Rethinking Settlement Patterns at the Weeden Island Site (8PI1) on Florida’s Central Gulf Coast

by

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ABSTRACT

The Weeden Island site (8PI1), despite its importance as a Weeden Island period (AD 200-900) settlement and ceremonial center of the southeastern United States and type site for the ceramic series bearing its name, has largely remained poorly-dated given its size and multiple components. With the limited number of dates available to archaeologists from the Weeden Island component, there has continued to be a lack of temporal and spatial control needed to answer many of the significant questions involving change at the site. Through the execution of shovel testing in previously uninvestigated areas of the site and analysis of material from past excavations, new radiocarbon dates have been obtained to help build a more accurate chronology of the site. Additionally, this research employs Bayesian modeling of radiocarbon dates to aid in further understanding of the settlement patterning and landscape use of the Weeden Island site.

CHAPTER ONE: INTRODUCTION

For much of archaeology's history, explanations for cultural change have been dominated by an emphasis on long-term evolutionary processes (see Binford 1965). However, the post-processual turn in archaeology brought greater attention to history, and specifically how even shorter-term, localized events may affect change over the long-term and over wide areas (see Pauketat 2001; Pluckhahn et al 2017). An example of this redirected focus is in the southeastern U.S., where archaeologists have recently begun to examine the local histories of Woodland period (ca. 1000 BC to AD 1000) civic-ceremonial sites along the Gulf Coast, using these local histories to examine changes at larger, regional scales. Building from detailed chronological work at sites such as Garden Patch (Wallis et al. 2015) and Crystal River (Pluckhahn et al. 2015; Pluckhahn et al. 2017) on the Florida peninsula, and Kolomoki (Pluckhahn 2003; West 2016) in the interior Coastal Plain of Georgia, Pluckhahn and colleagues (Pluckhahn et al. 2015; Pluckhahn et al. 2017) identified regional shifts in settlement which included migrations from south to north, perhaps in relation to climate change. As this example demonstrates, the precise chronometric dating of sites enables archaeologists to "establish the contemporaneity of archaeological deposits from different sites, correlate archaeological occupations with climatic events, and examine periods of transition between major cultural traditions" (Austin et al. 2014: 95).

The Weeden Island site (8PI1), located in Pinellas County on the west-central peninsular Gulf Coast of Florida, is known as a major Weeden Island period (AD 200-900) settlement and ceremonial center of the southeastern United States and serves as the type-site for the ceramic

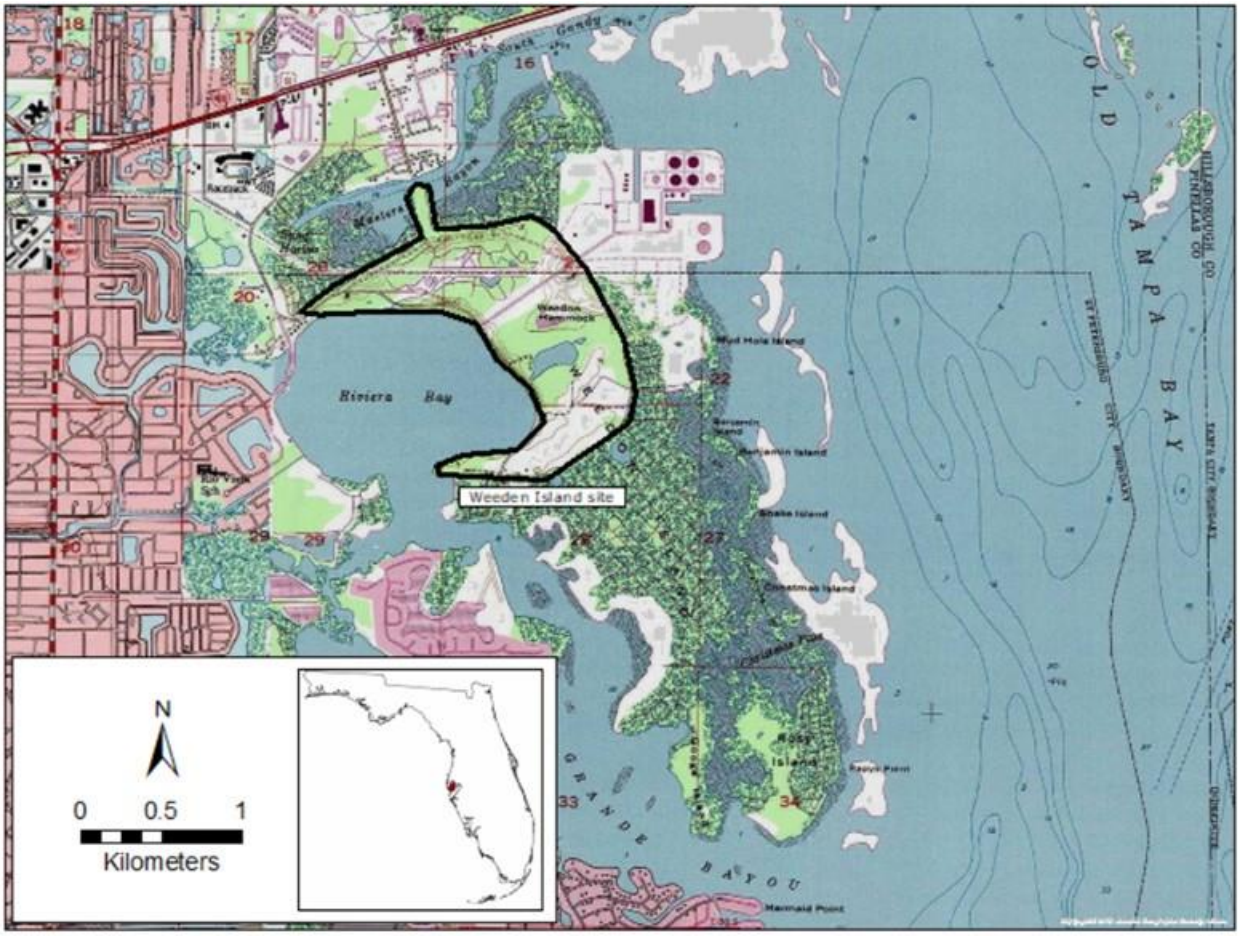

Figure 1.1 Location of the Weeden Island site (8PI1).

series bearing its name (Figure 1.1). Although Weeden Island is one of the largest and most famous sites of the Woodland period, Pluckhahn and colleagues excluded the site from their analysis owing to the lack of chronological control. Although the site has been known and investigated for over a century, it has never been systematically sampled and remains poorly-dated. Prior to this research, less than 10% of the over 425-hectare site had been investigated and from those investigations a total of only 42 radiocarbon dates have been obtained, with 38 of these coming solely from what is presumed to be a later and spatially-restricted Safety Harbor period (AD 900-1750) component. The limited number of dates presently available to archaeologists has meant a lack of the temporal and spatial control needed to answer many of the big questions involving change at the Weeden Island site. A particular time period that I am interested in is the interval from around AD 400 to 700. As noted by Austin and colleagues (2014:94-120), well-dated sites around Tampa Bay show settlement reorganization, including small scale and large scale migrations, occurring around the same time, perhaps in response to climatic changes associated with the Vandal Minimum climatic event. Based on the work of Wang, Surge, and Walker (2011), it is suggested that climate conditions during the Vandal Minimum in southwest Florida "were characterized by cooling during AD 500–600 and AD 650–700 and dry summer conditions during AD 500–600 and AD 650–750 [which] resulted in a persistent drought coincident with low sea level" (Wang et al. 2011:10). It can be assumed that similar climatic conditions manifested on the peninsular Gulf Coast around the same time. The observed settlement reorganization pattern seems to continue--possibly in a south-to-north, time-transgressive manner--across many of the major settlements and ceremonial centers of the Woodland period Gulf Coast, as noted by Pluckhahn and colleagues (2017;2020). Some reasons for reorganization may include reactions to climate shifts, resource changes, and cultural pushes and pulls to ceremonial centers people have ties to, amongst other possibilities. Does Weeden Island fit into regional Woodland period settlement patterns? Does the Weeden Island site fit into the regional pattern of settlement reorganization and movement between AD 400-700? To address these questions, I utilized Geographic Information Systems (GIS) to map the locations of all previous investigations, examined collections from previous excavations to select materials suitable for Accelerator Mass Spectrometry (AMS) dating, conducted targeted small-scale testing in high-probability areas of the site not previously covered or lacking in datable materials to obtain samples for relative and absolute dating, and employed Bayesian modeling of resulting radiocarbon dates to develop an improved chronological model for the settlement of the Weeden Island site.

This thesis seeks to elucidate the chronology of settlement patterns at the Weeden Island site throughout the Weeden Island and Safety Harbor periods (ca. AD 200-900 and 900-1750, respectively). In Chapter Two, I provide an environmental and historical context for the Weeden Island site as well as a background on my theoretical approach. The site's variably elevated landscape ranging from xeric hammock high areas to marshy low areas and resources available within each, along with proximity to Tampa Bay, was conducive for the settlement of people in pre-Columbian times. Archaeological investigations at the site, which span well over a century, include those that sought to enhance knowledge about the people that occupied Weeden Island and their everyday lives, as well as compliance work for development of the preserve. Studies with the objective of increasing knowledge about the site and its inhabitants have provided data on burial practices, subsistence, craft production, and settlement practices. Chapter Three describes the methods that I employed during my project. Field methods included GIS mapping and shovel testing in six areas of the site and laboratory methods included the examination of materials from previous collections and processing of material from my testing. Additionally, I employed Bayesian modeling as it is useful for creating a more accurate settlement history and site chronology. Following in Chapter Four, I report the results from my archaeological reconnaissance survey of the site. In Chapter Five, I report on the results of radiocarbon dating materials from previous collections, such as Sears (1971) and Dean et al. (2008). Then, in Chapter Six, I discuss what the relationship between sample locations and assigned radiocarbon dates could mean as far as settlement patterning throughout the Weeden Island and Safety Harbor periods at the site by using Bayesian modeling. First, the site was divided into four loci and each was modeled separately. Then, a nine-phase sitewide model is proposed for timing of site occupation with results showing concentration in the northern portion of the site during early phases followed by expansion and intensive occupation of the south/eastern portion in the middle/late phases. Finally, in Chapter Seven, I report key findings from my project and propose future research directions to further aid in overall understanding of the Weeden Island site.

CHAPTER TWO: BACKGROUND

By the fifth century AD, though likely before, coastal foragers began anthropogenic modification of the landscape now known as Weedon Island (the spelling of the toponym) by way of building shell middens and mounds atop natural aeolian sand dune ridges. The Weeden Island site (as the archaeological site is spelled), situated on the western shore of Tampa Bay with aquatic and terrestrial resources aplenty, provided an ideal locale for the pre-Columbian inhabitants to settle. To learn about these inhabitants and the site itself, archaeologists have been working at the site off and on for over a century, though mostly in only small portions of the large site. With the extent of disturbance present from previous work, development and looting, it is imperative to recognize the background of the site to understand the many aspects of the site and how they are manifested today when moving forward with archaeological investigations. This understanding relates to the features of a site’s plan/layout as well as how archaeological work can affect these features over time.

Environmental Background of Weedon Island

The Weeden Island site consists of a main sand burial mound, several shell mounds, and shell middens dispersed over two parallel, arcuate ridges that extend more than a kilometer east-west and half a kilometer north-south. Upon closer examination of the topography of the landscape and the locales of these built features it becomes apparent that there is a correlation between natural aspects of the environment and anthropogenic use and alteration thereof. A topographic map created using LiDAR data shows two large arcuate ridges; one running along the northern portion of the site then down to the southeast, and another running along Riviera Bay (Figure 2.1). When coupled with a map drawn by Fewkes (1924) of the locations of notable shell deposits (mounds, middens), it appears that these arcs of higher elevation may be the result of human occupation (Figure 2.2). However, a combined effort of geological and archaeological surveys of the site indicates that these ridges were created by the accumulation of aeolian sands thousands of years ago.

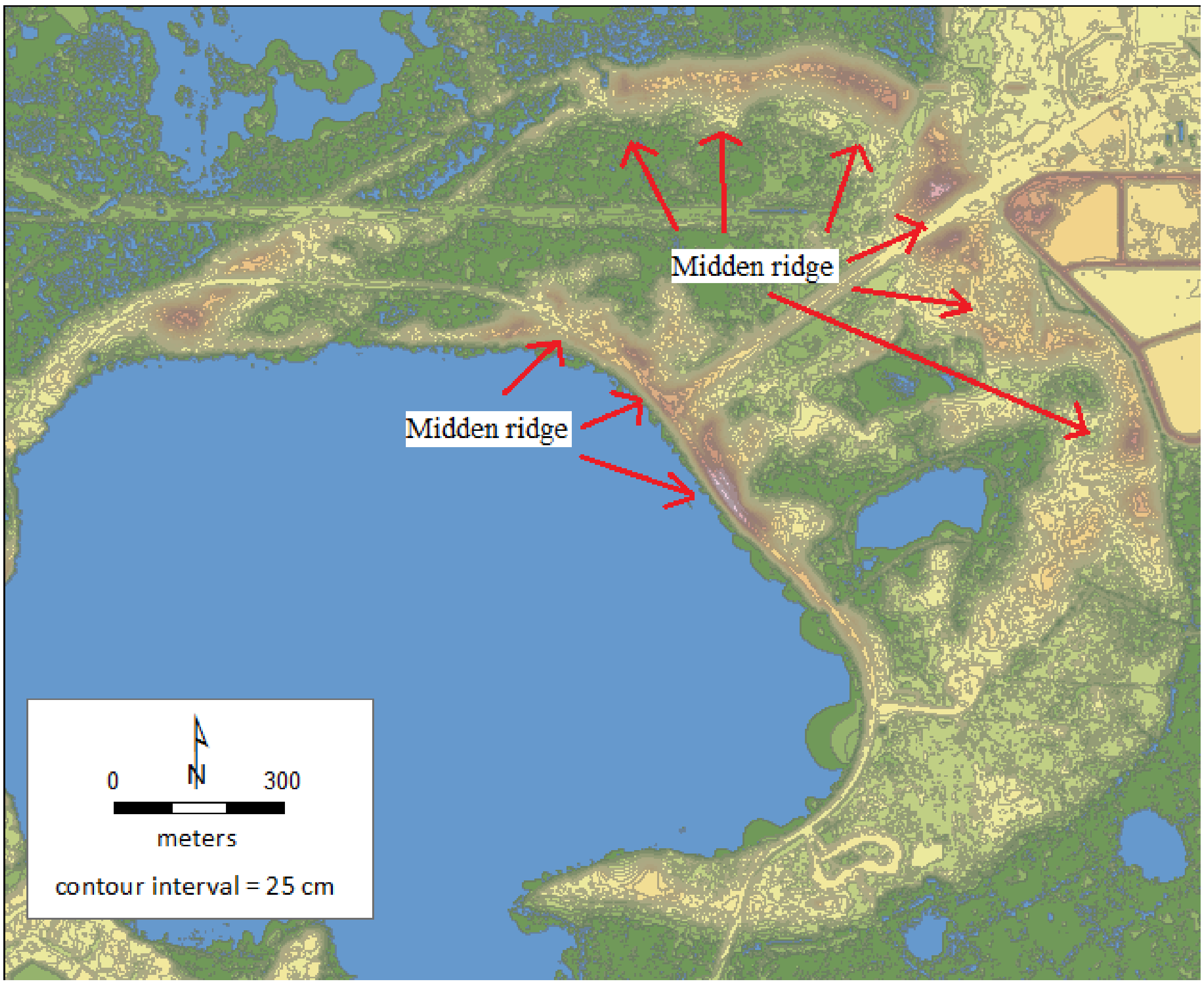

Figure 2.1. Arcuate midden ridge locations.

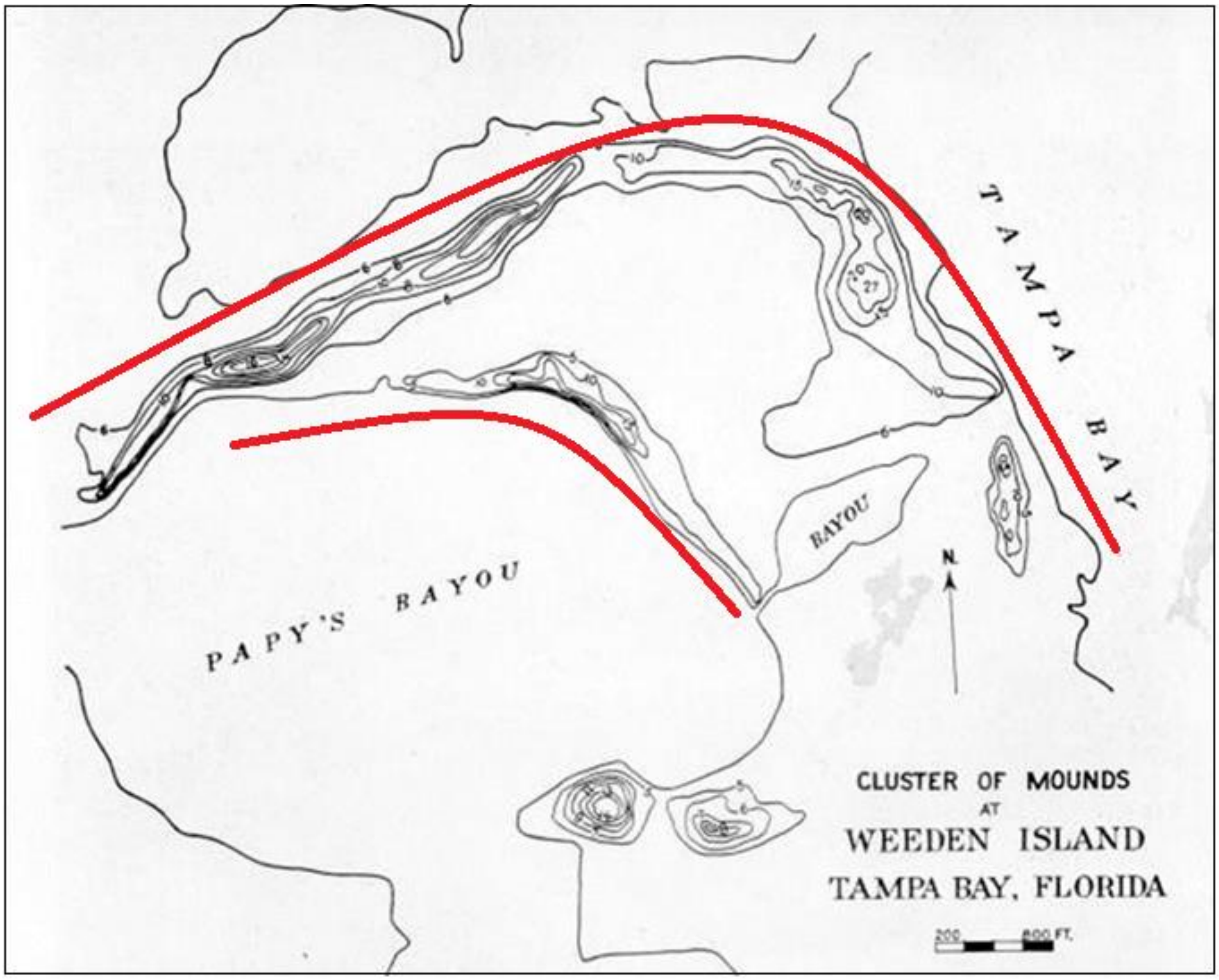

Figure 2.2. 8PI1 shell deposits, adapted from Fewkes (1924:3).

Soil cores indicate that these dune ridges are underlain by a thick layer of yellow sand (Dean et al. 2008:12). This basal layer of yellow sand is devoid of cultural materials from the Early Archaic period (7500-5500 BC) but contains some from the subsequent Middle Archaic (5500-3000 BC), cluing researchers in on a possible timing of deposition during drier climatic conditions associated with the geologic interval known as the Altithermal, from around 5000 to 2500 BC. It should be noted that while the sand is now yellow, it once had an A horizon similar to the modern topsoil that changed due to thousands of years of leaching. Accumulated atop the yellow sand base is a layer of white sand that is thick in lower elevations and thinner on dune ridges on account of water movement and erosion when sea levels began to rise. It is the accumulation of white sands that aided in giving the Weedon Island landscape its modern appearance. Additionally, the white sand lacks cultural materials from earlier than the Late Archaic/Transitional, which again aids researchers in determining when it was deposited. Archaeologists find cultural materials from the Weeden Island and Safety Harbor period occupations near the end of the white sand depositional period. Much like the yellow sand, the white sand once had an A horizon similar to the modern topsoil but was transformed by leaching over thousands of years.

The three soil orders represented at the site are Entisols, Spodosols, and Histosols, with Entisols comprising the vast majority of the site as they are located over the two sand ridge complexes (Dean et al. 2008:14). Entisol series found include Astatula, Paola, and St. Lucie fine sands, which are typically recently formed soils composed of excessively well-drained quartz sand arranged into A/C horizons sequences. The yellow sands are comprised of Astatula and Paola soils while the white sands are made up of St. Lucie soil in addition to the other two soils. What distinguishes which type of soil(s) comprise the yellow sand layer and the white sand layer is location on the Preserve. The yellow and white sand layers found on the shoulder and summit portions of the dune ridges south of Master’s Bayou and southwest of the Duke Energy plant are comprised of Astatula soil. Paola soils are found in association with Astatula but are also more widely distributed to all dunes and ridges within the upland terrestrial area as well as the high portions of the ridges found on Googe and Ross Islands. St. Lucie soils are not represented in the yellow sand layer but are found in the white sand layers located in the most elevated portions of the inner ridge that fronts Riviera Bay and the southern ends of the dunes on Googe and Ross

Islands. The presence of cultural materials and anthropogenic sediments (shell and earth midden deposits) from the Weeden Island and Safety Harbor period occupations within and atop the white sand seems to indicate that people opportunistically occupied and built upon these naturally occurring arcuate dune ridges once they were stabilized by ameliorated environmental conditions. To support this, a combination of coring, shovel testing, and bathymetry data were used to reconstruct the landscape prior to white sand accumulation (Dean et al. 2008; Lambert 2006). According to Dean et al. (2008), prior to white sand deposition the yellow sand dunes likely "supported 'high pine' or evergreen-dominated scrub communities and would have been 'islands,' not in a sea of water, but in a sea of pine-palmetto flatwoods [and] as sea level rose over time the areas of flatwoods would have retreated while fresh- and saltwater marshes advanced westward" (Dean et al. 2008:12). Further, using these data along with aerial photography and satellite imagery, Dean et al. (2008) were able to model the geomorphological units that formed as sea levels rose and the white sand was deposited. Oscillations in sea level, along with tidal pool development, likely weathered the eastern sandy plain leaving a sandy and rocky bottom of low ridges and depressions, thus creating areas of constant salinity conducive for the proliferation of oyster and coral reefs, as well as sea grasses. All in all, the changes in topography, vegetation, and available resources for subsistence would have made the landscape of Weedon Island favorable for human occupation.

The Weeden Island site comprises a vast majority of the terrestrial upland area of the Weedon Island Preserve and the current landscape includes most, if not all, of the environments that existed for the earliest inhabitants. At elevations that range from 0-7.6 m amsl, the environment is widely variable throughout the preserve with low areas consisting of marshes or wetlands and high areas consisting of dunes and loose-sand ridges (Dean et al. 2008:50). These dunes and loose-sand ridges have additionally been considerably elevated and augmented by purposeful terraforming by pre-Columbian inhabitants. The deposition of shell atop these naturally elevated areas contributed greatly to the landscape seen today. The preserve consists of mainly marine and estuary lands like tidal/mangrove swamps, but the uplands contain xeric hammocks, pine/scrubby flatwoods, and ruderal communities (Dean et al. 2008:14-5; The Weedon Island Story 2005:1). The marine and estuary lands were and continue to be areas for subsistence. Tidal swamps served as nursery places for many fish and shellfish and they provided a low-energy foraging ground for wading birds, shorebirds, and of course people. Protected by the tidal swamps on the shoreline are tidal marshes where species such as wading birds, snails, crabs, and terrapins were available for capture. Further, seagrass beds of turtle grass, manatee grass, and shoal grass provide people with species such as turtles, manatees, fish, clams, scallops, and sea urchins, while mollusk beds provided people with oysters and other shellfish. The terrestrial lands of the preserve consist of pine/scrubby flatwoods, maritime hammocks, and xeric hammocks; which include vegetation like slash pine, palmetto, oaks, and palms. These vegetation profiles are indicative of the various soils present on the preserve (see Dean et al. 2008:14-5 for an in-depth soil description). The abundance of resources available to the earliest Weedon Islanders allowed for the settlement and growth of the Weeden Island site (8PI1). With a background on what made Weedon Island conducive for settlement, a look into what is known from an archaeological standpoint is easier to understand.

As with nearly every archaeological site that is in easily accessible to the public, the Weeden Island site has experienced more than its fair share of undocumented digging (looting). When William Sears came to the Weeden Island site in 1962 to conduct salvage excavations in advance of a gas transmission pipeline that was to be cut through the site, he noted that the burial mound and surrounding areas were pockmarked with looter pits and even some looter trenches (Sears 1971:51). Two of the looter trenches would later become a focus of later controlled research by Sampson (2019), discussed later. Most of the burial mound was destroyed and contours had become nearly imperceptible from the time Sears was there in 1956 to when he went back in 1962. Of course, the burial mound has been the biggest target for looting, but a survey of the entire preserve shows that nearly all areas have been affected by uncontrolled digging by now.

Archaeological Background

Pre-Columbian Culture History

The Weeden Island site is located within the Central Peninsular Gulf Coast archaeological region defined by Milanich (1994). This archaeological region extends southward along the Florida Gulf Coast from Pasco County to Sarasota County and stretches inland to the area of the Peace River drainage. The Tampa Bay Watershed, encompassed by this archaeological region, is fed by four major rivers – Hillsborough, Alafia, Little Manatee, and Manatee – and hundreds of tributaries that create Tampa Bay, the largest open-water estuary in Florida (Kolianos and Austin 2012:7). Weedon Island forms part of the Pinellas County coastline on the western side of Tampa Bay. The environment of this resource-rich estuary made it favorable for long-term human habitation. Currently, there is no evidence of human settlement during the Paleoindian (ca. 11500-9500 BC) or Early Archaic (ca. 7500-5500 BC) periods. However, lithic scatters found within the site yielded miscellaneous Archaic stemmed points, including an Alachua/Levy projectile point, which lends credence to a Middle to Late Archaic landscape use/settlement. Progressing into the Woodland period (ca. 1000 BC to AD 1000) and extending to the Colonial era (AD 1528-1821), there is a plethora of evidence indicating human settlement provided by the construction of shell middens/mounds, pottery, projectile points, etc.

The people of the Manasota culture, 500 BC to AD 800 (Luer and Almy 1982), lived along the Florida Gulf Coast during the more broadly defined Middle Woodland period, and created built environments consisting of shell middens and mounds. They subsisted by foraging for shellfish and fishing in the estuaries and hunted deer and other terrestrial animals in the pine flatwoods near their mesic hammock settlements. Their village structure likely consisted of hamlets or small villages of extended family groups. The social structure of the Manasota people was likely egalitarian given the absence of grave goods and lack of differential burial found at sites associated with the culture. An example of a hamlet near Weeden Island that fits this definition is the Yat Kitischee site (see Austin 1995 for further reading on the site).

Following AD 400, some Manasota groups adopted a regional set of beliefs, mainly revolving around ceremonial, religious, and mortuary practices, that archaeologists refer to as Weeden Island after the site it was first identified. Now, archaeologists suspect that the regional belief system likely developed further north near the Florida Panhandle, southeastern Alabama, and southwestern Georgia, based on the prevalence of artifacts (mainly ceramics) bearing associated motifs (Milanich 2002). In the Tampa Bay region, the post-AD 400 manifestation of this belief system is referred to as Weeden Island-related Manasota culture.

Developing from the Weeden Island-related Manasota Culture in Tampa Bay was the Safety Harbor culture, seen archaeologically from AD 900-1750 (Mitchem 1989). This culture was influenced by Mississippian cultures elsewhere in the Southeast by way of their social and political structures becoming more complex and stratified, but they also retained many aspects of the previous Manasota culture, particularly the continuation of coastal resource exploitation. The people associated with this culture in the Tampa Bay area were the ancestors to the historic Tocobaga that had their seat at the Safety Harbor site (8PI2) just north of Weeden Island.

The Weeden Island site has evidence of occupation during the Manasota, Weeden Island-related Manasota, and Safety Harbor cultural periods showing its long history of occupation and change. Whether people remained at the site continuously throughout the cultural periods or left and returned is debatable, but with archaeological work conducted over the past century and into the present we may answer that question.

Previous Investigations at Weeden Island

There is a long history of archaeological excavations at Weeden Island that span well over a century. However, these excavations have been mostly limited in modern era to small portions of the very large site. The map shown in Figure 2.3 illustrates just how little of the site has actually been investigated since explorations began in 1879.

Excavations by S.T. Walker, 1879. The earliest explorations of the Weeden Island site were conducted by S.T. Walker in 1879. He published a report in 1880 that described around 20 mound sites on the west coast of Florida near Tampa Bay, including Weeden Island (called Mounds at Papy's Bayou by Walker). It should be noted that "Papy's Bayou" is synonymous with present-day "Riviera Bay." He included detailed notes and sketches in his report that helped document what existed at that time (Figure 2.4). According to Walker, using the locale of a clearing with tumble-down houses and straggling orange and lemon trees as a starting point, taking a due north course would take you to an area containing mounds. By this description and what is known about citrus grove locations on the site, he was referencing the northeast portion of the site. He notes a burial mound, depicted in Figures 1 and 2 of his sketches, containing a whole bowl and "human bones in every portion," though the bones were poorly preserved (Walker 1880:409). It is probable that this burial mound is the same as the one investigated later by Fewkes in 1924. Interestingly, Figure 3 and 4 of his sketches show a low mound with a ramp that is presumably, by way of his

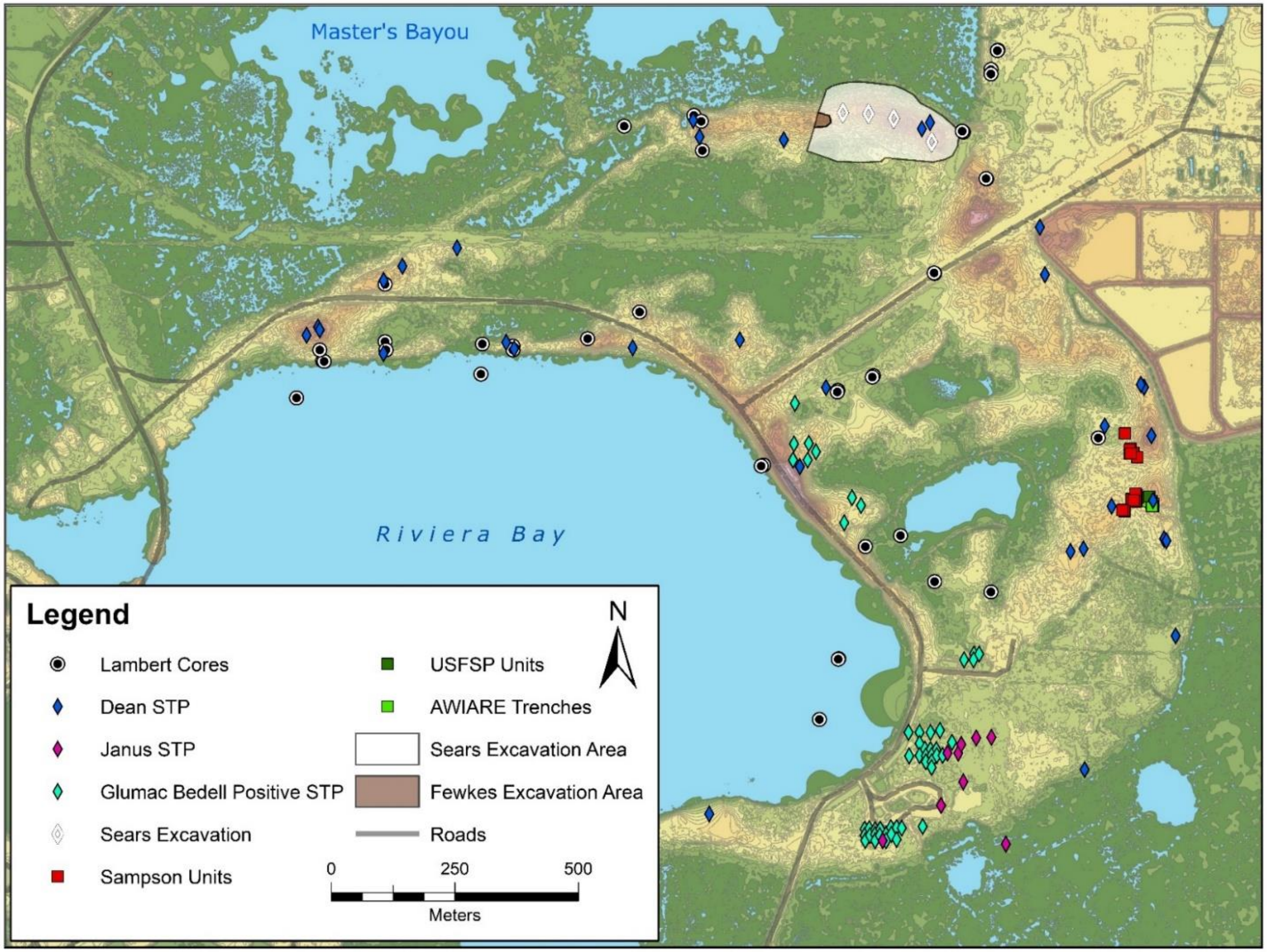

Figure 2.3. Locations of previous investigations.

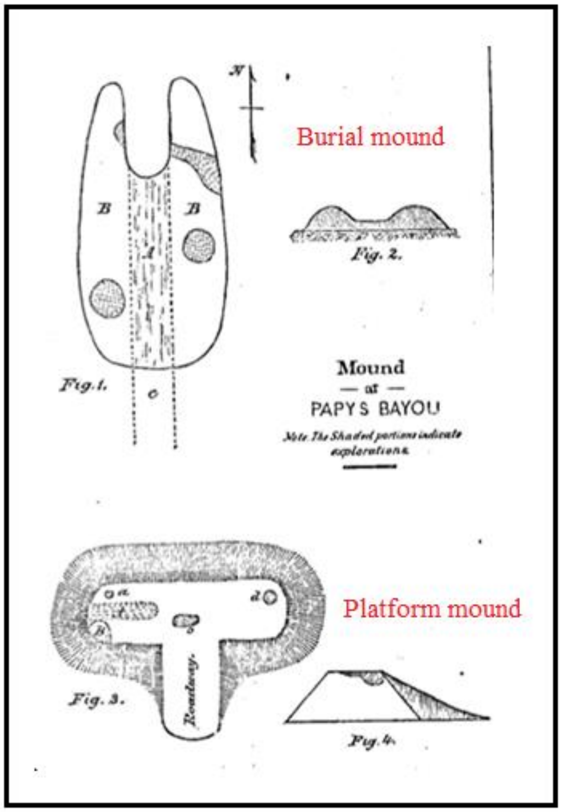

Figure 2.4. Sketches of mounds excavated by S.T. Walker (adapted from Walker 1880:408).

description of location, to be 400 yards west of the burial mound he described (Walker 1880:408). According to Walker, this mound measuring 150 ft long by 45 ft wide and only 4.5 ft at its highest point consisted of alternating layers of sand and shell with no artifacts worthy of note (Walker 1880:410). It is worth noting that Walker states that "the northern end of the mound was once level and contained a dwelling," as an existing temple/platform mound is a feature lacking from the Weeden Island landscape. Unfortunately, neither the survey by Dean and colleagues in 2004 nor accounts and maps by Fewkes in 1924 show or discuss this alleged mound, perhaps because of its low height and vegetation cover or subsequent destruction (Dean et al. 2008:30; Fewkes 1924). While it is exciting to think there could be a largely unexplored mound hidden in the dense vegetation of Weedon Island, it is just as likely, if not more, that development of the land into citrus groves destroyed the mound described by Walker, along with any information it contained.

J.W. Fewkes and the Smithsonian Excavations, 1923-1924. The first major excavations carried out at the Weeden Island site were concentrated on the burial mound and led by Jesse Walter Fewkes, the director of the Smithsonian's Bureau of American Ethnology, in 1923-1924 (Fewkes 1924). Fewkes conducted his excavations in order to obtain collections for the museum in Washington D.C. after Eugene Elliot drew the Smithsonian's attention to the area. As Fewkes was often away from the site, excavations were carried out by Matthew Stirling and assistants Stanley A. Hedberg and M.W. Oliver (Tampa Tribune 1923:2-J). While Fewkes and his team began by investigating midden contexts, once they found the burial mound, all of their attention was focused on this area. Within the main burial mound, Fewkes's team found the decorated ceramic vessels that would become the basis for defining the Weeden Island ceramic complex. Fewkes and his team also documented and excavated 465 burials from the mound during their investigation. These collections are now curated at the Smithsonian. For further reading and an analysis of the burial records see Hrdlička (1940) and Sampson (2015). Fewkes's excavations at Weedon Island were quite newsworthy in the Tampa Bay area, with at least five newspaper articles reporting on his activities in the Tampa Tribune alone. This coverage made Weedon Island, and especially the archaeology at Weedon Island, a popular attraction to locals.

Outside of the burial mound context, Fewkes investigated the shell mounds and middens that are dispersed throughout the landscape, though he did not really go further than documenting their presence and locations. He interpreted the shell mounds as either domicile mounds or trash dumps (Fewkes 1924:7-10) but did not go into whether they differed in composition or not (Sampson 2019:57-8). Again, the focus of Fewkes's investigations was the burial mound, which provided archaeologists with information on the Weeden Island ceramic complex and mortuary practices indicative of the time period, as well as locations of major built features on the Weedon Island landscape.

The material from Fewkes's excavations was reanalyzed by Gordon Willey (1949) for his seminal synthesis of the archaeology of the Gulf Coast. Willey noted that the vessels illustrated by Fewkes seem to have been chosen for their aesthetic qualities and were not representative of the types present at the site. Willey (1949) goes further in detail about the frequencies of types, like check-stamped and complicated-stamped, which were made to seem rare according to Fewkes by going through his notes and discussing the excavations with Fewkes's colleague, the primary excavator Matthew Stirling. According to Willey and Woodbury (1942:242-244), Weeden Island pottery is classified into a complex with three categories; Weeden Island Incised, Weeden Island Plain, and Wakulla Check Stamped; all of which are sand tempered. Weeden Island Incised is the marker type for the Weeden Island culture and both time periods (Weeden Island I and Weeden Island II). Characteristics of this type include: a surface treatment that tends to be polished; intricate designs created with incisions, punctations, or red paint; and folded rims. Additionally, there are many vessel forms associated with Weeden Island Incised, including effigy vessels (often birds), but flattened globular bowls with constricted orifices are most common. Weeden Island Plain is the most common pottery type of the Weeden Island complex, making up at least 80% of the sherd count of Weeden Island pottery complex at any village site within the cultural area. Weeden Island Plain has the same ware characteristics as Weeden Island Incised and the rims are always modified and most commonly incurving. Additionally, the vessel forms associated with Weeden Island Plain are typically flattened globular bowls, collared jars, and beakers. Finally, Wakulla Check Stamped is another marker type for the Weeden Island II period and it has the same ware characteristics as other Weeden Island types. What sets it apart is the fine check stamped decoration that covers essentially the entire vessel. Wakulla Check stamped vessels include jars, globular bowls, wide-mouthed bowls with slightly incurving walls, and pots, all with long-flat rims with check stamping on them. Improving upon Willey's two-part classification, Percy and Brose (1974:6) suggest a refined five-part Weeden Island chronology based on ceramics. In Weeden Island 1, there is a continuation of late Swift Creek Complicated Stamped and an addition of Weeden Island incised and punctated types. Following in Weeden Island 2, there is a greater variety of Weeden Island types, excluding only those found in mortuary contexts such as effigy and cut-out vessels. Weeden Island 3 is characterized by the introduction of Wakulla Check Stamped and a decline in Swift Creek Complicated Stamped. By Weeden Island 4, Wakulla Check Stamped is the dominant type and Swift Creek Complicated Stamped has disappeared. Finally, Weeden Island 5 is characterized by the continued dominance of check stamped pottery along with limited occurrence of incised and punctated types and the occasional representation of corn-cob marked ceramics.

William Sears's Salvage Excavations, 1962. The excavations conducted by William Sears in 1962 were the first to document areas of the Weeden Island site besides the burial mound. Sears was brought in to conduct salvage work ahead of the construction of a gas transmission pipeline. He found that the burial mound described by Fewkes was nearly obliterated by looters from the time he was at Weedon Island in 1956 until he came back in 1962. However, the midden that was adjacent to the burial mound appeared largely intact and thus became the focus of his work.

From his excavations, Sears found that the adjacent midden dated to the Weeden Island period, just like the mound. This was confirmed by a radiocarbon date from Level 7 of Test A at AD 400 ±130, although he suspected that the chemical treatment of the sample was inadequate

(Sears 1971:56-7). While this date is helpful, Sears's identification of Pinellas Plain sherds in the upper levels of his units, with Weeden Island types in deeper levels, was a bigger contribution. This discovery hinted at the possibility that the area was occupied during the Weeden Island and Safety Harbor periods. Later explorations in the southern portion of the site would confirm this notion. Also, Sears's research at Weeden Island was a major contributor to his secular vs sacred ceramic dichotomy (Sears 1973). In this work, Sears found that Weeden Island series pottery, and associated decorated wares, were only found in the burial mound while midden contexts bore plain, sand-tempered bowl sherds. This discovery bolstered his argument that Weeden Island pottery is only used in ceremonial (sacred) context while plain, cookpot wares are utilitarian and thus found in domestic (secular) context. This separation in pottery types based on context extended from the Weeden Island period, based on his AD 400 ±130 date, until the late prehistoric/early historic periods where sherds closely related to, or perhaps identical to, Pinellas Plain were found.

Compliance Archaeology. After Sears's excavations in 1962, another thirty years went by before any work was done at the Weeden Island site. In 1994, Petar Glumac and John Bedell with Parson Engineering-Science, Inc., conducted a Phase I investigation of Weeden Island in support of design plans for the future locations of the interpretive center and associated parking facilities, the park superintendent's residence and maintenance facility, and the portion of Weedon Drive between the Bartow Plant access road and the access road to the superintendent's residence (Glumac and Bedell 1995:8). This project included the excavation of 180 shovel test pits within three proposed impact areas, which led to the discovery of six distinct archaeological deposits. Area I, the site of interpretive center, yielded predominantly chert debitage as well as two shell artifacts. Area II, the location of the maintenance facility and park superintendent residence, contained a small amount of chert debitage. Last, Area III, paralleling Weedon Drive, yielded a small amount debitage as well as some shell midden material from one shovel test nearest the main portion of the site. Subsequently in 2001, another compliance survey conducted by Janus Research took place at the Weeden Island site to determine if the building of the interpretive center would impact archaeological resources (Janus Research 2001:3). This survey included the excavation of 39 shovel tests, with eight being positive for cultural material. From these eight positive tests, artifacts included lithic flakes, lithic tools, and one Levy/Alachua projectile point. A more recent survey of the gas transmission line, conducted by SEARCH in 2015, included the excavation of 195 shovel tests to ensure cultural materials would not be affected by the relocation of a portion of the pipeline (Austin 2015:30). Out of the 195 shovel tests, 13 were positive for prehistoric cultural material and four were positive for prehistoric midden deposit. Artifacts recovered include 15 lithic flakes, five pottery sherds, two animal bone fragments, and 11 pieces of shell.

University of South Florida Survey, 2004-2005. From 2004-2005, Jonathan Dean, Brent Weisman, Matthew O'Brien, and Lori Collins conducted a systematic reconnaissance survey of the Weedon Island Preserve (Dean et al. 2008). They divided the Preserve into nine locations, with each location sub-divided into operations, to conduct systematic shovel testing (locations shown above in Figure 2.3). Their reasoning behind completing a comprehensive survey of the Preserve was to sample archaeological deposits across the property to identify cultural periods of occupation and function of the sites, and to provide preserve managers with knowledge of how to preserve and protect the cultural resources on the property (Dean et al. 2008:4). Through their systematic survey, they identified 17 new prehistoric archaeological sites from all over the preserve, and also documented more aspects of the established Weeden Island site (Dean et al. 2008). Further, their survey identified four categories of deposits representing a late pre-Columbian occupation of the site (Weisman et al. 2005:377-390). In a way, their survey serves as a launching point for future research questions at the Preserve.

In collaboration with the survey by Dean and colleagues (2008), Jeanne Lambert (2006), from the University of South Florida, conducted her thesis research on the geomorphic evolution of Weedon Island. Lambert's geomorphic mapping and sediment coring was conducted to complement archaeological survey and excavation in order to "test [the] hypothesis and to reveal the extent to which natural processes and human activities interacted to shape the present-day configuration of the peninsula" (Lambert 2006:iv). A benefit of Lambert's work is that it provides the deep time depth needed to understand environmental change. The 41 vibra-cores that she collected (locations shown in Figure 2.3) "reveal[ed] possible paleoenvironmental shifts associated with mid to late Holocene sea-level rise, paleoclimatic shifts, and pre-historic human activity" (Lambert 2006: v).

University of South Florida St. Petersburg Midden Excavations, 2007-Present. John Arthur of the University of South Florida St. Petersburg (USFSP) has directed excavations at the Jeanne Mound Complex portion of the site in 2007, 2009, 2011, 2013, 2014, 2016, 2018, and 2020 with undergraduate students from USFSP and graduate students from USF. While the moniker Jeanne Mound Complex may elicit thoughts of monument construction, it should be noted that this portion of the site is comprised of shell mounds that were likely the result of refuse deposition. Excavations have mainly produced a detailed record of subsistence remains, though more recent excavations lend insight into other aspects of everyday life during the Safety Harbor period occupation, with the discovery of features such as possible house floors, postholes, and a pit. Projects stemming from work in this area have identified evidence for year-round occupation of the site, compared the results of using two different archaeobotanical recovery methods, conducted an allometric study using crown conch, detailed typology and function of the ceramics present, and identified data on bead production and typologies from the Safety Harbor period (Arthur et al. 2016; Brittingham 2018; Draskovich 2017; Jackson et al. 2018; O'Donnell 2015).

Sharlene O'Donnell (2015) analyzed the invertebrate and vertebrate subsistence remains from the USFSP excavation area for her master's thesis at the University of Florida. She examined the zooarchaeological remains to investigate what resources from aquatic environments were available for inhabitants to collect. One result from her work indicated that habitats adjacent to and south of the Weeden Island site are where people most likely focused their subsistence efforts based on the zooarchaeological assemblage. Furthermore, the results of her work complement the results of later investigations by Sampson (2019), a project to which O'Donnell lent her expertise.

AWIARE Trench Excavations, 2013-2015. From 2013-2015, the Alliance for Weeden Island Archaeological Research and Education (AWIARE) conducted trench excavations in a ridge of the Jeanne Mound Complex just south of the USFSP excavations. They took the opportunity to try to glean data from disturbed contexts by cleaning and profiling two large looter trenches. Their main goal was to document the stratigraphy of the midden as well as collect dateable materials and artifacts from stratified contexts. These investigations found that the midden in this area was around 50 cm thick and deposited on top of layers of white and then yellow aeolian sands, just as observed elsewhere on the preserve. They also uncovered shell-filled pits, postholes, and raw clay, which was interpreted as this area being used for clay processing (Arthur et al. 2016). Another interesting discovery was that of many shell disk beads, which are also found in USFSP excavations, likely indicating that this area was also used for bead production. Coupling discoveries in the AWIARE trenches with what has been found in USFSP excavations, information about everyday life during the Safety Harbor period is becoming readily apparent.

Christina Perry Sampson Investigations, 2013-2015. From 2013-2015, Christina Perry Sampson conducted block excavations and geophysical survey on the Weedon Island Preserve for her dissertation from the University of Michigan. Using past research and investigations of the Weeden Island site and preserve, in general, Sampson identified various areas that she could conduct her work. Her focus was on sampling Safety Harbor domestic contexts (Sampson 2019:66), which were likely located in the southern portion of the site since work by Fewkes and Sears indicated an earlier Manasota-Weeden Island context to the north. Also, the survey conducted by Dean and colleagues (2008) noted that the southern portion was also the least disturbed area, which was beneficial for context, and that it was the location of two mound complexes (Jeanne Mound Complex and Three Ogres Mound Complex) with dark earth middens surrounding the both of them (Figure 2.5). Clearly this area would give her the best chance of finding intact Safety Harbor domestic contexts.

Sampson used magnetic susceptibility and magnetometer survey to survey an area of approximately 180 x 270 meters at Weeden Island (Sampson 2019:66). This survey was focused around the two prominent mound complexes and the dark earth middens that surround them with the hypothesis that buried domestic contexts might be found in the flatter areas adjacent to the ridges. For a detailed account of the magnetic susceptibility and magnetometer survey and methods used, refer to (Sampson 2019:66-71). The results of her magnetic susceptibility survey show that human occupational activity increased on higher topography, the established midden mounds, and the dark earth middens, but also that there were discrete, yet well-defined areas of increased susceptibility to the west of the mound complexes. She used magnetometer survey to investigate five of these areas. The results of the magnetometer survey showed anomalies that made these areas prime targets for excavation.

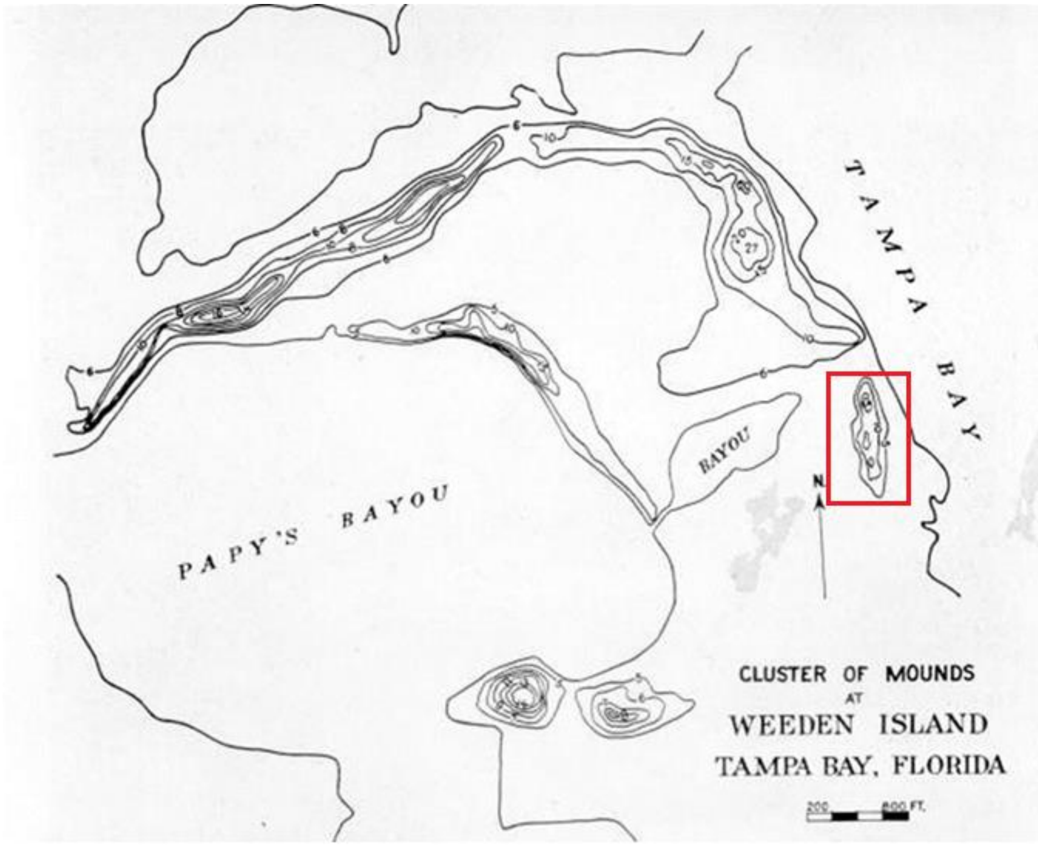

Figure 2.5. Location of Three Ogres Mound and Jeanne Mound Complexes (adapted from Fewkes 1924:3).

With an intent to ground-truth magnetic anomalies and collect samples from specific areas and features of the site, Sampson opened up 1-x-1-m and 2-x-1-m test units, as well as two excavation blocks (Sampson 2019:71-2). Her block excavations were located where areas of concentrated, large magnetic anomalies were present and were intended to reveal relationships between features through increased horizontal exposure and longer stratigraphic profiles (Sampson 2019:72). For a detailed description of her excavation, see Sampson (2019:97-151).

Mid-19th to 20th Century Development and Modern Disturbances of Weedon Island

The land that makes up the Weedon Island Preserve has a relatively short history of modern management/ownership that began in the mid-19th century. Looking at the names of many of the areas in and around the preserve offers a glimpse into the ownership history. The land of the Preserve has passed hands between several people such as Charles Papy (Papy's Bayou namesake), Joseph Masters (Masters Bayou namesake), Lorenzo Dow Ross (Ross Island namesake), and of course the Weedon family, to name a few (Dean et al. 2008; The Weedon Island Story 2005). It is important to know about the ownership of the land because it helps explain how and when archaeological deposits were disturbed/destroyed, which is crucial for providing context for research. Luckily, most of the owners prior to the Weedon family did not disturb areas of archaeological interest to much of an extent. But, beginning with Blanche and Leslie Weedon, who built a house atop the large shell mound just south of the burial mound and used the land as a vacation spot from 1898 to 1923, disturbance was rampant at the Weeden Island site (The Weedon Island Story 2005). A 1926 aerial of Weedon Island, Figure 2.6, shows disturbance during this time period. Not only did the Weedon family built their home atop the highest shell mound within the site, measuring 27 ft high according to Fewkes's map, but they also had multiple grapefruit groves on the property (The Weedon Island Story 2005:19).

When the Weedon's sold the property to a land developer by the name of Eugene Elliot in 1923, he attempted to turn the land into a resort. To Elliot, the archaeological features on the landscape added to the resort's appeal so he salted the property with artifacts to gain the attention of archaeologists at the Smithsonian. His plan worked because Jesse Walter Fewkes came down to examine Weedon Island and, although he recognized that the artifacts were planted, he saw potential and decided to conduct excavations from 1923-1924. A deeper description of Fewkes's excavations will be discussed later. While Fewkes was conducting excavations, Elliot continued to disturb the land by investing in a speakeasy (the Narvaez Dance Club, later known as the San Remo Club), in the same location as the Weedon house on the large mound south of the burial

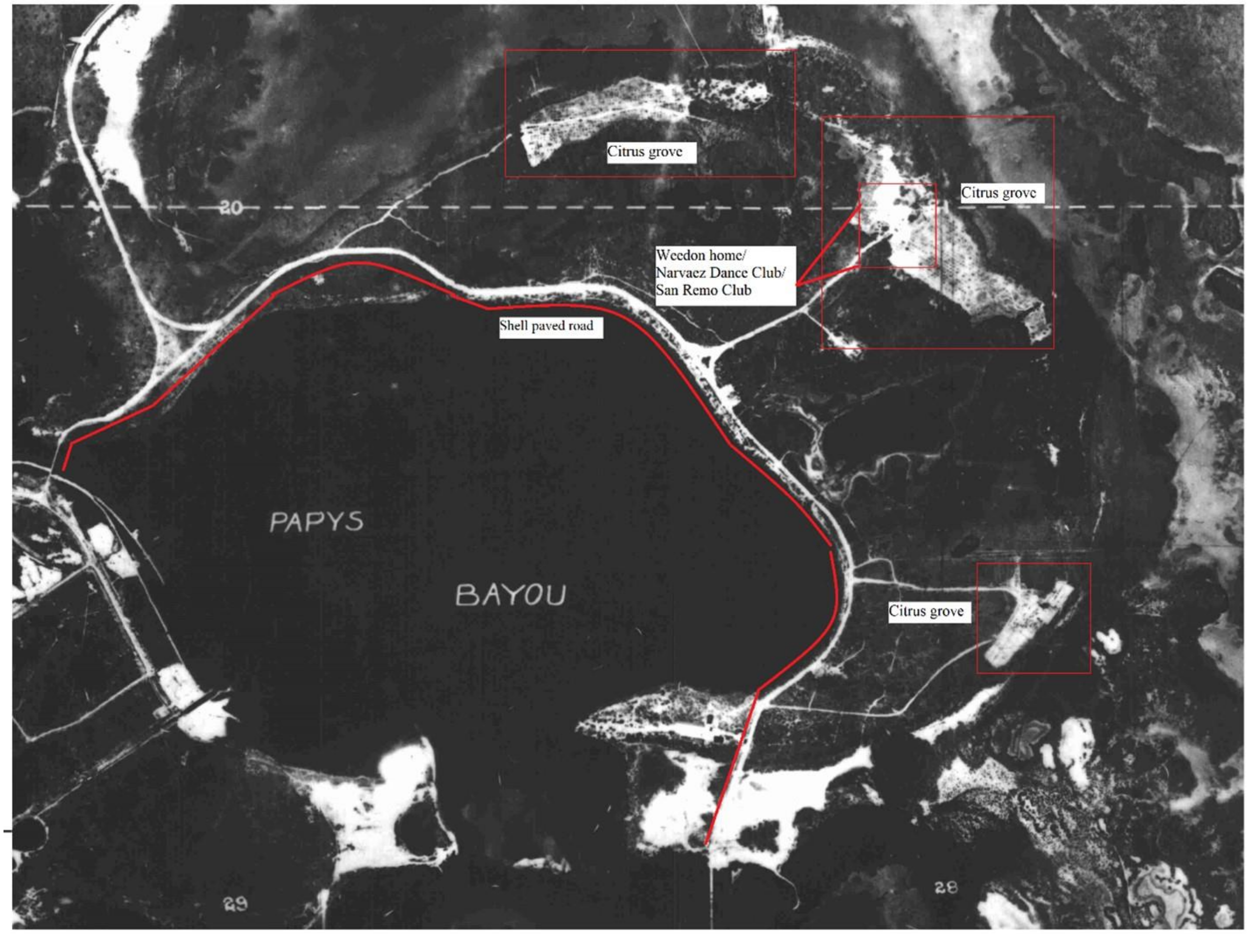

Figure 2.6. A 1926 aerial photograph showing destruction of shell deposits and development of Weedon Island.

mound, and adding a 50-ft tower for guests to overlook the island. As a sales pitch for his resort, Elliot also took people to watch and sometimes participate in the ongoing excavation.

Other major disturbance to archaeological deposits occurred with the dredging of Riviera Bay (previously known as Papy's Bayou) to build a road to link Weedon Island with the mainland (The Weedon Island Story 2005:25-9). Shell from the mounds on the northern and eastern perimeter of the site were used for road fill in this 1922 project. Later, Elliot also used shell from the mounds to build the main road that ran along Riviera Bay, across the island, and up the shoreline into St. Petersburg.

Further disturbance to the Weeden Island site occurred in the 1930s when Weedon Island was the home of two airports and a movie studio (The Weedon Island Story 2005: 33-4). A 1943 aerial of Weedon Island, Figure 2.7, shows this development. The most famous airport, the Grand Central Airport, mainly offered flights between St. Petersburg and Tampa, though flights to further destinations were introduced by the 1950s. The Sun Haven Movie Studio, which used the land for the production of three motion pictures, was set up in the location of the old San Remo Club. Evidence of these land uses litter the surface throughout the preserve even today, including the ruins of the airport's waiting room and a variety of Kodak photo solution bottles (Figure 2.8).

Progressing through time to 1955, the Florida Power Corporation (later known as Progress Energy) bought a northern portion of Weedon Island where they built their Bartow Plant in 1958 (Dean et al. 2008:34; The Weedon Island Story 2005:39). This plant is currently owned by Duke Energy. Though the building of a power plant seems like the absolute worst thing that could happen to the Weeden Island site, it is important to note that the land that the plant sits on is the product of a major dredge-and-fill project. Dredging a channel in Tampa Bay created fill that allowed for a 2,500 ft extension that juts out from the Preserve, to be used to build upon instead of the preserve itself.

The biggest physical disturbance that the power plant made to archaeological remains is the road that leads up to it, which cuts directly through the highest shell mound at the site. This is clearly not ideal, but one can be sure disturbance would have been exponentially worse had they built the plant directly where the mounds are located instead of using fill. Other disturbances include the gas transmission line and the areas for waste disposal. The rest of the Preserve was bought by the State of Florida in 1974 and is leased to and managed by Pinellas County in cooperation with Duke Energy (Dean et al. 2008:34). Some added features in the 21st century include a cultural center and the ranger station/AWIARE research station.

In addition to the construction of the power plant, a gas transmission pipeline, roads, movie studios, airports, clubs, and houses, the archaeological remains of the Weeden Island site have also

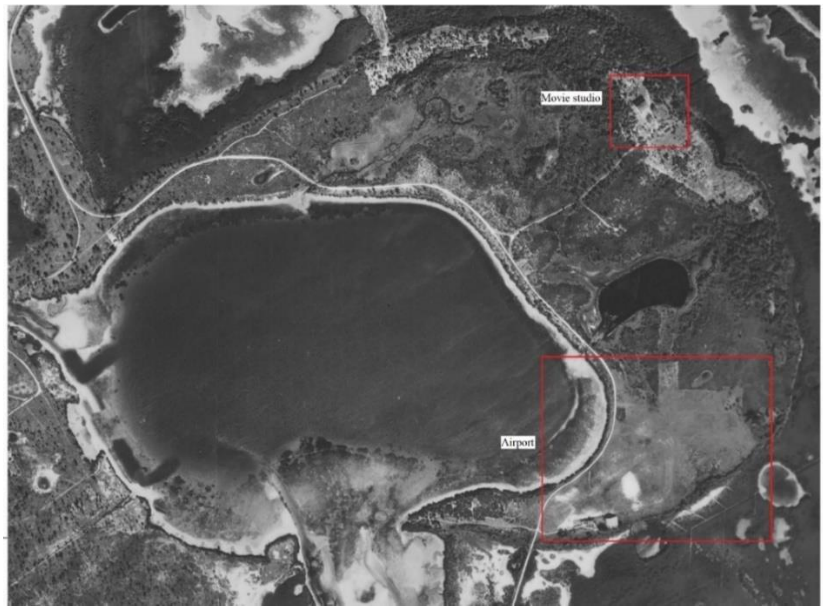

Figure 2.7. A 1943 aerial photograph showing development areas for the movie studio and airport.

Figure 2.8. Kodak photo solution bottle (Photograph by author).

experienced disturbance from agricultural activity and mosquito ditching (The Weedon Island Story 2005). These developments can be seen in a 2000 aerial photograph of Weedon Island (Figure 2.9). In addition to the destruction from digging the mosquito ditches, the location of ditching of the preserve was carried out on the mud flats and upland dunes, which created an ideal environment for mangroves and the invasive Brazilian Pepper that continue to disturb archaeological deposits (Sampson 2019:56). The area of the preserve that has been the least affected by disturbance, except for looting, is the terrestrial uplands of the southeastern portion, which includes the southern half of the Weeden Island site itself (Sampson 2019:56).

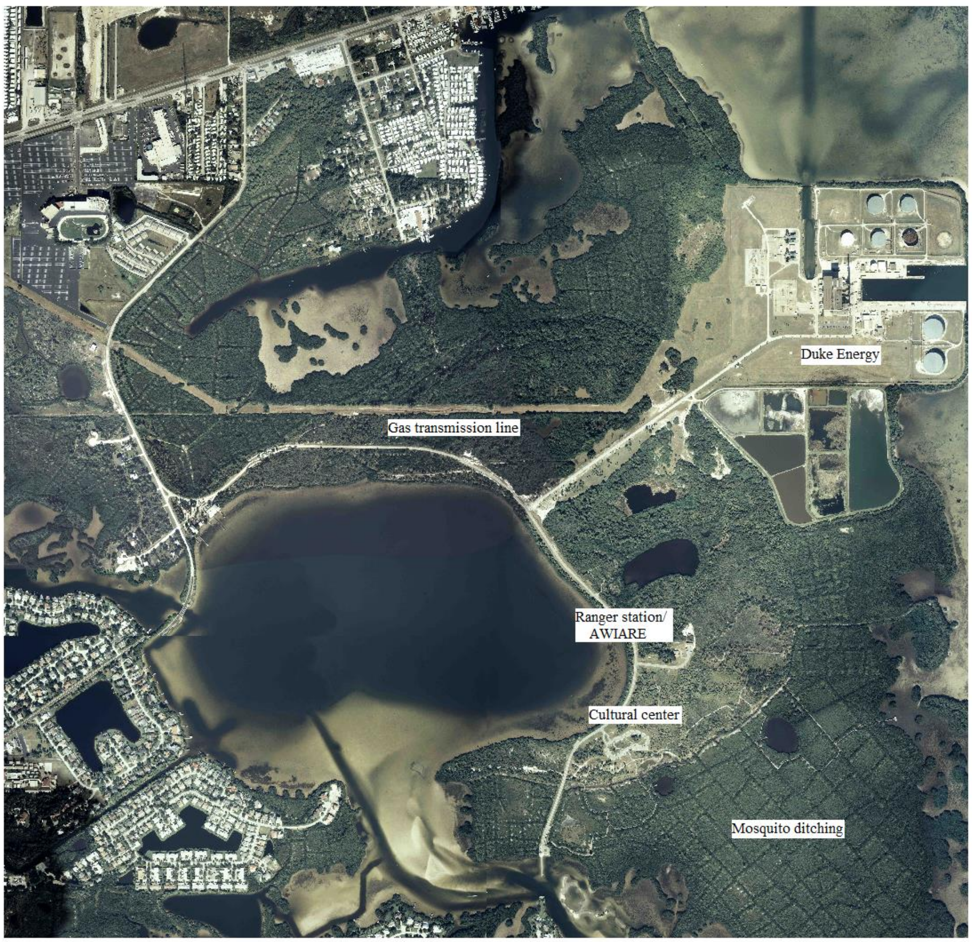

Figure 2.9. A 2000 aerial photograph of Weedon Island showing modern development.

With the extent of archaeological work and development that has been conducted at the Weeden Island site, it is both helpful and imperative to understand what the typical layout of sites occupied during the same time period(s) looked like. Having an idea of what types of features to look for on the landscape, as well as where they are usually located in relation to each other, can be quite beneficial. This is especially true when many of the typical features may have been altered or destroyed subsequent to the time period of focus.

Woodland Period Gulf Coast Settlement Patterns

This portion of the chapter is divided into two sections. The first section outlines three site examples that exhibit the typical Woodland Period site layouts. These examples include Crystal River (8CI1), Garden Patch (8DI4) and Kolomoki (9ER1). The next section focuses on the climatic events that occurred during the Woodland Period and how archaeologists have proposed their potential effects on settlement reorganization.

Site Examples

Settlement patterns in the Woodland period (ca. 1000 BC to AD 1050) Gulf Coast tend to follow a particular model, though slight differences occur from site to site. It is during the Middle Woodland period (ca. 200 BC to AD 400) that groups of people, who were once mobile and scattered across the landscape, began to become increasingly sedentary and congregate in larger village settlements (Anderson and Mainfort 2002). Village settlement layouts typically take a circular form with continuous midden or unconnected heaps of midden arranged in a ring or horseshoe shape around a plaza that is mostly devoid of cultural material (Pluckhahn 2010; Russo et al. 2014; Stephenson et al.2002; Wallis et al. 2015). Additionally, at coastal sites such as those on Tampa Bay, settlement is often found in linear patterns by way of middens that follow the coastline (Milanich 2002). Regardless of the exact pattern of settlement found within each site, common elements prevail such as the presence of extensive middens, burial mounds, platform mounds, and plazas yielding very little cultural material. Some examples of Woodland period Gulf Coast sites that display this typical settlement patterning include Crystal River (8CI1) (Pluckhahn et al. 2015; Pluckhahn et al. 2017) and Garden Patch (8DI4) (Wallis et al. 2015) on the Florida peninsula, and Kolomoki (9ER1) (Pluckhahn 2003; West 2016) in the interior Coastal Plain of Georgia. It should be noted that while "village sites with a single burial mound are most common," according to Milanich (2002:359), the three site examples mentioned here contain more than one burial mound.

Climatic Events

Climatic events occurring during the time periods of interest include the Roman Warm and Medieval Warm Periods, which correspond with the Wulfert and La Costa sea level highs, the Buck Key Low stand (lower sea level), and the Vandal Minimum and Little Ice Age (cooler climate) (Austin et al. 2014:97-101). The changes in climate and sea level seems to have affected sites of Tampa Bay, such as Bayshore Homes (8PI41) on the west side of the Pinellas County peninsula, as indicated by shifts in settlement (abandonment during period of lower sea level and repopulation during period of higher sea level) (Austin et al. 2014:97-101). It is posited by Austin and colleagues that changes in marine ecology may have prompted settlement shifts in some areas of Tampa Bay, while other sites may not have seen this same change depending on location. For example, Bayshore Homes is on Boca Ciega Bay, an estuary fed by the Gulf of Mexico and thus drastically affected by lowered sea levels. People relying on this estuary for subsistence would be forced to move on account of changes to the marine ecology during a low stand but would be able to return once the estuary is again fed by the Gulf of Mexico in higher stands. In contrast, sites such as Yat Kitischee (8PI1753), Shaw's Point (8MA7), Shoreline Midden (8PI11569), and Shoreline Canoe (8PI11624) on Tampa Bay did not have drastic settlement shifts because marine ecology was not likely impacted as severely. Settlement shifts at these sites typically involved moving more shoreward during low stands and inland during high stands. The ability of inhabitants to occupy some Tampa Bay sites continuously during various climatic events while others had to abandon sites is likely because of the microenvironments that are found on the Tampa Bay shoreline given its shape. As Weeden Island is situated directly on Tampa Bay, in somewhat close proximity to the sites mentioned above, it is most likely that settlement shifts resembled those seen at these sites and were therefore less drastic.

CHAPTER THREE: METHODS

The scope of this thesis project involved the use of a GIS database, archaeological field methods, laboratory analysis, Bayesian modeling, and curation. A GIS database was utilized to superimpose the locations of all previous archaeological investigations onto a LiDAR map of the Preserve. This was done for three main reasons: (1) to better understand the layout of the site and which landscape features had been targeted for archaeological research in the past; (2) to have a visual representation of where artifacts from previous excavations came from within the site; and (3) to identify locations in need of sub-surface testing, owing to the paucity of previous investigations and dated contexts. In essence, I wanted to target only those areas of the site that had the potential to contain data that would increase what is known about habitation of the site.

Archaeological fieldwork was carried out by way of a reconnaissance survey of the preserve. I inspected the vegetation and overall topography of landforms to identify potential areas where cultural remains would be found and then conducted archaeological sub-surface sampling (shovel testing) of cultural deposits to discern the pre-Columbian chronology of various areas.

The laboratory methods included analyses of all materials recovered from shovel testing as well as an examination of cultural materials recovered by previous researchers, which were curated in various facilities. Last, all cultural materials were curated in a way consistent with state standards in the research station of AWIARE.

GIS Database

The dense vegetation and sheer size of the Weeden Island site necessitates a mapping method beyond transits and total stations. LiDAR allows for the penetration of the forest canopy through a combination of a large number of laser pulses at a variety of scan angles, which results in the collection of millions of data points. Once unwanted data points (trees, roads, structures, etc.) are removed, about 12 million ground surface elevation points are left, which are used to generate contours that show changes in elevations (Pluckhahn 2014). Therefore, a digital elevation model (DEM) created in GIS with LiDAR "bare earth" elevation data was used to provide an overview of the Weedon Island landscape and its topography.

Using the DEM as a base, I georeferenced the locations of all previous archaeological investigations conducted on the Preserve using maps and/or Universal Transverse Mercator (UTM) coordinates published in articles and reports. Once this was completed it was clear that past archaeological endeavors, with the exception of compliance work done for development, were predominantly along the two main arcuate ridges. Additionally, each excavation was concentrated in small, discrete locales of these ridges with little to no overlap, thus leaving more than 90% of the site untested.

Further, to better understand the landscape of the Preserve and how it has been altered in historic times, I examined aerial photographs taken in 1926, 1943, 1951, 1957, 1965, 1967, 1968, 1970, 1971, and 2000 and georeferenced them on the LiDAR map. Lots of changes in vegetation and land use are apparent when looking at these aerial photographs, which made it easier to decide whether an area truly had a high probability of containing in-context pre-Columbian artifacts or was likely too disturbed.

Based on GIS data and the LiDAR map, I chose eight previously uninvestigated areas of interest that I thought had a high probability of containing intact cultural deposits (Figure 3.1). I chose these high probability areas based on their proximity to known cultural deposits and whether they were highly elevated, well-drained landforms. There is not much natural topography on the Weedon Island Preserve besides dune ridges that are already known to be the base of the pre-Columbian built landscape, so odds are that if an area is more than a meter higher than its surrounding area there is a higher chance of it containing evidence of habitation. Besides higher, well-drained landforms, I also targeted areas that were less likely to be disturbed contexts since the goal of my project was to achieve better temporal and spatial control of the site.

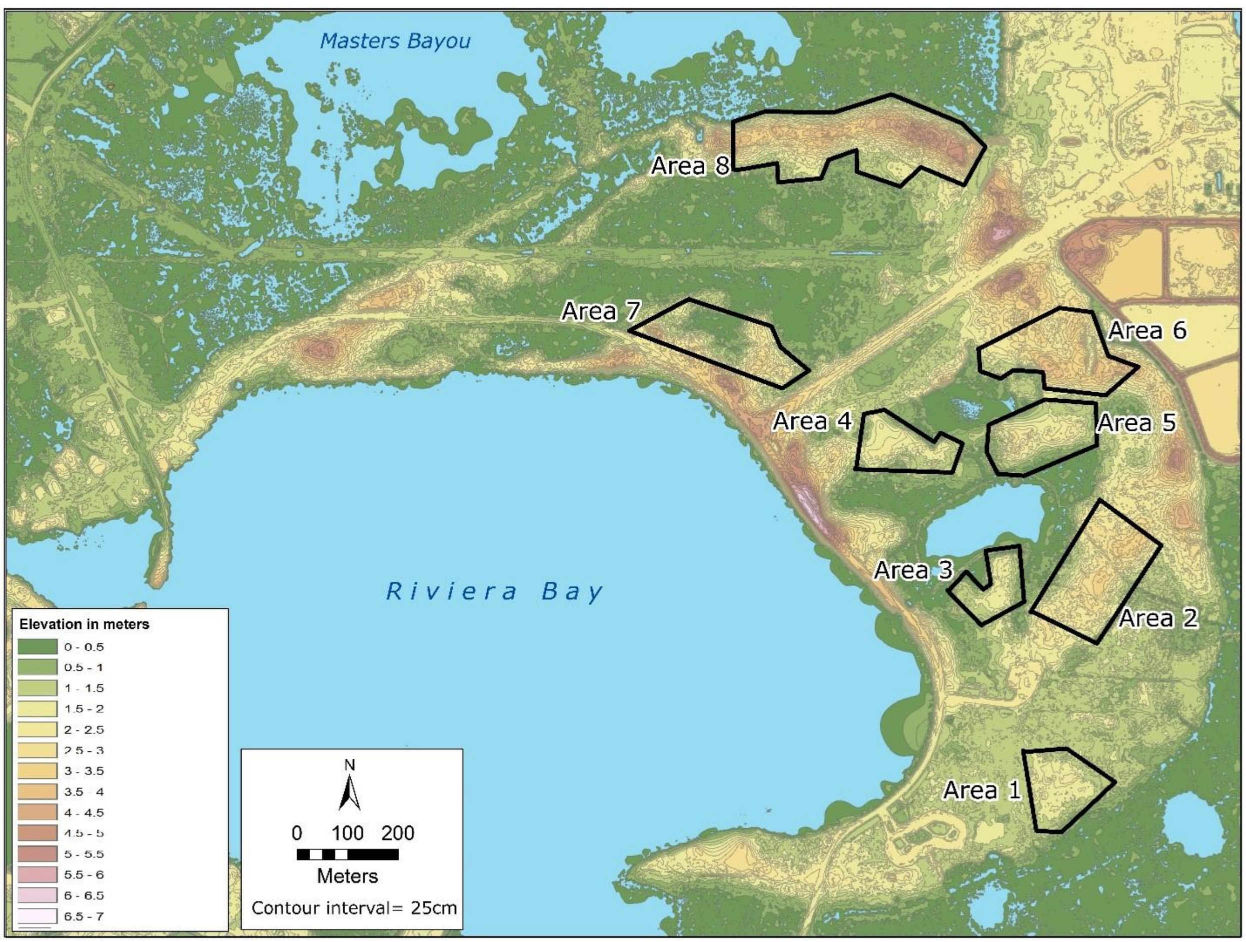

Figure 3.1. Locations of eight areas of interest for this project's shovel testing.

Field Methods

Fieldwork for this project was accomplished with the help of the hardworking undergraduate students enrolled in Thomas J. Pluckhahn's archaeological field methods course during the spring and summer semesters of 2019 along with a couple of fellow USF graduate students. Their contribution consisted of digging shovel tests in high probability areas throughout the Weeden Island site.

Using GIS data, I selected eight previously uninvestigated areas of the site as locations for 50-x-50-cm shovel tests to collect materials for relative and absolute dating. In total, I excavated 30 shovel tests in six of the eight areas of interest. It should be noted that two of my areas of interest were left uninvestigated because of circumstances I was unaware of when they were initially created. Area 1 seemed to be a high-probability area according to LiDAR data, but when an aerial photograph from 1943 was georeferenced it became clear that the higher elevation depicted on the LiDAR map was the result of a push pile created by the leveling of runways and the later destruction of the Grand Central airport in this location. Area 6 was not investigated because it was brought to my attention that this area was off-limits because of unsafe conditions related to the nearby power plant. Though this area would have likely been fruitful in the capacity needed for this project given its proximity to the area of highest elevation on the arcuate ridge, caution was heeded and the area was avoided.

To place the shovel tests, I utilized a handheld GPS preloaded with UTM coordinates of high-probability locations observed in the LiDAR data, within my areas of interest, to navigate the terrain. The GPS unit was used to find the exact location of where I intended to place a shovel test but 95% of the time there was an impediment to actually digging a shovel test in that location. Such impediments included trees, mosquito ditches, and impenetrable briars. On account of these common impediments, many shovel tests were “judgmentals” dug as close to the intended location as possible. It should be noted that following the first shovel test in each area of interest, each subsequent shovel test adhered as closely as possible to a defined transect and a 20 m interval. Once the location of each shovel test was found, the spot was flagged, and the area was cleared of vegetation to the point where digging and screening was possible. We attempted to cause a minimum amount of disturbance to the shovel test areas when setting up, though no mercy was given to the briars. On a site that has already been heavily altered by human activity, I felt it important to not create any disturbance beyond what was necessary to carry out the research objective. Additionally, a UTM coordinate was recorded with the GPS at the southwest corner of each shovel test using the North American Datum of 1983 (NAD83) coordinate projection.

The shovel tests were documented in accordance with the state standards outlined in the *Cultural Resource Management Standards and Operational Manual: Module 3* (Florida Department of State, Division of Historical Resources [FDS, DHR] 2002). All shovel tests were dug in 50-x-50-cm squares and to a depth of at least one meter, barring prohibitive circumstances such as hitting the water table, hitting hardpan, or encountering human remains (Figure 3.2). When human remains were encountered, we complied with state protocols outlined in Chapter 872 of the Florida Statutes. Excavation proceeded in arbitrary 10-cm levels within natural stratigraphic zones to below the level of cultural sterility, with each shovel test dug to at least one meter below surface. While shovels were predominantly used, trowels were also often employed to ensure tight control in levels particularly rich in cultural materials. All soil removed from each shovel test was screened through 6.4 mm (1/4-inch) mesh hardware screens over tarps. Further, the soil color of each stratigraphic zone was determined using a Munsell soil color chart, profiles of shovel test walls were drawn and photographed, all cultural materials recovered were bagged by provenience, and all bags were properly labeled as to site number, provenience, contents, and Field Specimen (FS) number. Once each shovel test was completed, they were promptly backfilled.

This thesis research was grounded in the traditional archaeological method of shovel testing but in addition utilized a sampling strategy known as catch-and-release (Gonzalez et al. 2006; Lightfoot 2008). Essentially, a catch-and-release sampling strategy involves gathering data about artifacts/ecofacts--shell, in this case--while in the field in order to minimize ground impact and cut down on space needed in the lab and for curation. The decision was made to gather data on counts and weights of the most predominant shell species present at the Weeden Island site

Figure 3.2. Example of STP dug during project (Photo by author).

while in the field instead of bagging tens of thousands of shells and bringing them back to the lab for analysis. It should be noted that only unmodified, presumably subsistence-related, shells were analyzed in field and all modified shells were bagged for future analysis. There are six predominant shell species found at the Weeden Island site: *Melongena corona* (crown conch); *Busycon spiratus* (pear whelk); *Busycon perversum* (lightning whelk); *Crassostrea virginica* (Eastern oyster); *Neverita duplicata* (shark's eye); and *Cinctura lilium* (banded tulip). For each of these species, piles were made on a tarp and they were separated into whole shells, partial shells, or fragments of shells (Figure 3.3). The three piles created for each species were counted, weighed, and recorded on a shell tally form. The counting was done by hand and the weighing was accomplished using plastic buckets and a handheld digital scale. The less common shell species, those of an uncommon size, and those with evidence of modification for tool use were bagged by provenience for future analysis in the lab along with samples for specialized analysis (sooted ceramic sherds and terrestrial mammal bone).

In addition to shells that were bagged for later lab analysis, all artifacts and bones were collected from the screen and bagged, with only their presence noted on the shovel test form. Extra caution was taken when artifacts and ecofacts that had the possibility of being used for AMS dating were recovered, such as sooted pottery and terrestrial mammal bone. This was done so as to not contaminate the samples. When pottery was recovered, it was handled as little as possible and immediately placed in a pouch of aluminum foil and then given its own labeled plastic bag to prevent contamination and destruction. When terrestrial mammal bone was found, it was also placed in its own labeled bag. Further, these artifacts were piece-plotted, and bags were labeled with the (x, y, z) provenience, when possible.

Figure 3.3. Student separating shell by species for counting and weighing during in-field "catch-and-release" sampling (photo courtesy of Alex Fawbush).

Laboratory Methods

Cultural materials recovered from archaeological investigations at Weeden Island were examined to select suitable samples for AMS dating. This included the reanalysis of archaeological materials from previous work by William Sears in 1962, curated at the Florida Museum of Natural History in Gainesville, FL, and material from prior work by Brent Weisman and colleagues in 2004, housed at the AWIARE station on Weedon Island. The types of materials that I selected included sooted pottery sherds and terrestrial mammal bone. Additionally, I was open to dating botanicals such as charred nutshell or seeds, but no samples were recovered during testing. These materials were chosen for analysis because of their higher "rank" when considering chronometric hygiene (Nolan 2012:195). On a scale of 1-5, with 5 being most "chronometrically hygienic," soot on pottery sherds is scored at 5 and bone is scored at 4. Bone selected for dating in this study was specifically selected from samples of terrestrial mammal bone, and moreover from terrestrial mammals that do not prey primarily on marine organisms. Animals that live in marine environments or that subsist mainly on marine organisms are not typically good for dating because of the marine reservoir effect wherein dead carbon locked in the calcium carbonate shells of organisms skews representation of 14C in a sample (Reimer et al. 2013). Additionally, wood is less preferential for radiocarbon dating because of the possibility for the "old wood effect" in which older layers of wood—not associated with the targeted event—provide later dates. For this reason, I did not select wood samples or those from marine contexts for analysis. Prior to analysis of samples from previous collections, the bone and ceramics were identified to type or taxon, weighed, measured, and photographed. The bone was also sided when possible. The same documentation process occurred on all material recovered from my own excavations.

Cultural materials recovered from shovel testing were brought to the AWIARE research station for processing and analysis. Processing included sorting material into artifact type (shell, bone, ceramic, lithic, etc.), counting, weighing, and re-bagging. Once the material was rough sorted by type, I performed a finer separation of each type. As previously mentioned, most shell analysis was done in-field as part of a "catch-and-release" sampling strategy. However, some shell was brought back to the lab if there was not much present or if there were different species present that were small, unknown, or interesting to me because of their usual scarcity in Weeden Island collections, or modification. For shell, I divided specimens by species and then further by whether they were in whole form, partial form, or fragments. To distinguish between the three forms, I used a criterion based on four allometric measurements: length, height, width, and aperture (Figure 3.4) (see Jackson et al. 2018 and Palmer 1982). If a shell had all four measurements present, it was considered to be in whole form; if at least one measurement could be taken, it was considered to be in partial form; and if no measurements could be taken, it was considered a fragment. Each form was then counted, weighed, and re-bagged in curation standard plastic bags.

Bone was separated into general taxonomic classes (mammal, reptile, fish, amphibian, bird, etc.) with mammals further divided into aquatic or terrestrial. Identification of finer taxonomic categories was done when possible. Bones of each animal class were counted, weighed, and re-bagged with provenience clearly marked.

All ceramics were separated according to type, when possible, using temper and surface decoration, and then counted, weighed, and re-bagged. Sherds unable to be identified by type because of small size were grouped into an other/unidentified (UID) category for the purposes of this project.

Lithics were divided according to material (chert or agatized coral) and then examined for possible use as tools (projectile points, scrapers, drills, etc.) and sorted according to whether they exhibited evidence of use as tools or merely debitage. Then, possible stone tools were counted, weighed, and bagged with provenience information clearly marked. The same method was used for debitage. Debitage flakes were sorted based on the presence or absence of dorsal cortex (primary, secondary, or none), using Austin (1997:189) as a reference. Primary flakes had at least 90 percent of their dorsal surfaces covered by cortical rind. Secondary flakes had 10 to 90 percent of their dorsal surfaces covered by cortex. Tertiary flakes had less than 10 percent of their dorsal surfaces covered by cortex. It should be noted that the vast majority of lithic material found was in the form of small tertiary flakes.

For charcoal, as no recovered pieces were big enough for identification to species, no further analysis was conducted past weighing and bagging the samples from each provenience. Any terrestrial mammal bone of reasonable size and all ceramics with evidence of sooting were bagged separately for possible AMS dating.

When samples suitable for AMS dating were found, they were separated and placed in aluminum foil pouches and/or 4 mil plastic bags, photographed, and weighed. Sooted ceramic sherds were scraped with sterilized tweezers onto aluminum foil and then the soot was weighed

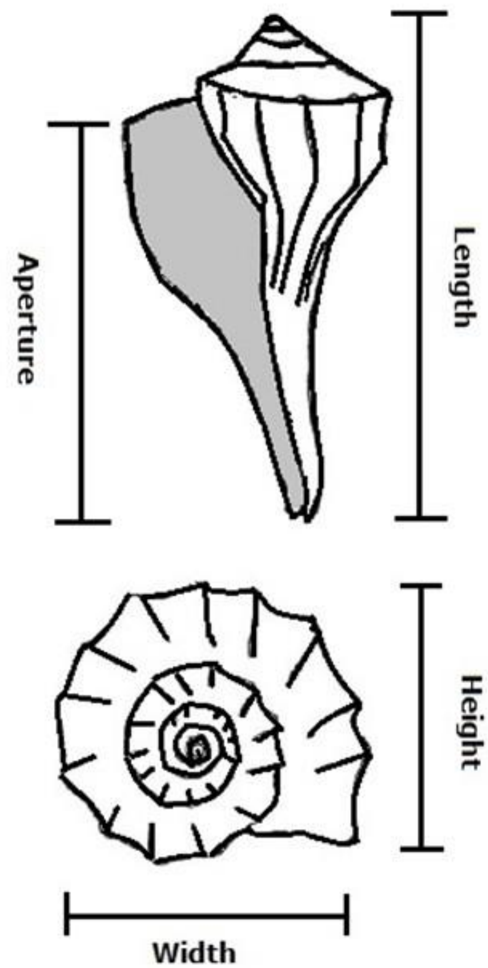

Figure 3.4. Allometric measurements, shown on a lightning whelk, used as criterion for separating shells during sorting.

before folding the foil into a pouch and bagging it with all provenience information legibly marked. All terrestrial mammal bones were identified to species and element, when possible, weighed, and bagged with all provenience information legibly marked. Once samples were ready for analysis, they were sent to the Center for Applied Isotope Studies at the University of Georgia for AMS dating.

All data gleaned from in-field and in-lab analysis were recorded on paper forms and spreadsheets as well as copied into an online database for future research. In conjunction with field and lab forms, the online database contains all photographs from the field and lab analysis.

Modeling Methods

Bayesian modeling involves estimating the probability of a belief after the collection of data that is used to test the belief. In relation to archaeology, the date probabilities in a chronological model are estimated by using radiocarbon dates and prior archaeological data. In other words, data that are new and relevant to a hypothesis (likelihoods), such as radiocarbon dates, are considered in the context of existing knowledge (prior beliefs), like stratigraphic relationships of an area, which leads to a new understanding (posterior beliefs) (Bayliss et al. 2011; Pluckhahn and Thompson 2017; Pluckhahn et al. 2018). Bayesian modeling of radiocarbon dates was employed for this project because it typically produces chronologies of higher accuracy, transparency, and reproducibility than those formed by informal interpretations (Hamilton and Krus 2018: 187). In addition, a useful benefit of Bayesian modeling for this project is the ability to estimate settlement histories and evaluate the timing and tempo of social change, topics largely unknown at the Weeden Island site. It is necessary to understand these changes on an intra-site and site level in order to construct regional chronologies.

Typically, Bayesian modeling is used when the radiocarbon data is constrained by informative prior information, such as defined stratigraphic relationships between samples; something largely lacking at the site. However, there are some stratified deposits at the site, and whenever possible I used these stratigraphic relationships to model associated radiocarbon dates (Darvill et al. 2012; Dee et al. 2013; Krus et al. 2015). Where such stratigraphic relationships were not present, I rely on the assumption that radiocarbon dates of comparable age from closely-related contexts (i.e., in the same area of the site) represent a phase of occupation, while those of greater or less age represent distinct phases of settlement. This assumption is consistent with Tobler's (1970:236) first law of geography: "everything is related to everything else, but near things are more related than distant things."

Prior to modeling, I plotted the spatial locations of the samples from which all of the radiocarbon dates were obtained, including newly obtained dates as well as prior dates, on a topographic map of the site in GIS, then used a buffering tool with a 50 m setting to isolate clusters. This resulted in the definition of four radiocarbon loci. It should be noted that it was necessary for some of these newly created loci to be further separated into sub-loci if the dates were similar in temporal range but spatially fell outside of a 50 m buffer zone. Loci 1 and 2 fall into this category. After modeling each locus separately into phases, they were then modeled together into site-wide phases (Pluckhahn et al. 2020).

Calibration of radiocarbon dates was completed using the IntCal20 curve in OxCal 4.4 (Reimer et al. 2013). The Bayesian models were created using the OxCal v 4.4.2 program (Bronk Ramsey 2020). As recommended by Hamilton and Krus (2018) in discussion of modeling, italics are used to differentiate the modeling results from the date calibrations because they are the result of an interpretative model. Also, all modeled probabilities were rounded outward to five years to account for slight differences in results from different runs of the model as well as being easier for readers to retain in their head. Last, when dates did not fit expectations, possible reasons are provided.

Curation

All archaeological materials and associated documentation associated with this thesis project have been prepared for permanent storage and curation at the AWIARE research station. All notes and forms are stored in archival quality containers and artifacts are stored in 4 mil plastic bags within weatherproof plastic containers, with accompanying provenience information legibly marked. The AWIARE research station was chosen as the curatorial facility to maintain the collections generated by this research together with those from previous investigations of the Weeden Island site.

CHAPTER FOUR: RESULTS OF THE ARCHAEOLOGICAL RECONNAISSANCE SURVEY

A total of 30 shovel tests were excavated from six areas of the site. Of these 30 shovel tests, 20 contained cultural material. Appendix A details the recovered materials from each shovel test and Appendix B provides profile drawings of each shovel test. It should be noted that shovel test locations include designations introduced by the Dean et al. survey conducted on the preserve. The map shown in Figure 4.1 shows the different designations assigned to each portion.

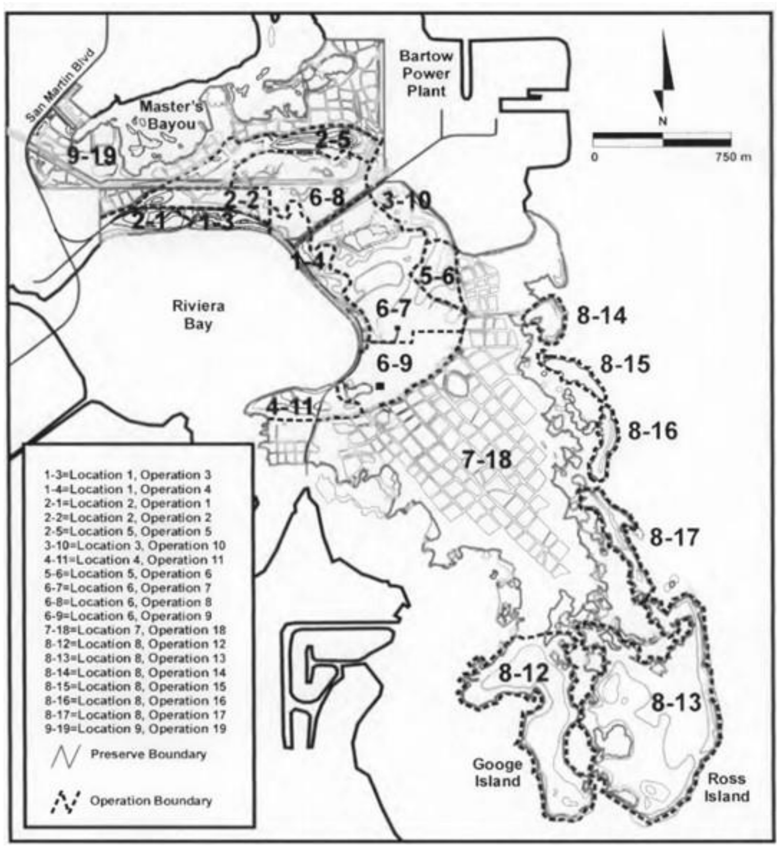

Figure 4.1. Map of Dean and colleagues survey area designations (adapted from Dean et al. 2008: 64, Fig. 5_1).

Area 2

Six shovel tests were dug in Area 2, with two located in the portion of the site designated 8PI1-5-6 (STP 1, 2) and four in the portion designated 8PI1-6-7 (STP 1, 2, 3, 4) (Figure 4.2). All shovel tests from Area 2 were positive for the presence of cultural material.

8PI1-5-6: STP 1 (E342019/N3081929)

We excavated Shovel Test 1 in Location 5, Operation 6 on March 29 of 2019. The location of testing appeared to be an uninvestigated area, on the other side of a saddle, of a previously studied portion of the main midden ridge.

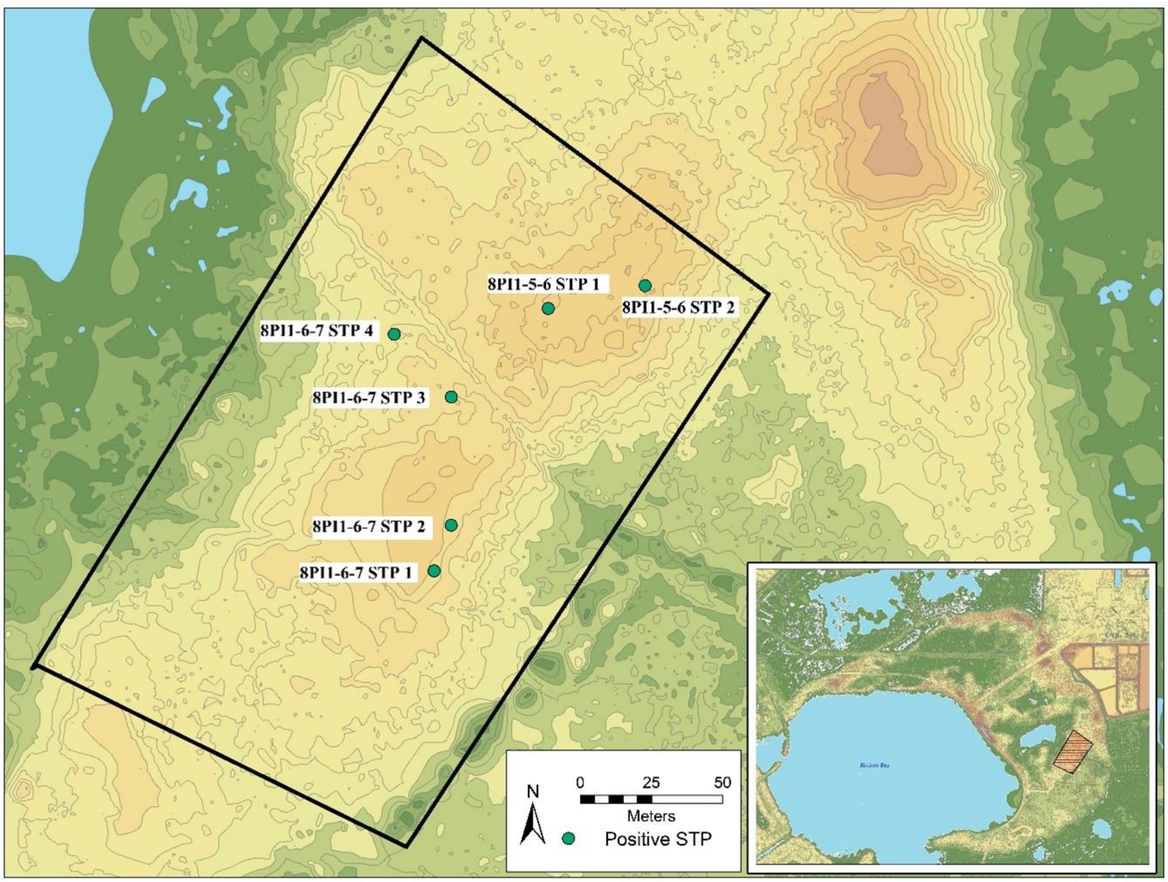

Figure 4.2. Locations of Area 2 shovel tests.

Stratum 1 extended to 20 cmbs in the north half of the test and consisted of 10YR4/1 dark gray, medium-coarse sand with no cultural material present. Stratum 2 extended from 20-55 cmbs and consisted of 10YR7/1 light gray loamy sand with an area in the middle of the test from 30-45 cmbs consisting of 10YR8/1 white loamy sand. This stratum contained only lithic artifacts. Stratum 3 spanned from 55-85 cmbs and consisted of 10YR5/4 yellowish brown loamy sand with only lithic artifacts present. Stratum 4 extended to the base of the test at 100 cmbs and consisted of 10YR7/6 yellow loamy sand with only lithic artifacts present.

None of the artifacts are temporally diagnostic; all consist of flaked stone debitage. Levels 1 and 2, corresponding to Stratum 1, contained no cultural material. Artifact density picked up in Stratum 2, with one chert tertiary flake in Level 3, eight in Level 4, and one in Level 5. Artifacts were variable in number, but generally infrequent in Strata 3 and 4. Working through Stratum 3, Level 6 produced one tertiary chert flake, and Level 7 yielded another, while Level 8 contained no cultural material. Levels 9 and 10, corresponding with the last of Stratum 3 and Stratum 4, each produced one tertiary chert flake.

8PI1-5-6: STP 2 (E342053/N3081937)

The location of Shovel Test 2 in Location 5, Operation 6 is an interesting area that appeared to be an offshoot spur of the investigated Jeanne’s Mound Complex known to be about 200 m to the northeast. We partially excavated this shovel test on March 29 of 2019 and then finished May 22 of 2019.

Stratum 1 extended to 12 cmbs in the west half of the test and consisted of 10YR6/1 gray, fine silty sand. This stratum contained shell. Stratum 2 extended from 12-42 cmbs and consisted of 10YR5/2 grayish brown mottled with 10YR4/1 dark gray, very fine silty sand. In this stratum, shell and pottery were recovered. Stratum 3 spanned 42-85 cmbs and consisted of 10YR7/4 very pale brown mottled with 10YR5/4 yellowish brown, medium-grained silty sand. This stratum contained very little cultural material, with only a small amount of shell, pottery, and bone being found. Stratum 4 extended to the base of the test at 100 cmbs and consisted of 10YR7/6 yellow, fine silty sand with no cultural material present.

None of the artifacts are temporally diagnostic, consisting entirely of shell and unsooted, sand-tempered plain pottery sherds. Stratum 1, corresponding to Level 1, contained gastropods such as crown conch and lightning whelk, along with oyster. Stratum 2, correlating to Levels 2 through 4, had an uptick in the amount of shell found, mostly in Level 2 with the numbers dropping as the stratum progressed, as well as the addition of one sherd of sand tempered plain pottery near the base of Level 4. Stratum 3 showed a continued decrease in cultural material as it was dug through. At the top of the stratum, in Level 5, only a few oyster, lightning whelk, and crown conch shells were present. Then, there was a break in cultural material in Levels 6 and 7, followed by half of a fish vertebrae and one sand tempered plain pottery sherd near the bottom of the stratum in Level 8. By Stratum 4, corresponding to Levels 9 and 10, no cultural material was present.

8PI1-6-7: STP 1 (E341979/N3081837)

The location of Shovel Test 1 in Location 6, Operation 7 was chosen by referencing where the Dean and colleagues (2008) survey noted pre-Columbian surface finds and then digging in the spot of highest elevation near their vicinity. The test would have been done in the location of the surface find but thick saw palmetto and briars forced us to offset to a slightly less vegetated spot. We excavated the shovel test in its entirety on March 8 of 2019.

Stratum 1, which extended to 10 cmbs in the north half of the test and consisted of 10YR5/1 gray, loamy sand, was excavated with a single level (Level 1) which produced no cultural material. Stratum 2 extended from 10-47 cmbs and consisted of 10YR7/1 light gray sand; Levels 2-4 in this stratum were devoid of cultural material, while Level 5 contained two tertiary chert flakes. Stratum 3 spanned 47-62 cmbs and was 10YR7/4 pale brown sand. Most of this layer was removed with Level 6, which yielded one tertiary chert flake. Stratum 4 extended to the base of the test at 100 cmbs and consisted of very fine 10YR7/6 yellow sand. Lithics were found in small and intermittent quantities with increasing depth through this soil horizon; Level 7 produced a single tertiary flake, Level 8 lacked cultural material, and Levels 9 and 10 each yielded one tertiary chert flake.

8PI1-6-7: STP 2 (E341985/N3081853)

We excavated Shovel Test 2 in Location 6, Operation 7 on March 8 of 2019. The shovel test location is the spot of second highest elevation, as close to 20 m away from STP 1 allowed by vegetation, in the vicinity of pre-Columbian surface finds noted by the Dean et al. survey.

Stratum 1, excavated in two layers (Levels 1-2), extended to 23 cmbs in the south half of the test and consisted of 10YR4/1 dark gray, sandy loam devoid of cultural material. Stratum 2 spanned 23-50 cmbs and consisted of 10YR7/1 light gray, sandy loam; Levels 3-5 also did not contain cultural material. Stratum 3 extended from 50 cmbs to the base of the test at 100 cmbs and it consisted of 10YR7/6 yellow, sandy loam. This layer was largely devoid of cultural material similar to the above strata, however lithic artifacts were recovered near the base of the test with Level 9 containing two tertiary flakes and Level 10 yielding one tertiary chert flake.

8PI1-6-7: STP 3 (E341985/N3081898)

Shovel Test 3 in Location 6, Operation 7 is the area of third highest elevation in the vicinity of small pockets of midden on the surface noted by the Dean and colleagues (2008) survey. We excavated the shovel test on March 22 of 2019.

Stratum 1 extending to 23 cmbs and consisting of 10YR5/1 gray, silty loam contained no cultural material. Stratum 2 spanned from 23-59 cmbs and consisted of 10YR7/1 light gray, silty loam with only lithic artifacts present. Stratum 3 extended from 59 cmbs to the base of the test at 100 cmbs and consisted of 10YR5/4 yellowish brown, silty loam. Within stratum 3, beginning at 47 cmbs and extending to the base of the test, was a column of 10YR8/1 white, silty loam spanning from 25-32 cm E-W. Stratum 3 contained only lithic artifacts. Levels 1-4 contained no cultural material. Level 5 contained 24 tertiary chert flakes. Level 6 had four tertiary flakes of chert. Level 7 had four tertiary chert flakes. Level 8 contained three tertiary chert flakes. Levels 9 and 10 contained no cultural material.

As only flaked stone debitage was found within the test, no recovered artifacts were temporally diagnostic. Levels 1 and 2, making up Stratum 1, yielded no cultural material. The lack of cultural material continued into Stratum 2 with Levels 3-4 devoid of artifacts, but then lithic artifact density increased dramatically near the end of Stratum 2, in Level 5, with 24 tertiary chert flakes found. By Stratum 3, lithic artifact density dropped off considerably and the number of chert flakes recovered dwindled. Digging through Stratum 3, Levels 6 and 7 each yielded four tertiary chert flakes, Level 8 produced three flakes, and Levels 9 and 10 contained no cultural material.

8PI1-6-7: STP 4 (E341965/N3081920)

Shovel Test 4, excavated on March 22 of 2019, was selected because its location is the spot of fourth highest elevation, at least 20 m away from all other shovel tests in the surrounding area, that had pockets of midden on the surface as described by the Dean and colleagues (2008) survey.

Stratum 1, extending to 15 cmbs, consisted of 10YR4/1 dark gray, sand with Level 1 containing two tertiary chert flakes of chert and Level 2 yielding one. Stratum 2 spanning from 15-55 cmbs and consisting of 10YR6/1 gray, loamy sand had a dramatic uptick in lithic artifacts. Level 3 contained no cultural material, but Level 4 produced 19 tertiary chert flakes, while Level 5 yielded 44 tertiary flakes and Level 6 contained nine tertiary flakes. By Stratum 3, which extended from 55-80 cmbs and consisted of 10YR3/1, loamy sand until the 80 cmbs mark where it became hardpan clay, the number of lithic artifacts declined with only four tertiary chert flakes recovered in Level 7 and no cultural material found in Level 8. The test was called at 80 cmbs because of the hardpan.

Area 3

Three shovel tests were dug in Area 3, located in the portion of the site designated 8PI1-6-7 (STP 7, 9, 14), and they were all devoid of cultural material (Figure 4.3). Shovel test locations were chosen using the fishnet tool on ArcMap and then tackling those in the highest probability spots first, hence the seemingly random shovel test numbering for this area.

8PI1-6-7: STP 7 (E341811/N3081891)

Shovel Test 7 in Location 6, Operation 7 is located in an interesting area of elevated land just south of Boy Scout Lake, a pre-Columbian freshwater source. It was the very first shovel test that we excavated for the project during the Spring 2019 field season on January 25 of 2019.

Stratum 1, corresponding to Levels 1-6, extended to 57 cmbs and consisted of 10YR4/1 dark gray mottled with 10YR2/1 black, silty sand and no cultural material. Stratum 2, corresponding to the very end of Level 6, though it more than likely continued deeper, spanned 57-60 cmbs and consisted of 10YR6/1 gray, sandy loam devoid of cultural material. The shovel test flooded at 60 cmbs because of the high water table after an overnight rainstorm, forcing us to call the test at that depth.

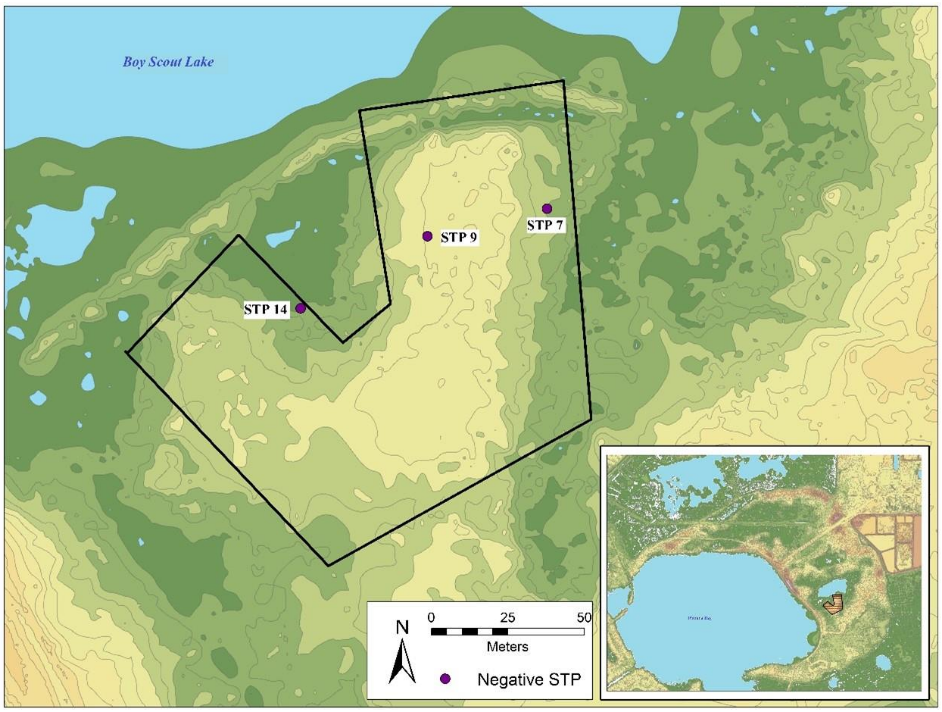

Figure 4.3. Locations of Area 3 shovel tests.

8PI1-6-7: STP 9 (E341773/N3081882)

We excavated Shovel Test 9 in Location 6, Operation 7 on February 8 of 2019. The shovel test location is a place of high elevation and the vegetation was different than that of the surrounding area and relatively open.

Stratum 1, extending to 14 cmbs and consisting of 10YR4/1 dark gray, fine silty sand, and Stratum 2 spanning from 14-23 cmbs and 10YR5/1 gray, fine silty sand, corresponded with Levels 1 and 2 and produced no cultural material. Stratum 3, consisting of Levels 3-9, spanned from 23-90 cmbs and was 10YR7/1 light gray, fine silty sand devoid of cultural material. Stratum 4, which extended from 90 cmbs to the base of the test at 100 cmbs, was excavated in a single level (Level 10) and consisted of 10YR8/1 white, very fine sand with no cultural material.

8PI1-6-7: STP 14 (E341732/N3081858)

Shovel Test 14 in Location 6, Operation 7 is located in a unique area of bracken ferns, which I was told may indicate a nearby or unseen freshwater source. Wanting to investigate this type of context further, we excavated a shovel test in this location on February 1 of 2019.

Stratum 1, corresponding to Levels 1-3, extended to 30 cmbs and consisted of 10YR2/1 black, extremely moist loam with no cultural material. Though it is possible that this stratum may have continued further and that more strata would have been found beneath, the test flooded at 30 cmbs because the water table was so high from an overnight rainstorm. On account of premature flooding, the shovel test was called at that 30 cmbs.

Area 4

Two shovel tests were dug in Area 4, located in the portion of the site designated 8PI1-6-7 (STP 1, 2), and no cultural materials were recovered (Figure 4.4).

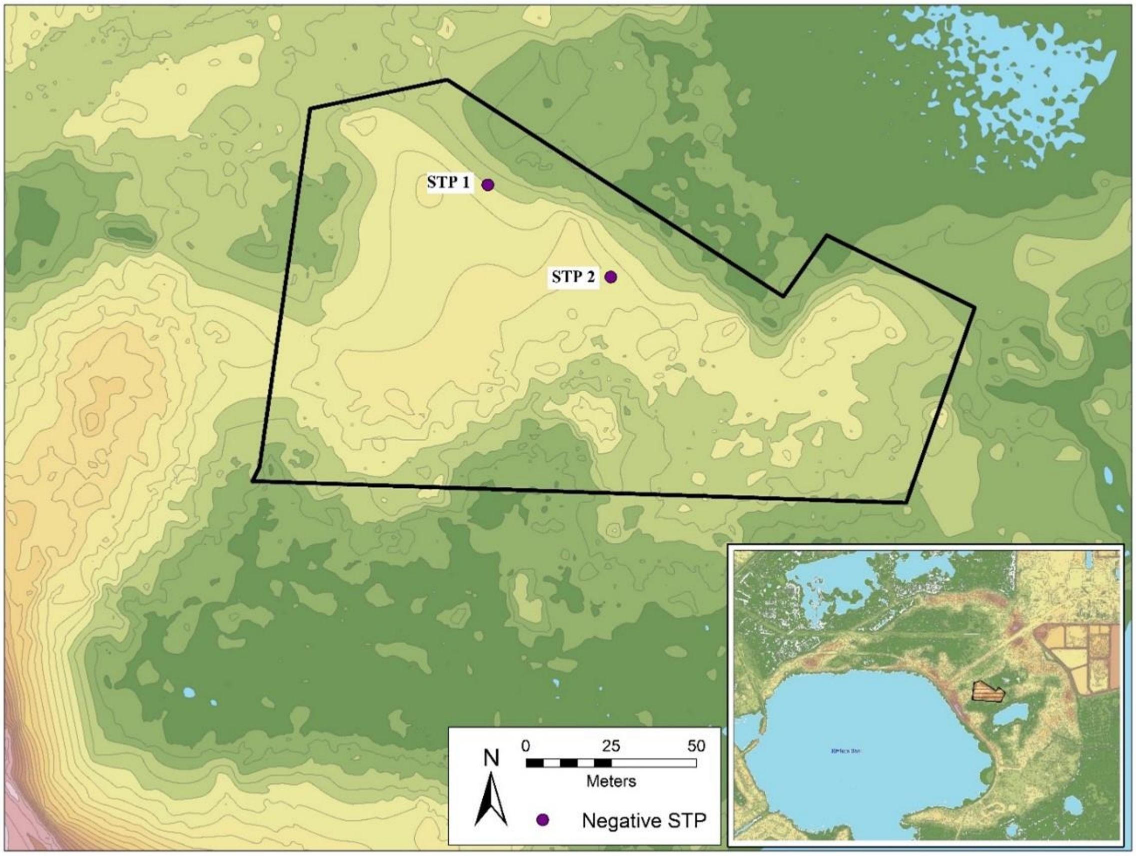

Figure 4.4. Locations of Area 4 shovel tests.

8PI1-6-7: STP 1 (E341561/N3082171)

We excavated Shovel Test 1 located in Location 6, Operation 7 on February 15 of 2019. The shovel test location is an area of high elevation to the north of Boy Scout Lake, a pre-Columbian source of fresh water.

Stratum 1, correlating to Level 1 and the first half of Level 2, extended to 25 cmbs and consisted of 10YR5/1 gray, very fine moist sand with no cultural material. Stratum 2, consisting of the second half of Level 2 along with Levels 3-10, spanned from 25 cmbs to the base of the test at 100 cmbs and was 10YR7/6 yellow mottled with 10YR5/1 gray, sandy clay devoid of any cultural material.

8PI1-6-7: STP 2 (E341597/N3082144)

Shovel Test 2 in Location 6, Operation 7 is in a spot of higher elevation north of Boy Scout Lake, at least 20 m away from Shovel Test 1, and the vegetation was more open than the surrounding area. We excavated the shovel test on February 15 of 2019.

Stratum 1, corresponding to Level 1-3, extended to 33 cmbs and consisted of 10YR5/1 gray, very fine, silty sand with no cultural material. Stratum 2, consisting of Levels 4-6, spanned from 33-55 cmbs and was 10YR7/1 light gray, very fine sand devoid of cultural material. Within Stratum 1 and Stratum 2, from 50-60 cmbs and 25-30 E-W, was a sterile section of 10YR2/2 very dark brown, sandy clay. Stratum 3 extending from 55-70 cmbs and consisting of 10YR8/1 white, very fine sand, corresponds with Level 7 and produced no cultural material. Stratum 4 was excavated in one level (Level 8) as it extended from 70 cmbs to the base of the test at 80 cmbs and was 10YR2/2 very dark brown clay devoid of cultural material. Although it is possible Stratum 4 may have continued further or a different stratum may have presented, at 80 cmbs we encountered hardpan and were unable to dig further, so I called the test at that depth.

Area 5

Six shovel tests were dug in Area 5, located in the portion of the site designated 8Pi1-6-7 (STP 1, 2, 3, 4, 5, 6). All shovel tests from Area 5 were positive for the presence of cultural material (Figure 4.5).

8PI1-6-7: STP 1 (E342069/N3082132)

We excavated Shovel Test 1 in Location 6, Operation 7 on April 12 of 2019 and its location was chosen because it was an unexplored area of higher elevation that was to the west of two very interestingly contrasting portions of the site that were previously investigated. One portion, studied by Sampson (2019) had Safety Harbor period artifacts, and the other, investigated under the supervision of Robert Austin during numerous kid's summer archaeology camps put on by AWIARE and the Florida Public Archaeology Network (FPAN), yielded only lithic artifacts of presumably Archaic period origin.

No artifacts within this shovel test were temporally diagnostic as they consisted of shell, fish bone, unsooted, plain pottery, and lithic flakes. Stratum 1, corresponding to Level 1, extended to 11 cmbs and consisted of 10YR2/1 black, loamy fine-grained sand with various gastropod species and bivalves present, along with some bony fish bone and four otoliths. Stratum 2, corresponding with Level 2, spanned 11- 22 cmbs and consisted of 10YR5/1 dark gray, loamy fine-

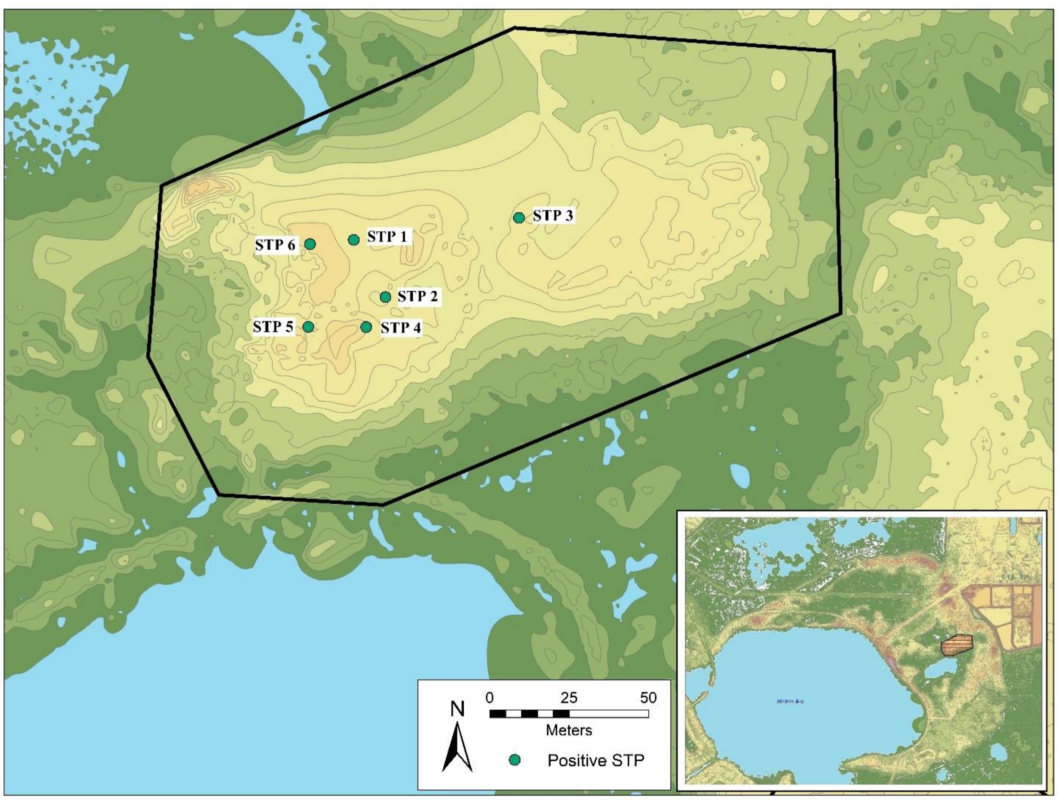

Figure 4.5. Locations of Area 5 shovel tests.

grained sand. This stratum contained roughly the same number of bivalves accompanied by decreased numbers of gastropod species and fish bones. The next stratum, Stratum 3, extended from 22-52 cmbs and was comprised of 10YR7/1 light gray, very fine sand. Within Stratum 3, consisting of Levels 3-5, the amount of shell continued to decrease dramatically through the levels. However, the number of fish bone from this stratum spiked in Level 3 but then petered back out as the we dug deeper, similar to the shell. We also recovered a sherd of sand-tempered plain pottery from Level 3 of this stratum. Last, Stratum 4, comprised of Levels 6-10, extended from 52 cmbs to the base of the test at 100 cmbs and consisted of 10YR8/1 white, very fine sand. This stratum contained no cultural material in Level 6, followed by a small amount of shell in Levels 7 through 9, and again no cultural material in Level 10. In addition to shell, Level 8 also yielded two tertiary flakes of chert.

8PI1-6-7: STP 2 (E342085/N3082120)

We excavated Shovel Test 2 on April 12 of 2019. The test's location is on a cleared portion of the midden that had many large gastropods present on the surface and seemed somewhat level compared to surrounding areas.

Stratum 1 extended to 47 cmbs and consisted of 10YR5/1 gray, fine sand with shell and pottery. Stratum 2 spanned 47-60 cmbs and was 10YR8/1 white, very fine sand. This stratum contained only shell. Stratum 3 extended from 60 cmbs to the base of the test at 100 cmbs and consisted of 10YR6/8 brownish yellow mottled with 10YR8/1 white, very fine sand devoid of cultural material.

None of the artifacts are temporally diagnostic as only shell and unsooted, sand tempered plain pottery were found. Levels 1-5, corresponding with Stratum 1, yielded a modest number of gastropods and bivalves with Level 1 being the most artifact dense and then a stark decline in the subsequent levels. Stratum 2, which was excavated in one level (Level 6), had a continuation of decline in shell density from the previous stratum. Levels 6-10, comprising Stratum 3, contained no cultural material.

8PI1-6-7: STP 3 (E342143/N3082128)

We excavated Shovel Test 3 in Location 6, Operation 7 on May 17 of 2019. The location is in a level area without a lot of trees and with many large gastropods in the vicinity exhibiting evidence of modification. Also, this spot is the highest part of the midden that we could find and access.

Stratum 1, which corresponds with Levels 1-3, extended to 30 cmbs in the east half of the test and consisted of 10YR2/1 black, silty sand. Working through the stratum, no artifacts were temporally diagnostic but artifact density increased dramatically near the end of the stratum. Stratum 2, correlating to Levels 4 and 5, spanned 30-50 cmbs and was 10YR3/1 very dark gray, silty sand. The density of fish bones and pottery remained relatively the same as the end of the previous stratum, however the density of shell increased and new artifact types presented within Stratum 2. Stratum 3, corresponding to Levels 6-8, spanned 50-80 cmbs and consisted of 10YR4/2 dark grayish brown, very fine sand. This stratum had a decrease in the density of all artifact types the further we excavated except for lithics, which saw an increase by the end of the stratum. Stratum 4, corresponding to Levels 9 and 10, spanned from 80-97 cmbs and was 10YR5/2 grayish brown, very fine sand. Level 9 had a stark increase in lithics with 93 tertiary chert flakes recovered and then a drop by Level 10 with 36 tertiary chert flakes found. Level 10 also contained one temporally diagnostic artifact, a single Weeden Island Incised rim sherd, in addition to 1 piece of sandstone and one sharks eye shell. Stratum 5, correlating to Levels 11 and 12, extended from 97 cmbs to the base of the test at 120 cmbs and consisted of 10YR5/3 brown, very fine sand. This stratum continued the pattern of decreasing artifact density with Level 12 producing 13 tertiary chert flakes and one crab claw fragment while Level 12 yielded one tertiary chert flake and one sand tempered plain pottery sherd.

8PI1-6-7: STP 4 (E341820/N3082127)

We excavated Shovel Test 4 on May 28 of 2019. The test's location is in an area of level ground, devoid of vegetation, that has midden visible on the surface. Also, it is at least 20 m from the first three shovel tests in the area but in what appeared to be either a spur off the main midden ridge or spoil from a nearby mosquito ditch. Further investigation was needed to ascertain which circumstance caused the exposed midden.

Stratum 1 extended to 59 cmbs and consisted of 10YR4/1 dark gray, fine sand with shell, pottery, bone, lithics, and charcoal present. Stratum 2 spanned from 59-76 cmbs and was 10YR5/1 gray, fine sand. This stratum contained bone and shell. Stratum 3 extended from 76 cmbs to the base of the test at 100 cmbs and consisted of bone, shell, and lithics.

No artifacts from this shovel test were temporally diagnostic; consisting of ubiquitous unsooted, sand tempered plain pottery, shell, flaked stone debitage, and small fish bones. Levels 1-6, corresponding to Stratum 1, contained a moderate number of gastropods and bivalves along with pottery and bone. Working through the stratum, Level 1 contained a small amount of shell, six sand-tempered plain body sherds, and three small fish bones. The next level had an increase in bivalves, while gastropod and fish bone numbers stayed roughly the same as the previous level. Level 3 yielded similar numbers of gastropods, bivalves, and fish bone along with a single tertiary chert flake. By Level 4, shell counts remained consistent with the previous level, but the amount of bone present increased dramatically with the addition of bones from small mammals and turtles included in the count. This level also yielded a single sand-tempered plain body sherd and ten otoliths. Levels 5 and 6 had a dramatic decrease in bone but amounts of other artifact types remained somewhat consistent through the end of the stratum. Stratum 2, consisting of Level 7 and part of Level 8, yielded a very small number of shell and bones. Last, Stratum 3, comprised of the end of Level 8 and extending to the base of the shovel test, had very little cultural material with Level 9 yielding one hardhead catfish otolith and Level 10 containing one tertiary chert flake and one fish vertebra.

8PI1-6-7: STP 5 (E341801/3082127)

We excavated Shovel Test 5 on May 28 of 2019. This test's location is in an oddly circular, open space that happened to be 20 m away from Shovel Test 4 and had midden visible on the surface.

Stratum 1, which extended to 38 cmbs in the south half of the test and consisted of 10YR2/1 black, fine sand, had shell, pottery, charcoal, bone, and lithics present. Level 1 contained a very little amount of shell and a single sand-tempered plain body sherd. Level 2 had an increased number of gastropods and bivalves present, as well as eight pottery sherds and a small number of fish bones. By Level 3, the number of gastropods spiked dramatically while bivalve numbers stayed roughly the same as the previous level. This level also contained an increased amount of pottery sherds and fish bone. Working through Level 4, artifact density dropped considerably. Stratum 2, spanning from 38-51 cmbs and consisting of 10YR5/2 grayish brown, fine sand, was excavated in a single level (Level 5) and continued the decrease in artifact density pattern witnessed in the previous stratum. Stratum 3 extended from 51 cmbs to the base of the test at 100 cmbs and was 10YR4/3 dark grayish brown mottled with 10YR3/2 very dark grayish brown very fine sand. This stratum also had a decrease in artifact density from Level 6, which yielded two tertiary chert flakes and two sand tempered plain pottery sherds along with some shell. Working through to the end of the stratum, artifact density stayed relatively similar with very little cultural material found.

8PI1-6-7: STP 6 (E341802/N3082153)

We excavated Shovel Test 6 on May 28 of 2019. The test's location was chosen by going 20 m away from Shovel Test 5 and then finding an accessible area without large oak tree roots. Also, there were half a dozen large lightning whelk shells, with evidence of modification, present nearby on the surface so we got as close to that location as possible.

Stratum 1 extended 25 cmbs and consisted of 10YR2/1 black, medium-grained sand with pottery, shell, and bone present. Stratum 2 spanned 25-48 cmbs and was 10YR5/1 gray, fine sand with pottery, bone, and shell present. Stratum 3 spanned from 48-74 cmbs and consisted of 10YR7/1 light gray, fine sand with shell, bone, and pottery present. Stratum 4 spanned from 74-97 cmbs and was 10YR5/4 yellowish brown, fine sand with bone, shell, and lithics present. Stratum 5 extended from 97 cmbs to the base of the test at 100 cmbs and was 10YR4/4 dark yellowish-brown fine sand devoid of cultural material.

Levels 1-3, corresponding to Stratum 1 and the beginning of Stratum 2, contained shell, pottery, and bone. Working through the stratum, Level 1 contained a small amount of gastropods and bivalves. By the next level, the number of gastropods increased while the bivalve numbers stayed roughly the same. Level 2 also contained three sand-tempered plain body sherds. By the end of the stratum, in Level 3, the number of gastropods spiked considerably to nearly five times the number in the previous level. Bivalve numbers stayed similar and the amount of bone and pottery also grew in this level. Stratum 2, consisting of the bottom of Level 3 as well as Levels 4-5, yielded less shell, bone, and pottery as the stratum progressed. Working through Stratum 3, artifact density continued to decrease starting with Level 6 containing roughly the same amount of shell, bone, and pottery, and then density decreasing the deeper we dug. By Stratum 4, corresponding to Level 9, there was only a three small fish bones and a tertiary chert flake present. Then in Stratum 5, consisting of the end of Level 10, no cultural material was present.

One AMS sample, obtained from a long bone of a white-tailed deer (*Odocoileus virginianus*) in Level 3 of this test, provided a radiocarbon age of 870 ± 25 (UGAMS-44074). The three possible 2σ calibrated ranges for this assay are: cal AD 1050 to 1080 (7.4%), cal AD 115 to 1229 (87.1%), and cal AD 1246 to 1255 (1.0%).

Area 7

Five shovel tests were dug in Area 7 and all were devoid of cultural material (Figure 4.6). Two of the shovel tests were located in the portion of the site designated 8PI1-6-7 (STP 1, 2), and three were located in the portion designated 8PI1-6-8 (STP 1, 2, 3).

8PI1-6-7: STP 1 (E341324/N3082331)

The location of Shovel Test 1 in Location 6, Operation 7 is a large area of higher elevation that extends off what appears to be either a ridge of spoil from the construction of Weedon Drive or a natural dune. This ridge was split in half by the road leading to the Duke power plant and this test is on the southern portion. I wanted to confirm whether the high elevation parallel to Weedon

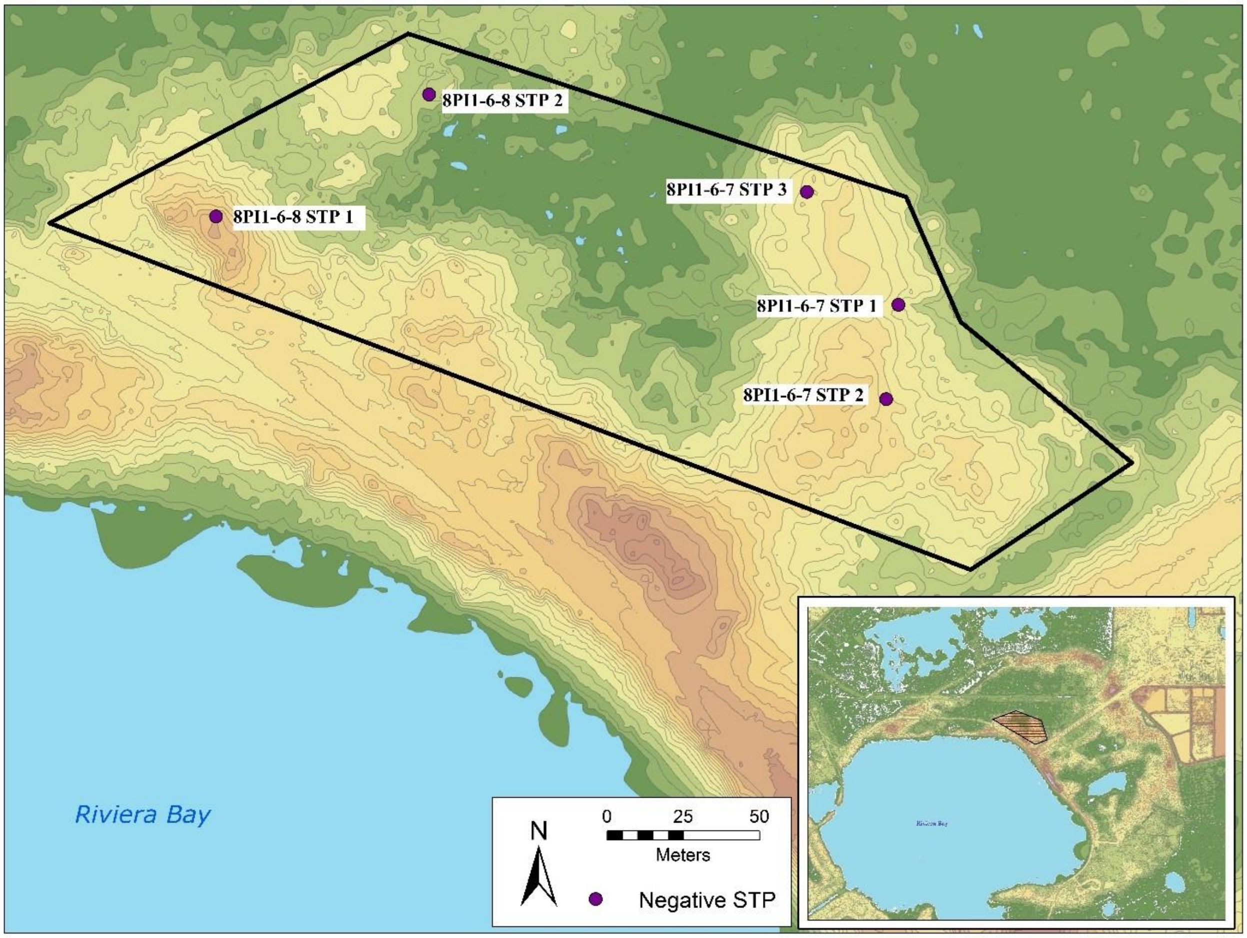

Figure 4.6. Locations of Area 7 shovel tests.

Drive was natural or artificial and if my area of interest was part of, or apart from, that ridge. We excavated this shovel test on February 22 of 2019.

Stratum 1, corresponding to Levels 1-3, extended to 30 cmbs and consisted of 10YR5/1 gray mottled with 10YR4/1 dark gray, loamy sand devoid of cultural material. Stratum 2, correlating to Level 4, spanned from 30-38 cmbs and was 10YR8/1 white, fine sand without cultural material. Stratum 3, matching with Level 5, extended from 38-51 cmbs and consisted of 10YR6/2 light brownish gray, loamy sand with no cultural material. Stratum 4, corresponding to

Levels 6-10, extended from 51 cmbs to the base of the test at 100 cmbs and was 10YR8/2 very pale brown, loamy sand devoid of cultural material.

8PI1-6-7: STP 2 (E341294/N3082368)

We excavated Shovel Test 2 in Location 6, Operation 7 on February 22 of 2019. The shovel test's location is on top of the ridge and in an open area at least 20 m from the first shovel test in Area 7.

Stratum 1, matching with Levels 1-3, extended to 28 cmbs and consisted of 10YR5/1 gray, very fine silty sand, and no cultural material. Stratum 2, corresponding to Levels 4-7, spanned from 28-71 cmbs and was 10YR7/2 light gray, very fine silty sand devoid of cultural material. Stratum 3 extended from 71-80 cmbs and was excavated in one level (Level 8), and consisted of 10YR8/1 white, very fine sand without cultural material. Stratum 4, correlating with Level 9-10, extended from 80 cmbs to the base of the test at 100 cmbs and was 10YR5/6 yellowish brown, very fine sand, and no cultural material.

8PI1-6-8: STP 1 (E341100/N3082360)

Shovel Test 1 in Location 6, Operation 8 is atop a ridge of elevated land running parallel to Weedon Drive but on the north side of the road leading to the Duke power plant. I placed this STP in this location to investigate if the elevated area was artificially built up or part of a natural dune, similar to what was seen on the southern side of the road to the Duke power plant. We excavated this test on March 1 of 2019.

Stratum 1, which extended to 26 cmbs, corresponds to Levels 1, 2, and half of Level 3, and consisted of 10YR4/1 dark gray, fine sand without cultural material. Stratum 2, matching with the second half of Level 3, all of Level 4, and most of Level 5, spanned 26-48 cmbs and was 10YR7/1 light gray, fine sand devoid of cultural material. Stratum 3, corresponding to Levels 6-10, extended from 48 cmbs to the base of the test at 100 cmbs and consisted of 10YR4/1 dark gray, very fine sand with no cultural material.

8PI1-6-8: STP 2 (E341170/N3082400)

We excavated Shovel Test 2 in Location 6, Operation 8 on March 1 of 2019. The test location is an open area along the ridge at least 20 m away from Shovel Test 1.

Stratum 1, consisting of levels 1-5, extended to 50 cmbs and consisted of 10 YR 4/1 dark gray, fine sand devoid of cultural material. Stratum 2, corresponding to Levels 6-9, spanned 50-89 cmbs and was 10YR7/1 light gray, fine sand without cultural material. Stratum 3 extending from 89 cmbs to the base of the test at 100 cmbs and was excavated in one level (Level 10) and consisted of 10YR5/4 yellowish brown, very fine sand with no cultural material.

8PI1-6-8: STP 3 (E341320/N3082300)

We excavated Shovel Test 3 in Location 6, Operation 8 on March 1 of 2019 in an open area, compared to the surrounding thick vegetation, at least 20 m away from Shovel Test 2.

Stratum 1, correlating with Levels 1-4, extended to 38 cmbs and was 10YR5/1 gray, fine sand with no cultural material. Stratum 2, consisting of Levels 5-10, spanned 38-96 cmbs and consisted of 10YR7/1 light gray, very fine sand devoid of cultural material. Stratum 3, corresponding to near the base of Level 10, extended from 96 cmbs to the base of the test at 100 cmbs and was 10YR5/1 gray, very fine sand without cultural material.

Area 8

Eight shovel tests were dug in Area 8, located in the portion of the site designated as 8PI1-2-5 (STPs 1 through 8) (Figure 4.7). Seven out of eight shovel tests from Area 8 were positive for the presence of cultural material (STPs 1-4, and 6-8); only STP 5 was negative.

8PI1-2-5: STP 1 (E341618/N3082757)

We excavated Shovel Test 1 in Location 2, Operation 5 on May 30 of 2019. The shovel test location is in an open area on one of the highest parts of the midden ridge.

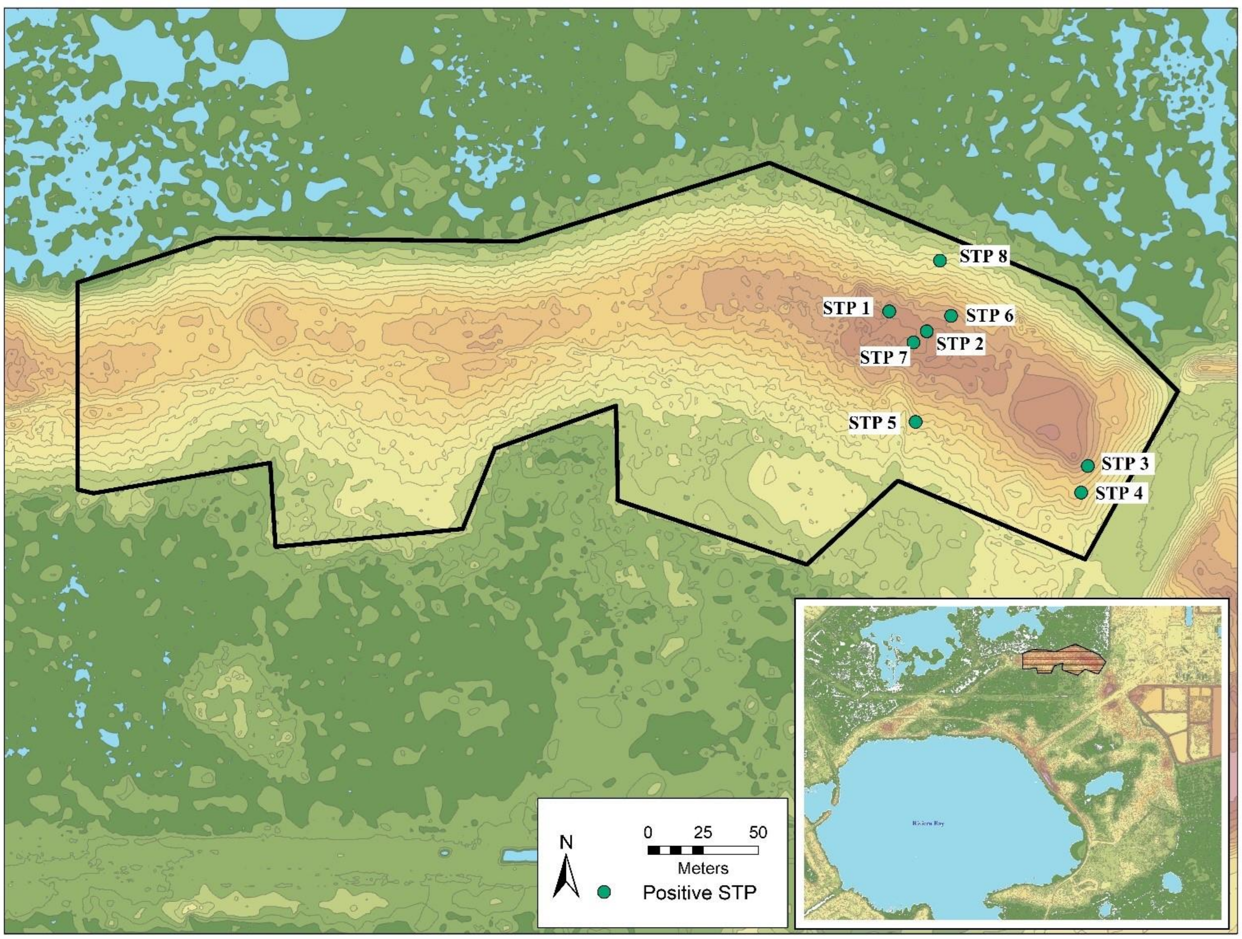

Figure 4.7. Locations of Area 8 shovel tests.

Stratum 1, which extended to 20 cmbs and consisted of 10YR7/1 light gray, very fine sand, was excavated in two levels (Levels 1-2). Level 1 contained four St. Johns check-stamped body sherds and six sand-tempered plain body sherds, a small amount of shell, and one tertiary chert flake. Level 2 had one Wakulla check-stamped sherd and a single human molar, which were immediately returned to the test and reburied. The test was not excavated any further due to the discovery of human remains, protected under the Native American Graves Protection and Repatriation Act (NAGPRA) and Chapter 872 of the Florida Statutes.

8PI1-2-5: STP 2 (E341635/N3082748)

We excavated Shovel Test 2 in Location 2, Operation 5 on May 30 of 2019. The location of the test is on the highest part of the midden ridge and 20 m from Shovel Test 1, though a large oak tree was in the way so we offset the test 3 m to the west.

Stratum 1 extended to 48 cmbs and consisted of 10YR4/2 dark grayish brown, fine sand with shell, pottery, bone, and lithics present. Stratum 2 spanned 48-70 cmbs and was 10YR5/3 brown, fine sand with shell, bone, and lithics. Stratum 3 spanned from 70-80 cmbs and consisted of 10YR7/6 yellow, fine sand with shell present. Stratum 4 extended from 80 cmbs to the base of the test at 100 cmbs and consisted of 10YR7/4 very pale brown, fine sand with no cultural material present.

Level 1 had a small amount of shell along with two sand-tempered plain body sherds and two mammal long bone fragments. Artifact densities remained the same through Levels 2 and 3, with the exception of the addition of fish bone and chert fragments near the end of the third level. By Level 4, only a small amount of shell along with 29 mammal long bone fragments were recovered. Working through Stratum 2, Level 5 had a small amount of shell and bone, while Levels

6 and 7 contained an increased amount of shell along with some pottery sherds and chert fragments. The final stratum, corresponding with Levels 8-10 contained no cultural material.

8PI1-2-5: STP 3 (N341708/E3082687)

We excavated Shovel Test 3 in Location 2, Operation 5 on June 3 of 2019. The location of the test is on a high peak near the mound/midden that was cut in half by the gas transmission pipeline and appeared intact. Additionally, there is flat area just south of this peak that I wanted to test (STP 4) to see if both areas were used concomitantly.

Stratum 1 extended to 50 cmbs in the east half of the test and consisted of 10YR 4/1 dark gray, very fine sand with shell, pottery, bone, and lithics present. Stratum 2 extended from 50-82 cmbs and consisted of 10YR5/1 gray, very fine silty sand. In this stratum, shell, bone, and lithics were recovered. Stratum 3 spanned from 82 cmbs to the base of the test at 110 cmbs and consisted of 10YR3/1 very dark gray fine silty sand with shell, pottery, bone, and turtle shell present.

Levels 1-5, corresponding to Stratum 1, had an ever-increasing amount of shell as the stratum was excavated. From Level 1 to Level 2, a small increase in shell density occurred, but by Level 3 the shell density of the stratum increased dramatically with nearly 4x the amount of shell present. This density continued in Levels 4 and 5. Pottery, bone, and stone flaked debitage was also found in Stratum 1 with increasing density. Levels 6-8, corresponding to Stratum 2, also had a high density of shell present, similar to the previous stratum, as well as bone. By Stratum 3, corresponding with Levels 9 through 11, the artifact density declined significantly with about 1/3 of the amount of shell present as well as less pottery, bone, and lithics.

Interestingly, the shell species composition of this shovel test seemed to have flipped at around 50 cmbs from predominantly gastropods to bivalves. In the first stratum, I found hundreds of crown conch, lightning whelk, pear whelk, and other gastropod species and considerably less oyster. Stratum 1 contained 1,376 gastropods and 427 oysters. Then, near the end of Stratum 1 and continuing into Stratum 2 and beyond, I found hundreds of oysters and a stark decline in number of gastropods present. Strata 2 and 3 contained 1,106 gastropods and 2,958 oysters. It should be noted that the midden in which this shovel test was excavated unquestionably extended down at least another meter, if not more, so whether this is significant or a pattern is speculative and unfortunately unknown at this time.

We obtained two AMS samples from this test. One sample ran on a white-tailed deer *(Odocoileus virginianus)* carpal from Level 6 returned a radiocarbon age of 1120 ± 25. This is calibrated at 2σ to cal AD 884-994 (UGAMS-44075). The other date, obtained from soot (0.17g) on the interior of a sand-tempered plain pottery sherd found in Level 10, produced a radiocarbon age of 1400 ± 25, calibrated at 2σ to cal AD 604-663 (UGAMS-44076). These dates suggest at least two phases of occupation in this area, broadly consistent with the stratigraphic differences in shell composition I noted above.

8PI1-2-5: STP 4 (E341705/N3082675)

We excavated Shovel Test 4 in Location 2, Operation 5 on June 11 of 2019. The location of the test is a flattened portion of the midden parallel to a high peak which we also tested (STP 3) to ascertain if they were occupied contemporaneously.

Stratum 1, consisting of levels 1-7, extended to 74 cmbs and consisted of 10YR3/1 very dark gray silty sand. Working through the stratum, a very low amount of shell was recovered from the first two levels, but by Level 3 the number of gastropods and bivalves increased dramatically. Level 3 is also where we found a single sand-tempered body sherd. By Level 4, the amount of shell tapered off to nearly half that found in the previous level. Then, Level 5 yielded even more of a decrease in shell before steadily increasing in Levels 6 and 7. In addition to shell, Level 5 also contained a small number of fish and turtle bone. By Stratum 2, extending from 74-89 cmbs and consisting of 10YR5/1 gray, mottled with 10YR3/2 very dark grayish brown, fine silty sand, the density of shell dropped considerably and we no longer found pottery or bone. Then by Stratum 3, which spanned from 89 cmbs to the base of the test at 100 cmbs and consisted of 10YR5/2 grayish brown fine silty sand, only a small amount of shell and fish bone was present.

One AMS sample ran on a turkey *(Meleagris gallopavo)* scapula from Level 8 produced a radiocarbon age of 1270 ± 25 (UGAMS-44077). The two possible 2σ calibrated age ranges for this date are cal AD 668-777 (89.3%) and cal AD 791-821 (6.1%).

8PI1-2-5: STP 5 (E341630/N3082707)

We excavated Shovel Test 5 in Location 2, Operation 5 on June 18 of 2019. This shovel test's location is in an open flat area, slightly elevated from the surrounding area and just off the main midden ridge in what looked like it could have been a habitation area.

Stratum 1, corresponding to Levels 1-2, extended to 20 cmbs and consisted of 10YR3/1 very dark gray, fine silty sand devoid of cultural material. Stratum 2, containing Levels 3-6, spanned 20-60 cmbs and consisted of 10YR6/1 gray, fine sand without cultural material. Stratum 3, correlating to Levels 7-10, extended from 60 cmbs to the base of the test at 100 cmbs and was 10YR5/6 yellowish brown, fine sand with no cultural materials present.

8PI1-2-5: STP 6 (E341646/N3082755)

We excavated Shovel Test 6 in Location 2, Operation 5 on June 18 of 2019. The location of the test is in a flat, open area just off the main midden ridge that I wanted to compare to STP 8 on the ridge to ascertain if they were occupied concomitantly.

Stratum 1, extending to 27 cmbs in the east half of the test and consisting of 10YR5/1 gray, fine sand, produced shell and pottery. Level 1 contained oyster. Level 2 yielded oyster and crown conch. Level 3 contained pottery, shell, and bone. Stratum 2 spanning 27-33 cmbs and was 10YR3/1 very dark gray, loamy sand with pottery and shell present. Stratum 3 spanning from 33-68 cmbs, corresponding to Levels 4-7, consisted of 10YR5/2 grayish brown, fine sand with shell, pottery, lithics, bone, and charcoal present. Working through the stratum, artifact density decreased with Level 4 containing shell, pottery, lithics, bone, and charcoal; Level 5 having only oyster and tertiary chert flakes; Level 6 containing tertiary chert flakes and crown conch; and Level 7 yielding only one tertiary flake. Stratum 4 extended from 68 cmbs to the base of the test at 100 cmbs and consisted of 10YR7/6 yellow mottled with 10YR5/4 yellowish brown fine sand with chert and shell present. The top of this stratum, in Level 8, had no cultural material and the rest of the stratum yielded only a small number of artifacts with Level 9 containing a tertiary chert flake and crown conch, and Level 10 yielding oyster.

8PI1-2-5: STP 7 (E341629/N3082743)

The location of Shovel Test 7 in Location 2, Operation 5 is on a flat, open area just off the main midden ridge that we thought to be the potential locale of a habitation area. We excavated the shovel test on June 18 of 2019.

No temporally diagnostic artifacts were found in this test. Stratum 1, corresponding to Level 1, extended to 11 cmbs and consisted of 10YR4/1 dark gray, fine silty sand, and contained only a small amount of oyster shell (four hinges, four umbos, and 18 fragments) and two sand tempered plain pottery sherds. Stratum 2, matching with Levels 2 and 3, spanned 11-25 cmbs and was 10YR5/2 grayish brown, fine silty sand with slightly more artifacts. Level 2 produced nine hinges, five umbo, and 28 fragments of oyster, three fragments of shark's eye, one pear whelk fragment, four crown conch fragments, and one sand tempered plain pottery sherd, while Level 3 was devoid of cultural material. Stratum 3, correlating to Levels 3 and 4, spanned 25-38 cmbs and consisted of 10YR4/3 brown, fine sand devoid of cultural material. Stratum 4, correlating with Levels 5-10, spanned from 38-98 cmbs and was 10YR6/1 gray, fine sand with only one tertiary chert flake found in Level 5 in Level 8. Stratum 5, consisting of the end of Level 10, extended from 98 cmbs to the base of the test at 100 cmbs and consisted of 10YR5/4 yellowish brown, fine sand devoid of cultural material.

8PI1-2-5: STP 8 (E341641/N3082780)

We excavated Shovel Test 8 in Location 2, Operation 5 on June 19 of 2019. The shovel test's location is atop the main midden ridge and essentially in-line with a flattened area just off the midden, STP 6, that we also investigated.

On the surface, five modern glass sherds were found. Stratum 1, corresponding to Levels 1 and 2, extended to 20 cmbs and consisted of 10YR5/1 gray, fine sand devoid of cultural material Stratum 2, correlating with Levels 3-8, consisted of 10YR7/1 light gray, fine sand and contained only four sand tempered plain pottery sherds in Level 4 and one tertiary chert flake in Level 8. Stratum 3, consisting of Levels 9 and 10, extended from 90 cmbs to the base of the test at 100 cmbs and was 10YR6/2 brownish gray, fine sand produced only one tertiary chert flake in Level 9.

Summary

In summary, 30 shovel tests were conducted during this project within six separate areas of the site. Out of these 30 tests, 20 tests were positive for cultural material and 10 were negative. From the positive shovel tests, two diagnostic pottery sherds were obtained from different areas of the site. A Wakulla Check-stamped sherd, diagnostic of the Weeden Island Period, was recovered from the northern portion of the site, corroborating the radiocarbon dates from that time period in that area of the site. A Weeden Island Incised rim sherd, also indicative of the Weeden Island period, was recovered in the southeastern portion of the site. Finding this pottery type in this portion of the site supports the radiocarbon dates found further south that indicate occupation during the transition from the Weeden Island to Safety Harbor Period. I was able to obtain four new samples for AMS dating from three shovel tests; two from Area 8 STP 3, one from Area 8 STP 4, and one from Area 5 STP 6 (Table 4.1). A discussion of these dates will follow in Chapter Six.

Table 4.1. AMS dates recovered from shovel testing during this project.

Sample ID	AMS Lab ID	Provenience	Material	Δ13c,‰	14C BP	±	pMC	±	2σ calibrated date
8PI1-102-B	UGAMS-44074	Area 5/STP 6/lvl 3	Deer bone	-18.71	870	25	89.68	0.24	cal AD 1050-1080 (7.4%) cal AD 1152-1229 (87.1%) cal AD 1246-1255 (1.0%)
8PI1-135-B	UGAMS-44075	Area 8/STP 3/lvl 6	Deer bone	-21.14	1120	25	86.98	0.23	cal AD 884-994
8PI1-139-S	UGAMS-44076	Area 8/STP 3/lvl 10	Soot	-24.27	1400	25	84	0.25	cal AD 604-663
8PI1-148-B	UGAMS-44077	Area 8/STP 4/lvl 8	Turkey bone	-17.85	1270	25	85.37	0.23	cal AD 668-777 (89.3%) cal AD 791-821 (6.1%)

*All dates calibrated using the IntCal2020 curve in OxCal 4.4.

CHAPTER FIVE: RESULTS OF RADIOCARBON DATING SAMPLES FROM PREVIOUS COLLECTIONS

As noted above, there were 42 radiocarbon dates collected by previous researchers, with 38 coming solely from what is presumed to be a later and spatially-restricted Safety Harbor period (AD 900-1750) component. Of these 38 Safety Harbor period dates, 26 came from excavations led by Christina Perry Sampson of the University of Michigan for her dissertation research, five came from excavations led by John Arthur of USFSP, three came from trench excavations by AWIARE, and four came from Sharlene O'Donnell's masters research in a unit of Arthur's excavations. These dates provide the backbone of evidence for a Safety Harbor period occupation of the site and will be discussed in the following chapter when modeling the site into phases of occupation. The discussion of dates that follow in this chapter stem from my reanalysis of collections composed of materials from investigations by previous researchers.

Through inspection of two collections from previous investigations conducted at the Weeden Island site, I was able to obtain seven samples for AMS dating. One collection, curated at the Florida Museum of Natural History in Gainesville, FL, is from the investigations conducted by William Sears in 1962. The other collection, curated at AWIARE, is from the Dean and colleagues survey in 2004.

Samples from Sears's Excavations

William Sears concentrated his efforts near the burial mound, which corresponds with a portion of Area 8 of my project (Figure 5.1). I was able to obtain four samples for AMS dating from Sears's collection. The first was obtained from soot (0.03g) on the interior of a Sand-Tempered Plain pottery sherd recovered from a provenience denoted only as "pottery zone below burials." This returned a radiocarbon age of 1100 ± 25, calibrated at 2σ to cal AD 889-995 (UGAMS-41143). Given the vagueness of description for the provenience of this sherd, it is unclear whether it came directly from the burial mound itself or the lower-in-elevation ring of disturbance surrounding the burial mound. I think the latter is the most likely scenario, but either way this sherd provides evidence of the TPQ for the time period the burial mound was constructed/used. It should be noted that it is not clear if Sears collected artifacts from this provenience himself, as the assigned accession number at FLMNH differs from that of other artifacts from his 1962 excavations of Weeden Island. However, given the burial context and collection time period, it is highly likely they were collected by Sears or his team. This date is consistent with late Weeden Island period, which may have once been deemed surprising based on previous understanding of Weeden Island chronology given the contemporary understanding

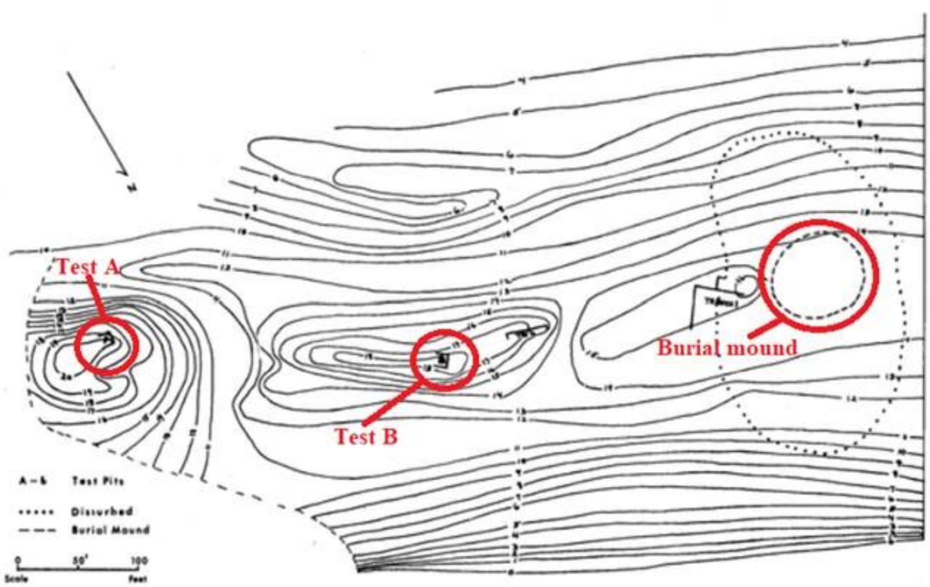

Fig. 1. Contour map of part of Weeden Island site locating midden tests.

Figure 5.1. Locations of Sears's Tests A and B (Adapted from: Sears 1971:53, Fig. 1).

(e.g., (Austin et al. 2008:100) that Pinellas Plain pottery has a longer range (beginning in the Middle Woodland) than originally assumed by Gordon Willey (1949:482) (who associated it exclusively with the Safety Harbor period). However, with consideration of more recent understandings of the extended temporal span that the Weeden Island site was occupied, reaching well into the Safety Harbor period, this later date is consistent and logical (Arthur et al. 2016; O'Donnell 2015; Sampson 2019).

Sears's Test A, located in midden about 500 ft east of the burial mound, yielded two samples utilized for this project. One AMS sample of soot (0.02g) from the interior of a Sand-Tempered Plain pottery sherd recovered from Level 3 (12-24") of Test A returned a radiocarbon age of 1240 ± 25 (UGAMS-41144). This date has three possible 2σ calibrated ages: cal AD 681-745 (40.6%), cal AD 760-779 (4.4%), and cal AD 784-879 (50.4%). This level, according to Sears (1971: 55-6), was comprised of conch shells along with pottery sherds (Figure 5.2). The sherds were a mix of sand tempered plain (n=14), Pinellas Laminated (n=12), Pinellas Contorted (n=8), and Belle Glade (n=1). The radiocarbon date is generally consistent with these pottery types.

The second sample from Sears's Test A, obtained from soot (0.01g) from the interior of a Sand-Tempered Plain pottery sherd from Level 7 (60-72"), yielded a radiocarbon age of 2900 ± 25 (UGAMS-41145). This date has 2σ calibrated ages of 1201-1142 cal BC (14.9%) and 1132-1008 cal BC (80.5%). This is a considerably earlier date than one obtained by Sears (1971:56) on "carefully selected charcoal" from the same level, which yielded a radiocarbon age of 1550 ±130 (M-1598), and which has 2σ calibrated ranges of cal AD 230-702 (94.0%) and cal AD 741-772 (1.4%). Per Sears (1971: 55-6), this level consisted mainly of crushed, dirty shell below a thin layer of conch and small, crushed, miscellaneous shell. Pottery sherds, represented mainly by sand tempered plain (n=38), along with a minority of Pinellas Laminated (n=2) and Pasco Plain (n=1), were also found within this level. Sears's date, although having a large uncertainty, is broadly consistent with this artifact assemblage. In contrast, my date is too early, given the lack of fiber-tempered ceramics or other diagnostic artifacts of the Late Archaic period. It is possible that this seemingly anomalous early date reflects an old wood effect, if the soot was produced from the burning of older trees. It is also possible that older carbon was introduced from inclusions in the body of the sherd or from food residues (especially if these introduced a marine reservoir effect) (Teetaert et al. 2017). In any case, the dates from Test A are interesting as my date from Level 3, as well as Sears's date from Level 7, are consistent with the Weeden Island era, even if both dates are slightly earlier than the aforementioned date from the burial mound area (AD 880-1000). The combination of these dates suggests this area of the site was perhaps occupied and used for multiple purposes for an extended period of time, with at least two breaks in occupation as as evidenced by build-up of humus layers.

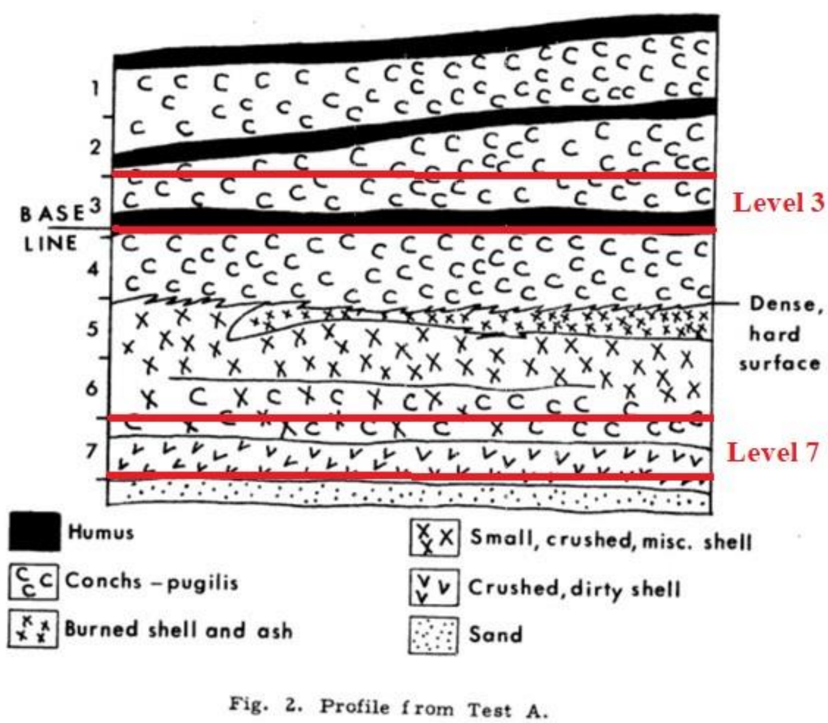

Figure 5.2. Profile of Sears's Test A (Reprinted from Sears: 1971: 55, fig, 2).

I obtained one AMS sample from Sears's Test B, located in midden about 250 ft east of the burial mound. This sample, which consisted of (*Odocoileous virginianus*) white-tailed deer bone recovered from Level 4 (36-48"), returned a radiocarbon age of 1330 ± 25 (UGAMS-41146). This has 2σ calibrated age ranges of cal AD 651-705 (59.5%) and cal AD 738-775 (35.9%).). According to Sears (1971:57), the six feet of midden that accumulated where Test B is located is homogenous throughout and comparable to Levels 5 and 6 of Test A, thus suggesting that they were deposited during the same time. Levels 5 and 6 of Test A, and thus also Test B, are comprised of a layer of small, crushed, miscellaneous shell atop a layer of conch mixed with smaller, crushed miscellaneous shell. The pottery sherd typology from Level 4 of Test B is very comparable to that of Levels 5 and 6 of Test A, as well. Level 4 of Test B contained sand tempered plain (n=33), Pinellas Laminated (n=6), Pinellas Contorted (n=8), Pasco Plain (n=1), and St. Johns Plain (n=1).

Not surprisingly given these similarities, the date returned from Level 3 of Test A overlaps with the date from Level 4 of Test B and the date obtained by Sears. In summation, the dates from Sears's research in these areas confidently suggest that this portion of the site was occupied and utilized for various activities from at least cal AD 650-1000. Additionally, given the stratigraphy of Test A, it seems clear that this area was occupied even earlier, though how much earlier cannot be confidently stated based on current evidence.

Samples from the Survey by Dean and Colleagues

The Dean and colleagues survey covered the entire Weedon Island Preserve (Figure 5.3), but very few suitable samples were obtained for radiocarbon dating. I was able to identify three suitable samples in their collections. Two of these came from Location 2, Operation 5, which corresponds with Area 8 of my project. The third sample came from Dean and colleagues Location 3, Operation 10, which is in close proximity to Area 6 of my project.

From Location 2, Operation 5, I obtained a sample of deer bone from Level 3 of Profile 2, Stake 6, Strata 6. This sample returned a radiocarbon age of 1590 ± 25 (UGAMS-41147), with a 2σ calibrated date range of cal AD 420-545. Profile 2 was a 35 m-long section of black earth and shell midden along the west bank of a mosquito canal that was divided into seven 30 cm-wide tests marked by stakes (Dean et al. 2008: 111). The midden exposed by Profile 2 was comprised of

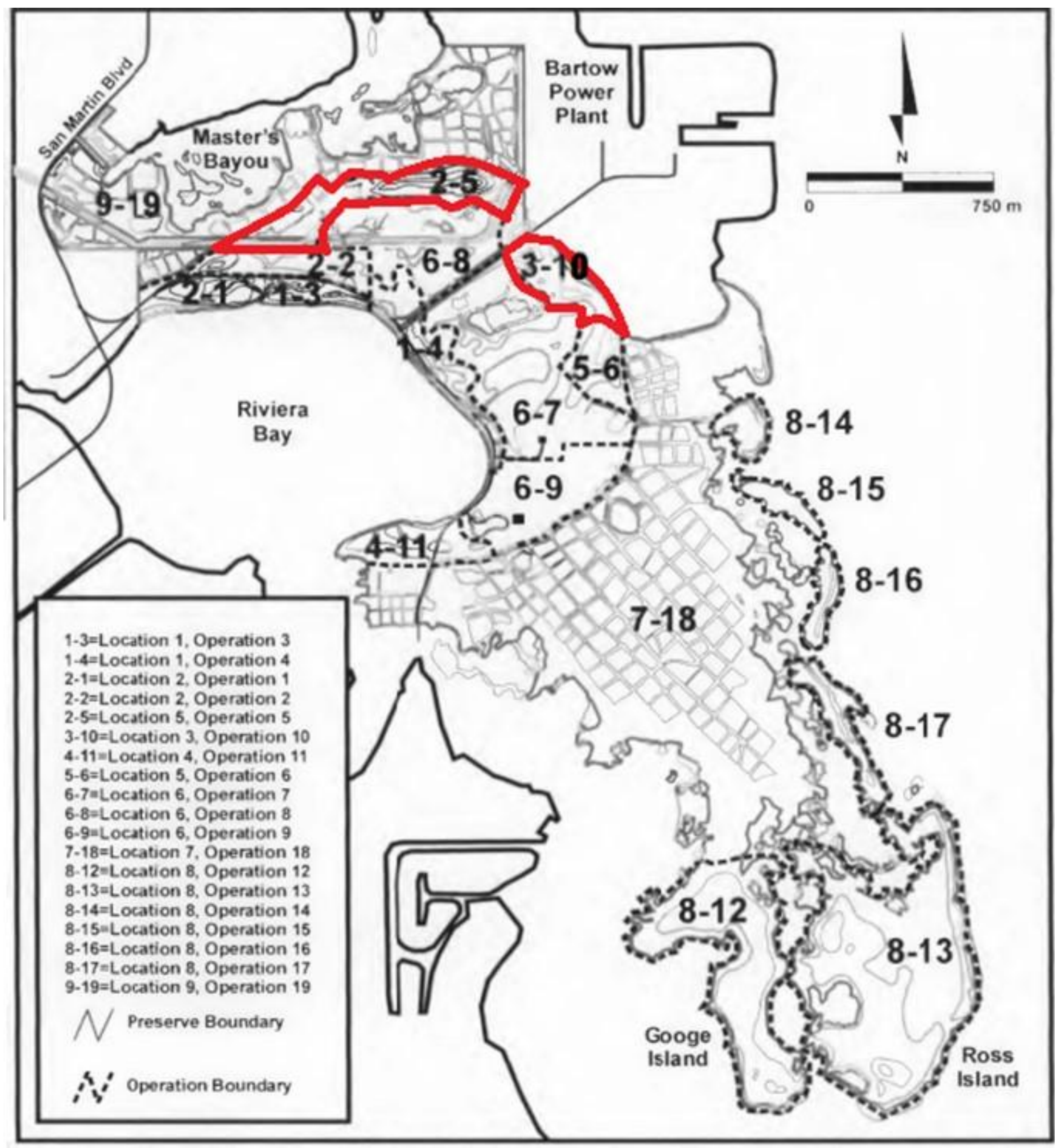

Figure 5.3. Map of Dean and colleagues survey areas with outlined locations and operations of interest (adapted from Dean et al. 2008: 64, Fig. 5_1).

gray, fine sand with predominantly oyster, lightning whelk, and crown conch, pottery, and very little animal bone. But at Stake 6, the only artifacts were recovered from Level 3 and consisted of 15 deer long bone fragments and eight sand tempered plain sherds. This early Weeden Island period date is consistent with what would be expected to be found in the northern part of the site based on the Sears date from Test A, described above. Further, the location of this date lends additional credence to the idea that the entirety of the northern arcuate ridge was occupied at roughly the same time, since it was found on the far west portion of the ridge while Sears's Test A location was found on the far east portion.

Additionally, from Location 2, Operation 5, I obtained a sample of deer molar from Level 3a (21-31 cmbs) of STP 2. This sample yielded a radiocarbon age of 710 ± 25 (UGAMS-41148). This date has two 2σ calibrated age ranges: cal AD 1267-1304 (85.9%) and cal AD 1366-1381 (9.5%). The location of STP 2 had an 18 cm thick earth midden deposit consisting of 10YR4/1 dark gray fine sand with very little cultural material. Level 3a yielded deer molars (n=4), turtle shell fragments (n=4), animal bones (n=69), chert debitage (n=8), coral shatter (n=1), sand tempered plain sherds (n=16), a sand-tempered check-stamped sherd (n=1), and a Pasco plain sherd (n=1). This date situates occupation of this area during the Safety Harbor period, which seems anomalous for its location in the northern portion of the site. The provenience from which the sample was taken is only about 100 m southwest of the burial mound, which is thought to have been deposited in the late Weeden Island period. Given the relatively thin layer of earth midden found in this location and its proximity to a nonextant freshwater source to the south, it is possible this area in the northern portion of the site was inundated until the Safety Harbor period and therefore unused during the Weeden Island period. Further, the associated artifacts may suggest specialized use of the area and not extensive occupation. More testing would be needed to bolster this hypothesis.

From Location 3, Operation 10, I obtained a sample of deer antler from Level 5b (95-109 cmbs) of STP 1 that returned a radiocarbon age of 1600 ± 25 (UGAMS-41149), with a 2σ calibrated date range of cal AD 411-553. Level 5b consisted of a 2.5Y5/3 light olive brown to 2.5Y6/4 light yellowish brown loose, dry sand, according to Dean et al. (2008:141). Found in association with the deer antler fragments (n=101), were flakes of chert (n=11) and bony fish bone fragments (n=3). This date situates use of this area in the early Weeden Island period, which is anomalous with what would be expected. Other dates obtained by researchers working in Location 5, Operation 6 just south of this area suggests a Safety Harbor period occupation in this portion of the site (Arthur et al. 2016; O'Donnell 2015; Sampson 2019). Given the sample type (deer antler) and the associated artifacts that do not suggest occupation, but more likely specialized use, I think an early date is acceptable despite its proximity to what is thought of as a Safety Harbor component of the site.

In summary, seven new samples were obtained for AMS dating from the Sears and Dean collections (Table 5.1). The four new AMS dates from Sears's collection, obtained from samples from the midden context around the burial mound, as well as the zone below the burial mound itself, indicate people were occupying the northern portion of the site from the middle to late Weeden Island period. Of the three new AMS dates obtained from the Dean collection, taken from various portions of the site, two introduced potential anomalies and one supported preconceived notions of settlement. In the northern portion of the site, one early Weeden Island period date supports the preconceived notion that that area of the site was occupied during that time period. Meanwhile, another sample from the northern portion of the site returned a seemingly anomalous

Safety Harbor period date, potentially indicating a specialized use of the land during that time period. The third date from the Dean collection, obtained from the southeastern portion of the site, indicates an early Weeden Island period. This date seems anomalous and potentially indicates specialized use of this area during this time period, as all other dates from this portion of the site support an occupation from the late Weeden Island period through the Colonial era.

Table 5.1. AMS dates from previous collections analyzed for this project.

Sample ID	AMS Lab ID	Provenience	Material	Δ13c‰	14CBP	±	pMC	±	2σ calibrated date
8PI1-C93445-S	UGAMS-41143	Pottery zone below burials	Soot	-25.21	1100	25	87.19	0.25	cal AD 889-995
8PI1-C97136-S	UGAMS-41144	Test A/lvl 3/12-24"	Soot	-24.56	1240	25	85.74	0.24	cal AD 681-745 (40.6%) cal AD 760-779 (4.4%) cal AD 784-879 (50.4%)
8PI1-C97140-S	UGAMS-41145	Test A/lvl 7/60-72"	Soot	-24.26	2900	35	69.65	0.28	1215-987 cal BC
8PI1-C97144-B	UGAMS-41146	Test B/lvl 4/36-48"	Deer bone	-19.99	1330	25	84.72	0.24	cal AD 651-705 (59.5%) cal AD 738-775 (35.9%)
8PI1-FS164-05-B	UGAMS-41147	Loc 2, Op 5/Profile 2/lvl 3/stake 6/strata 6	Deer bone	-20.17	1590	25	82.07	0.23	cal AD 420-545
8PI1-FS342-05-T	UGAMS-41148	Loc 2, Op 5/STP 2/lvl 3a/21-31 cmbs	Deer molar	-20.49	710	25	91.48	0.26	cal AD 1267-1304 (85.9%) cal AD 1366-1381 (9.5%)
8PI1-FS568-05-A	UGAMS-41149	Loc 3, Op 10/STP 1/lvl 5b/95-109 cmbs	Deer antler	-21.95	1600	35	81.91	0.34	cal AD 411-553

*All dates calibrated using the IntCal2020 curve in OxCal 4.4.

CHAPTER SIX: MODELING ANALYSIS AND DISCUSSION

To further understand the settlement patterning and landscape use of the Weeden Island site during pre-Columbian times, I employed Bayesian modeling to model phases of occupation based on the radiocarbon dates gathered from this research, along with all known dates obtained by previous researchers (Table 6.1). As I noted in Chapter 2, this dataset is not ideally suited to Bayesian modeling, in that few of the dates come from stratigraphic relationships that are typically used as “priors” to constrain the likelihoods of the calibrated radiocarbon date ranges. In addition, Weeden Island is a very large site and—even with the additional dates obtained in the course of my research—many portions of the site remain poorly dated. To compensate for these issues to the extent possible, I chose to model radiocarbon dates from four separate sub-areas of the site—which I refer to as Loci 1-4—separately (Figure 6.1). These four loci were chosen by grouping together radiocarbon dates, of similar archaeological contexts, that fell within a 50m of each other using the Buffer tool in ArcMap. For each of these four loci, I define between two and six phases of occupation. Then, I attempt model these area-specific phases together into a site-wide chronology.

Table 6.1. All AMS dates used for modeling.

Sample ID	AMS Lab ID	Provenience	Material	Δ13c‰	14C BP	±	pMC	±	2σ calibrated date*	Source
UM-117	OS-135381	Area 1/Unit H/ lvl 2 midden	Charcoal	n/a	855	15	—	—	cal AD 1165-1224	Sampson 2019
UM-123	OS-135382	Area 1/Unit H/ lvl 3 midden	Charcoal	n/a	875	30	—	—	cal AD 1046-1084 (13.8%) cal AD 1096-1102 (0.6%) cal AD 1125-1231 (79.2%) cal AD 1243-1258 (1.8%)	Sampson 2019
UM-136	OS-135383	Area 1/Unit H/ lvl 5 midden	Charcoal	n/a	895	25	—	—	cal AD 1045-1085 (25.8%) cal AD 1093-1105 (2.3%) cal AD 1121-1220 (67.3%)	Sampson 2019
UM-11	UGAMS-18448	Area 1/Unit A/ adjacent to F1 pit	Charcoal	-27.4	960	20	—	—	cal AD 1028-1054 (21.0%) cal AD 1074-1157 (74.5%)	Sampson 2019
UM-82	UGAMS-18449	Unit D/F2 burn feature	Charcoal	-23.9	850	20	—	—	cal AD 1162-1231 (89.7%) cal AD 1242-1258 (5.8%)	Sampson 2019
UM-97	UGAMS-18450	Unit N/shell and burning feature	Charcoal	-25.5	990	20	—	—	cal AD 995-1005 (4.3%) cal AD 1016-1050 (47.5%) cal AD 1081-1153 (43.6%)	Sampson 2019
UM-368	OS-135116	Area 2/Unit R/ shell midden lvl 3	Charcoal	n/a	880	15	—	—	cal AD 1157-1219	Sampson 2019
UM-388	D-AMS031057	Area 2/Unit R/ shell midden lvl 4	Deer bone	n/a	745	27	—	—	cal AD 1226-1294	Sampson 2019
UM-253	UGAMS-21780	Area 3/Block D North Midden/ shell midden	Charcoal	-25.3	850	20	—	—	cal AD 1162-1231 (89.7%) cal AD 1242-1258 (5.8%)	Sampson 2019
UM-278	OS-135114	Area 3/Block D North Midden/ F9 pit	Charcoal	n/a	900	15	—	—	cal AD 1047-1216 (33.0%) cal AD 1132-1137 (1.0%) cal AD 1150-1216 (61.5%)	Sampson 2019
UM-233	OS-135115	Area 3/Block D North Midden/ shell midden	Charcoal	n/a	905	20	—	—	cal AD 1045-1085 (37.0%) cal AD 1093-1105 (3.0%) cal AD 1121-1216 (55.4%)	Sampson 2019
UM-333	D-AMS031058	Area 3/Block D/F15 pit	Deer bone	n/a	770	25	—	—	cal AD 1224-1280	Sampson 2019
UM-351	OS-135168	Area 3/Block D/F17 pit	Charcoal	n/a	895	15	—	—	cal AD 1051-1080 (21.9%) cal AD 1153-1217 (73.6%)	Sampson 2019
UM-287	UGAMS-21781	Area 3/Block D/F13a pit	Charcoal	-25.8	800	20	—	—	cal AD 1220-1271	Sampson 2019
UM-309	D-AMS030672	Area 3/Block D/brown soil midden	Charcoal	n/a	748	26	—	—	cal AD 1226-1290	Sampson 2019
UM-341	D-AMS030673	Area 3/Block D/F13c	Charcoal	n/a	330	26	—	—	cal AD 1483-1639	Sampson 2019
UM-322	D-AMS030674	Area 3/Block D/brown soil midden	Charcoal	n/a	844	29	—	—	cal AD 1161-1266	Sampson 2019
UM-169	D-AMS030675	Area 3/Unit T/lvl 3 midden	Charcoal	n/a	629	26	—	—	cal AD 1295-1398	Sampson 2019
UM-203	UGAMS-21779	Area 4/Block C/F19	Charcoal	-24.9	620	20	—	—	cal AD 1300-1398	Sampson 2019
UM-196	OS-135113	Area 4/Block C/F20	Charcoal	n/a	285	15	—	—	cal AD 1523-1573 (54.6%) cal AD 1629-1655 (40.9%)	Sampson 2019
UM-200	D-AMS031059	Area 4/Block C/F20	Deer bone	n/a	255	27	—	—	cal AD 1521-1576 (18.4%) cal AD 1624-1674 (59.9%) cal AD 1767-1800 (17.1%)	Sampson 2019
UM-373	OS-135167	Area 5/Unit V/lvl 3 midden	Charcoal	n/a	645	15	—	—	cal AD 1295-1322 (37.9%) cal AD 1357-1391 (57.6%)	Sampson 2019
UM-380	OS-135166	Area 5/Unit V/ F21 pit	Charcoal	n/a	2270	15	—	—	395-355 cal BC (60.6%) 282-231 cal BC (34.9%)	Sampson 2019
UM-379	OS-135165	Area 5/Unit V/upper F21 pit	Charcoal	n/a	975	15	—	—	cal AD 1025-1049 (33.1%) cal AD 1081-1152 (62.3%)	Sampson 2019
UM-376	D-AMS030676	Area 5/Unit V/ lvl 4 midden	Charcoal	n/a	789	26	—	—	cal AD 1221-1276	Sampson 2019
UM-380	D-AMS030677	Area 5/Unit V/ lower F21 pit	Charcoal	n/a	930	26	—	—	cal AD 1033-1175	Sampson 2019
PI1-17	UGAMS-33485	Trench 2/Str. IIb/lvl 3	Burned wood	-25.17	320	20	96.14	0.26	cal AD 1496-1602 (76.2%) cal AD 1612-1642 (19.2%)	AWIARE
PI1-32	UGAMS-33486	Feat. 14/postmold/Trench 2/ TU 3/Str. III/lvl 8	Charcoal	-26.47	520	20	93.77	0.26	cal AD 1400-1438	AWIARE
PI1-95	UGAMS-33492	Feat. 2/Trench 1/TU 4/ Str. II/lvl 4	Charred wood	-24.82	60	20	99.28	0.27	cal AD 1695-1725 (29.6%) cal AD 1811-1839 (28.5%) cal AD 1845-1853 (1.1%) cal AD 1877-1916 (36.3%)	AWIARE
PI1-67	UGAMS-33487	11S7.75E/lvl IIa-2	Charcoal	-22.98	490	20	94.05	0.26	cal AD 1410-1446	Arthur et al. 2016
PI1-68	UGAMS-33488	8S12E/lvl IIb-1	Charcoal	-25.31	910	20	89.32	0.25	cal AD 1043-1106 (46.6%) cal AD 1118-1212 (48.8%)	Arthur et al. 2016
PI1-70	UGAMS-33489	Feature 10/10S7.75E/ lvl IIIa-1	Charcoal	-25	830	20	90.23	0.25	cal AD 1176-1267	Arthur et al. 2016
PI1-78	UGAMS-33490	Feature 15/11S7.75E/ lvl IIIa-1	Charcoal	-24.21	800	20	90.55	0.25	cal AD 1220-1271	Arthur et al. 2016
PI1-79	UGAMS-33491	8S13E/IIb-1	Charcoal	-26.72	1020	20	87.95	0.24	cal AD 991-1036	Arthur et al. 2016

Table 6.1 (continued)

O'Donnell	BETA-390720	8S11E/top of shell layer	Terrestrial mammal bone	-19.1	720	30	—	—	cal AD 1230-1244 (2.5%) cal AD 1257-1305 (84.2%) cal AD 1365-1384 (8.7%)	O'Donnell 2015
O'Donnell	BETA-387322	8S11E/ Column B/ middle of shell layer	Charcoal	-22.3	830	30	—	—	cal AD 1167-1269	O'Donnell 2015
O'Donnell	BETA-387323	8S11E/ Column B/ bottom of shell layer	Charcoal	-23.4	830	30	—	—	cal AD 1167-1269	O'Donnell 2015
O'Donnell	BETA-387324	8S11E/ Feature 2/ beneath shell layer	Charcoal	-25.4	1090	30	—	—	cal AD 890-1020	O'Donnell 2015
Sears	M-1598	Test A/lvl 7	Charcoal	—	1550	130	—	—	cal AD 230-702 (94.0%) cal AD 741-772 (1.4%)	Sears 1971
04-WI-1-51	RA-A60848	Core 1/Midden core/51 cm	Charcoal	-25.65	1453	36	—	—	cal AD 562-654	Lambert 2006
04-WI-3-81	RA-A60849	Core 3/Paleoshoreline core/81 cm	Fine roots	-26.36	456	36	—	—	cal AD 1406-1493 (94.9%) cal AD 1603-1608 (0.6%)	Lambert 2006
04-WI-3-268	RA-A60850	Core 3/Paleoshoreline core/268 cm	Wood	-28.75	3369	45	—	—	1862-1856 cal BC (0.6%) 1766-1759 cal BC (0.7%) 1752-1531 cal BC (93.9%) 1523-1520 cal BC (0.2%)	Lambert 2006
8PI1-C93445-S	UGAMS-41143	Pottery zone below burials	Soot	-25.21	1100	25	87.19	0.25	cal AD 889-995	Draskovich 2021
8PI1-C97136-S	UGAMS-41144	Pit A/lvl 3/12-24"	Soot	-24.56	1240	25	85.74	0.24	cal AD 681-745 (40.6%) cal AD 760-779 (4.4%) cal AD 784-879 (50.4%)	Draskovich 2021
8PI1-C97140-S	UGAMS-41145	Pit A/lvl 7/60-72"	Soot	-24.26	2900	35	69.65	0.28	1215-987 cal BC	Draskovich 2021
8PI1-C97144-B	UGAMS-41146	Pit B/lvl 4/36-48"	Deer bone	-19.99	1330	25	84.72	0.24	cal AD 651-705 (59.5%) cal AD 738-775 (35.9%)	Draskovich 2021
8PI1-FS164-05-B	UGAMS-41147	Loc 2, Op 5/Profile 2/lvl 3/ stake 6/strata 6	Deer bone	-20.17	1590	25	82.07	0.23	cal AD 420-545	Draskovich 2021
8PI1-FS342-05-T	UGAMS-41148	Loc 2, Op 5/STP 2/ lvl 3a/21-31 cmbs	Deer molar	-20.49	710	25	91.48	0.26	cal AD 1267-1304 (85.9%) cal AD 1366-1381 (9.5%)	Draskovich 2021
8PI1-FS568-05-A	UGAMS-41149	Loc 3, Op 10/STP 1/lvl 5b/ 95-109 cmbs	Deer antler	-21.95	1600	35	81.91	0.34	cal AD 411-553	Draskovich 2021
8PI1-102-B	UGAMS-44074	Area 5/STP 6/lvl 3	Deer bone	-18.71	870	25	89.68	0.24	cal AD 1050-1080 (7.4%) cal AD 1152-1229 (87.1%) cal AD 1246-1255 (1.0%)	Draskovich 2021
8PI1-135-B	UGAMS-44075	Area 8/STP 3/lvl 6	Deer bone	-21.14	1120	25	86.98	0.23	cal AD 884-994	Draskovich 2021
8PI1-139-S	UGAMS-44076	Area 8/STP 3/lvl 10	Soot	-24.27	1400	25	84	0.25	cal AD 604-663	Draskovich 2021
8PI1-148-B	UGAMS-44077	Area 8/STP 4/lvl 8	Turkey bone	-17.85	1270	25	85.37	0.23	cal AD 668-777 (89.3%) cal AD 791-821 (6.1%)	Draskovich 2021

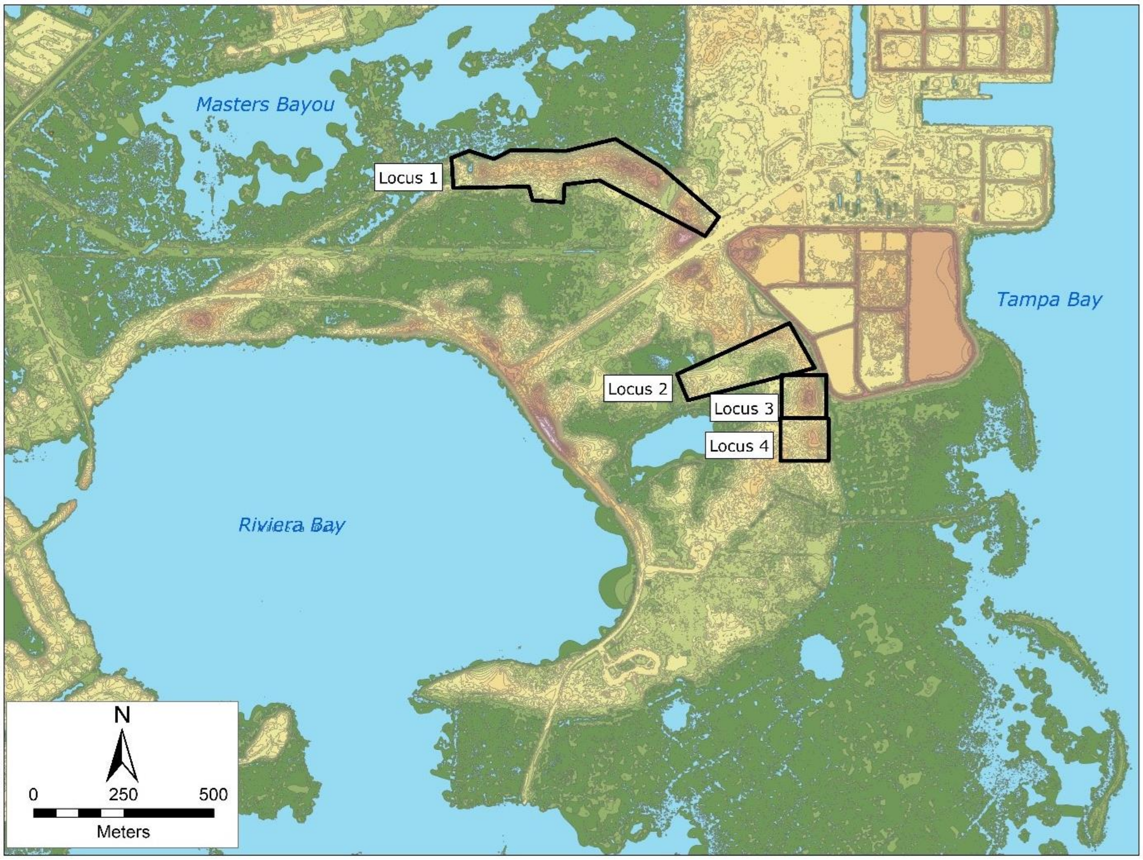

Figure 6.1. Location of the four loci used for modeling within the site.

Modeling of Loci

Locus 1

Locus 1 encompasses the entirety of the arcuate midden ridge in the northern portion of the site. If referencing the pre-selected areas of interest employed in this project, this locus corresponds to Area 8, and if referencing the Dean et al. survey it is synonymous with Location 2, Operation 5. Based on the radiocarbon dates obtained and published by Sears (1971), Dean et al. (2008), Lambert (2006), and myself, along with ceramics recovered by Fewkes (1924) and classified by Willey (1949), this portion of the site is considered the Weeden Island period component of the site.

There is a total of 11 dates from this locus (Figure 6.2), but one of these (RA-A60850) was obtained by Lambert (2006) from a sample of wood found at 268 cmbs in Core 3. Not surprisingly, given that this comes from a depth below any evidence of human occupation, the date is quite early and likely represents a paleoshoreline, rather than any human activity. However, it is useful as a *terminus post quem* (TPQ) for my modeling of the settlement of this portion of the site.

Modelling the 10 remaining dates as a single phase yields acceptable agreement indices (A_{model} =101.2). However, the spread of the dates, the breaks in stratigraphy noted above with regard to Sears's Pit B, and the divergent dates on samples from different levels in my STP 3 in Area 8, all suggest that more than one phase of occupation is likely present (Figure 6.3). I found a four-phase model, incorporating some of these stratigraphic relationships (including the aforementioned TPQ on the paleoshore) to be a good solution for the distribution of these dates (A_{model} =116, $A_{overall}$ = 116.2) (Figure 6.4).

Locus 1, Phase 1 likely began *between cal AD 300 and 555* and ended *between cal AD 440 and 610* (95% posterior density estimates). Included here are the dates from Dean and colleagues' Loc 2, Op 5 (UGAMS-41147) and Sears's Level 7 of Test A (M-1598). This phase is consistent with the early Weeden Island period.

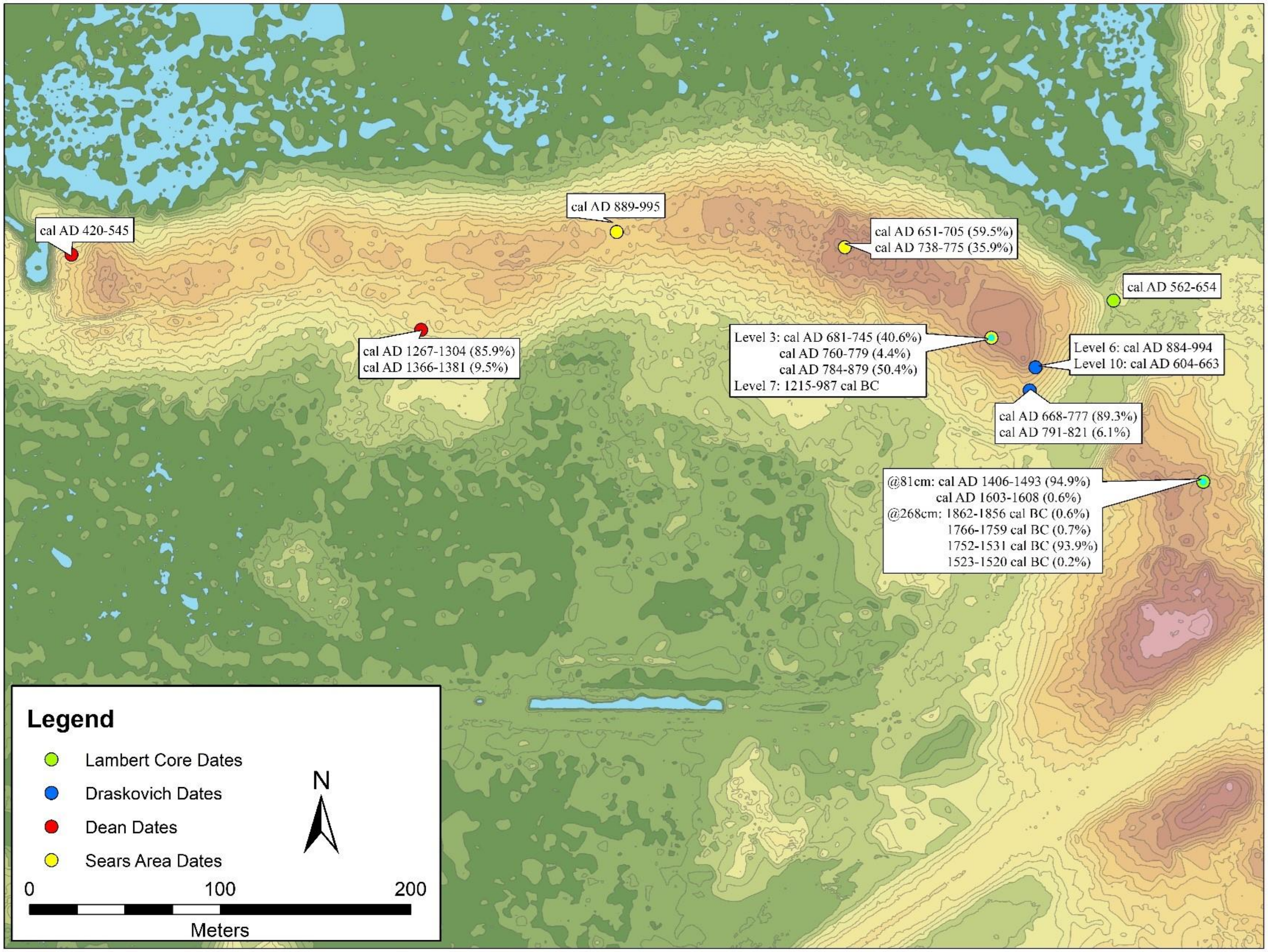

Figure 6.2. Location of dates within Locus 1.

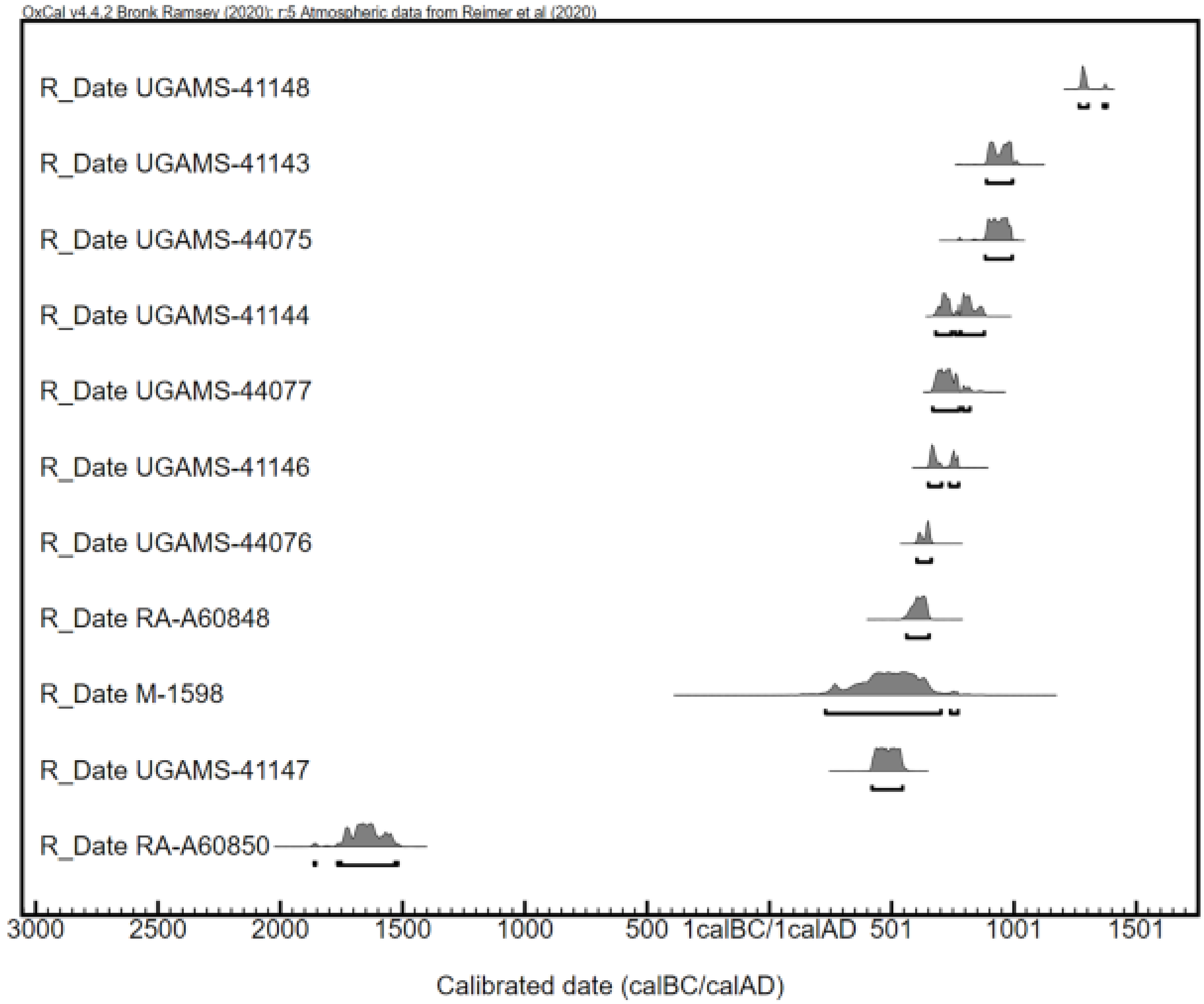

Figure 6.3. Probability likelihoods for the calibrated dates from Locus 1 (the brackets indicate the ranges associated with the 2σ likelihoods).

-
  - Sequence("Weeden Island Locus 1 4 Phase")
    - R_Date("RA-A60850", 3369, 45)
    - Boundary("Start P1.1")
    - Phase("P1.1")
      - R_Date("UGAMS-41147", 1590, 25)
      - R_Date("M-1598", 1550, 130)
    - Boundary("End P1.1")
    - Boundary("Start P1.2")
    - Phase("P1.2")
      - R_Date("RA-A60848", 1453, 36)
      - R_Date("UGAMS-44076", 1400, 25)
      - R_Date("UGAMS-41146", 1330, 25)
      - R_Date("UGAMS-44077", 1270, 25)
      - R_Date("UGAMS-41144", 1240, 25)
    - Boundary("End P1.2")
    - Boundary("Start P1.3")
    - Phase("P1.3")
      - R_Date("UGAMS-44075", 1120, 25)

Figure 6.4. Parameters for modeling Locus 1.

Locus 1, Phase 2 probably began *between cal AD 530 and 650* and ended *between cal AD 685 and 870* (95% posterior estimates). My modeling of this phase includes five dates: my date on the stratigraphically superior sherd from Level 3 of Sears's Pit A (UGAMS-41144), the previously dated charcoal from Dean et al.'s Core 1 (RA-A60848), my date on deer bone from Level 4 of Sears's Pit B (UGAMS-41146), and my dates from Level 8 in my STP 4 (UGAMS-44077) and Level 10 of my STP 3 (UGAMS-44076) in Area 8. Although there are problems with associating the number of dates with the intensity of habitation, my working hypothesis would be that Phase

2, which corresponds with the Weeden Island period, witnessed the most intensive habitation of Locus 1.

Locus 1, Phase 3 is modeled to have likely begun *between cal AD 775 and 980* and ended *between cal AD 895 and 1165* (95% posterior estimates). This phase is comprised of my dates on a sooted sherd reportedly associated with the pottery layer below the burial mound (UGAMS-41143) and Level 6 of my STP 3 in Area 8 (UGAMS-44075). This phase is consistent with the later Weeden Island and early Safety Harbor periods.

Finally, Locus 1 Phase 4 is modeled to have probably begun *between cal AD 990 and 1300* and ended *between cal AD 1265 and 1550* (95% posterior estimates). This phase is based on a single date, from Dean and colleagues STP 2 in Location 2, Operation 5 (UGAMS-41148). This phase likely represents limited habitation of Locus 1 during the Safety Harbor period, or perhaps specialized activities by people who resided elsewhere on the site during this interval.

Overall, Locus 1 was likely occupied from the early Weeden Island period until the early Safety Harbor period. Occupation of this locus seems to have been spread out over the entire northern ridge during the early Weeden Island period, corresponding with Phase 1. Then, by the middle of the Weeden Island period, during Phase 2, people more intensely occupied the eastern half of the ridge. By Phases 3 and 4, at the transition from the Weeden Island period to Safety Harbor period, people seem to have continued occupation of the eastern half of the ridge, but perhaps spread to other areas of the site.

Locus 2

Locus 2 is located near the center of the arcuate midden ridge that runs along the southeastern side of the site and juts to the west above Boy Scout Lake. Prior to this project, all radiocarbon dates obtained from the eastern midden ridge indicated a Safety Harbor occupation, with a few very late Weeden Island period transitional dates mixed in. However, all previous dates came from a constricted area of around one hectare, which left the nearly 700 m of midden ridge leading northward uninvestigated. This large gap, with dates closest in proximity indicating a Safety Harbor occupation, allowed the assumption that the entirety of the eastern midden ridge was occupied only during that time period. Locus 2, located as far north on the eastern ridge as was permitted, was chosen to test this hypothesis.

Unfortunately, I was able to obtain only two dates for Locus 2 (Figure 6.5). These two dates are relatively widely separated in space and time, suggesting at least two distinct phases of occupation in this area (Figure 6.6). However, the limited number of dates does not support formal modeling of these phases.

The first of the two dates was taken from a deer bone recovered from Level 3 in my STP 6 in Area 5, which corresponds Dean et al.'s Location 6, Operation 7. This area of the site is situated is approximately 100 m north-northeast of Boy Scout Lake, and juts off the main portion of the arcuate midden ridge that runs on the eastern side of the site. This shovel test location was in a spot that had a concentration of at least a half-dozen very large lightning whelk shells on the surface, in an area largely devoid of surface shell. The third level of the test consisted of 10YR5/1 gray, medium-grained sand with pottery, terrestrial mammal and fish bone, some charcoal bits, and shell such as lightning whelk, sunray venus clam, and shark's eye.

The deer bone yielded a radiocarbon age of 870 ±25 (UGAMS-44074). This has three possible 2σ calibrated ages: cal AD 1050-1080 (7.4%), cal AD 1152-1229 (87.1%), and cal AD 1246-1255 (1.0%). This early Safety Harbor period calibrated date makes sense given the provenience near the arcuate midden ridge that runs on the east side of the site. This portion of the

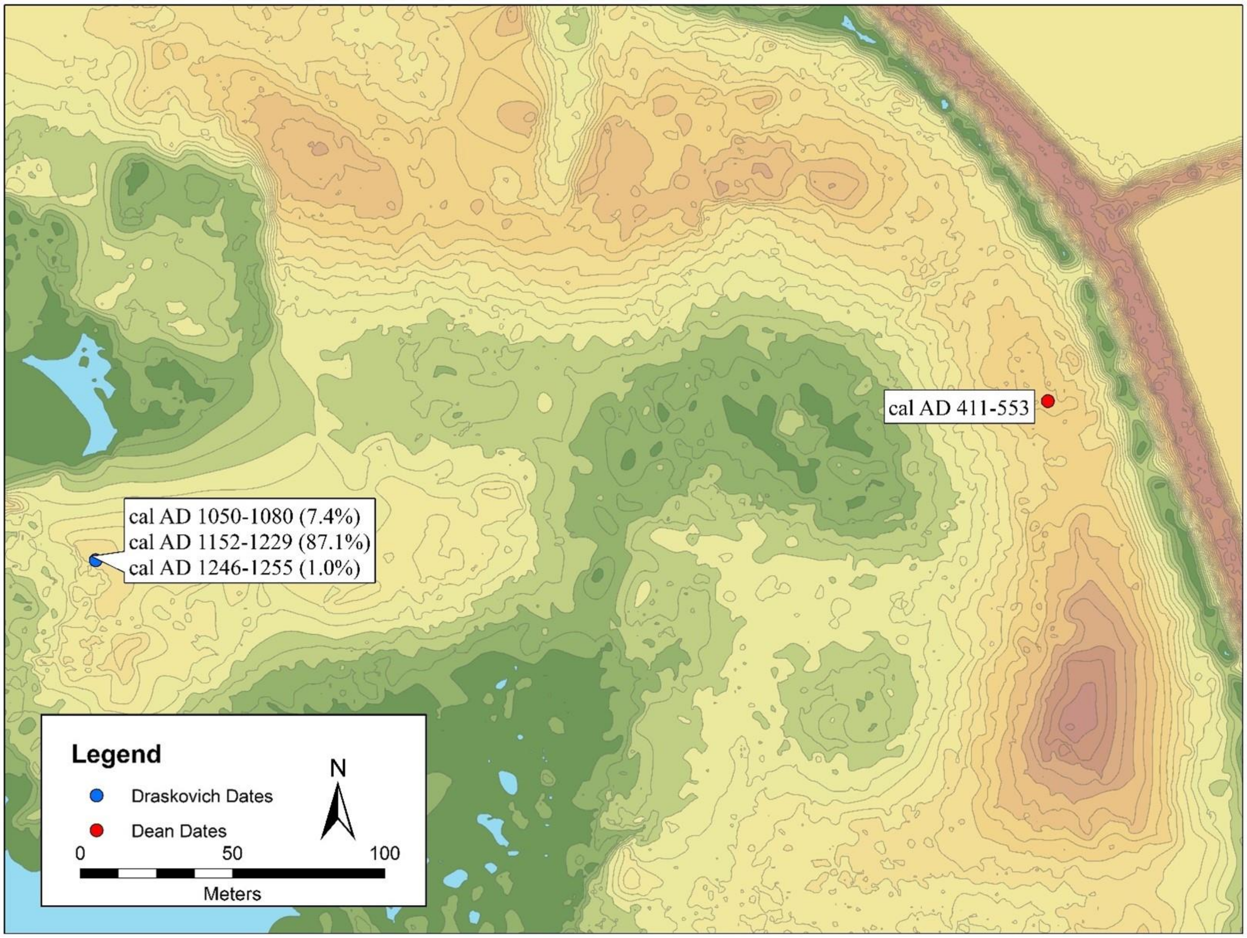

Figure 6.5. Location of dates within Locus 2.

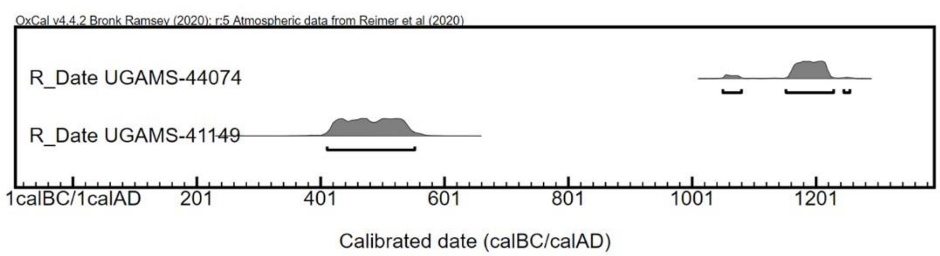

Figure 6.6. Probability likelihoods for the calibrated dates from Locus 2 (the brackets indicate the ranges associated with the 2σ likelihoods).

midden ridge has been heavily dated, especially compared to the rest of the site, and evidence points to occupation almost exclusively during the Safety Harbor period according to radiocarbon dates obtained by Arthur et al. (2016), O'Donnell (2015), and Sampson (2019).

I obtained the second date from Locus 2 on a sample of deer antler taken from Level 5b of STP 1 in Location 3, Operation 10 of Dean et al.'s survey. This sample yielded a radiocarbon age of 1600 ± 35 (UGAMS-41149), which has a 2σ calibrated age of cal AD 411-553. This early Weeden Island date is anomalous given its location on the portion of the midden ridge lining the east side of the site. All other dates obtained from this area of the site support occupation in the late Weeden Island and Safety Harbor periods. When the context of this date is taken into consideration, it is likely that this early date is a result of specialized use of this portion of the site and not occupation. For a more detailed description of the context from which this date came, refer to the previous chapter on radiocarbon dates from previous collections.

Overall, it is difficult to glean much information about occupation of Locus 2 given the lack of dates, which are spread out both spatially and temporally. It is most probable that this locus represents two separate occupations.

Locus 3

Locus 3, encompassing the Three Ogre's mound complex and falling entirely within Dean's Location 5, Operation 6, has produced a total of 16 radiocarbon dates, all obtained by Sampson (2019) for her dissertation research (for a discussion of the context of these dates see Sampson (2019: 99-145) (Figures 6.7). All of these dates fall within the Safety Harbor and early colonial periods, but they span a total of around 1000 years. The length of this span may reflect the fact that all of the dates were recovered on unidentified wood charcoal, which probably introduces some old wood effect. Visual inspection of the calibrated age ranges suggests that at least four phases of occupation are represented (Figure 6.8). Modeling with successively more phases yielded increasingly high agreement indices; I suggest a 6-phase model (A_{model} = 115.4, $A_{overall}$ = 115.1) as a compromise between detail and generality (Figure 6.9).

The first phase of occupation in Locus 3 is modeled to begin *between cal AD 1015 and 1155* and end *between 1040 and 1170* (95% posterior estimates). This phase is modeled based on two radiocarbon dates recovered from the same pit feature, Feature 21. This pit feature was located in Unit V of Sampson's Area 5, which is located to the west of the center of Three Ogres Mound

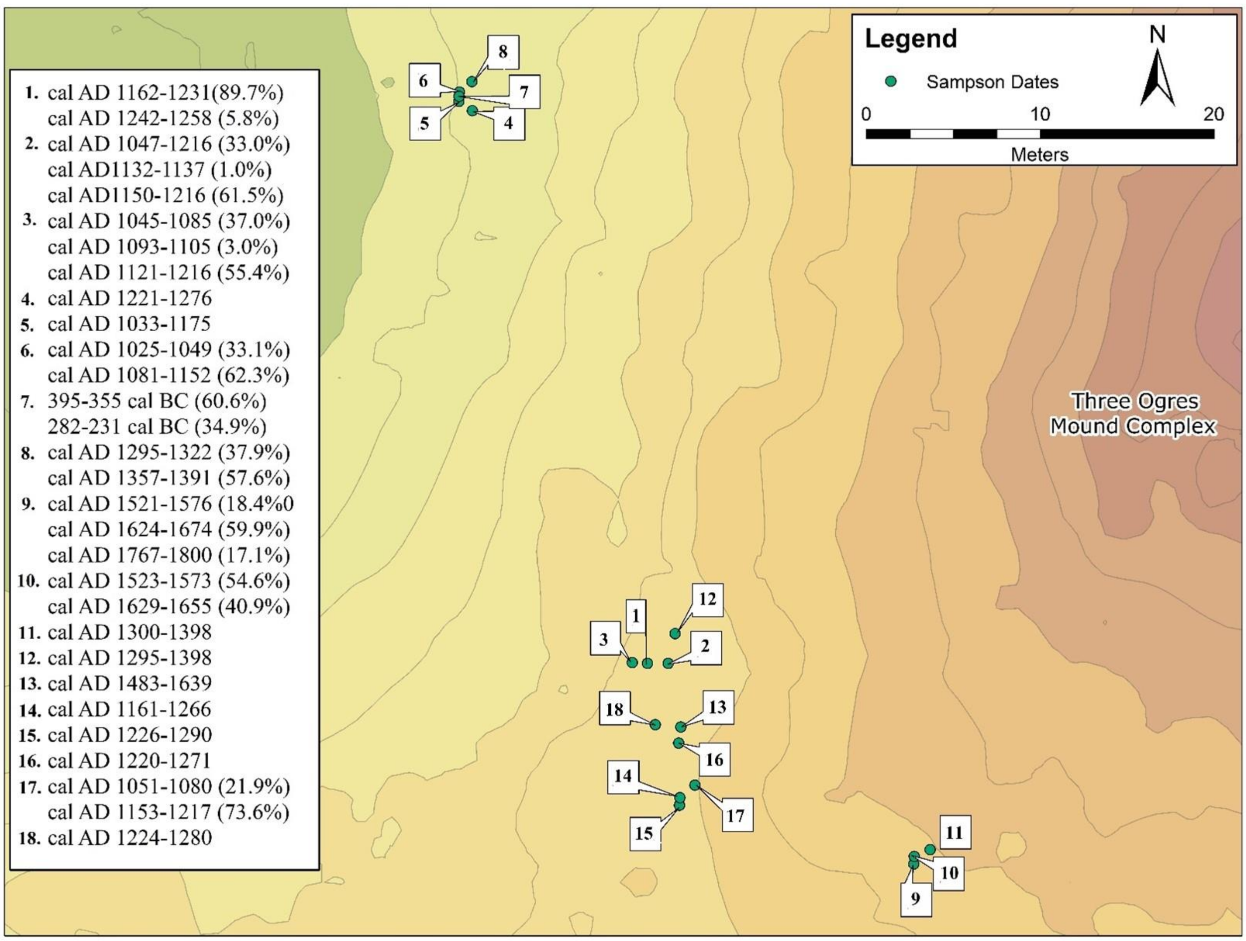

Figure 6.7. Location of individual dates within Locus 3.

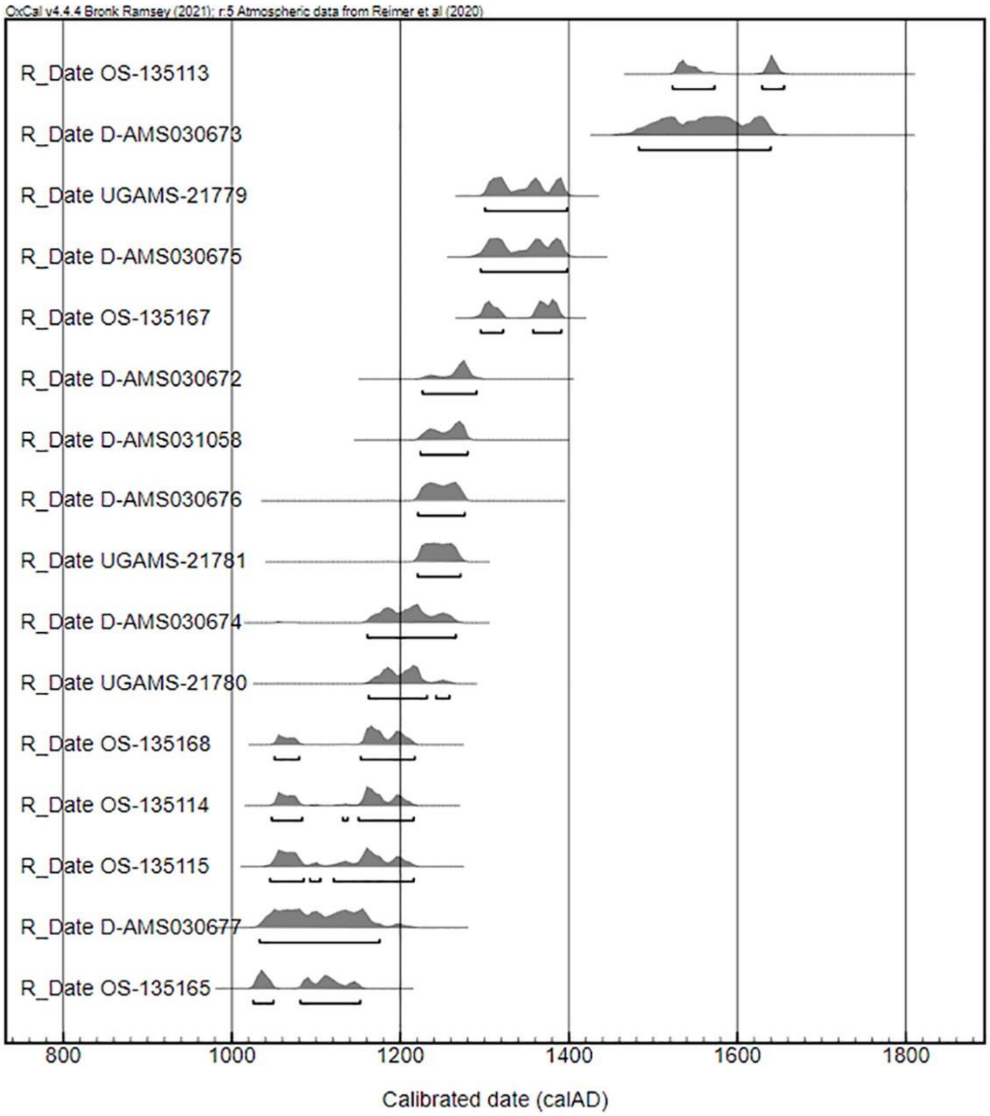

Figure 6. 8. Probability likelihoods for the calibrated dates from Locus 3 (the brackets indicate the ranges associated with the 2σ likelihoods).

Sequence("Weeden Island Locus 3 6 phases")

- Boundary("Start P3.1")
- Phase("P3.1")
    - R_Date("OS-135165", 975, 15)
    - R_Date("D-AMS030677", 930, 26)
- Boundary("End P3.1")
- Boundary("Start P3.2")
- Phase("P3.2")
    - R_Date("OS-135115", 905, 20)
    - R_Date("OS-135114", 900, 15)
    - R_Date("OS-135168", 895, 15)
- Boundary("End P3.2")
- Boundary("Start P3.3")
- Phase("P3.3")
    - R_Date("D-AMS030674", 844, 29)
    - R_Date("UGAMS-21780", 850, 20)
- Boundary("End P3.3")
- Boundary("Start P3.4")
- Phase("P3.4")
    - R_Date("UGAMS-21781", 800, 20)
    - R_Date("D-AMS030676", 789, 26)
    - R_Date("D-AMS031058", 770, 25)
    - R_Date("D-AMS030672", 748, 26)
- Boundary("End P3.4")
- Boundary("Start P3.5")
- Phase("P3.5")

Figure 6.9. Parameters for modeling Locus 3.

for location of complex, see Dean et al. 2008:171). The slightly earlier date (OS-135165) came from the upper portion of the pit feature. The slightly later date (D-AMS030677) came from the lower portion of Feature 21. This phase indicates that this part of the site was occupied during the early Safety Harbor period.

Phase 2 in Locus 3 is modeled to begin *between cal AD 1125 and 1200* and end *between cal AD 1155 and 1210* (95% posterior estimates). This phase is based on three dates come from Block D of Sampson's Area 3, which is located west of the southern part of Three Ogres Mound. The Block D excavations were comprised of two separate locations—"a 3 x 2 m series of units over a large positive [magnetic] anomaly ("Block D North") and an approximately 19 square meter configuration of units over at least five overlapping magnetic anomalies" (Sampson 2019:114). These locations were also further broken down according to the types of deposits found, e.g., "North Midden" or "North Central Features." The younger of the three radiocarbon date comes from Block D North Midden (OS-135115). A slightly older date also comes from Block D North Midden, but in this case from a pit (Feature 9) (OS-135114). Finally, the third and oldest date was obtained on Feature 17 pit within Block D (OS-135168). This phase suggests a second occupation during the middle Safety Harbor period.

A third phase of occupation in Locus 3, also falling in the middle Safety Harbor period and overlapping temporally with Phase 2, is modeled to begin *between cal AD 1165 and 1225* and end *between cal AD 1180 and 1255* (95% posterior estimates). This phase is modeled from two radiocarbon dates from Block D within Sampson's Area 3. The slightly earlier of the two dates was taken on a sample of charcoal recovered from near the base of a brown soil midden (AMS030674), while the more recent of the two was obtained on a sample of wood charcoal from the shell midden (UGAMS-21780).

Phase 4 of occupation in Locus 3 is modeled to have begun *between cal AD 1215 and 1270* and ended *between cal AD 1235 and 1305* (95% posterior estimates), thus overlapping only slightly with Phase 3 in the middle Safety Harbor period. This phase includes four dates that come from two separate areas of the locus. The first portion of the locus, Block D of Sampson's Area 3, yielded three radiocarbon dates that fall within this phase. These include a sample of wood charcoal from Feature 13a (UGAMS-21781), and another from the bottom of a brown soil midden (D-AMS030672), along with a white-tailed deer bone from Feature 15 (D-AMS031058). The fourth date included here is from wood charcoal associated with Level 4 in the midden of Unit V in Area 5 (D-AMS030676).

The fifth phase of occupation is modeled to have begun *between cal AD 1275 and 1385* and ended *between cal AD 1300 and 1460* (95% posterior estimates). This phase overlaps slightly with the previous but indicates occupation of Locus 3 continued into the later Safety Harbor period. The proveniences of the three dates included in this phase also suggest an expansion of settlement. All of the dates were obtained on wood charcoal. One of these was obtained from Level 3 in the midden in Unit V of Sampson's Area 5 (OS-135167), the same context that produced a date (D-AMS030676) assigned to the previous phase. The second date was obtained on a sample taken from Level 3 of the midden in Unit T of Sampson's Area 3 (D-AMS030675). The last date included in this phase came from Sampson's Area 4 to the west of the southern part of Three Ogres Mound, on a sample of wood charcoal recovered from Feature 19 within Block C (UGAMS-21779).

The sixth and final phase of occupation that I have modeled for Locus 3 probably began *between cal AD 1385 and 1575* and ended *between cal AD 1525 and 1660* (95% posterior estimates). This places a final occupation of Locus 3 in the late Safety Harbor and early colonial eras. The phase is represented by two radiocarbon dates from two areas of this locus. The first date was obtained on wood charcoal from Feature 13c of Block D in Sampson's Area 3 (D-AMS030673). The other date for this phase comes from a sample of wood charcoal from Feature 20 of Block C within Sampson's Area 4 (OS-135113).

Overall, Locus 3 was occupied from the early Safety Harbor period until the early colonial era. Occupation of this locus began to the north-northwest of the Three Ogres Mound Complex in Phase 1 and then spread south to the area southwest of Three Ogres during Phases 3 and 4. By Phase 5, the area to the southwest of Three Ogres had a continuation of occupation and people also spread slightly more south where they remained through Phase 6.

Locus 4

Locus 4 is encompassed by the Jeanne Mound Complex and is located just south of Locus 3. Like Locus 3, it also falls within the area designated by Dean et al. as Location 5, Operation 6 (Figure 6.10). Locus 4 has produced 19 radiocarbon dates that together span around 700 years (Figure 6.11). Of these 19 radiocarbon dates, nine come from dissertation research by Sampson (2019), four from master's research by O'Donnell (2015), five from excavations conducted by Arthur at USFSP, and two from trench excavations done by AWIARE.

The two-sigma calibrated ages likelihoods of the 19 dates from Locus 4 span approximately 700 years. Although the ranges are thus relatively tightly clustered (particularly considering the fact that they are based almost exclusively on wood charcoal), visual inspection of the likelihoods suggests at least four phases may be represented (Figure 6.12). My modeling from 4 to 6 phases produced successive improvement of the agreement indices, but with the largest improvement in the move from 4 to 5 phases. The 5-phase model I present below has agreement indices of A_{model} = 124.3 and $A_{overall}$ = 122.4 (Figure 6.15). The dates from this locus situate its occupation from the transition from the Weeden Island to Safety Harbor periods and continuing into the colonial era.

The first phase of occupation within Locus 4 is modeled to have probably begun *between cal AD 910 and 1030* and ended *between cal AD 1025 and 1155* (95% posterior estimates). This phase, which falls in the terminal Weeden Island and early Safety Harbor periods, is composed of four radiocarbon dates. The oldest of these comes from a sample of charcoal recovered during O’Donnell’s master’s research in 2015, specifically from beneath the shell stratum of a pit feature, Feature 2, in Unit 8S11E (BETA-387324). This unit is attached to others atop the northern portion

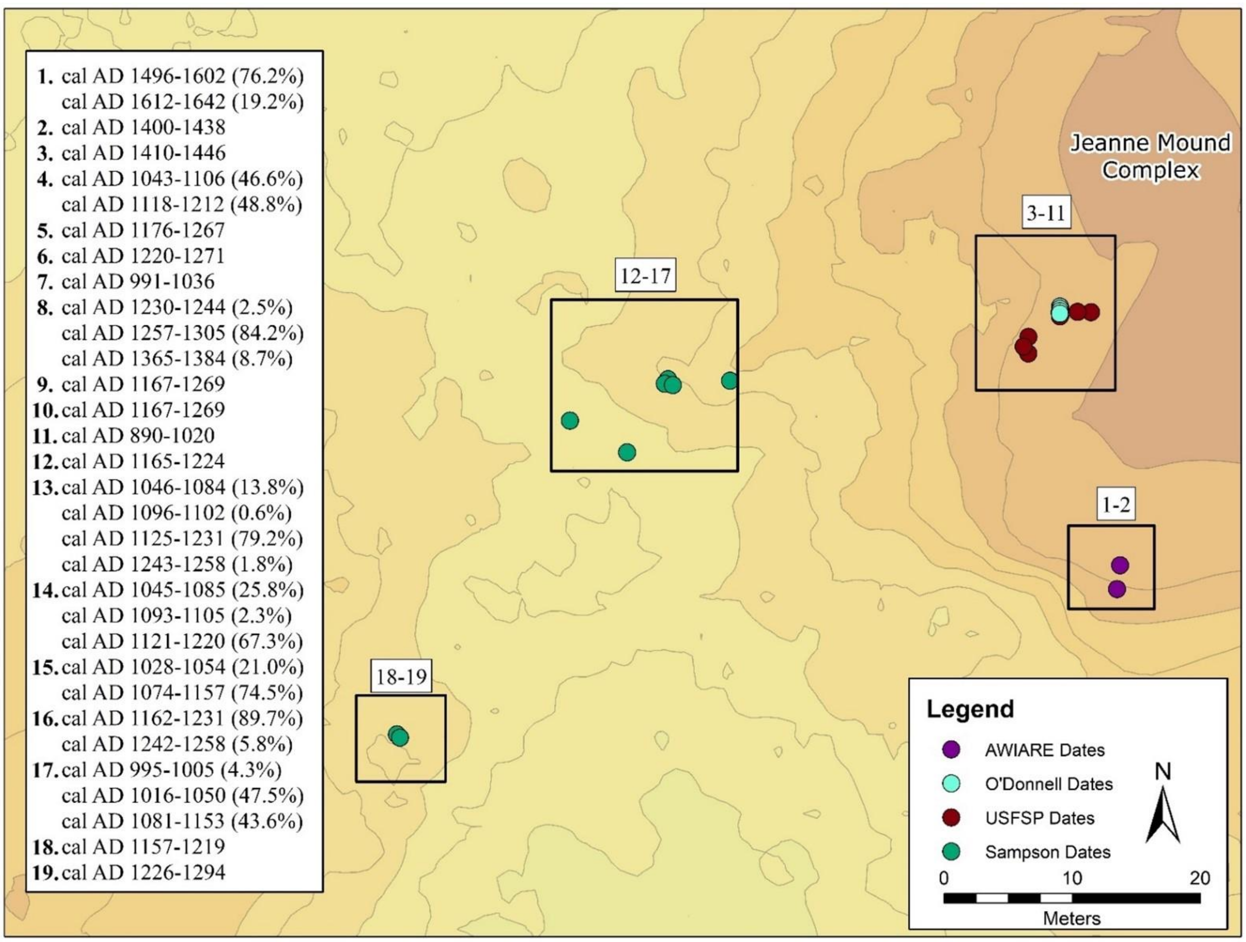

Figure 6.10. Location of individual dates within Locus 4.

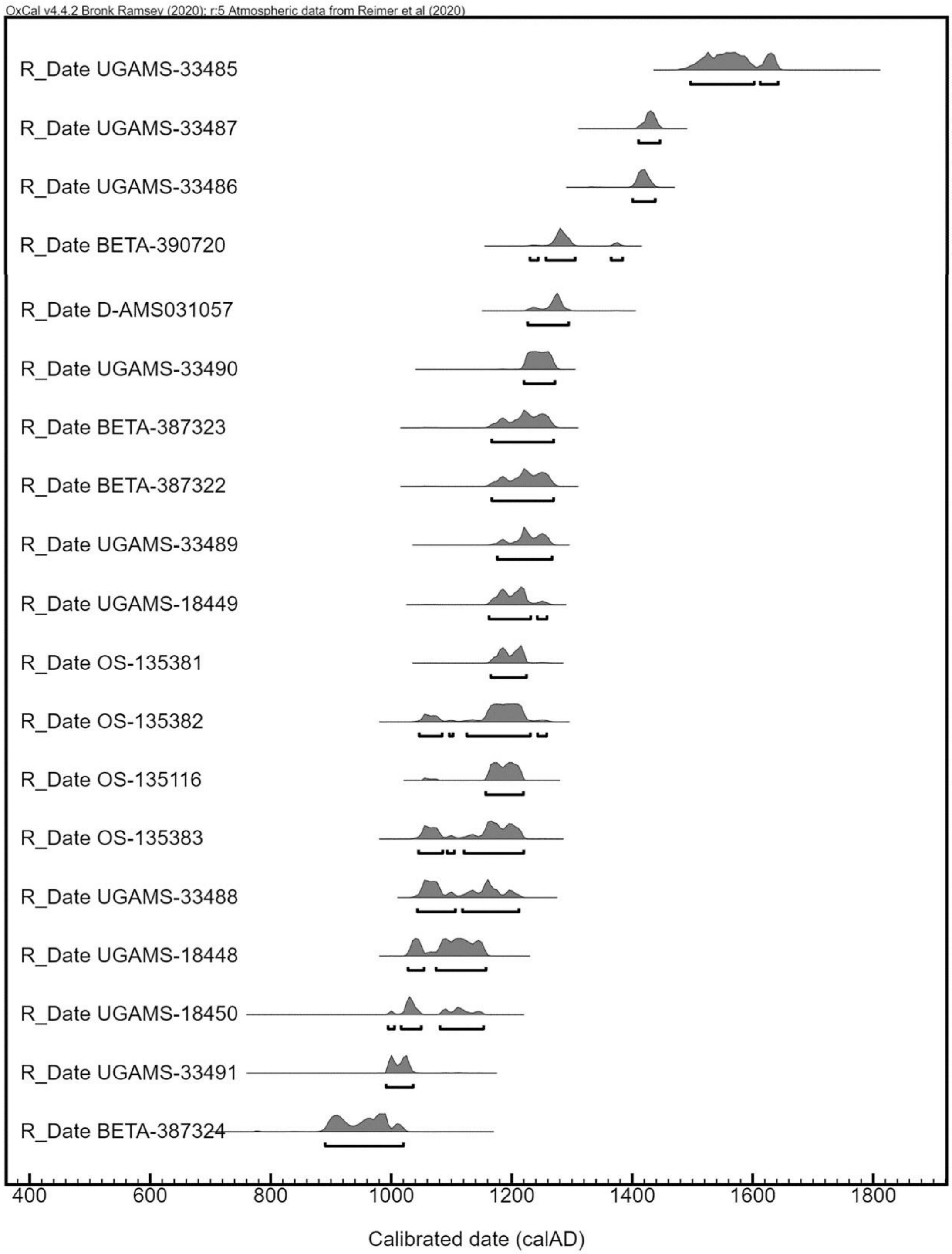

Figure 6.11. Probability likelihoods for the calibrated dates from Locus 4 (the brackets indicate the ranges associated with the 2σ likelihoods).

- Sequence("Weeden Island Locus 4 5 phases")
- Boundary("Start P4.1")
- Phase("P4.1")
    - R_Date("BETA-387324", 1090, 30)
    - R_Date("UGAMS-33491", 1020, 20)
    - R_Date("UGAMS-18450", 990, 20)
    - R_Date("UGAMS-18448", 960, 20)
        - Boundary("End P4.1")
- Boundary("Start P4.2")
- Phase("P4.2")
    - R_Date("UGAMS-33488", 910, 20)
    - R_Date("OS-135383", 895, 25)
    - R_Date("OS-135116", 880, 15)
    - R_Date("OS-135382", 875, 30)
- Boundary("End P4.2")
- Boundary("Start P4.3")
- Phase("P4.3")
    - R_Date("OS-135381", 855, 15)
    - R_Date("UGAMS-18449", 850, 20)
    - R_Date("UGAMS-33489", 830, 20)
    - R_Date("BETA-387322", 830, 30)
    - R_Date("BETA-387323", 830, 30)
- Boundary("End P4.3")
- Boundary("Start P4.4")
- Phase("P4.4")

Figure 6.12. Parameters for modeling Locus 4.

of the Jeanne Mound Complex that have been excavated by Arthur and his students from 2007 to the present. A slightly more recent date comes from one of the aforementioned units (Level IIb-1 of Unit 8S13E) excavated by Arthur, from a sample of charcoal (UGAMS-33491). These two dates come from the northern portion of the Jeanne Mound Complex (for location description, see Dean et al. 2008:399). Located west of the northern portion of Jeanne Mound Complex is Sampson's Area 1, which yielded the other two radiocarbon dates for what I have modeled as Phase 1 of Locus 4. From Unit N, one date was obtained from a sample of charcoal recovered from a shell and burning feature (UGAMS-18450). Then, adjacent to Feature 1 in Unit A, a sample of charcoal returned a slightly more recent age (UGAMS-18448).

My model suggests that Phase 2 of occupation in Locus 4 likely began *between cal AD 1055 and 1205* and ended *between cal AD 1160 and 1215* (95% posterior estimates), corresponding to the early Safety Harbor period. There is considerable overlap between the end of Phase 1 and the start of this phase, suggesting the possibility that the occupation was continuous. The first and oldest of the four dates that comprise this phase is based on wood charcoal recovered during Arthur's excavation of Level IIb-1 in Unit 8S12E (UGAMS-33488). The next two dates come from Sampson's Area 1 to the west of the northern portion of the Jeanne Mound Complex. From Level 5 in the midden of Unit H, one was obtained on a sample of wood charcoal (OS-135383), while another came on wood charcoal from Level 3 of the same unit (OS-135382). The final date falling into Phase 2 for Locus 4 comes from Sampson's Area 2, located west of the center of the Jeanne Mound Complex, on a sample of wood charcoal from Level 3 of the midden in Unit R (OS-135116). The overlap of Phases 1 and 2 of Locus 4 suggests that the northern portion of the Jeanne Mound Complex and the area directly to the west were occupied relatively continuously from the transition from the Weeden Island to Safety Harbor eras. The proveniences represented by Phase 2 suggest that settlement may have expanded to the southwest, to incorporate the area corresponding to Sampson's Area 2.

The third phase of occupation in Locus 4 is modeled to have begun *between cal AD 1180 and 1225* and ended *between cal AD 1185 and 1260* (95% posterior estimates). As with the previous transition, there is substantial overlap between the end of the previous phase and the beginning of this one, suggesting a more-or-less continuous occupation. Phase 3 is based on five radiocarbon dates. Two of the dates come from separate units within Sampson's Area 1, one from wood charcoal in Level 2 midden of Unit H (OS-135381) and the second obtained on wood charcoal from a burned area within Feature 2 in Unit D (UGAMS-18449). From Column B in Unit 8S11E of O'Donnell's excavations, come two radiocarbon dates, one on charcoal from the middle of the shell layer (BETA-387322) and another on charcoal from the bottom of the shell layer (BETA-387323). The final date for this phase came from Levels IIIa-1 of Feature 10 in Unit 10S7.75E of Arthur's excavations (UGAMS-33489). These dates indicate that the northern portion of the Jeanne Mound Complex as well as the area directly to the west were continuously occupied from the previous phases through Phase 3.

My model suggests that Phase 4 of occupation in Locus 4 likely began *between cal AD 1220 and 1275* and ended *between 1255 and 1365* (95% posterior estimates). The modeled start dates for this phase do not overlap substantially with the end dates for Phase 3, suggesting there may have been a break in occupation of Locus 4. Phase 4 of Locus 4 is based on the collection of three radiocarbon dates. One of these three was obtained on a sample of terrestrial mammal bone from the top of the shell layer in O'Donnell's excavations in Unit 8S11E (BETA-390720). Nearby, in Feature 15 within Unit 11S7.75E of Arthur's excavations, a sample of charcoal produced a second date (UGAMS-33490). The last date comes on a sample of deer bone from Sampson's Area 2 to the west of the center of the Jeanne Mound Complex (D-AMS031057).

The fifth and final phase of occupation in Locus 4 is modeled to have begun *between cal AD 1300 and 1430* and ended *between cal AD 1475 and 1655* (95% posterior estimates). There is some overlap here with end of Phase 4, although it is not enough to assume that these were continuous occupations. Phase 5 is based on three radiocarbon dates. One is from wood charcoal found in Level IIa-2 of Unit 11S7.75E of Arthur's excavations (UGAMS-33487). The other two radiocarbon dates were obtained from samples recovered by AWIARE from trench excavations near the center of the Jeanne Mound Complex and directly south of Arthur's excavations. One of these was on charcoal from Level 8 in the third stratum of Feature 14, a postmold within Test Unit 3 of Trench 2 (UGAMS-33486). The other date from AWIARE's excavations was taken on a sample of wood charcoal from Level 3 of Stratum IIb of Trench 2 (UGAMS-33485). The spatial distribution of these dates suggests that by Phase 5, people were no longer occupying the land to west of the Jeanne Mound Complex but continued to occupy the land atop the Jeanne Mound. They also show that people were spreading south down the Jeanne Mound Complex as time progressed through the Safety Harbor period into the colonial era.

Overall, Locus 4 was occupied during the transition from the Weeden Island period into the Safety Harbor period. Occupation of the locus began in the northern portion of the Jeanne Mound Complex and the area directly to the west. By Phase 2, people were continuing to occupy the same areas, but also spread to an area southwest of the Jeanne Mound Complex where they likely remained until Phase 4. It seems that the transition of time between Phases 2 and 4 is when occupation of this locus was the most intensive, around cal AD 1000-1300. By Phase 5, people seem to have constricted their occupation to atop the Jeanne Mound Complex and away from the area directly to the west that was occupied in previous phases. Occupation of Locus 4 seems to have been contemporaneous with occupation of Locus 3, with most intensive occupation from cal AD 1000-1300 and a constricting of occupied land after around cal AD 1300 in both loci.

Site-wide Modeling

While Weeden Island is considered a single site, it may be easier to conceptualize it as two sites within the same landscape when thinking about its occupation. If conceptualized as two sites within the same landscape, the north/western arcuate midden ridge (Locus 1) would constitute one site and the south/eastern arcuate midden ridge (Loci 2-4) would be the other. Through this project it seems that the occupation of Weedon Island was largely reserved to these ridges during the Weeden Island and Safety Harbor periods, supported by a lack of cultural material from these periods elsewhere in the site. If separating Weedon Island into two separate sites, it appears that the north/western arcuate midden ridge dates to the early phases of occupation while the south/eastern ridge dates primarily to the middle/late phases. It should be noted that since Weedon Island is a large landscape, it is not possible to state absolutely that occupation of each area was restricted to only the phases in which they are placed during this project. However, using data currently available, nine phases of occupation at the Weeden Island site are proposed, with the north/western ridge occupied in the early phases and then occupation moving to the south/eastern ridge by the middle/late phases (Figure 6.13). As an alternative to modeling together all 53 individual dates from around the site to ascertain phases of occupation, I instead modeled together the start and end dates of each individual phase within the loci (A_{model} =127.6, $A_{overall}$ = 117.7). It should be noted that occupation of the site is based on a TPQ of 1765-1529 cal BC, though it is known that people inhabited the site prior to this during the Archaic period based on lithic scatters in various areas of the site. Since dateable materials diagnostic to the Archaic period, like fiber tempered pottery, have not been found, the aforementioned TPQ serves as a base for determining occupation.

Sequence(WI Sitewide 9 Phases)

- Boundary("Start WI Phase 1")
- Phase("WI Phase 1")
  - Boundary("=Start P2.1")
  - Boundary("=Start P1.1")
  - Boundary("=End P1.1")
- Boundary("End WI Phase 1")
- Boundary("Start WI Phase 2")
- Phase("WI Phase 2")
  - Boundary("=Start P1.2")
  - Boundary("=End P1.2")
  - Boundary("=Start P2.2")
- Boundary("End WI Phase 2")
- Boundary("Start WI Phase 3")
- Phase("WI Phase 3")
  - Boundary("=Start P1.3")
  - Boundary("=End P1.3")
  - Boundary("=Start P4.1")
  - Boundary("=End P4.1")
- Boundary("End WI Phase 3")
- Boundary("Start WI Phase 4")
- Phase("WI Phase 4")
  - Boundary("=Start P1.4")
  - Boundary("=Start P3.1")
  - Boundary("=End P3.1")
- Boundary("End WI Phase 4")
- Boundary("Start WI Phase 5")
- Phase("WI Phase 5")
  - Boundary("=Start P4.2")
  - Boundary("=End P4.2")
  - Boundary("=Start P3.2")
  - Boundary("=End P3.2")
- Boundary("End WI Phase 5")
- Boundary("Start WI Phase 6")
- Phase("WI Phase 6")
  - Boundary("=Start P3.3")
  - Boundary("=End P3.3")
  - Boundary("=Start P4.3")
  - Boundary("=End P4.3")
- Boundary("End WI Phase 6")
- Boundary("Start WI Phase 7")
- Phase("WI Phase 7")
  - Boundary("=Start P3.4")
  - Boundary("=End P3.4")
  - Boundary("=Start P4.4")
  - Boundary("=End P4.4")
- Boundary("End WI Phase 7")
- Boundary("Start WI Phase 8")
- Phase("WI Phase 8")
  - Boundary("=Start P3.5")
  - Boundary("=End P3.5")
- Boundary("End WI Phase 8")
- Boundary("Start WI Phase 9")
- Phase("WI Phase 9")
  - Boundary("=Start P4.5")
  - Boundary("=End P4.5")
  - Boundary("=Start P3.6")
  - Boundary("=End P3.6")
- Boundary("End WI Phase 9")

Figure 6.13. Parameters for site-wide modeling.

The first phase of the site-wide Weeden Island chronology likely began *between cal AD 380 and 545* and ended *between cal AD 445 and 590* (95% posterior density estimates). Included here are the start and end dates of Locus 1, Phase 1 (UGAMS-41147, M-1598) and the earlier of the two dates from Locus 2 (UGAMS-41149). This phase is consistent with the early Weeden Island period. Based on the locales of dates, people were likely only occupying the northern ridge (Figure 6.14). As previously mentioned above in discussion of Locus 2, the other date from the south/eastern ridge likely indicates a specialized use of that area by people that resided elsewhere in the site during this interval.

My model suggests that Phase 2 of occupation probably began *between cal AD 505 and 640* and ended *between cal AD 700 and 930* (95% posterior density estimates). Modeling of this phase includes the start and end dates of Locus 1, Phase 2 (RA-A60848, UGAMS-41144) and the second and later date from Locus 2 (UGAMS-44074). This phase overlaps only slightly with the end of the previous phase, which suggests the probability of a break in occupation. The distribution of dates indicate that people continued to occupy the northern ridge, though more concentrated on the eastern side of the ridge than in the previous phase, while also beginning to reside in areas to the south during this interval (Figure 6.15).

Phase 3 likely began *between cal AD 810 and 985* and ended *between cal AD 1025 and 1125* (95% posterior density estimates). Included in this site-wide phase are the start and end dates of Locus 1, Phase 3 (UGAMS-44075, UGAMS-41143) and the start and end dates of Locus 4, Phase 1 (BETA-387324, UGAMS-18448). This phase is consistent with the terminal Weeden Island and early Safety Harbor periods. There is a more substantial overlap with the end of the previous phase, suggesting a lessened probability of a break in occupation or a shorter break if one did occur. By this phase it is clear that people are occupying both the northern and southeastern

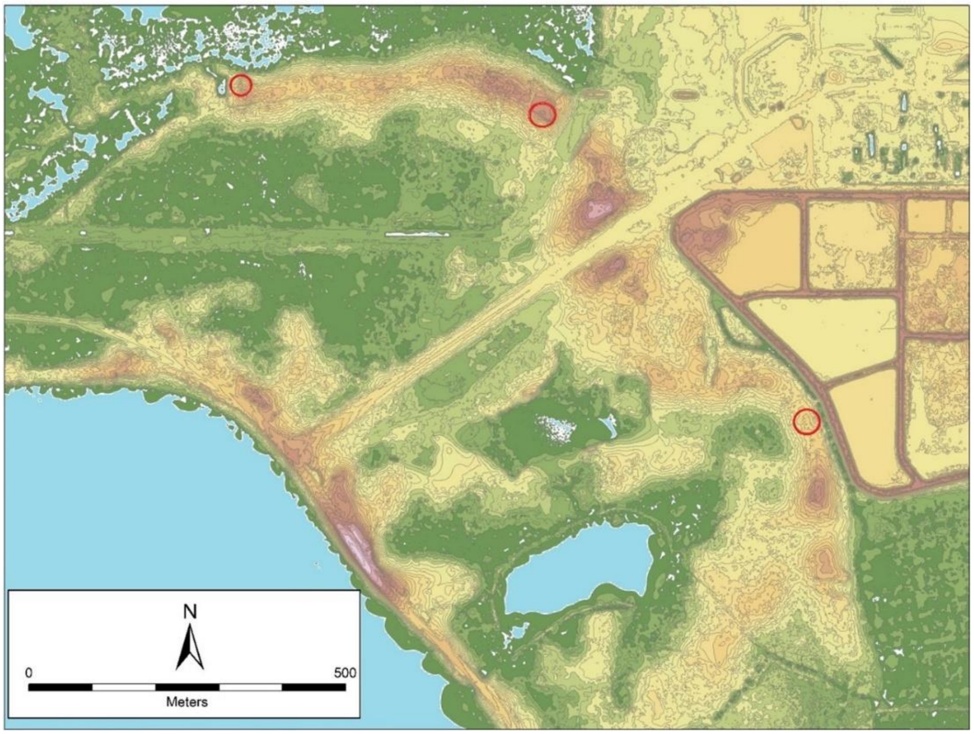

Figure 6.14. Areas of occupation during Phase 1.

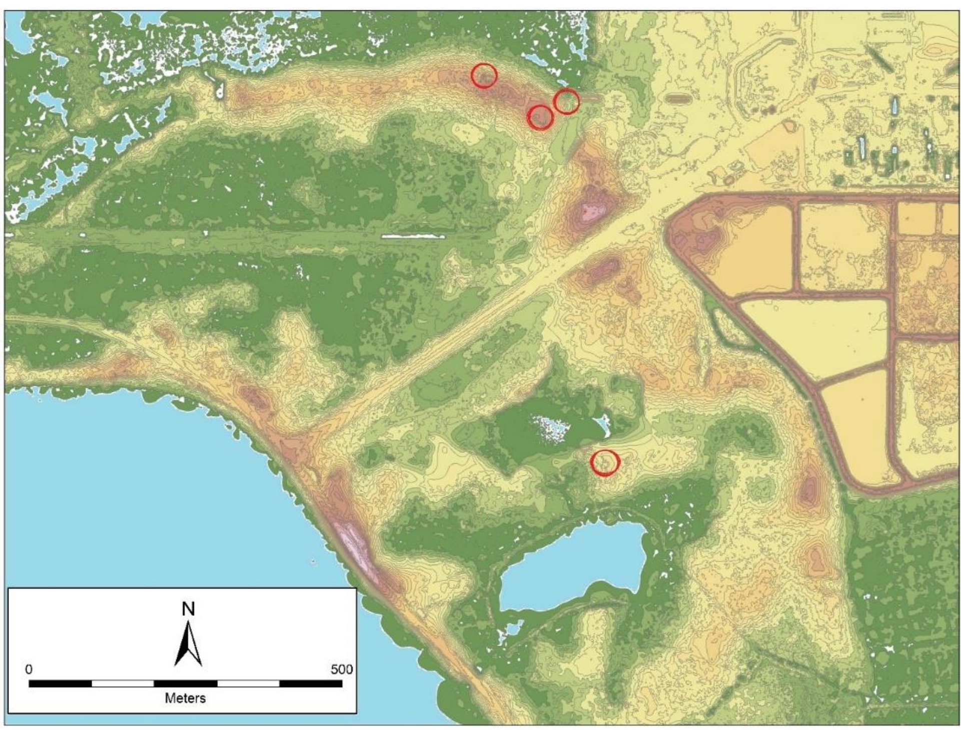

Figure 6.15. Areas of occupation during Phase 2.

ridges, though judging by intensity of dates it seems occupation is more heavily concentrated on the southeastern ridge during this interval (Figure 6.16).

The fourth phase of occupation likely began *between cal AD 1035 and 1150* and ended *between cal AD 1035 and 1170* (95% posterior density estimates). Modeling of this phase includes the start date of Locus 1, Phase 4 (UGAMS-41148) and the start and end dates of Locus 3, Phase 1 (OS-135165, D-AMS030677). The end date of Locus 1, Phase 4 was not included in the site-wide model because it extended so long. Phase four is consistent with the early Safety Harbor period. This phase was considerably short with substantial overlap from the previous phase, suggesting the possibility of continuous occupation, though a short break is possible. It is indicated by current evidence that occupation was limited to the southeastern ridge during this interval, as the date from the northern ridge likely reflects a specialized use of the land by people residing elsewhere in the site. The portion of the ridge occupied during this interval is the area west of the Three Ogres Mound, a locale named during the Dean et al. survey (Figure 6.17).

Phase 5 probably began *between cal AD 1045 and 1200* and ended *between cal AD 1050 and 1215* (95% posterior density estimates). Included here are the start and end dates of Locus 4, Phase 2 (UGAMS-33488, OS-135382) and the start and end dates of Locus 3, Phase 2 (OS-135115, OS-135168). This phase is consistent with the early Safety Harbor period and is again a short phase that overlaps considerably with the previous, likely indicating continuous occupation or only a minute break. During this phase, people were still occupying the area to the west of Three Ogres Mound but also spread further south to what is known as the Jeanne Mound Complex (Figure 6.18). Similar to the occupation near Three Ogres Mound, people were occupying the land directly to the west of the Jeanne Mound Complex.

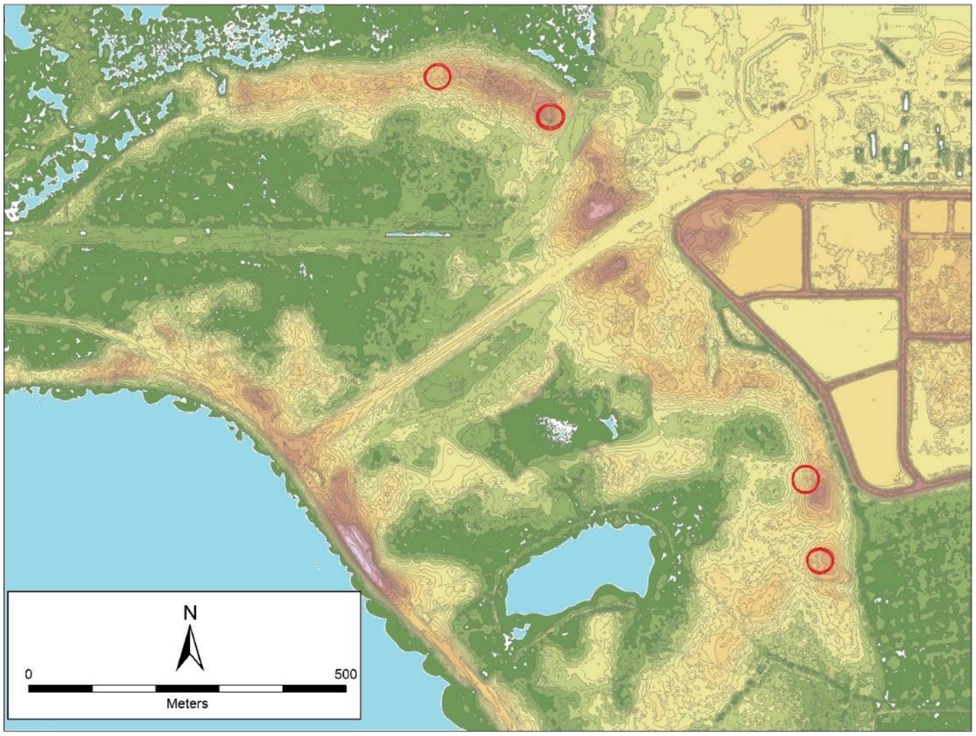

Figure 6.16. Areas of occupation during Phase 3.

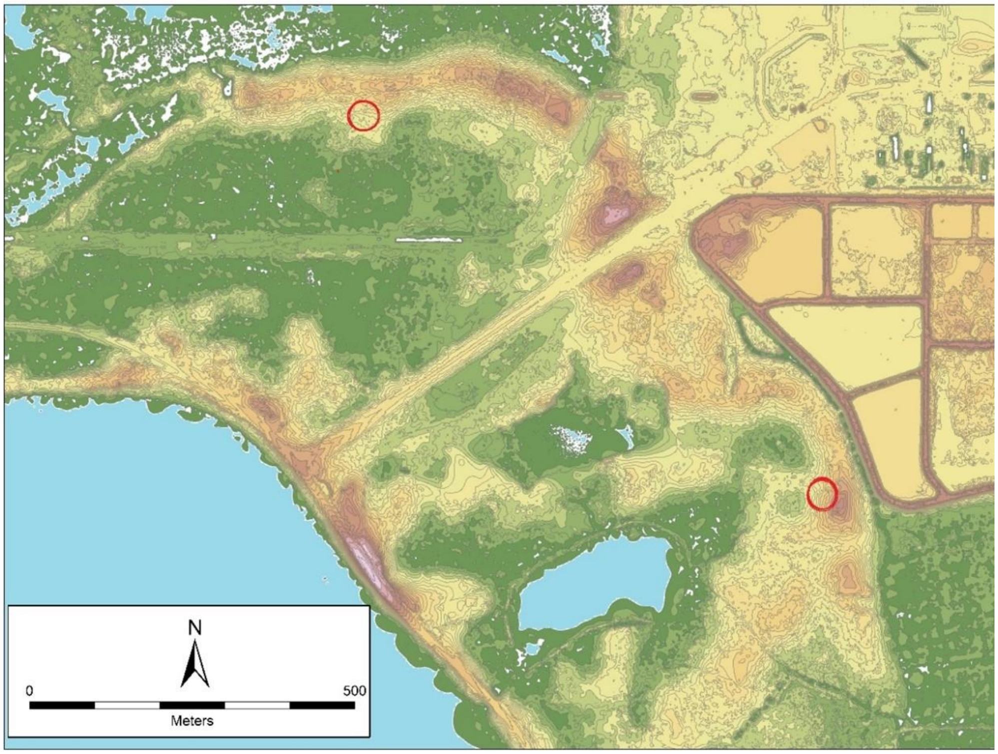

Figure 6.17. Areas of occupation during Phase 4.

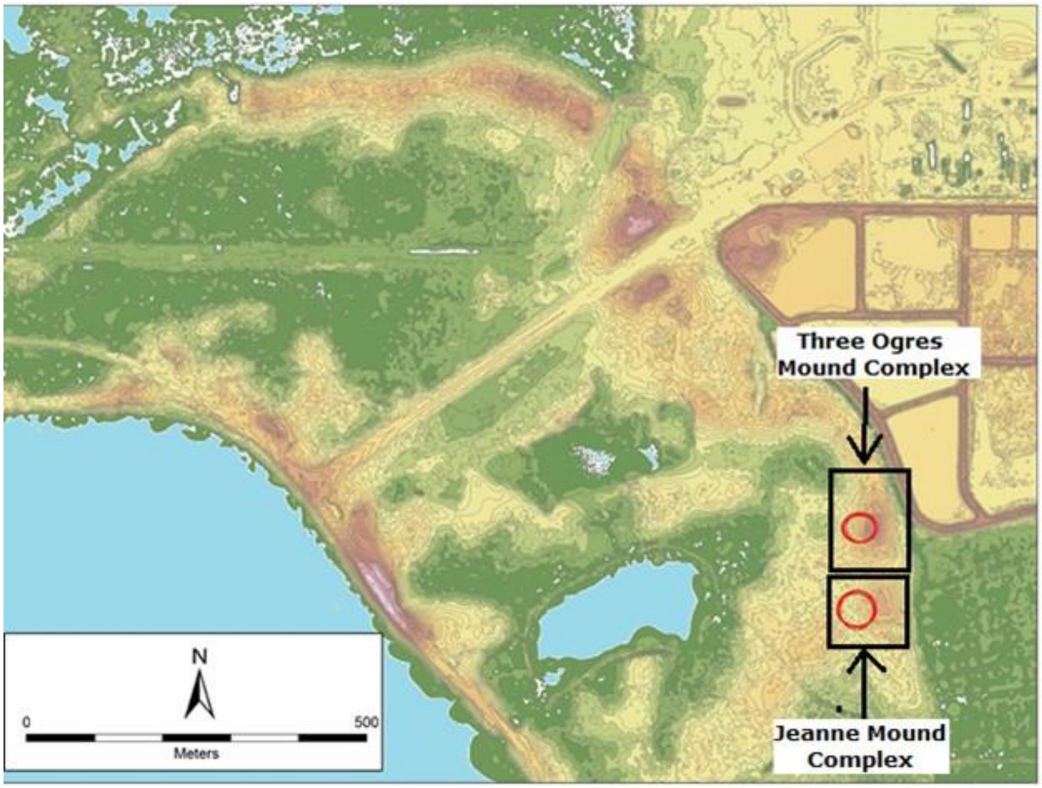

Figure 6.18. Areas of occupation during Phase 5.

My model suggests that the sixth phase of occupation likely began *between cal AD 1055 and 1225* and ended *between cal AD 1060 and 1265* (95% posterior density estimates). Included in this site-wide phase are the start and end dates of Locus 3, Phase 3 (D-AMS030674, UGAMS-21780) and the start and end dates of Locus 4, Phase 3 (OS-135381, BETA-387323). This phase is brief and consistent with the early Safety Harbor period, similar to Phases 3-5. While current evidence suggests at least the possibility of breaks between occupations, more dating could reveal that Phases 3-6 were one continuous occupation during the early Safety Harbor period. Similar to the previous phase, people were occupying the areas to the west of the Three Ogres and Jeanne Mound complexes during this interval (Figure 6.19).

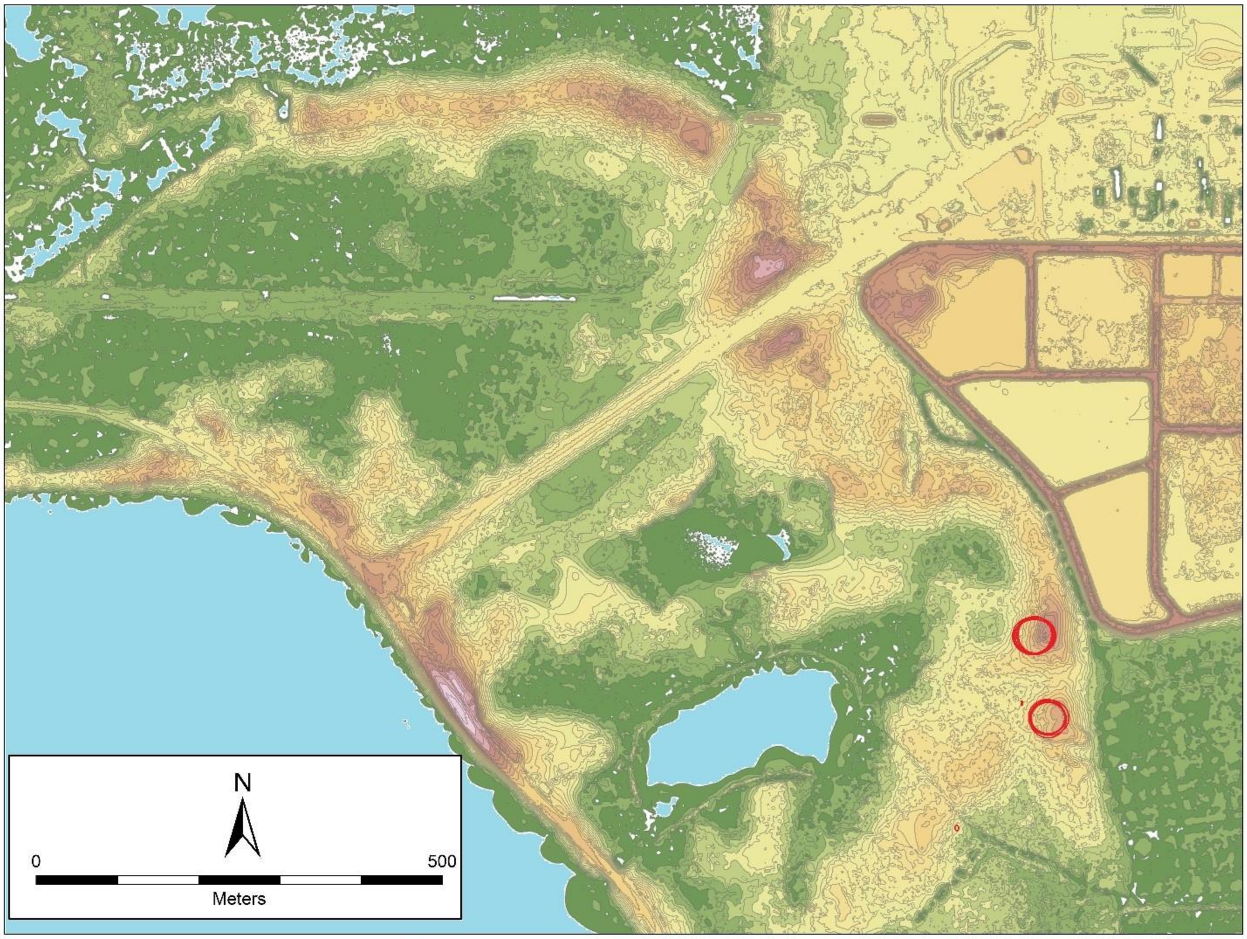

Figure 6.19. Areas of occupation during Phase 6.

Phase 7 probably began *between cal AD 1225 and 1275* and ended *between cal AD 1240 and 1320* (95% posterior density estimates). My modeling of this phase included the start and end dates of Locus 3, Phase 4 (UGAMS-21781, D-AMS030672) and the start and end dates of Locus 4, Phase 4 (UGAMS-33490, BETA-390720). Occupation during this phase, situated within the middle Safety Harbor period, occurred in the same areas of the site as the previous phase (Figure 6.20). However, despite occupation occurring in the same area, there seems to have been more of a substantial break in occupation from the previous phase as there is not much overlap in dates.

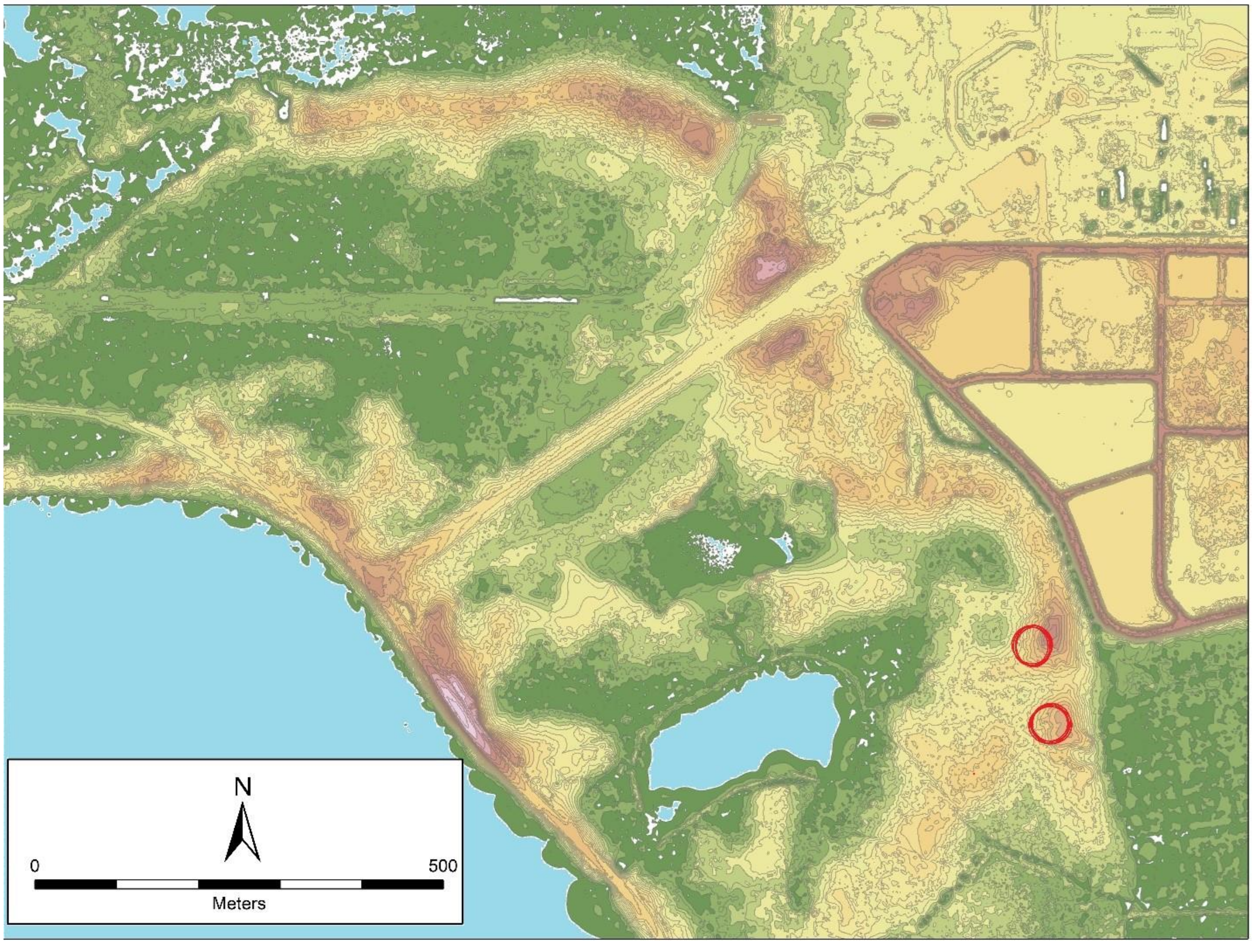

Figure 6.20. Areas of occupation during Phase 7.

The eighth phase of occupation probably began *between cal AD 1275 and 1385* and ended *between cal AD 1305 and 1405* (95% posterior density estimates). Included here is only the start and end dates of Locus 3, Phase 5 (OS-135167, UGAMS-21779), so there is not a lot of evidence for settlement during this phase. Phase 8, situated within the middle Safety Harbor period, does not overlap much with the previous phase, likely indicating a longer break between occupations. Additionally, people do not seem to have occupied the Jeanne Mound complex during this phase based on current evidence, but instead were restricted to the Three Ogres Mound (Figure 6.21). This is not to say people did not occupy Jeanne Mound, we just do not currently have supporting evidence.

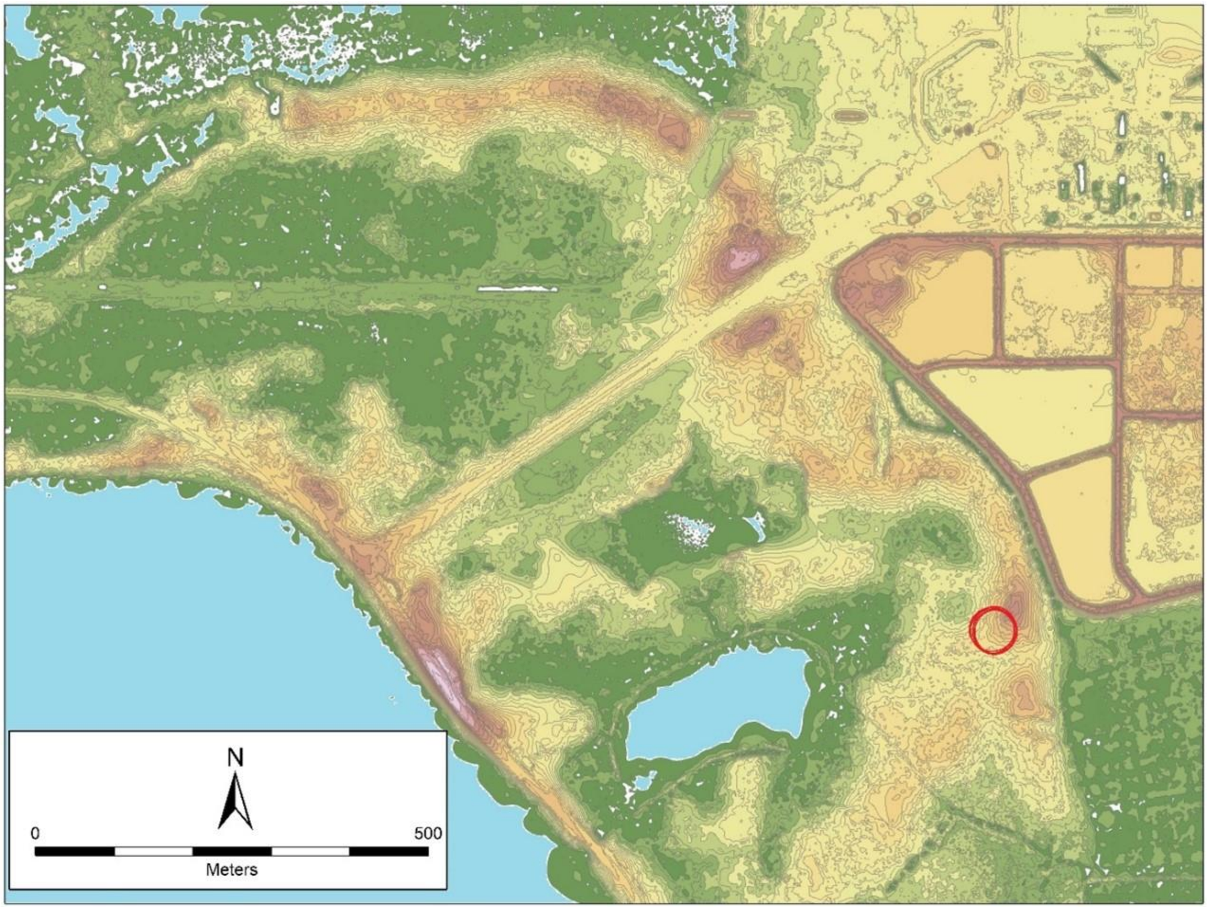

Figure 6.21. Areas of occupation during Phase 8.

The ninth and final phase of occupation is modeled to have begun *between cal AD 1330 and 1425* and ended *between cal AD 1525 and 1660* (95% posterior density estimates). Modeling of this site-wide phase included the start and end dates of Locus 4, Phase 5 (UGAMS-33486, UGAMS-33485) and the start and end dates of Locus 3, Phase 6 (D-AMS030673, OS-135113). During this phase, people are again occupying both the Three Ogres Mound and Jeanne Mound complex like in Phase 7 (Figure 6.22). Based on a fairly substantial overlap in dates from the end of the previous phase, there may have been continuous occupation of this portion of the site, though a short break may have occurred.

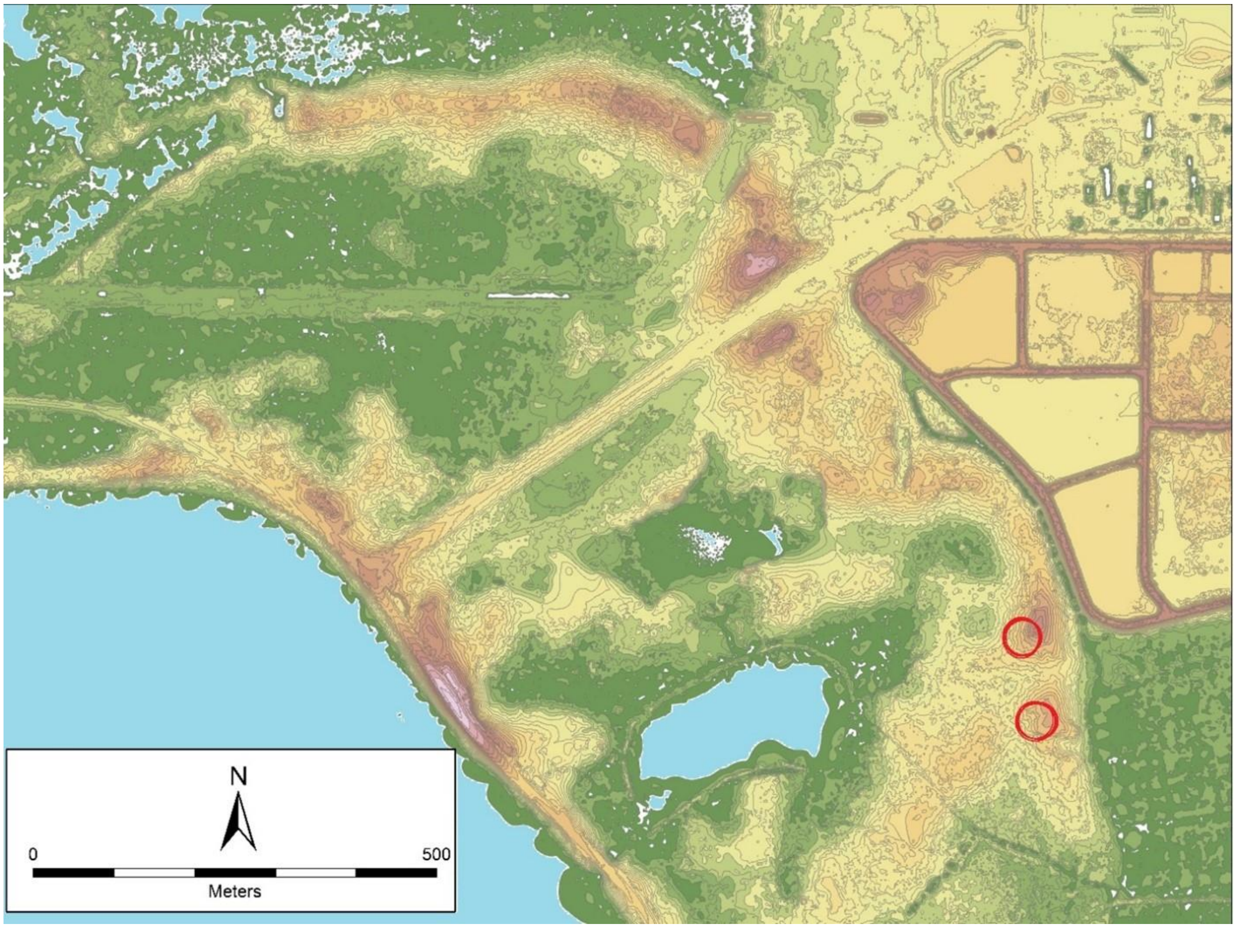

Figure 6.22. Areas of occupation during Phase 9.

In summary, the north/western arcuate midden ridge was exclusively occupied during the early phases from the early Weeden Island period until the transition to the Safety Harbor period. The south/eastern ridge was occupied during the middle/late phases from the late Weeden Island period to the Safety Harbor period, with the most intensive occupation of the ridge during the middle phases from cal AD 1000-1300. Although it may seem problematic to infer the most intensive occupation occurred during the middle phases, given unequal sampling of the site, the feature evidence from excavations by Sampson, Arthur, O'Donnell, and AWIARE fairly corroborate this notion. Additionally, if the most intensive occupation occurred in the middle phases as the current evidence suggests, this would corroborate that there was a major expansion of sites appearing on the Gulf Coast, and therefore Tampa Bay, beginning in the late 800s, a regional model put forth by Austin et al. (2014) and Pluckhahn et al. (2017). Also, as the Safety Harbor period progressed into the later phases, people seem to have begun moving further south atop the midden ridge and away from areas directly to the west of it. Last, based on singular anomalous dates on each ridge, it seems apparent and adherent to logic that the entire site was used throughout all periods, though occupation was restricted to particular areas depending on the time period.

CHAPTER SEVEN: CONCLUSION AND FUTURE DIRECTIONS

The goal of this research was to provide better spatial and temporal control for the Weeden Island site in order to further understanding of its settlement patterning and assess whether it fits into larger, regional patterns. To achieve this goal, I analyzed collections from previous excavations to select materials suitable for AMS dating, conducted targeted small-scale testing in high-probability areas of the site not previously investigated or lacking in dateable materials to obtain samples for relative and absolute dating, and employed Bayesian modeling of radiocarbon dates to elucidate the site's chronology.

From results gained from dating materials from excavations by Sears (1971), Dean et al. (2008), and myself during this project, it is now known that the north/western arcuate midden ridge was occupied during the early-late Weeden Island period up until the transition to the Safety Harbor period. From modeling results, it is now known that the occupation of the site was restricted to the north/western arcuate midden ridge in the early phases, correlating to the Weeden Island period, and then by the beginning of the Safety Harbor period, corresponding to the middle/late phases, occupation was restricted to the south/eastern midden ridge. Additionally, from singular anomalous dates on each ridge, it appears that people were utilizing both ridges throughout all phases but occupying only one at a time depending on the time period. This research also indicates that people restricted their occupation to the aforementioned midden ridges, as shovel testing elsewhere in the site provided no cultural material indicative of occupation. The only cultural material found in areas away from the midden ridges was in the form of sparse lithic debitage.

Based on current evidence, Weeden Island seems to fit the regional settlement pattern of a horseshoe-shaped layout, though the amount of destruction to features makes this statement speculative at best. If Walker's description of a platform mound is true, then all elements typically found at Woodland period sites are present (platform mound, burial mound, extensive midden, and plaza). Unfortunately, using the 1926 aerial photograph as proof, it seems that the area about 400 yards west of the burial mound where Walker states the platform mound was located was destroyed by a citrus grove. Additionally, this area appears to be where visitors to the site would have traveled to view excavations. Given the platform mounds purported low height it is very plausible that it would have been easily missed and destroyed prior to Fewkes arriving to the site in 1923, thus giving reason to why he did not mention or record its presence. It is also highly likely that the large shell mound that the Weedon family built upon was a platform mound given its roughly rectangular shape and nine-meter height. Again, destruction and development leaves this to speculation.

Dissimilar to most other Woodland period sites, Weeden Island only has one burial mound, at least according to current knowledge, but the presence of one suffices to fit the pattern. Last, a plaza has not been confirmed at the site, but given the placement of the mounds in the northern portion of the site (which was occupied during the Woodland period) it was be hypothesized that the area between the large shell mound and burial mound may be a plaza, thus creating a horseshoe-shaped layout.

Based on features found today it is hard to confidently say that Weeden Island fits the Woodland period Gulf Coast settlement pattern. But, if you take into account the description of a platform mound by Walker, the burial mound, the large (probably platform) shell mound, and hypothesize about logical plaza placements, you can speculate that it does likely fit the mold as this creates a horseshoe-shaped layout.

Based on modeling results, occupation of the Weeden Island site intensified during the middle phases around cal AD 1000-1300. Not only were more people occupying the site, but more areas of the site began to be settled. Intensification during this interval corroborates the notion that major expansion, in terms of more sites appearing, occurred in the region around the late 800s. This expansion is consistent with regional models of settlement reorganization patterning, discussed by Austin et al. (2014) and Pluckhahn et al. (2017), that moved in a south to north transgressive manner across major Woodland Gulf Coast ceremonial centers. This may also situate the Weeden Island site as one of the latest, southernmost examples of this pattern.

This thesis is meant to be a stepping-stone for future research on the Weeden Island site, Tampa Bay region, and Woodland period Gulf Coast. With a site as extensive as Weeden Island, it will take time to collect enough dates to sufficiently offer the amount of spatial and temporal control needed to answer significant questions of change. While the southern midden ridge has been intensively dated in the recent past, the northern ridge still has large spatial gaps that need to be tested in order to better understand its chronology. I think the area to the west of the burial mound should be a future focus to ascertain whether the entirety of the ridge was occupied in the middle/late Weeden Island period or if occupation was concentrated on its eastern portion. Additionally, I think it is necessary for the midden in the far eastern portion of the north ridge, where I placed STP 4 of my Area 8, to be studied further. I think this area is especially important given the interesting species composition change around the 800s, when expansion likely occurred at the Weeden Island site and other Woodland period Gulf Coast sites. Perhaps this area could provide evidence supporting the reasoning for expansion and settlement reorganization. It would also be interesting to core this area, along with the rest of the northern ridge to obtain basal dates of midden construction. Another possible avenue of future research could be ceramic provenance studies to ascertain whether ceramics reflect a reverse transfer of ideas, people, etc. after resettling the site from the north near the end of the Weeden Island period. Last, I think a future direction for research could be the possible freshwater sources that people utilized and if they changed. Was the now extant spring to the south of the northern ridge a reason for moving to the south/eastern ridge? Was Boy Scout Lake the freshwater source for the south/eastern ridge and did it shrink during the late phases of the Safety Harbor period, causing gradual movement further south down the ridge? With interdisciplinary research of the Weeden Island site to answer environmental questions, as well as more focused archaeological endeavors, we will move closer toward a better understanding of the Weeden Island site and its inhabitants for academia and the public alike.

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APPENDICES

Appendix A: Supplemental Tables of Recovered Materials by Area.

Area 2

Table A1. Recovered materials from Area 2 by FS Number.

FS#	Site	Area	STP#	Level	Date	Species/ Artifact type	Whole#/ Weight	Partial#/ Weight	Frag#/ Weight	Valve(L/R):#/ Weight	Artifact#/ Weight	Comments
10	8PI1-6-7	2	1	5	3/8/19	Chert	—	—	—	—	2/0.12g	
11	8PI1-6-7	2	1	6	3/8/19	Chert	—	—	—	—	1/4.90g	
12	8PI1-6-7	2	1	7	3/8/19	Chert	—	—	—	—	1/1.82g	
13	8PI1-6-7	2	1	9	3/8/19	Chert	—	—	—	—	1/2.01g	
14	8PI1-6-7	2	1	10	3/8/19	Chert	—	—	—	—	1/0.68g	
15	8PI1-6-7	2	2	9	3/8/19	Chert	—	—	—	—	2/3.21g	
16	8PI1-6-7	2	2	10	3/8/19	Chert	—	—	—	—	1/2.29g	
17	8PI1-6-7	2	3	5	3/22/19	Chert	—	—	—	—	24/12.72g	
18	8PI1-6-7	2	3	6	3/22/19	Chert	—	—	—	—	4/4.01g	
19	8PI1-6-7	2	3	7	3/22/19	Chert	—	—	—	—	4/1.41g	
20	8PI1-6-7	2	3	8	3/22/19	Chert	—	—	—	—	3/1.62g	
21	8PI1-6-7	2	4	1	3/22/19	Chert	—	—	—	—	2/0.29g	
22	8PI1-6-7	2	4	2	3/22/19	Chert	—	—	—	—	1/0.26g	
23	8PI1-6-7	2	4	4	3/22/19	Chert	—	—	—	—	19/6.67g	
24	8PI1-6-7	2	4	5	3/22/19	Chert	—	—	—	—	44/34.57g	
25	8PI1-6-7	2	4	6	3/22/19	Chert	—	—	—	—	9/6.81g	
26	8PI1-6-7	2	4	7	3/22/19	Chert	—	—	—	—	4/5.01g	
27	8PI1-5-6	2	1	3	3/29/19	Chert	—	—	—	—	1/0.25g	
28	8PI1-5-6	2	1	4	3/29/19	Chert	—	—	—	—	8/3.52g	
29	8PI1-5-6	2	1	5	3/29/19	Chert	—	—	—	—	1/1.71g	
30	8PI1-5-6	2	1	6	3/29/19	Chert	—	—	—	—	1/2.04g	
31	8PI1-5-6	2	1	7	3/29/19	Chert	—	—	—	—	1/1.38g	
32	8PI1-5-6	2	1	9	3/29/19	Chert	—	—	—	—	1/0.53g	
33	8PI1-5-6	2	1	10	3/29/19	Chert	—	—	—	—	1/1.16g	
34	8PI1-5-6	2	2	1	3/29/19	*Crassostrea virginica*	—	—	10/21.32g	L:11/37.71g R:14/55.93g	—	
34	8PI1-5-6	2	2	1	3/29/19	*Melongena corona*	5/140.58g	5/124.32g	2/3.65g	—	—	
34	8PI1-5-6	2	2	1	3/29/19	*Busycon contrarium*	—	8/47.52g	12/27.85g	—	—	
34	8PI1-5-6	2	2	1	3/29/19	Modified *B. contrarium*	—	—	—	—	1/94.24g	

Table A1. (continued)

FS#	Site	Area	STP#	Level	Date	Species/ Artifact type	Whole#/ Weight	Partial#/ Weight	Frag#/ Weight	Valve(L/R):#/ Weight	Artifact#/ Weight	Comments
35	8PI1-5-6	2	2	2	3/29/19	*Melongena corona*	12/216.57g	15/128.12g	8/11.49g	—	—	
35	8PI1-5-6	2	2	2	3/29/19	*Neverita duplicata*	1/12.25g	—	—	—	—	
35	8PI1-5-6	2	2	2	3/29/19	*Fasciolaria lilium*	1/7.56g	5/25.71g	3/2.50g	—	—	
35	8PI1-5-6	2	2	2	3/29/19	*Mercenaria campechiensis*	—	—	2/23.88g	—	—	
35	8PI1-5-6	2	2	2	3/29/19	*Busycotypus spiratus*		2/9.94g	13/39.84g	—	—	
35	8PI1-5-6	2	2	2	3/29/19	*Crassostrea virginica*	—	—	84/95.27g	L:59/313.79g R:40/176.79g	—	
35	8PI1-5-6	2	2	2	3/29/19	*Busycon contrarium*	4/53.99g	16/132.44g	43/95.94g	—	—	
35	8PI1-5-6	2	2	2	3/29/19	*Crepidula fornicata*	1/0.11g	—		—	—	
35	8PI1-5-6	2	2	2	3/29/19	*Urosalpinx cinerea*	—	—	1/0.58g	—	—	
35	8PI1-5-6	2	2	2	3/29/19	Bone	—	—		—	3/0.22g	Fish bone
35	8PI1-5-6	2	2	2	3/29/19	Gastropod	—	—	23/17.33g	—	—	
35	8PI1-5-6	2	2	2	3/29/19	UID	—	—	11/4.55g	—	—	
36	8PI1-5-6	2	2	2	3/29/19	—	—	—	—	—	—	Soil
37	8PI1-5-6	2	2	3	3/29/19	*Fasciolaria lilium*	—	1/3.95g	—	—	—	
37	8PI1-5-6	2	2	3	3/29/19	*Melongena corona*	7/108.54g	8/251.26g	9/7.59g	—	—	
37	8PI1-5-6	2	2	3	3/29/19	*Crassostrea virginica*	—	—	43/31.44g	L:14/54.11g R:19/50.33g	—	
37	8PI1-5-6	2	2	3	3/29/19	*Mercenaria campechiensis*	—	—	3/91.58g	—	—	
37	8PI1-5-6	2	2	3	3/29/19	*Busycotypus spiratus*	—	2/9.66g	2/5.91g	—	—	
37	8PI1-5-6	2	2	3	3/29/19	*Busycon contrarium*	—	7/66.01g	38/62.63g	—	—	
37	8PI1-5-6	2	2	3	3/29/19	*Ostrea equestris*	—	—		L:1/0.92g	—	
37	8PI1-5-6	2	2	3	3/29/19	*Neverita duplicata*	—	—	2/1.04g	—	—	
37	8PI1-5-6	2	2	3	3/29/19	Bone	—	—		—	1/0.02g	Fish bone
37	8PI1-5-6	2	2	3	3/29/19	Gastropod	—	—	26/22.55g	—		
38	8PI1-5-6	2	2	3	3/29/19	—	—	—	—	—	—	Soil
39	8PI1-5-6	2	2	4	3/29/19	*Crassostrea virginica*	—	—	6/10.31g	L:7/15.16g R:10/52.65g	—	
39	8PI1-5-6	2	2	4	3/29/19	*Melongena corona*	1/8.52g	5/43.84g	1/1.57g	—	—	
39	8PI1-5-6	2	2	4	3/29/19	*Busycon contrarium*	—	8/29.07g	19/24.98g	—	—	
39	8PI1-5-6	2	2	4	3/29/19	*Neverita duplicata*	—	—	2/4.74g	—	—	
39	8PI1-5-6	2	2	4	3/29/19	*Mercenaria campechiensis*	—	—	6/194.89g	—	—	
39	8PI1-5-6	2	2	4	3/29/19	Sand-tempered plain sherd	—	—	—	—	1/1.58g	

Table A1. (continued)

FS#	Site	Area	STP#	Level	Date	Species/ Artifact type	Whole#/ Weight	Partial#/ Weight	Frag#/ Weight	Valve(L/R):#/ Weight	Artifact#/ Weight	Comments
40	8PI1-5-6	2	2	4	3/29/19	—	—	—	—	—	—	Soil
41	8PI1-5-6	2	2	5	3/29/19	*Crassostrea virginica*	—	—	8/13.09g	L:1/3.95g	—	
41	8PI1-5-6	2	2	5	3/29/19	*Melongena corona*	—	—	2/10.53g	—	—	
41	8PI1-5-6	2	2	5	3/29/19	*Busycon contrarium*	—	—	3/2.83g	—	—	
68	8PI1-5-6	2	2	6	5/22/19	*Crassostrea virginica*	—	—	—	R:1/8.00g	—	
69	8PI1-5-6	2	2	7	5/22/19	—	—	—	—	—	—	NCM
70	8PI1-5-6	2	2	8	5/22/19	Sand-tempered plain sherd	—	—	—	—	1/1.81g	
70	8PI1-5-6	2	2	8	5/22/19	Bone	—	—	—	—	1/0.21g	Fish bone
71	8PI1-5-6	2	2	9	5/22/19	*Crassostrea virginica*	—	—	—	L:1/7.00g	—	
72	8PI1-5-6	2	2	10	5/22/19	—	—	—	—	—	—	NCM

Area 3

Table A2. Recovered materials from Area 3 by FS Number.

FS#	Site	Area	STP#	Level	Date	Species/ Artifact type	Whole#/ Weight	Partial#/ Weight	Frag#/ Weight	Valve(L/R):#/ Weight	Artifact#/ Weight	Comments
1	8PI1-6-7	3	9	1	2/8/19	—	—	—	—	—	—	NCM
2	8PI1-6-7	3	9	2	2/8/19	—	—	—	—	—	—	NCM
3	8PI1-6-7	3	9	5	2/8/19	—	—	—	—	—	—	NCM
4	8PI1-6-7	3	9	9	2/8/19	—	—	—	—	—	—	NCM

Area 4

Table A3. Recovered materials from Area 4 by FS Number.

FS#	Site	Area	STP#	Level	Date	Species/ Artifact type	Whole#/ Weight	Partial#/ Weight	Frag#/ Weight	Valve(L/R):#/ Weight	Artifact#/ Weight	Comments
5	8PI1-6-7	4	1	5	2/15/19	—	—	—	—	—	—	NCM
6	8PI1-6-7	4	1	6	2/15/19	—	—	—	—	—	—	NCM
7	8PI1-6-7	4	2	4	2/15/19	—	—	—	—	—	—	NCM

Area 5

Table A4.Recovered materials from Area 5 by FS Number.

FS#	Site	Area	STP#	Level	Date	Species/Artifact type	Whole#/Weight	Partial#/Weight	Frag#/Weight	Valve(L/R):#/Weight	Artifact#/Weight	Comments
42	8PI1-6-7	5	1	1	April 12, 2019	*Fasciolaria lilium*	2/9.76g	2/6.55g	12/5.66g	—	—	
42	8PI1-6-7	5	1	1	April 12, 2019	*Busycotypus spiratus*	2/19.19g	3/19.45g	9.43g	—	—	
42	8PI1-6-7	5	1	1	April 12, 2019	*Busycon contrarium*	20/174.54g	54/296.04g	246.12g	—	—	
42	8PI1-6-7	5	1	1	April 12, 2019	*Melongena corona*	47/696.80g	53/369.01g	307.02g	—	—	
42	8PI1-6-7	5	1	1	April 12, 2019	*Neverita duplicata*	8/33.97g	11/48.55g	30.01g	—	—	
42	8PI1-6-7	5	1	1	April 12, 2019	*Crassostrea virginica*	—	—	431.24g	L:69/102.97g R:77/96.69g	—	
42	8PI1-6-7	5	1	1	April 12, 2019	*Anomalocardia puella*	2/0.69g	—	—	—	—	
42	8PI1-6-7	5	1	1	April 12, 2019	UID gastropod	—	—	316.66g	—	—	
42	8PI1-6-7	5	1	1	April 12, 2019	UID shell	—	—	77.52g	—	—	
42	8PI1-6-7	5	1	1	April 12, 2019	Bone	—	—	—	—	70/14.78g	Fish bone
42	8PI1-6-7	5	1	1	April 12, 2019	Otoliths	—	—	—	—	4/0.89g	2 A. felis, 2 C. nebulosus
42	8PI1-6-7	5	1	1	April 12, 2019	Modified M. corona	—	—	—	—	1/28.70g	
42	8PI1-6-7	5	1	1	April 12, 2019	*Geukensia granosissima*	—	—	9.67g	—	—	
42	8PI1-6-7	5	1	1	April 12, 2019	*Spisula solidissima*	—	—	6/1.07g	—	—	
42	8PI1-6-7	5	1	1	April 12, 2019	*Argopecten irradians*	—	—	2/0.34g	—	—	
42	8PI1-6-7	5	1	1	April 12, 2019	Cirripedia (Barnacle)	—	—	6/0.52g	—	—	
42	8PI1-6-7	5	1	1	April 12, 2019	*Macrocallista nimbosa*	—	—	1/0.93g	—	—	
42	8PI1-6-7	5	1	1	April 12, 2019	UID bivalve	—	—	3/2.34g	—	—	
43	8PI1-6-7	5	1	2	April 12, 2019	*Busycotypus spiratus*	7/40.01g	9/42.99g	9/7.13g	—	—	
43	8PI1-6-7	5	1	2	April 12, 2019	*Fasciolaria lilium*	—	1/3.23g	1/1.27g	—	—	
43	8PI1-6-7	5	1	2	April 12, 2019	*Cynoscion nebulosus otolith*	—	—	—	—	1/0.33g	
43	8PI1-6-7	5	1	2	April 12, 2019	Cirripedia (Barnacle)	1/0.32g	—	1/0.02g	—	—	
43	8PI1-6-7	5	1	2	April 12, 2019	*Carditamera floridana*	—	—	1/1.24g	—	—	
43	8PI1-6-7	5	1	2	April 12, 2019	*Crassostrea virginica*	—	—	155.06g	L:73/274.86g R:61/220.20g	—	
43	8PI1-6-7	5	1	2	April 12, 2019	*Cerithium atratum*	—	1/0.13g	—	—	—	
43	8PI1-6-7	5	1	2	April 12, 2019	*Anomalocardia puella*	2/0.08g	—	2/0.05g	—	—	
43	8PI1-6-7	5	1	2	April 12, 2019	*Mercenaria campechiensis*	—	—	1/1.49g	—	—	
43	8PI1-6-7	5	1	2	April 12, 2019	*Melongena corona*	10/135.48g	12/166.91g	12/48.84g	—	—	

Table A4. (continued)

FS#	Site	Area	STP#	Level	Date	Species/Artifact type	Whole#/Weight	Partial#/Weight	Frag#/Weight	Valve(L/R):#/Weight	Artifact#/Weight	Comments
43	8PI1-6-7	5	1	2	April 12, 2019	*Busycon contrarium*	12/113.41g	6/42.88g	84.26g	—	—	
43	8PI1-6-7	5	1	2	April 12, 2019	*Neverita duplicata*	4/17.86g	3/15.18g	30.00g	—	—	
43	8PI1-6-7	5	1	2	April 12, 2019	Bone	—	—	—	—	8/2.79g	Fish bone
43	8PI1-6-7	5	1	2	April 12, 2019	UID gastropod	—	—	27.87g	—	—	
43	8PI1-6-7	5	1	2	April 12, 2019	UID bivalve	—	—	0.75g	—	—	
43	8PI1-6-7	5	1	2	April 12, 2019	*Geukensia granosissima*	—	—	32.67g	—	—	
44	8PI1-6-7	5	1	3	April 12, 2019	Pottery	—	—	—	—	1/1.64g	
44	8PI1-6-7	5	1	3	April 12, 2019	*Mercenaria campechiensis*	—	—	2/5.72g	—	—	
44	8PI1-6-7	5	1	3	April 12, 2019	*Argopecten irradians*	—	—	1/0.17g	—	—	
44	8PI1-6-7	5	1	3	April 12, 2019	Cirripedia (Barnacle)	2/0.12g	—	5/0.36g	—	—	
44	8PI1-6-7	5	1	3	April 12, 2019	*Anomalocardia puella*	5/0.56g	—	6/1.01g	—	—	
44	8PI1-6-7	5	1	3	April 12, 2019	*Crepidula fornicata*	—	1/0.20g	—	—	—	
44	8PI1-6-7	5	1	3	April 12, 2019	*Ariopsis felis* otolith	—	—	—	—	5/1.31g	
44	8PI1-6-7	5	1	3	April 12, 2019	*Cerithium atratum*	1/0.38g	—	—	—	—	
44	8PI1-6-7	5	1	3	April 12, 2019	Bone	—	—	—	—	105/14.76g	Fish bone
44	8PI1-6-7	5	1	3	April 12, 2019	*Fasciolaria lilium*	4/25.71g	2/5.34g	35/23.94g	—	—	
44	8PI1-6-7	5	1	3	April 12, 2019	*Melongena corona*	23/358.66g	35/134.40g	150.73g	—	—	
44	8PI1-6-7	5	1	3	April 12, 2019	*Busycon contrarium*	20/123.87g	19/124.54g	283.14g	—	—	
44	8PI1-6-7	5	1	3	April 12, 2019	*Neverita duplicata*	3/13.23g	18/73.84g	58.81g	—	—	
44	8PI1-6-7	5	1	3	April 12, 2019	*Busycotypus spiratus*	9/45.56g	1/9.74g	10.45g	—	—	
44	8PI1-6-7	5	1	3	April 12, 2019	*Crassostrea virginica*	—	—	203.64g	L:96/226.14g R:81/156.10g	—	
44	8PI1-6-7	5	1	3	April 12, 2019	*Geukensia granosissima*	—	—	17.47g	—	—	
44	8PI1-6-7	5	1	3	April 12, 2019	*Busycon carica*	—	—	1/2.99g	—	—	
44	8PI1-6-7	5	1	3	April 12, 2019	UID bivalve	—	—	2/0.15g	—	—	
44	8PI1-6-7	5	1	3	April 12, 2019	UID gastropod	—	—	75.97g	—	—	
44	8PI1-6-7	5	1	3	April 12, 2019	UID shell	—	—	156.26g	—	—	
45	8PI1-6-7	5	1	4	April 12, 2019	*Nassarius* sp.	—	—	1/0.18g	—	—	
45	8PI1-6-7	5	1	4	April 12, 2019	*Macrocallista nimbosa*	—	—	1/0.92g	—	—	

Table A4. (continued)

FS#	Site	Area	STP#	Level	Date	Species/Artifact type	Whole#/Weight	Partial#/Weight	Frag#/Weight	Valve(L/R):#/Weight	Artifact#/Weight	Comments
45	8PI1-6-7	5	1	4	April 12, 2019	*Donax variabilis*	—	—	2/0.05g	—	—	
45	8PI1-6-7	5	1	4	April 12, 2019	*Spisula solidissima*	—	—	1/0.13g	—	—	
45	8PI1-6-7	5	1	4	April 12, 2019	*Busycotypus spiratus*	—	—	3/6.22g	—	—	
45	8PI1-6-7	5	1	4	April 12, 2019	*Crassostrea virginica*	—	—	34.79g	L:4/9.71g R:11/20.37g	—	
45	8PI1-6-7	5	1	4	April 12, 2019	*Geukensia granosissima*	—	—	18.61g	—	—	
45	8PI1-6-7	5	1	4	April 12, 2019	*Busycon contrarium*	6/63.88g	6/53.44g	18.41g	—	—	
45	8PI1-6-7	5	1	4	April 12, 2019	*Neverita duplicata*	—	1/3.92g	3/0.56g	—	—	
45	8PI1-6-7	5	1	4	April 12, 2019	*Fasciolaria lilium*	—	—	11/6.59g	—	—	
45	8PI1-6-7	5	1	4	April 12, 2019	*Anomalocardia puella*	1/0.05g	—	—	—	—	
45	8PI1-6-7	5	1	4	April 12, 2019	*Melongena corona*	12/108.35g	11/22.26g	15.77g	—	—	
45	8PI1-6-7	5	1	4	April 12, 2019	UID gastropod	—	—	48.64g	—	—	
45	8PI1-6-7	5	1	4	April 12, 2019	UID shell	—	—	7.62g	—	—	
45	8PI1-6-7	5	1	4	April 12, 2019	Bone	—	—	—	—	79/12.55g	Fish bone
46	8PI1-6-7	5	1	5	April 12, 2019	*Crassostrea virginica*	—	—	—	L:1/1.85g R:3/10.69g	—	
46	8PI1-6-7	5	1	5	April 12, 2019	*Melongena corona*	2/39.51g	3/5.19g	1/0.79g	—	—	
46	8PI1-6-7	5	1	5	April 12, 2019	*Busycon contrarium*	—	3/13.61g	1/0.66g	—	—	
46	8PI1-6-7	5	1	5	April 12, 2019	Bone	—	—	—	—	9/1.69g	Fish bone
47	8PI1-6-7	5	1	7	April 12, 2019	*Crassostrea virginica*	—	—	9/5.46g	L:1/6.64g	—	
47	8PI1-6-7	5	1	7	April 12, 2019	*Busycon contrarium*	—	—	2/1.97g	—	—	
48	8PI1-6-7	5	1	8	April 12, 2019	*Crassostrea virginica*	—	—	4/3.64g	—	—	
48	8PI1-6-7	5	1	8	April 12, 2019	*Melongena corona*	—	—	1/8.17g	—	—	
48	8PI1-6-7	5	1	8	April 12, 2019	*Busycon contrarium*	—	1/7.56g	2/0.46g	—	—	
48	8PI1-6-7	5	1	8	April 12, 2019	*Neverita duplicata*	—	—	1/1.12g	—	—	
48	8PI1-6-7	5	1	8	April 12, 2019	Chert	—	—	—	—	2/5.21g	
49	8PI1-6-7	5	1	9	April 12, 2019	*Crassostrea virginica*	—	—	4/3.69g	L:2/11.37g	—	
49	8PI1-6-7	5	1	9	April 12, 2019	*Busycon contrarium*	2/13.56g	—	—	—	—	
49	8PI1-6-7	5	1	9	April 12, 2019	*Neverita duplicata*	1/2.95g	—	—	—	—	
50	8PI1-6-7	5	1	10	April 12, 2019	—	—	—	—	—	—	NCM

Table A4. (continued)

FS#	Site	Area	STP#	Level	Date	Species/Artifact type	Whole#/Weight	Partial#/Weight	Frag#/Weight	Valve(L/R):#/Weight	Artifact#/Weight	Comments
51	8PI1-6-7	5	2	1	April 12, 2019	*Fasciolaria lilium*	1/4.31g	3/11.99g	2/1.55g	—	—	
51	8PI1-6-7	5	2	1	April 12, 2019	Iron concretion	—	—	—	—	1/1.95g	
51	8PI1-6-7	5	2	1	April 12, 2019	Sand-tempered plain sherd	—	—	—	—	2/3.17g	1 rim; 1 body sherd
51	8PI1-6-7	5	2	1	April 12, 2019	*Argopecten irradians*	—	—	1/0.03g	—	—	
51	8PI1-6-7	5	2	1	April 12, 2019	*Polygyra* sp.	2/0.21g	—		—	—	
51	8PI1-6-7	5	2	1	April 12, 2019	*Mercenaria campechiensis*	—	—	4/109.70g	—	—	
51	8PI1-6-7	5	2	1	April 12, 2019	*Geukensia granosissima*	—	—	0.85g	—	—	
51	8PI1-6-7	5	2	1	April 12, 2019	*Ariopsis felis* otolith	—	—	—	—	1/0.49g	
51	8PI1-6-7	5	2	1	April 12, 2019	Bone	—	—	—	—	16/1.36g	Fish bone
51	8PI1-6-7	5	2	1	April 12, 2019	*Busycotypus spiratus*	3/33.82g	7/34.87g	33.34g	—	—	
51	8PI1-6-7	5	2	1	April 12, 2019	*Neverita duplicata*	9/53.96g	29/92.31g	73.29g	—	—	
51	8PI1-6-7	5	2	1	April 12, 2019	*Crassostrea virginica*	—	—	124.97g	L:51/94.84g R:44/60.07g	—	
51	8PI1-6-7	5	2	1	April 12, 2019	*Busycon contrarium*	36/223.04g	60/304.81g	247.42g	—	—	
51	8PI1-6-7	5	2	1	April 12, 2019	*Melongena corona*	87/1360.13g	63/412.22g	162.79g	—	—	
51	8PI1-6-7	5	2	1	April 12, 2019	UID gastropod	—	—	248.96g	—	—	
51	8PI1-6-7	5	2	1	April 12, 2019	UID shell	—	—	91.86g	—	—	
52	8PI1-6-7	5	2	2	April 12, 2019	Pottery	—	—	—	—	1/6.87g	
52	8PI1-6-7	5	2	2	April 12, 2019	Bone	—	—	—	—	1/0.11g	
52	8PI1-6-7	5	2	2	April 12, 2019	*Busycotypus spiratus*	2/22.16g	1/5.96g	2/9.02g	—	—	
52	8PI1-6-7	5	2	2	April 12, 2019	*Neverita duplicata*	—	6/31.41g	2/1.41g	—	—	
52	8PI1-6-7	5	2	2	April 12, 2019	*Fasciolaria lilium*	1/15.13g	1/11.23g	1/0.45g	—	—	
52	8PI1-6-7	5	2	2	April 12, 2019	*Crassostrea virginica*	—	—	—	R:3/15.71g	—	
52	8PI1-6-7	5	2	2	April 12, 2019	*Melongena corona*	71/861.33g	47/338.24	12/55.11g	—	—	
52	8PI1-6-7	5	2	2	April 12, 2019	*Busycon contrarium*	29/221.23g	31/257.66g	8/35.69g	—	—	
53	8PI1-6-7	5	2	3	April 12, 2019	*Crassostrea virginica*	—	—	—	L:3/3.79g R:1/3.13g	—	
53	8PI1-6-7	5	2	3	April 12, 2019	*Melongena corona*	8/119.77g	5/20.04g	2/5.35g	—	—	
53	8PI1-6-7	5	2	3	April 12, 2019	*Busycon contrarium*	10/123.89g	6/41.54g	3/8.28g	—	—	
53	8PI1-6-7	5	2	3	April 12, 2019	*Neverita duplicata*	—	3/18.72g	3/5.24g	—	—	
53	8PI1-6-7	5	2	3	April 12, 2019	*Busycotypus spiratus*	—	—	2/4.87g	—	—	
53	8PI1-6-7	5	2	3	April 12, 2019	Chert	—	—	—	—	1/8.67g	

Table A4. (continued)

FS#	Site	Area	STP#	Level	Date	Species/Artifact type	Whole#/Weight	Partial#/Weight	Frag#/Weight	Valve(L/R):#/Weight	Artifact#/Weight	Comments
54	8PI1-6-7	5	2	4	April 12, 2019	*Melongena corona*	7/83.64g	4/39.36g	2/4.61g	—	—	
54	8PI1-6-7	5	2	4	April 12, 2019	*Busycon contrarium*	7/47.14g	8/53.06g	1/3.61g	—	—	
54	8PI1-6-7	5	2	4	April 12, 2019	*Neverita duplicata*	—	1/2.41g	—	—	—	
54	8PI1-6-7	5	2	4	April 12, 2019	*Busycotypus spiratus*	—	1/1.95g	—	—	—	
55	8PI1-6-7	5	2	5	April 12, 2019	*Melongena corona*	2/21.14g	2/47.31g	—	—	—	
55	8PI1-6-7	5	2	5	April 12, 2019	*Busycon contrarium*	5/32.87g	1/4.19g	2/2.24g	—	—	
55	8PI1-6-7	5	2	5	April 12, 2019	*Busycotypus spiratus*	—	1/4.69g	—	—	—	
56	8PI1-6-7	5	3	1	May 16, 2019	*Busycon contrarium*	8/120.00g	—	—	—	—	
56	8PI1-6-7	5	3	1	May 16, 2019	*Melongena corona*	7/110.00g	—	—	—	—	
56	8PI1-6-7	5	3	1	May 16, 2019	*Neverita duplicata*	7/30.00g	—	—	—	—	
56	8PI1-6-7	5	3	1	May 16, 2019	Sand-tempered plain sherd	—	—	—	—	4/22.19g	
56	8PI1-6-7	5	3	1	May 16, 2019	Bone	—	—	—	—	10/3.21g	Fish bone
56	8PI1-6-7	5	3	1	May 16, 2019	*Ariopsis felis* Otolith	—	—	—	—	7/3.95g	
56	8PI1-6-7	5	3	1	May 16, 2019	*Crassostrea virginica*	—	—	—	L:95/422.05g R:59/280.00g	—	
57	8PI1-6-7	5	3	2	May 16, 2019	Sand-tempered plain sherd	—	—	—	—	4/20.58g	
57	8PI1-6-7	5	3	2	May 16, 2019	*Busycon contrarium*	19/260.00g	—	—	—	—	
57	8PI1-6-7	5	3	2	May 16, 2019	*Melongena corona*	13/305.00g	—	—	—	—	
57	8PI1-6-7	5	3	2	May 16, 2019	*Neverita duplicata*	10/80.00g	—	—	—	—	
57	8PI1-6-7	5	3	2	May 16, 2019	Bone	—	—	—	—	22/6.04g	Fish bone
57	8PI1-6-7	5	3	2	May 16, 2019	*Ariopsis felis* Otolith	—	—	—	—	9/4.22g	
57	8PI1-6-7	5	3	2	May 16, 2019	*Crassostrea virginica*	—	—	—	L:24/165.73g R:4/20.00g	—	
58	8PI1-6-7	5	3	3	May 16, 2019	*Busycon contrarium*	31/350.00g	—	—	—	—	
58	8PI1-6-7	5	3	3	May 16, 2019	*Melongena corona*	13/150.00g	—	—	—	—	
58	8PI1-6-7	5	3	3	May 16, 2019	*Neverita duplicata*	30/210.00g	—	—	—	—	
58	8PI1-6-7	5	3	3	May 16, 2019	*Busycotypus spiratus*	3/45.00g	—	—	—	—	
58	8PI1-6-7	5	3	3	May 16, 2019	Sand-tempered plain sherd	—	—	—	—	6/25.75g	
58	8PI1-6-7	5	3	3	May 16, 2019	Bone	—	—	—	—	121/26.85g	Fish bone
58	8PI1-6-7	5	3	3	May 16, 2019	*Ariopsis felis* Otolith	—	—	—	—	27/11.97g	

Table A4. (continued)

FS#	Site	Area	STP#	Level	Date	Species/Artifact type	Whole#/Weight	Partial#/Weight	Frag#/Weight	Valve(L/R):#/Weight	Artifact#/Weight	Comments
58	8PI1-6-7	5	3	3	May 16, 2019	*Sciaenops ocellatus* Otolith	—	—	—	—	2/1.19g	
58	8PI1-6-7	5	3	3	May 16, 2019	Sm. Terr. Mammal bone	—	—	—	—	5/4.02g	
58	8PI1-6-7	5	3	3	May 16, 2019	*Crassostrea virginica*	—	—	—	L:35/246.03g R:28/150.00g	—	
59	8PI1-6-7	5	3	4	May 16, 2019	*Busycon contrarium*	24/365.00g	—	—	—	—	
59	8PI1-6-7	5	3	4	May 16, 2019	*Melongena corona*	17/235.00g	—	—	—	—	
59	8PI1-6-7	5	3	4	May 16, 2019	*Neverita duplicata*	55/270.00g	—	—	—	—	
59	8PI1-6-7	5	3	4	May 16, 2019	*Busycotypus spiratus*	2/25.00g	—	—	—	—	
59	8PI1-6-7	5	3	4	May 16, 2019	Sand-tempered plain sherd	—	—	—	—	11/49.10g	
59	8PI1-6-7	5	3	4	May 16, 2019	Bone	—	—	—	—	143/22.56g	Fish bone
59	8PI1-6-7	5	3	4	May 16, 2019	*Ariopsis felis* Otoliths	—	—	—	—	17/8.04g	
59	8PI1-6-7	5	3	4	May 16, 2019	*Cynoscion nebulosus* Otolith	—	—	—	—	3/1.58g	
59	8PI1-6-7	5	3	4	May 16, 2019	Med. Terr. Mammal bone	—	—	—	—	3/11.32g	
59	8PI1-6-7	5	3	4	May 16, 2019	Chert	—	—	—	—	3/9.96g	
59	8PI1-6-7	5	3	4	May 16, 2019	*Crassostrea virginica*	—	—	—	L:3/20.00g R:12/78.21g	—	
60	8PI1-6-7	5	3	5	May 21, 2019	Sand-tempered plain sherd	—	—	—	—	8/34.01g	
60	8PI1-6-7	5	3	5	May 21, 2019	Bone	—	—	—	—	113/17.92g	Fish bone
60	8PI1-6-7	5	3	5	May 21, 2019	*Ariopsis felis* Otoliths	—	—	—	—	3/1.36g	
60	8PI1-6-7	5	3	5	May 21, 2019	Sm. Terr. Mammal bone	—	—	—	—	9/8.10g	
60	8PI1-6-7	5	3	5	May 21, 2019	Bead	—	—	—	—	1/0.61g	
60	8PI1-6-7	5	3	5	May 21, 2019	Crab claw	—	—	—	—	5/4.42g	
60	8PI1-6-7	5	3	5	May 21, 2019	*Busycotypus spiratus*	7/75.00g	—	—	—	—	
60	8PI1-6-7	5	3	5	May 21, 2019	*Neverita duplicata*	40/670.00g	—	—	—	—	
60	8PI1-6-7	5	3	5	May 21, 2019	*Crassostrea virginica*	—	—	—	L:5/12.47g R:7/35.01g	—	
60	8PI1-6-7	5	3	5	May 21, 2019	*Melongena corona*	17/609.23g	—	1/1.60g	—	—	
60	8PI1-6-7	5	3	5	May 21, 2019	*Busycon contrarium*	26/830.00g	—	1/0.65g	—	—	
60	8PI1-6-7	5	3	5	May 21, 2019	*Geukensia granosissima*	—	—	4/3.77g	—	—	
60	8PI1-6-7	5	3	5	May 21, 2019	Cirripedia (Barnacle)	—	—	6/1.47g	—	—	
60	8PI1-6-7	5	3	5	May 21, 2019	*Hexaplex fulvescens*	1/15.21g	—	—	—	—	

Table A4. (continued)

FS#	Site	Area	STP#	Level	Date	Species/Artifact type	Whole#/Weight	Partial#/Weight	Frag#/Weight	Valve(L/R):#/Weight	Artifact#/Weight	Comments
61	8PI1-6-7	5	3	6	May 21, 2019	Sand-tempered plain sherd	—	—	—	—	1/3.17g	
61	8PI1-6-7	5	3	6	May 21, 2019	Bone	—	—	—	—	78/10.91g	Fish bone
61	8PI1-6-7	5	3	6	May 21, 2019	*Ariopsis felis* Otoliths	—	—	—	—	4/1.32g	
61	8PI1-6-7	5	3	6	May 21, 2019	Sm. Terr. Mammal bone	—	—	—	—	2/0.82g	
61	8PI1-6-7	5	3	6	May 21, 2019	Bead	—	—	—	—	1/0.70g	
61	8PI1-6-7	5	3	6	May 21, 2019	Crab claw	—	—	—	—	1/0.23g	
61	8PI1-6-7	5	3	6	May 21, 2019	Turtle shell	—	—	—	—	1/13.04g	
61	8PI1-6-7	5	3	6	May 21, 2019	*Sciaenops ocellatus* Otolith	—	—	—	—	1/0.39g	
61	8PI1-6-7	5	3	6	May 21, 2019	Cirripedia (Barnacle)	—	—	—	—	1/0.21g	
61	8PI1-6-7	5	3	6	May 21, 2019	*Busycotypus spiratus*	2/10.00g	—	—	—	—	
61	8PI1-6-7	5	3	6	May 21, 2019	*Neverita duplicata*	16/80.00g	—	—	—	—	
61	8PI1-6-7	5	3	6	May 21, 2019	*Busycon contrarium*	14/200.00g	—	—	—	—	
61	8PI1-6-7	5	3	6	May 21, 2019	*Crassostrea virginica*	—	—	—	L:5/35.52g R:4/28.92g	—	
61	8PI1-6-7	5	3	6	May 21, 2019	*Melongena corona*	3/20.00g	—	2/13.91g	—	—	
62	8PI1-6-7	5	3	7	May 21, 2019	*Busycon contrarium*	2/40.00g	—	—	—	—	
62	8PI1-6-7	5	3	7	May 21, 2019	*Melongena corona*	1/10.00g	—	—	—	—	
62	8PI1-6-7	5	3	7	May 21, 2019	*Neverita duplicata*	4/30.00g	—	—	—	—	
62	8PI1-6-7	5	3	7	May 21, 2019	Chert	—	—	—	—	7/18.02g	
62	8PI1-6-7	5	3	7	May 21, 2019	Bone	—	—	—	—	50/8.09g	Fish bone
62	8PI1-6-7	5	3	7	May 21, 2019	*Ariopsis felis* Otoliths	—	—	—	—	3/1.02g	
63	8PI1-6-7	5	3	8	May 21, 2019	Chert	—	—	—	—	23/26.99g	
63	8PI1-6-7	5	3	8	May 21, 2019	*Ariopsis felis* Otoliths	—	—	—	—	1/0.32g	
63	8PI1-6-7	5	3	8	May 21, 2019	Cirripedia (Barnacle)	—	—	—	—	1/0.26g	
63	8PI1-6-7	5	3	8	May 21, 2019	Bone	—	—	—	—	9/1.51g	Fish bone
63	8PI1-6-7	5	3	8	May 21, 2019	*Melongena corona*	1/60.00g	—	—	—	—	
63	8PI1-6-7	5	3	8	May 21, 2019	*Crassostrea virginica*	—	—	—	L:1/10.00g	—	
63	8PI1-6-7	5	3	8	May 21, 2019	*Busycon contrarium*	1/20.00g	—	1/1.21g	—	—	
64	8PI1-6-7	5	3	9	May 21, 2019	Chert	—	—	—	—	93/120.02g	

Table A4. (continued)

FS#	Site	Area	STP#	Level	Date	Species/Artifact type	Whole#/Weight	Partial#/Weight	Frag#/Weight	Valve(L/R):#/Weight	Artifact#/Weight	Comments
65	8PI1-6-7	5	3	10	May 21, 2019	Chert	—	—	—	—	36/16.34g	
65	8PI1-6-7	5	3	10	May 21, 2019	Sandstone	—	—	—	—	1/9.62g	
65	8PI1-6-7	5	3	10	May 21, 2019	WI Incised sherd	—	—	—	—	1/5.51g	Rim sherd
65	8PI1-6-7	5	3	10	May 21, 2019	*Neverita duplicata*	1/4.21g	—	—	—	—	
66	8PI1-6-7	5	3	11	May 21, 2019	Chert	—	—	—	—	13/6.58g	
66	8PI1-6-7	5	3	11	May 21, 2019	Crab claw	—	—	—	—	1/0.47g	
67	8PI1-6-7	5	3	12	May 21, 2019	Chert	—	—	—	—	1/0.98g	
67	8PI1-6-7	5	3	12	May 21, 2019	Sand-tempered plain sherd	—	—	—	—	1/7.48g	
73	8PI1-6-7	5	4	1	May 28, 2019	*Neverita duplicata*	6/59.24g	—	—	—	—	
73	8PI1-6-7	5	4	1	May 28, 2019	*Melongena corona*	52/1428.22g	—	—	—	—	
73	8PI1-6-7	5	4	1	May 28, 2019	*Busycotypus spiratus*	8/83.15g	—	—	—	—	
73	8PI1-6-7	5	4	1	May 28, 2019	*Crassostrea virginica*	—	—	—	L:39/308.01g R:11/55.56g	—	
73	8PI1-6-7	5	4	1	May 28, 2019	*Busycon contrarium*	93/1320.00g	1/9.40g	—	—	—	
73	8PI1-6-7	5	4	1	May 28, 2019	Sand-tempered plain sherd	—	—	—	—	6/17.90g	
73	8PI1-6-7	5	4	1	May 28, 2019	Modified *B. contrarium*	—	—	—	—	2/134.55	Columnella tools?
73	8PI1-6-7	5	4	1	May 28, 2019	Bone	—	—	—	—	3/0.83g	Fish bone
74	8PI1-6-7	5	4	2	May 28, 2019	*Busycon contrarium*	113/1465.96g	—	1/1.42g	—	—	
74	8PI1-6-7	5	4	2	May 28, 2019	*Melongena corona*	34/700.00g	1/10.43g	—	—	—	
74	8PI1-6-7	5	4	2	May 28, 2019	*Crassostrea virginica*	—	—	—	L:148/923.59g R:52/736.80g	—	
74	8PI1-6-7	5	4	2	May 28, 2019	*Neverita duplicata*	3/35.00g	—	—	—	—	
74	8PI1-6-7	5	4	2	May 28, 2019	Bone	—	—		—	1/0.63g	Fish bone
74	8PI1-6-7	5	4	2	May 28, 2019	UID gastropod	—	—	1/1.43g	—	—	
74	8PI1-6-7	5	4	2	May 28, 2019	*Busycotypus spiratus*	26/240.00g	—	—	—	—	
75	8PI1-6-7	5	4	3	May 28, 2019	*Busycon contrarium*	118/1370.00g	—	—	—	—	
75	8PI1-6-7	5	4	3	May 28, 2019	*Melongena corona*	38/710.00g	—	—	—	—	
75	8PI1-6-7	5	4	3	May 28, 2019	*Crassostrea virginica*	—	—	—	L:98/427.81g R:33/178.01g	—	
75	8PI1-6-7	5	4	3	May 28, 2019	*Neverita duplicata*	10/35.00g	—	—	—	—	
75	8PI1-6-7	5	4	3	May 28, 2019	*Busycotypus spiratus*	26/215.00g	—	—	—	—	
75	8PI1-6-7	5	4	3	May 28, 2019	Chert	—	—	—	—	1/69.94g	

Table A4. (continued)

FS#	Site	Area	STP#	Level	Date	Species/Artifact type	Whole#/Weight	Partial#/Weight	Frag#/Weight	Valve(L/R):#/Weight	Artifact#/Weight	Comments
75	8PI1-6-7	5	4	3	May 28, 2019	*Geukensia granosissima*	—	—	8.89g	—	—	
75	8PI1-6-7	5	4	3	May 28, 2019	Bone	—	—	—	—	6/2.63g	Fish bone
75	8PI1-6-7	5	4	3	May 28, 2019	*Mercenaria campechiensis*	1/171.71g	—	1/77.34g	—	—	
76	8PI1-6-7	5	4	4	May 29, 2019	*Busycon contrarium*	118/1370.00g	1/7.26g	—	—	—	
76	8PI1-6-7	5	4	4	May 29, 2019	*Melongena corona*	75/1320.00g	—	—	—	—	
76	8PI1-6-7	5	4	4	May 29, 2019	*Crassostrea virginica*	—	—	—	L:104/556.84g R:26/146.00g	—	
76	8PI1-6-7	5	4	4	May 29, 2019	*Neverita duplicata*	33/200.00g	—	—	—	—	
76	8PI1-6-7	5	4	4	May 29, 2019	*Busycotypus spiratus*	21/175.00g	—	—	—	—	
76	8PI1-6-7	5	4	4	May 29, 2019	Charcoal	—	—	4.69g	—	—	
76	8PI1-6-7	5	4	4	May 29, 2019	*Macrocallista nimbosa*	—	—	2/13.73g	—	—	
76	8PI1-6-7	5	4	4	May 29, 2019	UID gastropod	—	—	1/1.84g	—	—	
76	8PI1-6-7	5	4	4	May 29, 2019	*Geukensia granosissima*	—	—	2.88g	—	—	
76	8PI1-6-7	5	4	4	May 29, 2019	Bone	—	—	—	—	157/38.07g	fish bone, turtle, sm. mammal jaw, sm.mammal long bone frag
76	8PI1-6-7	5	4	4	May 29, 2019	*Ariopsis felis* otolith	—	—	—	—	10/3.92g	
76	8PI1-6-7	5	4	4	May 29, 2019	Sand-tempered plain sherd	—	—	—	—	1/0.89g	Body sherd
76	8PI1-6-7	5	4	4	May 29, 2019	Iron concretion	—	—	—	—	1/0.76g	
77	8PI1-6-7	5	4	5	May 29, 2019	*Busycon contrarium*	101/1025.00g	—	—	—	—	
77	8PI1-6-7	5	4	5	May 29, 2019	*Melongena corona*	45/780.00g	—	—	—	—	
77	8PI1-6-7	5	4	5	May 29, 2019	*Crassostrea virginica*	—	—	—	L:34/160.28g R:14/88.87g	—	
77	8PI1-6-7	5	4	5	May 29, 2019	*Neverita duplicata*	15/60.00g	—	—	—	—	
77	8PI1-6-7	5	4	5	May 29, 2019	*Busycotypus spiratus*	5/35.00g	—	—	—	—	
77	8PI1-6-7	5	4	5	May 29, 2019	Bone	—	—	—	—	12/24.93g	mammal long bone, fish, turtle
77	8PI1-6-7	5	4	5	May 29, 2019	*Ariopsis felis* otolith	—	—	—	—	5/1.65g	
77	8PI1-6-7	5	4	5	May 29, 2019	UID shell	—	—	1/7.49g	—	—	
77	8PI1-6-7	5	4	5	May 29, 2019	UID gastropod	—	—	1/5.63g	—	—	
77	8PI1-6-7	5	4	5	May 29, 2019	*Geukensia granosissima*	—	—	7.48g	—	—	
77	8PI1-6-7	5	4	5	May 29, 2019	Sand-tempered plain sherd	—	—	—	—	3/20.56g	Body sherds
78	8PI1-6-7	5	4	6	May 29, 2019	*Busycon contrarium*	43/510.00g	—	1/24.96g	—	—	
78	8PI1-6-7	5	4	6	May 29, 2019	*Melongena corona*	30/450.00g	—	—	—	—	

Table A4. (continued)

FS#	Site	Area	STP#	Level	Date	Species/Artifact type	Whole#/Weight	Partial#/Weight	Frag#/Weight	Valve(L/R):#/Weight	Artifact#/Weight	Comments
78	8PI1-6-7	5	4	6	May 29, 2019	*Crassostrea virginica*	—	—	—	L:20/94.59g R:9/55.00g	—	
78	8PI1-6-7	5	4	6	May 29, 2019	*Neverita duplicata*	4/45.00g	—	—	—	—	
78	8PI1-6-7	5	4	6	May 29, 2019	*Busycotypus spiratus*	2/60.00g	—	—	—	—	
78	8PI1-6-7	5	4	6	May 29, 2019	*Mercenaria campechiensis*	—	—	1/24.74g	—	—	
78	8PI1-6-7	5	4	6	May 29, 2019	Bone	—	—	—	—	11/2.26g	fish bone
78	8PI1-6-7	5	4	6	May 29, 2019	*Ariopsis felis* otolith	—	—	—	—	1/0.62g	
79	8PI1-6-7	5	4	7	May 29, 2019	*Busycon contrarium*	7/85.00g	—	—	—	—	
79	8PI1-6-7	5	4	7	May 29, 2019	*Melongena corona*	6/110.00g	—	—	—	—	
79	8PI1-6-7	5	4	7	May 29, 2019	*Crassostrea virginica*	—	—	—	L:2/14.40g	—	
79	8PI1-6-7	5	4	7	May 29, 2019	*Neverita duplicata*	1/10.00g	—	—	—	—	
79	8PI1-6-7	5	4	7	May 29, 2019	*Busycotypus spiratus*	1/10.00g	—	—	—	—	
79	8PI1-6-7	5	4	7	May 29, 2019	Charcoal	—	—	—	—	1.36g	
79	8PI1-6-7	5	4	7	May 29, 2019	Bone	—	—	—	—	3/0.54g	fish bone
79	8PI1-6-7	5	4	7	May 29, 2019	*Ariopsis felis* otolith	—	—	—	—	2/0.55g	
80	8PI1-6-7	5	4	8	May 29, 2019	*Busycon contrarium*	8/105.00g	—	—	—	—	
80	8PI1-6-7	5	4	8	May 29, 2019	*Melongena corona*	4/45.00g	—	—	—	—	
80	8PI1-6-7	5	4	8	May 29, 2019	*Crassostrea virginica*	—	—	—	L:7/65.09g R:1/7.60g	—	
80	8PI1-6-7	5	4	8	May 29, 2019	*Neverita duplicata*	1/30.00g	—	—	—	—	
80	8PI1-6-7	5	4	8	May 29, 2019	*Ariopsis felis* otolith	—	—	—	—	1/0.29g	
80	8PI1-6-7	5	4	8	May 29, 2019	Bone	—	—	—	—	1/0.09g	fish bone
80	8PI1-6-7	5	4	8	May 29, 2019	Chert	—	—	—	—	1/1.82g	
81	8PI1-6-7	5	4	9	May 29, 2019	*Ariopsis felis* Otolith	—	—	—	—	1/0.34g	
82	8PI1-6-7	5	4	10	May 29, 2019	Chert	—	—	—	—	1/4.18g	
82	8PI1-6-7	5	4	10	May 29, 2019	Bone	—	—	—	—	1/0.09g	fish bone
83	8PI1-6-7	5	4	1	May 29, 2019	—	—	—	—	—	—	Soil
84	8PI1-6-7	5	4	2	May 29, 2019	—	—	—	—	—	—	Soil
85	8PI1-6-7	5	4	3	May 29, 2019	—	—	—	—	—	—	Soil

Table A4. (continued)

FS#	Site	Area	STP#	Level	Date	Species/Artifact type	Whole#/Weight	Partial#/Weight	Frag#/Weight	Valve(L/R):#/Weight	Artifact#/Weight	Comments
86	8PI1-6-7	5	5	1	May 28, 2019	*Crassostrea virginica*	—	—	—	L:4/10.58g R:5/19.00g	—	
86	8PI1-6-7	5	5	1	May 28, 2019	*Busycon contrarium*	6/45.00g	—	—	—	—	
86	8PI1-6-7	5	5	1	May 28, 2019	*Melongena corona*	4/30.00g	—	—	—	—	
86	8PI1-6-7	5	5	1	May 28, 2019	*Neverita duplicata*	1/9.00g	—	—	—	—	
86	8PI1-6-7	5	5	1	May 28, 2019	Sand-tempered plain sherd	—	—	—	—	1/10.79g	body sherd
87	8PI1-6-7	5	5	2	May 28, 2019	*Busycon contrarium*	19/120.00g	—	—	—	—	
87	8PI1-6-7	5	5	2	May 28, 2019	*Melongena corona*	29/405.00g	—	1/4.06g	—	—	
87	8PI1-6-7	5	5	2	May 28, 2019	*Crassostrea virginica*	—	—	2/7.93g	L:36/201.91g R:20/115.00g	—	
87	8PI1-6-7	5	5	2	May 28, 2019	*Neverita duplicata*	9/10.00g	—	—	—	—	
87	8PI1-6-7	5	5	2	May 28, 2019	Pottery	—	—	—	—	8/26.16g	2 ticked rims; 5 STP body sherds; 1 St. Johns Plain body sherd
87	8PI1-6-7	5	5	2	May 28, 2019	UID shell	—	—	2/5.13g	—	—	
87	8PI1-6-7	5	5	2	May 28, 2019	Bone	—	—	—	—	5/1.18g	burnt XL fish vert
87	8PI1-6-7	5	5	2	May 28, 2019	*Ariopsis felis* otolith	—	—	—	—	2/1.39g	
87	8PI1-6-7	5	5	2	May 28, 2019	Charcoal	—	—	—	—	0.73g	
88	8PI1-6-7	5	5	3	May 28, 2019	*Busycon contrarium*	507/7285.00g	—	—	—	—	
88	8PI1-6-7	5	5	3	May 28, 2019	*Melongena corona*	190/4775.00g	—	—	—	—	
88	8PI1-6-7	5	5	3	May 28, 2019	*Crassostrea virginica*	—	—	2/11.17g	L:47/310.42g R:41/139.49g	—	
88	8PI1-6-7	5	5	3	May 28, 2019	*Neverita duplicata*	40/170.00g	—	—	—	—	
88	8PI1-6-7	5	5	3	May 28, 2019	*Busycotypus spiratus*	30/290.00g	—	—	—	—	
88	8PI1-6-7	5	5	3	May 28, 2019	Bone	—	—	—	—	79/19.05g	shark verts, bony fish bones, sting ray dental plates, turtle carapace

Table A4. (continued)

FS#	Site	Area	STP#	Level	Date	Species/Artifact type	Whole#/Weight	Partial#/Weight	Frag#/Weight	Valve(L/R):#/Weight	Artifact#/Weight	Comments
88	8PI1-6-7	5	5	3	May 28, 2019	*Ariopsis felis* otolith	—	—	—	—	1/0.28g	
88	8PI1-6-7	5	5	3	May 28, 2019	Charcoal	—	—	—	—	6.29g	
88	8PI1-6-7	5	5	3	May 28, 2019	Pottery	—	—	—	—	21/52.63g	2 STP rims, 1 STP rim w/ hole, 1 ticked rim 17 STP body sherds
88	8PI1-6-7	5	5	3	May 28, 2019	UID shell	—	—	1/4.16g	—	—	
89	8PI1-6-7	5	5	4	May 28, 2019	*Busycon contrarium*	65/730.00g	—	1/0.20g	—	—	
89	8PI1-6-7	5	5	4	May 28, 2019	*Melongena corona*	16/405.00g	—	1/0.49g	—	—	
89	8PI1-6-7	5	5	4	May 28, 2019	*Crassostrea virginica*	—	—	—	L:3/23.76g R:3/19.49g	—	
89	8PI1-6-7	5	5	4	May 28, 2019	*Neverita duplicata*	13/35.00g	—	1/0.72g	—	—	
89	8PI1-6-7	5	5	4	May 28, 2019	*Busycotypus spiratus*	1/25.00g	—	—	—	—	
89	8PI1-6-7	5	5	4	May 28, 2019	Charcoal	—	—	0.89g	—	—	
89	8PI1-6-7	5	5	4	May 28, 2019	Bone	—	—	—	—	39/19.12g	mammal bone, shark verts, stingray dental plates, bony fish verts
89	8PI1-6-7	5	5	4	May 28, 2019	*Ariopsis felis* otolith	—	—	—	—	1/0.31g	
89	8PI1-6-7	5	5	4	May 28, 2019	Sand-tempered plain sherd	—	—	—	—	1/0.22g	body sherd
89	8PI1-6-7	5	5	4	May 28, 2019	UID shell	—	—	2/1.39g	—	—	
90	8PI1-6-7	5	5	5	May 28, 2019	*Busycon contrarium*	24/235.00g	—	—	—	—	
90	8PI1-6-7	5	5	5	May 28, 2019	*Melongena corona*	4/65.00g	—	—	—	—	
90	8PI1-6-7	5	5	5	May 28, 2019	*Crassostrea virginica*	—	—	—	R:1/10.00g	—	
90	8PI1-6-7	5	5	5	May 28, 2019	*Neverita duplicata*	3/10.00g	—	—	—	—	
90	8PI1-6-7	5	5	5	May 28, 2019	*Busycotypus spiratus*	2/20.00g	—	—	—	—	
90	8PI1-6-7	5	5	5	May 28, 2019	*Ariopsis felis Otolith*	—	—	—	—	2/0.45g	
90	8PI1-6-7	5	5	5	May 29, 2019	Bone	—	—	—	—	8/1.15g	Fish bone
91	8PI1-6-7	5	5	6	May 29, 2019	*Busycon contrarium*	1/20.00g	—	—	—	—	
91	8PI1-6-7	5	5	6	May 29, 2019	*Melongena corona*	8/280.00g	—	—	—	—	
91	8PI1-6-7	5	5	6	May 29, 2019	Chert	—	—	—	—	2/1.39g	
91	8PI1-6-7	5	5	6	May 29, 2019	Sand-tempered plain sherd	—	—	—	—	2/2.58g	
92	8PI1-6-7	5	5	7	May 29, 2019	*Melongena corona*	7/250.00g	—	—	—	—	
92	8PI1-6-7	5	5	7	May 29, 2019	Modified *M. corona*	—	—	—	—	6/130.07g	Fragments
92	8PI1-6-7	5	5	7	May 29, 2019	Chert	—	—	—	—	5/9.76g	
93	8PI1-6-7	5	5	8	May 29, 2019	Chert	—	—	—	—	1/37.62g	Chunk

Table A4. (continued)

FS#	Site	Area	STP#	Level	Date	Species/Artifact type	Whole#/Weight	Partial#/Weight	Frag#/Weight	Valve(L/R):#/Weight	Artifact#/Weight	Comments
93	8PI1-6-7	5	5	8	May 29, 2019	Sand-tempered plain sherd	—	—	—	—	1/4.64g	
93	8PI1-6-7	5	5	8	May 29, 2019	Modified *M. corona*	—	—	—	—	7/201.06g	Fragments
94	8PI1-6-7	5	5	9	May 29, 2019	Chert	—	—	—	—	1/0.19g	
95	8PI1-6-7	5	5	10	May 29, 2019	*Busycon contrarium*	1/10.00g	—	—	—	—	
95	8PI1-6-7	5	5	10	May 29, 2019	*Melongena corona*	1/20.00g	—	—	—	—	
95	8PI1-6-7	5	5	10	May 29, 2019	Bone	—	—	—	—	4/0.66g	Fish: 3 vert. and 1 gar scale
96	8PI1-6-7	5	5	1	May 29, 2019	—	—	—	—	—	—	Soil
97	8PI1-6-7	5	5	2	May 29, 2019	—	—	—	—	—	—	Soil
98	8PI1-6-7	5	5	3	May 29, 2019	—	—	—	—	—	—	Soil
99	8PI1-6-7	5	5	4	May 29, 2019	—	—	—	—	—	—	Soil
100	8PI1-6-7	5	6	1	May 28, 2019	*Melongena corona*	42/605.00g	—	—	—	—	
100	8PI1-6-7	5	6	1	May 28, 2019	*Neverita duplicata*	3/20.00g	—	—	—	—	
100	8PI1-6-7	5	6	1	May 28, 2019	*Fasciolaria lilium*	2/10.00g	—	—	—	—	
100	8PI1-6-7	5	6	1	May 28, 2019	*Busycotypus spiratus*	2/10.00g	—	—	—	—	
100	8PI1-6-7	5	6	1	May 28, 2019	*Crassostrea virginica*	—	—	—	L:12/95.54g R:12/94.72g	—	
100	8PI1-6-7	5	6	1	May 28, 2019	*Noetia ponderous*	—	—	1/13.82g	—	—	
100	8PI1-6-7	5	6	1	May 28, 2019	*Busycon contrarium*	—	—	24/327.41g	—	—	
101	8PI1-6-7	5	6	2	May 28, 2019	*Melongena corona*	110/2010.00g	—	—	—	—	
101	8PI1-6-7	5	6	2	May 28, 2019	*Neverita duplicata*	13/80.00g	—	—	—	—	
101	8PI1-6-7	5	6	2	May 28, 2019	*Fasciolaria lilium*	9/50.00g	—	—	—	—	
101	8PI1-6-7	5	6	2	May 28, 2019	*Busycotypus spiratus*	15/150.00g	—	—	—	—	
101	8PI1-6-7	5	6	2	May 28, 2019	*Busycon contrarium*	105/1350.00g	—	—	—	—	
101	8PI1-6-7	5	6	2	May 28, 2019	*Crassostrea virginica*	—	—	—	L:19/147.31g R:5/35.00g	—	
101	8PI1-6-7	5	6	2	May 28, 2019	Sand-tempered plain sherd	—	—	—	—	3/13.45g	
101	8PI1-6-7	5	6	2	May 28, 2019	Modified *N. ponderous*	—	—	—	—	1/17.18g	Net weight?
102	8PI1-6-7	5	6	3	May 29, 2019	*Melongena corona*	348/7267.62g	—	—	—	—	
102	8PI1-6-7	5	6	3	May 29, 2019	*Busycon contrarium*	740/6210.00g	—	2/124.69g	—	—	
102	8PI1-6-7	5	6	3	May 29, 2019	*Neverita duplicata*	40/210.00g	—	—	—	—	
102	8PI1-6-7	5	6	3	May 29, 2019	*Fasciolaria lilium*	36/462.05g	—	—	—	—	
102	8PI1-6-7	5	6	3	May 29, 2019	*Busycotypus spiratus*	63/595.00g	—	—	—	—	

Table A4. (continued)

FS#	Site	Area	STP#	Level	Date	Species/Artifact type	Whole#/Weight	Partial#/Weight	Frag#/Weight	Valve(L/R):#/Weight	Artifact#/Weight	Comments
102	8PI1-6-7	5	6	3	May 29, 2019	*Crassostrea virginica*	—	—	—	L:21/105.00g R:12/75.00g	—	
102	8PI1-6-7	5	6	3	May 29, 2019	Bone	—	—	—	—	15/18.15g	deer long bone frags, bony fish verts
102	8PI1-6-7	5	6	3	May 29, 2019	*Mercenaria campechiensis*	—	—	1/88.47g	—	—	
102	8PI1-6-7	5	6	3	May 29, 2019	Pottery	—	—	—	—	8/58.50g	1 STP rim, 7 STP body sherds
102	8PI1-6-7	5	6	3	May 29, 2019	UID gastropod	—	—	3/13.77g	—	—	
102	8PI1-6-7	5	6	3	May 29, 2019	UID bivalve	—	—	1/1.34g	—	—	
102	8PI1-6-7	5	6	3	May 29, 2019	*Carditamera floridana*	1/0.42g	—	—	—	—	
102	8PI1-6-7	5	6	3	May 29, 2019	Charcoal	—	—	2.03g	—	—	
103	8PI1-6-7	5	6	4	May 29, 2019	*Melongena corona*	70/1090.00g	—	—	—	—	
103	8PI1-6-7	5	6	4	May 29, 2019	*Busycon contrarium*	237/2760.00g	—	1/2.97g	—	—	
103	8PI1-6-7	5	6	4	May 29, 2019	*Neverita duplicata*	17/50.00g	—	—	—	—	
103	8PI1-6-7	5	6	4	May 29, 2019	*Fasciolaria lilium*	7/45.00g	—	—	—	—	
103	8PI1-6-7	5	6	4	May 29, 2019	*Busycotypus spiratus*	23/220.00g	—	—	—	—	
103	8PI1-6-7	5	6	4	May 29, 2019	*Crassostrea virginica*	—	—	1/2.50g	L:34/187.70g R:10/52.85g	—	
103	8PI1-6-7	5	6	4	May 29, 2019	Charcoal	—	—	2.88g	—	—	
103	8PI1-6-7	5	6	4	May 29, 2019	*Triplofusus papillosus*	—	—	1/113.33g	—	—	
103	8PI1-6-7	5	6	4	May 29, 2019	Pottery	—	—	—	—	2/6.76g	1 Pinellas Plain rim, 1 STP body sherd
103	8PI1-6-7	5	6	4	May 29, 2019	Bone	—	—	—	—	25/6.35g	stingray dental plates, shark verts, mammal long bone frags, bony fish verts
103	8PI1-6-7	5	6	4	May 29, 2019	*Mercenaria campechiensis*	—	—	2/53.11g	—	—	
104	8PI1-6-7	5	6	5	May 29, 2019	*Melongena corona*	8/20.00g	—	—	—	—	
104	8PI1-6-7	5	6	5	May 29, 2019	*Neverita duplicata*	2/10.00g	—	—	—	—	
104	8PI1-6-7	5	6	5	May 29, 2019	*Fasciolaria lilium*	2/20.00g	—	—	—	—	
104	8PI1-6-7	5	6	5	May 29, 2019	*Busycotypus spiratus*	11/130.00g	—	—	—	—	
104	8PI1-6-7	5	6	5	May 29, 2019	*Crassostrea virginica*	—	—	—	L:2/10.00g R:2/10.00g	—	
104	8PI1-6-7	5	6	5	May 29, 2019	*Mercenaria campechiensis*	—	—	1/80.89g	—	—	
104	8PI1-6-7	5	6	5	May 29, 2019	*Busycon contrarium*	44/475.00g	—	2/4.95g	—	—	
104	8PI1-6-7	5	6	5	May 29, 2019	Bone	—	—	—	—	5/0.47g	Fish bone
105	8PI1-6-7	5	6	6	May 29, 2019	*Melongena corona*	13/20.00g	—	—	—	—	
105	8PI1-6-7	5	6	6	May 29, 2019	*Busycon contrarium*	64/610.00g	—	—	—	—	

Table A4. (continued)

FS#	Site	Area	STP#	Level	Date	Species/Artifact type	Whole#/Weight	Partial#/Weight	Frag#/Weight	Valve(L/R):#/Weight	Artifact#/Weight	Comments
105	8PI1-6-7	5	6	6	May 29, 2019	*Neverita duplicata*	5/40.00g	—	—	—	—	
105	8PI1-6-7	5	6	6	May 29, 2019	*Fasciolaria lilium*	1/10.00g	—	—	—	—	
105	8PI1-6-7	5	6	6	May 29, 2019	*Busycotypus spiratus*	5/55.00g	—	—	—	—	
105	8PI1-6-7	5	6	6	May 29, 2019	*Crassostrea virginica*	—	—	—	L:9/50.00g R;2/10.00g	—	
105	8PI1-6-7	5	6	6	May 29, 2019	Bone	—	—	—	—	5/0.39g	Fish bone
106	8PI1-6-7	5	6	7	May 29, 2019	*Melongena corona*	8/150.00g	—	—	—	—	
106	8PI1-6-7	5	6	7	May 29, 2019	*Busycon contrarium*	24/250.00g	—	—	—	—	
106	8PI1-6-7	5	6	7	May 29, 2019	*Neverita duplicata*	2/10.00g	—	—	—	—	
106	8PI1-6-7	5	6	7	May 29, 2019	*Fasciolaria lilium*	1/10.00g	—	—	—	—	
106	8PI1-6-7	5	6	7	May 29, 2019	*Busycotypus spiratus*	2/30.00g	—	—	—	—	
106	8PI1-6-7	5	6	7	May 29, 2019	*Crassostrea virginica*	—	—	—	L:6/25.00g	—	
106	8PI1-6-7	5	6	7	May 29, 2019	Sm. Terr. Mammal bone	—	—	—	—	3/0.32g	
106	8PI1-6-7	5	6	7	May 29, 2019	*Mercenaria campechiensis*	—	—	1/28.11g	—	—	
107	8PI1-6-7	5	6	8	May 29, 2019	*Melongena corona*	4/75.00g	—	—	—	—	
107	8PI1-6-7	5	6	8	May 29, 2019	*Busycon contrarium*	19/20.00g	—	—	—	—	
107	8PI1-6-7	5	6	8	May 29, 2019	*Neverita duplicata*	1/10.00g	—	—	—	—	
107	8PI1-6-7	5	6	8	May 29, 2019	*Busycotypus spiratus*	3/20.00g	—	—	—	—	
107	8PI1-6-7	5	6	8	May 29, 2019	*Crassostrea virginica*	—	—	—	L:3/20.00g R:2/10.00g	—	
107	8PI1-6-7	5	6	8	May 29, 2019	Sand-tempered plain sherd	—	—	—	—	1/25.95g	
107	8PI1-6-7	5	6	8	May 29, 2019	Sm. Terr. Mammal bone	—	—	—	—	5/3.54g	
107	8PI1-6-7	5	6	8	May 29, 2019	Bone	—	—	—	—	11/0.82g	Fish bone
108	8PI1-6-7	5	6	9	May 29, 2019	*Neverita duplicata*	1/10.00g	—	—	—	—	
108	8PI1-6-7	5	6	9	May 29, 2019	*Fasciolaria lilium*	1/10.00g	—	—	—	—	
108	8PI1-6-7	5	6	9	May 29, 2019	*Melongena corona*	3/25.00g	1/4.59g	—	—	—	
108	8PI1-6-7	5	6	9	May 29, 2019	*Busycon contrarium*	4/30.00g	—	1/5.14g	—	—	
108	8PI1-6-7	5	6	9	May 29, 2019	Chert	—	—	—	—	1/1.39g	
108	8PI1-6-7	5	6	9	May 29, 2019	Bone	—	—	—	—	3/0.31g	Fish bone
109	8PI1-6-7	5	6	10	May 29, 2019	—	—	—	—	—	—	NCM
110	8PI1-6-7	5	6	1	May 29, 2019	—	—	—	—	—	—	Soil
111	8PI1-6-7	5	6	2	May 29, 2019	—	—	—	—	—	—	Soil
112	8PI1-6-7	5	6	3	May 29, 2019	—	—	—	—	—	—	Soil
113	8PI1-6-7	5	6	4	May 29, 2019	—	—	—	—	—	—	Soil

Area 7

Table A5. Recovered materials from Area 7 by FS Number.

FS#	Site	Area	STP#	Level	Date	Species/ Artifact type	Whole#/ Weight	Partial#/ Weight	Frag#/ Weight	Valve(L/R):#/ Weight	Artifact#/ Weight	Comments
8	8PI1-6-7	7	1	1	2/22/19	—	—	—	—	—	—	NCM
9	8PI1-6-7	7	1	2	2/22/19	—	—	—	—	—	—	NCM

Area 8

Table A6. Recovered materials from Area 8 by FS Number.

FS#	Site	Area	STP#	Level	Date	Species/Artifact type	Whole#/Weight	Partial#/Weight	Frag#/Weight	Valve(L/R):#/Weight	Artifact#/Weight	Comments
114	8PI1-2-5	8	1	1	May 30, 2019	Bone	—	—	—	—	8/4.45g	mammal
114	8PI1-2-5	8	1	1	May 30, 2019	*Mercenaria campechiensis*	—	—	1/12.29g	—	—	
114	8PI1-2-5	8	1	1	May 30, 2019	*Fasciolaria lilium*	—	1/3.72g		—	—	
114	8PI1-2-5	8	1	1	May 30, 2019	*Melongena corona*	—	—	1/1.16g	—	—	
114	8PI1-2-5	8	1	1	May 30, 2019	Chert	—	—	—	—	1/0.66g	
114	8PI1-2-5	8	1	1	May 30, 2019	Pottery	—	—	—	—	10/70.56g	4 St. Johns Check stamped body sherds, 6 STP body sherds
114	8PI1-2-5	8	1	1	May 30, 2019	*Crassostrea virginica*	—	—	3/13.49g	L:4/18.04g R:1/4.76g	—	
115	8PI1-2-5	8	1	2	May 30, 2019	—	—	—	—	—	—	level contained human molar and Wakulla Check Stamped body sherd (returned)
116	8PI1-2-5	8	2	1	May 30, 2019	Bone	—	—	—	—	5/8.42g	mammal long bone frags
116	8PI1-2-5	8	2	1	May 30, 2019	*Busycon contrarium*	1/30.81g	—	1/1.55g	—	—	
116	8PI1-2-5	8	2	1	May 30, 2019	Pottery	—	—	—	—	2/3.26g	STP body sherds
116	8PI1-2-5	8	2	1	May 30, 2019	*Melongena corona*	3/72.78g	—	—	—	—	
116	8PI1-2-5	8	2	1	May 30, 2019	*Crassostrea virginica*	—	—	2/7.25g	L:12/133.09g R:1/5.29g	—	
117	8PI1-2-5	8	2	2	May 30, 2019	Bone	—	—	—	—	8/2.88g	mammal long bone frags
117	8PI1-2-5	8	2	2	May 30, 2019	*Fasciolaria lilium*	—	1/10.48g	—	—	—	
117	8PI1-2-5	8	2	2	May 30, 2019	*Busycon contrarium*	—	—	1/2.92g	—	—	
117	8PI1-2-5	8	2	2	May 30, 2019	Pottery	—	—	—	—	2/7.70g	2 STP body sherds
117	8PI1-2-5	8	2	2	May 30, 2019	*Melongena corona*	1/16.43g	—	1/6.19g	—	—	
117	8PI1-2-5	8	2	2	May 30, 2019	*Crassostrea virginica*	—	—	1/8.26g	L:7/77.97g R:2/24.43g	—	
118	8PI1-2-5	8	2	3	May 30, 2019	*Busycotypus spiratus*	1/9.16g	—	—	—	—	
118	8PI1-2-5	8	2	3	May 30, 2019	*Busycon contrarium*	—	—	1/1.81g	—	—	
118	8PI1-2-5	8	2	3	May 30, 2019	*Melongena corona*	3/55.28g	1/32.13g		—	—	
118	8PI1-2-5	8	2	3	May 30, 2019	*Crassostrea virginica*	—	—	5/25.19g	L:2/7.97g R:13/81.77g	—	
118	8PI1-2-5	8	2	3	May 30, 2019	Sand-tempered plain sherd	—	—	—	—	2/8.85g	body sherds
118	8PI1-2-5	8	2	3	May 30, 2019	Chert	—	—	—	—	2/1.60g	
118	8PI1-2-5	8	2	3	May 30, 2019	Bone	—	—	—	—	14/9.12g	shark vert.,mamm. long bones, mamm. tooth
119	8PI1-2-5	8	2	4	May 30, 2019	Bone	—	—	—	—	29/11.40g	mammal long bone frags
119	8PI1-2-5	8	2	4	May 30, 2019	*Argopecten irradians*	—	—	1/0.41g	—	—	

Table A6. (continued)

FS#	Site	Area	STP#	Level	Date	Species/Artifact type	Whole#/Weight	Partial#/Weight	Frag#/Weight	Valve(L/R):#/Weight	Artifact#/Weight	Comments
119	8PI1-2-5	8	2	4	May 30, 2019	*Busycon contrarium*	—	1/9.17g	4/1.31g	—	—	
119	8PI1-2-5	8	2	4	May 30, 2019	*Melongena corona*	—	2/6.57g	4/5.71g	—	—	
119	8PI1-2-5	8	2	4	May 30, 2019	*ercenaria campechiens*	—	—	1/79.45g	—	—	
119	8PI1-2-5	8	2	4	May 30, 2019	*Crassostrea virginica*	—	—	5/7.30g	L:11/55.42g R:4/16.82g	—	
119	8PI1-2-5	8	2	4	May 30, 2019	*Neverita duplicata*	—	1/2.74g	—	—	—	
120	8PI1-2-5	8	2	5	May 30, 2019	Charcoal	—	—	2.56g	—	—	
120	8PI1-2-5	8	2	5	May 30, 2019	*Fasciolaria lilium*	—	—	1/1.48g	—	—	
120	8PI1-2-5	8	2	5	May 30, 2019	*Melongena corona*	1/11.60g	2/35.40g	2/4.73g	—	—	
120	8PI1-2-5	8	2	5	May 30, 2019	UID gastropod	—	—	1/0.83g	—	—	
120	8PI1-2-5	8	2	5	May 30, 2019	Bone	—	—	—	—	14/7.78g	mammal and shark verts
120	8PI1-2-5	8	2	5	May 30, 2019	*Crassostrea virginica*	—	—	8/9.66g	L:14/73.59g	—	
121	8PI1-2-5	8	2	6	May 30, 2019	Chert	—	—	—	—	1/1.06g	
121	8PI1-2-5	8	2	6	May 30, 2019	Charcoal	—	—	0.34g	—	—	
121	8PI1-2-5	8	2	6	May 30, 2019	UID gastropod	—	—	1/0.14g	—	—	
121	8PI1-2-5	8	2	6	May 30, 2019	*Neverita duplicata*	1/6.99g	—	1/3.75g	—	—	
121	8PI1-2-5	8	2	6	May 30, 2019	*Triplofusus papillosus*	—	—	1/81.87g	—	—	
121	8PI1-2-5	8	2	6	May 30, 2019	*Fasciolaria lilium*	—	1/7.44g	—	—	—	
121	8PI1-2-5	8	2	6	May 30, 2019	*Busycon contrarium*	1/5.29g	—	—	—	—	
121	8PI1-2-5	8	2	6	May 30, 2019	*Busycotypus spiratus*	1/13.68g	1/4.91g	—	—	—	
121	8PI1-2-5	8	2	6	May 30, 2019	*Melongena corona*	2/40.07g	6/16.47g	7/5.60g	—	—	
121	8PI1-2-5	8	2	6	May 30, 2019	Bone	—	—	—	—	18/10.19g	large vert, mammal long bone frags, shark vert,bony fish
121	8PI1-2-5	8	2	6	May 30, 2019	*Crassostrea virginica*	—	—	14/28.36g	L:16/78.71g R:6/33.82g	—	
122	8PI1-2-5	8	2	7	May 30, 2019	*Crassostrea virginica*	—	—	6/17.42g	L:10/56.14g R:2/11.38g	—	
122	8PI1-2-5	8	2	7	May 30, 2019	Pottery	—	—		—	1/0.27g	STP body sherd
122	8PI1-2-5	8	2	7	May 30, 2019	UID gastropod	—	—	1/1.51g	—	—	
122	8PI1-2-5	8	2	7	May 30, 2019	Bone	—	—	—	—	25/3.13g	shark verts, bony fish
122	8PI1-2-5	8	2	7	May 30, 2019	Otoliths	—	—	—	—	1/0.27g	hardhead catfish

Table A6. (continued)

FS#	Site	Area	STP#	Level	Date	Species/Artifact type	Whole#/Weight	Partial#/Weight	Frag#/Weight	Valve(L/R):#/Weight	Artifact#/Weight	Comments
122	8PI1-2-5	8	2	7	May 30, 2019	*Neverita duplicata*	—	1/1.06g	—	—	—	
122	8PI1-2-5	8	2	7	May 30, 2019	*Macrocallista nimbosa*	—	—	2/3.28g	—	—	
122	8PI1-2-5	8	2	7	May 30, 2019	*Busycotypus spiratus*	—	1/3.30g	—	—	—	
122	8PI1-2-5	8	2	7	May 30, 2019	Chert	—	—	—	—	2/1.55g	
122	8PI1-2-5	8	2	7	May 30, 2019	*Fasciolaria lilium*	—	1/4.45g	—	—	—	
122	8PI1-2-5	8	2	7	May 30, 2019	*Trachycardium egmontianum*	—	1/9.14g	—	—	—	
122	8PI1-2-5	8	2	7	May 30, 2019	*Geukensia granosissima*	1/0.06g	—	—	—	—	
122	8PI1-2-5	8	2	7	May 30, 2019	*Melongena corona*	2/52.13g	3/23.96g	1/0.93g	—	—	
123	8PI1-2-5	8	2	8	May 30, 2019	—	—	—	—	—	—	NCM
124	8PI1-2-5	8	2	9	May 30, 2019	—	—	—	—	—	—	NCM
125	8PI1-2-5	8	2	10	May 30, 2019	—	—	—	—	—	—	NCM
126	8PI1-2-5	8	2	1	May 30, 2019	—	—	—	—	—	—	Soil
127	8PI1-2-5	8	2	2	May 30, 2019	—	—	—	—	—	—	Soil
128	8PI1-2-5	8	2	3	May 30, 2019	—	—	—	—	—	—	Soil
129	8PI1-2-5	8	2	4	May 30, 2019	—	—	—	—	—	—	Soil
130	8PI1-2-5	8	3	1	June 4, 2019	*Busycon contrarium*	22/150.00g	—	—	—	—	
130	8PI1-2-5	8	3	1	June 4, 2019	*Busycotypus spiratus*	2/20.00g	—	—	—	—	
130	8PI1-2-5	8	3	1	June 4, 2019	*Neverita duplicata*	8/30.00g	—	—	—	—	
130	8PI1-2-5	8	3	1	June 4, 2019	*Fasciolaria lilium*	4/45.00g	—	—	—	—	
130	8PI1-2-5	8	3	1	June 4, 2019	*Melongena corona*	13/100.00g	1/0.27g	—	—	—	
130	8PI1-2-5	8	3	1	June 4, 2019	*Mercenaria campechiensis*	—	—	2/11.53g	—	—	
130	8PI1-2-5	8	3	1	June 4, 2019	*Crassostrea virginica*	—	—	—	L:26/92.84g R:17/50.00g	—	
130	8PI1-2-5	8	3	1	June 4, 2019	*Argopecten irradians*	—	—	1/0.78g	—	—	
130	8PI1-2-5	8	3	1	June 4, 2019	Sand-tempered plain sherd	—	—	—	—	1/7.82g	
130	8PI1-2-5	8	3	1	June 4, 2019	Bone	—	—	—	—	4/0.87g	Fish bone
130	8PI1-2-5	8	3	1	June 4, 2019	Turtle shell	—	—	—	—	2/2.55g	
131	8PI1-2-5	8	3	2	June 4, 2019	*Melongena corona*	31/210.00g	—	—	—	—	
131	8PI1-2-5	8	3	2	June 4, 2019	*Busycon contrarium*	95/840.00g	—	1/9.43g	—	—	
131	8PI1-2-5	8	3	2	June 4, 2019	*Crassostrea virginica*	—	—	1/1.64g	L:67/177.20g R:45/130.00g	—	

Table A6. (continued)

FS#	Site	Area	STP#	Level	Date	Species/Artifact type	Whole#/Weight	Partial#/Weight	Frag#/Weight	Valve(L/R):#/Weight	Artifact#/Weight	Comments
131	8PI1-2-5	8	3	2	June 4, 2019	*Busycotypus spiratus*	7/35.00g	—	—	—	—	
131	8PI1-2-5	8	3	2	June 4, 2019	*Neverita duplicata*	19/80.00g	—	—	—	—	
131	8PI1-2-5	8	3	2	June 4, 2019	*Fasciolaria lilium*	6/40.00g	—	—	—	—	
131	8PI1-2-5	8	3	2	June 4, 2019	Charcoal	—	—	1.37g	—	—	
131	8PI1-2-5	8	3	2	June 4, 2019	*Argopecten irradians*	—	—	2/6.38g	—	—	
131	8PI1-2-5	8	3	2	June 4, 2019	*Mercenaria campechiensis*	—	—	1/13.60g	—	—	
131	8PI1-2-5	8	3	2	June 4, 2019	*Trachycardium egmontianum*	—	—	1/5.21g	—	—	
131	8PI1-2-5	8	3	2	June 4, 2019	UID gastropod	—	—	1/2.89g	—	—	
131	8PI1-2-5	8	3	2	June 4, 2019	Pottery	—	—	—	—	2/3.17g	1 STP body sherd, 1 St. Johns Check Stamped rim
131	8PI1-2-5	8	3	2	June 4, 2019	*Macrocallista nimbosa*	—	1/11.92g	3/7.59g	—	—	
131	8PI1-2-5	8	3	2	June 4, 2019	*Urosalpinx tampaensis*	2/2.15g	—	—	—	—	
131	8PI1-2-5	8	3	2	June 4, 2019	Bone	—	—	—	—	18/7.16g	stingray dental plates, shark verts, turtle, bony fish
131	8PI1-2-5	8	3	2	June 4, 2019	Otoliths	—	—	—	—	1/0.27g	hardhead catfish
132	8PI1-2-5	8	3	3	June 4, 2019	*Melongena corona*	114/405.00g	—	—	—	—	
132	8PI1-2-5	8	3	3	June 4, 2019	*Busycon contrarium*	338/3310.00g	—	—	—	—	
132	8PI1-2-5	8	3	3	June 4, 2019	*Crassostrea virginica*	—	—	—	L:164/604.13g R:78/310.00g	—	
132	8PI1-2-5	8	3	3	June 4, 2019	*Busycotypus spiratus*	58/530.00g	—	—	—	—	
132	8PI1-2-5	8	3	3	June 4, 2019	*Neverita duplicata*	48/65.00g	—	—	—	—	
132	8PI1-2-5	8	3	3	June 4, 2019	*Fasciolaria lilium*	37/100.00g	—	—	—	—	
132	8PI1-2-5	8	3	3	June 4, 2019	*Urosalpinx tampaensis*	2/1.68g	—	—	—	—	
132	8PI1-2-5	8	3	3	June 4, 2019	*Polygyra sp.*	1/0.05g	—	—	—	—	
132	8PI1-2-5	8	3	3	June 4, 2019	*Geukensia granosissima*	—	—	0.16g	—	—	
132	8PI1-2-5	8	3	3	June 4, 2019	*Cerithium atratum*	2/0.26g	—	1/0.09g	—	—	
132	8PI1-2-5	8	3	3	June 4, 2019	Modified M. corona	—	—	—	—	1/43.50g	
132	8PI1-2-5	8	3	3	June 4, 2019	UID gastropod	—	—	2/11.14g	—	—	
132	8PI1-2-5	8	3	3	June 4, 2019	UID shell	—	—	1/2.82g	—	—	
132	8PI1-2-5	8	3	3	June 4, 2019	*Argopecten irradians*	1/11.44g	1/8.31g	—	—	—	
132	8PI1-2-5	8	3	3	June 4, 2019	Charcoal	—	—	1.13g	—	—	

Table A6. (continued)

FS#	Site	Area	STP#	Level	Date	Species/Artifact type	Whole#/Weight	Partial#/Weight	Frag#/Weight	Valve(L/R):#/Weight	Artifact#/Weight	Comments
132	8PI1-2-5	8	3	3	June 4, 2019	Pottery	—	—	—	—	5/18.36g	4 STP body sherds, 1 STP rim
132	8PI1-2-5	8	3	3	June 4, 2019	Bone	—	—	—	—	60/23.59g	mammal long bone frags, bony fish, stingray dental plates, turtle
132	8PI1-2-5	8	3	3	June 4, 2019	Otoliths	—	—	—	—	5/2.00g	3 hardhead catfish, 2 seatrout
132	8PI1-2-5	8	3	3	June 4, 2019	*Crepidula fornicata*	—	—	1/0.10g	—	—	
132	8PI1-2-5	8	3	3	June 4, 2019	*Macrocallista nimbosa*	—	—	1/1.43g	—	—	
133	8PI1-2-5	8	3	4	June 4, 2019	*Melongena corona*	123/1230.00g	—	—	—	—	
133	8PI1-2-5	8	3	4	June 4, 2019	*Busycon contrarium*	285/3015.00g	—	3/105.49g	—	—	
133	8PI1-2-5	8	3	4	June 4, 2019	*Crassostrea virginica*	—	—	2/3.20g	L:170/808.59g R:144/524.55g	—	
133	8PI1-2-5	8	3	4	June 4, 2019	*Busycotypus spiratus*	67/500.00g	—	—	—	—	
133	8PI1-2-5	8	3	4	June 4, 2019	*Neverita duplicata*	75/180.00g	—	—	—	—	
133	8PI1-2-5	8	3	4	June 4, 2019	*Fasciolaria lilium*	24/80.00g	—	—	—	—	
133	8PI1-2-5	8	3	4	June 4, 2019	Bone	—	—	—	—	245/48.34g	mammal bone, bird bone, stingray dental plates, snake verts,bony fish, turtle
133	8PI1-2-5	8	3	4	June 4, 2019	Otoliths	—	—	—	—	10/3.59g	7 hardhead catfish, 1 red drum, 2 seatrout
133	8PI1-2-5	8	3	4	June 4, 2019	*Geukensia granosissima*	—	—	1.07g	—	—	
133	8PI1-2-5	8	3	4	June 4, 2019	*Polygyra sp.*	1/0.04g	—	—	—	—	
133	8PI1-2-5	8	3	4	June 4, 2019	*Crepidula fornicata*	—	1/0.20g	—	—	—	
133	8PI1-2-5	8	3	4	June 4, 2019	*Euglandina rosea*	3/0.35g	—	1/0.02g	—	—	
133	8PI1-2-5	8	3	4	June 4, 2019	Seed	—	—		—	1/0.05g	
133	8PI1-2-5	8	3	4	June 4, 2019	*Trachycardium egmontianum*	1/4.06g	—	4/12.59g	—	—	
133	8PI1-2-5	8	3	4	June 4, 2019	*Cerithium atratum*	6/1.02g	1/0.07g	—	—	—	
133	8PI1-2-5	8	3	4	June 4, 2019	*Urosalpinx tampaensis*	1/0.25g	3/1.80g	—	—	—	
133	8PI1-2-5	8	3	4	June 4, 2019	Lithic	—	—	—	—	2/36.02g	
133	8PI1-2-5	8	3	4	June 4, 2019	Charcoal	—	—	4.04g	—	—	
133	8PI1-2-5	8	3	4	June 4, 2019	*Argopecten irradians*	—	4/33.27g	6/6.69g	—	—	
133	8PI1-2-5	8	3	4	June 4, 2019	Pottery	—	—		—	9/48.20g	8 STP body sherds, 1 St Johns Plain rim
133	8PI1-2-5	8	3	4	June 4, 2019	*Mercenaria campechiensis*	—	—	5/97.53g	—	—	
133	8PI1-2-5	8	3	4	June 4, 2019	*Macrocallista nimbosa*	—	—	5/30.51g	—	—	
133	8PI1-2-5	8	3	4	June 4, 2019	*Prunum apicinum*	1/0.17g	—	—	—	—	
133	8PI1-2-5	8	3	4	June 4, 2019	*Modulus modulus*		1/0.09g	—	—	—	

Table A6. (continued)

FS#	Site	Area	STP#	Level	Date	Species/Artifact type	Whole#/Weight	Partial#/Weight	Frag#/Weight	Valve(L/R):#/Weight	Artifact#/Weight	Comments
133	8PI1-2-5	8	3	4	June 4, 2019	*Nassarius sp.*	2/0.24g	1/0.09g	—	—	—	
133	8PI1-2-5	8	3	4	June 4, 2019	UID gastropod	—	—	1/1.09g	—	—	
134	8PI1-2-5	8	3	5	June 4, 2019	*Melongena corona*	134/1210.00g	—	—	—	—	
134	8PI1-2-5	8	3	5	June 4, 2019	*Busycon contrarium*	74/930.00g	—	—	—	—	
134	8PI1-2-5	8	3	5	June 4, 2019	*Crassostrea virginica*	—	—	—	L:730/3246.01g R:531/2114.43g	—	
134	8PI1-2-5	8	3	5	June 4, 2019	*Busycotypus spiratus*	26/240.00g	—	—	—	—	
134	8PI1-2-5	8	3	5	June 4, 2019	*Neverita duplicata*	111/495.00g	—	—	—	—	
134	8PI1-2-5	8	3	5	June 4, 2019	*Fasciolaria lilium*	37/215.00g	—	—	—	—	
134	8PI1-2-5	8	3	5	June 4, 2019	Bone	—	—	—	—	208/33.56g	bony fish
134	8PI1-2-5	8	3	5	June 4, 2019	Otoliths	—	—	—	—	4/1.43g	3 hardhead catfish, 1 red drum
134	8PI1-2-5	8	3	5	June 4, 2019	Cirripedia (Barnacle)	1/0.36g	—	2/0.14g	—	—	
134	8PI1-2-5	8	3	5	June 4, 2019	*Trachycardium egmontianum*	—	—	1/3.09g	—	—	
134	8PI1-2-5	8	3	5	June 4, 2019	*Crepidula fornicata*	4/0.81g	—	—	—	—	
134	8PI1-2-5	8	3	5	June 4, 2019	*Geukensia granosissima*	—	—	3.56g	—	—	
134	8PI1-2-5	8	3	5	June 4, 2019	*Polygyra sp.*	1/0.02g	—	—	—	—	
134	8PI1-2-5	8	3	5	June 4, 2019	Charcoal	—	—	2.35g	—	—	
134	8PI1-2-5	8	3	5	June 4, 2019	*Argopecten irradians*	—	3/16.66g	3/2.78g	—	—	
134	8PI1-2-5	8	3	5	June 4, 2019	*Macrocallista nimbosa*	—	—	2/8.39g	—	—	
134	8PI1-2-5	8	3	5	June 4, 2019	*Urosalpinx tampaensis*	6/2.88g	—	—	—	—	
134	8PI1-2-5	8	3	5	June 4, 2019	*Cerithium atratum*	1/0.11g	—	—	—	—	
134	8PI1-2-5	8	3	5	June 4, 2019	*Urosalpinx cinerea*	2/0.21g	—	—	—	—	
134	8PI1-2-5	8	3	5	June 4, 2019	*Carditamera floridana*	3/3.50g	—	—	—	—	
134	8PI1-2-5	8	3	5	June 4, 2019	*Spisula solidissima*	1/0.05g	—	—	—	—	
134	8PI1-2-5	8	3	5	June 4, 2019	Pottery	—	—	—	—	6/22.79	2 STP rims, 4 STP body sherds
134	8PI1-2-5	8	3	5	June 4, 2019	Sooted pottery	—	—	—	—	1/35.33g	STP rim; 44cmbs
135	8PI1-2-5	8	3	6	June 5, 2019	*Melongena corona*	133/1280.00g	—	1/64.90g	—	—	
135	8PI1-2-5	8	3	6	June 5, 2019	*Busycon contrarium*	39/360.00g	—	—	—	—	

Table A6. (continued)

FS#	Site	Area	STP#	Level	Date	Species/Artifact type	Whole#/Weight	Partial#/Weight	Frag#/Weight	Valve(L/R):#/Weight	Artifact#/Weight	Comments
135	8PI1-2-5	8	3	6	June 5, 2019	*Crassostrea virginica*	—	—	4/3.70g	L:859/3560.86g R:421/1576.80g	—	
135	8PI1-2-5	8	3	6	June 5, 2019	*Busycotypus spiratus*	12/85.00g	—	—	—	—	
135	8PI1-2-5	8	3	6	June 5, 2019	*Neverita duplicata*	65/355.33g	—	—	—	—	
135	8PI1-2-5	8	3	6	June 5, 2019	*Fasciolaria lilium*	26/160.00g	—	—	—	—	
135	8PI1-2-5	8	3	6	June 5, 2019	*Cerithium atratum*	3/0.42g	—	—	—	—	
135	8PI1-2-5	8	3	6	June 5, 2019	*Littorina littorea*	4/0.52g	—	—	—	—	
135	8PI1-2-5	8	3	6	June 5, 2019	*Nassarius sp.*	1/0.15g	1/0.09g	—	—	—	
135	8PI1-2-5	8	3	6	June 5, 2019	Bone	—	—	—	—	663/77.87g	deer bone, bony fish, shark verts, stingray dental plates
135	8PI1-2-5	8	3	6	June 5, 2019	Otoliths	—	—	—	—	8/3.33	hardhead catfish
135	8PI1-2-5	8	3	6	June 5, 2019	Crab claw	—	—	3/0.76g	—	—	
135	8PI1-2-5	8	3	6	June 5, 2019	*Mercenaria campechiensis*	—	1/113.14g	—	—	—	
135	8PI1-2-5	8	3	6	June 5, 2019	*Urosalpinx tampaensis*	4/2.75g	—	—	—	—	
135	8PI1-2-5	8	3	6	June 5, 2019	*Crepidula fornicata*	2/0.33g	—	—	—	—	
135	8PI1-2-5	8	3	6	June 5, 2019	*Geukensia granosissima*	—	—	164.04g	—	—	
135	8PI1-2-5	8	3	6	June 5, 2019	*Mercenaria campechiensis*	—	—	1/113.13g	—	—	
135	8PI1-2-5	8	3	6	June 5, 2019	*Cirripedia (Barnacle)*	5/2.41g		14/0.91g	—	—	
135	8PI1-2-5	8	3	6	June 5, 2019	Concretion	—	—	—	—	1/3.81g	
135	8PI1-2-5	8	3	6	June 5, 2019	*Polygyra sp.*	1/0.02g	—	—	—	—	
135	8PI1-2-5	8	3	6	June 5, 2019	Charcoal	—	—	0.81g	—	—	
135	8PI1-2-5	8	3	6	June 5, 2019	Crested oyster	—	—	—	L:22/55.00g R:4/6.93g	—	
135	8PI1-2-5	8	3	6	June 5, 2019	*Argopecten irradians*	4/31.67g	3/22.24g	7/21.50g	—	—	
135	8PI1-2-5	8	3	6	June 5, 2019	UID shell	—	—	1.63g	—	—	
136	8PI1-2-5	8	3	7	June 5, 2019	*Melongena corona*	66/845.00g	1/58.17g	—	—	—	
136	8PI1-2-5	8	3	7	June 5, 2019	*Busycon contrarium*	39/300.00g	—	1/2.45g	—	—	
136	8PI1-2-5	8	3	7	June 5, 2019	*Crassostrea virginica*	—	—	—	L:503/1750.00g R:399/1020.00g	—	
136	8PI1-2-5	8	3	7	June 5, 2019	*Busycotypus spiratus*	9/100.00g	—	—	—	—	
136	8PI1-2-5	8	3	7	June 5, 2019	*Neverita duplicata*	39/290.00g	—	—	—	—	
136	8PI1-2-5	8	3	7	June 5, 2019	*Fasciolaria lilium*	11/65.00g	—	—	—	—	

Table A6. (continued)

FS#	Site	Area	STP#	Level	Date	Species/Artifact type	Whole#/Weight	Partial#/Weight	Frag#/Weight	Valve(L/R):#/Weight	Artifact#/Weight	Comments
136	8PI1-2-5	8	3	7	June 5, 2019	Bone	—	—	—	—	1174/134.04g	stingray dental plates, turtle, bony fish, shark verts
136	8PI1-2-5	8	3	7	June 5, 2019	Otoliths	—	—	—	—	11/3.79g	3 gafftopsail catfish, 8 hardhead catfish
136	8PI1-2-5	8	3	7	June 5, 2019	Crested oyster	—	—	—	L:13/31.23g	—	
136	8PI1-2-5	8	3	7	June 5, 2019	Charcoal	—	—	0.94g	—	—	
136	8PI1-2-5	8	3	7	June 5, 2019	*Crepidula fornicata*	3/0.57g	—	—	—	—	
136	8PI1-2-5	8	3	7	June 5, 2019	*Spisula solidissima*	2/0.27g	—	—	—	—	
136	8PI1-2-5	8	3	7	June 5, 2019	*Argopecten irradians*	—	—	4/10.70g	—	—	
136	8PI1-2-5	8	3	7	June 5, 2019	*Urosalpinx tampaensis*	2/1.52g	—	—	—	—	
136	8PI1-2-5	8	3	7	June 5, 2019	Cirripedia (Barnacle)	3/1.52g	—	9/0.45g	—	—	
136	8PI1-2-5	8	3	7	June 5, 2019	*Mercenaria campechiensis*	—	—	1/88.01g	—	—	
136	8PI1-2-5	8	3	7	June 5, 2019	*Geukensia granosissima*	—	—	37.21g	—	—	
136	8PI1-2-5	8	3	7	June 5, 2019	*Nassarius sp.*	1/0.18g	—	—	—	—	
136	8PI1-2-5	8	3	7	June 5, 2019	UID gastropod	—	—	3.76g	—	—	
136	8PI1-2-5	8	3	7	June 5, 2019	Pottery	—	—	—	—	1/0.98g	STP body sherds
137	8PI1-2-5	8	3	8	June 5, 2019	*Melongena corona*	108/1430.00g	—	—	—	—	
137	8PI1-2-5	8	3	8	June 5, 2019	*Busycon contrarium*	72/600.00g	—	—	—	—	
137	8PI1-2-5	8	3	8	June 5, 2019	*Crassostrea virginica*	—	—	—	L:587/2893.90g R:384/1920.00g	—	
137	8PI1-2-5	8	3	8	June 5, 2019	*Busycotypus spiratus*	38/200.00g	—	—	—	—	
137	8PI1-2-5	8	3	8	June 5, 2019	*Neverita duplicata*	49/350.00g	—	—	—	—	
137	8PI1-2-5	8	3	8	June 5, 2019	*Fasciolaria lilium*	21/170.00g	—	—	—	—	
137	8PI1-2-5	8	3	8	June 5, 2019	Shark vertebrae	—	—	—	—	32/8.08g	
137	8PI1-2-5	8	3	8	June 5, 2019	Fish bone	—	—	—	—	70.30g	
137	8PI1-2-5	8	3	8	June 5, 2019	*Odocoileus virginianus*	—	—	—	—	3/16.76g	Right distal radius, right scaphoid, right lunate
137	8PI1-2-5	8	3	8	June 5, 2019	Med. Mammal bone	—	—	—	—	11/13.17g	2 left ribs, right mandible, 2 long bone frags, 6 UID frags
137	8PI1-2-5	8	3	8	June 5, 2019	Stingray	—	—	—	—	7/1.79g	3 barbs, 4 dental plates
137	8PI1-2-5	8	3	8	June 5, 2019	*Carya glabra* nut	—	—	—	—	1/0.95g	Burnt hickory nut
137	8PI1-2-5	8	3	8	June 5, 2019	Modified *M. corona*	—	—	—	—	4/76.87g	
137	8PI1-2-5	8	3	8	June 5, 2019	*Mercenaria campechiensis*	—	—	3/302.84g	—	—	

Table A6. (continued)

FS#	Site	Area	STP#	Level	Date	Species/Artifact type	Whole#/Weight	Partial#/Weight	Frag#/Weight	Valve(L/R):#/Weight	Artifact#/Weight	Comments
137	8PI1-2-5	8	3	8	June 5, 2019	Modified *B. contrarium*	—	—	—	—	1/15.09g	
137	8PI1-2-5	8	3	8	June 5, 2019	*Macrocallista nimbosa*	—	—	2/16.81g	—	—	
137	8PI1-2-5	8	3	8	June 5, 2019	*Argopecten irradians*	—	—	3/15.46g	—	—	
137	8PI1-2-5	8	3	8	June 5, 2019	Sand-tempered plain sherd	—	—	—	—	2/25.87g	body sherds
137	8PI1-2-5	8	3	8	June 5, 2019	Cirripedia (Barnacle)	—	—	4/1.17g	—	—	
138	8PI1-2-5	8	3	9	June 6, 2019	*Macrocallista nimbosa*	1/3.24g	—	—	—	—	
138	8PI1-2-5	8	3	9	June 6, 2019	*Mercenaria campechiensis*	—	—	2/83.06g	—	—	
138	8PI1-2-5	8	3	9	June 6, 2019	*Geukensia granosissima*	—	—	4/3.10g	—	—	
138	8PI1-2-5	8	3	9	June 6, 2019	*Crassostrea virginica*	1/1.94	—	—	L:175/872.20g R:126/610.00g	—	one intact oyster
138	8PI1-2-5	8	3	9	June 6, 2019	*Melongena corona*	1/22.18g	1/7.56g	1/8.91g	—	—	
138	8PI1-2-5	8	3	9	June 6, 2019	*Noetia ponderous*	2/1.93g	—	—	—	—	
138	8PI1-2-5	8	3	9	June 6, 2019	Sand-tempered plain sherd	—	—	—	—	5/48.94g	
138	8PI1-2-5	8	3	9	June 6, 2019	Bone	—	—	—	—	177/41.38g	Fish bone
138	8PI1-2-5	8	3	9	June 6, 2019	*Ariopsis felis* Otolith	—	—	—	—	4/1.93g	
138	8PI1-2-5	8	3	9	June 6, 2019	*Sciaenops ocellatus* Otolith	—	—	—	—	2/0.97g	
139	8PI1-2-5	8	3	10	June 6, 2019	*Crassostrea virginica*	—	—	—	L:101/454.32g R:77/243.70g	—	
139	8PI1-2-5	8	3	10	June 6, 2019	*Melongena corona*	—	2/8.28g	1/6.81g	—	—	
139	8PI1-2-5	8	3	10	June 6, 2019	Bone	—	—	—	—	120/26.98g	Fish bone
139	8PI1-2-5	8	3	10	June 6, 2019	Sand-tempered plain sherd	—	—	—	—	2/24.32g	
139	8PI1-2-5	8	3	10	June 6, 2019	*Ariopsis felis* Otolith	—	—	—	—	5/1.85g	
139	8PI1-2-5	8	3	10	June 6, 2019	Mammal bone	—	—	—	—	9/14.01g	
139	8PI1-2-5	8	3	10	June 6, 2019	*Mercenaria campechiensis*	—	—	2/29.95g	—	—	
139	8PI1-2-5	8	3	10	June 6, 2019	*Busycon contrarium*	—	—	3/4.41g	—	—	
139	8PI1-2-5	8	3	10	June 6, 2019	*Crepidula fornicata*	1/1.52g	—	—	—	—	
139	8PI1-2-5	8	3	10	June 6, 2019	*Macrocallista nimbosa*	—	—	8/34.02g	—	—	
139	8PI1-2-5	8	3	10	June 6, 2019	Turtle shell	—	—	—	—	16/37.39g	
139	8PI1-2-5	8	3	10	June 6, 2019	Chert	—	—	—	—	1/4.18g	Chunk
140	8PI1-2-5	8	3	11	June 11, 2019	Bone	—	—	—	—	184/35.88g	

Table A6. (continued)

FS#	Site	Area	STP#	Level	Date	Species/Artifact type	Whole#/Weight	Partial#/Weight	Frag#/Weight	Valve(L/R):#/Weight	Artifact#/Weight	Comments
140	8PI1-2-5	8	3	11	June 11, 2019	Otoliths	—	—	—	—	5/1.77g	2 hardhead catfish, 2 gafftopsail catfish, 1 seatrout
140	8PI1-2-5	8	3	11	June 11, 2019	UID shell	—	—	7.52g	—	—	
140	8PI1-2-5	8	3	11	June 11, 2019	*Nassarius sp.*	—	2/0.35g	—	—	—	
140	8PI1-2-5	8	3	11	June 11, 2019	*Euglandina rosea*	—	1/3.30g	—	—	—	
140	8PI1-2-5	8	3	11	June 11, 2019	UID gastropod	—	—	5/3.58g	—	—	
140	8PI1-2-5	8	3	11	June 11, 2019	*Argopecten irradians*	—	—	1/0.52g	—	—	
140	8PI1-2-5	8	3	11	June 11, 2019	Charcoal	—	—	1.97g	—	—	
140	8PI1-2-5	8	3	11	June 11, 2019	Modified *Melongena corona*	—	1/37.58g	—	—	—	
140	8PI1-2-5	8	3	11	June 11, 2019	Pottery	—	—	—	—	5/22.08g	STP body sherds
140	8PI1-2-5	8	3	11	June 11, 2019	*Rangia cuneata*	—	1/2.38g	—	—	—	
140	8PI1-2-5	8	3	11	June 11, 2019	*Mercenaria campechiensis*	—	—	3/139.95g	—	—	
140	8PI1-2-5	8	3	11	June 11, 2019	*Geukensia granosissima*	—	—	8.40g	—	—	
140	8PI1-2-5	8	3	11	June 11, 2019	Cirripedia (Barnacle)	1/0.35g	—	—	—	—	
140	8PI1-2-5	8	3	11	June 11, 2019	*Crassostrea virginica*	—	—	—	L:32/213.09g	—	
141	8PI1-2-5	8	4	1	June 11, 2019	*Busycotypus spiratus*	—	1/5.37g	—	—	—	
141	8PI1-2-5	8	4	1	June 11, 2019	*Crassostrea virginica*	—	—	—	L:1/6.11g	—	
141	8PI1-2-5	8	4	1	June 11, 2019	*Busycon contrarium*	2/9.96g	—	—	—	—	
141	8PI1-2-5	8	4	1	June 11, 2019	*Melongena corona*	1/16.16g	2/19.80g	—	—	—	
142	8PI1-2-5	8	4	2	June 11, 2019	*Busycotypus spiratus*	—	1/5.63g	—	—	—	
142	8PI1-2-5	8	4	2	June 11, 2019	*Melongena corona*	—	3/25.41g	—	—	—	
143	8PI1-2-5	8	4	3	June 11, 2019	*Neverita duplicata*	—	6/6.75g	—	—	—	
143	8PI1-2-5	8	4	3	June 11, 2019	*Busycotypus spiratus*	19/200.00g	—	—	—	—	
143	8PI1-2-5	8	4	3	June 11, 2019	*Mercenaria campechiensis*	—	—	2/201.00g	—	—	
143	8PI1-2-5	8	4	3	June 11, 2019	*Crassostrea virginica*	—	—	—	L:27/240.00g R:16/95.00g	—	
143	8PI1-2-5	8	4	3	June 11, 2019	*Argopecten irradians*	1/19.74g	—	—	—	—	
143	8PI1-2-5	8	4	3	June 11, 2019	*Fasciolaria lilium*	11/145.00g	—	—	—	—	
143	8PI1-2-5	8	4	3	June 11, 2019	*Busycon contrarium*	123/1680.00g	—	—	—	—	
143	8PI1-2-5	8	4	3	June 11, 2019	*Melongena corona*	47/1166.09g	—	—	—	—	
143	8PI1-2-5	8	4	3	June 11, 2019	Modified *B. contrarium*	—	—	—	—	1/204.13g	

Table A6. (continued)

FS#	Site	Area	STP#	Level	Date	Species/Artifact type	Whole#/Weight	Partial#/Weight	Frag#/Weight	Valve(L/R):#/Weight	Artifact#/Weight	Comments
143	8PI1-2-5	8	4	3	June 11, 2019	Sand-tempered plain sherd	—	—	—	—	1/11.54g	
143	8PI1-2-5	8	4	3	June 11, 2019	*Crassostrea virginica*	—	—	—	L:28/210.56g	—	
144	8PI1-2-5	8	4	4	June 11, 2019	Sand-tempered plain sherd	—	—	—	—	2/31.02g	
144	8PI1-2-5	8	4	4	June 11, 2019	*Crassostrea virginica*	—	—	—	—	L:9/85.00g R:10/90.00g	
144	8PI1-2-5	8	4	4	June 11, 2019	*Busycon contrarium*	79/1110.00g	—	—	—	—	
144	8PI1-2-5	8	4	4	June 11, 2019	*Melongena corona*	11/180.00g	—	—	—	—	
144	8PI1-2-5	8	4	4	June 11, 2019	*Fasciolaria lilium*	7/60.00g	—	—	—	—	
144	8PI1-2-5	8	4	4	June 11, 2019	*Neverita duplicata*	6/20.00g	—	—	—	—	
144	8PI1-2-5	8	4	4	June 11, 2019	*Busycotypus spiratus*	22/245.00g	—	—	—	—	
145	8PI1-2-5	8	4	5	June 11, 2019	*Neverita duplicata*	6/70.00g	—	—	—	—	
145	8PI1-2-5	8	4	5	June 11, 2019	*Busycotypus spiratus*	9/170.00g	—	—	—	—	
145	8PI1-2-5	8	4	5	June 11, 2019	*Melongena corona*	8/140.00g	—	—	—	—	
145	8PI1-2-5	8	4	5	June 11, 2019	*Busycon contrarium*	39/630.00g	—	—	—	—	
145	8PI1-2-5	8	4	5	June 11, 2019	Modified *M. corona*	—	—	—	—	2/63.31g	Fragments
145	8PI1-2-5	8	4	5	June 11, 2019	*Fasciolaria lilium*	4/139.59g	—	—	—	—	
145	8PI1-2-5	8	4	5	June 11, 2019	*Crassostrea virginica*	—	—	—	L:69/963.58g R:42/540.00g	—	
145	8PI1-2-5	8	4	5	June 11, 2019	Sand-tempered plain sherd	—	—	—	—	2/17.49g	
145	8PI1-2-5	8	4	5	June 11, 2019	Bone	—	—	—	—	7/2.31g	Fish bone
145	8PI1-2-5	8	4	5	June 11, 2019	Turtle shell	—	—	—	—	1/1.74g	
146	8PI1-2-5	8	4	6	June 11, 2019	*Busycon contrarium*	20/295.00g	—	—	—	—	
146	8PI1-2-5	8	4	6	June 11, 2019	*Fasciolaria lilium*	3/40.00g	—	—	—	—	
146	8PI1-2-5	8	4	6	June 11, 2019	*Melongena corona*	44/265.00g	—	—	—	—	
146	8PI1-2-5	8	4	6	June 11, 2019	*Neverita duplicata*	8/75.00g	—	—	—	—	
146	8PI1-2-5	8	4	6	June 11, 2019	*Busycotypus spiratus*	27/380.00g	—	—	—	—	
146	8PI1-2-5	8	4	6	June 11, 2019	*Geukensia granosissima*	—	—	3.01g	—	—	
146	8PI1-2-5	8	4	6	June 11, 2019	Pottery	—	—	—	—	1/5.62g	STP body sherd
146	8PI1-2-5	8	4	6	June 11, 2019	Bone	—	—	—	—	6/2.11g	Bony fish, deer teeth, shark vert
146	8PI1-2-5	8	4	6	June 11, 2019	UID bivalve	—	—	2/0.30g	—	—	

Table A6. (continued)

FS#	Site	Area	STP#	Level	Date	Species/Artifact type	Whole#/Weight	Partial#/Weight	Frag#/Weight	Valve(L/R):#/Weight	Artifact#/Weight	Comments
146	8PI1-2-5	8	4	6	June 11, 2019	*Urosalpinx cinerea*	1/0.85g	—	—	—	—	
146	8PI1-2-5	8	4	6	June 11, 2019	*Polygyra sp.*	1/0.12g	—	—	—	—	
146	8PI1-2-5	8	4	6	June 11, 2019	*Macrocallista nimbosa*	—	—	1/2.41g	—	—	
146	8PI1-2-5	8	4	6	June 11, 2019	*Cirripedia (*Barnacle*)*	—	—	1/0.11g	—	—	
146	8PI1-2-5	8	4	6	June 11, 2019	Modified *M. corona*	—	—	—	—	1/26.61g	
146	8PI1-2-5	8	4	6	June 11, 2019	Charcoal	—	—	—	—	0.13g	
146	8PI1-2-5	8	4	6	June 11, 2019	*Crassostrea virginica*	—	—	—	L:91/1595.40g R:45/540.00g	—	
147	8PI1-2-5	8	4	7	June 12, 2019	*Busycon contrarium*	31/424.08g	—	1/2.59g	—	—	
147	8PI1-2-5	8	4	7	June 12, 2019	*Fasciolaria lilium*	5/140.87g	1/2.09g	1/2.98g	—	—	
147	8PI1-2-5	8	4	7	June 12, 2019	*Melongena corona*	43/421.71g	7/22.82g	—	—	—	
147	8PI1-2-5	8	4	7	June 12, 2019	*Neverita duplicata*	14/95.00g	—	—	—	—	
147	8PI1-2-5	8	4	7	June 12, 2019	*Busycotypus spiratus*	49/545.00g	—	—	—	—	
147	8PI1-2-5	8	4	7	June 12, 2019	*Crassostrea virginica*	—	—	—	L:108/1750.42g R:51/580.00g	—	
147	8PI1-2-5	8	4	7	June 12, 2019	*Geukensia granosissima*	—	—	9.76g	—	—	
147	8PI1-2-5	8	4	7	June 12, 2019	Pottery	—	—	—	—	2/29.33g	STP body sherds
147	8PI1-2-5	8	4	7	June 12, 2019	Bone	—	—	—	—	5/2.96g	Bony fish and med. mammal rib?
147	8PI1-2-5	8	4	7	June 12, 2019	*Polygyra sp.*	10/0.56g	—	—	—	—	
147	8PI1-2-5	8	4	7	June 12, 2019	*Ariopsis felis* otolith	—	—	—	—	1/0.35g	
147	8PI1-2-5	8	4	7	June 12, 2019	*Trachycardium egmontianum*	—	1/7.23g	—	—	—	
147	8PI1-2-5	8	4	7	June 12, 2019	*Argopecten irradians*	—	—	2/1.44g	—	—	
147	8PI1-2-5	8	4	7	June 12, 2019	*Macrocallista nimbosa*	—	—	3/8.26g	—	—	
147	8PI1-2-5	8	4	7	June 12, 2019	*Carditamera floridana*	1/0.60g	—	—	—	—	
147	8PI1-2-5	8	4	7	June 12, 2019	Cirripedia (Barnacle)	2/0.83g	—	—	—	—	
148	8PI1-2-5	8	4	8	June 12, 2019	*Busycon contrarium*	8/135.00g	—	—	—	—	
148	8PI1-2-5	8	4	8	June 12, 2019	*Fasciolaria lilium*	3/20.00g	3/17.77g	—	—	—	
148	8PI1-2-5	8	4	8	June 12, 2019	*Melongena corona*	14/85.00g	—	1/42.36g	—	—	
148	8PI1-2-5	8	4	8	June 12, 2019	Pottery	—	—	—	—	2/16.15g	STP body sherds
148	8PI1-2-5	8	4	8	June 12, 2019	*Meleagris gallopavo*	—	—	—	—	3/9.78g	scapulae

Table A6. (continued)

FS#	Site	Area	STP#	Level	Date	Species/Artifact type	Whole#/Weight	Partial#/Weight	Frag#/Weight	Valve(L/R):#/Weight	Artifact#/Weight	Comments
148	8PI1-2-5	8	4	8	June 12, 2019	*Murex pomum*	1/7.75g	—	—	—	—	
148	8PI1-2-5	8	4	8	June 12, 2019	*Neverita duplicata*	3/20.00g	—	—	—	—	
148	8PI1-2-5	8	4	8	June 12, 2019	*Busycotypus spiratus*	15/185.00g	—	—	—	—	
148	8PI1-2-5	8	4	8	June 12, 2019	*Crassostrea virginica*	—	—	—	L:70/902.69g R:20/300.00g	—	
149	8PI1-2-5	8	4	9	June 12, 2019	*Busycon contrarium*	4/45.00g	—	—	—	—	
149	8PI1-2-5	8	4	9	June 12, 2019	*Fasciolaria lilium*	1/10.00g	—	—	—	—	
149	8PI1-2-5	8	4	9	June 12, 2019	*Euglandina rosea*	1/2.57g	—	—	—	—	
149	8PI1-2-5	8	4	9	June 12, 2019	*Cerithium atratum*	1/0.35g	—	—	—	—	
149	8PI1-2-5	8	4	9	June 12, 2019	*Prunum apicinum*	3/0.41g	—	—	—	—	
149	8PI1-2-5	8	4	9	June 12, 2019	Bone	—	—	—	—	17/4.05g	Bony fish
149	8PI1-2-5	8	4	9	June 12, 2019	*Melongena corona*	11/135.00g	—	—	—	—	
149	8PI1-2-5	8	4	9	June 12, 2019	Modified pottery	—	—	—	—	1/3.31g	Circular sherd
149	8PI1-2-5	8	4	9	June 12, 2019	*Neverita duplicata*	2/20.00g	—	—	—	—	
149	8PI1-2-5	8	4	9	June 12, 2019	*Busycotypus spiratus*	6/75.00g	—	—	—	—	
149	8PI1-2-5	8	4	9	June 12, 2019	*Crassostrea virginica*	—	—	—	L:52/969.76g R:16/137.48g	—	
150	8PI1-2-5	8	4	10	June 12, 2019	*Busycon contrarium*	8/110.00g	—	—	—	—	
150	8PI1-2-5	8	4	10	June 12, 2019	*Busycotypus spiratus*	2/20.00g	—	—	—	—	
150	8PI1-2-5	8	4	10	June 12, 2019	*Crassostrea virginica*	—	—	—	L:33/396.27g R:9/51.07g	—	
150	8PI1-2-5	8	4	10	June 12, 2019	*Melongena corona*	7/40.00g	4/4.23g	—	—	—	
150	8PI1-2-5	8	4	10	June 12, 2019	Cirripedia (Barnacle)	1/0.16g	—	—	—	—	
150	8PI1-2-5	8	4	10	June 12, 2019	*Carditamera floridana*	1/1.13g	—	—	—	—	
150	8PI1-2-5	8	4	10	June 12, 2019	Bone	—	—	—	—	13/3.52g	Fish bone
150	8PI1-2-5	8	4	10	June 12, 2019	*Ariopsis felis* Otolith	—	—	—	—	1/0.37g	
151	8PI1-2-5	8	4	SURFACE	June 11, 2019	*Melongena corona*	1/11.07g	2/11.24g	—	—	—	
151	8PI1-2-5	8	4	SURFACE	June 11, 2019	*Busycotypus spiratus*	1/7.41g	2/9.69g	—	—	—	
151	8PI1-2-5	8	4	SURFACE	June 11, 2019	*Fasciolaria lilium*	—	3/120.64g	—	—	—	large
151	8PI1-2-5	8	4	SURFACE	June 11, 2019	*Crassostrea virginica*	—	—	—	L:2/59.36g R:1/54.29g	—	
151	8PI1-2-5	8	4	SURFACE	June 11, 2019	*Busycon contrarium*	5/76.42g	5/78.78g	—	—	—	

Table A6. (continued)

FS#	Site	Area	STP#	Level	Date	Species/Artifact type	Whole#/Weight	Partial#/Weight	Frag#/Weight	Valve(L/R):#/Weight	Artifact#/Weight	Comments
152	8PI1-2-5	8	5	1	June 18, 2019	—	—	—	—	—	—	Soil
153	8PI1-2-5	8	5	2	June 18, 2019	—	—	—	—	—	—	Soil
154	8PI1-2-5	8	5	3	June 18, 2019	—	—	—	—	—	—	Soil
155	8PI1-2-5	8	5	1	June 18, 2019	—	—	—	—	—	—	NCM
156	8PI1-2-5	8	5	2	June 18, 2019	—	—	—	—	—	—	NCM
157	8PI1-2-5	8	5	3	June 18, 2019	—	—	—	—	—	—	NCM
158	8PI1-2-5	8	5	4	June 18, 2019	—	—	—	—	—	—	NCM
159	8PI1-2-5	8	5	5	June 18, 2019	—	—	—	—	—	—	NCM
160	8PI1-2-5	8	5	6	June 18, 2019	—	—	—	—	—	—	NCM
161	8PI1-2-5	8	5	7	June 18, 2019	—	—	—	—	—	—	NCM
162	8PI1-2-5	8	5	8	June 18, 2019	—	—	—	—	—	—	NCM
163	8PI1-2-5	8	5	9	June 18, 2019	—	—	—	—	—	—	NCM
164	8PI1-2-5	8	5	10	June 18, 2019	—	—	—	—	—	—	NCM
165	8PI1-2-5	8	6	1	June 18, 2019	—	—	—	—	—	—	Soil
166	8PI1-2-5	8	6	2	June 18, 2019	—	—	—	—	—	—	Soil
167	8PI1-2-5	8	6	3	June 18, 2019	—	—	—	—	—	—	Soil
168	8PI1-2-5	8	6	4	June 18, 2019	—	—	—	—	—	—	Soil
169	8PI1-2-5	8	6	1	June 18, 2019	*Crassostrea virginica*	—	—	7/11.43g	L:1/14.15g R:2/5/53g	—	
170	8PI1-2-5	8	6	2	June 18, 2019	*Melongena corona*	—	2/33.66g	—	—	—	
170	8PI1-2-5	8	6	2	June 18, 2019	*Crassostrea virginica*	—	—	—	R:2/24.78g	—	
171	8PI1-2-5	8	6	3	June 18, 2019	*Crassostrea virginica*	—	—	7.16g	L:41/78.95g R:29/72.10g	—	
171	8PI1-2-5	8	6	3	June 18, 2019	*Melongena corona*	6/83.95g	29/439.77g	7/47.71g	—	—	
171	8PI1-2-5	8	6	3	June 18, 2019	*Busycon contrarium*	—	—	2/10.79g	—	—	
171	8PI1-2-5	8	6	3	June 18, 2019	*Argopecten irradians*	—	—	5/2.11g	—	—	
171	8PI1-2-5	8	6	3	June 18, 2019	*Polygyra sp.*	1/0.03g	—	—	—	—	
171	8PI1-2-5	8	6	3	June 18, 2019	*Mercenaria campechiensis*	—	—	1/1.78g	—	—	
171	8PI1-2-5	8	6	3	June 18, 2019	Bone	—	—	—	—	5.68g	Fish bone
171	8PI1-2-5	8	6	3	June 18, 2019	Pottery	—	—	—	—	13/56.45g	Sand-tempered plain body sherds

Table A6. (continued)

FS#	Site	Area	STP#	Level	Date	Species/Artifact type	Whole#/Weight	Partial#/Weight	Frag#/Weight	Valve(L/R):#/Weight	Artifact#/Weight	Comments
172	8PI1-2-5	8	6	4	June 18, 2019	*Crassostrea virginica*	—	—	13.55g	L:40/169.22g R:50/213.33g	—	
172	8PI1-2-5	8	6	4	June 18, 2019	*Melongena corona*	9/150.91g	3/18.24g	3/54.84g	—	—	
172	8PI1-2-5	8	6	4	June 18, 2019	*Busycon contrarium*	—	2/30.51g	—	—	—	
172	8PI1-2-5	8	6	4	June 18, 2019	*Argopecten irradians*	—	—	1/0.33g	—	—	
172	8PI1-2-5	8	6	4	June 18, 2019	*Neverita duplicata*	—	2/9.90g	—	—	—	
172	8PI1-2-5	8	6	4	June 18, 2019	*Mercenaria campechiensis*	—	—	1/4.47g	—	—	
172	8PI1-2-5	8	6	4	June 18, 2019	Modified *M. campechiensis*	—	—	—	—	1/40.47g	
172	8PI1-2-5	8	6	4	June 18, 2019	UID gastropod	—	—	2.34g	—	—	
172	8PI1-2-5	8	6	4	June 18, 2019	Bone	—	—	—	—	5.28g	Fish bone
172	8PI1-2-5	8	6	4	June 18, 2019	Otoliths	—	—	—	—	2/0.69g	*Ariopsis felis*
172	8PI1-2-5	8	6	4	June 18, 2019	Lithic	—	—	—	—	3/2.48g	Chert
172	8PI1-2-5	8	6	4	June 18, 2019	Pottery	—	—	—	—	4/12.63g	Sand-tempered plain body sherds
173	8PI1-2-5	8	6	5	June 18, 2019	*Crassostrea virginica*	—	—	—	L:1/0.69g R:2/4.31g	—	
173	8PI1-2-5	8	6	5	June 18, 2019	*Mercenaria campechiensis*	—	—	1/9.69g	—	—	
173	8PI1-2-5	8	6	5	June 18, 2019	Chert	—	—	—	—	5/3.56g	
174	8PI1-2-5	8	6	6	June 18, 2019	*Melongena corona*	—	1/11.62g	—	—	—	
174	8PI1-2-5	8	6	6	June 18, 2019	Chert	—	—	—	—	4/3.55g	
175	8PI1-2-5	8	6	7	June 18, 2019	Chert	—	—	—	—	1/0.67g	
176	8PI1-2-5	8	6	8	June 18, 2019	—	—	—	—	—	—	NCM
177	8PI1-2-5	8	6	9	June 18, 2019	*Melongena corona*	—	1/0.92g	—	—	—	
177	8PI1-2-5	8	6	9	June 18, 2019	Chert	—	—	—	—	3/1.13g	
178	8PI1-2-5	8	6	10	June 18, 2019	*Crassostrea virginica*	—	—	—	L:1/1.11g	—	
179	8PI1-2-5	8	7	1	June 18, 2019	*Crassostrea virginica*	—	—	18/30.02g	L:4/3.91g R:4/9.51g	—	
179	8PI1-2-5	8	7	1	June 18, 2019	Sand-tempered plain sherd	—	—	—	—	2/1.84g	
180	8PI1-2-5	8	7	2	June 18, 2019	*Crassostrea virginica*	—	—	28/45.32g	L:9/19.38g R:5/8.55g	—	
180	8PI1-2-5	8	7	2	June 18, 2019	*Neverita duplicata*	—	—	3/5.89g	—	—	
180	8PI1-2-5	8	7	2	June 18, 2019	*Busycotypus spiratus*	—	—	1/2.11g	—	—	
180	8PI1-2-5	8	7	2	June 18, 2019	*Melongena corona*	—	—	4/9.47g	—	—	
180	8PI1-2-5	8	7	2	June 18, 2019	Sand-tempered plain sherd	—	—	—	—	1/2.66g	

Table A6. (continued)

FS#	Site	Area	STP#	Level	Date	Species/Artifact type	Whole#/Weight	Partial#/Weight	Frag#/Weight	Valve(L/R):#/Weight	Artifact#/Weight	Comments
181	8PI1-2-5	8	7	3	June 18, 2019	—	—	—	—	—	—	NCM
182	8PI1-2-5	8	7	4	June 18, 2019	—	—	—	—	—	—	NCM
183	8PI1-2-5	8	7	5	June 18, 2019	Chert	—	—	—	—	1/0.99g	
184	8PI1-2-5	8	7	6	June 18, 2019	—	—	—	—	—	—	NCM
185	8PI1-2-5	8	7	7	June 18, 2019	—	—	—	—	—	—	NCM
186	8PI1-2-5	8	7	8	June 18, 2019	Chert	—	—	—	—	1/1.49g	
187	8PI1-2-5	8	7	9	June 18, 2019	—	—	—	—	—	—	NCM
188	8PI1-2-5	8	7	10	June 18, 2019	—	—	—	—	—	—	NCM
189	8PI1-2-5	8	8	1	June 19, 2019	—	—	—	—	—	—	Soil
190	8PI1-2-5	8	8	2	June 19, 2019	—	—	—	—	—	—	Soil
191	8PI1-2-5	8	8	3	June 19, 2019	—	—	—	—	—	—	Soil
192	8PI1-2-5	8	8	SURFACE	June 19, 2019	Modern glass	—	—	—	—	5/333.71g	
193	8PI1-2-5	8	8	1	June 19, 2019	—	—	—	—	—	—	NCM
194	8PI1-2-5	8	8	2	June 19, 2019	—	—	—	—	—	—	NCM
195	8PI1-2-5	8	8	3	June 19, 2019	—	—	—	—	—	—	NCM
196	8PI1-2-5	8	8	4	June 19, 2019	Sand-tempered plain sherd	—	—	—	—	4/11.95g	
197	8PI1-2-5	8	8	5	June 19, 2019	—	—	—	—	—	—	NCM
198	8PI1-2-5	8	8	6	June 19, 2019	—	—	—	—	—	—	NCM
199	8PI1-2-5	8	8	7	June 19, 2019	Chert	—	—	—	—	1/8.94g	
200	8PI1-2-5	8	8	8	June 19, 2019	—	—	—	—	—	—	NCM
201	8PI1-2-5	8	8	9	June 19, 2019	Chert	—	—	—	—	1/0.21g	
202	8PI1-2-5	8	8	10	June 19, 2019	—	—	—	—	—	—	NCM

Appendix B: Supplemental figures of shovel test profiles.

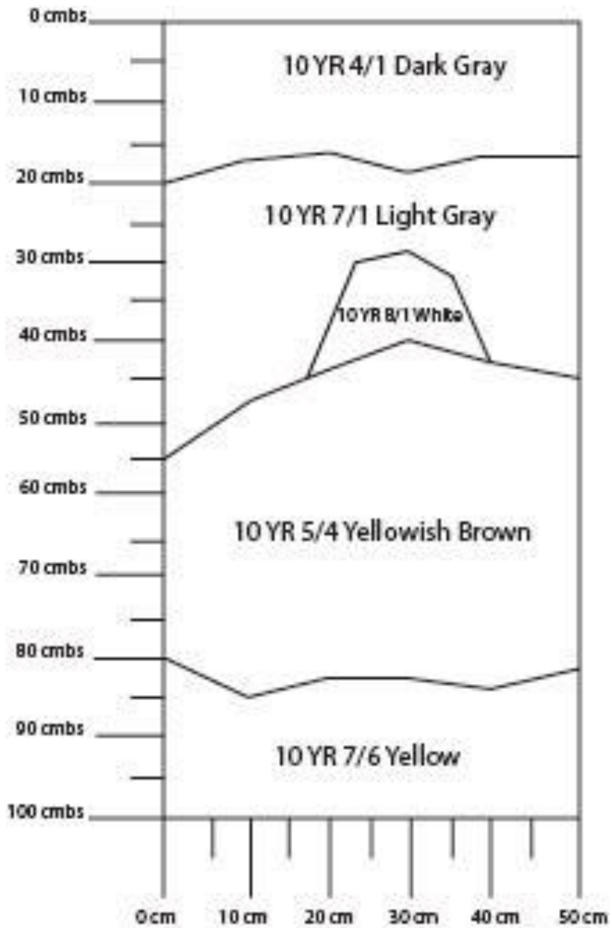

Figure B1. North profile of 8PI1-5-6, Area 2, STP 1.

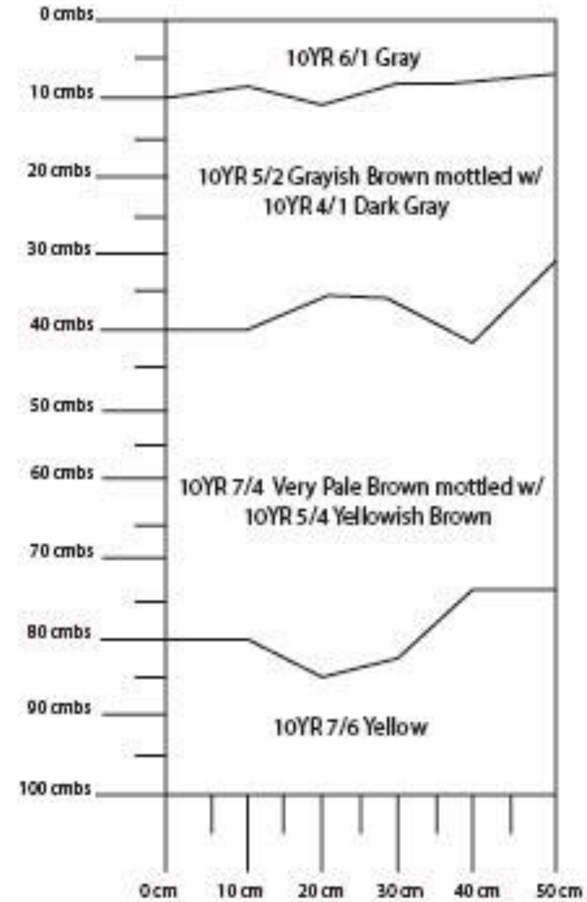

Figure B2. West profile of 8PI1-5-6, Area 2, STP 2.

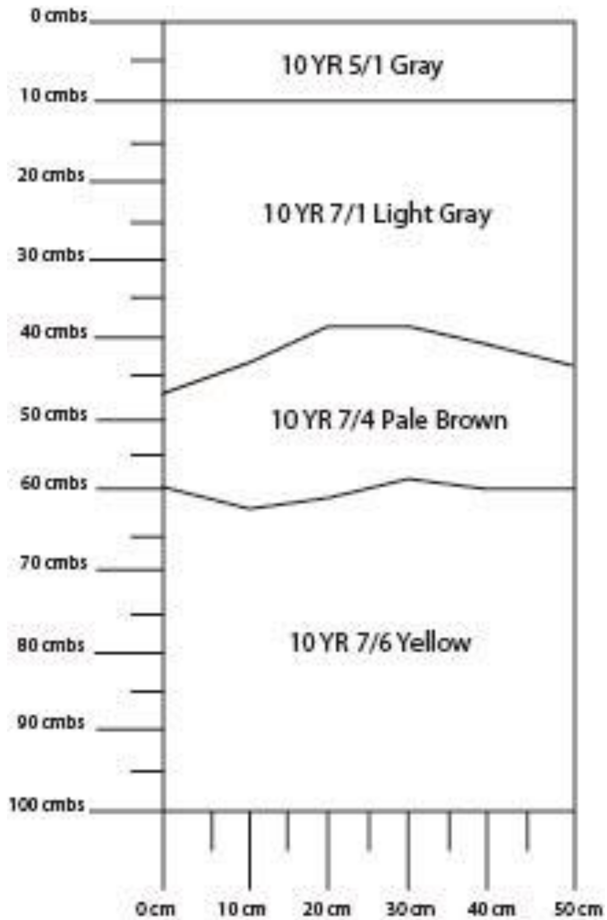

Figure B3. North profile of 8PI1-6-7, Area 2, STP 1.

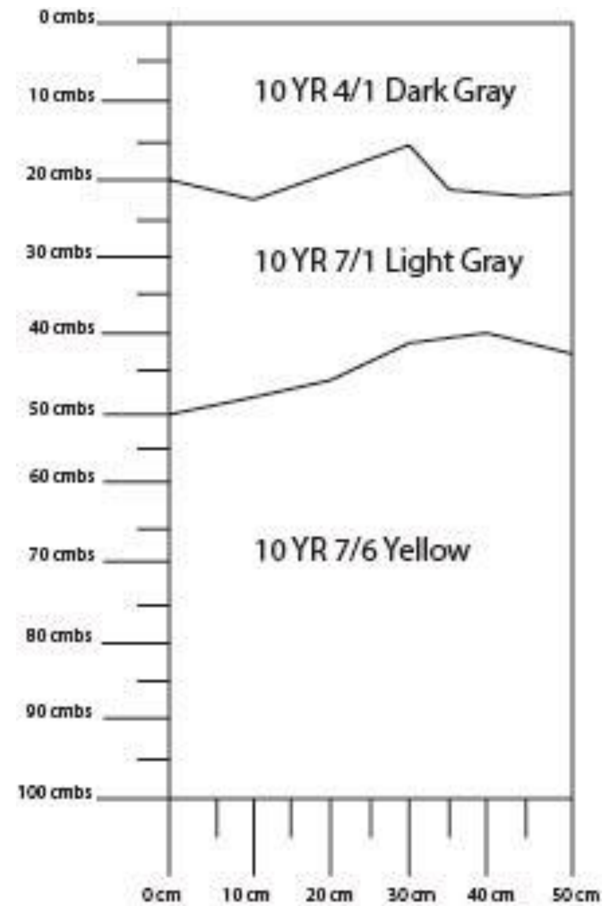

Figure B4. South profile of 8PI1-6-7, Area 2, STP 2.

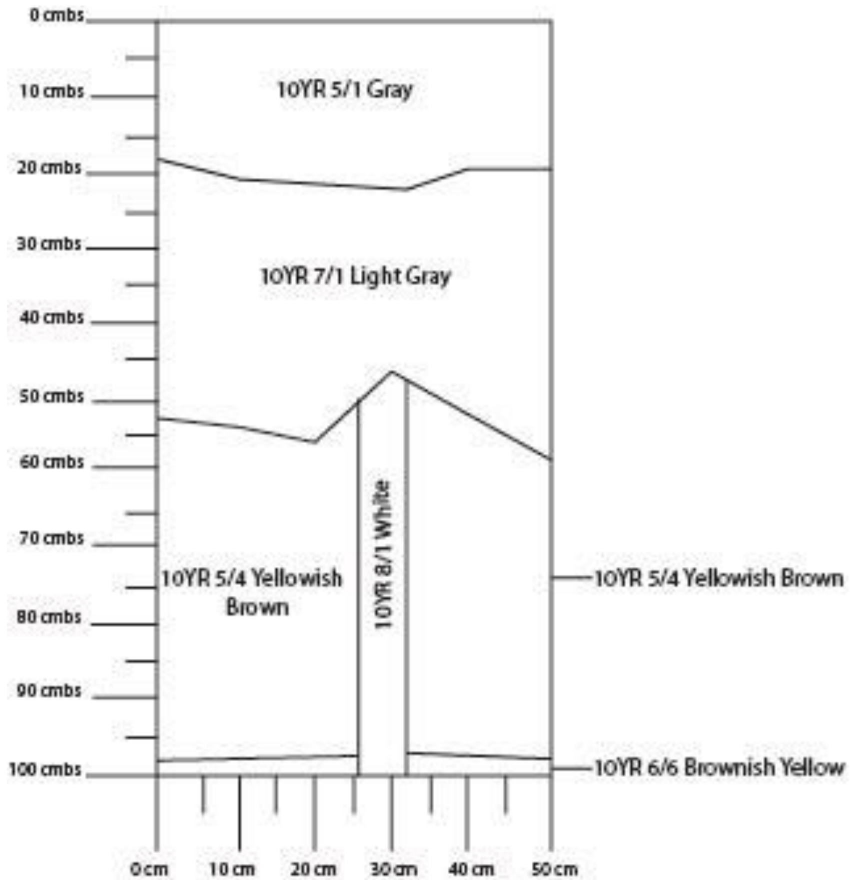

Figure B5. South profile of 8PI1-6-7, Area 2, STP 3.

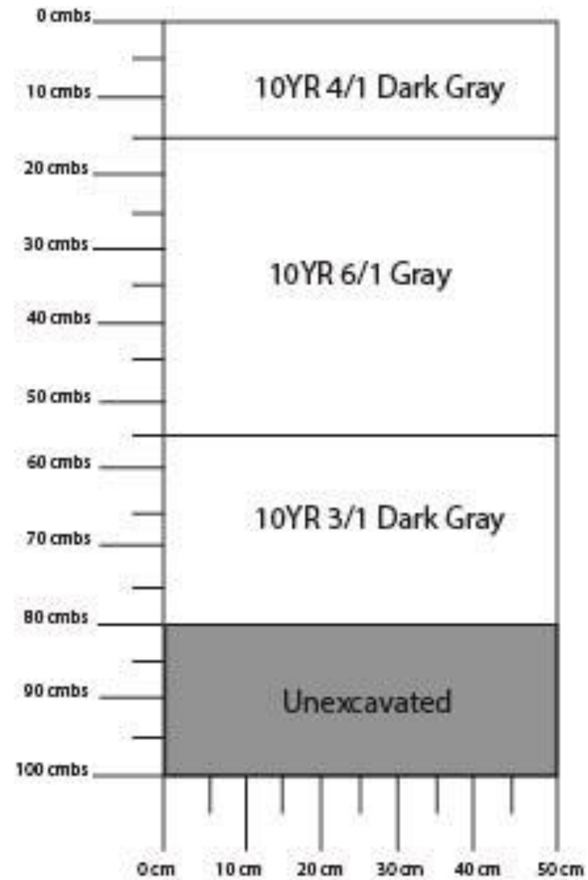

Figure B6. West profile of 8PI1-6-7, Area 2, STP 4.

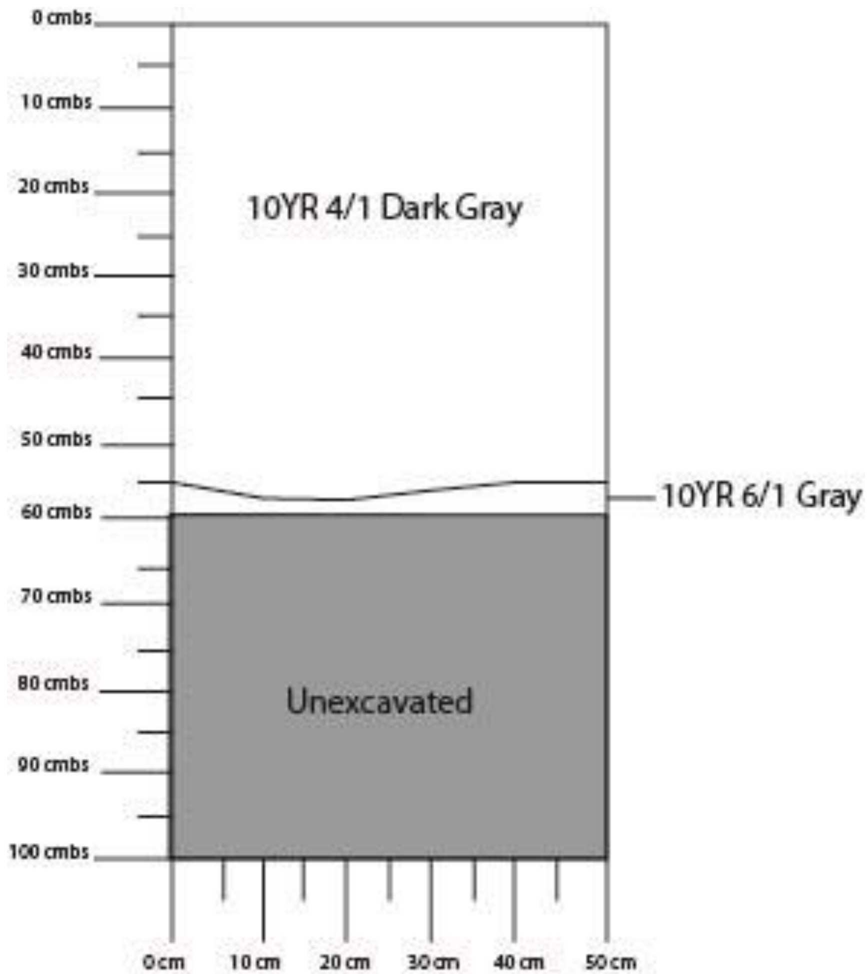

Figure B7. East profile of 8PI1-6-7, Area 3, STP 7.

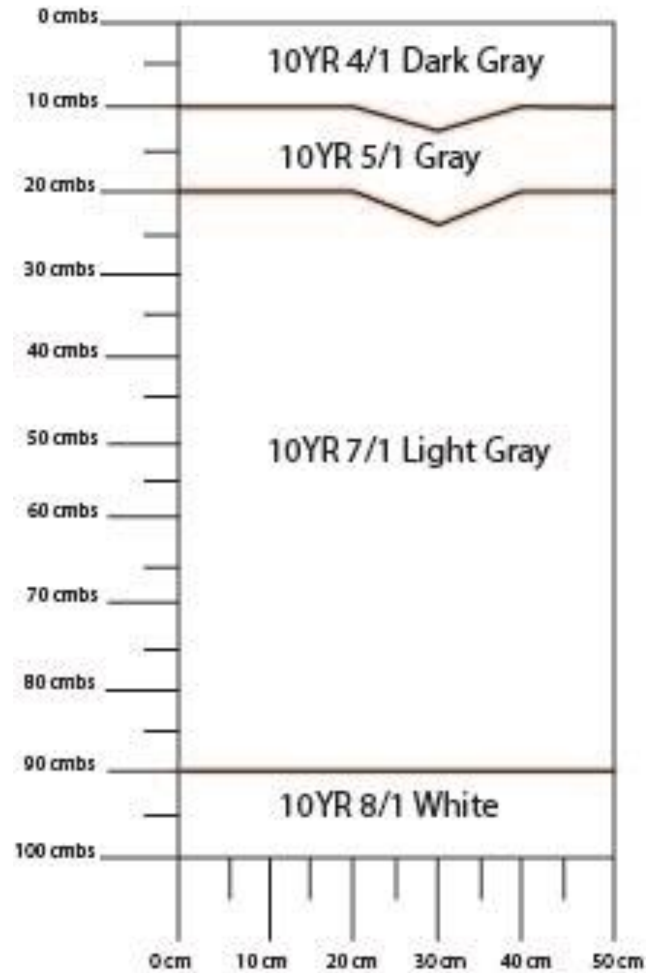

Figure B8. North profile of 8PI1-6-7, Area 3, STP 9.

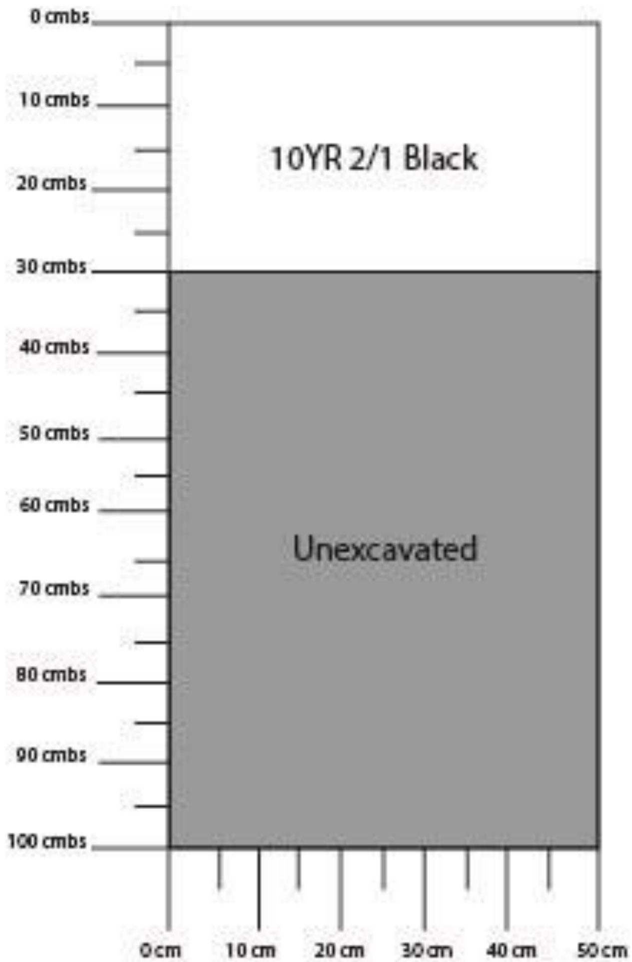

Figure B9. North profile of 8PI1-6-7, Area 3, STP 14.

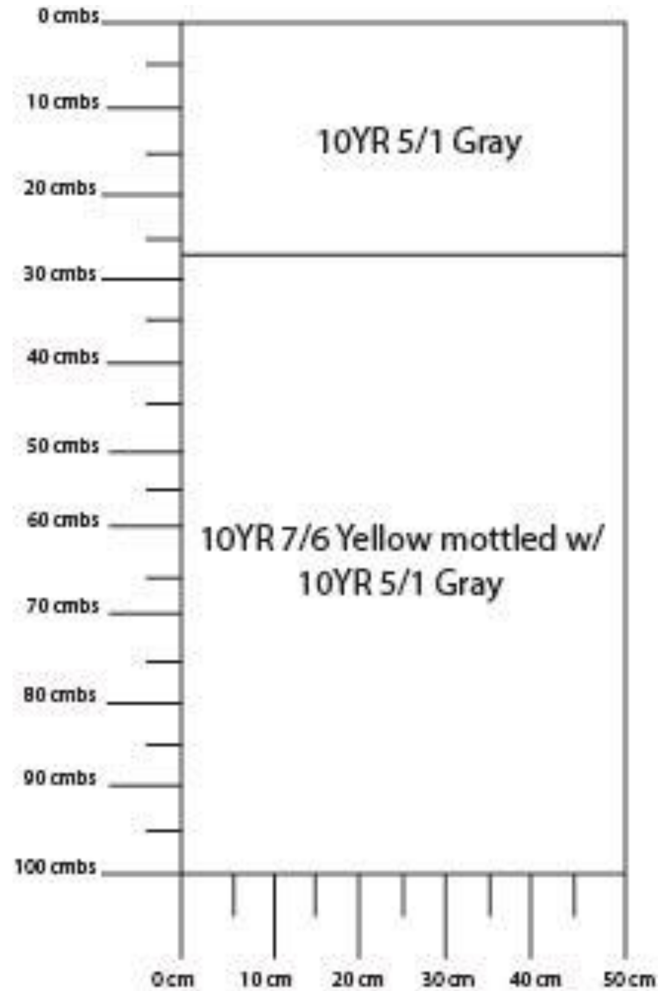

Figure B10. North profile of 8PI1-6-7, Area 4, STP 1.

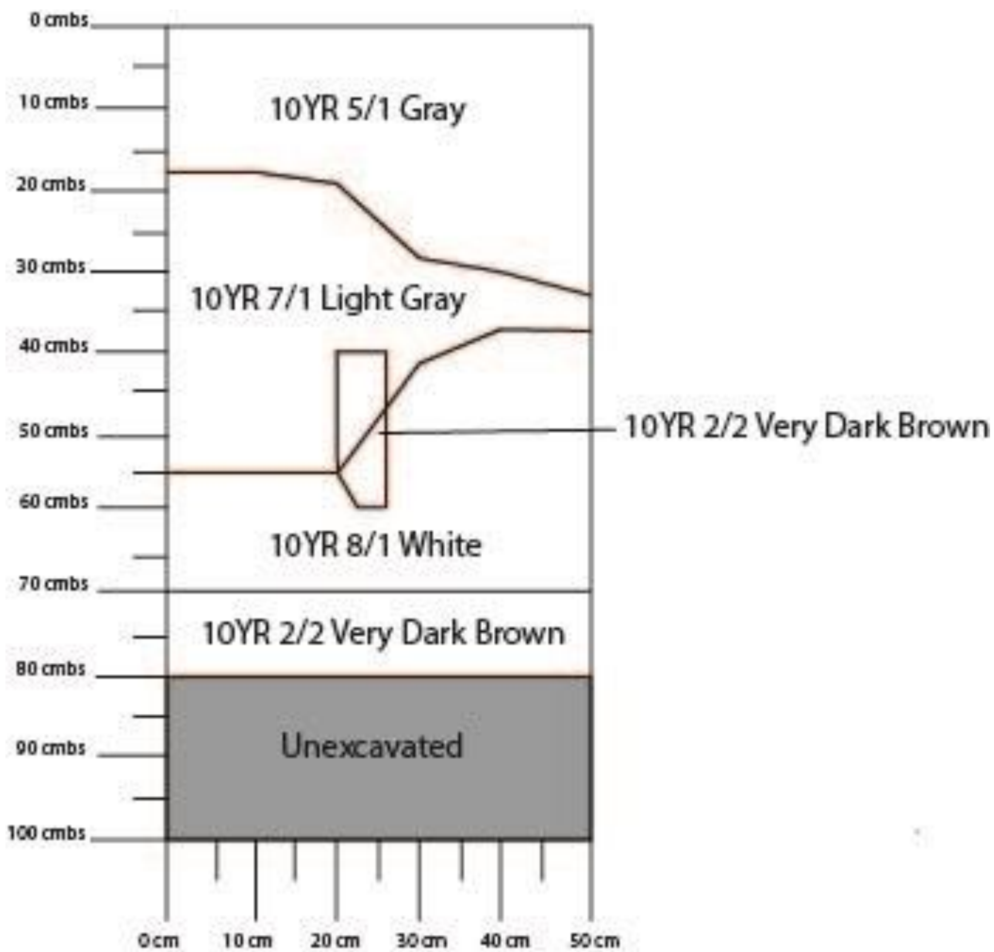

Figure B11. North profile of 8PI1-6-7, Area 4, STP 2.

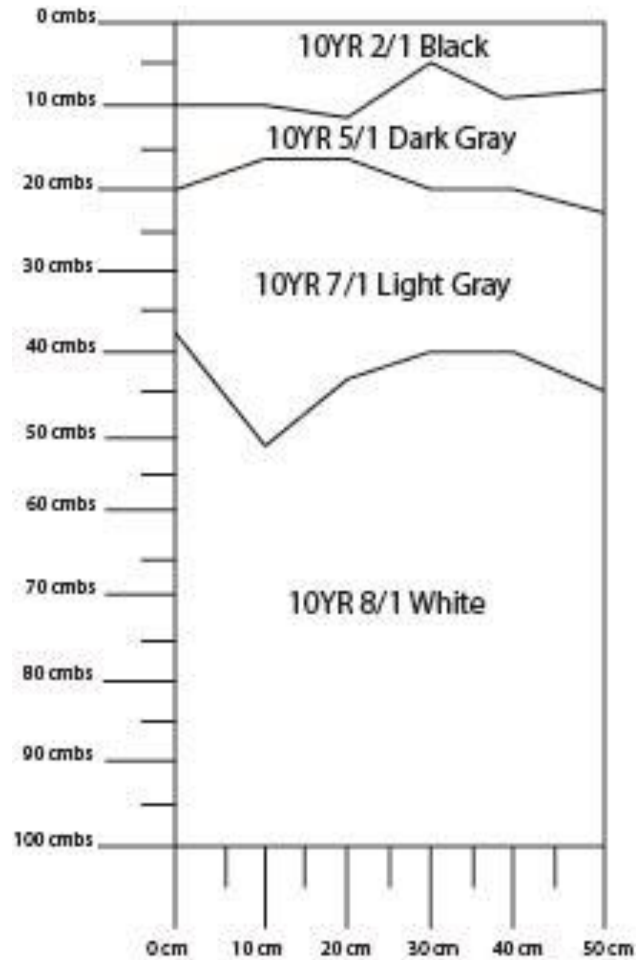

Figure B12. East profile of 8PI1-6-7, Area 5, STP 1.

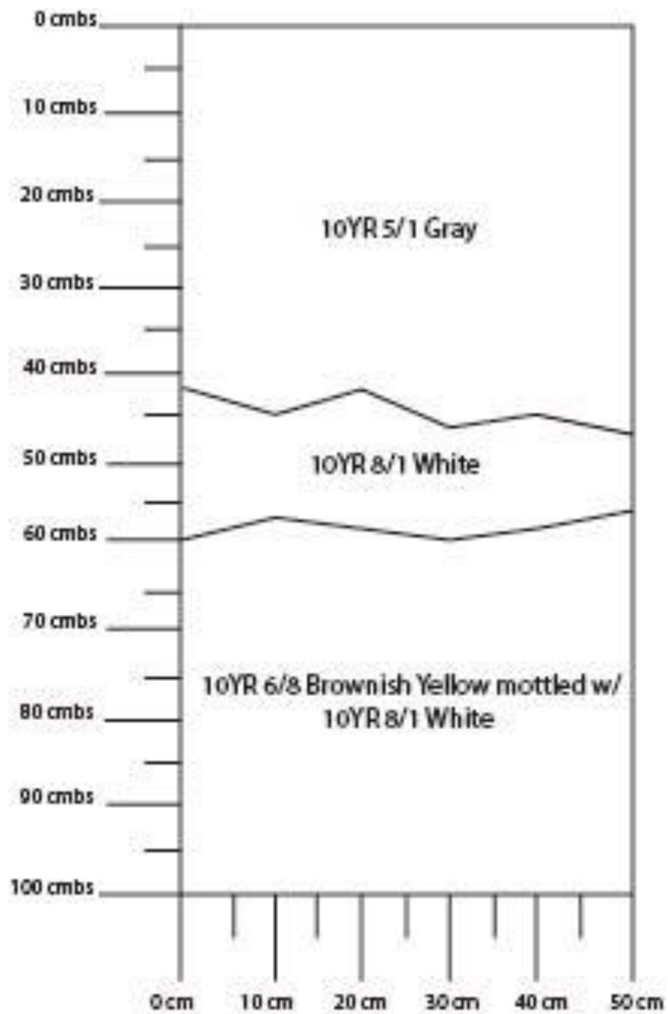

Figure B13. West profile of 8PI1-6-7, Area 5, STP 2.

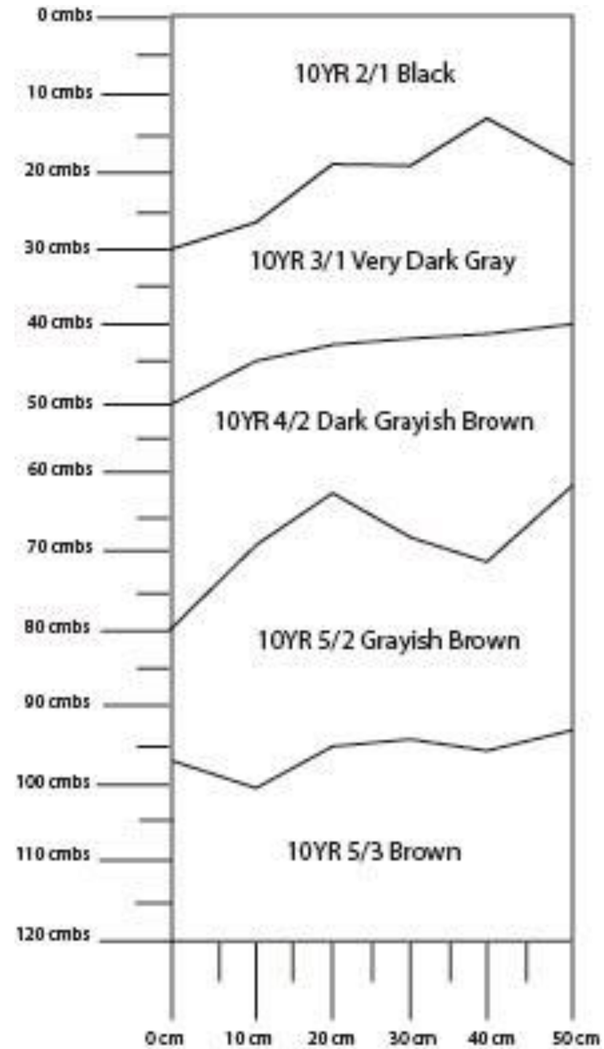

Figure B14. East profile of 8PI1-6-7, Area 5, STP 3.

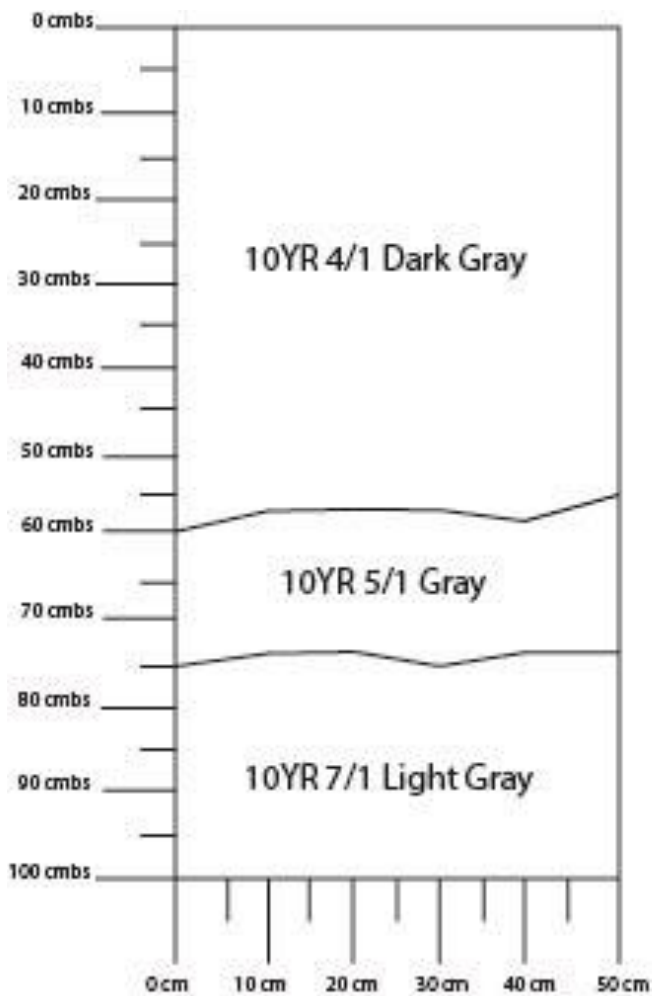

Figure B15. South profile of 8PI1-6-7, Area 5, STP 4.

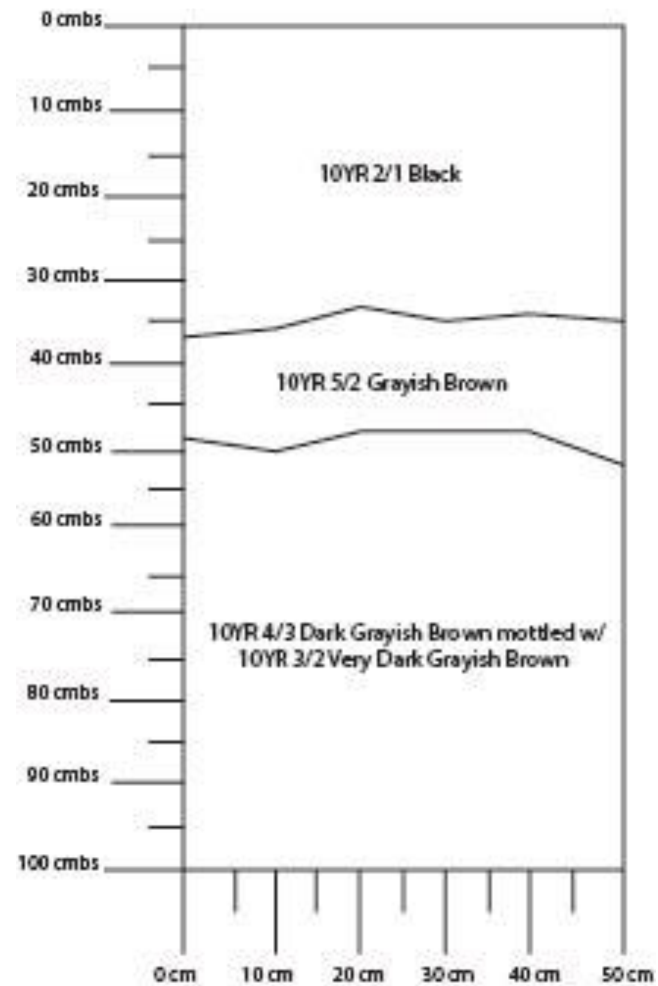

Figure B16. South profile of 8PI1-6-7, Area 5, STP 5.

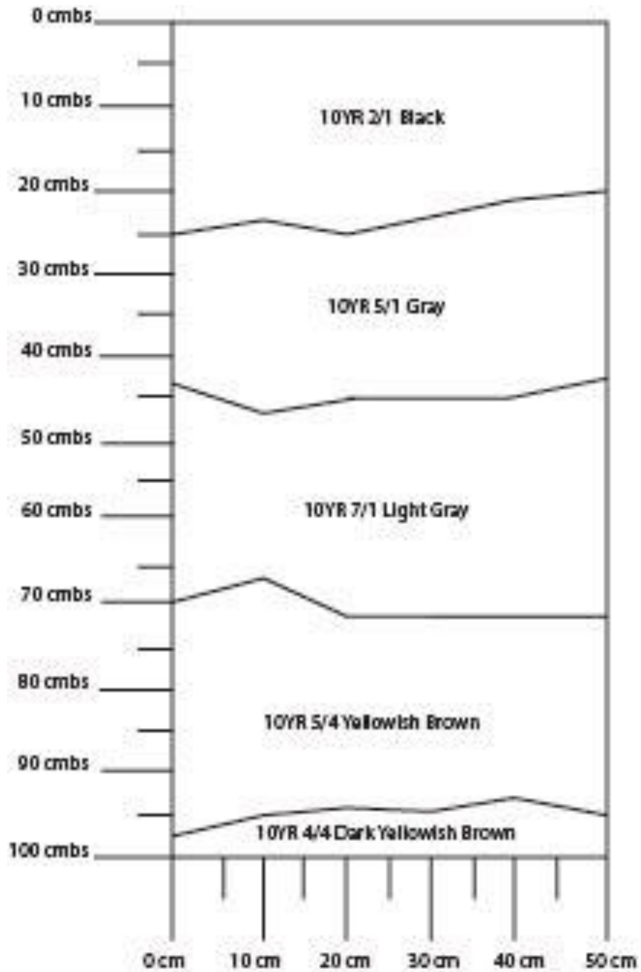

Figure B17. South profile of 8PI1-6-7, Area 5, STP 6.

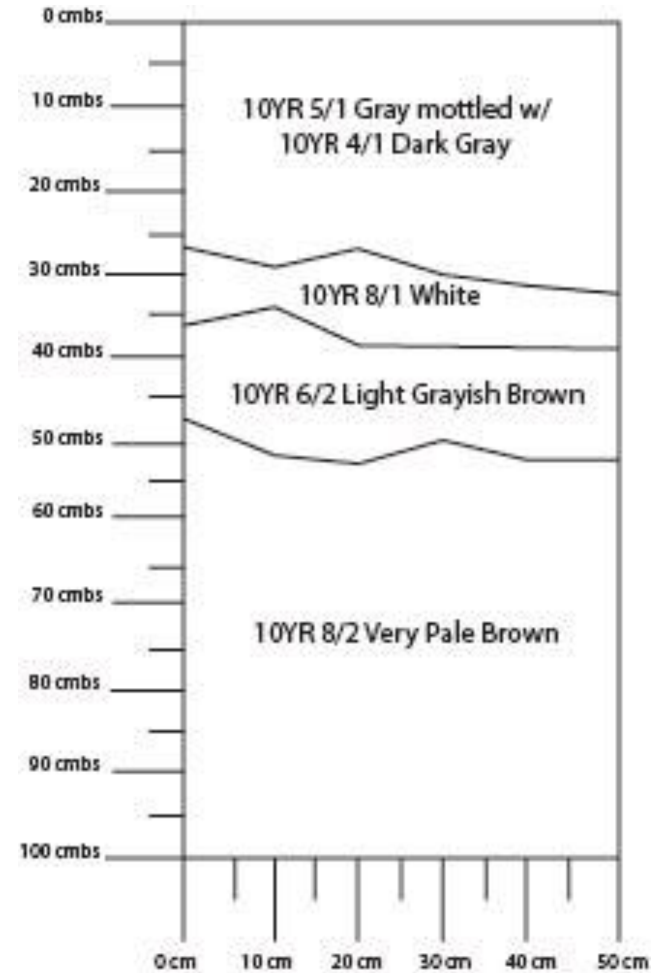

Figure B18. West profile of 8PI1-6-7, Area 7, STP 1.

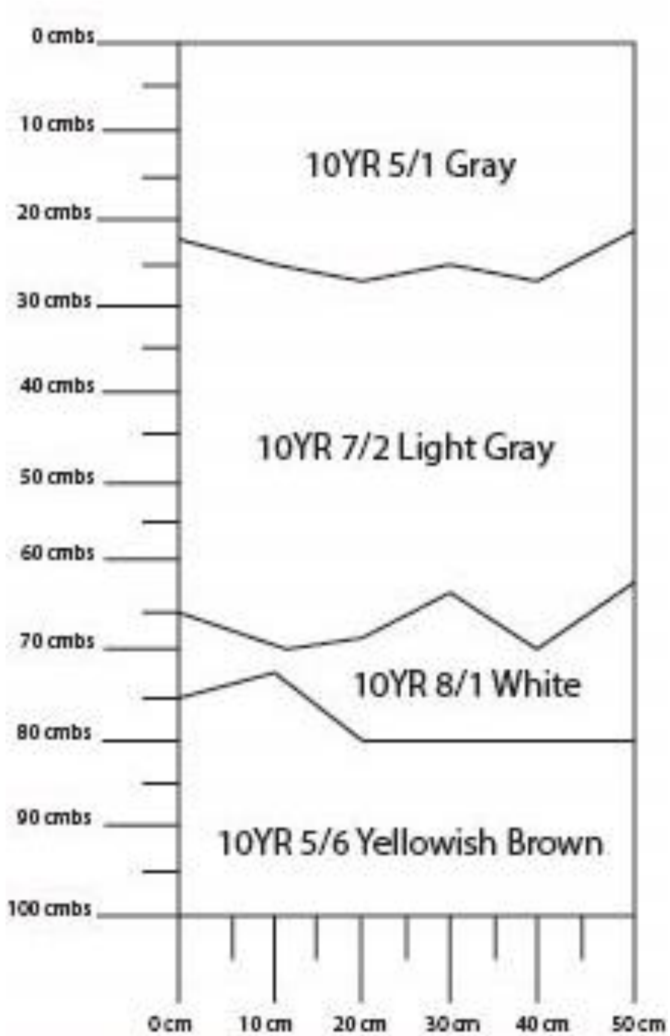

Figure B19. South profile of 8PI1-6-7, Area 7, STP 2.

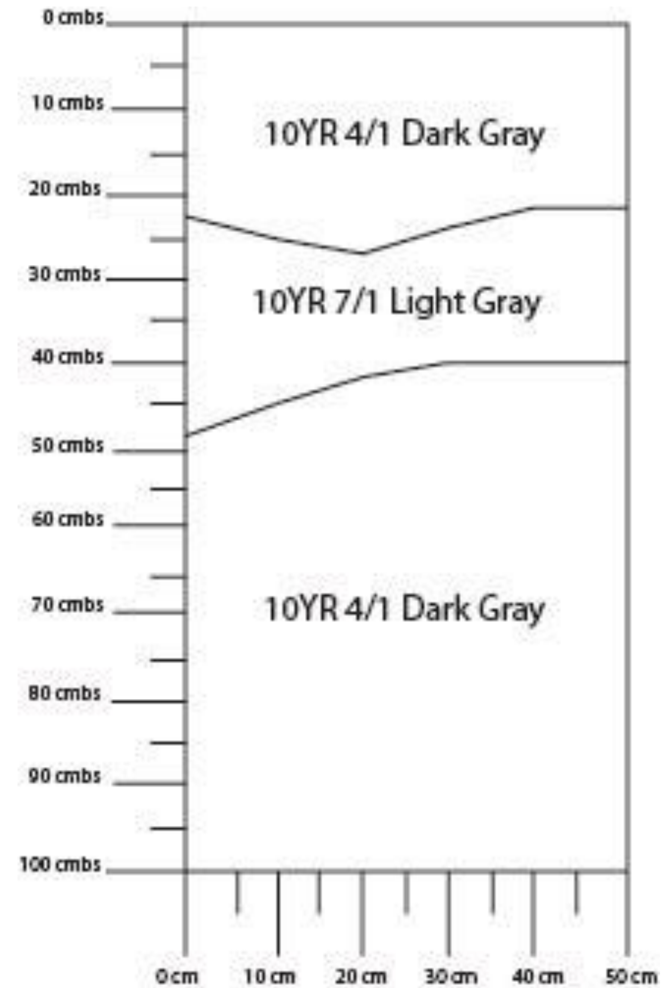

Figure B20. North profile of 8PI1-6-8, Area 7, STP 1.

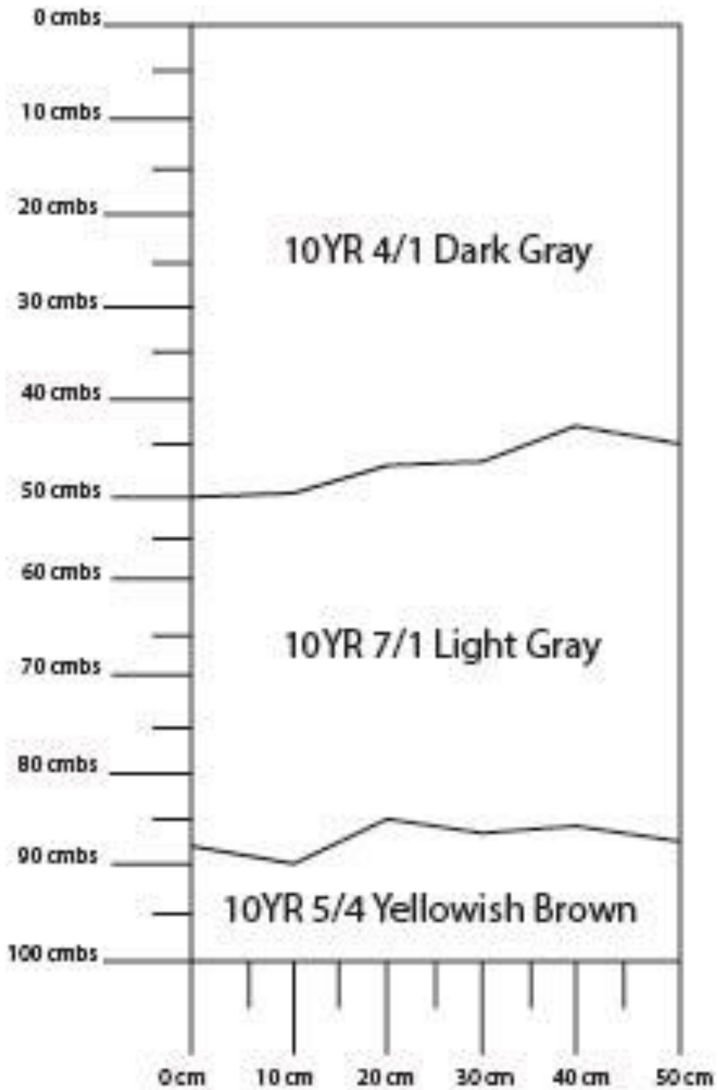

Figure B21. North profile of 8PI1-6-8, Area 7, STP 2.

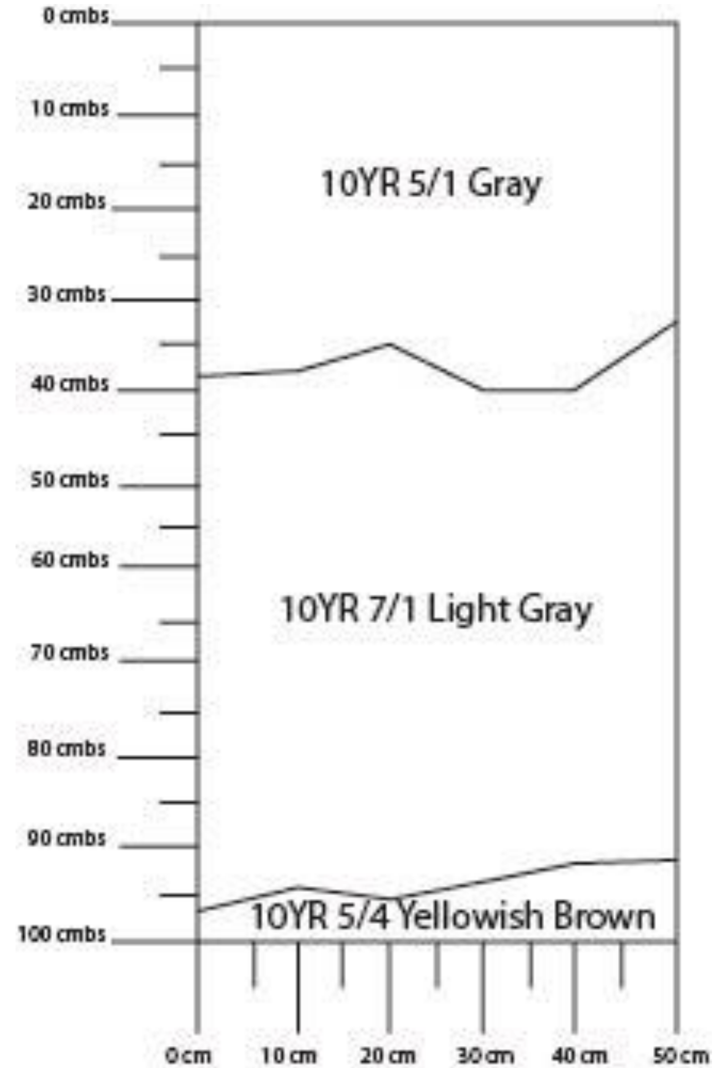

Figure B22. North profile of 8PI1-6-8, Area 7, STP 3.

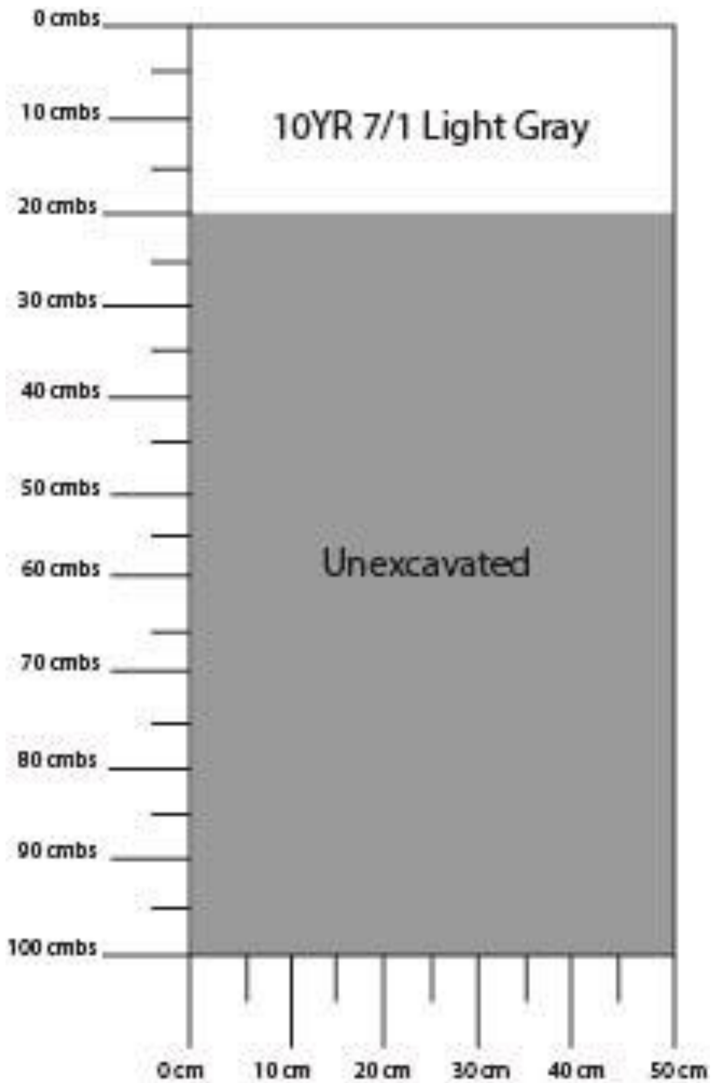

Figure B23. North profile of 8PI1-2-5, Area 8, STP 1.

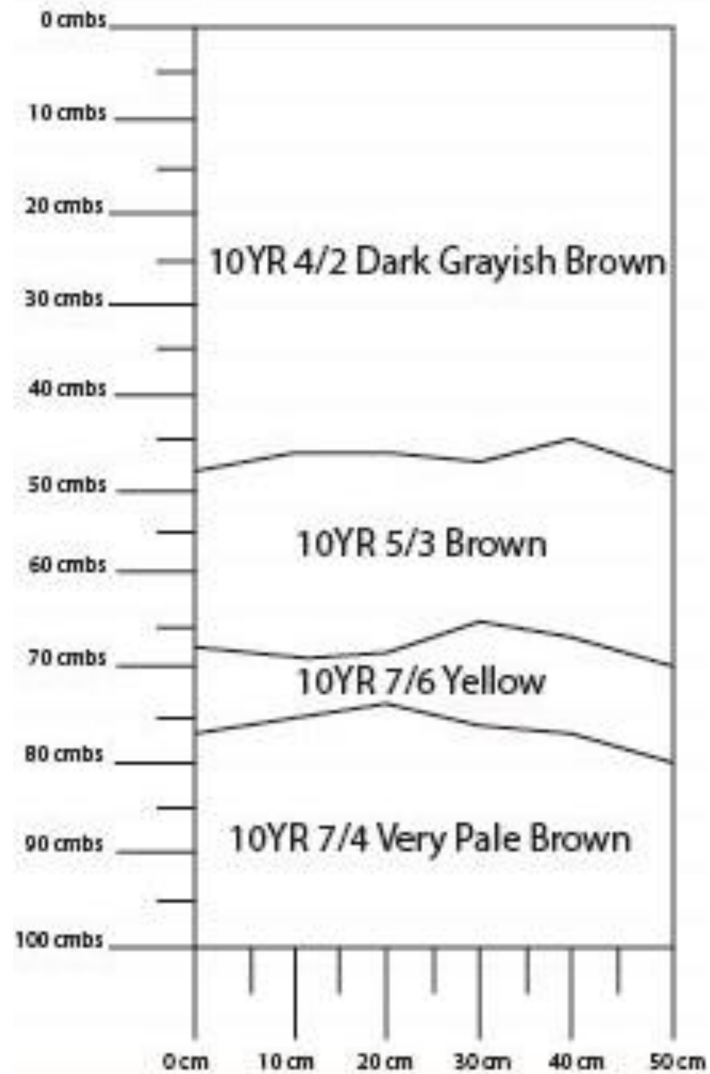

Figure B24. North profile of 8PI1-2-5, Area 8, STP 2.

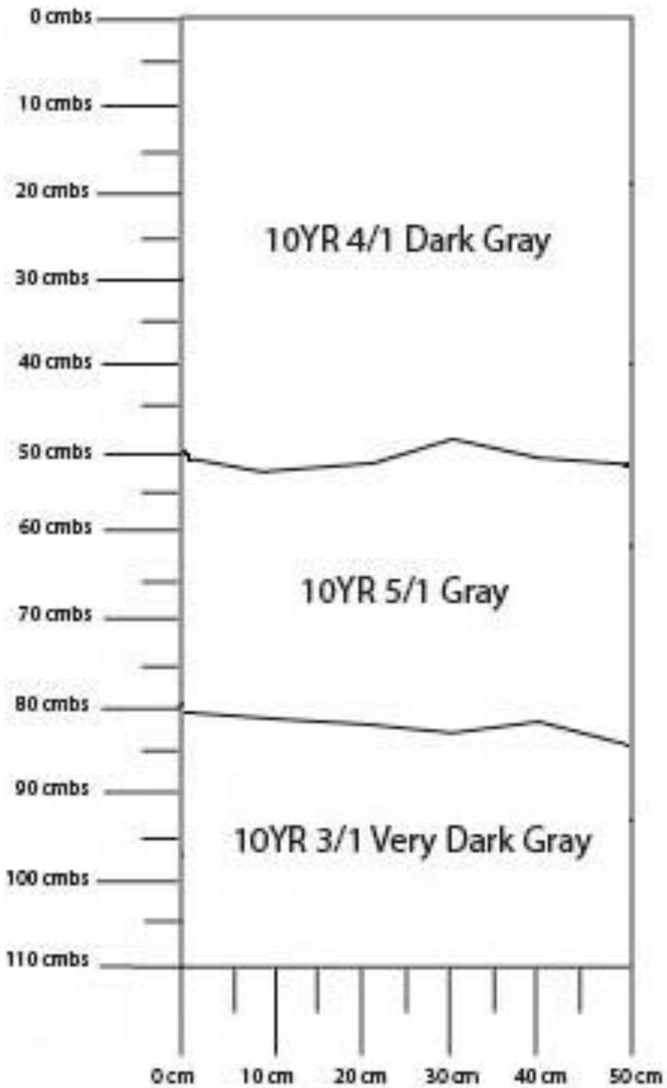

Figure B25. East profile of 8PI1-2-5, Area 8, STP 3.

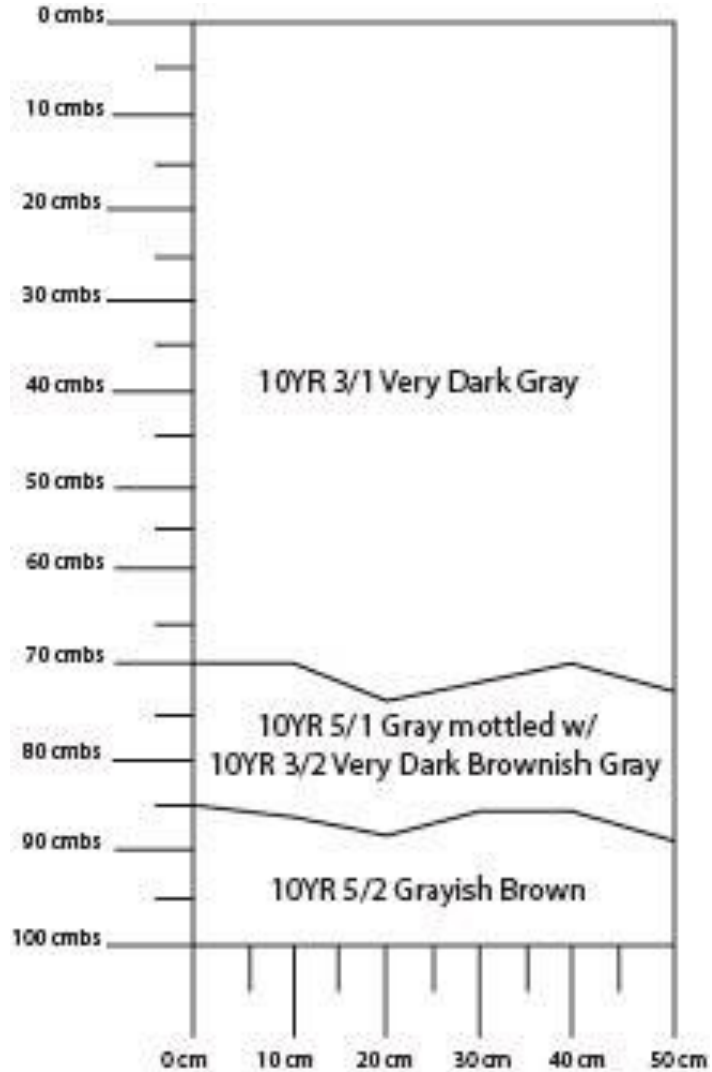

Figure B26. North profile of 8PI1-2-5, Area 8, STP 4.

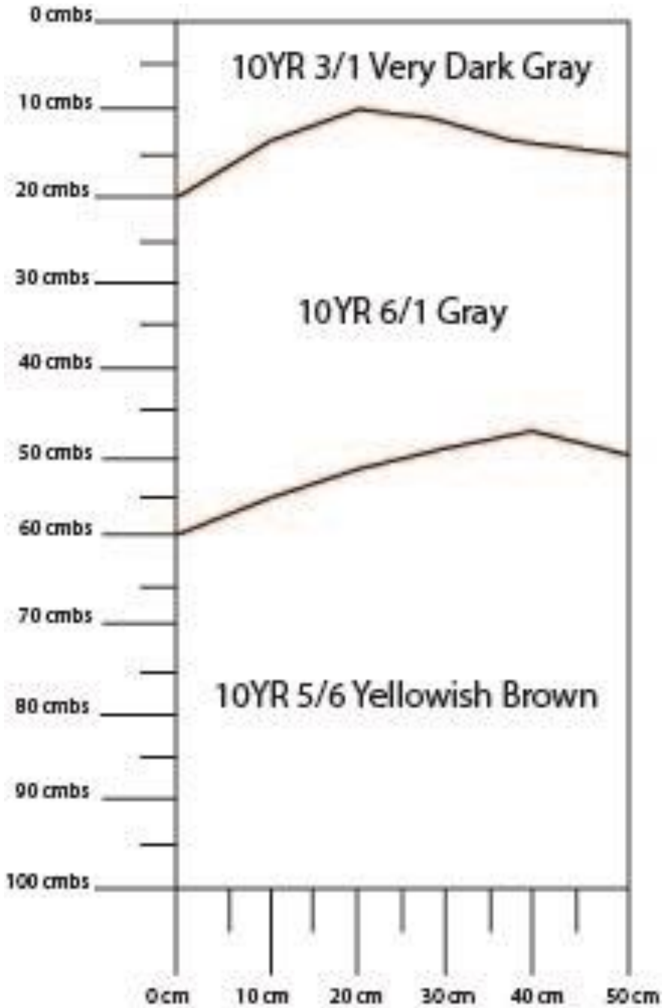

Figure B27. East profile of 8PI1-2-5, Area 8, STP 5.

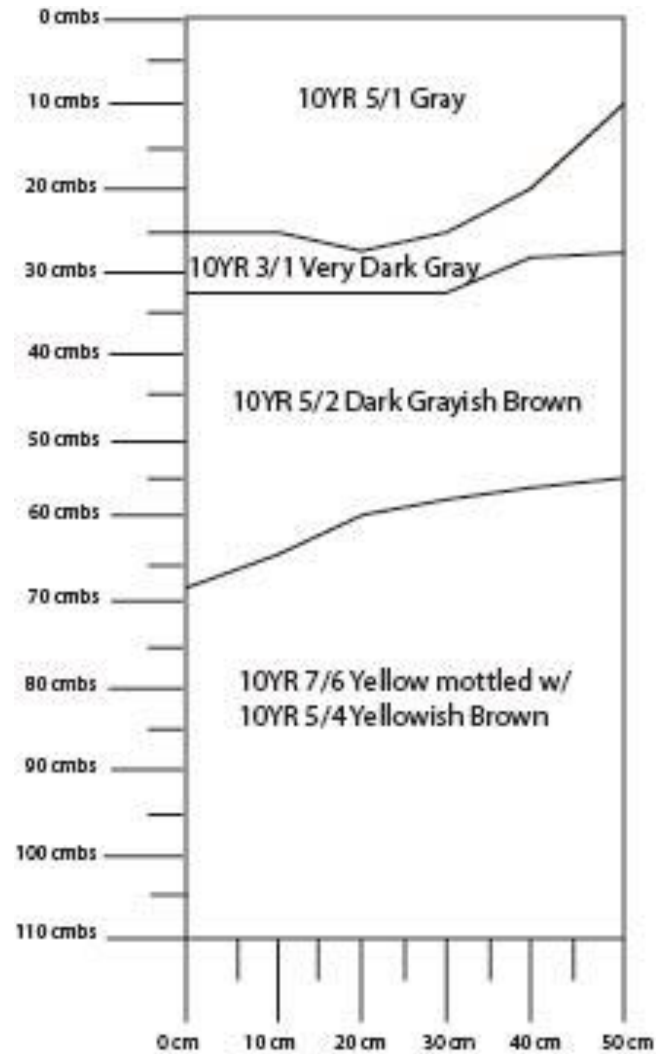

Figure B28. East profile of 8PI1-2-5, Area 8, STP 6.

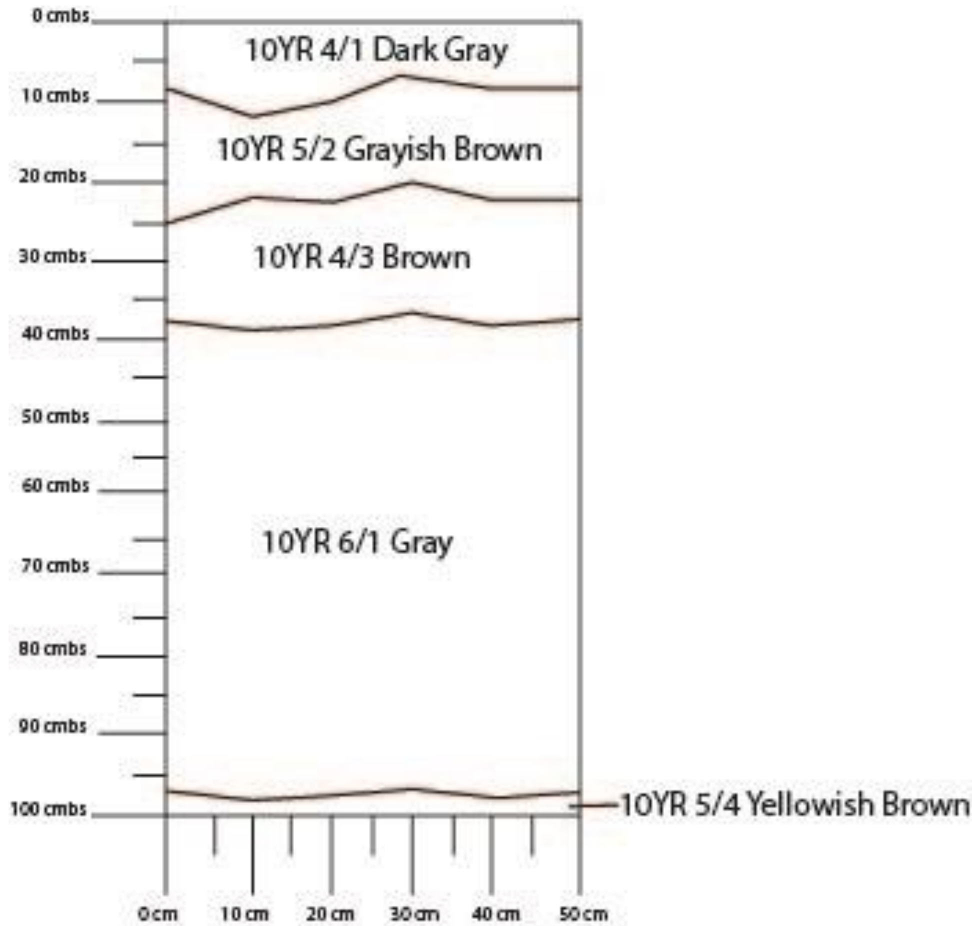

Figure B29. North profile of 8PI1-2-5, Area 8, STP 7.

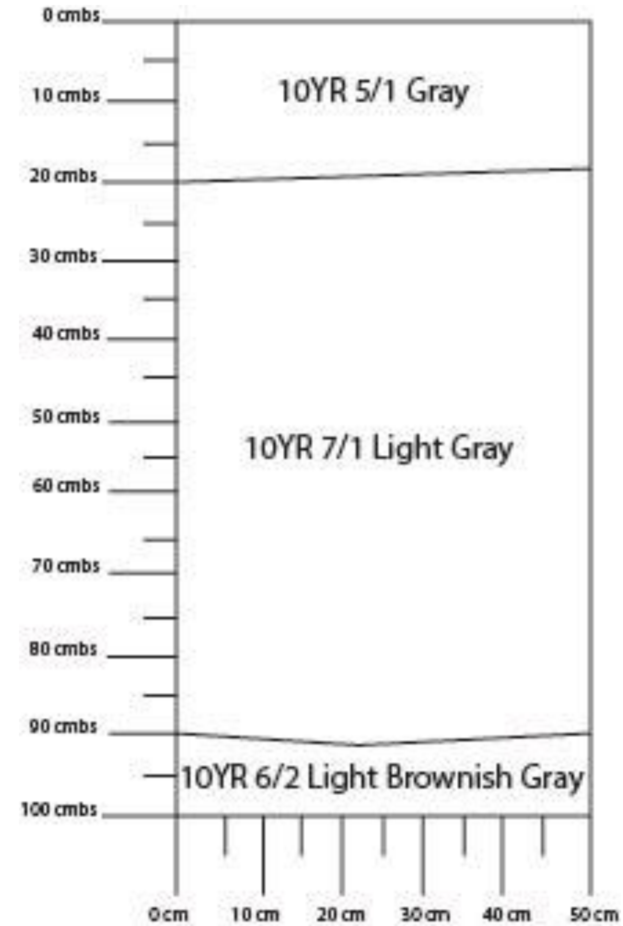

Figure B30. West profile of 8PI1-2-5, Area 8, STP 8.