaps in the map where no subsurface information was known, so the picture of occupation and activity areas beyond mounds could be ascertained. Individual excavation units and materials recovered are described in the following chapters under the sections of the site where they are located. The Appendix presents the complete catalog, in numerical order, of all materials obtained by BAR and USF (location of Penton's 1996 materials and notes is currently unknown). The site and its contents are described in standard archaeological fashion in the following pages, with some additional explanation to make everything accessible to any reader. Abbreviations used in the tables and text are listed after the table of contents.

The first research questions were standard culture history: where everything is, how old it is, and so forth. Only then can later issues -- mound ceremonialism, subsistence and technology, and socioeconomic systems – be investigated. Excavations thus targeted both unknown mounds and the areas around them. Table 3 lists all USF excavations and Tesar and Jones's shovel test, locations of which are shown on Figure 9. They are designated with abbreviations for easy organization on tables, catalog databases (Appendix), and maps.

Table 3. *USF and BAR Archaeological Excavation Units at Pierce Mounds Complex*

*Name**	*Original Name*	*Location*	*UTM coord***	*Cultural materials*
1994				
C94-8-1	Core 1 Area 8	Central Village		none
C94-2-1	Core 1 Area 2	E Village		sherds, bone, shell
C94A1	Core 1 Mound A	S side Mound A, pothole		sherds
C94A2	Core 2 Mound A	N side Mound A pothole		sherds, shell
ST94TJ	Tesar/Jones (BAR)	Central Village	692722/3290978	sherds, lithics
ST94-1	Shovel Test 1, also STLTM, LMT1	Mound Near Apalach/E Village		sherds, bone, shell
ST94LT2	Shovel Test LT2	Mound Near Apalach/E Village		sherds, bone, shell
2007				
ST07-1	Shovel Test 07-1	Central Village, S end	692789/3290740	modern materials
ST07-2	Shovel Test 07-2	Central Village, SE end	692747/3290795	charcoal
ST07-3	Shovel Test 07-3	W Village, between Mds A, C	692515/3290980	sherds
ST07-4	Shovel Test 07-4	W Village, between Mds A, C	692463/3290971	none
ST07-5	Shovel Test 07-5	Central Village, SW end	692529/3290899	none
ST07-6	Shovel Test 07-6	W Village, S of Singer Md	692452/3291036	sherds
TU07-1	Test Unit 1	Central Village, center of oval	692623/3290873	lithics, modern materials
TU07-E1	Test Unit 2 E	N slope Mound E	692795/3290789	sherds
TU07S1	Test Unit Sing 1	NW slope Singer Mound	692426/3291100	sherds, shell, bone
2011				
SS		W Village, NW, near Mound D	692447/3291145	bone, shell
SS		E Village E of Md H	692732/3291003	sherds, bone, shell
C11E1	Core E 1	Mound E, SW slope	692794/3290784	modern materials
ST11-1	Shovel Test 11-1	Central Village	692630/3290956	sherds, lithics, point
ST11-2	Shovel Test 11-2	West Village, NW side	692356/3291156	sherds
ST11-3	Shovel Test 11-3	West Village, NW side	692363/3291092	sherds
ST11-4	Shovel Test 11-4	West Village, NW side	692261/3291084	none
ST11-5	Shovel Test 11-5	Central Village, W side	692432/3290858	none
ST11-6	Shovel Test 11-6	E Village, SE side	692913/3290767	none
TU11A	Test Unit A	Md F, SE side	692776/3290834	sherds
TU11B	Test Unit B	Md G, E summit	692742/3290782	none
TU11C	Test Unit C	West Village	692462/3291093	sherds, lithics, bone, shell

*C = core (4" bucket auger); SS = soil sample (9 liters); ST = shovel test (50 cm square); TU = test unit (1 x 1 m or 1 x 2 m); Md = mound

** Universal Transmercator coordinates (in meters; where available; no GPS available in early years) all in Zone 16 R, Easting/Northing; see Figures 9, 12 for map locations

THE MOUND COMPLEX AND SITE AREAS

The best reconstruction now possible of the whole prehistoric Pierce complex is given in this section, based on the results of these years of investigations, combined with the following: artifact data from collections at USF, the BAR, and local residents; land ownership information from the Franklin County courthouse, where I compared 1902 records with what Moore said about landowners' names in describing these mound sites; and Moore's newly discovered original map. Table 4 lists all of Moore's mounds and what locations correspond with them, correcting longstanding mistakes. It includes mounds Moore mentioned but did not name (I have given them names) and additional recorded sites and how they fit into the complex. This information supercedes all earlier interpretations of Pierce, including mine (e.g., Marrinan and White 2007; White 2007), as well as those by the earlier researchers mentioned throughout this report (e.g., Willey 1949) made before both the additional unpublished information from Moore and the results of all the extensive testing were available.

Moore's notes indicate he and his crew reached Apalachicola at 9 P.M. on the evening of January 14, 1902, having traveled in the *Gopher* from St. Marks, and, despite some rain, began the next afternoon digging at Pierce. He stayed through 23 January, devoting over a week to the site. His notes even record temperatures (40s and 50s F) and barometer readings for each day. His sketch (Figure 6) shows 7 mounds in a rough oval, with Mound D outside to the northwest and Singer Mound beyond that. He must have spent most of his time digging the rich Mound A with its 99 burials, and far less on the rest of the site. Besides the 9 mounds in the sketch, he later recorded the Cemetery Mound, Mound Near Apalachicola, a "shell heap" near that, Cool Spring Mound, and Jackson Mound. Of these total 14 mounds, 12 of the 13 of the Pierce complex have been relocated. Cool Spring, the farthest southeast of the group, still eludes discovery. Jackson Mound (discussed later) is far enough northwest of Pierce to be its own center. The rest are close enough to each other to be part of a clearly interrelated ceremonial and village complex. Much of this is confirmed with aerial photos, the topographic map, and other imagery now available.

For the 2011 fieldwork, a lidar image by Jeff Du Vernay helped in discovery of previously unknown mounds. Lidar (Light Detection and Ranging) uses laser light pulses from aerial survey to measure distances from air to ground, indicating elevations of millions of points to achieve contour mapping. In the lidar digital elevation model (DEM) image (Figure 11), darker red shows higher elevations. The oval of seven mounds is clear on the west, and even an elongated elevation along the midden bank outside the oval to the northwest, which must be the remains of Mound D (compare with Figure 6). Two yellow north-south roads delimit the old cemetery and two elevations within them are probably remnants of the Cemetery Mound and the Mound Near Apalachicola. Another lidar image (Figure 12) shows the arbitrary divisions of the whole site that structure discussion in this report: the mounds and the west, central, east, and far east village areas.

Table 4. *Pierce Mound complex and associated mounds: corrected/updated names, numbers, explanations.*

Site #	*Name*	*Location*	*UTM Coord*	*Ht, Area**	*Moore's ht, area*	*Composed of*	*Moore's description*	*Current state*	*Contents (Moore)*	*USF materials*	*Cultural affiliation*
8Fr14A	**Pierce Mound A**	SW	692511 3290732	5' 120'NW-SE 105'NE-SW	8' 96' E-W 76'N-S	yellow sand and oyster shell	yellow sand underlain by fire-darkened sand mixed with shell; irregular layers of shell throughout; summit broadened	4-wheel tracks, looter holes	99 burials; WI, SwCr, red-pted; points; celt; pendant; copper & silver; shell tools & beads; bison-bone gorget; wolf, panther teeth	Deptford, Sw Cr/ early W I, ch-st sherds, shell tool	late Early Woodland, Middle Woodland, late WI?
8Fr14B	**Pierce Mound B**	N center adj to RR bed	692635 3291031	15' 100'WNW-ESE 75' NNW-SSW	16' 100' diam	dark sand and shell	sand with slight admixture of shell; "much of the marginal parts had been hauled away for use in an adjoining cultivated field" (p.228)	cut by RR bed; new potholes in N, NW sides; 4-wheel tracks to summit	"a superficial skeleton lay near the margin" (p. 230); he did not dig here much because of palmettos	Deptford, check-st sherds, shell tool, lithic debitage, faunal remains	Early Woodland, Middle or Late Woodland?
8Fr14C	**Pierce Mound C**	NNE of Mound A	692547 3291016	5.5' 110' NW-SE 100' NE-SW	6.5' 90' E-W 74' N-S	gray sand, oyster,clam shell, over oyster stratum, over yellow sand base at ~1 m depth	elliptical outline, flat top, sand over shell base; he dug 35' trench 15' wide to within 3' of center (unknown depth; p.228)	heavily looted recently, 2 trenches (1=4 m long) backfilled; wheel tracks	3 skeletons; shell beads; ch-st, SwCr Comp-St punctated ceramics	SwCr Comp-St, Santa Rosa, check-st sherds, shell beads	Early-Middle Woodland
8Fr14D	**Pierce Mound D**	NW of Md C	692447 3291145	1.5 m? on shell ridge, hard to see	20" 40' diam	blackened sand, shell	"in thick scrub"; "dwellings"	cut by RR bed, mostly gone	ch-st, "pinched," incised sherds	Tucker Ridge Pinched?	indet Woodland

Site #	*Name*	*Location*	*UTM Coord*	*Ht, Area**	*Moore's ht, area*	*Composed of*	*Moore's description*	*Current state*	*Contents (Moore)*	*USF materials*	*Cultural affiliation*
8Fr14E	**Pierce Mound E**	SE side, between Mds F, G	692630 3290956	3.5' 85' E-W 80' N-S	3.5' 76' N-S 82' E-W	sand platform	all sand, no shell, much spread, dug 14 holes each 3' square to base; "evidently domiciliary"	low vegetation	1 sherd; said was domiciliary (house platform)	3 plain sherds; modern glass, metal	Fort Walton?
8Fr14F	**Pierce Mound F****	SE side, N of E	692776 3290834	1.5' 100' E-W 50' N-S	2.5' 240'E-W 75'N-S	sand platform	dark sand with sm layers of clam,oyster shell; said he dug half of it away	low vegetation	pinched, incised, check-st sherds	a few plain, indet incised sherds	Fort Walton?
8Fr14 G	**Pierce Mound G****	SE side, SW of Md E	692742 3290782	2' 130' E-W 60' N-S	3' 120'E-W 60'N-S	sand platform	"dwelling site"	low vegetation	none	no artifacts	Fort Walton?
8Fr14H	**Pierce Mound H** (temple mound)**	ESE of Md B	692768 3290968	6" 120' NW-SE 80' NE-SW (Willey, p.280) said 7.5' hi, 95' square	did not say	mostly shell	"commonly believed to be of shell throughout. It is said by some that the shell extends to a depth of 2' only, after which sand is encountered"	heavily cut by 4-wheel tracks, RR construc, looters over decades; 75% gone?	"As the shell is used for streets of town, digging into the mound is not encouraged"	Ft. Walton, check-st sherds, shell tools	Fort Walton
8Fr16	**Singer Mound**	1300' NW of 2 on RR bed	692308 3291023	4.5' 35' diam	5.5' 65' diam	sand, some shell	truncated cone, white sand above dark sand base; some shell over burials;	large hole in middle; doughnut shape; cleared	plain, check-st sherds, celts	plain, ch-st, indet incised-punc sherds,	indet Woodland
8Fr14	**Pierce village**	around & S of whole mound complex	W end: 6921090 3291250 E end: 693540 3290800	1.5 km WNW-ESE	from outskirts to 1.5 m W of town	shell midden ridges, sandy habitation areas	only mentioned shell fields, not shell midden ridge or domestic debris	damaged by looting, railroad;	only mentioned shell fields	Dept, SwCr, WI, FW sherds, lithics; bone; historic artifacts	Early through Late Woodland; Fort Walton

Site #	*Name*	*Location*	*UTM Coord*	*Ht, Area**	*Moore's ht, area*	*Composed of*	*Moore's description*	*Current state*	*Contents (Moore)*	*USF materials*	*Cultural affiliation*
8Fr21	**Cemetery Mound**	1100' ESE of temple mound, in cemetery	693179 3290862	max: 1'	5' (did not give area)	flattened, recent graves	truncated cone; white and gray sand, oyster shell at central base; he dug it all	spread to nearly flat, modern graves in it; sherds, shells on surface	5 skeletons; plain and check-st sherds copper-covered limestone earplug; bone pin	Sw Cr, St. Andrews Comp-St, Keith, Carrabelle, ch-st sherds, fauna	Early-Middle Woodland, Late Woodland?
8Fr20A	**Mound Near Apalachi-cola**	E side of cemetery	est: 693378 3290827	max: 2'	2' 100' N-S 80' E-W	flattened, recent graves	.5 mi W of town, Cypress Lumber Co. property, in a cultivated field near shell-field; spread by plow; sand overlying shell base;	taken out in 1935 (?) to use as fill; area covered with newer graves in cemetery	"no result .... presumably... a place of abode" (p.217)	Sw Cr Com-St, Keith, Carrabelle Inc, Tucker, early WI, ch-st, FW sherds; fauna	Middle Woodland. Fort Walton
8Fr20B	**Shell Mound Near Apalachi-cola**	225' ENE from Mound Near Apalachicola	?	?	considerable size (p.217)	flattened, in area of recent graves	shell-heap near or within shell-field near the Mound Near Apalachicola; Willey (p.270) has remains of big shell midden 1 mi W of town, E of cemetery	razed for new section of cemetery	Apparently did not dig	SwCr, early WI, Keith, Crooked River Com-St, ch-st sherds, fauna, shell tool	Middle Woodland, Late Woodland?
8Fr19	**Cool Spring Mound**	? W outskirts of town; farthest SE of Pierce complex	?	?	7.5' 90'diam	unable to be relocated	Heavily looted when Moore got there; he dug 2/3; sand?	not relocated; removed for housing projects?	9+ burials; mica; chert point; celt; frog effigy & animal rim effigies, Sw Cr Comp-St, check-st, handles, incised & punc sherds		SwCr-eWI, FW

Site #	*Name*	*Location*	*UTM Coord*	*Ht, Area**	*Moore's ht, area*	*Composed of*	*Moore's description*	*Current state*	*Contents (Moore)*	*USF materials*	*Cultural affiliation*
8Fr15	**Jackson Mound**	W. side Mitchell Cr. 1.5 km NW of Pierce complex	691587 3291771	16 m N-S 19 m E-W	9' 72' N-S 66' E-W	sand	2.5 mi WNW of town; various colors of sand including red (hematite);	looted, eroded, flattened, driven on, lg looter trench on NE side; parts intact	26 central burials, cremations; chert points; SwCr, compound pots, handle frag; bitumen; clay & soapstone pipes; hammerstone; celts, hatchets; pendants; quartz crystal; galena, WI Inc?	Sw Cr Comp-St, WI Inc, FW sherds [2013 work still to be reported]	Middle Woodland; Fort Walton
8Fr77	**Jackson midden**	NNE side of Jackson Md		240 m E-W 60 m N-S		sand, shell midden	did not mention	was overgrown garden, now bulldozed, gone		Rangia shell midden [2013 work still to be reported]	Middle Woodland; Fort Walton
8Fr22	NOT A SITE "Mound Near Apalachicola 2" in Site File; requesting site number be vacated										

*Dimensions given in feet to allow comparison with previous works and with topographic map (Figure 9) that has 1-foot contour lines
**Name not assigned by Moore; Willey mistakenly thought the temple mound was Moore's Mound C; others followed Willey.

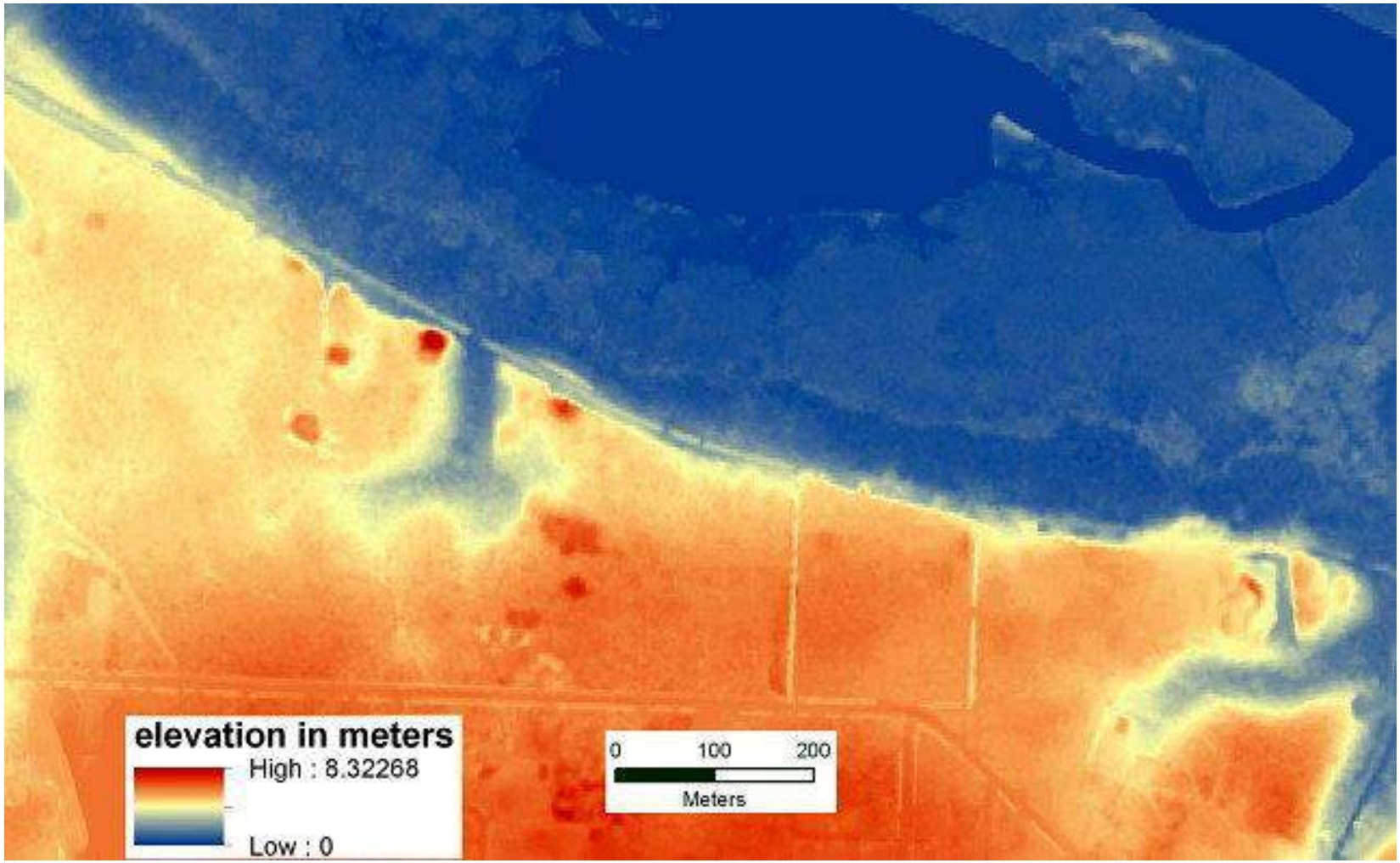


Figure 11. *Lidar image of Pierce Mounds complex (by Jeff Du Vernay), showing oval of 7 mounds, possible elongated remnant of Mound D at northwest, probable Cemetery Mound and Mound Near Apalachicola within boundaries of cemetery (north-south yellow roads); Turtle Harbor is to the north and Scipio Creek at northeast corner of image.*

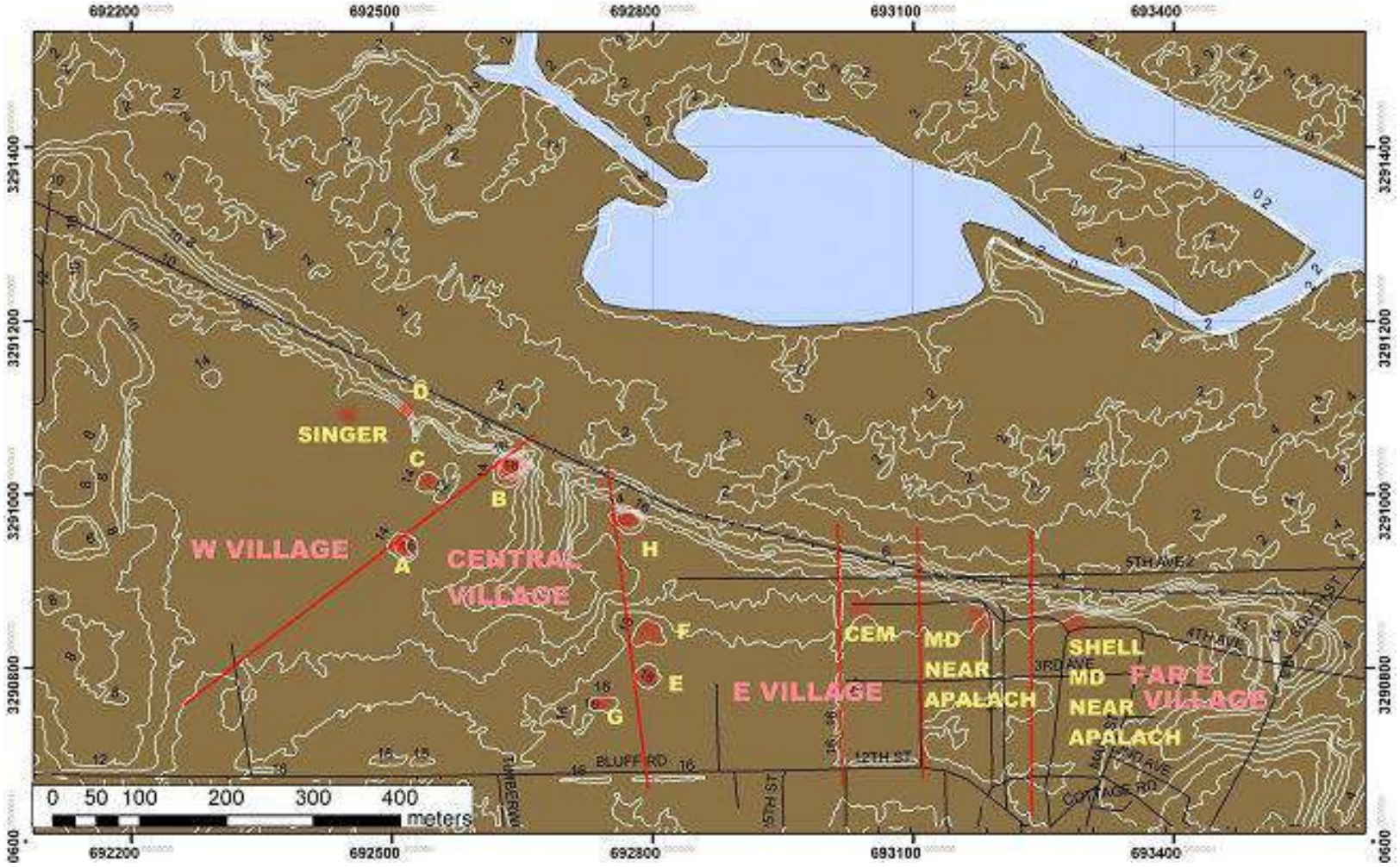


Figure 12. *Lidar image of Pierce Mounds complex (by Chris Hunt) with enhanced topography of contour lines, showing mounds (red) and arbitrary divisions of the site (red lines) as discussed in this report; contour interval 2 feet; UTM coordinate grid lines indicated at map edges; railroad bed indicated as cross-hatched black line, and water of Turtle Harbor and Scipio Creek in northeast.*

Moore's shell heap 75 m north-northeast of the Mound Near Apalachicola, herein named the Shell Mound Near Apalachicola, does not appear on his map and, as discussed later, must have been bulldozed before the lidar images were flown (2007). Similarly, Singer Mound, northwest of the oval, does not appear on the lidar images either, probably because it is too small to show up with this technology. A remnant of Mound D, also northwest of the oval, may show as the red smear northwest of the oval in Figure 11. We thought that the small round red elevation in the far southeast of Figure 11, close to the former head of a tiny (blue) stream, might be the Cool Spring Mound, based on Moore's description. In 2011 we checked it out, walking down the city street that now exists there. It was easy to find this nice round mound-shaped elevation -- and determine that it is a recently-buried septic tank!

All this information makes possible a better map of what the site must have looked like aboriginally, as approximated in Figure 13. The proximity of these 13 mounds makes it very likely that they were part of a complex settlement and ceremonial center. Whether all were used at once is unknown but the descriptions and analyses of each mound, as well as of the settlement around them, in the chapters that follow, attempt interpretation of the entire site's prehistoric chronology. Mounds are discussed in order (alphabetical, then west to east for the rest), then the habitation areas, for ease of discussion arbitrarily designated west, central, east, and far east village areas.

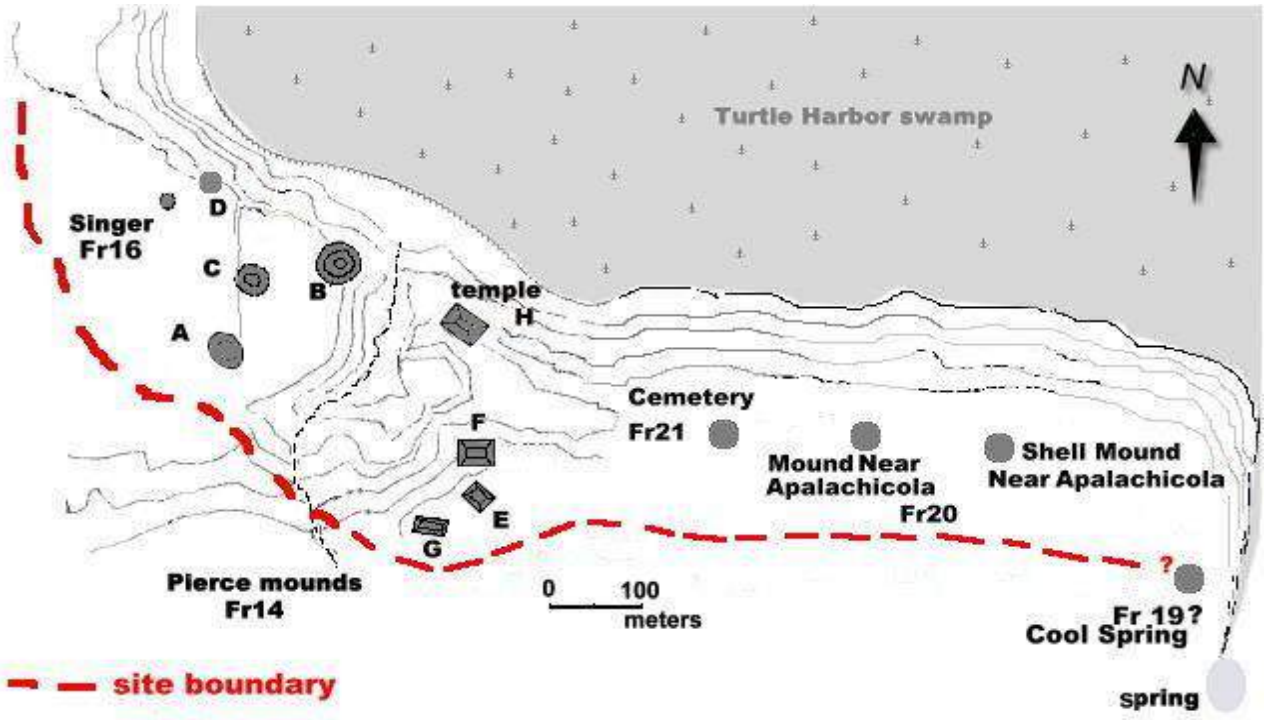


Figure 13. *Approximation of the layout of Pierce Mounds complex overlaid on modern topography; contour interval = 1 foot.*

PIERCE MOUND A (8FR14A)

Location and Description

The most spectacular mound at Pierce has been Mound A, mostly because Moore (1902:217-228) dug it thoroughly and recovered 99 burials and exotic and elaborate grave goods. He devoted the most pages to its description and clearly stated that it was the southwesternmost mound in the group, so it is unknown why later researchers thought it was one of the other mounds. Moore's original field notes locate Mound A at the "edge of scrub" and say "to E & W md extends in sort of roadway," a setting much changed, as it was recently in heavy forest and then cleared, with little evidence of a roadway. Moore said it was 8 feet high, 96 feet east-west and 76 feet north-south, implying an oval, which is indeed its shape in the unpublished notes. He referred to the "summit plateau" as 40 x 34 feet but much broadened "to prepare for interments made in recent times " – a statement with no explanation. It is hard to believe he would be allowed to dig in a cemetery with recent graves.

Moore thought this mound was not too disturbed but then mentioned previous digging in places as he went along describing the burials in his notes. He said he and his workers completely demolished the mound, but this is the case for many he investigated over the decades that still retain their mound shape and elevation; today Mound A is about 1.5 to 2 m (perhaps 5 feet) high. He described it as made of yellow sand, with fire and organic darkening at the base, where the sand was mixed with oyster shells, and containing irregular layers of shells throughout, especially around most burials. So shell from the midden deposits was used as a burial fill material for practical and/or special reasons. Most of the shell and burials were at the base of the mound, with those higher up surrounded by sand. A layer of shell may have been laid as preparation for mound building or for the earliest burials.

Moore stated that the mound had seemed full of promise to yield spectacular artifacts at first but proved to be disappointing as the work continued (similarly, in his unpublished notes, at the top of the page 44, is the word "disappointed"). But to modern archaeologists not simply after fancy goodies, Mound A is full of fascinating material and information.

Burials

Burials were not in-the-flesh, Moore thought, as skeletons showed signs of having been exposed for flesh to decay or be removed, and then interred (such as missing or misplaced bones); this is typical for native societies of the South. The 99 burials Moore recorded sometimes included remains of more than one individual. They are summarized in Table 5, derived from his descriptions in publication and notes and also his illustration (Moore 1902: Figure 154), adapted in Figures 14 and 15.

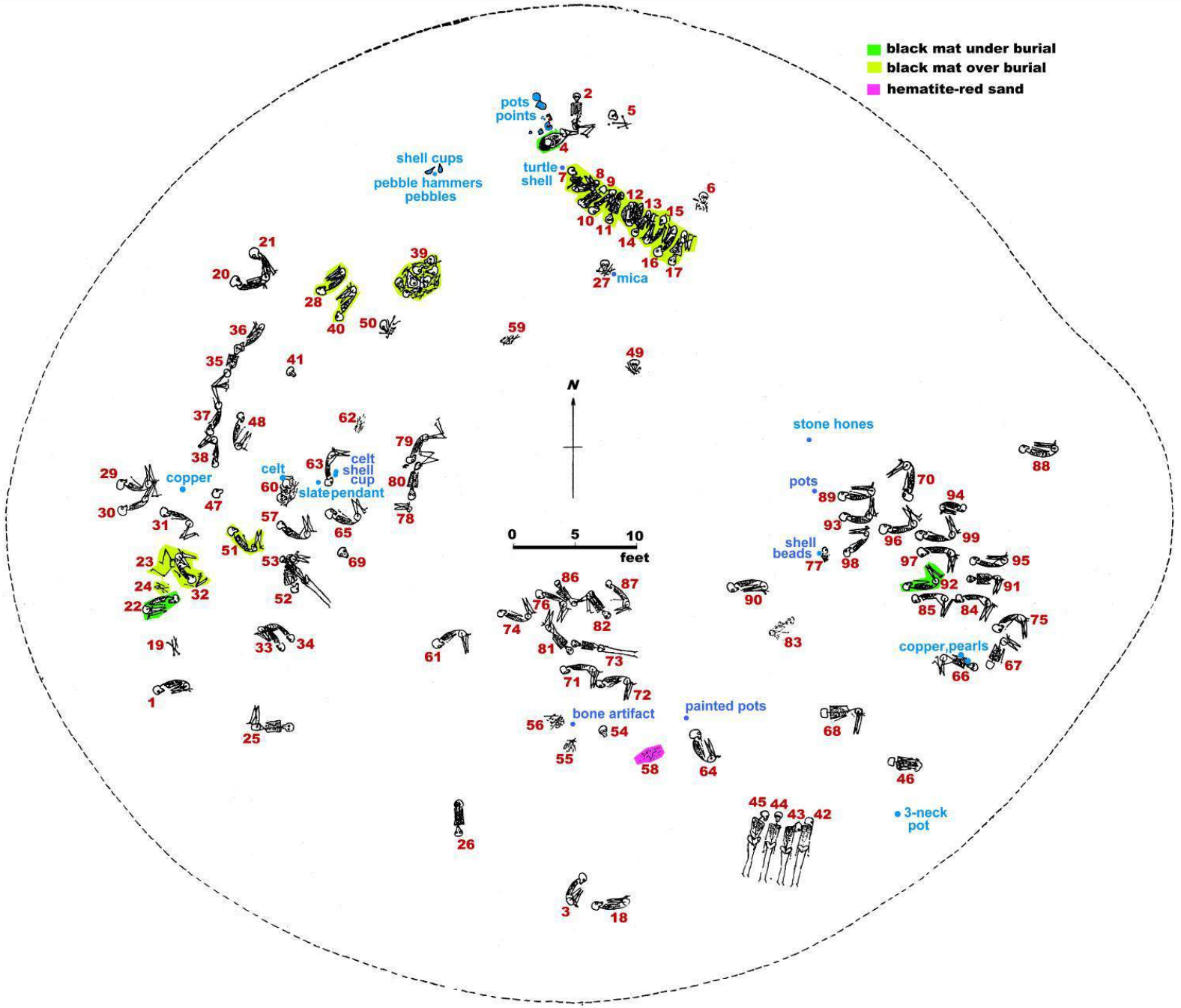


Figure 14. *Pierce Mound A burials, adapted from Moore's drawing, with similar treatments and artifacts indicated.*

Table 5. *Burials in Pierce Mound A, 8Fr14A (? indicates inference or no information given by Moore).*

#	Location (from center)	Orientation	Head/Facing	Bones	Grave goods/notes
1	WSW 38', 1.5' deep, in shell lens	flexed, on rt	W/S	adult male skeleton; "left ulna shows large inflam. node in lower half"	platform pipe fragment nearby
2	N 34', 2.5' deep in yellow sand, pelvis at legs of B4	flexed, on back, legs to l	N/up	skeleton	broken red ware vessel under thorax; near 2 plain pots, double vessel, worm-shaped pot, points, vessel with incised hands, red paint
3	S 32', 2' deep in sand	flexed, on l	NNE/SSE	skeleton, much-decayed	
4	N, in yellow sand, legs at pelvis of B2, 3' deep	part flexed on back, legs to rt	WSW/down or E (bent)	skeleton	burned mass under shoulders and beyond
5	N, 2' E of B2 at same depth	bundle?	NW/E	skull, scattered bones (2 femurs, tibia)	
6	NNE 28', 5 ft deep in yellow sand	bundle? "impossible to tell position or extent"	N/up?	skull and some bones very much decayed	
7	N 25', 2.5' deep; com-mingled with B8; in shell layer 1-1.5' thick, 1' above base	bundle or flexed?	NW/E	"mingled bones some showing effects of fire?"	under burned mass; turtle carapace just to NW/excavated by ? "Reuben"
8	NNE 25', 3'deep, under B7? in shell layer 1-1.5' thick, 1' above base	flexed on r	ENE/up?	upper body missing or unclear?	under burned mass/ excavated by ? "Wm Cull"
9	N, in shell layer 1-1.5' thick, 1' above base, 3.5'deep	flexed on l?	SW?/?	skeleton	under burned mass
10	N, in shell layer 1-1.5' thick, 1' above base, 3.5'deep	flexed on r	SW/SE	skeleton	under burned mass
11	N, in shell layer 1-1.5' thick, 1' above base, 3.5'deep	flexed on back, legs to l	SW/up	skeleton	under burned mass
12	N, in shell layer 1-1.5' N, thick, 1' above base, 3.5'deep; commingled with B13?	flexed	?	skeleton	under burned mass
13	N, in shell layer 1-1.5' thick, 1' above base, 3.5'deep; commingled with B12?	flexed	SW?/up?	skeleton	under burned mass
14	N, in shell layer 1-1.5' thick, 1' above base, 3.5'deep	flexed on back legs to r	SW/up	skeleton	under burned mass
15	N, in shell layer 1-1.5' thick, 1' above base, 3.5'deep	flexed on r	NE/W	skeleton	under burned mass
16	N, in shell layer 1-1.5' thick, 1' above base, 3.5'deep	flexed on l	SW/NW	skeleton	under burned mass
17	N, in shell layer 1-1.5' thick, 1' above base, 3.5'deep	flexed on back, legs to r	SW/up	skeleton	under burned mass

#	Location (from center)	Orientation	Head/Facing	Bones	Grave goods/notes
18	S 32.5', 2 ft deep in sand above shell	flexed on l	W/N	skeleton	/excavated by (?) "Charlie"
19	SW, 3' N of B1, 2.5'deep in shell	bundle?	no skull	scattered, "2 tib, foot bones, 2 fib, 1 fem"	
20	NW 34', 4.5'deep, lying on base covered by shell, overlaps B21	part flexed on l	WNW/NE	skeleton	
21	NW, on base with no shell above, overlapped by lower part of B20	flexed on r	NW/S	skeleton	
22	WSW 37', 3'deep	flexed on l	ENE/S	skeleton	"lying on great mass of charcoal, etc."
23	WSW 35', 3.5' deep, "cut off at trunk" by B32	extended, knees bent to each side	?	lower half of skeleton only?	"under extensive layer of charcoal, burnt shell, etc."
24	WSW, 2' S of B23	bundle?	?	scattered human bones	under same black layer as B23
25	SW 32', 3.5' deep in shell layer	flexed on r or on back with legs to r	E/up	skeleton	
26	SSW 28', 6' deep, on mound base beneath layer of shell	flexed on back, legs drawn up on torso	S/up	skeleton	
27	NNE 20', 5' deep, in shell	bundle	N/up	skull and a few bones	small piece of mica
28	NW 28', 5.5' deep	flexed on l	SW/N	skeleton	"under mass of black mat & charcoal, ashes, etc."
29	WNW 38', 1.5' deep, in yellow sand above shell	flexed on l	W/N	skeleton	
30	W 38', 2' S of B29, 2' deep in yellow sand above shell	flexed on l	SW/N	skeleton	
31	W34', 4.5' deep on base in sand	flexed on r	WNW/S	skeleton	
32	WSW 34', 4'deep on base in sand, overlapping and cutting off B 23	flexed on r	SE/NNE	skeleton, "scattered human bone along side and flexed long extremities at head," with cranium on trunk (parts of B23?)	trophy skull? part of earlier Burial 23?
33	WSW 28', 5' deep on base with mixed sand, shell; next to B34	flexed on l	SE/SW	skeleton	
34	WSW, "immediately at inner side of" B33	flexed on l	SE/SW	skeleton	
35	WNW 31', 5' deep, in sand with scattered shell on base; shoulder over skull of B36	on back, legs slightly flexed to r	NNE/up	skeleton	
36	WNW, skull under shoulder of B35, trunk to NE, at base in sand	flexed on l	SW/?	skeleton	
37	WNW, knees up against knees of B35, on base	flexed on l	SSW/NNW	skeleton	
38	WNW, with feet at skull of B37	flexed on l	S/W	skeleton	
39	NNW 24', 5' deep, in sand of body of mound	bundle burials?		mass of bones including 7 skulls	"black mat above and sand and shell mixed below"

#	Location (from center)	Orientation	Head/Facing	Bones	Grave goods/notes
40	NW 26', 7' deep in base of mound in sand	flexed on l	SSW/NW	skeleton	under black mat of burned material
41	WNW 26', 3'deep, in sand	skull	NW/up	isolated skull	
42 to 45	SSE 35', 5'deep, in yellow sand, no base line evident, side by side	extended supine	NNW/E, up, S, E	4 skeletons	
46	SE 35', 5' deep, on base in sand	bundle? upper skeleton on face, lower on back, flexed	W/down	skeleton	3-necked pot nearby
47	W 30', 2' deep in yellow sand	skull	W/N	isolated skull	
48	WNW 29', 7' deep on base, in sand	flexed on l	N/SE	skeleton	hammerstone nearby
49	NNE13', 4.5' deep in body of mound in yellow sand	bundle	N/up	skeletal elements missing pelvis, lower legs	
50	NW 22', 5.5' deep, in body of mound	bundle?		"group of unassociated human bones"	
51	W 29', 6' deep on base in shell	flexed on l	NW/NE	skeleton	"directly under mass of fire remains"
52	WSW 24', 8' from surface, in shallow grave dug 9" down in clear yellow sand that is 20" between lower surface of shell layer, on probably original surface of the ground; under B53	flexed on r, "chest front down, face to left shoulder, lower trunk on back	S/E	skeleton	femur, which was lying across the finger, had repaired fracture of the upper 1/3, with some shortening of the bone
53	WSW , on top of B52 on base, 7' deep, covered by shell layer	extended on back	NW/up	skeleton	
54	SSE 18', 2' down in yellow sand	skull	NW/up	isolated skull	
55	S 19', 8.5' deep, under shell	bundle?		disturbed bones; no skull?	near flat bone artifact
56	SSW 17.5', 8.5' deep, under shell	bundle?		disturbed bones; no skull?	near flat bone artifact
57	WSW 25', 8' deep on base under shell	flexed on l	WNW/NE	skeleton	
58	SSW 2', 2' deep in yellow sand and sand dyed red with hematite	bundle?		much decayed bones in no order	in sand dyed red with hematite
59	NNW 15', 3' deep in yellow sand in body of mound	bundle?		much decayed bones, no order evident	
60	W 25", 6.5' deep, in base under shell	2 bundle? commingled	W/up, S	2 skulls, some bones	celt under one skull; pot nearby?
61	SW 16', 8'deep, on base under shell on sand	flexed on r	WSW/SE	skeleton	
62	WNW 19', 2' deep in yellow sand	bundle		bones; no skull	"badly decayed bones disturbed by previous diggers"

#	Location (from center)	Orientation	Head/Facing	Bones	Grave goods/notes
63	WNW 21', 8' deep, on base under shell	flexed on r	S/E	skeleton	slate pendant 1' W of head; probably shell cup and broken celt
64	SSE 23', 7' deep, in shell near base	flexed on l	NNW/E	skeleton	near 3 (?) painted pots
65	W 21', 9'deep, "in shallow grave (depression; surface above about 1 ft) grave extending 17 in below lower level of shell"	flexed on l	W/NE	skeleton	
66	ESE 35', 6' deep "in shallow grave" [notes] "beneath eastern slope" (published version)	flexed on l	ESE/up	skeleton	copper tube on r humerus; pearl beads at neck (only one bead in notes)
67	SE 38', 5' deep, in shallow grave	flexed on r, face down	SW/down	skeleton	
68	SE 29', 7.5' deep, in shallow grave	flexed on r, face down	W/down	skeleton	
69	WSW 20' in caved sand	skull	NW/up	skull only	
70	E 27' 6' deep in shallow grave	flexed on l	S/NW	skeleton	
71	S 13', 8' deep, in base under shell; legs at head of B 72	flexed on r	W/S	skeleton	
72	S 14'(?), 8' deep, skull at knees of B71	flexed on r	W/S	skeleton	
73	SSE 11', 6.5' deep in sand	extended on back	WNW/up	skeleton	
74	SSW 10' on base, here 8' deep	flexed on l	W/N	skeleton	
75	ESE 38', 5' deep on base in sand	flexed on r	SW/SE	skeleton	
76	SSW 9', 6' deep in sand, adjacent to SW of B86	flexed on r	WNW/S	skeleton	
77	ESE 21', 9' deep in shallow grave	bundle? or tightly flexed	N?/SE?	bones of infant	shell beads
78	W 14', in shell about 1' above base, under big hole (previous digging?)	flexed on l		partial skeleton, pelvis, legs	part of skeleton also dropped "in caved sand"
79	WNW 14', under hole on base in sand has B80 legs at chest	loosely flexed on r	SW/SE	skeleton	
80	WNW, 1' E of B79 with pelvis opposite head of 79, feet near its chest	flexed (notes say on r, diagram shows on back with legs to r)	S/up	skeleton	
81	S 11', 8' deep, at base of mound under shell	flexed on r	SE/up	skeleton	silver-covered copper disk on each shoulder
82	S 9', 6' deep, in sand; pelvis at knees of B86 (on map, not text)	flexed on back, legs to chest	SE/up	skeleton	
83	ESE 24', 5' deep in sand	flexed on back, knees to l?	NE/up	child skeleton	much decayed
84	ESE 35', 5.5' deep, in yellow sand, covered by shell and sand; skull at feet of B85	flexed on r	WNW/S	skeleton	
85	ESE 35', 5.5'deep, to W of B84 with its feet at B84 skull	flexed on r	W/S	skeleton	

#	Location (from center)	Orientation	Head/Facing	Bones	Grave goods/notes
86	S 8', 6'deep in sand, knees at pelvis of B82 (not noted by Moore)	flexed (notes say on l, map shows on back, knees to l)	NW/up	skeleton	
87	SSE 9'on base under shell (no depth)	flexed on r	NW/SW	skeleton	
88	ENE 39', 5.5' deep in yellow sand under shell; near edge of mound	flexed on l	W/N	skeleton	
89	E25', 6.6' deep in sand under shell	flexed on l	W/N	skeleton	
90	ESE 17', 2.5' deep in yellow sand	flexed on r	W/S	skeleton	
91	ESE 35', 6.5' deep in yellow sand	flexed (notes say on r, map shows on back, knees to r)	W/up	skeleton	
92	ESE 30.5', 6'10" deep in yellow sand	flexed on l	(notes say SW; map shows W/N	skeleton	"large fire place on base" (uncertain if with the burial)
93	E 25', 8' deep in sand in base	flexed on l	W/N	skeleton	shell beads at neck, small pinched pot at shoulder; "skull saved"
94	E 32', 5'deep in yellow sand in shallow grave	flexed on l	E/S	child skeleton	
95	ESE 35.5', 5' deep in yellow sand under shell	flexed on l	W/N	skeleton	
96	ESE 28.5', 6' deep in yellow sand	flexed on l	(notes say SW; map shows W/N	skeleton	
97	ESE 32', 6' deep in yellow sand	flexed on r	W/S	skeleton	
98	E 25' 6'9" deep	flexed on l	SW/NW	skeleton	
99	E SE 31' on base	flexed on l	W/N	skeleton	

I assume all were adult burials unless indicated. Location of each burial is given from his center point of the mound, indicated by a "C" on the original drawing right above the scale. Since Burial 1 is in the southwest I suspect Moore still had his directions backwards (see discussion of his map of all mounds and Figure 6 [p. 12]) when he first began digging, since he knew by this time that elaborate pottery deposits were often on the east side of burial mounds.

Moore's published map that I adapted in Figure 14 has information beyond his verbal descriptions, as do the unpublished notes. For example, sketches of lone artifacts are described in the notes (p. 36) as being in the north-northwest area, 30 feet from the center, 3.5 feet deep: "on top of shell layer, 2 shell cups, one perforated, 2 peb [sic] hammers & 6 pebbles"; in the published version (Moore 1902:225) what must be these same items are described as being simply "loose in the sand" with no further location given. The grave goods indicated in Table 5 include items nearby that may not necessarily have been associated with the burial. Lack of items noted in this column of course does not indicate the person was buried with nothing, as so much of the material culture must have been of wood and other perishables.

The group of Burials 2, 4, and 5 had some of the most spectacular artifacts. Figure 15 shows page 33 of Moore's unpublished notes, where he first sketched these graves before later incorporating them into the larger map, with my color and labels added. Burial 2 was the very northernmost grave, "34 ft due north from center, 2 ft 6 in. from surface in yellow sand," apparently an adult flexed skeleton on its back, with the head to the north, face-up, and legs to the left. Under its torso ("thorax") was a "curiously shaped" broken red ware vessel. Three feet to the west were two broken plain pots he described as one-gallon in capacity, with one seen in the drawing as having a rounded base and outflaring rim, and at least one with basal perforation. One foot west was the now well-known double-chambered Weeden Island Red vessel, and near or touching that ("in contact"), a broken piece of the famous spiral vessel which he called a "worm pot" (ceramics discussed later in this chapter). About 6 inches farther west were 4 "arrowpoints or knives"; 10 inches south was the base of the "worm vessel" and "same distance away" were fragments of the Weeden Island Incised pot with figures of hands. Burial 4 was 6 inches deeper so must have been made earlier but its flexed legs were in contact with Burial 2's as it lay on its back pointing southwest, its torso bordering the southeasterly extent of the fancy artifacts. Its head was bent to the chest and behind the head and under the shoulders was a mass of charcoal, burned shell and sand blackened by burned organic material "about 1 ft diam & 3-5 in thick"; this is shown on the sketch as two separate entities: the black mass adjacent to the back and the burned shell spreading westward beyond it as smudged sketch line. Just 2 feet east of this whole scene, at the same depth, Burial 5 was a skull and scattered bones labeled in the sketch as two femurs and a tibia.

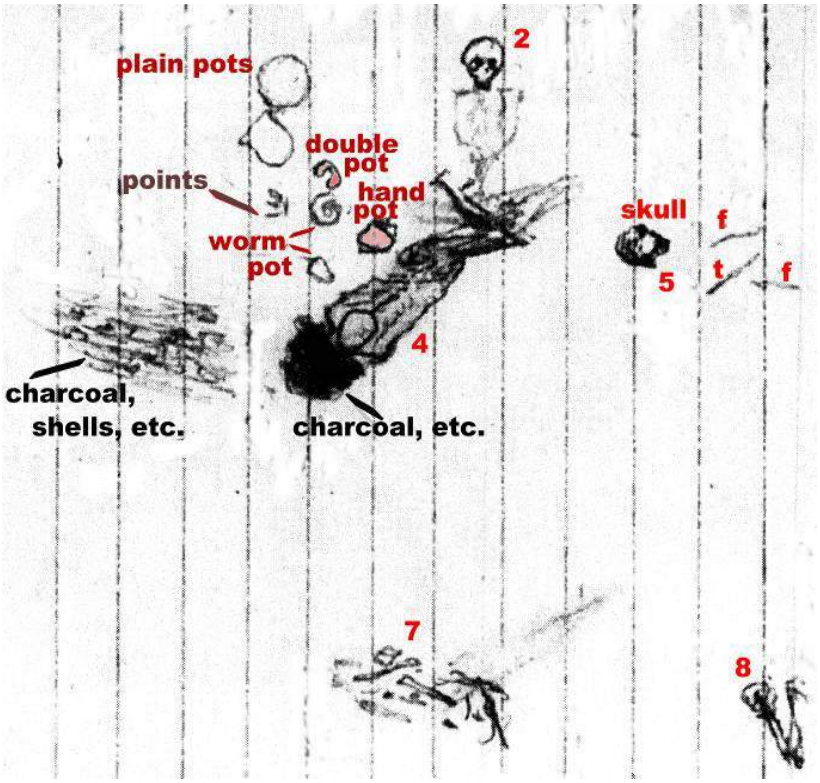


Figure 15. *Moore's sketch from unpublished notes (p. 33) of the group of Burials 2, 4, 5 from Pierce Mound A, (and parts of additional burials), in closeup, with color and labels added.*

The original Burial 7 was thought to be a lone skull, but proved to be a turtle shell at the base of the mound, over 4 feet deep. It may have been an offering anchoring a line of skeletons running northwest-southeast, laid out in parallel, each oriented southwest-northeast. The northwesternmost in this line was then named real Burial 7 and the southeasternmost was Burial 17. These 11 mostly flexed skeletons had some heads toward the mound center (southwest) and one to the northeast. They were in a layer of shell 1 to 1.5 feet thick, 1 foot above base of the mound, and under black masses of charcoal, calcined shell, and ashes that seemed to have been burning elsewhere then placed on the bones, charring them in places.

Burials 20 and 21 were flexed on their left and right sides, respectively, and facing each other with the pelvis and legs of the former overlapping and touching that of the latter; B20 was laid on the shell of the mound base and covered with some shell but B21 had no shell on top, suggesting deliberately different treatment. The knees of B20 were over the chest of B21, but the upper legs of B21 ran over the lower part of the trunk of B20, with the lower legs flexed beyond. So these two individuals were deliberately arranged to have unusually overlapping lower bodies; it would be impossible to tell the interval of time between their interments, but they must have been related in some fashion. Other burials had skeletons touching as well, possibly an indication of relationship or else of accidental placement.

Burials 35, 36, 37, 38 in Moore's plan view of the mound make an interesting arc along the northwestern side, with the touching skeletons (37 and 35 are flexed with knees to knees) suggesting family ties or some other relationship. Burial 39, a mass of bones with 7 skulls, Moore described as being in the body of the mound, sitting on sand and shell, with a black burned mass above the bones; this might also be some family group, possibly stored for later burial together. Burials 42 through 45, in the southeastern section of the mound, were extended skeletons, all with heads to the north-northeast, 43 bent down on 42's shoulder, side-by-side in a shallow grave beneath the mound base.

Describing Burial 51, located in the center of a loose group of flexed burials on the central west side of the mound, 6 feet deep, Moore's notes (p.44) indicate a "(depression of surface corresponding to old truck [track?] accounts [?] for apparent shell mining of mound at this point; this is also under the western extension of the mound)." This may mean that later burials were covered with mound extensions, constructed to accommodate more burials at a later date, as is seen with some southeastern mounds of Woodland and later times. Or it could mean Mound A was also mined for fill. Just southeast of Burial 51, Burial 52 was placed in deep yellow sand 20" below the bottom of a local shell layer (lens) and under Burial 53. Moore's notes indicate this shell lens extended 7' below the surface. So either there was a mound extension here or the original ground was not prepared with a shell base for the entire mound.

As Moore summarized, burial orientations were diverse; heads pointed in all directions, some skeletons tightly flexed and some flexed with legs at right angles to the trunk. Moore's notes often differentiate between skeletons tightly flexed, with knees drawn up to the chest, and those flexed at a right angle ("R a"); I did not differentiate these in Table 5 because the data

are inconsistent but this might be an area for future research. From the diagram I inferred the direction the skull was facing, as Moore did not say this information anywhere.

Since the current location of these skeletal remains is completely unknown, even if they do exist, we cannot know basic details about age, sex, stature, pathologies, and other data that could be determined from the bones (not to mention the wealth of questions that could be answered by DNA analysis). Moore did indicate when he encountered remains of infants and of isolated skulls. He provided data on burial types for 83 burials, as follows:

flexed on left side	33	lone skulls (trophies?)	3
flexed on right side	25	scattered bones	9
flexed on the back	3	“aboriginal disturbance”	1
extended	2	“recent disturbance”	1
infants (badly decayed)	2	“skull in caved sand”	1
skulls with bone fragments (bundle burials)	3		

The remaining 16 burials are not even able to be characterized this clearly. The lone skulls may be simply missing the postcranial skeleton, or perhaps they are trophy heads taken for ritual purposes. The scattered piles of bones with no skull indicated may be simply what was able to be recovered by those burying the person (perhaps after a trophy skull was taken!). In all cases the disturbance to Mound A by Moore and those coming before him may easily have dislodged bones, including skulls, belonging to particular skeletons such that the associations are gone.

As with much of Moore’s collections, the skeletal remains he excavated remain lost. He does mention giving an unusual bone, the Burial 52 femur with a healed fracture, to the Army Medical Museum in Washington, D.C. This is now US Dept. of Defense, Armed Forces Institute of Pathology, National Museum of Health and Medicine; Curator Franklin E. Damann graciously confirmed for me that the femur is still there (#1002551) and could be available for further research. Moore says in the notebook (p. 56) that the skull from Burial 93 was saved (underlined twice), but not where it went. The inference is that most of the other bone was discarded somewhere. What we could learn from these bones about genetic relationships, diet, environment, and so forth in the age of fancy science might merit a search for them.

Moore said “scattered human bones were frequent in the southwest section of mound. Many burials [were] under masses of oyster shells. However, large masses or layers of oyster shells without burials” (p. 41, notebook) were also encountered. On the same page Moore noted that “no distinct stratification... a well worked base line, very dark sand in (on?) white... oyster shell at some places especially over burials, closely packed, and at other points loose as though to fill in mound....frags of pottery mainly in shell, ...plain, check-stamp, comp stamp”; all this indicates both specific use of shell midden full of bone, shell, and pottery to cover burials but also to fill in other areas and probably to make the mound base.

Other aspects of burial treatment are noteworthy, especially the "black masses" on top of or beneath skeletons. It is a shame we do not have this black, burned organic material interred with so many, since it could be analyzed using modern scientific methods. Perhaps it was food, clothing, woven cane matting used as burial covers, or other offerings sacrificed in a fire as part of burial ritual. Moore (1902:225) also noted "certain scattered bones lay in sand colored with hematite"; many Middle Woodland burials throughout the eastern U.S. area associated with such reddened soils and other colorful deposits. Certainly red was an important ritual color, associated with blood and therefore probably both death and fertility (menstruation and birth).

There seem to be distinct groupings of graves. On the north are 3 different burials with elaborate artifacts, just north of a line of 11 tightly flexed parallel skeletons. on the east is a group of many flexed skeletons somewhat near each other, and a few outliers. To the southeast is the group of 4 parallel extended skeletons in a row, and to the south another group of flexed skeletons with 3 bundle burials and a lone skull south of them. Burials on the west side are farther apart, of many different kinds, but the arc of skeletons, the two flexed facing each other, and the mass of bones are distinctive. There could be any number of reasons for such groupings or they could be accidental. The testing we did in the Magnolia Cemetery, specifically *not* near any graves, occasionally did nonetheless uncover human bone; people can forget where they buried even loved ones in the past, or may be unaware of graves from the more distant past. Or people can remember well and bury kin together.

Other Mound Deposits

Further and more detailed study of the graves and their associations will be necessary to infer more about Middle Woodland ceremonial practices, not to mention their meanings. Deposits of other artifacts apparently separate from human graves included many additional interesting items of apparent ritual importance, which may also have been funerary offerings. Details from Moore's unpublished notebook can be added to his published descriptions.

East-northeast 20' from the center of the mound and 4' deep (p. 40 of notebook) were "5 pieces of sandstone used as smoothers or hones and one stone hone also one 'sinker [and] one base of bot [pot? bottom?] cup [?] in fallen sand"; these sound like more utilitarian artifacts, not fancy ceremonial goods.

Southeast 38 feet from the mound center and 2 feet deep, near the margin of mound, in yellow sand somewhere near Burial 36, a broken Weeden Island Plain vessel with three necks was recovered. Thirty feet west of the center in "fallen sand" similar to that on the surface was a piece of copper apart from any burials (but not far from Burials 29-31 and 47).

Right after Moore's unpublished notes for Burial 48, for which no grave goods are indicated, he notes (p. 43) a hammerstone loose in the yellow sand, and a stone hone showing marked wear, lying in the shell, so these items may or may not have been near B 48. On p. 45

he notes a shell drinking cup loose in the sand near the mound base, and another in shell and sand mixed on the base, with fragments of human bones near it; it is unknown if these were assigned a burial number or if they are the isolated shell cups depicted on the map. There follows the phrase "cup contains gladiolus" – a phrase of completely unknown meaning since the flower by that name or even the bulb would never have been preserved and is native to the Old World so would not occur in prehistoric Florida.

Moore's unpublished notes, after describing Burial 60 (p. 47), contain at the bottom of the page a passage as follows: "under ves[sel] cem [?] type perf bot in caved sand rim wanting [?]"; the next page (48) says at the top "24 ft E 5 ft down in basal dark sand Pots x, y, & frags." These two passages seem to indicate at least 3 separate vessels but I could only put the latter 2 on the diagram in Figure 14. The next passage gives the location of a flat bone implement at 16' S, 8 ' down on the mound base under shell with scattered bones. This may be the bison-bone pendant, and it is located near Burials 55 and 56, which were indeed piles of loose bones, so may be associated, though he does not say this. The next note on p. 48 is "21 ft SSE frags of painted pot in fallen sand; also painted ves[sels] a & b"; no depth is given but these pots (whether actually numbering 2 or 3 vessels) are near the head of burial 64.

After describing Burial 63 and its accompanying slate pendant a foot west of the skull, Moore's next line of notes (p.48) says "shell cup with large perf[oration] of base. Broken celt on base [of mound?]." These can only be assumed to accompany Burial 63 as well, and the celt must be of ground stone. On Figure 14 they are shown only in a very roughly approximate position relative to the skeleton.

In the notebook between descriptions of Burials 65 and 66 are the notes on the copper tube with Burial 66, then the bison-bone gorget described as at the mound base "Loose in shell" and then a piece of fluted sheet copper "in caved sand" Since these two burials are in nearly opposite sides of the mound it is impossible to determine where these artifacts might have been, so they are not pictured on Figure 14. By the time the work got to publication Moore (1902:225) simply listed several artifacts like these as "loose in the sand." It is impossible to tell if these were indeed all burial goods or just other kinds of offerings. On the south-southeast slope of the mound in "fallen sand" was a pot with red-painted vertical bars associated with the broken Weeden Incised pot with the flower-like design, a plain tetrapodal pot, and a cordmarked tetrapodal pot. Under the eastern slope of the mound was a three-necked plain vessel.

Near what Moore called "a great fireplace, on the base of the mound" were a shell cup, three animal canine teeth (carnivore, wolf, panther), a *Glycymeris americana* clamshell, deer bone fragments, a small rodent lower jaw, a mass of shell resembling a large unperforated bead, and a "rude shell gouge." This may have been a pile of special objects sacrificed as a memorial offering for the building of the mound.

Among the items described as loose in the sand without associations were whelk shell cups, several with perforated bases; two chert points and a chisel; a small, presumably stone pendant; hammerstones, pebbles, broken hones; two pointed shell implements; a few shell beads; a small tetrapodal pot; a clay monitor pipe; an unusual incised and punctated vessel fragment; a complicated-stamped sherd; a neatly made broken shell gouge. Willey (1949:282), in summarizing his findings from what must have been a brief visit to Pierce, mentioned that the R.S. Peabody Foundations collections in Andover, Massachusetts, contained two items from Pierce Mound A: a zoned red ceramic specimen (#39301) and a clay platform monitor pipe (#39182); both of these must be the ones Moore described (then gave away).

Understanding the graves of Mound A remains as difficult as with any Middle Woodland mound in the eastern U.S. Some interpretations, based on what was recovered archaeologically and on the assumption that fancier items, the more expensive to make, indicate higher status, might emphasize the differential importance of the people buried. There are many faults with this reasoning, of course, not the least of which is the accident of preservation. Far more elaborate and expensive burial goods could be made of perishable material such as painted wood. The black, burned masses were clearly important offerings, possibly destroyed possessions of the deceased. They were of some organic substance, perhaps wood, cloth, or skin. The artifact deposits not with any grave could be original grave goods displaced by later digging (whether aboriginal disturbance, possibly for additional burials, or historic looting before or during Moore's work). Finally, many of the plain pots and utilitarian stone tools are not interpretable as elaborate or specially-made grave goods. Their importance might have come not from being unusual but because they were possessions of the dead and/or perhaps used in the ritual of the funeral.

Pierce Mound A did also, of course, contain some highly decorative artifacts that have become archaeologically famous. However, the majority of the burials (55 of the 99) do not have grave goods clearly associated and many others have nearby goods which may not belong to them. Besides the charred black materials whose original form will probably never be known, the preserved artifacts include many fascinating specimens, as well as mundane items of daily life, as described in the next section. By including all these detailed (and sometimes tedious) data in this report, I hope at least to make them available for future research. For example, 3-dimensional modeling of the mound and its burials and artifacts might show new relationships, should the resources for that and other advanced study become available.

Ceramics

Pierce Mound A included everything from the plainest of plain pots to the elaborate spiral-shaped vessel and Weeden Island Incised and red-painted vessels that are famous throughout the Southeast. These epitomize the height of Middle Woodland artistic and probably spiritual expression. Many were with burials and others not, though again, given the amount of disturbance at this mound, many such associations were doubtless long lost before Moore got there, and then during his own digging.

Weeden Island Zoned Red vessels (a type of Weeden Island Incised with red paint) were numerous and notable. Associated with the Burials 2 and 4 group were three such pots. One is the double-chambered vessel (Figure 16) shown on the map (see Figures 14, 15) with incised rectilinear zones, some painted red, with only one compartment having the basal perforation. Another is only described by Moore as under the torso of the burial, fragments of part of a vessel with incised lines and red paint in places. The third is the near-cylindrical cup (cover illustration) with a flat base that was knocked out and an incised pattern depicting hands, palms down, reaching out to each other or, as Moore described in his unpublished notebook (p.37) "two open hands extended as though to grasp an object between them." The hands include fingernails, a filling of punctations, spiral forms across the back and red paint between the fingers. Between the hands is a figure that could almost be a headless person, upside down, or any other symbol (or a meaningless but pretty design).

Figure 16. *Weeden Island Zoned Red double-chambered vessel from Pierce Mound A, Burials 2 and 4 group (NMAI #174530.000; photo courtesy of the National Museum of the American Indian, Smithsonian Institution; photo by NMAI Photo Services Staff)*

A ceramic group on the south-southeast slope (apparently unassociated with any burials) included two more of these zoned, red-painted pots (Figure 17). One is a globular bowl of 1-quart capacity and perforated base, painted with vertical red bars. The other is a beautiful vessel shaped like a cup set in a bowl with an incised design including circles and what looks to a modern viewer like a 4-petal flower drawing, all surrounded by punctations dotted outside the flower and circles and eroded zones of red paint. Elsewhere in Mound A Moore noted sherds of three or four other broken red-painted pots.

Figure 17. *Two Weeden Island Zoned Red vessels from the south-southeast slope of Pierce Mound A (NMAI 174067.000 and 174077; photo courtesy of the National Museum of the American Indian, Smithsonian Institution; photo by NMAI Photo Services Staff)*

Willey (1949:282) originally called the double-chambered vessel "Pierce Zoned Red," and noted (but did not describe) another pot falling within this type name that was in the R. S. Peabody Foundation Museum collections (#39301) in Andover, Massachusetts. He (Willey 1949:391-92) considered this type to be distinct and earlier than his later type Weeden Island Zoned Red (*Ibid*:422). The reasons for this separate and earlier placement were the somewhat simpler designs and the supposed contemporaneity with Swift Creek Complicated-Stamped ceramics. Willey also labeled the pots with the hand design and flower design as "Crystal River Zoned Red" (*Ibid*:282, 389-91), distinguishing this type by the presence of punctations in addition to the incisions. But these vessels all fall neatly into the classification of Weeden Island Incised with red paint added. In the half-century since he defined these types, it has become clear that Swift Creek and early Weeden Island ceramic series are mostly contemporaneous, and are *not* necessarily representative of archaeological cultures (different ethnic or geographic groups) but simply pottery styles (White 2012). Thus the earlier type name has been discarded.

What Moore (1902:225, Fig. 162) described as a "curious fragment of earthenware" isolated somewhere in the mound was a solid inverted cone or flaring cylinder that becomes hollow rising from the narrow base, possibly the bottom of some kind of cup. It was decorated

with a pattern of zigzag lines made up of two parallel rows of tiny rocker-stamped lines, which could have been made with a fingernail, a small shell or, as Moore described them, punctations made with a "crescentic point," as well as larger punctations and incised circles or large annular punctations. What must have been the rim is broken off, and the tiny fragment is only about 7 cm tall. This unusual vessel is shown in Figure 18; it is classified as **Santa Rosa Stamped** (Willey 1949:282, 376-78), a type more common farther to the west along the Gulf Coast, around Pensacola, but clearly within the late Early and Middle Woodland manifestations there.

Figure 18. *Santa Rosa Stamped small unusual vessel from unknown location in Pierce Mound A (NMAI 174992.000; photo courtesy of the National Museum of the American Indian, Smithsonian Institution; photo by NMAI Photo Services Staff).*

Swift Creek Complicated-Stamped was represented only briefly in Moore's (1902:227, Fig. 165) description, mostly because he wanted to illustrate a stamped pattern of concentric, overlapping circles he had not seen before. No location is given for the sherd.

At least one **cordmarked** vessel came from Mound A. I could find no illustration of a pot (with no association) Moore (1902:227) described as "a rude vessel of about 1 quart capacity with flaring rim and seemingly cord-marked decoration" with three of the four feet removed by deliberate basal perforation. Twisted cords were impressed into the wet clay of the vessel surface in this often more utilitarian-type decorative mode. This is the first time I have heard of cordmarked ceramics associated with the Early Woodland tetrapodal form.

Franklin Plain is the best type classification for another pot with no association that Moore (1902:225) described as small, with a globular body, constricted neck, flaring and notched rim, "rude meander decoration" around the body, and tetrapodal base. The

classification is made based on the notched rim, a diagnostic attribute (Willey 1949:392-3). It is unclear if the meander decoration was made by incising or just molding. This vessel is probably the tetrapodal small jar shown in Figure 19, from the National Museum of the American Indian collections (NMAI #174531); in the photo it is hard to tell whether there are incised lines but a notched, outflaring rim is evident. (Or the photo may depict the small plain tetrapodal pot [Moore 1902:226-27] associated with the red wares on the south-southeast slope).

Figure 19. *Franklin Plain pot from unknown location in Pierce Mound A (NMAI 174531.000; photo courtesy of the National Museum of the American Indian, Smithsonian Institution; photo by NMAI Photo Services Staff).*

Weeden Island Plain is a type often more fancy than it sounds. It includes complex, compound, cutout and other elaborate shapes, even if the surfaces are undecorated. Possibly the most elaborate of this type from Pierce was the **worm-shaped pot** with Mound A Burial 2 group. Moore speculated it could have been modeled after a ram horn, but there were no wild sheep in Florida and its corrugations resemble those of a grub worm, of which there are plenty in Florida. He notes that Spanish explorer Alvar Núñez Cabeza de Vaca (Covey 1961) recorded the Indians in 1528 considering grub worms important, sometimes in the diet. Since we encountered a nice fat grub worm during fieldwork, I picture this pot with it in Figure 20. There is also the possibility that this vessel was just an esthetically pleasing shape imagined by a creative potter, perhaps to describe something that naturally spirals, such as a waterspout.

In the eastern slope of the mound (somewhere near Burial 46) was an interesting flattened ring-shaped vessel with three necks of equal size in the form of inverted cones. Under each neck was a basal perforation. Moore (1902:227) called this pot “very inferior ware” and noted it had been broken but was restored; Figure 21 shows that the restoration was less than effective. This multi-chambered vessel is typical of Weeden Island Plain compound forms; a similar but four-necked and incised pot came from Jackson Mound, not far from Pierce. The multiple necks, even the number three, may have had some distinctive symbolism (as indeed all the fancy stuff and grave offerings probably did).

Figure 20. *Weeden Island Plain "worm-shaped" pot from Burial 2-4 group at Pierce Mound A (NMAI 174993.000; photo courtesy of the National Museum of the American Indian, Smithsonian Institution; photos by NMAI Photo Services Staff). The two views serve different purposes: dramatic photo at right is more easily compared with the shape of the grub worm (lower left) seen at the site in 2007; lower right view indicates orange color of clay.*

Figure 21. *Weeden Island Plain three-necked vessel from east slope of Pierce Mound A (NMAI 174529.000; photo courtesy of the National Museum of the American Indian, Smithsonian Institution; photos by NMAI Photo Services Staff).*

Two plain pots also with the rich Burial 2 and 4 group were described as being of about 6-quart capacity; as shown in the sketch on the map one of these is a jar with an outflaring neck, the other possibly a globular bowl. The small plain pot with Burial 93 (Moore 1902:Figure 160) is only 7 cm tall and unusually shaped, pinched around the neck to give it a lobed shape or scalloped appearance if viewed from above (Figure 22).

Figure 22. *Weeden Island Plain tiny pot with pinched or lobed shape from Burial 93, Pierce Mound A (NMAI 174991.000; photo courtesy of the National Museum of the American Indian, Smithsonian Institution; photos by NMAI Photo Services Staff).*

Moore summarized various groupings of pottery fragments to give a general summary of other ceramic types in Mound A, though of course he did not give a complete list of types. On the north end of the mound were many sherds just below the surface, of “good ware” that was plain, check-stamped, complicated-stamped, “zigzag punctate” (probably he meant rocker-stamped, so Santa Rosa Stamped) , incised, and modeled. Many were already broken, or even broken by the diggers, he noted. The assemblage as described, including additional sherds

recovered later by USF investigations, gives a good representation of all the types to be expected in a burial mound dating from late Early Woodland through Middle Woodland.

Besides pottery vessels, one additional clay artifact from Pierce Mound A is important to describe. A **clay platform pipe** described as "in debris" (Moore 1902:225; also p. 31 of notes) is of the monitor style. I have no illustration of this but the form is easy to describe: a flat platform with a hole drilled through it connecting to the bowl set in the middle of the platform. The burning tobacco in the bowl was inhaled usually through a hollow reed set into the platform hole. Platform pipes are famous at Middle Woodland mounds throughout the eastern U.S., made of clay or stone. They often had the bowl modeled in the shape of an animal or other object, but when the bowl was a plain cylinder they were called monitor pipes, named after the resemblance to the shape of the famous Civil War ironclad gunboat, the *Monitor*. Willey (1949:282) notes that the Peabody Foundation Museum collections include a clay monitor pipe (#39182) which is probably this specimen.

Stone

Four **projectile points**, three of chert and one of quartzite, came from the Burial 2-4 group on the north side of Pierce Mound A. Moore also found (p. 30 of notes) a "rude smooth arrowhead about 1 ft down" in the north side of the mound (possibly related to the first four). Somewhere loose in the sand were two (presumably) additional chert points. None of these 5 or 6 points is described, but two of them must be the chert points in the collection of the National Museum of the American Indian (Figure 23).

Figure 23. *Chert points probably from Pierce Mound A (NMAI 170786.000 and 001; photo courtesy of the National Museum of the American Indian, Smithsonian Institution; photos by NMAI Photo Services Staff).*

The NMAI points are of what appears to be local honey-colored chert. The wider stemmed or corner-notched point could be a variety of the Broward type, Subtype 1 (Bullen 1975:15) or Hamilton type (Cambron and Hulse 1964:65), associated with Middle Woodland elsewhere in the Southeast. The side-notched point is possibly a Duval (Bullen 1975:13) also associated with Middle Woodland, or a Big Sandy or Pine Tree (Cambron and Hulse 1964:14, 104), more likely to be Archaic in age (but possibly saved by later people).

At least one other **chipped stone** tool was recovered. With the two points loose in the sand was a "rude chipped chisel of chert" that Moore did not describe further. There may also have been lithic debitage (chipping waste) but Moore would certainly not pick up or even record humble flakes of stone, though they could tell a lot about tool manufacture.

A number of **ground stone** items also came from Pierce Mound A. An 11-inch long **celt**, presumably of some ground stone (Moore would have said if it were of shell or chipped stone), lay under one of the two skulls of Burial 60. An item loose in the sand somewhere in the mound, the "small **pendant** roughly made" (Moore 1902:225) was probably of ground stone. With burial 63 was a "beautifully smoothed pendant of fine-grained slate" 6.5" [long], .5" in diameter, grooved at one end for suspension, that Moore said was similar to one from Yent mound. This item was probably the long thin pendant shown in the NMAI collections (Figure 24), which has close to those dimensions. It may have been decorative or for weighting a net or other utilitarian purpose, or both.

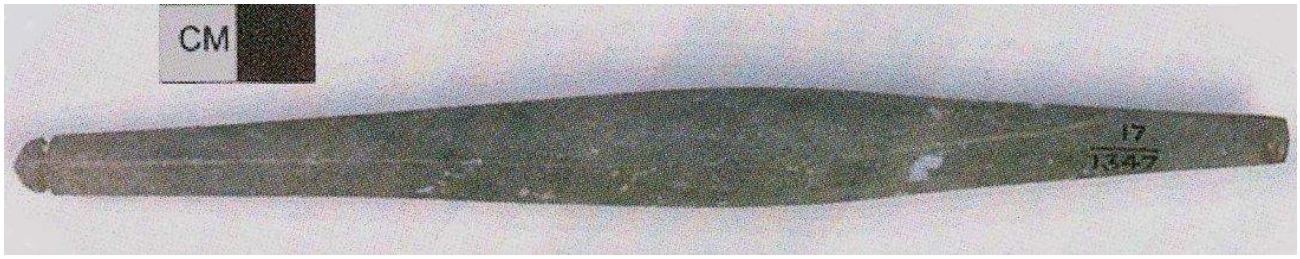


Figure 24. *Ground stone pendant probably from Pierce Mound A Burial 63 (NMAI 171347.000; photo courtesy of the National Museum of the American Indian, Smithsonian Institution; photos by NMAI Photo Services Staff).*

Among other ground stone items not quantified, Moore (1902:225) indicated "the usual quota of hammer-stones, pebble hammers, pebbles, broken hones, etc." from Mound A. His map includes sketches of lone artifacts in the north-northwest area, 30 feet from the center, 3.5 feet deep, "on top of shell layer, 2 shell cups, one perforated, 2 peb [sic] hammers & 6 pebbles" (notebook p. 36). While hammerstones and pebble hammers may have been imported rocks with use wear indicating they were used for chipped stone tool manufacture, the pebbles may have been unmodified manuports useful for smoothing pottery or other tasks, or special in some unknown way.

A final stone category was **mica**, an imported shiny, sheet-like rock seen throughout the eastern U.S. in burial mounds, sometimes cut into specific shapes. A sheet of mica was in Pierce Mound A near the head of a burial that Moore did not name in the published account, but in the notes he said Burial 27 had a small piece of mica.

Shell and Pearl

Several **shell cups** were uncovered in Pierce Mound A, undoubtedly of lightning whelk or horse conch, and including several with perforated bases. These seemed to be deposited not with burials but in various locations throughout the mound, including that a deposit with the pebbles and pebble hammers on the northwest side (see Figure 14) and the "great fireplace" at the base of the mound. They were probably for drinking the famous "black drink" tea made from roasted leaves of yaupon holly (*Ilex vomitoria*), a species that grows in coastal areas. Through historic times this tea was a special part of southeastern Indian ritual that also involved singing and smoking tobacco. (The drink was called *asi* by Muskogean-speaking Indians, and famous Creek leader Osceola's name was actually *Asi yahola*, black drink singer). This tea contained caffeine and also supposedly emetic properties; it was sometimes but not always used to induce vomiting, but often considered a spiritual purgative.

Also in the NMAI collections and unrelated to Moore's work is a small lightning whelk shell cup indicated as being from the J. E. Mattern collection, collected and excavated/acquired 1-1-1905, Catalog # 006933.000. Its photo indicates it is about 10.7 cm long and broken at the base, rather small. It is relatively unremarkable except for indicating that someone else was collecting items from the site that ended up with Moore's things – or maybe Moore gave it to someone who later sent it to the museum.

Moore's notes describe a "shell perforator found in sand thrown back by digger" at the north end of the mound; the published account mentions "two pointed implements made from the axis of Fulgur" or lightning whelk (now known as *Busycon sinistrum*). These must be pointed tools made from the inner columella of the shell. Pointed and even bi-pointed **columellae** are frequently found at coastal sites in the region.

Also in the great fireplace at the mound base, with the animal teeth were the shell cup, the shell mass resembling a large, undrilled bead, the "rude shell gouge" and a shell he called *Glycymeris americana*, the American bittersweet clam. At some other unknown location was a more neatly made shell gouge with the upper end missing. The term gouge may indicate a whelk hammer or chisel. A few **shell beads** are noted near the skeleton of the infant in Burial 77 (Moore does not note burial number in the published description) and a few more were at the neck of Burial 93. The size or shape of these is unknown, though they are probably made from lightning whelk, the most common bead raw material.

Drilled **pearl beads** and bead fragments were at the neck of Burial 66; the number of beads was not recorded. These are likely the ones in the NMAI collections (#171348.000), which

appear to be at least eight freshwater pearls, at least one up to a cm in length (Figure 25). They could have been gathered from shellfish right in the river, but would be rare.

Figure 25. *Pearl beads probably from Pierce Mound A Burial 66, shown in labeled specimen bag (NMAI 171348.000; photo courtesy of the National Museum of the American Indian, Smithsonian Institution; photos by NMAI Photo Services Staff).*

Bone and Teeth

A fascinating artifact from Pierce Mound A was the **bone gorget** (Figure 26) that Moore said was lying on the mound base among the shells; this artifact he determined (in some unknown way) was made from the femur of a bison. If it was indeed from such an animal, it probably had to come from a long distance, as bison were not known at any time in the region except as noted by the Spanish in early historic times. DNA and trace element study of this specimen might be enormously enlightening as to its origins. Buffalo bone may not have been available east of the Mississippi during Middle Woodland times unless traded or otherwise brought in as an exotic.

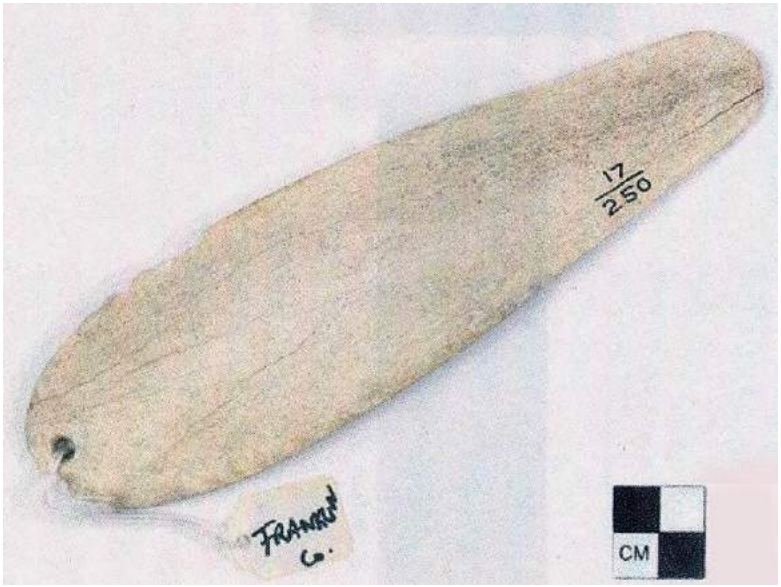


Figure 26. *Bison bone gorget from Pierce Mound A (NMAI 170250.000; photo courtesy of the National Museum of the American Indian, Smithsonian Institution; photos by NMAI Photo Services Staff).*

In the notes Moore mentions a flat bone implement apparently somewhere near Burials 55 and 56. This may be different from the bison bone gorget. Other fascinating bone specimens were the **animal canine teeth** associated with the "great fireplace" at the base of the mound. One was classified simply as being from a carnivore but the other two were left lower canines of a wolf and a Florida panther. Presumably these were unmodified. They certainly had some ritual significance and may have been among the few animals that could attack humans or at least scare them. Carnivore teeth and jaws are known at Middle Woodland mound sites throughout the eastern U.S.; canine teeth of course project the most and present the most characteristic (possibly fierce or otherwise threatening) appearance.

Metals

Exotic metals in Pierce Mound A were few but important. A fluted piece of sheet copper was found in some unknown location but apart from any burials. Burial 66 had a **copper tube** along the upper arm originally 10" long and 1.7" long, bent over upon itself making a flattened tube .8" in diameter. It disintegrated into pieces as Moore unearthed it; these pieces are likely represented by the fragments in the NMAI collection from Pierce (Figure 27). This tube could have been anything from an ornament to a musical instrument to a spiritual/medical device for a shaman to use to suck out some bad thing causing a person's illness or bad fortune, as recorded in many native cultures.

Figure 27. *Copper tube from Pierce Mound A Burial 66 (NMAI 172987.000; photo courtesy of the National Museum of the American Indian, Smithsonian Institution; photos by NMAI Photo Services Staff).*

Burial 81, a deep, flexed skeleton, had two **silver-covered copper disks**, one on each shoulder. Moore (1902:224) says these ornaments were so decayed he could not estimate the original size. As they are likely the ones in the NMAI collection (Figure 28), the diameter of the larger can at least be given as minimally 5 cm. The silver coating is very thin and might have been hammered right on to the copper. Moore spent nearly a whole page demonstrating these were of aboriginal manufacture, not post-contact fabrications of Spanish metals. He realized even a century ago how raw silver and raw copper nuggets are available in the Midwest, and how aboriginal craftworkers could heat these soft metals and hammer them to the desired

forms ("cold-hammering" metals as opposed to smelting). Silver nuggets might even be naturally associated with the native copper, but could also come from as far as Ontario (Walthal 1980:106). Such disks of both silver and copper are known from Midwestern Middle Woodland mounds; they are sometimes considered ear ornaments but with this burial may have highlighted the collar or shoulder pieces of a now-decayed cloak or some other garment. They certainly indicate obtaining materials from long distances. This was the first prehistoric aboriginal silver known in Florida in Moore's time. Though the material is still extremely rare in the aboriginal Southeast, it is known from other Middle Woodland mounds, such as one in northwest Georgia that produced silver-covered panpipes (a musical instrument; Jeffries 1976).

Plain copper disks are more frequently found in Florida, several in the Apalachicola region. For example, some 7 km northwest of Pierce, the Middle Woodland Huckleberry Landing burial mound (8Fr12) contained one burial with copper-covered ceramic ear disks (Moore 1902:238). Farther upriver in Calhoun County the Corbin-Tucker site (8Ca142) produced two copper disks with cemetery burials dating to the later prehistoric Fort Walton period and even the contact period (perhaps A.D. 1650; White 1994).

Figure 28. *Silver-covered copper disk fragments from Pierce Mound A Burial 81(NMAI 172987.000; photo courtesy of the National Museum of the American Indian, Smithsonian Institution; photos by NMAI Photo Services Staff).*

Recent Investigations

No further archaeological work was done at Pierce Mound A after Moore's 1902 efforts, as far as I am able to reconstruct, until USF's brief investigations in 1994. It is unclear in what state he left the mound. His usual *modus operandi* was to leave his holes open, not bothering to backfill. This has left many mounds he dug all over the South with a large chasm in the center, and many have been nicknamed "doughnut mound" for that reason (including Singer Mound at Pierce, discussed below). Possibly his digging was so extensive here that it involved refilling some holes while digging others, or possibly the landowner refilled the holes (then or later) or asked Moore to do it. Whatever the case, Mound A still stands, now closer to 5 feet in height, and with small looter holes and all-terrain vehicle tracks criss-crossing it. As shown on the topographic map in Figure 9, it is more spread out at the base, likely because of all the excavations, and appears disturbed. The 2006 photo (Figure 29) shows Mound A amid relatively thick vegetation, but already it had been cleared a great deal compared to when we first saw it in 1994, and today is nearly all cleared of trees.

***Figure 29**. Pierce Mound A in summer 2006, with then-students Jeff Du Vernay, left, part way up mound slope and Dan Tyler on summit; view facing north.*

As described above, the 1994 USF work included making our way through the thick vegetation moving due south from the railroad bed in several transects as we tried to relocate all of Moore's mounds at Pierce. Mound A was on the west side of the north-south ditch, the southeasternmost mound, as Moore had described, less than 50 m south-southwest of Mound C (which is on the east side of the ditch; see Figure 9). At that time we encountered on the disturbed mound surface in animal burrow backdirt the two bits of bone (human cranium and rib fragments); these were sent to the BAR collections for proper curation of human remains.

To ascertain the condition of the mound without causing too much damage, we excavated with the 4" bucket hand-auger two cores, C94A1 and A2, on the south slope base and north mid-slope, respectively. Stratification in these cores is shown in Table 6. It was impossible to tell how disturbed the mound remains, but it still has archaeological contents. Several sherds were recovered all the way down to the water table and below, at 214 cm deep in the northerly core, which also had two shell lenses or strata (or disturbed piles of shell fill).

Table 7 lists all cultural materials recovered by USF investigations at Mound A. Though they are relatively few – a grit-tempered plain and a dozen check-stamped sherds and a shell tool – they are fairly revealing. Moore barely mentioned check-stamped pottery in passing, probably because it was so boring and ubiquitous. But its abundance in our small tests supports the idea of an Early Woodland (Deptford) beginning for this mound.

Final additions to the inventory of materials from Mound A are artifacts recovered by landowner George Mahr. These include a chert projectile point, 28 shell columella beads, and

one olive shell bead; they are discussed in detail the Private Collections section later in this report. Here it can be noted that they are similar to the materials included with the Burials 2-4 group and Burial 77, respectively, discussed above.

Table 6 . *Soil stratification in cores in Pierce Mound A.*

C94A1 (S side lower slope)		***C94A2 (N side upper slope)***	
0 - 86 cm	lt gray sand	0 - 69 cm	lt brown sand, some oyster shell
86 - 94 cm	lt brown sand, sherds	69 - 86 cm	lt gray to white sand, sherd
94 - 100 cm	dk brown sand	86 - 126 cm	lt grayish-brown sand, sherds
100 - 110 cm	lt brown sand	126 - 146 cm	mixed yellowish-brown, gray, black sands, some shell
110 - 132 cm	brown sand, sherd	146 - 185 cm	brown to lt brown sand, oyster shell, some charcoal
		185 - 195 cm	wet sand, water table
		195 - 207 cm	very light brown
		207 - 213 cm	white and pale brown mottled, wet, small oyster shell frags
		213 - 214 cm	oyster shell, sherd

Table 7. *Materials recovered from Mound A by USF investigations.*

CAT #	***PROVENIENCE***	***CONTENTS***	***N***	***WT (g)***	***COMMENTS***
94-11.1	surface, area 6	*Busycon* shell tool	1	41.6	chisel edge- cut
94-11.2		oyster shells	2	143.3	one poss petrified?
94-11.3		Rangia shell	1	16	
94-22.1	surface, mound area	ch-st rim	1	14.5	rectangular, lst temper
94-22.2		ch-st	1	4.5	slightly linear, sand-t
94-22.3		human cranial frags	3	18.3	1 bleached white; sent to DHR
94-22.4		human rib frags	6	3.2	sent to DHR
94-37.1	Core94A2, -214 cm	ch-st	1	6.5	sand-t, Deptford?
94-66.1	Core94A2, -69 cm	ch-st	1	3.9	
94-70.1	Core 94A2 -86-126 cm	ch-st	3	12.2	eroded
94-70.2		oyster shell frag	1	2.3	
94-70.3		charcoal		0.1	85 cm depth, tiny flecks in sand
94-70A.1	Core94A2, -207 cm	shell frags	2	0.1	tiny, eroded
94-72.1	Core 94A2 185 cm	oyster shells/frags	2	85.2	
94-74.1	Core94A2 (no depth given)	oyster frag	1	4.7	
94-86.1	Core94A2, backfill disturbed	shell frags		0.2	prob cockle, very tiny
95-102.1	N edge of looter hole	grit-t pl	1	12.4	
95-103-1.1	Core94A1, -78-88 cm	ch-st	2	2.9	sand-t, tiny
95-103-2.1	Core94A1, -120-132 cm	ch-st	1	3.3	grog-t
97-7.1	surface	ch-st	1	9.7	sand-t
00-1.1	surface of 4 wheeler tracks	longbone frag	1	8.4	poss human or animal
07-73.1	backdirt of small looter hole	oyster	5	347.2	
07-73.2	(~30 cm) in clam, oyster &	Rangia shell	3	21.3	
07-73.3	yellow sand	slightly linear ch-st	1	4	Deptford?

Interpretation of Mound A

A typical Middle Woodland burial mound, Pierce Mound A can hold its own among similar and even more spectacular mounds throughout the eastern U.S. Originally such mounds were considered to be offshoots of Ohio Hopewell culture, the material manifestation first described in the nineteenth century and thought to be the source of widespread burial mound practices. Now it is clear that such elaborate mortuary ritual and ceremonial mound interment was characteristic of roughly contemporaneous societies all over the eastern U.S. during the Middle Woodland (e.g., Brose 1979; Brose and Greber 1979; Carr and Case 2005; Pacheco 1996). This archaeological time period, possibly earlier in the Midwest and/or lasting longer in the deep South, was the time of the height of burial mound construction and ritual that had begun during the Early Woodland. Though there are several Middle Woodland burial mounds in the Apalachicola valley region, Pierce Mound A has arguably the most spectacular grave goods, though there are many similarities from mound to mound (Frashuer 2006).

Prepared mound floors; still-smoldering piles of burning material laid with the dead; central fire evidence at the mound base; fancy pottery and exotic artifacts of copper, silver, mica, and whelk shell; trophy skulls; animal jaws and teeth, especially carnivore and predator teeth; and other unusual items buried either with the dead or elsewhere in the mound as offerings are all frequent expressions of Middle Woodland funerary practice. Carr and Case (2008:7) think Ohio Hopewell (and by extension, related Middle Woodland societies across the eastern U.S.) expressed in their material culture a great deal about their social, political, and spiritual beliefs. “Claws, talons, foot bones, teeth, and jaws of various animal species – their ‘power’ parts” may have “marked clan affiliations and clan eponyms or totems of deceased persons in their graves.” Other items such as copper and mica these authors associate with the practices of shaman-like leaders in “divining, healing, processing corpses, leading public ceremonies, and integrating their people with the cosmos” and solidifying community alliances.

The great diversity of burial types, including the majority of interments with no grave goods (or none preserved) is typical. This “shared ceremonialism that linked diverse Middle Woodland peoples in much of eastern North America” may relate to shamanistic religious practice and individual ecstatic experience (Beck and Brown 2012:76, 82) and/or be part of celebrations involving the whole society. But also, these burial practices served to remove the elaborate, exotic, and expensive artifacts from circulation, possibly stimulating both economic and political/ideological demand for more.

Some artifacts in Pierce Mound A are destroyed – pots and shell cups with the bottoms knocked out (‘killed”), the copper tube bent upon itself and crushed. Archaeologists have been trying to understand for centuries the behavior that resulted in damaged or broken objects left with the presumably honored dead. But we are really no closer to an answer beyond the idea that the spirit might have been let out of these objects to go along with the spirit of the deceased on its way to another world.

Each of the exotic items in Mound B could be researched further as to its raw material origins and occurrences throughout the eastern U.S. at similar mounds. Interesting variations on typical Middle Woodland exotics at Pierce Mound A include the bison-bone pendant, the unusually-shaped ceramics, and of course the silver-covered copper disks. A few other examples of silver plated disks are known, for example, at the Mount Vernon mound on the Ohio River in Indiana (Tomak and Burkett 1996:359). Often copper disks are placed on either side of the the head of the deceased in Middle Woodland mounds; they were decorations often called earspools. However the placement of such disks at the shoulders of Mound A Burial 81 can be compared with a few other unusual examples, such as the copper earspools (sic!) found at each wrist of a principal burial of an adult woman in the Bynum Mound A in northeastern Mississippi (Mainfort 1996:379).

Volumes have been written on the meanings of the elaborate grave offerings of Early and Middle Woodland mounds. For example, the isolated human skull (or other body parts) could be considered trophies of war or other violence. It is easier to carry home a head or scalp of the enemy than the whole dead body, and such an item can become a prize. From the shrunken heads of the Amazon to skulls displayed on Aztec and earlier monuments in Mexico to customs of old Europe, where bounties were paid for scalps, these practices were widespread. Depictions of decapitation and human heads in stone ceramic, textile, and other media are known worldwide and can be many thousands of years old (Chacon and Dye 2008, Verano 2008). I witnessed trophy skulls still hanging in the Iban ethnic longhouse on the island of Borneo in 2007, where several different cultures practiced headhunting as a way to earn status (and where the practice, outlawed in modern times, was apparently revived after the Japanese invasion of World War II).

A problem with interpreting isolated skulls in a burial mound is that we do not know if they are heads of captured enemies or of honored persons kept after their death out of reverence, or some other kind of token. Nor can we know if the isolated skull was originally just a head, or was from a skeleton for which the postcranial bones all decayed away or were lost. From ethnographic and historic evidence we know that southeastern Indians often left the dead, even honored people, exposed so the flesh would decay. Or a religious practitioner might help natural processes by removing soft tissue with long fingernails. The important dead might be displayed for a while before burial, or even unearthed for some ritual then reburied.

Middle Woodland societies are often seen as peaceful, sometimes semi-sedentary groups organized along kinship lines and participating in craft specialization and interaction networks across the eastern U.S. that brought Gulf Coast whelk shells as far as Ohio and raw copper and silver as far as Florida. The ceremonial nature of these and other exotic artifacts may mean that they were revered status-symbols for important persons or even that ideological systems – religious and other beliefs – were spreading with them as they were traded across the continent. This was also a time when people in the Midwest were beginning to domesticate local weedy crops such as sunflower and shifting to some actual production of their own food instead of obtaining everything wild. The absence of warfare is suggested by the

lack of evidence for violent death and defensive structures (e.g., Milner 1999). Other interpretations see Middle Woodland as a time of much violent imagery and competition as indicated by those trophy skulls (mostly identified as young men's), dismembered human body parts, and images of predators in art and as represented by wolf or cat teeth (Seeman 2008).

The sands and shells used to build the mound were perhaps less important than the specific individual grave construction soils. Perhaps there was little choice, and people had to work with easily-obtainable soils for fill. The lime in the shell may have helped mask the smell of decay, as well. So the choices of building materials for mounds or even individual graves might have been utilitarian, in part. Yet burial mounds in the eastern U.S. often had distinctive layers or lenses of colored sands, clays, and other soils, shells, woven cane mats, and/or logs. Pierce Mound A had deposits of black masses and at least one of red, hematite-colored sand. Both Mound A and Mounds B and C (discussed below) had black and yellow sands and shells, which could have been deliberately chosen for certain material or ritual properties or could have been just what was easiest to get at the moment.

In Florida's acidic soils, bone does not preserve well; it is often the consistency of wet crackers when exposed. Moore remarked how some burials were more decayed than others. It is impossible to know what other grave artifacts made of perishable materials might have rotted away. Charring does aid preservation, and it is too bad we do not have those black matted remains from so many burials in Mound A in order to analyze them with modern tools of chemistry and physics to research trace elements, DNA, and other identifying factors. Unburned organic substances usually do not preserve at typical Florida sites, where alternate wet and dry, hot and cold, acidic and biologically active environments prevail. In the lush forest of the river bottom and coastal plain, natives would certainly have taken advantage of easily obtainable wood and other plant materials to make most of their material culture.

There are many diverse burial programs represented in Pierce Mound A, but there are some patterns. The sacred vs. secular dichotomy proposed by some archaeologists is not upheld, since the mound contains so many plain and mundane items in addition to the elaborate artifacts. A picture is gained of important ritual, sometimes accompanied by fancy grave goods, reinforcing the beliefs of the living about what happens after death and sacred ancestors. The continual use of something as architecturally visible as a mound to be a special place for those ancestors meant it would endure as venerated ground – possibly over many centuries and through the occupations of many different peoples.

An aspect of Pierce Mound A that needs to be emphasized is the clearly Deptford (tetrapodal and check-stamped) ceramics that suggest its construction began as early as late Early Woodland times, perhaps around A.D. 200. Elsewhere in the eastern and midwestern U.S., Early Woodland mounds have clear antecedents (perhaps on a smaller scale) for the blossoming of burial ritual in Middle Woodland. But few burial or other mounds have been known from Early Woodland times in the Apalachicola valley region. Pierce Mound A may have been under construction and ritual use for many centuries.

PIERCE MOUND B (8Fr14B)

Description and History

Moore (1902:228) recorded only a short three paragraphs on Mound B, and actually only one of them concerned the mound itself (the other two being about the temple mound and the area in between). He apparently did not dig at Mound B much – in fact it is unknown exactly what he did do there or what he found. The landowner prized the "palmettoes" (probably cabbage or sabal palms, the state tree of Florida) on top this mound (see note about palmettos on Figure 6) and wanted to preserve them; Moore's notes (p. 53) say "in deference to his [the landowner's] wish but a partial exam. made by us." In 1902 this was the tallest mound, at 16 feet, and today it still is, rising about 14' (over 4.25 m) above the forest floor (Figure 30), making it clearly identifiable and less mistaken for something else in later work.

Mound B's height is exaggerated because its north slope has been sliced away by the construction of the adjacent raised railroad bed path and the drainage ditches on either side of this bed. The ditches were probably dug down well below the ground surface on which the mound was first constructed (future archaeological investigation here should include cleaning this ditch and sampling intact deposits below it, then doing a test unit in the lowest slope of the mound). The solid, regular railroad bed is *made of* shell midden and sandy soils, probably some from this mound, and from the riverbank village, the shell midden ridge upon which the mound was originally constructed.

Figure 30. *Pierce Mound B, summer 2007, with Jeff Du Vernay on summit, view facing south-southeast; portion of flat railroad-bed path visible in lower left corner.*

Mound B had been disturbed by digging on all sides, according to Moore, and "marginal parts had been hauled away for use in an adjoining cultivated field" (which must have been to the south or southeast?). The mound was of sand with some shell, as it still appears today. Moore found "a superficial skeleton" near the margin, probably meaning he dug around the base and encountered a shallow burial. On p. 53 of his unpublished notes, below the Mound B description, is the notation "1-Full length," possibly meaning this burial, and that it was extended. In the 1990s there were some large old potholes in the top of the mound, but it is unknown if they were left by Moore or later (or earlier) diggers, or some combination thereof. It is also unknown *where* around the circumference of the mound base he found this shallow burial.

Since the open path of the railroad bed gives easy access to Mound B, and since it is so tall, most researchers after Moore have had no trouble finding and identifying it. Willey (1949:280) described it as 3 m high and having a ramp on the south side. Such a ramp is not really visible today, despite the forest clearing. Possibly the slope appears more gradual on the south side by comparison with the steep cut through the north edge of the mound made by the railroad bed. Willey (1949:281) collected 38 ceramic sherds from the top and area around the mound, as follows: 1 Fort Walton Incised, 13 check-stamped, 3 Swift Creek Complicated-Stamped, 1 cordmarked, 16 plain, 4 "unclassified."

Later investigators continued the tradition of picking up surface artifacts from disturbed ground around and on Mound B. Tesar and Jones of the BAR collected a check-stamped sherd and an indeterminate incised sherd from the mound surface in 1994 (Table 8). In the 1990s and 2000s, USF crews also surface-collected, measured its height with a (mechanical) transit and stadia rod, and witnessed new episodes of looting over the years. By 2011, much of the mound itself and the surrounding land had been cleared of trees (including the palms), and contours were more visible (Figure 31). So were potholes; we were appalled at the sudden appearance of a large one (about 1 m wide) on the north-facing side, about 2/3 of the way up the slope, that appeared to be an old looter excavation recently dug again. From the loose dirt in its rich blackened sand, we recovered clam and oyster shells, animal bone, ceramic and stone artifacts (Table 8).

Materials and Interpretation of Mound B

All the cultural materials recovered and available for study (BAR and USF materials) from Mound B are listed in Table 8. They include 16 check-stamped sherds, at least 3 of which are Deptford Linear Check-Stamped. The three indeterminate stamped and one indeterminate incised sherds are only slightly more diagnostic than the 9 plain-surfaced sherds, but together this assemblage clearly indicates a Deptford presence. Whether this means Early Woodland peoples first built this mound or later peoples scooped up earlier midden soils full of broken pottery to build it is unknown, but could be tested.

Table 8. *Materials recovered from Pierce Mound B (8Fr14B) by BAR and USF investigations.*

CAT #	PROVENIENCE	CONTENTS	N	WT (g)	COMMENTS
94.38.02	surface, BAR	ch-st	1	7.5	
		indet inc	1	4.2	punch & drag incision
98-1.1	pothole backdirt	Deptford Linear Ch-St	3	23.2	1=rim
98-1.2		ch-st	6	98.3	
98-1.3		grog-t pl	1	14.7	
98-1.4		sand-t pl	3	24.3	
98-1.5		bone frag	1	1.4	
98-1.6		fish bone	1	3.9	pneumatized
01-1.1	looter hole backdirt	2nd ary flakes	3	5.9	weathered, blackened chert
01-1.2		block shatter	1	2.5	
01-1.3		bone frags	5	4.3	3 or 4 turtle carapace frags, 1 sm animal rib
04-1.1	surface	ch-st	3	29.4	sand-t
04-1.2		ch-st	1	5.1	grit-t
04-10.1	from railroad bed at Mound B	ch-st	2	17	
04-10.2		sand-t pl	1	9.6	
07-53.1	surface of RR bed (dirt road) at	sand-t pl rim	1	9.3	with 2 incisions
07-53.2	NW edge of Mound B	railroad spike head	1	77	
07-58.1	surface, N edge of RR bed at	ch-st	1	3.6	
07-58.2	NE side of Mound B	indet inc	1	5.4	
07-58.3		grit+shell-t pl	2	14.3	
07-58.4		grit-t pl	2	24.5	
07-60.1	looter hole 2	ch-st	2	6.1	sand+grog-t
07-60.2		indet st	2	11.8	grit+grog-t
11-35.1	looter hole on N slope of	ch-st	2	14.6	1= sand-t, 1= grog-t
11-35.2	mound, UTM coordinates	sand-t pl	1	10	
11-35.3	692650 3291045	quartz cobble mano	1	85.7	use wear on two edges
11-35.4		sandstone fragment	1	92	flaked, poss tool
11-35.5		quartz cobble mano frag	1	29.8	use wear
11-35.6		Busycon shell debitage?	1	34	cut whorl, subrectangular; tool?
11-35.7		Rangia shells	3	53.7	unbroken
11-35.8		bone fragment	1	2.1	identifiable animal
11-35.9		oyster shell	1	22.1	
11-35.10		charcoal	1	1.2	

Interestingly, the artifact assemblage also includes 4 pieces of lithic debitage from the later stages of tool manufacture, as well as a cut piece of whelk shell debitage. In addition there are three ground-stone tools: 2 natural quartzite cobbles used for grinding (called “manos”: hand-held grinding stones) as seen by the worn places on their surfaces, and a piece of clearly flaked sandstone that could be some kind of tool or debitage. Nearly 12 g of faunal remains include turtle carapace and small animal bone bits, all food garbage.

Figure 31. *Pierce Mound B:* above, *pothole on north slope, showing black shell midden soils;* right*, view facing northeast, after 2011 clearing, with yellow field notebook on mound slope at right, railroad bed and ditch visible at left, cleared marshland beyond.*

The big picture inferred from these cultural materials is one of Early Woodland domestic activity, subsistence tasks processing animals and shellfish, using utilitarian implements. However, this is the tallest mound in the Pierce group, requiring a great deal of labor to build, and with contents practically unknown, though probably including human burials. Its construction materials may have been the typical shell midden soils of the midden ridge upon which it sits, but this much labor and design is not done for mundane reasons. Later peoples must have considered it important; at least one piece of Fort Walton pottery was found on it. Its sheer size also suggests the excesses of Middle Woodland.

Pierce Mound B remains the mound at the whole Pierce complex with the *greatest* potential to have human remains, to have undisturbed deposits from Early Woodland and probably later times, and to have enormous scientific potential. While future research into this mound would be exciting, it is crucial for now to preserve it.

PIERCE MOUND C (8Fr14C)

Location, Description, Looting, Investigation

Describing Mound C, Moore (1902:228) wrote only two short paragraphs, calling it elliptical in outline, flat-topped, 6.5 feet high, 90 feet east-west and 74 feet north-south. He did not give a location, and its identity remained lost to professional knowledge (though we had actually rediscovered it in 1994 on the ground) until it was found in his notebook, on the map on p. 29 (see Figure 6). There is apparently no description in any accompanying notes beyond what he published. He said he put a 35-foot trench through it, finding it was built upon a shell base. For most of the trench he dug out only the sand, apparently because it was harder to dig through the shell. He found "no regular stratification, sand being white, bright yellow, and black at various points….[with] local deposits of shell mainly of the oyster." Moore encountered in Mound C two flexed adult burials, and one infant skeleton with small shell beads, the infant disturbed apparently by his own digging. "Loose in the sand" he got check-stamped, "pinched," and complicated-stamped sherds, a sherd with "semi-circular impressions made, perhaps, by a portion of a reed" (today labeled indeterminate punctate) and a "rude stone chisel."

It was unfortunate that Moore said Mound C had a flat top; this confused later workers into thinking that it was a temple mound. It is not a temple mound, nor is it Fort Walton in age, but seems to be thoroughly Early to early Middle Woodland. Whether Moore actually backfilled his trench or the landowner or someone else later did, Mound C did not show much damage when relocated by the USF team in 1994. As I have noted, it was a struggle trekking through the thorny vine thickets and tight secondary-growth trees. But we found it rising from the forest floor, slightly lower and wider than Moore described (see Table 3), probably because of his digging. It became visible as we moved along a north-south transect between the railroad bed and Bluff Road, the same transect along which we discovered Mound A. Both A and C sit on a long, even ditch cut to run some 200 m from the railroad bed nearly due south (see Figures 9, 11, 12; A is on the west side and C is on the east side of the ditch). At that time I knew B was the big mound and the most southwesterly Moore said was A, so this one between the two was probably C. Moore's map (see Figure 6) obtained in 2011 confirmed this. It also did not show any ditch or stream, let alone one so regular. The ditch must have been cut by the railroad builders a few years after Moore left, possibly to drain the bed during the wet season, when the swamp to the north might rise up and inundate the track if it rained or stormed enough. Or it was cut later for some other kind of drainage.

Despite its heavy cover, Mound C (Figure 32) had small looter holes when we first saw it; no cultural materials were collected in 1994. New potholes appeared over the years, the backdirt from which produced ceramics and other items. In 2006 there was a major looting episode, and in 2007 we were able to mitigate this damage and also learn some details. One giant pothole in the center of the summit was 1.6 m deep, 3 m north-south and nearly 4 m east-west; a second hole was nearly as large.

Figure 32. *Pierce Mound C:* above, *summer 2006, with waving fieldworkers Jeff Du Vernay on summit and Dan Tyler halfway down slope, view facing north;* below*, summer 2007, cleaning up looter holes on summit, with fieldworkers N. White, Erik Palm, Elicia Kimble; view facing northeast.*

We cleaned a meter-wide west-facing profile on the side of the larger hole in Mound C, recorded stratification, and backfilled both holes, leaving black plastic sheeting at the bottom. All soils were screened before refilling. It is unknown if the looters went through soils already dug by Moore or others, or whether they dug undisturbed deposits. Moore had made it to within 3 feet of the center of this mound but we do not know from what direction nor if his trench actually was a radius. He probably started at the east side, hoping for a typical pottery deposit there as he had seen at many burial mounds in the Southeast. So it is possible that we screened soils not disturbed before the recent looting. Moore was certainly correct that there were strata or lenses of dark, yellow, and lighter sand as well as shell. Figure 33 and Table 9 show the stratification of the larger looter hole. We did not reach the bottom of the cultural deposits. The photo does not show all of them clearly (and of course soil colors do not reproduce accurately), but there were obviously different choices of materials for different construction stages.

Figure 33. *Pierce Mound C summit looter hole stratification:* right, *enhanced field profile drawing (X shows check-stamped sherds in situ);* below, *cleaned, slumping east wall.*

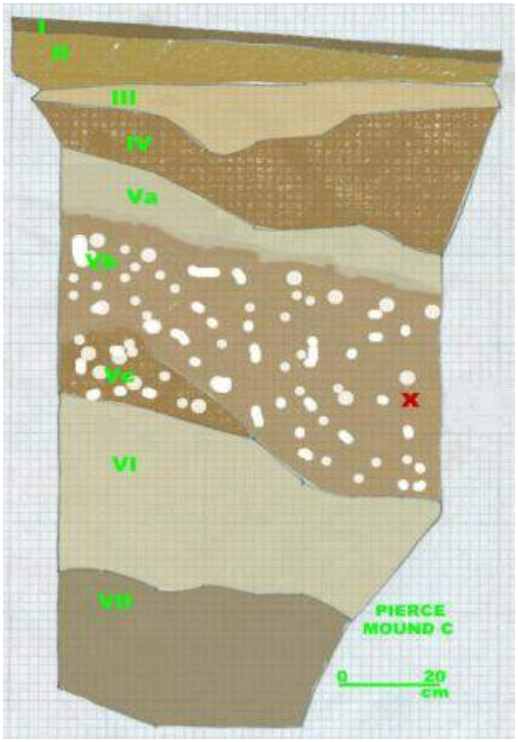


Table 9*. Pierce Mound C strata in looter hole profile*

#	*Soil*	*Munsell color*
I	forest humus, sand, dark grayish brown	10YR6/2
II	coarse sand, topsoil, brown	10YR5/3
III	slightly finer, medium sand, pale brown	10YR6/3
IV	medium sand, brown	10YR4/3
Va	coarse sand with shell, gray	10YR6/1
Vb	medium and coarse sand with shell, brown	10YR4/3
Vc	medium, coarse sand, brown	10YR4/3
VI	medium sand, light yellowish brown	10YR6/4
VII	medium coarse sand, dark grayish brown	10YR4/2

Materials and Interpretation

Table 10 lists all cultural materials recovered from the backdirt of the looters' digging at Pierce Mound C, as well as a couple check-stamped sherds taken in situ from the cleaned profile. It is unknown what the looters got or if they disturbed any burials beyond Moore's three. They exerted a great deal of effort to dig into the shell layer, which Moore even said he gave up on partway through his trench. But they may have been discouraged by the rather unspectacular nature of the artifacts in this mound, and they were not so careful as to notice little shell disc beads and a few nicely decorated ceramics.

Table 10. *Materials recovered by USF investigations from Pierce Mound C.*

CAT #	*PROVENIENCE*	*CONTENTS*	*N*	*WT (g)*	*COMMENTS*
97-4.1	surface	Sw Cr Comp-St	1	8.7	
04-5.1	looter hole, E side of mound	ch-st	1	14.3	
04-5.2		sand-t pl	1	10	
04-7.1	next to looter hole	indet inc	1	9.5	sand-t
04-7.2		*Busycon* shell frag	1	27.9	whorl fragment, debitage?
04-8.1	looter trench	Sw Cr Comp-St	1	5.1	sand-t
04-8.2		Sw Cr Comp-St	1	18.8	unusual, has punctations
04-8.3		sand-t pl	3	25.2	
04-8.4		ch-st	7	72.7	
04-12.1	fresh looter hole surface	soil sample	1	95.0	
06-08.1	surface of looter hole	ch-st	6	122.5	check sizes= 9.2, 6.3, 3.2 mm
06-08.2		Deptford Linear Ch-St	1	18.2	
06-08.3		sand-t pl	1	52.1	
06-08.4		quartzite cobble frag	1	96.5	has use wear
06-08.5		catfish spine	1	0.7	
06-08.6		deer? foot bone	1	3.4	poss phalanx or metapodial
07-6.1	disturbed soil from pothole	Sw Cr Comp-St	3	14	1 = unusual
07-6.2		cordmarked	1	2.3	
07-6.3		Santa Rosa St	2	6.4	1 = only possibly
07-6.4		Deptford Linear ch-st	12	99.3	lg range of sizes of checks
07-6.5		ch-st	53	375.4	check sizes 1.27 to .15 cm, some a little linear; 1 rim; 1 has scratches on inside - thin brush? 1 = thick podal basal sherd, all mostly sand-t
07-6.6		sand-t pl	20	86.9	
07-6.7		grog-t pl	1	23.8	
07-6.8		fabric-impressed	1	3.8	open, loosely woven fabric
07-6.9		Busycon shell disc bead	1	0.7	subrectangular
07-6.10		fish vertebrae	6	1.2	1 = large
07-6.11		turtle carapace frag	1	1.2	
07-6.12		pneumatized fish bone	1	5.1	
07-6.13		deer tooth	1	3.4	
07-6.14		burnt bone frag	1	1.1	
07-6.15		fish pharyngeal plate frag	1	0.6	tooth sockets, sheepshead?

CAT #	PROVENIENCE	CONTENTS	N	WT (g)	COMMENTS
07-6.16		fish teeth, round	2	0.5	sheepshead? big
07-6.17		modern clay frag?	1	13.7	
07-7.1	Stratum I	indet st, unusual pattern, sand-t	1	3.1	stamped with braided twine?
07-7.2		ch-st	8	29.9	all sand-t
07-7.3		sand-t pl	1	2.3	
07-7.4		grit-t pl	1	0.9	
07-7.5		flat bone frags	2	1.4	
07-17	Stratum II,	soil sample for flotation	1	7748.4	shell, sand, bone, organics
07-18.1	pothole disturbed soil	Sw Cr Comp-St	7	36.3	great variation
07-18.2		Santa Rosa St	1	12.5	rocker-stamped
07-18.3		ch-st	72	439	1 has coil smoothing mark on interior, 1 rim, 1 podal support, wide range of check sizes, sand-t, some grog
07-18.4		Deptford Linear Ch-St	7	47.5	
07-18.5		sand-t pl	7	13.1	some burnished, 1 = rim
07-18.6		grog-t pl	3	2.5	crumbs
07-18.7		grit-t pl	1	3	
07-18.8		red sandstone frag	1	5.1	hematite? rubs off
07-18.9		agatized coral chunks	2	90.3	hard to see any working
07-18.10		chert 2ndary flake	1	1	dull opaque white
07-18.11		block shatter	2	41.4	1 small, white; 1 reddish
07-18.12		bone frags	3	12.2	1 complete metapodial? identifiable
07-18.13		fish pharyngeal plate	2	1.4	jack? plate frags, 1 tooth
07-18.14		turtle carapace frags	2	0.6	tiny
07-18.15		pneumatized fish bone	4	12.8	
07-18.16		fish vertebrae	20	4.2	a couple very big
07-18.17		*Busycon* shell debitage?	3	20.7	2 very small, 1 lg cut
07-18.18		fish otolith	1	2.1	large
07-18.19		oyster shell frag	1	1.3	
07-18.20		charcoal		13.5	many pieces
07-19	Stratum I	soil sample for flotation	1	4840.4	sand, shell, roots, seeds
07-20.1	Stratum V in situ	ch-st sherds	2	191.6	large; 1 = basal, curved, tetrapod? 1 = 2 glued
07-21.1	Stratum III	ch-st rim	1	15.5	sand-t
07-22.1	Stratum III, brown soil 21 cm below surface	unusual unifacial tool	1	207.9	use-wear, convex ventrally, concave dorsally; has cortex
07-23	Stratum I	permanent soil sample	1	1165.1	coarse sand, shell, 10YR 5/3
07-24	Stratum II	permanent soil sample	1	2225.6	
07-25.1	mixed (looter's backdirt)	Busycon shell disc beads	6	15.1	round, oval, and squarish; range = ca. 1.5 to 2.5 cm wide
07-25.2		clear quartz flake	1	0.5	or glass?
07-25.3		pneumatized fish bone	3	6	1 = cut, at ends?
07-25.4		bone tool? prob deer	1	3.6	point/pin/awl, central ridge
07-25.5		fish vertebra	8	1	
07-25.6		fish spine	1	0.2	catfish
07-25.7		fish teeth	2	0.5	round, sheepshead or drum?

CAT #	PROVENIENCE	CONTENTS	N	WT (g)	COMMENTS
07-27.1	Stratum IV	longbone frag	1	1.2	
07-47.1	disturbed, looter	Deptford Linear Ch-st	1	9.1	
07-47.2	backdirt	Deptford Plain, sand-t	1	10.4	basal sherd, podal supports
07-47.3		ch-st	1	26	sand+lst-t
07-47.4		ch-st	5	27.9	grit-t
07-47.5		ch-st	5	37.1	sand-t
07-47.6		ch-st	27	291.9	grit+grog-t
07-47.7		ch-st rims	2	70.1	grit+grog-t, 1 has checks along top of rim, 1 linear
07-47.8		ch-st rim	1	10.3	sand-t
07-47.9		shell-t pl	1	5.8	
07-47.10		poss fabric-impressed	1	7.5	grit-t
07-47.11		indet brushed or st	1	3.6	grit-t
07-47.12		indet st	1	13	poss net-marked, grit+grog-t
07-47.13		sand-t pl	4	44.8	1 = rim
07-47.14		grit+grog-t pl	4	26.9	
07-47.15		chert block shatter	1	21.3	fossils in it, poss not cultural
07-47.16		sandstone concretion	1	10.3	tiny geode inside - natural
07-47.17		limestone frag	1	131.9	smoothed
07-47.18		pneumatized fish bone	2	3.7	
07-47.19		turtle carapace frag	1	0.9	
07-47.20		fish vertebrae	1	0.7	large
07-47.21		mammal bone - claw?	1	2	distal phalanx – dog?
07-55.1	backfill of looter's hole, 6-2-2007,	ch-st	14	99.2	check sizes 80 to 20 mm; rectangular ones; sand-t
07-55.2		woven fabric-impressed	1	5.6	sand-t, thin parallel lines on interior - even finer fabric?
07-55.3		sand-t pl	3	15.2	1 = rim, may be smoothed-over surface treatment
07-55.4		grog-t pl	1	6.1	
07-55.5		oyster shell	1	114	large
07-55.6		Busycon shell debitage	1	25.9	body whorl frag
07-55.7		burnt shell frags	3	3.4	1 may be clam
07-55.8		turtle carapace frags	2	3.1	
07-55.9		bone: distal phalanx	1	3.1	identifiable animal
07-55.10		burnt bone frag	1	0.3	flat and tiny
07-55.11		bone frag	1	0.5	artic surface, sm animal
07-55.12		nutshell frags	2	0.6	prob modern
07-55.13		charcoal	2	0.7	
07-72.1	backfill of looter's hole	ch-st	6	72.2	1 = rim, grog-t, mostly sand-t
07-72.2		sand-t pl	4	50.6	thick, rough
07-72.3		indet st	1	3.3	rough
07-72.4		chert block shatter	1	1.8	
07-72.5		Busycon shell debitage	1	5	flat, cut
07-72.6		shell frags	2	3	oyster?
07-72.7		fish bone frag	1	0.3	
07-72.8		turtle carapace frag	1	2	
07-72.9		fish tooth	1	0.4	round - sheepshead?

The **ceramics** include several interesting diagnostics (Figures 34, 35). Of the 197 check-stamped sherds, 12 are linear in the stamp design and one is a basal sherd with tetrapodal supports; another additional 9 sherds are clearly of the type Deptford Linear Check-Stamped. The rest can only be called generic check-stamped but are probably Deptford (or could be Gulf Check-Stamped). There are 13 Swift Creek Complicated-Stamped sherds; two have an unusual pattern with added punctations.

Figure 34. *Pierce Mound C ceramics:* left, *Deptford Linear Check-Stamped (upper 7; 1st one= rim) and check-stamped (all #07-6);* above right*, Swift Creek Complicated-Stamped (top row #07-18; bottom row #07-6);* below right*, unusual complicated-stamped with punctations (#04-8).*

There are two Santa Rosa (rocker-) Stamped sherds, for which the pre-fired, wet surface was decorated by rocking the edge of a shell back and forth to make a continuous curved zig-zag pattern (Figure 35). These are rare in the Apalachicola valley region, being more characteristic of late Early and Middle Woodland farther to the west along the Gulf coast. One sherd is stamped with an unusual pattern that looks like it was done with a braided cord, and it also has punctations. There is one cordmarked sherd (stamped with a paddle wrapped in twisted cords), and three impressed with different kinds of woven fabric. (These types become more obvious with the application of modeling clay to the sherd surface to see the positive impression of what was used for the design). Five other sherds can only be classified as indeterminate stamped, since the design is too faint to discern; one more is indeterminate

incised. Of the plain wares, 59 sherds are sand-tempered, including one basal sherd with tetrapods classified as Deptford Plain; 5 are grog-tempered, and 2 are grit-tempered, with one more having mixed grit and grog.

Figure 35. *Pierce Mound C ceramics:* top, r-l*, fine fabric-impressed (#07-55.2), coarser fabric-marked (#07-6.8), cordmarked (#07-6.2), braid-impressed (?) with punctations (#07-7.1);* middle*, 2 Santa Rosa Stamped (#07-6.3, 07-18.2);* bottom left*, Deptford Plain basal sherd (side view) with tetrapodal support.*

Lithic artifacts from Pierce Mound C are a chert unifacial tool (chipped on one face only), 4 pieces of block shatter debitage, and 2 secondary flakes (one of quartz), This is not a very big chipped-stone assemblage. A quartzite cobble has use wear, indicating it was a mano or grinding stone.

Shell artifacts are seven disk beads (Figure 36), the only cultural materials suggesting non-utilitarian activities. They are all of lightning whelk (*Busycon sinistrum*) which, as noted, has two potentially desirable qualities: a good thick shell useful for both tools and durable decorative items, and a counter-clockwise spiral in its growth (hence the name, left-handed whelk), unlike most large gastropods, possibly indicating its special nature among indigenous peoples. Bead dimensions and other details are given in Table 11. They range from nearly rectangular and of irregular thickness to oval and regular, but none is perfectly circular. Most are drilled from both sides. It is impossible to know if these beads are rejects from the manufacturing process or just of low quality or unfinished. Or perhaps they were deemed perfectly suitable by their makers, traders, and wearers and were lost in mound fill. They are similar in size and variability but generally less well made than the many shell beads from Pierce

in the H. L. Grady collection of the Florida Museum of Natural History (discussed later in the chapter on collections). Six pieces of cut *Busycon* shell debitage also recovered from Mound C could be raw material fragments remaining from the production of such shell beads, though they could be from making other artifacts as well.

Figure 36 . *Pierce Mound C shell disk beads (all #07-25.1 except bottom rt, 07-6.9).*

Table 11 . *Details of Busycon shell disc beads from Pierce Mound C.*

Cat #	***length (cm)***	***width (cm)***	***thickness (mm)***	***wt (g)***	***comments***
07-6.9	1.44	1.28	25	.7	subrectangular, drilled from 1 side?
07-25.1	2.75	2.85	46-74	6.7	more rectangular, not flat, bulge of whorl gives irregular thickness
	2.56	2.79	18	2.7	oval, uniform thinness, gently convex
	2.00	2.40	28-68	2.6	subrectangular, not flat, bulge of whorl gives irregular thickness
	2.2	1.55	31	2.1	nearly rectangular, mostly flat
	1.56	1.93	28	.7	nearly square or rectangular, fairly uniform thickness
	1.23	1.11	12	.3	nearly square or rectangular, thin, flat

Other cultural materials from Mound C include a large number of **animal remains** (Figure 37). A pointed bone tool could be an artifact -- a pin, awl, or projectile point, but the rest are “ecofacts” or food garbage: fish spines, teeth, otolith, pneumatized and other bone; probable deer bone; turtle carapace fragments; and oyster shell. Curiously, there is a relative scarcity of *Rangia* clamshell, suggesting either specifically-chosen mound strata/lenses of oyster shell or else just sampling error. Pneumatized fish bones (puffed-up from air or oil, according to the zooarchaeologists) could have been used for artifacts as they have a nice pointed shape, and occasionally they have cut marks.

Figure 37. *Pierce Mound C bone:* l-r*, deer(?) longbone point/pin, 4 pneumatized fish bones (all #07-25 except far right one is #07-6.12); deer tooth (*upper*), 2 jack? fish teeth (*middle*), fish vertebra* (lower*; all #07-6).*

Given this faunal assemblage and the pieces of waste from chipped stone and shell artifact manufacture, it is easy to say that the mound was constructed from a lot of midden soils scooped up from the surrounding village. But the different strata and lenses in Mound C suggest deliberate stratification or construction episodes. It would be nice to get a solid date for Mound C or, better, several dates to show its occupational history. Small soil samples were taken of each stratum during mapping, and they may produce datable charcoal in the future.

With Mound C, again there is the combination of the mundane, midden soils laden with everyday garbage, and exotic/special artifacts to build mounds for the honored dead, as well as the combination of Early and Middle Woodland pottery. Diagnostics such as the Deptford Linear Check-Stamped and tetrapodal sherds securely place Pierce Mound C within the Deptford/Early Woodland Period. The Swift Creek, rocker-stamped, cordmarked, and other unusual sherds are usually considered Middle Woodland but also occur at the end of Early Woodland. Of course these time periods are archaeological constructs, pigeonholes useful for categorizing our data. But a big difference from Early to Middle Woodland is the rapid increase in distinctive and elaborate burial mound building. Indeed, Pierce Mounds A and C provide the first really solid evidence for Early Woodland mound building in this valley (and even then, the Deptford materials may have come from the midden below the mounds, not the time they were built, as logically older sediments are scooped up and placed on top during mound construction). Secure dates on materials from a more-controlled provenience from Pierce Mound C might help resolve the issue of when mound building actually starts and how to recognize the end of Early Woodland and beginning of Middle Woodland.

PIERCE MOUND D (8Fr14D)

Mound D merited only 4 sentences in Moore's (1902:228-9) published description and apparently nothing in the notes except its clear designation on the sketch map (see Figure 6). For this reason its location has been completely unknown for 110 years. It was right on the riverbank edge about 300 m west-northwest from Mound B, and most interesting of all, *outside* the oval of seven mounds.

Moore said it was in thick scrub in 1902, only 20 inches (50 cm) high, 40 feet in diameter at the base, made of blackened sand with local layers of oyster and clam shells. He claimed to have dug it half away and determined it was a "dwelling site." He said "sherds of good quality were present, mainly of the small checked stamp, though pinched and lined decorations were present. " These generic descriptions give few clues as to time period, though the pinched pottery may be the Middle Woodland type Tucker Ridge Pinched. Mound D may have been an area of the already raised riverbank shell midden ridge built to be raised higher, perhaps a platform (if it was indeed aboriginally flattened on top) for a structure. After Moore, it must have been considerably reduced, if not taken out completely, by the building of the railroad. Thus we spent many field seasons having no clue about its whereabouts. But now, knowing where it is, its elevation can be seen somewhat in the topographic map and even more in the lidar image (see Figures 9, 11), where the redder, higher elevation is spread in a linear fashion.

During the 2011 fieldwork, Mound D's location was still not known. However, we took samples of the midden ridge in two of the highest places. One of these (labeled SS on Figure 9) was northeast of Singer Mound, not very far from where Mound D must have been. Flotation of this sample produced a number of similarly generic ceramics, a lot of fish and small terrestrial animal bone, and some charcoal that could be dated. This is discussed further in the section on the West Village.

PIERCE MOUND E (8Fr14E)

Meriting only four even shorter sentences than the four that Mound D got in Moore's (1902:229) published account, Mound E at least got a designation in the unpublished notes (p. 28) opposite the sketch map on p. 29 (see Figure 6). In the notes it is described as being at the fence, and the dotted line on the sketch map is thus interpreted as a fence in place at that time. Mound E was described as 3.5 feet high, 76 feet north-south and 82 feet east-west, with a flat top much spread. Today it is slightly lower but roughly the same size as depicted on Moore's sketch map (see Figures 9, 11, 12, and Table 3), appearing almost oval or trapezoidal. Moore put 14 holes into Mound E, each 3 feet square and dug to the base. He found this mound to be all of sand, light brown and black, with no shell, and containing only a single fragment of check-stamped pottery. Thus he deemed Mound E to be "domiciliary" – some kind of platform for habitation.

The location of Mound E was completely unknown and unseen until the site was cleared of its thick forest; E was one of three previously unknown mounds that jumped out (along with Mounds F and G) after the low vegetation was cut down. It was slightly higher than the other two (Figure 38), rising about a meter above the surrounding land, and measuring about 20 m in rough diameter. In 2007, I named it "possible Mound E" and placed Test Unit 2 (TU07-2E) into its north slope. This unit was 1 m x 2 m, with the long axis going up the slope to try to get a picture of any stratification. We took out the sloping natural dark topsoil (Strata I and II) as one level, since it seemed to be modern and was full of broken glass, then switched to arbitrary 20-cm excavation levels down to a depth of about a meter. At this point, in the interests of time, excavation continued only in the south half of the unit (Figure 39), to a depth of 2 m, so as to get data from farther up the slope.

Figure 38. *View facing southeast of Pierce Mounds F (at left) and E (at right-center) after clearing, summer 2011.*

The stratification seen in this unit is described in Table 12. The deepest two strata, which were level and not sloped, were natural, and Stratum VII extended down into the water table. Materials recovered are detailed in Table 13. Glass, metal, crockery, and other modern objects occurred in the first two levels, which encompassed Strata I and II. Three aboriginal plain potsherds also occurred in these levels, two of them in Stratum II, part of the sloping, constructed mound. Though there was no evidence for basket-loading or other proof of

deliberate construction, this mound had to have been built by humans and would not occur naturally here. It had no shell or features, and the artifacts do suggest historic people either lived on it or near enough to it to dump trash there. The one easily recognizable glass artifact looked like a 1920s cold cream bottle.

Figure 39. *Test Unit 2E, on north slope of Pierce Mound E, showing Floor 6 at 150 cm deep in south half, near the bottom of Stratum VI. Below this the soil turned dark, as seen in the southeast corner, as Stratum VII appeared; trowel points north and corners hold up datum stakes.*

Table 12. *Pierce Mound E strata in TU2E profile of E wall.*

#	Soil	Munsell color	Description, contents
I	forest humus, sand, dark yellowish brown	10YR4/4	sloped, natural forest decay
II	medium sand, topsoil, gray	10YR5/1	sloped
III	medium sand, light gray	10YR7/1	sloped, lightest
IV	coarse sand, yellowish brown	10YR5/6	sloped
V	medium sand, very pale brown	10YR7/4	sloped
VI	medium sand, very pale brown [whitish]	10YR8/2	level, very pale, natural
VII	wet sand, dark grayish brown	10YR4/2	level

In 2011, just to make sure of our interpretation, we excavated another subsurface test into Pierce Mound E summit, a core (C11E1; see Figure 9). Bits of rusted metal in the topsoil (not saved) were the only cultural materials and the stratigraphy was much the same as in the test unit. Though Pierce Mound E could have been a more modern facility, it is more likely, especially given its placement around the oval of mounds, to have been aboriginally built. I

recreate it on Figure 13 as a rectangular platform. Perhaps it supported some structure (whose postmolds we might have failed to find), keeping it above water during flood times, or it may have delimited an area for some other function (dancing or performing?).

Table 13. *Materials recovered by USF investigations at Pierce Mound E (aboriginal artifacts shaded).*

CAT #	PROVENIENCE	CONTENTS	N	WT (g)	COMMENTS
07-26.1	Surface just N of unit TU 2E, under leaves	white glass jar, cosmetic	1	120	about ½ of a side, screw top; prob cold cream, 1920s
07-26.2		clear glass bottle base	1	63.3	glass round/sub-square
07-26.3		clear glass bottle	1	30.6	flat, recessed, straight side
07-26.4		basal glass sherd	1	19.3	clear, oval, prob bottle?
07-42	TU07-2E, Level 1	permanent soil sample	1		1 liter
07-43	TU07-2E, Level 2	permanent soil sample	1		1 liter
07-44	TU07-2E, Level 1	soil sample for flotation	1	7323	9 liters
07-45	TU07-2E, Level 2	soil sample for flotation	1	8017.9	9 liters
07-46.1	TU07-2E, Level 2	grit-t pl	1	5.1	could be stamped
07-46.2	TU07-2E, Level 2	sand-t pl - unusual	1	11	burnished dark exterior; soft pale interior
07-46.3	TU07-2E, Level 2	clear glass	5	1.9	thin, fine, some slightly curved, not window, 1= a bit solarized - wineglass?
07-46.4	TU07-2E, Level 2	rusted iron frags	7	1.5	all flat but 1 might be nail
07-46.5	TU07-2E, Level 2	charcoal		~.3	
07-48.1	TU07-2E, Level 1	grit-t pl	1	4.7	
07-48.2		whiteware teacup sherds	8	140.4	2 = bases, 1 = rim
07-48.3		whiteware plate sherds	17	128.8	some scalloped-rim pink flower transfer-print
07-48.4		pearlware	1	0.3	tiny blue-painted sherd
07-48.5		metal objects	3	16.6	1 rusted, holes -strainer? 1 round base
07-48.6		rusted iron nail	1	2	
07-48.7		metal bottlecap	1	6.7	
07-48.8		shotgun shell	1	3.8	REM-UMC-20 "NITRO CLUB"
07-48.9		plastic object	1	2.4	badminton shuttlecock?
07-48.10		clear glass sherds	74	343.3	some thin, some thick, some from bottles
07-48.11		clear glass fluted bottle	8	127.9	different kinds
07-48.12		clear glass bottle basal	12	271.9	some with marks, some square, some round
07-48.13		clear glass bottleneck	9	215	1 pop bottle, 2 pop off, rest = screwtop jar
07-48.14		clear glass	1	3.1	small cylinder with base- test tube?
07-48.15		clear glass bottle	1	17.9	subrectangular; “ ..ICE-US”
07-48.16		clear glass bottle	1	7.4	subrectangular;”Chas H Fletch. “
07-48.17		clear glass bottle	1	90.1	rectangular; 2 pieces; "Castoria"
07-48.18		clear glass	14	62	cloudy, translucent, weathered
07-48.19		solarized clear glass	14	239.3	1 = base, 1 = fluted, 1 = tiny neck
07-48.20		brown glass sherds	2	3.4	
07-48.21		blue glass sherds	13	10.8	1 = small neck
07-48.22		mammal bone frags	2	1.4	articulating

PIERCE MOUND F (8Fr14F)

Moore did not mention this mound in his published work but the notebook (p. 28) describes it without naming it, and it appears in his sketch map on p. 29 (see Figure 6). He said it was 20 yards north of Mound E and 80 yards long by 20 to 30 yards wide, 2 to 3 feet high. His only evaluation was that "holes showed it to be dwelling site," probably meaning that he got no artifacts from it. His map shows it as an amorphous oval widely spread; today it appears on the topographic and lidar maps (see Figures 9, 11, 12) as a bit more compact, but still amorphous and the widest of the mounds, and less than a meter high. It is within the oval of mounds and, like Mounds E and G, must be an aboriginally-constructed platform; I optimistically recreated it as rectangular on Figure 13, and named it F after seeing Moore's notes (after 2011 fieldwork was completed!).

Pierce Mound F was one of those that suddenly appeared when the southeastern section of the site was cleared (see Figure 38). Penton probably did not even realize his Shovel Test 28 (see Table 2, Figure 9) just clipped the lowest northwest slope of this mound; that test produced 2 check-stamped and 3 sand-tempered plain sherds. In 2011 my USF crew and I finally tested Mound F, opening Test Unit A (or TU11A), measuring 1-m square, in the west-center of the summit (Figure 40). We dug in 15-cm arbitrary levels and reached a depth of a little over 60 cm when the aboriginal material in the screen petered out. To get a quick view of deeper strata, we then cored into the unit floor (Floor 4) to a total depth of 238 cm.

Figure 40. *Test Unit A on the summit of Pierce Mound F, showing Floor 3, 60 cm deep, the dark natural stratum below the midden.*

Mound stratification is detailed in Table 14 and cultural materials recovered are listed in Table 15. The midden stratum was sandwiched between the topsoil (which had disturbed it somewhat) and a very dark chocolate-brown natural soil layer that is the same as what Penton

had referred to as hardpan, as it was harder packed and more difficult to dig. No cultural materials were present in or below this hardpan. The undisturbed midden lay between 21 cm and 33 cm deep, and produced numbingly non-diagnostic ceramic sherds: 4 indeterminate incised and 6 sand-tempered plain. This could be consistent with a Fort Walton affiliation, especially as the incised sherds could fit within the type Point Washington Incised. The lack of basket-loading or other evidence of deliberate construction in this mound is countered by the real prehistoric cultural content and lack of modern materials. Mound F must be another platform deliberately built for some purpose.

Table 14 . *Pierce Mound F strata in TU11A and core.*

#	Depth (cm)	Soil	Munsell color
I	0-21	medium sand topsoil, light gray	10YR6/2, 7/2
II	21-33	medium sand, midden, grayish brown	10YR6/2, 5/2
III	33-65	medium sand, very dark brown	10YR2/2
IV	65-144	sand, brown/white mottled	
V	144-160	sand, very dark brown	10YR2/2
VI	160-170	sand, brown	10YR4/3
VII	170-216	coarse sand, white with orange streaks	10YR8/3, 6/8
VIII	216-238	wet coarse sand, white, yellow streaks	10YR8/2, 8/8

Table 15 . *Materials recovered by USF investigations in Pierce Mound F.*

CAT #	PROVENIENCE	CONTENTS	N	WT (g)	COMMENTS
11-2.1	mound surface of NE end	sand-t pl	1	3.3	
11-3.1	TU11A Level 1	indet Inc	1	3.9	curvilinear - Pt Washington Inc?
11-3.2		sand-t pl	4	9.3	
11-3.3		charcoal	1	1	
11-4.1	TU11A Level 1	hickory nuts	2	11	
11-5.1	TU11A Level 1	indet inc	1	2.8	curvilinear - Pt Washington Inc?
11-6	TU11A Level 2	permanent soil sample	1		1 liter
11-7	TU11A Level 2	soil flotation sample	1		9 liter
11-8.1	TU11A Level 2	indet Inc	1	6.6	curvilinear sand-t
11-8.2		indet Inc	1	0.4	sand-t
11-8.3		sand-t pl	1	1.4	
11-8.4		shell	1	3.4	
11-8.5		charcoal	3	0.2	
11-9	TU11A Level 3	permanent soil sample	1		1 liter
11-10	TU11A Level 3	soil flotation sample	1		9 liter
11-11.1	TU11A Level 3	sand-t pl	2	2.8	
11-11.2		charcoal	4	1	
11-12.1	TU11A Level 3	charcoal	5	0.3	
11-13.1	TU11A Level 4 7-25-2011	charcoal	4	0.4	

PIERCE MOUND G (8Fr14G)

Not at all mentioned in Moore's published work, Mound G was briefly described, but not named, in Moore's unpublished notes (p. 28) opposite the map showing it 30 yards southwest of Mound E (see Figure 6). He said it was a low ridge 120 feet east-west by 60 feet north-south and 3 feet high, covered with palmetto and low scrub. The last line in the short treatment in the notes reads "Holes showed dwelling site"; this suggests he dug in it but found no prehistoric cultural materials.

This mound was completely unknown since Moore's time until the land was recently cleared of undergrowth and many trees, when it became evident (Figure 41). It is roughly the same size as Moore indicated, subrectangular and oriented with the longer side aligned east-west; it rises little more than 2 feet (60 cm) above the surrounding land. On the ground and more obviously on the lidar and topographic images (see Figures 9-12) it is clearly a mound. It delimits the southern edge of the oval of seven mounds at Pierce, and is the farthest away from the riverbank midden ridge. For operational purposes I had been calling it "D?" until Moore's notes became available and the real location of D was revealed. Thus I bestowed the name Mound G for easier reference.

Figure 41. *Pierce Mound G in 2011, barely discernible in lower center of photo above shadows as slight, roughly flat-topped platform; view facing east.*

Test excavation at Pierce Mound G was conducted in 2011. Test Unit B (TU11B) measured 1 m square and was placed on the highest area of the summit (see Figure 9). After excavating two arbitrary 15-cm levels (Figure 42), we hit the dark-chocolate brown hardpan stratum seen in this southern part of the site and realized we were deeper than the probable prehistoric cultural level, as the only materials recovered were bits of natural sandstone

concretions and a few very tiny shell fragments (cat. # 11-14). Nonetheless we had to be sure, and so a core was placed into the southwest corner of the unit floor with the 4" bucket auger. The core was taken to 148 cm depth, where we reached the white coarse beach sand underlying the dark hardpan, and came close to the water table. Stratification of TU11B is given in Table 16.

Figure 42. *Pierce Mound G, Test Unit B (TU11B), Floor 2 (30 cm depth) showing dark brown hardpan stratum; trowel points north; chalkboard says "D?" because we did not yet know which mound this was when photo was taken.*

Table 16. *Pierce Mound G strata in TU11B and core.*

#	Depth (cm)	Soil	Munsell color
I	0-4	forest humus, brown, leaves	
II	4-28	fine-medium sand, light gray	10YR7/1
III	28-52	silty sand, very dark grayish brown	10YR3/2
IV	52-65	siltier sand, very dark brown	10YR2/2
V	65-74	silty sand, grayish brown	10YR5/2
VI	74-148	coarse mottle sand, brown and white	10YR5/3, 8/1

Despite the lack of cultural evidence, there is little doubt that Mound G is a human construction for some purpose, like Mounds E and F, since its existence is hard to explain as a result of any natural processes. Perhaps our excavation was devoid of cultural materials because of sampling error or because this mound was so far away from the riverbank village area that soils used to build it were devoid of midden materials. It is definitely a platform, possibly for domestic purposes or some other function.

PIERCE TEMPLE MOUND H (8Fr14H)

Location, Description, Corrections

Pierce Mound H (Figures 43, 44) is most likely a flat-topped platform or "temple" mound centering the Fort Walton occupation at Pierce, but researchers did not realize this until very recently. Moore never named it and succeeding researchers did not identify it correctly even though the clues were right in Moore's descriptions. But this platform mound has been the most misunderstood of all those in the whole Pierce complex.

Right after Moore's (1902:228) discussion of Mound B and before Mound C, he mentioned not only the three skeletons in a shell field east of B (discussed later under Central Village area) but also a shell heap (mound) 70 m farther east from the skeletons (120 yards east from Mound B) in this same field, "commonly believed to be of shell throughout....said by some" to have shell only up to 2 feet deep overlying sand. He added that "As the shell is used for the streets of the town, digging into the mound is not encouraged." His unpublished notes (p. 55) say this shell heap was "not shown on our plan" but it does indeed appear on the plan map (see Figure 6) labeled "Large shell heap."

Shortly after Moore's visit to this mound, which was already so heavily damaged for fill, the railroad bed construction sliced off its north side and took much of it away as building material in the early twentieth century. By the end of that century and continuing today, the poor mound is probably about 60% gone from all this damage, plus now looting and driving over it with all-terrain vehicles. It is still imposing, and was first called a temple mound by Willey (1949:280), who considered it a flat-topped pyramid typical of late prehistoric Fort Walton culture. Willey was also the first to give its dimensions: 2.5 m high, 15 m square at the summit, 30 m square at base. He considered these dimensions roughly similar to those Moore indicated for Mound C and said this temple mound *may* therefore have been Mound C. In true and unfortunate archaeological fashion, many researchers who came afterward did not evaluate this hypothesis but assumed from the start that this *was* Mound C, especially since Moore did not give a location for C at all in his published description. Mistakes continued to be compounded but I hope this report clears them all up. Willey was probably correct about its being a temple mound. I named it Mound H for clarity and easy reference.

Willey said the temple mound showed in the profile exposed by the railroad cut a sand and midden fill zone covered with a shell mantle. He collected the following ceramics from the disturbed mound surface and surrounding midden, as re-typed according to current (White 2009) names: 8 Fort Walton Incised, 7 Pensacola Incised, 15 check-stamped, 1 indeterminate incised, 55 plain, 2 "unclassified" or indeterminate. These types are quite consistent with our findings over a half-century later. This mound sits amid what was a dense scatter of Fort Walton pottery on the much-disturbed surface of a broad shell midden area. The original setting would have had the mound right on the edge of the shell midden ridge before it drops off down to the

marsh leading to the open water of Turtle Harbor. The shell midden ridge area southeastward of the temple mound, on the east side of the site, has been churned up by dirt roads and may have had a historic residence somewhere, as there were occasionally bricks and other trash lying around until recent clearing.

Figure 43. *Pierce Mound H (temple mound):* left*, in 1940s (adapted from Willey 1949: Plate 11);* below, *in 2006 with archaeologist Jeff Du Vernay on summit and possibly descendant palm tree; railroad bed in foreground; view facing southwest.*

It is important for this research to note that most of the people obtaining artifacts at Pierce over the last 50-75 years have apparently collected from this temple mound and open area around it, where criss-crossing dirt roads allowed easy entry. In the literature Pierce has a reputation for being a fancy Middle Woodland burial mound site, because Moore's publication included no Fort Walton artifacts or descriptions. Some professionals have not realized it has an important Fort Walton component too. In fact, more recently most of the material the site has produced is Fort Walton in age/cultural affiliation.

Figure 44. *Pierce Mound H (temple mound), in 2011:* right*, view facing southwest, after clearing, with shell midden ridge continuing beyond the mound to the right;* below*, view of back side, facing north toward open marsh beyond.*

Investigations, Materials, Interpretation

The USF and BAR investigations of Pierce Mound H have involved only surface collection and examination of the exposed mound contents in looter holes and ATV tracks. (In 2011 a soil sample of shell midden was taken just to the east of Mound H on the midden ridge, as discussed in the chapter on the East Village). But the accumulation of Fort Walton artifacts from this mound has been considerable, as detailed in Table 17. The artifacts include historic crockery too, supporting the idea that someone lived on or near the mound in historic times.

Table 17. *Materials recovered from BAR and USF investigations at Pierce (Temple) Mound H.*

CAT #	*PROVENIENCE*	*CONTENTS*	*N*	*WT (g)*	*COMMENTS*
BAR					
74.164.1.1	platform mound and slope	Fort Walton Inc	2	19.7	ticks, 6 pt bowl
74.164.1.2		indet inc	1	4.6	
74.164.1.3		ch-st	10	65.5	
74.164.1.4		indet punc	1	2.9	
74.164.1.5		indet inc	1	4.3	sand-tempered
74.164.1.6		grit-t pl	1	6.5	
74.164.1.7		grog-t pl	5	41.2	
74.164.1.8		sand-t pl	4	13.7	
74.164.1.9		primary decort flake	1	8.1	
74.164.1.10		turtle bones	3	5.4	
74.164.1.11		burnt shell	1	5.5	
74.164.4.1	Penton's Area 1: just W of lg shell mound on railroad cut and borrow pit	Cool Branch Inc	1	12.4	
74.164.4.2		Fort Walton Inc	15	77.9	
74.164.4.3		Tucker Ridge Pinched	1	3.4	
74.164.4.4		Point Washington Inc rims	2	13.7	
74.164.4.5		indet inc	4	17	
74.164.4.6		indet punc	1	6.3	
74.164.4.7		Lake Jackson Inc rims	7	80.9	
74.164.4.8		Lake Jackson pl rims	9	97.8	
74.164.4.9		Lake Jackson	1	12.8	rim gone; D-node
74.164.4.10		shell-t pl	5	30	
74.164.4.12		ch-st	25	214	
74.164.4.13		indet stamped	1	5.9	
74.164.4.14		grit & grog-t pl	5	71.8	
74.164.4.15		lst-t pl	6	61.3	
74.164.4.16		grit, grog & lst-t pl	3	23.1	
74.164.4.17		grit-t pl	71	545.7	
74.164.4.18		sand-t pl	39	229.4	
74.164.4.19		grog-t pl	32	274.9	
74.164.4.20		daub or clay ball frag	1	18.2	
74.164.4.21		hammerstone frag	1	62.9	
74.164.4.22		chert shatter	1	1.0	
74.164.4.23		chert block shatter	2	20.9	
74.164.4.24		large chert biface frag	1	47.5	
74.164.4.25		biface tip	1	9.8	

CAT #	PROVENIENCE	CONTENTS	N	WT (g)	COMMENTS
74.164.4.26		sandstone frags	2	23.3	
74.164.4.27		chert pebble frag	1	18.1	
94.38.30	mound surface (Tesar & Jones)	F W Inc	5	28.4	
		Pt Washington Inc	1	6.4	
		L J rims, pl	6	33.2	1=ticked
		L J rim, inc	1	6.0	ticked
		ch-st	4	25.7	
		indet punc	1	.9	
		indet inc	1	3.9	
		grit-t pl	1	6.9	
		prob daub frag	1	5.8	
94.38.31	mound surface	F W Inc	1	4.1	
		indet inc	2	4.1	
		lst-t pl	2	12.7	
		lst & grit-t pl	1	5.4	
		shell-t pl	1	4.7	
		grit-t pl	30	177.9	
		grog-t pl	11	55.9	
		sand-t pl	27	134.2	
		Rangia shells	4	93.1	
		oyster shell	1	26.6	
USF					
88-1.1	surface	F W Inc	19	91.6	a couple have grog temper
88-1.2		L J Inc	9	63.5	2 pl rims, 7 ticked
88-1.3		L J Pl	8	77.4	3 = ticked
88-1.4		poss W I pl rim	1	10.0	thickened in 1 spot
88-1.5		ch-st	16	179.0	4 rims, 1= grit+lst temper
88-1.6		indet Punc	1	6.0	
88-1.7		shell-t pl	6	71.5	2 rims; shell not leached
88-1.8		indet inc	4	38.2	
88-1.9		heavy grog+grit- t	1	34.8	2 sherds, can glue
88-1.10		grog-t pl	3	16.3	
88-1.11		sand-t pl	4	64.8	
88-1.12		grit-t pl	8	68.0	
88-1.13		sand+grit-t pl	6	45.1	
88-1.14		daub frag	1	20.0	
88-1.15		sandstone frags	2	49.5	1 chunk, 1 poss potsherd
88-1.16		quartzite pebbles	2	23.6	
88-1.17		tiny chert block shatter	1	0.6	
88-1.18		*Busycon* shell tools	2	238.3	1 end scoop/dipper, other has beveled cutting edge
91-1.1	surface concentration #1 near temple mound	Pt. Washington Inc	1	4.7	
91-1.2		ch-st rim	1	5.6	eroded
91-1.3		indet punc	1	8.6	fingernail
91-1.4		grog-t pl	4	151.2	
91-1.5		sand-t pl	2	6.4	burnished inside and out
91-2.1	surface concentration #2	F W Inc	3	25.2	1 = rim from 6 pt. bowl, ticks on underside

CAT #	PROVENIENCE	CONTENTS	N	WT (g)	COMMENTS
91-2.2	near temple mound	sand+grog-t pl	1	6.7	
94-6.1	surface - easterly and lower mound	*Rangia* shell	2	20.8	sample, marsh clam
94-6.2		*Polymesoda* shell	3	8	sample, also marsh clam
94-6.3		quartzite cobble tool	1	90.2	small amount of use-wear
94-6.4		indet punc	1	8.2	fingernail
94-6.5		indet inc	1	1.9	sand-t
94-6.6		F W Inc	1	8.3	sloppy grit-t
94-6.7		grit-t pl	1	7.6	L J? poss worn lug/ node
94-6.8		sand-t pl	1	6.2	rim point or scallop
94-6.9		sand-t pl	2	7.6	
94-6.10		grog-t pl	2	7.3	
94-6.11		grit-t pl	4	14	
94-6.12		lst+grog-t pl	2	2.3	
94-9-1.1	Area 3 Shell temple mound	ch-st	1	5.1	grit-t
94-9-1.2		grit-t pl	3	31.5	
94-9-1.3		grog-t pl	1	5.2	
94-9-1.4		primary decort flake	1	4.8	
94-9-1.5		*Busycon* shell tool	1	7.3	2.8 X 2.5 cm, use wear 1 side
94-9-1.6		*Rangia* shell	2	47	
94-9-1.7		oyster shells, lg	3	268.6	modern? l=16, 12, 11.5 cm
94-9-2.1	SW side of Area 3 (shell midden SW side of temple mound)	grit-t pl	5	10.4	
94-9-2.2		F W Inc	1	5.8	sand-t
94-9-2.3		grit+grog-t pl	4	14.3	
94-9-2.4		sand-t pl	1	5.5	
94-9-2.5		grit+lst t	1	8.3	red grit
94-9-2.6		shell-t pl	2	10.3	1 unleached (shell still present), 1 partly leached
94-28.1	N side of Area 3 - N side of mound	L J pl rim	1	24.5	
94-65.1	surface, mound summit, where dirt rd ascends N side	ch-st	1	3.5	
95-1.1	surface, W slope	2nd ary chert flake	1	2.5	gravel brought in?
95-8.1	surface	F W Inc	1	10.1	grit-t
95-8.2		indet inc	1	15.1	prob L J, 2 incisions, sand-t
95-8.3		sand+grog-t pl	5	30.2	
95-8.4		grit-t pl	3	24.8	
95-9.1	surface, Area 3, back of mound	F W Inc	2	23.8	carinated bowl sherd (shoulder)
95-9.2		grit-t pl	2	7.4	
95-9.3		sand+grog-t pl	1	36	
95-9.4		Rangia shell	1	6	
96-2.1	surface, W side temple mound	prob F W Inc	1	5.5	grit+red grog-t
96-2.2		L J rim	1	10.2	1 incision
96-2.3		indet inc	1	10.2	grit-t
96-2.4		ch-st	1	3.3	red grog-t
96-5.1	surface on temple mound	F W Inc	2	18.9	grit-t
96-5.2		indet inc	1	3.4	prob Marsh I, carina, sand-t

CAT #	PROVENIENCE	CONTENTS	N	WT (g)	COMMENTS
96-5.3		indet inc	1	1.8	grit-t
96-5.4		ch-st	1	4.6	sand-t
97-2.1	surface, temple mound	L J pl rim	1	1.6	tick
97-2.2		sand-t pl	1	12	
97-2.3		Point Washington Inc rim	1	6	lovely, sand-t
98-2.1	shell temple mound vicinity	L J Inc	1	6.5	ticked rim
98-2.2		ch-st rim	1	14.1	
03-02.1	s side of temple mound	L J	1	14.8	D- shaped lug
03-02.2		poss handle	1	4.9	or lug frag
03-02.3		F W Inc rim	1	10.8	
03-05.1	top of temple mound, surface	blue shell-edged whiteware	1	10.8	historic crockery rim
03-07.1	temple mound area surface	iron poss railroad bolt	1	201.6	
03-07.2		L J Inc rim	1	3.4	
03-07.3		grit-t pl	3	27.4	1 = rim
03-07.4		F W Inc	1	5	
03-07.5		sand-t pl	3	19	
03-07.6		longbone frags	3	13.7	
04-2.1	temple mound base in ATV tracks	sand-t pl	1	13.1	
04-3.1	E side of mound on road surface	L J rim	1	9.1	4 incisions below lip
04-3.2		F W Inc	3	19.8	
04-3.3		indet inc	1	10	grit-t
04-3.4		indet inc	1	5.5	grog-t
04-3.5		shell-t pl rim	1	10.1	
04-3.6		sand-t pl	3	20.8	1 = rim
04-3.7		blue glass	1	4.1	container
04-3.8		whiteware	1	9.6	gold transfer-print fleur-de-lis
04-11.1	on top of temple mound	Marsh Island Inc	1	8.7	
04-11.2		F W Inc	14	100.2	
04-11.3		L J	6	28.6	
04-11.4		ch-st	14	144.4	
04-11.5		grit-t pl	5	37.4	
04-11.6		fabric-impressed?	1	17.5	or lousy check-st
04-11.7		indet inc	7	83.9	
04-11.8		sand-t pl	4	34.9	
04-13.1	RR bed near temple mound	F W Inc	1	9.1	
05-02.1	surface, RR road bed in front of temple mound,	shell whorl debitage	1	80	cut, poss *Busycon*
06-11.1	surface of temple mound, deliberate pile	F W Inc	6	61.9	3 rims, 1= open bowl?
06-11.2		L J rims	2	14.1	1 with ticks, incisions
06-11.3		ch-st	5	52.5	
06-11.4		grit-t pl	15	128.9	1 = rim
06-11.5		shell-t pl	6	37.4	
06-11.6		shell+grit-t pl	4	39.5	
06-11.7		sand-t pl	5	32.7	

CAT #	PROVENIENCE	CONTENTS	N	WT (g)	COMMENTS
06-11.8		grog-t pl	2	9.7	1 = rim
06-11.9		sand+grog-t pl	1	14.9	
06-11.10		shell+grog-t pl	1	13	
06-11.11		burnt turtle carapace	1	1.7	frag
07-54.1	surface, summit	Pensacola Inc rim	1	12.9	very fine thin shell temper
11-48.1	surface, vicinity of temple mound	Cool Branch Inc	1	5	sand-t, rim
11-48.2		Cool Branch Inc	1	14.6	sand-t
11-48.3		F W Inc	1	2.5	grog-t, rim
11-48.4		F W Inc	2	6.4	sand-t
11-48.5		F W Inc	1	5.8	sand-t, 6 pointed bowl rim
11-48.6		L J	2	4.3	ticked rims
11-48.7		ch-st	2	27	sand-t
11-48.8		indet inc	1	1.8	sand-t
11-48.9		indet brushed rim	1	4.1	grit-t, brushed interior
11-48.10		salt-glazed stoneware	2	11.2	
11-48.11		shell-t pl	4	17.9	
11-48.12		grit-t pl	7	28.4	
11-48.13		sand-t pl	16	60.7	
11-48.14		turtle shell fragment	1	5.5	
11-48.15		bone frag	1	1.6	
11-48.16		concrete frag	1	1.2	

Standard diagnostic Fort Walton ceramic types recovered from Pierce Mound H, as derived from the table above, are the following, with sherd counts:

Fort Walton Incised	83 (includes one piece of 6-pointed open bowl; Figure 45)
Lake Jackson	59 (all rims; merges former types Plain and Incised; variable rims)
Point Washington Incised	5
Cool Branch Incised	3
Marsh Island Incised	1
Pensacola Incised	1
check-stamped	82

Figure 45 . *Fort Walton Incised rim sherds from Pierce Mound H (temple mound) surface; all have ticked rims but lower left is half a rim point from an open 6-pointed bowl, so ticks are on underside (all #91-2.1).*

The 28 indeterminate incised and 6 indeterminate punctate are probably also Fort Walton Incised though they do not have enough decoration remaining to confirm this. There is also one sherd impressed with a possible woven fabric, one indeterminate stamped, and one indeterminate brushed. No Early or Middle Woodland types are present except for a single sherd of Tucker Ridge Pinched.

Of the plain ceramics from Pierce Temple Mound H, again by sherd count, the following numbers are present by temper (the main attribute giving archaeological information):

grit	159	limestone & grog	2
sand	114	limestone & grit	2
grog	28	limestone, grit, grog	3
grit & grog	42	shell	21
sand & grit	6	shell & grit	4
limestone	8	shell & grog	1

Quantitative summaries of surface-collected materials are not all that useful, as many biases come into play. People prefer to pick up and save decorated potsherds, and proveniences are relatively uncontrolled. However, it is interesting that, of this total of 390 plain sherds, over 40% are grit-tempered, and slightly more than 6% are shell-tempered. Typically there is a tendency for more grit temper in Fort Walton sites within the Apalachicola valley region, but there is also a wide variety of temper choices (Marrinan and White 2007; White et al. 2012), nearly all of which are *not* crushed shell, as in most late prehistoric Mississippian cultures of the Southeast. The absence of shell tempering in Fort Walton can possibly be interpreted as some kind of identity marker for the region.

The lack of typical Mississippian shell temper is suggested to be an identity factor among Fort Walton societies, and the relatively few shell-tempered sherds that are present are usually considered to have come from elsewhere in the Southeast. Similarly, among the diagnostic types, Pensacola Incised is the only one that is shell-tempered. Crushed limestone is a rare but typically present temper in this region, appearing in Fort Walton sites in the uppermost and lowermost parts of the valley. So the entire ceramic assemblage from Mound H is very typical for Fort Walton.

The other artifacts from this mound also fit well into a Fort Walton component. Two pieces of clay daub suggest the presence of wattle-and-daub structures. Penton found an unusual clay ball, the function of which is unknown. There are only two chipped-stone tools (biface fragments) and 8 pieces of lithic debitage: 2 chert primary decortication flakes, 1 secondary flake, and 5 pieces of block shatter. This tiny lithic assemblage fits well with what we know of Fort Walton in this region: for unknown reasons, it has relatively little chipped stone compared with earlier and later time periods. Other stone items recovered include two quartzite cobbles with use wear as grinding or hammering implements, and 4 pieces of

sandstone that look natural but might have been used. Finally, there are 3 shell tools made of *Busycon* whelk and one cut piece of shell that is probably debitage from tool production. One of the tools is a small rectangle (Figure 46) that might have been a scraper or net-mesh gauge; one edge has smoothing and beveling from use.

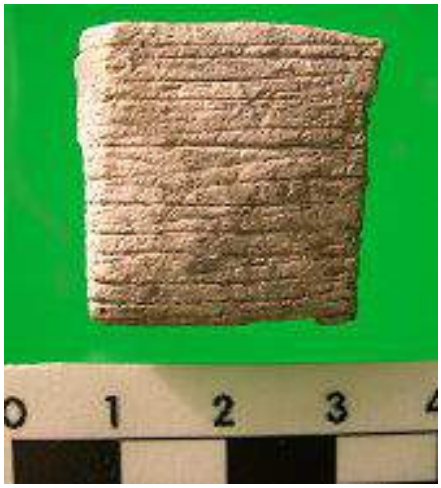


Figure 46. *Whelk shell implement, possible scraper, from Pierce Mound H (#94-9-1.5), with beveled, smoothed, work edge on left.*

Thus the Fort Walton artifact assemblage at Pierce Mound H nicely corresponds with what is standard for the region and the time, a village anchored by a temple mound. We do not know the size of the village or its boundaries but, as discussed in the next chapters, Fort Walton pottery turns up all across the site, especially on the railroad bed and far to the northwest on the shell midden ridge. There is no obvious ramp on Mound H, as many typical rectangular, flat-topped temple mounds have, but a ramp might have been on the north side and so removed by railroad construction. Whether there is a plaza in front of this mound, as also would be typical, is still unknown but discussed under the Central Village chapter.

The larger amount of Fort Walton materials at the site than artifacts of any other time period, as well as the greater spread of them, may indicate that the population was greater at this time than in earlier prehistory (or else it might mean that people had more material possessions or left more of a mess!).

SINGER MOUND (8Fr16)

Singer has been one of the most elusive mounds; all that was known from the published record was that it was west of Pierce. Given its description as 1.5 miles west-northwest of town, and Pierce's description as 1 to 1.5 miles west, it makes sense that Singer would be at the western edge of Pierce, but how close? Moore (1902:229) spent about a half-page describing it but did say it was in a cultivated field, so it could have been plowed down. My earlier investigations included surface collection westward up to the edge of what is now the Mahr property and beyond, especially along the easily walkable railroad bed. Material we picked up was sometimes labeled "possible Singer"; since the village area continues unabated for a distance in that direction, it could easily resemble a former mound now spread everywhere.

In 1995 my crew, traversing the dense forest just south of the railroad bed west of Mound B, discovered a small, low mound with a large pothole in the middle (Figure 47), making it resemble a doughnut. Moore left many "doughnut" mounds all over the Southeast, but we were unsure which this was, whether part of Pierce or something else. In a published photo, I named this doughnut mound "possible Jackson Mound" (Brose and White 1999:14, Figure 3) but that is an error; it is Singer Mound. After clearing, it was of course more prominent. Based on its appearance and also on the courthouse land records of the 20-acre property in the west half of the east half of Section 35, listed as belonging to Joseph Singer, the landowner Moore named, I began in 2007 calling this mound "probable Singer." The question was finally resolved with the acquisition of Moore's unpublished map (see Figure 6, page 12), which clearly shows our doughnut mound is Singer, at the north-northwestern edge of Pierce. Moore labeled it on this sketch map and noted it was 350 yards northwest of Mound A. In reality it is more like 373 yards (see Figure 9), but there is no mistaking this small but real mound. However it is so small and low that it does not appear on the lidar images in Figures 11 and 12.

Originally described as a truncated cone 5.5 feet high and 65 feet in diameter, Singer Mound is today slightly lower, about 4.5 feet (1.5 m) high and 35 feet (10 to 12 m) in diameter, with Moore's apparently unfilled hole in the middle having removed perhaps 40% of it (though he said he "totally demolished" it). He recorded the upper portions of white sand, which he thought might have been the yellow sand in the middle part but bleached by sun and rain. Above the base was fire-blackened sand, up to 2.5 feet thick in the center of the mound.

Moore excavated 19 burials, spread around the mound from the edge to the center, most of badly decayed bones. He did not describe each burial in his published account, only highlights. The unpublished notebook (pp. 4-7) says "all bones very rotten" and at least lists all 19, with descriptive words or phrases. No directional orientation and hardly any locational data are given. All this information is listed in Table 18.

Burial 10 and apparently others were covered with some oyster shells. Burial 14 was extended supine, with other bones across its legs. Burial 15 was a young person, the deepest in

Figure 47. *Singer Mound, 8Fr16, view facing south:* right, *relocated in the forest in 1995 by USF students J. Richardson, at base on left (in white shirt), and Ken Russell (in blue jeans) and Anna East (in black hat and shirt) on summit;* below*, after clearing, with giant center hole, including pockets of shell, and landowner George Mahr.*

the mound, in the black layer at the base. All the other burials were fragments; there were isolated skulls and one isolated femur fragment. Only a small amount of check-stamped and plain pottery came from the mound, and Moore thought these pieces might have been "introduced with the sand" or in other words, scraped up from the surrounding, possibly earlier midden deposits. But there were two "gracefully wrought celts" each about 8 inches long which "lay separate and unassociated"; this could mean they were together or not, but they seem not to have been with any burials. Moore used the term "celt" to mean a stone ax. Celts and check-

stamped pottery not being very diagnostic of age, the cultural classification and age of the burials in Singer Mound remained indeterminate.

Table 18. *Burials excavated by C. B. Moore in 1902 at Singer Mound, 8Fr16.*

#	Location	Orientation	Bones	Grave goods/notes
1			skull, 1 tibia, 1 femur, astragalus in position	
2	about 1' from B1		part of skull	
3			skull, part of femur & ulna, 2 small unident frags	
4			part of femur & 2 small frags	
5			skull, 2 femurs, 2 tibiae	
6			parts of 1 tibia & 1 femur	
7			skull frags	
8			skull frags, pelvis, farther out, parts of 2 femurs, placed as though flexed up	
9	about 1.5' from surface		skull, 1 clavicle, parts of 2 femurs, ulna & humerus; longbones in proper order	apparently unassociated stone celt about 8" long, neat, well formed cutting edge, neatly rounded [illegible] point; some small masses [of] chert rock, chipped
10	under some oyster shells	extended on back	skeleton of young person "had been held together in part by ligaments"; skull and much of skeleton in order but part of scapula with legs	celt unassociated same graceful make and size as other [B9]
11	in caved sand		bones in caved sand	
12			skull	
13			skull	
14		extended on back	skeleton with other human bones lying across legs	
15	near center of mound, in black soil layer near the base, first burial, over 2.5' deep	flexed on l	skeleton, fairly well preserved	
16	ca. 2' deep		part of skull, femur, humerus	
17			part of 1 femur	part of rude pot in frags near surface (unclear if with B17)
18			skull	
19			skull, parts of 2 femurs, 1 tibia	

During the 2007 field season we excavated Test Unit Singer 1 (TUSing1) into the lower slope of the west side of Singer Mound. This unit was a 1 x 2-m rectangle with the longer axis running upslope. It was dug in 20-cm arbitrary levels based on the southwest corner elevation (meaning that upslope the level was thicker). The digging was made difficult by the dense tangle of roots and extreme softness of the sand, which caved in often (Figure 48). By Floor 7

(140 cm deep) it was impossible to continue and our field time was up anyhow, so it is not certain that the mound base or bottom of cultural deposits was reached.

Details of this unit's stratification are given in Table 19. It is possible that, with this unit, we hit a portion of the mound that had not been churned up by Moore or others, as there was not much evidence of disturbance of the strata and lenses originally laid down to build the mound. Under the topsoil was a yellowish-gray sandy layer with some shell and a darker lens with oyster and clam shell, overlying white sand and then the yellowish sand (apparently) natural subsoil. We encountered no evidence of human bone but did recover ceramics, animal bone, and shell. As elsewhere within the Pierce complex, the oyster and two genera of marsh clam (*Rangia* and *Polymesoda*) appeared together in varying proportions.

Figure 48. *Test Unit Sing1, view facing east, showing sand cave-in from north wall onto Floor 7, dark sand and shell lens in southeast corner upper wall, small black feature in south wall.*

Table 19. *Singer Mound strata in Test Unit Sing1.*

#	Thickness (cm)	Soil	Munsell color
I	15-20	forest humus, light brownish gray	10YR6/2
II	15	fine sand, grayish brown, shell	10YR5/2
III	38-40	fine sand, gray/brown, some shell	10YR5/3
IV	25	fine sand, white/light gray	10YR8/1
V	60+	fine sand, light yellowish brown	10YR6/4

Materials recovered from Singer Mound by USF fieldwork are listed in Table 20, with a few items shown in Figure 49. Pottery included check-stamped, indeterminate incised, and punctated. One tiny rim sherd with a couple punctations could be Santa Rosa Punctated but is too small to be sure. A small shell disk could be a bead preform. The entire artifact assemblage is far too generic to indicate time period. Even a full-scale excavation unit produced only

frustratingly non-diagnostic artifacts. The age and cultural affiliation of this mound remains uncertain. Clearly it is composed of midden soils containing everyday garbage but also special things such as the shell disk and the burials and artifacts with them. But the burials do not have the elaborate character of those in Pierce Mound A. For Singer Mound, a late Early Woodland construction is suggested. Given the large proportion of check-stamped pottery, it could be equivalent to Mound C, which at least apparently began as Deptford.

Table 20. *Cultural materials recovered by USF from Singer Mound.*

Cat #	***Provenience***	***Contents***	***N***	***Wt (G)***	***Comments***
04-1.1	surface	indet inc	2	14.6	grit-t
04-1.2		industrial slag frag?	1	.7	
04-1.3		indet st	2	11.5	
04-1.4		grit-t pl	6	22.9	
04-1.5		ch-st	10	54.9	
04-1.6		indet punc	3	6.7	fingernail
07-1.1	TU Sing1 L 2	ch-st	1	0.3	
07-1.2		oyster shells	2	91.1	with flaky frags
07-1.3		*Rangia* shells	2	29.3	large shells and frags
07-2.1	TU Sing1 L 1	ch-st	5	16.7	1 rim
07-2.2		sand-t pl	2	10	thin, burnished
07-2.3		bone frags	7	0.8	2 fish vert
07-2.4		unident shell frags	9	7.2	1=tiny shell (shell sample only)
07-2.5		oyster shell frags	2	19.7	(shell sample only)
07-2.6		*Rangia* shell	1	25.7	(shell sample only)
07-2.7		*Polymesoda*	1	10.7	
07-2.8		shell disk (bead preform?	1	1.1	1.93 x 1.52 cm, 26 mm thick
07-2.9		charcoal	1	0.1	poss nutshell frag
07-2.10		shotgun shell	1	4.5	rusted, modern
07-5.1	TU Sing1 L 2	unident bone frag	1	0.4	burned
07-5.2		fish vert	1	0.1	
07-5.3		charcoal		3.2	
07-12.1	TU Sing1 L 3	oyster shells	2	61.8	smaller
07-12.2		*Rangia* shells	2	25	1 large and 1 small
07-12.3		*Polymesoda*	1	8.8	
07-13.1	TU Sing1 L 4	*Rangia* shell sample	6	33.3	1 lg (14.4g); rest=broken
07-13.2		oyster shell sample	1	11.2	frags
07-16.3	TU Sing1 L 3, E ½	fish bone	1	1.2	pneumatized
07-16.4		unident bone frags	6	0.5	crumbs, prob fish
07-17.1	TU Sing1 L 3, W½	ch-st	2	39.6	1 rim; heavy grit-t
07-17.2		sand-t pl	2	24.1	burnished, grog bits
07-17.3		grit-t p	2	15.6	
07-17.4		indet punc	1	3.6	sand+grit+grog-t
07-17.5		charcoal		0.3	
07-18.1		*Busycon* shell disc	1	1.1	poss undrilled bead
07-19.1	TU Sing1 L 4, E ½	indet punc rim	1	1	tiny; Santa Rosa Punc?
07-19.2		ch-st	3	19.6	
07-19.3		grog-t plain	4		
07-19.4		sand-t pl	4	20.3	black and burnished

Cat #	Provenience	Contents	N	Wt (G)	Comments
07-19.5		grit-t pl	2	4.1	
07-19.6		chert 2nd ary flake	1	0.9	
07-19.7		charcoal		0.7	
07-20.1	TU Sing1 L 4, E1/2	unident bone	1	0.3	poss alligator scute
07-20.2	TU Sing1 L 4, E1/2	charcoal		< 0.1	
07-21.1	TU Sing1 L 4, W1/2	indet punc	1	3.4	
07-21.2	TU Sing1 L 4, W1/2	grit-t plain	1	1.9	
07-23.1	TU Sing1 L 4, E1/2	ch-st	1	7.5	
07-24.1	TU Sing1 L 5, W1/2	sand & grog-t pl	2	24.9	red grog
07-24.2	TU Sing1 L 5, W1/2	oyster shell frags	7	77.2	
07-24.3	TU Sing1 L 5, W1/2	shell frags	2	5.1	1 poss Rangia; 1=wavy
07-24.4	TU Sing1 L 5, W1/2	charcoal		0.5	2 packs
07-25.1	TU Sing1 L 4, W1/2	sand-t pl	4	6.9	crumbs; 1 thin & burnished
07-25.2	TU Sing1 L 4, W1/2	grog-t plain	1	7.6	thick
07-25.3	TU Sing1 L 4, W1/2	shell frags	2	2.3	1 clam
07-26.1	TU Sing1 L 5, E1/2	grog-t plain	1	1.2	
07-26.2	TU Sing1 L 5, E1/2	poss slag frag	1	0.1	poss charred plant?
07-26.3	TU Sing1 L 5, E1/2	shell frags			mostly oyster
07-26.4	TU Sing1 L 5, E1/2	charcoal		0.9	2 packs
07-27.1	TU Sing1 Feature 1	charcoal		0.1	
07-28.1	surface, bulldozed shell ridge NW of mound, 3-6 m S of RR bed	ch-st	37	261.5	5 rims; some grit, grog, sand-t
07-28.2		sand-t pl	11	47.3	1 rim
07-28.3		grit-t pl	1	3.4	
07-28.4		grog-t pl	3	12.5	
07-28.5		indet st	4	25.3	
07-28.6		indet inc	3	13.6	
07-28.7		poss coal/slag	3	39	modern
07-31.1	TU Sing1 mixed, wall shavings	grog-t pl	1	5.5	
07-32.1	TU Sing1 E, L 7	unident rock	1	0.4	
07-33.1	TU Sing1 L 6	grog-temper plain	1	1.3	thin, burnished
07-33.2		charcoal		2.8	frags
07-34.1	TU Sing1 Feature 07-1-1,	*Rangia* shells	2	7.2	small, sample
07-34.2		oyster shell frags	30	68.2	sample includes frags
07-36.1	TU Sing1, Feature 07-01	permanent soil sample	1	156.8	1 liter
07-36.2		charcoal		0.5	
07-36.3		mussel		0.1	tiny mussel

Figure 49. *Materials recovered from Singer Mound Test Unit Sing1: l-r, large alligator tooth (#07-16), shell disk (#07-2), tiny rim sherd with punctations (Santa Rosa Punctated? #07-19)*

PIERCE WEST VILLAGE AREA (8Fr14)

To discuss the habitation and other activity areas around the mounds at the Pierce complex, I divide the site into different areas. The space outside the oval of seven mounds on the west side is herein labeled the Pierce West Village area (see Figure 12). Within this area are located Pierce Mound D (apparently right on the line where the railroad bed is today) and Singer Mound. The West Village area extends at least another 500 m west-northwest, mostly as the shell midden ridge, which sometimes subdivides into multiple ridges or spreads out as a lower, wider ridge. Beyond this distance we were unable to investigate as the Mahr property ends and the land is built up with homes and roads. It would not be surprising if the shell midden continued along this old riverbank as far as the 1-km distance to Jackson Mound on Mitchell Creek, and beyond before modern disturbance.

On the farthest west end just east of the modern houses and roads is the "sanitary landfill" where the city and county have been dumping household garbage for decades. Mahr has been trying to clear up all this trash, but a great deal remains, with prehistoric trash interspersed. Especially all along the railroad bed, surface shell and prehistoric pottery is scattered widely among the more recent cans, bottles, and old plastic toys.

BAR and USF crews have collected a considerable amount of prehistoric cultural materials from the Pierce West Village area, as listed in Table 21. Local residents have also shared collections and information on this area, especially at some of our USF public archaeology day programs. For example, in 1996, Diana Anthony allowed us to photograph some unusual items (Figure 50) that she picked up here: a tetrapodal ceramic vessel base, a sherd of Santa Rosa Stamped and a sherd with multiple protrusions, like nodes, covering the vessel body, probably a variety of Tucker Ridge Pinched.

Figure 50. *Ceramic sherds in D. Anthony collection from Pierce West Village area: clockwise from top left, plain tetrapodal (Deptford) vessel base (side view); Santa Rosa Stamped; noded, probably a form of Tucker Ridge Pinched.*

Bordering the western edge of Pierce is also the land of the J. Brown family (615 Bluff Road). Mr. Brown was helpful in 1994 when we asked for further information. He said a man named Charles Smith, now deceased, had collected artifacts from Pierce, including points, clay

pipes, and bowls some 25 years earlier. Brown himself said his family had lived on this lot (Parcel 5) since 1944, and had only found a few sherds from their plowed field, very little compared to what was able to be found in Magnolia Cemetery. He also said the fishing at Turtle Harbor was not so good because of the high salinity of the water.

Table 21. *Materials recovered by BAR and USF investigations at Pierce West Village area.*

CAT #	*PROVENIENCE*	*CONTENTS*	*N*	*WT(g)*	*COMMENTS*
BAR					
74.164.2.1	road cut surface between garbage dump and mound, west of Mound B	Tucker Ridge Pinched	1	13.2	
74.164.2.2		indet inc	1	2.3	sand-t
74.164.2.3		cobmarked	1	14.5	
74.164.2.4		grog-t inc	1	21.5	
74.164.2.5		ch-st	16	235.9	
74.164.2.6		grog-t pl	3	62.7	
74.164.2.7		sand-t pl	20	88.4	
74.164.2.8		grit-t pl	1	11.1	
74.164.3.1	surface, borrow pit between road cut and dump	shell-t pl	1	4.2	
74.164.3.2		sand-t pl	1	2.4	red paint on interior
74.164.3.3		Tucker Ridge Pinched	1	6.8	parallel incisions below lip
74.164.3.4		Carrabelle Inc	1	5.1	
		indet inc	1	3.5	
74.164.3.5		indet inc	2	11.7	
74.164.3.6		cobmarked	1	18.6	
74.164.3.7		Tucker Ridge Pinched	1	5.5	
		poss Santa Rosa St	1	5.4	
74.164.3.8		ch-st	34	554.5	
74.164.3.9		grit-t pl	6		
74.164.3.10		sand-t pl	23	145	
74.164.3.11		grog-t pl	6	51.5	
94.38.01	west midden area surface	indet inc	3	29.6	
		indet punc	1	4.7	
		ch-st	2	21.8	
		grog-t pl	2	9.1	
		indet st	1	3.1	
		grit-t pl	2	18.0	
		sand-t pl	2	10.5	
		chert 2ndary flake	1	1.7	thermally altered
USF					
94-6-5.1	surface, SW corner of site, trail through pine, cedar, reindeer moss (dryer area)	sand-t pl	1	34.5	big piece, some grit, burnished
94-23.1	surface of shell road, just N of Area 8	whiteware historic sherd	1	1.6	" G. Meakin, Hanley, [E?]ngland"
94-24-1.1	surface (gopher hole) of reindeer moss clearing, 60 m N of Md. A, Area 6	ch-st	1	14.7	sand-t
94-24-1.2		*Busycon* shell debitage	1	17.8	cut rectangular, chisel shaped projection, no use-wear

CAT #	PROVENIENCE	CONTENTS	N	WT(g)	COMMENTS
94-24-2.1	surface 20 m E of reindeer moss clearing	indet punc	1	2.2	annular, sand-t
94-26.1	surface in looters' hole in shell midden ridge N of Area 10 (Mound C)	crown conch shell (*Melongena corona*)	1	33.8	both ends broken off; chisel/ hammer? 8 cm long
94-58.1	surface, 65 m S of RR bed, transect #6, N-S line 50 m W of mounds A, C	ch-st	1	33.7	
94-58.2		oyster shell	1	65.9	
94-58.3		*Polymesoda* shell	1	9.7	
94-68.1	burrow into hollow tree trunk, 20 m S of RR bed, 100 m W of Mound B	linear ch-st	1	4.6	poss Deptford
94-68.2		turtle carapace frag	1	0.9	probable
95-6.1	surface, Area 12 around "Donut Mound" (Singer Mound)	oyster shell	2	107.2	
95-6.2		*Rangia* shell	2	23.5	
95-6.3		*Polymesoda* shell	2	16.2	
95-105.1	shell ridge SE of donut (Singer) mound along RR bed, near Mound D location	ch-st	3	17.6	1 = rim, sand-t
96-1.1	surface W of big mound (Mound B)	ch-st	4	22.3	sand or grit-t
96-1.2		indet punc	1	1.3	sand-t
03-03.1	ditch area W of Mound A	F W Inc	2	15.2	
04-9.1	W side of big mound (B) on railroad bed surface	*Busycon* shell columella tool	1	16.5	chisel end on each side
04-9.2		industrial slag	1	5.5	from RR
04-9.3		F W Inc	2	6.1	
04-9.4		indet punc	2	16	
07-61.1	Shovel Test 07-3	ch-st	3	34.8	grit+grog-t
07-61.2		grit+grog-t pl	4	9.8	eroded; might have been ch-st
07-61.3		grit+grog+lst-t pl	2	1.7	
07-61.4		sandstone chunks	2	17.3	soft
07-61.5		charcoal		1.2	
07-62.1	Shovel Test 07-3	soil sample, Stratum 1	1	24	humus, sand, gray topsoil, 10YR6/1
07-62.2		soil sample, Stratum 2	1	30.1	fine sand 10YR8/1
07-62.3		soil sample, Stratum 3	1	31.3	medium fine sand 10YR4/3
07-62.4		soil sample, Stratum 4	1	46	medium sand 10YR6/4
07-71.1	between Singer & Mound B, RR bed surface	F W Inc	1	27.5	
11-1.1	Surface W of Mound B	blue transfer-print rim	1	10.7	
11-1.2		blue shell-edge rim	1	3.3	
11-16.1	TU11C (between Mounds B,C, and Singer) Level 1	chert microtool	1	0.3	
11-16.2		2nd ary decort flake	1	0.6	quartz
11-16.3		sandstone concretion	1	0.3	
11-16.4		shell fragments	15	1.8	
11-17	TU11C Level 1	permanent soil sample			1 liter
11-18	TU11C Level 1	soil flotation sample			9 liter
11-19.1	TU11C Level 2	ch-st	6	26.6	sand-t, 1 folded rim

CAT #	PROVENIENCE	CONTENTS	N	WT(g)	COMMENTS
11-19.2		indet Inc	1	1.7	sand-t
11-19.3		grit-t pl	1	1.2	
11-19.4		sand-t pl	12	12	
11-19.5		primary decort flake	4	3.5	
11-19.6		2nd ary flake	1	0.3	
11-19.7		quartz chips	13	9.6	
11-19.8		sandstone concretion	1	0.9	
11-19.9		shell fragment	1	0.3	
11-19.10		charcoal	3	1.4	
11-20.1	TU11C Level 1, under feature 11-1	2nd ary decort flake	1	0.5	
11-20.2		quartz chip	1	0.3	
11-21	TU11C Level 2	permanent soil sample	1		1 liter
11-22	TU11C Level 2	soil flotation sample	1		9 liter
11-23.1	TU11C Level 3	ch-st	6	13.9	sand-t
11-23.2		sand-t pl	22	12.6	1 rim
11-23.3		2nd ary flake worked	1	11.4	worked edge, expedient tool
11-23.4		2nd ary chert flakes	2	0.8	
11-23.5		quartz chips	3	1.6	
11-23.6		sandstone concretions	22	16.6	
11-23.7		broken shell fragments	1	0.5	
11-23.8		fish bones	8	1.1	4 rounded fish teeth, 1 vert
11-23.9		charcoal	2	0.2	
11-24	TU11C Level 3, S wall	ch-st	1	40.7	
11-25	TU11C Level 3	permanent soil sample	1		1 liter
11-26	TU11C Level 3	9 liter flotation sample	1		
11-27.1	TU11C Level 4	ch-st	1	0.4	sand-t
11-27.2		sand-t pl	1	0.3	
11-27.3		burnt? sand concretions	26	29.7	
11-27.4		fish tooth	2	0.3	rounded
11-28	TU11C Level 4	permanent soil sample	1		1 liter
11-29	TU11C Level 4	soil flotation sample	1		9 liter
11-30	TU11C Level 5	permanent soil sample	1		1 liter
11-31	TU11C Level 5	soil flotation sample	1		9 liter
11-32	TU11C, feature 11-1, 36 cm from NE corner, northern ½	soil sample	1		
11-33	TU11C, feature 11-1, 36 cm from NE corner, southern ½	soil sample	1		
11-34.1	highest shell midden ridge, 47 m NE of SW corner of TU11C, surface of SE end of ridge, near Mound D location	fabric-impressed	1	10.8	sand-t; thin, irregular-width threads in simple weave
11-34.2		sand-t pl	7	28.8	
11-34.3		2nd ary flake	1	9.5	
11-36.1	surface of RR bed between Singer and NE elevation (poss remnants of Mound D)	sand-t pl	1	3.7	
11-43.1	ST11-2, -20-33 cm	ch-st	5	38.6	grit-t

CAT #	PROVENIENCE	CONTENTS	N	WT(g)	COMMENTS
11-43.2		indet st	1	6.9	sand-t
11-44.1	ST11-3	ch-st	2	16.4	sand-t, 1 folded rim
11-44.2		ch-st	1	9.6	grit-t, lg range in check size
11-44.3		indet st	1	3.6	grit-t
11-44.4		sand-t pl	10	28	
11-44.5		burned soil	5	66.9	
11-45.1	northernwestern-most point on shell ridge, UTM E 692275/N 3291255, far western village	L J loop handle	1	28.7	white grog temper
11-45.2		ch-st	1	2.8	sand-t
11-45.3		indet st	1	3.5	sand-t, cob- or fabric-mk
11-45.4		grit-t pl	6	21.6	
11-45.5		sand-t pl	6	35.5	
11-45.6		brick fragment	1	36.8	
11-46.1	surface of shell midden ridge between Singer Md and 100 m WNW of Singer	ch-st	5	38.3	2 grit -t, 3 sand-t
11-46.2		indet punc	1	5.7	sand-t, rim, fingernail punc
11-46.3		indet brushed	1	3.5	sand-t
11-46.4		sand-t pl	4	43.1	
11-47.1	surface, midden ridge from 100 m W of Singer Mound to NW end of Mahr property	ch-st	1	2.4	
11-49	surface, W end of site, 692447 3291145	shell midden soil sample	2		ca. 7 liters

Among the cultural materials collected from the surface, as culled from Table 21, there were three additional sherds of Tucker Ridge Pinched and one Carrabelle Incised, both generally Middle Woodland ceramic types, but also five Fort Walton Incised and one cob-marked sherd, from the later time period. Plain pottery of varying tempers (75 sherds) and check-stamped (69 sherds) were numerous. Other ceramics were of indeterminate (punctated, incised, stamped) types, including one fabric-marked.

Both USF archaeologists over the years and Penton during his 1996 shovel testing obtained a subsurface sample of the Pierce West Village area (see Figure 9). Penton's tests 12, 14, 18, and 45 (see Table 2) produced Swift Creek Complicated-Stamped, dentate-stamped, check-stamped, and plain sherds, a chert flake, and even some fish and other animal bone. An important sherd from his Shovel Test 18 was Gulf Check-Stamped, with a scalloped rim, the only example of this type known from the site. As noted, check-stamped pottery is usually not very diagnostic, but this rim treatment places it securely within Middle Woodland times.

Three shovel tests were excavated in the Pierce West Village area by the USF crew in 2007 and four in 2011, as well as a larger unit, Test Unit 11C (Figure 51). Data on these tests are given in Table 22. In them the grayish topsoil overlay a relatively pale midden zone with mostly non-diagnostic Woodland ceramics, a few lithic remains, and faunal materials, though much less bone and shell away from the preservative environment of the shell midden ridge. Below

this prehistoric cultural stratum was the dark chocolate-brown hard-packed soil that solidified into real hardpan in some areas. In the test unit, before the hardpan was reached, a dark feature appeared in Floor 2, about the middle of the cultural zone. It was an oval stain only 10 cm deep, with no artifacts in it but a chert flake and a quartzite chip below it.

Table 22. *USF Subsurface tests in the Pierce West Village area.*

Unit	*Location*	*Dimensions*	*Cultural materials*
ST07-3	between Mounds A, C	.5 x 5. m, 1 m deep	ch-st, plain sherds
ST07-4	50 m W of ST07-3	.5 x 5. m, 1 m deep	none
ST07-5	SSE of Mound A	.5 x 5. m, 1 m deep	none
ST11-2	NW of mounds	.5 x 5. m, 1 m deep	ch-st, indet st up to -33 cm
ST11-3	NW of mounds	.5 x 5. m, 1 m deep	ch-st, indet st, pl
ST11-4	NW of mounds	.5 x 5. m, 1 m deep	none
ST11-5	SW of Mound A	.5 x 5. m, 1 m deep	none
TU11-C	SE of Singer Mound	1 x 1 m, 1 m deep	ch-st, indet inc, pl, lithics, animal bone, shell

The Pierce West Village area can be characterized as an occupation area with relatively sparse cultural materials or darkening of midden soils moving farther back from the riverbank edge. No subsurface Fort Walton artifacts occurred here, suggesting a thin overlay of the later cultural component on top of an Early to Middle Woodland village inhabited by people who used the mounds on the west side of the oval.

Figure 51. *Pierce West Village area excavations:* below*, Test Unit 11-C, Floor 2 with dark feature on east side;* right, *Shovel Test 11-3 showing light gray topsoil over pale midden zone over brown hardpan.*

PIERCE CENTRAL VILLAGE AREA

When the maps and images showing topography became available, it was obvious that seven of the mounds at Pierce formed an open oval (see Figures 6, 9, 11). Whether this was a deliberate layout by the prehistoric builders or not is still unknown, but strongly suspected. The mounds are obviously not all of equal size or age. However, one of the purposes of the later peoples who added Mounds E, F, G, and H on the east side may have been to make an enclosed space as some distinctive activity area within the Pierce complex. If so, the area within the oval may have been a prehistoric plaza, a cleared space for public functions. The entire space is labeled the Pierce Central Village area (see Figure 12), and it continues north to the riverbank shell midden ridge.

Within this space, apparently along the ridge, Moore (1902:228) made a discovery that he mentioned rather casually. Fifty yards east of Mound B, close enough to have possible association with it, were three additional burials, in a "field covered with scattered shells." Though there was no mound there, Moore "had done some trenching" there, but he quit because the owner "did not wish to have unproductive soil brought to the surface." The rectangular, smudged area on Moore's unpublished map of the site (see Figure 6) must be the location of these burials, a spot also some 70 yards or meters west of the Temple Mound H (which he described next in the notes and publication but is given in alphabetical order above). In his notebook (p. 55) under the line about the three skeletons Moore wrote "vessels reported fd"; this probably means he heard pots had been found here.

Investigations within the Pierce Central Village area since Moore's time have produced more solid, if less spectacular data. The surface of the railroad bed between Mounds B and H and the open sand roads on the east side of the oval are often sprinkled with artifacts; sometimes people pile them up and leave them (Figure 52). Subsurface tests have been located in this area as well. Penton (1996) excavated 15 shovel tests within the proposed roadway (see Figure 9) that fall within this area, five of which produced cultural materials (see Table 2). His tests 8 and 9 on the west side of the interior oval, southeast of Mound A, produced chert flakes, a bifacial tool fragment, and check-stamped, complicated-stamped, and plain sherds, as well as faunal remains. His three tests within the east side of the oval, numbers 27, 33, and 34 (see Table 2), yielded 6 sherds he classified as Fort Walton Incised, as well as plain pottery, animal remains, and a modern plastic button.

Surface and excavated cultural materials recovered by BAR and USF crews from the Pierce Central Village area are listed in Table 23. The BAR shovel test dug by Tesar and Jones (ST94TJ; see Figure 9), which they called a "test pit," in the "shell field," was probably larger than the standard 50 cm square. Jones was known to dig larger units, usually about 50 cm by 75 cm, but there is no record of this unit size. However, its relatively rich yield of artifacts suggests it was larger.

Table 23. *Materials recovered by BAR and USF in* ***Pierce Central Village*** *area (mostly within oval).*

CAT #	*PROVENIENCE*	*CONTENTS*	*N*	*WT(g)*	*COMMENTS*
BAR					
94.38.04	Test pit level 1, 0-15 cm (shell field) [ST94TJ]	L J rim	1	.7	ticks
		L J grit-t lug or pod	1	13.6	
		L J rim plain	1	1.2	single punctation
94.38.05	Test pit level 1,0-15 cm [ST94TJ]	L J rim plain	1	6.1	ticks
		L J rim plain	1	1.6	single punctation
		grit-t pl	1	3.2	
		indet inc shell or lst-t	1	.9	
		grog-t pl	1	1.0	
94.38.06	Test pit level 1, 0-15 cm [ST94TJ]	grit-t pl	19	46.9	
		sand-t pl	7	23.5	
		grog-t pl	8	19.7	
		grit & grog-t pl	5	15.3	
94.38.07	Test pit level 1, 0-15 cm [ST94TJ]	shell-t pl	4	11.1	
		grit-t pl	12	25.2	
		grog-t pl	1	2.9	
		sand-t pl	2	2.9	
		burned bone frags	2	.2	tiny
		shell frag	1	.1	
94.38.08	Test pit level 1, 0-15 cm, shell sample [ST94TJ]	Atlantic wing shell	1	27.4	
		Rangia clam shell	17	187.8	
		poss. boat shell	1	5.7	
		oyster shell	1	36.7	
		shell frags	5	12.2	
94.38.09	Test pit level 1, 0-15 cm, faunal remains, [ST94TJ]	sm gastropod shell	1	.4	
		unident vertebra frag	1	.1	
		unident bone frags	4	3.1	
		tooth frag	1	.8	deer?
94.38.10	Test pit level 1, 0-15 cm, recent (?) materials [ST94TJ]	sedimentary rock frag	1	6.8	
		brown bottle glass	32	138.2	
		clear glass	23	86.9	
		metal frags	5	18.5	tin can?
		gun shell casings	3	5.1	
		piece plastic	1	1.4	Bakelite?
94.38.11	Test pit level 2, 15-30 cm [ST94TJ]	L J rim	1	14.9	incised
		L J. rim, plain	1	1.6	
		L J prob strap handle	1	3.3	frag
		F W Inc	5	27.2	
		indet inc	3	24.2	
		sand-t pl	1	5.6	
94.38.12	Test pit level 2, 15-30 cm, [ST94TJ]	F W Inc	3	19.2	
		L J rims	3	9.6	incised
		L J rim plain	1	3.3	ticked
		indet inc	3	5.0	
		grit-t plain disc	1	38.3	
		sand-t pl rims	2	20.8	
94.38.13	Test pit level 2, 15-30 cm [ST94TJ]	indet punc	1	10.3	

CAT #	PROVENIENCE	CONTENTS	N	WT(g)	COMMENTS
		indet st	1	6.9	
		indet inc	4	13.4	
		grit-t pl	25	76.6	
		grit & grog-t pl	5	27.6	
		lst-t pl	3	4.8	
		grog-t pl	4	12.7	
		sand-t pl	62	221.6	
94.38.14	Test pit level 2, 15-30 cm [ST94TJ]	indet brushed	1	19.0	
		indet inc	3	11.7	
		shell-t pl	2	3.5	
		lst-t pl	6	17.2	
		grit-t pl	14	74.5	
		sand-t pl	15	73.0	
94.38.15	Test pit level 2, 15-30 cm, shell sample [ST94TJ]	*Rangia* shells	14	225.7	
		oyster shells	7	202.0	
		shell frags	27	42.6	
94.38.16	Test pit level 2, 15-30 cm, faunal remains, [ST94TJ]	drum fish tooth	1	<.1	
		drum fish tooth plate	1	.6	
		fish otolith	1	.9	
		alligator dermal scutes	3	1.8	
		unident fish bone	6	.9	frags
		turtle carapace frags	6	9.1	
		deer teeth frags	43	3.0	
		fish vertebrae	46	6.9	
		gar fish scales	8	1.4	
		unident bone frags	85	29.6	
		shell frags	23	2.0	
		charcoal		1.1	
		modern concrete frags	10	1.2	
94.38.17	Test pit level 2, 15-30 cm [ST94TJ]	chert blocky flake	1	1.4	
		brown glass frag	1	.9	
94.38.18	Test pit level 3, 30-45 cm [ST94TJ]	F W Inc	8	152.5	7 glued, same pot
		F W Inc	4	9.4	different pots
		L J	4	13.7	incised
		Pt Washington Inc	3	8.9	
		indet inc	2	7.8	
		sand-t pl rim	1	4.4	
94.38.19	Test pit level 3, 30-45 cm [ST94TJ]	L J rim plain handle	1	56.8	squared loop
		indet inc	2	14.7	
		concrete (?) frags	19	15.3	
94.38.20	Test pit level 3, 30-45 cm [ST94TJ]	indet inc	2	3.8	
		grit-t pl	11	67.2	
		grog-t pl	12	62.9	
		grit & grog-t pl	4	39.0	
		clay daub frag	1	2.1	finger? imprint
		sand-t pl	1	43.0	newly? engraved
		sand-t pl	49	239.5	
94.38.22	Test pit level 3, 30-45 cm [ST94TJ]	oyster shell	7	349.1	

CAT #	PROVENIENCE	CONTENTS	N	WT(g)	COMMENTS
		Rangia shell	10	149.1	
		shell frags	21	28.9	
		unident bone frag	1	.3	
		gastropod shell	1	<.1	tiny snail
94.38.23A	Test pit level 3, 30-45 cm [ST94TJ]	chert block shatter frag	1	1.2	
		stone frag (granite?)	1	13.4	foreign
		lg yellow sandstone	1	75.0	concretion, has iron
94.38.23B	Test pit level 3, 30-45 cm [ST94TJ]	deer teeth	3	4.4	also frags
		gar fish scales	4	.5	
		fish otoliths	4	3.7	
		drum fish teeth	2	.5	lg
		turtle carapace frags	17	26.2	
		lg & sm fish vertebrae		10.7	
		unident bone frags		37.1	includes fish, turtle
		charcoal		3.7	
94.38.24	Test pit level 4, 45-60 cm [ST94TJ]	L J rims plain	2	7.5	1 ticked
		F W Inc	1	1.7	
		ch-st	3	29.5	
		sand-t pl	1	1.3	eroded
		lst or concrete frag	1	.7	
94.38.25	Test pit level 4, 45-60 cm [ST94TJ]	Pensacola Inc	1	15.5	
94.38.26	Test pit level 4, 45-60 cm [ST94TJ]	shell-t pl	1	2.5	
		lst-t pl	1	1.0	
		grog-t pl	4	43.1	
		sand-t pl	7	13	
		grit & grog-t pl	1	1.4	
94.38.27	Test pit level 4, 45-60 cm [ST94TJ]	shell-t pl	3	17.0	
94.38.28	Test pit level 4, 45-60 cm [ST94TJ]	oyster shells	2	102.1	
		Rangia shells	4	87.3	
		shell frags		2.9	
94.38.29	Test pit level 4, 45-60 cm [ST94TJ]	unident faunal bone		.6	some burned, 4 fish vert
USF					
94-6-2.1	surface 200 m S of Mound B, shell area in pine flatwoods	ch-st	1	27.5	sand+grit-t
94-12.1	Area 8 (~75 m S of Temple mound)	scallop shell	1	8.8	*Chlamys senatoria*
94-12.2		scallop shell frags	3	3.5	small pieces
94-12.3		sand+shell-t pl	1	2	
94-12.4		grit-t pl	2	28.9	
94-12.5		grit+grog-t pl	1	4.5	
94-12.6		*Busycon* shell spatula/scraper	1	53.3	trapezoidal, worn smooth on sides
94-13.1	surface of clearing+road (Area 9 - SSW 150-200 m from temple mound)	grog-t pl	2	6.4	
94-13.2		indet punc	1	5.7	lg square puncs, grit -t
94-13.3		grit-t pl	1	11.1	
94-20.1	surface on trail W of shell mound	ch-st	1	4.7	grit-t
94-21.1	surface on trail W of shell mound	F W Inc	3	40	1 grit-t, 1 grog-t, 1

CAT #	PROVENIENCE	CONTENTS	N	WT(g)	COMMENTS
					grit+grog-t
94-21.2		L J Inc rim	1	9.7	ticks, broken prob lug, grog+sand-t
94-21.3		indet. inc	14	3.6	grit-t
94-21.4		grit-t pl	2	9.5	
94-21.5		shell-t pl	1	2.5	
94-21.6		grit+grog-t pl	2	7.3	
94-25.1	S transect from area 6 (Mound A) 170 m E, in tree roots	indet st	1	16.2	sand-t, v worn, rough
94-67.1	surface 100 m E of Mound B, 70m W of Area 4, RR bed path	indet inc	1	4.2	
94-80.1	surface 35 m WSW Area 3; 8 m N of Tesar & C. Jones shovel test	Pensacola Inc	1	1.8	
94-80.2		FW Inc	1	8.1	6- pt bowl rim
94-80.3		grit+grog-t rim	1	6.7	single incision below lip
94-80.4		grit-t pl	7	25.6	heavy grit
94-80.5		grog-t pl	3	9.5	
94-80.6		2nd ary chert flake	1	3.2	brownish, fossiliferous
95-2.1	surface, Area 11, road SW of temple mound and SE of Mound B	grog-t pl rims	2	32.8	1 L J jar collar? 1 = inward curve
95-2.2		F W Inc	4	26.6	
95-2.3		indet inc	2	5.4	one punch-&-drag?
95-2.4		shell-t pl	1	5.1	
95-2.5		grit+ grog-t pl	3	41.4	
95-2.6		grit-t pl	3	30.9	
95-10.1	surface, Area 11, fork in dirt road directly SW of temple mound	F W Inc	4	29.9	1 rim, sand or grit-t
95-10.2		ch-st	1	4.8	
95-10.3		L J rims	2	10	1 has incision below lip, 1 has ticks, 1 has lg ticks/sm scallops
95-10.4		Carrabelle Inc rim	1	6.5	grit-t, vertical (II) incisions
95-10.5		indet st	1	8.8	poss ch-st
95-10.6		grog-t pl	4	30.2	
95-10.7		sand-t pl	5	27.5	
95-10.8		grit-t pl	2	11.5	
95-10.9		shell-t pl	1	6.1	
95-11.1	surface, Area 9, on road SSW of temple mound	Cool Branch Inc	1	15.1	heavy grog-t
95-11.2		ch-st	2	10.6	one very eroded
95-11.3		indet inc	1	2.7	
95-11.4		grit-t pl	2	20.5	
95-11.5		grog-t pl	1	5.2	
95-11.6		oyster shell	1	21	
95-11.7		Rangia shell	1	17.9	
96-3.1	shell midden ridge (presumably W of temple mound) surface	ch-st	1	9.9	heavy grit-t
96-4.1		L J rim	1	14.4	B-lug, red grog-t
96-4.2		cord-marked or ch-st	1	4.1	hard to tell which

CAT #	PROVENIENCE	CONTENTS	N	WT(g)	COMMENTS
96-4.3		indet inc	1	5.5	sand-t
96-4.4		grog-t pl	1	7.1	cream-colored grog
97-1.1	surface, N side of railroad bed (newly dredged)	sand-t pl	8	3.2	
03-01.1	widened road E of Mound A, surface	ch-st or fabric impressed	1	10.2	
03-04.1	road surface SW of temple mound	F W Inc	1	9.7	
03-04.2		Cool Branch Inc	1	12	
04-6.1	between temple (H) and conical (B) mounds	indet punc	1	5.6	
06-03.1	surface, new built-up road E of Mound B,	indet punc	1	5.8	
06-03.2		grit-t pl	1	8.4	
06-03.3		lst-t pl	1	7.5	
06-04.1	surface of road that goes S from W side of temple mound	F W Inc rim	1	5.8	
06-04.2		ch-st	1	8.7	
06-04.3		indet inc	1	5.7	
06-04.4		sand+grit-t pl	1	4.1	
06-04.5		grit+grog-t pl	1	17.7	
06-09.1	area of disturbed ridge W of temple mound	ch-st rim	1	8.3	sand-t
06-09.2		grit-t pl	1	34.9	
06-09.3		linear ch-st	1	7.5	sand-t, poss Dept
06-13.1	surface NNW of temple mound - newly cleared (in swamp)	F W Inc	2	21.7	1 = 6 pt bowl?
06-13.2		Pensacola Inc rim	1	6.6	
06-13.3		Marsh Island Inc rim	1	17.9	
06-13.4		indet inc	1	18.1	grit-t
06-13.5		L J rims	2	23.3	incisions; 1 = thick pl lip, 1=ticks
06-13.6		ch-st	4	34.5	
06-13.7		shell-t pl	3	34.7	
06-13.8		sand-t pl	3	31.8	1 has brush marks
06-13.9		grit-t pl	2	18.7	
06-13.10		indet brushed	1	11.4	not Chattahoochee Brushed
06-13.11		daub	1	6.2	
06-13.12		green/black glass	1	24.2	bottleneck?
06-13.13		blue glass jar frags	2	4.4	1 rim, 1 shoulder
06-13.14		*Rangia* shell	1	29.8	
06-13.15		Busycon shell scoop	1	138	
06-13.16		oyster shell	1	50.4	
06-15.1	artifact scatter N of Mound B (deliberate pile next to road)	ch-st rim	1	16.5	several glued
06-15.2		F W Inc	4	81	2 rims, 1 sloppy
06-15.3		lst-t pl	2	32.3	
06-15.4		grit+grog-t pl	3	19.7	
06-15.5		grit-t pl	3	35.5	1 wide flat rim
06-15.6		Busycon shell tool, poss hammer	1	479.4	large whorl section cut below apex-haft? no use wear
07-1	TU07-1 L1	soil sample			1 liter permanent
07-2	TU07-1 L4	soil sample			1 liter permanent

CAT #	PROVENIENCE	CONTENTS	N	WT(g)	COMMENTS
07-3	TU07-1 L2	soil sample			1 liter permanent
07-4	TU07-1 L3	soil sample			1 liter permanent
07-5	TU07-1 L5, S ½	soil sample			1 liter permanent
07-08.1	Shovel Test 07-2	charcoal	1	1.7	
07-09.1	TU07-1, Level 3	clear glass sherd	1	0.5	thin, window?
07-09.2		rusted iron nails	10	36.3	
07-09.3		charcoal		6.6	
07-11.1	TU07-1, Level 4	rusty nail?	1	6.8	does not react to magnet
07-11.2		rust frags		2.4	
07-11.3		charcoal		1	
07-12	TU07-1, Level 1	soil sample	1	17005	9 liter flotation
07-13	TU07-1, Level 3	soil sample	1	10283	9 liter flotation
07-14	TU07-1, Level 5	soil sample	1	10307	9 liter flotation
07-15	TU07-1, Level 4	soil sample	1	9864	9 liter flotation
07-16	TU07-1, Level 2	soil sample	1	9635	9 liter flotation
07-28.1	TU07-1, Level 2	block shatter	2	6.7	
07-28.2		metal chain frags	25	904.5	thin flat links
07-28.3		charcoal		2.0	
07-29	TU07-1, Level 6	soil sample	1		1 liter permanent
07-30	TU07-1, Level 7	soil sample	1		1 liter permanent
07-31	TU07-1, Level 8	soil sample	1		1 liter permanent
07-32	TU07-1, Level 10	soil sample	1		1 liter permanent
07-33.1	TU07-1, Level 6 South	clear glass	1	1.6	thin; window?
07-33.2		charcoal		2.8	
07-34.1	TU07-1, Level 7 South	charcoal		5.1	
07-35.1	TU07-1, Level 8, South	charcoal		2.4	
07-36.1	TU07-1, Floor, 95, 36E, 55N	black glass sherd	1	5.3	worn, old bottle?
07-37.1	Surface, lunch area ~80 m N of Mound E	*Busycon* shell	1	63.5	midden in it
07-38	TU07-1, Level 10	soil sample	1	12080	9 liter flotation
07-39	TU07-1, Level 8, South	soil sample	1	12922	9 liter flotation
07-40	TU07-1, Level 7 South	soil sample	1	11815	9 liter flotation
07-41	TU07-1, Level 6 South	soil sample	1	5108	9 liter flotation
07-52.1	near lunch area, surface, ~80 m N of Mound E	L J rim	1	12.2	ticks, node, grit-t
07-52.2		L J rim	1	12	lug and prob broken lug, grit-t
07-59.1	surface of road (RR bed) between temple mound and Mound B	indet inc	1	8.8	Carrabelle or Marsh Island?
11-37.1	ST11-1, 100 m E of Mound A, 0-10 cm	ch-st	3	28.2	sand-t
11-37.2		sand-t pl	11	9.9	
11-37.3		primary decort flake	3	10.6	
11-37.4		2nd ary decort flake	5	4.4	
11-37.5		2nd ary flakes	6	1.8	
11-37.6		quartz chips	4	1.8	
11-37.7		broken burned shell fragments	4	1	
11-37.8		broken shell fragments	22	19.5	

CAT #	PROVENIENCE	CONTENTS	N	WT(g)	COMMENTS
11-37.9		sand/shell concretion	3	22.2	
11-37.10		machine cut nail	1	1.5	round-head
11-37.11		clear glass fragment	1	10	partial embossed
11-38.1	ST11-1, 25-35 cm	ch-st	20	108.8	sand-t, 5 rims
11-38.2		indet st	4	16.5	
11-38.3		sand-t pl	24	20.1	
11-38.4		primary decort flakes	7	134.4	mostly cortex
11-38.5		2nd ary decort flakes	2	0.8	
11-38.6		2nd ary flakes	5	4.8	
11-38.7		quartz chip	1	0.6	
11-38.8		burned shell fragments	13	5.4	
11-38.9		shell fragments	20	11.2	
11-38.10		bone fragment	1	0.5	
11-38.11		charcoal	21	4.3	
11-39.1	ST11-1, 35-47 cm	ch-st	1	8.8	sand-t
11-39.2		sand-t pl	2	0.5	
11-39.3		2nd ary flakes	2	4.8	
11-39.4		shell frags	5	0..5	
11-39.5		shell frags	3	0.3	
11-39.6		bone frags	3	0.9	
11-39.7		charcoal	7	0.7	
11-40.1	ST11-1, 47-60 cm	ch-st	4	16.1	
11-40.2		sand-t pl	6	5.6	
11-40.3		grit-t pl	2	1.2	
11-40.4		primary decort flake	1	0.5	
11-40.5		broken shell fragments	2	0.7	
11-40.6		poss burned seeds	7	0.4	
11-40.7		charcoal	4	0.3	
11-41.1	ST11-1, 30 cm deep in N wall & 5 cm from NE corner	projectile point-Decatur type?	1	10.8	
11-42.1	ST11-1, 38 cm deep in SW corner	fired clay	1	8.9	
11-52.1	surface W of temple mound on shell midden ridge that also curves around to S on small stream bank	F W Inc	5	22.4	2 rims, sand-t
11-52.2		Marsh Island Inc	1	8.2	rim, sand-t
11-52.3		L J rims	9	54.2	7 ticked, 1 loop handle, 1 D-lug, grit-t
11-52.4		ch-st	2	13.1	
11-52.5		indet inc	5	18.7	grit-t, 1 rim
11-52.6		indet punc	5	16.2	sand-t
11-52.7		grit & shell-t pl	1	9.5	
11-52.8		shell-t pl	3	10.8	
11-52.9		grit & grog-t pl	2	5.7	
11-52.10		grog-t pl	12	39.5	
11-52.11		grit-t pl	34	129.8	
11-52.12		sand-t pl	19	69.2	
11-52.13		fish vertebrae	1	0.7	
11-52.14		clear glass bottle base	1	75	Owens-Illinois Glass Co., after 1954

Figure 52 . *Surface artifacts along the shell midden-packed old railroad bed between Pierce Mounds B and H, in the Central Village area, August 2006; this pile had been left by someone and includes Fort Walton Incised, check-stamped, and plain sherds, as well as a lightning whelk possibly used as a hammer.*

Materials were recovered in 15-cm levels by Tesar and Jones (Table 24) down to 60 cm depth. Interestingly, the only check-stamped sherd is in the deepest level, with the rest of the pottery being a typical Fort Walton assemblage. There is more sand-tempered plain with greater depth and less grit-tempered. Though grit is more associated with Fort Walton, this could be just a chance distribution; or the greater amount of sand-tempered pottery could be associated with the earlier Early-Middle Woodland village occupation. The single piece of lithic debitage is also more suggestive of Fort Walton, which has very little chipped stone.

Table 24 . *Cultural materials from Shovel Test 94TJ (dug by BAR archaeologists) by depth (in cm).*

Artifact type	***0-15***	***15-30***	***30-45***	***45-60***
L J rims	5	7	5	2
F W Inc		8	12	1
Pt Washington Inc			3	
Pensacola Inc				1
indet inc	1	14	6	
indet punc		1		
indet st	1			
shell-t pl	4	2		4
grit-t pl	32	38	11	
grog-t pl	10	4	12	4
sand-t pl	9	80	51	8
grit & grog-t pl	5	6	4	1
limestone-t pl		9		1
indet brushed	1			
ch-st				1
chert debitage		1		

USF excavations in the Central Village area included a core, a test unit and four shovel tests. Test Unit 07-1 (Figure 53) was 1 x 2 m, placed roughly in the center of the oval (see Figure 9) to look for any signs of a public use area such as a plaza. This was also a very low area, possibly within the original bed of the small stream that flows north between Mounds B and H. Excavating in 10-cm levels, we found modern metal and glass as deep as 50 cm. After three levels the decision was made to continue only in the south 1 x 1-m square to get deeper faster; the water table was reached at about 1 m depth. Stratification was simple, with pale gray topsoil overlying mottled brown and gray natural subsoil, and black swamp muck below that.

Figure 53. *Test Unit 07-1, south half, showing deep black stratum near water table.*

Absolutely no prehistoric cultural materials were recovered from TU07-1, except for 2 pieces of chert block shatter in the topsoil. This suggests several possibilities. Perhaps the area was cleared and swept clean for a plaza or other special-activity space. Or it was scoured by the small stream, which might have flowed in a larger valley prehistorically (though it may be more recent in this vicinity, since it does not appear on Moore's map). Or the natives dug out the sides of the stream bed to use the soils for building mounds.

Shovel Test 07-2, positioned 50 m west of Mound E (see Figure 9), was taken to 60 cm depth with no cultural materials recovered. Shovel Test 07-5, 50 m south of Mound A, was taken to hardpan at 85 cm deep, producing no cultural materials. Shovel Test 07-6, located about 50 m west of and halfway between Mounds E and F, was taken to 1 m and produced one

check-stamped sherd. Core 948-1, northwest of Mound F, taken to well over 1 m deep, yielded no cultural materials.

But Shovel Test 11-1 (Figure 54; also see Figure 9), positioned 50 m southeast of Mound C, on relatively high ground above the small stream valley, was very productive, indicating the northern part of the area within the oval (and closer to the shell midden ridge) must have had intensive settlement or other use. Table 25 (extracted from Table 23) lists the materials from this small test by depth. There were 77 ceramic sherds, 28 of them clearly check-stamped, several others with an indistinct but probable check stamp, and the rest plain. The 37 pieces of lithic debitage included quartz chips. In addition, a projectile point appeared in the north wall just as landowner George Mahr walked up (to hand us insect head nets to help with the highly annoying gnats, mosquitoes, and flies). This point (Figure 54) most resembles the Decatur type, a corner-notched point with a broad short stem and concave base; its length is 5.93 cm, width 3.18 cm, thickness .66 cm. Other materials from the test (not shown on the table) included very small and sometimes burned shell and bone bits from all levels, and modern glass and iron from the top 10 cm.

Table 25. Cultural materials from Shovel Test 11-1, by depth (in cm).

Artifacts	***0-10***	***25-35***	***35-47***	***47-60***
ch-st	3	20	1	4
indet st		4		
grit-t pl				2
sand-t pl	11	24	2	6
Decatur (?) point		1		
primary decort flake	3	7		1
2ndary decort flake	5	2		
2ndary flake	6	5	2	
quartz chips	5	1		

These cultural materials from Shovel Test 11-1 extended only to about 60 cm depth, beyond which a hardpan soil made further digging very difficult. The artifacts are consistent with an Early to Middle Woodland occupation which must be only very shallow, but possibly undisturbed beyond the 10 cm of topsoil. If this area was cultivated for crops, the plowing was not too deep.

In sum, the Pierce Central Village area does seem a little segregated as to prehistoric cultural identities. The Early-Middle Woodland west side is characterized by check-stamped pottery and far more lithic remains. The east side, which is south of the Temple Mound H, produced at least some surface Fort Walton material, but just about nothing at the southern end near Mounds E, F, and G. Whether the center of the oval was a special area or even intended to be an intra-mound zone is a question that will need further investigation from both

archaeological and geomorphological standpoints, including tracing the origins and history of the little stream.

Figure 54. *Pierce Central Village area Shovel Test 11-3:* above*, projectile point from 30 cm depth;* right*, stratigraphy of east wall at 60 cm depth.*

PIERCE EAST VILLAGE AREA

Outside the oval of Pierce mounds on the east side (as designated on Figure 12, for easy analysis) is the area labeled Pierce East Village. It extends to the boundary between the Mahr land and the Magnolia Cemetery, simply for classification purposes. A ditch over 1 m wide and up to 1 m deep runs north-south along that boundary from the marsh, even cutting through the railroad bed, all the way to Bluff Road. East of this East Village area is the Cemetery Mound, which was on the west side of the cemetery, and is now mostly leveled and spread around. The picture is confused because the Cemetery Mound was apparently earlier than the Fort Walton occupation in Pierce East Village area. Of course the ditch probably did not exist in prehistoric times, but it is a convenient marker today. So the rest of the east-side prehistoric occupation area at Pierce and the Cemetery Mound and others are discussed in the next chapters.

The Pierce East Village area is the part of the site that has had the most disturbance and surface collection because it has been the easiest to get to, the least forested, and the most criss-crossed by dirt roads. At the north end is the shell field Moore (1902:228) referred to around the shell heap of the Temple Mound H. During 2011, the landowner cleared the entire northeast side, including the edge of the marsh, which permitted more extensive surface inspection (Figure 55).

Figure 55. *Pierce East Village area, extreme northeast corner of Mahr property, 2011. Raised railroad bed made of shell midden runs across middle of photo, with surface-collecting fieldworkers D. Woodward and C. Hunt; at right are workers clearing the land; view facing north-northeast, with open water of Turtle Harbor visible in left-center background and forest marking edge of cemetery in right background.*

During Penton's (1996) survey for the proposed road, he dug eight shovel tests in the Pierce East Village area (see Figure 9), six of which produced cultural materials (see Table 2). From his tests 24, 25, 26, 35, 36, and 37, he obtained 41 Fort Walton Incised sherds, 2 Lake Jackson handle fragments, 2 check-stamped sherds, and plain sherds totaling 240, of which he classified only 79 as grit-tempered, 22 as sand and grit, and the remaining 139 as sand-tempered. In the category of lithic materials he recovered only one chert flake and a ground-stone fragment, and he also got some animal bone including alligator scutes. All this is quite consistent with the assignment of this habitation area to the Fort Walton period. While there is usually more grit temper in Fort Walton sherds than sand, different researchers classify these inclusions differently, and grit (crushed quartzite) is sometimes classified as large sand particles.

BAR and USF archaeologists have picked up a great deal of surface material from the Pierce East Village area over the years, as listed in Table 26. Most of it is Fort Walton ceramics of the types Fort Walton Incised (n=45) and Lake Jackson (several rim styles; n= 27), with a smaller number of Cool Branch Incised (n=4), Point Washington Incised (n=2), and Marsh Island Incised (n=2) sherds. Among the 332 plain ceramics are a few shell-tempered sherds (36 with crushed shell only, 8 with shell and grog temper, 1 with shell and grit), as well as a few shell-tempered Pensacola Incised. Many incised, punctated, or stamped sherds are too small or indeterminate to be classified by type. There are one engraved, one brushed, and one fabric-impressed sherd but, interestingly, only 25 check-stamped sherds from this area. The relatively small number of check-stamped suggests a later Fort Walton component or possibly a different activity area; at a few other Fort Walton sites in this region, more check-stamped sherds have come from the east side of the occupation area (White et al 2012), consistent with Pierce.

Other surface artifacts from the Pierce East Village area include some fragments of clay daub (from wattle-and-daub structures), four shell tools, and a couple pieces of lightning whelk shell debitage. The lithic assemblage is tiny: two scrapers and one flake – consistent with the known character of Fort Walton in this region. Various animal bone and shell samples collected are undoubtedly refuse from the spread-around shell midden. More recent Euroamerican use of the area is indicated by the historic crockery and glass, as well as the interesting gunflint (Figure 56), probably French, made of translucent, honey-colored flint.

Excavations by USF in the Pierce East Village area include two shovel tests, a core, and a soil sample from the shell midden ridge. Shovel Tests 07-1 and 11-6, at the south end (see Figure 9), produced no artifacts. The soil sample from the midden ridge, just to the east side of the Temple Mound H, was packed full of *Rangia* and oyster shell, as well as fish bone and other food garbage. Flotation of this sample to recover all cultural materials will give an idea of the percentages of different species obtained by the prehistoric natives; if the black sand contains any sizeable charcoal, a radiocarbon date could be obtained to verify the results of the date already returned from charcoal in a core dug in 1994.

Table 26. *Materials recovered by BAR and USF from* ***Pierce East Village*** *area (east of mound oval up to ditch at east end of Mahr property, west boundary of Magnolia Cemetery).*

CAT #	*PROVENIENCE*	*CONTENTS*	*N*	*WT (g)*	*COMMENTS*
74.164.8.1	Pierce site W of cemetery	Fort Walton Inc	1	12.2	
74.164.8.2		shell-t pl rim	1	6.1	broken handle
74.164.8.3		indet inc	1	1.9	
83-1.1	Surface, Mound H area and east side	L J rim	1	10.7	
83-1.2		Pensacola Inc	1	3.7	
83-1.3		F W Inc	6	26.8	
83-1.4		ch-st	9	128	
83-1.5		grit-t pl	8	101.4	2 = rims
83-1.6		Marsh Island Inc	1	12	heavy grog temper
83-1.7		sand-t pl	1	9	
83-1.8		indet st	1	7	coil-smoothing lines?
83-2.1		Cool Branch Inc	3	29.6	grog-t, lg variation
83-2.2		F W Inc	1	8.7	
83-2.3		ch-st rim	1	10.5	large unstamped neck
83-2.4		L J Inc rim	1	5.6	
83-2.5		indet inc	5	30.3	1 = rim
83-2.6		shell-t pl	5	37.9	1 = rim
83-2.7		sand-t pl	4	23	
83-2.8		grog-t pl	3	30.5	
83-2.9		shell+grog-t pl	2	14.4	
83-2.10		poss ch-st	1	5.5	
83-2.11		lst-t pl	1	10.6	
83-2.12		grit-t crumb	1	0.3	
94-6-3.1	easterly mounds near railroad bed surface	sand-t pl	1	14.9	
94-6-3.2		ch-st	1	20.7	sand+grog-t
94-6-3.3		poss *Busycon* shell tool	1	44.5	
94-6-4.1	surface along sand road which runs between cemetery and mounds	shell+grog-t pl	1	3	shell still present
94-6-4.2		grit-t pl	1	8	
94-6-4.3		grit+grog-t pl	3	20.9	
94-7-1.1	collection Area 1, surface, E of temple mound	grit-t pl	11	38.3	
94-7-1.2		grit+grog-t pl	15	40.7	red temper
94-7-1.3		ch-st	4	21	grit-t, some grog
94-7-1.4		historic stoneware	1	18.1	molded jar rim, orange
94-7-1.5		shell columella tool	1	20.3	*Busycon*, chisel?
94-7-1.6		*Busycon* shell debitage	1	4.1	cut rectangle
94-7-1.7		*Rangia* shell	1	9.4	sample
94-8.1	Area 2 around road fork, *Rangia shell* midden, E of temple Mound H, surface	F W Inc	6	31.6	2 rims; 1 grog-t, rest = grit
94-8.2		Pensacola Inc rim	1	6.8	B-lug, very protruding
94-8.3		Pt Washington Inc rim	1	10.2	incision on interior?
94-8.4		L J	2	10.9	1 strap handle frag, 1 D-lug
94-8.5		indet inc	2	7.4	grog-t
94-8.6		L J Inc	1	1.9	4 incisions, grit+grog-t
94-8.7		ch-st	1	4.8	smoothed-over, lst-t

CAT #	PROVENIENCE	CONTENTS	N	WT (g)	COMMENTS
94-8.8		shell-t pl	7	17.2	
94-8.9		grit-t pl	21	48.9	
94-8.10		grog-t pl	11	34.6	
94-8.11		shell+grit-t pl	1	1.6	
94-8.12		grit+grog-t pl	12	19.9	1 rim
94-8.13		sand-t pl	2	8.8	
94-8.14		shell+grog-t pl	2	8.7	
94-8.15		sand+grog-t pl	1	4.7	
94-8.16		indet bone frag	1	1.6	
94-8.17		sandstone	1	3.1	
94-8.18		quartzite broken pebble	1	9.3	poss use-wear
94-8.19		*Busycon* shell tool – hammer?	1	92.2	worn, whorl cut, sharpened; hafted
94-8.20		*Rangia* shell	3	71.7	
94-8.21		oyster shell	1	22.9	hinge frag
94-14.1	Area 2 Core 1, 0-34 cm deep, 35 degrees, 10 m from "Y" in road [C94A2-1]	grit-t pl	2	4.5	
94-14.2		grit+lst t pl	1	3.1	
94-14.3		*Rangia* shell	1	10.2	
94-14.4		*Polymesoda* shell	1	12.3	
94-14.5		bone frags	3	1.6	
94-14.6		fish? vertebrae	1	0.1	
94-15.1	Area 2- Core 1, - 34-60 cm [C94A2-1]	grit-t pl	2	4.9	
94-15.2		*Rangia* shells	2	20.8	1 broken
94-15.3		turtle carapace frag	1	0.9	
94-15.4		gar fish scale	1	0.4	
94-15.5		fish vertebra	1	0.2	
94-15.6		bone frag	1	0.1	
94-16.1	Area 2- Core 1,- 60-125 cm [C94A2-1]	ch-st	1	3.3	sand-t
94-16.2		grit+grog-t pl	1	3.1	
94-16.3		sand-t pl	1	1	
94-16.4		grit-t pl	1	2.1	
94-16.5		bone frags	6	1	1 may be tooth cap
94-16.6		vertebra	1	0.1	
94-16.7		turtle carapace frags	6	9	
94-16.8		cockle shell frag	1	3.4	*Dinocardium*
94-16.9		*Rangia* shell	1	6.5	
94-16.10		*Polymesoda* shell	1	8.9	
94-16.11		shell frag	1	0.1	
94-16.12		charcoal		0.6	**C14-dated A.D. 1270**
94-17.1	Area 2- Core 1, -125-200 cm [C94A2-1]	indet inc	1	2.5	sand-t
94-17.2		sand-t pl	1	1.7	
94-17.3		sand+grog-t pl	2	6.1	
94-17.4		turtle carapace frags	3	4.1	
94-17.5		Rangia shell frag	1	0.5	burnt
95-5.1	surface, Area 2, shell midden SE (along rd) of temple mound	F W Inc	4	17.3	
95-5.2		L J rim	1	8.4	ticks, 2 incisions
95-5.3		Pensacola Inc rim	1	4.4	shell+grog-t
95-5.4		poss brushed	1	4.3	not Chattahoochee Br,

CAT #	PROVENIENCE	CONTENTS	N	WT (g)	COMMENTS
					grit-t
95-5.5		lst-t pl	2	14.7	
95-5.6		grog-t pl	2	13.8	
95-5.7		sand-t pl	1	6.3	
95-5.8		grit-t pl	1	12.3	
95-12.1	Surface, Area 2, ESE of temple mound, in shell field, on road, and RR bed	Cool Branch Inc	1	9.6	grog-t
95-12.2		F W Inc	21	139.0	wide variety: sand, grit, and/or grog-t, 2 rims, 2 = 6 pt bowl
95-12.3		L J rims	12	107.4	2 ticked; 1 has 2 incisions, 1 has 3 incisions; 2 handles; 1 scalloped; 1 node
95-12.4		indet punc	3	16.4	
95-12.5		shell-t pl rim	1	13.7	1 incision below collar
95-12.6		indet inc	13	98.2	
95-12.7		lst-t pl	4	31.2	
95-12.8		shell-t pl	14	110.7	2 = rims
95-12.9		sand-t pl	26	134.1	
95-12.10		grit-t pl	49	385.4	
95-12.11		daub	5	76.6	nice pieces
95-12.12		ch-st	2	7.2	smoothed-over?
95-12.13		bone frag	1	1.2	long bone
95-12.14		turtle carapace frags	2	3.6	1 = prob softshell
95-12.15		brown cockle shell	1	8.8	
95-12.16		grog-t pl	11	79.5	
95-12.17		*Busycon* shell debitage	1	83.4	cut body whorl
95-12.18		*Busycon* shell scraper	1	12.2	smoothed/use wear
95-12.19		flat sandstone rock	1	4.4	probably an artifact
95-12.20		sand+grit+grog-t pl	1	3.9	
95-12.21		grit+grog-t pl	6	38.1	
95-12.22		agatized coral scraper	1	102.6	heavy, steep retouch, opposite end beaked
95-12.23		chert core frag/scraper	1	30.0	steep retouch, weathered, 2 beaks
95-12.24		clay pigeon frag?	1	1.9	modern industrial item
95-12.25		Marsh Island Inc	1	5.4	sand+grog-t, rim
95-12.26		Carrabelle Inc rim	1	9.5	sand-t, burnished, very micaceous
95-12.27		Pt Washington Inc	1	7.7	ticked rim pt, sand-t
95-12.28		indet engraved	1	17.4	sand-t, straight line
95-12.29		shell+grog-t pl	2	3.9	
95-101.1	surface, Area 2+3 temple mound+ area E of it	F W Inc	2	11.1	
95-101.2		ch-st	1	1.8	sand-t
95-101.3		L J	1	17.4	with B-lug, 1 incision, grit-t
95-101.4		L J	1	3	1 incision, grog-t, rolled lip
95-101.5		indet inc	1	3.8	

CAT #	PROVENIENCE	CONTENTS	N	WT (g)	COMMENTS
95-101.6		grit+grog-t pl	1	5.2	
95-101.7		lst+grog-t pl	1	6	
95-101.8		grit-t pl	7	39.6	
95-101.9		sand-t pl	5	10.2	
95-101.10		grog-t pl	4	28.6	
95-104.1	surface, Area 9 (100-200 meters S of temple mound in shell field+road)	unusual indet inc	1	2.4	Pt. Washington? punch & drag or rolled stamp? grit-t
95-106.1	shell area 2, surface of disturbed road bed E of temple mound, 6-27-1995,	grit-t pl	1	4.7	
96-11.1	surface, area around first (northeasternmost) shell concentration in road W of NW corner of cemetery	grit-t pl	1	15.4	
97-5.1	surface, area E of temple mound,	indet inc - unusual	1	2.9	fingernail or check-st?
97-5.2		indet punc	1	1.6	
97-5.3		grit-t pl	1	5.9	
97-6.1	surface, E of temple mound,	L J rim	1	16.4	L J?, squared-off lip
97-6.2		grit-t pl	1	4.9	
04-04.1	new clearing at end of driveway next to cemetery	concrete fragment	1	5.5	
04-04.2		ch-st	4	45.7	
06-02.1	surface area 50-100 m S of temple mound	Pensacola Inc	1	3.9	shell+grog-t
06-02.2		L J rim	1	10.7	ticks, plain
06-02.3		ch-st	1	7.8	grit-t
06-02.4		shell+grog-t pl	1	4.7	
11-50	20 m E of Temple Mound H, from shell ridge	shell midden soil	1		1 liter soil sample
11-51.1	W of railroad cut, surface 75 m W to 80 m E of temple mound	F W Inc	1	15.6	sand-t, rim
11-51.2		L J rim	1	10.5	2 incisions, sand-t
11-51.3		L J rim	1	2.1	1 tick and 1 incision
11-51.4		L J node	1	4.6	
11-51.5		Pensacola Inc	1	2.5	
11-51.6		indet punc	3	17.7	sand-t
11-51.7		indet inc	1	5.2	sand-t
11-51.8		indet inc	1	1.6	grit-t
11-51.9		indet inc	1	4.1	grit, shell, and grog-t
11-51.10		shell-t pl	5	22.1	
11-51.11		grit-t pl	18	89.2	1= rim
11-51.12		sand-t pl	15	64	1= rim
11-51.13		2nd ary decort flake	1	2.5	
11-51.14		iron railroad spikes	2	346	1 square, 1 round
11-51.15		coal	1	7.6	RR bed fill?
11-51.16		industrial slag	1	5.5	RR bed fill?
11-51.17		shale frag	1	7.1	RR bed fill?
11-53.1	surface S of temple mound, 75 m S of shell ridge/railroad bed	L J Inc rim	1	9	3 incis, ticked rim
11-53.2		grit-t pl	7	19.7	
11-53.3		grog-t pl	1	2.9	
11-53.4		sand-t pl	2	8.6	

CAT #	PROVENIENCE	CONTENTS	N	WT (g)	COMMENTS
11-53.5		whiteware	1	0.9	
11-53.6		blue glass bottle base	1	13.5	Milk of Magnesia
11-53.7		honey- colored gunflint	1	6.5	historic, French?
11-54.1	surface, cleared area extreme NE part of Mahr property, shell midden ridges	F W Inc	3	8.5	
11-54.2		L J rim	1	2.4	1 tick mark
11-54.3		fabric-impressed	1	9.5	open weave
11-54.4		indet inc	2	2.1	
11-54.5		shell-t pl	3	10.7	
11-54.6		grit & grog-t pl	1	3.4	
11-54.7		grog-t pl	1	5.7	
11-54.8		grit-t pl	19	89.1	
11-54.9		*Rangia* shell	1	12.1	
11-54.10		whiteware	1	6.1	historic
11-54.11		iron railroad spike head	1	61.4	
11-54.12		coal	4	24.8	
11-55	shell midden 20 m E of temple mound	soil sample	1		9 liters for flotation

Figure 56. *Historic gunflint, probably French, from Pierce East Village area surface (cat #11-53.7); scale in cm.*

In 1994 the Pierce site was divided into investigation areas and what is now the Pierce East Village area was designated “Area 2.” Here, a 4” core was dug in a place about 50 m southeast of the Temple Mound H, chosen because it had large palms that indicated the shell midden soil might be less disturbed. The core was excavated to find the depth of the midden and whether it was multicomponent, with peoples of different time periods returning to pile more garbage on top of previous peoples’ refuse. This core, later named Core 94A2-1 (Figure 57; and see Figure 9) extended 3.8 m deep. All of its soil was fine-screened. At about 1.25 m depth the dark sand and shell midden tapered off and the whitish sandy subsoil began to appear, transitioning into darker hardpan. At 3 m the water table was reached, and at 3.8 m, the white coarse original beach sand. This core produced a good amount of cultural material from the midden zone (Table 26): 1 check-stamped, 1 indeterminate incised, and 11 plain

sherds; shells of cockle and 2 species of marsh clam (*Rangia, Polymesoda*); a gar fish scale; other fish bone; and turtle bone. It also contained, at a depth of 1 m, a small amount (.6 g) of charcoal that was burned, fine grained wood or charred resin, inside a shell. In October 2006 funds became available to date this charcoal; it required the (more expensive) AMS (accelerator mass spectrometry) radiocarbon method because it was so small. The raw radiocarbon age returned was 750±40 years B.P. which, after calibration, gave an intercept date of A.D. 1270, and a range, at 95% probability, between A.D. 1220 and 1300 (Beta 221908).

Figure 57. *Core 94A2-1 being dug in 1994 by fieldworker Brian Parker, while Tony White helps screen the soil being removed, which is black midden full of shells.*

So the Pierce East Village area cultural deposits, even as deep as a meter, are middle Fort Walton in age. The scarcity of check-stamped pottery and lithic materials corroborates that age. There is no clear evidence of Woodland materials here, but there are the same kinds of fish, shellfish, and other animals as the Woodland people on the west side of the site had been procuring for centuries before Fort Walton groups existed.

CEMETERY MOUND (8Fr21)/EAST VILLAGE

Only a short paragraph was devoted to the Cemetery Mound in Moore's (1902:217) published work. He located it in Magnolia Cemetery, describing it as a truncated cone made of some white sand and some gray sand, with oyster shells near the base in the center. It was of course already heavily looted when he got there, and he notes that the City Council gave him permission to demolish it. His unpublished notes (p. 55) say even less than that.

Moore found five burials comprising two whole skeletons and parts of three others in this mound. The notes (p. 55) say "1. 20 – 1 ft.9. – full l on back. 2. 3 & 4 disturbances prob. recent. 5 dist bones." All this is hard to decipher but probably means that one or both whole skeletons were extended on the back, and the other three were either ancient burials recently disturbed or possibly even recent burials. He mentions no grave goods but, given the earlier looting, the artifacts he found were probably originally deposited with burials. These artifacts were a "circular ear plug of lime rock covered with sheet copper on one side, with a diameter of 1.6 inches"; a bone pin 8 inches long, and plain and check-stamped potsherds. The check-stamped pottery, always of indeterminate temporal position when unaccompanied by more diagnostic artifacts, could be Woodland or Fort Walton, as could the other two items described.

The limestone ear spool is not pictured but he notes that it is like one he recovered at Mount Royal Mound near Jacksonville on the Atlantic coast. This Mount Royal artifact (Moore 1894:Figure 1.14; I also thank archaeologist Keith Ashley for sending a photo from the NMAI collections) is a white stone spool with a cylindrical, hollow center, beyond which one side is far more expanded than the other and retains a bit of thin (green) copper plating. The expanded ends would have enabled the wearer to keep it secure within a (rather large) hole in the earlobe. This is a probably a Mississippi-period artifact, possibly used by an important person to display some status. The copper would have been polished and gleaming as wide disks at each ear, equally impressive when seen from the front or the side.

The bone pin from the Cemetery Mound may still be extant. Among the items recovered by Moore in the NMAI collections with a provenience listed only as "Franklin County, Apalachicola mounds" is a long thin bone pin with one pointed end and the other narrowed to a tang that could have fit into a socket (Figure 58). Based on the scale in the photo (NMAI catalog #170249.000), it is about 8.5" (13.5 cm) long and could easily be the one described by Moore. Its function is hard to determine; it could have been hafted with its narrow tang into a socket to be a long, poking tool, point or weapon, or perhaps it was an awl or pin for making holes or holding together pieces of fabric or other items.

It is uncertain exactly where the Cemetery Mound was within Magnolia Cemetery. Moore probably helped level it a great deal, but not totally, given the still-elevated appearance of other mounds at Pierce he says he destroyed. The picture is further confused because there

Figure 58. *Bone pin probably from Cemetery Mound, 8Fr21 (NMAI cat #170249.000).*

were *two additional* mounds in what is today the cemetery: Moore's Mound Near Apalachicola (8Fr20A) and a shell ("heap") mound (8Fr20B) east of it. However, painstaking and tedious fieldwork involving surface collection, mapping and oral history-gathering for the modern cemetery, as well as the lidar image, have helped in determining the probable locations of these three mounds. The Cemetery Mound was still standing in 1902 when Moore came. The oldest part of the cemetery is the western section, closest to the Pierce oval of mounds and just east of the north-south property boundary ditch. The Cemetery Mound was most likely at the northwest edge of that western cemetery segment. A distinct, if low and blurry, red elevation in this area is shown on the lidar map there (see Figure 11), and over the years the surface in that spot (Figure 59), which has scattered shell, has produced a large number of artifacts.

Figure 59. *Archaeologist Lee Hutchinson stands near northwest corner of Magnolia Cemetery amid area of scattered shell and surface artifacts that is probably the spread remains of the Cemetery Mound, 8Fr21; view facing east; photographed in 2007.*

Figure 60 (extracted from Figure 12's lidar image) shows the Magnolia Cemetery, east of the eastern edge of the Mahr property, with the north-south ditch along the west boundary (compare with Figures 9, 11, 13). The USF excavation units (yellow) and probable locations of the three mounds (red dots) are shown. Since the Cemetery Mound was eventually spread and nearly leveled, probably by everything from railroad construction to borrowing for road fill to historic grave digging, I call the western rectangle of the cemetery the Pierce Cemetery Mound/East Village area. Some of the cultural materials may have been scooped up by the natives from the shell midden ridge to build the mound, only to be pushed down and spread around again centuries later. Shell is scattered in wide patches throughout the cemetery, especially in roads and in certain localized areas. Most, if not all of this shell fill must have been originally from the midden ridge, and probably the Cemetery Mound (and other two mounds).

Many artifacts have been collected from the Cemetery Mound area over the decades since Moore (though some that people have obtained from the cemetery may be from the other two mounds there). Penton (1972a:2) noted that local residents reported the recovery of bones and artifacts from the cemetery during the building of a fence around it. Carr (1975:30) reported the large ceramic and lithic collection of Apalachicola residents Donald Totman and his wife, which included "a cache of five stone celts recovered from Magnolia Cemetery." Local people have told me for many years about finding artifacts in the cemetery. One name I heard often was Newman Marshall, who was said to have a collection. In the Jimmy Moses collection are Swift Creek Complicated-Stamped sherds and a lithic tool from the southwest corner of the cemetery.

Amazingly, in 1994 we obtained permission from city manager John Meyer to conduct limited testing within the cemetery. We were to do only cores or small shovel tests, and stay on roads or paths between graves, but still we occasionally uncovered bone, which we quickly covered back up. Old cemeteries are known to have more recent dead buried on top of or even intruding into earlier burials whose locations were forgotten (in modern as in prehistoric times). In addition to digging, we interviewed custodian Joe Zingarelli and Ed Branch, who had worked there also. Both told of former mounds farther to the east within the cemetery (described in the next chapters).

The Magnolia Cemetery has a fascinating history itself, which could certainly be researched more. The oldest graves are from 1897, with even older ones having been moved here (Swoboda 2010). The north side, with its often stately stone monuments, was for white people and the south side, with few grave markers, was for blacks or, as also described to me, for paupers. The heaviest prehistoric deposits are of course on the north side where they have been spread from the mound and the shell midden ridge along the bank edge. Over the side of the bank, just north of the cemetery, is a heavily forested area where the railroad bed can barely be discerned and where a great deal of modern garbage has been dumped (especially plastic flowers from graves).

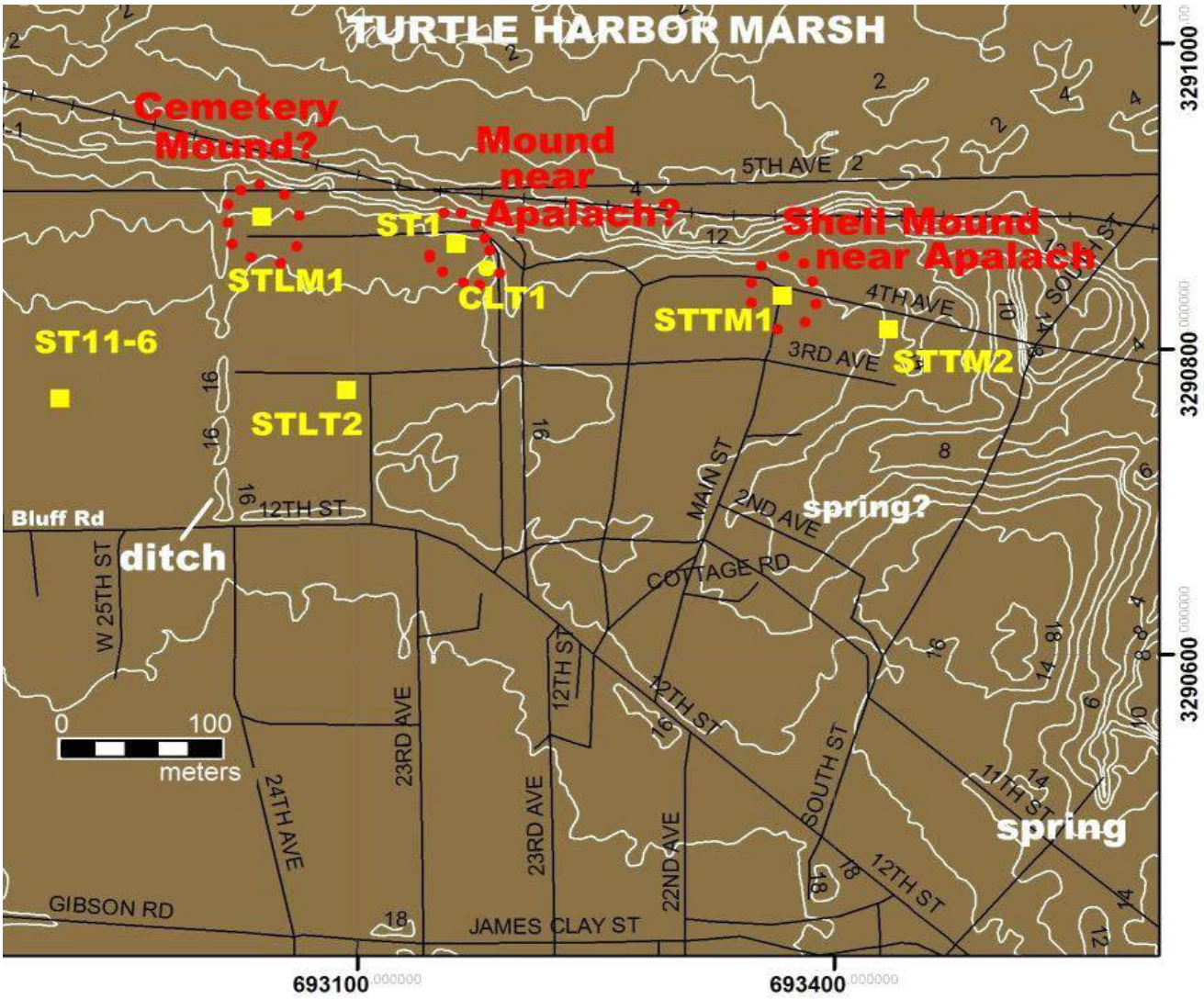


Figure 60. *Magnolia Cemetery depicted on current lidar image (provided by Chris Hunt), showing probable locations of Moore's Cemetery Mound (8Fr21), Mound Near Apalachicola (8Fr20A), and Shell Mound Near Apalachicola (8Fr20B) in red, and USF excavation units in yellow. North-south ditch marks boundary between Mahr land (where Shovel Test 11-6 was the southeasternmost unit) and city cemetery property. Contour lines show two stream segments on the east side deriving from Cool Spring (or possibly more than one spring), but flow patterns have been altered in recent times, and the location of Cool Spring Mound (8Fr19) remains unknown. UTM coordinates shown on bottom and right sides of map; old railroad bed shown as cross-hatched black line. Contour interval = 2 feet.*

The Pierce Cemetery Mound/East Village area has produced interesting cultural materials (Table 27) that contrast with those obtained just to the west in Pierce East Village area on Mahr land. Among surface artifacts the most common diagnostics are Swift Creek Complicated-Stamped ceramics (n=27), along with one each of the types St. Andrews Complicated-Stamped, Weeden Island Punctate, Keith Incised, and Carrabelle Incised. There are 4 Carrabelle Punctate but only 19 check-stamped sherds out of the 162 recovered from the surface. Of the less diagnostic, generic types there are 7 indeterminate punctate, 2 indeterminate incised, 1 indeterminate stamped, one red-painted, and one fabric-impressed. There are no Fort Walton types, and the plain sherds are more dominated by sand-tempered (n-49), with fewer having tempers of grit (n=7), grog (n=35), and limestone (n-1). Thus it almost appears that the property boundary line in effect today was the same in prehistoric time, confining the later prehistoric occupation to the west, around the temple mound. Other surface items are 1 prehistoric chert flake and of course the scattered bivalve shell from the midden ridge and probably from the deepest layer of the mound. Historic crockery and other items are to be expected in a Euro-American and African-American cemetery.

USF excavation units within the whole Magnolia Cemetery had somewhat confusing nomenclature, based on the initials of the excavator in most cases; also we did not then know that up to three mounds were in this cemetery. Within the spread area of the probable Cemetery Mound and continuation of the east village were two 50 cm-square shovel tests (Figures 60, 61). Shovel Test LM1 (STLM1) was just outside the mown cemetery in the woods to the north, but within the area of scattered shell and sherds considered to represent the leveled mound or at least part of the original midden shell ridge. It was taken to 60 cm depth, the minimum thickness of the midden, and produced a St. Andrews Complicated-Stamped sherd, 7 check-stamped, 3 indeterminate stamped, and 8 plain sherds as well as pieces of daub, animal and fish bone, and shell.

***Figure 61**. Author and students excavate Shovel Test LM1 in wooded area north of northwest corner of Magnolia Cemetery, at probable location of Cemetery Mound (8Fr21) in 1994; view facing northwest.*

T*able 27.* *Materials recovered by BAR and USF from* ***Cemetery Mound/Pierce East Village*** *area (older, western segment of Magnolia Cemetery), 8Fr21.*

CAT #	*PROVENIENCE*	*CONTENTS*	*N*	*WT (g)*	*COMMENTS*
74.164.5.1	cemetery midden surface	St. Andrews Comp-St	1	7.8	
74.164.5.2		Sw Cr Comp-St	18	277.8	
74.164.5.3		Keith Inc rim	1	15.8	
74.164.5.4		indet fingernail punc	1	5.5	
74.164.5.5		sand-t pl rim	1	15.5	red-painted
74.164.5.6		indet punc	3	11.4	
74.164.5.7		ch-st	6	44.5	
74.164.5.8		grog-t pl	26	190.1	
74.164.5.9		sand-t pl	33	193.4	
74.164.5.10		grit-t pl	1	4.9	
74.164.5.11		red-painted pl	1	3.2	interior
74.164.5.12		Sw Cr Comp-St	3	22.4	
74.164.5.13		check-stamped	1	5.1	
74.164.5.14		indet fingernail punc	1	2.7	
74.164.5.15		indet inc	1	35.1	
74.164.5.16		sand-t pl	5	81.9	
74.164.5.17		chert secondary flake	1	17.4	large, use wear
74.164.5.26	west end of cemetery	poss fabric-impressed	1	8.8	
74.164.5.27		Sw Cr Comp-St	1	10.2	
94-6-1.1	surface cemetery	sand-t pl	5	56.9	
94-6-1.2		grog-t pl	6	48.9	2 = rims
94-6-1.3		SwCr Comp-St	4	27.1	2 grit-t, 2 grog-t
94-6-1.4		grit-t pl	5	23.6	
94-6-1.5		Carrabelle Punc rims	2	40.9	
94-6-1.6		indet punc	1	6.3	grog-t
94-27.1	Magnolia Cemetery, STLM1 Level 3, -38-50 cm	Sw Cr Comp-St rim	1	12.4	eroded, square pattern
94-27.2		ch-st	2	17	sand-t
94-27.3		bone and shell bits		2.2	prob fish, mussel
94-27.4		bird bone	1	0.4	
94-29.1	Magnolia Cemetery dirt road surface E of Magurrtee grave	Carrabelle Punc rim	1	16.9	grog-t, fat and folded
94-30.1	grave backdirt on N end of cemetery	sand and lst-t pl	1	9.5	
94-30.2		grog-t pl	1	7.1	
94-31.1	surface - 210 m, 0 degrees from rd Ken/Tom transect	purple glass bottleneck	1	21.6	looks molded but old
94-32.1	surface - N side of Magnolia Cemetery	W I Punc rim	1	8.8	2 sherds glued
94-32.2		Carrabelle Punc rim	1	7	sand-t
94-32.3		Carrabelle Inc rim	1	15.7	sand-t, 2 incisions below lip
94-32.4		indet inc	1	8.8	prob Carrabelle
94-32.5		sand-t pl	3	19.5	2 = pl, thickened rims
94-32.6		grog-t pl	1	12	
94-38.1	Magnolia Cemetery STLM1, Level 4B, -100-120 cm	Rangia shells	2	11.2	
94-38.2		oyster shell frag	1	2.4	
94-38.3		river pebble	1	1.9	
94-41.1	STLT2, Level 1B, 10-20 cm	ch-st	1	4.1	

CAT #	PROVENIENCE	CONTENTS	N	WT (g)	COMMENTS
94-41.2		grog-t pl	1	0.5	
94-41.3		grit-t pl	1	1	
94-41.4		clay lump	1	1.8	
94-41.5		milk glass frag	1	0.4	
94-41.6		iron nails + frags	5	7.2	rusty
94-41.7		Rangia shell	1	10.3	
94-42.1	STLM 1, Level 2, -26-38 cm	indet st	1	4.3	check or comp-st, sand-t
94-42.2		ch-st	2	8.6	grit + sand-t
94-42.3		sand-t pl	2	6.6	1 = fine rim, black, thin
94-42.4		piece of modern coral	1	1.5	
94-42.5		turtle carapace frag	1	1.6	
94-42.6		fish? vertebrae	2	0.2	
94-44.1	STLM1, 8 meters N of oak	St. Andrews Comp-St	1	1.7	
94-44.2	along path, Level 1A, 0-20 cm	indet st	2	0.9	
94-44.3		sand-t pl	2	2.1	
94-44.4		grit-t pl	2	2	
94-44.5		prob daub frag	1	0.3	
94-44.6		quartz pebbles	6	25.3	rounded, poss fill
94-44.7		concrete ? frags	4	1.7	
94-44.8		oyster shell frags	8	7.8	
94-44.9		*Rangia* shell	1	7.1	
94-44.10		scallop or mussel shell	2	0.2	frags
94-44.11		bone frags	7	1.9	some vertebrae
94-44.12		bone frags	26	5.9	sm animal long bone, rib, fish? 1 turtle carapace
94-45.1	STLT2, L 3B, -40-50 cm	grit-t pl	2	6.9	1 = tiny
94-45.2		sand + grog-t pl	1	0.3	
94-45.3		Polymesoda shell	1	4.9	
94-45.4		Rangia shell shell	1	12.7	
94-45.5		crown conch frag	1	19.4	broken, used for food?
94-45.6		gar fish scale	1	0.1	
94-45.7		bone frag	19	3.5	sm mammal, big fish scale, some calcined
94-45.8		charcoal		0.1	
94-46.1	STLM 1, Level 3B, -50-60 cm	ch-st	6	36.8	1 thin fine rim, sand-t, tiny bit of grog
94-46.2		sand-t pl crumb	1	0.8	
94-46.3		sand+grog-t pl	1	9.2	recent machine scar
94-46.4		burnt (?) clay lump	1	0.5	gritty
94-46.5		quartz pebble	1	3	gravel fill?
94-46.6		*Rangia* shell	1	8.1	
94-46.7		oyster shell	1	30.6	
94-46.8		shell frag	1	0.6	
94-46.9		vertebrae	3	0.6	1 = fish
94-46.10		drum fish tooth	1	0.2	
94-46.11		gar fish scale	1	<.1	
94-46.12		bone frags	18	4	some = fish

CAT #	*PROVENIENCE*	*CONTENTS*	*N*	*WT (g)*	*COMMENTS*
94-47.1	STLM1, Level 1B, -20-26 cm	sand-t pl crumbs	2	2.0	
94-47.2		clay lump	1	.4	poss daub
94-47.3		quartz pebbles	5	21.7	gravel fill?
94-47.4		bone frags	8	1.4	1-2 sm mammal long bone
94-52.1	STLT2, Level 1A, 0-10 cm	St. Andrews Comp-St	1	4.9	
94-52.2		Sw Cr Comp-St	1	3.6	snowshoe? eroded
94-52.3		indet punc	1	1.2	large shallow round punctations, sand-t
94-52.4		grog-t pl	6	20.3	2 = rims
94-52.5		sand-t pl	6	126.1	1 lg basal sherd, 1 rim
94-52.6		bone frags	2	1.8	
94-52.7		poss fish vert	1	4.2	lg: 2 cm diameter
94-52.8		*Rangia* shell	1	6.7	
94-59.1	STLT2 Level 2, -20-30 cm	grog-t pl	1	2.6	
94-59.2		sand-t pl crumbs	2	0.9	
94-59.3		rusty nail frags		7.3	square cut? historic?
94-73.1	STLT2, Level 3A, -30-40 cm	indet engraved?	1	4.9	or recent cuts; sand-t
94-73.2		sand-t pl	10	33.5	1 rim, 1 recent cut mark
94-73.3		bivalve shell	1	5.1	prob *Rangia*; broken
94-73.4		pneumatized fish bone	1	0.6	
94-73.5		bone frags	10	13	some burned
94-73.6		charcoal		0.8	
94-81.1	surface, old section, 2-4 m NE of Louis Murphy grave	ch-st	6	140.1	1 rim; most sand-t, some grit; surface soot datable? 1 lg sherd with drilled hole
94-83.1	surface N of Robert Lee Hurd grave	sand & grog-t pl	4	28.1	1 rim
94-83-2		sand-t pl	1	5.9	
94-83.3		grit-t pl	1	7.6	
94-84.1	surface SE of Legalle Bartes grave	sand+grog-t pl rim	1	38.7	incision below lip, 3 sherds glued, pot radius = 8 cm
05-01.1	surface, N end, westernmost rd into cemetery	blue transfer print rim	1	25.9	hollow loop fold - jug?
06-05.1	NW corner between Duggar and Page graves	ch-st	1	11.9	
06-10.1	Dump NW of Howell family plot (N center of old cemetery)	ch-st	3	31.2	1 rim
06-10.2		indet punc	1	5.5	grog+sand-t
06-10.3		sand-t pl rim	1	6.8	

Shovel Test LT2, south of the east-west dirt road bisecting the cemetery and thus outside the suggested spread of the Cemetery Mound deposits, nonetheless produced a check-stamped and 8 plain sherds, as well as a possible daub fragment, and some shell and bone. Both tests had modern items such as glass and concrete in their upper levels. Both support the interpretation of the Cemetery Mound as a late Early or Middle Woodland burial construction, with little overlap of the Pierce East Village Fort Walton component this far east.

MOUND NEAR APALACHICOLA (8Fr20A)/EAST VILLAGE

Similar to his treatment of the Cemetery Mound, Moore's (1902:216-17) published description of his Mound Near Apalachicola is only a short paragraph, and there is even less in his unpublished notebooks. I got few clues from his placing it a half-mile west of town on Cypress Lumber Company property, as courthouse records showed this company owned a lot of land. He said it was much spread by plowing but mentioned no artifacts or burials, considering it a "place of abode." Indicating that "Nearby is a shell–field" may have meant that this mound was near the shell midden ridge that lined the old riverbank and was, soon after his visit, to be spread even more by the railroad construction. Moore did not describe the Mound Near Apalachicola (nor the shell mound 75 yards east-northeast of it; see next section) as being in the Magnolia Cemetery because, at the time he was there, the cemetery had not expanded that far eastward and these two mounds had not yet been taken away. Willey (1949:279) explored the open field east of the cemetery in 1940 and noted that any mounds there would already have been destroyed (and see below for his comments on another possible mound).

We had long suspected that a mound with a lot of shell content had been located at the northeast edge of the old cemetery, on the west side of the long north-south ditch excavated for drainage that now runs alongside the main entrance of Magnolia Cemetery. The sides of the ditch show a lot of shell in the fill and could represent mound fill spread around by machine excavation in recent historic time. That corner of the cemetery, around the grave of John Marshall and graced with three palm trees, also had surface ceramics and shell, and is elevated above the surrounding land perhaps as much as 50 cm.

During the 2007 season, we met Dan Sangaree, then in his 90s, who lived farther up Bluff Road and had been a lifelong resident. He said there had indeed been a mound in that location and it was taken out in 1935 to use as fill to build a new bridge over the bay, at Battery Park. When an even newer bridge was built recently, he said, the same fill dirt from the mound was moved elsewhere, to be fill for another park (Lafayette Park, apparently – this could be verified from other sources). We also had a report from another informant that there had long ago been a mound around where the baseball diamond is now in Battery Park (immediately north-northwest of where the bridge hits land). This may have been another mound or may have been the mound fill from Moore's Mound Near Apalachicola, which was still producing artifacts. Survey at the time of construction of the newest bridge, as well as construction of the community center at Battery Park, has always produced a large number of artifacts (e.g., Meyer et al. 1992). One can still find the occasional prehistoric ceramics in the disturbed sand around the bridge at this park. The context of any cultural materials from this location will always be questionable, if indeed a mound located elsewhere had been scraped up and deposited here.

At any rate, the context of the original prehistoric deposits that made up the Mound Near Apalachicola is utterly lost (even in building the mound, the original midden of the shell midden ridge encircling the whole Pierce complex was scooped up and redeposited by

prehistoric natives). However, based on all this information and also the fact that the lidar image (see Figure 11) shows a slightly higher elevation at this northeast corner of the old cemetery (a darker red area elongated and smeared, doubtless from the ditch digging), the best interpretation is that the Mound Near Apalachicola was located here in the present-day cemetery, and that small traces remain. (There is a smaller possibility that it was the Cemetery Mound which was actually located here).

Given the dimensions of 100 x 80 feet that Moore recorded for the Mound Near Apalachicola (see Table 4) and low height of 2 feet, it could have been a small platform, while the presumably larger shell heap (described in the next section) could have been the one removed for fill in 1935. But the dates of graves, the surface distribution of shell and sherds, and the statements of one other cemetery worker who remembered its remnants there, not to mention its slight elevation (Figure 62), are the best arguments for locating it as shown on the map in Figure 60. Another clue came from Frances Monroe, a former Apalachicola resident, whom we met one day while she was visiting graves of her family. She said she had picked up potsherds in that area and later mailed me a rubbing of the design on one, a Swift Creek Complicated-Stamped sherd (concentric circle pattern). She provided good data on grave dates and the size of the cemetery in 1902, when Moore visited. Finally, Penton's (1972a:1) early description of Pierce says that a portion of the site was used in building the causeway for the Apalachicola bridge (though he does not say which portion, or how he found this out).

Figure 62. *Probable location of Moore's Mound Near Apalachicola, still slightly elevated, in northeast corner of old portion of Magnolia Cemetery, with graves of John Marshall and others, and three distinctive palm trees; view facing north-northwest.*

Moore did not find anything but sand and shell in his Mound Near Apalachicola. However, later archaeologists obtained a great deal of cultural materials on the surface here. Willey (1949:279) picked up 135 sherds from what he described as an open field east of the

cemetery and saw the remnants of “a great shell midden” which could have been the shell mound he noted 75 yards east-northeast of the Mound Near Apalachicola or else could have been simply the continuation of the shell midden ridge along the old bank. He did not indicate a more exact provenience for the sherds he got, and considered 90 of them to be plain and unclassifiable. The rest, he listed as deriving from three time periods:

Fort Walton (1 Lake Jackson and 1 shell-tempered plain)
Middle Woodland (3 Weeden Island Incised, 6 Carrabelle Punctated, 2 Keith Incised, 1 red, 9 plain)
Early Woodland (1 Deptford Simple Stamped)

Surface materials obtained by BAR archaeologists and my USF crews over the years are listed in Table 28 and include just a very few Fort Walton-period ceramics but a lot of Middle Woodland types.

Table 28. *Materials recovered by BAR and USF from the Mound Near Apalachicola/Pierce East Village area, Magnolia Cemetery (old northeast portion of cemetery).*

CAT #	*PROVENIENCE*	*CONTENTS*	*N*	*WT (g)*	*COMMENTS*
BAR – 1972(?)					
74.164.5.18	east end of Magnolia Cemetery surface	Keith Inc	1	3.8	
74.164.5.19		Sw Cr Comp-st	2	7.9	
74.164.5.20		Carrabelle Inc	1	7.8	
74.164.5.21		sand-t pl	6	36.8	
74.164.5.22		red-painted clay ball?	1	3.9	or strange sherd
74.164.5.23		*Rangia* shell	1	17.7	
74.164.5.24		oyster shell	1	86.2	
74.164.5.25		Weeden Island plain rims	2	22.1	regular sand-t pl
USF -1994, 2006					
94-JM.1	surface, E side of cemetery (Jimmy Moses collection)	Sw Cr Comp-St	10	171.7	3 = rims, folded, smoothed, some grog
94-JM.2		W I Punc? rim	1	12.2	sand-t, punch-&-drag incisions on interior, exterior, tip of lip
94-JM.3		Carrabelle Punc rim	1	27.9	could be W I Punc
94-JM.4		Carrabelle Inc rim	1	6.9	
94-JM.5		indet punc	3	16.1	punctations: tiny dots, fingernail, big triangles
94-JM.6		ch-st rim	1	6.1	
94-JM.7		sand-t rim	1	6	painted red on interior and top of lip
94-JM.8		grog-t pl	8	119.1	7=rims, some sand, some folded, 1 has incision below lip
94-JM.9		sand-t pl rims	2	22.5	
94-JM.10		cordmarked	1	8.6	
94-18.1	surface, *Rangia shell* midden NE-central Magnolia Cemetery	grog-t pl rim	1	42.9	wide fold

CAT #	PROVENIENCE	CONTENTS	N	WT (g)	COMMENTS
94-18-1.1	Magnolia Cemetery NE corner surface	F W Inc	2	8.7	grog-t
94-18-1.2		Sw Cr Comp-St	1	6	grit-t, eye motif?
94-18-1.3		indet Inc	2	10.6	sand-t
94-18-1.4		grit+grog-t pl	1	4.5	
94-18-1.5		bone frag	1	0.9	rib or curved longbone
94-18-1.6		*Rangia* shells	2	31.3	
94-18-1.7		oyster shells	2	262.4	
94-18-2.1	surface, NE corner of existing cemetery, poss recently exposed burnt clam feature	ch-st	1	3.8	grit-t
94-19-1.1	Magnolia Cemetery, N central, in recent dirt dump	indet punc	3	11.8	grog-t, 1 pinched, 1 fingernail, 1 triangle
94-19-1.2		indet inc	2	42.3	
94-19-1.3		red-painted grog-t pl	1	14.2	painted inside & out, straight side
94-19-1.4		grog-t pl rim	1	25.5	incurving bowl
94-19-2.1	Magnolia Cemetery N central, treefall near Lucius Allen grave	ch-st	3	28	grog+sand-t
94-19-2.2		Rangia shell	1	21.6	
94-34.1	Magnolia Cemetery NE border, surface	sand-t pl	1	23.7	
94-34.2		sand-t pl rim	1	11.5	pl, rounded
94-34.3		Sw Cr Comp-St rim	1	23.6	only tiny bit of pattern, wide straight collar, ragged incision below
94-34.4		pneumatized fish bone	1	1.1	cut on 1 or both ends
94-35.1	Magnolia Cemetery, ST94-1, 0-43 cm	Weeden Island Zoned Red	1	0.9	red above incision on exterior
94-35.2		red-painted grit-t pl	1	3.1	
94-35.3		cordmarked	1	6.4	sand-t, widely-spaced cords
94-35.4		indet punc	7	44.5	3 fingernail, 2 triangle, 2 square, all sand-t or sand+grog
94-35.5		indet inc and punc	1	3.2	sand-t, could be WI Inc, Carrabelle, or FW Inc
94-35.6		grit+grog-t pl	23	94.5	1 = rim, pl
94-35.7		indet st	4	11	prob small ch-st, sand+grog t
94-35.8		sand-t pl	7	20.5	2 = rims, 1 folded
94-35.9		grit+grog+lst-t pl	2	6.4	tiny particles of lst
94-35.10		grog-t pl	7	27.6	1 = tiny folded rim
94-35.11		grit-t pl	15	28.3	
94-35.12		clear glass sherds	2	32.2	1 solarized straight-walled bottle/bowl base with starburst molded
94-35.13		historic whiteware sherd	1	2.8	
94-35.14		chert pebble	1	6.9	block shatter? patinated

CAT #	PROVENIENCE	CONTENTS	N	WT (g)	COMMENTS
94-35.15		metal gear	1	19.9	iron & prob aluminum
94-35.16		pneumatized fish bone	2	10.1	
94-35.17		animal bone, vertebrae	13	1.9	some = fish
94-35.18		burnt animal bone, verts	2	0.1	
94-35.19		drum fish tooth	1	0.3	
94-35.20		unburnt wood fiber frags	2	0.2	
94-35.21		poss fulgurite	1	0.3	lightning-burnt sand
94-35.22		small gastropod shell	1	1	marine?
94-35.23		bone	10	4	
94-36.1	surface, area around King plot - next to Tesar and Weill core (C94LT1), N central cemetery	grit+grog-t pl	5	61.8	2 = folded rims, 4 = burnished
94-39.1	Magnolia Cemetery ST94-1, -1.09 m	sand+grog-t pl	1	2	
94-39.2		burnt animal vert	1	0.2	
94-39.3		animal vertebrae	43	4.9	
94-39.4		pneumatized fish bone	1	1.9	
94-39.5		bone frags	18	4.6	
94-39.6		long bone frags, animal	7	10.5	
94-39.7		*Rangia* shell shell + frag	1	17.3	
94-39.8		tiny gastropod shell	1	0.1	
94-39.9		poss nut frag	1	<.1	undecayed, modern?
94-39.10		charcoal		3.4	2 vials, date this?
94-40.1	ST94-1 Level 4A, 88-100 cm	poss fabric-impressed	1	2.9	
94-40.2		ch-st	1	2.9	
94-40.3		clear glass	1	0.4	
94-43.1	C94LT1, Level 4, -30-39 cm	clay prob brick frags	5	12.8	
94-43.2		tiny bivalve shell	1	0.2	mussel that lives on oysters?
94-43.3		battery pack	1	65.5	corroded, modern
94-43.4		plastic wrapper	1	<.1	
94-43.5		styrofoam frag	1	<.1	
94-43.6		clear glass sherds	3	<.1	
94-43.7		brown glass sherds	2	0.9	1 raised pattern
94-48.1	ST94-1, shell zone NE 1/4, -1.09 - 1.10 m	Carrabelle Punc rim	1	5.5	rectangular puncs
94-48.2		sand-t pl	1	2.5	
94-48.3		quartz pebble frag	1	1.8	machine break? deep
94-48.4		shell frags	2	0.3	
94-48.5		bone frags		8.7	
94-48.6		animal vertebrae	30	2.9	many = fish
94-48.7		fish otolith	1	0.8	
94-48.8		charcoal		2.4	
94-49.1	ST94-1 wall cleanup	Sw Cr Comp-St	1	5.4	sand+grog-t, herringbone design
94-49.2		sand+grog-t pl	2	60.5	
94-49.3		W I Incised red-painted	1	9.5	sand & grog-t, folded rim, red int & ext, incised on top of lip,
94-49.4		mica flake	1		5-6 mm long
94-49.5		deer longbone	1	13.7	

CAT #	PROVENIENCE	CONTENTS	N	WT (g)	COMMENTS
94-49.6		vertebrae	41	4.1	
94-49.7		bone frags	21	4.4	poss turtle or fish
94-49.8		charcoal		4.4	
94-50.1	ST94-1, -90-109 cm, Stratum 2	Sw Cr Comp-St	2	21.5	1 = nice pattern, photographed, other = smoothed over
94-50.2		grit-t pl	2	9.6	
94-50.3		grog-t pl	2	11.7	
94-50.4		sand-t pl	5	104.8	
94-50.5		quartz pebble	1	6.6	natural; in gravel fill?
94-50.6		fish otolith	1	0.2	
94-50.7		animal vertebrae	146	18.5	some fish
94-50.8		bone frags		14.9	some = fish
94-50.9		oyster shell	1	30.8	
94-51.1	C94LT1, Level 2, -10-20 cm	quartz pebble	1	1.4	natural or in fill
94-51.2		oyster shells	2	136.5	
94-51.3		clear glass	2	5.1	1 bottleneck sherd
94-51.4		concrete/mortar chunks	2	94.3	modern
94-51.5		whiteware sherd	1	1.5	historic
94-53.1	surface 5 m W of Peggy White grave, 9 m ESE of oak/pecan tree	chert biface	1	119.8	lg, crude, thick, some use-wear
94-54.1	surface, base of largest old oak tree on N side of cemetery near road separating old/new graveyard (near ST94-1)	Sw Cr Comp-St	1	5	
94-54.2		poss Carrabelle Inc rim	1	3.6	folded, incision, parallel vertical lines below rim, red on interior
94-54.3		red-painted pl rim	1	14.6	sand & grog-t, paint invisible below rim
94-54.4		sand+grog-t pl	2	54.5	
94-54.5		sand-t pl	4	42	1 rim, folded, 1 incision
94-54.6		bone frag	1	0.9	looks like lg fish spine
94-57.1	ST94-1, Stratum II, -43-66 cm	Carrabelle Punc rim	1	10.1	
94-57.2		Tucker Ridge Pinched	2	46.9	
94-57.3		indet punc	3	32.2	fingernail, prob Carrabelle
94-57.4		indet inc	1	1.5	sand-t
94-57.5		shell+grog-t rim	1	17.4	prob still Middle Woodland - only 1 shell frag stuck in paste
94-57.6		sand-t pl	29	102.2	4 rims, 1 has incision below lip
94-57.7		grit-t pl	10	54.1	
94-57.8		grog-t pl	24	121.6	few grog particles in most but 1 rim with lots of grog
94-57.9		daub frags	4	18.6	
94-57.10		*Polymesoda* shell	1	5.9	
94-57.11		*Rangia* shell	3	27	

CAT #	PROVENIENCE	CONTENTS	N	WT (g)	COMMENTS
94-57.12		shell frags	8	9.6	
94-57.13		snail shell	1	0.2	tiny
94-57.14		drumfish teeth	2	0.6	
94-57.15		vertebrae	135	14.5	mostly fish
94-57.16		pneumatized fish bone	3	4.6	2 seem cut
94-57.17		bone frags		30.3	fish, turtle, fish scale, some lg mammal
94-57.18		charcoal		12	1 piece wood unburned
94-61.1	C94LT1, Level 6B, -50-55 cm	fired clay chunk	1	5.5	eroded
94-61.2		quartz pebble	1	35.5	broken edge
94-61.3		clear glass sherd	1	5.1	
94-61.4		brown glass	1	1.7	
94-61.5		plastic wrappers	4	1.1	
94-61.6		styrofoam frags	2	0.8	
94-63.1	ST94-1, -100 cm?	ch-st	1	17.8	very eroded
94-63.2		grog-t pl	3	58.3	1 = lg folded rim
94-63.3		sand-t pl	3	34.6	
94-63.4		shell frag	1	0.2	prob *Rangia* shell
94-63.5		drumfish tooth plate + teeth	4	18.9	frags
94-63.6		pneumatized fish bone	1	11.1	big and chunky
94-63.7		vertebrae	73	9.4	mostly medium sized fish?
94-63.8		bone frags	58	56	catfish spines, deer leg, 3 poss mammal metapodials, some poss fish, 1 burnt frag
94-63.9		plant frags	4	0.4	lightly burned?
94-63.10		iron nail	1	21.3	round, round head
94-71.1	ST94-1, -70-88 cm, Level 3D	ch-st	3	18.7	1 has soot
94-71.2		sand-t pl	4	32	1 lg rim, smoothed fold
94-71.3		quartzite pebble	1	0.6	natural
94-71.4		*Rangia* shell	1	4.3	
94-71.5		drumfish tooth	1	0.6	
94-71.6		bone frags	13	2.5	many = tiny slivers
94-71.7		human tooth, upper left? PM 1	1	0.4	little wear, root broken, 10-20 year-old
94-71.8		charcoal		0.5	
94-76.1	ST94-1, Level 3C, -60-70 cm)	W I Inc	1	3.2	
94-76.2		ch-st	3	12.2	1 = rim, some grog
94-76.3		indet st	1	16.2	cord, fabric, or ch-st
94-76.4		grog-t pl	1	3.8	
94-76.5		sand-t pl	6	7.9	
94-76.6		pebbles	2	1.6	natural
94-76.7		vertebrae	7	1.6	
94-76.8		bone frags	8	3.8	catfish spine, sm mammal long bone
94-76.9		human cranium frag	1	4.3	prob parietal
94-76.10		*Rangia* shell	1	19.2	

CAT #	PROVENIENCE	CONTENTS	N	WT (g)	COMMENTS
94-76.11		oyster shell+ frags	2	27.4	
94-76.12		charcoal		0.4	
94-77.1	C94LT1, Level 3, -20-30 cm	Sw Cr Comp-St	1	1.5	tiny, very little pattern
94-77.2		sand-t pl	1	2	
94-77.3		turpentine pot	1	1.7	Herty cup frag
94-77.4		brick fragment	1	0.7	modern
94-77.5		limestone frag	1	27.8	chipped? gravel fill?
94-77.6		limestone	1	7.1	
94-77.7		pebble	2	1.9	quartz, probably natural
94-77.8		oyster shell	1	22.9	
94-77.9		*Rangia* shell frag	1	3.5	
94-78.1	C94LT1, Level 1, 0-10 cm	indet inc	2	8.4	
94-78.2		grog-t pl	3	5.3	
94-78.3		sand-t pl	4	3.2	
94-78.4		quartzite pebble	1	2.8	natural?
94-78.5		conglomerate pebble	1	28.6	RR gravel
94-78.6		limestone	1	11.2	natural
94-78.7		oyster shell	2	29.2	
94-78.8		*Rangia* shell shell+ frags	1	7.9	
94-78.9		mussel shell frags	3	1.6	the kind that lives on oysters
94-78.10		clear glass sherd	1	1.1	
94-78.11		translucent/clear glass	1	4.8	battered
94-79.1	C94LT1, Level 5, -39-48 cm	burned clay lumps	2	5.1	prob recent
94-79.2		quartz pebble	1	20.2	natural
94-79.3		oyster shell	1	19.3	
94-79.4		*Rangia* shell	1	22.4	
94-79.5		concrete pieces	2	21.5	probable
94-79.6		plastic flower	1	0.8	
94-79.7		plaster piece	1	0.6	
97-79.8		iron nail	1	2.2	rusted
94-79.9		strapping tape	1	0.1	modern
94-85.1	surface, NE border of cemetery	Carrabelle Punc	1	6.6	incision below, lg deep triangle puncs, sand-t
94-85.2		W I Inc rim, red-painted interior, exterior, top of lip	1	6.2	sand & grog-t, incision below lip, orange-red
94-87.1	unprovenienced (new?) grave backdirt, N boundary near old/new cemetery boundary	sand+grog-t pl rim	1	32.6	broken on incision? very few red grog bits
94-89.1	surface, NE side of cemetery	Sw Cr Comp-St	1	14.6	grog bits in sand temper, eroded pattern
94-90.1	E side of cemetery, E of Bishop graves, surface	ch-st rim	1	8	
94-90.2		grog-t pl rim	1	9.1	very little grog
94-90.3		sand-t pl	1	4.4	
94-90.4		quartzite slab	1	452	flat, could be worked, or modern tablet
94-90.5		iron nail frags		4.8	

CAT #	PROVENIENCE	CONTENTS	N	WT (g)	COMMENTS
94-100.1	ST94-1 Magnolia Cemetery, Stratum 2, -66-90 cm	Sw Cr Comp-St	6	71	eye, web patterns, etc.
94-100.2		indet-stamped (barbed tool-impressed)	1	27.8	unusual, sand-t jar rim+ neck (3 sherds glued) folded rim collar
94-100.3		indet-stamped (wedge- tool impressed)	1	9.3	folded rim jar neck, sand-t
94-100.4		grog+ lst-t pl	4	26.4	
94-100.5		sand+ lst-t pl	8	53.8	
94-100.6		grit+grog+lst-t pl	1	2.4	
94-100.7		sand-t pl	18	132.5	
94-100.8		grog-t pl	14	142.4	
94-100.9		grog-t pl rims	2	50.1	folded, incision, WI?
94-100.10		turtle bone	3	3.3	
94-100.11		bone frags	~30	10.3	
94-100.12		fish vertebrae	200	65.7	lg to small, some burnt
94-100.13		shell	1	1.6	clam?
94-100.14		*Polymesoda* shell	1	6	
94-100.15		*Rangia* shells	2	17.3	
94-100.16		oyster shells + frags	1	56.1	
94-100.17		soil around fauna		29.6	black sand
94-100.18		charcoal	3	1.3	3 pces, 1= carbonized cane?
94-101.1	ST94-1, top of Stratum A, 0 -10 cm Fraction A	burnt nutshell		<.01	
94-101.2		fish bone		<.01	
94-101.3		calcined bone		<.01	
94-101.4		*Rangia* shell		3.6	
94-101.5		*Rangia* shell frags		29.2	burned?
94-101.6		botanical remains		2.3	
94-101.7		charcoal		<.01	
94-101.8	ST94-1, top of Stratum A, 0 -10 cm Fraction B	shell frags		11.5	
94-101.9		snail shells		<.01	
94-101.10		charcoal		0.2	
94-101.11		bone frags		1.2	
94-101.12		seeds		1.6	
94-101.13		unknown - poss bone		0.1	
94-101.14		remains after sorting		15.1	sand, shell, black dirt
94-101.15	ST94-1, top of Stratum A, 0 -10 cm Fraction C	snail shells		<.01	tiny
94-101.16		seeds		0.4	
94-101.17		charcoal		0.1	
94-101.18		misc botanicals		7.8	wood and sand
94-101.1 (2)	ST94-1, top of Stratum A, -10-20 cm Fraction A	charcoal		0.1	
94-101.2 (2)		poss modern grass		0.5	
94-101.3 (2)		botanical remains		0.3	poss modern
94-101.4 (2)		shell frags		23.8	1 *Rangia* shell
94-101.5 (2)		indet Inc	1	1.5	grog-t
94-101.6 (2)	ST94-1, top of Stratum A, -10-20 cm Fraction B	charcoal		0.2	
94-101.7 (2)		bone		0.4	
94-101.8 (2)		clear glass		0.1	

CAT #	PROVENIENCE	CONTENTS	N	WT (g)	COMMENTS
94-101.9 (2)		botanical		0.2	
94-101.10 (2)		stones		0.4	
94-101.11 (2)		shell frags		3.9	
94-101.12 (2)		remains after sorting		7.3	charcoal, shell, sand
94-101.13 (2)	ST94-1, top of Stratum A, -10-20 cm Fraction C	insect remains		0.1	modern
94-101.14 (2)		snails		0.1	tiny, poss opercula
94-101.15 (2)		botanical remains		0.7	modern
94-101.16 (2)		charred seeds			
94-102.1	ST94-1, Stratum A, -20-30 cm Fraction A	botanical remains		<0.1	
94-102.2		bone pieces		0.3	1 = burnt
94-102.3		charcoal		0.1	
94-102.4		sand-t pl		3.5	
94-102.5		shell pieces		21.5	
94-102.6		gravel		0.8	
94-102.7	ST94-1, Stratum A, -20-30 cm Fraction B	charcoal		0.4	
94-102.8		shell pieces		4.9	
94-102.9		botanical remains		<0.1	
94-102.10		bone		0.8	
94-102.11		poss buckshot		0.3	tiny, round ball
94-102.12		remains after sorting		9	bone, shell, sand, charcoal, roots
94-102.13	ST94-1 Stratum A, -20-30 cm Fraction C	botanical remains		0.7	bark, grass, twigs
94-102.14		charcoal		<0.1	
94-102.15		snails		<0.1	microscopic, opercula
94-103.1	ST94-1, -30-40 cm, Fraction A	grit+grog-t pl	1	4.6	
94-103.2		sand-t pl	4	7.3	
94-103.3		fish vertebrae	5	0.6	
94-103.4		bone frags	4	0.8	prob fish
94-103.5		fish scale	1	<.1	2 = poss scale frags **missing
94-103.6		bone frags, sm animal	6	<.1	**missing
94-103.7		poss shaft frag	1	0.6	small-medium animal **missing
94-103.8		*Rangia* shell	30	141.1	1 = burnt
94-103.9		*Rangia* shell frags		37.1	
94-103.10		charcoal		0.2	
94-103.11		poss nut shell		0.4	
94-103.12	ST94-1, 30-40 cm, Fraction B	charcoal		1.3	
94-103.13		*Rangia* shell frags		3.1	
94-103.14		fish bone frags		0.6	
94-103.15		remainder after sorting		12.8	shell, charcoal, etc.
94-103.16	ST94-1, -30-40 cm, Fraction C	charcoal		1.4	
94-103.17	ST94-1, -30-40 cm, Fraction C	wood frags		1.4	
94-103.18		remainder after sorting		1.2	charcoal, roots, etc.
94-104.1	ST94-1, -40-50 cm, Fraction A	bivalve shell		318.6	*Anodontia philippiana*?
94-104.2		charcoal		1.8	
94-104.3		fish bones, mostly vert		2.2	
94-104.4		remains after sorting		0.7	shell frags, twigs

CAT #	PROVENIENCE	CONTENTS	N	WT (g)	COMMENTS
94-104.5	ST94-1, -40-50 cm, Fraction B	bone, tooth, marsh rat		<.1	*Oryzomys palustris*
94-104.6		bone bits		7.5	
94-104.7		eggshell?		<.1	
94-104.8		fish vertebrae		0.2	
94-104.9		shell frags		2.37	
94-104.10		seeds - marsh grasses		<.1	
94-104.11		charcoal		1.8	
94-104.12		remains after sorting		10.1	bone, shell, charcoal
94-104.13		botanical remains		<.1	modern
94-104.14	ST94-1, -40-50 cm, Fraction C	wood fibers		0.1	
94-104.15		charcoal		0.8	
94-104.16		remains after sorting		0.4	modern roots, etc.
94-105.1	ST94-1, -50-60 cm, Stratum C, Fraction A	charcoal		0.4	
94-105.2		fish vertebrae		3.15	
94-105.3		bone		3.99	poss fish bone
94-105.4		sand-t pl		0.2	sherd crumbs
94-105.5		*Rangia* shells		102.1	
94-105.6		*Rangia* shell frags		7.1	
94-105.7		botanical material		1.2	modern
94-105.8	ST94-1, -50-60 cm, Stratum C, Fraction B	bone		6.2	
94-105.9		charcoal		1.2	
94-105.10		bone bits + fish scales		0.7	
94-105.11		shell pieces		5	
94-105.12		botanical remains		0.1	
94-105.13		fish bone		0.8	
94-105.14		remains after sorting		7.3	bone, charcoal, shell
94-105.15		snail		0.1	*Amnicola*?
94-105.16		gar fish scale		<.1	
94-105.17	ST94-1, -50-60 cm, Stratum C, Fraction C	charcoal		0.1	
94-105.18		botanical material		0.1	
94-106.1	ST94-1, -60-70 cm, Stratum C, Fraction A	shell fragments		18.4	
94-106.2		*Rangia* shell	39	295.9	
94-106.3		*Polymesoda* shell	2	13.6	
94-106.4		charcoal		0.5	
94-106.5		fish bones		3.1	
94-106.6		sand-t pl sherd		1.4	
94-106.7	ST94-1, -60-70 cm, Stratum C, Fraction B	charcoal	175	1.2	
94-106.8		shell	113	4.5	
94-106.9		vertebrae	10	0.4	
94-106.10		bones	215	7.9	
94-106.11	ST94-1, -60-70 cm, Stratum C, Fraction C	charcoal		0.1	some modern?
94-106.12		snail shells		<.1	
94-106.13		remains after sorting		0.1	roots, charcoal
94-107.1	ST94-1, -70-76 cm, Stratum C, Fraction A	charcoal	21	1.3	
94-107.2		bone	10	1.4	
94-107.3		shell	36	127.3	
94-107.4	ST94-1, -70-76 cm, Stratum C, Fraction B	charcoal		0.5	
94-107.5		bone	65	1.6	

CAT #	PROVENIENCE	CONTENTS	N	WT (g)	COMMENTS
94-107.6		shell	55	3.2	
94-107.7	ST94-1, -70-76 cm, Stratum C, Fraction C	charcoal	11	0.3	
94-107.8		bones	25	0.5	
94-107.9		shell	2	<.1	
94-108.1	ST94-1, -76-80 cm, Stratum C, Fraction A	*Rangia* shell frags	28	143.1	
94-108.2		fish bone		1.4	big- possibly marine
94-108.3		bone		1.9	
94-108.4		charcoal		0.1	
94-108.5		remains after sorting		0.1	roots, etc.
94-108.6	ST94-1, -76-80 cm, Stratum C, Fraction B	bone, some burnt		2.6	
94-108.7		fish bone		0.4	
94-108.8		charcoal		0.5	
94-108.9		seed+ seed shell		0.1	***missing
94-108.10		botanical remains		0.1	modern
94-108.11		clay or stone crumb		0.1	
94-108.12		shell frags		4	
94-108.13		teeth frags	2	<.1	1 has root; sm mammal?
94-108.14		remains after sorting		4.8	bone, shell, charcoal
94-108.15	ST94-1, -76-80 cm, Stratum C, Fraction C	charcoal		0.1	
94-108.16		botanical remains		0.2	modern
94-108.17		shell frags		0.1	
94-108.18		snail shell	1	<.1	microscopic
94-108.19		drumfish tooth	1	<.1	round
94-109.1	ST94-1, -80-90 cm, Stratum C, Fraction A	*Rangia* shell + frags		218.1	
94-109.2		charcoal		0.8	
94-109.3		botanical remains		0.3	modern
94-109.4		fish bone		0.9	
94-109.5		bone frags		1.8	
94-109.6	ST94-1, -80-90 cm, Stratum C, Fraction B	charcoal		1.1	
94-109.7		fish bone frags		0.3	
94-109.8		bone frags		2.1	some burnt gray, white
94-109.9		shell frags		8	
94-109.10		tooth		0.1	poss small mammal
94-109.11		sand grains	5	0.1	
94-109.12		sand-t pl (?)		0.2	sherd crumb
94-109.13		seed casing		0.1	tiny
94-109.14		remainder after sorting		8.2	bone, shell, charcoal
94-109.15	ST94-1, -80-90 cm, Stratum C, Fraction C	charcoal		3.6	big pieces
94-109.16		snail shell		0.1	poss apercula, type-A multispiral
94-109.17		botanical remains		1.5	modern
94-110.1	ST94-1, -90-100 cm, Stratum C, Fraction A	charcoal	35	1	
94-110.2		bone frags	17	2.3	
94-110.3		shell frags	51	225.4	
94-110.4	ST94-1, -90-100 cm, Stratum C, Fraction B	charcoal		4.3	
94-110.5		shells	128	6.2	
94-110.6		bone	132	3.5	

CAT #	PROVENIENCE	CONTENTS	N	WT (g)	COMMENTS
94-110.7	ST94-1, -90-100 cm, Stratum C, Fraction C	charcoal	20	0.1	
94-111.1	bottom Stratum C, Interface, -100-103 cm, Fraction A	*Rangia* shell + frag	2	8.3	
94-111.2		charcoal		2.1	
94-111.3		botanical material		1.5	modern
94-111.4	bottom Stratum C, Interface, -100-103 cm, Fraction B	shell pieces		0.1	
94-111.5		botanical remains		0.1	modern
94-111.6		charcoal		2.5	
94-111.7		bone frags		0.1	
94-111.8	bottom Stratum C, Interface, -100-103 cm, Fraction C	charcoal		3.6	
94-112.1	ST94-1, -103-110 cm, Stratum E, Fraction A	charcoal	16	0.8	
94-112.2		shell	1	1.5	
94-112.3		bone	1	0.3	
94-112.4	ST94-1, -103-110 cm, Stratum E, Fraction B	charcoal		0.8	
94-112.5		shells	9	0.1	
94-112.6		bones	4	0.1	
94-112.7		quartzite	110	0.3	pebbles, natural
94-112.8	ST94-1, -103-110 cm, Stratum E, Fraction C	charcoal	4	<.1	
94-113.1	ST94-1, -110-120 cm, Stratum E, Fraction B	charcoal	25	0.2	
94-113.2		coarse sand grains		2.2	
94-113.3		shell	1	0.1	
94-113.4	ST94-1, -110-120 cm, Stratum E, Fraction C	charcoal	1	0.1	
94-114.1	ST94-1, -120-140 cm, A Frac	fish bone, verts	3	0.7	
94-114.2		shell fragments	3	0.4	*Polymesoda*?
94-114.3		charcoal		0.3	
94-114.4	ST94-1, -120-140 cm, B Frac	shell fragments		1.6	*Polymesoda*?
94-114.5		botanical material		1.1	modern
94-114.6		charcoal		1.8	
94-114.7		remains after sorting		5.1	charcoal, sand
94-114.8		tooth		<.1	
94-114.9		small twigs		<.1	
94-114.10	ST94-1, -120-140 cm, Fraction C	charcoal		<.1	
94-114.11		snail shell		<.1	
94-114.12		botanical material		<.1	modern
94-115.1	ST94-1, -140-148 cm, A Frac	turtle shell	1	3.1	
94-115.2	ST94-1, -140-148 cm, B Frac	charcoal		0.2	
94-115.3		coarse sand		12.6	
94-115.4	ST94-1, -140-148 cm, C Frac	roots		0.2	modern
94-117.1	ST94-1, -159- 172 cm, B Frac B	charcoal	13	0.1	
94-117.2		bone	1	0.1	
94-117.3		shell	2	0.1	
94-117.4	ST94-1, -159- 172 cm, C Frac	sand		<.1	
94-118.1	C94LT1, 0-12 cm, A Frac	shells	10	6.3	
94-118.2		charcoal	4	0.2	
94-118.3		bone	1	0.1	

CAT #	PROVENIENCE	CONTENTS	N	WT (g)	COMMENTS
94-118.4	C94LT1, 0-12 cm, B Frac	charcoal	10	0.2	
94-118.5		pebbles	2	0.4	
94-118.6		shells	24	1.4	
94-118.7		bone	1	0.2	
94-118.8		metal wire frags	54	0.9	thin
94-118.9	C94LT1, 0-12 cm, C Frac	charcoal	30	0.6	
94-118.10		seeds	12	0.2	
94-118.11		shell	1	<.1	
94-119.1	C94LT1, -12-25 cm A Frac	shells	82	88.7	
94-119.2		shell-t pl	2	3.2	
94-119.3		bones	2	0.4	
94-119.4	C94LT1, -12-25 cm B Frac	shells		27.3	
94-119.5		charcoal	50	0.6	
94-119.6		bones	52	2	
94-119.7	C94LT1, -12-25 cm C Frac	shells	10	0.3	
94-119.8		charcoal	12	0.1	
94-119.9		seeds	3	0.2	
94-120.1	C94LT1, -25-32 cm Fraction A	shells		137.2	
94-120.2		bone	1	0.3	
94-120.3		charcoal	2	0.1	
94-120.4	C94LT1, -25-32 cm Fraction B	shells		24	
94-120.5		bones	4	0.2	
94-120.6		charcoal	40	0.5	
94-120.7		metal frags	2	0.2	
94-120.8	C94LT1, -25-32 cm Fraction C	shells	20	0.3	
94-120.9		seed	1	<.1	
94-120.10		charcoal	25	0.5	
94-121.1	C94LT1, -32-39 cm Fraction A-	shell frags		96.4	
94-121.2		charcoal	6	0.2	
94-121.3		shell-t pl	1	1.6	
94-121.4	C94LT1, -32-39 cm Fraction B	shells		20.5	
94-121.5		charcoal	36	0.7	
94-121.6		bones	6	0.3	
94-121.7		fish scale	1	0.1	
94-121.8	C94LT1, -32-39 cm Fraction C	charcoal	20	0.2	
94-122.1	C94LT1, -39-50.5 cm Fraction A	shells		59.4	
94-122.2		indet st	2	4.2	grog-t
94-122.3		bone	1	0.1	
94-122.4	C94LT1, -39-50.5 cm Fraction B	shells		20.8	
94-122.5		charcoal	50	0.9	
94-122.6		bones	12	0.5	
94-122.7		metal frags	4	0.1	
94-122.8	C94LT1, -39-50.5 cm Fraction A	charcoal	30	0.1	
94-123.1	C94LT1, -50.5- 61 cm Fraction A	shells		97	
94-123.2		bones	3	0.3	
94-123.3	C94LT1, -50.5-61 cm Fraction B	charcoal	40	0.6	
94-123.4		bones	16	0.5	
94-123.5		shells		18.7	

CAT #	PROVENIENCE	CONTENTS	N	WT (g)	COMMENTS
94-123.6	C94LT1, -50.5-61 cm Fraction C	seed	1	0.1	
94-123.7		charcoal	30	0.2	
94-124.1	C94LT1, -61-72 cm, Fraction A	shells		117.9	
94-124.2		bones	2	0.2	
94-124.3		charcoal	23	0.9	
94-124.4	C94LT1, -61-72 cm, Fraction B	bones	18	0.5	
94-124.5		charcoal	35	0.8	
94-124.6		shells		13.9	
94-124.7		poss nut frag		0.1	
94-124.8	C94LT1, -61-72 cm, Fraction C	charcoal	30	0.2	
94-125.1	C94LT1, -72-82 cm, Fraction A	shells		110.9	
94-125.2		bones	3	0.5	
94-125.3		charcoal	10	0.6	
94-125.4	C94LT1, -72-82 cm, Fraction B	bones	12	0.5	
94-125.5		charcoal	25	0.9	
94-125.6		shells		15	
94-125.7	C94LT1, -72-82 cm, Fraction C	charcoal	45	0.12	
94-125.8		shells	2	<.1	
94-125.9		bones	2	<.1	
94-126.1	C94LT1, -82-95 cm, Fraction A	shells		70.9	
94-126.2	C94LT1, -82-95 cm, Fraction B	shells		14.3	
94-126.3		charcoal	56	0.3	
94-126.4		bones	14	0.7	
94-126.5	C94LT1, -82-95 cm, Fraction C	charcoal	16	0.1	
94-127.1	C94LT1, -93-99 cm, Fraction A	shells	31	20.8	
94-127.2		charcoal	2	0.1	
94-127.3	C94LT1, -93-99 cm, Fraction B	charcoal	35	0.3	
94-127.4		shells	55	4.4	
94-127.5		sand-t pl	2	0.1	
94-127.6	C94LT1, -93-99 cm, Fraction C	remainder after sorting	30	0.1	roots, etc.
94-128.1	C94LT1, -99-109 cm, Fraction B	charcoal	3	0.1	
94-128.2		shells			
94-128.3	C94LT1, -99-109 cm, Fraction C	roots and remainder			
94-129.1	C94LT1, -109-121 cm, Fraction B	charcoal	10	0.2	
94-129.2		shells	14	0.7	
94-129.3	C94LT1, -109-121 cm, Fraction C	remains after sorting, roots			
94-130.1	C94LT1, -121-138 cm, Fraction B	charcoal	35	0.2	
94-130.2		shells	42	2.4	
94-130.3	C94LT1, -121-138 cm, Fraction C	remains after sorting			roots, etc.
94-131.1	C94LT1, -138-144 cm, Fraction B	shells	7	0.3	
94-131.2		charcoal	8	0.1	
94-131.3	C94LT1, -138-144 cm, Fraction C	roots			
06-06.1	new section E side of cemetery	ch-st	1	3.7	sand+grog-t
06-07.1	NE corner of old cemetery, surface	ch-st	1	4.9	sand+grog-t
06-07.2		sand+grog-t pl	1	13.1	
06-12.1	foot of Alice Smith, Marshall Plot, NE? corner newer part of old cem, near ditch	Sw Cr Comp-St	1	10.3	

The surface ceramics (as extracted from Table 28) from the Mound Near Apalachicola include 76 sherds, which can be classified as follows:

2 Fort Walton Incised
1 Weeden Island Zoned Red
1 Keith Incised
3 Carrabelle Incised
2 Carrabelle Punctate
7 Swift Creek Complicated-Stamped
1 cordmarked
2 red-painted (grog, sand & grog temper)
4 indeterminate incised
6 indeterminate punctated
8 check-stamped
18 sand-tempered plain
11 grog-tempered plain
6 grit and grog-tempered plain
4 sand and grog-tempered plain

This looks like a typical Middle Woodland assemblage with a small amount of Fort Walton material from the later component that is centered farther to the west. Additional surface finds were an unusual red clay ball (probably associated with Middle Woodland), and a chert biface (Figure 63; probably a multi-purpose tool and possibly even used as a core) one of the rare stone artifacts encountered in the entire cemetery (or at the Pierce complex as a whole).

Figure 63. *Chert biface (#94-53) from surface of Magnolia Cemetery in area of Mound Near Apalachicola.*

In 1994, we were able to excavate two tests in the probable area of the Mound Near Apalachicola: a core with the 4-inch bucket auger and a 50-cm-square shovel test (see Figure 61). Core LT2 located just south of the graves under the three palms, was taken to 144 cm depth and still produced shell fragments and darkened soils, suggesting midden/mound fill. Ceramics from this core included a Swift Creek Complicated-Stamped, 2 indeterminate incised, and 8 plain sherds as deep as 55 cm, but mixed with glass, plastic, and other modern materials.

Shovel Test 1 (ST1) was dug 3 m east of the large oak at this corner of the cemetery, north of the east-west road marking the north cemetery boundary. This test produced mixed dark shell midden soils (often with whole clamshells) as deep as 110 cm, below which was culturally sterile paler soil. At 120 cm depth excavation was changed from shoveling to coring, which was then taken to 172 cm where the water table was reached. This unit produced sherds as shown in Table 29 (as extracted from Table 28; depths overlap as they are compiled

from bags and student notes at different times), as well as fragments of bone (fish, deer, turtle), charcoal, and shell, and 4 clay daub pieces from some kind of native structure. Unfortunately modern bits such as glass or iron were mixed in with the aboriginal materials down to at least 50 cm depth, but below that deposits seem to be intact.

Table 28 is a long one because it includes materials processed from flotation of soil samples from these two excavated units. Most of these materials are charred botanical remains or bone bits, though there are a few sherd crumbs. If future funding becomes available some of the charcoal could provide radiocarbon dates, and plant remains could be identified by an ethnobotanist. Meanwhile the ceramics, especially, give good information characterizing the Middle Woodland nature of this probable Mound Near Apalachicola. Sherds from Shovel Test 1 included several interesting types illustrated in Figures 64 and 65.

***Table 29**. Ceramics by type and depth (in cm) in Shovel Test 1 at Mound Near Apalachicola.*

	0-43	*43-66*	*60-70*	*66-90*	*70-88*	*88-100*	*90-109*	*109-110*	*mixed*
Weeden Island Zoned Red	1								1
Weeden Island Incised			1						
Swift Creek Complicated-Stamped				6			2		1
Carrabelle Punctate		1						1	
Tucker Ridge Pinched		2							
check-stamped			3		3	2			
indeterminate incised		1							
indeterminate punctate	7	3							
indeterminate stamped	4		1	2					
cordmarked	1								
red-painted	1								
fabric-impressed						1			
sand-tempered plain	7	29	6	18	4	3	5	1	
grog-tempered plain	7	24	1	16		3	2	1	2
grit-tempered plain	15	10					2		
grit and grog-tempered plain	23								
grit, grog, and limestone-t plain	2	1		1					
sand and limestone-t plain				8					
grog and limestone-t plain				4					

Swift Creek Complicated-Stamped sherds included one with an unusual herringbone pattern as well as more typical curvilinear designs. Red-painted sherds included plain-surfaced examples as well as those classifiable as Weeden Island Zoned Red (see discussion of Mound A, above). The several punctated sherds included Carrabelle Punctate and Tucker Ridge Pinched (with little bits of wet clay pinched by fingernails) as well as other fingernail-punctated examples. Two unusual stamped sherds included one impressed with some sort of wedge-shaped object and another stamped with a long barbed object (Figure 65 upper) that, despite producing a clear positive impression in modeling clay pressed to the sherd surface, defies classification; it is not a stingray spine, which has tinier barbs, but may be the edge of a saw

palmetto stem or possibly sea-oats seed head. In general the Swift Creek and early Weeden Island-series ceramics indicate a clear Middle Woodland affiliation for this probable area of the spread remains of the Mound Near Apalachicola.

Figure 64. *Ceramics from Test Unit 1, probable Mound Near Apalachicola area,* l-r, *2 Swift Creek Complicated-Stamped (#94-50, 94-49; chalk rubbed on pattern to show it better), showing a curvilinear design and an unusual herringbone design; plain sand-tempered sherd with interior painted red (#94-49).*

Figure 65. *Ceramics from Test Unit 1, probable Mound Near Apalachicola area:* left, *rim stamped in unusual pattern with unknown barbed implement (#94-100; positive impression in modern soft clay shown at right);* below left *(all #94-57)*, upper, *Carrabelle Punctate rim and two Tucker Ridge Pinched*; lower, *3 indeterminate punctate, showing variation in fingernail punctations.*

SHELL MOUND NEAR MOUND NEAR APALACHICOLA/ FAR EASTERN VILLAGE

Within Moore's (1902:216) description of the Mound Near Apalachicola (described in the previous section) was the line that "a shell heap of considerable size is distant about 75 yards, in an ENE direction." This sounds like specifically mounded shell, not just the long, low ridge of midden running all along the riverbank. Moore had used the same term (shell heap) for the Pierce Temple Mound H (see earlier discussion in this report). During his 1940 visit, Willey (1949:279) investigated the open field east of the Magnolia Cemetery. He photographed "the remains of what once must have been a great shell midden…clustered around a few palm trees"; this could have been a mound that had once been 2 meters high, or possibly just a remnant of the shell midden ridge encircling the old riverbank. Willey's (1949:Plate 11) photo of this remnant is reproduced in Figure 66 below. It was all being removed for fill, and the rest of the field was cleared. There is a small possibility it was actually Moore's Mound Near Apalachicola, but since it is (apparently all) of shell it is more likely this shell heap. Since the field around it was in the process of being leveled and the soil removed for fill, the Mound Near Apalachicola was probably already gone and the sherds Willey picked up there are reported in the previous section.

Figure 66. *Probable Shell Mound near Mound Near Apalachicola, east of Magnolia Cemetery, as it was being dismantled in 1940; photo adapted from Willey 1949:Plate 11); view probably facing northwest.*

Much of the rest of this field east of the cemetery was still being bulldozed during the 1990s, when we first looked there and picked up artifacts we could later attribute to the Mound Near Apalachicola, but a shell area to the east of it was also very productive for surface collection and so was investigated further with Shovel Tests TM1 and TM2 in 1994. In later years this area became all flattened and full of recent graves as Magnolia Cemetery has expanded (Figure 67). But we do have the information from the two individuals (as reported

above) who stated there was a mound here taken out for bridge fill in 1935. We also heard from former cemetery worker Joe Zingarelli that there had been a mound roughly around here that was bulldozed (he said it was just north of a little red house owned by J. A. Little). So the location of the shell heap is approximated in Figure 60 based on the witness statements, Willey's photo, and the concentrations of shell and artifacts on the surface.

***Figure 67**. Area hypothesized to be location of Shell Mound near Mound Near Apalachicola as leveled today for cemetery expansion; view facing northwest is probably close to the view in 1940 photo shown in Figure 66.*

In 1997 archaeologist Louis Tesar from the BAR checked out a report of human remains from the fields east of the Magnolia cemetery. A local resident showed him a portion of a human skull and artifacts recovered from an area of *Rangia* shell midden amid the recently cleared lighter-colored sandy soils. Tesar (1997) thought the best explanation for the finds was that they were remnants of the great shell heap noted by Willey. Human bones could also be from recent graves accidentally disturbed by cemetery expansion.

East of this new part of the cemetery is another large area that was doubtless once a cultivated field but is now completely bulldozed away and bordered on the east by huge dirt piles (Figure 68; and see high red elevation far to east of cemetery in Figure 11). If the Mound Near Apalachicola and/or its accompanying shell mound was over here, it is now scattered around or completely removed. But shell midden deposits continue eastward all the way into the woods and to the edge of the bluff overlooking what was once the stream running from Cool Spring. This shell midden may be associated with the mounds already described. Or, it also might be part of the as-yet-unlocated Cool Spring Mound, 8Fr19 (discussed in the next section). But this *Rangia* midden may be the continuation of the midden ridge running along the old bank all the way to the spring mouth. It is still being actively bulldozed and used for fill, despite its relatively intact prehistoric cultural deposits; city and cemetery authorities should attempt to preserve what is left of it and stop the heavy equipment damage. Cultural materials recovered from this area on the far east side of the cemetery are listed in Table 30.

Figure 68. *Area to the far east of Magnolia Cemetery where prehistoric cultural deposits are still being bulldozed apparently for fill dirt.* Above, *Jeff Du Vernay checks gps reading;* below, *closeup of intact shell midden deposits up to a meter thick over his head (with white sand culturally sterile subsoil below shell midden layer); view facing north-northeast.*

Table 30. *Materials recovered by BAR and USF from the probable area of the Shell Mound Near the Mound Near Apalachicola/Pierce Far-East Village area.*

CAT #	*PROVENIENCE*	*CONTENTS*	*N*	*WT (g)*	*COMMENTS*
BAR					
74.164.6.1	cleared area east of cemetery hump	Weeden Island Inc	1	18.4	
74.164.6.2		Sw Cr Comp-St	1	8.7	
74.164.6.3		*Rangia*	2	31.4	
74.164.6.4		clear quartz block shatter	1	10.8	
74.164.6.5	area east of cemetery midden	Sw Cr Comp-St	1	11.8	
74.164.6.6		Carrabelle Punc	1	9.8	
74.164.6.7		indet punc	1	4.1	
74.164.6.8		grog-t pl rim	1	25.5	
74.164.6.10	sand field east of cemetery	Crooked River Comp-St	1	13.7	
74.164.6.11		ch-st	1	6.7	
USF					
94-55.1	ST94TM1, -12-22 cm	ch-st	3	22.6	2 = mostly eroded
94-55.2		sand-t pl	3	9.2	1 = rim, recent cut
94-55.3		clump of concreted sand	1	1.3	burned?
94-55.4		lg snail shell	1	9.4	moon shell?
94-55.5		bone frags		1	some fish/turtle? 1 vert
94-56.1	ST94TM1, 0-12 cm	Sw Cr Comp-St	2	7.1	
94-56.2		indet punc	1	9.2	
94-56.3		ch-st	11	43.6	sand-t, some grog-t
94-56.4		unusual inc/punc	1	4.7	WI Inc?
94-56.5		woven-fabric-impressed	1	3.8	fine weave, 1 mm cord
94-56.6		indet inc	1	1.9	sand-t, 1 grog-t
94-56.7		grit -t pl	2	6.6	
94-56.8		sand-t pl rim	1	2.3	fine, outflaring, squared off
94-56.9		sand-t pl	7	19	
94-56.10		grog-t pl	4	12.1	
94-56.11		oyster shell	1	43.3	
94-56.12		bone frags	17	4.3	2 = turtle, some fish
94-62.1	surface, clearing at end of dirt rd running away from E side of cemetery (across from Bishop plot)	Sw Cr Comp-St	1	5.5	
94-62.2		unusual comp-st	1	13.6	
94-62.3		ch-st	2	11.8	
94-62.4		sand-t pl	1	4.6	
94-62.5		2nd ary chert flake	1	0.6	
94-64.1	ST94TM2, Level 1	ch-st	3	18.4	sand-t
94-64.2		sand-t pl	2	9	
94-64.3		granite chip	1	1.5	fresh; off a headstone?
94-64.4		green glass sherd	1	0.6	bright
94-64.5		square iron nail+ frags	1	6.9	rusted
94-64.6		bone frags	1	1.2	cranial?
94-69.1	ST94TM2, 1/8 screen sample, L3	prob ch-st	2	4.3	grog-t, folded, smoothed
94-75.1	ST94TM1, L 3	grit-t pl	1	2.7	
94-75.2		grog-t pl	1	1	
94-75.3		sand-t pl	1	1.7	
94-75.4		bone frag	1	0.5	articulating end, sm animal - mammal or turtle?

CAT #	PROVENIENCE	CONTENTS	N	WT (g)	COMMENTS
94-88.1	surface, dirt road E of cemetery	ch-st	5	51.9	
94-88.2		*Busycon* shell spatula/scraper	1	26.4	nicely smoothed, worn edge
96-9.1	S side of E half of cemetery open lot	Keith Inc rim	1	10.4	
96-9.2		Sw Cr Comp-St	1	3.9	finger-shaped pattern
96-9.3		ch-st	7	74.1	2 rims
96-9.4		grit-t pl	3	16.1	
96-9.5		grog-t pl	7	45	
96-9.6		grit+grog-t pl	4	43.9	
96-9.7		sand-t pl	14	84.4	
96-10.1	disturbed piles NW side of the cemetery open lot E of Magnolia cemetery	ch-st	7	60.7	
96-10.2		grit-t pl	2	3.8	
96-10.3		sand-t pl	7	25.4	
96-10.4		grog-t pl	5	20.1	
96-10.5		grit+grog-t pl	4	25.8	
96-10.6		quartz pebbles	2	42.2	brought in or natural?
96-10.7		limerock	1	5	brought in for road fill?
96-10.8		modern items	3	24.1	slag, asbestos
03-06.1	50 m NE of cemetery, surface	F W Inc rim	1	11.6	ticked inner rim
06-1.1	Magnolia Cemetery, area NE of new section, surface	WI Inc or Carrabelle Punc	1	3.9	
06-1.2		Sw Cr Comp-St	1	7.1	sand+grog-t
06-1.3		ch-st	3	7.8	sand+grog-t
06-1.4		grog+sand-t pl	1	8	
06-1.5		sand-t pl	1	3.4	
06-14.1	surface of new cemetery area in NE, next to Duncan + Robinson plot	Sw Cr Comp- St	2	7.2	
06-14.2		ind punc	3	17.3	all fingernail, all different
06-14.3		ch-st	4	22.8	1 has drilled hole
06-14.4		indet inc	1	5.8	complex triangular pattern
06-14.5		grog-t pl	1	4.2	
06-14.6		grit+grog-t pl	4	6.1	
06-14.7		grit-t pl	3	5.2	
06-14.8		sand-t pl	2	2.6	
06-16.1	surface, Magnolia Cemetery far NE/N end, new area, Jones plot	Sw Cr Comp-St	1	5.7	sloppy
06-16.2		indet inc	2	15.6	1 = poss Marsh Island
06-16.3		ch-st	7	42.2	
06-16.4		grit-t pl	4	19	1 = rim
06-16.5		grit+grog-t pl	5	35.5	
06-16.6		sand-t pl	5	17.5	1 = rim
06-16.7		blue edge-decorated pearlware	1	5.2	raised rim design

Surface materials from the bulldozed area east of Magnolia Cemetery, the probable location of the Shell Mound near the Mound Near Apalachicola, as well as of the continuing shell midden ridge around the north edge of the whole Pierce Complex, include diverse ceramic types. Listed below (as compiled from Table 30), they show a typical late Early to Middle Woodland assemblage (with a single Fort Walton sherd). The unusual ladder-like pattern on one complicated-stamped sherd (Figure 69) is identical to that on a sherd from Gotier

Hammock Mound in Gulf County (White 2010:Figure 11) from a provenience radiocarbon-dated to A.D. 650.

1 Fort Walton Incised
1 Weeden Island Incised
10 Swift Creek Complicated-Stamped
1 Crooked River Complicated-Stamped
2 Carrabelle Punctate
1 Keith Incised
31 check-stamped
3 indeterminate incised
4 indeterminate punctate
30 sand-tempered plain
12 grit-tempered plain
14 grog-tempered plain
14 grit & grog-tempered plain
1 grog & sand-tempered plain

Surface artifacts from this area also included one secondary chert flake (again, a rare example of chipped-stone tool use) and a shell scraper or spatula crafted from a lightning whelk (*Busycon)* shell whorl, with a nice smooth, worn edge (Figure 69). There were also *Rangia* shells and traces of black midden soils with animal bone bits.

Figure 69. *Artifacts recovered from the surface of the bulldozed area east of Magnolia Cemetery, probably associated with the Shell Mound near the Mound Near Apalachicola:* left, *unusual ladder-pattern Swift Creek Complicated-Stamped sherd (#94-62.2);* right, Busycon *shell spatula/scraper (#94-88.2)*

Shovel Tests 94TM1 and 94TM2 (see Table 30, Figure 61) produced similar materials as deep as about 30 cm, but the bulldozed area was so disturbed that it is unclear if much remains intact even down to this depth. The large number of check-stamped sherds (31 from surface, up to 19 from shovel tests) suggest either the end of an Early Woodland Deptford presence or the continuation of the Middle Woodland occupation into Late Woodland (or both). My experience in the region suggests that people did live here or otherwise use the area for mound construction from Early through Late Woodland and into Fort Walton times, since it is such an important mound complex.

COOL SPRING MOUND (8Fr19)

Moore (1902:216) described the mounds today considered part of the entire greater Pierce group as he encountered them from east to west, moving westward out of the city of Apalachicola. Thus the Cool Spring Mound was described before all the others; it must have been the southeasternmost mound within the Pierce group. He said it was on the western outskirts of town (at that time) and was 7.5 feet high and 90 feet in diameter. It had been looted ("has long been the center of attack for avaricious or curious persons. ") but was somewhat preserved because diggers threw dirt from new trenches into existing ones. He recovered ceramics typical of the area, including part of a frog effigy vessel, on the disturbed mound surface.

Then he excavated at least 9 burials he described as flexed or semi-flexed on the back or side, with no grave goods except for a piece of mica with one and a chert point 4.75" (12 cm) long under the chin of another. He said he dug two-thirds of the mound, including already disturbed parts, and encountered other probable burials already damaged, including a single skull with a humerus, but "No bones were in a condition to preserve." In the mound fill he obtained a stone celt and plain, incised and punctate, complicated-stamped, and a few check-stamped sherds, as well as loop handles and handles with animal or bird effigies, including one piece with "animal legs in relief on the sides." He noted that "deeply scalloped margins were abundant" on ceramic rims.

Hardly any more information is available in Moore's unpublished notebook (#22, first entry on p. 1, undated) on Cool Spring Mound, beyond his statement that the mound had probably been conical and extremely brief descriptions of the 9 burials, as quoted in Table 31.

Table 31. *Burials described by Moore in Cool Spring Mound (8Fr19)*

#	***REMAINS as described in notes***	***ARTIFACTS, COMMENTS***
1	trunk on back, legs flexed on trunk	in clear white sand below base
2	upper skeleton (lower part dug away)	lance well made 4 ¾ in under chin"
3	single skull other bones poss. dist by our digger tho none seen by us	
4	trunk on back "thi[gh]s up almost at r angle, legs down somewhat away for thi[gh]s"	mica
5	trunk on back thi[gh]s & legs back on body"	
6	trunk on back thi[gh]s at r angle legs away from thi[gh]s some"	
7	trunk do (?) legs & thi[gh]s more obtuse angle	
8	trunk on back, base on thi[gh] & leg up against body, thi[gh?] other laterally almost r angle	
9	trunk on back, legs up r angle obtuse angle	

The burials sound similar to those of the Early to Middle Woodland mounds already described within the Pierce complex. But the ceramic assemblage appears to have had both Fort Walton and Middle Woodland components, the former unmistakably indicated by the

vessels with handles and the latter by the complicated-stamped pieces (all the other items could go with either time period). It would be very interesting to have had a Middle Woodland burial mound with later use by late prehistoric peoples at the far *eastern* end of the whole Pierce complex, since most of the pre-Fort Walton material seems to be associated with the west side and Mounds A through C, though there are also apparently Early and Middle Woodland associations for the Cemetery Mound and the Mound Near Apalachicola.

Many attempts to find Cool Spring Mound over the years have failed completely. Based on Moore's general description, it must be somewhere east of Magnolia Cemetery, where there are streets and houses. Unfortunately he did not say where it was in relation to the spring itself, or to the stream that runs from it. Using the term spring instead of creek might mean it was near the source of the creek, which today has been significantly rechanneled and developed over. The hugely disturbed nature of the mound when Moore saw it may mean that those building houses and redesigning the stream flow may have felt no qualms about bulldozing the rest of it away. On the other hand, the rest of the Pierce mounds complex components are all still there despite such a long history of damage.

In 2011 we obtained a lidar image (courtesy of archaeologist Jeff Du Vernay) of the whole Pierce complex. It shows a location with an elevation and diameter about the size of a prehistoric mound located north of 2nd Avenue, a red dot shown on Figure 11 right near the origin of the western blue stream channel that feeds into what must be the main, rechanneled creek flowing from Cool Spring. With specific coordinates we could investigate this elevation; we found it walking down the paved street and sidewalk: it was a new septic tank burial!

Wondering what on earth we were doing walking down her city street with packs, long sleeves, gloves, and boots on the hot July day we went searching for this mound, a local resident came outside to ask us. After we explained, she said she had not heard of any mound but it probably had been taken out by the construction of the (low-income) housing projects in the 1950s or 60s. She said as a kid she had played in the spring and the creek but had not heard of any mounds or skeletons, and now all the drainage had been rechanneled.

Carr (1975:22) had reported that Apalachicola city manager John Meyer said he had seen an Indian site east and south of the creek mouth, but Carr's survey failed to relocate this, and this area has also been very much disturbed by city construction. Thus Cool Spring Mound either remains to be discovered or is lost forever under concrete.

JACKSON MOUND (8Fr15)

Scipio Creek was originally named after a late nineteenth-century African-American resident, Scipio Jackson; Jackson Mound was on his property. As originally described (Moore 1902:213-236), Jackson Mound was as spectacular as the other mounds near Pierce. It produced 26 central burials with chert points, Swift Creek Complicated-Stamped and Weeden Island compound ceramic vessels, bitumen (natural asphalt or tar), clay and soapstone pipes, celts, pendants, quartz crystal, galena (a shiny lead ore), and other items, including a ceramic handle fragment that suggests an additional Fort Walton component along with the Middle Woodland burials. Some materials from this mound remain in the NMAI collections. Carr's 1975 survey accurately relocated it, but gave the adjacent shell midden another name and site number (8Fr77, see discussion below). Once, we thought Jackson might be represented by the surface artifacts northwest of Singer Mound (Pierce West Village Area) on or just beyond the Mahr property; some artifacts collected there were labeled as possibly being from Jackson Mound, but the record is now corrected and the mound's location is verified.

Today Jackson Mound is also on the property of George Mahr, who took the crew there in 2011 and allowed some fieldwork in 2013. The mound is much diminished but still has scientific potential. It is about 1.5 km northwest of Pierce along the old river bank, perhaps a 15-minute walk if the path were cleared. It sits on the west side of a small tributary of Scipio Creek named Mitchell Creek, which may once have flowed near the southwestern edge of Pierce, thus allowing another transportation route between the sites. Jackson Mound is too far away to have been an integral part of the Pierce complex, though its users and inhabitants must have been the same as or closely related in time and/or space to the people at Pierce. A clearly separate site, Jackson Mound is not extensively reported here but will be described in another report. With its elaborate Middle Woodland burials, it may have been a territory or traditional burial ground for a different ethnic group or faction from that/those of the people who lived and were interred at Pierce. Or it could have been built during a hiatus of a generation or a few decades in the use of burial mounds at Pierce for some reason relating to religion or politics.

JACKSON MIDDEN, 8FR77

During Carr's 1975 survey, he relocated gave a separate site number to the large shell midden extending 800 feet (240 m) to the east-northeast of Jackson mound. This midden was about 200 feet (60 m) wide. He observed a large number of artifacts in the plowed garden here. This was the village associated with the mound, with artifacts typical of Middle Woodland and perhaps additional time periods. By 2013, when we investigated it, the midden had been mostly bulldozed away. It will be described in greater detail in our report on Jackson mound.

"MOUND NEAR APALACHICOLA 2" ~~8Fr22~~

This name and site number were officially given by the Florida Master Site File not to any site or geographic location but to an artifact collection. As noted in this report's discussion of the history of Pierce, in 1888 H. L. Grady collected artifacts from a mound near Apalachicola. His heirs apparently donated these artifacts to what was to become the Florida State Museum, now the Florida Museum of Natural History (FLMNH). A map accompanying the collection was said to have been made by the landowner at Pierce much later (in 1948); it showed two mound sites only: the Pierce main complex and Jackson Mound. Florida archaeologist John Goggin at the museum obtained the map after he had written to request more information on the Grady collection. This story is detailed below in the chapter on additional collections from Pierce.

The H. L. Grady collection most likely came from Pierce. Caution is needed here because there could have been any number of mounds known near Apalachicola in 1888 which the landowner 60 years later would not have been familiar with. There were possibly mounds downtown and we know of several outside of town still in existence, unrelated to the Pierce complex, though probably well known to contemporaneous prehistoric peoples. However, since collecting at Pierce was well established by the mid-nineteenth century (as described above and below), it is most likely that the Grady collection was from Pierce too. And Goggin was well versed in the archaeology of all of Florida. The fact that he knew to write to someone who knew well about Pierce supports this interpretation.

Meanwhile, Willey (1949:284) published the information on the H. L. Grady collection curated in the museum in his famous synthesis and compendium of Florida sites, saying it might or might not be from Pierce. Then, sometime between the 1950s and the 1980s, someone in the Florida Master Site File, diligently recording all archaeological sites known from publications as well as fieldwork, listed this collection with a new number, mentioning Willey's citation, the museum collection, and the map, but clearly stating that no location was known. However, a circle got put on the map with the infamous "GV" designation, meaning "general vicinity."

Florida archaeologists have struggled with "GV" locations for decades, and it was typical practice at the Site File to give site numbers to collections without any specific locations. I documented another example in Gulf County, where a site number was given simply to a collection that later proved to be from a mound which already had a name and different number (White 2010). As the map associated with the Grady collection was drawn long after the materials were collected and donated, and shows only two sites, there could be any number of mounds from which the collection was obtained, so the provenience must remain a general one at the Pierce main complex. However, this collection does NOT represent an additional site. Therefore, "Mound Near Apalachicola 2," and the number 8Fr22 should be subsumed under Pierce, 8Fr14. I will submit an update form to the Site File recommending that site number 8Fr22 be eliminated or vacated, and the information collapsed into the data for Pierce, 8Fr14.

ADDITIONAL DATA FROM PIERCE ARTIFACT COLLECTIONS

Collections from Pierce exist in many places; more could come to light in the future. This chapter lists those now known, in the hopes that future research could pursue these and additional avenues to gain a greater understanding of the site. Because artifact collectors pick up fancier items, as opposed to the everyday detritus of domestic life that archaeologists more often retrieve, there is usually more and different information available in such collections, so caution is needed in interpreting them (e.g., Huster 2013).

British Museum Collection, London, England

Archaeologists visiting London told me in the 1990s that the British Museum had materials from Apalachicola. Many such institutions now put collections information online, allowing searches by location for data and artifact photos. After finding 13 specimens in the online British Museum catalog from "Appalachicola," from the 1800s, and four of these described as "Found/Acquired Turtle Harbour," I communicated with the museum's Africa, Oceania, and the Americas (AOA) Department collections person Jim Hamill. He sent information on more pieces that were not shown online. In early January 2013, he graciously hosted me and colleagues Rich Weinstein and Sally Morehead for a half-day visit to the museum stores (collections), on Orsman Road, in northeast London, about three miles from the main museum. (We were in England anyway to attend the Society for Historical Archaeology annual meeting later that week in Leicester). We photographed and measured many artifacts he had pulled out from Pierce and elsewhere in Florida (Figure 70).

Figure 70. *Author examining greenstone celt and other artifacts from Pierce and elsewhere in Florida stored in the British Museum collections, January 2013.*

Table 32 lists a total of 18 objects, four from near Turtle Harbor, obtained in 1869, and others which may be from there, obtained in 1875; the table gives registration (catalog) numbers and other data.

Table 32. *Materials from (and probably from) Pierce at the British Museum. Highlighted items from "Turtle Harbour" are certainly from somewhere at Pierce. Others may be from elsewhere in or near the town of Apalachicola.*

Reg #	***Data***	***Material***
Am.5327	"Appalachicola"; collected by Cutter, donated by Sir Augustus Wollaston Franks, 1869	ground stone celt, tan or buff color, possibly greenstone or sandstone
Am.5328		greenstone celt
Am.5329		large sandstone (?) hone, 2 worn grooves on top surface at converging angles
Am.5330		ovate, straight-base chipped stone biface, honey-colored chert, either broken on side or notched as tool
Am.5331		side-notched chert point, honey-colored chert
Am.5332		long, narrow-stemmed point, weathered-white chert
Am.5333		shell pendant
Am.5334		shell disk
Am.5335		small pot, casuela-shaped but narrow orifice, perforations at lip (apparently) on opposite sides for suspension; Fort Walton Incised
Am.5336	Indian mound Appalachicola A.W. Franks Esq…1869"	large plain (?) sherd of globular bowl with rounded. folded lip
Am.5842	"Found in a 'shell bank' at Turtle Harbour, 2 miles from Appalachicola, Florida…Pres? by A.W. Franks Esq…1869 (Waters) "	"Large Greyish-red earthenware pipe, bowl ornamented with a few sets of treble lines" l= 4.75, stem opening diam = 1"
Am.5843		Adze-shaped celt, "hard light green stone. Butt broken off…flat on one face, rounded on the other.. polished, or smoothly ground all over. Cutting edge oblique" l=4.5", w=2.5"
Am.5844		chunkey stone, "Small circular dark reddish brown" diam = 1.5"; thickness = .9"
Am.5845	"Found in a 'shell bank' (?) at Turtle Harbour, 2 miles from Appalachicola, Florida… Pres? by A.W. Franks Esq…1869 (Waters) "	ground stone, bola or plummet, "Pale colored egg-shaped…conical at the larger end, & having a small concavity at in the smaller"; l=2.25", diam=1.5"
Am.9394	"from a mound near Apalachicola, Canada West" donated by Dr. William Sparrow Simpson. 1875 (another record says Franklin County, Ohio)	triangular chert biface
Am.9418	1875, from Franklin County, either Florida or Ohio; donated by Dr. William Sparrow Simpson, 1875	side-notched chert point, rather crudely made, possible serrated
AM.9419		chert point with expanding-stem base
Am.9420		chert point with long narrow stem, crudely made
Am.9421		stemmed chert point, broken base
Am.9428		greenstone celt
Am.9433		shell plummet or net weight or pendant, possibly of columella

The four items from a shell bank in Turtle Harbor (the open water body just east-northeast of the site; see Figures 3, 7, 12, 13) must be from the Pierce complex, though it is unknown exactly where within the site. The railroad was not yet built, but probably the shell midden ridge and mounds were already being mined for construction materials, so artifacts became visible. They could have been obtained by local people or visitors from England. British merchants were instrumental in the economic livelihood of the city of Apalachicola. Cotton sent downriver on steamboats from northwest Florida and south Georgia and Alabama was stored, then loaded onto ships sailing to textile mills in New England and (old) England. Museum records show that the four items from Turtle Harbor were collected by Waters, collected by Cutter, donated by Sir Augustus Wollaston Franks. Hamill said that Cutter might have been sent out by Waters, but probably Waters was the one who actually obtained things from the site, then told the museum in 1869 more specifically where the artifacts came from.

William D. Cutter was a London dealer in antiques, antiquities, and ethnographic and natural history "curiousities" based at 36 Great Russell St., London WC1, from at least the 1860s onward. Through about 1900 he and his daughter Eva were involved in hundreds of sales of such objects to the British Museum. Though one note says "Miss Cutter," Hamill thinks her father William would have been the one to obtain the Turtle Harbor artifacts since it was in 1869. Most transactions were from William to Sir Augustus Wollaston Franks, the famous collector and curator of the museum from 1851-1897, who expanded what was already one of the largest buildings and greatest museums in Europe to include specimens from all over the world, especially distant places such as the Americas.

The objects traceable to Pierce are a clay pipe, a greenstone adze, a chunkey stone and a bola stone or plummet. Their "registration slips" (original acquisition/catalog data) include comments on colors and dimensions. The British Museum permits use of their photos for educational, non-commercial purposes (after filling out the permission form), so I include some of theirs and some of my photos of a few of these objects. The fired clay elbow pipe (Figure 71) is 11 cm long, with a relatively large bowl (5 cm external and 3.8 cm internal diameter) and a stem opening of 2.8 cm diameter (external diameter 4.5 cm). The bowl height is 7.5 cm and the stem length is 9.5 cm. The pipe has three parallel-line incisions encircling the necks of both the bowl and the stem, as well as three around the whole pipe, three crossing the join of the stem to the bowl, and three around a small protrusion extending out from the stem beyond the bowl. On the side not shown, the incisions are somewhat smoothed-over.

The polished greenstone celt (see Figure 70) is plano-convex in cross-section and thus defined as an adze instead of an ax; dimensions are 6.3 cm width and 11.4 cm length, but the butt-end is broken. The chunkey stone (Figure 72) is a typical game piece of later prehistoric native America. It is a thick disk like a hockey puck, with two flat sides, that was rolled across the ground for players to throw spears at to estimate where it would stop, and often gamble on the outcome. The specimen from Pierce is 3.8 cm diameter, 2 cm thick, and dark reddish-brown, probably of sandstone.

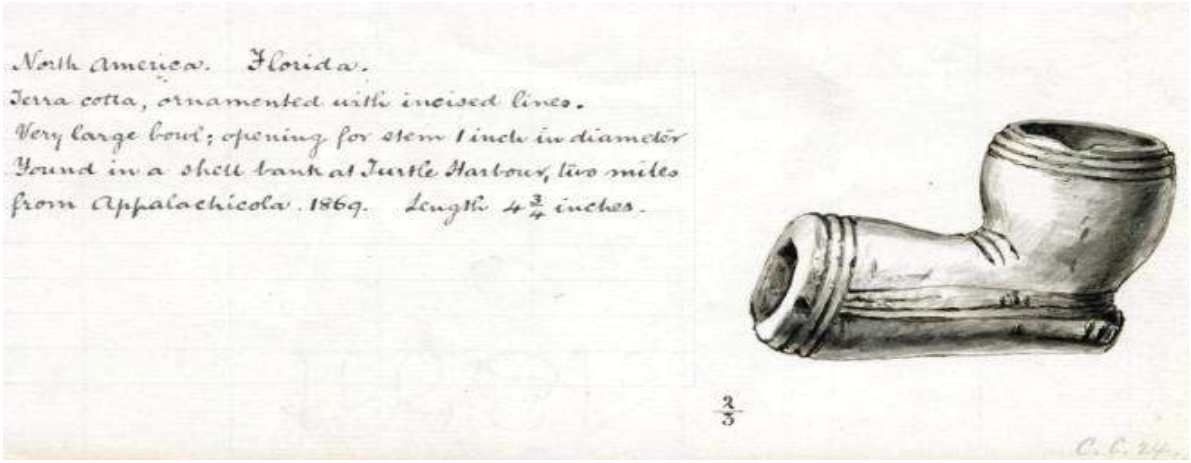
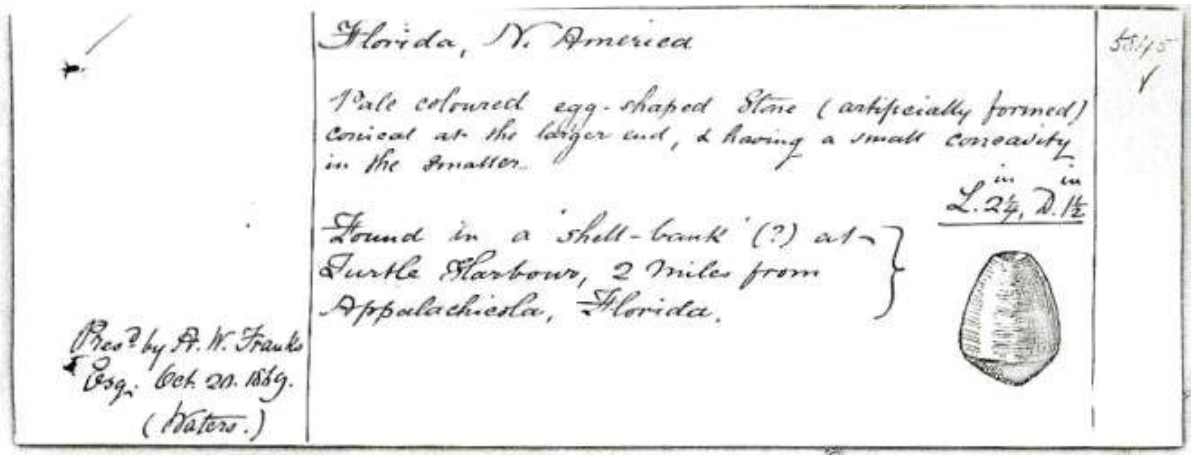


Figure 71. Above, r*egistration slip showing fired clay pipe from Pierce in British Museum Collections, #Am.5842, acquired 1869; below, two views of the pipe, photographed 3 January 2013.*

Figure 72. Right, *chunkey stone (Am.5844) with British Museum catalog number (white label) and card, photographed 3 January 2013;*

Whether the “egg-shaped” ground-stone specimen (Am.5845) from Pierce is a plummet or some other kind of weight or a bola stone (Figure 73) is unknown. It is conical at the wider end, coming to a soft point and thus suggesting it was meant to hang. But the smaller end is

concave on top, like a typical Archaic bola that was lashed into straps and supposedly swung around the head and hurled at a running animal to wrap around its legs and take it down. Bolas occur in the Apalachicola-Chattahoochee valley (e.g., White 1981) and elsewhere but have usually been associated with hunter-gatherer cultures older than the time of Middle Woodland mound building. In addition, bolas usually have the wider end rounded, not pointed. This specimen is probably some kind of a weight, perhaps utilitarian in function but polished, perhaps for a special purpose. That its provenience data include a question-mark after the term 'shell-bank' may mean that the collection place was less certain, though it seems to have been part of the group with the other three artifacts.


Florida, N. America

Pale coloured egg-shaped Stone (artificially formed) conical at the larger end, & having a small concavity in the smaller.

L. 2¼, D. 1½ in in

Found in a 'shell-bank' (?) at Turtle Harbour, 2 Miles from Appalachicola, Florida.

Pres.d by A. W. Franks Esq. Oct. 20. 1869. (Waters.)

Figure 73. *Registration slip from the British Museum showing plummet or bola stone (Am.5845) collected in 1869 from Pierce.*

The additional 17 artifacts that may be from Pierce (Figure 74, Table 32) include four other ground-stone implements: three celts (2 greenstone, 1 sandstone or greenstone) and a sandstone hone (large rock with two converging grooves worn into its surface from sharpening bone or wood tools). The cylindrical shell plummet (Am. 9433) has one flat end and one chisel end, as well as three engraved, encircling lines. It was probably made on a large whelk columella and is 8.8 cm long, plano-convex in cross-section, and 2 cm thick. Another shell item, probably probably a plummet (Am.5333) is egg-shaped, with a tapered neck, 7 cm long and 3.3 cm wide at its widest dimension. The simple shell disk (Am. 5444) is 4 cm in diameter.

The seven chipped-stone pieces of local chert are two general bifacial tools and five projectile points (2 side-notched, one expanding-stemmed, one narrow-stemmed, one broken). Ceramics seem to have been less important to these collectors, as there are only two pieces. One is a large sand-tempered plain sherd from a globular bowl with a rolled, folded lip and a probable remnant of a podal support on the base (diagnostic of an Early Woodland age). The other is more unusual, a tiny bowl of a carinated (shouldered) shape with a constricting neck and four vertical areas set off by zones of 3 or 4 linear incisions filled with punctations. There are holes right below the lip, probably for suspension, and the modern string through these holes was possibly put there by the original collector. This miniature vessel fits the criteria for

the late prehistoric ceramic type Fort Walton Incised, but could also fit within the type Weeden Island Incised as well, which would make it some 500 or more years earlier than Fort Walton.

Figure 74. *Additional artifacts possibly from Pierce (or in/near the town of Apalachicola) in the British Museum collections, photographed 3 January 2013:* above, left to right, *incised shell columella tool (plummet ? Am. 9433); shell plummet (Am. 5333); chert bifacial tool (Am. 5330), narrow-stemmed point (Am.5332), side-notched point (Am. 5331);* below, *miniature Fort Walton Incised (or Weeden Island Incised) small bowl (Am.5335), side and top views (with modern string, blue rubber-gloved finger to hold it on its side).*

These 17 artifacts are listed as being from a mound or site in or near Apalachicola or Franklin County. They could have come from Pierce or any other of the many sand and shell mounds and midden ridges we know were all over town in the nineteenth century. Many of these elevations were leveled and the sand or shell was used for construction; so these artifacts might also have been picked up in the streets. There were also sites lining the bay shore for

over 10 miles west of town which could have produced these specimens. Though there is no way to know specific proveniences for them, they were made and used by people who at least were within the sphere of influence for the Pierce mound complex. Thus, since I traveled to England to do this work, I show these photos of some of them to aid future research.

Archaeological materials in the eastern U.S. were among the first Native American artifacts discovered by Europeans, with examples brought early to the British Museum. Given the greater popularity later attained by Indian objects from the U.S. Southwest or Great Plains, it is commendable that the British Museum has cared for and even sponsored research on Eastern Woodlands prehistoric material culture (e.g., King and Feest 2007).

Florida Museum of Natural History, Gainesville, Florida

Willey (1949:284) first published information on the H. L. Grady collection, which was donated to the Florida State Museum (now the Florida Museum of Natural History, FLMNH) and contained Fort Walton-period ceramics, an elbow pipe of the "Georgia Lamar Period type," shell pins, a whelk shell (cup?), and shell and stone celts. His mention of this collection unfortunately caused it to be given an official archaeological site number (see discussion above of 8Fr22), though it was nearly unquestionably from Pierce.

A handwritten note in the Florida Master Site File of the DHR (probably a copy of one in the FLMNH), possibly by John Goggin at the Florida State Museum in the 1940s, lists the materials in the collection as follows:

10 Fort Walton Incised vessels	1 bold comp stamp (Jefferson?)	1 shell pin (miss..[illegible])
1 Safety Harbor Incised	1 effigy jar	1 B. [*Busycon*/whelk] celt
1 Lake Jackson Plain	1 full grooved ax	1 clay pipe
2 check stamped gritty [?]	1 polished flint celt	

This list does not jive with Willey's list, nor with the FLMNH collections, so some further work is needed there. However, at the FLMNH, collections specialist Donna Ruhl helped me find several accession numbers associated with Pierce, including data on the Grady collection. It was apparently made during the late 1800s and is associated with an old map, Accession #2790 (Figure 75), said to show 8Fr14 (Pierce) or "Fr22, Mound Near Apalachicola 2" (not a real archaeological site; see discussion above) that had been donated by H. L. Grady in 1888.

Grady is a well-known name in the town of Apalachicola. In 1884 John E. Grady founded a ship chandlery, located in a cotton warehouse building on the riverfront, which today has been transformed into the Grady Market, with boutique-type shops and adjacent luxury hotel accommodations. Later documentation indicates that the donation to the museum was from the estate of H.L. Grady. The most likely scenario is that materials he (?) collected in the nineteenth century were disposed of after his death by donating them to the principal (possibly only) museum repository in Florida.

Ruhl helped piece together the map's story. Since the museum did not exist in 1888, that must be the year the collection was first recognized and stored somewhere. After the museum was established, many collections came to it from the 1930s onward. In 1947, interim museum director Niles Schaffer, at the request of archaeologist John Goggin, wrote to J. H. Hodges of Apalachicola, apparently then the landowner of Pierce. He asked Hodges about the location of the collection site for the materials at the museum that were catalogued as coming from Grady from a mound in vicinity of Apalachicola about 1900 (note that Schaffer or Goggin already knew that a mound near Apalachicola must be Pierce; that is how famous the site was). Hodges provided the small sketch map and note to the museum dated January 2, 1948.

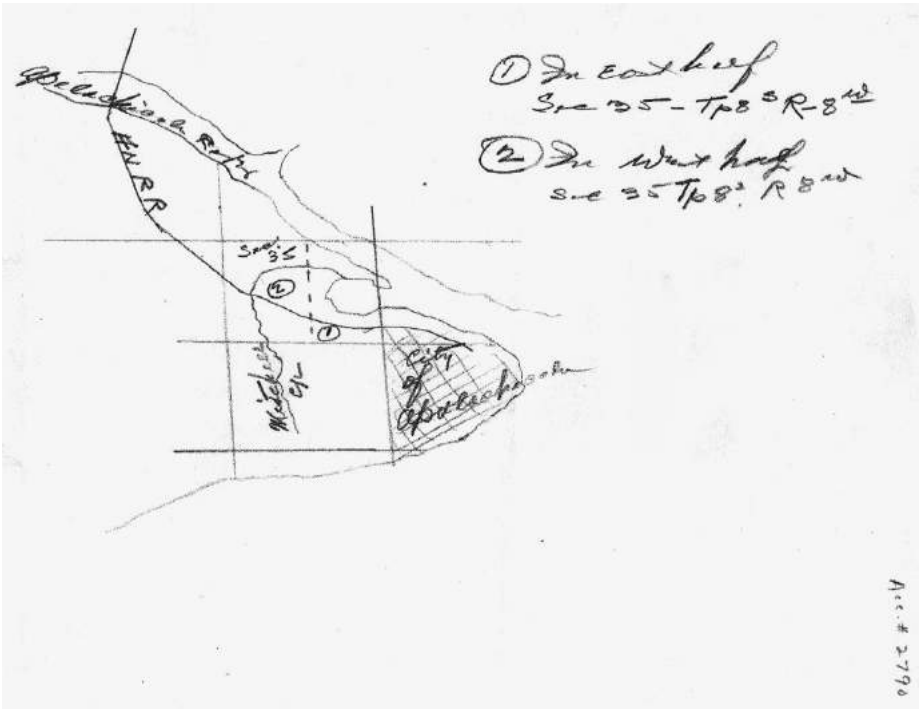


Figure 75. *1948 sketch map in the Florida Museum of Natural History (Accession #2790) showing Section 35 with (probably) Jackson (2) and Pierce (1) mounds on either side of the half-section dotted line. Note Mitchell Creek is also indicated, coming from a distance to the south.*

The map shows the Apalachicola River, the city, the Apalachicola Northern railroad ("ANRR"), and Mitchell Creek snaking through the middle. In the center is Section 35, with a dotted line marking the half-section boundary, and circles numbered 1 and 2 to show mounds on either side of that boundary. The top left notes show what the numbers mean: 1 is in the east half of Section 35, Township 8S, Range 8W and 2 is in the west half. These can only be indications of Pierce (all mounds subsumed under number 1), the spectacular mound group in the east half of Section 35, and Jackson Mound (number 2), the only one in the area situated in the west half of Section 35. But the map was drawn perhaps a half-century after the materials were collected, presumably by someone other than the collector. The most likely scenario is that the materials associated with this accession at the FLMNH were from Pierce, the most prominent mound group. The artifacts in FLMNH catalog numbers 50583, 84, and 85 were therefore probably originally collected by H. L. Grady in the late 1800s and donated later.

At the FLMNH there are also materials from Pierce collected in the 1950s by William Sears (see discussion under site history, above), and possibly others from additional workers. So

many collections from separate times and individuals are housed there that they really should be sorted out better at some future time. I was able to view a portion of the Pierce collections during a visit on 10 December 2010, and take a few photos. The museum collections have moved a lot, and curators and collections managers are overwhelmed with both their regular work and increasing requests from researchers. I could not see all the artifacts thought to be from Pierce, but I did examine some very interesting specimens, listed in Table 33.

Table 33. *Summary of Pierce Collections Viewed in the Florida Museum of Natural History.*

Cat. #	***Provenience***	***Materials***
50526	"Fr22" Grady collection	incised ceramic pipe, somewhat restored; probably same as collection presented to FSM by Grady Estate, Accession #2780
50583	same as 50584?	?
50584	Indian Mound in Vicinity of Apalachicola, Grady collection	poss. bannerstone of sedimentary rock, plano-convex with gash in bottom, donated by H. L. Grady
50585	same as 50584?	bag of at least 3-dozen shell disk beads, apparently of lightning whelk
94878	Pierce Site West, Mus. Exp. Wm H. Sears (NSF)	188 specimens, accession number 4143, "value $.25" [!] 2 check-stamped including one "rimmed" sent to University of New Orleans 11-12-76"; "Site 1 W of cemetery" 1 lg Cool Branch Incised noded rim several large shell-tempered sherds Lake Jackson rim with nodes and handle Fort Walton Incised
94879	E of cemetery[Mound Near Apalachicola? Sears?]	6 Swift Creek Comp-St 1 Lake Jackson 4 indet incised 22 check-stamped 76 plain sand-tempered
94903	N Md [Mound B?]	check-st and plain sherds in small box
94904	"center"	1 Fort Walton Inc box of mostly plain grit-tempered and indet incised small sherds

Notable artifacts include some 4-dozen shell disk beads (Figure 76) probably of lightning whelk. They are oval or circular, between about .8 and 2.5 cm in diameter, with drilled holes ranging from tiny to occupying much of the area of the bead, and hole diameters between 2.5 and 5 mm. They resemble the beads recovered from Mound C (see Figure 36). Curiously, they are not in either Willey's or the Site File's list of materials in the Grady donation.

Another interesting item is the ceramic pipe (Figure 77) that has been restored to have (and maybe originally had) equal-sized and -shaped bowl and stem, with a projection at the joining, and incised parallel circular lines and flared rims with folded lip (cat# 50526). It measures about 9 cm wide and a maximum of 6 cm high, with bowl diameter at the opening of about 3 cm. It shares attributes, such as the projection and circular incisions, with the British Museum pipe (see Figure 71). It is also similar to an elbow pipe of the same size and decoration but of single-bowl form from the Fort Walton site of Winewood, near Tallahassee (Jones and

Figure 76. *Shell disc beads from "Fr22"(Pierce, Grady collection), FLMNH Cat# 50585 (photo used with permission of the Florida Museum of Natural History).*

Penman 1973:85 [Plate 7]). It must be the pipe described by Willey as in a style of Lamar, but simply called a pipe on the later list. How it fits with Lamar, now known to be a protohistoric ceramic series attributable to unknown but foreign early historic Indians in the Apalachicola valley, is unknown. However, it might be significant that the Winewood site has been reappraised by FSU archaeologist Rochelle Marrinan (personal communication 2011), who thinks it is a seventeenth-century mission site, based on the layout of burials in parallel Christian, sub-church-floor fashion.

Figure 77. *Incised ceramic pipe from "Fr22" (H. L. Grady collection from Pierce), FLMNH Cat# 50526 (photo used with permission of the Florida Museum of Natural History).*

Willey does not mention any complicated-stamped sherds, while the later list (which ended up in the BAR DHR; see p. 172) calls one sherd boldly stamped and possibly Jefferson ware. Lamar/Jefferson ceramics were made by the Apalache mission Indians in Tallahassee. But in the Apalachicola valley they are characteristic of unknown historic Indians from a time after the demise of the original natives who possessed a Fort Walton material culture. Data from other sites in northwest Florida suggest Lamar has a date around 1700, nearly two centuries after the arrival of Europeans and others from the Old World who brought the disease, violence, and massive culture change that meant the disappearance of all the original Florida natives (White 2011; White et al. 2012). No other evidence from any collection at Pierce

suggests protohistoric or historic Native American occupation, so these hypothetical characterizations are mere speculation until better evidence is discovered. So far there is no evidence of aboriginal habitation at Pierce after middle Fort Walton times. I did not see any Lamar materials in the FLMNH collections from Pierce. The DHR list may have been from later classifications of the sherds by someone who may not have known the ceramic types well.

Sears (1959), who was interested in Middle Woodland ceremonial systems, collected about a couple hundred sherds of typical types of both Middle Woodland and Fort Walton. A note in the FLMNH collection states that one check-stamped "rimmed" sherd was given to the University of New Orleans (UNO). However, David Beriss (chair) and Juana Ibanez of the UNO anthropology department and Rick Shenkel, recently retired from there, have no records of any northwest Florida materials, nor does Steve Fullen of the Louisiana State Museum collections (communicated via emails in March and April 2007).

Finally, at the FLMNH, there are display cases in the museum galleries showing many beautiful pots from northwest Florida. At the time of my visit in 2010, and afterward, despite a request for the information, records were unavailable to see if any of these pots on display were from Pierce. Future research should include another attempt to determine everything that the museum has from this important site.

Bureau of Archaeological Research, Division of Historical Resources, Tallahassee

Both artifacts and photographs from Pierce are numerous in the BAR collections in Tallahassee. With a student who began some of this research in the 1990s, I borrowed some of the materials from the BAR collections to itemize them. After the student unfortunately dropped out of the research project, I quickly went through them and returned them. Then before beginning the 2011 research, my crew and I visited the collections on the way to Apalachicola and studied them on July 14th and 15th. The results have already been included in the tables and descriptions throughout this report. Here I add additional data on photos of Pierce also stored in the DHR collections (Table 34; information graciously provided by Louis Tesar) which may be of use for future research.

Table 34. *Photos of Pierce in the DHR Collections (data from Louis Tesar)*

Book	Number	Subject
2	72-N-03-654-664	Pierce (8Fr14) midden W of cemetery, poss. Md C [probably Md H]
	72-N-03-701-718	Pierce (8Fr14) platform md, etc., Moore Md E [unknown which mound this is]
21-22+	75-N-03-17	8Fr14 Pierce, Md B, midden, etc.
	75-N-03-43	8Fr10 [Eleven-mile Point, a mound 11 miles west of the town of Apalachicola] & 8Fr14
	75-N-04-1	cache of celts from cemetery, Fr14 Pierce, elbow pipe (no provenience)

Other Institutional Collections

As noted above in the discussion of the FLMNH collections from Pierce, some evidence suggests materials from the site also made it to Louisiana, but I have been unable to verify this. A sheet of paper in the DHR information on the site summarizing Moore's original work lists several of his pots but has a drawing of one constricted-neck, red-painted jar with the notation "RSPF 39301." This could mean the pot is at the Robert S. Peabody Foundation Museum in Andover, Massachusetts, which is known to have obtained other materials from Moore's work in northwest Florida (e.g., Gotier Hammock mound in Gulf County, White 2010). I have had good luck with the R.S. Peabody Foundation Museum in the past but have not received a response regarding these materials.

The Smithsonian Institution National Museum of the American Indian (NMAI) collections data for Pierce say that some materials were exchanged with the Florida State College for Women in 1945; this institution became Florida State University. Rochelle Marrinan, professor and current manager of those collections (since 1985), told me in a phone call (October 2011) that there are indeed some records of things sent to and received from the Smithsonian, but no items. Their current accession numbers begin at 800 but these were numbered 500-something. She said that, as early as 1962, the FSU collections have things noted as missing.

The problem with many collections, even those well managed, is that things get removed over the years, loaned out or put in or taken out of exhibits; personnel change; recording systems get updated; materials get put into newer containers. In these and many other ways, information is sometimes lost. Sometimes a detailed search can retrieve it, but the process involves a lot of work.

Private Collections

Over the years (centuries), probably many hundreds (if not thousands) of locals and visitors have collected artifacts from Pierce. Many have shown them to me and permitted photography. In general they contain mostly the kinds of things discussed in this report. Some are worth further mention.

A private collector (JC) who spent many years in the Apalachicola area, obtained a single interesting artifact from somewhere at Pierce mounds: a steatite pipe (Figure 78), which he donated to the USF archaeology lab. Steatite or soapstone is a silvery, shiny, almost gleaming and very soft stone which is very easy to carve; you can cut into it with a fingernail. It is available in the north Georgia mountains, but certainly not in Florida, so this artifact is made from a raw material that had to come from a considerable distance. Steatite pipes are known from other Middle Woodland contexts in the region.

***Figure 78**. Steatite pipe fragment from Pierce, private collection (cat # 8Fr14-JC; donated to USF archaeology lab): above, interior; below, exterior (label bears the collector's site number).*

Landowner George Mahr has a few items and is proud of the cultural significance of his property and collections Carr (1975:30) lists names of 1970s Apalachicola residents who had collections that probably included items from Pierce. He was not able to contact all these folks but future researchers might see if they or their collections are still around. The names are Jerry Allen and wife, Rudolph Buzier, Donald Totman and wife. Other collections, especially from people who attended our USF public archaeology day programs, are noted in the sections on locations from which the collections were derived.

SUMMARY AND INTERPRETATION OF PIERCE MOUND COMPLEX

The importance and longstanding fame of the site notwithstanding, Pierce Mounds complex has been poorly understood and neglected. It is often mentioned in passing during syntheses of Middle Woodland burial mound ceremonialism, and many southeastern archaeologists have not even realized that it also has a sizeable Fort Walton component, not to mention some of the very earliest evidence (Early Woodland) for burial mound activity in this region. It is certainly comparable to centers such as the great Bottle Creek mound complex in the Mobile Delta area of Alabama (Brown 2003). The long history of Native American occupation and ritual activity at Pierce is not surprising given its strategic geographic location and the rich array of resources available here from so many and varied terrestrial and aquatic ecological zones. Introducing his description of Pierce, Willey (1949:279) said, "The delta country of the Apalachicola was undoubtedly one of the most favorable and most densely populated areas for prehistoric peoples."

Pierce has been noteworthy for over a century for its sensational finds, and is cited often in the literature. As noted, Willey later even wrote about it in fictional context (see Figure 8; Willey 1993:13,20). In a letter to me (dated 7 March 1994), he said that he certainly would have tried to excavate at Pierce if he had not gone to Peru in 1941, and that it would have been a great opportunity at that time since workmen cost $2 a day. I am glad to carry on Willey's legacy (if not with such cheap labor!) and reexamine this important ancient capital.

Mounds and Habitation Areas

Of the 13 mounds that were probably all part of the Pierce complex, 9 are extant on Mahr property, 3 were probably destroyed and spread around within the Magnolia Cemetery and one remains to be relocated. As summarized in Table 35, the west side of the site, including Mounds A through D, seems to have originated within the later portion of the Early Woodland period, perhaps as early as a century or two A.D., as indicated by Deptford Linear Check-Stamped and tetrapodal vessels. The lack of diagnostics indicating habitation or use during earlier Early Woodland (such as Deptford Simple-Stamped pottery) or Late Archaic (such as fiber-tempered pottery) is interesting. Perhaps the fluvial geomorphology of this lowest portion of the river valley was not as favorable for people to live here until late Deptford times.

Nonetheless, the late Early Woodland components of these mounds are the earliest documented burial mound evidence in the Apalachicola delta region. Occupation and burial of the dead continued on this west side of the site through the height of burial mound ceremonialism in the Middle Woodland, with abundant evidence ranging from Swift Creek, early Weeden Island, and a few Santa Rosa ceramics, to exotics such as silver and copper, and ceremonial items such as whelk shell cups and stone artifacts. Though no radiocarbon dates are yet available from Pierce for this Middle Woodland component, elsewhere in the region it is known to extend as late as A.D. 650 (White 2010).

Similar late Early and Middle Woodland components are present in the Magnolia Cemetery on the east and far east side of the Pierce complex. Here the domestic deposits of shell midden material and also apparently at least three mounds were partially removed and partially remain as spread, nearly leveled soils. Thus the complex is anchored on west and east sides by the earlier mounds and habitation debris.

Table 35. *Summary of Mounds and Components in Pierce Complex by Function and Time Period*

Area Name	Site #	Time Period(s)	Function	Condition
Pierce Mound A	8Fr14	Early & Middle Woodland	burial	excavated, looted
Pierce Mound B		prob Early & Middle Woodland	burial?	somewhat looted
Pierce Mound C		Early & Middle Woodland	burial	very looted, backfilled
Pierce Mound D		indet Woodland	burial?	gone by 1907?
Singer Mound	8Fr16	Early & Middle Woodland	burial	looted
West Village area	8Fr14	Early & Middle Woodland	habitation	plowed
Central Village area		Early & Middle Woodland, Fort Walton	plaza? burials at N end	plowed, bulldozed
Pierce Mound E		Fort Walton?	platform?	slightly damaged
Pierce Mound F		Fort Walton	platform?	slightly damaged
Pierce Mound G		Fort Walton	platform?	slightly damaged
Pierce Mound H		Fort Walton	temple md	cut by railroad; looted
East Village area		Fort Walton	habitation	heavily bulldozed
Cemetery Mound/E Village area	8Fr21	Early & Middle Woodland	burial, habitation	mound gone; spread with midden, shell
Mound Near Apalachicola, Shell Mound Near Mound Near Apalachicola, far eastern town area (new cemetery midden)	8Fr20	Early? & Middle Woodland	burial, habitation	both mounds gone, used for fill in 1935, 45?, and spread around; midden mostly bulldozed away, some remaining at far eastern end, shells, black soil, artifacts
Cool Spring Mound	8Fr19	Middle Woodland, Fort Walton	burial	gone? not relocated

Significantly, the abundance of generic check-stamped pottery nearly everywhere throughout the Pierce site, as well as the occasional occurrence of ceramic types such as Carrabelle Incised and Punctate and Keith Incised, which are known to have lasted into late Weeden Island times, suggest continuing habitation through the Late Woodland period (as late as about A.D. 900). Unfortunately, there exist few diagnostic artifacts unmistakably indicating a Late Woodland occupation, and cultural deposits of this time period are often only recognized through radiocarbon dates. More dates could delimit the full occupation span.

One hypothesized reason for the decline in spectacular burial mound ceremonialism and exotic or elaborate artifact production and/or importation during Late Woodland has been the possible shifting of labor effort toward the intensification of food production. This was the time during which native peoples were experimenting with horticulture, growing the already-domesticated local crops such as gourds and sunflower, but also the even more productive

cultivar, maize, which had been imported from Mexico (possibly through the southwestern U.S). Farming took up a lot more time than did simply gathering wild animals and plants. However, in coastal and estuarine areas such as the environment around Pierce, agricultural lifeways may not have developed. Aboriginal groups seem to have continued harvesting wild resources from the river, estuary, and bays through late prehistoric times, as their ancestors had done for centuries, even millennia.

During Fort Walton times, maize-beans-squash farming became the foundation for powerful chiefdoms that emerged at inland riverine sites, but the material evidence suggests this was not the case on the low swampy, salty coast (White et al. 2012:263). New data on this issue are derived from the geochemistry of archaeological shells collected by Fort Walton groups on St. Joseph Bay. Harke (2012) found that these late prehistoric people camped there to obtain seafood during the summer, a time when their inland counterparts (probably also their relatives) were planting, tending, and harvesting corn. The interior Apalachicola valley has several Fort Walton temple mound centers, with flat-topped platform mounds, plazas, and large agricultural villages, usually right on the river (Du Vernay 2011; Marrinan and White 2007; White 2011a, b). These are typical Mississippi-period towns like so many others all over the Southeast (Ashley and White 2012). But Pierce is a coastal Fort Walton temple mound-village center without evidence for agriculture. Even at places on the coast where maize remains have been found in late prehistoric contexts, such as Bottle Creek mounds in the Mobile delta region of Alabama, this maize appears to have been brought in already processed, possibly as tribute (Scarry 2003). The coastal soils, salty environment, and ubiquitous wetlands are not beneficial for growing maize and other domesticates.

The Fort Walton component at Pierce is on the east side of the site, anchored by the Temple Mound H, but spread over a smaller area than the Woodland habitation area and mounds (Figure 79). Like other archaeologists, I have called what is now named Mound H a temple mound because of its shape and its position amid the Fort Walton occupation. It is a rare example of a flat-topped mound made apparently mostly of shell (embedded in the black-sand midden soil matrix). Rather than a ceremonial deposit of oyster and clam shell, it is more likely a ceremonial construction made of the easiest building material to obtain, the midden garbage that had already been piled up in a high ridge. Since the temple mound appears to have sat right on the midden ridge (hard to tell after the railroad construction took so much away), it would not have taken a huge amount of labor to construct by simply piling the surrounding shell and sand even higher in one spot. Mound H has no visible ramp, a feature typical of temple mounds, but there might have been one that is now gone. At least one major temple mound extant in this valley, Yon mound (8Li2; Du Vernay 2011) does not have a ramp.

Though the Pierce Fort Walton component is well-dated to A.D. 1270 by the single radiocarbon assay from the charcoal in the core east of the temple mound, we do not know the duration of this occupation; it probably extended for several centuries. More dates would help of course, and no site can ever be characterized by a single date. Since no contact-period materials have yet been recovered, it looks like people had abandoned Pierce by the time of

the Spanish entrada in the early 1500s. Even though no conquistadores are documented as far inland as the Apalachicola River valley, glass and metal artifacts at a very few sites indicate that the Spanish presence, and probably their germs, made it into the region during the sixteenth century, resulting in the extinction of the local populations who produced Fort Walton material culture (White 2011a). Another potential explanation for the abandonment of the site in late prehistoric times might be fluvial geomorphology. Perhaps the time around 1400-1500 was when the Apalachicola River migrated eastward and no longer flowed right next to to the site, taking away both a nearby food source and a convenient transportation/information corridor.

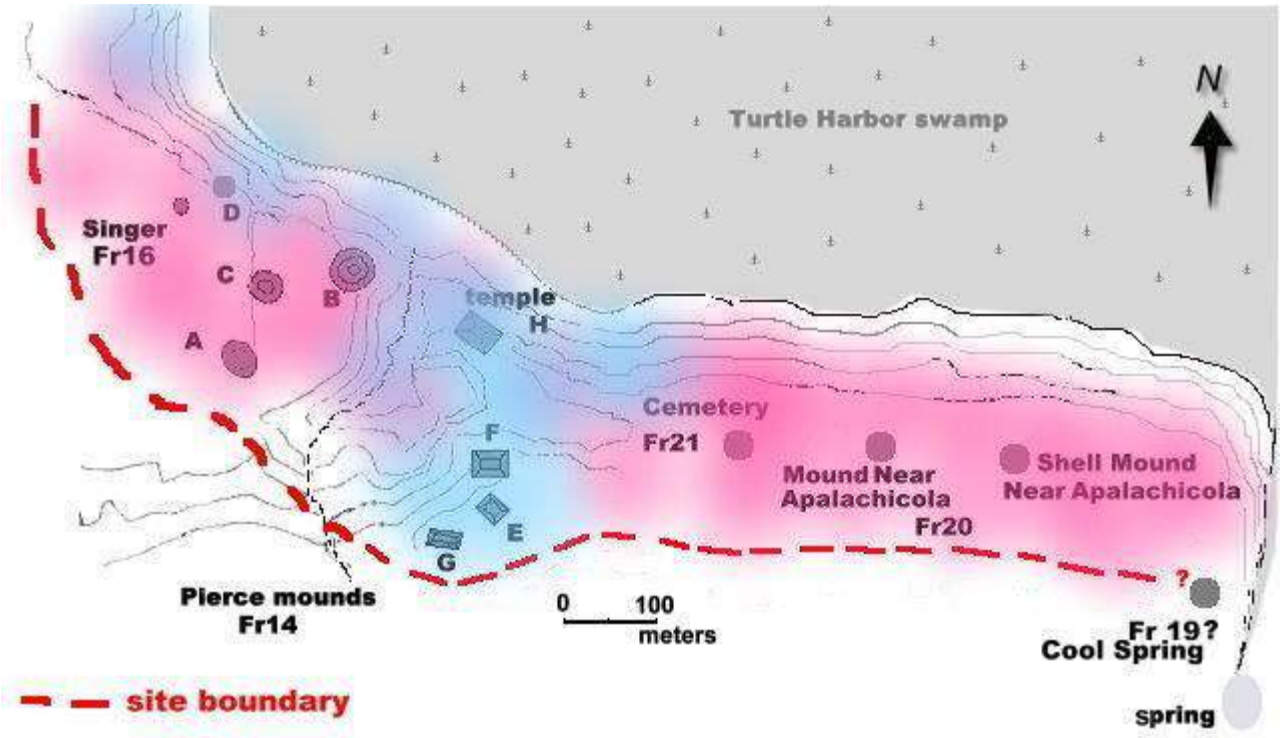


Figure 79. *Map showing extent of Pierce prehistoric components as presently known, with pink indicating late Early and Middle Woodland, and blue indicating Fort Walton.*

Fort Walton ceramics were present in small numbers on the far west side of the site on the shell midden ridge, indicating these later prehistoric people utilized the riverbank probably for subsistence purposes, if not also for spiritual reasons related to the mounds there. A big question is whether the seven mounds (A, B, C, E, F, G, H) that seem to be arranged in an open oval, with the interior long axis measuring about 450 m northwest-southeast, were deliberately placed in that configuration. Obvious related and equally important questions are whether Mounds E, F, and G were platforms constructed by people and for what reason. Compared with the exotics and spectacular material record of the burial mounds, Mounds E, F, and G are astoundingly boring, with those very few and non-diagnostic ceramic sherds. My best reconstruction, however, is that these three are indeed artificial mounds, intentionally- built

Fort Walton platforms (as idealized in Figure 79). Though no structural features have been exposed in their summits, there are no other natural or cultural explanations for them. Other platform mounds in this region attributable to Fort Walton times have little evidence for specific function other than possibly elevation of people and buildings above rising waters during the annual late winter-early spring flood season. An example is at Chattahoochee Landing, a mound complex at the other end of the Apalachicola River some 110 miles upstream (White 2011b).

Native Americans were experts in geometry and engineering of mounds and other earthworks, sometimes in accordance with astronomical or geometric alignments. Perhaps the reverence of later people for the earlier Woodland burial mounds inspired them to complete an oval figure to delimit some sacred ground. Though we obtained no definitive evidence for a plaza in the middle of the oval, two arguments suggest there could indeed have been such a specifically delimited area amid the mounds. First, two shovel tests, a test unit, and a core dug within this oval revealed absolutely no cultural materials, but plaza areas were known to have been swept clean of debris in preparation for public events such as ritual practices. The abundance of check-stamped and plain ceramics and projectile point and lithic debitage in Shovel Test 11-1 (see Figure 9), on the northwest side within the oval, may have resulted from the earlier occupation many centuries before the Fort Walton component, and a central plaza may not have extended as far west as its location. The abundance of materials from Shovel Test 94TJ dug by Tesar and Jones of the BAR is probably a result of the location of this test on the shell midden ridge at the north edge of the oval; it would not be specifically within any plaza area but at the margin.

The second argument in favor of the existence of a plaza is that the stream now running through the middle of the oval and between Mounds B and H may be of modern origin and may have taken away some prehistoric evidence. This stream, possibly identified with the one named Mitchell Creek, is not shown on Moore's sketch map and may have been dug as a drainage ditch by the railroad construction crew, as the second ditch, farther west and running south between Mounds A and C, probably also was. The larger and more irregular stream/ditch within the oval was clearly described by Willey (1949:280), who called it a "sluggish stream and swamp-filled ravine" and probably did not explore it (he was not a swamp guy). It is a deeply incised stream and may also have come from or been otherwise connected with a possible spring at the southwest of the site outside the oval (which was a nearly dry, very small hole in summer 2011). Another possibility is that this was a tiny drainage enlarged by the natives who got soil to construct mounds. There are no other excavated areas at the site that could be postulated as borrow pits, which is unusual for a mound site (unless the mound fill was obtained from the low wetlands to the north; we already know some mound fills were shells from the shell midden ridge).

Gordon Willey told me he hoped I could someday dig at Pierce, and if I ever did, I should look for some postmold in the middle of the oval of mounds that the Indians would have measured from. Perhaps some priest-engineer standing in the center directed helpers to hold

strings out specific distances and in specific directions according to the sun, moon, or some star or planet at a particular significant date to mark locations to build mounds. However, if the mounds are as far apart in age as up to 1000 years, this probably did not happen all at once for the whole place. So the question of a typical Fort Walton plaza amid an atypical oval of older and Fort Walton mounds, including low platforms, remains open.

Subsistence, Ceremony, Significance, and Potential

The indigenous inhabitants of Pierce harvested the bountiful resources of the waters, wetlands, and higher ground around the site and beyond. Faunal remains preserved within the shell midden ridge and elsewhere include those of many fish, shellfish, turtles, various mammals, and probably some herpetological species as well. Charcoal and other charred botanical remains include various seeds and probably hickory nut and acorn shell fragments too. There would have been plenty to eat. Shellfish, if ethnographic evidence from elsewhere in the world is applicable here, may have been only a supplemental food, easy to get when nothing else is around or little effort is desired (though of course today Apalachicola oysters are prized). Perhaps the combination of both *Rangia* clams and oysters in the midden deposits indicates that natural fluctuations in salinity of nearby waters simply meant harvesting whatever shellfish was available. Or it may mean that people traveled to different segments of the watery environment to pick up different foodstuffs.

The thick bottomland hardwood forest that would have covered the riverbank, as well as the lower wetlands filled with cypress trees and marsh grasses, would have provided a vast supply of wood, bark, and other plant resources for manufacture of tools, textiles, buildings, and other items. Whether the river was immediately adjacent to the site or had already moved eastward when people first arrived or continued to live there, access to its resources and travel networks would have been easy. While some people today in the age of air-conditioning and controlled environments find marshes and swamps to be disagreeable places, the Indians would have considered them perfect for habitation and full of everything they needed – it would have been like living next to the mall with grocery, hardware, clothing, and other stores just steps or short rides away.

By late prehistoric times, Fort Walton sites upriver were producing a great deal of maize, some cobs and kernels of which have been recovered in archaeological contexts (White 2000). But the inhabitants of Pierce had all they needed right there without the additional hard work of food production. They probably had just as complex a sociopolitical system as the inland chiefdoms, as well. In late prehistoric peninsular Florida the Spanish recorded Calusa Indians and others with tributary chiefdoms supported solely on wild, gathered resources, with no maize or other agriculture at all (Ashley and White 2012).

The work described in this report is far from completed. Animal and plant remains recovered need to be quantified; then dietary contributions of different species can be detailed. Meanwhile, a big question at coastal sites such as Pierce, whether for the earlier or

later prehistoric component, is the issue of residential mobility. Obtaining wild resources can mean moving around to where the different species are available at different times of the year, instead of permanently settling near gardens or agricultural fields that need tending.

Traditionally, shell midden sites left by prehistoric coastal foragers were taken as evidence of seasonal movement, especially if they consisted of just piles of food garbage. Now many researchers (e.g., Crook 2012; Marquardt and Walker 2013; Quitmyer 2013) are realizing that large sites where monument construction was important and where evidence in the soils, faunal, and floral remains points to year-round occupation were indeed centers for sedentary populations. Not only burial mounds, but other communal or public architecture such as the platforms and midden ridge at Pierce, as well as the vast quantities of faunal remains, indicate it was a permanent town, probably continuously for up to two millennia. If parties of fishers, hunters, or gatherers went out for a few days to harvest whatever resources were available in different seasons, they probably brought them back home to this place. If particular species that were usually abundant in the streams and bays became unavailable due to storms, sea-level fluctuations, or other natural events or processes, the richness of the lower Apalachicola delta environments probably meant that other species equally or almost as good could be obtained (and by Fort Walton times, people could trade upriver for agricultural products).

The fact that Pierce is more than simply a big prehistoric Native American town may relate to spiritual qualities of the rich environment; we know wetlands are sacred in many cultures (Van de Noort and O'Sullivan 2006). Whatever the reasons, people built at least a dozen mounds here, at least half of which were for purposes of burying the dead, often with elaborate ceremony and grave goods. Since Moore found additional burials off the mounds (in the area between Mounds B and H and off the side of Mound B), we might expect there are more as yet undiscovered. It would be more typical for Fort Walton-period graves to be in cemeteries, not in mounds. The whole site is imbued with enormous significance for both living and dead, and must have been strongly within the consciousness of native populations for at least 1000 to 1500 years. By the time of its latest occupation, the site stretched some 1.5 km, not an unusual size for a significant mound complex in the Southeast.

It is unknown whether the shell midden of the ridges lining the bank was deposited only as garbage or also as a solid foundation for domestic activity. But we do know that the shell was used to construct some strata in mounds, both in Woodland and Fort Walton times. The ridge extends the entire length of the site, and probably once continued unbroken at least 2 km long around the edge of the whole modern city of Apalachicola. Now it is demolished in so many places, taken out for fill dirt, newer construction or even ancient burial mound building. But probably more of it remains than we think. For example, the North Ridge site, 8Fr73, was a shell midden with plain pottery recorded by Carr (1975 and data in Florida Master Site File) that was removed for building a filtration plant. During excavations for buildings along the Apalachicola city waterfront and for the old and new bridge, many prehistoric ceramics and other artifacts have been found. At least one collector has told me of digging for years along the waterfront on Water Street and obtaining hundreds of artifacts. On the other hand, my survey (White 1987)

of the Scipio Creek boat basin enlargement turned up absolutely no evidence of prehistoric occupation, suggesting that the immediate area of Scipio Creek was marshy, low, and unfit for living (but probably good for obtaining animal and plant resources) during prehistoric times.

Other construction, such as the Cypress Lumber Company, shipping and seafood businesses along the river docks, and waterfront homes, have all doubtless removed or severely altered what must once have been this continuous prehistoric shell midden ridge around the city. Its elevation probably made it more attractive for successive habitation, putting it above the regular flood zone. The importance of sitting on the elevation of the bank or bluff above the river is emphasized even today, as the major road running along the southern boundary of the Pierce site is called Bluff Road (an extension of 12th Street as it runs out of town), even though it is not really on a high bluff but just a sand ridge. But we can imagine how prehistoric travelers along the river or bay may have seen the Pierce shell midden ridge as a visible line of white ground along the green banks and shores, possibly covered with houses, and with canoes tied up at the water's edge. People may have stayed there temporarily or lived there permanently to make a good living.

There was probably a lot more ceremonial activity at this site than even is apparent from the archaeology. Moore may have expended so much time and energy in Mound A because he started finding things right away. He was otherwise prevented from digging elsewhere for additional reasons (such as the palms on Mound B), so he may have given up long before finding all the spectacular burial artifacts he might have wanted. Previous research at other sites he investigated (e.g., White 2010) has shown me that many fancy ceramics and other items remain to be discovered, especially in Middle Woodland burial mounds. But further digging is not a high priority if preservation is possible. Additional study of the Pierce materials already excavated can be done with new scientific tools.

Material Culture and Long-Distance Connections

The Middle Woodland burial mound ceremonialism at Pierce displays clear connections with sites of similar age throughout the eastern U.S., as far north as Ohio and New England, as far south as Crystal River near Tampa, and as far west as Arkansas. Many of the Pierce artifacts bear similarities to those from distant locales, and many raw materials had to have been obtained from afar. The Fort Walton component, similarly, resembles mainstream Mississippi-period cultures throughout the Southeast, but with distinctive characteristics for the region.

Such items as the worm-shaped pot or the vessels with two and three necks or red-painted and incised designs are typical of burial mound elaboration in the East. But the plain pottery is equally common in grave offerings and is good evidence to reject the "sacred-secular" dichotomy in artifact manufacture and use (the idea that plain artifacts were only for everyday use and other, fancier ones were only for ritual). The ubiquitous check-stamped pottery found nearly everywhere at Pierce is probably attributable to many different time periods, from Deptford through Middle and Late Woodland and early Fort Walton.

The Santa Rosa pottery, with its rocker-stamped surface decoration, is extremely rare in the Apalachicola valley region. It is more characteristic of Middle Woodland farther to the west, around Pensacola. Our USF database of over 1200 Apalachicola Valley archaeological sites includes about 200 Middle Woodland mounds and occupation areas; from all of these the total artifacts combined include only 3 or 4 Santa Rosa Stamped sherds. So the few from Pierce Mound C and elsewhere are all the more significant, showing interaction with groups to the west along the Gulf.

Late prehistoric ceramics at Pierce include all the typical Fort Walton types. A long span of habitation is suggested in several ways. For example, the very small percentage of shell-tempered sherds, as well as the cobmarked ceramics, are typical of the earliest Fort Walton in this region (Du Vernay 2011; White et al. 2012). The ceramic type Cool Branch Incised suggest a date of about A.D. 1200, as proposed by Du Vernay (2011). The sherds of 6-pointed open bowls of the type Fort Walton Incised are recognized to be one of the distinctive ceramic aspects of identity for this archaeological culture. Such bowls have been found with contact-period burials in Calhoun County (White et al. 2012). An interesting sherd disk from Pierce (donated, assumed to be surface-collected, #94-2.7), inscribed with a star-shaped figure like an asterisk, resembles one found at the Fort Walton site of Thick Greenbriar (8Ja417), some 99 miles upstream, which also is dated to the contact period (White 2000). This design may have some specific late Fort Walton symbolism.

The few pieces of clay daub recovered suggest structural remains at the site. We cannot know (so far) if they were sacred buildings or everyday domestic dwellings or both. Shell tools, mostly of *Busycon* (lightning whelk) have come from all areas of the site, and probably date to all time periods. This shell was important in both Middle Woodland and Mississippi-period ritual, especially for cups with which to drink the special “black drink” (yaupon holly tea). Many shells/shell cups were with or apart from the graves in Mound A, attesting to their ritual importance. However, the use of the large gastropod shell for utilitarian tools was also prevalent at Pierce and elsewhere along the coast (e.g., White 2005a), though not much inland.

Gulf Coast whelk and conch shells moved as far north as Ohio during the Middle Woodland, to be interred with the honored dead in Hopewell and other burial mounds. But this shell may have been less associated only with the sacred at Pierce since it is common and easily available, and so it could also be used for those mundane tools. However, people at Pierce could also have traded these northward for many of their exotics. They could also have traded the yaupon holly tea leaves, obtainable from a tree that grows mostly along the coast.

Elsewhere, I have speculated (White 2013) that, by Early Woodland times, Apalachicola valley natives were trading what may have been their two most valuable items, big shells and dried yaupon leaves, widely into the interior. Shells were easy to get and transport, not available inland, and important for ceremonial artifacts all over the eastern U.S. (whether as black drink cups or for carving into beads, gorgets, or other decorations or ritual paraphernalia). Yaupon provided caffeine, one of only two drugs (the other being nicotine) available in the

South. Native Americans north of Mexico apparently did not have alcohol or any other mind-altering substances beyond these two drugs, for unknown reasons (White 2005b). We know that people will go far and expend great effort to acquire drugs. Pierce may have been a major center for this kind of economic exchange (and its social and political correlates).

As for the other fancy Middle Woodland items that Pierce is famous for, they are comparable to similar kinds of grave offerings at other burial mounds. For example, the panther and other carnivore teeth from Mound A, while locally available, recall similar predatory animal teeth in mounds throughout the East. We do not know if these animals were eaten, revered for their scary behavior, celebrated in ceremonies, thought to have some spiritual power – or any combination of these (Wheeler 2011). Platform pipes, copper disks and tubes, silver, shell beads, mica, all occur in rare but significant instances throughout the eastern U.S. Silver and native copper came from the far north. The copper tube from Pierce Mound A could be a musical instrument like the silver-covered panpipes from Tunnacunhee mound in north Georgia (Jeffries 1976).

Greenstone and other ground stone that was made into celts is not native to Florida but must come from the Appalachian mountains, probably from north Georgia down the Chattahoochee/Apalachicola system. The same is true of mica and steatite. Someone had to obtain these stones, either on single trips or down-the-line from others who moved such goods. Plus, the artifacts of these materials were probably made elsewhere and brought in, as there is no debitage that would indicate manufacture at the site.

Tobacco is known to be an important substance for spiritual and political use (as well as its pharmaceutical properties), which continues among modern Indians. It is no surprise that artifact finds at Pierce included clay smoking pipes of both the elbow and platform shapes. Dan Penton, an archaeologist who, as noted throughout this report, has worked at Pierce, also identifies with his Native American forbears as an elder of the Muscogee Nation of Florida. He told me that Pierce is still considered a sacred site, and tobacco offerings are appropriate there.

Such fancy and notable items as those in the Pierce mounds may have been keepsakes or special possessions of the dead, prizes recovered during pilgrimages, or specific magical things for shamans or other spiritual practitioners. We have few clues on the burial ceremonies, but interpreting all this mortuary ritual has been a favorite pastime of archaeologists in the East for at least a century, and the theorizing and documentation of data continues unabated (e.g., Carr and Case 2005). Recently I have suggested that they may not necessarily religious objects to have been used and deposited in such ceremonies (White 2013). However, the fact remains that, when artifacts that were expensive in terms of the time, effort, and distance needed to obtain them were buried, they were taken out of economic circulation, stimulating the demand for replacement goods of some kind. Thus there are not only ideological systems under study here, but systems of wealth, social standing, and political and economic power conferred by such possessions. The Pierce site would have been at an important node in the sociopolitical interaction and information-flow networks because of its strategic location. It became

established early as a major center, and succeeding cultures maintained its importance and probably its sacredness, establishing later Woodland and then Fort Walton occupations and mounds. All this is all the more fascinating given that the subsistence systems continued traditions and practices established for thousands of years, with people living mostly on wild aquatic resources.

By the time of the Fort Walton occupation at Pierce, the mound building ritual and accompanying ceremonial practice may have become more "routinized" and may have helped reinforce the presumably more complex social order of the chiefdom (Beck and Brown 2012). Though there is no evidence of Fort Walton ritual yet recovered at Pierce beyond the building of the temple and platform mounds (which may have been utilitarian), it may remain to be discovered. Further, the idea that Fort Walton or any other Mississippian society must be built upon a foundation of maize farming is nicely challenged by the data from Pierce, a significant but seemingly non-agricultural center. While it might be possible that coastal Fort Walton people traded smoked fish, oysters, yaupon holly leaves, and/or large shells upriver to obtain dried maize, it is equally possible that they were able to accumulate a surplus of their own local resources just based upon the abundant aquatic resources of the rivers, other streams, bays, and Gulf.

A report such as this is not the place for an extended discussion of archaeological theory (nor does the reader really want to wade into what has lately become a complex and sometimes boring area of our otherwise exciting profession!). However, it is important to note that I am interpreting the material record at Pierce through a mostly materialist, scientific perspective, but with the understanding that some humanistic modeling is useful to try to imagine how generations of native Americans were living there. We can picture limitless scenarios of aboriginal folks canoeing down the river, pulling up to the banks, where the white shell ridge and possible cleared, yellow-sand mounds were visible as monumental places significant in the consciousness of the average person. We can more reliably reconstruct groups of fishers or collectors on the shores, netting or diving for or spearing various animals, possibly with the kids wading in to collect shellfish (a less dangerous activity requiring fewer adult skills). Less reliable, but no less interesting, might be reconstructions of ceremonial activity, with special people burning important possessions used in burial rituals to leave with the dead, and dragging hides covered with dirt to cover the grave and continue construction of the mound. Even such imaginative models can spin off hypotheses for scientific testing. Suggestions for future research amid all the unanswered questions for the Pierce site are given in the next section.

CONTRIBUTIONS OF THIS WORK

The years of research at Pierce are in no way finished with the production of this report. But I hope that correcting the mistakes and documentation of the material record and remains of this important site can make some contributions to Florida archaeology in many ways. This section is an appeal for greater appreciation, conservation, and good management of the site, and further research.

Archaeological Synthesis and the Stories of the Past

First, we need to tell the story of the past. Even if it we do not have family/genetic or cultural ties with peoples who lived here in ancient times, the natives who inhabited the Pierce Mounds Complex are part of the human heritage that belongs to everyone. It is supremely worth learning about how they got along at different times in the past and not only faced the mundane tasks and challenges of daily life but also constructed systems of belief, ritual and ceremony, as well as beautiful and interesting art and craftwork. Plus, the knowledge of how different groups made a living on the same land we inhabit today can be both fascinating and useful. For some two millennia Indians obtained here the animals and plants of the lands and waters, utilized the forest and river and bay resources, and faced many of the same kinds of challenges we have now.

The aboriginal American societies who left the archaeological record at Pierce probably came to live there some time around 2000 years ago. They hauled soil in baskets or sacks or dragged it on hides or cloths to pile it up and build mounds. They made both beautiful and plain pots, paints, points, pipes, musical instruments, and other artifacts, and used many in special ceremonies that also involved burnt offerings to accompany burial of their dead. Wolves, panthers, other cats, but maybe even grubworms too were among the animals they considered important for more than just food. They hunted, fished, gathered nuts, chopped down and burned trees, made canoes, played chunkey and other games. They must have obtained some kind of status associated with exotic artifacts, which were expensive and yet buried with some people, not allowing others to have them.

We cannot know if the area of the entire Pierce complex was occupied at the same time or throughout the perhaps 2000 years of prehistory, or whether occupation was continuous. The distribution of artifacts from all time periods represented suggests it was. The earlier mounds may have become sacred places for later people to come to pray, worship ancestors known or thought to have been placed there, or just feel a sense of the spiritual beyond everyday life, or a sense of territory and patriotism. The existing Woodland mounds were part of the cultural landscape that may have attracted later peoples or, more likely made attractive the continuous occupation through Fort Walton times. It looks as if Fort Walton people came there as early as A.D. 1000, or more likely were already there and gradually changed artifact styles from their Middle and Late Woodland antecedents. These folks must have lasted until

about A.D. 1500, when all the original natives in the region began to disappear as a result of the invasion from Europe.

There is no indication of a protohistoric or historic Indian presence at Pierce, which would be indicated mostly by ceramics. There is no Lamar or later Lower Creek/Seminole pottery (though Willey mentioned a Lamar-type pipe from the donated Grady collection). Thus it is unclear why this strategic area was abandoned in historic times. Probably there were plenty of Fort Walton people here at the time of contact; when they all died off due to the warfare and germs introduced by the Spanish entrada and colonization, nobody returned to continue the site's occupation. By that time more interaction was centered around the confluence of the three rivers 110 miles upstream where Spanish missions were built in the late seventeenth century. Also, there is Lamar occupation on the barrier islands surrounding the river mouth and bay. Lamar is the material culture of some unknown historic Indians, but may have been from Apalachee Indians or others briefly stopping as they fled the 1704 invasions by the British and their Creek Indian allies, who ultimately destroyed (and sometimes absorbed) the indigenous peoples of northwest Florida. Pierce seems to have been uninhabited from the end of Fort Walton times until some two or three centuries later, when Euro-American settlers came to build a historic town and began to remove its artifacts.

Future Research

Many avenues remain to be explored in the scientific documentation and interpretation of the Pierce Mounds complex. But the site has exciting and amazing potential to address several of the big questions in twenty-first century archaeology, from ritual systems to ancient subsistence differences between coast and interior. The USF collections continue to undergo analysis; some soil samples still need flotation, and for others, the remains recovered by flotation need to be sorted (a long arduous process under the microscope). The artifacts should undergo additional analyses, and the faunal and floral remains should be identified and analyzed by qualified zooarchaeologists and ethnobotanists.

All these collections remain well-curated and available for additional research when the tools and support become available. Throughout this report I have indicated areas of possible further investigation, from obtaining more radiocarbon dates to continued inventory and documentation of museum collections to wider comparisons with the record of similar sites in the eastern U.S. The copper and silver artifacts, the ceramics, and other materials could undergo sourcing studies (materials analysis or trace element identification) with the proper instrumentation, and even DNA study of faunal specimens and shell and bone artifacts might shed light on everything from subsistence questions to trade and long-distance exchange in the prehistoric eastern U.S. Perhaps the DNA of the one known human bone from Mound A, in the National Museum of Health and Medicine, could be examined.

The materials in the Florida Museum of Natural History, as mentioned, need to be located, classified, and quantified, so as to permit comparison with other collections. More early documentation (such as the map in Figure 7) may turn up there too, and perhaps the identifications of the whole pots in the northwest Florida display can be determined, to see if any are from Pierce.

A potentially fruitful area of research that is popular lately is the study of Swift Creek Complicated-Stamped patterns, whether in their symbolism or the more practical topic of identification of the distribution of different designs across the landscape. There are many unusual and typical (and beautiful) designs represented by the complete assemblage from the whole Pierce complex. In addition, there are other ceramic treatments worthy of further investigation. For example, sherds from the Mound Near Apalachicola/Pierce East Village include an unusual complicated-stamped herringbone design, and a stamped pattern done with some barbed tool that we have been unable to identify (it is not a stingray spine or shell edge but may be some fish bone; see Figures 64, 65). Other ceramic attributes are also worthy of further study. The Middle Woodland sherds often have a much more micaceous paste amid the usual micaceous wares of this region of the South, and they are often highly burnished.

Digging into Archives

This research shows, I hope, some of the value of the immensely difficult and complex labor of digging into unpublished field notes and maps, museum accession data, courthouse records, and other original sources. Today many think research is something done online. But there is a wealth of unpublished, dusty old paper out there (or even microfilm) with information that can greatly change or help interpretation. In addition, much of that old, unpublished stuff is now being made available electronically, including museum collections data, or can be scanned for further use. Great insight was gained from the Pierce collections and also the archives during the visit to the British Museum.

C.B. Moore investigated many sites in coastal locations that contained mounds and associated shell middens, and more of this is becoming understood as researchers re-examine his work and consult unpublished sources on his investigations (e.g., Pearson and Cook 2003). For understanding Pierce, nothing has had an impact as big as that of finding Moore's original map of the site in his notes. Why he did not publish it is a mystery, but at least he kept field notes. No researcher can proceed well without original notes. Recent writing on the subject (Canfield 2011; Greene 2011) notes how field scientists' training is lately diminished as universities offer fewer field courses and students are not prepared for the tedious daily data collection of science that requires so much time and effort. But explorers, travelers and naturalists of earlier centuries have provided a wealth of observations crucial to modern scientists working in radically changed environments. Greene (2011) even notes how European Paleolithic cave painters were not only crafting their art but also leaving field notes, depicting Ice-Age animals they observed and hunted, with accurate portrayals of now-extinct species, as data for scientists 30,000 years later.

Management Recommendations And Public Archaeology

The beauty and monumental nature of the Pierce mounds complex remains impressive today, even with the damage to so much of the site. I hope this report helps its proper scientific documentation at a time when archaeological looting is at an all-time high worldwide, and collecting ancient artifacts, real or fake, not only destroys what little of the human past remains but also feeds into unethical, often illegal markets and allows the uninformed and greedy to "create fictional narratives" (Early 2012) about the past.

On 11 January 1974, thanks to the work of state archaeologists, the site was listed on the National Register of Historic Places. However, such a listing does not afford any protection for an archaeological site. It is crucial that Pierce be preserved as much as possible, for so many reasons, from heritage conservation to ecological issues to scientific research potential. Since the work described in this report adds interpretation and clears up mistakes, updated site forms will be sent to the Florida Master Site File to eliminate the mountains of confusion about names, numbers, and locations of mounds and other site features at the Pierce complex.

Landowner George Mahr invited this work and hopes either to develop the land and have the archaeological site be an attraction for those who would build homes there, giving residents the opportunity to dig along with archaeologists, or else to sell the land for conservation purposes. As scary as the first alternative might sound to a modern professional archaeologist mainly interested in resource preservation, it might be a way to save the site. As noted in a Montana newspaper article (Headwaters News 2007; forwarded by the DHR's Brian Yates, to whom I am indebted), this might be an option for both preservation and public archaeology, not to mention research. The second alternative is far preferable, however, especially as the city of Apalachicola continues to attract heritage tourism. There is also the possibility of human burials, not only in the mounds, but (as Moore found in 1903), in between the mounds and potentially anywhere else at the site. Chapter 872, Florida statutes, especially Section 872.05, prohibits any disturbance of unmarked human skeletal remains; its stringent permitting obligations and other requirements, such as consultation with living Native Americans, can mean years of work and huge expense.

In their recent comprehensive plan, the City of Apalachicola (2004) notes, in section F, Historical Archaeological and Architectural Resource Land Use, that the catalog of prehistoric archaeological sites includes Pierce, in poor condition and mistakenly described as being east of the cemetery. Other sites are Cool Springs and Cemetery Mounds, listed as "disappeared," and another site, North Ridge, 8Fr73, noted as "Prehistoric Indian Site" in poor condition. All these characterizations are erroneous. Perhaps a concerted effort to discuss the issues with those in power locally or even up as far as the governor's office, emphasizing the importance of historic preservation, tourism, the possibility of creating heritage jobs, and other crucial economic issues for our time, would help preserve Pierce mounds as an astounding archaeological site and element of Florida's cultural heritage.

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APPENDIX

CATALOG OF MATERIALS
FROM BAR AND USF INVESTIGATIONS
AT PIERCE MOUNDS COMPLEX

Proveniences are listed in numerical order by year and bag number, according to the original information on the bag, then with a translation of that information into the specific proveniences based on site area as described in this report, as follows:

GENERAL SURFACE

MOUNDS A, B, C, D, E, F, G, H

W VILLAGE

CEN VILLAGE

E VILLAGE

CEMETERY MOUND/E VILLAGE

MOUND NEAR APALACH/E VILLAGE

SHELL MOUND E OF MOUND NEAR APALACH/FAR E VILLAGE

Cultural materials listed in the various tables in the body of this report are grouped by provenience as extracted from this catalog. Catalog numbers for USF materials should be understood to include the site number, followed by a dash, and then the numbers in the tables. Yes, some catalog numbers are listed as Pierce, 8Fr14, when they are now known to be from other sites that are part of the mound complex but have different official numbers. This is one correction that must eventually be made to this catalog. Another is to include all the details of artifacts, floral, and faunal remains after they have been sorted from the materials recovered by flotation of soil samples, only some of which have been processed.

Appendix Table 1. *Catalog of materials from Pierce Mounds Complex at the Bureau of Archaeological Research (BAR), Division of Historical Resources (DHR), Florida Department of State, Tallahassee.*

CAT #	*PROVENIENCE*	*CONTENTS*	*N*	*WT G)*	*COMMENTS*
Collected by Dan Penton, 3-21-1972					
74.164.1.1	platform mound and slope of large	Fort Walton Incised	2	19.7	ticks, 6 pt bowl
74.164.1.2	**MOUND H**	indet. incised	1	4.6	
74.164.1.3		check-stamped	10	65.5	
74.164.1.4		indet. punctate	1	2.9	
74.164.1.5		indet. incised	1	4.3	sand-t
74.164.1.6		grit-tempered plain	1	6.5	
74.164.1.7		grog-tempered plain	5	41.2	
74.164.1.8		sand-tempered plain	4	13.7	
74.164.1.9		primary decort. Flake	1	8.1	
74.164.1.10		turtle bones	3	5.4	
74.164.1.11		burnt shell	1	5.5	
74.164.2.1	road cut between garbage dump and	Tucker Ridge Pinched	1	13.2	
74.164.2.2	mound, west of Mound B, **WEST**	indet. incised	1	2.3	sand-t
74.164.2.3	**VILLAGE**	cob-marked	1	14.5	
74.164.2.4		grog-tempered incised	1	21.5	
74.164.2.5		check-stamped	16	235.9	
74.164.2.6		grog-tempered plain	3	62.7	
74.164.2.7		sand-tempered plain	20	88.4	
74.164.2.8		grit-tempered plain	1	11.1	
74.164.3.1	surface collected, borrow pit between	shell-tempered plain	1	4.2	
74.164.3.2	road cut and dump, **WEST VILLAGE**	sand-tempered plain	1	2.4	red paint on interior
74.164.3.3		Tucker Ridge	1	6.8	with parallel incisions below
74.164.3.4		Carrabelle Incised	1	5.1	
		indet. incised	1	3.5	
74.164.3.5		indet. incised	2	11.7	
74.164.3.6		cob-marked	1	18.6	
74.164.3.7		Tucker Ridge Incised	1	5.5	
		poss. Santa Rosa Stamped	1	5.4	
74.164.3.8		check-stamped	34	554.5	
74.164.3.9		grit-tempered plain	6		
74.164.3.10		sand-tempered plain	23	145	
74.164.3.11		grog-tempered plain	6	51.5	
74.164.4.1	Area 1: just W of mound of large shell	Cool Branch Incised	1	12.4	
74.164.4.2	midden on Railroad cut and large shell	Fort Walton Incised	15	77.9	
74.164.4.3	midden near railroad cut, borrow pit	Tucker Ridge Pinched	1	3.4	
74.164.4.4	**MOUND H**	Point Washington Incised rims	2	13.7	
74.164.4.5		indet. incised	4	17	
74.164.4.6		indet. punctate	1	6.3	
74.164.4.7		Lake Jackson Incised rims	7	80.9	
74.164.4.8		Lake Jackson plain rims	9	97.8	
74.164.4.9		Lake Jackson D-node	1	12.8	rim gone
74.164.4.10		shell-tempered plain	5	30	
74.164.4.12		check-stamped	25	214	
74.164.4.13		indet. stamped	1	5.9	
74.164.4.14		grit & grog-tempered plain	5	71.8	
74.164.4.15		limestone-tempered plain	6	61.3	
74.164.4.16		grit, grog & limestone-tempered plain	3	23.1	
74.164.4.17		grit-tempered plain	71	545.7	

CAT #	PROVENIENCE	CONTENTS	N	WT G)	COMMENTS
74.164.4.18		sand-tempered plain	39	229.4	
74.164.4.19		grog-tempered plain	32	274.9	
74.164.4.20		daub or clay ball frag	1	18.2	
74.164.4.21		hamerstone frag	1	62.9	
74.164.4.22		chert shatter	1	1	
74.164.4.23		chert block shatter	2	20.9	
74.164.4.24		large chert biface frag	1	47.5	
74.164.4.25		biface tip	1	9.8	
74.164.4.26		sandstone frag	2	23.3	
74.164.4.27		chert pebble frag	1	18.1	
74.164.5.1	cemetery midden surface **CEMETERY**	St. Andrews Comp-St	1	7.8	
74.164.5.2	**MOUND E VILLAGE**	Swift Creek Comp-St	18	277.8	
74.164.5.3		Keith Incised rim	1	15.8	
74.164.5.4		indet punc	1	5.5	fingernail
74.164.5.5		sand-t pl rim	1	15.5	red-painted
74.164.5.6		indet punc	3	11.4	
74.164.5.7		ch-st	6	44.5	
74.164.5.8		grog-t pl	26	190.1	
74.164.5.9		sand-t pl	33	193.4	
74.164.5.10		grit-t pl	1	4.9	
74.164.5.11		red-painted pl	1	3.2	red on interior
74.164.5.12		Sw Cr Comp-st	3	22.4	
74.164.5.13		ch-st	1	5.1	
74.164.5.14		indet punc	1	2.7	fingernail
74.164.5.15		indet inc	1	35.1	
74.164.5.16		sand-t pl	5	81.9	
74.164.5.17		large chert 2ndary flake	1	17.4	with use wear
74.164.5.18	East end of Magnolia cemetery	Keith Inc	1	3.8	
74.164.5.19	**MOUND NEAR APALACH/E VILLAGE**	Sw Cr Comp-St	2	7.9	
74.164.5.20		Carrabelle Inc	1	7.8	
74.164.5.21		sand-t pl	6	36.8	
74.164.5.22		red-painted clay ball or strange sherd	1	3.9	
74.164.5.23		Rangia	1	17.7	
74.164.5.24		Oyster	1	86.2	
74.164.5.25		Weeden Island Pl rims	2	22.1	prob sand-t pl
74.164.5.26	West end of cemetery **CEMETERY**	poss fabric-impressed	1	8.8	
74.164.5.27	**MOUND/E VILLAGE**	Sw Cr Comp-St	1	10.2	
74.164.6.1	Cleared area east of cemetery hump	Weeden Island Inc	1	18.4	
74.164.6.2	**SHELL MOUND/FAR E VILLAGE**	Sw Cr Comp-St	1	8.7	
74.164.6.3		Rangia	2	31.4	
74.164.6.4		clear quartz block shatter	1	10.8	
74.164.6.5	Area east of cemetery midden **SHELL**	Sw Cr Comp-St	1	11.8	
74.164.6.6	**MOUND/FAR E VILLAGE**	Carrabelle Punc	1	9.8	
74.164.6.7		indet punc	1	4.1	
74.164.6.8		grog-t pl rim	1	25.5	
74.164.6.10	Sand field east of cemetery **SHELL**	Crooked River Comp-St	1	13.7	
74.164.6.11	**MOUND /FAR E VILLAGE**	ch-st	1	6.7	
74.164.7.1	Midden area to West (Mound B) just	Tucker Ridge Pinched	1	11.8	
74.164.7.2	East of Pierce Mounds [sic] **GENERAL**	Weeden Island Pl	2	31.7	
74.164.7.3	**SURFACE**	ch-st	2	50.9	
74.164.7.4		Busycon shell scoop/hoe	1	98.1	
74.164.8.1	Pierce site West of cemetery **EAST**	Fort Walton Inc	1	12.2	
74.164.8.2	**VILLAGE**	shell-t pl rim	1	6.1	broken handle
74.164.8.3		indet inc	1	1.9	

CAT #	*PROVENIENCE*	*CONTENTS*	*N*	*WT G)*	*COMMENTS*
Collected by Louis Tesar and Calvin Jones, 1994					
94.38.01	West midden area surface **W VILLAGE**	indet inc	3	29.6	
		indet punc	1	4.7	
		ch-st	2	21.8	
		grog-t pl	2	9.1	
		indet st	1	3.1	
		grit-t pl	2	18.0	
		sand-t pl	2	10.5	
		chert 2nd ary flake	1	1.7	thermally altered
94.38.02	**MOUND B** surface	ch-st	1	7.5	
		indet inc	1	4.2	punch & drag incision
94.38.03	Shell field surface **CENTRAL VILLAGE**	FW Inc	1	2.7	
		indet inc	1	2.9	
		grit-t pl	6	48.7	
		shell & grog-t pl	1	5.7	
		shell & sand-t pl	2	8.1	
		sand-t pl	2	4.0	
		shell spatula/scoop/awl	1	22.1	*Busycon*
94.38.04	Test pit level 1, 0-15 cm (shell field) ST94TJ, **CENTRAL VILLAGE**	L J rim	1	.7	ticks
		L J grit-t lug or pod	1	13.6	
		L J rim plain	1	1.2	single punctation
94.38.05	Test pit level 1,0-15 cm ST94TJ, **CENTRAL VILLAGE**	L J rim plain	1	6.1	ticks
		L J rim plain	1	1.6	single punctation
		grit-t pl	1	3.2	
		indet inc shell or lst-t	1	.9	
		grog-t pl	1	1.0	
94.38.06	Test pit level 1, 0-15 cm, ST94TJ, **CENTRAL VILLAGE**	grit-t pl	19	46.9	
		sand-t pl	7	23.5	
		grog-t pl	8	19.7	
		grit & grog-t pl	5	15.3	
94.38.07	Test pit level 1, 0-15 cm, ST94TJ, **CENTRAL VILLAGE**	shell-t pl	4	11.1	
		grit-t pl	12	25.2	
		grog-t pl	1	2.9	
		sand-t pl	2	2.9	
		burned bone frags	2	.2	tiny
		shell frag	1	.1	
94.38.08	Test pit level 1, 0-15 cm, shell sample ST94TJ, **CENTRAL VILLAGE**	Atlantic wing shell	1	27.4	
		Rangia clam shell	17	187.8	
		poss. boat shell	1	5.7	
		oyster shell	1	36.7	
		shell frags	5	12.2	
94.38.09	Test pit level 1, 0-15 cm, faunal remains, ST94TJ, **CENTRAL VILLAGE**	sm gastropod shell	1	.4	
		unident vertebra frag	1	.1	
		unident bone frags	4	3.1	
		tooth frag	1	.8	deer?
94.38.10	Test pit level 1, 0-15 cm, recent (?) materials, ST94TJ, **CENTRAL VILLAGE**	sedimentary rock frag	1	6.8	
		brown bottle glass sherds	32	138.2	
		clear glass sherds	23	86.9	
		metal frags	5	18.5	tin can?
		gun shell casings	3	5.1	
		piece plastic	1	1.4	Bakelite?
94.38.11	Test pit level 2, 15-30 cm, ST94TJ, **CENTRAL VILLAGE**	L J rim	1	14.9	incised
		L J. rim, plain	1	1.6	
		L J prob strap handle frag	1	3.3	

CAT #	*PROVENIENCE*	*CONTENTS*	*N*	*WT G)*	*COMMENTS*
		F W Inc	5	27.2	
		indet inc	3	24.2	
		sand-t pl	1	5.6	
94.38.12	Test pit level 2, 15-30 cm, ST94TJ, **CENTRAL VILLAGE**	F W Inc	3	19.2	
		L J rims	3	9.6	incised
		L J rim plain	1	3.3	ticked
		indet inc	3	5.0	
		grit-t plain disc	1	38.3	
		sand-t pl rims	2	20.8	
94.38.13	Test pit level 2, 15-30 cm, ST94TJ, **CENTRAL VILLAGE**	indet punc	1	10.3	
		indet st	1	6.9	
		indet inc	4	13.4	
		grit-t pl	25	76.6	
		grit & grog-t pl	5	27.6	
		lst-t pl	3	4.8	
		grog-t pl	4	12.7	
		sand-t pl	62	221.6	
94.38.14	Test pit level 2, 15-30 cm, ST94TJ, **CENTRAL VILLAGE**	indet brushed	1	19.0	
		indet inc	3	11.7	
		shell-t pl	2	3.5	
		lst-t pl	6	17.2	
		grit-t pl	14	74.5	
		sand-t pl	15	73.0	
94.38.15	Test pit level 2, 15-30 cm, shell sample ST94TJ, **CENTRAL VILLAGE**	*Rangia* shells	14	225.7	
		oyster shells	7	202.0	
		shell frags	27	42.6	
94.38.16	Test pit level 2, 15-30 cm, faunal remains, ST94TJ, **CENTRAL VILLAGE**	drum fish tooth	1	<.1	
		drum fish tooth plate	1	.6	
		fish otolith	1	.9	
		alligator dermal scutes	3	1.8	
		unident fish bone frags	6	.9	
		turtle carapace frags	6	9.1	
		deer teeth frags	43	3.0	
		fish vertebrae	46	6.9	
		gar fish scales	8	1.4	
		unident bone frags	85	29.6	
		shell frags	23	2.0	
		charcoal		1.1	
		modern concrete frags	10	1.2	
94.38.17	Test pit level 2, 15-30 cm, ST94TJ, **CENTRAL VILLAGE**	chert blocky flake	1	1.4	
		brown glass frag	1	.9	
94.38.18	Test pit level 3, 30-45 cm, ST94TJ, **CENTRAL VILLAGE**	F W Inc	8	152.5	7 glued, all same pot
		F W Inc	4	9.4	different pots
		L J	4	13.7	incised
		Pt Washington Inc	3	8.9	
		indet inc	2	7.8	
		sand-t pl rim	1	4.4	
94.38.19	Test pit level 3, 30-45 cm, ST94TJ, **CENTRAL VILLAGE**	L J rim plain	1	56.8	squared loop handle
		indet inc	2	14.7	
		concrete (?) frags	19	15.3	
94.38.20	Test pit level 3, 30-45 cm, ST94TJ, **CENTRAL VILLAGE**	indet inc	2	3.8	
		grit-t pl	11	67.2	
		grog-t pl	12	62.9	
		grit & grog-t pl	4	39.0	

CAT #	*PROVENIENCE*	*CONTENTS*	*N*	*WT G)*	*COMMENTS*
		clay daub frag	1	2.1	plant? finger? imprint
		sand-t pl	1	43.0	cut/engraved, recent?
		sand-t pl	49	239.5	
94.38.22*	Test pit level 3, 30-45 cm, ST94TJ, **CENTRAL VILLAGE**	oyster shell	7	349.1	
		Rangia shell	10	149.1	
		shell frags	21	28.9	
		unident bone frag	1	.3	
		gastropod shell	1	<.1	tiny snail
94.38.23A	Test pit level 3, 30-45 cm, ST94TJ, **CENTRAL VILLAGE**	chert block shatter frag	1	1.2	
		stone frag (granite?)	1	13.4	foreign
		lg yellow sandstone concretion	1	75.0	iron content
94.38.23B	Test pit level 3, 30-45 cm, ST94TJ, **CENTRAL VILLAGE**	deer teeth	3	4.4	also frags
		gar fish scales	4	.5	
		fish otoliths	4	3.7	
		drum fish teeth	2	.5	lg
		turtle carapace frags	17	26.2	
		lg & sm fish vertebrae		10.7	
		unident bone frags		37.1	includes fish, turtle
		charcoal		3.7	
94.38.24	Test pit level 4, 45-60 cm, ST94TJ, **CENTRAL VILLAGE**	L J rims plain	2	7.5	1 ticked
		F W Inc	1	1.7	
		ch-st	3	29.5	
		sand-t pl	1	1.3	eroded
		lst or concrete frag	1	.7	
94.38.25	Test pit level 4, 45-60 cm, ST94TJ, **CENTRAL VILLAGE**	Pensacola Inc	1	15.5	
94.38.26	Test pit level 4, 45-60 cm, ST94TJ, **CENTRAL VILLAGE**	shell-t pl	1	2.5	
		lst-t pl	1	1.0	
		grog-t pl	4	43.1	
		sand-t pl	7	13	
		grit & grog-t pl	1	1.4	
94.38.27	Test pit level 4, 45-60 cm, ST94TJ, **CENTRAL VILLAGE**	shell-t pl	3	17.0	
94.38.28	Test pit level 4, 45-60 cm, ST94TJ, **CENTRAL VILLAGE**	oyster shells	2	102.1	
		Rangia shells	4	87.3	
		shell frags		2.9	
94.38.29	Test pit level 4, 45-60 cm, ST94TJ, **CENTRAL VILLAGE**	unident faunal bone frags		.6	some burned, 4=fish vertebre
94.38.30	Mound C surface **MOUND H**	F W Inc	5	28.4	
		Pt Washington Inc	1	6.4	
		L J rims, plain	6	33.2	1=ticked
		L J rim, incised	1	6.0	ticked
		ch-st	4	25.7	
		indet punc	1	.9	
		indet inc	1	3.9	
		grit-t pl	1	6.9	
		prob daub frag	1	5.8	
94.38.31	Mound C surface **MOUND H**	F W Inc	1	4.1	
		indet inc	2	4.1	
		lst-t pl	2	12.7	
		lst & grit-t pl	1	5.4	
		shell-t pl	1	4.7	
		grit-t pl	30	177.9	
		grog-t pl	11	55.9	

CAT #	PROVENIENCE	CONTENTS	N	WT G)	COMMENTS
		sand-t pl	27	134.2	
94.38.31	Mound C surface **MOUND H**	*Rangia* shells	4	93.1	
		oyster shell	1	26.6	

*There was no bag numbered 94.38.21, but there were two with 94.38.23, so A and B were added.

Appendix Table2. *Catalog of materials from Pierce Mounds Complex at the University of South Florida Department of Anthropology Archaeology Laboratory, Tampa.*

CAT #	PROVENIENCE	CONTENTS	N	WT (g)	COMMENTS
8Fr14- Collected 6-11-1983					
83-1.1	Surface, Mound H area and east side**, E**	L J rim, Inc	1	10.7	
83-1.2	**VILLAGE**	Pensacola Inc	1	3.7	
83-1.3		F W Inc	6	26.8	
83-1.4		ch-st	9	128	
83-1.5		grit-t pl	8	101.4	2 = rims
83-1.6		Marsh Island Inc	1	12	heavy grog temper
83-1.7		sand-t pl	1	9	
83-1.8		indet st	1	7	could be coil-smoothing lines
83-2.1		Cool Branch Inc	3	29.6	grog-t, nice range of variation
83-2.2		F W Inc	1	8.7	
83-2.3		ch-st rim	1	10.5	large unstamped neck
83-2.4		L J Inc rim	1	5.6	
83-2.5		indet Inc	5	30.3	1 = rim
83-2.6		shell-t pl	5	37.9	1 = rim
83-2.7		sand-t pl	4	23	
83-2.8		grog-t pl	3	30.5	
83-2.9		shell+grog t pl	2	14.4	
83-2.10		poss ch-st	1	5.5	
83-2.11		lst-t pl	1	10.6	
83-2.12		grit-t crumb	1	0.3	
8Fr14- Collected 7-1-1988					
88-1.1	Surface, shell mound 300 meters W of	F W Inc	19	91.6	a couple have grog temper
88-1.2	Magnolia cemetery, 100 m N of 12th St.	L J Inc	9	63.5	2 pl rims, 7 ticked
88-1.3	**MOUND H**	L J Pl	8	77.4	3 = ticked
88-1.4		poss W I pl rim	1	10	thickened in 1 spot
88-1.5		ch-st	16	179	4 = rims, 1 has grit +lst temper
88-1.6		indet Punc	1	6	
88-1.7		shell-t pl	6	71.5	2 = rims, shell not leached away
88-1.8		indet inc	4	38.2	
88-1.9		heavy grog+grit- t	1	34.8	2 sherds, can glue
88-1.10		grog-t pl	3	16.3	
88-1.11		sand-t pl	4	64.8	
88-1.12		grit-t pl	8	68	
88-1.13		sand+grit-t pl	6	45.1	
88-1.14		daub frag	1	20	
88-1.15		sandstone frags	2	49.5	1 = chunk, 1 = poss vessel sherd
88-1.16		quartzite pebbles	2	23.6	
88-1.17		tiny chert block shatter	1	0.6	
88-1.18		Busycon shell tools	2	238.3	scoop/dipper at 1 end, beveled cutting edge at other

CAT #	PROVENIENCE	CONTENTS	N	WT (g)	COMMENTS
8Fr14- Collected 6-22-1991					
91-1.1	Surface concentration #1 near temple mound **MOUND H**	Pt. Washington Inc	1	4.7	
91-1.2		ch-st rim	1	5.6	eroded
91-1.3		indet punc	1	8.6	fingernail
91-1.4		grog-t pl	4	151.2	
91-1.5		sand-t pl	2	6.4	burnished inside and out
91-2.1	Surface concentration #2 near temple mound **MOUND H**	F W Inc	3	25.2	1 rim from 6 pt. bowl, ext ticks
91-2.2		sand+grog-t pl	1	6.7	
8Fr14- Collected 7-9-1993					
93-1.1	**GENERAL SURFACE**	F W Inc	14	84.9	great variety; 1 frag of 6 sided open bowl (11.9 g); all grit-t
93-1.2		indet inc	8	55.5	grit-t
93-1.3		Pensacola Inc	2	10.3	1 = shell+grog+grit-t
93-1.4		poss Cool Branch Inc	1	25.2	B-lug, ticked rim, fingernail punc (many); grog-t
93-1.5		L J	2	11.8	node
93-1.6		L J	1	16.7	D-lug
93-1.7		L J	1	10.2	tiny loop handle + 2 incisions
93-1.8		L J rims	2	14.3	1 incision, 1 grit-t
93-1.9		sand-t pl rims	2	10	1 single incision
93-1.10		L J pl	10	49.5	2 grog-t, rest are grit-t
93-1.11		Deptford Linear Ch-st	1	10.1	
93-1.12		ch-st	16	132.1	1 rim
93-1.13		indet punc	1	4.7	fingernail
93-1.14		shell-t pl	1	7.7	**on sheet, missing
93-1.15		indet inc	6	18.1	grog-t
93-1.16		Cool Branch Inc	1	6	body, grog-t ** missing
93-1.17		grit-t pl	13	98.3	
93-1.18		grit-t pl rim	1	10.1	
93-1.19		grit+grog-t pl	17	200.6	many from same vessel
93-1.20		grit+shell-t pl	1	8.9	
93-1.21		grog-t pl	8	43.2	
93-1.22		grog+shell-t pl	1	8.2	
93-1.23		shell-t pl	3	22	shell is not leached away
93-1.24		sand-t pl	1	11.2	
93-1.25		daub	2	60.7	
93-1.26		primary decort Flake	1	17.9	
93-1.27		2nd ary decort Flake	1	6.5	
93-1.28		small chert core	1	36.6	blue-white chert, primary decort flake
93-1.29		sandstone frags	2	47.3	poss from RR
93-1.30		siltstone frags	4	44.2	poss from RR
93-1.31		modern ceramic sherd	1	2.3	prob clay pigeon
93-1.32		fish otolith bone	1	1.3	
93-1.33		columella Busycon shell tool	1	41.1	rough cut, smooth end, chisel-
93-1.34		historic glass	1	32.4	mold-made bottleneck amethyst
93-1.35		Pt. Washington Inc rim	1	10.9	burnished, single incision under lip, curvilinear incisions below

8Fr14- Collected 1994					
94-JM.1	Surface - E side of cemetery (Jimmy Moses collection), 4-1994, **MOUND NEAR APALACH/E VILLAGE**	Sw Cr Comp-St	10	171.7	3 = rims, folded, smoothed, some grog
94-JM.2		poss W I pl or punc. rim	1	12.2	sand-t, punch-and-drag incisions on interior, exterior, tip of lip
94-JM.3		Carrabelle Punc rim	1	27.9	could be W I Punc
94-JM.4		Carrabelle Inc rim	1	6.9	
94-JM.5		indet punc	3	16.1	tiny dots,fingernail,big triangles
94-JM.6		ch-st rim	1	6.1	
94-JM.7		sand-t rim	1	6	painted red on interior and top of lip
94-JM.8		grog-t pl	8	119.1	7=rims, some sand, some folded, 1 has incision below lip
94-JM.9		sand-t pl rims	2	22.5	
94-JM.10		cordmarked	1	8.6	**discovered in bag on 5/31/11
94-1.1	Donated 4-1994 **GENERAL SURFACE**	Pt Washington Inc	2	14.8	by definition; may be FW Inc 6 pt. bowl
94-1.2		Tucker Ridge Pinched	1	22	
94-1.3		W I Inc	2	29	1 = rim, incision on top of lip, zoned incisions, burnished
94-1.4		F W Inc	2	12.6	1 = prob 6-sided open bowl
94-1.5		Keith Inc	3	29.2	2 = rims, folded, incision below lip, 1 body has Puncs on incisions
94-1.6		indet st	2	32.4	
94-1.7		indet punc	1	9.8	could be WI Punc applique piece or LJ or flattened node
94-1.8		red-painted grog-t	3	25.1	2 = rims, 1 with drag scratches; red on exterior
94-1.9		red-painted grit-t rims	2	26.1	wide fold,incision under it, interior and exterior paint
94-1.10		prob Carrabelle Inc rim	1	16.5	burnished, split up middle
94-2.1	Donated 4-1994 **GENERAL SURFACE**	L J Inc	1	22.5	scalloped rim, grog-t
94-2.2		Marsh Island Inc	1	8.5	
94-2.3		Point Washington Inc	1	5.5	grog-t
94-2.4		L J pl rim	1	32.6	B-shaped lug, ticks, grog-t
94-2.5		L J ticked rim	1	12.9	D-shaped lug, grog-t
94-2.6		L J pl rim	1	14.5	D-shaped lug,grog-t
94-2.7		discoidal sherd	1	12.8	starburst* pattern (7 lines) incised on interior
94-2.8		Busycon columella shell tool	1	156.4	spire ground off- hammer or pestle? apex missing, whorl cut off, use-wear on bottom
94-2.9		Rangia shell	1	34.7	sample
94-2.10		worked quahog shell	1	77.1	small, curved cut, Mercenaria campechiensis
94-6.1	Surface - Easterly and lower shell mound, 1-7-1994 **MOUND H**	Rangia shell	2	20.8	sample, marsh clam
94-6.2		Polymesoda shell	3	8	sample, also marsh clam
94-6.3		quartzite cobble tool	1	90.2	small amount of use-wear
94-6.4		indet punc	1	8.2	fingernail
94-6.5		indet inc	1	1.9	sand-t
94-6.6		F W Inc	1	8.3	sloppy grit-t

94-6.7		grit-t pl	1	7.6	poss L J, poss worn lug or node
94-6.8		sand-t pl	1	6.2	rim point or scallop
94-6.9		sand-t pl	2	7.6	
94-6.10		grog-t pl	2	7.3	
94-6.11		grit-t pl	4	14	
94-6.12		lst+grog-t pl	2	2.3	
94-6-1.1	Surface, cemetery, 1-7-94, **CEMETERY MOUND/E VILLAGE**	sand-t pl	5	56.9	
94-6-1.2		grog-t pl	6	48.9	2 = rims
94-6-1.3		complicated-st	4	27.1	2 grit-t, 2 grog-t
94-6-1.4		grit-t pl	5	23.6	
94-6-1.5		Carrabelle Punc rims	2	40.9	
94-6-1.6		indet punc	1	6.3	grog-t
94-6-2.1	surface 200 m S of Mound B shell area in pine flatwoods, 1-7-1994, **CENTRAL VILLAGE**	ch-st	1	27.5	sand+grit-t
94-6-3.1	Easterly mounds near railroad bed surface, 1-7-1994, **E VILLAGE**	sand-t pl	1	14.9	
94-6-3.2		ch-st	1	20.7	sand+grog-t
94-6-3.3		poss Busycon shell tool	1	44.5	
94-6-4.1	Surface along sand road which runs between cemetery and mounds, 1-7-1994, **E VILLAGE**	shell+grog t pl	1	3	bleached shell still present
94-6-4.2		grit-t pl	1	8	
94-6-4.3		grit+grog-t pl	3	20.9	
94-6-5.1	Surface- SW corner of site, along trail running through sand pine, cedar, reindeer moss (dryer area), 1-7-1994, **W VILLAGE**	sand-t pl	1	34.5	big piece, some grit, burnished
94-7-1.1	Collection Area 1, surface, E of temple mound, 6-2-1994, **E VILLAGE**	grit-t pl	11	38.3	
94-7-1.2		grit+grog-t pl	15	40.7	red temper
94-7-1.3		ch-st	4	21	grit-t, some grog
94-7-1.4		poss historic stoneware	1	18.1	molded jar rim, orange dull glaze or painted
94-7-1.5		Busycon shell columella tool	1	20.3	chisel or pounding/cutting edge
94-7-1.6		Busycon shell debitage	1	4.1	cut rectangle, no use-wear
94-7-1.7		Rangia shell	1	9.4	sample
94-8.1	Area 2 around road fork, *Rangia shell* midden, E. of temple mound H, surface, 6-3-1994, **E VILLAGE**	F W Inc	6	31.6	2 = rims, 1 bodysherd has lots of grog-t, rest = grit
94-8.2		Pensacola Inc rim	1	6.8	bi-noded lug, very protruding
94-8.3		Point Washington Inc rim	1	10.2	incision maybe on interior
94-8.4		L J Pl	2	10.9	1 = strap handle frag, 1 = D-lug
94-8.5		indet inc	2	7.4	grog-t
94-8.6		L J Inc	1	1.9	4 incisions, grit+grog-t
94-8.7		ch-st	1	4.8	smoothed-over, lst-t
94-8.8		shell-t pl	7	17.2	
94-8.9		grit-t pl	21	48.9	
94-8.10		grog-t pl	11	34.6	
94-8.11		shell+grit -t pl	1	1.6	
94-8.12		grit+grog-t pl	12	19.9	1 = rim
94-8.13		sand-t pl	2	8.8	
94-8.14		shell+grog t pl	2	8.7	
94-8.15		sand+grog-t pl	1	4.7	
94-8.16		indet bone frag	1	1.6	
94-8.17		sandstone	1	3.1	
94-8.18		quartzite broken pebble	1	9.3	poss use-wear
94-8.19		Busycon shell tool	1	92.2	very worn, whorl cut, sharpened; hafted hammer?

94-8.20		*Rangia* shell	3	71.7	
94-8.21		oyster shell	1	22.9	hinge frag of shell
94-9-1.1	Area 3 Shell mound, 6-3-1994, **MOUND H**	ch-st	1	5.1	grit-t
94-9-1.2		grit-t pl	3	31.5	
94-9-1.3		grog-t pl	1	5.2	
94-9-1.4		primary decort flake	1	4.8	
94-9-1.5		*Busycon* shell tool	1	7.3	2.8 X 2.5 cm, use wear on 1 side
94-9-1.6		*Rangia* shell	2	47	
94-9-1.7		oyster shells, lg	3	268.6	modern? l=16, 12, 11.5 cm
94-9-2.1	SW side of Area 3 (shell midden SW side of temple mound), 6-4-1994, **MOUND H**	grit-t pl	5	10.4	
94-9-2.2		F W Inc	1	5.8	sand-t
94-9-2.3		grit+grog-t pl	4	14.3	
94-9-2.4		sand-t pl	1	5.5	
94-9-2.5		grit+lst t	1	8.3	red grit
94-9-2.6		shell-t pl	2	10.3	1 - unleached, shells still present, 1 - parts leached, most shells still present
94-10.1	Area 4 - NNE base of **MOUND B**	crown conch shell	1	26.4	unmodified except tiny chip out of siphon
94-11.1	Surface area 6, 6-7-94, **MOUND A**	*Busycon* shell tool	1	41.6	chisel edge- cut
94-11.2		oyster shells	2	143.3	one poss petrified?
94-11.3		*Rangia* shell	1	16	
94-12.1	Area 8 (~75 M S of Temple mound), 6-4-1994, **CENTRAL VILLAGE**	scallop shell	1	8.8	*Chlamys senatoria*
94-12.2		scallop shell frags	3	3.5	small pieces
94-12.3		sand+shell-t pl	1	2	
94-12.4		grit-t pl	2	28.9	
94-12.5		grit+grog-t pl	1	4.5	
94-12.6		Busycon shell tool	1	53.3	spatula/scraper, trapezoidal cut, smoothed/ worn on 1 short & long sides; sides= 3.6, 5.5, 4.6 cm, beveled wkng edge = 5.5 cm
94-13.1	Surface of clearing+road (Area 9 - SSW 150-200 M from temple mound), 6-4-1994, **CENTRAL VILLAGE**	grog-t pl	2	6.4	
94-13.2		indet punc	1	5.7	large square puncs, grit -t
94-13.3		grit-t pl	1	11.1	
94-13.4		indet inc	2	13.3	poss Marsh Island Inc,2 diff vessels, sand+grog-t
94-13.5		*Busycon* shell tool	1	9.6	cut frag, 4-sided (sort of)
94-14.1	Area 2- Core 1, 0-34 cm deep, 10 m from "Y" in road, C94A2-1, 6-4-1994,**E VILLAGE**	grit-t pl	2	4.5	
94-14.2		grit+lst t pl	1	3.1	
94-14.3		*Rangia* shell	1	10.2	
94-14.4		*Polymesoda* shell	1	12.3	
94-14.5		bone frags	3	1.6	
94-14.6		fish? vertebrae	1	0.1	
94-15.1	Area 2- Core 1- 34-60 cm, 35 degrees, 10 m from "Y" in road, C94A2-1, 6-4-1994, **E VILLAGE**	grit-t pl	2	4.9	
94-15.2		*Rangia* shells	2	20.8	1 broken
94-15.3		turtle carapace frag	1	0.9	
94-15.4		gar fish scale	1	0.4	
94-15.5		fish vertebra	1	0.2	
94-15.6		bone frag	1	0.1	
94-16.1	Area 2- Core 1- 60 - 125 cm, C94A2-1, 6-4-1994, **E VILLAGE**	ch-st	1	3.3	sand-t
94-16.2		grit+grog-t pl	1	3.1	
94-16.3		sand-t pl	1	1	
94-16.4		grit-t pl	1	2.1	
94-16.5		bone frags	6	1	1 may be tooth cap

94-16.6		vertebra	1	0.1	
94-16.7		turtle carapace frags	6	9	
94-16.8		cockle shell frag	1	3.4	Dinocardium
94-16.9		*Rangia* shell	1	6.5	
94-16.10		*Polymesoda* shell	1	8.9	
94-16.11		shell frag	1	0.1	
94-16.12		charcoal		0.6	fine grained wood? some charred resin? **C14 dated on 10-2-06 to A.D. 1270**
94-17.1	Area 2- Core 1- 125 - 200 cm, C94A2-1, 6-4-1994, **E VILLAGE**	indet Inc	1	2.5	sand-t
94-17.2		sand-t pl	1	1.7	
94-17.3		sand+grog-t pl	2	6.1	
94-17.4		turtle carapace frags	3	4.1	
94-17.5		*Rangia* shell frag	1	0.5	burnt
94-18.1	Surface, *Rangia shell* midden NE Central Magnolia cemetery, 6-5-1994, **MOUND NEAR APALACH/E VILLAGE**	grog-t pl rim	1	42.9	wide fold
94-18-1.1	Magnolia cemetery NE corner surface, 6-5-1994, **MOUND NEAR APALACH/E VILLAGE**	F W Inc	2	8.7	grog-t
94-18-1.2		Sw Cr Comp-St	1	6	grit-t, eye motif?
94-18-1.3		indet Inc	2	10.6	sand-t
94-18-1.4		grit+grog-t pl	1	4.5	
94-18-1.5		bone frag	1	0.9	rib or curved longbone
94-18-1.6		*Rangia* shells	2	31.3	
94-18-1.7		oyster shells	2	262.4	
94-18-2.1	Surface, NE corner of existing cemetery, poss recently exposed burnt clam feature, 6-5-1994, **MOUND NEAR APALACH/E VILLAGE**	ch-st	1	3.8	grit-t
94-19-1.1	Magnolia cemetery- N central (recent dirt dump), 6-5-1994, **MOUND NEAR APALACH/E VILLAGE**	indet punc	3	11.8	grog-t, 1 pinched, 1 fingernail, 1 triangle
94-19-1.2		indet inc	2	42.3	
94-19-1.3		red-painted grog-t pl	1	14.2	painted inside&out, straight side
94-19-1.4		grog-t pl rim	1	25.5	incurving bowl
94-19-2.1	Magnolia cemetery- N central (treefall near Lucius Allen grave), 6-1994, **MOUND NEAR APALACH/E VILLAGE**	ch-st	3	28	grog+sand-t
94-19-2.2		*Rangia* shell	1	21.6	
94-20.1	Surface on trail W of shell mound, 6-18-1994, **CENTRAL VILLAGE**	ch-st	1	4.7	grit-t
94-21.1	Surface on trail W of shell mound, 6-18-1994, **CENTRAL VILLAGE**	F W Inc	3	40	1 grit-t, 1 grog-t, 1 grit+grog-t
94-21.2		L J Inc rim	1	9.7	ticks,broken prob lug, grog+sand-t
94-21.3		indet. inc	14	3.6	grit-t
94-21.4		grit-t pl	2	9.5	
94-21.5		shell-t pl	1	2.5	
94-21.6		grit+grog-t pl	2	7.3	
94-22.1	Surface mound area 6, 6-18-1994, **MOUND A**	ch-st rim	1	14.5	rectangular, lst temper
94-22.2		ch-st	1	4.5	slightly linear, sand-t
94-22.3		human cranial frags	3	18.3	1 bleached white; sent to DHR
94-22.4		human rib frags	6	3.2	sent to DHR
94-23.1	Surface of shell road, just N of Area 8, 6-17-1994, **W VILLAGE**	whiteware historic sherd	1	1.6	" G. Meakin, Hanley, [E?]ngland"
94-24-1.1	Surface (gopher hole) of deer moss clearing, 60 m N of Md. A, Area 6, 6-18-1994, **W VILLAGE**	ch-st	1	14.7	sand-t
94-24-1.2		*Busycon* shell debitage	1	17.8	cut rectangular, chisel shaped projection, no use-wear

94-24-2.1	Surface 20 m E of deer moss clearing, 6-18-1994, **W VILLAGE**	indet punc	1	2.2	annular, sand-t
94-25.1	S. transect from area 6 (Mound A) 170 Meters E, in tree roots, 6-18-1994, **CENTRAL VILLAGE**	indet st	1	16.2	sand-t, v worn, rough
94-26.1	Surface in looters' hole in shell midden ridge N of Area 10 (Mound C), 6-18-1994, **W VILLAGE**	crown conch shell (*Melongena corona*)	1	33.8	both ends broken off; chisel/ hammer? 8 cm long
94-27.1	Magnolia cemetery - LM 1 Level 3 (38-50 cm), 8-11-1994, STLM1, **CEMETERY MOUND/E VILLAGE**	Sw Cr Comp-St rim	1	12.4	eroded with a square pattern
94-27.2		ch-st	2	17	sand-t
94-27.3		bone and shell bits		2.2	vial includes prob fish, mussel
94-27.4		bird bone	1	0.4	
94-28.1	N side of Area 3 - N side of temple mound, 8-11-1994, **MOUND H**	L J pl rim	1	24.5	
94-29.1	Magnolia cemetery surface of dirt road (E of Ethel Magurrtee grave), 8-11-1994, **CEMETERY MOUND/E VILLAGE**	Carrabelle Punc rim	1	16.9	grog-t, fat and folded
94-30.1	Magnolia cemetery - Grave backdirt on N end of cemetery (disturbed), 8-9-1994, **CEMETERY MOUND/E VILLAGE**	sand and lst-t pl	1	9.5	
94-30.2		grog-t pl	1	7.1	
94-31.1	Surface - 210 m, 0 degrees from rd. Ken/Tom transect. 8-8-1994, **CEMETERY MOUND/E VILLAGE**	purple glass bottleneck	1	21.6	looks molded but old
94-32.1	Surface - N side of Magnolia cemetery, 8-9-1994, **CEMETERY MOUND/E VILLAGE**	W I Punc rim	1	8.8	2 sherds glued
94-32.2		Carrabelle Punc rim	1	7	sand-t
94-32.3		Carrabelle Inc rim	1	15.7	sand-t, 2nd incision below lip
94-32.4		indet inc	1	8.8	prob Carrabelle
94-32.5		sand-t pl	3	19.5	2 = pl, thickened rims
94-32.6		grog-t pl	1	12	
94-33.1	Mound B, side of summit, surface, 8-8-1994, **MOUND B**	crown conch shell (*Melongena corona*)	1	37.9	part of whorl cut or broken off, spire and tip poss worn or removed; poss tool
94-34.1	Magnolia cemetery - NE border surface, 8-9-1994, **MOUND NEAR APALACH/E VILLAGE**	sand-t pl	1	23.7	
94-34.2		sand-t pl rim	1	11.5	pl, rounded
94-34.3		Sw Cr Comp-St rim	1	23.6	only tiny bit of pattern, wide straight collar, ragged incision below it
94-34.4		pneumatized fish bone	1	1.1	cut on 1 or both ends
94-35.1	Magnolia cemetery - ST1 (0-43 cm), 8-9-1994, **MOUND NEAR APALACH/E VILLAGE**	indet inc red-painted	1	0.9	red above incision on exterior
94-35.2		red-painted grit-t pl	1	3.1	
94-35.3		cordmarked	1	6.4	sand-t, widely spaced cords
94-35.4		indet punc	7	44.5	3 fingernail, 2 triangle, 2 square, all sand-t or sand+grog
94-35.5		indet inc and punc	1	3.2	sand-t, could be Carrabelle, WI Inc, or FW Inc
94-35.6		grit+grog-t pl	23	94.5	1 = rim, pl
94-35.7		indet st	4	11	prob small ch-st, sand+grog t
94-35.8		sand-t pl	7	20.5	2 = rims, 1 folded
94-35.9		grit+grog+lst-t pl	2	6.4	v small tiny particles of lst
94-35.10		grog-t pl	7	27.6	1 = tiny folded rim
94-35.11		grit-t pl	15	28.3	
94-35.12		glass sherds	2	32.2	clear; 1 = solarized straight-walled bottle/ bowl base with starburst molded
94-35.13		historic whiteware	1	2.8	sherd

94-35.14		chert pebble	1	6.9	block shatter?, patinated
94-35.15		metal gear	1	19.9	iron and prob aluminum
94-35.16		pneumatized fish bone	2	10.1	
94-35.17		animal bone, vertebrae	13	1.9	some = fish
94-35.18		burnt animal bone, verts	2	0.1	
94-35.19		drum fish tooth	1	0.3	
94-35.20		unburnt wood fiber frags	2	0.2	
94-35.21		poss fulgurite	1	0.3	burnt sand from lightning
94-35.22		small gastropod shell	1	1	marine?
94-35.23		bone	10	4	
94-36.1	surface, area around King Plot - mound? Next to Tesar and Weill core (CLT1), N central part of cemetery, 8-9-1994, **MOUND NEAR APALACH/E VILLAGE**	grit+grog-t pl	5	61.8	2 = folded rims, 4 = burnished
94-37.1	Mound A poss core or cave in at 214 cm, C94A2, 8-8-1994 **MOUND A**	ch-st	1	6.5	sand-t, Deptford? At that depth?
94-38.1	Magnolia cemetery STLM 1, Level 4B (100-120 cm), 8-11-1994, **CEMETERY MOUND/E VILLAGE**	*Rangia* shells	2	11.2	
94-38.2		oyster shell frag	1	2.4	
94-38.3		river pebble	1	1.9	
94-39.1	Magnolia cemetery Shovel TeST1 (1.09 - m), ST1, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	sand+grog-t pl	1	2	
94-39.2		burnt animal vert	1	0.2	
94-39.3		animal vertebrae	43	4.9	
94-39.4		pneumatized fish bone	1	1.9	
94-39.5		bone frags	18	4.6	
94-39.6		long bone frags, animal	7	10.5	
94-39.7		*Rangia* shell shell + frag	1	17.3	
94-39.8		tiny gastropod shell	1	0.1	
94-39.9		poss nut frag	1	<.1	undecayed, probably modern (ID to learn of forest?)
94-39.10		charcoal		3.4	2 vials, date this?
94-40.1	Level 4A LTM-1 (88-100 cm), ST1, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	poss fabric-impressed	1	2.9	
94-40.2		ch-st	1	2.9	
94-40.3		clear glass	1	0.4	
94-41.1	LT 2, Level 1B (10-20 cm), STLT2, 8-12-1994, **CEMETERY MOUND/E VILLAGE**	ch-st	1	4.1	
94-41.2		grog-t pl	1	0.5	
94-41.3		grit-t pl	1	1	
94-41.4		clay lump	1	1.8	
94-41.5		milk glass frag	1	0.4	
94-41.6		iron nails + frags	5	7.2	rusty
94-41.7		Rangia shell	1	10.3	
94-42.1	LM 1, Level 2 (26-38 cm), STLM1, 8-11-1994, **CEMETERY MOUND/E VILLAGE**	indet st	1	4.3	check or comp-st, sand-t
94-42.2		ch-st	2	8.6	grit + sand-t
94-42.3		sand-t pl	2	6.6	1 = fine rim, black, thin
94-42.4		piece of modern coral	1	1.5	
94-42.5		turtle carapace frag	1	1.6	
94-42.6		fish? Vertebrae	2	0.2	
94-43.1	LT 1, Level 4 (30-39 cm), CLT1, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	clay prob brick frags	5	12.8	
94-43.2		tiny bivalve shell	1	0.2	a mussel that lives on oysters?
94-43.3		battery pack	1	65.5	corroded, modern
94-43.4		plastic wrapper	1	<.1	
94-43.5		styrofoam frag	1	<.1	
94-43.6		clear glass sherds	3	<.1	
94-43.7		brown glass sherds	2	0.9	1 raised pattern

94-44.1	LM 1, S of Rolande Brown grave, 8 meters N of oak along path Level 1A (0-20 cm), STLM1, 8-11-1994, **CEMETERY MOUND/E VILLAGE**	St. Andrews Comp-St	1	1.7	
94-44.2		indet st	2	0.9	
94-44.3		sand-t pl	2	2.1	
94-44.4		grit-t pl	2	2	
94-44.5		prob daub frag	1	0.3	
94-44.6		quartz pebbles	6	25.3	rounded, poss fill
94-44.7		concrete ? frags	4	1.7	
94-44.8		oyster shell frags	8	7.8	
94-44.9		*Rangia* shell	1	7.1	
94-44.10		scallop or mussel shell	2	0.2	frags
94-44.11		bone frags	7	1.9	some vertebrae
94-44.12		bone frags	26	5.9	including sm animal longbone, rib, fish? 1 turtle carapace
94-45.1	LT 2, L- 3B (40-50 cm), SHLT2, 8-11-1994, **CEMETERY MOUND/E VILLAGE**	grit-t pl	2	6.9	1 = tiny
94-45.2		sand + grog-t pl	1	0.3	
94-45.3		*Polymesoda* shell	1	4.9	
94-45.4		*Rangia* shell shell	1	12.7	
94-45.5		crown conch frag	1	19.4	busted open and very eroded - used at least for food
94-45.6		gar fish scale	1	0.1	
94-45.7		bone frag	19	3.5	sm mammal, fish scale (big-poss gar), some = calcined
94-45.8		charcoal		0.1	
94-46.1	LM 1, Level 3B (50-60 cm), STLM1, 8-11-1994, **CEMETERY MOUND/E VILLAGE**	ch-st	6	36.8	1 = thin fine rim, sand-t, tiny bit of grog
94-46.2		sand-t pl crumb	1	0.8	
94-46.3		sand+grog-t pl	1	9.2	with recent machine scar
94-46.4		burnt (?) clay lump	1	0.5	gritty
94-46.5		quartz pebble	1	3	gravel fill?
94-46.6		*Rangia* shell	1	8.1	
94-46.7		oyster shell	1	30.6	
94-46.8		shell frag	1	0.6	
94-46.9		vertebrae	3	0.6	1 = fish
94-46.10		drum fish tooth	1	0.2	
94-46.11		gar fish scale	1	<.1	
94-46.12		bone frags	18	4	some = fish
94-47.1		sand-t pl crumbs	2	2	
94-47.2		clay lump	1	0.4	poss daub
94-47.3		quartz pebbles	5	21.7	gravel fill?
94-47.4		bone frags	8	1.4	1 or 2 = sm mammal longbone
94-48.1	Shovel TeST1, Shell zone NE 1/4, 1.09 - 1.10 m, ST1, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	Carrabelle Punc rim	1	5.5	rectangular puncs
94-48.2		sand-t pl	1	2.5	
94-48.3		quartz pebble frag	1	1.8	machine break? deep
94-48.4		shell frags	2	0.3	
94-48.5		bone frags		8.7	
94-48.6		animal vertebrae	30	2.9	many = fish
94-48.7		fish otolith	1	0.8	
94-48.8		charcoal		2.4	
94-49.1	Shovel TeST1 Wall Cleanup, ST1, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	Sw Cr Comp-St	1	5.4	sand+grog-t, herringbone design
94-49.2		sand+grog-t pl	2	60.5	
94-49.3		W I Incised red-painted	1	9.5	sand & grog-t, interior and exterior painted, incised on top of lip, folded rims
94-49.4		mica flake	1		5-6 mm long

94-49.5		deer longbone	1	13.7	
94-49.6		vertebrae	41	4.1	
94-49.7		bone frags	21	4.4	poss turtle or fish
94-49.8		charcoal		4.4	
94-50.1	ST1 (90-109 cm) Stratum 2, 27 meters W of Broxton Grave, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	Sw Cr Comp-St	2	21.5	1 = nice pattern, photographed, other = smoothed over
94-50.2		grit-t pl	2	9.6	
94-50.3		grog-t pl	2	11.7	
94-50.4		sand-t pl	5	104.8	
94-50.5		quartz pebble	1	6.6	natural; dragged in gravel?
94-50.6		fish otolith	1	0.2	
94-50.7		animal vertebrae	146	18.5	some fish; 20 taken for Museum of Sci & Ind (?)
94-50.8		bone frags		14.9	some = fish
94-50.9		oyster shell	1	30.8	
94-51.1	LT 1, Level 2 (10-20 cm),CLT1, 8-12-1994, **MOUND NEAR APALCH/E VILLAGE**	quartz pebble	1	1.4	natural or brought in as fill
94-51.2		oyster shells	2	136.5	
94-51.3		clear glass	2	5.1	1 bottleneck sherd
94-51.4		concrete/mortar chunks	2	94.3	modern
94-51.5		whiteware sherd	1	1.5	historic
94-52.1	LT 2, Level 1A (0-10 cm), STLT2, 8-12-1994, **MOUND NEAR APALACH/E VILLAGE**	St. Andrews Comp-St	1	4.9	
94-52.2		Sw Cr Comp-St	1	3.6	snowshoe? Very eroded
94-52.3		indet punc	1	1.2	large shallow round punctations, sand-t
94-52.4		grog-t pl	6	20.3	2 = rims
94-52.5		sand-t pl	6	126.1	1 large basal sherd, 1 rim
94-52.6		bone frags	2	1.8	
94-52.7		pos fish vert	1	4.2	lg: 2 cm diameter
94-52.8		*Rangia* shell	1	6.7	
94-53.1	cemetery Surface 5m W of Peggy White grave, 9 m ESE of oak/pecan tree, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	chert biface	1	119.8	lg, crude, thick, some use-wear
94-54.1	surface, base of largest old oak tree on N side of cemetery near road separating old/new graveyard (near ST1), 8-8-1994, **MOUND NEAR APALACH/E VILLAGE**	Sw Cr Comp-St	1	5	
94-54.2		poss Carrabelle Inc rim	1	3.6	folded,incision, 11 vertical lines below rim, red on interior
94-54.3		red-painted pl rim	1	14.6	sand & grog-t, paint invisible below rim
94-54.4		sand+grog-t pl	2	54.5	
94-54.5		sand-t pl	4	42	1 = rim, folded, 1 incision
94-54.6		bone frag	1	0.9	looks like lg fish spine
94-55.1	50X50 #1, TM-1 E of cemetery (12-22 cm), STTM1, 8-11-1994, **SHELL MOUND NEAR APALACH/FAR E VILLAGE**	ch-st	3	22.6	2 = mostly eroded
94-55.2		sand-t pl	3	9.2	1 = rim, recent cut
94-55.3		clump of concreted sand	1	1.3	burned?
94-55.4		lg snail shell	1	9.4	moon shell?
94-55.5		bone frags		1	some fish/turtle? 1 = vertebrae
94-56.1	TM 1, (0-12 cm) midden E of cemetery, STTM1, 8-11-1994, **SHELL MOUND NEAR APALACH/FAR E VILLAGE**	Sw Cr Comp-St	2	7.1	
94-56.2		indet punc	1	9.2	
94-56.3		ch-st	11	43.6	sand-t, some grog-t
94-56.4		unusual inc/punc	1	4.7	WI Inc?
94-56.5		oven-fabric- impressed	1	3.8	"V" fine strip weave, 1 mm cord
94-56.6		indet inc	1	1.9	sand-t, 1 grog-t
94-56.7		grit -t pl	2	6.6	
94-56.8		sand-t pl rim	1	2.3	fine, outflaring, squared off
94-56.9		sand-t pl	7	19	

94-56.10		grog-t pl	4	12.1	
94-56.11		oyster shell	1	43.3	
94-56.12		bone frags	17	4.3	2 = turtle, some fish
94-57.1	Shovel Test1, Stratum II (43-66 cm), ST1, 8-9-1994, **MOUND NEAR APALACH/E VILLAGE**	Carrabelle Punc rim	1	10.1	
94-57.2		Tucker Ridge Pinched	2	46.9	
94-57.3		indet punc	3	32.2	fingernail, prob Carrabelle
94-57.4		indet inc	1	1.5	sand-t
94-57.5		shell+grog-t rim	1	17.4	prob still Middle Woodland - only 1 shell frag stuck in paste
94-57.6		sand-t pl	29	102.2	4 = rims, 1 has incision below lip
94-57.7		grit-t pl	10	54.1	
94-57.8		grog-t pl	24	121.6	few grog particles in most but 1 = rim with lots of grog
94-57.9		daub frags	4	18.6	
94-57.10		*Polymesoda* shell	1	5.9	
94-57.11		*Rangia* shell	3	27	
94-57.12		shell frags	8	9.6	
94-57.13		snail shell	1	0.2	tiny
94-57.14		drumfish teeth	2	0.6	
94-57.15		vertebrae	135	14.5	mostly fish
94-57.16		pneumatized fish bone	3	4.6	2 seem cut
94-57.17		bone frags		30.3	fish, turtle, fish scale, some large mammal
94-57.18		charcoal		12	1 piece wood unburned
94-58.1	surface, 65 m, 180 degrees S of RR bed, transect #6, 8-12-1994, N-S line 50 m W of mounds A, C, **WEST VILLAGE**	ch-st	1	33.7	
94-58.2		oyster shell	1	65.9	
94-58.3		*Polymesoda* shell	1	9.7	
94-59.1	LT 2 Level 2 (20-30 cm), STLT2, 8-12-1994, **CEMETERY MOUND/E VILLAGE**	grog-t pl	1	2.6	
94-59.2		sand-t pl crumbs	2	0.9	
94-59.3		rusty nail frags		7.3	square cut? historic?
94-60.1	TM-2, Level 2, 8-11-1994, **GENERAL SURFACE**	sand-t rim	1	19.3	folded, wide collar (2-5 cm tall)
94-60.2		grog-t pl	4	7.6	
94-60.3		bone frags	2	0.8	
94-61.1	Core LT 1, Level 6B (50-55 cm), 8-12-1994, **MOUND NEAR APALACH/E VILLAGE**	fired clay chunk	1	5.5	eroded
94-61.2		quartz pebble	1	35.5	broken edge
94-61.3		clear glass sherd	1	5.1	
94-61.4		brown glass	1	1.7	
94-61.5		plastic wrappers	4	1.1	
94-61.6		styrofoam frags	2	0.8	
94-62.1	surface, clearing at end of dirt rd running away from E side of cemetery (across from Bishop plot), 8-9-1994, **SHELL MOUND NEAR APALACH/FAR E VILLAGE**	Sw Cr Comp-St	1	5.5	
94-62.2		unusual comp-st	1	13.6	
94-62.3		ch-st	2	11.8	
94-62.4		sand-t pl	1	4.6	
94-62.5		2nd ary chert flake	1	0.6	
94-63.1	ST1, (100 cm?), 8-1994, **MOUND NEAR APALACH/E VILLAGE**	ch-st	1	17.8	very eroded
94-63.2		grog-t pl	3	58.3	1 = lg folded rim
94-63.3		sand-t pl	3	34.6	
94-63.4		shell frag	1	0.2	prob *Rangia* clam
94-63.5		drumfish tooth plate frags + teeth	4	18.9	
94-63.6		pneumatized fish bone	1	11.1	big and chunky
94-63.7		vertebrae	73	9.4	mostly medium sized fish?
94-63.8		bone frags	58	56	including catfish spines, deer leg, 3 poss mammal

					metapodials, some poss fish, 1 burned frag
94-63.9		plant frags	4	0.4	unburned or lightly burned
94-63.10		iron nail	1	21.3	round, round head,min rust
94-64.1	TM 2, Level 1, 8-11-1994, ST94TM2, **FAR E VILLAGE**	ch-st	3	18.4	sand-t, 1 piece grog in 1, 1= faint
94-64.2		sand-t pl	2	9	
94-64.3		granite chip	1	1.5	looks fresh, off a headstone?
94-64.4		green glass sherd	1	0.6	bright
94-64.5		square iron nail+ frags	1	6.9	rusted
94-64.6		bone frags	1	1.2	cranial?
94-65.1	Surface of shell mound summit, Area 3 where E dirt rd ascends N side of mound, 8-8-1994, **MOUND H**	ch-st	1	3.5	
94-66.1	Core Sample, Mound A (69 cm), N side, C94A2, 8-8-1994, **MOUND A**	ch-st	1	3.9	
94-67.1	Surface 100m E of Mound B, 70m W of Area 4 RR bed path, 8-8-1994, **CENTRAL VILLAGE**	indet inc	1	4.2	
94-68.1	Burrow into hollow tree trunk, 20m S of RR bed, 100m W of Mound B, 8-8-1994, **W VILLAGE**	linear ch-st	1	4.6	poss Deptford
94-68.2		turtle carapace frag	1	0.9	probable
94-69.1	2 m N, L.F. Wilson ? grave, 50X50 #2, 1/8 screen sample, TM 2 L3, 8-11-1994, ST94TM2, **SHELL MOUND NEAR APALACH/FAR E VILLAGE**	prob ch-st	2	4.3	grog-t, folded, smoothed
94-70.1	Core 2 Mound A (86-126 cm) N side, C94A2, 8-8-1994, **MOUND A**	ch-st	3	12.2	eroded
94-70.2		oyster shell frag	1	2.3	
94-70.3		charcoal		0.1	85 cm depth, tiny flecks in sand
94-70A.1	Core 2, N side Mound A (207 cm), C94A2, 8-8-1994, **MOUND A**	shell frags	2	0.1	tiny, eroded
94-71.1	LMT 1 (70-88 cm) Level 3D, ST1, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	ch-st	3	18.7	1 has soot
94-71.2		sand-t pl	4	32	including lg rim, smoothed fold
94-71.3		quartzite pebble	1	0.6	natural
94-71.4		Rangia shell	1	4.3	
94-71.5		drumfish tooth	1	0.6	
94-71.6		bone frags	13	2.5	many = tiny slivers
94-71.7		human tooth	1	0.4	upper PM 1, prob left, little wear, root broken, 10-20 year-old
94-71.8		charcoal		0.5	
94-72.1	Core Mound A , N side (185 cm), C94A2, 8-8-1994, **MOUND A**	oyster shells/frags	2	85.2	
94-73.1	LT 2, Level 3A (30-40 cm), STLT2, 8-8-1994, **MOUND NEAR APALACH/E VILLAGE**	indet engraved	1	4.9	poss, or else recent cuts, sand-t
94-73.2		sand-t pl	10	33.5	1 = pl rim, 1 has recent cut mark
94-73.3		bivalve shell	1	5.1	prob *Rangia*, broken hinge
94-73.4		pneumatized fish bone	1	0.6	
94-73.5		bone	10	13	including some burned
94-73.6		charcoal		0.8	
94-74.1	Core Mound A, N Side, C94A2, 8-8-1994, **MOUND A**	oyster frag	1	4.7	
94-75.1	TM 1, L 3, 50X50 #1, midden E of cemetery, ST94TM1, 8-11-94, **SHELL MOUND NEAR APALACH/FAR E VILLAGE**	grit-t pl	1	2.7	
94-75.2		grog-t pl	1	1	
94-75.3		sand-t pl	1	1.7	

94-75.4		bone frag	1	0.5	articulating end, sm animal - mammal or turtle?
94-76.1	LMT 1, Level 3C (60-70 cm), ST1, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	W I Inc	1	3.2	
94-76.2		ch-st	3	12.2	1 = rim, some grog
94-76.3		indet st	1	16.2	cord, fabric, or ch-st
94-76.4		grog-t pl	1	3.8	
94-76.5		sand-t pl	6	7.9	
94-76.6		pebbles	2	1.6	natural
94-76.7		vertebrae	7	1.6	
94-76.8		bone frags	8	3.8	include catfish spine, sm mammal long bone
94-76.9		human cranium frag	1	4.3	prob parietal
94-76.10		*Rangia* shell	1	19.2	
94-76.11		oyster shell+ frags	2	27.4	
94-76.12		charcoal		0.4	
94-77.1	LT 1, Level 3, (20-30 cm), CLT1, 8-12-1994, **MOUND NEAR APALACH/E VILLAGE**	Sw Cr Comp-St	1	1.5	tiny, very little pattern
94-77.2		sand-t pl	1	2	
94-77.3		turpentine pot	1	1.7	Herty cup frag
94-77.4		brick fragment	1	0.7	modern
94-77.5		limestone frag	1	27.8	unifacially chipped? prob gravel brought in – for railroad?
94-77.6		limestone	1	7.1	
94-77.7		pebble	2	1.9	quartz, probably natural
94-77.8		oyster shell	1	22.9	
94-77.9		*Rangia* shell frag	1	3.5	
94-78.1	LT 1, NE corner of new side of cemetery, Level 1 (0-10 cm), 8-12-1994, **MOUND NEAR APALACH/E VILLAGE**	indet inc	2	8.4	
94-78.2		grog-t pl	3	5.3	
94-78.3		sand-t pl	4	3.2	
94-78.4		quartzite pebble	1	2.8	natural
94-78.5		conglomerate pebble	1	28.6	railroad gravel
94-78.6		limestone	1	11.2	natural
94-78.7		oyster shell	2	29.2	
94-78.8		*Rangia* shell shell+ frags	1	7.9	
94-78.9		mussel shell frags	3	1.6	the kind that lives on oysters
94-78.10		clear glass sherd	1	1.1	
94-78.11		translucent/clear glass	1	4.8	battered
94-79.1	LT 1, Level 5 (39-48 cm), 8-12-1994, **MOUND NEAR APALACH/E VILLAGE**	burned clay lumps	2	5.1	prob recent
94-79.2		quartz pebble	1	20.2	natural
94-79.3		oyster shell	1	19.3	
94-79.4		Rangia shell	1	22.4	
94-79.5		concrete pieces	2	21.5	probable
94-79.6		plastic flower	1	0.8	
94-79.7		plaster piece	1	0.6	
97-79.8		iron nail	1	2.2	rusted
94-79.9		strapping tape	1	0.1	modern
94-80.1	Surface 35m WSW Area 3; 8m N of Tesar & C. Jones shovel test, 8-8-1994, **CENTRAL VILLAGE**	Pensacola Inc	1	1.8	
94-80.2		FW Inc	1	8.1	6- pt. bowl rim
94-80.3		grit+grog-t rim	1	6.7	single incsion below lip
94-80.4		grit-t pl	7	25.6	heavy and numerous grit
94-80.5		grog-t pl	3	9.5	
94-80.6		2ndary chert flake	1	3.2	brownish, fossiliferous, broken
94-81.1	Surface - old section, 2-4 m NE of Louis Murphy grav, 8-11-1994, **CEMETERY MOUND/E VILLAGE**	ch-st	6	140.1	1 = rim, mostly sand-t, some grit; surface soot could be dated; 1 lg one has drilled hole. (Deptford?)

94-81.2		grog-t pl	1	2.9	eroded rim
94-82.1	Surface Mound B, hole N side of summit, 8-8-1994, **MOUND B**	ch-st	1	6.9	somewhat linear
94-83.1	Surface N of Robert Lee Hurd grave, 8-9-1994, **CEMETERY MOUND/E VILLAGE**	sand+grog-t pl	4	28.1	1 = pl rim
94-83.2		sand-t pl	1	5.9	
94-83.3		grit -t pl	1	7.6	
94-84.1	Surface SE of Legalle Bartes grave, 8-11-1994, **CEMETERY MOUND/E VILLAGE**	sand+grog-t pl rim	1	38.7	1 incision below lip, 3 sherds glued, pot radius = 8 cm
94-85.1	Surface - NE border of cemetery, 8-1994, **MOUND NEAR APALACH/E VILLAGE**	Carrabelle Punc	1	6.6	incision below, lg deep triangle puncs, sand-t
94-85.2		W I Inc rim, red-painted	1	6.2	sand & grog-t, incision below lip, red-painted on interior AND exterior and over top of lip-lighter, orangier red
94-86.1	backfill disturbed, N core Mound A, C94A2, 8-8-1994, **MOUND A**	shell frags		0.2	prob cockle, very tiny
94-87.1	unprovenienced (new?) grave backdirt, N boundary near old/new cemetery boundary, 8-8-1994, **MOUND NEAR APALACH/E VILLAGE**	sand+grog-t pl rim	1	32.6	might have broken on incision, very few red grog pieces
94-88.1	Surface, dirt road E of cemetery, 8-8-1994, **SHELL MOUND NEAR APALACH/FAR E VILLAGE**	ch-st	5	51.9	
94-88.2		*Busycon* shell spatula/scraper	1	26.4	nicely smoothed, worn edge
94-89.1	Surface, NE side of cemetery, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	Sw Cr Comp-St	1	14.6	grog bits in sand temper, eroded pattern
94-90.1	E side of cemetery, E of Bishop graves 8-9-1994, **MOUND NEAR APALACH/E VILLAGE**	ch-st rim	1	8	
94-90.2		grog-t pl rim	1	9.1	very little grog
94-90.3		sand-t pl	1	4.4	
94-90.4		quartzite slab	1	452	flat, could be worked or part of some modern tablet
94-90.5		iron nail frags		4.8	
94-100.1	Shovel test ST1 (?) Magnolia cemetery, Stratum 2 (66-90 cm), ST1, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	Sw Cr Comp-St	6	71	eye, spiderweb patterns, etc
94-100.2		indet-stamped (barbed tool-impressed)	1	27.8	unusual, sand-t jar rim+ neck (3 sherds glued) folded rim collar
94-100.3		indet-stamped (wedge-tool impressed)	1	9.3	folded rim jar neck, sand-t
94-100.4		grog+ lst-t pl	4	26.4	
94-100.5		sand+ lst-t pl	8	53.8	
94-100.6		grit+grog+lst-t pl	1	2.4	
94-100.7		sand-t pl	18	132.5	
94-100.8		grog-t pl	14	142.4	
94-100.9		grog-t pl rims	2	50.1	folded, incision (WI? 1 = 2 glued)
94-100.10		turtle bone	3	3.3	
94-100.11		bone frags	~30	10.3	
94-100.12		fish vertebrae		65.7	lg to small, some burnt, ca.200
94-100.13		shell	1	1.6	clam?
94-100.14		*Polymesoda* shell	1	6	
94-100.15		*Rangia* shells	2	17.3	
94-100.16		oyster shells + frags	1	56.1	
94-100.17		soil		29.6	black sand around fauna
94-100.18		charcoal	3	1.3	3 pieces, 1= carbonized cane?
94-101.1	ST1, Top of Stratum A, 0 -10 cm Fraction A, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	burnt nutshell		<.01	
94-101.2		fish bone		<.01	
94-101.3		calcined bone		<.01	

94-101.4		*Rangia* shell		3.6	
94-101.5		*Rangia* shell frags		29.2	burned?
94-101.6		botanical remains		2.3	
94-101.7		charcoal		<.01	
94-101.8	ST1, Top of Stratum A, 0 -10 cm Fraction B, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	shell frags		11.5	
94-101.9		snail shells		<.01	
94-101.10		charcoal		0.2	
94-101.11		bone frags		1.2	
94-101.12		seeds		1.6	
94-101.13		unknown - poss bone		0.1	
94-101.14		remains after sorting		15.1	quartz grains, shell bits, black dirt
94-101.15	ST1, Top of Stratum A, 0 -10 cm Fraction C, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	snail shells		<.01	tiny
94-101.16		seeds		0.4	
94-101.17		charcoal		0.1	
94-101.18		misc botanicals		7.8	wood and sand
94-101.1 (2)	ST1, Top of Stratum A, 10-20 cm Fraction A, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	charcoal		0.1	
94-101.2 (2)		poss modern grass		0.5	
94-101.3 (2)		botanical remains		0.3	poss modern
94-101.4 (2)		shell frags		23.8	1 almost complete *Rangia* clam
94-101.5 (2)		indet Inc	1	1.5	grog-t
94-101.6 (2)	ST1, Top of Stratum A, 10-20 cm Fraction B, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	charcoal		0.2	
94-101.7 (2)		bone		0.4	
94-101.8 (2)		clear glass		0.1	
94-101.9 (2)		botanical		0.2	
94-101.10 (2)		stones		0.4	
94-101.11 (2)		shell frags		3.9	
94-101.12 (2)		remains after sorting		7.3	charcoal, shell, botanicals, sand
94-101.13 (2)	ST1, Top of Stratum A, 10-20 cm Fraction C, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	insect remains		0.1	modern
94-101.14 (2)		snails		0.1	tiny, poss opercula
94-101.15 (2)		botanical remains		0.7	modern
94-101.16 (2)		charred seeds			
94-102.1	ST1, Stratum A, 20-30 cm Fraction A, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	botanical remains		<0.1	
94-102.2		bone pieces		0.3	1 = burnt
94-102.3		charcoal		0.1	
94-102.4		sand-t pl		3.5	
94-102.5		shell pieces		21.5	
94-102.6		gravel		0.8	
94-102.7	ST1, Stratum A, 20-30 cm Fraction B, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	charcoal		0.4	
94-102.8		shell pieces		4.9	
94-102.9		botanical remains		<0.1	
94-102.10		bone		0.8	
94-102.11		poss buckshot		0.3	tiny, round ball
94-102.12		remains after sorting		9	bone, shell, charcoal, roots
94-102.13	ST1 Stratum A, 20-30 cm Fraction C, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	botanical remains		0.7	bark, grass, twigs
94-102.14		charcoal		<0.1	
94-102.15		snails		<0.1	microscopic, opercula
94-103.1	ST1, 30-40 cm, Fraction A, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	grit+grog-t pl	1	4.6	
94-103.2		sand-t pl	4	7.3	
94-103.3		fish vertebrae	5	0.6	
94-103.4		bone frags	4	0.8	prob fish
94-103.5		fish scale	1	<.1	2 = poss scale frags **missing
94-103.6		bone frags, sm animal	6	<.1	**missing
94-103.7		poss shaft frag	1	0.6	small-medium animal **missing

94-103.8		*Rangia* shell	30	141.1	1 = burnt
94-103.9		*Rangia* shell frags		37.1	
94-103.10		charcoal		0.2	
94-103.11		poss nut shell		0.4	**missing
94-103.12	ST1, 30-40 cm, Fraction B, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	charcoal		1.3	
94-103.13		*Rangia* shell frags		3.1	
94-103.14		fish bone frags		0.6	
94-103.15		remainder after sorting		12.8	shell, charcoal, etc.
94-103.16	ST1, 30-40 cm, Fraction C, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	charcoal		1.4	
94-103.17	ST1, 30-40 cm, Fraction C, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	wood frags		1.4	
94-103.18		remainder after sorting		1.2	charcoal, botanicals, etc.
94-104.1	ST1, 40-50cm, Fraction A, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	bivalve shell		318.6	*Anodontia philippiana*?
94-104.2		charcoal		1.8	
94-104.3		fish bones, mostly vert		2.2	
94-104.4		remains after sorting		0.7	shell frags, twigs
94-104.5	ST1, 40-50 cm, Fraction B, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	bone, tooth, marsh rat		<.1	*Oryzomys palustris*
94-104.6		bone bits		7.5	
94-104.7		eggshell?		<.1	
94-104.8		fish vertebrae		0.2	
94-104.9		shell frags		2.37	
94-104.10		seeds - marsh grasses		<.1	
94-104.11		charcoal		1.8	
94-104.12		remains after sorting		10.1	bone, shell, charcoal, sand
94-104.13		botanical remains		<.1	modern
94-104.14	ST1, 40-50cm, Fraction C, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	wood fibers		0.1	
94-104.15		charcoal		0.8	
94-104.16		remains after sorting		0.4	modern botanicals, etc.
94-105.1	ST1, 50-60 cm, Stratum C, Fraction A, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	charcoal		0.4	
94-105.2		fish vertebrae		3.15	
94-105.3		bone		3.99	poss fish bone
94-105.4		sand-t pl		0.2	sherd crumbs
94-105.5		*Rangia* shells		102.1	
94-105.6		*Rangia* shell frags		7.1	
94-105.7		botanical material		1.2	modern
94-105.8	ST1, 50-60 cm, Stratum C, Fraction B, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	bone		6.2	
94-105.9		charcoal		1.2	
94-105.10		bone slices + fish scales		0.7	
94-105.11		shell pieces		5	
94-105.12		botanical remains		0.1	
94-105.13		fish bone		0.8	
94-105.14		remains after sorting		7.3	bone bits, charcoal, and shell
94-105.15		snail		0.1	*Amnicola*?
94-105.16		gar fish scale		<.1	
94-105.17	ST1, 50-60 cm, Stratum C, Fraction C, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	charcoal		0.1	
94-105.18		botanical material		0.1	
94-106.1	ST1, 60-70 cm, Stratum C, Fraction A, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	shell fragments		18.4	
94-106.2		*Rangia* shell	39	295.9	
94-106.3		*Polymesoda* shell	2	13.6	
94-106.4		charcoal		0.5	
94-106.5		fish bones		3.1	
94-106.6		sand-t pl sherd		1.4	
94-106.7	ST1, 60-70 cm, Stratum C, Fraction B, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	charcoal	175	1.2	
94-106.8		shell	113	4.5	
94-106.9		vertebrae	10	0.4	

94-106.10		bones	215	7.9	
94-106.11	ST1, 60-70 cm, Stratum C, Fraction C, 8-11-	charcoal		0.1	some poss modern burnt wood
94-106.12	1994, **MOUND NEAR APALACH/E VILLAGE**	snail shells		<.1	
94-106.13		remains after sorting		0.1	botanical remains, charcoal
94-107.1	ST1, 70-76 cm, Stratum C, Fraction A, 8-11-	charcoal	21	1.3	
94-107.2	1994, **MOUND NEAR APALACH/E VILLAGE**	bone	10	1.4	
94-107.3		shell	36	127.3	
94-107.4	ST1, 70-76 cm, Stratum C, Fraction B, 8-11-	charcoal		0.5	
94-107.5	1994, **MOUND NEAR APALACH/E VILLAGE**	bone	65	1.6	
94-107.6		shell	55	3.2	
94-107.7	ST1, 70-76 cm, Stratum C, Fraction C, 8-11-	charcoal	11	0.3	
94-107.8	1994, **MOUND NEAR APALACH/E VILLAGE**	bones	25	0.5	
94-107.9		shell	2	<.1	
94-108.1	ST1, 76-80 cm, Stratum C, Fraction A, 8-11-	*Rangia* shell frags	28	143.1	
94-108.2	1994, **MOUND NEAR APALACH/E VILLAGE**	fish bone		1.4	big- possibly marine
94-108.3		bone		1.9	
94-108.4		charcoal		0.1	
94-108.5		remains after sorting		0.1	botanical, etc.
94-108.6	ST1, 76-80 cm, Stratum C, Fraction B, 8-11-	bone, some burnt		2.6	
94-108.7	1994, **MOUND NEAR APALACH/E VILLAGE**	fish bone		0.4	
94-108.8		charcoal		0.5	
94-108.9		seed+ seed shell		0.1	***missing
94-108.10		botanical remains		0.1	modern
94-108.11		clay or stone crumb		0.1	
94-108.12		shell frags		4	
94-108.13		teeth	2	<.1	1 = broken, 1 has root but broken, poss small mammal
94-108.14		remains after sorting		4.8	bone, shell, charcoal, botanical
94-108.15	ST1, 76-80 cm, Stratum C, Fraction C, 8-11-	charcoal		0.1	
94-108.16	1994, **MOUND NEAR APALACH/E VILLAGE**	botanical remains		0.2	modern
94-108.17		shell frags		0.1	
94-108.18		snail shell	1	<.1	microscopic
94-108.19		drumfish tooth	1	<.1	round
94-109.1	ST1, 80-90 cm, Stratum C, Fraction A, 8-11-	*Rangia* shell + frags		218.1	
94-109.2	1994, **MOUND NEAR APALACH/E VILLAGE**	charcoal		0.8	
94-109.3		botanical remains		0.3	modern
94-109.4		fish bone		0.9	
94-109.5		bone frags		1.8	
94-109.6	ST1, 80-90 cm, Stratum C, Fraction B, 8-11-	charcoal		1.1	
94-109.7	1994, **MOUND NEAR APALACH/E VILLAGE**	fish bone frags		0.3	
94-109.8		bone frags		2.1	some burnt, 1 gray, 1 white
94-109.9		shell frags		8	
94-109.10		tooth		0.1	poss small mammal
94-109.11		sand grains	5	0.1	
94-109.12		sand-t pl (?)		0.2	sherd crumb
94-109.13		seed casing		0.1	tiny
94-109.14		remainder after sorting		8.2	bone, shell, charcoal
94-109.15	ST1, 80-90 cm, Stratum C, Fraction C, 8-11-	charcoal		3.6	big pieces
94-109.16	1994, **MOUND NEAR APALACH/E VILLAGE**	snail shell		0.1	poss apercula, type-A multispiral
94-109.17		botanical remains		1.5	modern
94-110.1	ST1, 90-100 cm, Stratum C, Fraction A, 8-	charcoal	35	1	
94-110.2	11-1994, **MOUND NEAR APALACH/E**	bone frags	17	2.3	
94-110.3	**VILLAGE**	shell frags	51	225.4	

94-110.4	ST1, 90-100 cm, Stratum C, Fraction B, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	charcoal		4.3	
94-110.5		shells	128	6.2	
94-110.6		bone	132	3.5	
94-110.7	ST1, 90-100 cm, Stratum C, Fraction C, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	charcoal	20	0.1	
94-111.1	Bottom Stratum C, Interface, 100-103 cm, Fraction A, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	*Rangia* shell + frag	2	8.3	
94-111.2		charcoal		2.1	
94-111.3		botanical material		1.5	modern
94-111.4	Bottom Stratum C, Interface, 100-103 cm, Fraction B, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	shell pieces		0.1	
94-111.5		botanical remains		0.1	modern
94-111.6		charcoal		2.5	
94-111.7		bone frags		0.1	
94-111.8	Bottom Stratum C, Interface, 100-103 cm, Fraction C, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	charcoal		3.6	
94-112.1	ST1, 103-110 cm, Stratum E, Fraction A, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	charcoal	16	0.8	
94-112.2		shell	1	1.5	
94-112.3		bone	1	0.3	
94-112.4	ST1, 103-110 cm, Stratum E, Fraction B, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	charcoal		0.8	
94-112.5		shells	9	0.1	
94-112.6		bones	4	0.1	
94-112.7		quartzite	110	0.3	pebbles, tiny grains, natural
94-112.8	ST1, 103-110 cm, Stratum E, Fraction C, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	charcoal	4	<.1	
94-113.1	ST1, 110-120 cm, Stratum E, Fraction B, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	charcoal	25	0.2	
94-113.2		coarse sand grains		2.2	
94-113.3		shell	1	0.1	
94-113.4	ST1, 110-120 cm, Stratum E, Fraction C, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	charcoal	1	0.1	
94-114.1	ST1, 120-140 cm, Fraction A, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	fish bone, verts	3	0.7	
94-114.2		shell fragments	3	0.4	*Polymesoda*?
94-114.3		charcoal		0.3	
94-114.4	ST1, 120-140 cm, Fraction B, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	shell fragments		1.6	*Polymesoda*?
94-114.5		botanical material		1.1	modern
94-114.6		charcoal		1.8	
94-114.7		remains after sorting		5.1	charcoal, sand frags
94-114.8		tooth		<.1	
94-114.9		small twigs		<.1	
94-114.10	ST1, 120-140 cm, Fraction C, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	charcoal		<.1	
94-114.11		snail shell		<.1	
94-114.12		botanical material		<.1	modern
94-115.1	ST1, 140-148 cm, bottom, Fraction A, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	turtle shell	1	3.1	
94-115.2	ST1, 140-148 cm, bottom, Fraction B, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	charcoal		0.2	
94-115.3		course sand		12.6	
94-115.4	ST1, 140-148 cm, bottom, Fraction C, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	roots		0.2	modern
94-117.1	ST1, 159- 172 cm, bottom, Fraction B, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	charcoal	13	0.1	
94-117.2		bones	1	0.1	
94-117.3		shell	2	0.1	

94-117.4	ST1, 159- 172 cm, bottom, Fraction C, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	sand		<.1	
94-118.1	Core LT, 0-12 cm, next to 2 palms, top of midden, west of ditch on N side of cemetery, Fraction A, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	shells	10	6.3	
94-118.2		charcoal	4	0.2	
94-118.3		bone	1	0.1	
94-118.4	Core LT, 0-12 cm, Core next to 2 palms, top of midden, west of ditch on N side of cemetery, Fraction B, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	charcoal	10	0.2	
94-118.5		pebbles	2	0.4	
94-118.6		shells	24	1.4	
94-118.7		bone	1	0.2	
94-118.8		metal wire frags	54	0.9	thin
94-118.9	Core LT, 0-12 cm, Core next to 2 palms, top of midden, west of ditch on N side of cemetery, Fraction C, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	charcoal	30	0.6	
94-118.10		seeds	12	0.2	
94-118.11		shell	1	<.1	
94-119.1	Core LT, 12-25 cm Fraction A, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	shells	82	88.7	
94-119.2		shell-t pl	2	3.2	
94-119.3		bones	2	0.4	
94-119.4	Core LT, 12-25 cm Fraction B, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	shells		27.3	
94-119.5		charcoal	50	0.6	
94-119.6		bones	52	2	
94-119.7	Core LT, 12-25 cm Fraction C, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	shells	10	0.3	
94-119.8		charcoal	12	0.1	
94-119.9		seeds	3	0.2	
94-120.1	Core LT, 25-32 cm Fraction A, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	shells		137.2	
94-120.2		bone	1	0.3	
94-120.3		charcoal	2	0.1	
94-120.4	Core LT, 25-32 cm Fraction B, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	shells		24	
94-120.5		bones	4	0.2	
94-120.6		charcoal	40	0.5	
94-120.7		metal frags	2	0.2	
94-120.8	Core LT, 25-32 cm Fraction C, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	shells	20	0.3	
94-120.9		seed	1	<.1	
94-120.10		charcoal	25	0.5	
94-121.1	Core LT, 32-39 cm Fraction A, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	shells		96.4	
94-121.2		charcoal	6	0.2	
94-121.3		shell-t pl	1	1.6	
94-121.4	Core LT, 32-39 cm Fraction B, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	shells		20.5	
94-121.5		charcoal	36	0.7	
94-121.6		bones	6	0.3	
94-121.7		fish scale	1	0.1	
94-121.8	Core LT, 32-39 cm Fraction C, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	charcoal	20	0.2	
94-122.1	Core LT, 39-50.5 Fraction A, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	shells		59.4	
94-122.2		indet st	2	4.2	grog-t
94-122.3		bone	1	0.1	
94-122.4	Core LT, 39-50.5 Fraction B, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	shells		20.8	
94-122.5		charcoal	50	0.9	
94-122.6		bones	12	0.5	
94-122.7		metal frags	4	0.1	
94-122.8	Core LT, 39-50.5 Fraction A, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	charcoal	30	0.1	
94-123.1	Core LT, 50.5-61 Fraction A, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	shells		97	
94-123.2		bones	3	0.3	
94-123.3	Core LT, 50.5-61 Fraction B, 8-11-1994,	charcoal	40	0.6	

94-123.4	**MOUND NEAR APALACH/E VILLAGE**	bones	16	0.5	
94-123.5		shells		18.7	
94-123.6	Core LT, 50.5-61 Fraction C, 8-11-1994,	seed	1	0.1	
94-123.7	**MOUND NEAR APALACH/E VILLAGE**	charcoal	30	0.2	
94-124.1	Core LT, 61-72 cm, Fraction A, 8-11-1994,	shells		117.9	
94-124.2	**MOUND NEAR APALACH/E VILLAGE**	bones	2	0.2	
94-124.3		charcoal	23	0.9	
94-124.4	Core LT, 61-72 cm, Fraction B, 8-11-1994,	bones	18	0.5	
94-124.5	**MOUND NEAR APALACH/E VILLAGE**	charcoal	35	0.8	
94-124.6		shells		13.9	
94-124.7		poss nut frag		0.1	
94-124.8	Core LT, 61-72 cm, Fraction C, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	charcoal	30	0.2	
94-125.1	Core LT, 72-82 cm, Fraction A, 8-11-1994,	shells		110.9	
94-125.2	**MOUND NEAR APALACH/E VILLAGE**	bones	3	0.5	
94-125.3		charcoal	10	0.6	
94-125.4	Core LT, 72-82 cm, Fraction B, 8-11-1994,	bones	12	0.5	
94-125.5	**MOUND NEAR APALACH/E VILLAGE**	charcoal	25	0.9	
94-125.6		shells		15	
94-125.7	Core LT, 72-82 cm, Fraction C, 8-11-1994,	charcoal	45	0.12	
94-125.8	**MOUND NEAR APALACH/E VILLAGE**	shells	2	<.1	
94-125.9		bones	2	<.1	
94-126.1	Core LT, 82-95 cm, Fraction A, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	shells		70.9	
94-126.2	Core LT, 82-95 cm, Fraction B, 8-11-1994,	shells		14.3	
94-126.3	**MOUND NEAR APALACH/E VILLAGE**	charcoal	56	0.3	
94-126.4		bones	14	0.7	
94-126.5	Core LT, 82-95 cm, Fraction C, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	charcoal	16	0.1	
94-127.1	Core LT, 93-99 cm, Fraction A, 8-11-1994,	shells	31	20.8	
94-127.2	**MOUND NEAR APALACH/E VILLAGE**	charcoal	2	0.1	
94-127.3	Core LT, 93-99 cm, Fraction B, 8-11-1994,	charcoal	35	0.3	
94-127.4	**MOUND NEAR APALACH/E VILLAGE**	shells	55	4.4	
94-127.5		sand-t pl	2	0.1	
94-127.6	Core LT, 93-99 cm, Fraction C, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	remainder after sorting	30	0.1	roots, etc.
94-128.1	Core LT, 99-109 cm, Fraction B, 8-11-1994,	charcoal	3	0.1	
94-128.2	**MOUND NEAR APALACH/E VILLAGE**	shells			
94-128.3	Core LT, 99-109 cm, Fraction C, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	roots and remainder			
94-129.1	Core LT, 109-121 cm, Fraction B, 8-11-1994,	charcoal	10	0.2	
94-129.2	**MOUND NEAR APALACH/E VILLAGE**	shells	14	0.7	
94-129.3	Core LT, 109-121 cm, Fraction C, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	remains after sorting			
94-130.1	Core LT, 121-138 cm, Fraction B, 8-11-1994,	charcoal	35	0.2	
94-130.2	**MOUND NEAR APALACH/E VILLAGE**	shells	42	2.4	
94-130.3	Core LT, 121-138 cm, Fraction C, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	remains after sorting			roots, etc.
94-131.1	Core LT, 138-144 cm, Fraction B, 8-11-1994,	shells	7	0.3	
94-131.2	**MOUND NEAR APALACH/E VILLAGE**	charcoal	8	0.1	
94-131.3	Core LT, 138-144 cm, Fraction C, 8-11-1994, **MOUND NEAR APALACH/E VILLAGE**	roots			

8Fr14- Collected 1995					
95-1.1	Surface, W slope of shell mound, Area 3 (Temple mound) 1-5-1995, **MOUND H**	2nd ary chert flake	1	2.5	gravel that was brought in?
95-2.1	Surface, Area 11, road SW of temple mound and SE of mound B, 1-5-1995, **CENTRAL VILLAGE**	grog-t pl rims	2	32.8	1 could be L J jar collar, 1 = inward curved
95-2.2		F W Inc	4	26.6	
95-2.3		indet inc	2	5.4	one looks like punch&drag
95-2.4		shell-t pl	1	5.1	
95-2.5		grit+ grog-t pl	3	41.4	
95-2.6		grit-t pl	3	30.9	
95-3.1	Surface, Pierce Mound Trails, 1-5-1995, **GENERAL SURFACE**	F W Inc rim	1	4.2	6 pt bowl? only incisions but exterior ticks
95-3.2		L J rims	4	31.3	all have 1 incision, ticks, 3 = stp, 1 = grog-t
95-3.3		ch-st	1	6.6	
95-3.4		indet inc	1	19.2	12 parallel incisions, sand-t
95-3.5		lst+grit-t pl	1	4.1	
95-3.6		poss lst-t pl	1	2	
95-3.7		grit+grog-t pl	3	14.1	
95-3.8		grog-t pl	11	52.4	
95-3.9		grit-t pl	19	101.6	
95-3.10		sand-t pl	7	41.4	
95-3.11		indet st	1	2.5	sand-t
95-3.12		Busycon shell debitage	1	63.4	cut outer whorl frag, trapezoidal
95-4.1	Surface, E side of Area 9, due S of Temple mound in roads, 1-5-1995, **GENERAL SURFACE**	Cool Branch Inc rim	1	7.2	
95-4.2		L J Pl	1	10.9	1 incision below rim, ticks, collared jar, sand-t
95-4.3		indet inc	2	4.9	grit +grog-t
95-4.4		shell-t pl	1	2.6	
95-4.5		grit-t pl	1	1.4	
95-4.6		sand-t pl	5	23.9	
95-5.1	Surface, Area 2, shell midden SE (along Rd) of temple mound, 1-5-1995, **E VILLAGE**	F W Inc	4	17.3	
95-5.2		L J rim	1	8.4	ticks, 2 incisions
95-5.3		Pensacola Inc rim	1	4.4	shell+grog-t
95-5.4		poss brushed	1	4.3	not Chattahoochee Br, grit-t
95-5.5		lst-t pl	2	14.7	
95-5.6		grog-t pl	2	13.8	
95-5.7		sand-t pl	1	6.3	
95-5.8		grit -t pl	1	12.3	
95-6.1	Surface, Area 12 "Donut Mound" 1-5-1995, **SINGER MOUND/W VILLAGE**	oyster shell	2	107.2	
95-6.2		*Rangia* shell	2	23.5	
95-6.3		*Polymesoda* shell	2	16.2	
95-7.1	Surface, disturbed crater Area 12 "Donut Mound" 1-5-1995, **SINGER MOUND**	ch-st	1	2.2	very eroded, sand-t
95-7.2		*Polymesoda* shell	1	14.4	
95-8.1	Surface, Area 3 shell midden, temple mound, 1-6-1995, **MOUND H**	F W Inc	1	10.1	grit-t
95-8.2		indet inc	1	15.1	prob L J, 2 incisions, sand-t
95-8.3		sand+grog-t pl	5	30.2	
95-8.4		grit-t pl	3	24.8	
95-9.1	Surface, Area 3, back of shell mound, 1-5-1995, **MOUND H**	F W Inc	2	23.8	carinated bowl sherd (shoulder)
95-9.2		grit-t pl	2	7.4	
95-9.3		sand+grog-t pl	1	36	
95-9.4		Rangia shell	1	6	

95-10.1	Surface, Area 11, fork in dirt road directly SW of temple mound, 1-6-1995, **CENTRAL VILLAGE**	F W Inc	4	29.9	1 = rim, sand or grit-t
95-10.2		ch-st	1	4.8	
95-10.3		L J rims	2	10	1 has incision below lip, 1 has ticks, 1 has lg ticks/sm scallops
95-10.4		Carrabelle Inc rim	1	6.5	grit-t, vertical (II) incisions
95-10.5		indet st	1	8.8	poss ch-st
95-10.6		grog-t pl	4	30.2	
95-10.7		sand-t pl	5	27.5	
95-10.8		grit-t pl	2	11.5	
95-10.9		shell-t pl	1	6.1	
95-11.1	Surface, Area 9, on road SSW of temple mound, 1-5-1995, **CENTRAL VILLAGE**	Cool Branch Inc	1	15.1	heavy grog-t
95-11.2		ch-st	2	10.6	one very eroded
95-11.3		indet inc	1	2.7	
95-11.4		grit-t pl	2	20.5	
95-11.5		grog-t pl	1	5.2	
95-11.6		oyster shell	1	21	
95-11.7		*Rangia* shell	1	17.9	
95-12.1	Surface, Area 2, ESE of temple mound, in shell field, on road, and RR bed, 1-5-1995, **E VILLAGE**	Cool Branch Inc	1	9.6	grog-t
95-12.2		F W Inc	21	139.0	wide variety, sand, grit, and/or grog-t, 2 rims, 2 = 6 pt bowl
95-12.3		L J rims	12	107.4	2 ticked, 1 with 2 incisions, 1 with 3 incisions, 2 handles, 1 scalloped, 1 node: wide variety
95-12.4		indet punc	3	16.4	
95-12.5		shell-t pl rim	1	13.7	1 incision below collar
95-12.6		indet inc	13	98.2	
95-12.7		lst-t pl	4	31.2	
95-12.8		shell-t pl	14	110.7	2 = rims
95-12.9		sand-t pl	26	134.1	
95-12.10		grit-t pl	49	385.4	
95-12.11		daub	5	76.6	nice pieces
95-12.12		ch-st	2	7.2	smoothed-over or distorted
95-12.13		bone frag	1	1.2	long bone
95-12.14		turtle carapace frags	2	3.6	1 = prob softshell *Trionyx*
95-12.15		brown cockle shell	1	8.8	
95-12.16		grog-t pl	11	79.5	
95-12.17		*Busycon* shell debitage	1	83.4	cut body whorl
95-12.18		*Busycon* shell tool	1	12.2	scraper, smoothed/use wear
95-12.19		flat sandstone rock	1	4.4	
95-12.20		sand+grit+grog-t pl	1	3.9	
95-12.21		grit+grog-t pl	6	38.1	
95-12.22		agatized coral scraper	1	102.6	heavy, steep retouch, opposite end beaked
95-12.23		chert core frag/scraper	1	30.0	steep retouch, weathered, 2 beaks
95-12.24		industrial item frag	1	1.9	prob piece of clay pigeon
95-12.25		Marsh Island Inc	1	5.4	sand+grog-t, rim
95-12.26		Carrabelle Inc rim	1	9.5	sand-t, burnished, very micaceous
95-12.27		Point Washington Inc	1	7.7	ticked rim point, sand-t
95-12.28		indet engraved	1	17.4	sand-t, straight line
95-12.29		shell+grog-t pl	2	3.9	
95-101.1	surface, Area 2+3 temple mound+ area E of it, 6-17-1995, **E VILLAGE**	F W Inc	2	11.1	
95-101.2		ch-st	1	1.8	sand-t
95-101.3		L J Pl	1	17.4	with B-lug, 1 incision, grit-t

95-101.4		L J Pl	1	3	1 incision, grog-t, rolled lip
95-101.5		indet inc	1	3.8	
95-101.6		grit+grog-t pl	1	5.2	
95-101.7		lst+grog-t pl	1	6	
95-101.8		grit-t pl	7	39.6	
95-101.9		sand-t pl	5	10.2	
95-101.10		grog-t pl	4	28.6	
95-102.1	looter hole in southernmost mound (prob Mound A, N edge of hole), 6-22-1995, **MOUND A**	grit-t pl	1	12.4	
95-103-1.1	Core 1 on mound Area A southernmost mound (78-88 cm), C94A1, 6-23-1995, **MOUND A**	ch-st	2	2.9	sand-t, tiny
95-103-2.1	Core 1 on mound Area A southernmost mound (120-132 cm), C94A1, 6-23-1995, **MOUND A**	ch-st	1	3.3	grog-t
95-104.1	Surface, Area 9 (100-200 meters S of temple mound in shell field+road), 6-22-1995, **E VILLAGE**	unusual indet inc	1	2.4	Pt. Washington? grog-t, punch&drag or rolled stamp?
95-105.1	Shell ridge SE of donut (Singer) mound along RR bed, 6-22-1995, **MOUND D/W VILLAGE**	ch-st	3	17.6	1 = rim, sand-t
95-106.1	Shell area 2, Surface of disturbed road bed E of temple mound, 6-27-1995, **E VILLAGE**	grit-t pl	1	4.7	
8Fr14- Collected 7-10-1996					
96-1.1	Surface - W of big mound (Mound B),**WEST VILLAGE**	ch-st	4	22.3	sand or grit-t
96-1.2		indet punc	1	1.3	sand-t
96-2.1	Surface, W side of shell midden (temple mound), **MOUND H**	prob F W Inc	1	5.5	grit+red grog-t
96-2.2		L J rim	1	10.2	1 incision
96-2.3		indet inc	1	10.2	grit -t
96-2.4		ch-st	1	3.3	red grog-t
96-3.1	Shell midden ridge (presumably W of temple mound, surface), **CENTRAL VILLAGE**	ch-st	1	9.9	heavy grit-t
96-4.1		L J rim	1	14.4	B-lug (bottom node of B=larger) red grog temper
96-4.2		cord-marked or ch-st	1	4.1	hard to tell which
96-4.3		indet inc	1	5.5	sand-t
96-4.4		grog-t pl	1	7.1	cream-colored grog
96-5.1	Surface on big shell (temple) mound,**MOUND H**	F W Inc	2	18.9	grit-t
96-5.2		indet inc	1	3.4	prob Marsh I, carina, sand-t
96-5.3		indet inc	1	1.8	grit-t
96-5.4		ch-st	1	4.6	sand-t
96-6.1	Surface, open lot E of Magnolia cemetery, S side, **SHELL MOUND NEAR APALACH/FAR E VILLAGE**	Sw Cr Comp-St	3	13.2	
96-6.2		Keith Inc	1	3.8	
96-6.3		indet punc rim	1	4.8	prob Carrabelle
96-6.4		indet st	1	1.7	
96-6.5		indet inc	3		1 = rim
96-6.6		ch-st	29		6 = rims, most sand-t
96-6.7		grit+grog-t pl rim	1	6.1	
96-6.8		grit-t pl	10	46.5	1 = rim
96-6.9		sand-t pl	44	218.8	and crumbs, 4 = rims
96-6.10		grog-t pl	24	126.7	1 = rim, grog = mostly red, 1 = basal sherd, thick and curved
96-6.11		prob daub frags	2	6.1	but grog-t!
96-6.12		sandstone rock	1	4.2	
96-6.13		cockle shell frag – fossil?	1	6.5	encrusted with limerock?

96-7.1	Surface, open field E of Magnolia cemetery, N side, **SHELL MOUND NEAR APALACH/FAR E VILLAGE**	Sw Cr Comp-St	4	21.6	
96-7.2		indet st	1	9.2	cord-marked or woven fabric-impressed
96-7.3		ch-st	4	22.9	1 = rim
96-7.4		grit+grog-t pl	3	8.4	1 = rim
96-7.5		grog-t pl	5	19.6	
96-7.6		sand-t pl	8	22.4	1 = rim
96-7.7		grog+lst-t pl	1	2.7	
96-7.8		Busycon shell debitage	1	15.8	cut
96-7.9		Rangia shells	2	16.9	
96-7.10		crab claw	1	1	modern
96-7.11		gastropod shell	1	8.6	unknown, broken, land or sea?
96-7.12		clay basal sherd	1	11.7	wheel-made, sand-t, probably from recent cemetery plot
96-8.1	E side of open field, E of Magnolia cemetery, **SHELL MOUND NEAR APALACH/FAR E VILLAGE**	Sw Cr Comp-St	4	26.6	
96-8.2		L J Inc	2	22.2	1 has ticks, 4 incisions, grit +grog-t; 1 is grog-t, 2 incisions
96-8.3		ch-st	10	79.4	
96-8.4		grit+grog-t pl	2	18.8	
96-8.5		sand-t pl	21	104.9	
96-8.6		grog-t pl	10	39.1	
96-8.7		plastic, asbestos	3	6.1	modern
96-8.8		limerock - dumped	1	0.6	piece from new road
96-9.1	S side of E half of cemetery open lot, **SHELL MOUND NEAR APALACH/FAR E VILLAGE**	Keith Inc rim	1	10.4	
96-9.2		Sw Cr Comp-St	1	3.9	finger shaped pattern
96-9.3		ch-st	7	74.1	2 = rims
96-9.4		grit-t pl	3	16.1	
96-9.5		grog-t pl	7	45	
96-9.6		grit+grog-t pl	4	43.9	
96-9.7		sand-t pl	14	84.4	
96-10.1	Disturbed piles NW of the cemetery open lot E of Magnolia cemetery, **SHELL MOUND NEAR APALACH/FAR E VILLAGE**	ch-st	7	60.7	
96-10.2		grit-t pl	2	3.8	
96-10.3		sand-t pl	7	25.4	
96-10.4		grog-t pl	5	20.1	
96-10.5		grit+grog-t pl	4	25.8	
96-10.6		quartz pebbles	2	42.2	brought in or natural?
96-10.7		limerock	1	5	piece brought in for road fill?
96-10.8		modern items	3	24.1	slag,asbestos
96-11.1	Surface, area around first (northeasternmost) shell concentration in road W of NW corner of cemetery, **E VILLAGE**	grit-t pl	1	15.4	
8Fr14- Collected 8-4-1997					
97-1.1	Surface, N side of railroad bed (newly dredged), 30-40 m E. of Md. B, **CENTRAL VILLAGE**	sand-t pl	8	3.2	
97-2.1	Surface, temple mound, **MOUND H**	L J pl rim	1	1.6	tick
97-2.2		sand-t pl	1	12	
97-2.3		Point Washington Inc rim	1	6	lovely, sand-t
97-3.1	Surface, **MOUND B**	ch-st	3	42	all sand-t
97-4.1	Surface, Mound 3, **Mound C**	Sw Cr Comp-St	1	8.7	
97-5.1	Surface, area E of temple mound, **E VILLAGE**	indet Inc	1	2.9	unusual fingernail or check-st?
97-5.2		indet punc	1	1.6	

97-5.3		grit-t pl	1	5.9	
97-6.1	Surface, E of temple mound, **E VILLAGE**	L J rim	1	16.4	L J?, squared-off lip, very pl
97-6.2		grit-t pl	1	4.9	
97-7.1	Surface, **MOUND A**	ch-st	1	9.7	sand-t
8Fr14- Collected 7-11-1998					
98-1.1	Surface, big mound in potholes backfill, **MOUND B**	Deptford Linear Ch-st	3	23.2	1 = rim, or could be Wakula
98-1.2		ch-st	6	98.3	
98-1.3		grog-t pl	1	14.7	
98-1.4		sand-t pl	3	24.3	
98-1.5		bone frag	1	1.4	
98-1.6		pneumatized fish bone	1	3.9	
98-2.1	Shell temple mound vicinity, **MOUND H**	L J Inc	1	6.5	ticked rim
98-2.2		ch-st rim	1	14.1	
8Fr14- Collected 7-10-2000					
00-1.1	Surface of burial md SW side in ATV tracks, **MOUND A**	longbone frag	1	8.4	poss human or animal
8Fr14- Collected 6-11-2001					
01-1.1	looter hole backdirt, **MOUND B**	2nd ary flakes	3	5.9	weathered, blackened chert
01-1.2		block shatter	1	2.5	
01-1.3		bone frags	5	4.3	prob 3-4 = turtle carapace, 1 = small animal rib
8Fr14- Collected 2003					
03-01.1	Widened road E of Mound A, surface, 6-6-2003, **CENTRAL VILLAGE**	ch-st or fabric impressed	1	10.2	
03-02.1	S side of temple mound, 6-6-2003, **MOUND H**	L J	1	14.8	D- shaped lug
03-02.2		poss handle	1	4.9	or lug frag
03-02.3		F W Inc rim	1	10.8	
03-03.1	ditch area W of Mound A, 6-6-2003, **W VILLAGE**	F W Inc	2	15.2	
03-04.1	Surface, dirt road SW of temple mound,6-6-2003m **CENTRAL VILLAGE**	F W Inc	1	9.7	
03-04.2		Cool Branch Inc	1	12	
03-05.1	Top of temple mound, surface, 8-30-2003, **MOUND H**	blue shell-edged whiteware	1	10.8	historic crockery rim
03-06.1	50 m NE of cemetery, surface, 8-30-2003, **SHELL MOUND NEAR APALACH/FAR E VILLAGE**	F W Inc rim	1	11.6	ticked inner rim
03-07.1	Pierce Temple Mound area, 10-10-2003, **MOUND H**	iron poss railroad bolt	1	201.6	
03-07.2		L J Inc rim	1	3.4	
03-07.3		grit-t pl	3	27.4	1 = rim
03-07.4		F W Inc	1	5	
03-07.5		sand-t pl	3	19	
03-07.6		longbone frags	3	13.7	
8Fr14- Collected 2004					
04-1.1	6-2-2004, **MOUND B**	ch-st	3	29.4	sand-t
04-1.2		ch-st	1	5.1	grit-t
04-2.1	temple mound base in ATV tracks, 6-2-2004, **MOUND H**	sand-t pl	1	13.1	
04-3.1	E side of F W Mound on road surface, 6-2-2004, **MOUND H**	L J rim	1	9.1	4 incisions below lip
04-3.2		F W Inc	3	19.8	
04-3.3		indet inc	1	10	grit-t
04-3.4		indet inc	1	5.5	grog-t
04-3.5		shell-t pl rim	1	10.1	
04-3.6		sand-t pl	3	20.8	1 = rim
04-3.7		blue glass	1	4.1	container
04-3.8		whiteware	1	9.6	gold transfer-print fleur-de-lis

04-04.1	New clearing at end of driveway next to cemetery, 6-2-2004, **E VILLAGE**	concrete fragment	1	5.5	
04-04.2		ch-st	4	45.7	
04-5.1	Looter hole on east side of mound located NE of Moore burial mound, 6-2-2004, **MOUND C**	ch-st	1	14.3	
04-5.2		sand-t pl	1	10	
04-6.1	Between temple (H) and conical (B) mounds, 6-2-2004, **CENTRAL VILLAGE**	indet punc	1	5.6	
04-7.1	Next to looter hole, 6-2-2004, **MOUND C**	indet inc	1	9.5	sand-t
04-7.2		*Busycon* shell fragment	1	27.9	whorl fragment, debitage?
04-8.1	Looter trench at Mound NE of burial mound, 6-2-2004, **MOUND C**	Sw Cr Comp-St	1	5.1	sand-t
04-8.2		Sw Cr Comp-St	1	18.8	unusual, has punctations
04-8.3		sand-t pl	3	25.2	
04-8.4		ch-st	7	72.7	
04-9.1	W side of big mound (B) on railroad bed surface, 6-2-2004, **W VILLAGE**	Busycon shell columella tool	1	16.5	chisel end on each side
04-9.2		industrial slag	1	5.5	from railroad?
04-9.3		F W Inc	2	6.1	
04-9.4		indet punc	2	16	
04-10.1	From railroad bed near Mound B, 6-2-2004, **MOUND B**	ch-st	2	17	
04-10.2		sand-t pl	1	9.6	
04-11.1	On top of temple mound, 6-2-2004, **MOUND H**	Marsh Island Inc	1	8.7	
04-11.2		F W Inc	14	100.2	
04-11.3		L J	6	28.6	
04-11.4		ch-st	14	144.4	
04-11.5		grit-t pl	5	37.4	
04-11.6		fabric-impressed?	1	17.5	or lousy check-st?
04-11.7		indet inc	7	83.9	
04-11.8		sand-t pl	4	34.9	
04-12.1	fresh looter hole, 6-2-2004, **MOUND C**	soil sample	1	95.0	
04-13.1	RR bed near temple mound, 8-2-2004, **MOUND H**	F W Inc	1	9.1	
8Fr14- Collected 9-3-2005					
05-01.1	Surface, N end of westernmost rd into cemetery, **CEMETERY MOUND/E VILLAGE**	blue transfer print rim	1	25.9	hollow loop fold - jug?
05-02.1	Surface of railroad bed in front of temple mound, **MOUND H**	shell whorl debitage	1	80	cut, poss *Busycon*
8Fr14- Collected 2006					
06-1.1	Magnolia cemetery, area NE of new section, surface, 8-16-2006, **SHELL MOUND NEAR APALACH/FAR E VILLAGE**	WI Inc or Carrabelle Punc	1	3.9	
06-1.2		Sw Cr Comp-St	1	7.1	sand+grog-t
06-1.3		ch-st	3	7.8	sand+grog-t
06-1.4		grog+sand-t pl	1	8	
06-1.5		sand-t pl	1	3.4	
06-02.1	Surface Area 50-100 m S of temple mound, 8-14-2006, **E VILLAGE**	Pensacola Inc	1	3.9	shell+grog-t
06-02.2		L J rim	1	10.7	ticks, plain
06-02.3		ch-st	1	7.8	grit-t
06-02.4		shell+grog-t pl	1	4.7	
06-03.1	Surface of new built-up road E of Mound B, 8-14-2006, **CENTRAL VILLAGE**	indet punc	1	5.8	
06-03.2		grit-t pl	1	8.4	
06-03.3		lst-t pl	1	7.5	
06-04.1	Surface of road that goes S from W side of temple mound, 8-14-2006, **CENTRAL VILLAGE**	F W Inc rim	1	5.8	
06-04.2		Ch-st	1	8.7	
06-04.3		indet inc	1	5.7	
06-04.4		sand+grit -t pl	1	4.1	
06-04.5		grit+grog-t pl	1	17.7	

06-05.1	Magnolia cemetery NW corner area, between graves of Duggar and Page, 8-15-2006, **CEMETERY MOUND/E VILLAGE**	ch-st	1	11.9	
06-06.1	New section E side of cemetery, 8-15-2006, **MOUND NEAR APALACH/E VILLAGE**	ch-st	1	3.7	sand+grog-t
06-07.1	NE corner of old cemetery, 8-14-2006, **MOUND NEAR APALACH/E VILLAGE**	ch-st	1	4.9	sand+grog-t
06-07.2		sand+grog-t pl	1	13.1	
06-08.1	Surface of looter hole Mound 3 (C), 8-14-2006, **MOUND C**	ch-st	6	122.5	check sizes= 9.2, 6.3, 3.2 mm
06-08.2		linear ch-st	1	18.2	Deptford?
06-08.3		sand-t pl	1	52.1	
06-08.4		quartzite cobble frag	1	96.5	has use wear
06-08.5		catfish spine	1	0.7	
06-08.6		deer? foot bone	1	3.4	poss phalanx or metapodial
06-09.1	Area of disturbed ridge W of temple mound, 8-14-2006, **CENTRAL VILLAGE**	ch-st rim	1	8.3	sand-t
06-09.2		grit-t pl	1	34.9	
06-09.3		linear ch-st	1	7.5	sand-t, poss Deptford
06-10.1	Dump NW of Howell family plot (N center of old cemetery area), 8-15-2006, **CEMETERY MOUND/E VILLAGE**	ch-st	3	31.2	1 = rim
06-10.2		indet punc	1	5.5	grog+sand-t
06-10.3		sand-t pl rim	1	6.8	
06-11.1	Surface of temple mound, deliberate pile, 8-15-2006, **MOUND H**	F W Inc	6	61.9	1 rim may be an open bowl, 3 = rims
06-11.2		L J rims	2	14.1	1 with ticks, incisions
06-11.3		ch-st	5	52.5	
06-11.4		grit-t pl	15	128.9	1 = rim
06-11.5		shell-t pl	6	37.4	
06-11.6		shell+grit-t pl	4	39.5	
06-11.7		sand-t pl	5	32.7	
06-11.8		grog-t pl	2	9.7	1 = rim
06-11.9		sand+grog-t pl	1	14.9	
06-11.10		shell+grog-t pl	1	13	
06-11.11		burnt turtle carapace	1	1.7	frag
06-12.1	Foot of Alice Smith, Marshall Plot, prob NE corner newer part of old cem, near ditch, 8-15-2006, **MOUND NEAR APALACH/E VILLAGE**	Sw Cr Comp-St	1	10.3	
06-13.1	Surface NNW of temple mound - newly cleared (in swamp), 8-14-2006, **CENTRAL VILLAGE**	F W Inc	2	21.7	1 has interior decoration – 6 pt?
06-13.2		Pensacola Inc rim	1	6.6	
06-13.3		Marsh Island Inc rim	1	17.9	
06-13.4		indet inc	1	18.1	grit-t
06-13.5		L J rims	2	23.3	incisions; 1 = thick pl lip, 1=ticks
06-13.6		ch-st	4	34.5	
06-13.7		shell-t pl	3	34.7	
06-13.8		sand-t pl	3	31.8	1 has brush marks
06-13.9		grit-t pl	2	18.7	
06-13.10		indet brushed	1	11.4	grit-t, not Chattahoochee Br
06-13.11		daub	1	6.2	
06-13.12		green/black glass	1	24.2	weathered, prob bottleneck
06-13.13		blue glass jar frags	2	4.4	1 rim, 1 shoulder
06-13.14		*Rangia* shell	1	29.8	
06-13.15		*Busycon* shell scoop	1	138	
06-13.16		oyster shell	1	50.4	
06-14.1	Surface of new area in NE next to Duncan + Robinson Plot, new cemetery area, 8-16-2006, **FAR E VILLAGE**	Sw Cr Comp- St	2	7.2	
06-14.2		ind punc	3	17.3	all fingernail, all different
06-14.3		ch-st	4	22.8	1 has drilled hole

06-14.4		indet inc	1	5.8	complex triangular pattern
06-14.5		grog-t pl	1	4.2	
06-14.6		grit+grog-t pl	4	6.1	
06-14.7		grit-t pl	3	5.2	
06-14.8		sand-t pl	2	2.6	
06-15.1	Artifact scatter N of Mound B (deliberate pile next to road), 8-15-2006, **CENTRAL VILLAGE**	ch-st rim	1	16.5	several sherds glued
06-15.2		F W Inc	4	81	2 = rims, 1 body = sloppy
06-15.3		lst-t pl	2	32.3	
06-15.4		grit+grog-t pl	3	19.7	
06-15.5		grit-t pl	3	35.5	1 = wide flat rim
06-15.6		*Busycon* shell tool, poss hammer	1	479.4	large section of whorl cut below apex- poss haft; no use wear
06-16.1	Surface, Magnolia cemetery- far NE/N end, new area, Jones plot, 8-16-2006, **SHELL MOUND NEAR APALACH/FAR E VILLAGE**	Sw Cr Comp-St	1	5.7	sloppy
06-16.2		indet inc	2	15.6	1 = poss Marsh Island
06-16.3		ch-st	7	42.2	
06-16.4		grit-t pl	4	19	1 = rim
06-16.5		grit+grog-t pl	5	35.5	
06-16.6		sand-t pl	5	17.5	1 = rim
06-16.7		blue edge-decorated pearlware	1	5.2	raised rim design
8Fr14- Collected 2007					
07-1	TU1 L1, 5-29-2007, **CENTRAL VILLAGE**	permanent soil sample			1 liter
07-2	TU1 L4, 5-30-2007, **CENTRAL VILLAGE**	permanent soil sample			1 liter
07-3	TU1 L2, 5-30-2007, **CENTRAL VILLAGE**	permanent soil sample			1 liter
07-4	TU1 L3, 5-30-2007, **CENTRAL VILLAGE**	permanent soil sample			1 liter
07-5	TU1 L5, S ½, 5-30-2007, **CENTRAL VILLAGE**	permanent soil sample			1 liter
07-6.1	disturbed soil, pothole, 5-29-2007, **MOUND C**	Sw Cr Comp-St	3	14	1 = unusual
07-6.2		cordmarked	1	2.3	
07-6.3		indet st	2	6.4	1 = short 11 lines, 1 = fine concentric scratches, prob rocker-st
07-6.4		linear ch-st	12	99.3	lg range of sizes of checks, clearly linear, Deptford?
07-6.5		ch-st	53	375.4	check sizes 1.27 to .15 cm, some a little linear; 1 rim; 1 has scratches on inside - thin brush? 1 = thick podal basal sherd, all mostly sand-t
07-6.6		sand-t pl	20	86.9	
07-6.7		grog-t pl	1	23.8	
07-6.8		fabric-impressed	1	3.8	open, loosely woven fabric
07-6.9		*Busycon* shell disc bead	1	0.7	1.28 X 1.44 cm, subrectangular, drilled from 1 side? 25 mm thick
07-6.10		fish vertebrae	6	1.2	1 = large
07-6.11		turtle carapace frag	1	1.2	
07-6.12		pneumatized fish bone	1	5.1	
07-6.13		deer tooth	1	3.4	
07-6.14		burnt bone frag	1	1.1	
07-6.15		fish pharyngeal plate frag	1	0.6	tooth sockets, sheepshead drum
07-6.16		fish teeth, round	2	0.5	sheepshead; bigger than sockets
07-6.17		modern clay frag?	1	13.7	1st recorded in 2011 by R Harke

07-07.1	Mound C Stratum 1, 5-29-2007, **MOUND C**	indet st, unusual pattern, sand-t	1	3.1	herringbone pattern, bone? plant? braided twine? too regular to be punch-and-drag
07-07.2		ch-st	8	29.9	all sand-t
07-07.3		sand-t pl	1	2.3	
07-07.4		grit-t pl	1	0.9	
07-07.5		flat bone frags	2	1.4	
07-08.1	Shovel T07-2, 5-30-2007, **CENTRAL VILLAGE**	charcoal	1	1.7	
07-09.1	TU 1, Level 3, TU071, 5-30-2007, **CENTRAL VILLAGE**	clear glass sherd	1	0.5	thin, window?
07-09.2		rusted iron nails	10	36.3	
07-09.3		charcoal		6.6	
07-11.1	TU 1, Level 4, TU071, 5-30-2007, **CENTRAL VILLAGE**	poss rusty nail	1	6.8	does not react to magnet-rusted away?
07-11.2		rust frags		2.4	
07-11.3		charcoal		1	
07-12	TU 1, Level 1, TU071, 5-24-2007, **CENTRAL VILLAGE**	soil sample for flotation	1	17005.5	sandy with lots of organics
07-13	TU 1, Level 3, TU071, 5-30-2007, **CENTRAL VILLAGE**	soil sample for flotation	1	10283.3	
07-14	TU 1, Level 5, TU071, 5-30-2007, **CENTRAL VILLAGE**	soil sample for flotation	1	10307.1	dark, humus rich soil, silty
07-15	TU 1, Level 4, TU071, 5-30-2007, **CENTRAL VILLAGE**	soil sample for flotation	1	9864.5	dark, humus rich soil
07-16	TU 1, Level 2, TU071, 5-30-2007, **CENTRAL VILLAGE**	soil sample for flotation	1	9635.9	sandy, silty soil with lots of organics
07-17	Stratum II, 5-30-2007, **MOUND C**	soil sample for flotation	1	7748.4	lots of shell, sandy, bone with some organics
07-18.1	pothole, 5-30-2007, **MOUND C**	Sw Cr Comp-St	7	36.3	great variation
07-18.2		Santa Rosa or Alligator Bayou St	1	12.5	rocker-stamped with shell; photo: modern clay impression
07-18.3		ch-st	72	439	1 has coil smoothing mark on interior, 1 = rim, 1 = podal support, wide range of check sizes, mostly sand-t, some grog
07-18.4		Deptford Linear Ch-St	7	47.5	
07-18.5		sand-t pl	7	13.1	some burnished, 1 = rim
07-18.6		grog-t pl	3	2.5	crumbs
07-18.7		grit-t pl	1	3	
07-18.8		red sandstone frag	1	5.1	hematite? rubs off
07-18.9		agatized coral chunks	2	90.3	hard to see any working
07-18.10		chert 2ndary flake	1	1	dull opaque white
07-18.11		block shatter	2	41.4	1=small and white, 1= g, reddish, cubical
07-18.12		bones	3	12.2	1 complete metapodial? identifiable!
07-18.13		fish pharyngeal plate frags & tooth	2	1.4	jack? 1 = plate broken in two, 1 = sm round tooth
07-18.14		turtle carapace frags	2	0.6	tiny
07-18.15		pneumatized fish bone	4	12.8	
07-18.16		fish vertebrae	20	4.2	a couple are very big
07-18.17		*Busycon* shell debitage?	3	20.7	2 very small, 1 lg cut
07-18.18		fish otolith	1	2.1	large
07-18.19		oyster shell frag	1	1.3	
07-18.20		charcoal		13.5	many pieces
07-19	Stratum I, 5-30-2007, **MOUND C**	soil sample for flotation	1	4840.4	sandy, shell, chert, roots,seeds

07-20.1	Stratum 5, 5-30-2007, **MOUND C**	ch-st sherds	2	191.6	large, 1 = basal, curved, rounded , almost tetrapod, 1 = 2 glued, fresh break
07-21.1	Stratum 3, 5-30-2007, **MOUND C**	ch-st rim	1	15.5	sand-t
07-22.1	Stratum 3 - brown soil 21 cm below surface, 5-30-2007, **MOUND C**	unusual unifacial tool	1	207.9	use-wear, convex ventrally but concave dorsally; cortex; weird
07-23	Stratum I, 5-30-2007, **MOUND C**	permanent soil sample	1	1165.1	coarse sand, 10YR 5/3, Rangia shell
07-24	Stratum II, 5-30-2007, **MOUND C**	permanent soil sample	1	2225.6	
07-25.1	mixed (looter's backdirt), 5-30-2007, **MOUND C**	*Busycon* shell disc beads	6	15.1	round, oval, and squarish; range = ca. 1.5 to 2.5 cmwide
07-25.2		clear quartz flake	1	0.5	or glass? can't tell from Mohs
07-25.3		pneumatized fish bone	3	6	1 = cut, at ends?
07-25.4		bone tool? prob deer	1	3.6	point/pin/awl, ridge up middle
07-25.5		fish vertebra	8	1	
07-25.6		fish spine	1	0.2	catfish
07-25.7		fish teeth	2	0.5	round, sheepshead or drum
07-26.1	Poss Mound E near TU 2E, just N of unit, on surface under leaves, 5-30-2007, **MOUND E**	white glass jar, cosmetic	1	120	about ½ of a side, screw top
07-26.2		clear glass bottle base	1	63.3	glass round/sub-square
07-26.3		clear glass bottle	1	30.6	flat, recessed, straight side sherd
07-26.4		basal glass sherd	1	19.3	clear, oval, prob bottle? St, 2
07-27.1	Stratum 4, 5-30-2007, **MOUND C**	longbone frag	1	1.2	
07-28.1	TU 1, Level 2, TU071, 5-30-2007, **CENTRAL VILLAGE**	block shatter	2	6.7	opaque, honey-colored chert
07-28.2	TU 1, Level 2, TU071, 5-30-2007, **CENTRAL VILLAGE**	metal chain frags	25	904.5	thin flat links, related to rusted iron elsewhere in unit? don't react to magnet, all rust except innermost thin chain does react
07-28.3		charcoal		2.0	
07-29	TU 1, Level 6, TU071, 6-2-2007, **CENTRAL VILLAGE**	permanent soil sample	1		1 liter
07-30	TU 1, Level 7, TU071, 6-2-2007, **CENTRAL VILLAGE**	permanent soil sample	1		1 liter
07-31	TU 1, Level 8, TU071, 6-2-2007, **CENTRAL VILLAGE**	permanent soil sample	1		1 liter
07-32	TU 1, Level 10, TU071, 6-2-2007, **CENTRAL VILLAGE**	permanent soil sample	1		1 liter
07-33.1	TU 1, Level 6 south, TU071, 5-30-2007, **CENTRAL VILLAGE**	clear glass	1	1.6	thin; could be window
07-33.2		charcoal		2.8	
07-34.1	TU1, Level 7 South, TU071, 5-31-2007, **CENTRAL VILLAGE**	charcoal		5.1	
07-35.1	TU1, Level 8, South, TU071, 5-31-2007, **CENTRAL VILLAGE**	charcoal		2.4	
07-36.1	TU1, Floor 95, 36E, 55N, TU071, 5-31-2007, **CENTRAL VILLAGE**	black glass sherd	1	5.3	thick, worn, old bottle?
07-37.1	Surface of lunch area ~80m N of Mound E, 5-31-2007, **CENTRAL VILLAGE**	*Busycon* shell	1	63.5	young, unmodified? midden in it
07-38	TU 1, Level 10, TU071, 5-31-2007, **CENTRAL VILLAGE**	soil sample for flotation	1	12080.7	moist dark silty soil, some organics, 9 liters
07-39	TU1, Level 8, South, TU071, 5-31-2007, **CENTRAL VILLAGE**	soil sample for flotation	1	12922.4	damp, dark, sandy soil with lots of organics, 9 liters
07-40	TU 1, Level 7 south, TU071, 5-31-2007, **CENTRAL VILLAGE**	soil sample for flotation	1	11815.2	9 liters
07-41	TU 1, Level 6 south, TU071, 5-31-2007, **CENTRAL VILLAGE**	soil sample for flotation	1	5108.4	sandy, 9 liters

07-42	TU 2E, Level 1, TU07-2E, 6-2-2007, **MOUND E**	permanent soil sample	1		1 liter
07-43	TU 2E, Level 2, TU07-2E, 6-2-2007, **MOUND E**	permanent soil sample	1		1 liter
07-44	TU 2E, Level 1, TU07-2E, 5-31-2007, **MOUND E**	soil sample for flotation	1	7323	9 liters
07-45	TU 2E, Level 2, 07-45, TU07-2E, 5-31-2007, **MOUND E**	soil sample for flotation	1	8017.9	9 liters
07-46.1	TU 2E, Level 2, TU07-2E, 5-31-2007, **MOUND E**	grit-t pl	1	5.1	could stamped
07-46.2	TU 2E, Level 2, TU07-2E, 5-31-2007, **MOUND E**	sand-t pl	1	11	burnished dark exterior; soft pale interior –weird.
07-46.3	TU 2E, Level 2, TU07-2E, 5-31-2007, **MOUND E**	clear glass	5	1.9	thin, fine, some slightly curved, not window, 1 = a bit solarized - wineglass?
07-46.4	TU 2E, Level 2, TU07-2E, 5-31-2007, **MOUND E**	rusted iron frags	7	1.5	all flat but 1 might be nail
07-46.5	TU 2E, Level 2, TU07-2E, 5-31-2007, **MOUND E**	charcoal		~.3	
07-47.1	disturbed, looter backdirt, 5-31-2007, **MOUND C**	Deptford Linear Ch-st	1	9.1	
07-47.2		Deptford Plain, sand-t	1	10.4	basal sherd with podal supports
07-47.3		ch-st	1	26	sand+lst-t
07-47.4		ch-st	5	27.9	grit-t
07-47.5		ch-st	5	37.1	sand-t
07-47.6		ch-st	27	291.9	grit+grog-t
07-47.7		ch-st rims	2	70.1	grit+grog-t, 1 has checks along top of rim, other = v linear
07-47.8		ch-st rim	1	10.3	sand-t
07-47.9		shell-t pl	1	5.8	
07-47.10		poss fabric-impressed	1	7.5	grit-t
07-47.11		indet brushed or st	1	3.6	grit-t
07-47.12		indet st	1	13	poss net-marked, grit+grog-t
07-47.13		sand-t pl	4	44.8	1 = rim
07-47.14		grit+grog-t pl	4	26.9	
07-47.15		chert block shatter	1	21.3	fossils in it, poss not cultural
07-47.16		sandstone concretion	1	10.3	tiny geode inside - natural
07-47.17		limestone frag	1	131.9	smoothed
07-47.18		pneumatized fish bone	2	3.7	
07-47.19		turtle carapace frag	1	0.9	
07-47.20		fish vertebrae	1	0.7	large
07-47.21		mammal bone - claw?	1	2	distal phalanx – dog?
07-48.1	TU 2E, Level 1, TU07-2E, 5-31-2007, **MOUND E**	grit-t pl	1	4.7	
07-48.2		whiteware teacup sherds	8	140.4	2 = bases, 1 = rim
07-48.3		whiteware plate sherds	17	128.8	several from scalloped - rim pink flower transfer print plate
07-48.4		pearlware	1	0.3	tiny blue-painted sherd
07-48.5		metal objects	3	16.6	1 has holes and is rusted - strainer? 1 = round base
07-48.6		rusted iron nail	1	2	
07-48.7		metal bottlecap	1	6.7	
07-48.8		shotgun shell	1	3.8	REM-UMC-20 "NITRO CLUB"
07-48.9		plastic object	1	2.4	badminton shuttlecock?
07-48.10		clear glass sherds	74	343.3	some thin, some thick, some shoulders and sides of bottles

07-48.11		clear glass fluted bottle	8	127.9	different kinds
07-48.12		clear glass bottle basal	12	271.9	some with marks, some square, some round
07-48.13		clear glass bottleneck sherds	9	215	1 = pop bottle, 2 = pop off, rest = screwtop jar
07-48.14		clear glass	1	3.1	small cylinder with base- test tube? not rounded
07-48.15		clear glass bottle	1	17.9	subrectangular; " ..ICE-US"
07-48.16		clear glass bottle	1	7.4	subrectangular;"Chas H Fletch. "
07-48.17		clear glass bottle	1	90.1	rectangular; 2 pieces; "Castoria"
07-48.18		clear glass	14	62	cloudy, translucent, weathered
07-48.19		solarized clear glass	14	239.3	1 = base, 1 = fluted, 1 = tiny neck
07-48.20		brown glass sherds	2	3.4	
07-48.21		blue glass sherds	13	10.8	1 = small neck
07-48.22		mammal bone frags	2	1.4	articulating
07-48.23		charcoal		0.1	
07-49	TU 2E, Level 5, TU07-2E, 6-2-2007, **MOUND E**	permanent soil sample	1		1 liter
07-50	TU 2E, Level 4, TU07-2E, 6-2-2007, **MOUND E**	permanent soil sample	1		1liter
07-51	TU 2E, Level 3, TU07-2E, 6-2-2007, **MOUND E**	permanent soil sample	1		1liter
07-52.1	near lunch area, surface, ~80 m N of Mound E, 5-29-2007, **CENTRAL VILLAGE**	L J rim	1	12.2	ticks and node, grit-t
07-52.2		L J rim	1	12	lug and prob broken lug, grit-t
07-53.1	Surface of RR bed (dirt road) at NW edge of Mound B, 6-2-2007, **MOUND B**	sand-t pl rim	1	9.3	with 2 incisions
07-53.2		railroad spike head	1	77	
07-54.1	Surface of temple mound summit, 6-2-2007, **MOUND H**	Pensacola Inc rim	1	12.9	very fine thin shell temper
07-55.1	backfill of looter's hole, 6-2-2007, **MOUND C**	ch-st	14	99.2	wide range of check sizes: 80 to 20 mm; some rectang; sand-t
07-55.2		woven fabric-impressed	1	5.6	sand-t, thin parallel lines on interior - even finer fabric?
07-55.3		sand-t pl	3	15.2	1 = rim, may be smoothed-over surface treatment
07-55.4		grog-t pl	1	6.1	
07-55.5		oyster shell	1	114	large
07-55.6		*Busycon* shell debitage	1	25.9	body whorl frag
07-55.7		burnt shell frags	3	3.4	1 may be clam
07-55.8		turtle carapace frags	2	3.1	
07-55.9		bone: distal phalanx	1	3.1	identifiable animal
07-55.10		burnt bone frag	1	0.3	flat and tiny
07-55.11		bone frag	1	0.5	articulating surface, sm animal
07-55.12		nutshell frags	2	0.6	prob modern
07-55.13		charcoal	2	0.7	
07-56.1	TU E2, Level 3, TU07-2E, 6-2-2007, **MOUND E**	charcoal		4.0	
07-56.2		glass bottleneck sherd	1	3.2	screw-on
07-57.1	TU 2E, Level 4, TU07-2E, 6-2-2007, **MOUND E**	charcoal		8.8	some unburnt wood?
07-58.1	Surface, N edge of RR bed at NE side of Mound B, 6-2-2007, **MOUND B**	ch-st	1	3.6	
07-58.2		indet inc	1	5.4	
07-58.3		grit+shell-t pl	2	14.3	
07-58.4		grit-t pl	2	24.5	

07-59.1	surface of road (rr bed) between temple mound and Mound B, 6-2-2007, **CENTRAL VILLAGE**	indet inc	1	8.8	Carrabelle or Marsh Island?
07-60.1	Looter hole 2, 6-2-2007, **MOUND B**	ch-st	2	6.1	sand+grog-t
07-60.2		indet st	2	11.8	grit+grog-t
07-61.1	Shovel Test 3, 6-2-2007, **W VILLAGE**	ch-st	3	34.8	grit+grog-t
07-61.2		grit+grog-t pl	4	9.8	eroded; might have been ch-st
07-61.3		grit+grog+lst-t pl	2	1.7	
07-61.4		sandstone chunks	2	17.3	soft
07-61.5		charcoal		1.2	
07-62.1	Shovel Test 3, 6-2-2007, **W VILLAGE**	soil sample -Stratum 1	1	24	humus mixed with pale gray topsoil, about 10YR6/1, medium sand
07-62.2		soil sample -Stratum 2	1	30.1	fine sand 10YR8/1
07-62.3		soil sample - Stratum 3	1	31.3	medium fine sand 10YR4/3
07-62.4		soil sample - Stratum 4	1	46	medium sand 10YR6/4
07-63	TU 2E, Level 4, TU07-2E, 6-2-2007, **MOUND E**	soil sample for flotation	1	11207.4	9 liters; dark sandy soil, organics, small grainy material
07-64	TU 2E, Level 3, TU07-2E, 6-2-2007, **MOUND E**	soil sample for flotation	1	7791.1	9 liters; silty sand; organics, only B & C fractions; screens easily
07-65	TU 2E, Level 5, TU07-2E, 6-2-2007, **MOUND E**	soil sample for flotation	1	11680.2	fine sand, roots, charcoal; used older sm flotation unit; some leakage between A & B
07-66.1	Shovel Test 07-6, (0-10 cm), 6-4-2007, **E VILLAGE**	ch-st sherd	1	15.7	fragile, crumbling
07-67.1	TU 2E, Level 5, TU07-2E, 6-4-2007, **MOUND E**	wood, seed/charcoal	3	0.5	fragments
07-67.2		flat metal frag	1	0.1	
07-68.1	TU 2E, Level 5, TU07-2E, 6-4-2007, **MOUND E**	charcoal		2.7	
07-70	TU 2E, Level 6, TU07-2E, 6-4-2007, **MOUND E**	permanent soil sample	1		1 liter [#07-69, duplicate sample, was discarded]
07-71.1	Between Singer and Mound B on old RR bed surface, 6-4-2007, **W VILLAGE**	F W Inc	1	27.5	
07-72.1	backfill of looter's hole, 6-4-2007, **MOUND C**	ch-st	6	72.2	1 = rim, grog-t, mostly sand-t
07-72.2		sand-t pl	4	50.6	thick, rough
07-72.3		indet st	1	3.3	rough
07-72.4		chert block shatter	1	1.8	
07-72.5		*Busycon* shell debitage	1	5	flat, cut
07-72.6		shell frags	2	3	oyster?
07-72.7		fish bone frag	1	0.3	
07-72.8		turtle carapace frag	1	2	
07-72.9		fish tooth	1	0.4	round, from plate - sheepshead?
07-73.1	Southwesternmost Mound A, backdirt of small looter hole (~30 cm) in clam, oyster & yellow sand, 6-4-2007, **MOUND A**	oyster	5	347.2	
07-73.2		*Rangia* shell	3	21.3	
07-73.3		slightly linear ch-st	1	4	Deptford?
07-74	TU 2E, Level 6, TU07-2E, 6-4-2007, **MOUND E**	soil sample for flotation	1	9953.1	1 liter, very fine sand
8Fr14- Collected 2011					
11-1.1	Surface W of Mound B, 7-24-2011, **W VILLAGE**	blue transfer-print rim	1	10.7	
11-1.2		blue shell-edge rim	1	3.3	
11-2.1	Mound surface of NE end, 7-24-2011, **MOUND F**	sand-t pl	1	3.3	

11-3.1	Mound, TUA, Level 1, 7-24-2011, **MOUND F**	indet Inc	1	3.9	curvilinear, Pt Washington Inc?
11-3.2		sand-t pl	4	9.3	
11-3.2		charcoal	1	1	
11-4.1	Mound, TUA, Level 1, 7-24-2011, **MOUND F**	hickory nuts	2	11	
11-5.1	Mound, TUA, Level 1, 7-24-2011, **MOUND F**	indet inc	1	2.8	curvilinear, Pt Washington Inc?
11-6	Mound, TUA, Level 2, 7-24-2011, **MOUND F**	permanent soil sample	1		1 liter
11-7	Mound, TUA, Level 2, 7-24-2011, **MOUND F**	soil flotation sample	1		9 liter
11-8.1	Mound, TUA, Level 2, 7-24-2011, **MOUND F**	indet Inc	1	6.6	curviliner, sand-t
11-8.2		indet Inc	1	0.4	sand-t
11-8.3		sand-t pl	1	1.4	
11-8.4		shell	1	3.4	
11-8.5		charcoal	3	0.2	
11-9	Mound, TUA, Level 3, 7-24-2011, **MOUND F**	permanent soil sample	1		1 liter
11-10	Mound, TUA, Level 3, 7-24-2011, **MOUND F**	soil flotation sample	1		9 liter
11-11.1	Mound, TUA, Level 3, 7-24-2011, **MOUND F**	sand-t pl	2	2.8	
11-11.2		charcoal	4	1	
11-12.1	Mound, TUA, Level 3, 7-24-2011, **MOUND F**	charcoal	5	0.3	
11-13.1	Mound, TUA, Level 4, 7-25-2011, **MOUND F**	charcoal	4	0.4	
11-14.1	Mound, TUB, Level 2, 7-25-2011, **MOUND**	sandstone concretion	2	1.7	
11-14.2	**G**	broken shell fragments	7	1.1	
11-15.1	Mound E, Core 1, Level 1, C11E1, 7-27-2011, **MOUND E**	iron nail fragments	7	1.8	1 = round nail head
11-16.1	Between Mounds B,C, and Singer; TUC, Level 1, 7-27-2011, **W VILLAGE**	chert microtool	1	0.3	
11-16.2		2nd ary decort flake	1	0.6	quartz
11-16.3		sandstone concretion	1	0.3	
11-16.4		shell fragments	15	1.8	
11-17	TUC Level 1, 7-27-2011, **W VILLAGE**	permanent soil sample			1 liter
11-18	TUC Level 1, 7-27-2011, **W VILLAGE**	soil flotation sample			9 liter
11-19.1	TUC Level 2, 7-28-2011, **W VILLAGE**	ch-st	6	26.6	sand-t, 1= poss folded rim
11-19.2		indet Inc	1	1.7	sand-t
11-19.3		grit-t pl	1	1.2	
11-19.4		sand-t pl	12	12	
11-19.5		primary decort flake	4	3.5	
11-19.6		2nd ary flake	1	0.3	
11-19.7		quartz chips	13	9.6	
11-19.8		sandstone concretion	1	0.9	
11-19.9		shell fragment	1	0.3	
11-19.10		charcoal	3	1.4	
11-20.1	TUC Level 1, under feature 11-1, 7-28-2011, **W VILLAGE**	2nd ary decort flake	1	0.5	
11-20.2		quartz chip	1	0.3	
11-21	TUC Level 2, 7-28-2011, **W VILLAGE**	permanent soil sample	1		1 liter
11-22	TUC Level 2, 7-28-2011, **W VILLAGE**	soil flotation sample	1		9 liter
11-23.1	TUC Level 3, 7-28-2011, **W VILLAGE**	ch-st	6	13.9	sand-t
11-23.2		sand-t pl	22	12.6	1= rim
11-23.3		2nd ary flake worked	1	11.4	worked edge=expedient tool
11-23.4		2nd ary chert flakes	2	0.8	
11-23.5		quartz chips	3	1.6	
11-23.6		sandstone concretions	22	16.6	
11-23.7		broken shell fragments	1	0.5	
11-23.8		fish bones	8	1.1	4= rounded fish teeth, 1= vert
11-23.9		charcoal	2	0.2	
11-24	TUC Level 3, S wall, 7-28-2011, **W VILLAGE**	ch-st	1	40.7	
11-25	TUC Level 3, 7-28-2011, **W VILLAGE**	permanent soil sample	1		1 liter
11-26	TUC Level 3, 7-28-2011, **W VILLAGE**	9 liter flotation sample	1		
11-27.1	TUC Level 4, 7-28-2011, **W VILLAGE**	ch-st	1	0.4	sand-t

11-27.2		sand-t pl	1	0.3	
11-27.3		burnt? sand concretions	26	29.7	
11-27.4		fish tooth	2	0.3	rounded
11-28	TUC Level 4, 7-28-2011, **W VILLAGE**	permanent soil sample	1		1 liter
11-29	TUC Level 4, 7-28-2011, **W VILLAGE**	soil flotation sample	1		9 liter
11-30	TUC Level 5, 7-28-2011, **W VILLAGE**	permanent soil sample	1		1 liter
11-31	TUC Level 5, 7-28-2011, **W VILLAGE**	soil flotation sample	1		9 liter
11-32	TUC, feature 11-1, 36cm from NE corner, northern ½, 7-28-2011, **W VILLAGE**	soil sample	1		
11-33	TUC, feature 11-1, 36cm from NE corner, southern ½, 7-28-2011, **W VILLAGE**	soil sample	1		
11-34.1	Highest shell midden ridge, 47 m NE of SW corner of TUC, surface of SE end of ridge, 7-28-2011, NEAR **MOUND D, W VILLAGE**	woven fabric-impressed	1	10.8	sand-t; thin but irregular-width threads in simple weave
11-34.2		sand-t pl	7	28.8	
11-34.3		2nd ary flake	1	9.5	
11-35.1	Mound B looter hole on N slope of mound, E 0692650/N 3291045, 7-30-2011, **MOUND B**	ch-st	2	14.6	1= sand-t, 1= grog-t
11-35.2		sand-t pl	1	10	
11-35.3		quartz cobble mano	1	85.7	use wear on two edges
11-35.4		sandstone fragment	1	92	flaked, poss tool
11-35.5		quartz cobble mano frag	1	29.8	use wear
11-35.6		*Busycon* shell debitage?	1	34	cut whorl, subrectangular, tool?
11-35.7		*Rangia* shells	3	53.7	unbroken
11-35.8		bone fragment	1	2.1	identifiable animal
11-35.9		oyster shell	1	22.1	
11-35.10		charcoal	1	1.2	
11-36.1	Surface of railroad bed between Singer and NE elevation (poss remnants of Mound D), 7-30-2011, **W VILLAGE**	sand-t pl	1	3.7	
11-37.1	ST11-1, 100 m E of Mound A, 0-10 cm, 7-30-2011, **CENTRAL VILLAGE**	ch-st	3	28.2	sand-t
11-37.2		sand-t pl	11	9.9	
11-37.3		primary decort flake	3	10.6	
11-37.4		2nd ary decort flake	5	4.4	
11-37.5		2nd ary flakes	6	1.8	
11-37.6		quartz chips	4	1.8	
11-37.7		broken burned shell fragments	4	1	
11-37.8		broken shell fragments	22	19.5	
11-37.9		sand/shell concretion	3	22.2	
11-37.10		machine cut nail	1	1.5	round-head
11-37.11		clear glass fragment	1	10	partial embossed mark
11-38.1	ST11-1, 25-35 cm, 7-30-2011, **CENTRAL VILLAGE**	ch-st	20	108.8	sand-t, 5= rims
11-38.2		indet st	4	16.5	
11-38.3		sand-t pl	24	20.1	
11-38.4		primary decort flakes	7	134.4	mostly cortex
11-38.5		2nd ary decort flakes	2	0.8	
11-38.6		2nd ary flakes	5	4.8	
11-38.7		quartz chip	1	0.6	
11-38.8		burned shell fragments	13	5.4	
11-38.9		shell fragments	20	11.2	
11-38.10		bone fragment	1	0.5	
11-38.11		charcoal	21	4.3	
11-39.1	ST11-1, 35-47 cm, 7-30-2011, **CENTRAL VILLAGE**	ch-st	1	8.8	sand-t
11-39.2		sand-t pl	2	0.5	
11-39.3		2nd ary flakes	2	4.8	
11-39.4		shell frags	5	0..5	

11-39.5		shell frags	3	0.3	
11-39.6		bone frags	3	0.9	
11-39.7		charcoal	7	0.7	
11-40.1	ST11-1, 47-60 cm, 7-30-2011, **CENTRAL VILLAGE**	ch-st	4	16.1	
11-40.2		sand-t pl	6	5.6	
11-40.3		grit-t pl	2	1.2	
11-40.4		primary decort flake	1	0.5	
11-40.5		broken shell fragments	2	0.7	
11-40.6		poss burned seeds	7	0.4	
11-40.7		charcoal	4	0.3	
11-41.1	ST11-1, 30 cm deep in N wall & 5 cm from NE corner, 7-30-2011, **CENTRAL VILLAGE**	projectile point- Decatur type?	1	10.8	corner-notched, broad short stem, concave base, l=5.93 cm, w= 3.18 cm, thickness = .66cm
11-42.1	ST11-1, 38 cm deep in SW corner, 7-30-2011, **CENTRAL VILLAGE**	fired clay	1	8.9	
11-43.1	ST11-2, 20-33 cm, 7-31-2011, **W VILLAGE**	ch-st	5	38.6	grit-t
11-43.2		indet st	1	6.9	sand-t
11-44.1	ST11-3 ,7-31-2011, **W VILLAGE**	ch-st	2	16.4	sand-t, 1= folded rim
11-44.2		ch-st	1	9.6	grit-t, huge range in check size
11-44.3		indet st	1	3.6	grit-t
11-44.4		sand-t pl	10	28	
11-44.5		burned soil	5	66.9	
11-45.1	Northernwestern most point on shell ridge, UTM E 692275/N 3291255, 7-31-2011 **FAR W VILLAGE**	L J loop handle	1	28.7	white grog temper
11-45.2		ch-st	1	2.8	sand-t
11-45.3		indet st	1	3.5	sand-t, poss cob or fabric-mk
11-45.4		grit-t pl	6	21.6	
11-45.5		sand-t pl	6	35.5	
11-45.6		brick fragment	1	36.8	
11-46.1	Surface of shell midden ridge between Singer Md (Fr16) and 100 m WNW, 7-31-2011, **W VILLAGE**	ch-st	5	38.3	2= grit -t, 3= sand-t
11-46.2		indet punc	1	5.7	sand-t, rim, fingernail punc
11-46.3		indet brushed	1	3.5	sand-t
11-46.4		sand-t pl	4	43.1	
11-47.1	Surface of shell midden ridge between 100 m W of Singer (Fr16) and NW end of Mahr property, 7-31-2011, **W VILLAGE**	ch-st	1	2.4	
11-48.1	Surface collection, vicinity of temple mound, 7-31-2011, **MOUND H**	Cool Branch Inc	1	5	sand-t, rim
11-48.2		Cool Branch Inc	1	14.6	sand-t
11-48.3		F W Inc	1	2.5	grog-t, rim
11-48.4		F W Inc	2	6.4	sand-t
11-48.5		F W Inc	1	5.8	sand-t, 6 pointed bowl rim
11-48.6		L J	2	4.3	ticked rims
11-48.7		ch-st	2	27	sand-t
11-48.8		indet inc	1	1.8	sand-t
11-48.9		indet brushed rim	1	4.1	grit-t, brushed interior
11-48.10		salt-glazed stoneware	2	11.2	
11-48.11		shell-t pl	4	17.9	
11-48.12		grit-t pl	7	28.4	
11-48.13		sand-t pl	16	60.7	
11-48.14		turtle shell fragment	1	5.5	
11-48.15		bone frag	1	1.6	
11-48.16		concrete frag	1	1.2	
11-49	West end of site, UTM E 692447/E 3291145, surface, 7-31-2011, **W VILLAGE**	shell midden soil sample	2		ca. 7 liters
11-50	20 m E of temple mound on shell ridge, 8-2-2011, **E VILLAGE**	shell midden soil sample	1		ca. 9 liters

11-51.1	West of railroad cut, surface 75 m W to 80 m E of temple mound, 8-2-2011, **E VILLAGE**	F W Inc	1	15.6	sand-t, rim
11-51.2		L J rim	1	10.5	2 horizontal incisions, sand-t
11-51.3		L J rim	1	2.1	rim, one tick and one incision
11-51.4		L J node	1	4.6	
11-51.5		Pensacola Inc	1	2.5	
11-51.6		indet punc	3	17.7	sand-t
11-51.7		indet inc	1	5.2	sand-t
11-51.8		indet inc	1	1.6	grit-t
11-51.9		indet inc	1	4.1	grit, shell, and grog-t
11-51.10		shell-t pl	5	22.1	
11-51.11		grit-t pl	18	89.2	1= rim
11-51.12		sand-t pl	15	64	1= rim
11-51.13		2nd ary decort flakes	1	2.5	
11-51.14		iron railroad spikes	2	346	1 square, 13 cm long; 1 round, 7 cm long
11-51.15		coal	1	7.6	RR bed fill?
11-51.16		industrial slag	1	5.5	RR bed fill?
11-51.17		shale frag	1	7.1	RR bed fill?
11-52.1	Surface W of temple mound on shell midden ridge that also curves around to S on small stream bank, 8-2-2011, **CENTRAL VILLAGE**	F W Inc	5	22.4	2=rims, sand-t
11-52.2		Marsh Island Inc	1	8.2	rim, sand-t
11-52.3		L J rims	9	54.2	7 ticked, 1 loop handle, 1 D-lug, grit-t
11-52.4		ch-st	2	13.1	
11-52.5		indet inc	5	18.7	grit-t, 1=rim
11-52.6		indet punc	5	16.2	sand-t
11-52.7		grit & shell-t pl	1	9.5	
11-52.8		shell-t pl	3	10.8	
11-52.9		grit & grog-t pl	2	5.7	
11-52.10		grog-t pl	12	39.5	
11-52.11		grit-t pl	34	129.8	
11-52.12		sand-t pl	19	69.2	
11-52.13		fish vertebrae	1	0.7	
11-52.14		clear glass bottle base	1	75	machine-manufatured, Owens-Illinois Glass Co., after 1954
11-53.1	surface S of temple mound, 75 m of S shell ridge/railroad bed, 8-2-2011, **E VILLAGE**	L J Inc rim	1	9	3 incis below ticked rim
11-53.2		grit-t pl	7	19.7	
11-53.3		grog-t pl	1	2.9	
11-53.4		sand-t pl	2	8.6	
11-53.5		whiteware	1	0.9	
11-53.6		blue glass bottle base	1	13.5	oval, Phillip's Milk of Magnesia
11-53.7		honey- colored gunflint	1	6.5	historic, French?
11-54.1	surface, cleared area extreme NE part of Mahr property, shell ridges, 8-2-2011, **E VILLAGE**	F W Inc	3	8.5	
11-54.2		L J rim	1	2.4	1 tick mark
11-54.3		fabric-impressed	1	9.5	open weave, twisted cord
11-54.4		indet Inc	2	2.1	
11-54.5		shell-t pl	3	10.7	
11-54.6		grit & grog-t pl	1	3.4	
11-54.7		grog-t pl	1	5.7	
11-54.8		grit-t pl	19	89.1	
11-54.9		*Rangia* shell	1	12.1	
11-54.10		whiteware	1	6.1	
11-54.11		iron railroad spike head	1	61.4	
11-54.12		coal	4	24.8	
11-55	shell midden 20 m E of temple mound, 8-2-2011, **E VILLAGE**	soil sample for flotation	1		9 liters

8Fr14-JC Donated 2012					
JCFr14-1	general surface, obtained 1980s or 90s	steatite pipe frag (elbow shape)	1	56.5	bowl or stem? 5.5 x 4.2 cm
8Fr14- collection of landowner George Mahr, Apalachicola (NOT stored at USF)					
	Mound A, N side summit, 3'x 4' excavation, 30" deep	probable Little Bear Creek point	1		9.2 cm long
	Mound A, SW summit, 4' x 4' excavation, 18"-30" deep	shell columella beads	28		1 to 2 cm long, prob whelk
		olive shell bead	1		ca. 3 cm long