

LOWER SUWANNEE ARCHAEOLOGICAL SURVEY 2013–2014: Shell Mound and Cedar Key Tracts



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**Technical Report 21
Laboratory of Southeastern Archaeology
Department of Anthropology
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Cover photo: View facing north-northwest of Test Unit 8 upon completion, Shell Mound (8LV42).

MANAGEMENT SUMMARY

Working under Archaeological Resources Protection Act (ARPA) permits LSCKNWR022113 and LSCKNWR060614, issued by U.S. Fish and Wildlife Service (USFWS), staff and students of the Laboratory of Southeastern Archaeology (LSA), Department of Anthropology, University of Florida, conducted archaeological survey and test excavations at several sites in the Lower Suwannee and Cedar Keys National Wildlife Refuges in Levy County, Florida from March, 2013 through January, 2015. These efforts were part of the ongoing Lower Suwannee Archaeological Survey (LSAS) of LSA, a long-term project to inventory, sample, and interpret the archaeological record of aboriginal coastal settlement on the northern Gulf Coast of Florida. Reported here are the results of investigations at Shell Mound (8LV42), Palmetto Mound (8LV2), A. B. Midden (8LV65), Clam Beach (8LV66a), Gardiner's Point (8LV68), and Seahorse Key Shell Midden (8LV64). An occupational sequence at Shell Mound spanning ca. A.D. 200–700 has been clarified by recent testing, as has the scope of activities taking place, notably intensive occupation from A.D. 450–600 of the relict sand dune on which the massive shell ridge was later emplaced, as well as the digging of large pits that were backfilled with a variety of vertebrate faunal remains and artifacts. These activities are likely to be related to mortuary practices expressed at the nearby Palmetto Mound. The results of mapping and limited testing reported here constitute the first documented investigations of Palmetto Mound, which had been the target of looting and undocumented digging since the mid-nineteenth century. Ongoing collections research of large assemblages of pottery in public repositories is further clarifying the timing and nature of mortuary practices at this largely destroyed site. Survey and testing at North Key and Seahorse Key reported here is the first documented investigations of sites on the “distal” islands of the refuge (i.e., islands a few kilometers offshore). Collectively, investigations at A. B. Midden, Clam Beach, Gardiner's Point, Seahorse Key Shell Midden, and other sites on the distal islands hold great potential for revealing the impacts of sea-level rise on coastal living. A. B. Midden, in particular, encases archaeological remains from a period when sea level is believed to have regressed (ca. 1200–500 B.C.). Like other sites on these islands, it also contains components that date to a later century of rapid shoreline transgression (ca. A.D. 200–300). Research on changing human-environment relationships structures much of LSAS efforts, complemented by graduate student projects in fishing technology, oyster mariculture, seasonality, ritual practices, and the built environment. In addition, field work in the summer of 2014 was conducted under the auspices of the Lower Suwannee Archaeological Field School, University of Florida. Local citizens also participated in field work and provided insights useful to the interpretation of sites. The results of investigations reported here underscore the significance of archaeological sites on the refuges and the need to continue investigating them before they are further impacted by rising sea and other agents of destruction.

ACKNOWLEDGMENTS

We are grateful to staff of U.S. Fish and Wildlife Service (USFWS) for their enduring support of our efforts. Work reported here was conducted under Archaeological Resources Protection Act (ARPA) permits LSCKNWR022113 and LSCKNWR060614 issued by USFWS. Regional Historic Preservation Officer and Regional Archaeologist Richard S. Kanaski shepherded us through the permitting process and has been a stalwart advocate of the Lower Suwannee Archaeological Survey since its inception in 2009. Locally we have benefited from the support and encouragement of staff of the Lower Suwannee and Cedar Keys National Wildlife Refuges, namely Manager Andrew Gude, Deputy Manager Larry Woodward, Ranger Pam Darty, and Fire Management Officer Vic Doig. Special Use permits to accompany the ARPA permits were kindly issued by Andrew and Larry.

Part-time Refuge staff member and perennial volunteer Ron Black deserves special thanks for lending all sorts of support to our efforts. We are grateful to Ron's daughter, Tiffany, for donating a case of her homemade essential oil bug repellent to the project; it works well at keeping bugs at bay without harming the humans. Friends of the Lower Suwannee and Cedar Keys National Wildlife Refuges volunteered in the field and provided strong public support, as did citizens of Cedar Key. Hedy Havel has been a long-time friend and collaborator of the LSAS and we look forward to many more years of working with her. An especially dedicated pair of volunteers last summer, during field school, were Milli Chapell and her beautiful dog, Sophia, Goddess of Wisdom.

Our work on Seahorse Key was enabled by staff of the Seahorse Key Marine Lab (SKML) of the University of Florida, under direction of Drs. Mark Martindale and Coleman Sheehy. SKML Education and Outreach Coordinator, Dr. Maria Sgambati, has been especially enthusiastic about our work and has enfolded us into a variety of educational programs. We also owe a debt of thanks to Cedar Key Librarian Molly Jubitz for hosting annual public lectures of our work, which we greatly enjoy.

The logistics of moving across water in the study area has been an ongoing learning process for LSA staff who have spent the majority of their lives on terra firma. SKML Boat Captain Kenny McCain has been generous with his time and knowledge, steering us in the right direction on all sorts of water-related matters, among others, and saving us from disaster when we went wrong. Kenny's wife Rose has been there many times to help too, and for both of them we are very grateful.

Most of the field work reported here was undertaken by students of the Lower Suwannee Archaeological Field School. Enduring tough field conditions with dignity and flair were Anthony Boucher, Nick Butler, Alex Haidari, Leah Honaker, Jocelyn Hurtado, Olivia Isaacs, Austin Jacobs, Michael Meyer, Cristina Oliveira, Andrea Puentes-Davis, Alejandro Reggeti, James Snyder, Domenique Sorreso, and Alec Tasi. Binghamton University Ph.D. student Halona Young-Wolfe volunteered for the entire field school and served essentially as a fourth Teaching Assistant (TA). The "official" TAs for field school were Ginessa Mahar, Mark Donop, and Jessica Jenkins.

Artifact processing back at the lab in Gainesville was undertaken by a corps of student volunteers, all under the supervision of GiNESSA Mahar: Nick Butler, Jared Gaum, Alex Haidari, Jocelyn Hurtado, Olivia Isaacs, Austin Jacobs, Kelsey Jones, Megan Lisle, Matt Mele, Paetyn Milton, Alejandro Reggeti, Marine Robbins, Maggie Silva, James Snyder, and Domenique Sorreso. Anthony Boucher, Cristina Oliveira, Josh Goodwin, and Alec Tasi each contributed data to this report from their own analyses, some conducted under employment, some as volunteers.

Beyond the field school and student volunteerism, support for the work reported here was provided by the Hyatt and Cici Brown Endowment for Florida Archaeology. Administering the funds and providing overall support in the Department of Anthropology, University of Florida were Chair Dr. Susan deFrance, Office Manager Karen Jones, and staff members Patricia King and Pamela Freeman. None of our efforts would have been possible without the enduring support of these fine colleagues.

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CHAPTER 1

OVERVIEW AND RESEARCH ORIENTATION

The Lower Suwannee Archaeological Survey (LSAS) was launched in 2009 with the intent of documenting and interpreting an archaeological record of coastal dwelling spanning the past 5,000 years (Sassaman et al. 2011, 2014). Under the direction of Kenneth E. Sassaman, the LSAS is a long-term project of the Laboratory of Southeastern Archaeology (LSA), Department of Anthropology, University of Florida. The project area is located along the northern Gulf Coast of Florida, between the towns of Cedar Key, to the south, and Horseshoe Beach, to the north (Figure 1-1). This expanse bounds the Lower Suwannee and Cedar Key National Wildlife Refuges, under jurisdiction of U.S. Fish and Wildlife Service (USFWS). Refuge land comprises the bulk of the study area and thus the LSAS must be permitted by USFWS for access to sites and opportunities for subsurface testing. The work reported here was conducted under Archaeological Resources Protection Act (ARPA) permits LSCKNWR022113 and LSCKNWR060614.

The LSAS was designed from its inception to be responsive to the physical reality of a rapidly disappearing archaeological record. Many sites in the study area are actively eroding along shorelines from tidal action, boat wake, storm surge, and the multifaceted effects of rising sea. Ironically, what we stand to lose from a deteriorating record of coastal history is an archive of how people dealt with the sort of sea-level changes we have experienced in recent years and are expected to continue to experience through at least this century. Thus, an overarching research objective of the LSAS has been to collect data relevant to an understanding of how humans dealt with changes in sea level in the past, before this archive is lost.

After five years of intermittent field work and perennial lab work, the LSAS has generated sufficient information to begin assembling a culture history of dealing with change. It is a history of abandonment and resettlement, the physical reality of coastal living. But it is also a history of resilience and persistence, as communities reorganized themselves under conditions of stress, often through alliances with communities in the interior Southeast. It is certainly the case that the history of coastal living even 5,000 years ago cannot be understood apart from the goings on elsewhere. Our perspective in this regard is bolstered by parallel research projects along the northern Gulf Coast and beyond. In particular, the ongoing work of Neill Wallis and colleagues of the Florida Museum of Natural History is adding tremendous new data on places like Garden Patch, near Horseshoe Beach (Wallis and McFadden 2013), as well as sites in north-central Florida with gulf-coastal connections (Wallis et al. 2014). The work of Tom Pluckhahn and colleagues at the Crystal River and Roberts Island sites, south of our study area, provides new insight on regional-scale political economies that enfolded the resources and interests of local communities between about A.D. 200 and 600 (Pluckhahn et al. 2015). This period of the ancient past draws our attention as an especially crucial archive of change, when not only the physical reality of coastal living was beset by rapid transgression of the coastline (Goodbred et al. 1998), but also by the extralocal influences of a religious movement involving ancestor veneration and the construction of mounds, many made of shell.

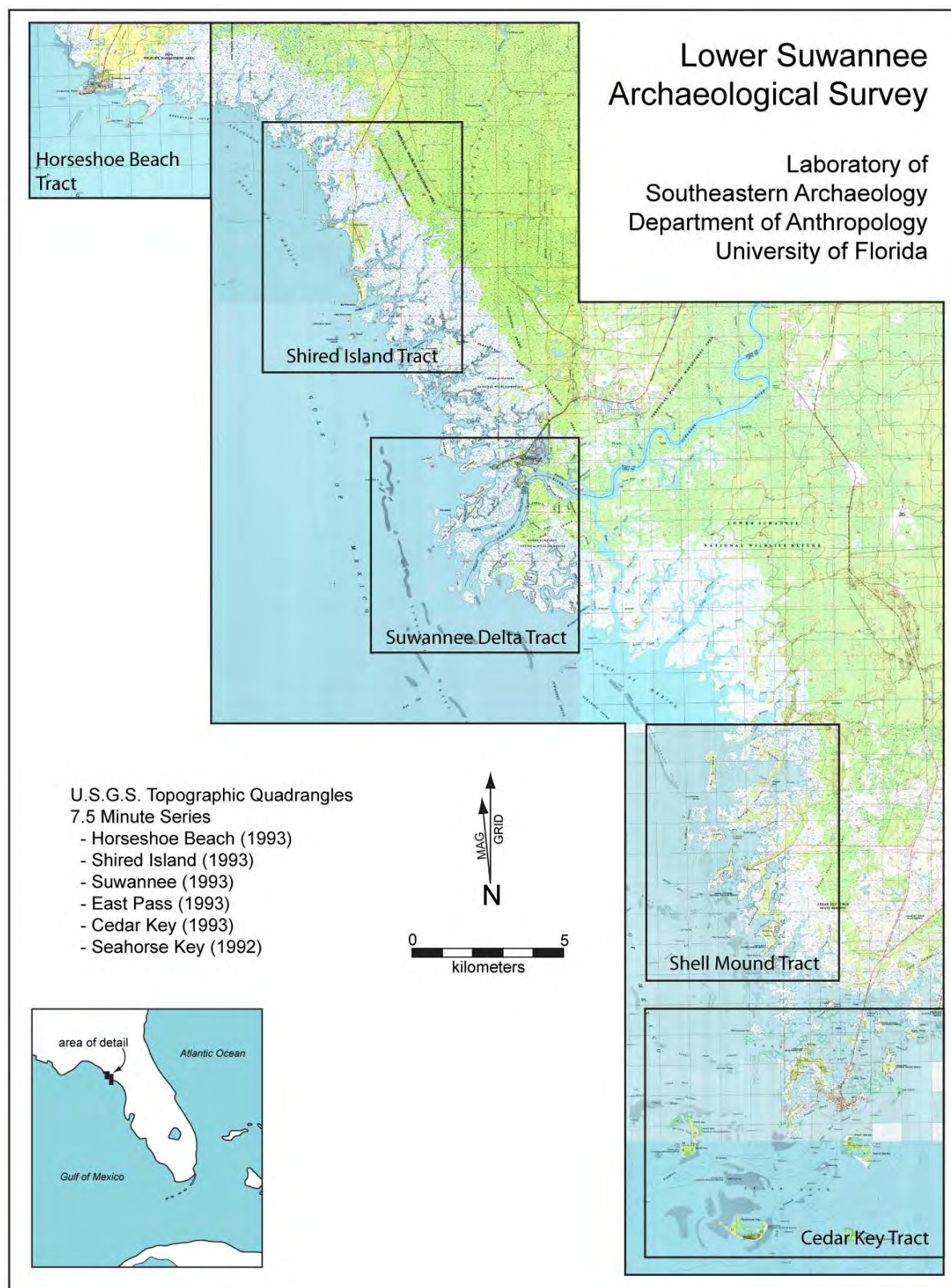


Figure 1-1. Composite topographic map of the Lower Suwannee Archaeological Survey, showing the locations of our five survey tracts.

Reconstructing this history through archaeology is a painstaking process involving field work, laboratory analyses, and many radiocarbon age estimates. Through January 2015, staff and students of the LSA have conducted test excavations at over 20 sites in the study area. Besides the usual analysis needed to catalog and curate collections from these sites, specialty analyses involving vertebrate and invertebrate remains, pottery, lithic artifacts, and sediment have been undertaken by students of the University of Florida, including several Ph.D. and M.A. candidates. A modest inventory of 43 accelerator mass spectrometry (AMS) assays on charcoal from 17 sites provides the rudiments of a chronology that will require hundreds more assays to reach our goal of 50-year resolution. Add to these age estimates about 50 more from Garden Patch (Wallis et al. 2015), Crystal River, and Roberts Island (Pluckhahn et al. 2015) and we have grounds for inferring the contours of ancient history at century-scale resolution, at least for the past 2,000 years.

Simultaneously, the history of environmental change in the study area requires its own, independent reconstruction. This need has been given a boost recently by the Ph.D. research of Paulette McFadden (2015), whose dissertation on changing human-environment relationships in the Horseshoe Beach area was informed by a series of geological cores. McFadden's work points to the need for many more local, high-resolution reconstructions of sea-level change for indeed the effects of climate change varied from place to place along the Gulf coast. Ultimately, environmental change must be correlated with changes in human practices in order to understand how one was affected by the other. In this sense, archaeological data serves as a proxy for both human practice and environmental conditions, provided, that is, we guard against the circularity of reasoning for lack of independent data, or, worse, succumb to the temptation to regard all archaeological residues as a direct measure of local environmental conditions. Again, coastal living was never simply local, but instead regional, even subcontinental in scope.

As we continue to learn about ancient history through archaeological research, the questions get more convoluted and the answers more complex. That is how it should be and the reason why any true gains in knowledge about the past require long-term research commitments. That is the philosophy of the LSAS: to continue working in the study area until it is either inundated by rising sea (in which case we turn it over to our colleagues in underwater archaeology) or until we run out of questions to ask. We doubt the latter will ever transpire because research questions and our ability to address them evolve. It is more likely the case that sites in the study area will fall victim to coastal erosion attending sea-level rise, as have many of those with occupations predating 5,000 years ago. We address the intertwined nature of salvage archaeology and research below after reviewing briefly the venues of survey and testing operations reported here.

SITES AND LANDFORMS OF 2013–2014 INVESTIGATIONS

Figure 1-2 shows the locations of all landforms and sites investigated by the LSAS from March 2013 through January 2015 under the ARPA permits listed above (note that only one field project reported here elapsed this calendar year, in January, thus the title of the report is restricted to 2013–2014 to avoid confusion with reporting on fieldwork to be conducted in the second half of 2015). Other LSAS work conducted over this period on private inholdings

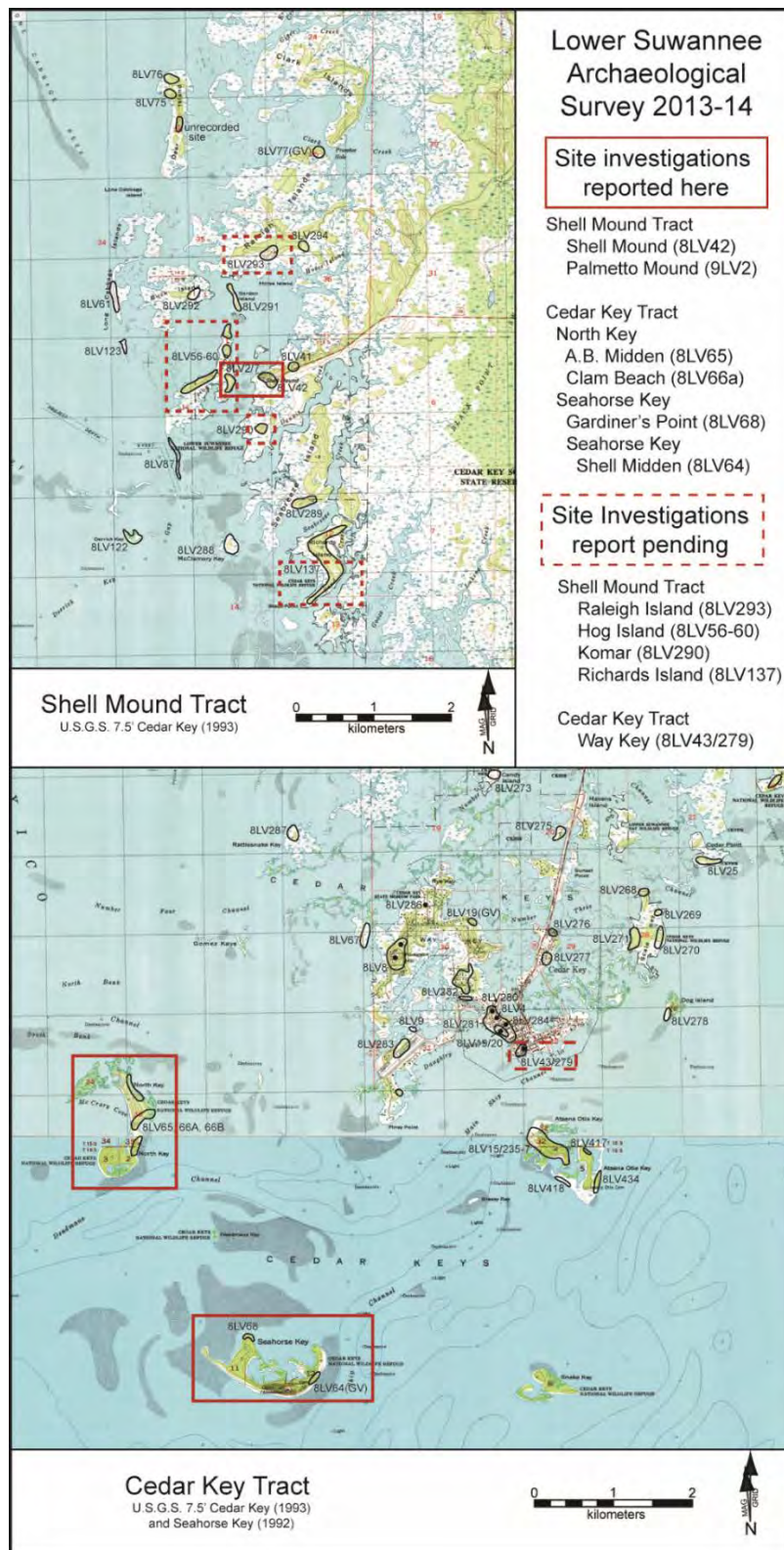


Figure 1-2. Shell Mound and Cedar Key tracts of the Lower Suwannee Archaeological Survey, showing locations of landforms and sites investigated from March 2013 through January 2015.

inholdings or state or county land is reported elsewhere (McFadden and Palmiotto 2014; Sassaman et al. 2015).

Chapter 2 of this report provides the results of testing at Shell Mound in 2013 and 2014. The site consists of a large (180 x 170 m in diameter, and ~7 m tall) U-shaped shell ridge of mostly oyster shell emplaced at the distal end of the relict arm of a parabolic dune. Shell Mound is the most imposing anthropogenic deposit on the landscape, although at the time it was occupied (ca. A.D. 200–700) even bigger deposits of shell and sand evidently existed on Way Key, now leveled under the town of Cedar Key. Directly west of Shell Mound, only 500 m across a shallow channel, lies Palmetto Mound, the subject of investigations reported in Chapter 3 by Mark Donop. A mortuary mound of considerable historical gravity, Palmetto was one of several places in the greater region to attract a large assemblage of persons and objects. Shell Mound is implicated in the rituality of Palmetto Mound by proximity (and cardinality perhaps), but its precise relationship to this mortuary complex eludes us for now.

Insight on the relationship between these two sites turns on a nuanced understanding of Shell Mound. Sites of massive accumulations of shell may not seem to be all that complex, but Shell Mound defies this simplification. The enduring goal for testing has been to sample the site extensively to seek variation in the occupational sequence and activities of different parts of the site (e.g., outside perimeter of ridge, top of ridge, interior opening). Adding the results of our initial effort in 2012 (Sassaman et al. 2013) with those reported here, we now have 25 m² of subsurface testing in nine units spread out over six areas of the site. Units from different areas produced different results, indicative perhaps of a structured place where certain activities were sited in spatial (and temporal?) relationship to other activities. Collectively, the results of widespread sampling reveal a history of five centuries (A.D. 200–700) that can be divided into four phases. Most of the shell that formed the ridge was emplaced relatively late in this sequence, and the site may have been abandoned as a place of residence long before it was abandoned as a place of gathering, presumably because of the gravity of Palmetto Mound.

The report of investigations of Palmetto Mound by Donop (Chapter 3) is the first professional treatment this site has seen in over 150 years of digging. A mortuary mound of once great density, Palmetto is today a pocked surface of illicit and unreported excavation. Large collections from Palmetto Mound exist in several repositories, including the Florida Museum of Natural History (FLMNH) and the South Florida Museum. Robust efforts led by Wallis to maximize the research potential of FLMNH collections include Donop's analysis of hundreds of pottery vessels, many of which are effigy vessels. That work will be reported in a forthcoming dissertation, but here Donop provides the results of his own, original fieldwork: the first map of the site, the first systematic survey to delineate its boundaries, and the first controlled excavation designed expressly to collect stratigraphic data.

Chapters 4 and 5 of this report are the work of GiNESSA Mahar. Picking up where Nina Borremans (n.d.) left off, Mahar directed test excavations at sites on North Key and Seahorse Key, in the Cedar Key tract (Figure 1-2). These are among the most distant offshore islands in the region, and at over 50 ft amsl, Seahorse Key is the highest elevation of the Florida Gulf coast. We sometimes refer to these landforms as the “distal” islands. From Borremans' unpublished field records and a set of radiocarbon dates, we could see that the distal islands

encase nicely stratified sequences, with basal dates possibly as early as 3,000 years ago. We have documented much older components at other sites in the study area, and they are not scarce (e.g., McFadden and Palmiotto 2012, 2013; Monés et al. 2012; Sassaman et al. 2011, 2013), but we have a gap of several centuries (ca. 1500–700 B.C.) when extant coastal landforms (islands, peninsulas, dunes, hammocks) lack archaeological residues of settlement, or actually any activity. This is a time of widespread reorganization throughout the Southeast (Thomas and Sanger 2010), including along both the Atlantic and Gulf coasts. Climate change at this time evidently was impactful (Kidder 2006), although effective conditions no doubt varied at local and subregional scales. That sea level may have regressed during this interval has not been substantiated by independent geological data (McFadden 2015; Wright et al. 2005). Judging from the archaeological record alone, the seaward relocation of communities, with regressive sea, is the most likely scenario, with the distal islands being the last places to be abandoned by tidal water.

Unsubstantiated climate events aside, archaeological residues on the distal islands have already revealed a level of diversity in shellfish taxa unmatched by any of the nearshore islands or mainland sites. As Mahar documents, stratified sequences like the one at A. B. Midden encase assemblages of gastropods and bivalves that vary over time in taxa represented. Discriminating ecological change from change in human preference, and from sample bias, is a challenge that will only be met with additional testing, which is in the offing (see Chapter 6).

The work at distal islands goes beyond documenting its record of change and sorting environmental influences from culture preferences. Mahar's research centers on the use of alternative fishing technologies, notably mass-capture technologies, as a measure of not only fishing practices but also the integration of persons into communities of practice. Distal islands represent a part of the spectrum of fish ecology than can be compared to places like the Shell Mound tract, which is comprised of nearshore islands, dunes, marsh, and tidal creeks. This too is a dissertation project, one that involves experimental and ethnographic work, as well as archaeology. Mahar's work illustrates nicely the connection between saving a diminishing archaeological record and problem-oriented research that goes beyond the particular sites to address problems of broader anthropological significance.

Investigations at several of the sites and landforms shown in Figure 2-1 are not reported here but will be issued under separate cover in a report later this year. These include survey of Raleigh, Hog, and Komar islands, and testing at Raleigh, Komar, and Richards islands. These investigations are the work of UF Ph.D. candidate Micah Monés, whose dissertation on settlement the Shell Mound tract took an unexpected turn with the discovery of twelfth-thirteenth-century A.D. shell rings on Raleigh Island. Until Monés tested these rings we had assumed that all such constructions were much older. He likewise found, in association with these rings, assemblages of *Busycon* shell blanks and chert microlithics from the production of disk shell beads.

Most of the work reported here was undertaken by students of the Lower Suwannee Archaeological Field School, under the direction of Sassaman. Last year marked the inaugural summer of a coastal field school; Sassaman and his students spent the prior 13 summers on the St. Johns River of northeast Florida. Like all field schools, those on the St. Johns and now the

Lower Suwannee, are structured by research agendas; it would be unethical to conduct field schools without asking meaningful questions to justify the digging. In this regard it is of particular note that the research agenda of the LSAS has grown, as we had hoped, with the expanding interests of a dedicated group of students.

RESEARCH ORIENTATION

We have already touched on the research projects of four Ph.D. students and we can add to that the work of Ph.D. candidate Andrea Palmiotto, who is revisiting the concept of “seasonality” with zooarcheological analysis and data from the longstanding fish sampling program of Florida Fish and Wildlife Conservation Commission. Ongoing projects by M.A. students Jessica Jenkins, Joshua Goodwin, and Anthony Boucher add to the research agenda of the LSAS. Within reason, students have the opportunity to pursue whatever research they would like, but ultimately they converge on related themes, all true to a historical perspective on coastal dwelling that demands details about both everyday life and the “path dependence” (Sewell 1996) of existing structure, or tradition.

The LSAS has more prosaic goals, of course, namely rescuing sites that are in imminent danger of destruction (e.g., Sassaman et al. 2015), and surveying land for unrecorded sites. None of the work reported here fits the bill of rescue. To be sure, sites on the distal islands, like so many closer to shore, are eroding, often from mass wasting of erosional cutbanks, but none are in imminent danger of destruction. The other mission—reconnaissance—aims to do two things: clarify the boundaries of extant sites and seek evidence of archaeological deposits in places hitherto not investigated or recorded. For the most part the latter effort involves shovel testing along transects of the “upland” units of islands and other coastal landforms. With the exception of Seahorse Key, the term “upland” may seem exaggerated for a coastal landscape of low topographic relief. However, even small hammocks provide sufficient relief from high water, barring major storm surge. Of course before about 5,000 years ago and during times of coastal regression since then, water levels were lower, making low-relief terrain even more inhabitable. Likewise, many of the islands besides Seahorse Key are relicts of Ice Age dunes, two or more meters above sea level today.

Ultimately, the existing record of archaeological sites in the study area is biased towards the high-profile sites (e.g., Garden Patch, Shell Mound, and Palmetto Mound), or those with middens actively eroding along shorelines. The latter are obvious to anyone who can distinguish between anthropogenic and geological deposits. Many local citizens and passers-by have collected artifacts from these sites, and some have donated their collections to the LSA. One such collector commented on the wisdom of shovel testing the “upland” portions of islands, suggesting that native inhabitants lived along the shoreline, where the artifacts and shell are eroding. This may be true in some cases, but in many others the middens eroding today at the water’s edge are most likely secondary middens, meaning refuse that accumulated away from places of habitation. We have seen repeatedly that back from the water’s edge, at elevations that in some places are only slightly higher than the shoreline middens, is evidence for habitation, often in the form of shell rings and ridges. The work of Monés is particularly revealing of this pattern. He has found shell rings at several sites in the Shell Mound tract (e.g., Deer, Raleigh, Richards islands), and on a casual visit to North Key, he observed rings in the

“upland” unit of A. B. Midden. Thus, reconnaissance work is critical for establishing the full range of variation of archeological deposits in the study area. “Upland” units, by definition, are less vulnerable to destruction than the shoreline middens that border them and thus we have time, over the ensuing years, to continue this work with the goal of full-coverage survey. In the meantime, the discoveries to date from “upland” settings have expanded our perspective on the scope and sequence of habitation in the area, leading to new questions and new research opportunities. A review of some of the major areas of research that structure the LSAS are summarized below.

Chronology Building

Any effort to reconstruct the history of settlement going back centuries and millennia depends on the establishment of a solid chronology. The standard means for estimating the age of archaeological deposits is radiocarbon dating, or more precisely AMS dating. Sites in the study area provide plenty of organic matter in the form of shell, bone, charcoal, and organic sediment. However, not all datable materials are reliable, at least not without corrections for physical and chemical processes that intervene in the uptake and decay of radioactive carbon. Oyster shell, for instance, is ubiquitous, and totally “datable,” but it suffers from two problems: its metabolic uptake of C14 deviates from the wood standard such that corrections for fractionation are required, and it absorbs “old” carbon from the sea in what is known as the “reservoir effect.” The bottom line is that age estimates from shell can be off by centuries. The discussion of age estimates on shell obtained by Borremans (n.d.) in Chapters 3 and 4 is a case in point. These biasing effects can be controlled, as they have in the long-term research of Dave Thomas and colleagues at St. Catherines Island, Georgia (Thomas 2008). We have not yet delved into this in the Lower Suwannee region, and have instead targeted for sampling wood charcoal (including nutshell), the medium on which radiocarbon dating is based.

Aside from the selection of materials for dating, the context and association of datable organics to the anthropogenic deposits whose age we aim to estimate must be secure. Wood charcoal may be the standard for radiocarbon dating, but it too suffers from biases, such as the “old wood” problem (when, for instance, the charcoal of old driftwood is submitted for dating the burning event, which took place long after the tree or one its branches “died”). And of course the roots of trees much younger than the archaeological deposits we aim to date infiltrate into the ground and sometimes burn from natural causes, such as lightning strikes. Thus, context and association is critical in sampling any material. Our strategy in selecting materials for dating involves removing in bulk the matrix of well-defined archaeological contexts, preferably discrete features with well-established points of origin, or, more commonly, the basal level of archaeostrata observed and recorded in profile. This latter approach is biased towards the initial deposition of a given stratum, and thus not terribly sensitive to duration of a depositional process. However, in stratified sequences such as the one reported in Chapter 4 from A. B. Midden, assays from basal levels of strata provide a sequence of “starting points” whose ages mark the *terminus ante quem* of prior depositional events. Filling in these gaps with additional assays is a goal of future work.

Throughout this report we discuss chronology as we discuss the results of 11 new AMS assays, and in Chapter 6 the total inventory of assays from the LSAS is reviewed in light of

calibration and Bayesian statistics for refining precision. What this emerging chronology reveals are the fits and starts of a history of occupation, abandonment, and reoccupation. It also reveals the dangers of crossdating sites on the basis of diagnostic artifacts whose ages have been established (or simply assumed) from work elsewhere. Part of what we observe in the fits and starts of occupation in the Lower Suwannee region is the time-transgression trends of large-scale population movements and the realignments of groups across vast spaces. The consequence for crossdating artifact types is that a particular type or tradition will have existed at different times at different places, by virtue of movement. Add to this the complexities of “hierlooming” items that eventually get emplaced in contexts like Palmetto Mound and we come to appreciate the indirect relationship between the time an object is made and the time it was deposited into a context we later uncover through excavation. Chronology building is not something to be taken for granted nor treated as routine.

Response to Sea-Level Change

An overarching research goal of the LSAS is to understand how humans dealt with changes in sea level. This entails far more than the inhabitability of particular landforms or sites to include changes in the distribution of plants and animals, salinity regimes, rates of erosion and deposition, the navigability of waterways, and the periodicity of storms and other extreme weather events, among other factors. Obviously, this goal requires detailed paleoenvironmental reconstructions. Extant reconstructions of sea-level change exist at three levels of resolution. The coarsest level is the millennia-scale models that agree that sea level has risen since the end of the Pleistocene to drown about half of the Florida peninsula (Donoghue 2011). The next level of resolution takes us to the multicentury scale of change that is expressed in the “sawtooth” pattern of subregional sea-level curves (Balsillie and Donoghue 2004), that is, change at millennia scale is for consistently rising sea, but at finer scale we find many reversals in this trend. It is at this level of resolution that we appreciate that conditions varied across subregions of the Gulf coast, rendering suspect, as with crossdating pottery, any attempt to extrapolate events and consequences beyond the local. That then leads to the third level of resolution, exemplified in the work of McFadden (2015) Wright et al. (2005), and Goodbred et al. (1998). The results of local-scale projects such as these reveal variation in the magnitude and timing of climate events that constrain our ability to generalize about environmental change at larger spatial scales. For instance, purported higher-than-present sea-level stands in the Florida panhandle (Donoghue 2011) and in southwest Florida (Walker et al. 1995) have not been substantiated with data from the lower Suwannee region (McFadden 2015; Wright et al. 2005), nor has there been geological evidence in the study area for a regression of sea during the second and first millennia B.C., as noted earlier. Conversely, we have strong local evidence for climate events that are not necessarily registered in the records of change elsewhere, as in the pulse of sea at ca. A.D. 200–300 documented by Goodbred et al. (1998) in Waccasassa Bay, just south of the project area.

The same sort of scalar issues affect our reading of human responses to changing environment. The abandonment of a site because of flooding is not tantamount to the abandonment of the coast; in many cases it simply signals slight adjustments in the distribution of people. This logic is informing the dissertation work of Andrea Palmiotto, who questions the usual definition of sedentism that is predicated on zooarchaeological evidence for year-

round occupation. At what scale of settlement permanence do we find the conditions that truly signal a shift from mobile to sedentary living? At increasingly greater temporal scales we might suggest that no people are ever sedentary insofar as lineages of descendant people eventually abandon sites of their forebears. The time involved in cycles of site abandonment cannot be assumed but instead questioned, as must the consequences of staying put, despite changing physical conditions.

We have thus far learned that communities of the study area responded to changes in sea level and its collateral consequences in a variety of ways. We have some evidence to suggest that communities occasionally relocated landward as water levels rose, in one case perhaps relocating cemeteries ahead of relocating settlements (Sassaman et al. 2015). We have some evidence to suggest that communities adjusted their shellfish procurement patterns as water levels changed, as in the shift to use of low-salinity species at sites in the Suwannee Delta (Sassaman et al. 2011). And we have evidence for terraforming that suggests some communities attempted to defend against rising sea. This latter response—erecting mounds, ridges, rings, and other above-ground architecture—defines much of the landscape of the project area, but it would be wrong to group all such efforts into one particular strategy for dealing with change. Indeed, sometimes the construction of mounds and other monuments was for sacred purposes, like burying the dead, and in other cases for practical reasons, such as platforms for the living or barriers to wind and water. And in many cases we find evidence for connections with groups far and wide, suggesting that a leading strategy for dealing with change was to establish and maintain a large social network that afforded options for relocating. No matter the particular motive for terraforming, it always resulted in infrastructure that could not be moved, thus making more vulnerable the sustainability of coastal communities who traded mobility for investments in particular places.

Terraforming, Monumentality, Social Networks, and Gathering Events

To gaze upon the massive, U-shaped ridge at Shell Mound from a practical perspective is to observe an engineering marvel for dealing with rising seas. However, the pragmatics of elevating a community above the water does not explain why Shell Mound was sited in proximity to Palmetto Mound, which predates it, or why a sand mound was erected at the opening of the shell ridge, or why the ridge was oriented to the solstices, or why the assemblage pots in Palmetto Mound came from all over the region, not just the immediate area. Obviously there is much more to the terraforming of the Lower Suwannee than the pragmatics of sea-level change. These efforts only make sense to us in the larger context of mound building, mortuary practice, and social networking, practices with histories and geographies far beyond the project area.

From the work of Monés we know that the first efforts at terraforming in the project area date to about 2,000 years ago, when communities making pottery of the Deptford tradition constructed rings on elevated landforms like Deer Island (Monés et al. 2012). These may well have been practical affairs, the sites of households that built “walls” of shell around their homes. We have been inside one such ring during a storm and can appreciate that they work well as wind breaks. We also know that sites of this period also exist at low elevation, where evidence of occupations (but not rings) is accompanied by burials in seemingly informal

cemeteries (e.g., Little Bradford [8DI32] and possibly Atsena Otie). Burial mounds of this age are known from sites in the interior of Florida (River Styx and Melton [Wallis et al. 2014]), but we know of none yet in the study area predating A.D. 200.

The third century A.D. was a time of prolific terraforming on the northern Gulf coast. At this time mound complexes began to be erected at Garden Patch and Crystal River, apparently by communities with Deptford ancestry, but also persons from distant places, if the inventory of nonlocal materials at Crystal River is any indication. As noted earlier, this was a time of rapid sea-level rise in Waccasassa Bay, located between these two mound complexes. Both complexes were sited back from the water's edge, on relatively high terrain and protected from the onslaught of storm surge. They were both what might be called "civic-ceremonial centers," meaning they were places of human interment, as well as home to living resident communities. The rationale for building such permanent infrastructure in protected places was no doubt sound at the time, but both centers were abandoned by about A.D. 600, for reasons not yet understood. Terraforming and monumentality along the northern Gulf coast took a radical turn after this time. New mounds were erected at places like Shired Island, north of the Suwannee Delta, but they were filled with mostly nonlocal pots (Neill Wallis, personal communication, 2015). Shell Mound received the bulk of its shell at about this time, forming the U-shaped ridge that still stands today. However, it is not clear that the site housed a large resident population like the one responsible for thick organic midden and large pits dating to the previous two centuries. Palmetto Mound continued to receive bodies and pots, albeit now mostly nonlocal, or at least we suspect so and await verification from the ongoing work of Wallis and his bioarchaeological collaborator John Krigbaum. In short, it would appear that after A.D. 600 large civic-ceremonial centers on the coast were abandoned, even as mortuary ritual and regional exchanges intensified in the greater region. The implication here is that coastal dwelling may have undergone a shift after A.D. 600 from large resident populations to occasional large-scale social gatherings involving persons from across the interior of Florida, and perhaps beyond (Sassaman and Wallis 2015).

Mass Capture, Mariculture, and Economic Intensification

Terraforming required labor and the provisions to support it. Terraforming also imposed fixed relationships between infrastructure and people and thus constrained options for mobility. Whether communities who built and used mounds and other infrastructure remained at these locations throughout the year and for multiple years, or, instead came and went with the cycles of rituality and environment that structured their world, demands on provisioning went beyond what was sufficient for small-scale, mobile communities. The conditions were ripe, it would seem, for economic intensification, driven, in this case, by a political or ritual economy of considerable social scale.

Research on the subsistence economies of coastal dwelling have turned in recent years on the recovery of small fish bone. With justification, zooarchaeologists in the latter part of the last century admonished archaeologists for not using fine screens in their recovery of food remains. The result of fine-screening, in coastal settings, was an abundance of bone from small fishes. Small fish appear to have been the mainstay, along with shellfish, of aboriginal communities throughout coastal Florida. It is an inescapable conclusion. However, were small

fish and shellfish the economic foundation of terraforming, and of large social gatherings? Perhaps, but as we will see in Chapter 2, Shell Mound has pit contexts that include a large number of mature fish, in this case mullet, along with deer, water birds, and other resources. It is not at all clear that these resources were taken for routine human consumption, but that would not seem to matter if they were integral to the activities taking place there, or at nearby Palmetto Mound. Likewise, the intensification of oyster harvesting attending the construction of the ridge at Shell Mound may have little to do with everyday diets and more to do with the desire to construct the ridge. As the work of Jessica Jenkins (2015) suggests, oyster may have been cultivated at this time, a reflection of the demand placed on harvesting oyster as well as a measure of the fixed relationship of Shell Mound to beds of oyster.

Questions centered on the political economy of food acquisition are being taken up by Guinnessa Mahar in her dissertation research on alternative fishing technologies, and by Jenkins in her M.A. research on oyster mariculture. The standard approach to research in economic intensification is structured by the microeconomics of foraging, notably behavioral ecological theory on optimal diet. To intensify a subsistence economy is to add resources to the diet that are ranked lower by consumers than the preferred foods, an expectation of what is known in behavioral ecology as the *diet breadth model* (Kelly 1995:78–90). To know what is preferred or not among a suite of food options is to know the people and their culture. But the diet breadth model does not require such intimate knowledge; rather it is predicated on an evolutionary logic that expects rank to be determined by the energetic cost of finding, capturing, and processing a particular resource relative to the energetic return that comes from consuming it. This logic is hard to deny in the course of everyday practice among organisms that are well adapted to their surroundings after long periods dwelling within them. Anything that intervenes in the adaptive balance between population and environment can lead to intensification (i.e., increased production at the cost of decreased productivity, in this case by adding on resources with lower returns on energy investment than preferred resources). Growth in human population, environmental change, overexploitation, and the stress of fixed settlement are among the various causes. Anything that curtails mobility is especially impactful on diet breadth because relocating people to sources of food is the least expensive way to ameliorate the diminishing returns of fixed living.

The foregoing logic may be applicable to the economics of daily living, but how about a political economy of ritual practice that involves fixed infrastructure and large gatherings of people, at times including persons with only transient knowledge of the local environment? In the terraforming, mortuary ritual, and social gatherings of the study area we find the circumstances of intensification that belie the logic of optimal foraging. Large gatherings require lots of food. The small fish of daily practice may do, but it would take many, perhaps an impossible number to collect with daily technology. Might fish weirs and large seine nets be useful for this purpose? If so, the costs of making and using this technology comes into play. How about bigger fish? Can they be taken in large numbers more efficiently than smaller fish once we get past the threshold of daily practice? What about the imponderables, such as the prestige value of large vs. small fish, or ritual protocols that require the use of certain taxa?

These and related questions inform much of the methods employed by Mahar, in both the archaeology and experiments in mass capture. Similarly, Jenkins is looking at oyster

production in light of terraforming and rituality at Shell Mound. As we will see in Chapter 2, a shift from the harvesting of intertidal to subtidal oysters coincides with the emplacement of oyster shell to form the ridge. Moreover, Jenkins is documenting evidence of change in size and quality of oysters through the sequence of accumulation that hints at maricultural practices, that is, efforts to improve the quality and quantity of oysters through practices like culling clusters and relocating them to more productive locations. Interestingly, evidence of mariculture drops off half way through the sequence of accumulation, as if those who continued to harvest oyster no longer intervened in production but merely took whatever they could get. We suspect that this coincides with abandonment of Shell Mound after about A.D. 650 followed by a period of unknown length during which persons at the site visited but did not live there, and thus had no investment in mariculture locally, and perhaps little or no knowledge of it. The promise in all this work—combined with that of chronology building, seasonality, and land use practices—is to understand how life on the coast over hundreds, even thousands of years was structured by changes that are themselves embedded in larger spatial and temporal scales of variation, such as regional political economies and the path dependencies of terraforming. An archaeology of the coast that emphasizes stasis and resilience (i.e., people always ate small fish and moved when they had to) offers little value to our own challenges in dealing with climate change and the inevitability of coastal inundation.

CONCLUSION

The results of the fifth year of investigations by the Lower Suwannee Archaeological Survey (LSAS) build on a foundation of documenting the full range of sites and sequences encased in an increasingly vulnerable archaeological record. As new students have become involved in the project, new questions have risen, leading to adjustments in sampling and other methods. Still, the goal of chronology building pervades all research approaches and the overarching issue of changing human-environmental relations helps to situate individual projects in a larger context. If the LSAS is to be distinguished from other long-term projects on the Florida Gulf coast, it is in its emphasis on the broader temporal and spatial contexts of coastal dwelling, a perspective that may be effective for parlaying our results into information more useful for confronting our own challenges with changing human-environmental relations.

CHAPTER 2

SHELL MOUND (8LV42)

Shell Mound (8LV42) is a U-shaped ridge of mostly oyster shell measuring roughly 180 x 170 m in plan, and nearly 7 m tall, enclosing a 60-m-diameter central area largely devoid of shell that is open to the southeast, where a 2-m-tall sand-and-shell mound measuring 10 x 20 m in plan is located (Figure 2-1). The complex lies at the southwest end of a 2-km-long peninsula, the relict arm of a massive dune that formed during the last Ice Age. In April 2012, staff of the Laboratory of Southeastern Archaeology (LSA), Department of Anthropology, University of Florida (UF) conducted limited test excavations at Shell Mound (Sassaman et al. 2013). Prior archaeological investigations were limited to one test excavation at the summit of the ridge (Bullen and Dolan 1960). Reported in this chapter are the results of additional testing of Shell Mound by LSA staff in the summers of 2013 and 2014, the latter conducted under the auspices of the Lower Suwannee Archaeological Field School of UF. These most recent efforts entailed the excavation of two 1 x 2-m units, and four 2 x 2-m units.

Further background on Shell Mound is provided in the report of LSA investigations in 2012 (Sassaman et al. 2013) and need not be repeated here. Fieldwork in 2013 and 2014 continued the effort started in 2012 to characterize the stratigraphy of Shell Mound around its outside perimeter, and to search for evidence of architecture, notably residential structures, in its central, open area. Direct evidence for structures has yet to be found, but testing in 2014 revealed aspects of Shell Mound hitherto unknown to us. Near the top of the shell ridge at its northern aspect we uncovered not only a thick mantle of stratified shell but an underlying organic midden attesting to intensive habitation of the dune summit dating to ca. A.D. 400–550. Moreover, testing on the interior slope of the northern aspect of the ridge revealed an assemblage of large pit features containing unusually large quantities of vertebrate fauna, sharks' teeth, lithic artifacts, and nonlocal items, such as a quartz crystal. These pits were emplaced in dune sands between about A.D. 400–550 and are likely associated with some sort of nondomestic structure, although additional excavation is needed to substantiate this assertion.

Reported in this chapter are the methods and results of testing at Shell Mound in 2013 and 2014, starting with test units located around the outside perimeter of the ridge (Test Units 6 and 9). Testing in the central, open area is then described (Test Units 4 and 5), followed by the results of a single test unit at the apex of the ridge (Test Unit 8), and the complex of pit features and associated materials revealed in a test unit along the interior northern slope (Test Unit 7). Given its unusual assemblage of pits and materials, this last unit is given considerably more attention than others in this chapter, including preliminary results of zooarchaeological analyses of the large assemblage of fish and bird remains from the largest pit feature. Otherwise, this chapter is limited to the results of field work and primary analyses of artifacts, which are assembled in sections in the second half of this chapter by material type (i.e., pottery, lithic, shell). Secondary analyses of artifacts, invertebrate, and vertebrate fauna are pending.

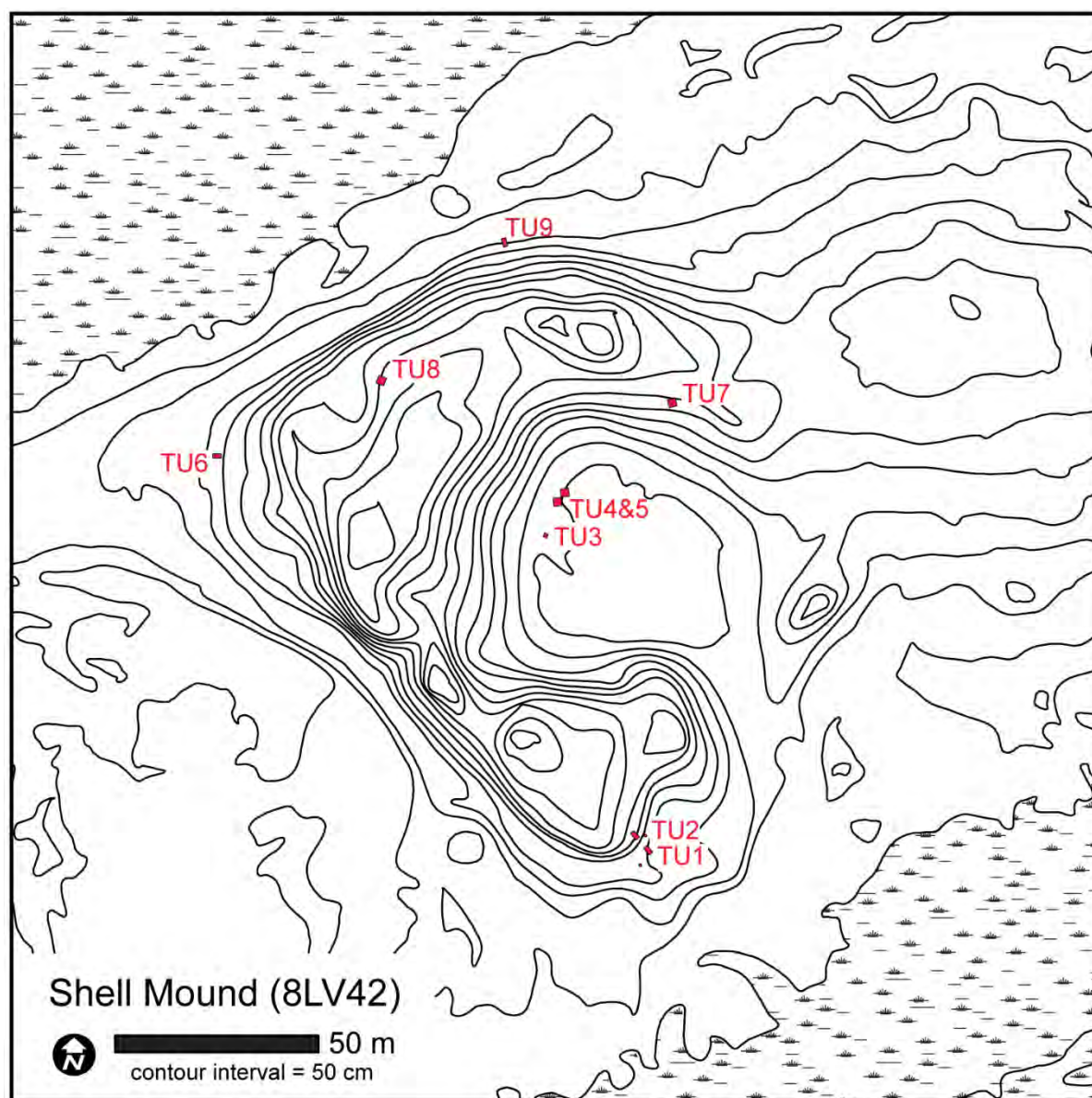


Figure 2-1. LiDAR topographic map of Shell Mound (8LV42), showing locations of test units excavated in 2012 (TU1–3), 2013 (TU4–6), and 2014 (TU7–9).

TEST UNITS ON OUTSIDE PERIMETER OF THE SHELL RIDGE

Testing at Shell Mound by the LSA in 2012 began on the southern perimeter of the U-shaped shell ridge in an area that was impacted by shell mining in the 1970s (Sassaman et al. 2013). Observed in Test Unit 1 (TU1) was a 180-cm-deep profile consisting of about 120 cm of bedded shell with limestone-tempered pottery (Pasco). Radiometric dating of charcoal from this thick stratum in TU1 and the nearby Test Unit 2 (TU2) place the accumulation of shell on the south perimeter of Shell Mound at ca. A.D. 450-600. Beneath the shell in TU1 we observed an organic midden with pit features and postholes and occasional sand-tempered sherds of the

Deptford series. This midden coincides roughly with the surface on which shell was deposited. Although materials from this stratum were not directly dated radiometrically, the Deptford pottery and inferior stratigraphic position places it prior to ca. A.D. 450. Observed below the midden was a brownish-yellow fine sand, evidently the “natural” substrate, underlain by a buried midden with oyster shell but lacking pottery. One of two pits emanating from this buried midden contained charcoal that returned an AMS assay of 3920 ± 30 B.P. (two-sigma calibrated range of 2470–2300 B.C.), putting it in the Late Archaic period. In sum, our very first observation of the stratigraphy of Shell Mound revealed three distinct strata: a basal Late Archaic midden with little organic matter other than shell, an organic midden coincident with a buried A horizon and estimated to date before A.D. 450, and a thick accumulation of oyster shell and associated pottery and bone dating from ca. A.D. 450–600.

The goal in testing other portions of the outside perimeter of Shell Mound was to see if this stratigraphic sequence was duplicated across the entire expanse of the mound. If, for instance, the basal midden were to exist across the entire expanse of Shell Mound, mounded shell was emplaced over an existing arcuate-shaped village, essentially burying the surface evidence of a large-scale, intensive occupation. The same could be said of the earlier Late Archaic stratum although in this case a time gap of over 2,000 years makes it seem unlikely that shell mounding depended on social memory alone.

Test Unit 6

Sited on the western outside perimeter of Shell Mound, Test Unit 6 (TU6) was a 1 x 2-m unit excavated in June of 2013 (Figure 2-2). Located at the base of the shell ridge, TU6 was excavated in 10-cm arbitrary levels after removing the upper 20 cm as a single level. A local datum at the southeast corner of the unit was established for vertical control using a line level. All level fill was passed through ¼-inch hardware cloth and all artifacts, modified shell, and vertebrate faunal remains were retrieved and bagged by level. In addition, all unmodified gastropod shell was collected and bagged. This change in procedure was instituted in 2013 to establish a comparative basis for the selection and modification of such shells. Level forms were used to record information on the content and composition of each level, including observations on possible features. Additional forms were used to record the plan and profiles of features, and all four profiles of the excavation unit were photographed and drawn to scale on graph paper. Bulk samples were taken from feature contexts as well as select strata of unit profiles. The unit was backfilled after completing all sampling and profiling.

Shown in Figure 2-3 are photographs and drawings of the four profiles of TU6. Descriptions of the strata mapped are provided in Table 2-1, and an artifact inventory is given in Table 2-2.

The results of excavation of TU6 generally duplicate the basal strata of TU1 on the south side of Shell Mound, although it lacked the overlying shell strata of the latter unit simply because TU6 was sited several meters west of the shell ridge. The primary archaeological stratum is a ~35 cm thick oyster shell midden in a very dark gray medium to fine sand matrix



Figure 2-2. Micah Monés and Kristen Hall excavating Test Unit 6 on the western margin of Shell Mound (8LV42), June 2013.

(Stratum III). Overlying strata (I and II) are the result of pedogenesis and near-surface biotic activity, including numerous small roots and one possible root burn (IIa). Emanating from the midden designated Stratum III are two pit features (see below) that penetrate into underlying light gray fine sand (Stratum IV), the presumed “natural” substrate. Sparse pottery throughout the midden is dominated by sherds of sand-tempered and limestone-tempered pottery, consistent with those recovered from shell strata in TU1, TU2, and elsewhere at Shell Mound that date from ca. A.D. 450–600. Charcoal from the strata and features of TU6 are available for AMS assays but have yet to be submitted.

Distributed discontinuously in sand underlying the midden is a stratum of yellow fine sand with degraded oyster shell (Stratum V). Similar to the substrate of Test Unit 1 on the south side of Shell Mound, this buried stratum is likely Late Archaic in age, the remains of deposits that predate the ridge by nearly three millennia. It is not clear whether the discontinuity of this stratum is a matter of postdepositional disturbance or ephemerality. Clearly, features emanating from the midden above intercepted this stratum in places, but in places lacking features it is barely perceivable. Were it not for its associated shell, this stratum may have gone undetected.

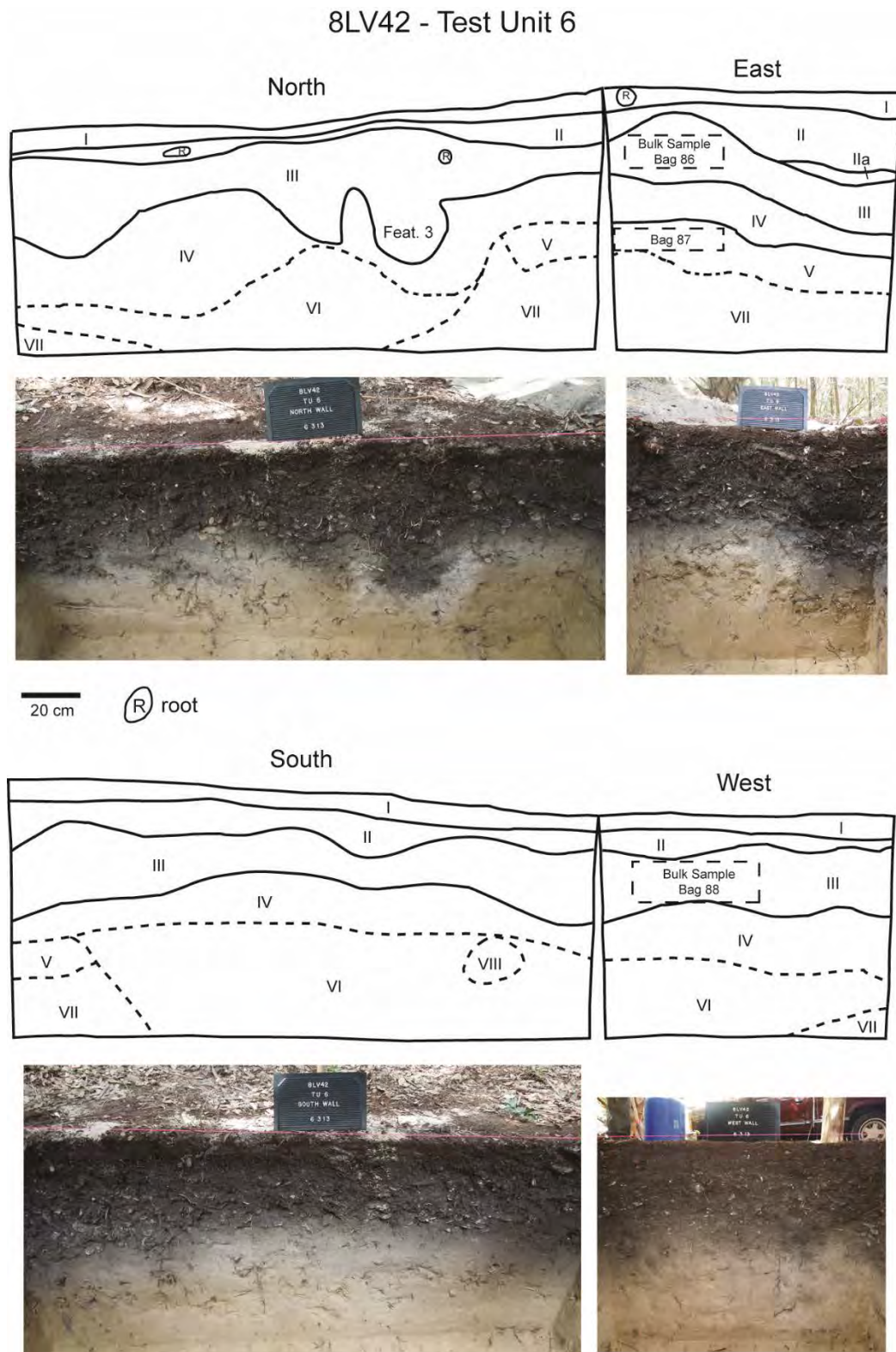


Figure 2-3. Photographs and scaled drawings of the profiles of all four walls of Test Unit 6, Shell Mound (8LV42).

Table 2-1. Stratigraphic Units of Test Unit 6, Shell Mound (8LV42).

Stratum	Max. Depth (cm BD)	Munsell Color	Description
I	25	5YR3/4	Dark reddish brown medium sand with dense small roots, and sparse oyster, hard clam, and gastropod shell.
II	31	7.5YR3/1	Very dark gray medium sand with crushed oyster shell and small roots, and occasional hard clam and marine gastropod shell.
Ila	35	10YR2/1	Lens of black medium sand with charcoal (root burn?)
III	60	7.5YR3/1	Very dark gray medium sand with moderately dense crushed and whole oyster shell
IV	80	10YR7/2	Light gray fine sand with sparse oyster shell
V	72	10YR7/6	Discontinuous stratum of yellow fine sand with degraded oyster shell
VI	91	10YR8/2	Very pale brown fine sand
VII	94	10YR8/3	Very pale brown fine sand
VIII	73	n/a	Sparse oyster shell concentration

Table 2-2. Inventory of Materials Recovered from Test Unit 6 by Level, Shell Mound (8LV42).

Level	Pottery Sherds		Flaked Stone		Modified Shell		Unmodified Gastropod ¹		Vertebrate	Misc.	Historic
	ct	wt(g)	ct	wt(g)	ct	wt(g)	ct	wt(g)	Fauna wt(g)	Rock wt(g)	
A	4	10.8	1	46.5			90	442.6	4.1	7.6	284.3
B	25	67.6	2	3.9	1	51.1	222	2,593.8	12.0	261.6	305.8
C	14	45.4	1	65.9	4	113.9	275	4,015.7	41.2	473.0	50.8
D	12	58.7	4	68.7	3	116.6	146	3,027.6	41.3	13.5	3.3
E			3	19.3			7	104.8	9.9		
F							5	33.1			
G			3	8.6			11	396.7	1.9	18.3	
H			3	3.0			1	0.1	2.9	18.3	
I							1	1.0			
Total	55	182.5	17	215.9	8	281.6	758	10,615.4	113.3	792.3	644.2

1. includes all gastropod shell collected from ¼-inch screening of level fill. Starting in the summer of 2013 field projects of the Lower Suwannee Archaeological Survey began to collect all gastropods shell from level fill in order to establish baseline data on the full inventory of shell with potential for technological modification. In general, such shells are classified to taxa, inspected for modification, counted, weighed, cataloged, and then deaccessioned.

Analysis of material culture from TU6 and all other units at Shell Mound is reported in a later section of his chapter. Here a few general observations are warranted. First, as noted above, there was relatively little pottery collected from TU6 and all sherds were either sand-tempered or limestone-tempered plain. An assemblage of unadorned pottery with these temper types is typical of those recovered from the shell strata that comprises the ridge at Shell Mound, and is estimated to date from ca. A.D. 450-600. Missing from TU6 are decorated sherds of the Deptford and Swift Creek series. Thus, the limited density of pottery in TU6 reflects in part the absence of the “founding” component of Shell Mound, but even then the density of the plain pottery is far below that of any other unit excavated to date.

Other classes of material culture are likewise sparsely represented. The 15 lithic artifacts recovered are flakes or shatter of chert from both bifacial and expedient flake production, the latter reflected in the occurrence of two amorphous cores. The eight modified shells are all crown conch (*Melongena corona*), seven of which are Type G hammers (Marquardt 1992). Compared to the frequency of Type G hammers from other text units at Shell Mound, the TU6 assemblage is meager. The low frequency of this tool type cannot be attributed to a lack of raw material, because 97.5 percent of the 758 “unmodified gastropod” shells listed in Table 2-2 is crown conch. The volume of vertebrate faunal remains from TU6 is likewise sparse compared to other units except for those in the central opening of the shell ridge.

In sum, the density of artifacts, shell, and vertebrate fauna of TU6 is low compared to most other contexts tested to date at Shell Mound, reflecting, we suspect, the marginal location of this unit relative to the shell ridge. Other units on the outside periphery of the shell ridge (i.e. TU1, TU9) are more proximate to the ridge.

Despite the limited artifact and faunal inventory of TU6, two pit features like those from other units on the periphery of the ridge were observed (Figure 2-4). Both features were hemispherical pits that contained oyster shell and assorted organic matter, but no diagnostic artifacts. Feature 3 was identified in plan at 50 cm BD as a 45 x 50-cm pit containing a dark brown fine sand matrix with abundant oyster shell. Surrounding the dark brown sand was a band of light gray fine sand, lacking shell. This lighter matrix is not uncommon at the base of the organic midden and lies intermediate between anthropogenic deposits and the underlying yellow fine sand of the substrate. The derivation of the light gray sand is unknown, but it likely resulted from pedogenic processes (leaching?), as opposed to emplacement. This pit extended down about 18 cm from its point of recognition, which is likely a bit deeper than its point of origin, which is indeterminate. The entirety of Feature 3 contained in TU6 was removed as a single bulk sample and returned to the lab for flotation.

Feature 7, at the west end of the TU6, is a hemispherical pit with an oblong plan measuring 42 x 54 cm. It was first identified in Level D (40–50 cm BD) as an amorphous zone of darker sand with oyster shell. It was not recognized as a pit feature until the excavation of Level F. The plan of Feature 7 shown in Figure 2-4 was recorded at 62 cm BD. At this depth the feature was sectioned and the east half removed as a bulk sample. After photographing and drawing the profile (Figure 2-4), the west half was likewise removed as a bulk sample.

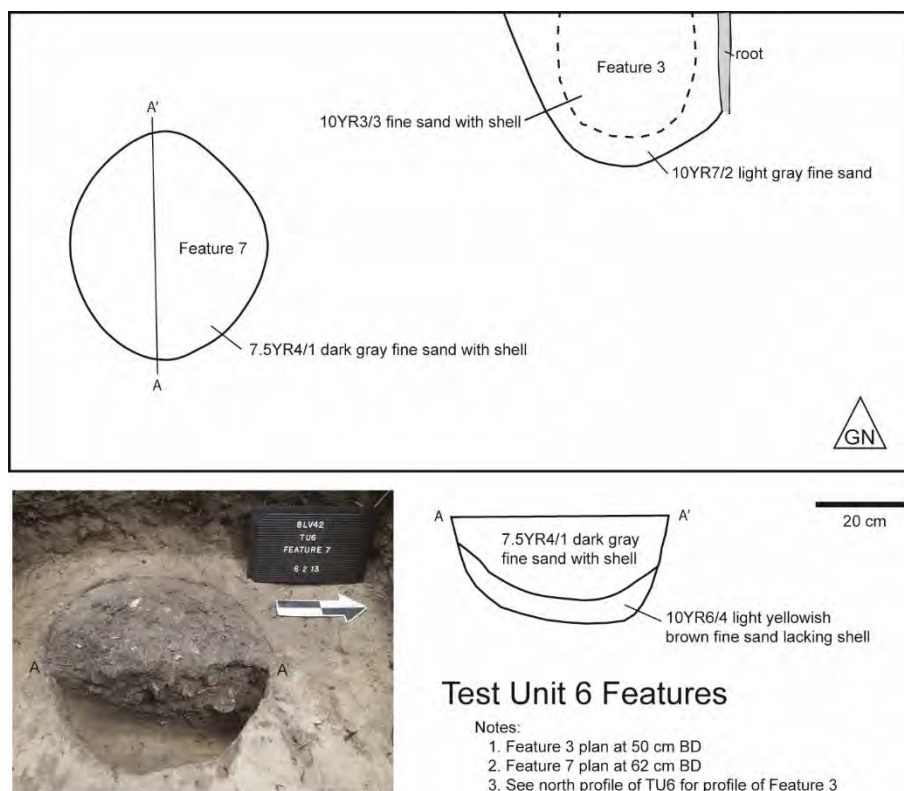


Figure 2-4. Plan view of Features 3 and 7 in Test Unit 6 (top) and photograph and drawing of profile of Feature 7 (bottom) at Shell Mound (8LV42).

Although the two pit features have depths at the point of recognition that is 12 cm apart with respect to the datum, they both became conspicuous at the contact between midden and the yellow substrate, which varies from about 40 to 50 cm below surface. Hemispherical pits about 50 cm in diameter at the top appear to be very common at the base of the Woodland midden at Shell Mound. At least two were observed in TU1, along the south perimeter of the shell ridge, one of which provided charcoal that yielded an AMS assay of 1420 ± 30 B.P. (two-sigma cal A.D. 600–660) (Sassaman et al. 2013:29). This age estimate is a bit younger than overlying shell strata in TU1 and the adjacent TU2; we suspect most of the pits emanating from the base of the Woodland midden date to the interval of ~A.D. 450–600. It is worth noting that the base of the midden in TU1 expressed abundant charcoal, seemingly in a continuous stratum (Sassaman et al. 2013:29), as if the surface were burned before shell was deposited. The profile of TU6 did not contain this charcoal-rich stratum.

Test Unit 9

Sited on the northern outside perimeter of the shell ridge (Figure 2-1), Test Unit 9 (TU9) was a 1 x 2-m unit excavated in July and August of 2014 (Figure 2-5). Procedures for excavation followed those described above for TU6. Levels were removed in 10-cm arbitrary units, with the exception of the first level (Level A), which was taken out as a “wedge” to



Figure 2-5. Field school students excavating Test Unit 9 on the northern margin of Shell Mound (8LV42), July 2014.

offset the 27-cm surface slope to the unit. A local datum was established at the surface in the southeast corner.

Shown in Figure 2-6 are photographs and drawings of the four profiles of TU9. Descriptions of the strata mapped are provided in Table 2-3, and an artifact inventory is given in Table 2-4.

The stratigraphy of TU9 is a bit more complicated than that observed in TU6. The usual surface stratum of humus gives way to oyster shell midden that extends about one meter below surface, but it is not neatly stratified. Interrupting shell midden in places are various intrusive features (e.g., Strata IIIa and IVb), none of which are clearly anthropogenic. Nonetheless, two archaeostrata can be inferred from the combination of profiles and artifact content. An upper stratum of oyster midden is best represented by Strata III and IIIa, which extend roughly 20–50 cm below surface, albeit irregularly. Most of the pottery in levels of these strata are sand-tempered and limestone tempered plain wares, plus sherds with spiculate paste (i.e. St. Johns), several with check-stamped surfaces. Sand-tempered sherds with stamped surfaces

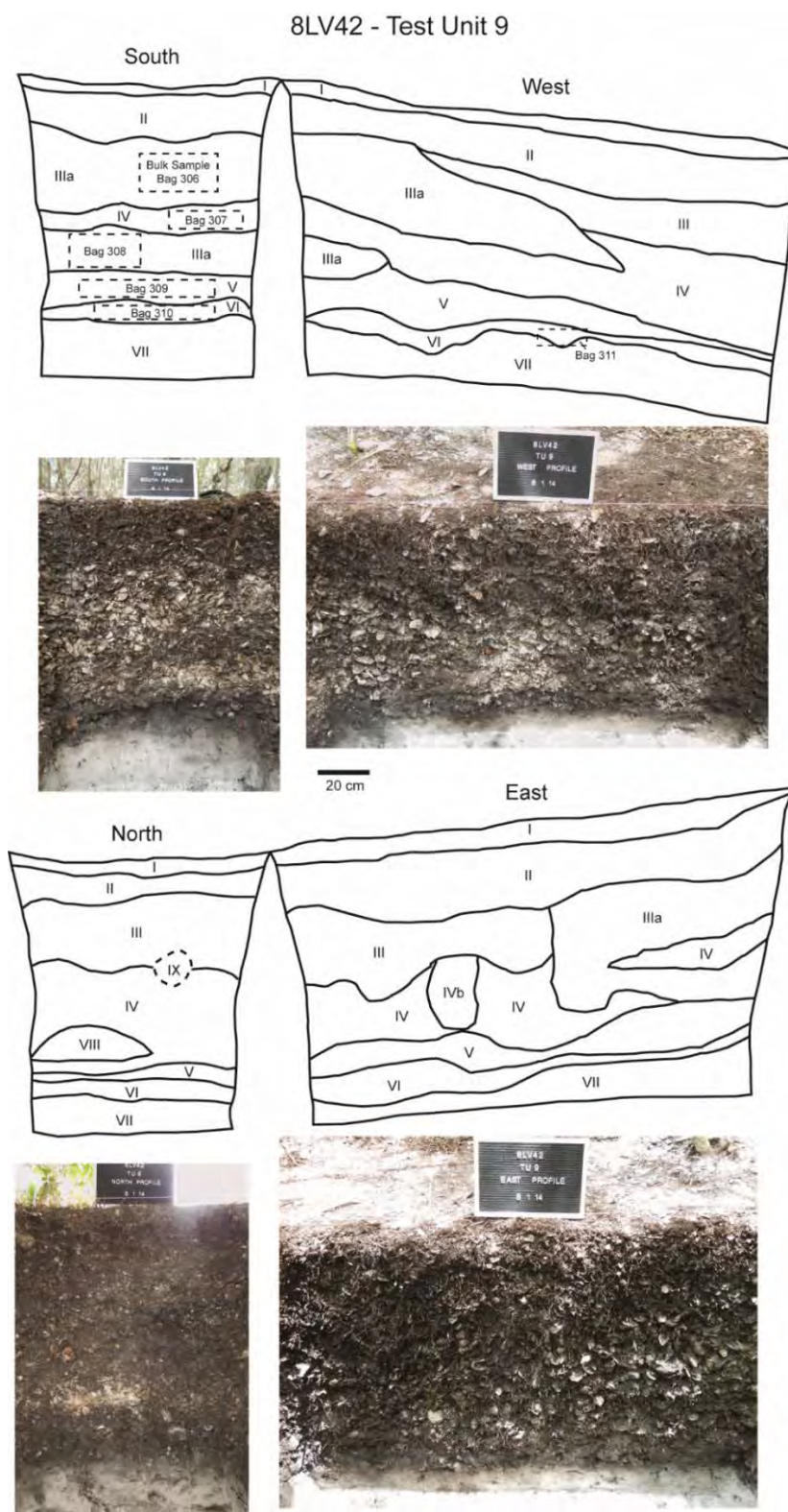


Figure 2-6. Photographs and scaled drawings of the profiles of all four walls of Test Unit 9, Shell Mound (8LV42).

Table 2-3. Stratigraphic Units of Test Unit 9, Shell Mound (8LV42).

Stratum	Max. Depth (cm BD)	Munsell Color	Description
I	34	7.5YR4/6	Strong brown fine sandy loam with moderate amount of fragmented shell and fine roots
II	53	7.5YR2.5/2	Very dark brown fine-medium sandy loam with moderate amount of fragmented and whole shell (mostly oyster)
III	83	10YR3/1	Very dark gray fine sand with dense, mostly fragmented oyster shell
IIIa	86	10YR3/1	Very dark gray fine sand with dense, mostly whole oyster shell
IV	110	10YR3/2	Very dark grayish brown fine sand with moderate to dense whole and fragmented shell, mostly oyster
IVa	93	10YR7/1	Light gray medium sand lacking shell
V	116	10YR3/1	Very dark gray medium sand with moderate amount of whole shell, mostly oyster (1770 ± 30 B.P.)
VI	123	10YR4/1	Dark gray medium sand with no shell
VII	134	10YR7/1	Light gray medium sand with no shell
VIII	105	10YR3/4	Dark yellow brown fine sand with dense whole and fragmented oyster shell
IX	76	10YR2/1	Black fine sandy loam with trace shell

(complicated [Swift Creek] and linear check [Deptford]) appear in Levels H and I, corresponding to the basal portion of Stratum IV and Stratum V, or roughly 50–80 cm below surface. The boundary between these archaeostrata is indistinct, suggesting more-or-less continuous deposition of shell and related organic matter as pottery shifted in emphasis from stamped wares to plain wares. Incidentally, the base of the midden, what is here defined as Stratum V, is noticeably darker than the overlying shell midden. Contained in the corresponding level (roughly Level I) was an inordinate amount of charred organic matter, including abundant hickory nutshell (*Carya* spp.) and wood charcoal. Field school student Alec Tasi identified the wood as either pine or juniper. Tasi also identified a single charred saw palmetto seed (*Serenoa repens*). Notably, this stratum of charred material corresponds, stratigraphically, with the burned surface at the base of the midden observed in TU1 in 2012 (Sassaman et al. 2013:29). Evidently, this was a widespread event, perhaps a broadcast burn, either natural or human-set, and the addition of hickory nutshell points to the latter. A sample of charred nutshell from the fill of Level I (#302) returned an AMS assay of 1770 ± 30 B.P., which gives a two-sigma calibrated range of A.D. 180–190 and 215–340 (taking two intercepts into account).

Table 2-4. Inventory of Materials Recovered from Test Unit 9 by Level.

Level	Pottery Sherds		Flaked Stone		Modified Shell		Unmodified Gastropod		Vertebrate Fauna	Misc. Rock	Historic
	ct	wt(g)	ct	wt(g)	ct	wt(g)	ct	wt(g)	wt(g)	wt(g)	wt(g)
A	57	142.6	1	0.9	7	216.8	70	1,755.9	30.8		3.1
B	85	153.1	1	4.6	11	332.3	127	2,140.9	45.8		5.6
C	53	138.7	1	43.4	3	111.9	109	1,824.5	69.4	3	1.6
D	133	388.0	1	1.0	10	286.3	221	4,160.2	241.0	2.4	11.8
E	161	2,030.8			17	668.2	241	4,519.8	562.9	105.6	
F	52	148.4			9	1,406.0	236	3,959.4	215.5		
G	38	138.6			6	357.6	238	5,148.9	110.0		
H	5	33.7			9	392.7	186	5,787.2	115.2	0.6	
I	17	225.2			4	160.9	116	3,830.6	61.8	44.7	
J	3	22.3	2	10.8	2	26.3	1	9.0	16.7		
Wall	7	8.0			5	224.4	59	1,211.2	35.1	1.5	
Total	611	3,429.4	6	60.7	83	4,183.4	1,604	34,347.6	1,491.6	157.8	22.1

Test Unit 9 contained no features that were discerned and recorded in the field. The discontinuous nature of the shell midden in general suggest that several intrusions discombobulated otherwise horizontal strata, and no doubt some of these were the work of human agents.

Summary

Adding the results of testing on the south perimeter of Shell Mound (TU1) to those reported here and we have a perspective on the outer edge of the shell ridge in three locations separated each by at least 85 m. Both TU1 and TU9 express stratified deposits resting on a buried surface with an abundance of charcoal; this stratum in TU9 contains abundant charred hickory nutshell. Midden that accumulated immediately over this surface includes sherds of the Deptford and Swift Creek traditions. Based on AMS assays from TU9, we estimate that the burning event(s) dates to ~A.D. 200–350. Test Unit 6 did not contain this basal stratum.

All three units along the perimeter exposed shell midden that accumulated from about A.D. 450–600 and contains plain limestone-tempered and sand-tempered sherds, with occasional spiculate-tempered sherds. Given that each of these units was on the edge of the shell ridge, none expressed the full height of mounded shell, although TU1 revealed well over a meter of largely whole shell with limited matrix, and TU6 a thin stratum of shell with a moderate amount of shell and associated organic matter. As shell midden accumulated, pits were dug into the underlying sand substrate. These tended to be ~50 cm in diameter and perhaps as deep, although in most cases pits could not be detected until the surrounding midden was removed, thus they were truncated before being measured. Pits routinely contain shell, charcoal, vertebrate fauna, and other typical constituents of the overlying shell midden, but with little pottery or other artifacts. As we will see in discussion of TU8 below, pits like this were also dug into the sandy substrate at the apex of the shell ridge.

One final observation of note is the lack of a buried Late Archaic stratum in TU9. Both TU1 and TU6 contained a diffuse oyster shell stratum about 10 cm below the buried surface

with charcoal/nutshell. Artifacts of Late Archaic age were not observed in either unit, but an AMS assay on charcoal from this stratum in TU1 provides a calibrated age estimate of 2470–2300 B.C. Other sites in the greater study area also contain a buried Late Archaic stratum that is separated from overlying Woodland components by a layer of “sterile” sand (e.g., McFadden and Palmiotto 2012; Mones et al. 2012). The processes responsible for the intervening sand strata remain unknown.

TEST UNITS IN INTERIOR OPENING OF THE SHELL RIDGE

In 2012 we excavated a single 1 x 1-m unit (TU3) in the western margin of the interior opening of the shell ridge (Figure 2-1). This opening was long assumed to be the result of shell mining before testing revealed an intact near-surface midden dating to the seventh century A.D. Local informants and photographs from the Montague Tallant collection housed at the South Florida Museum in Bradenton (Sassaman et al. 2013:6) confirm that the arcuate configuration and central opening of Shell Mound are true to their original form and not the result of mining. Indeed, many more shell rings of this age and later have since been identified in the greater study area, although Shell Mound is among the largest, if not *the* largest. All such rings and arcuate ridges have interior openings that resemble the plazas of circular villages, specifically in being flat and free of above-ground shell. Earthen ridges such as the one at River Styx in Alachua County (Wallis et al. 2014) sometimes have a central burial mound, but at Shell Mound the “plaza” is clear. At Shell Mound instead is a sand mound of presumed mortuary function that sits just to the east of the plaza, at the opening of the shell ridge.

Test Unit 3, the unit excavated in the interior opening in 2012, revealed a relatively thin organic midden extending down about 40 cm below surface. The upper 20 cm was disturbed by modern biotic activity and limited human activity, but otherwise the midden was intact and dense with pottery, flaked stone debris, shell tools, and vertebrate fauna, but not much unmodified shell. The density of lithic flakes and sherds was far greater than observed in TUs 1 and 2, on the southern outer perimeter of the shell ridge, but the density of vertebrate faunal remains was comparable in all locations. Nearly three-quarters of 179 sherds from TU3 are limestone-tempered plain; most of the balance consists of sand-tempered plain, followed by a trace of spiculate-tempered plain. A single AMS assay on charcoal from a bulk sample of the midden returned a two-sigma calibrated range of A.D. 650–690 and A.D. 750–760. This is the latest age estimate of the current inventory of ten AMS assays from Shell Mound, including four reported here.

The goal in expanding testing of the interior opening of Shell Mound in 2013 was to seek evidence for domestic architecture. We suspected, based on the results of augering and TU3, that the interior perimeter was the location of habitation structures arranged in semi-circle fashion. Finding evidence for architecture meant opening up sufficient area to expose the pattern of in-ground posts or equivalent subsurface features of domestic activities. Given the shallowness of the midden in the interior opening, we did not expect to find evidence of house floors, although features such as hearths or pits dug into floors, like postholes, could extend below the midden (i.e. >40 cm BS) into light-colored substrate. Our effort to locate

such evidence was concentrated about 10 m north of TU3, in two 2 x 2-m units designated Test Units 4 and 5.

Test Units 4 and 5

In June of 2013, two 2 x 2-m units were excavated in the western portion of the interior opening of Shell Mound (Figure 2-1). Test Units 4 and 5 (hereafter TU4 and TU5) were sited in “checkerboard” fashion with a shared corner (Figure 2-7), which offered the perspective of two 4-m-long profiles bisecting the excavated area at the midpoints of both major axes (grid N-S and E-W). Both units were excavated in 10-cm arbitrary levels after removing the upper 20 cm in a single level. Local datums were established at the northwest corners of each unit. All other excavation procedures followed those described earlier.

Shown in Figures 2-8 through 2-11 are photographs and drawings of the four profiles each of TU4 and TU5. Descriptions of the strata mapped are provided in Table 2-5, and artifact inventories are given in Tables 2-6 and 2-7.



Figure 2-7. View facing southwest of Test Unit 4 (background) and Test Unit 5 (foreground).

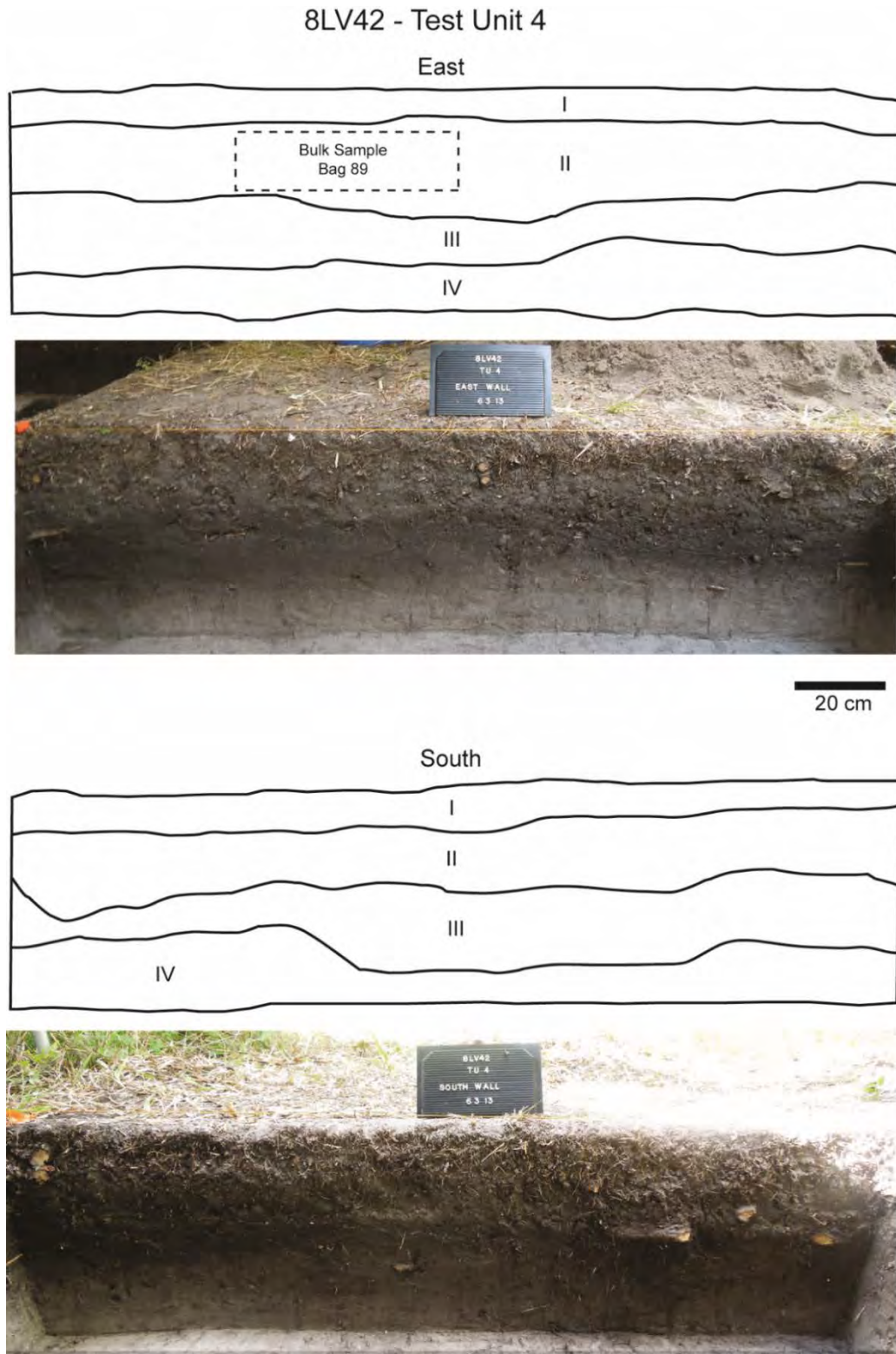


Figure 2-8. Photographs and scaled drawings of the profiles of the east and south walls of Test Unit 4, Shell Mound (8LV42).

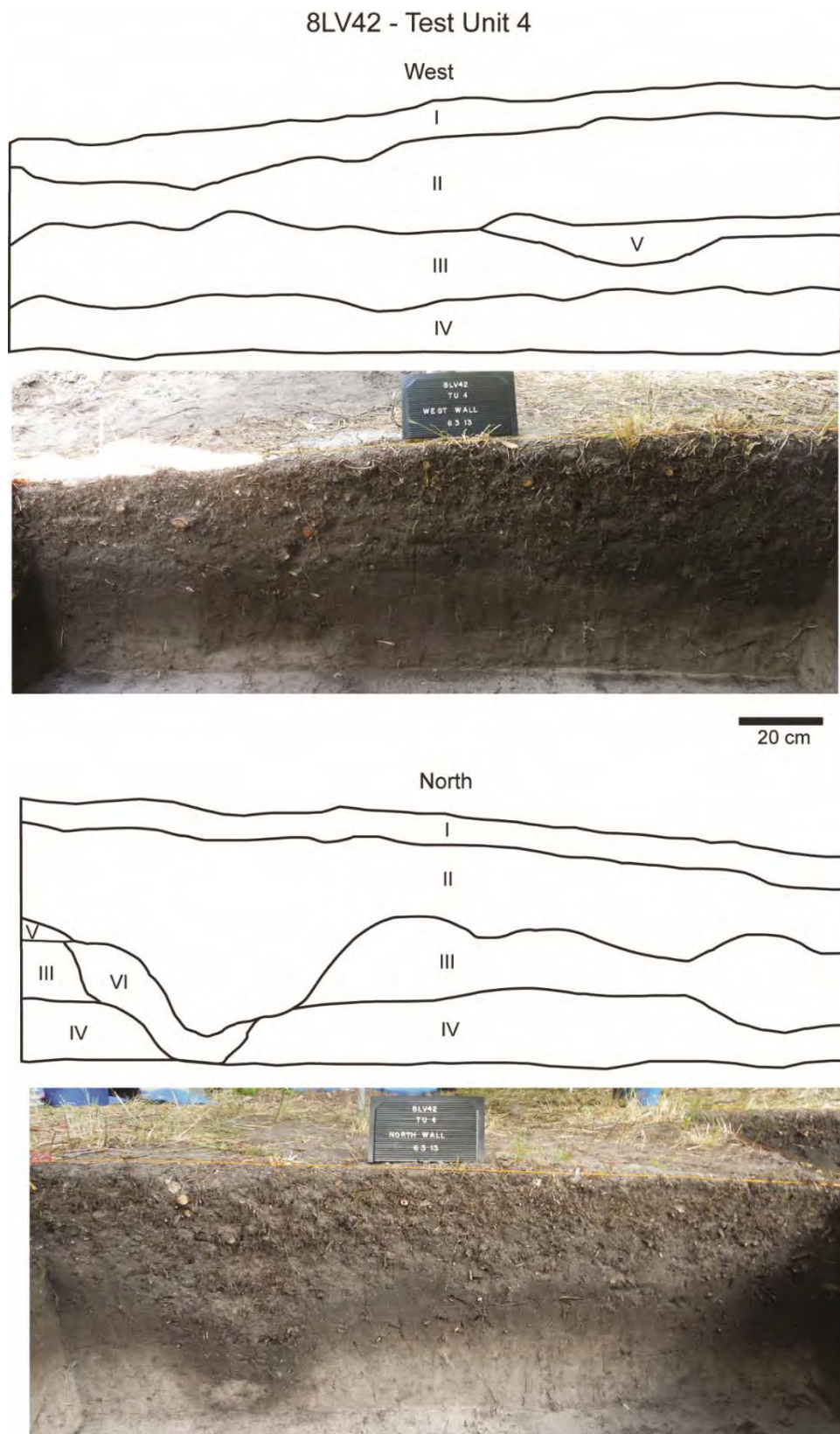


Figure 2-9. Photographs and scaled drawings of the profiles of the west and north walls of Test Unit 4, Shell Mound (8LV42).

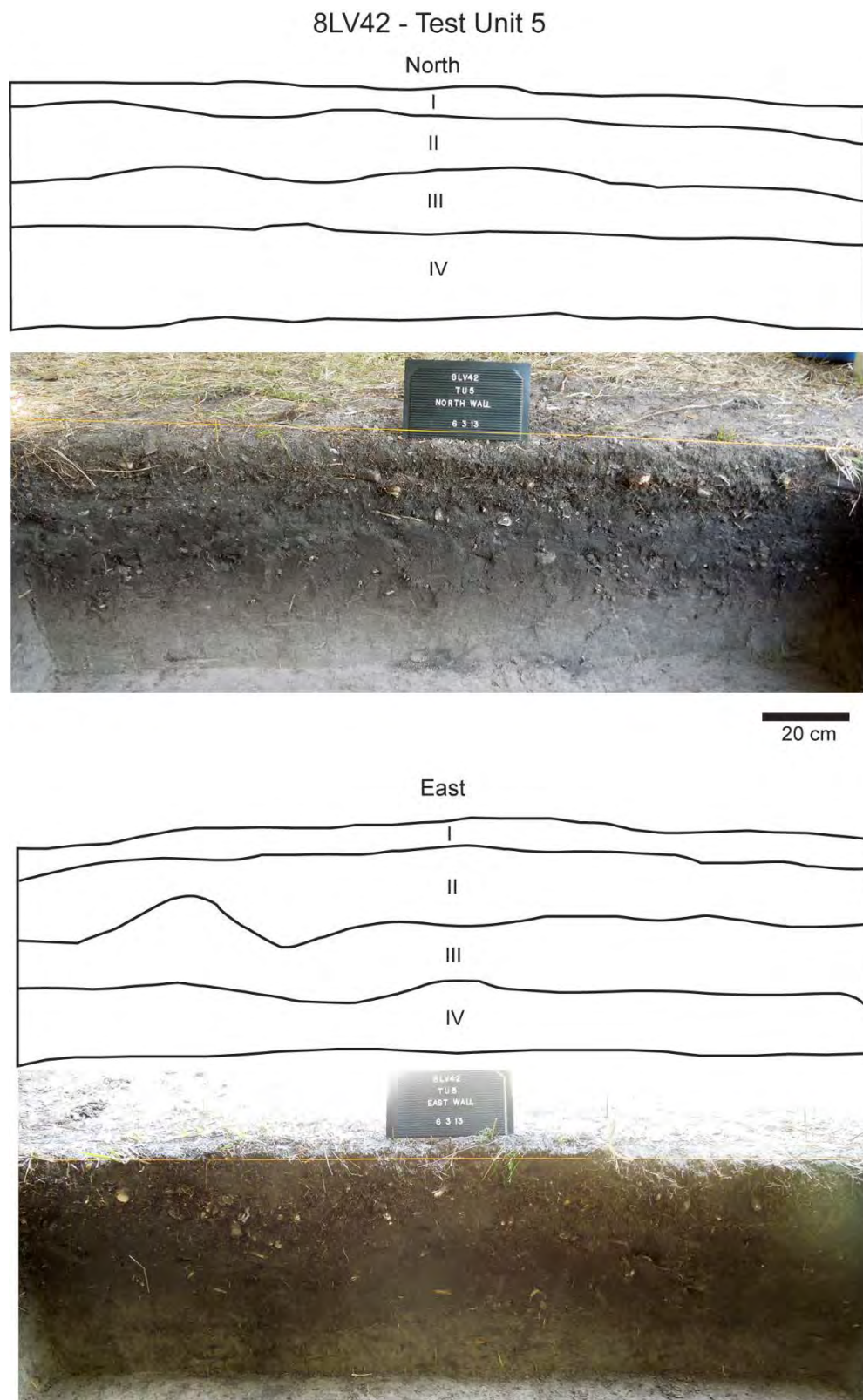


Figure 2-10. Photographs and scaled drawings of the profiles of the north and east walls of Test Unit 5, Shell Mound (8LV42).

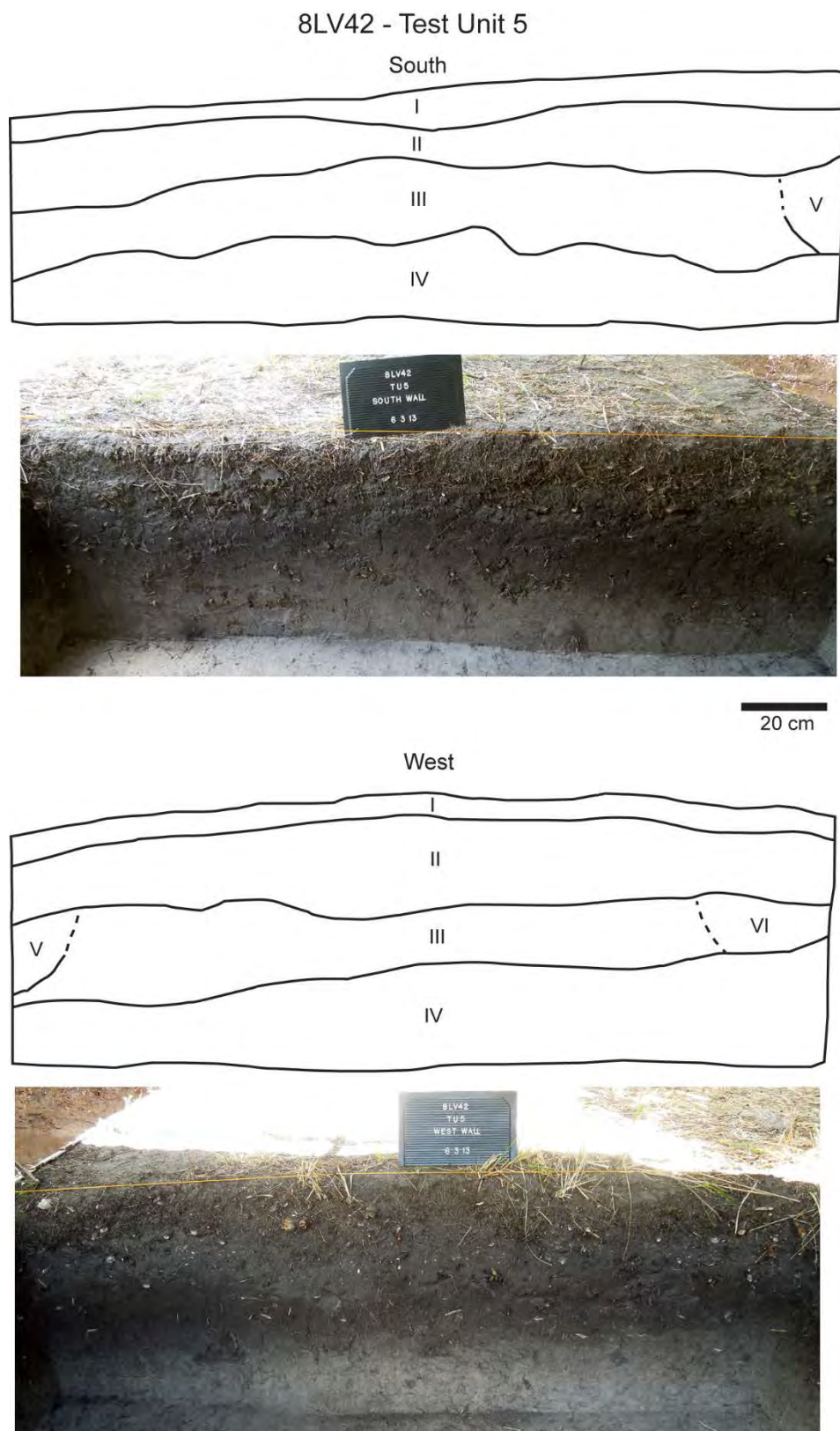


Figure 2-11. Photographs and scaled drawings of the profiles of the south and west walls of Test Unit 5, Shell Mound (8LV42).

Table 2-5. Stratigraphic Units of Test Units 4 and 5, Shell Mound (8LV42).

Stratum	Max. Depth (cm BD)	Munsell Color	Description
I	23	10YR3/1	Very dark gray fine sand with heavy root mat
II	57	10YR2/1	Black fine sand with sparse oyster shell (midden)
III	57	10YR3/1	Very dark gray fine sand with trace oyster shell (submidden sand)
IV	65+	10YR4/1	Dark gray fine sand; substrate
V	42	10YR2-4/1	Black to dark gray fine sand (feature fill)
VI	65	10YR2-3/1	Black to very dark gray fine sand (feature fill)

Table 2-6. Inventory of Materials Recovered from Test Unit 4 by Level, Shell Mound (8LV42).

Level	Pottery Sherds		Flaked Stone		Modified Shell		Unmodified Gastropod ¹		Vertebrate Fauna	Misc. Rock	Historic
	ct	wt(g)	ct	wt(g)	ct	wt(g)	ct	wt(g)	wt(g)	wt(g)	wt(g)
A	35	68.2			5	176.3	13	274.5	15.6	10.1	235.2
B	165	335.1	8	40.7	5	240.7	43	750.6	93.1	32.6	214.6
C	216	330.3	5	95.2	3	225.9	36	757.2	57.8	74.2	113.9
D	200	541.4	8	6.4	1	11.5			10.1	8.5	4.9
E	148	485.4	22	22.7					5.0		0.3
F	36	85.2	14	8.7					1.7	2.6	
A-F Wall	11	7.7	1	0.3					0.9		
Features	4	11.5	2	1.5					0.4		
Total	811	1,853.3	60	175.7	14	654.4	92	1,782.3	184.6	128.0	568.9

Table 2-7. Inventory of Materials Recovered from Test Unit 5 by Level, Shell Mound (8LV42).

Level	Pottery Sherds		Flaked Stone		Modified Shell		Unmodified Gastropod ¹		Vertebrate Fauna	Misc. Rock	Historic
	ct	wt(g)	ct	wt(g)	ct	wt(g)	ct	wt(g)	wt(g)	wt(g)	wt(g)
A	135	199.6	1	0.6	1	21.5	48	987.9	53.0	583.7	138.9
B	344	508.6	10	35.2	8	238.1	47	956.3	110.5	45.1	392.7
C	335	922.4	18	61.7			49	603.4	281.5	8.6	52.7
D	61	285.3	7	10.5	2	22.3	19	60.2	154.5	52.7	9.6
E	19	98.6	5	3.8					24.8		
A-D Wall	5	21.3	2	0.3					1.6		
Total	899	2,035.8	43	112.1	11	281.9	163	2,607.8	625.9	690.1	593.9

The profiles of TU4 and TU5 are very similar and relatively simple. In the photographs shown in Figures 2-8 through 2-11, Stratum II does not always appear as dark as its 10YR2/1 color would indicate. Weather leading up to and during the June 2013 excavation was unusually dry and the profiles were not adequately moistened before being photographed. In many of the photos, the submidden sands (Stratum III) appear to be darker than the overlying midden, but that is simply a matter of differential drying. In general, the midden was consistent in color and texture across all profiles of both units. In some places undulation of the lower margin of Stratum II signify pit features (Strata V and VI) that emanate from the midden. In all such cases, however, the point of origin for pit features could not be discerned because of the lack of color or textural differences between feature fill and the surrounding matrix. Moreover, features that were not intercepted by one of the unit profiles were not recognized in plan until reaching the lighter substrate (Stratum III), which likely means that shallow features emanating from Stratum II were not observed at all.

The plan views of TU4 and TU5 at ~50 cm BD show a series of dark soil anomalies that penetrated into lighter-colored substrate (Figure 2-12). Most of these proved to be cultural features, but all except one was only about 20 cm deep (Figure 2-13). A subset of five pits are oriented along a line running southwest to northeast, across both units, and spaced about one meter apart. Although this lends some optimism to the detection of architecture, only one such pit (Feature 8) has the size and shape of a posthole or postmold. In general, pits were shallow, poorly defined, and bereft of cultural material, although they clearly contained more organic matter than the surrounding submidden sands. Despite the ambiguity of these features, it seems clear at this point that the general vicinity of TU4 and TU5 holds great potential for preserved evidence of habitation structures.

The artifact assemblages from TU4 and TU5 corroborate what we observed in the nearby TU3. Pottery density in the units is relatively high, with an assemblage dominated by limestone-tempered plain, followed by sand-tempered plain, and a minority of spiculate-tempered plain. Traces of fabric-impressed, check-stamped, and punctated surface treatments are among the sand-tempered sherds. Taken as a whole, the sherd assemblage matches those from the upper strata of all the test units on the outside perimeter of the shell ridge, as well as TU3 to the immediate south. The difference with pottery in TU4 and TU5, compared to units around the outside perimeter, is density per unit volume. The limited volume of shell in these interior units is partly responsible for the disparity in sherd density, as the volume of shell in most of the outside perimeter units swamps the sherd density.

The lithic assemblage from TU4 and TU5 cannot be explained by differential volume of shell. Both units, like TU3, express a much higher density of chert flakes than outside perimeter units, as well as an array of tools, including bifaces, unifaces, and utilized flakes. A sandstone abradar and a piece of polished stone round out the assemblage. Evidently, a range of stone-tool-using activities took place in the interior opening of Shell Mound, as did an appreciable level of tool manufacture, all involving raw materials than had to be acquired from considerable distance from the site. Notably, as high as the density of lithic artifacts in TU4 and TU5 is relative to outside perimeter units, it pales in comparison to the assemblage recovered in TU7 (see below).



Figure 2-12. Photographs of Test Unit 4 (bottom left) and Test Unit 5 (upper right) at ~50 cm below datum (cm BD), showing stains of pit features and other soil anomalies.

The frequency of modified shells in the TU4 and TU5 assemblage is modest compared to those from outside perimeter units, excepting TU6, which likewise had a low density of shell tools. The vast majority of those from TU4 and TU5 are Type G hammers made from crown conch. It would appear that shell hammers covary with the density of oyster shell at Shell Mound, but this has yet to be quantified.

Finally, vertebrate faunal remains were not abundant in TU4 and TU5. The limited amount of animal bone may be partly a function of preservation, given the lower density of shell in these units, but equally plausible is the hypothesis that boney remains were removed from the vicinity of these test units and deposited in and amongst the mounded shell of the ridge. This supposition goes to the larger hypothesis that the open interior Shell Mound was not only a locus of habitation but also a cleared “plaza” that was kept clean of the by-products of meals.

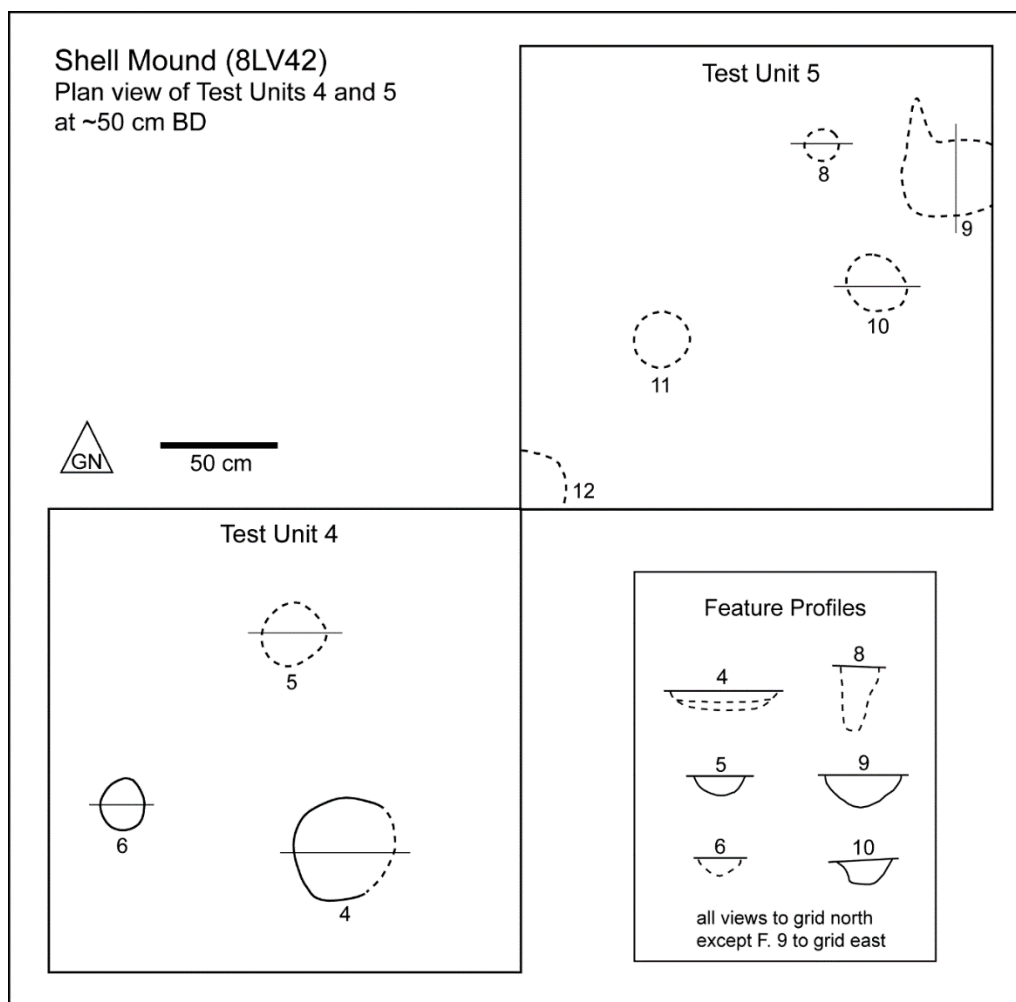


Figure 2-13. Plan views of Test Units 4 and 5 at ~50 cm below datum (cm BD), showing eight pit features and profiles for six of them. Each of the thin transverse lines on the profiled features marks the location in plan of the cross-sectional plane.

Summary

Testing in 2012 and 2013 in the interior opening of Shell Mound provided no definitive evidence for habitation structures or any sort of architecture. However, circumstantial evidence encourages us to continue seeking the traces of houses and domestic living in the interior opening. Compared to the results of testing of the outside perimeter of the shell ridge, units in the interior opening have higher sherd density, higher lithic artifact frequency and diversity, and lower density of vertebrate faunal remains and shell tools. They likewise lack dense shell deposits, including shell-filled pits. Moreover, units in the interior opening contain what appears to be a single component midden, dating to the very last occupation of Shell Mound, shortly after A.D. 650. Larger excavations in the interior opening would increase the chances of locating architectural remains, but serious consideration should be given to remote sensing such as gradiometry, to see if subsurface anomalies in the opening are concentrated in an arc along the interior edge, as is currently assumed but unsubstantiated.

TEST UNITS ON THE SHELL RIDGE

In 1959 a fellow by the name of Edward Dolan excavated a 10-ft-square unit into the summit of Shell Mound. The results of his efforts were published a year later with the assistance of Ripley Bullen (Bullen and Dolan 1960). Lacking in their report is a map indicating just exactly where this unit was placed. If placed at the very highest elevation of the ridge, Dolan's unit would have been located on the western aspect, opposite the opening to the southeast. We do have some details of the stratigraphy Dolan observed, as well as an inventory of the artifacts collected. Recorded in the 10-ft-deep profile he exposed was an upper, thick stratum of mostly oyster shell with abundant limestone-tempered pottery along with a minority of spiculate-tempered sherds. At about 5 feet below the surface Dolan encountered a black earth midden with pulverized shell and possible hearths. Spiculate-tempered sherds dropped from the inventory and sand-tempered sherds increased, while limestone-tempered pottery persisted. Bullen and Dolan (1960:22) also noted changes in the taxa of shellfish species that accompanied the ever-dominant oyster shell, specifically an increase in hard clam with depth.

The profile Dolan exposed matches roughly the stratigraphy of TU1 on the southern outside perimeter of the shell ridge, albeit with much greater depth. The key observation in both locations is a stratigraphic break in the profile that coincides with a shift in pottery types, or at least in the proportions of types. How similar the two are with respect to changes in the species composition of the shell strata is uncertain, nor can we attest to the nature of the deepest strata Dolan exposed, which have yet to be observed in modern excavations. Still, Dolan's results provided strong evidence for well-stratified deposits in the highest elevations of Shell Mound, encouraging us to make our own soundings at the summit. Reported in this section are the results of excavation in Test Unit 8 (TU8), near the highest elevation and presumably in proximity to Dolan's unit, as well as the results of Test Unit 7, on the inside downslope of the northern arm of the ridge, which yielded results hitherto unobserved and unexpected.

Test Unit 8

With the primary goal of opening a test unit at or near the highest elevation of Shell Mound, we sited Test Unit 8 (TU8) with a second goal in mind. Across the upper portion of the shell ridge are various depressions and "valleys." The latter appear to be erosional gullies and perhaps a few remnants of trails or even fire breaks from decades past. The depressions, however, include some that resemble the many shell rings we have observed at sites in the greater study area (e.g., Monés et al. 2012; Sassaman et al. 2011). One located just off of the trail descending down the north ridge to the access road is particularly symmetrical, and about 10 m in diameter (Figures 2-14 and 2-15). We therefore sited TU8 to not only provide access to some of the deepest stratigraphy at the site, but to also test the idea that this "depression" formed from the accumulation of shell around a house or some sort of habitation structure. Specifically, TU8 was placed at the southeast edge of the depression, at a point where surface topography began to ascend steeply. The axes of this unit deviated from cardinal directions in order to observe stratigraphy running both with and against the grain of local surface contours.

The procedure for excavating TU8 followed those already described except for adjustments made because of depth. Based on the results of Dolan's test in 1959, we expected as much as 3 m (~10 ft) of shell deposits. To avoid collapsing the walls as he dug deeper, Dolan

tapered his 10 x 10-ft unit such that by 7 ft in depth, the unit was only 7 x 7 ft in plan, and at that depth the unit was reduced to 2 x 2 ft in plan to complete the excavation to 10 ft below the surface. Our strategy was a bit different. The entire 2 x 2-m area of TU8 was excavated by level down to ~195 cm BD, at which point only the western half of the unit continued down in 10-cm arbitrary levels for a maximum depth of ~280 cm BD (Figure 2-16). Surprisingly, we encountered at this depth the sterile sands of the relict dune on which Shell Mound sits. The difference in depth between TU8 and the one excavated by Dolan is most likely a matter of location on the ridge. The highest elevation of the ridge is at least one meter higher than the elevation of TU8, and that is likely the locus of Dolan's unit. Moreover, the local depression in which TU8 was sited accounts for much of this difference; had we located it 10 m to the east, up the slope, the surface elevation of TU8 would have been about one meter higher, and presumably consisting of unconsolidated shell like the 1.4-m upper portion of TU8.

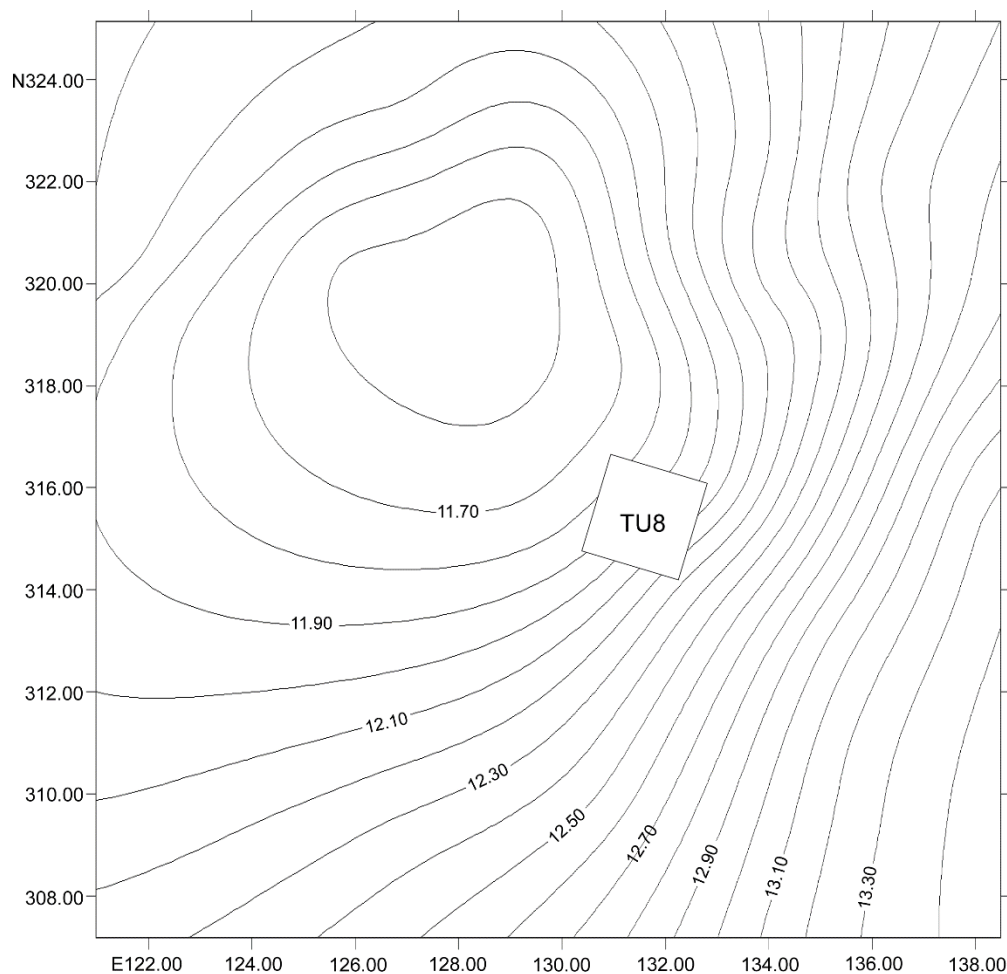


Figure 2-14. Topographic map of depressed area on top of shell ridge in which Test Unit 8 was placed, Shell Mound (8LV42).



Figure 2-15. View facing north of field school students opening Test Unit 8, Shell Mound (8LV42).



Figure 2-15. View facing north-northwest of Test Unit 8 upon completion, Shell Mound (8LV42). Note the pedestalled 1 x 2-m subunit in eastern half of unit, on which a makeshift ladder rests.

In addition to the usual level excavation, TU8 was sampled with a continuous column 30 x 30 cm in plan. The upper 1.4 m of unconsolidated shell was sampled in 10-cm increments from the east profile, while the ~80 cm of subshell midden was sampled in similar fashion from the west profile. All matrix from these bulk samples was processed with a Dausman Flote-Tech flotation machine and then fractionated for secondary analyses.

Shown in Figures 2-16 through 2-19 are photographs and drawings of the four profiles of TU8. Descriptions of the strata mapped are provided in Table 2-8, and an artifact inventory is given in Table 2-9.

The stratigraphy of TU8 can be simplified as three macrostratigraphic units (hereafter *macrounits*), the upper two of which are anthropogenic: an upper macrounit of bedded oyster shell (Strata I-III), and a lower macrounit of organically enriched sands with moderate to sparse shell (Strata IV-V). Submidden sand comprises the third macrounit (Strata VI-VII), into which pit features were dug and backfilled. Each of these macrounits is described in turn below.

Upper Macrounit of Bedded Oyster Shell. The namesake material of Shell Mound is expressed most directly in a macrounit of unconsolidated oyster shell. The thickness of this macrounit varies depending on both the original surface elevation on which shell was emplaced, as well as the current surface elevations of the ridge formed from shell, as noted earlier. What excavation of TU8 revealed is that the northern arm of the shell ridge is underlain by relict dune sands with topographic relief independent of emplaced shell. In other words, the mound that is Shell Mound had a head start. Judging from current topography alone, what appears to be 6–7 m of mounded shell along the northern arm of the ridge is actually no more than 3 m of shell on 3–4 m of dune sand. Our prior work on the south arm of the ridge would suggest that the southern portion of Shell Mound indeed is mostly shell (with associated sand, of course, but not a relict dune remnant). All this squares with the surface contours of the greater area, which expresses a 2+ km arc of elevated sand following the access road (CR 326) to the northeast and then arcing north at the point where the access road turns directly east.

The macrounit of largely unconsolidated oyster shell is subdivided into three strata in the profiles of TU8. Stratum I is the surface stratum of A horizon development, consisting of black fine sand with abundant small roots and largely fragmented oyster shell. The thickness of this stratum varies and its contact with the underlying stratum is diffuse in most places. Stratum II is distinguished from Stratum I by an increase in oyster shell in an otherwise similar sand matrix. Intercepting some of these upper strata are a series of large pits emanating from the surface, expressed most directly in the south and west profiles of TU8 (Strata IIa and IIb). Common to all four of these strata (Strata I–IIb) are artifacts of modern age: nails, window and bottle glass, scraps of can metal, door hinges, and ceramics, among other items. The source of this debris is unknown but evidently the depression in which TU8 was sited made for a convenient place to dump refuse by recent inhabitants. The pit outlines seen in the west and south profiles would suggest further that refuse was emplaced in pits, although we cannot be certain that pits were dug for the express purpose of burying refuse. The density of historic-era artifacts is, in fact, relatively low.

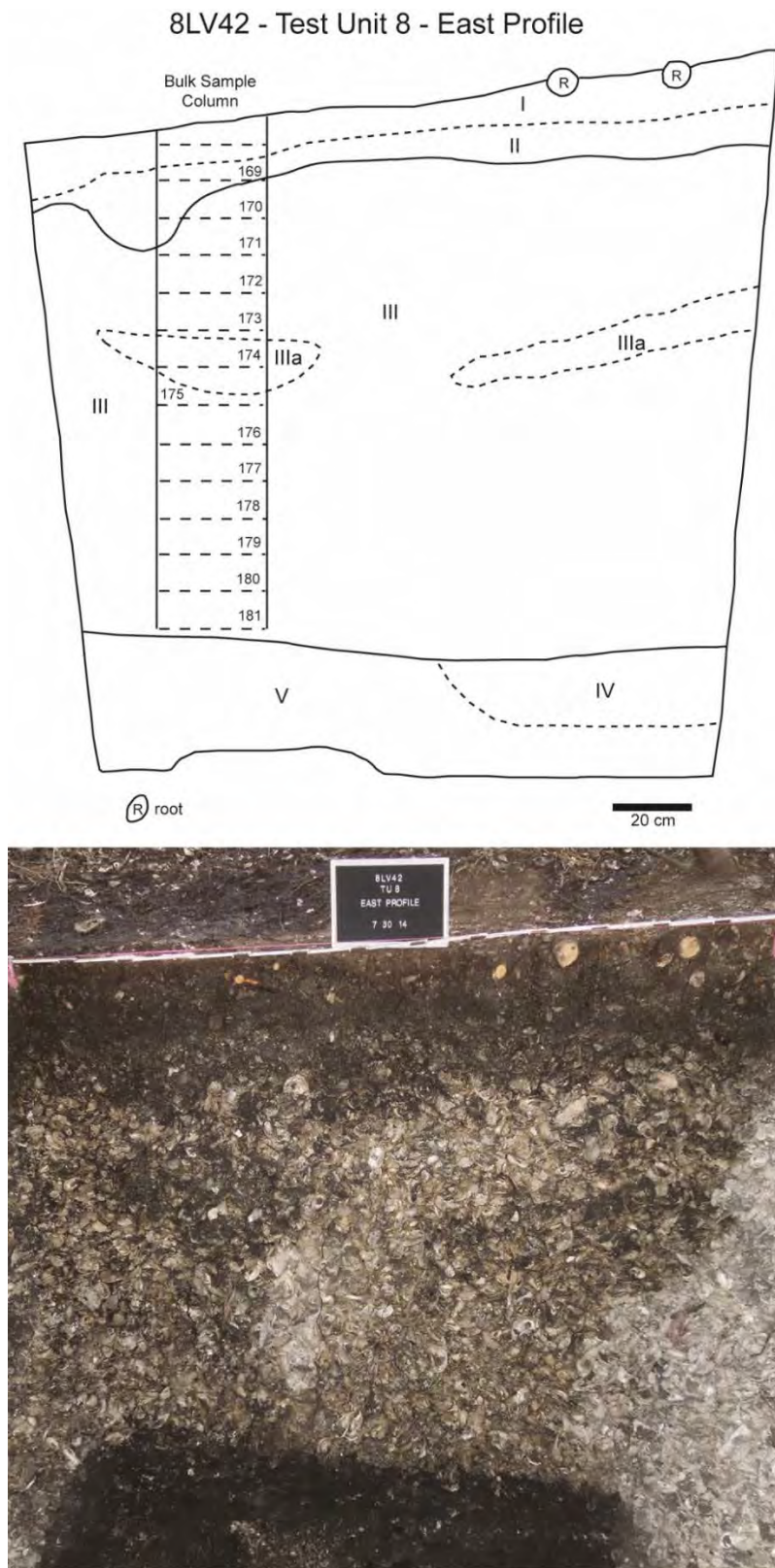


Figure 2-16. Photograph and scaled drawing of the profile of the east wall of Test Unit 8, Shell Mound (8LV42).

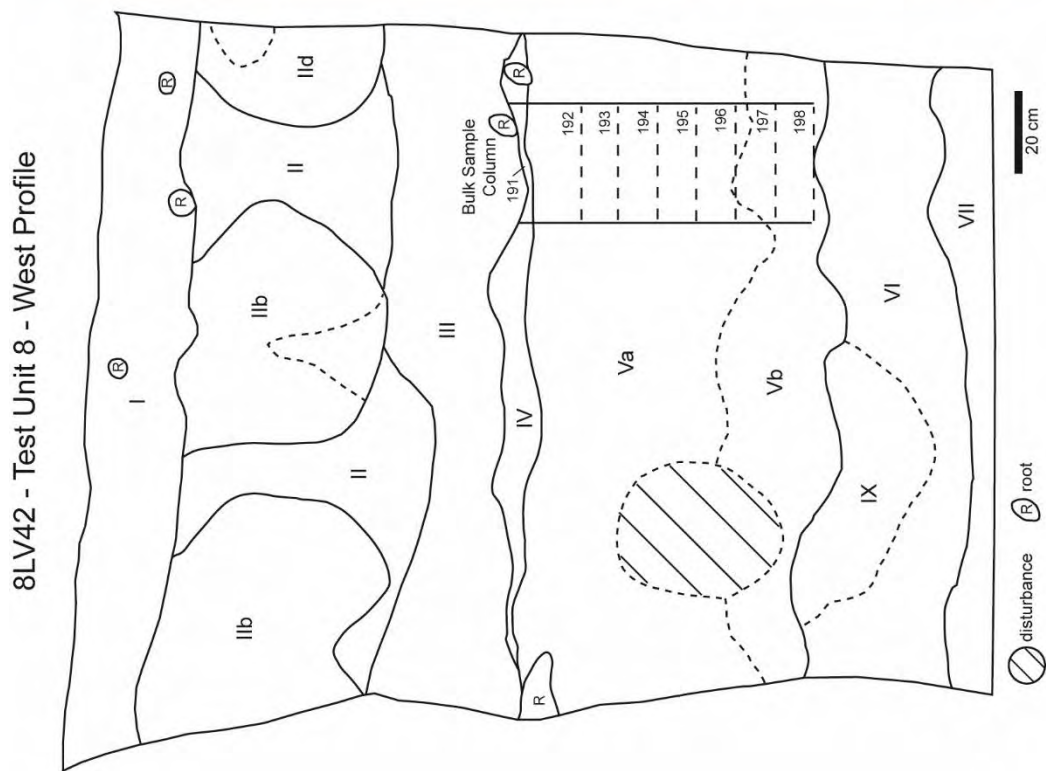


Figure 2-17. Photograph and scaled drawing of the profile of the west wall of Test Unit 8, Shell Mound (8LV42).



Figure 2-18. Photograph and scaled drawing of the profile of the north wall of Test Unit 8, Shell Mound (8LV42). Note that photograph is of the western half of profile only.

Stratum III of the upper macrounit consists of largely unconsolidated oyster shell with minimal sand matrix. Extending down at least 162 cm BD in TU8, this stratum appears to have accumulated quickly, with little evidence of interruptions in the deposition of shell. The only possible hiatus of significant duration is seen in what is labeled as Stratum IIIa in the east and south profiles of TU8. This is a thin layer of dark gray ashy fine sand with some shell. Along the south wall this stratum is more-or-less continuous, truncated only along the west side by one of the recent intrusive pits. In the east profile Stratum IIIa is discontinuous, and along the north wall it was noted in the field as “ephemeral,” but not mapped in as a distinct stratum. On balance it would appear that Stratum IIIa represents a surface on which something other than oyster shell accumulated. That this reflects a “living surface,” we cannot say, but it evidently was an interruption in an otherwise continuous pattern of shell deposition. Compared to overlying Strata I and II, Stratum IIIa formed quickly. That is, the overlying strata formed through long-term pedogenic process (as well as recent human disturbance). We know that this surface has been exposed for many centuries, accumulating leaf litter and other detritus that

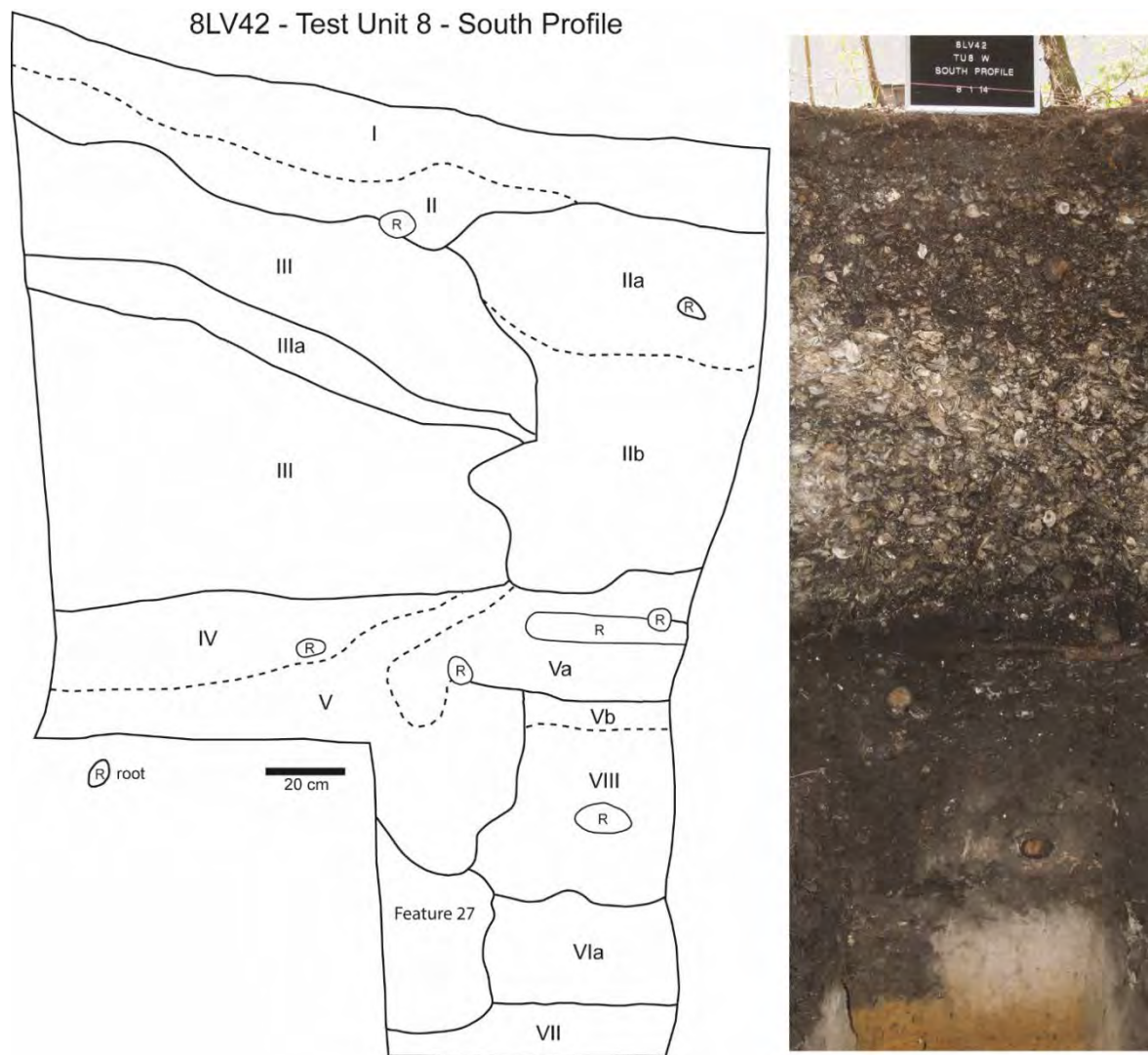


Figure 2-19. Photograph and scaled drawing of the profile of the south wall of Test Unit 8, Shell Mound (8LV42). Note that photograph is of the eastern half of profile only.

contributed to its organic nature. What is more, Strata I and II follow roughly the contours of the present-day surface, indicating that they were not truncated in the modern era by intrusions beyond the pits noted above. In short, the depression in which TU8 was sited is “original” to surface contours in this portion of Shell Mound and not a result of recent land use.

The integrity of shell strata in TU8 is corroborated by the dip and strike of Strata III and IIIa. Seen best in the south profile of TU8 (Figure 2-19), shell layers conform to the contours of the surface depression. This would imply that shell was in fact deposited in a ring around a central area, presumably the location of a habitation structure. Although direct evidence of such a structure eludes us for now, an assemblage of features in the sand beneath the shell attest to intensive activity involving infrastructure in this particular location.

Table 2-8. Stratigraphic Units of Test Unit 8, Shell Mound (8LV42).

Stratum	Max. Depth (cm BD)	Munsell Color	Description
I	59	10YR2/1	Black fine-medium sand; A horizon with small roots throughout, sparse oyster shell (mostly fragmented), and occasional historic-period artifacts
II	83	10YR2/1	Black fine sand with moderate whole and fragmented oyster shell and occasional historic-period artifacts
Ila	126	10YR2/1	Black fine sand with moderate whole and fragmented oyster shell and occasional historic-period artifacts; intrusive pits
Ilb	154	10YR2/1	Black fine sand with abundant whole and fragmented oyster shell and occasional historic-period artifacts; intrusive pit
III	162	10YR6/2	Light brownish gray fine sand with abundant whole and fragmented oyster shell; very sparse sand matrix (1470 $\pm$ 30 B.P. at base)
IIIa	122	10YR4/1	Dark gray fine ashy sand with moderate whole and fragmented oyster shell
IV	180	10YR3/1	Very dark gray fine ashy sand with moderate to abundant whole and fragmented shell, mostly oyster
V	234	10YR4/2	Dark grayish brown fine sand with sparse oyster shell
Va	218	10YR3/1	Very dark gray fine sand with sparse fragmented oyster shell (1520 $\pm$ 30 B.P.)
Vb	238	10YR2/1	Black fine sand with sparse fragmented and whole oyster shell
VI	273	10YR8/2	Very pale brown fine sand with no shell
VII	285+	10YR5/8	Yellowish brown fine sand with no shell
VIII	237	10YR4-6/2	Dark grayish brown clayey fine sand with light-brownish gray mottles with sparse whole and fragmented oyster shell
IX	262	10YR5/1	Gray fine sand with no shell (undefined pit feature)
X	241	10YR6/2	Light brownish gray fine sand with no shell
Feat. 27	270	10YR6/2	Light grayish brown fine sand with abundant whole oyster shell
Feat. 29	275	10YR2/2	Very dark brown fine sand with moderate whole and fragmented oyster shell

Table 2-9. Inventory of Materials Recovered from Test Unit 8 by Level, Shell Mound (8LV42).

Level	Pottery Sherds		Flaked Stone		Modified Shell		Unmodified Gastropod ¹		Vertebrate Fauna	Misc. Rock	Historic
	ct	wt(g)	ct	wt(g)	ct	wt(g)	ct	wt(g)	wt(g)	wt(g)	wt(g)
A	61	119.3	3	4.6	3	155.0	106	1,605.9	127.4	224.0	1,428.7
B	73	77.3	5	7.7	1	32.7	111	1,562.3	388.0	80.0	1,785.1
C	46	101.0	6	35.5	4	126.1	105	1,932.3	585.5	60.1	1,495.9
D	70	180.7	2	14.9	3	120.8	160	2,915.7	455.8	116.6	239.8
E	83	292.5	5	22.9	8	372.3	67	1,468.3	431.8	469.4	53.2
F	62	163.6	6	27.0	4	146.0	62	1,182.6	350.3	90.7	23.8
G	28	100.6	1	4.7	3	134.0	129	2,392.2	410.6	79.7	
H	25	167.2			7	349.5	94	2,470.6	453.5	15.4	
I	26	150.2	1	8.4	2	135.1	96	2,149.2	345.9	59.5	
J	10	61.5			5	284.9	78	2,162.7	307.3	7.3	
K	17	113.4			17	1,259.3	111	3,259.2	404.2	47.6	
L	70	163.3			3	148.4	63	1,351.9	287.1	357.7	
M	71	293.2	3	14.4	2	101.7	51	730.3	282.4	2,151.0	
N	84	327.8	6	28.4	8	286.2	66	1,078.1	276.9	852.7	
O	72	412.2	1	34.6	6	308.0	35	853.1	524.7	177.6	
<i>Levels hereafter from 1 x 2-m subunit of TU8</i>											
P	20	92.2	1	0.2	4	131.8	31	294.4	210.6	2.4	
Q	20	164.4	4	2.7	2	71.0	32	324.1	424.5	2.1	
R	24	142.3	2	20.3	3	105.8	21	553.0	320.0		
S	21	137.3	1	1.4	4	189.7	7	421.3	237.5		
T	52	234.0	1	0.1			8	82.3	66.6	0.5	
U	4	20.8	2	0.5			4	47.5	10.9		
V									1.8		
W	1	0.4	1	0.1							
Wall	91	396.8			3	115.8	94	2,066.7	524.0	1,699.4	145.1
Features	26	153.4	6	11.4	1	63.8	32	710.3	361.1	6.4	
Total	1,057	4,065.4	57	239.8	93	4,637.9	1,563	31,614.0	7,788.4	6,500.1	5,171.6

Lower Macrounit of Organically Enriched Sand. Immediately beneath the macrounit of unconsolidated oyster shell is a ~80-cm-thick stratum of organically enriched sands. With only moderate to trace amounts of shell, this stratum is the anthropogenic consequence of intensive activity involving the digging and in-filling of pits, deposition of various organic matter, including wood ash, and, presumably, the de facto residues of domestic dwelling. Referred to as Stratum V in the profiles of TU8, this “midden” is overlain in places by a thinner stratum (Stratum IV) of ashy sand, not unlike Stratum IIIa in the overlying shell, but with much more organic matter. In places along the contact between unconsolidated shell and organic midden are notable concentrations of ash and charcoal, much like those seen at the base of the shell in TU1 and TU9. It is worth considering the hypothesis that before shell was laid down to form the ridge, much, if not all of the surface of the site was burned.

In profiles where the entirety of Stratum V was exposed, concentrations of particulate organic matter at the base warranted a subdivision of the stratum. This is seen best in the west profile of TU8 (Figure 2-17), where Stratum Va signifies an especially dark layer with diffuse

contact with the overlying midden (Stratum V). This is likely the result of pedogenic processes that translocated fine organic matter down through the sand column. Alternatively, the enhanced organic nature of this subunit is a buried A horizon. For all intents and purposes, Strata V and Va are part of the same archaeostratum.

Obviously, the lower anthropogenic macrounit (Strata V and Va) reflects an entirely different set of circumstances compared to those resulting in the deposition of oyster shell in the overlying strata. Besides the difference in matrix composition, the period during which the underlying midden formed involved the use and discard of sand-tempered pottery not found in the overlying shell. Included in the lower unit are sherds with check-stamped, complicated-stamped, cordmarked, and fabric-impressed surfaces, types of the Deptford and Swift Creek series. The overlying shell is dominated by plain sherds, most with limestone tempering of the Pasco series (see section on Material Culture below for more details). This shift in pottery apparently took place over a relatively short period of time. A sample of charcoal from the bulk sample of Stratum Va (#197; Figure 2-17) returned an AMS assay of 1520 ± 30 B.P., which gives a two-sigma calibrated range of A.D. 430–605 (taking multiple intercepts into account). A sample of charcoal from the base of the shell (Stratum III; #181; Figure 2-16) returned an AMS assay of 1470 ± 30 B.P., which gives a two-sigma calibrated range of A.D. 545–645. This span of about two centuries corroborates all other Woodland-period assays from Shell Mound, corresponding to a period of intensive occupation during the fifth century A.D., followed by the deposition of shell in a U-shaped configuration during the sixth century A.D. A hiatus between the two episodes cannot be detected, although the change in pottery would suggest either a “replacement” of one people by another, or a sea change in culture precipitated by exogenous factors. Either way, Shell Mound houses a record of this microhistory and documenting and explaining this change will remain a high priority for future investigations.

Submidden Macrounit. Excavation below the organic midden exposed inorganic sands of the relict dune on which Shell Mound resides. Labeled in TU8 profiles as Strata VI and VII, underlying sands are devoid of shell or artifacts save for the occasional translocation of items from above. The upper part of this macrounit consists of very pale brown sand (Stratum VI), which grades below into a yellowish brown sand (Stratum VII). The difference between these strata is almost certainly the result of pedogenic processes

Into the sands of the submidden macrounit were dug several pits and possibly some postholes (Figure 2-20). These features vary in size, shape, and content, but generally are organically enriched and contain sand-tempered sherds consistent with those from the overlying midden, as well as charcoal, oyster shell, other shell, and vertebrate fauna. In many cases the point of origin of pit features could not be determined and they did not become evident to excavators until submidden sands were reached, as seen in Figure 2-20. Others became apparent in the profiles of TU8, such as Feature 27 in the south profile (Figure 2-19), Feature 29 in the north profile (Figure 2-18), and an undefined feature (Stratum IX) in the west profile (Figure 2-17). In some cases of planview observation, features were sectioned, profiled and sampled. In cases where features were defined in profiles, bulk samples were taken directly from profiles. All feature samples were processed through the Flote-Tech machine and the >1/4-inch fraction cataloged like any other provenience. Analysis of the fine-fraction of feature fill, like that of the bulk-sample columns, has yet to be conducted.



Figure 2-20. View of pit features and possible postholes in submidden sands of Test Unit 8, Shell Mound (8LV42).

Summary. Test Unit 8 exposed the deepest sequence of stratified deposits documented at Shell Mound since testing conducted by Dolan in 1959 (Bullen and Dolan 1960). Notably, TU8 penetrated through a thick stratum of bedded shell and underlying midden to reveal the relict dune that lends some topographic relief to the landform on which Shell Mound lies. We can now state with certainty that the elevation of the northern arm of the shell ridge is both anthropogenic and geological. The anthropogenic part came in two phases: first the formation of an organic midden and associated pits dating to the fifth century A.D., and second, the emplacement of mostly oyster shell in an overlying mantle some 1.6-m thick during the sixth century A.D. The latter phase in the vicinity of TU8 involved emplacement of shell in a ring surrounding an area roughly 10-m in diameter. However, shell was emplaced across much, if not all, of the U-shaped ridge, in places much thicker than at TU8 and not always in ring-like fashion. The relationship between the underlying midden and overlying shell is uncertain although we are confident that the transition in depositional processes was quick and that oyster shell accumulated rapidly, within a century. Besides the changes in pottery noted earlier, the shift from midden to shell was accompanied by a shift from small intertidal oysters to subtidal oysters, a trend discussed further in a later section of this chapter.

Test Unit 7

By far the least anticipated results of testing at Shell Mound in 2014 were realized in Test Unit 7 (TU7). Sited on the inside slope of the northern arm of the shell ridge, TU7 was intended to search for evidence of domestic architecture. Using a bucket auger to locate subsurface deposits, we began the process of siting TU7 close to the edge of the interior opening. The lack of anthropogenic deposits in this area was surprising, so the crew moved up slope, to the north, until striking what appeared to be intact shell midden. With positive results, TU7 was emplaced directly over the bucket auger hole, with axes oriented parallel and perpendicular to the slope of the ridge. Excavation proceeded in the usual fashion (Figure 2-21), but it did not take long to realize that shell was only a minor constituent of the subsoil. Instead, shell was confined to scattered shell midden, the fill of pits, and, apparently, the fill of postholes (Figure 2-22). Obvious features were mapped, profiled, and sampled as usual, but upon further excavation it became apparent that TU7 contained an assemblage of massive pits with little to no shell. The strategy for investigating these unexpected features involved some trial and error. In general, the strategy was to trench large soil anomalies along one of more edges in order to expose three-dimensional view of the features. As described further below, this strategy entailed some deep excavation, as some of the pits exceeded 1.5 m in depth.

Shown in Figures 2-23 through 2-26 are photographs and drawings of the four profiles of TU7. Descriptions of the strata mapped are provided in Table 2-10, and an artifact inventory is given in Table 2-11.

It is difficult to estimate the “natural” profile of substrate in TU7 because pit features were pervasive. It clearly lacks the emplaced shell seen in TUs 1, 2, and 8, nor does it have an anthropogenic deposit that can be described as a “midden.” It does, however, have a large inventory of pits and postholes, most of which appear to emanate from near the present-day surface. A surface stratum of organically enriched sand (Stratum I) obscures any ancient surface from which pits were dug, a consequence, we presume, of centuries of abandonment. Because the area of TU7 does not support a thick layer of oyster shell, its archaeological deposits (generally feature fill) have been subject to near-surface disturbance more so than the buried middens of TU 1 and TU8. A case in point is the large animal burrow that was bisected along the east and south walls of TU7 (Stratum XIII).

As damaging as burrowing creatures have been to the integrity of pit features, ancient human agents leveled a greater impact. That is because so many of the pit features in TU7 intercepted earlier pit features, leaving an amalgam of partial profiles and obscured boundaries. The north profile of TU7, for example, shows at least five pit features overlapping (Figure 2-23), all of which could have emanated from the same surface. Even the boundaries of large pits such as Feature 25 are obscured by the fill of even larger features, such as Feature 30.

The usual level excavation was frustrated by the large number of pits and our inability to demarcate one from the other in planview alone. As some of the better defined features were mapped, sectioned, and sampled, others were subject to exploratory trenches or box sections to better define pit outlines, such as the small box section shown in Figure 2-27. This proved effective, but when larger pits were encountered the scale of trenching had to expand.



Figure 2-21. View facing south of field school students excavating Test Unit 7, Shell Mound (8LV42).



Figure 2-22. View facing northwest of field school students excavating Test Unit 7 at ~50 cm BD, Shell Mound (8LV42).

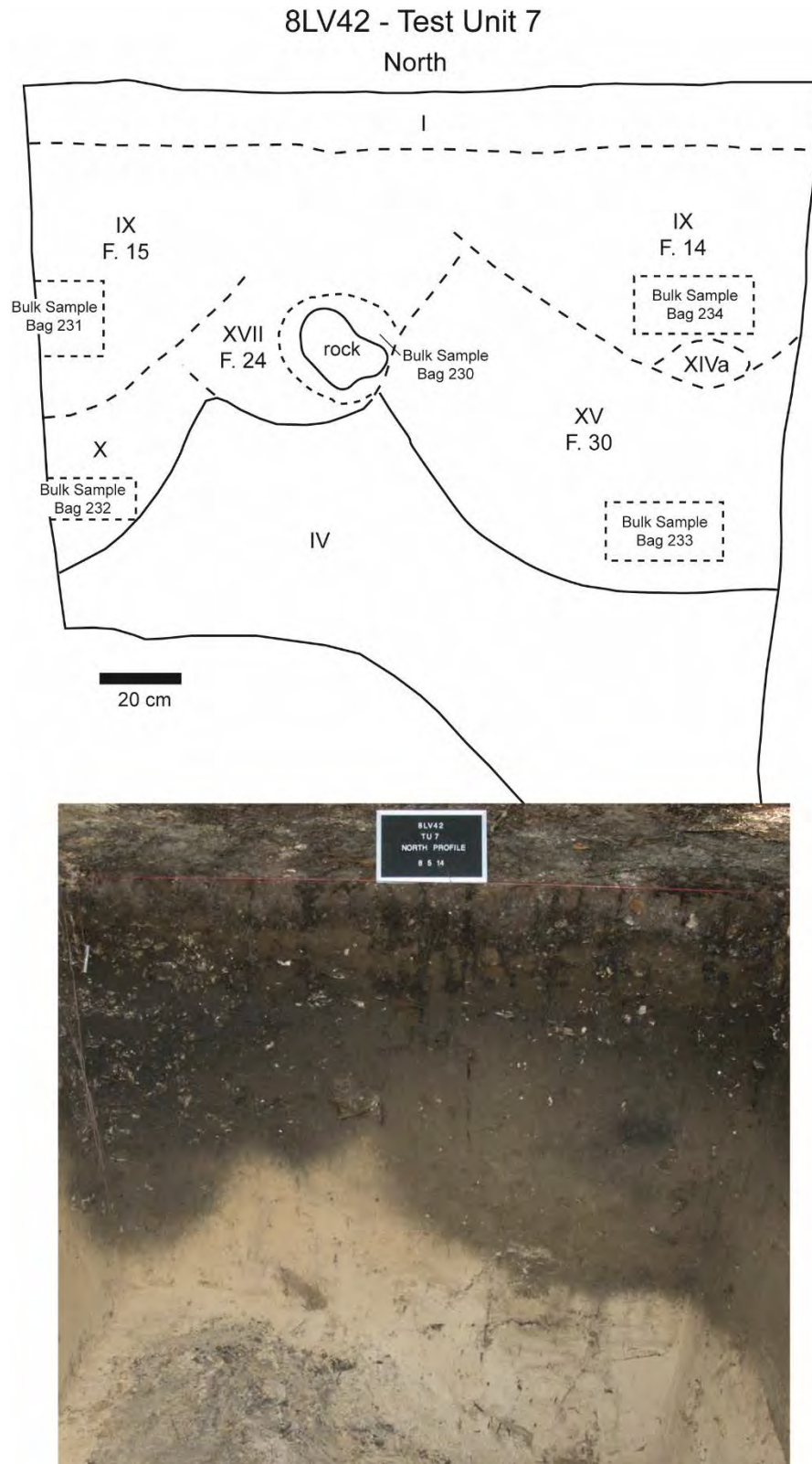


Figure 2-23. Photograph and scaled drawing of the profile of the north wall of Test Unit 7, Shell Mound (8LV42).

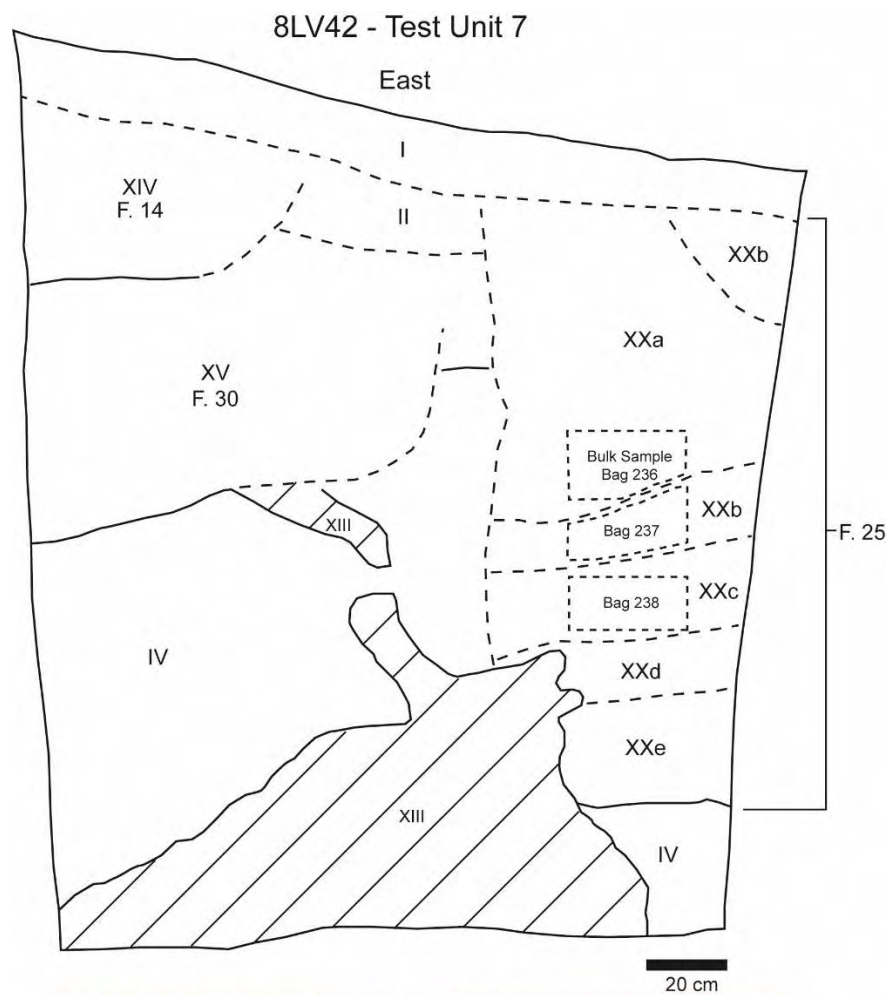


Figure 2-24. Photograph and scaled drawing of the profile of the east wall of Test Unit 7, Shell Mound (8LV42).

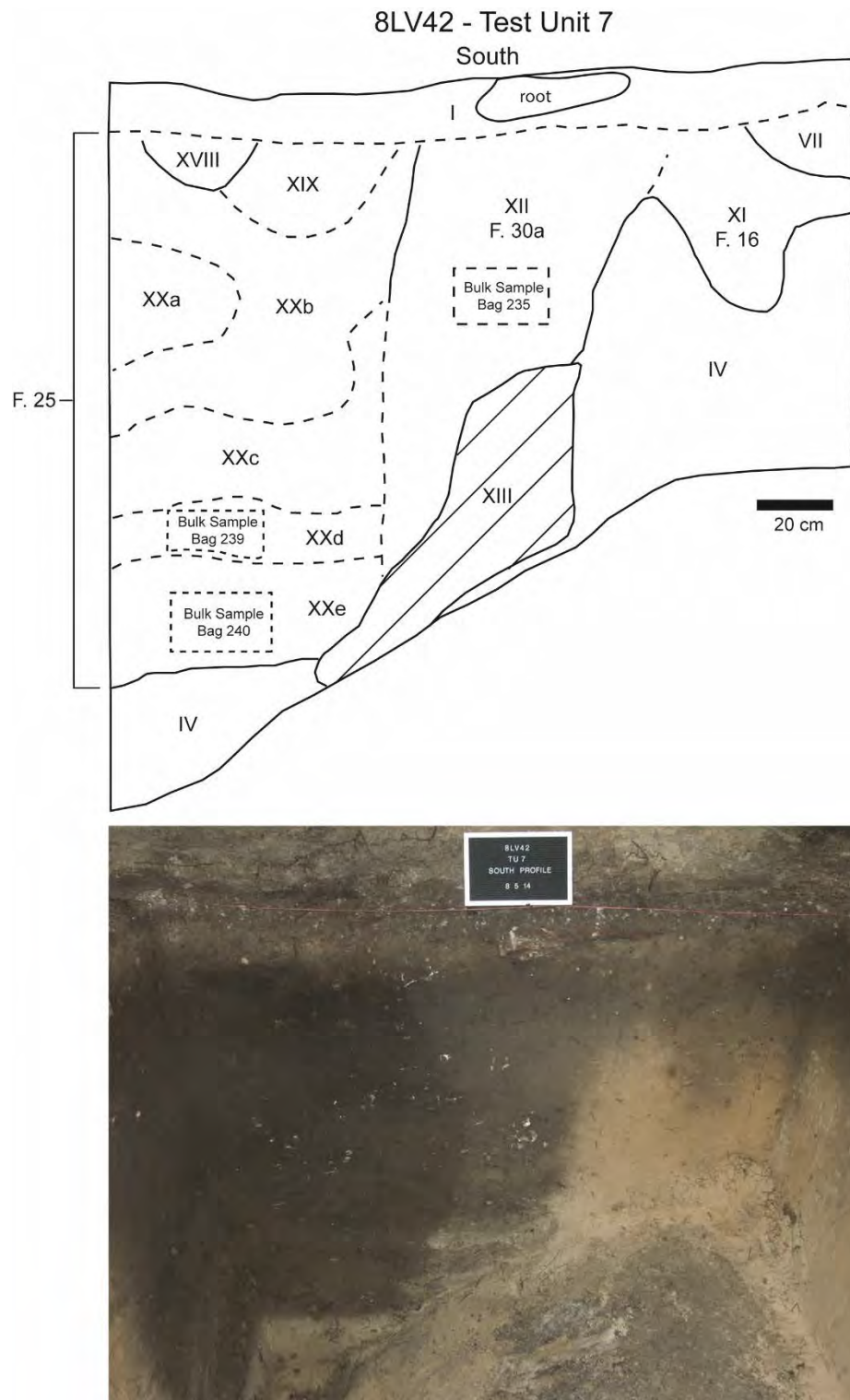


Figure 2-25. Photograph and scaled drawing of the profile of the south wall of Test Unit 7, Shell Mound (8LV42).

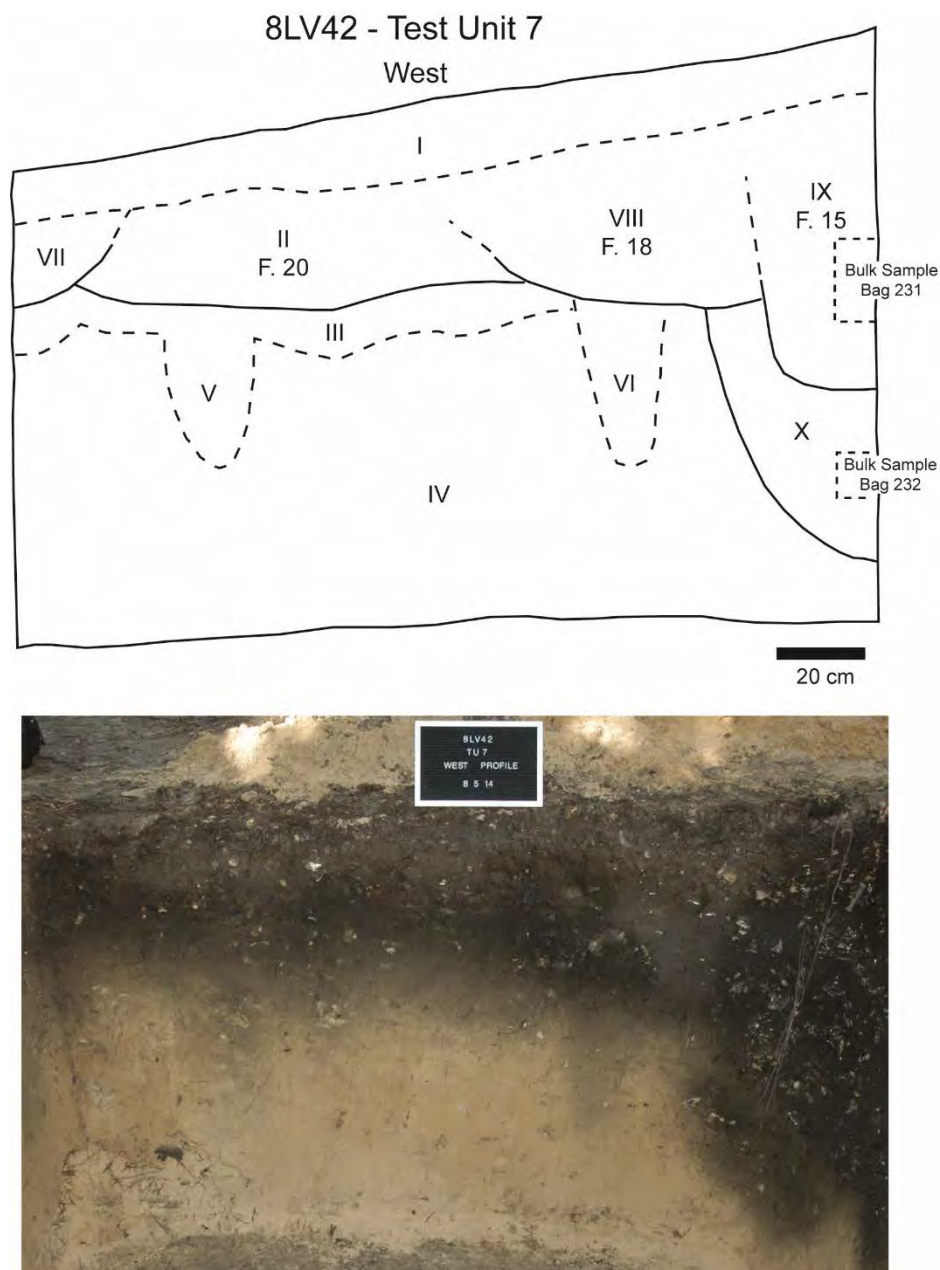


Figure 2-26. Photograph and scaled drawing of the profile of the west wall of Test Unit 7, Shell Mound (8LV42).

In particular, the two large pit features shown in Figure 2-28 were trenched by a subunit that started out 60-cm wide running along the south wall, but had to be expanded to the north and eventually reached the full depth of over 200 cm BD. All fill from this trenching operation was passed through ¼-inch hardware cloth but rather than pick out the artifacts and vertebrate fauna, all materials retained in the screen were bagged and returned to the lab for processing. The vast majority of this material listed in Table 2-11 as “SE trench” is fill from Feature 25.

Table 2-10. Stratigraphic Units of Test Unit 7, Shell Mound (8LV42).

Stratum	Max. Depth (cm BD)	Munsell Color	Description
I	58	10YR4/3	Brown fine sandy loam with surface root mat, moderate number of hardwood roots, and trace of crushed shell
II	69	10YR3/2	Very dark grayish brown fine sandy loam lacking shell
III	80	10YR4/3	Brown fine sandy loam lacking shell
IV	231+	10YR5/6-7/6-7/4	Yellowish brown fine sand grading to yellow fine sand and then to very pale brown sand, lacking shell
V	105	10YR5/4	Yellowish brown fine sand with brown (10YR5/3) mottles; lacking shell; probable posthole
VI	104	10YR4/1	Yellowish brown fine sand; lacking shell; probable posthole
VII	68	10YR2/2	Very dark brown fine sandy loam lacking shell; probable pit feature
VIII	68	10YR2/1	Black fine sandy loam with trace of shell (Feature 18)
IX	87	10YR2/1	Black fine sandy loam with moderate oyster and crown conch shell (Features 14 and 15)
X	126	10YR3/2	Very dark grayish brown fine sandy loam lacking shell (unassigned pit feature)
XI	103	10YR5/4	Yellowish brown fine sand with no shell (Feature 16)
XII	175	10YR3/1	Very dark gray fine sandy loam with ashy texture and trace of oyster shell (Feature 30a)
XIII	237	mottled	Recent animal burrows
XIVa	77	10YR2/1	Black fine sandy loam with pockets of oyster and crown conch (Feature 14)
XV	123	10YR3/3	Dark brown fine sandy loam with trace of shell (Feature 30)
XVII	90	10YR3/1	Very dark gray fine sandy loam with trace of shell (Feature 24)
XVIII	70	10YR2/1	Black fine sandy loam lacking shell (original Feature 25)
XIX	83	10YR3/1	Very dark gray fine sandy loam lacking shell
XXa	127	10YR3/1	Very dark gray fine sandy loam with trace of shell (Feature 25)
XXb	140	10YR2/1	Black fine sandy loam with trace of shell (Feature 25)
XXc	162	10YR3/3	Dark brown fine sandy loam with trace of shell (Feature 25)
XXd	174	10YR4/2	Dark grayish brown fine sandy loam with trace of crushed shell (Feature 25)
XXe	199	10YR3/3	Dark brown fine sandy loam with trace of shell (Feature 25; 1530 $\pm$ 30 BP)

Table 2-11. Inventory of Materials Recovered from Test Unit 7 by Level, Shell Mound (8LV42).

Level	Pottery Sherds		Flaked Stone		Modified Shell		Unmodified Gastropod		Vertebrate Fauna	Misc. Rock	Historic
	ct	wt(g)	ct	wt(g)	ct	wt(g)	ct	wt(g)	wt(g)	wt(g)	wt(g)
A	256	536.7	14	10.2	8	311.9	216	2,607.7	387.4	356.4	84.2
B	171	632.0	20	39.2	4	73.5	87	1,319.2	390.3	175.3	
C	118	513.5	66	136.6	5	338	95	1,045.6	392.3	29.5	
D	91	387.1	91	130.2	1	20.5	19	187.8	438.7	26.1	
E	53	295.5	217	304.3			15	199.6	293.8	1.4	
SE trench	164	1,234.9	132	155	1	67.8	121	1,161.1	1,457.4		0.9
E subsect.	13	73.9	19	31.2			4	67.3	112.3	6.6	21.9
Features	264	1,846.7	667	852.5	14	487.1	230	3,386.0	2,447.8	81.1	11.0
Total	1130	5,520.3	1,226	1,659.2	33	1,298.8	787	9,974.3	5,920.0	676.4	118.0

Given the exploratory nature of recovery methods used to excavate TU7, the integrity of some features was compromised. Most, however, were sufficiently documented and sampled to warrant an assessment of the range of variation among them. Short descriptions of each of the defined features are given below, followed by a general assessment of the assemblage as a whole. To facilitate discussion of feature content, a breakdown of recovered materials by feature is provided in Table 2-12. Plans of many of the features can be seen in Figures 2-27 and 2-28, and drawn profiles and photographs of features confined to TU7 are given in Figures 2-29 and 2-30. Profiles of most of the remaining features can be seen in the wall profiles of TU7 (Figures 2-23 through 2-26).

Table 2-12. Inventory of Materials Recovered from Features of Test Unit 7, Shell Mound (8LV42).

Feature	Pottery Sherds		Flaked Stone		Modified Shell		Unmodified Gastropod		Vertebrate Fauna ²
	ct	wt(g)	ct	wt(g)	ct	wt(g)	ct	wt(g)	wt(g)
13	47	236.3	47	73.9	1	12.9	42	243	404.3
14	31	94.6	25	17.9			19	92.4	88.9
15	44	388.8	4	3.0	3	160.6	101	1,402.6	789.0
16	3	0.8	4	5.0					13.1
17	2	3.2	11	12.7			10	120.8	32.6
18	1	0.3	2	0.5			1	3.8	36.4
19	5	181	13	27.2	1	77.1	3	28.7	50.2
20	5	21	9	4.4			3	78.8	16.7
23			4	2.1			2	6	15.5
24	12	67.4	20	34.4	1	15.5	18	130.3	169.6
25	33	281.6	52	34.7	1	44.2	32	218.1	376.3
30	68	450.6	471	549.5	3	77	85	386.3	609.0
30a	3	39.3	2	7.0			6	101.6	149.3
Total	254	1,764.9	664	772.3	10	387.3	322	2,812.4	2,750.9

¹ excludes feature contexts that were mixed (box section of Features 13 and 16); except for vertebrate fauna remains, excludes all materials <1/4-inch in maximum dimension

² includes 1/8-inch fraction from bulk samples

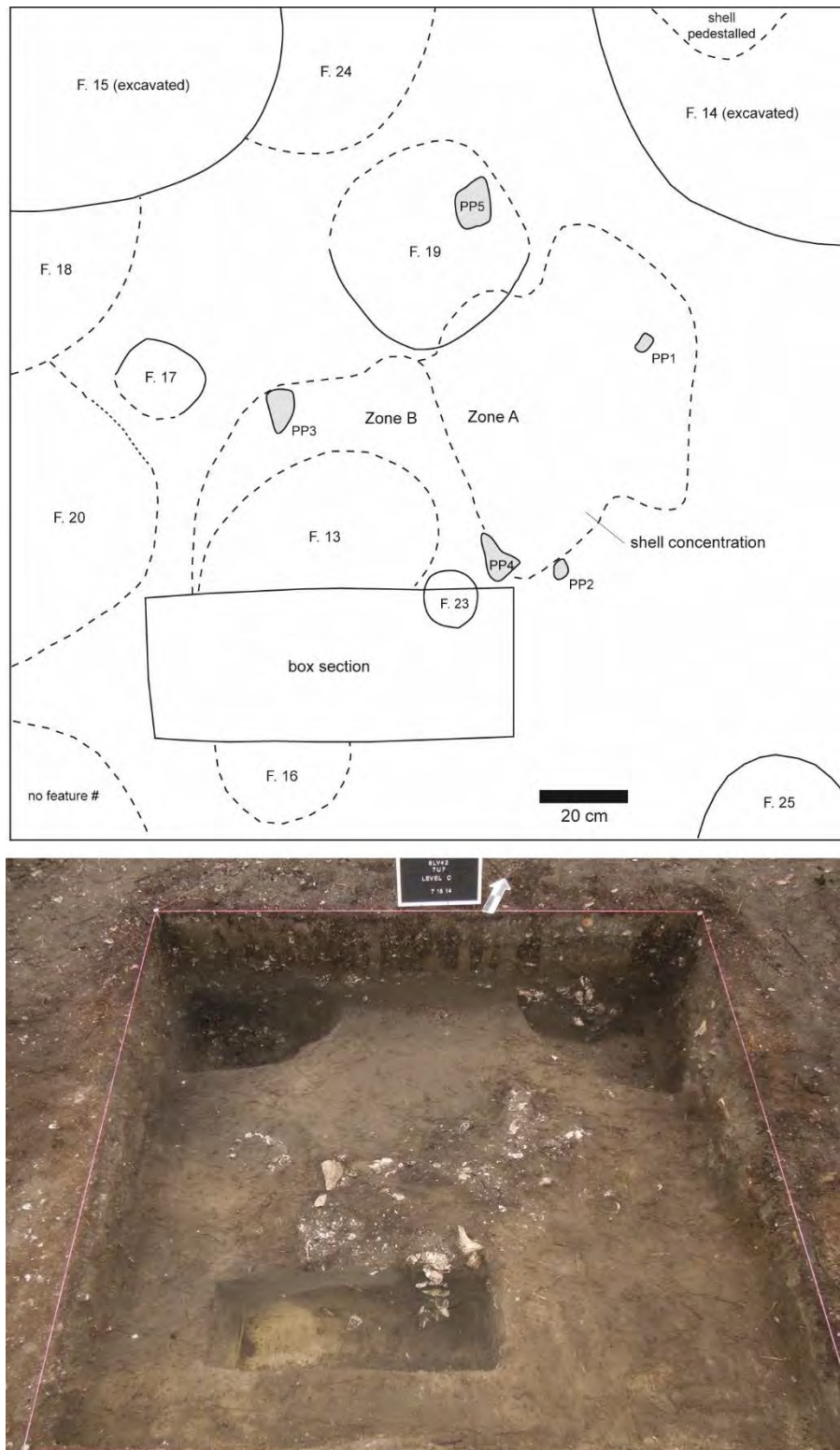


Figure 2-27. Plan view facing north of Test Unit 7 at ~57 cm BD, the base of Level C. Two features in background (Feature 14 and 15) have been sectioned, and a box section removed (foreground) to expose the profile of Features 13, 16, and 23. Items labeled “PP” are piece plots: hafted biface (PP1); chert core (PP2); whorl of *Busycon* shell (PP3, 4); limestone-tempered plain rim sherd (PP5).

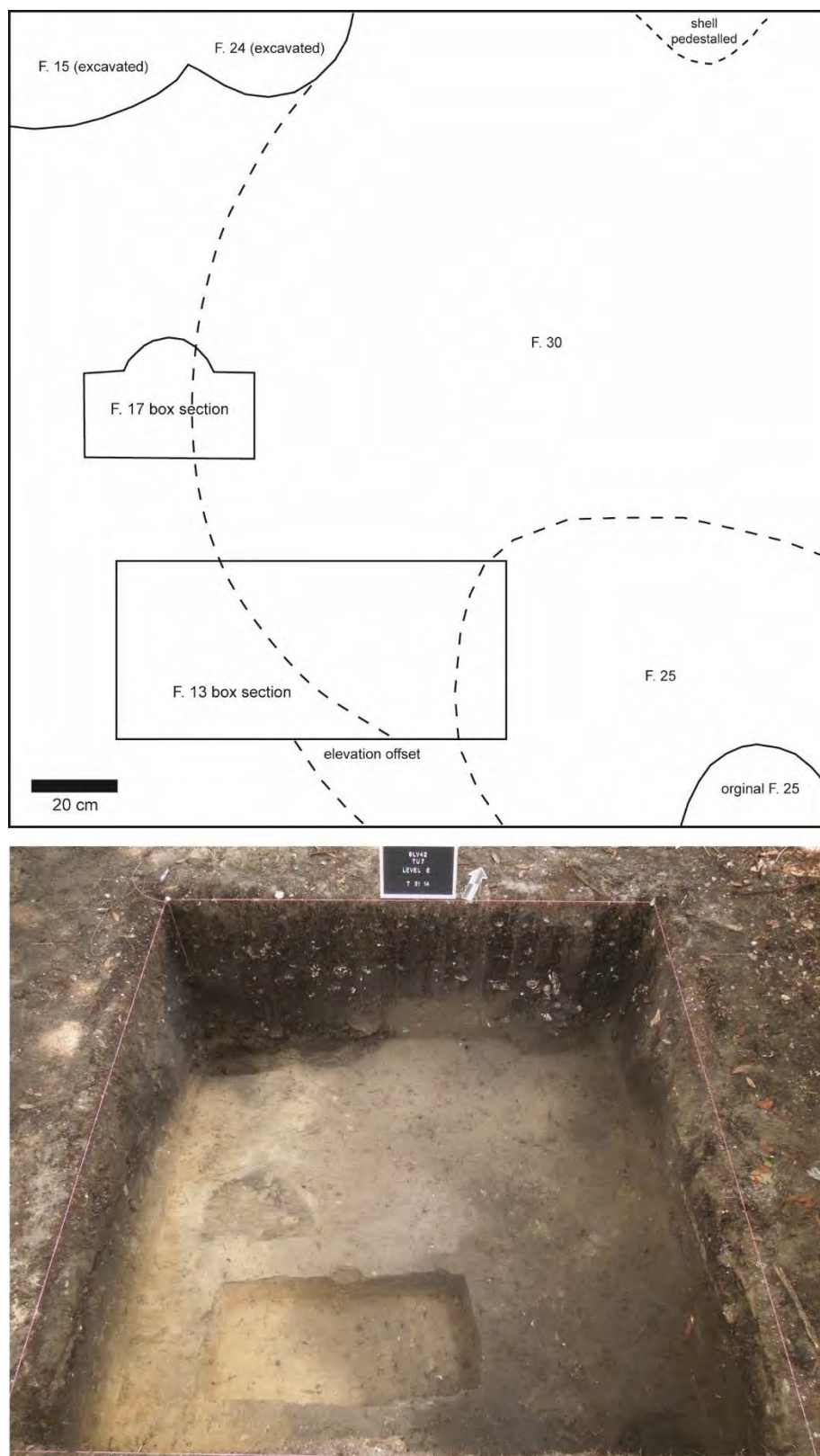


Figure 2-28. Plan view facing north of Test Unit 7 at ~72 cm BD, near top of Level E, showing outlines of two massive pits, Features 25 and 30.

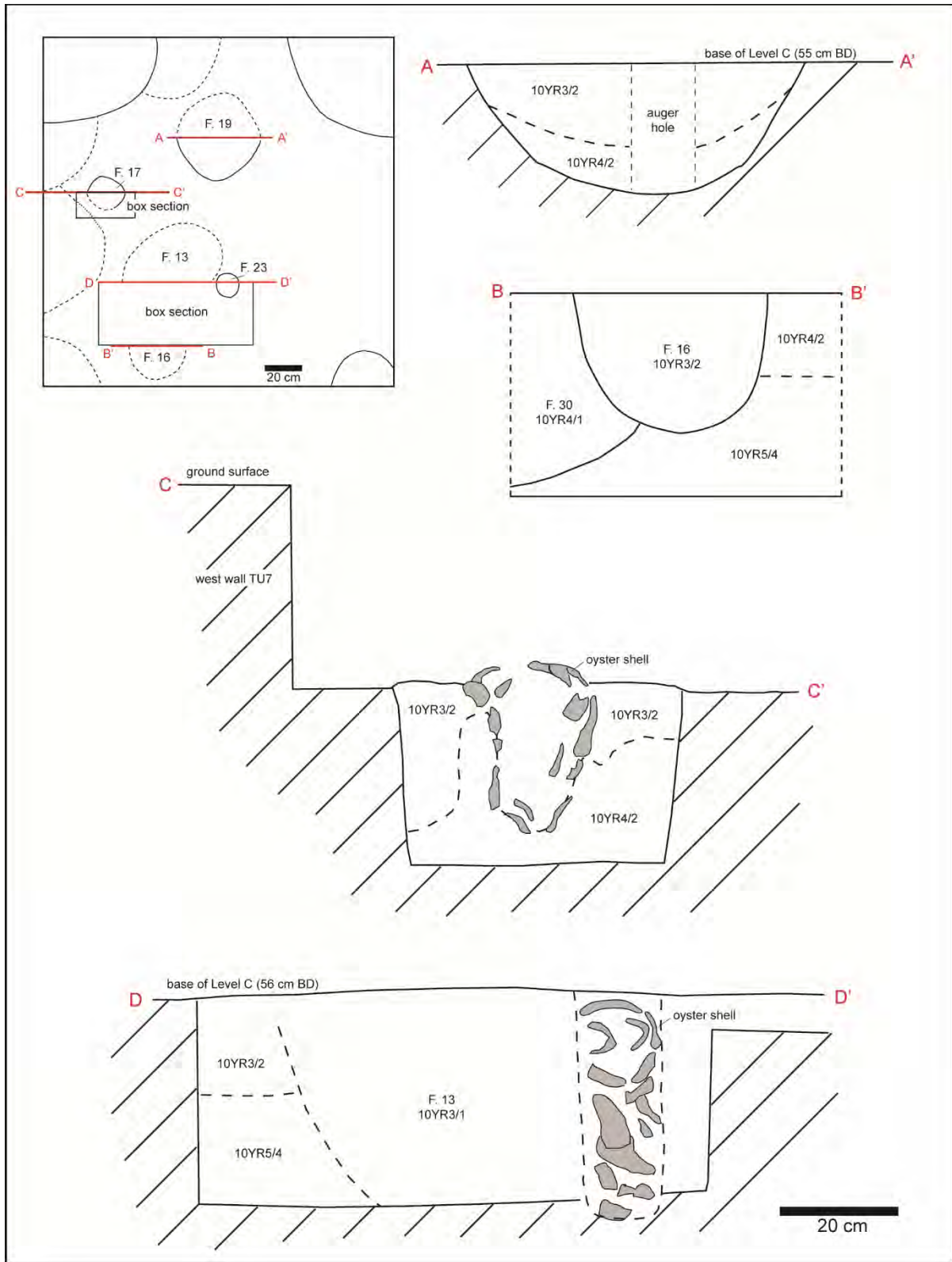


Figure 2-29. Plan schematic and profile drawings of features fully contained within Test Unit 7, Shell Mound (8LV42).



Figure 2-30. Photographs of profiles of features fully contained within Test Unit 7, Shell Mound (8LV42): a. Feature 19 (note bucket auger hole in center); b. Feature 16; c. Feature 23; d. Feature 17.

Feature 13. First recognized at about 48 cm BD as a concentration of shell and very dark gray (10YR3/1) sandy loam, Feature 13 proved to be a hemispherical pit approximately 55 x 60 cm in plan and at least 37 cm deep. The shell believed to be associated with this feature expanded to the northeast to encompass much of the central portion of TU7 (Figure 2-27). This concentration of shell had little depth (i.e., was “sheet” midden) and, in fact, did not coincide with either Feature 13 or other pit features in the immediate area, although it may well have been displaced from the digging and infilling of what came to be known as Feature 30. In

addition, a shell-filled cylinder reminiscent of a posthole was detected on the eastern margin of Feature 13 and matched or exceeded its depth of at least 37 cm below the point of recognition or ~93 cm BD (Figures 2-29 and 2-30).

The fill recovered from Feature 13 contained 47 sherds, all but seven limestone-tempered plain. The exceptions are six sand-tempered plain and one spicule-tempered plain sherd. The feature also contained a few dozen chert flakes, one stemmed hafted biface, one Type G shell hammer, and moderate amounts of unmodified shell and vertebrate fauna. The biface has a haft element with an expanding stem, a flat base, and weak shoulders. A similar form was plotted at the base of Level C to the northeast of Feature 13, of the edge of the shell scatter (PP#1 in Figure 2-27). Both of these bifaces fit within the range of Woodland types such as Bradford, Columbia, Sarasota, and Taylor (Bullen 1968).

Feature 14. Recognized at about 41 cm BD by a concentration of shell in black (10YR2/1) sandy loam, Feature 14 extended into the north and east walls of TU7, where it was profiled after excavation (Figure 2-23 and 2-24). A plan view of the portion of Feature 14 contained in TU7 is shown in Figure 2-27. Judging from the portion of the feature exposed and mapped, Feature 14 is a large basin-shaped pit at least 100 cm in diameter (if symmetrical in plan) and at least 37 cm deep, although likely 50+ cm deep.

Oyster, crown conch, and other shell was concentrated in pockets in the feature fill; one pocket of dense shell was left pedestalled along the north wall after the rest of the fill was removed (Figure 2-28). It was later removed en masse. Thirty-one sherds were recovered from the fill of Feature 14, all but four of which are limestone-tempered plain; the exceptions are sand-tempered plain sherds. Among the 25 lithic artifacts is a small, nondiagnostic biface fragment; the remaining items are chert flakes and shatter. Shell outside of defined pockets was not frequent and the amount of vertebrate fauna in the fill was modest, but included deer bone.

Feature 15. Located in the northwest corner of TU7. Feature 15 is very similar to Feature 14 in form and size, but contained a much larger assemblage of shell and bone, and far fewer lithic flakes. First recognized at about 50 cm BD, Feature 15 extended into the north and west walls of TU7, where it was profiled after excavation (Figures 2-23 and 2-26). A plan view of the portion of Feature 15 contained in TU7 is shown in Figure 2-27. It is difficult to judge the depth of this feature because the fill of a presumed deeper feature, recorded in the north profile as Stratum X (Figure 2-23) obscured the basal margins.

Although Feature 15 contained little oyster shell, it included several lightning whelk and many more crown conch shells, the latter concentrated at the base of the pit. Three of the crown conch shells were modified and used as Type G hammers. Vertebrate faunal remains were relatively abundant and include deer bone, catfish, jack, and other fish bone. All but one of 44 sherds from the feature are limestone-tempered plain; the exception is sand-tempered plain.

Feature 16. A small hemispherical pit, Feature 16 was first identified as a very dark grayish brown (10YR3/2) stain at the base of level C (ca. 57 cm BD). The box section for

Feature 13 doubled as a section for Feature 16, and from that view its profile was photographed and drawn (Figures 2-29 and 2-30). The pit is estimated to be about 32 cm in diameter at the top and at least 24 cm deep. Although it had a sand-tempered plain sherd on the top of the feature, the fill contained only three limestone-tempered “crumb” sherds. Four chert flakes and modest amounts of shell and vertebrate faunal remains were also recovered from the southern half of the unit, the only portion with good integrity, as removal of the box section did not differentiate between the fills of Features 13 and 16.

Feature 17. Represented at the base of Level C as a ring of shell ~20 cm in diameter (Figure 2-27), Feature 17 has a profile reminiscent of a posthole (Figure 2-28). If indeed this feature is a posthole, oyster shell was either used as chinking for the post or emplaced for reasons that cannot be inferred from the feature alone. After opening the feature with a box section, it became apparent that the oyster shell indeed followed the edge of a cylinder roughly 30 cm deep (from the base of Level C). Some shell was splayed to the east of the cylinder, and overall it appeared to taper with depth. The very dark gray (10YR3/1) sand of the core was removed as a single bulk sample, and the shell collected as a lot. Aside from the shell, the feature contained two small sherds (one limestone-tempered crumb sherd and one sand-tempered plain sherd), a few chert flakes, and modest amounts of unmodified gastropod shell and vertebrate faunal remains. A feature like this has never before been observed at Shell Mound or other sites in the Lower Suwannee region, although a second posthole-like feature in TU7, Feature 23, comes close.

Feature 18. Similar to Features 14 and 15 in size and shape, Feature 18 is a basin-shaped pit that was apparently truncated by Feature 15. It was detected only after the fill of Feature 15 was removed. Its plan at that stage is shown in Figure 2-27 and its profile recorded as part of the west wall of TU7 (Figure 2-26). Its very dark grayish brown (10YR3/2) sandy loam fill contained only one sherd, a limestone-tempered crumb sherd. Two chert flakes, unmodified shell, and a modest amount of vertebrate faunal remains are all that was recovered from the quarter-section sample of Feature 18. The excavator of Feature 18 noted that oyster shell was concentrated at the bottom and sides of the pit.

Feature 19. Fully contained within TU7, Feature 19 is a basin-shaped pit measuring about 50 cm in diameter in plan, at the top, and ~22 cm deep from the point of recognition, 55 cm BD (Figures 2-27 and 2-29). Lying at the top of the feature was a large rim sherd of limestone-tempered plain pottery (PP5 in Figure 2-27). Four other sherds of similar type were recovered from the feature fill (10YR3/2 fine sandy loam), as were 13 chert flakes (one large), one piece of modified shell, and modest amounts of unmodified shell and vertebrate fauna.

Feature 20. Similar to Feature 18, Feature 20 is a basin-shaped pit bisected by the west wall of TU7, where its profile was photographed and drawn (Figure 2-26). A plan of Feature 20 at ~57 cm BD is shown in Figure 2-27. Sherds from Feature 20 were limited to five specimens, four limestone-tempered plain sherds, and one sand-tempered simple-stamped sherd, one of the very few decorated sherds from TU7. Also recovered from Feature 20 were nine chert flakes and traces of shell and vertebrate faunal remains.

Feature 23. A second shell-filled cylinder (posthole?) was designated Feature 23. Unlike Feature 17, Feature 23 is a more-or-less solid column of shell (Figure 2-29 and 2-30), measuring ~13–14 cm in plan and 37 cm deep from its point of recognition at 56 cm BD. The shell consists largely of oyster, both whole and fragmented. Four small chert flakes and trace amounts of gastropod shell and vertebrate faunal remains are the only other material recovered from the feature. In form and size, Feature 23 compares favorably to Feature 17, although the former is about 6–7 cm deeper than the latter.

Feature 24. Another basin-shaped pit in the north wall of TU7 is Feature 24 (Figures 2-23 and 2-27). Although the upper portions of this and nearby features blend into a homogeneous matrix of black (10YR2/1) sandy loam, it would appear that Feature 24 was truncated by both Feature 14, to the east, and Feature 15, to the west. Distinguishing Feature 24 from the others is a large slab of limestone in its fill, shown in Figure 2-23 jutting out of the north wall of TU7. This slab and surrounding matrix was collected as a bulk sample after the rest of the feature fill was removed and the profile photographed and drawn. Also found in the fill were 12 limestone-tempered sherds, all plain, 20 chert flakes, one Type G shell hammer, a modest amount of unmodified gastropod shell, and moderate amount of vertebrate fauna, including deer bone. Notably, some of the oyster shells at the base of the feature were paired.

Feature 25. First mapped as a small pit in the southwest corner of TU7, Feature 25 was redefined as a massive cylindrical pit at least 1.0 m in diameter and about 130 cm deep (Figures 2-24, 2-25, and 2-28). The detection and recovery of Feature 25 was not ideal. Having not before seen a feature of this scale at sites in the Lower Suwannee region, the PI (Sassaman) had the crew bisect the very dark gray (10YR3/1) fine sandy loam of the upper part of Feature 25 with a trench oriented parallel with the south wall of TU7. The previously excavated box section for Features 13 and 16 had exposed a dark fill at the base (~90 cm BD), fill that proved to be part of both Feature 25, and a second massive pit, Feature 30 (see below). The box section was therefore expanded to the east, and widened to the south wall of the unit. Recorded in Table 2-11 as “SE Trench,” this unit of recovery is a mix of fill from Features 25 and 30, but the vast majority of it is estimated to come from Feature 25.

As seen in the east and south wall profiles of TU7 (Figures 2-24 and 2-25), Feature 25 is a stratified pit. Five distinct strata were observed, recorded, and sampled in bulk (Table 2-10). Strata vary only slightly in color and texture and, with exception of the upper stratum (XXa), all strata are between 20 and 30 cm thick and generally conformant to the geometry of the pit. An animal burrow disturbed the lower reaches of the northwest margins of the unit; the remaining portion was fully intact and well-preserved (Figure 2-31). The bulk sample of the basal stratum (XXe) provided a charcoal sample that returned an AMS age estimate of 1530 ± 30 B.P., which gives a two-sigma calibrate range of A.D. 425–600.

Feature 25 produced a large and diverse assemblage of artifacts and vertebrate faunal remains. The numbers reported in Table 2-12, however, do not favorably reflect the full inventory for they include only the materials recovered in bulk or otherwise expressly from Feature 25. As noted earlier, the SE Trench intercepted Feature 25 on its western margin, and it was taken down to the very base of the feature, until yellow brown sand of the substrate was encountered at ~200 cm BD. Add in the inventory of the SE Trench (Table 2-11) and we get



Figure 2-31. View facing southeast of the profile of Feature 25 at the time of profile drawing, southeast corner, Test Unit 7, Shell Mound (8LV42).

a better sense of the richness and volume of material in the Feature 25 fill. A full analysis of the vertebrate faunal remains is pending, but a portion of it bears mentioning here and warrants further discussion in a later section below. First, Feature 25 contained a relatively large inventory of deer bone, something found in only trace amounts in most contexts in the lower Suwannee region, save certain TU7 features. Second, Feature 25 contained a large inventory of water birds: ibis, heron, stork, and duck. Third, fish were abundant, as is often the case, but at least 92 mullet were recovered in the combined matrix of bulk samples and ¼-inch recovery of the SE Trench. Clearly an abundance and diversity of animal remains was deposited in Feature 25 and this signals an assemblage well beyond what is typical of archaeological deposits in the region.

Artifacts from Feature 25 were likewise numerous and diverse. An assemblage of nearly 200 sherds is dominated by limestone-tempered plain, but well represented are sand-tempered plain sherds and a few spicule-tempered sherds, as well as a small but diverse assemblage of decorated sherds, including one Dunns Creek Red. Lithic flakes are voluminous for a context so far from sources of toolstone. Several shark teeth were recovered too, including

at least two that were drilled. In the vicinity of Feature 25 (but not clearly within it) was a whole quartz crystal with engraving at the proximal end. (see section of Material Culture below for details). The assemblage from Feature 25 eclipses all other feature assemblages at Shell Mound. We estimate that up to half of it remains in the unexcavated east and south walls of TU7.

Features 30 and 30a. After most of the features were removed from TU7 and level excavation resumed at about 72 cm BD, it became apparent that another massive feature remained in the eastern half of the unit. Designated Feature 30, a dark brown (10YR3/3) zone of fine sandy loam covered most of the eastern 2/3rds of the unit at this depth (Figure 2-28). The exploratory trench revealed that like Feature 25, this feature reached far into the substrate. It also extended laterally beyond both the north and east walls of the unit, and possibly into the south wall. At the time Feature 30 was estimated to be about 4 m in diameter, prompting hypotheses about pithouses and other unprecedented features. The full extent of Feature 30 was not resolved, although its profiles in the north and east walls (Figures 2-23 and 2-24) provide a reasonably good perspective on its cross-sectional shape. The feature would appear to have been dug and filled before Feature 25, and thus likely extended into the south wall of TU7. On this profile (Figure 2-25), the apparent extension of Feature 30 is designated Feature 30a because of the uncertainty caused by the subsequent placement of Feature 25. Separate bulk samples were recovered from Feature 30 (north wall) and Feature 30a (south wall) to guard against mixture of distinct features. The materials from Feature 30 reported in Table 2-12 include the bulk sample of the north wall plus an indeterminate volume of fill that was extracted en masse and ¼-inch screened after all fill from Feature 25 was removed. The meager assemblage of material from Feature 30a in Table 2-12 comes exclusively from the single bulk sample from the south wall of TU7.

The inventory of material from Feature 30 is large and diverse. The assemblage of 68 sherds is dominated by limestone-tempered plain ($n = 46$), but sand-tempered wares are represented by 21 sherds, five of which are decorated (dentate, simple stamped). One Dunns Creek Red sherd was also recovered. A large number of chert flakes was accompanied by two biface fragments, core fragments, and a hammerstone. One Type G shell hammer was among the moderately large assemblage of shell and vertebrate faunal remains, with deer again well represented.

Summary. The pit assemblage of TU7 goes well beyond the usual density and variety of pits in other test units at Shell Mound. Several of the hemispherical pits resemble ones observed at the base of the shell in TUs 1 and 6, and the basin-shaped pits resemble some of those recorded in the interior opening of the shell ridge. However, we have no precedent for the size and shape of pits like Features 25 and 30. Likewise, the content of these features is without parallel at the site. Although we do not have a firm grasp of the full extent of either of these features, and especially not Feature 30, we appreciate that the scale of the activities involving both the use of the pits, as pits, and their subsequent infilling with food remains and artifacts, goes well beyond what might be expected of “domestic” activities. It would seem reasonable to hypothesize that these features reflect large-scale social gatherings involving the preparation, consumption, and deposition of food remains. The pottery and lithic assemblages

in these features were presumably involved in these food-related activities. More on the artifact and vertebrate faunal assemblages from these features is provided below.

Another aspect of the feature assemblage of TU7 worth mentioning is the high level of overlap among the pits. Clearly this location was used repeatedly for pit-digging activities. When we consider that the two shell-filled cylinders may be postholes, the presence of relatively permanent architecture must be considered. That the two shell-filled features are indeed postholes is bolstered by the evidence for two other (non-shell-filled) postholes in the west wall of TU7 (Figure 2-26; Strata V and VI). Nonrandom patterning among these four possible postholes is not evident, so we do not have grounds for inferring the location, size, and shape of architecture. However, we are confident that the combination of pits and postholes points to a dedicated space for nondomestic activities at the site. Further testing at Shell Mound must involve larger block excavations to seek better evidence for structures and the relationship between structures and pit features.

MATERIAL CULTURE

Each of the test excavations described above produced artifacts, and a tally of all recovered items was provided in a table for each unit. In the sections that follow below we take a closer look at pottery, flaked stone and other stone artifacts, worked bone, and modified shell from a site-wide perspective. Variations in the distribution on particular artifact types across test units and across strata within units are potentially revealing about changes in the communities occupying Shell Mound and/or the activities they engaged in. Throughout this discussion we must be mindful that our samples to date, although robust in their own terms, are but a small fraction of the vast inventory that comprises the Shell Mound site. We can, however, at this stage of research, propose that Shell Mound encases evidence for four phases of occupation dating to the Woodland era (recall that it also has an ephemeral Late Archaic component buried beneath the surface on which Shell Mound was erected): (1) an early phase spanning the second and third centuries A.D. during which a variety of pottery types were used and discarded in middens on the outside perimeter of the mound and long before shell accumulated in large volume; (2) an intermediate phase spanning at least the fifth and early sixth centuries A.D. involving intensive occupation across the top of the relict dune and the digging and infilling of large pits in the area of TU7; and (3) a mid-sixth to mid-seventh phase when most of the shell accumulated on the dune and to the south, forming the U-shaped ridge; and (4) a final century spanning the mid-seventh to mid-eighth centuries, when the interior opening was occupied and additional shell was deposited on the ridge, bringing it to its final configuration. These tentative phases are useful in discussing material culture from Shell Mound, with the caveat, again, that even bigger samples and more AMS assays are needed before this occupational sequence is fully substantiated.

Pottery

A total of 4,301 pottery sherds weighing 15,186.6 g was retrieved from testing at Shell Mound in 2013 and 2014. In Table 2-13, sherd counts and weights are collated by temper and surface treatment, and also by portion represented (rim, body, crumb). More than half (2,342 or 51.2 percent) of the assemblage consists of “crumb” sherds, that is, sherds less than ½-inch

in maximum dimension. These diminutive sherds are classified by temper but not surface treatment.

Four temper types are represented in the Shell Mound pottery assemblage; a fifth “Other” category in Table 2-13 includes two fiber-tempered sherds and one with unidentifiable temper. Limestone temper dominates the assemblage at 70.6 percent by count and 72.4 percent by weight, including crumb sherds. Sand temper is second in frequency (24.2 percent by count, 22.2 percent by weight), followed by spicule temper (4.3 percent by count, 4.0 percent by weight). Sherds with grog for temper are few in frequency (0.8 percent by count, 1.1 percent by weight) and restricted to the basal midden levels of TU8. The discussion that follows is organized by temper type, starting with the most common. Representative examples of sherds from TUs 9, 4, 5, 7, and 8 are provided in Figures 2-32 through 2-35.

Table 2-13. Absolute Frequency and Weight (g) of Pottery Sherds from 2013-2014 Investigations of Shell Mound (8LV42), by Temper and Surface Treatment.

Temper	Plain		Stamped		Impressed		Other		Eroded/UID		Total	
	ct	wt(g)	ct	wt(g)	ct	wt(g)	ct	wt(g)	ct	wt(g)	ct	wt(g)
Limestone												
Body	1,276	8,302.4	1	10.3	2	23.9			73	259.7	1,352	8,596.3
Rim	121	971.1			3	39.5	1	2.6 ¹	3	35.8	121	1,049.0
Crumb									1,556	1,342.5	1,556	1,342.6
Subtotal	1,397	9,273.5	1	10.3	5	63.4	1	2.6	1,632	1,638.0	3,036	10,987.8
Sand												
Body	275	1,483.4	67	658.1	44	373.7	4	11.5 ²	40	154.5	430	2,681.2
Rim	24	119.0	2	7.1	4	77.1	3	17.2 ³			33	220.4
Crumb									579	468.3	579	468.3
Subtotal	299	1,602.4	69	665.2	48	450.8	7	28.7	619	622.8	1,042	3,369.9
Spicule												
Body	73	331.2	23	109.3					22	47.1	118	487.6
Rim	5	24.8	6	60.0							11	84.8
Crumb									56	39.6	56	39.6
Subtotal	78	356.0	29	169.3					78	86.7	185	612.0
Grog												
Body					24	159.4			2	8.5	26	167.9
Crumb									9	6.4	9	6.4
Subtotal					24	159.4			11	14.9	35	174.3
Other												
Body	1 ⁴	41.9									1	41.9
Rim									1 ⁵	0.3	1	0.3
Crumb									1 ⁶	0.4	1	0.4
Subtotal	1	41.9							2	0.7	3	42.6
Total	1,775	11,273.8	99	844.8	77	673.6	8	31.3	2,342	2,363.1	4,301	15,186.6

¹linear incised

²one drag and jab punctate; three incised

³punctated

⁴unidentifiable temper

⁵fiber-tempered; surface treatment unidentifiable

⁶fiber-tempered

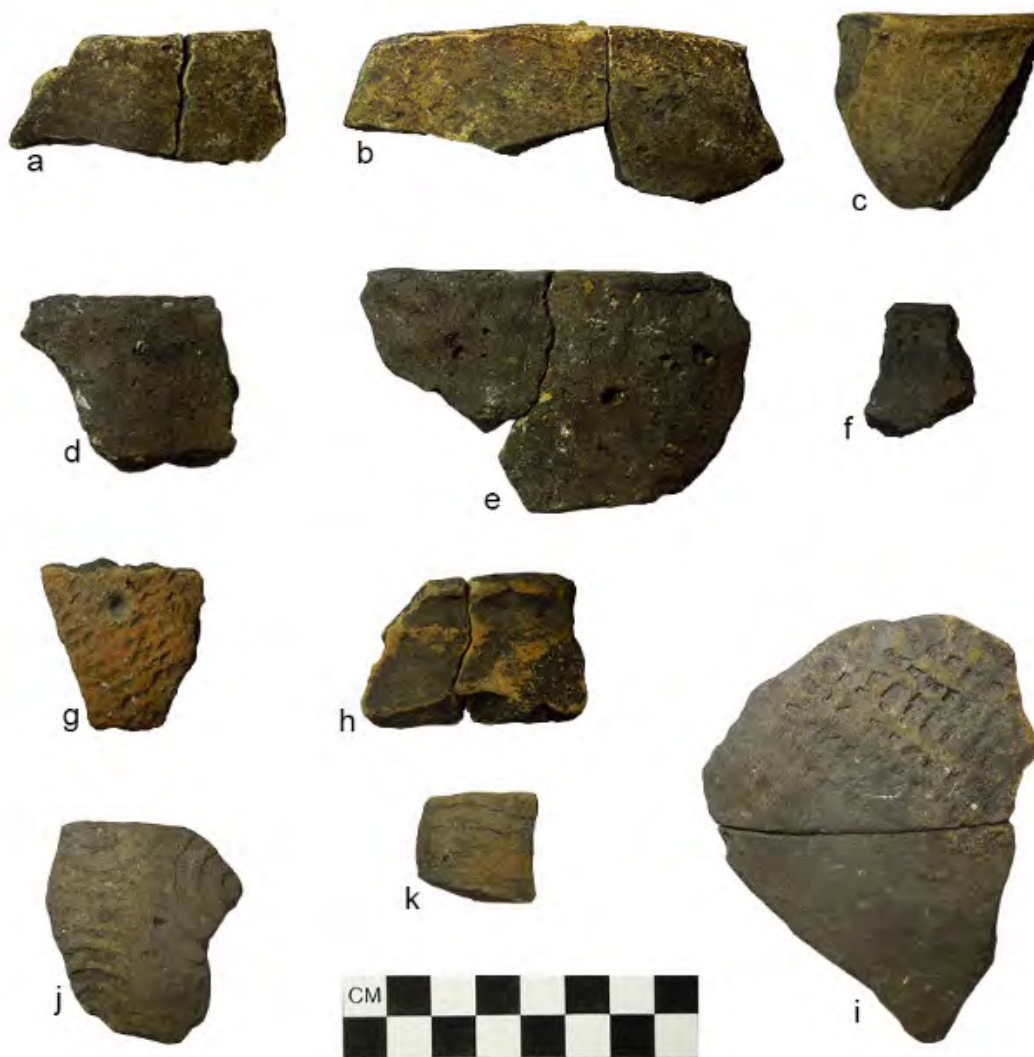


Figure 2-32. Select sherds from Test Unit 9, Shell Mound (8LV42): Level D (a–d); Level E (e–f); Level H (g); Level I (h–k). a. 96.18; b. 96.20; c. 96.20; d. 96.19; e. 98.27; f. 98.31; g. 301.17; h. 302.1; i. 302.6; j. 302.9; k. 302.9.



Figure 2-33. Select sherds from Test Units 4 and 5, Shell Mound (8LV42): TU4, Level C (a); Level D (b); Level E (c–e); TU5, Level B (f); Level C (g). a. 49.11; b. 57.2; c. 62.6; d. 62.3; e. 62.3; f. 48.4; g. 56.5; h. 56.5.



Figure 2-34. Select sherds from Test Unit 8, Shell Mound (8LV42): Level A (a); Level A–D wall (b); Level C (c); Level G (d); Level A–K Wall (e); Level K (f); Level M (g–i); Level N (j); Level O (k–o); wall (p, v); Level P–S wall (q); Level P (r–s); Level Q (t–u). a. 121.11; b. 128.12; c. 125.1; d. 141.1; e. 148.11; f. 147.18; g, h. 150.3; i. 150.5; j. 152.7; k. 153.25; l. 153.23; m. 153.22; n. 153.26; o. 153.23; p. 162.9; q. 162.10; r. 155.1; s. 155.5; t. 156.1; u. 156.3; v. 154.1.



Figure 2-35. Select sherds from Test Unit 7, Shell Mound (8LV42): Level A (a); Level C (b); Level D (c, d); Level E (e); Stratum XVII (f); Feature 13 (g–k); Feature 15 (l); Feature 19 (m–o); Feature 25 (p, q); Feature 30a (r); Feature 30 (s, t); Southeast Exploratory Trench (u–dd). a. 103.24; b. 114.2; c, d. 220.2; e. 226.15; f. 232.19; g, h. 219.18; i, j. 203.19; k. 112.14; l. 111.1; m–o. 212.13; p. 239.10; q. 238.15; r. 228.9; s, t. 227.11; u, v. 225.14; w. 225.21; x–z. 225.12; aa. 225.14; bb, cc. 225.22; dd. 225.12.

Limestone-Tempered Sherds. Two series of limestone-tempered pottery are known for Florida. The Pasco series was defined by Goggin (1948) from work in central Florida, and the Perico series defined by Willey (1949:361–366) from work just south of Tampa Bay. The spatial distribution of limestone-tempered pottery extends beyond these areas to include the northern Gulf coast of Florida, at least as far north as Horseshoe Beach. It is clearly the dominant ware in the study area. Differences in the surface treatment and form of Pasco and Perico pottery may be useful to parse the gulf coast into southern and northern subregions, but neither the dating nor technofunctional variation of these two series are sufficient to know what such variation entails. For now we are reluctant to use any type designation for limestone-tempered pottery and instead refer to it simply by its definitive paste.

Limestone-tempered sherds are pervasive at Shell Mound, and they are overwhelmingly plain (99.5 percent of sherds with noneroded surfaces, or 1,397 of 1,404 sherds; examples can be seen in Figure 2-32d,e; Figure 2-33b–h; Figure 2-34a–f, and Figure 2-35b–j, l–v, x–aa, dd. The few exceptions include one dentate stamped sherd (TU7, Level A), one incised sherd (TU8, Level O; Figure 2-34k), two cordmarked sherds (TU8, Level N and wall clean, Levels A–O [Figure 2-34v]), two fabric-impressed sherds (TU8, Levels O [Figure 2-34m] and R), and one unidentifiable impressed sherd (TU8, wall clean, Levels A–O). Contexts dating to the first phase of Shell Mound (Woodland) occupation include limestone-tempered sherds, but not to the extent that they occur in later phases. In general, limestone-tempered pottery has a long history in the region; Bullen (1950) in fact argued that it had origins in the Late Archaic pottery industries, although most others see it as predominately a Middle and Late Woodland ware. Complicating matters is the use of limestone temper in the Safety Harbor tradition of the tenth through seventeenth centuries A.D. (Milanich 1994:392, 412). In the study area, limestone-tempered pottery has been securely dated to the third century B.C. through at least the eighth century A.D. As indicated earlier, it is never found to the exclusion of other wares: in early context it is found with sand-tempered sherds (largely of Deptford series) and spicule-tempered sherds (of the St. Johns series), and in later contexts sand-tempered sherds of the Weeden Island tradition, as well as later spicule-tempered wares. Between the extremes in time, sand-tempered pottery of the Swift Creek tradition and a variety of poorly defined wares are associated with limestone-tempered pottery. At Shell Mound, limestone tempering dominates subassemblages dating to the third and fourth phases, or roughly the mid-sixth through mid-eighth centuries, as outlined above.

Technofunctional analysis of the limestone-tempered pottery from Shell Mound has yet to be conducted. However, a paper by O'Donoghue (2009) provides good insight into the formal variation of this type of pottery in a sample of 109 vessel lots from four sites (Coon, Little Bradford, Deer, and Big Pine islands), all to the north of Shell Mound. Like the assemblage from Shell Mound, the ones analyzed by O'Donoghue consist of predominantly (88 percent) plain vessels. Three forms were recognized from inspection of rim profiles: jars (52 percent), open bowls (22 percent), and restricted bowls (26 percent). Although jars tended to be larger than bowls, and restricted bowls were thicker-walled than other forms, there were actually no marked differences among vessel forms in metric dimensions of variation. As a lot, the limestone-tempered vessels had orifice diameters that averaged ($\pm$ one sigma) 25.24 ± 7.97 cm, and vessel wall thickness (measured 3 cm below the lip) that averaged 8.56 ± 1.54 mm. Lips across vessel forms were generally rounded or flattened. Limestone particles in the body

of sherds varied from moderate to abundant, but much of it had leached out of many sherds because of its solubility. In fact, the advantages of limestone as temper (workability, limits shrinkage during drying) are offset by the fact that it hydrates and dissolves, and can contribute to thermal shock (lime spalling) when heated. O'Donoughue found that about 20 percent and possibly as many as 40 percent of the vessels in his sample bore traces of soot, direct evidence for use over fire. Salt or saltwater added to clay ameliorates the negative effects of heating hydrated limestone (Rye 1976), a practice that apparently native potters followed because lime spalls are rare on limestone-tempered pottery in the study area.

Limestone-tempered pottery was evidently the “everyday” ware for communities at Shell Mound and the greater Lower Suwannee region. It clearly comprises the bulk of the assemblage at Shell Mound, although, again, it would appear to be the dominant ware later in the sequence, that is, after about A.D. 550. For the first few centuries of occupation, limestone-tempered pottery was accompanied by significant amounts of sand- and spicule-tempered wares.

Sand-Tempered Sherds. A variety of types are observed in the 1,042 sand-tempered sherds from Shell Mound. About 59 percent of these ($n = 619$) are either too eroded or too small (crumb) to classify to surface treatment. Of those with preserved exterior surfaces and sizes greater than $\frac{1}{2}$ inch, 70.7 percent are plain. The remaining 124 sherds include 69 with some form of stamping, 48 with impressed surfaces, four punctated, and three incised. Sand-tempered sherds in general are not evenly distributed among contexts at Shell Mound; rather, they tend to be in contexts dating to the first and second phases of occupation, that is, from the second to early sixth centuries A.D. The bulk of sand-tempered sherds are from the lower strata of TU8 (Figure 2-34g, i, j, l, o–u) and TU9 (Figure 2-32f–k), the former dating to the fifth and early sixth centuries A.D., the latter dating to the third century A.D. In both places Deptford Linear Check Stamped (Figure 2-32i; Figure 2-34l) and Swift Creek Complicated Stamped sherds (Figure 2-32j; Figure 2-34i) occur in low frequency. Besides the linear check-stamped examples, occasional simple stamped (Figure 2-34p) and cross simple-stamped sherds (Figure 2-34q) are likely part of the Deptford series. Also present at the base of the shell deposit are sand-tempered sherds with cordmarked (Figure 2-32g; Figure 2-24r, t) or fabric impressed surfaces (Figure 2-34s), treatments that also occur in low frequency on limestone- and grog-tempered sherds.

Lacking in the inventory of sand-tempered sherds from Shell Mound are examples of Weeden Island types. One dentate or punctated rim sherd in TU9 (Figure 2-32f) might be given to the Weeden Island series, but it remains ambiguous without supporting evidence. None of the sand-tempered plain rim sherds from Shell Mound sport the parallel incisions of the faux-folded rims of Weeden Island affiliation. Overall, the lack of classic Weeden Island wares supports the inference that Shell Mound was not used intensively after ca. A.D. 650, when Weeden Island pottery with incised, punctated, and painted surfaces burgeoned in popularity. This observation takes on greater significance when we consider that only 500 m to the west of Shell Mound, in the mortuary context of Palmetto Mound, Weeden Island pottery abounds (see Chapter 3). This again may be a matter of timing and not simply a sacred-secular dichotomy. Habitation sites dating to the seventh through ninth centuries A.D. in the study area

(e.g., Richards Island, McClamory Key, Deer Island South, Cat Island) contain sherds of classic Weeden Island pottery, including those from plain vessels with faux-folded rims.

Little more can be added to this account other than to note that sand-tempered plain pottery is pervasive at Shell Mound, although perhaps more frequent in earlier phases of occupation, and thus the reciprocal of limestone-tempered plain pottery. Vessels of both plain wares were occasionally drilled and presumably mended by lashing together opposing sides of a crack (e.g., Figure 2-34c; Figure 2-35 e, k, w). The only sherd with a hole that is not plain is a sand-tempered cordmarked sherd from TU9 (Figure 2-32g), although the hole does not penetrate through the wall entirely, calling into question its intent as a mend hole.

Spicule-Tempered Sherds. The use of sponge spicules for temper is a hallmark of the St. Johns series of Florida, although spicules have been observed in other wares, including fiber-tempered pottery (Cordell 2004; Gilmore 2014). Sherds from Shell Mound with spicules in the paste to the exclusion of fiber, sand, or other tempering agents are found in limited numbers across a variety of contexts. A total of 185 spicule-tempered sherds were recovered in recent testing. Seventy-eight of these sherds are plain (e.g., Figure 2-32a), two of which have a red slip or paint (cf. Dunns Creek Red; Figure 2-35bb), another 78 are eroded or crumbs, and the remaining 29 have some sort of stamping, mostly check stamping (e.g., Figure 2-32b, c; Figure 2-35a). If the latter sherds are to be classified as St. Johns Check Stamped, cross-dating with sites in the St. Johns Basin of northeast Florida would place them post-A.D. 750, but that seems too late given all other indications of age.

Spicule-tempered wares have a long history in the northern Gulf Coast region, as they do throughout much of Florida. Virtually every site tested to date has at least a trace of St. Johns pottery; conversely no site has an abundance of St. Johns pottery, nor is it ever the exclusive ware. Allegedly, spicule-tempered pots were abundant at the base of Palmetto Mound, in association with burials (see Chapter 3). It follows that St. Johns wares were delivered to the Gulf coast for mortuary purposes, but that would not explain the ambient, albeit low-frequency occurrence of sherds of this tradition across the entire study area.

Grog-Tempered Sherds. Thirty-five sherds from the basal levels of TU8 appear to have come from vessels that were tempered with crushed pottery, or grog. Of the 26 sherds larger than ½ inch, all but two are either fabric impressed or cordmarked (e.g., Figure 2-34n), much like sand-tempered sherds from the same context. Petrographic analysis is needed to verify the temper classification, but no matter the aplastics used, these sherds deviate from their sand-tempered counterparts in having a contorted paste.

Grog-tempered pottery has not been previously documented in the study area, although it is not uncommon to late-period assemblages of the Tampa Bay and panhandle subregions of the Florida Gulf coast. The assemblage from TU8 at Shell Mound is too small to infer much about the form and technology of vessels with grog temper, so further speculation awaits larger samples. For now we can be assured that the small assemblage from TU8 dates no later than the sixth century A.D.

Taphonomy of Sherds. The pottery from Shell Mound is always broken and no doubt there are many agents and processes responsible for breakage. Among these are processes archaeologists refer to as postdepositional, that is, breakage that occurs after pots, or in this case sherds, enter archaeological context for the first time. Free of the freeze-thaw cycles of northern climes, sherds from Shell Mound become fragmented when subject to forces such as trampling that tend to be concentrated around human activity areas. Communion of sherds is likely in areas of heavy foot traffic and related activities, but it does not take much to buffer sherds from such forces, especially when the substrate is yielding, as is the sand underlying Shell Mound. Removal of sherds to deep pits or even dedicated refuse disposal areas ensured greater preservation of larger portions of vessels. We can therefore use the average size or weight of sherds to infer spatial patterning in the distribution of activity areas, living surfaces, and locations of primary or secondary refuse.

The sherds from TU8 provide a case in point (Figure 2-36). The average weight of sherds across levels of TU8 vary from a low of about 1.0 g to a high over 8.0 g. Changes in these averages across levels are patterned. Sherds in the subshell midden (Levels L–U) tend to decrease in average weight through the sequence, with a low of just over 2.0 g in the upper level (Level L). Much heavier sherds return in Level K, the first of the overlying shell mantle, and hold at about 6.0 g/sherd through the next four levels. Average sherd weight drops again in Level G and continues generally downward through the remainder of the sequence.

Although the trend towards smaller sherds in the subshell midden seem to repeat itself in the shell mantle, the processes responsible for these patterns are likely to be very different. In the case of the subshell midden, sherds below the surface (that is, below Levels L and M) were often emplaced inside of pits that emanate from this same surface. Sherds in deep pits were not subject to communion like their counterparts on the living surface. It is certainly reasonable to assume larger sherds would tend to be collected and discarded more often than smaller sherds on surfaces, contributing to the bias for larger sherds well below the surface, if disposal of sherds in pits was routine practice, as it seems to have been.

In contrast, the trend for larger sherds in the overlying shell mantle of TU8 is more than likely a function of the rapidity with which shell accumulated in this location. That is, there are no living or activity surfaces within this thick stratum, with the exception of the ashy lens identified in profiles as Stratum IIIa. This exception could explain why sherds in the upper half of the shell mantle are so much smaller than those in the lower half. Thus, we propose two very different taphonomic processes at work here: the digging and infilling of pits and the rapid accumulation of shell. The outcome (larger sherds) is the same, but the processes much different. Either way, smaller sherds provide a proxy for the depth of living surfaces or other circumstances that resulted in the communion of pottery.

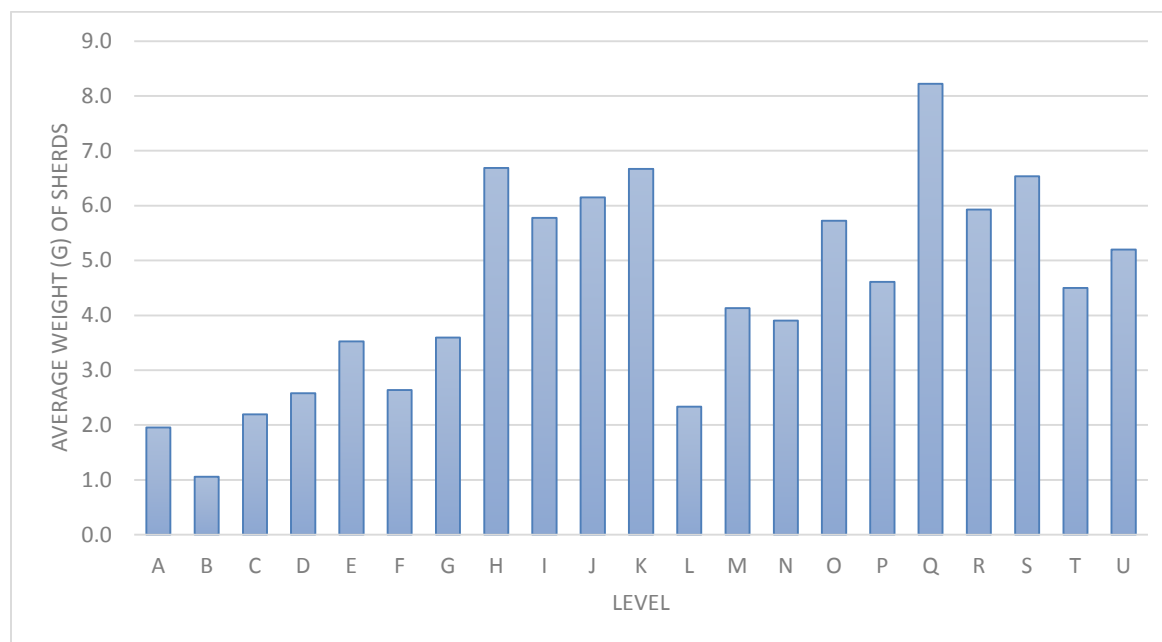


Figure 2-36. Average weight (g) of sherds per level in Test Unit 8, Shell Mound (8LV42).

Flaked Stone

A total of 1,407 flaked stone artifacts was collected from Shell Mound units in 2013–2014. All but 25 of these items are either flakes or shatter from the reduction of chert cores, both amorphous and bifacial. Thirteen of the exceptional items are formal bifaces or biface fragments, eight are amorphous cores, three are utilized flakes, and one is a uniface. The vast majority of the assemblage ($n = 1,226$ or 87.1 percent) was recovered from a single test unit, TU7, which also had a disproportionate number of formal tools.

Bifaces. Ten of the 13 bifaces and biface fragments recovered from Shell Mound are shown in Figure 2-37. With minor exception, the assemblage is consistent in form and raw material. Of those with haft elements (Figure 2-37e–i), stems are typically expanding towards the base, one (Figure 2-37g) with more clearly defined notches than the others. All five with haft elements exhibit moderate to heavy levels of attrition, two with transverse snaps of the blade. All of these specimens could be classified as one of several Woodland types, as configured by Bullen (1968), such as Bradford, Columbia, Sarasota, and Taylor. We are reluctant to assign specific type names, however, because of the effects of attrition, resharpening, and repair of the tools, which often changed the morphology of the original form.

Three of the hafted bifaces (Figure 2-37e, f, i) were recovered from TU7. Associated with these “finished” tools were the tips of two other bifaces from presumably use failure (Figure 2-37a, c), as well as a few bifacial preforms or preform fragments (e.g., Figure 2-37b, j). Evidently, biface production and tool replacement was more than a passing activity in the vicinity of TU7. No other unit at Shell Mound has produced as much evidence for production as TU7, although units in the central opening (TUs 3–5) are not without bifaces (Figure 2-37d,



Figure 2-37. Bifaces from test units at Shell Mound (8LV42): TU7, Feature 30 (a); Southeast Exploratory Trench (b); Feature 30a (c); TU4, Level C (d); TU7, Level C (e); Level E (f); TU8, Level E (g); TU5, Level C (h); TU7, Feature 13 (i); TU7, Level E (j). a. 227.25; b. 225.28; c. 235.19; d. 49.14; e. 116.1; f. 221.21; g. 130.14; h. 56.25; i. 223.2; j. 226.12.

h) and residues of biface production. Conversely, test units along the outside perimeter of the shell ridge (TUs 6 and 9, plus the 2012 TUs 1 and 2) are either bereft of lithic reduction debris or have small assemblages of amorphous flakes and the cores from which they were detached.

Cores and Debitage. Eight items from testing in 2013-2014 are classified as “cores,” meaning they were parent material for the production of flakes, as opposed to bifacial cores that were reduced to achieve a “core” tool, specifically a biface. Examples of three such items from TU6 are shown in Figure 2-38. These are amorphous or informal cores, from which flakes were struck for presumably expedient purposes. Although cores like these may have themselves served as impromptu tools (e.g., cleavers, hammers), their main purpose was to provide flakes for informal uses. Flakes struck from amorphous cores lack the distinctive features of bifacial flakes. Besides the three shown in Figure 2-37 from TU6, two amorphous cores were recovered from TU8 and three from TU7.

Debitage includes the flakes of bifacial reduction, flakes struck from amorphous cores, and shatter from the reduction of either bifaces or cores. As noted earlier, the vast majority of debitage came from TU7, the location of both biface and amorphous core reduction. Given the large number of flakes from TU7, the subassemblage was analyzed in greater detail than usual. Anthony Boucher undertook the analysis, following modified protocols used in recent contract projects of the LSA. In short, debitage from TU7 was sorted into flakes of bifacial retouch (FBR) and “other” flakes, the latter essentially flakes struck from amorphous cores. Criteria for discriminating between the two flake types centers largely on the diagnostic attributes of FBRs: a platform, often lipped, on proximal end of flake; bulb of percussion on ventral side, near platform; flake scars on dorsal side; and termination that ideally is feathered, but sometimes hinged or stepped. Further discrimination of FBRs isolated all whole flakes for the purpose of sizing them. Size was determined using nested circles scaled at 0.5-cm increments, starting at 1.0 cm.



Figure 2-38. Amorphous cores from Test Unit 6 at Shell Mound (8LV42): (a) Level C, 52.23; (b) Level D, Zone A, 53.22; (c) Level A, 50.16.

The results of Boucher's analysis are reported in Table 2-14. Flakes from TU7 are divided rather evenly between FBRs and other flakes, and among the FBRs, whole flakes are a bit more frequent than broken ones. As expected from the advanced state of reduction of bifaces from TU7, as elsewhere at Shell Mound, the modal size of whole FBRs is small, less than 2.5 cm in maximum dimension. Cortex is virtually absent on any of the flakes, further testimony to the advanced state of core reduction before arriving at Shell Mound. The particular sources of chert used for bifaces are unknown, but are not likely to be more proximate than about 25 km to the east, in what is known as the Suwannee formation. As is often the case, chert used for biface production is more vitreous and homogeneous than chert that is reduced from amorphous cores. Certainly some low-grade cherts were available not too far from Shell Mound, but one would have to travel to outcrops in the interior of the Florida peninsula to acquire better quality toolstone. The TU7 assemblage consists of generally good-quality rock that was transported to the site in mid- to late stages of bifacial core reduction.

Table 2-14. Absolute Frequency, Weight (g), and Mean Weight (g) of Flakes from Test Unit 7, Shell Mound (8LV42) by Type and Size.

	ct	wt(g)	mean wt(g)
Whole FBRs			
<1–1.5 cm	83	11.0	0.13
1.6–2.5	144	74.6	0.52
2.6–3.5	80	123.4	1.54
3.6–4.5	29	130	4.48
4.6–5.5	12	69.7	5.81
Subtotal	348	408.7	1.17
Broken FBRs	300	178.4	0.59
Other flake	561	761.5	1.36
Total	1,209	1,348.6	1.12

One additional note on the debitage from TU7 bears mentioning. While sorting flakes, Boucher noticed that several especially small FBRs had white phenocrysts much like those seen in the hafted biface from TU5 (Figure 2-37h). Although none of the small flakes could be refitted to this biface, it is all but certain that they were derived from this tool. Thus, bifacial retouch in the area of TU7 is spatially linked with the discard or loss of the biface in TU5, about 35 m to the southwest.

This material connection between two locations of activity at Shell Mound takes on added significance when we consider the site-wide distribution of lithic artifacts. Shown in Table 2-15 is the count of lithic artifacts from excavations along (1) the outside perimeter of the shell ridge (TUs 6 and 9 from recent testing, plus TUs 1 and 2 from work in 2012); (2) the top of the ridge (TU8); (3) the open interior of the ridge (TUs 4 and 5 from recent testing, plus

TU3 from work in 2012); and (4) TU7, which surpasses sixfold the size of assemblages from all other units combined. What these figures show is that lithic reduction and the discard of tools is concentrated in the interior of Shell Mound. This is true even without the contribution from TU7. Lithic artifact density in TUs 3–5 is six times greater than units along the outside perimeter and three times greater than TU8, on the ridge top. The two outside perimeter units excavated in 2012 (TUs 1 and 2) produced a meager one flake each out of a combined 4.2 m³ of screened matrix. The other outside units produced higher densities (2.9 and 8.5 lithic artifacts/m³) but again, most of these items can be attributed to amorphous core reduction and they lack bifaces altogether. Although further samples are needed to verify this pattern, the present samples suggest that Shell Mound was divided into areas of differentiated activities involving the production, use, and discard of bifacial technology.

Table 2-15. Count (ct) and Density (ct/m³ excavated) of Lithic Artifacts Recovered from all Excavation Units at Shell Mound (8LV42) by Area of Site.

	Lithic Artifacts (ct)	Volume Excavated (m ³)	Artifact Density (ct/m ³)
Outside (TUs 1, 2, 6, 9)	23	9.4	2.4
Top (TU8)	57	9	6.3
Interior (TU 3–5)	115	6.2	18.5
Interior (TU7)	1,226	4	306.5
Total	1,423	28.6	49.8

Other Lithic Artifacts

Hammerstones and Abraders. A subset of the lithic tool assemblage is not technically “flaked” stone, but it is directly involved in the reduction of flaked stone and thus part of that industry. Hammerstones and abraders—implicated in biface and core reduction, but likely drafted into others uses—were recovered in small numbers in TUs 4, 5, and 7, coincident with the highest densities of debitage and formal bifaces. Hammerstones tend to be made from limestone, assumed to be local, and have one or more surfaces affected by impact. Abraders consist of nondescript chunks of sedimentary rock that can be loosely categorized as sandstone, although its precise geological description and provenance are at this time unknown. As the term implies, abraders have facets from grinding surfaces of other rocks, notably the edges of bifaces and cores to prepare platforms for flake detachment.

Miscellaneous Rock. Reported in the tables of recovered materials for each of the test units is a weight for “miscellaneous rock.” The bulk of this is amorphous nodules of limestone, the ambient substrate of the entire peninsula of Florida and expressed at the several km south of the project area. The volume of limestone in any given level of any given unit is meager; many strata across the site lack it altogether. Uses of these nodules may have ranged from percussive, to thermal, to abrasive, to sources of temper for the most common pottery, and beyond. Limestone is perhaps not more abundant at Shell Mound because it is not expressed

surficially in the immediate area, but also because it tends to degrade rapidly under thermal conditions, so any sustained contact with high heat would compromise its physical integrity.

A different sort of “miscellaneous rock” is registered in the high volume of material recovered from the subshell midden of TU8. This is a platy, siltstone-like material, possibly related to activities involving heat. Levels M and N, near the top of the subshell midden, account for nearly half of the ~6.5 kg of miscellaneous rock in TU8. A lesser spike in frequency is seen in Level E, possibly associated with the ashy lens (Stratum IIIa) that interrupts the otherwise continuous sequence of mostly oyster shell (Stratum III).

Celt Fragments. Also from Level M of TU8 came a spall of nonlocal rock with polish facets consistent with the morphology of the bit of a greenstone celt (Figure 2-39). Greenstone celts are not uncommon in the greater northern Gulf coast, despite the fact that sources of this metamorphosed igneous material are found no closer than the Piedmont of eastern Alabama and north Georgia (cf. Gall and Steponaitis 2001). Specific geological identification and provenance of the specimen from TU8 is pending. A second, small fragment of nonlocal rock from TU4 bears a small polish facet that could well reflect the use (and damage) of another celt at Shell Mound. Polished celts are found in mortuary contexts of Woodland age, but clearly hafted cutting implements of nonlocal materials were drafted into actual use at places like Shell Mound.

Quartz Crystal. From the general fill of Level D in TU7 came a whole quartz crystal with use wear and modifications for an attachment (Figure 2-40). This 30.3-mm-long crystal has wear at the tip and a band of grinding that created a waist at the proximal end. The particular use of this nonlocal item is unknown, but the wear would indicate some sort of engraving function, and the waist suggests it was affixed with cordage or perhaps some sort of handle.



Figure 2-39. Obverse and reverse views of bit fragment from polished greenstone celt, Test Unit 8, Level M (150.30), Shell Mound (8LV42).



Figure 2-40. Quartz crystal with wear at tip and a waisted proximal end Test Unit 7, Level D (220.27), Shell Mound (8LV42).

The crew was suspicious about this item when it was recovered. It was found in general fill that was passed through ¼-inch screen, not in situ. At about the same time this was found a Cahokia-like arrowhead was found in TU9. An obvious replica, the arrowhead was planted there by a local prankster in a feeble attempt at fooling the archaeologist. The quartz crystal may likewise be a planted item, but it would not be out of place in any Swift Creek or Weeden Island assemblage. The wear on this crystal supports its authenticity.

Worked Bone

Until a full-blown analysis of all vertebrate fauna from Shell Mound is completed, we will not know the extent to which bone was modified for purposes other than culinary. Judging from casual inspection, the rate of bone working at Shell Mound was low. Only four bones were identified as worked items in the field or in the lab at the time of cataloging. All four came from TU8, spread across four different levels. A disk bead made from a fish vertebra came from the near the surface, in Level A (Figure 2-41a). A piece of drilled turtle carapace came from level E (Figure 2-41c), and pieces of worked deer long bone (Figure 2-41b, d) were recovered from Levels N and O, in the subshell midden.

Modified Shell

As we observed in our 2012 testing of Shell Mound (Sassaman et al. 2013), modified gastropod shells—especially those of crown conch (*Melongena corona*)—are ubiquitous at this site, as they are at many, but not all sites in the greater study area (cf. sites on Seahorse and North Keys; Chapters 3 and 4). Testing in 2013–2014 added another 242 modified gastropods to an existing inventory of 88, 220 of which are Type G hammers (Marquardt 1992), made from crown conch. Examples of Type G hammers from TU6 are shown in Figure 2-42. Even in this small sample one can get a sense of the range of variation in the size and condition of these tools. By definition they have at least one perforation of the whorl, presumed to accept a handle, and battering on the siphon end. Crown conch shells sometimes have perforation but no battering, and sometimes that they have traces of battering but no perforation. In addition, lightning whelk shells (*Busycon contrarium*) were occasionally drafted into similar uses (as well as for cutting tools and containers), and some of the larger crown conch (e.g., Figure 2-42h) approach the size of small lightning whelk, suggesting they may have been interchangeable. No matter, the overwhelming majority of hafted hammers are Type G hammers made from crown conch.



Figure 2-41. Worked bone from Test Unit 8, Shell Mound (8LV42): (a) Level A, 121.26; (b) Level O, 153.20; (c) Level E, Zone D, 133.18; (d) Level N, 15.41.

In the tallies for worked shell in the tables listed for each test unit, tools other than Type G hammers are a distinct minority, but worth mentioning. At least five large lightning whelk were modified in various ways, with most consisting of whorls that resemble dippers or scoops. One of two *Busycon* from Level K of TU8 has a large aperture in the whorl, as well as a large rectangular section removed (Figure 2-43). Another from this same level is likely the fragment of a cutting tool (adze). Columella from *Melongena*, *Busycon* and possibly other taxa occur with regular frequency, and some show attrition at the tips. Missing altogether are modified shells of the tulip and pear snails, both present at the site in more than trace frequencies (see section below on *Invertebrates*). Not counted in the tallies are shells of hard clam (*Mercenaria* spp.), which are occasionally fractured in angular fashion or show other signs of use or modification beyond what is necessary to open shells for eating. We have not systematically collected all clam shell to compare against modified clam shell, as we have with gastropods.



Figure 2-42. Type G Shell Hammers (*Melongena corona*) from Test Unit 6 of Shell Mound (8LV42): (a) Level B (51.8); (b–e) Level C (52.10); (f–h) Level D, Zone A (53.8).



Figure 2-43. Observe and reverse views of modified lightning whelk (*Busycon contrarium*) from Level K (147.10) of Test Unit 8. Shell Mound (8LV42).

Table 2-16. Count (ct) and Density (ct/m³ excavated) of Modified Gastropod Shell Recovered from all Excavation Units at Shell Mound (8LV42) by Area of Site.

	Modified Gastropod (ct)	Volume Excavated (m ³)	Mod. Gastro. Density (ct/m ³)
Outside (TUs 1, 2, 6, 9)	169	9.4	18.0
Top (TU8)	78	9.0	8.7
Interior (TU 3–5)	35	6.2	5.6
Interior (TU7)	33	4.0	8.3
Total	315	28.6	11.0

Spatial variations in the distribution of worked shell complement some of the patterns observed earlier among lithic artifacts. In Table 2-16 we use the same spatial constructs we used for lithic artifacts to make the point, and again include units from 2012 testing. As these density figures show, units on the outside perimeter of the shell ridge (TUs 1, 2, 6, 9) have the highest average number of worked shells (18.0) per volume of excavation. Values among units in this group vary wildly, with a high of 41.5/m³ in TU 9 and a low of 5.0/m³ in TU6. Contrast this with an average of only 5.6/m³ in the three interior units (TUs 3–5), which vary from a high of 16.7 m³ in TU3 and a low of 3.9/m³ in TU5. The other two locations (TU8 and TU7) have averages much closer to the inside value, essentially half of the average for the outside perimeter.

It would appear that modified hammers were discarded disproportionately on the outside perimeter of the shell ridge, at least in the north and south portions, which are most proximate to water. Although these are among the highest density occurrences of modified shells at Shell Mound, outside perimeter assemblages are not diverse, consisting almost exclusively of Type G hammers. Assemblages from TU8 and TU7 are more diverse and include dippers and cutting-edge tools, although Type G hammers remain the dominant form. The differential density and diversity of modified shell at Shell Mound may provide good insight into the spatial arrangement of the types of activities involving these tools, assuming, that is, we can infer something about their actual or intended uses. It also requires that we know something about the use-life of tools, because the spatial relationship between use and discard is complex if a tool is curated and moved among locations of use, maintenance, and eventually replacement. Marquardt (1992) argues that Type G hammers were expedient tools, in which case locations of use and discard are likely to be the same. Conversely, Menz (2012) argues that Type G hammers were curated, and thus locations of manufacture, use, and discard may vary across a prolonged use-life. By virtue of being hafted, Type G hammers fit the definition of curated technology in lithic studies insofar as hafting itself is an investment in more than expedient use.

Affecting curation is the availability of replacement material. The highest levels of tool maintenance occur among classes of tools that are costly to replace. The availability of raw material for replacing worn and broken tools is among the immediate costs to consider. If the discard of Type G hammers was affected by the availability of crown conch shell, we might expect levels of curation to vary inversely with immediate supplies of replacement shell. Of

course, crown conch was not likely to be collected for exclusive use as replacement shell, but more often as a food resource, which is likely why unmodified shell always outnumbers modified shell in most, if not all, cases we have seen in the greater study area. If Type G hammers were employed for very specific tasks, such as oyster processing (Menz 2012), then we can compare its variation across space and time relative to an independent variable, in this case the volume of oyster processed. The assumption in this case is that Type G hammers get discarded at places of routine use, making them appear expedient but no doubt used for more than one application.

Although data on level of tool attrition and curation are not yet available, the frequency of Type G hammers relative to supplies of replacement shell gives us reason to suspect that the two do not covary. Quantitative proof of this across contexts awaits secondary analyses¹, but for now some useful observations can be gleaned from the stratified deposits of TU8, where the sequence goes from a thick subshell midden to a thick mantle of dense oyster shell. Seventy-eight modified gastropods were recovered from levels of this unit. As shown in Figure 2-44, the frequency of modified gastropods does not track the variation in counts of gastropods in general, which tend to increase from bottom to the top of the sequence. This implies two things, the first of which is obvious: gastropods were not likely collected exclusively as raw material for tools. Second, demand for these tools was met well before exhausting supply, conditions that would have been conducive to expedient use, all else being equal. With each level except one producing less than 10 worked shell specimens, and no level producing fewer than 10 and as many as 160 unmodified gastropods, the ceiling on demand, relative to supply, was low.

A similar pattern is evident in the frequency distribution of gastropod shell by weight (Figure 2-45), although in this case the presence of a few large gastropod tools accentuates spikes in the distribution. This is most evident in Level K, where the modified *Busycon* shell in Figure 2-43 was found, along with two others. Standardizing these values as a proportion of modified gastropod shell relative to weight of all gastropod shell (Figure 2-46), we find a distinctive trend for diminished values over time, interrupted by a few spikes. After dropping incrementally in proportion through the subshell midden (Levels L–P), the proportion of modified shell spikes in Level K, a function of both the *Busycon* already noted, but also the largest subassemblage ($n = 12$) of Type G hammers in any level of TU8. In contrast, the second spike, in Level E, includes only one hammer and is dominated by nondescript fragmented shell. Both levels correspond with breaks in the sequence of TU8 strata: Level K is the initiation of oyster shell deposition, Level E the ashy lens that interrupts otherwise unconsolidated shell. The results from Level K alone tend to support the notion that Type G hammers were used primarily in oyster processing although we hasten to note that this assemblage of modified gastropods is among the more diverse at Shell Mound, implicating more than any single task. Like the subshell midden, these strata mark episodes of high demand for worked shell. Arguably, all three signal surfaces that were exposed sufficiently long to allow for the accumulation of artifacts over extended time.

¹ Ongoing analyses by Guinnessa Mahar, with the assistance of Nick Butler and Olivia Isaacs, address multiple issues with worked shell, including size selection, attrition, and alternative functions.

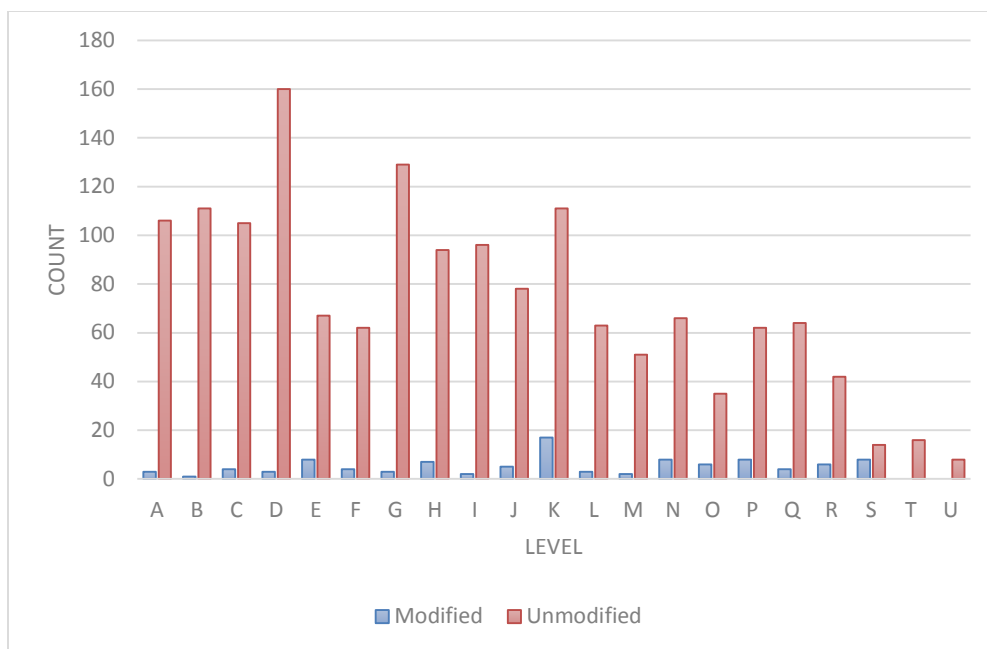


Figure 2-44. Frequency distribution of modified and unmodified gastropod shell by level, Test Unit 8, Shell Mound (8LV42). Note that values for Levels P–Q are doubled to compensate for the reduced volume (1 x 2 m) of this subunit.

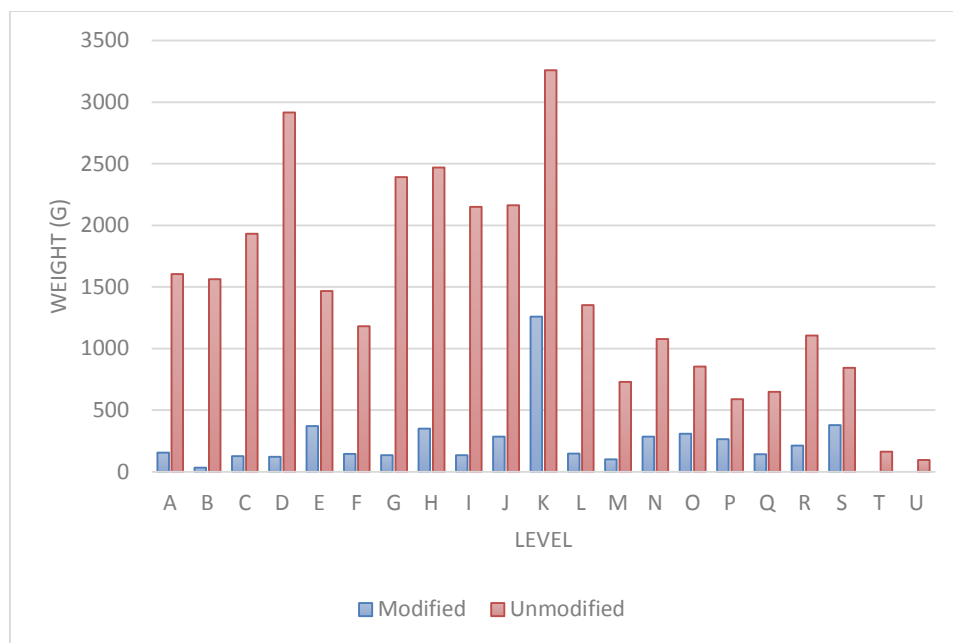


Figure 2-45. Frequency distribution by weight (g) of modified and unmodified gastropod shell by level, Test Unit 8, Shell Mound (8LV42). Note that values for Levels P–Q are doubled to compensate for the reduced volume (1 x 2 m) of this subunit.

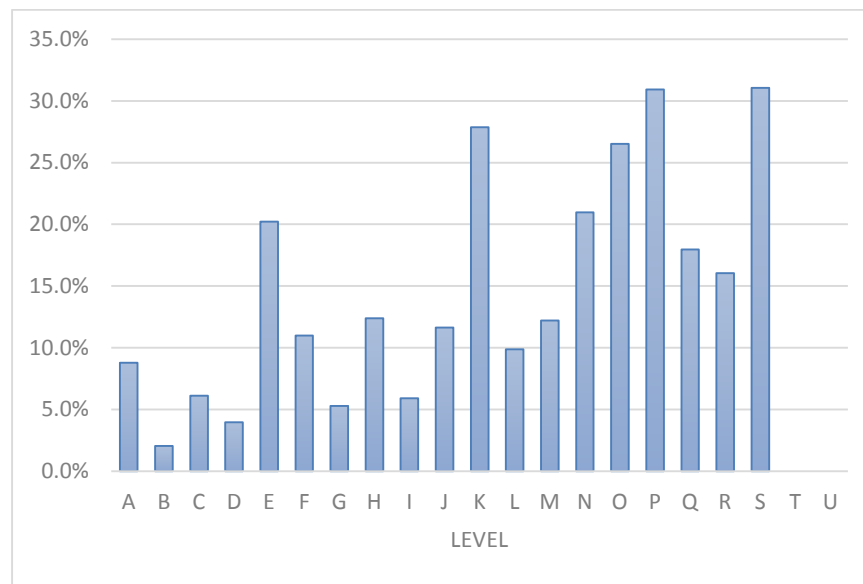


Figure 2-46. Percent frequency distribution of modified gastropod shell by weight (g) relative to total weight of gastropod shell by level, Test Unit 8, Shell Mound (8LV42).

A couple of other observations on modified and unmodified gastropods from TU8 bear mentioning. The average number of modified gastropods per level in this unit is 4.9, with an average sum weight of 236.0 g, which gives an average modified shell weight of 48.6 g. In contrast, the average number of unmodified gastropods in levels of TU8 is 73.3, with an average sum weight of 1,455.2 g, which gives an average weight per unmodified gastropod of only 19.84 g. Thus, unmodified gastropod shell from TU8 is much more fragmentary than modified shell from TU8. Only a detailed secondary analysis of all gastropod shell from this and other units will help to determine if the fragmentary nature of what is classified as “unmodified” shell includes an appreciable fraction of shell broken from use, and not simply processing for food or post-depositional breakage.

INVERTEBRATE FAUNAL REMAINS

The shells of oyster comprise the bulk of archaeological remains at Shell Mound. Apart from bulk samples, such as the column taken from TU8, we do not routinely collect oyster shell nor do we make any effort in the field to quantify its density or frequency. However, ongoing research by Jessica Jenkins on the aboriginal use of oyster throughout the study area is providing detailed data on not only the contribution of oyster to middens and mounds, but also insight on its size, shape, and condition. The results of Jenkins’ work will be presented later this year in her M.A. thesis at the University of Florida. In the meantime, some preliminary observations on the oyster in the TU8 bulk sample column are reviewed below following some further details on the unmodified gastropods from Shell Mound.

Unmodified Gastropods. We have already compared the proportion of modified to unmodified gastropods in discussion of TU8 above, and here add further information on unmodified gastropods from across test units of Shell Mound. Given in Table 2-17 is the distribution by weight of the four main taxa of marine snails by test unit. The nearly 92 kg of gastropods shells in this larger sample is more than sufficient to infer broad trends. These figures underscore the dominance of crown conch in all assemblages of gastropods, which make up no less than 71.8 percent in TU5 and as much as 95.7 percent in TU9. Lightning whelk are always present, but comprise greater fractions by weight in TUs 4 and 5, those on the interior opening, than in all others. Tulip and pear shells are the least common sitewide, comprising only trace frequencies in TUs 8 and 9, and absent altogether in TUs 4–6. Tulip shell is also present in trace amounts in TU7, while pear shell is absent in that unit.

Besides the value in quantifying gastropods for purposes of technological analyses, variations in the proportions of taxa through time may be sensitive to changes in estuarine ecology and/or human collection of alternative species. For a brief consideration of such variation we again turn to the stratified sequence of TU8. Table 2-18 provides the counts and percentages of unmodified gastropod shell by level, and Figure 2-47 displays the relative frequencies of taxa other than crown conch by level. Crown conch comprises no less than 85 percent of all unmodified gastropods in levels of TU8 and thus swamps the proportions of other taxa.

The most obvious patterning in Figure 2-47 are the spikes in lightning whelk in Levels K–L and E–F. Again, these levels correspond more or less with surfaces that were exposed for some unknown period and they are associated with diversity in modified shell. These spikes in lightning whelk are not, however, associated with increases in the diversity of unmodified gastropods in general. For instance, these are some of the few levels that lack pear shells. Pear snails in the subshell midden first increase then decrease through the sequence until Level H, where they occur with crown conch in the absence of lightning whelk and tulip shells. Tulip shell in general varies the most, and is absent in several levels, although as the lowest frequency taxon, it may suffer from sample bias. It is, nonetheless, a consistent if low-frequency presence in the upper 80+ cm of the sequence (Levels A–G). It remains for future work to figure out how these specific trends inform broader processes, like environmental change, or human interventions in the scale and scope of resource acquisition.

Table 2-17. Absolute and Relative Frequencies of Weight (g) of Unmodified Gastropod Shell Recovered from all Excavation Units at Shell Mound (8LV42).

	Crown		Lightning		Tulip		Pear		Total	
	wt(g)	%	wt(g)	%	wt(g)	%	wt(g)	%	wt(g)	%
TU4	2,451.0	83.6	480.9	16.4					2,931.9	100.0
TU5	2,666.8	71.8	1,049.1	28.2					3,715.9	100.0
TU6	6,328.3	97.5	161.3	2.5					6,489.6	100.0
TU7	6,132.5	91.3	568.3	8.5	16.7	0.2			6,717.5	100.0
TU8	31,624.5	92.2	1,890.8	5.5	318.3	0.9	468.4	1.4	34,302.0	100.0
TU9	35,929.8	95.7	892.3	2.4	547.1	1.5	156.7	0.4	37,525.9	100.0
Total	85,132.9	92.9	5,042.7	5.5	882.1	1.0	625.1	0.7	91,682.8	100.0

Table 2-18. Absolute and Relative Frequencies of Weight (g) of Unmodified Gastropod Shell Recovered from Test Unit 8, Shell Mound (8LV42), by Level. Note that Levels P–Q are only half the volume of the overlying levels, so absolute values for shell weight between these subunits are incomparable; relative values are not affected.

	Crown		Lightning		Tulip		Pear		Total	
	wt(g)	%	wt(g)	%	wt(g)	%	wt(g)	%	wt(g)	%
A	1,739.7	95.1	21.2	1.2	67.6	3.7			1,828.5	100.0
B	1,567.8	91.6	83.1	4.9	24.2	1.4	37.0	2.2	1,712.1	100.0
C	2,012.7	94.7	62.3	2.9	21.5	1.0	28.7	1.4	2,125.2	100.0
D	2,845.8	91.9	192.8	6.2	18.7	0.6	38.9	1.3	3,096.2	100.0
E	2,170.9	87.9	239.2	9.7	60.0	2.4			2,470.1	100.0
F	1,196.8	90.2	110.3	8.3	19.8	1.5			1,326.9	100.0
G	2,535.1	96.5	37.2	1.4	14.8	0.6	39.1	1.5	2,626.2	100.0
H	2,343.1	97.1					71.0	2.9	2,414.1	100.0
I	2,197.4	94.7	86.9	3.7	21.2	0.9	15.2	0.7	2,320.7	100.0
J	2,342.8	95.2	104.8	4.3			13.7	0.6	2,461.3	100.0
K	3,886.2	85.0	637.0	13.9	2.6	0.1	48.6	1.1	4,574.4	100.0
L	1,295.9	85.0	204.4	13.4	25.0	1.6			1,525.3	100.0
M	840.7	95.5			19.4	2.2	20.6	2.3	880.7	100.0
N	1,283.3	90.1	93.0	6.5			47.4	3.3	1,423.7	100.0
O	1,161.1	94.6					65.8	5.4	1,226.9	100.0
P	425.5	94.1			10.4	2.3	16.5	3.6	452.4	100.0
Q	377.6	92.0	18.6	4.5			14.3	3.5	410.5	100.0
R	658.8	96.5			12.6	1.8	11.6	1.7	683.0	100.0
S	611.0	100.0							611.0	100.0
T	84.8	99.4			0.5	0.6			85.3	100.0
U	47.5	100.0							47.5	100.0
Total	31,624.5	92.2	1,890.8	5.5	318.3	0.9	468.4	1.4	34,302.0	100.0

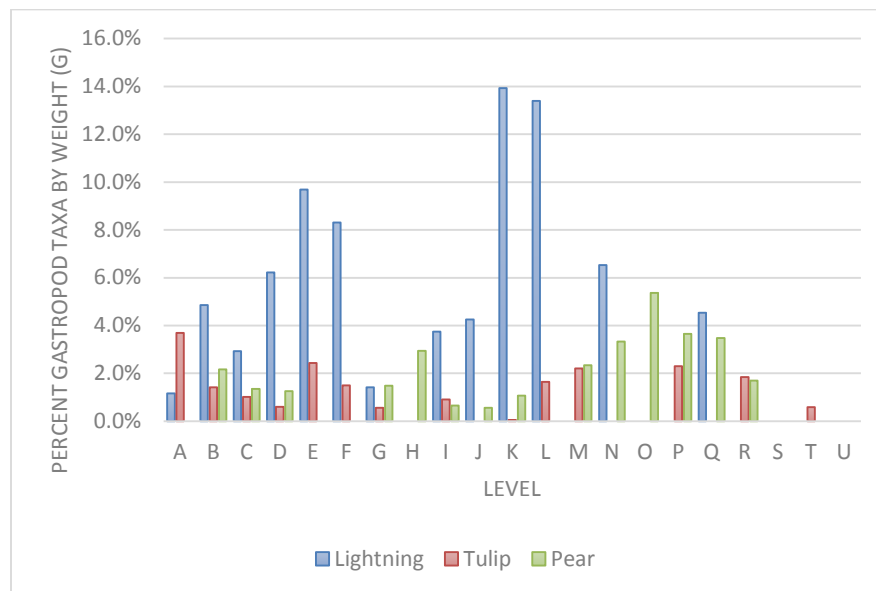


Figure 2-47. Percent frequency distribution of unmodified gastropod taxa by weight (g) and level, less crown conch, Test Unit 8, Shell Mound (8LV42).

Oysters. Compared to other locations of shell accumulation in the greater study area, Shell Mound houses an extreme abundance of oyster. From what we have seen, oyster shell of the ridge accumulated between about A.D. 400 and 650, but may have started as early as A.D. 200. The stratigraphic record of oyster deposition provides a number of research opportunities, several of which are being addressed in the thesis research of Jessica Jenkins (2015) mentioned earlier. The primary objective of Jenkins' research is to document evidence for the cultivation of oysters, if any. It stands to reason that the scope of oyster harvest in the immediate area of Shell Mound may have impacted the sustainability of oyster, and humans may have intervened. Working with oyster ecologists at UF, Jenkins has developed a set of attributes that index conditions affecting oyster quality and abundance, mostly dealing with the synergistic effects of salinity, parasitism, and the structure of local populations of oysters. Without anticipating the full results of Jenkins study, a few observations on the oyster shell in TU8 reveal changes in size and condition that may point to maricultural practices, or at least changes in selection.

From the bulk sample column of TU8, Jenkins measured 3,252 left valves of oysters for a variety of metric and nonmetric attributes. The vast majority of the shell ($n = 3,098$) came from the upper 13 samples of the column, corresponding to the thick mantle of largely unconsolidated shell from the surface to about 140 cm below surface. Although we have been referring to the underlying midden as the "subshell" midden, oyster continues in low density throughout this stratum to about 210 cm below surface, accounting for 154 valves in Jenkins' sample. The average size of valves in these two macrounits (shell mantle vs. subshell midden) vary significantly (Table 2-19). Oyster valves from the upper mantle average about 10 mm higher and 6 mm longer than those from the subshell midden. The percentage with evidence of parasitism on the valve (mostly sponge predation) likewise varies between these macrounits, with 47.7 percent from the upper mantle and only 29.9 percent from the subshell midden showing parasitism. Adding these observations together we can infer that the upper mantle contains a higher proportion of subtidal oysters than the subshell midden, which has more intertidal oysters. The latter are not subject to parasitism as much as the former, given that they are subaerial twice a day and thus outside of the habitat range of sponges and other parasites. But they are also not capable of growing as large as subtidal oysters because they are unable to feed during low tides. The overall health, size, and condition of oyster hinges on a balance between salinity, parasitism, substrate, and the depth of the water column. Parasitism correlates positively with salinity, which is generally higher in deeper water, at least away from the channel of the Suwannee River and other major inputs of freshwater. The TU8 oysters show a shift from emphasis on intertidal oysters to subtidal oysters at the time oyster shell began to accumulate rapidly and in great quantity.

Rightfully expecting an increase in oyster harvesting to have measurable effects on the quality of oysters, Jenkins examined shell from TU8 for indications of human intervention against diminishing returns. One possible intervention would have been the cultivation of oysters through practices such as culling oysters to encourage growth. A common means of culling is separating clusters by detaching individual oysters with percussion (Type G hammers?) and returning them to the water (perhaps even relocating them to better water) so that they grow without impediment. The scars of cluster attachments are evident on the outside of valves, and the presence of parasitism on scars indicates that a detached oyster was returned to the water (as opposed to being harvested immediately). Of the 1,479 valves with parasitism

from the upper mantle analyzed by Jenkins, 564 (38.1 percent) show parasitism on attachment scars. Significantly, the rate of scar parasitism increases incrementally from the bottom of the mantle (34.2 percent) to a high of 54.6 percent about one-third up the column and then levels off to between 43.8 and 48.4 percent before dropping incrementally over the upper 50 cm. The drop in rates of scar parasitism coincides with shell that accumulated above the ashy stratum identified at Stratum IIIa in TU8 profiles.

Further details on these data and comparisons to other samples from sites in the study area are forthcoming in Jenkins' thesis. For now the pattern she has identified is encouraging evidence for human intervention in oyster production. At a minimum we find a shift from intertidal to subtidal oysters with the intensification of oyster harvesting signaled by the rapid accumulation of shell in the upper mantle. Furthermore, the patterned variation in frequency of scar parasites provides tantalizing evidence for culling, a form of mariculture that may well have been responsive to the intensification of harvesting. That the rate of scar parasitism drops after the stratigraphic break in the shell mantle suggests that maricultural practices were eventually interrupted or abandoned.

Table 2-19. Summary Statistics of Attributes of Oyster Shell from the Bulk Sample Column of Test Unit 8, Shell Mound (8LV42).

	Shell Mantle (Column 1–13)	Subshell Midden (Column 14–20)
Height (mm)		
<i>n</i>	3,098	154
mean	55.5	45.7
st. dev.	16.8	15.3
minimum	15.0	17.4
maximum	145.9	85.3
Length		
<i>n</i>	3,098	154
mean	31.8	25.6
st. dev.	9.0	7.9
minimum	9.7	6.2
maximum	77.1	50.9
Parasites		
<i>n</i>	1,479	46
%	47.7	29.9
Attachment Scars		
<i>n</i>	1,985	93
%	64.1	60.4

VERTEBRATE FAUNAL REMAINS

Comprehensive analyses of vertebrate faunal remains from the 2013-2014 investigations of Shell Mound are pending. Zooarchaeological analysis of the animal bone from 2012 testing of Shell Mound was reported by Palmiotto (2013), with emphasis on bulk samples taken from select strata and features. Given that most of those samples came from the oyster-shell-rich strata of the exterior south ridge (TUs 1 and 2), it goes without saying that oyster shell dominated the inventory of individual organisms (minimum number of individuals, or MNI); the samples were volumetric and thus constrained by sampling pragmatics. In general, the finer the recovery margin, the smaller the volume sampled. This is simply a matter of time and effort: finer-grained sampling (e.g., vertebrate faunal remains <1/8-inch in maximum dimension) takes considerably more effort to sort and identify. Many years of applying fine-grained recovery methods to the analysis of archaeofauna in the coastal Southeast has demonstrated the importance of small fish to the routine diet of maritime communities. Conversely, few large fish have been identified in bulk samples from Shell Mound, despite the presence of large fish bone in general level fill.

The excavation of TU7 changed our perspective on the contribution on the vertebrate faunal assemblage of Shell Mound. Not only was the bone of larger fish (i.e., bigger than young-of-the-year) common to both level and feature fill of this unit, the bones of deer, other mammals (puma, rabbit), and a diversity of water birds were also recovered, much of it from Feature 25. In preliminary analyses of Feature 25 remains, Cristina Oliveira examined the fish bone with particular emphasis on the most abundant taxa represented, mullet (*Mugil spp.*). A preliminary look at the bird bone was undertaken by Joshua Goodwin, who identified a minimum of 18 individuals from nine different taxa. Summaries of these efforts follow in the subsection below with further details pending a complete report of faunal remains.

Mullet from Feature 25

As detailed earlier, Feature 25 was first encountered in the Southeast Exploratory Trench of TU7, which accounts for the vast majority of feature fill and includes some unknown portions of Feature 30 and 30a. All of this material was 1/4-inch screened and not sampled in bulk, but all materials retained in the screen were returned to the lab for processing, so bone at least >1/4-inch in size was not missed. A second portion of Feature 25 known as “Northern Residium” consists of feature fill that was observed in the northern wall of the trench; it too was 1/4-inch screened and all recovered materials return to lab. In addition to these fractions, five bulk samples were collected the strata of Feature 25 exposed in the east and south profiles of TU7. Oliveira analyzed all seven of these samples from Feature 25, with all bone >1/8 inch from the bulk samples included. Faunal identification was done with reference to the Florida Museum of Natural History’s (FLMNH) comparative collection using methods recommended by Reitz and Wing (1999)

It did not take long for the dominance of mullet bone in Feature 25 to become evident. At the request of Sassaman, Oliveira isolated all mullet bone from the assemblages and calculated the number of individual specimens (NISP) and minimum number of individuals (MNI). Two approaches were used for calculating MNI. First, counts of the first vertebrae, C1

(also called the atlas), were used because it is anatomically distinct from other vertebrae with each individual only possessing one such element. Second, the counting of cervical vertebrae was also used to calculate MNI. The vertebral column of a mullet contains only ten cervical vertebrae. These vertebrae are morphologically distinct, possessing a horizontal process that appears on both sides of the vertebrae; this characteristic only appears on specimens of the genus *Mugil*, and is only present on the first ten elements of the vertebral column. Counts of cervical vertebrae were used to supplement MNI estimates based on atlas counts.

Table 2-20 provides counts of mullet bone by NISP and MNI for each of the seven proveniences of Feature 25. With an NISP of 1,613 and MNI of 92, Feature 25 has produced more mullet than any other context examined from Shell Mound or any other site in the Lower Suwannee project area. Comparisons to contexts from which we have comparable data are shown in Table 2-21. In terms of NISP, no context comes close to the density of mullet bone in Feature 25. Comparisons of MNI are not so dramatic because of the effects of small sample sizes on many of the bulk samples. In general, the density of mullet in Feature 25 is at least six and as much as 24 times greater by NISP than in any context at Bird Island or Ehrbar, and at least twice and as much as 25 times greater than any other context at Shell Mound.

Oliveira also measured elements of mullet bone to estimate the standard length of fish from Feature 25. Allometric scaling is an approach relating the size of a whole animal to the dimensions of a single part (Reitz and Wing 2008). In this case, measurements of vertebrae of mullet—the atlases—was used to estimate standard length. Measurements of the atlases of mullet of known size from the FLMNH comparative collection were used to establish a linear regression between these two variables. The formula was then be applied to the recovered specimens from Feature 25 to estimate standard length. The formula used for these calculations were taken from Reitz and Wing (2008:70):

$$Y = 10^{a+b(\log X)}$$

where Y is the standard length, a is the Y -intercept, b is the slope, and X is the width of the measured element, in this case, the atlas.

Of 92 mullet atlases from Feature 25, 51 were sufficiently intact to derive allometric standard length estimates (Table 2-22). The most anterior part of the centrum was measured and then applied to the standard allometric equation. Using the FLMNH's comparative collection, the atlases of 61 individuals were measured and used to established an allometric equation of:

$$Y = 1.7887 + 0.8829X$$

which yielded an R^2 value of 0.96 (Figure 2-48).

Table 2-20. Number of Individual Specimens (NISP) and Minimum Number of Individuals (MNI) of the bones of *Mugil spp.* by Provenience from Feature 25, Sell Mound (8LV42).

Provenience	NISP	MNI
Pit feature 25	1,122	76
Northern Residuum	230	9
Bulk A	37	1
Bulk B	60	2
Bulk C	65	2
Bulk D	62	1
Bulk E	37	1
Total	1,613	92

Table 2-21. Comparison of NISP, MNI, and Density of Mullet per Unit Volume from Three Sites in the Lower Suwannee Archaeological Survey.

Provenience	Time Period	NISP	MNI	Volume (l)	NISP/l	MNI/l
Bird Island (8DI52)						
TU 3 Str II	Woodland	7	1	28.0	0.25	0.04
TU 1 Str II	Woodland	16	1	34.0	0.47	0.03
TU 1 Str III	Woodland	14	1	51.0	0.27	0.02
TU 1 Str V	Late Archaic	5	1	33.0	0.15	0.03
Ehrbar (8LV282)						
TU 1 Str IID	Late Archaic	19	2	36.0	0.53	0.06
TU 2 Str IIID	Late Archaic	7	2	16.5	0.42	0.12
Shell Mound (8LV42)						
TU1 Level E (1/4 inch)	Woodland	125	8	400.0	0.31	0.02
TU1 Str V Lower	Woodland	18	1	14.0	1.29	0.07
TU1 Str V Upper	Woodland	7	1	14.0	0.50	0.07
TU1 Str VI a	Woodland	8	1	5.0	1.60	0.20
TU2 Str II	Woodland	4	1	12.5	0.32	0.08
TU2 Str III	Woodland	10	2	13.0	0.77	0.15
TU2 Str IV	Woodland	2	1	14.0	0.14	0.07
TU3 Str II	Woodland	1	1	3.5	0.29	0.29
TU7 Feature 25 Str A	Woodland	37	1	9.0	4.11	0.11
TU7 Feature 25 Str B	Woodland	60	2	8.0	7.50	0.25
TU7 Feature 25 Str C	Woodland	65	2	9.0	7.22	0.22
TU7 Feature 25 Str D	Woodland	62	1	10.0	6.20	0.10
TU7 Feature 25 Str E	Woodland	37	1	11.0	3.36	0.09
Trench and Residuum (1/4 inch)	Woodland	1,342	85	400.0	3.36	0.21
Total Feature 25	Woodland	1,603	92	447.0	3.59	0.21

Table 2-22. Allometric Data for Estimating the Standard Lengths (SL) for *Mugil* sp. from Feature 25, Test Unit 7, Shell Mound (8LV42).

MNI#	Atlas Size (mm)	Estimated SL (mm)	MNI#	Atlas Size (mm)	Estimated SL (mm)
1	8.00	385.51	36	5.83	291.55
2	7.15	349.11	37	4.45	229.69
3	7.20	351.27	38	5.02	255.48
4	4.40	227.41	39	3.63	191.89
5	6.51	321.37	44	6.02	299.92
7	7.19	350.84	45	4.94	251.88
8	5.64	283.14	46	4.84	247.37
10	5.88	293.75	48	4.83	246.92
11	6.12	304.31	49	4.42	228.32
12	5.31	268.46	50	5.00	254.58
13	6.03	300.36	51	5.32	268.91
14	5.69	285.36	52	5.67	284.47
15	6.01	299.48	53	4.24	220.09
19	7.71	373.15	59	2.99	161.69
20	5.50	276.93	60	3.82	200.73
21	6.47	319.63	64	5.72	286.68
24	7.93	382.53	66	4.65	238.78
25	5.51	277.37	69	6.44	318.32
26	6.74	331.38	70	5.58	280.48
27	6.56	323.55	72	5.32	268.91
29	4.81	246.02	74	4.88	249.18
30	6.16	306.07	75	5.19	263.10
31	6.69	329.21	76	5.94	296.40
32	5.79	289.78	79	4.57	235.15
33	5.22	264.44	80	3.87	203.04
34	5.15	261.31			

The mean of the predicted standard length was calculated to be 279.9 mm, with a standard deviation of 48.4 mm and with a coefficient of variation of 0.17. Of the individuals from the FLMNH comparative collection, 28 were of the species *Mugil curema*, and the remaining 33 were from the species *Mugil cephalus*. Both species were used in formulation of the allometric equation for standard length due to the high prevalence of both within the Gulf Coast region, and the inability for mullet to be identified to species on the basis of bone alone. Variation between the two species is not considered marked enough to significantly bias the allometric estimates.

In sum, Feature 25 contained a minimum of 92 mullet averaging 279.9 ± 48.4 mm in standard length. The size of these fish and limited variation in standard length reflects a same-age population of mature mullet. It remains to be seen how this catch of fish factors into food consumption practices of denizens of Shell Mound, or how schools of mullet were captured, a question that may be resolved with Ginessa Mahar's dissertation research on mass capture

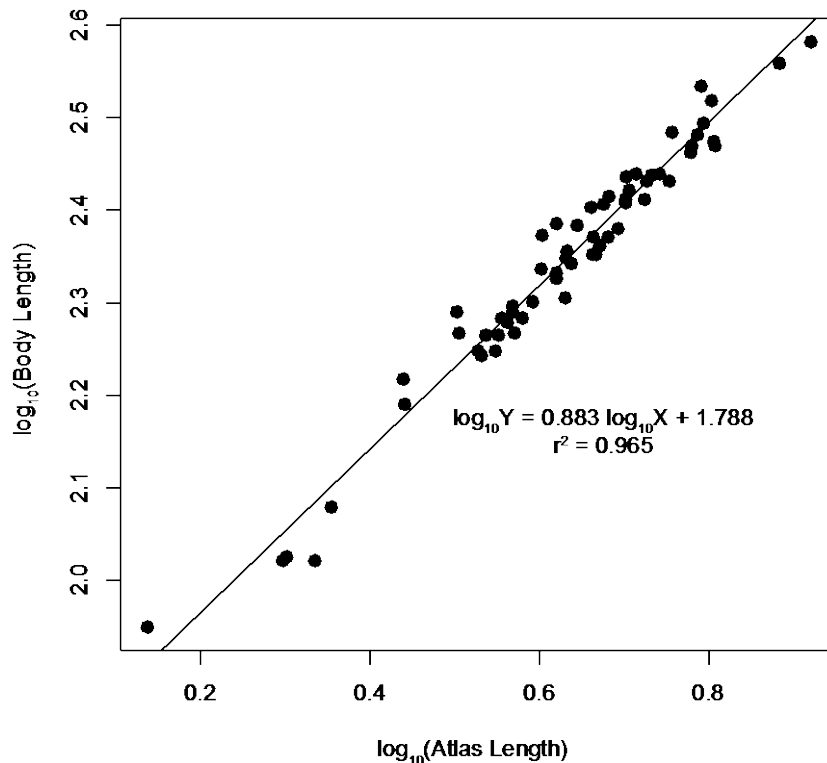


Figure 2-48. Allometric linear regression of predicted standard length for 51 archaeological specimens of mullet from Feature 25, Test Unit 7, Shell Mound (8LV42).

technologies. For now we can infer that Feature 25 deviates from all other contexts at Shell Mound and beyond in its density of mullet. Oliveira also identified in Feature 25 eight sheepshead, three hardhead catfish, four red drum, four sea trout, four gar, three jack, three flounder, three pinfish, and one each of toadfish, black drum, bowfin, pigfish, porgy, Atlantic tripletail, runner jack, and sturgeon. As noted, along with fish remains were the bones of mammals, including deer, and the remains of a variety of water birds, to which we now turn briefly.

Birds from Feature 25

Joshua Goodwin examined bone from Feature 25 and identified 140 (NISP) bony elements from species of birds. Using the comparative collections of the FLMNH, Goodwin was able to assign 107 elements to species and from those figures he calculated a minimum of 18 individuals (MNI) from nine taxa (Table 2-23).

The highest proportion of elements in regards to the total sample, 87 in total, were identified to white ibis. This included a number of elements belonging to subadult specimens. MNI for white ibis was calculated by analyzing the scapulae, coracoids, and tibiotarsi, taking

into account noticeable age and morphological differences. In sum, the assemblage represents four adult individuals and five subadult individuals.

Other birds identified include ducks, pie-billed grebe, horned grebe, great blue heron, great egret, yellow-crowned night heron, roseate spoonbill, and herring gull. With the exception of nine individuals identified to white ibis and two individuals identified to the duck subfamily, the remaining species represent one individual each. Three species, great blue heron, roseate spoonbill, and herring gull are represented solely by wing elements. In addition to the identified elements, thirty-two bone fragments were not sufficiently identifiable beyond class Aves.

Goodwin is researching the uses of birds in other Woodland contexts across the region (e.g., Milanich et al. 1984), including bird imagery in pottery and other media, such as the platform pipes of Hopewell. Arguably, the inclusion of birds in Feature 25 goes well beyond daily subsistence to signal ritual and social uses of animals and substances, perhaps in conjunction with mortuary practices centered on Palmetto Island. A ground puma tooth, shark teeth (some drilled), the quartz crystal noted earlier, and shell-filled postholes underscore the unusual nature of the large pits in TU7 and cause us to look beyond daily activities to explain their unusual density, scale, and composition. Further testing in the vicinity of TU7 is clearly warranted.

Table 2-23: Summary of Bird Taxa by NISP and MNI, Feature 25, Test Unit 7, Shell Mound (8LV42).

Taxa	Common Name	NISP	MNI
<i>Eudocimus albus</i>	White ibis	87	9
Anatinae	Ducks (subfamily)	8	2
<i>Podilymbus podiceps</i>	Pied-billed grebe	4	1
<i>Podiceps auritus</i>	Horned grebe	1	1
<i>Ardea herodias</i>	Great blue heron	2	1
<i>Ardea alba</i>	Great egret	1	1
<i>Nyctanassa violacea</i>	Yellow-crowned night heron	2	1
<i>Platalea ajaja</i>	Roseate spoonbill	1	1
<i>Larus argentatus</i>	Herring gull	1	1
Aves		33	
Total		140	18

SUMMARY AND CONCLUSION

Test excavations at Shell Mound in 2013 and 2014 added another 20 m² of perspective to the sample of 5 m² achieved in 2012. From the start, testing at Shell Mound was designed to be extensive, rather than intensive, so that we could characterize the full range of variation in types and locations of activities that contributed to the formation of this massive shell ridge. We have thus far obtained ten AMS age estimates from six different test units. Aside from one assay from a Late Archaic stratum below the buried ground surface of TU1, all age estimates

fall in the range of A.D. 200–700, with a decided cluster of assays in the range of A.D. 400–650. A sequence of four phases can be inferred at this point: (1) an early phase spanning the second and third centuries A.D. involving occupation on the outside perimeter of a relict dune; (2) an intermediate phase spanning at least the fifth and early sixth centuries A.D. involving intensive settlement atop the dune; (3) a mid-sixth to mid-seventh phase when most of the shell accumulated on the dune and to the south, forming the U-shaped ridge; and (4) a final century spanning the mid-seventh to mid-eighth centuries with occupation of the interior opening and additional shell deposition on the ridge. We conclude this chapter with a brief summary of what we have learned about each of these phases.

The initial phase of Woodland-era settlement in the second and third centuries A.D. involved a variety of pottery types at settlements that appear to be arranged along the low-elevation perimeter of a relict dune. Strata containing pottery of the Pasco, Swift Creek, and Deptford series, among possible others (e.g., St. Johns) is found at the base of shell deposits in TUs 1 and 9, on opposite sides of the extant ridge and each facing out to open water. It seems likely that a component of this age also exists at the base of shell on top of the dune, but so far age estimates for these occurrences date a century or two later. Oyster shell associated with these components is relatively small, not terribly dense, and is accompanied by a variety of gastropods. Hickory nutshell from TU9 attests to the use of mast resources and possibly fall or winter occupations. As inferred from accumulations of charcoal in both TU1 and TU9, this initial Woodland occupation may have involved broadcast burning of the ground surface.

The second phase of occupation was intensive, lasting perhaps two centuries, but perhaps only 150 years (ca. A.D. 400–550). Besides the thick midden at the base of TU8, a series of large pits in TU7 attest to large-scale processing of fish, mammals, and birds. We do not have a good sense of what the purpose of these large-scale activities may have been, but it does not seem likely that they were simply the activities of everyday living. Given the mortuary program at Palmetto Mound 500 m west of Shell Mound, it stands to reason that some of the activity involved rituals among large gatherings of people. The diversity of pottery types and unusual pastes of some of the sherds suggest that persons may have gathered at Shell Mound from far and wide. Oyster consumption at this time was still modest, and apparently involved the use of intertidal sources.

The bulk of the shell at Shell Mound was emplaced between about A.D. 550–650 and it seems to have involved oysters from subtidal sources, possibly the target of human management. The shell ridge took its final form at about this time, with a southern ridge added to the arm of the relict dune, on which shell was also emplaced. The accumulation of Type G shell hammers along the outside perimeter of the shell ridge may correspond with the intensification of oyster harvesting and processing. During this time pottery seems to be almost exclusively limestone- and sand-tempered plain. About half way through this century there may have been a change in the use of Shell Mound, possibly abandonment by much, if not all of the resident population, but still a locus of gatherings, presumably involving mortuary practices at Palmetto Mound.

Finally, the last 50 years or so involved occupation of the interior opening of the ridge. Our efforts to locate residential architecture have not yet been rewarded, but a sufficient

number of pits and postholes have been observed to know that such evidence will likely materialize once larger excavation blocks are open. We do know that virtually all the bifacial technology at Shell Mound comes from this interior area, including the inward-facing side slopes of the northern arm (the dune), location of TU7.

Much more needs to be done to bring the full story of Shell Mound to light. Specialty analyses of oyster, gastropods, vertebrate fauna, pottery, lithics, and more will elucidate much of the extant assemblages, but more testing is required to “fill in the gaps” of sampling. In the final chapter of this report, we outline the steps recommended to keep this research effort moving forward.

CHAPTER 3 PALMETTO MOUND (8LV2)

Mark C. Donop

Investigations at Palmetto Mound (8LV2) on Hog Island in 2014 by the Laboratory of Southeastern Archaeology (LSA) provided unprecedented information about this heavily-damaged mortuary site. Work consisted of topographic mapping, shovel test pit (STP) surveying, and the excavation of one 2 x 2-m test unit to map and delineate the mound and the landform and collect data about the stratigraphy and chronology of the site and its relationship to Shell Mound (8LV42) (Figure 3-1). Archaeological investigations were conducted in March and June, 2014 under ARPA permit LS CKNWR-022113 and July, August, and October under ARPA permit LSCKNWR060614. This chapter reports the results of these investigations.

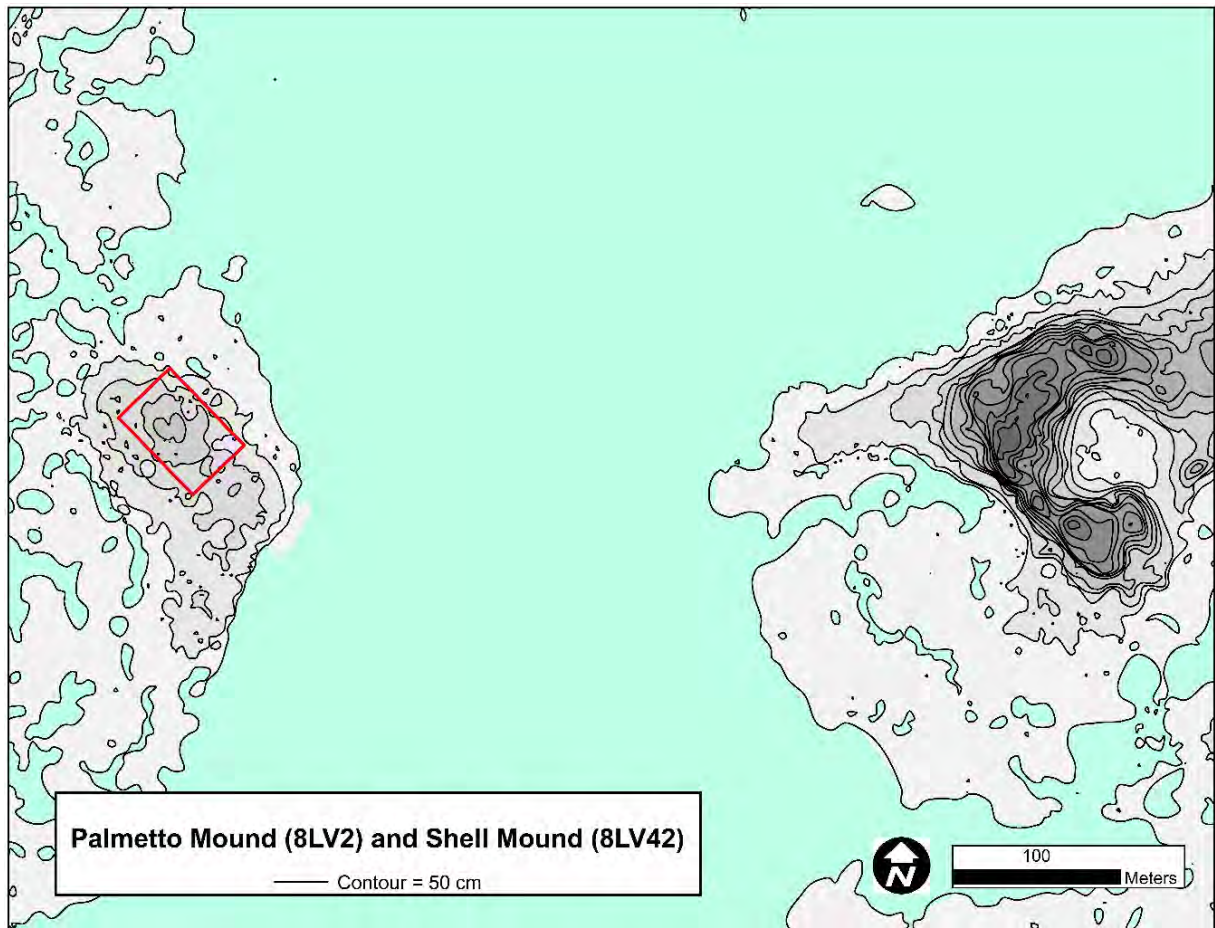


Figure 3-1. LiDAR topographic map of Palmetto Mound (8LV2; left, in red inset) and Shell Mound (8LV42), courtesy of Micah Monés.

Evidence indicates that Palmetto Mound was a major indigenous mortuary facility along the northern Florida Gulf Coast. Palmetto Mound has also been called Pine Key Mound, Rattlesnake Island, Graveyard Island, Hog Island, and Ceremonial Mound and has been designated 8LV2 and 8LV7 and possibly 8LV5 in the Florida Master Site File (FMSF). Large private collections indicate that this sand and shell burial mound was used primarily during the Weeden Island Period (ca. A.D. 200–1000). The mound contained hundreds of burials and ceramic vessels and other artifacts. Palmetto Mound was probably associated with Shell Mound given their proximity and east-west alignment.

Previous excavations conducted by amateur and professional archaeologists at Palmetto Mound produced collections of artifacts that lack detailed provenience. Decatur Pittman was an amateur archaeologist that amassed the largest known artifact collection from “Palmetto Island” (8LV7) in the 1880s (Willey 1949:311–312). The Pittman collection donated to the Florida Museum of Natural History (FLMNH) in 1917 contains over 5,000 ceramic sherds from probably over 600 vessels, many of which are significantly intact. Unfortunately, the donation did not include information regarding the context of the artifacts or the site itself. Amateur Montague Tallant also collected artifacts from “Hog Island” (8LV2) in the 1930s (Willey 1949:308). His journal included details about the site’s construction such as the existence of twin parallel ramps that projected from the eastern side of the mound. Tallant’s collection was the foundation for the South Florida Museum in Bradenton that currently houses 52 ceramic vessels from 8LV2 (Figure 3-2). Archaeologist Dr. John Goggin of the Florida State Museum (now the FLMNH) conducted excavations at Palmetto Mound in 1952 and 1962. Goggin curated a small collection of artifacts and a few notes about the excavation in 1952 and his six field school students provided a description of their excavation of a shallow 10 x 10 ft-unit in a “sherd path” southeast of the mound in 1962 (Figure 3-3). Numerous other people have collected artifacts and human remains from the site over the last ~150 years but no map, systematic survey, properly recorded excavation, radiocarbon date, or publication of Palmetto Mound existed before 2014.



Figure 3-2. Montague Tallant at “Shell Mound,” courtesy of the South Florida Museum.



Figure 3-3. Dr. Goggin’s field school at Palmetto Mound in 1962, courtesy of the Florida Museum of Natural History.

MAPPING

A topographic map of Palmetto Mound was produced in June and October of 2014. The map was generated from more than 492 data points measured with the use of a Nikon DTM-310 electronic total station (Figure 3-2). Two permanent data (A and B) were established using two 3-ft-long pieces of ½-inch electrical conduit hammered into the ground to create permanent reference points. Work was focused on mapping surface topography, STP locations, and looter pit dimensions. The mound is roughly 55 x 25 m in a northwest-southeast orientation and about 2 m tall. The Tallant journal, topographic map, and surface finds indicated that the

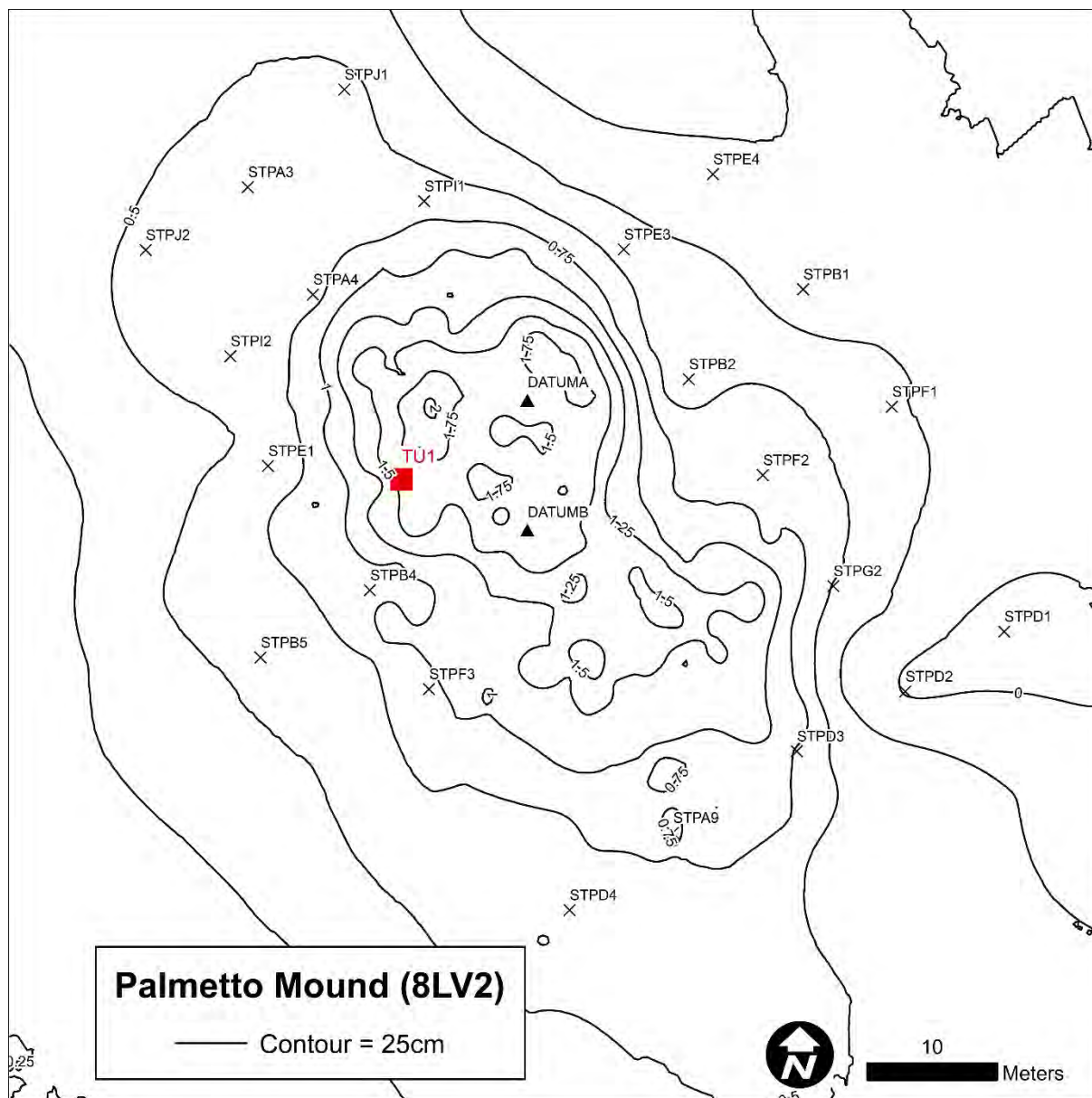


Figure 3-4. Topographic map of Palmetto Mound (8LV2), courtesy of Micah Monés.

mound was constructed of sand and oyster shell in the northwestern area and sand toward the southeast. The twin ramps that Tallant described are not evident.

SHOVEL TEST PIT SURVEY

The first survey of shovel test pits (STPs) at Palmetto Mound was performed in March and July of 2014 to delineate the site and investigate the landform that it was built upon. STPs were excavated at 10–30 m intervals along transects (A–M) that were 10–30 m apart from one another located adjacent to the mound and distributed throughout the small island (Figure 3-4). Each STP was 50 x 50 cm wide and excavated to a depth of at least 100 centimeters below surface (cm BS) or to the depth of the water table (Figure 3-5). Fill from the STPs was passed through ¼-inch hardware cloth and all artifacts except the human remains from STP B-4 were collected in labeled bags and brought back to the LSA for analysis.

The STP survey indicated that the Palmetto Mound landform was sparsely utilized outside of the burial mound (Table 3-1). Most of the STPs contained dark gray-brown sand in the upper ~20 cm followed by medium gray sand from ~50–60 cm and light gray sand to ~100 cm. Although 24 of 51 STPs were positive, most produced only a few artifacts that consisted primarily of small numbers of chert flakes and small sherds scattered throughout the landscape. Four sand-tempered, simple-stamped sherds were found in STPs B-5 and I-1 that may belong to the Deptford Period (500 B.C.–A.D. 200). Abundant pottery sherds ($n = 378$ or 81 percent of the total pottery sherds) were found in STPs A-9 and B-4. STPs B-4, F-3, and G-3 on the southwest side of the mound were discontinued after human remains were discovered at a depth of approximately 19–35 cm BS. The vertebrate faunal bone from B-4 likely originated from Stratum VIII discovered in Test Unit 1 (TU1).



Figure 3-5. Field school student Austin Jacobs excavating STP D-8.

Table 3-1. Inventory of Materials Recovered from the STP Survey, Palmetto Mound (8LV2).

STP#	Pottery Sherd (ct)	Lithic Flake (ct)	Vertebrate Fauna wt (g)	Human Remains
A-1		2		
A-2		17		
A-3	4	2		
A-4		1		
A-9	292			
A-10		1		
A-12		5		
B-2	3			
B-4	86		0.9	present
B-5	3	3		
B-6	1			
C-1		1		
C-2		1		
D-3	6	1		
D-4		11		
E-2		1		
F-3	9			present
F-4		1		
G-2	1			
G-3	14			present
G-4		1		
I-1	1			
J-1		1		
K-1	7			
Total	465	49	0.9	

TEST UNIT EXCAVATION

Test Unit 1 (TU1) was a 2 x 2-m unit excavated in a circular looter pit along the northwestern edge of the Palmetto Mound in July and August (Figure 3-4). The location was chosen earlier in the year because collectors had exposed a small ~ 20 x 30-cm portion of what had appeared to be intact oyster midden (Figure 3-6). TU1 was placed within the looter pit in an effort to expose the stratigraphy of the mound while minimizing further damage. A local datum established at the northwest corner of TU1 and the unit was excavated in 10-cm arbitrary levels (A–K) of variable volumes due to the slope and irregularity of the unit. All excavation levels were partially disturbed or contained material from several strata except Level G (Zone 1). The test unit was reduced to a 1 x 2 m from Levels H–J, 1 x 1 m in Level K, and 25 x 50 cm in Level L to avoid Feature 1 (a human burial). All fill from the excavation was passed through ¼-inch hardware cloth and all artifacts, vertebrate fauna, and human skeletal elements were collected. Artifacts and vertebrate fauna were placed in labeled bags and brought back to the LSA for analysis. Field school students trained in human osteology separated, identified, and recorded the human skeletal remains recovered from TU1. No human remains were



Figure 3-6. Cleared looter pit with partially exposed shell midden material underneath a large root, Test Unit 1, Palmetto Mound (8LV2).

knowingly removed from Palmetto Mound and those recovered were returned to the ground in Level K upon completion of the excavation.

The TU1 excavation revealed that relatively intact stratified deposits lay beneath the disturbed ones that cover most of the mound (Figures 3-7 and 3-8, Table 3-2). Levels A–D in approximately the upper 50–60 centimeters of TU1 consisted of disturbed deposits (Strata I–VII) with varying soils that contained unconsolidated oyster shells and fragmented artifacts and human remains (Table 3-3). A largely intact Stratum VIII of yellowish brown fine sand and dense, consolidated oyster midden material that contained fish bones, ceramic sherds, and shell hammers was found at a depth of ~50–100 centimeters below datum (cm BD) in Levels E–J. The two bulk samples (#44, #45) and the subsample from Level G (Zone 1) collected from this Stratum VIII lacked human remains and artifacts except one plain, limestone-tempered sherd. A human burial (Feature 1) was discovered in Level K. The excavation continued in a 25 x 50-cm section of the northwest corner of the unit to a depth of 173 cm BD through four, shell-free sand strata. A small soil auger was used to determine that light yellowish brown sand continued to at least a depth of 261 cm. No evidence of domestic features such as pits was discovered.

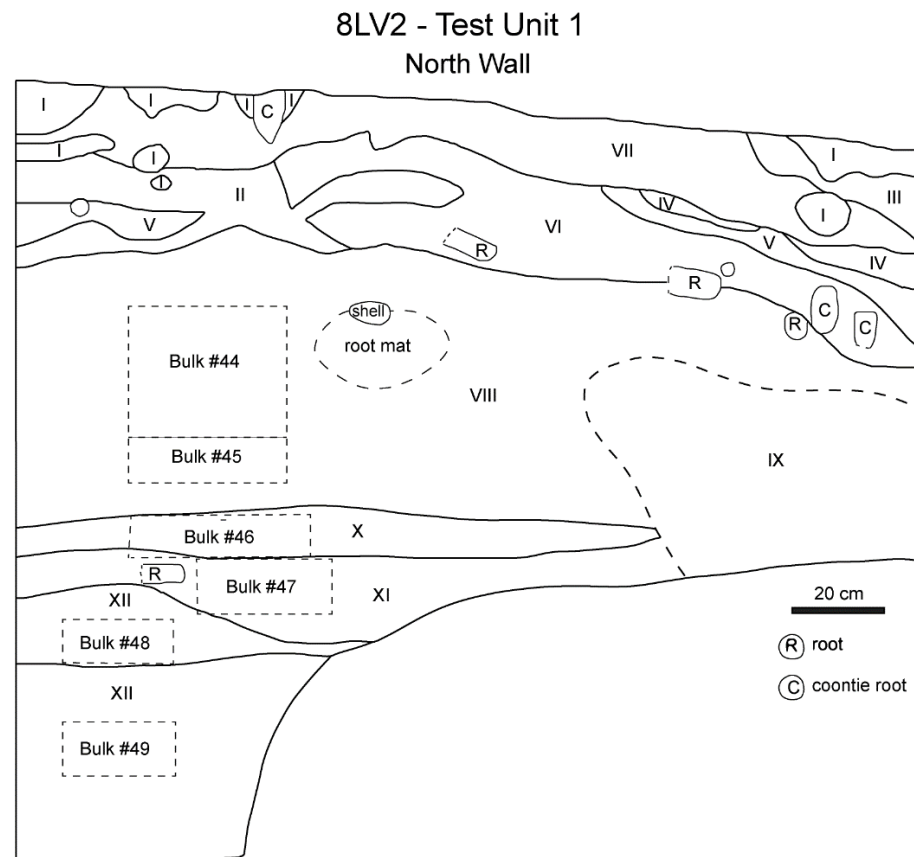


Figure 3-7. Photograph and scaled drawing of the north profile of Test Unit 1, Palmetto Mound (8LV2).

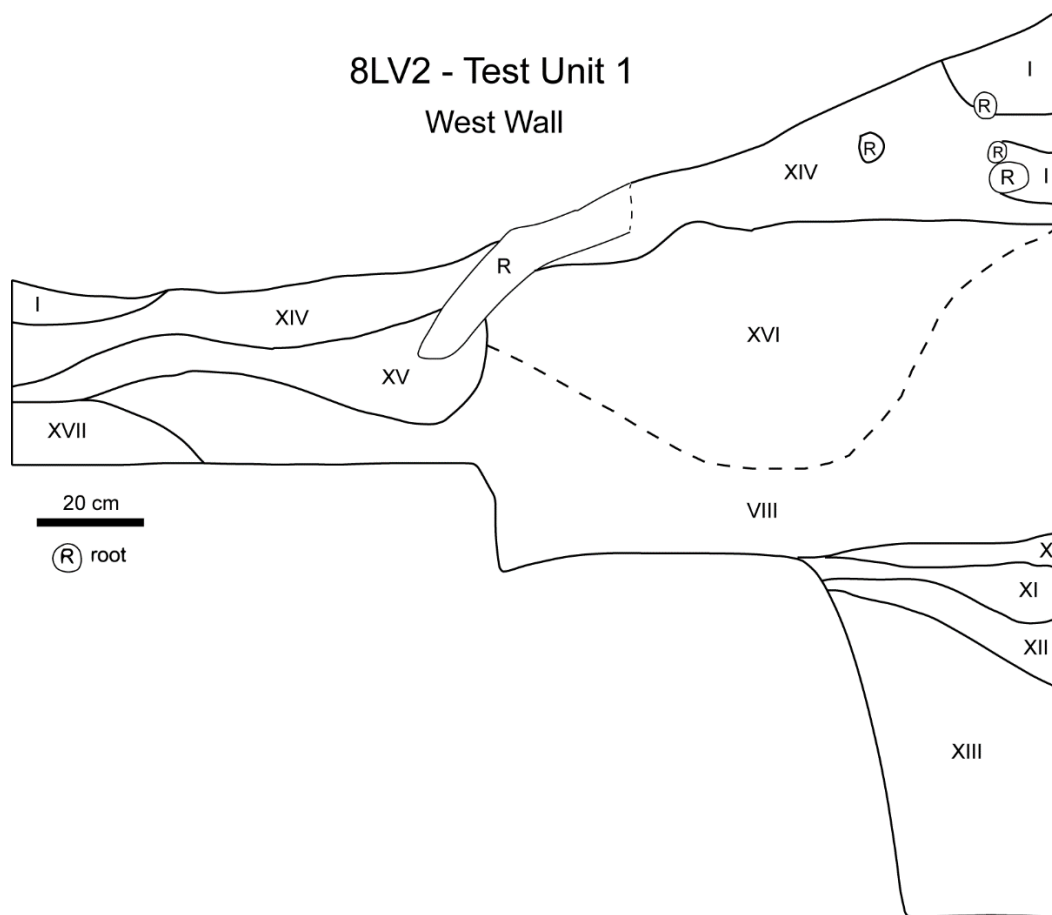


Figure 3-8. Photograph and scaled drawing of the west profile of Test Unit 1, Palmetto Mound (8LV2).

Table 3-2. Stratigraphic Units of Test Unit 1, Palmetto Mound (8LV2).

Stratum	Max. Depth (cm BD)	Munsell Color	Description
I	60	10YR4/2	Dark grayish brown medium sandy loam with root mat and moderately dense unconsolidated oyster shell
II	41	10YR6/3	Medium pale brown sand mottled with 10YR7/2 fine light gray sand and 10YR5/2 medium grayish brown sand with moderately dense, unconsolidated oyster shell
III	35	10YR6/2	Medium light brownish gray sand with moderately dense, unconsolidated oyster shells
IV	46	10YR6/4	Fine light yellowish brown sand mottled with 10YR7/4 fine very pale brown sand with moderately dense, unconsolidated oyster shell
V	59	10YR3/1	Medium very dark gray sand with charcoal and moderately dense, unconsolidated oyster shell
VI	63	10YR6/3	Medium pale brown sand with moderately dense, unconsolidated oyster shell
VII	38	10YR5/4-6/4	Light yellowish brown to yellowish brown fine to medium sand with dense, unconsolidated oyster shell
VIII	106	10YR6/4-7/4	Light yellowish brown to very pale brown fine sand with dense, consolidated oyster midden material
IX	110	10YR5/4	Yellowish brown fine to medium sand with dense, consolidated oyster midden material
X	106	10YR6/2	Light brownish gray fine sand
XI	124	10YR7/3	Very pale brown fine sand
XII	129	10YR7/4	Very pale brown fine sand
XIII	173	10YR6/4	Light yellowish brown fine sand
XIV	71	10YR6/2	Light brownish gray medium sand mottled with 10YR6/3 pale brown medium sand with moderately dense, unconsolidated oyster shell
XV	79	10YR6/4	Light yellowish brown fine to medium sand with dense, consolidated shell midden material
XVI	87	10YR5/4-6/4	Yellowish brown to light yellowish brown fine to medium sand with dense, consolidated shell midden material
XVII	86	10YR5/4	Yellowish brown fine to medium sand with dense, consolidated shell midden material

MATERIAL CULTURE AND HUMAN REMAINS FROM TEST UNIT 1

The materials recovered from TU1 included lithic flakes, shell hammers, pottery sherds, and vertebrate faunal and human bone in a predominantly disturbed context (Table 3-3). All unit levels except K and L included multiple, disturbed strata and the artifacts recovered from them do not accurately reflect the *in situ* deposits that existed before looting began at the site in the 18th century. Only one chert lithic flake was found in TU1 in Level B. The shell tools ($n = 8$) recovered from the unit were crown conch (*Melongena corona*) hammers with punch holes presumably for hafting and evidence of battering. Seven of these shell hammers were found in Levels H–J associated with Stratum VIII. The analysis of the vertebrate faunal bone has yet to be completed but field identifications included catfish, sheepshead, jack, mullet, sea trout, red drum, and birds. Fragmentary human remains were common ($n = 936$) throughout the unit except in the Level G (Zone 1) subsample of Stratum VIII and Level L.

Field identifications of human remains included cranial fragments, maxilla, mandibles, a zygomatic, incisors, premolars, molars, phalanges, cervical and thoracic vertebrae, clavicles, humeri, radii, ulna, metacarpals, pelvic bones, femurs, a pisiform, and metatarsals from an unknown number of individuals.

Pottery sherds were the most numerous artifacts recovered from TU1 (Table 3-4). All sherds from the unit except one plain, sand-tempered sherd possibly associated with the human burial in Level K were brought back to the LSA for analysis. The assemblage consists of 130 sherds excluding the 34 crumb sherds smaller than ½-inch. Sixteen “types” of pottery sherds based on temper and surface treatment were identified. Plain, sand-tempered and limestone-tempered sherds dominate the assemblage ($n = 75$ or 58 percent of the sherds). The sand-tempered sherds containing mica inclusions were found predominantly in the upper part of the unit while plain, limestone-tempered and spicule-tempered sherds were found in the lower portion.

Table 3-3. Inventory of Materials Recovered from Test Unit 1 by Level, Palmetto Mound (8LV2).

Level	Pottery Sherd (ct)	Lithic Flake (ct)	Shell Tool (ct)	Vertebrate Fauna wt (g)	Human Remains (ct)
A					19
B	1	1	1		79
C	6			1.8	179
D	7			2.6	70
E	6			0.3	68
F	23			1.5	65
G (Zone 1)	1				
G	45			8.5	83
H	38		2	15.5	204
I	28		3	17.3	101
J	8		2	12.7	68
K	1				
L					
Total	164	1	8	60.2	936

Table 3-4. Absolute Frequency of Pottery Sherds by Level, Temper, and Surface Treatment from Test Unit 1, Palmetto Mound (8LV2).

Level	-----Sand-----			Sand and Mica		Sand and Lime-stone		-----Grit-----		Spicule		Total
	Plain	CM ¹	Other	Plain	Other	Plain	Plain	Plain	Imp.	Plain	Crumb	
B	1											1
C	2			2							2	6
D	6							1				7
E	3			2				1				6
F ²	8		2	1	1	3					8	23
G (Zone 1)							1					1
G ³	23				1		16			2	2	44
H ⁴	18		2		1		2			4	11	38
I	8						7		3	1	9	28
J	1	5									2	8
K	1											1
L												0
Total	71	5	4	5	3	3	26	2	3	7	34	163

¹CM = cordmarked²Other = sand-tempered burnished (1) and incised (1), sand and mica-tempered check stamped (1).³Other = sand and mica-tempered painted and burnished (1).⁴Other = sand-tempered painted (1) and incised (1), sand and mica-tempered burnished (1).

FEATURE 1

A human burial (Feature 1) was discovered at a depth of 96–124 cm BD (Levels J–K) in light brownish gray sand (Stratum X) just underneath Stratum VIII. The excavators used brushes to slowly expose a portion of the cranium and post-cranial skeleton and it was determined from dental evidence that the person had been ~10 years of age at the time of death (Figure 3-9). The extended burial had been interred on his/her left side facing west [REDACTED]. Three charcoal samples for radiocarbon dating were collected near the burial to help establish a chronology for the site. Unfortunately, the AMS assay from one of these samples resulted in a date of 160 ± 30 B.P. and is likely the result of disturbance. The human remains were left intact [REDACTED] with soil and shell midden material. All of the human remains collected from the excavation were reburied in Level K adjacent to the intact burial and the unit was photographed, profiled, bulk sampled, and backfilled.

CONCLUSION

Investigations at Palmetto Mound (8LV2) on Hog Island in 2014 by the Laboratory of Southeastern Archaeology (LSA) generated significant new data about this important archaeological site. The topographic map provided very accurate dimensions of the burial mound and the surrounding area. Mapping also documented the damage caused by collectors and archaeologists and provided a baseline for monitoring any further anthropogenic or natural damage.

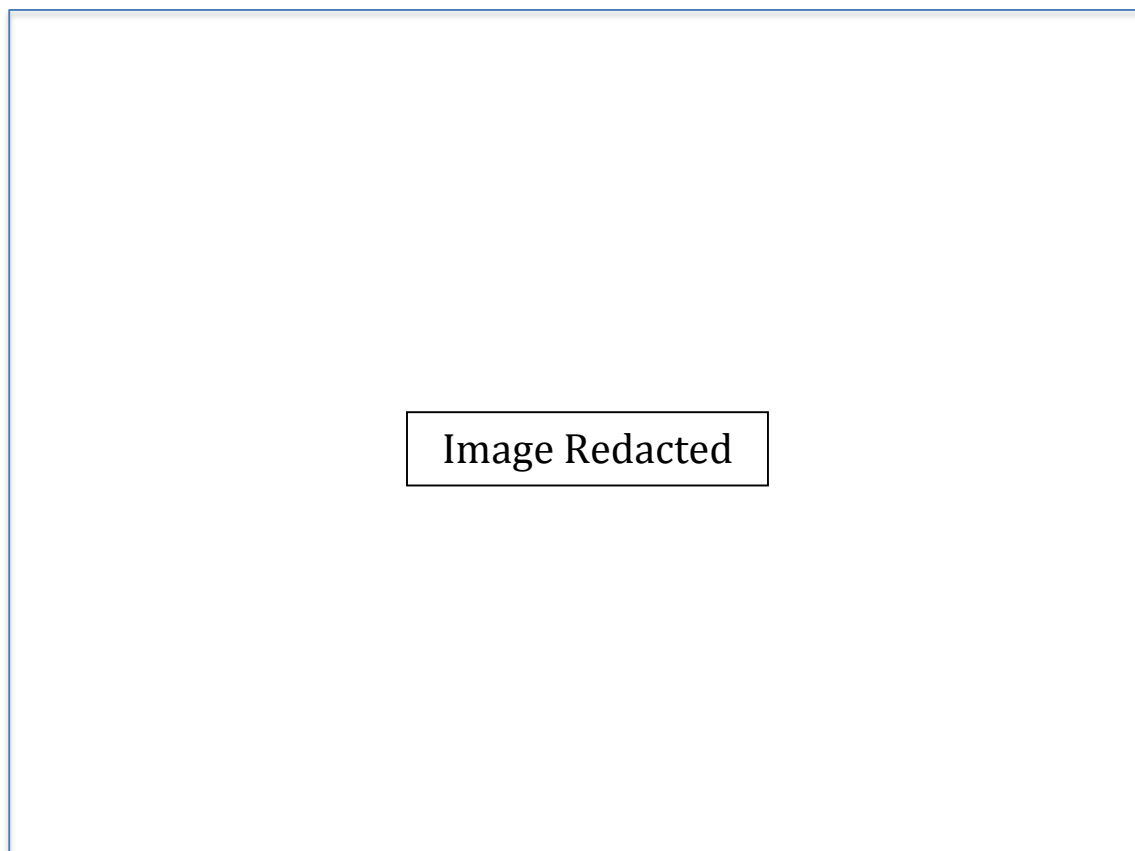


Figure 3-9. Feature 1 human burial [REDACTED] Palmetto Mound (8LV2).

The survey of 51 STPs indicated that the Palmetto Mound landform was dedicated to mortuary purposes. Unlike the other landforms in the area investigated to this point, the non-mound portion of the island does not contain *in situ* shell midden deposits or evidence of extended periods of use. The lack of vertebrate faunal bone in 50 of 51 STPs may support the argument that the island was not used for domestic purposes although poor preservation may be at least partially responsible for the pattern. The small numbers of scattered flakes and sherds found around the island may represent a minimal presence of people before the Weeden Island Period. Most of the artifacts recovered in the survey were concentrated in STPs with mottled soils adjacent to the mound, such as A-9 and B-4, in what is probably looter spoil.

The excavation of TU1 at Palmetto Mound revealed that at least the northwestern portion of the site is partially protected by Stratum VIII and intact although the upper deposits are significantly disturbed by collectors. This shell “cap” seems to be made of redeposited midden material from another site, possibly Shell Mound (8LV42), based on its artifact assemblage and lack of domestic features and human remains. The distribution of ceramic sherds in the unit suggests that different types were associated with different strata or episodes.

The sand-tempered sherds with mica inclusions found primarily in the upper levels of TU1 may represent vessels that were imported from areas that contain naturally-occurring sources of mica-rich clays sometime after the first phase of construction. The limestone-tempered and spicule-tempered sherds may be associated with an early phase of construction or Stratum VIII and a midden from another site. Montague Tallant believed that the untempered plain vessels, possibly misidentified St Johns spicule-tempered vessels, found in the yellow sand underneath the shell layer were associated with the earliest, unidentified culture represented at the site. In 2014, two AMS assays of 2670 ± 30 B.P. (two-sigma calibrated range of 890–800 B.C.) and 730 ± 30 B.P. (two-sigma calibrated range of A.D. 1255–1290) were obtained from soot from two St Johns spicule-tempered sherds from Goggin's excavations. It is possible that the older of the two dates may represent the earliest occupation of the site. The intact human burial (Feature 1) provided information about burial practices at the site but produced a 19th-century AMS date due to disturbance that may have been caused by early collectors. It also appears that Palmetto Mound at least partially rests on an elevated relict dune of yellowish brown sand on an island of gray sand that may have attracted indigenous people to the location.

CHAPTER 4

NORTH KEY (8LV65, 66a)

Ginessa J. Mahar

North Key is one of 13 islands included in the Cedar Keys National Wildlife Refuge and is the location of two state registered archaeological sites, 8LV65 and 8LV66 (loci a and b). One of these sites, 8LV65, also known as A. B. Midden, was previously tested in the 1980s. Results of those excavations, while not formally reported, indicate that sites on North Key may help to fill a temporal gap in the chronological sequence of the Northern Gulf Coast. The research potential of these sites is threatened by ongoing erosion. Staff from the Laboratory of Southeastern Archaeology (LSA) completed a reconnaissance trip to the island to determine the integrity of the archaeological sites and the potential for further testing. The team reported that both sites, located along the eastern shore of the island, were actively eroding due to wave action and other, probably natural, forces. It was thus decided that controlled excavation of the sites was warranted before they succumbed to further damage and loss. During the summer of 2015 one 4-inch auger test and one 1 x 2-m test unit were excavated at 8LV65 and one shovel test and one 1 x 1-m test unit were excavated at 8LV66a. This chapter summarizes the methods and results of those excavations conducted as a result of the Lower Suwannee Archaeological Field School.

SETTING

North Key is located within the Cedar Key tract of the Lower Suwannee Archaeological Survey (Sassaman et al. 2011). The Cedar Keys are a group of roughly 20 small islands (0.01–2 km²) situated squarely within Florida's Big Bend coastal region (Crystal River to Apalachee Bay). North Key is a roughly .35 km² island, 2.8 km directly west of Way Key, the island that supports the town of Cedar Key. Set within a shallow, brackish-marine open water coastal area, the islands are largely the result of a complex karst topography (Hine et al. 1988). The larger islands are likely relict paleodunes that formed during the Late Pleistocene or Early Holocene, while many smaller islands are the result of aeolian or fluvial sediments (Hine et al. 1988). Recent rise in sea level has had a negative effect on many of the smaller islands, some being more susceptible to erosion due to specific formation processes (Wright et al. 2005). Anthropogenic deposits of earth and shell on smaller islands have in many cases worked to protect them from erosional forces over the millennia (Sassaman et al. 2011). In this respect North Key is no exception, however neighboring islands have not fared as well. For instance, local residents have seen the islands of Derrick and Gomez Keys to the north erode into the Gulf within their lifetime. Today, these islands are mostly subaqueous, their sediments having been depleted by decades of erosional forces in a sediment starved environment. The islands' dead hardwood trees now serve as rookeries and resting areas for the regions shore bird populations including ibis, white and brown pelicans, egrets, oyster catchers, and spoon bills, among many others.

In addition to anthropogenic deposits helping to stave off erosion, North Key's long, shallow, flat, ocean-facing beach extends far into the Gulf on its western edge, likely reducing

the energy of oceanic waves and tides. The northern and southern sections of the island lack this buffer zone as channels have been dredged on either side, creating opportunities for faster, stronger sediment moving currents. Certainly, islands within the study region, large and small, are exceedingly vulnerable to rising seas and erosional forces as are many other locations in coastal Florida.

The Cedar Keys represent a collection of near shore islands in addition to several, more distal islands. Of these distal islands, North Key is the western most with Seahorse Key to the south and Atsena Otie and Snake Key to the east (Figure 4-1). The islands form a moderately protected area around Cedar Key's major marina, presently located on Way Key. Shallow waters typify the area, ranging from several inches to 15 feet in dredged channels, with an average of 2–3 feet. Tidal range for the region is from .6 feet at mean low water to

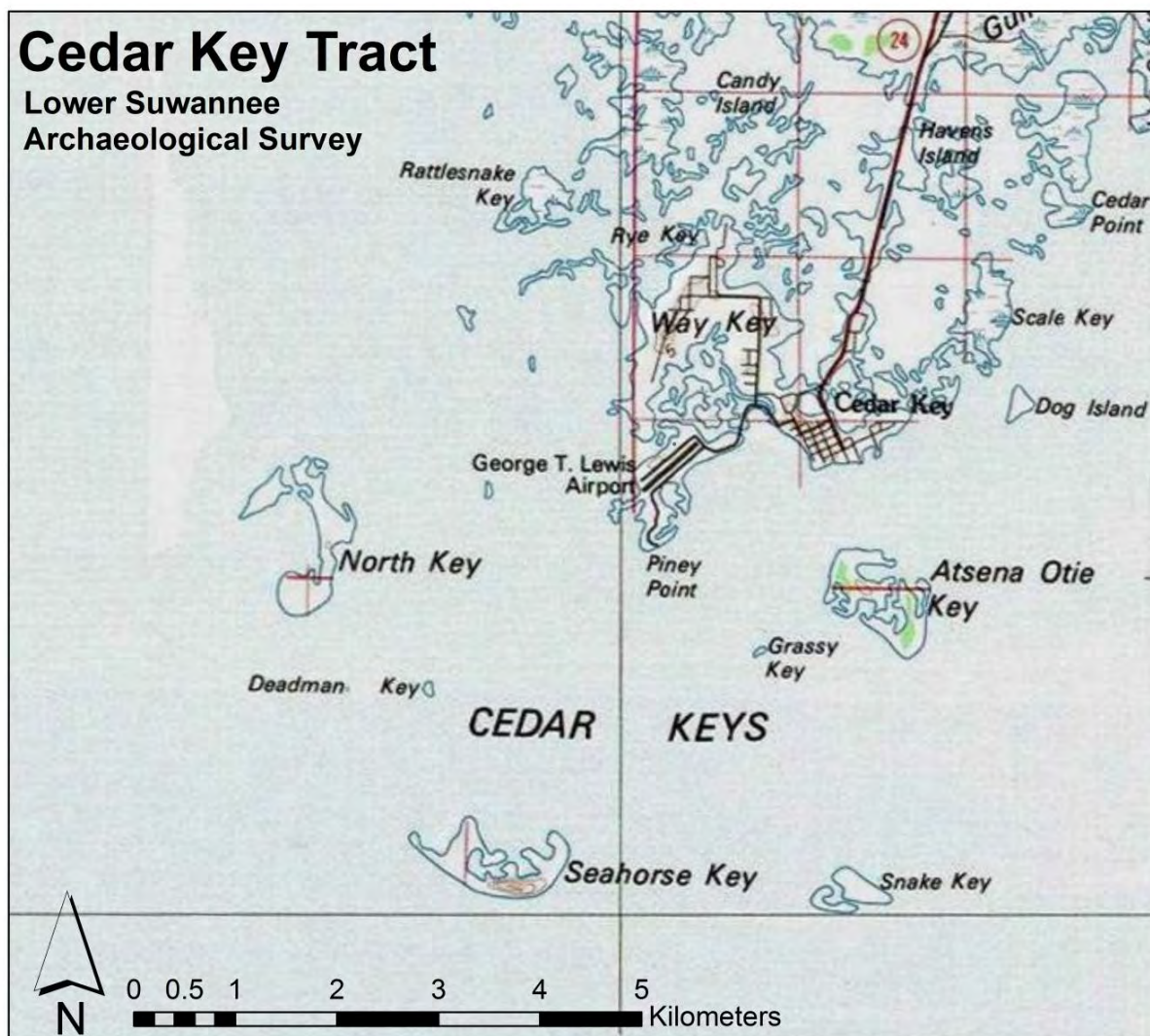


Figure 4-1. Section of USGS topographic quadrangle showing detail of the Cedar Key Tract of the Lower Suwannee Archaeological Survey Area.

3.8 feet at Mean Higher High Water (MHHW) (NOAA 2014). At low tide relict salt marsh, oyster bars, and sand and mud flats are often exposed around North Key, extending the island's subaerial land mass, at least for a short time. North Key's western shore is Gulf facing and therefore more vulnerable to storm surge events, high winds, and rough seas, while the eastern shore faces the calmer, intracoastal waters of the mainland and nearshore islands. Not surprisingly, preliminary survey of North Key has indicated that the majority of archaeological sites identified are located on the eastern side of the landform (Figure 4-2).



Figure 4-2. Aerial image of North Key (ESRI 2015) showing the locations of the sites referred to in text. Note that the blue site outlines are based on state archeological site file data and not actual mapping coordinates.

Unlike its more near shore counterparts, North Key occupies a higher saline environment, ranging from 30–35 ppt. The modern range for the Cedar Keys is 0–38 ppt (Nordlie and Haney 1998); such wide ranges are common for salt marsh habitats due to the influx of fresh and saltwater into the system. In the case of the Cedar Keys, the distal islands tend to maintain higher salinity levels as freshwater output from the Suwannee River to the north and freshwater creeks to the east mix quickly with the marine Gulf waters closer to shore. This is evident in the taxa of the island, most visibly represented by the presence of shoreline vegetation with high salinity tolerances (halophytes) such as *Spartina alterniflora* (smooth cord grass). Beyond the white beaches of North Key, high saline marine taxa are characteristic of the surrounding waters. For instance, locals will visit the salty, sand bottom waters surrounding North Key in search of bay scallops, which thrive in higher salinities (> 25 ppt).

PREVIOUS RESEARCH

First surveyed by John Goggin in 1956 (Florida Master Site Files, 8LV65 and 8LV66) and relocated by Alan Dorian in the late 1970s (Dorian 1980), archaeological deposits on North Key were grouped into two sites, 8LV65 and 8LV66, both of which were described as aboriginal shell middens with average to sparse amounts of material culture. This assessment was reached via surface survey of artifacts eroding out of the eastern shoreline; no subsurface testing was initiated on North Key until the mid-1980s. The site recorded as 8LV66 was split by Goggin into two loci, A and B or south and north. The southernmost portion, 8LV66a, is located along the northern section of the eastward facing cove in the center of North Key (Figure 4-2). It is described as stretching for 300 m along the cove beach and up to 35 m to the interior. It is also noted that this locus has a higher clam component than the more northern section of 8LV66. To the north, locus 8LV66b sits along the northeastern-most section of North Key. Dorian writes in his 1980 report that neither he nor Goggin could discern a firm division between the two loci as a thin sheet of shell deposit connects the two more well-defined portions of the site. This locus, 8LV66b, is described as stretching for 250 m along the northeastern shore of North Key and runs 10–15 m inland. Material culture recorded suggested to Dorian (1980) that the occupations likely dated to the Middle to Late Woodland Period. Dorian further notes that the site had recently been vandalized.

To the south of 8LV66 lies 8LV65 (A. B. Midden), located at the northern tip of the southern section of North Key. Goggin's 1956 survey indicates that aboriginal pottery sherds were identified as well as a human femur. He further notes that a historic homestead was located on North Key near this site. Dorian's subsequent survey over twenty years later did not mention any additional human remains, but did verify the presence of both historic and aboriginal material culture and offered a bit more detail about the site than what was reported by Goggin. Subsurface testing of A. B. Midden was initiated in the late 1980s by a University of Florida Ph.D. student named Nina Borremans as part of her doctoral dissertation research supervised by Dr. Michael Moseley. This was a part of a larger project to inventory and report upon the archaeology of the greater Cedar Key region (see Borremans and Moseley 1990). Unfortunately, Borremans left the program prior to completion of her research and before much of her work could be entered into the state site files. However, an archival search at the Florida Museum of Natural History prior to current excavations at North Key uncovered field notes, maps, and artifacts recovered in her investigations (Borremans n.d.). Although

Borremans did not test the site known as 8LV66 on the northern portion of North Key, she did test and map A. B. Midden (Figure 4-3).

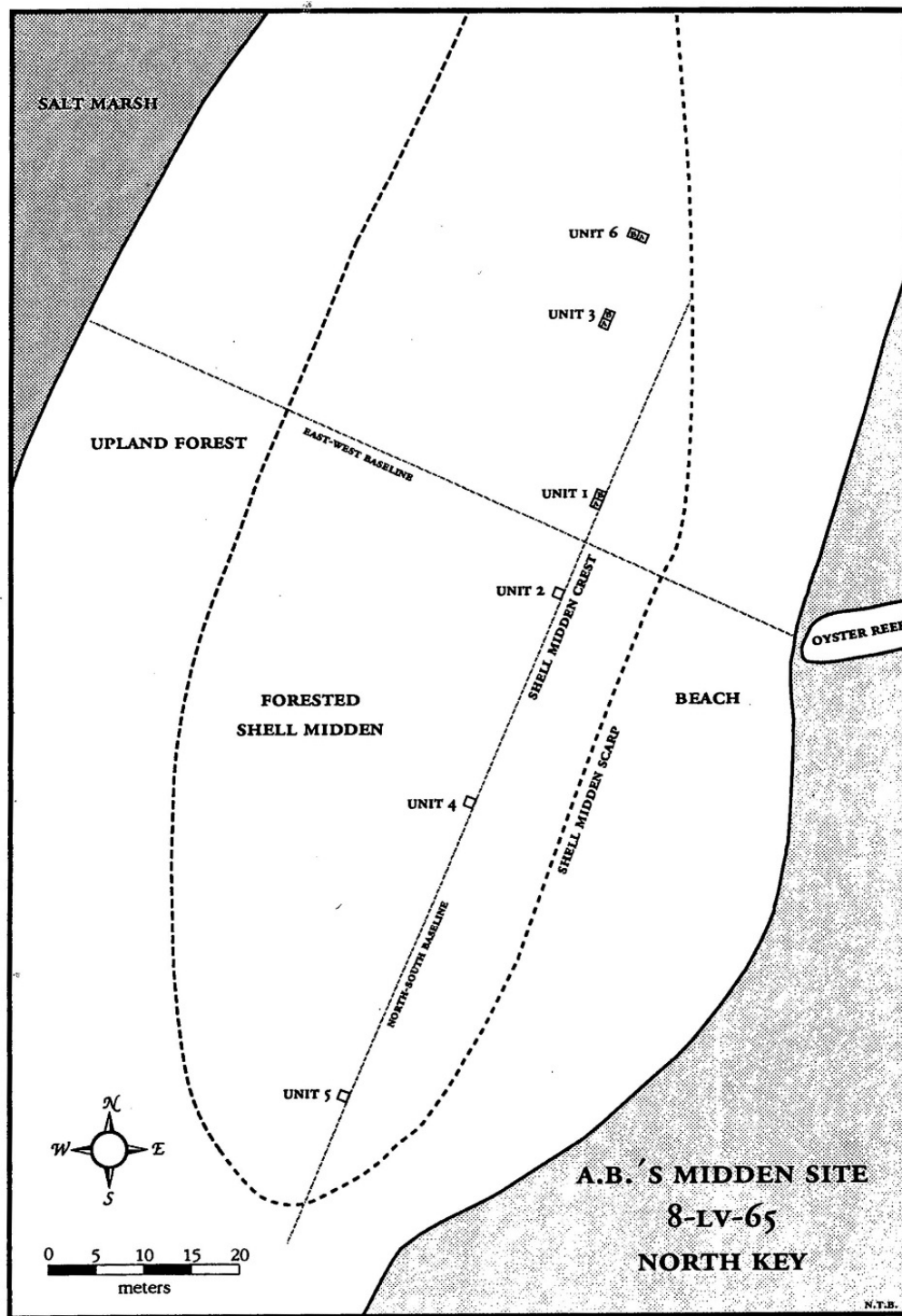


Figure 4-3. Digital reproduction of Borremans (n.d.) plan view map of North Key's A. B. Midden (8LV65). Auger 1 and Test Unit 1 (2014) were placed in between Test Unit 3 and 6 according to this map.

Borremans and field school students excavated six test units, recovering pottery, faunal remains, and charcoal for dating (Table 4-1). Four assays were run from samples from excavations of two of the units at A. B. Midden, indicating midden accumulation spanned approximately 1300–50 cal. B.C. However, it is unclear as what type of material was submitted for specific dates, as Borremans' unpublished radiocarbon table suggests perhaps that both marine shell and charcoal were submitted for dating (Borremans n.d.).

Table 4-1. Radiocarbon Age Determinations of Archaeological Specimens, Borremans Excavations, North Key, A. B. Midden (8LV65) (Borremans n.d.).¹

Lab No.	Sample No.	Provenience	C14 Age yrs BP $\pm \sigma$	C13/C12 0/00	C13 Adj. Age yrs BP $\pm \sigma$	Calibrated Age Range yrs BP	Calibrated Calendar Date Range
Beta-40455	65-9-8	U-1, L-5	2190 $\pm$ 60	**	2580 $\pm$ 60	2324–2161	375–212 BC
Beta-40456	65-67-84x	U-1, L-21	2120 $\pm$ 70	**	2510 $\pm$ 70	2290–2069	341–120 BC
Beta-40457	65-141-277	U-6, L-10	2060 $\pm$ 70	**	2450 $\pm$ 70	2173–2001	224–50 BC
Beta-40458	65-223-278	U-6, L-25	2950 $\pm$ 80	**	2950 $\pm$ 80	3318–3084	1369–1135 BC

¹ The following was taken directly from the footnotes on the original radiocarbon table produced by Borremans. “Note: C-13 adjusted ages for Beta-40455, Beta-40456, Beta-40457, and Beta-40458 were calculated by adding 390 years to the uncorrected C-14 age. The mean difference between C-14 age and C-13 adjusted age in the samples where stable carbon was determined was 390 years. Note: the calibrated age/date ranges indicate the time interval represented by the C-13 adjusted radiocarbon age after calibration to dendrochronological C-14 curve and correction for oceanic reservoir effect. The ranges were calculated using the Radiocarbon Calibration Program, file: Marine.14C (Stuvier and Pearson 1986:1022-1030). The datasets and intervals used for the marine calibration file come from Stuvier, Pearson, and Braziunas 1986:980-1021) *sic* (Borremans n.d.).” The first three samples were apparently run on hard clam shell (*Mercenaria campechiensis*), the fourth also perhaps hard shell clam, but if so, the C13/C12 correction was not applied to the “C13 Adj. Age” in the sixth column of the table above. It is possible that this fourth assay was obtained on charcoal (hence not corrected for C13/C12 fractionation, but this remains ambiguous.

Borremans age estimates on shell are problematic as there currently is no local reservoir correction for shell dating. Additionally, because it is unclear if all the samples consisted of marine shell (see footnote to Table 4-1 above), we cannot be sure if a C13/C12 fractionation correction should be applied to all samples. Due to the ambiguity of the dating results, it seemed prudent to further test the site and obtain new samples for dating. The importance of this clarification hinges on one particular date Borremans obtained. Beta-40458 returned an assay of 2950 $\pm$ 80 B.P. (Borremans n.d.), which dates to a period of archaeological invisibility or suspected abandonment of locations in the Southeast (e.g., Thomas and Sanger 2010). The following excerpt further details this point (Sassaman et al. 2014:4):

[T]he early third millennium was a period of great upheaval in much of the eastern United States, when many sites of the Atlantic and Gulf coast and large stretches of interior rivers were abandoned (Thomas and Sanger 2010). Given climatic trends for cooler temperatures during this time, some regression of the sea is not unexpected, and coastal communities may have kept pace with changes by relocating to shorefront sites that are now largely underwater, many no doubt destroyed. North Key, like other distal islands, may have provided one of the few locations for near-shore occupation during regression of the sea that has not been obliterated by subsequent transgressions. Marine shell recovered by Borremans from the base of the shell

midden at 8LV65 (~1.2 m BS) returned a conventional ^{14}C assay of 2950 ± 80 B.P. Although we have to guard against the uncritical acceptance of this age estimate (not knowing if it was adequately corrected for fractionation and the reservoir effect)—and thus are compelled to obtain new samples for dating—this is the first and only possible glimpse of the “transitional” period in the study area, making North Key an exceptionally critical site for documenting missing centuries of history on the coast.

All materials from the Borremans excavations are currently housed at the Florida Museum of Natural History. While a thorough investigation of these materials has not been completed, much was learned from a cursory review of the paper files (excavation forms, maps, etc.) and artifacts collections. Stratigraphic profiles and site maps were located for the A. B. Midden excavations. And while matrix descriptions were sometimes lacking on profile drawings, it appears that Borremans encountered well-stratified anthropogenic deposits at North Key. Specifically, Test Unit 6, excavated in November of 1988 had eleven strata—the first six of which were comprised of shell matrix. It is from this unit that the Terminal Archaic date was produced. Furthermore, Test Unit 6 contained a pottery sherd of the St. Johns Incised variety (Figure 4-4). This type has often been associated with what archaeologists have termed the “Transitional Period” (Milanich 1994:35). It was unclear from our brief review of the collections what level this sherd came from, and if it is associated with the Terminal Archaic date. It is our hope that a new investigation of A. B. midden will help to situate these findings and clarify this sites’ association with the Terminal Archaic Period.

METHODS AND RESULTS OF SUBSURFACE TESTING

Archaeological investigations of North Key by the LSA and students of the Lower Suwannee Archaeological Field School took place from July 21 to August 1, 2014. Survey and excavation was undertaken at two sites, A. B. Midden (8LV65) and 8LV66a.



Figure 4-4. Photograph of sherd from Borremans Test Unit 6, A. B. Midden (8LV65), with cross-hatched, incised carinated rim and spiculate paste, housed at the Florida Museum of Natural History.

A.B. Midden (8LV65)

A. B. Midden (8LV65) is located along the southeastern shore of the island of North Key. The midden deposit, as described by Borremans stretches for nearly 200 m in a southwest-northeast orientation. The highest point of the midden, or crest, lies along this same axis along its eastern edge (Figure 4-3). This was confirmed by members of the LSA during preliminary survey of the site in May of 2014. Team members also note that the site was eroding along its eastern shore face. There is no way to know exactly how much of the site has been impacted until it has been thoroughly mapped. The full extent of the midden was not confirmed during reconnaissance due to limited time and dense vegetation. Inspection of aerial photography from the last several decades has shown only minimal erosion of the island as a whole, faring better than some of its more northern counterparts.

Our investigation of A. B. Midden began with a small survey crew inspecting the surface for evidence of the test unit excavated by Borremans. Five of the six test units were relocated with high confidence using tape measures to compare the unit spacing against Borremans' map. Before a 1 x 2-m unit was cited in the vicinity of Borremans' Units 3 and 6, a single bucket auger was sunk to verify the integrity and depth of archaeological deposits.

Auger 1. A single 4-inch bucket auger was placed in the area in between Borremans Test Units 3 and 6 (approximately 4 m southeast of Test Unit 6) on July 18, 2014. From the ground surface to 80 cmbs an organically enriched shell midden was encountered. The stratigraphy of the midden and presence of artifacts indicated that the location of the auger was not formerly disturbed nor was it an area of previously excavated matrix (backdirt). At 80 cmbs a layer of brown sand was encountered followed by darker sand with shell at 90 cmbs. The final 30 cm of the auger consisted of yellow brown sand mixed with matrix from higher in the auger column reaching a final depth of 122 cmbs.

Auger 1 produced pottery and vertebrate and invertebrate fauna set within a dark, highly organic sand and shell midden matrix. Pottery types included those of sand and limestone tempering. Sand-tempered sherds were of check-stamped and plain types while the limestone-tempered pottery was plain, non-diagnostic. No lithic material was recovered. While some Lightning Whelk columellae were collected, their modification for tool manufacture and use was indeterminate. Since artifacts and faunal remains were recovered and stratigraphic breaks were noticed, it was determined that intact, undisturbed midden had been encountered in the test auger. These findings gave us confidence that we had not intersected one of the earlier test units or back fill piles from the Borremans excavations. With these results a decision was made to place a new 1 x 2-m test unit in the immediate vicinity in the hopes of reproducing similar dates and material culture recovered from Borremans' Test Unit 6.



Figure 4-5. Locator map showing the site file outline of A. B. Midden (8LV65). Green dot indicates the southwest corner (datum) of Test Unit 1. Note that the exposed tree tops align with what Borremans had mapped in as the “shell midden crest” along the eastern edge of the midden (Borremans n.d.).

Test Unit 1. Located in the northern section of the midden, Test Unit 1 (TU1) was placed between what survey crews have determined to be Borremans Test Unit 3 and Test Unit 6. Auger 1 was placed just south of Borremans Test Unit 6, and TU1 is located 3 m northeast of Auger 1, within meters of her Test Unit 3. Time and equipment limitations did not allow for total station mapping of the site at the time of excavation; it is our intention to return to the site to complete documentation at a future date. Excavation of TU1 began July 22, 2014 and was completed August 4, 2014 (Figure 4-6).



Figure 4-6. Left: Excavation of the opening level of TU1. Right: Field school students sorting through material culture from A.B. Midden TU 1. Borremans Test Unit 6 is behind the students between the oak trees in the background.

at A. B. Midden was excavated in arbitrary 10-cm levels. All excavated materials were screened through 1/4-inch hardware cloth, and artifacts, gastropods, and vertebrate faunal remains were bagged by level for laboratory analysis. Excavation forms were completed after each level, recording observations of artifactual content and matrix composition. Upon completion of excavation, all four profiles were cleaned, photographed, and drawn to scale and bulk samples were collected from the side walls within stratigraphic units. Descriptions of strata including Munsell color, texture, and composition were recorded on associated profile drawings. A small portion of each bulk sample was screened to collect the sediment matrix for future soil analysis, with the remainder of the samples processed using a Dausman Flote-Tech flotation machine. The light fraction of each sample was preserved for future analysis. The heavy fraction was sorted and cataloged, with the exception of materials that were smaller than 1/8-inch, which were curated for future analysis.

We encountered in TU1 the well stratified, deep midden deposit that Borremans recorded in the 1980s (Figure 4-7). Figures 4-8 and 4-9 feature the photographs and line drawn profiles of TU1, while Table 4-2 contains the descriptions of the strata. Artifact inventories follow in Table 4-3.

Nine individual stratigraphic units are evident in the 192-cm-deep profile of TU1. The upper layers (~55 cmbs) of the unit, Strata I–III, consist of crushed and whole oyster shell with mixed amounts of scallop and hard clam (*Mercenaria sp.*) set within organically enriched sands. Intersecting these layers are two intrusive units, Strata XII and XIII, which consist of less sand and organic material than the rest of the layers surrounding them. These stratigraphic units (Strata XII and XIII) are likely pits or redeposited shell representing a stratigraphic break from Strata I, II, and III (Figures 4-8 and 4-9). Pottery from the uppermost levels of excavation consists of predominately limestone-tempered wares, followed by sand- and spicule-tempered sherds. It is noteworthy that these upper stratigraphic levels had the highest amount of pottery for the unit. No modified shell or lithics were recovered from these layers while moderate amounts of vertebrate fauna, mostly fish, were collected. Charcoal from Stratum III was submitted for an AMS assay and returned an age estimate of 1690 ± 30 B.P. (two-sigma



Figure 4-7. Excavation of TU 1 proceeded through 110 cm of well stratified shell deposit, and continued through shell-free archaeostrata to a final depth of 192 cmbd. J. Jenkins (pictured) excavating below the shell heavy deposit of TU1.

calibrated range of A.D. 265–275). This date range coincides with what Sassaman and Wallis (2015) refer to as a pulse in sea-level rise and the onset of construction of mounds at regional sites such as Crystal River and Garden Patch.

Stratum IV is the first continuous stratum throughout the test unit. Part of the upper portion of Stratum IV may have been removed for the deposition of Stratum XII (redeposited, pitfill) as can be surmised from the profile drawings of the west and north walls (Figure 4-8). Comprised of whole, clean shell including oyster, scallop, mercenaria, and various gastropods, Stratum IV is much lighter in color than overlying strata. The shell in Stratum IV is light yellow to white, unlike shells in previous strata that were coated in dark organic matter or fine, dark gray sands. The onset of this stratum coincided with a decrease in fauna and pottery and the first appearance of modified shell (a fragment of a possible dipper vessel). The base of Stratum IV comes with a clear, sharp transition to the strata below it. Stratum V, which consists of once again whole and crushed shell, is set within a matrix of dark, organically enriched sands. This stratigraphic unit represents the basal level of the major shell midden deposit, with a max depth of 95 cmbd. A sample of charcoal from Bulk Sample 24 collected from this stratum produced an AMS assay of 1940 ± 30 B.P. (two-sigma calibrated range of A.D. 5–125).

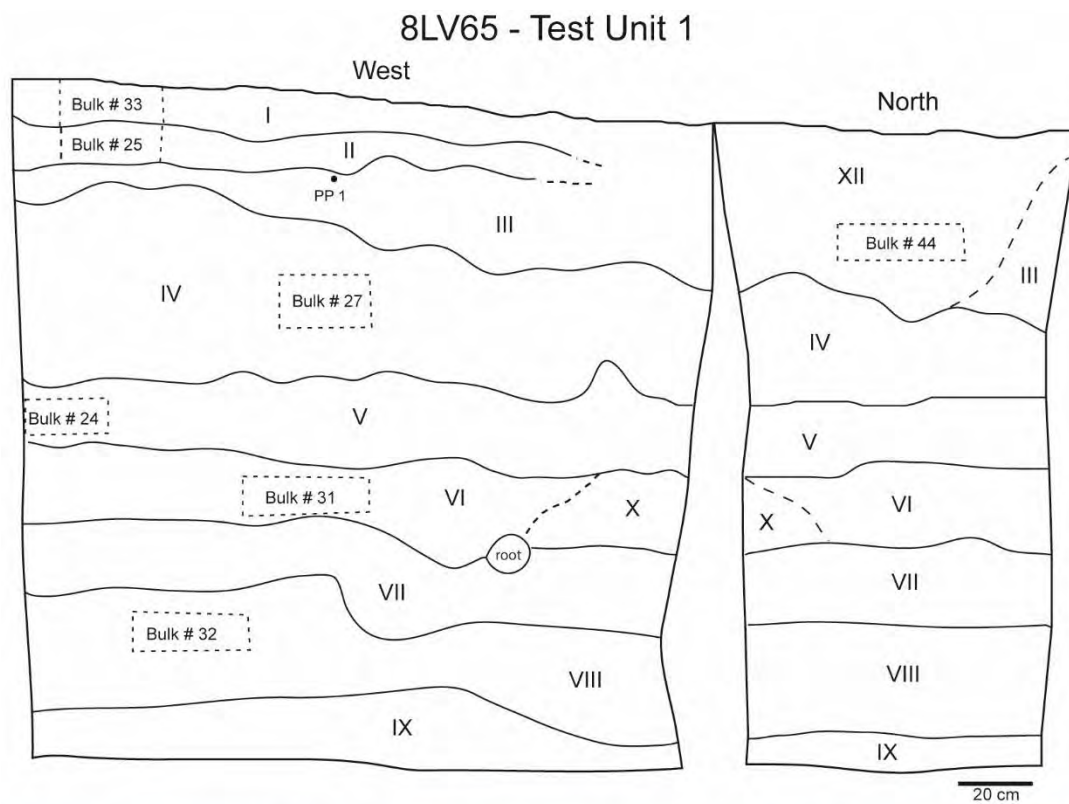


Figure 4-8. Stratigraphic drawings and photographs of the west and north profiles of Test Unit 1, A. B. Midden (8LV65).

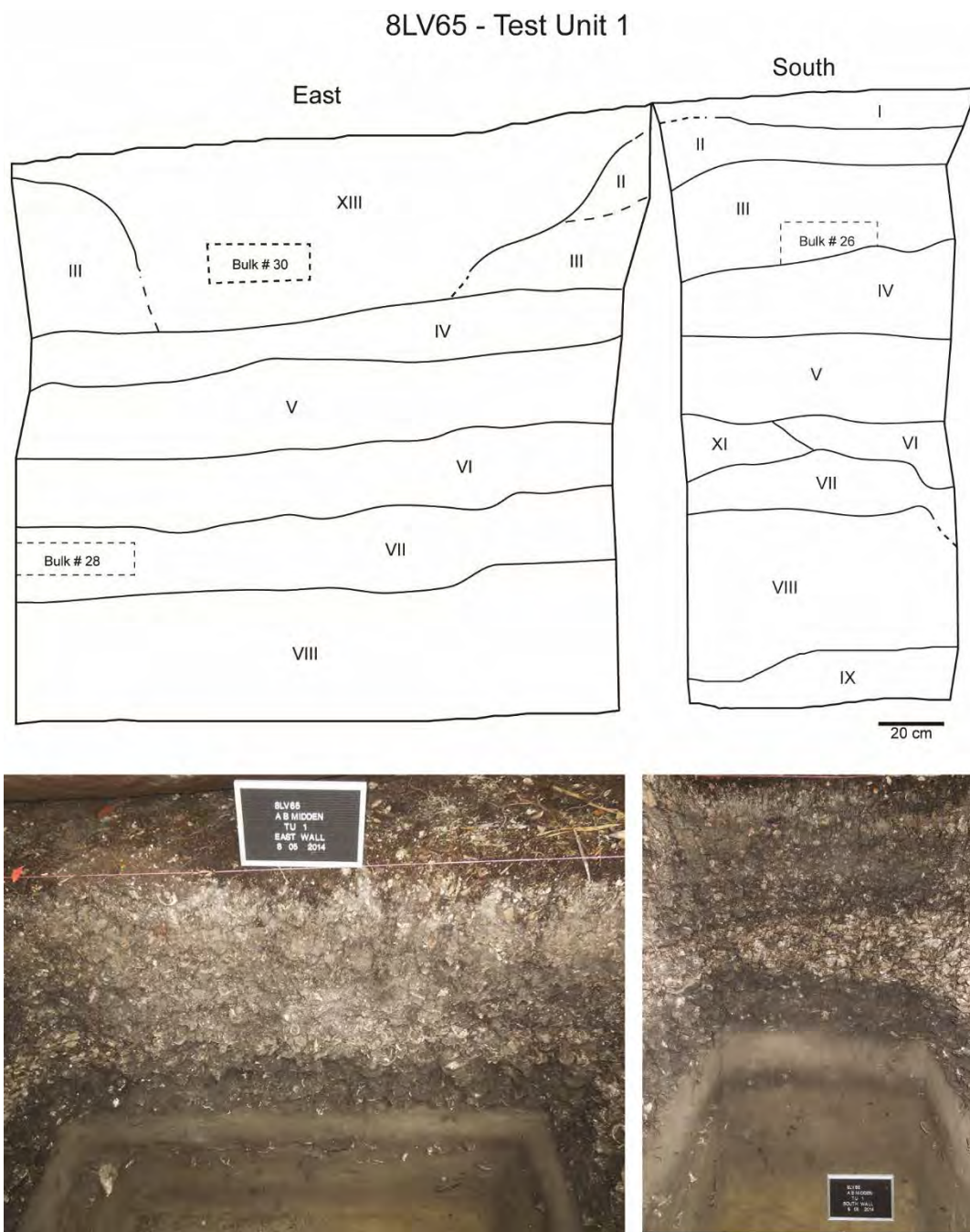


Figure 4-9 Stratigraphic drawings and photographs of the east and south profiles of Test Unit 1, A. B. Midden (8LV65).

Table 4-2. Stratigraphic Units of Test Unit 1, 8LV65.

Stratum	Max. Depth (cm BD)	Munsell Color	Description
I	15	10YR2/1	Dark brown organically enriched fine sand with high frequency crushed and whole oyster shell, trace bivalves and gastropods (Bulk 33)
II	35	10YR6/1	Gray fine sand with dense oyster, low density bivalves and gastropods (Bulk 25)
III	55	10YR3/1	Very dark gray fine sand with dense oyster and trace bivalves and gastropods (Bulk 26: 1690 ± 30 B.P.)
IV	85	10YR3/1	Very dark gray fine sand with high density whole, clean shell, low density bivalves and gastropods (Bulk 27)
V	95	10YR2/1	Dark brown fine sand with dense whole and crushed oyster shell, low density bivalves and gastropods (Bulk 24: 1940 ± 30 B.P.)
VI	110	10YR4/2	Dark grayish brown medium sand with sparse shell (Bulk 31)
VII	138	10YR4/1	Dark gray fine sand with sparse whole shell, mostly gastropods (Bulk 28: 2400 ± 30 B.P.)
VIII	170	10YR5/2	Grayish brown compact fine sand with sparse to no shell (Bulk 32)
IX	192	10YR6/3	Pale brown medium sand with no shell
X	118	10YR7/1	Light gray fine sand with no shell
XI	127	10YR5/2	Grayish brown fine sand with no shell
XII	55	10YR4/1, 3/1	Dark to very dark gray fine sand with dense crushed and whole oyster, moderate gastropod and bivalve (Bulk 29)
XIII	60	10YR5/1	Gray fine sand with dense crushed and whole oyster, moderate gastropod and bivalve (Bulk 30)

Four stratigraphic units are represented beneath the major shell deposit at A. B. Midden. Stratum VI consists of dark gray brown sand with very sparse shell and little material culture or faunal remains. This stratum overlies what appears to be a buried soil and shell horizon that may have been a living surface, indicated here as Stratum VII (Figure 4-9). This layer consists of dark gray fine sand with low density whole shell—mostly gastropods with

occasional oyster. Pottery for this stratigraphic unit includes mostly spicule-tempered sherds, one with cross-incising reminiscent of the sherd found in Borremans' excavation (Figure 4-3). The pottery and dark sand coincides with a slight increase in the amount of fauna from the previous level; however faunal amounts for the rest of the unit never exceed 25 g outside of the shell midden context (Table 4-3). Charcoal from this stratum (Bulk Sample 28) returned an age estimate of 2400 ± 30 B.P. (two-sigma calibrated range of 730–690 B.C.). This date falls just after the period of apparent abandonment referred earlier in this chapter (ca. 3200–2500 B.P.).

The final two stratigraphic units at the base of TU1, Strata VIII and IX, contained light colored sands with decreasing amounts of shell and organic matter. The only lithic material recovered in the excavation of TU1 was recovered in Stratum VIII along with minor amounts of fauna; no pottery or modified shell was recovered. The basal strata, Stratum IX consisted of pale brown sands with no material culture. It is possible that Stratum VIII might represent a Late Archaic deposit as it is positioned beneath the component dating to 730–690 B.C. (Stratum VII) or it might lie within the supposed period of abandonment. Charcoal was recovered from this stratum (0.2 g) and thus is available for dating.

Table 4-3. Inventory of Materials Recovered by Level from Test Unit 1, A. B. Midden (8LV65).

Level	Pottery		Lithic		Misc. Rock		Mod. Shell		Unmod. Gastropod		Vert. Fauna
	ct	wt(g)	ct	wt(g)	ct	wt(g)	ct	wt(g)	ct	wt(g)	wt(g)
A	33	97.4							82	1,804.7	101.3
B	46	197.5			2	15.7			115	2,189.4	217.0
C	66	253.8							69	1,154.8	214.4
D	27	93.0			1	24.4			48	904.8	156.0
E	12	50.8							31	570.3	82.8
F	5	23.8					1	81.0	34	1,081.4	146.1
G									26	841.1	77.4
H	1	2.1			1	71.2	3	252.0	56	2,213.3	171.6
I	9	30.7					4	280.4	42	1,917.4	147.2
J	2	10.4							18	927.3	11.5
K									1	65.4	3.8
L	5	54.9			4	1.1			17	348.3	17.0
M	6	27.6					2	101.7	26	886.8	16.1
N	4	36.4							61	1,823.7	19.1
O									3	340.0	22.8
P			7	5.3					1	0.5	17.3
Q			4	39.3							8.0
R											2.2
Subtotal	216	878.4	11	44.6	8	112.4	10	715.1	630	17,069.2	1,431.6
Wall Clean	4	17.2					4	236.3	58	1,566.1	108.1
Total	220	895.6	11	44.6	8	112.4	14	951.4	688	18,635.3	1,539.7

No features were identified in the excavation of TU1 except for Strata XII and XIII. Unfortunately they were not detected until excavation was complete and the walls were photographed and drawn. Note that the edges of each of these strata are difficult to delineate, even from the photographs shown in Figures 4-8 and 4-9.

Material Culture

This section provides a review of the material culture collected at A. B. Midden (8LV65) via excavations at TU1. The review is divided by material, and includes subsections on pottery, stone, and then shell. Bulk samples have yet to be fully analyzed and thus will not be included in the present discussion.

Pottery Assemblage. An assemblage of 216 pottery sherds was recovered from TU1 at A. B. Midden (Table 4-4). Nearly half of these were less than ½-inch in maximum dimension, described in Table 4-4 as crumb sherds. As cultural-historical pottery types at times are more problematic than insightful, pottery is classified and discussed according to temper type, surface treatment, and decoration. Within the greater study area, fiber, sand, spicule, and limestone are often used to temper pottery, with sand and limestone being the most prevalent temper types. A. B. Midden is no different as limestone (61.6%) and sand (31.9%) make up the majority of temper types in sherds collected (by number percentage). Spicule-tempered pottery forms a minority of the pottery assemblage (6.9%).

Of the limestone-tempered sherds recovered ($n = 133$) 55 are crumb sherds and 69 are Eroded/UID, making further analysis difficult. Sherds that were classified as Eroded/UID were too worn (chemical, abraded) to determine surface treatment. Additionally, the limestone temper of eroded sherds is often dissolved, leaving only holes where the temper would have been. The majority of those falling in this category were found in the upper six levels of excavation, comprising Strata I–IV, XII, and XIII. The balance of limestone tempered sherds ($n = 9$) were classified as plain, six of which are body sherds and the remaining three are rim sherds. Six of the nine plain sherds were recovered below the major shell deposit.

The second most prevalent temper type, sand tempered, displays a bit more diversity in surface treatment than those of the limestone-tempered variety. Of those recovered ($n = 69$), 35 are crumb sherds and 21 are Eroded/UID and thus unable to be categorized beyond temper. Thirteen sherds were able to be classified for surface treatment including four plain, five check-stamped, three complicated stamped, and one incised sherd (Table 4-4). The check-stamped sherds recovered from Level I are of the Deptford Series while the complicated-stamped sherds are of the Early Swift Creek Series (Figure 4-10). It is noteworthy that sand-tempered sherds are represented in only the major shell deposit layers, unlike the limestone- and spicule-tempered sherds, which are represented in subsequent levels.

Table 4-4. Absolute Frequency of Pottery Sherds Recovered in Test Excavations of A. B. Midden (8LV65) TU1, by Unit Level, Temper Type, and Surface Treatment.

Level	-----Limestone-----				-----Sand-----				-----Spicule-----				Total			
	Plain	Eroded	Crumb	Subtotal	Plain	Check	Comp	Incised	Eroded	Crumb	Subtotal	Plain		Stmp.	Inc.	Crumb
A	3	6	14	23	1	1			5	3	10					33
B		14	6	20		1	1		5	15	22	2			2	46
C		24	18	42			1		8	11	20				4	66
D		9	9	18				1	3	4	8				1	27
E		10	2	12												12
F		3	1	4	1						1					5
G																0
H					1						1					1
I		2	1	3	1	3				1	5	1			1	9
J							1			1	2					2
K																0
L	1			1								2		1	1	4
M	1	1	4	6												5
N	4			4												6
O																4
P																0
Q																0
R																0
Subtotal	9	69	55	133	4	5	3	1	21	35	69	5		1	8	216
Wall	1	2											1			4
Total	10	71	55	133	4	5	3	1	21	35	69	5	1	1	8	220



Figure 4-10. Examples of pottery sherds recovered from TU1 at A. B. Midden (8LV65): (a) spicule-tempered plain, Level B, (b) limestone-tempered plain, Level L, (c) limestone-tempered eroded, Level D, (d) sand-tempered complicated stamped, Early Swift Creek, Level J and Level B, (e) spicule-tempered check stamped, A-B Wall Clean, (f) spicule-tempered incised, St. John's Incised, Level L, (g) limestone-tempered, UID, Level M, (h) sand-tempered check stamped, Deptford Check Stamped, Level I.

Finally, spicule-tempered sherds ($n = 15$) are mostly represented by crumb sherds again ($n = 8$), followed by five plain sherds, one incised sherd, and one stamped rim sherd (Figure 4-10e). The stamped rim sherd was recovered in a wall clean and appears to be of the Weeden Island Series (Wakulla Check Stamped) (Figure 4-10e). The majority of the spicule-tempered sherds are found in the upper levels of the unit (Levels B–D) but then two additional (but not sequential) stratigraphic units contain spicule-tempered sherds as well—the basal portion of the shell deposit (Stratum V) and the buried soil midden (Stratum VII), both of which have been radiocarbon dated (see above discussion on stratigraphic descriptions). The sherd from Stratum V is a plain, nondiagnostic body sherd. The spicule-tempered sherd from the buried midden (Stratum VII) is the cross incised sherd from earlier discussion, and the only one of its kind from the present excavations (Figure 4-10f). Sherds like this have been found at other sites in Florida and are often called St. John's Incised (Austin and Endonino 2011).

A large amount of the pottery recovered from the site was either heavily eroded or very small (crumb sherds), thus the state of the majority of the pottery precluded much secondary analysis. Thus, in the effort to not overlook the nondiagnostic pottery recovered in TU1 both diagnostic and nondiagnostic sherds were summed by weight according to temper (Figure 4-11). Clearly from the chart certain tempers were favored over others at particular times and

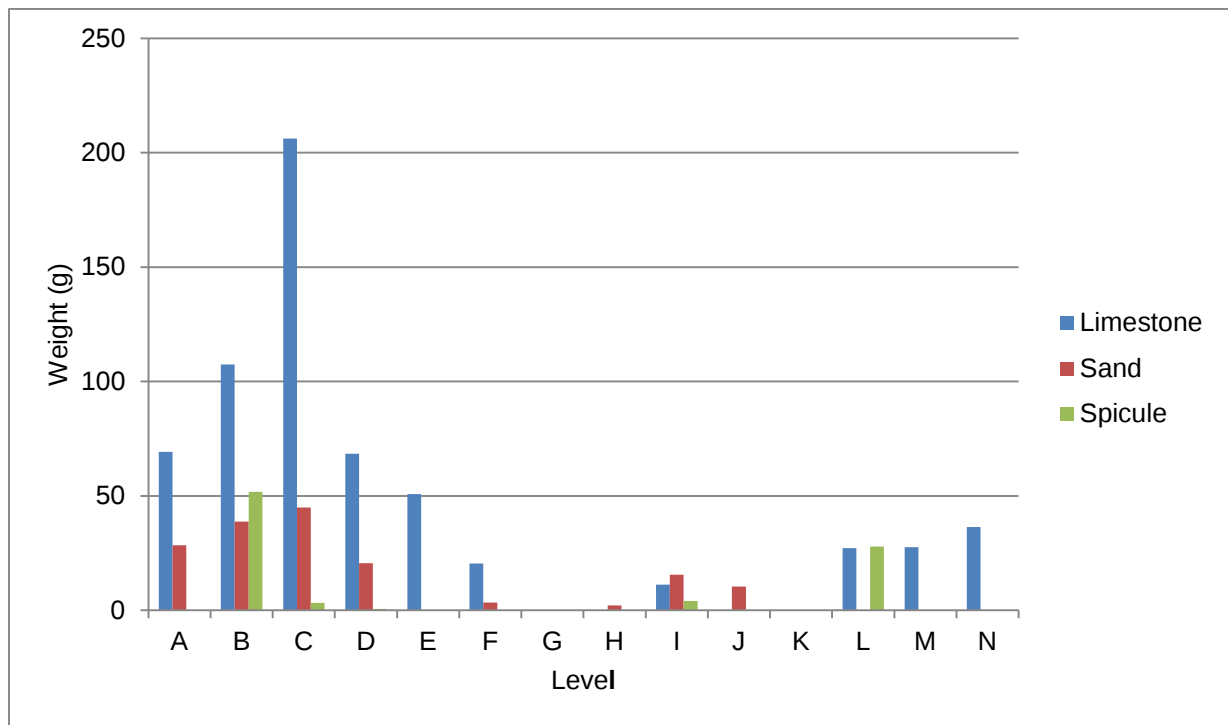


Figure 4-11. Frequency distribution by weight (g) of sherds by temper (limestone, sand, and spicule) and level, Test Unit 1, A. B. Midden (8LV65).

more pottery was recovered in the upper strata. Limestone was by far the dominant temper choice deposited in the upper strata, with a low frequency of sand-tempered pottery and only traces amounts of spicule-tempered. After this spicule-tempered wares disappear while sand- and limestone-tempered pottery are more equally (though infrequently) deposited. Lastly, note the high incidence of limestone- and spicule-tempered wares and absence of sand-tempered wares in the lower Levels (K-N). Also, it is only these levels where spicule-tempered wares appear to be evenly deposited with limestone-tempered pottery.

Lithic Assemblage. The following section briefly reviews the lithics and miscellaneous rock recovered in the excavation of TU1 (8LV65). The upper levels of TU1 contained trace amounts of miscellaneous rock (Table 4-5). These are seemingly unmodified rocks and are represented by a narrow range of material types. By far fragments of coral are the highest in number. Two of the eight unmodified rocks are not coral, one of sedimentary material and the other igneous. No flaked stone artifacts were recovered from the upper levels of TU1.

The basal levels of TU1, however, contain no unmodified rock but instead contain the test units' only flaked stone objects (Figure 4-12). Eleven flakes were collected from Stratum VIII (Levels P and Q), the stratigraphic unit beneath the buried soil midden. Although no assays were obtained for this deposit it is fair to assume that it is older than the deposit above it, which returned an age estimate of cal. 730–690 B.C.

Table 4-5. Absolute Frequency and Weight of Flaked Stone and Miscellaneous Rock Recovered in Excavation of Test Unit 1, A. B. Midden (8LV65), by Level.

Level	Form	Count	Weight (g)
B	Misc. Rock ¹	2	15.7
D	Misc. Rock ²	1	24.4
H	Misc. Rock ²	1	71.2
L	Misc. Rock ²	4	1.1
P	Chert Flake	7	5.3
Q	Chert Flake	4	39.3
Total		19	157.0

¹ Igneous ($n = 1$), Sedimentary ($n = 1$)

² Coral



Figure 4-12. Flaked Stone Recovered in Excavation of Test Unit 1, A. B. Midden (8LV65): (a, b) chert flakes, Level P, (c) chert flakes, Level Q.

Shell Assemblage. Fourteen modified shell objects were recovered from the excavation of TU1 at A. B. Midden (Table 4-6). Much like the lithics recovered from TU1, the modified shell objects are limited in material type and morphological form. The classification of modified shell objects follows the functional typology Marquardt (1992) formulated for his investigations in the Caloosahatchee area of South Florida. While typologies based on function are inherently problematic, as often evidence for tool use is lacking and any tool may have been used in multiple ways, this typology remains the most useful and complete for modified shell objects. This section will also discuss the quantification of unmodified gastropods recovered from the excavation of TU1. Beginning in 2013 the LSAS began collecting unmodified gastropods in the effort to better understand selection of specimens for tool manufacture and use.

Table 4-6. Absolute Frequency and Weight of Modified Shell Objects Recovered in Test Unit 1, A. B. Midden (8LV65), by Level.

Level	Species	Form	Count	Weight (g)
F	Lightning whelk	Dipper Vessel	1	81.0
H	Lightning whelk	Dipper Vessel	3	252.0
I	Lightning whelk	Dipper Vessel/Spoon/Scoop ¹	4	280.4
M	Lightning whelk	Hammer	2	101.7
Wall Clean	Lightning whelk	Dipper Vessel	2	208.4
Wall Clean	Hard clam	Net Gauge	1	27.9
Total			14	951.4

¹ Includes two dipper vessels and two spoon/scoops.



Figure 4-13. Examples of Modified Shell Recovered in Excavation of Test Unit 1, A. B. Midden (8LV65): (a, b) Dipper vessels, Level H and Wall Clean, (c) Net gauge, Wall Clean, (d) Hammers, Level M, (e) Spoon/scoops, Level I.

Four forms are represented in the collection from TU1: dipper vessel, spoon/scoop, hammer, and net gauge (Figure 4-13). The majority of identified forms are dipper vessels ($n = 8$), all of which were made from Lightning whelk (*Busycon contrarium*). Figure 4-13 shows a selection of the modified shells collected from TU1, including examples of the dipper vessels recovered. Dipper vessels are sometimes reported from burial sites (Marquardt 1992:215), but the utility of the form extends beyond that reserved for ritual purposes. Vessels such as dippers or related forms such as cups and spoon/scoops are made by removing the columella of the gastropod, leaving the concave outer whorl, which is suitable for holding or scooping liquid (Marquardt 1992). All dipper vessels were recovered from the shell bearing strata, the highest occurrence (seven of eight) coming from the basal shell stratum, Stratum V (A.D. 5-125). Two spoon/scoops have been identified from excavations as well (Figure 4-13: e). This form is much like that of the dipper vessel but typically smaller in size with more of the outer whorl being removed in the reduction sequence (Marquardt 1992:216). These were also found in the basal stratum (V) of the shell deposit.

The last two types of modified shell objects identified fall under the tool category: hammers and net gauges. Shell hammers are common in excavations along the Florida Gulf Coast and are typically made from Florida Crown conch (*Melongena corona*) or Lightning whelk, such as the present specimens. No Crown conch hammers (Type G Hammers, Marquardt 1992: 201) were recovered in this excavation. Both recovered Lightning whelk hammers display basal attrition, the most common identifier of a shell hammer, but do not have evidence of hafting (Figure 4-13d). This might be due to the fact that the outer whorl of the specimen is damaged and may preclude the identification of hafting. Hammers need not necessarily be hafted to be effective; still, incidental breakage and deterioration of the shell might possibly explain the form of the shells as they are not well preserved. Both specimens also exhibit basal breakage, making absolute categorization difficult. The breakage could have been the result of spalling, whereby chips of the shell are driven off during use, or incidental breakage from deposition and taphonomic processes. Both hammers were recovered from Level M. Many other Lightning whelk specimens were recovered from this excavation that did not display basal attrition, hafting holes, or other signs of intentional modification (Table 4-6).

The final type of shell tool recovered is classified as a net mesh gauge (Marquardt 1992:214). This type has sometimes been called “cut shell sections” or “polished rectangles” in the literature, preferring form over function, until Walker (1989) began to identify them as net mesh gauges. This type of tool is used to keep the mesh size consistent when making fishing nets. Net gauges will match the length of one bar of the net, or the space between knots (Walker 2000). Mesh stretch is the length of one bar doubled as the net is stretched out. Large nets like seine nets will often have a larger mesh stretch than smaller nets such as dip nets. The width of the specimen recovered from 8LV65 measures 32.2 mm (Figure 4-13c). This translates to roughly 1¼ inches, the precise size of net bar cordage recovered by Frank Hamilton Cushing at wet sites in Key Marco and net mesh gauges found at other South Florida sites (Walker 1992). Unfortunately, this specimen was found during a wall cleaning episode and thus its provenience can only be narrowed to the vicinity of Strata IV–V, the lower levels of the midden deposit.

Table 4-7. Absolute Frequency and Weight of Unmodified Gastropods Recovered in Test Unit 1 of A. B. Midden (8LV65), by Unit Level and Species.

Level	Crown conch		Lightning whelk		Pear whelk		Tulip shell		Modified ct
	ct	wt(g)	ct	wt(g)	ct	wt(g)	ct	wt(g)	
A	15	371.3	11	498.1	28	335.3	28	600.0	
B	34	608.9	14	651.3	35	292.0	32	637.2	
C	13	210.2	5	412.4	26	268.8	25	263.4	
D	13	288.7	8	299.2	13	132.9	14	184.0	
E	10	179.7	4	216.7	5	62.5	12	111.4	
F	10	362.8	5	328.6	8	161.7	11	228.3	1
G	6	190.6	3	190.2	10	141.8	7	318.5	3
H	12	368.7	13	947.0	23	542.2	8	355.4	4
I	6	222.3	12	1,037.3	12	164.2	12	493.6	
J	6	217.5	5	458.2	3	65.2	4	186.4	
K			1	65.4					
L			4	217.3			13	131.0	
M			10	407.1	1	22.3	15	457.4	2
N	1	7.0	30	1,203.6	2	28.0	28	585.1	
O			2	304.8			1	35.2	
P					1	0.5			
Total	126	3,027.7	127	7,237.2	167	2,217.4	210	4,586.9	10

In a systematic effort to establish baseline data on shell that has potential for technological modification, all modified and unmodified gastropods were collected from excavations at TU1. This has been standard operating procedure for LSAS investigations along the coast since the summer of 2013. Table 4-7 inventories the results of this effort, quantifying the number of unmodified and partially broken shells as compared to the numbers of intentionally modified shells in TU1. The counts in the table do not include fragments of gastropods but only whole and partially whole identifiable specimens to better reflect MNI of a particular taxa per unit level. The weights in this table do not include the weight of fragments either, for that information please refer to the catalog appendix (Appendix A) at the end of this report.

Table 4-7 and associated Figure 4-14 show the relative frequencies of unmodified gastropods by unit level. Firstly, the frequency of gastropods is highest in the shell midden component of TU1 as is the diversity of gastropods. Crown conch, Lightning whelk, and Pear whelk are represented more equitably in the upper strata of TU1, while diversity drops precipitously in levels beneath the primary shell deposit (Levels K-P). This may reflect environmental changes, or changes in targeted ecological niches. The low diversity beneath the deposit correlates with older radiocarbon assays (estimate of cal. 730–690 B.C.) and a change in the technological form of modified shell. Within the primary shell deposit dippers and spoons are the prevalent forms, whereas beneath the shell midden context only hammers are represented. Also, the frequency of modified shell positively correlates with the frequency of unmodified shells of the same taxa, Lightning whelk. The spike in Lightning whelk seen in Figure 4-14, in Levels H and I (Stratum V), correlates with the spike in modified shell objects (Table 4-7). The shell hammers from the submidden context correlates with a spike in the

frequency of unmodified Lightning whelk (Stratum VII). It is interesting to note that the level with the highest frequency of unmodified Lightning whelk, Level N, contains no modified specimens. Furthermore, while Crown conch are clearly available for modification, none recovered were modified into Type G hammers or any other tool form. Pear whelk and Tulip shell also were not modified, perhaps due to their fragile outer whorl and less robust columella.

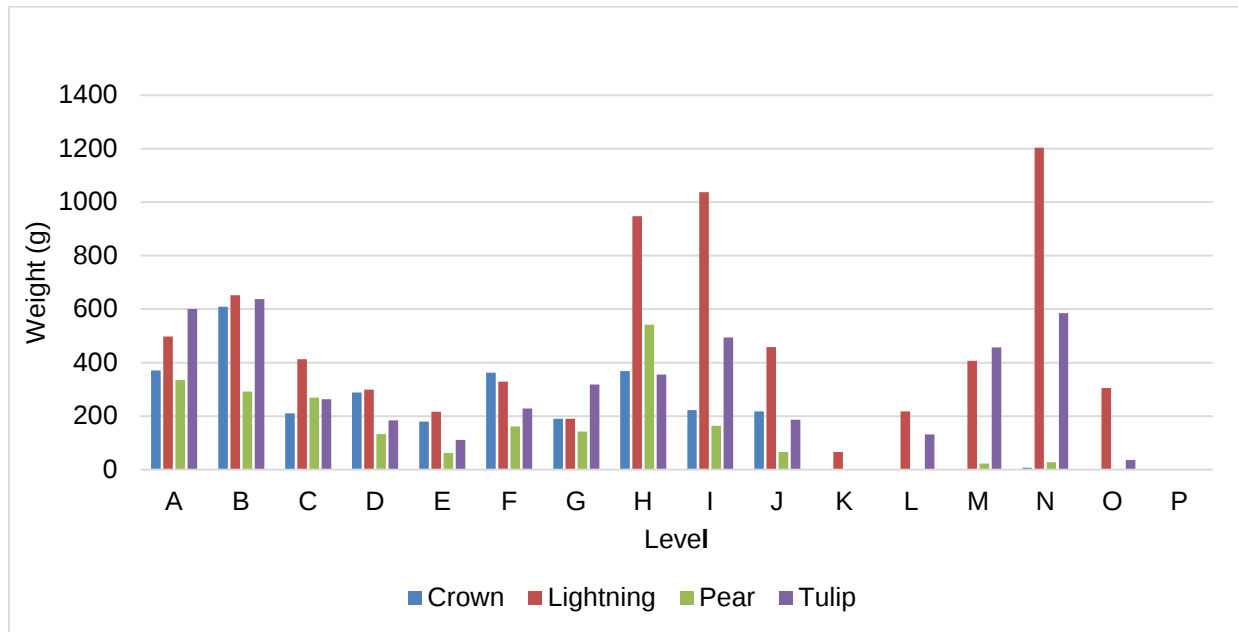


Figure 4-14. Frequency distribution by weight (g) of unmodified gastropods by taxa (crown, lightning, pear, tulip) and level, Test Unit 1, A. B. Midden (8LV65).

Discussion

The well stratified deposit at A. B. Midden appears to have cumulated over a millennium (Figure 4-15). The distinct strata represent changes in activity at the site over time, as most notably demonstrated by the differences in technological assemblages. Differences in pottery technology are distinguished by shifts back and forth between limestone- and sand-tempered pottery types. Shell tool technology underwent a change from Strata V and VII, from hammers to spoons and vessels. And while the vertebrate fauna has yet to be analyzed by species, excavators noted the high proportion of fish bones in the shell midden context; this correlates well with the identification of a *Mercenaria* sp. net gauge from the shell deposit. Finally, lithic technology was only represented in older stratigraphic deposits and is represented by strictly chert flakes (Stratum VIII). It is notable that no architectural features or pit features were observed during excavation.

Similarities in activity are evident as well, including the processing and deposition of vertebrate and invertebrate taxa, especially in Strata I-V, VII, XII, and XIII. Ecological differences were observed as well, via the recording of observations in the field and the quantification of unmodified gastropods in the lab. A. B. Midden contained a high frequency of gastropods, higher than observed in other excavated localities in the region. The position of

North Key, a distal island in high salinity waters, may account for this. It may also be logical to assume then that the changes in species diversity represented by the unmodified gastropods may also be a result of ecological variation, over time.



Figure 4-15. Photograph of the south profile of TU1 with associated strata and calibrated AMS age estimates.

Clam Beach (8LV66a)

Clam Beach (8LV66a) is located on the northern shore of the eastern facing cove in the center of North Key. Entering the cove is best done at high tide as it is very shallow and lined with live oyster clumps splayed out over a sand bed. At low tide the beach extends an additional 20 m and can make leaving the cove via boat nearly impossible. The beach fronting the exposed escarpment of eroding midden is covered in large hard clam shells, likely the southern quahog (*Mercenaria campechiensis*). The midden, as described by Goggin and later Dorian (1980) extends for 300 m along the beach, and up to 35 m inland. The high number of clams exposed in the midden context of 8LV66a was noted by both Goggin and Dorian in their descriptions of the site (Dorian 1980). Staff from LSA also observed the high amount of clams at the site and on the beach and thus has begun to refer to the site as Clam Beach (Figure 4-16). A Middle to Late Woodland Period association has been assigned to the site by Goggin and Dorian based on their observance of pottery on the surface during their investigations. Pottery is still visible on the beach and midden surface today and conforms to this general assessment. This section details the investigation of 8LV66a by members of LSA and the Lower Suwannee Archaeological Field School during the summer of 2015.



Figure 4-16. Photograph showing the copious amount of clam shell (*Mercenaria* sp.) that cover the beach at 8LV66a, view facing south.

Shovel Test Pit 1. As no subsurface excavations have ever been conducted at 8LV66a the goal of Shovel Test Pit 1 (STP1) was to investigate the structure of the major midden deposit including stratigraphy and shell content and determine its cultural association. The location of STP1 was selected arbitrarily. An area of moderate vegetation was identified along the exposed scarp and thus became the location of STP1 (Figure 4-17). The ground surface of the unit rests ~80 cm above the beach surface, thus exposing ~80 cm of midden deposit along the scarp. Excavation of the 50 x 50-cm square unit proceeded with shovel and trowel and all matrix was passed through a ¼-inch hardware cloth. All artifacts, gastropods, and vertebrate fauna were bagged by level. Observational data were recorded on a shovel test pit form and included the description of stratigraphic profile including sediment color, grain size, the depth of each stratigraphic unit, and detail pertaining to any cultural material recovered. Excavation did not penetrate the midden context as the integrity of the shovel test pit prevented excavation beyond 100 cmbs.



Figure 4-17. Aerial photograph of North Key (ESRI 2015) showing the site file outline of Clam Beach (8LV66a) in blue. Green dots indicate the locations of STP1 and TU1. Note that the northern extent of A. B. Midden (8LV65) can be seen in the bottom of the image.

Material culture recovered from STP1 included pottery, lithics, unmodified gastropods, vertebrate fauna, and historic materials. Historic material was found in only the first level of excavation of STP1 (0–45) and included glass, metal, and plastic fragments (Table 4-8). Pottery consisted of mostly limestone- ($n = 42$) and sand-tempered wares ($n = 29$), with a single spicule-tempered sherd. Plain sherds were by far the majority with only one check-stamped sherd (limestone) and one punctated (drag and jab) sherd (sand). Far fewer eroded sherds were recovered in this excavation than were collected from excavations at A. B. Midden, but crumb sherds are still high in number ($n = 33$). Seven flaked stone objects were recovered from STP1, three flakes and four pieces of shatter, all manufactured from chert and all recovered from the first level of excavation (0–45 cmbs). No modified shell objects were recovered from this excavation and the vertebrate fauna has yet to be analyzed. Level 45–100 contained far more whole shells than the level above it; this stratigraphic break was the reason for separating levels during excavation. From the limited amount of diagnostic material culture recovered we were unable to firmly assess the time period associated with the site.

Test Unit 1. Photographs and scaled drawings of the profiles of TU1 are provided in Figure 4-19 and Table 4-9 provides descriptions of the strata. Table 4-10 gives an inventory of the archaeological materials recovered by level.

Excavation of TU1 was terminated early as we ran out of time during the summer field season. Four arbitrary 10-cm levels were excavated and screened in full. At the base of level D, black plastic was used to line the unit and the hole was backfilled using the same matrix excavated from the context of TU1.

Test Unit 1 was excavated 30 m east of STP1, approximately 2 m back from the exposed escarpment alongside the southward facing beach. The ground surface of TU1 is approximately 1.5 m above the beach surface where much of the eroding midden is being deposited. Excavation of TU1 revealed three major strata. Stratum I is a minor strata which consists of dark fine sands and organic material. Stratum II is the first major strata, a layer of crushed and whole oyster intermixed with *Mercenaria* and scallop extending to 20 cmbs (Figure 4-18). Excavators noted that this layer appeared ashy and burnt, as most of the shell was dark gray or blue in color (Table 4-9). Below that, Stratum III had less burned shell but was comprised of slightly darker fine sands (very dark grayish brown) and crushed and whole shells extending to the base of excavation in the south and west walls. Artifact content for the opening strata consisted of largely plain sand- and limestone-tempered sherds, unmodified

Table 4-8. Inventory of Materials Recovered from Shovel Test Pit 1, Clam Beach (8LV66a).

Level (cmbs)	Pottery		Lithics		Unmod. Gastro.		Vert. Fauna	Historic	
	ct	wt(g)	ct	wt(g)	ct	wt(g)	wt(g)	ct	wt(g)
0–45	70	267.9	7	13.3	23	911.6	107.1	8	17.3
45–100	2	3.2			37	829.8	27.8		
Total	72	271.1	7	13.3	60	1,741.4	134.9	8	17.3



Figure 4-18. Photograph showing the excavation of Test Unit 1 at Clam Beach (8LV66a) by field school students.

gastropods, and the highest numbers of vertebrate fauna and the only lithics from the excavation. Stratum IV was marked by an increase in gastropods as can be seen from the profile photographs (Figure 4-19) as well as the counts in Table 4-10. Stratum IV was not yet present in the south and west walls, showing only in the north and east walls at this stage of excavation. Because the excavation of Strata III and IV was not complete, further description must await the resumption of excavation. One additional stratum was identified at the base of the present excavations and may be a feature. Stratum V a very dark, organically rich area of decreased shell frequency extending from 30–45 cmbd.

CONCLUSION

Archaeological investigations of North Key in the summer of 2015 by staff of the Laboratory of Southeastern Archaeology and students of the Lower Suwannee Archaeological Field School, University of Florida, consisted of reconnaissance survey and secondary testing at two locations of aboriginal occupation, 8LV65 and 8LV66a.

Survey at A. B. Midden (8LV65) served to relocate excavations from the 1980s conducted by Nina Borremans (n.d.). Auger 1 confirmed the intact stratigraphy of the area that would be the location of Test Unit 1. The second phase of testing included one 1 x 2 m test unit, Test Unit 1. TU1 revealed well-stratified, intact, subsurface components dating to the Early and Middle Woodland Periods with a possible earlier component that has yet to be dated (Stratum VIII). Survey of Clam Beach (8LV66a) included one shovel test pit, Shovel Test pit 1. STP1 was the first subsurface investigation of this site, documented first in the 1950s by John Goggin. It revealed over 100 cm of shell midden with intact stratigraphy. The second phase of testing involved one 1 x 1 m test unit that was unable to be completed, but showed intact, stratified midden comprised of burned, crushed, and whole shell.

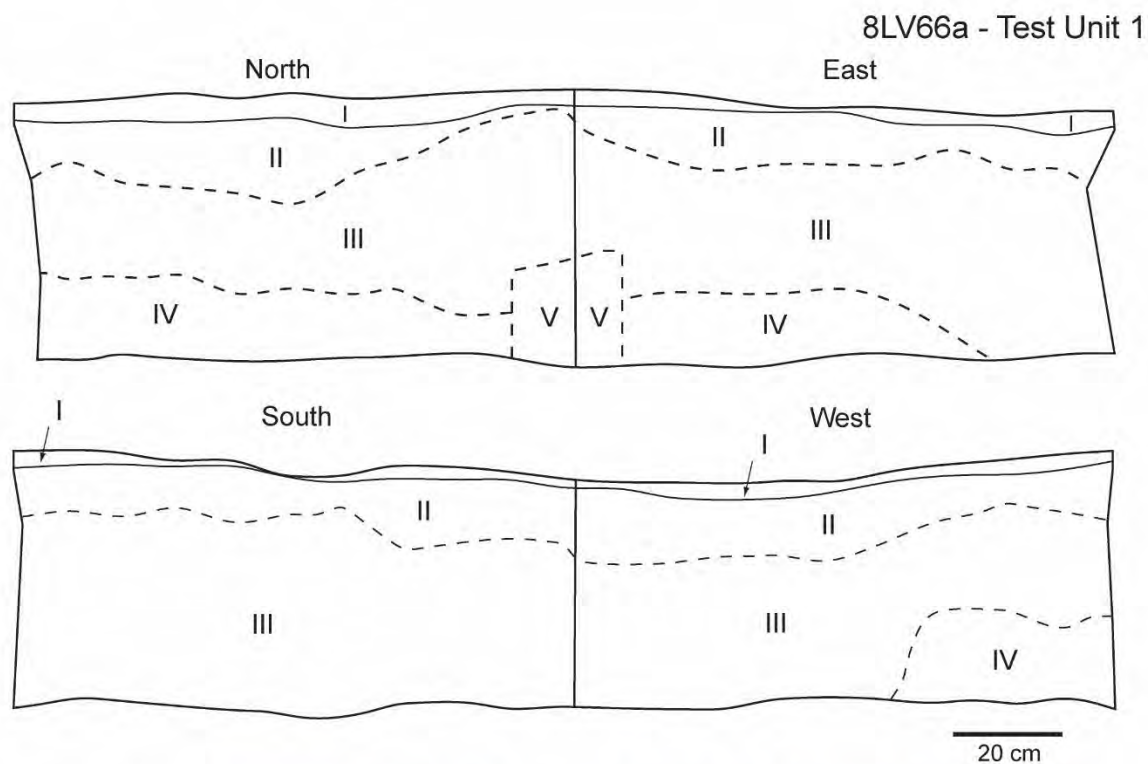


Figure 4-19. Stratigraphic drawings and photographs of the four profiles of Test Unit 1, Clam Beach (8LV66a), from upper left and moving clockwise: north, east, west, and south. Note that excavation is not complete at this unit and that plans include returning to it this summer to complete investigation.

Table 4-9. Stratigraphic Units of Test Unit 1, Clam Beach (8LV66a).

Stratum	Max. Depth (cm BD)	Munsell Color	Description
I	6	10YR3/4	Dark yellowish brown fine sand, moderate crushed shell and organic material
II	20	10YR5/2	Grayish brown fine sand, dense crushed and whole shell, high rate of burned shell
III	45	10YR3/2, 2/1	Very dark grayish brown fine sand, dense crushed and whole shell
IV	45	10YR2/2	Very dark brown fine sand, dense whole shell, oyster, scallop, and gastropods
V	45	10YR2/1	Black fine sand, highly organic, sparse whole and crushed shell

Table 4-10. Inventory of Materials Recovered from Test Unit 1, Clam Beach (8LV66a), by Level.

Level	Pottery		Lithics		Unmod. Gastropod		Vert. Fauna
	ct	wt(g)	ct	wt(g)	ct	wt(g)	wt(g)
A	24	109.0	4	5.2	25	427.7	80.4
B	23	52.6	2	1.8	49	1,373.9	380.5
C	19	30.4			34	1,222.4	59.0
D	9	49.1			44	2,673.3	22.1
Subtotal	75	241.1	6	7.0	152	5,697.3	542.0
Wall Clean	1	7.6			3	228.7	1.1
Total	76	248.7	6	7.0	155	5,926.0	543.1

Dating of North Key was only completed for A. B. Midden and returned three AMS assays. The oldest returned a two-sigma calibrated range of 730-690 B.C. (Stratum VIII), the middle a two-sigma calibrated range of A.D. 5-125 (Stratum V), and the youngest a two-sigma calibrated range of A.D. 265-275 (Stratum III). Anthropogenic deposits beneath the primary shell bearing strata at A. B. Midden indicate the presence of perhaps even older occupations, potentially dating to the period of suspected abandonment of the southeastern coastal region by aboriginal inhabitants ca. 3200–2500 B.P. (Sassaman and Wallis 2015; Thomas and Sanger 2010).

The material assemblages recovered through these efforts indicate that the majority of these deposits accumulated during the Early and Middle Woodland Periods. Temporally diagnostic pottery collected from the sites (sand- and limestone-tempered wares with period specific decorative surface treatments) included Deptford and Swift Creek sherds from TU1 at A. B. Midden and Woodland Period pottery observed on the surface at Clam Beach. All lithics

recovered from North Key excavations were nondiagnostic chert flakes. While lithic technology was deposited deeply at A. B. Midden, it was recovered from upper levels in the excavation of STP1 and TU1 at Clam Beach. Modified shell was only recovered at A. B. Midden, however, excavation of Clam Beach is not complete and may yet produce shell artifacts. Modified shell objects consisted of dipper vessels, spoon/scoops, hammers, and a net gauge. Only Lightning whelk and Hard clam were modified.

Excavations are only one portion of the work needed to fully understand the human and environmental history at North Key. Exploratory survey of the northern section of North Key, beyond the beach face, revealed a series of gastropod middens that appeared to be in ringlet form. The combination of ring middens with long linear shell middens has been described as a marker for Woodland Period village occupations along the Gulf Coast (Milanich 1994:144–145). These features combined with the well-stratified deposits indicating multiple occupations at A. B. Midden suggest that North Key was much more intensively occupied than once thought. Three distinct cultural occupations have already been dated from excavations on North Key and there exists at least one more beneath the major shell bearing deposit. It is unknown at the moment whether a similar sequence is present at Clam Beach, only the completion of TU1 will answer that question. Furthermore, since LiDAR and DEM data are not available for the distal islands of Cedar Keys a mapping program is warranted if we are to determine the context and arrangement of not only A. B. Midden but of the curious shell deposits at 8LV66a and b.

CHAPTER 5

SEAHORSE KEY (8LV64, 68)

Ginessa J. Mahar

Seahorse Key, roughly 2.5 km southeast of North Key, is another island member of the Cedar Keys National Wildlife Refuge, managed by the U.S. Fish and Wildlife Service. Perhaps the most notable of the islands within the refuge, Seahorse Key has been the site of a military outpost, a Seminole Internment Camp, a lighthouse, a marine research station, and numerous biological and ecological investigations for over 60 years. Still, the island's pre-Columbian human history has only recently begun to be researched. To date, four archaeological sites are registered with the state of Florida, two aboriginal middens (8LV64, 8LV68) and two historic sites (8LV121, 8LV136). As with North Key, subsurface testing of the aboriginal sites was conducted in the 1980s but was never formally reported. Staff from the LSA visually surveyed the sites prior to any testing and observed in both cases that the sites were actively eroding. This chapter reports on the current status of the aboriginal sites (8LV64, 68) and the methods and results of survey and excavation conducted by crews from the LSA and the Lower Suwannee Archaeological Field School. Survey consisted of surface collections and augering at 8LV64 and shovel testing along the summit of Seahorse Key. Testing at 8LV68 involved the excavation of one 1 x 2-m test unit.

SETTING

Seahorse Key is the tallest distal island in the Cedar Key tract of the Lower Suwannee Archaeological Survey (Sassaman et al. 2011). Its height was the impetus to build the region's first lighthouse in 1850 (8LV121), to guide cargo ships safely into the burgeoning port of Cedar Key. Formed during the Late Pleistocene, the island is another relict paleodune, albeit much taller than its immediate counterparts. At 52 feet above mean sea level, the dune island towers over its neighbors, making it one of the highest points along the Gulf of Mexico. Two aboriginal sites have been recorded for Seahorse Key, 8LV64 and 8LV68, both of which lie a few feet above sea level. Reasonably, such a tall, imposing, and rare feature on the landscape would have been noted by people passing through or settling the area for as long as humans have occupied Florida. Its status as a wayfinding marker or landscape feature is furthered by its association with the nearby monumental site known as Shell Mound (8LV42) which is sited directly north of the pinnacle of Seahorse Key. Sitting at the pinnacle of present-day Seahorse Key, is the Cedar Keys Lighthouse, again attesting to the utility of the high point in wayfinding and navigation.

Seahorse Key is a relict parabolic dune, a once u-shaped configuration with a convex arc and elongated arms. The shape of parabolic dunes is owed to strong unidirectional wind (Tsoar and Blumberg 2002), in this case from the southwest. Many parabolic dunes have been identified along the North Florida Gulf Coast (Wright et al. 2005). Centuries of sea-level rise, erosion, and deposition have reconfigured the original landform of Seahorse Key so that its arms currently extend to the north, instead of the southwest (Figure 5-1).

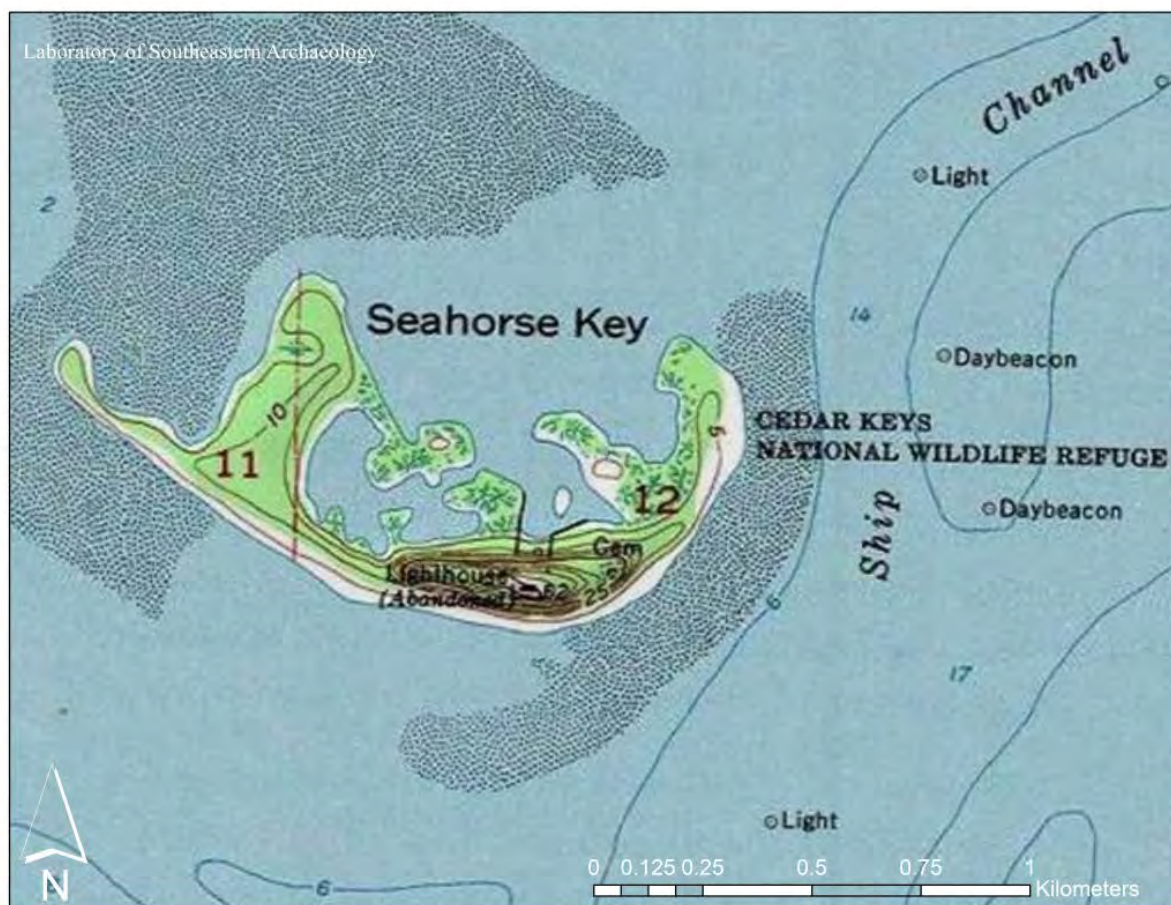


Figure 5-1. Section of USGS topographic quad showing Seahorse Key. Note that the elevation marks at 5 and 10 feet above mean sea level steeply climb to 25 and then 52 feet at the center of the island. The location of the lighthouse (8LV121) is also indicated, as is the cemetery (8LV136).

A survey of aerial photography from the last half century has revealed that Seahorse Key has remained relatively stable in terms of erosion or reworking. Seahorse's resilience to the erosional forces felt by its neighbors may be in part due to the wide, shallow skirt of sand and mud that surrounds the island shores. Although the Big Bend region of the North Florida Gulf Coast is a notoriously low energy coastline, the island of Seahorse Key has the added protection of an extremely shallow and wide shoulder beyond its beaches, perhaps helping to reduce marine generated wave action and energy. And although some erosion can be seen along the ~3-m-high Gulf facing escarpment, protection from development offered by the Cedar Keys National Wildlife Refuge ensures heavy vegetation and thus some protection from erosion due to high winds.

Inspection of aerial imagery of Seahorse Key indicates that the island has remained relatively stable except for its two most distal points, at the east and west edges of the island. These two points appear to have been reworked over the decades, perhaps from storm events or in the case of the eastern point, channelization. The southern entrance into the port of Cedar Key is channelized and runs alongside the eastern edge of Seahorse Key. Connected to this channel is a smaller channel that guides boats into the Seahorse Key bay area where the marine

research station (see below) is located at the foot of the steep rise that leads to the lighthouse. The western point of the island likely owes occasional reshaping to its position farther out in the Gulf and thus exposure to hurricanes and gale force winds. Its lower elevation (1–2 m above mean sea level) surely makes it more vulnerable to storm surge events. Contrary to this, the height of the apex of Seahorse Key provides shelter from severe fall storms and harsh winter winds, which often come from the northeast. This element was experienced during recent field sessions on the island when the dune formation blocked oncoming gusts, creating a calm refuge on the leeward side its girth.

Non-human residents also benefit from the refuge of Seahorse Key, as the island boasts tens of thousands of birds annually roosting in its rookery along the western side of the island. Researchers from around the state and bird enthusiasts from around the world come to the island to spot the numerous bird species that call the island home (at least temporarily) during their migration. As mentioned previously, scores of manuscripts have been written regarding the fauna living on and around Seahorse Key, this is due in part to the fact that the island is home to the Seahorse Key Marine Laboratory, established in 1951 by the University of Florida and today run in conjunction with the Whitney Laboratory for Marine Bioscience and Santa Fe College. Facilities include a dock, observation deck, marine sciences laboratory, saltwater and freshwater holding tanks and live wells, several utility sheds, and overnight housing in the historic lighthouse. The archaeological survey of Seahorse Key and North Key greatly benefitted from these facilities and the assistance of the dedicated personnel who attend to the island and its amenities (Figure 5-2).



Figure 5-2. Photograph of field school students at work in the Seahorse Key Marine Lab. The lab was used to wash artifacts recovered from excavations and reorganize equipment daily.

PREVIOUS RESEARCH

John Goggin was the first archaeologist to record the aboriginal sites on Seahorse Key in the mid-1950s. The Seahorse Key Shell Midden (8LV64) was documented as running along the southeastern margin of the island and consisted of a 100+ yards of narrow shell midden (Florida Master Site File, 8LV64). No map was made of the site at the time but later surveyors penciled in the approximate dimensions of the site (shown here in Figure 5-3). Goggin, and later Collingsworth, noted that the site was at least partially covered by sand in some locations, making it difficult to accurately estimate the size of the site. The state site files also indicate that the site was in a state of deterioration at its last official observance in 1999. No age estimate of the midden was ever provided except for a Woodland Period generalization for Seahorse Key and the surrounding islands (Dorian 1980). Dorian (1980) also reports that Goggin performed some subsurface testing but that the results were not available; he did however confirm the general size of the midden and reported that it was roughly 1.5 m deep judging by the highest point of the exposed scarp. Nina Borremans also completed work at 8LV64 in the late 1980s, after Goggin's and Dorian's surveys. While her methods and results are underreported and yet unpublished, archival research at the Florida Museum of Natural History indicates that she excavated about 40 shovel test pits and at least three stratigraphic test excavations. Three major stratigraphic deposits were recorded at 8LV64, however incomplete analysis and an ephemeral search of the archive prevented further interpretation. Borremans notes in one of her preliminary field reports that 8LV64 was mostly destroyed in 1985 by Hurricane Elena, three years prior to her testing of it.

The second aboriginal site of Seahorse Key, 8LV68, known as Gardiner's Point, is located on the namesake landform, the northernmost point of the island, which is also home to thousands of birds during nesting season (March–June). Information regarding this site is vague; the short account by Dorian alludes to excavations by Goggin, but no useful details are provided. The site is described as being a one-meter-high deposit of oyster shell and aboriginal ceramics, stretching 100 m along the eastern shore of this

Table 5-1. Radiocarbon Age Determinations of Archaeological Specimens, Borremans Excavations, Seahorse Key, Gardiner's Point (8LV68) (Borremans n.d.).¹

Lab No.	Sample No.	Provenience	C14 Age yrs BP $\pm \sigma$	C13/C12 0/00	C13 Adj. Age yrs BP $\pm \sigma$	Calibrated Age Range yrs BP	Calibrated Calendar Date Range
Beta-36940	68-2-1X	U-1, L3	1300 $\pm$ 80	-2.3	1670 $\pm$ 80	1289–1144	AD 604–764
Beta-36938	68-16-504	U-1, L7	1360 $\pm$ 70	-0.7	1760 $\pm$ 70	1357–1250	AD 524–664
Beta-36939	68-18-515	U-2, L-3	820 $\pm$ 60	-0.9	1220 $\pm$ 60	823–686	AD 1074–1194
Beta-36937	68-37-109	U-2, L-11	950 $\pm$ 70	-1.1	1340 $\pm$ 70	942–794	AD 944–1084

¹ Information in this table taken directly from archival records curated at the Florida Museum of Natural History (FLMNH). See the discussion of Borremans radiocarbon dates in Chapter 4, including the footnote associated with Table 4-1. Quoting directly from the FLMNH record: "Note: stable isotope ratios were calculated for Beta-36940, Beta-36938, Beta-36939, and Beta-36937 relative to the PDB-1 international standard; the C-13 adjusted ages are normalized to -25 per mil carbon 13" (Borremans n.d.). All of these assays were obtained from samples of hard clam shell (*Mercenaria campechiensis*).

western point. Collected specimens were noted to be highly eroded and thus temporally nondiagnostic. Borremans also visited the site and performed subsurface excavations in the late 1980s. An archival search of her notes suggests at least four stratigraphic test units were excavated but it was unclear if shovel test pits were excavated as well. Much like the reporting from 8LV64, the stratigraphic deposits recorded have little associated description. However vague, at least eight stratigraphic layers were drawn suggesting stratigraphy much like that of A. B. Midden on North Key discussed in the previous chapter. Fortunately, contexts from excavations at Gardiner's Point were dated along with assays from A. B. Midden (Table 5-1). A date range of A.D. 500–1200 was reported from her submitted materials (Sassaman et al. 2011). Note that this table provides C13/C12 corrections, suggesting that these samples were marine shell (see Table 5-1 associated footnote)

In sum, the previous research conducted at 8LV64 and 8LV68 on Seahorse Key (Figure 5-3) remains largely underreported and unfinished and only a cursory review of the materials housed at the Florida Museum of Natural History has been conducted. It is the sole purpose of this chapter to report the most recent findings at Seahorse Key.



Figure 5-3. Aerial image of Seahorse Key (ESRI 2015) showing the locations of the sites referred to in text. Note the blue site outlines are based on state archeological site file data and not actual mapping coordinates.

METHODS AND RESULTS OF SURVEY

Two locations on Seahorse Key were surveyed by crews from the LSA. Relocated during the summer field school, the Seahorse Key Shell Midden (8LV64) was surveyed briefly by staff from the LSA in January 2015. The impetus for the survey was an extremely low tide caused by strong northeasterly winds, also known as a blowout tide. The extremely low tide provided a good opportunity for surface collection of materials eroding from the midden site. The second area of survey involved the summit of Seahorse Key. At 52 feet above mean sea level the top of this paleodune island had not been archaeologically tested prior to our investigation, thus no site file number has been assigned as of this writing.

8LV64 Surface Collection

On January 8, 2015 three members of the LSA took advantage of extremely low tides and conducted a pedestrian survey of 8LV64, the Seahorse Key Shell Midden (Figure 5-4). Archival research conducted at the Florida Museum of Natural History indicates that contexts from Borremans excavations of 8LV64 have not been radiometrically dated. Review of the



Figure 5-4. Photograph of crew conducting the surface collection of 8LV64. Note the scatter of shell along the beach below the typical low tide mark, blue line. 8LV64 is located to the right of the image, out of frame.

materials archived at the museum (field notes, maps, artifacts, faunal collections) was cursory as of this writing and thus not much is known about the range of artifactual material recovered during Borremans investigations. Future analysis of this material is certainly warranted and will be further investigated in the near future. A review of reports from the site indicated that the site was in a state of deterioration as of Dorian's survey and that it had been severely affected by the hurricane of 1985 before Borremans' investigation (Borremans and Moseley 1990; Dorian 1980). Recent finds collected by the staff of Seahorse Key Marine Lab and the opportunity of an extreme low tide motivated the present survey. The purpose of the pedestrian survey was twofold; first, locate the site and determine its extent and integrity and second perform a surface collection to attempt to determine the cultural time period or periods most likely associated with the site via pottery identification.

The south beach along Seahorse Key is typically free of shell and aboriginal material culture, therefore relocation of 8LV64 was rather easy since it was the only location that contained both. Upon reaching the site, the survey crew attempted to determine its extent. The expanse of cultural materials and midden shell on the beach extends for about 100 m. Preliminary assessment suggests that the materials were redeposited on the beach after eroding from a ~20 m long, ~3-m-high exposed scarp at the intersection of beach and the vegetation line. It was evident that the site is actively eroding, but how much has been lost is currently unknown. Using a steel probe, the crew surveyed inland from the beach in an attempt to determine the extent of the midden. Shell was present in probes from 5–10 m back from the scarp along the ~20 m exposure. Two judgmental 4-inch auger tests were placed in the midden to determine the integrity of the deposit. The site appears to contain an intact, single occupation shell midden; however, further testing is warranted to substantiate these findings. If our findings are correct, about 200 m² still exists of 8LV64, though much of the site has been lost if the initial assessment of “over 100 yards of narrow midden” was accurate (Florida Master Site File 8LV64).

After recording the site context the crew turned to the surface survey. Lining up roughly 5 m apart and oriented parallel to the exposed escarpment, the three-person crew passed over the extent of the exposed materials along the beach twice to ensure a thorough collection. Modified shell objects, lithics, and pottery sherds were recovered during the collection and a sample can be seen in Figure 5-5. Pottery was by far the most prevalent type of material culture recovered ($n = 75$) with sand-tempered sherds the most common ($n = 66$), and check stamping the dominant decorated surface treatment ($n = 15$). Of the stamped sherds, some conform to the Wakulla Check Stamped variety while few sherds can be categorized as dentate, likely of the Ruskin Dentate type. The majority of sherds were plain ($n = 49$), some of which had incised rims similar to the Weeden Island Plain variety. These types would place the site within the Middle Woodland Period. Limestone- and spicule-tempered wares were also recovered in minor amounts, one spicule-tempered sherd having been carved into the shape of a projectile point, likely of recent manufacture (Figure 5-5).

A total of five lithic artifacts were collected during the survey, with an emphasis on cores ($n = 3$). This is likely due to the visibility of cores as opposed to smaller items like flakes. All flaked stone recovered was manufactured from chert ($n = 4$). One piece of sedimentary



Figure 5-5. Examples of material culture recovered from surface collections at the Seahorse Key Shell Midden (8LV64): (a) spicule-tempered plain rim sherd, (b) spicule-tempered plain sherd carved into projectile shape, (c, d, f) limestone-tempered plain rim sherds, (e) sand-tempered plain sherd, (g) sand-tempered dentate sherd, (h) chert core, (i) lightning whelk hammer.

rock was collected as well; however, in its current state it is not definitive as to whether it was intentionally modified. Few modified shell objects were collected from the beach survey, those that were collected are in a state of deterioration (water worn) that makes definite categorization impossible. Out of 14 shells collected, five may have been intentionally modified: three possible dipper vessels, one possible shell cup, and one possible hammer. All were made from lightning whelk.

Our surface collection at 8LV64 does not stand alone. Staff of the Seahorse Key Marine Laboratory (SKML), along with visiting researchers and students, have collected at this location intermittently as storms and high tides will often leave new exposures along the beach. As part of a collaborative effort between the LSA and the SKML surface finds from Seahorse Key are collected only under staff supervision, are bagged according to date and location, and submitted to the LSA for cataloging, identification, and curation. One recent find in particular deserves special note. Late in 2014 a biology student visiting Seahorse Key located a carved soapstone object on the beach fronting 8LV64 (Figure 5-6) (Sassaman 2015). Soapstone is nonlocal to Florida, originating in the Appalachians. Soapstone vessels and other objects were made and used in the Southeast from about 4,000 to 2,500 years ago although their presence in Florida is rare. One site within the Lower Suwannee Archaeological Survey area, however, has a surprising assemblage of 15 soapstone vessels in association with human burials dating to about 4,000 years ago (McFadden and Palmiotto 2012; Stojanowski and Doran 1998). This particular object's function is yet unclear; its recovery out of context unfortunately hampers



Figure 5-6. Three views of carved soapstone object recovered from the beach near 8LV64 on Seahorse Key by Seahorse Key Marine Lab staff

our ability to determine its precise purpose and function. However, investigation of associated subsurface deposits at 8LV64 could possibly shed light on the context the soapstone object came from, at least narrowing down the time range and potentially providing further materials that would indicate its function. For now all that is certain is that the object is nonlocal in origin, its shape is intentional for some purpose, and it was likely designed to accept cordage, as can be surmised from the groove carved transversely across one face and down two sides (Sassaman 2015). Soapstone is a dense material and thus its function as a weight would not be unreasonable—the rich fishing history of the region lends credence to its use in net fishing but for now this remains an unsubstantiated hypothesis.

While the survey and surface collection of 8LV64 provided data regarding the location and status of the site as well as a sample of the pottery types present it was not able to definitively determine the temporal range of the site. Only stratigraphic subsurface excavation of 8LV64 will determine this and help to situate archival collections. Fortunately, auger testing has indicated that intact deposits remain to be investigated.

Survey along the Summit of Seahorse Key

As previously stated, the objective of shovel testing the summit of Seahorse Key was to search for subsurface archaeological deposits along the apex of the parabolic dune. Since this area of the island has never before been archaeologically tested, there is no current site file number for this location. Formal registry of the locus will be applied for once the shovel testing survey has been completed. As of this writing, 11 shovel test pits have been excavated by staff from the LSA and field school students, and the materials cataloged. These test pits represent a transect (Eastern Transect 2014) stretching from the Cedar Keys Lighthouse east to a steep cliff, a distance of approximately 165 m (Figure 5-7). Our first shovel test pit (STP1) was placed 10 m east of the eastern wing of the lighthouse. Future plans include testing west of the lighthouse, but can only be conducted while the island is open as it closes during bird rookery season, March through June each year.

Using the lighthouse as a base station, a transect was laid out directly east and west of the structure. The area immediately surrounding the lighthouse is impacted by associated infrastructure. On the west side there is a water cistern, pump, and patio; on the east side there is a short brick walkway and sand volleyball court. Further down the hill, to the northwest, lies the historic period cemetery (8LV136). This area, not in our survey transect, was not addressed in our investigations. When the lighthouse was fully functional (i.e., before 1915), one to two

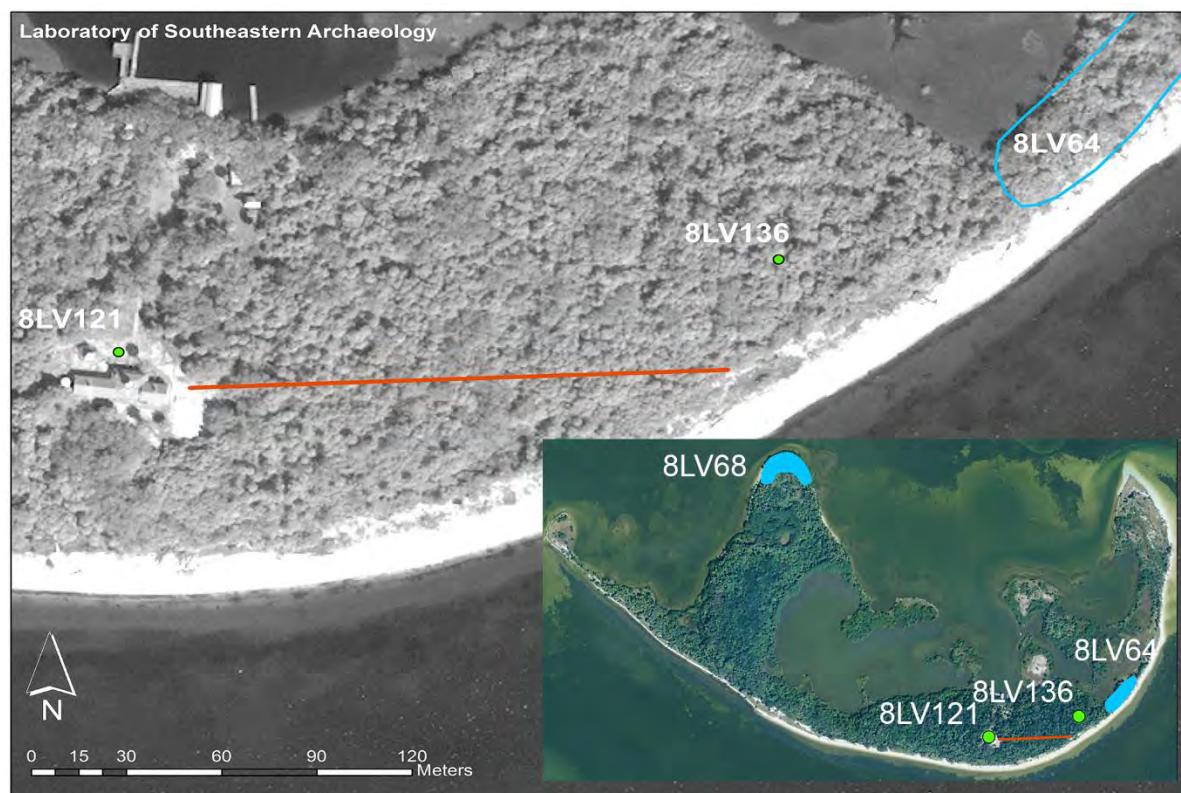


Figure 5-7. Map of the Seahorse Key Eastern Transect, where shovel test pits were excavated every 15 m, starting 10 m east of the lighthouse. Inset shows the context of the transect in relation to other sites on the island.

families lived on the island and thus it would be expected that several other outhouses, structures, gardens, or lived spaces would have been present and may have disturbed intact Native American deposits. Shovel testing was conducted next to the lighthouse and continued at 15-m intervals along a single east-west transect; the first test pit is located 10 m due east of the structure. Shovel tests were excavated as 50 x 50-cm squares to a minimum depth of 1 m. All excavated matrix was passed through ¼-inch hardware cloth and all collected material (fauna, material culture) was bagged by test pit and labeled with associated provenience information. Observational data were recorded on shovel test pit forms and included the shovel test pit number, description of stratigraphic profile including sediment color, texture, and grain size, the depth of each stratigraphic unit, and detail pertaining to any cultural material recovered.

Eleven STPs were excavated. No material of certain aboriginal manufacture was recovered in any of the STPs. The only diagnostic objects recovered were of historic origin ($n = 8$), likely associated with the lighthouse (brick fragments, glass, and one nail) as they were collected from shovel tests nearest the lighthouse. Stratigraphic profiles did not indicate any major activity areas outside the lighthouse perimeter. Sediments were pale to yellowish brown and consisted of fine to medium grained sands (Figure 5-8). No soil or shell middens or feature areas were encountered. Only the eastern transect was excavated due to time constraints and the prioritization of other projects. The western transect runs into the area reserved for nesting birds and can only be excavated during certain times of the year. It is our intention to return in the near future and complete the testing on the western side of the lighthouse.



Figure 5-8. Shovel testing the crest of Seahorse Key: photograph of the sand volleyball court where STP1 was excavated, view facing southeast (left); photograph of the stratigraphic profile of STP1 10 m east of the lighthouse (right).

METHODS AND RESULTS OF TEST UNIT EXCAVATION, 8LV68

This section presents the results of subsurface testing conducted by field crews from the LSA at Gardiner's Point (8LV68). Subsurface excavation of 8LV68, Gardiner's Point, was executed by staff and students of the LSA in January of 2015. Excavation was conducted with the purpose of obtaining stratigraphic data and collecting bulk material for dating. Previous investigations of the site conducted by Nina Borremans produced radiocarbon assays dating to the Woodland Period as formerly discussed. In the following sections the methods and results of the present investigation are discussed followed by concluding remarks.

Gardiner's Point (8LV68)

Excavation of Gardiner's Point (8LV68) took place January 4–9, 2015 by staff and students from LSA. Upon reaching the site it was clear that the exposed escarpment was revealing an actively eroding aboriginal shell midden deposit. Copious amounts of shell and artifacts were scattered along an approximately 30-m-long area of the adjacent beach. Staff climbed atop the escarpment and placed a single judgmental 4-inch bucket auger test in an area



Figure 5-9. Aerial image of Gardiner's Point (ESRI 2015). The extent of the site, based on site file data, is drawn in blue. The green dot indicates the location of the recent LSA excavation, TU1, and the red circle indicates the likely area of Borremans' excavations.

of low vegetation. Results of the auger suggested an intact deposit and it was decided that the location was suitable for a stratigraphic test excavation. Thus one test unit (1 x 2 m) was placed immediately north of the test auger, 3.5 m from the west-facing exposed escarpment which presently represents the area most visibly eroding into the Gulf (Figure 5-9).

It appears that the entire west-facing edge of the shell midden is affected by cut-bank erosion. The goal of subsurface testing was to determine the integrity of the site, gather stratigraphic data, and collect material adequate for dating. Excavation of the site also coincides with my dissertation research—investigating changes in fishing technology as they relate to changes in political economy and settlement systems in the Woodland Period. As noted previously, Borremans excavations at Gardiner’s Point produced radiocarbon assays dating to the Middle to Late Woodland Period. Figure 5-9 is an aerial image of Gardiner’s Point with the extent of the site drawn in blue. This outline was taken from drawings in the state site files and is not based on any recent knowledge or survey of the site in recent times. The area circled in red is thought to be the area where the Borremans excavations took place. During our cursory review of archival materials housed at the Florida Museum of Natural History, a rough plan sketch was identified of what seems to be shovel testing locations along the eastern side of Gardiner’s Point. While the stratigraphic test units excavated by Borremans were not drawn on the map, it is assumed at this time that follow up of the shovel testing survey would have been conducted in the same location. Clearly, a more thorough review of archival materials is certainly warranted to help situate the former excavations.



Figure 5-10. Sharlene O'Donnell, graduate student at UF, excavating TU1 at Gardiner's Point.

Test Unit 1 (Figure 5-10) was excavated in 10-cm arbitrary levels and all material was passed through ¼-inch hardware cloth. All artifacts, vertebrate fauna, and gastropods were collected and bagged by level. Observational data were recorded by level on forms and included compositional data, matrix content, sediment description, and relative frequencies of materials between levels. Features were recorded on separate forms and included similar descriptive elements in addition to profile and plan view drawings. All features were bisected with one half removed and screened through ¼-inch hardware cloth and the other half collected entirely for flotation back at the Laboratory of Southeastern Archaeology. Upon completion of unit excavation all four profiles were cleaned, photographed, and drawn to scale. Descriptions of strata were recorded on the profile drawings and included Munsell color, texture, and composition. Finally, a 30 x 30-cm bulk column sample was collected from the north wall for flotation and fine screen analysis.

Table 5-2 provides descriptions of the strata marked in Figure 5-11 and 5-12, which provide the photographs and line drawings of the stratigraphic profiles of TU1. Table 5-3 gives an inventory of the materials collected by level. Excavation revealed five distinct strata, three of which contained shell midden. Strata I consisted of unconsolidated, possibly redeposited crushed shell midden. Primary taxa included oyster followed by clam, scallop, and various gastropods. Extending from the ground surface (of the escarpment, 1 m above the beach surface) to 25 cmbd, Stratum I was comprised of grayish brown fine sands and a moderate artifact count including pottery and modified shell objects. Stratum II (25–65 cmbd) is the primary midden deposit and is characterized by a seemingly intact shell deposit consisting of more whole shell than overlying strata but with the same species listed above. The excavation of Stratum II is featured in Figure 5-10, the color difference between Stratum I and II helped to delineate the two deposits. No internal stratigraphy was noted within Stratum II and sediment was consistent, described as dark gray fine sand. An AMS age estimate of 1820 ± 30 B.P. (two-sigma calibrated range of A.D. 125–255) was returned off charcoal collected from the base of Stratum II. The pit features identified during excavation were detected at the base of Strata II and are intrusive into Stratum III, which consists of a generally dark gray fine sand, shell free, leach zone beneath the primary midden. Stratum III fades to Stratum IV which consisted of a light gray, shell free, fine sand. This stratum returned no material culture and no features. Stratum V was the last stratum encountered and is characterized by nonanthropogenic yellow brown fine sands.

Three pit features were encountered during the excavation of TU1, labeled in Figure 5-11 by both their feature numbers and stratigraphic numerals. All three appear to begin at the base of Stratum II, suggesting perhaps an older date than Stratum II and a later date than Stratum III. However, since the features have not been dated as of this writing this is merely speculation. While all three features were identified during the excavation of the midden deposit, Feature 3 (Stratum VIII) was encountered only at the end of Stratum III when the feature became clear enough to define.

Feature 1 was encountered at 71 cmbd and extended to 90 cmbd, terminating in Stratum IV. It is a circular shallow pit comprised of moderate shell (scallop, oyster, lightning whelk, tulip shell, and *Mercenaria*) and trace amounts of vertebrate fauna and charcoal. In plan the feature measured ~45 cm and is 20 cm deep from the base of Stratum II. The profile of this

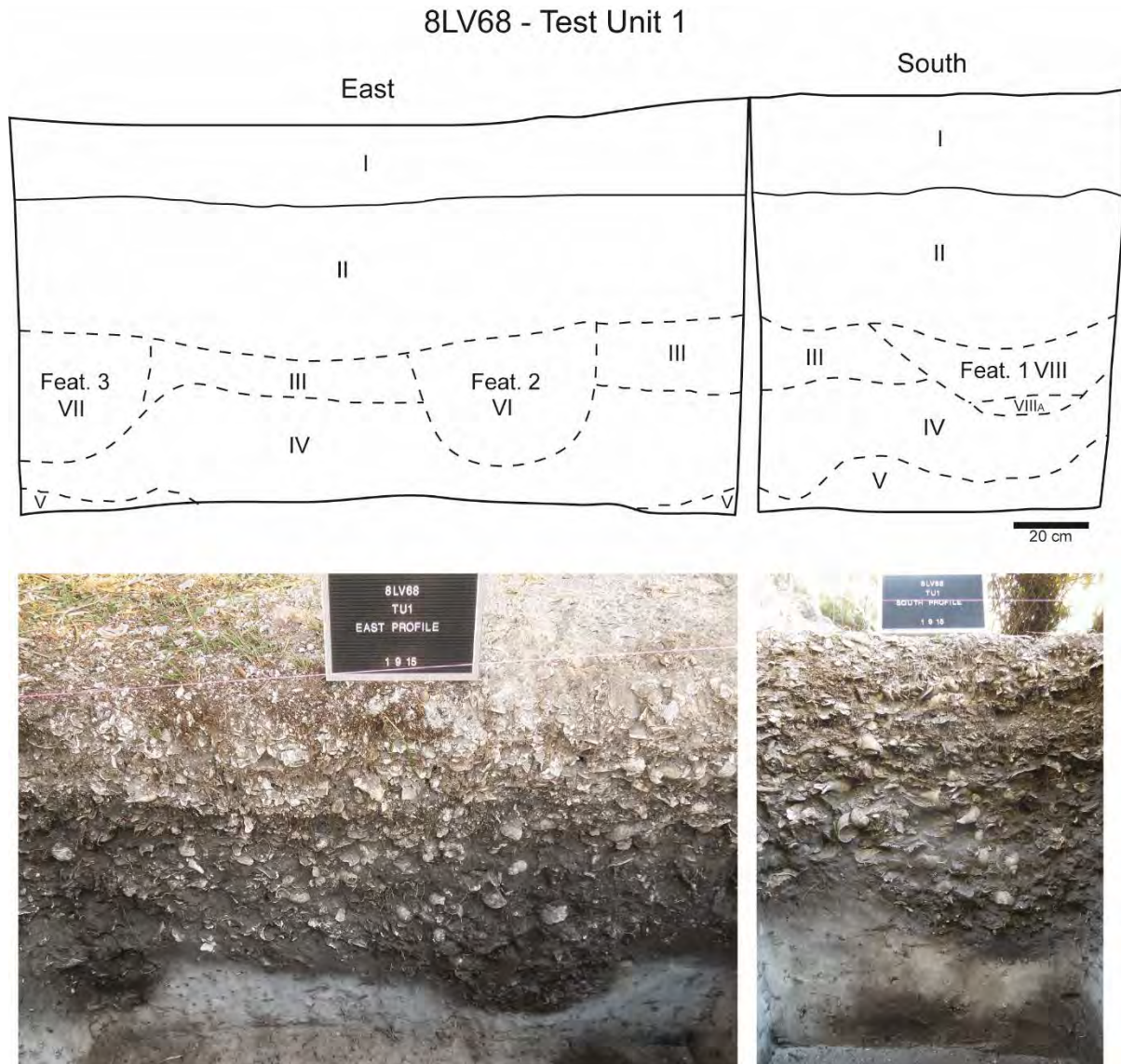


Figure 5-11. Stratigraphic drawings and photographs of the east and south profiles of Test Unit 1, Gardiner's Point (8LV68).

feature is well preserved in the south wall of TU1. The sand matrix of the pit is a very dark brown, appearing more organic than the stratum in which it is deposited. This feature contained no diagnostic material culture.

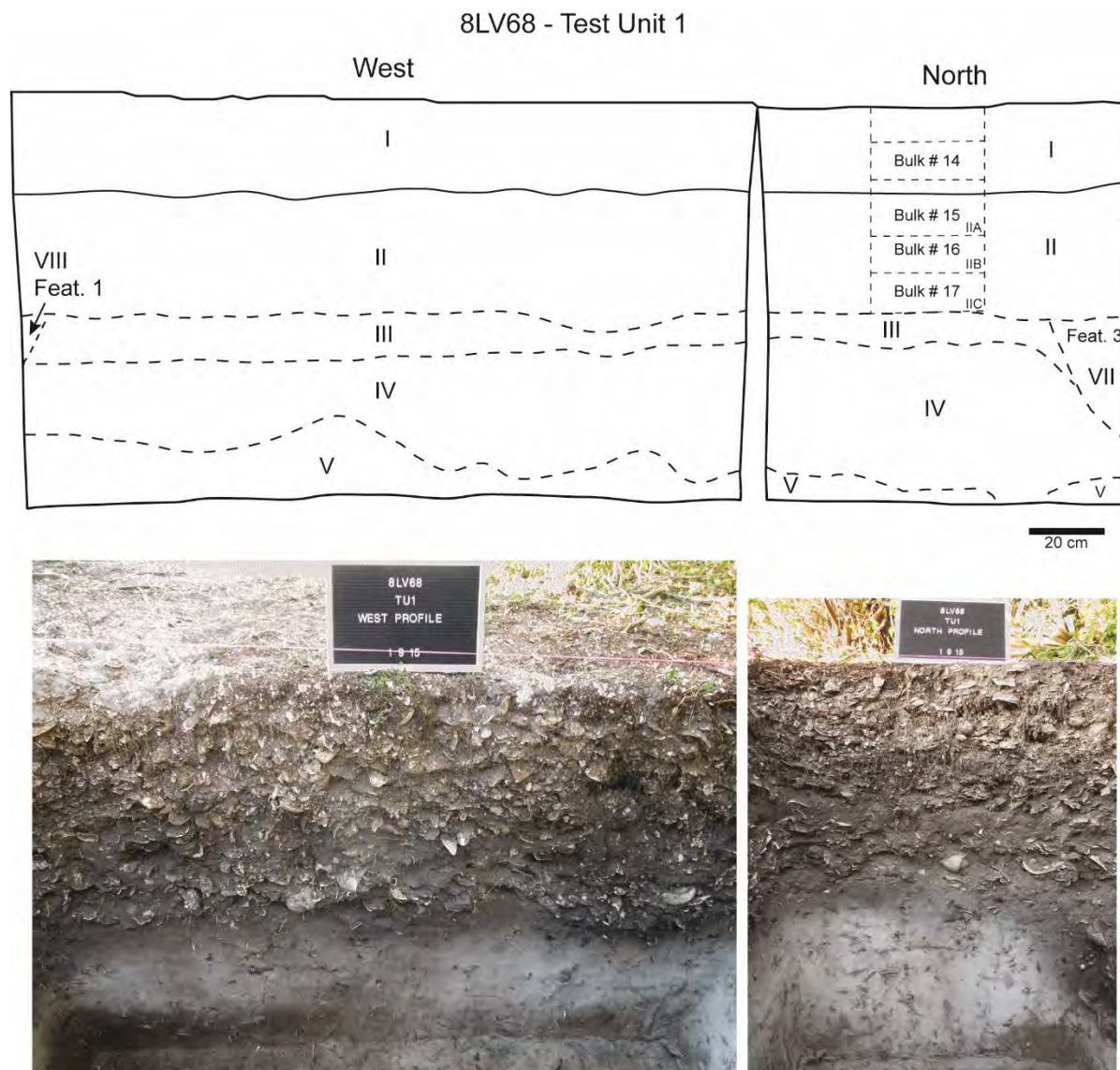


Figure 5-12. Stratigraphic drawings and photographs of the west and north profiles of Test Unit 1, Gardiner's Point (8LV68).

Feature 2 is a circular, basin-shaped pit measuring 70 cm in plan and is ~25 cm deep from the top of its detection in Str. III. The profile of Feature 2 can be seen in the eastern side wall of TU1, and is labeled as Str. VI (Figure 5-11). This feature is characterized by very dark to dark gray fine sands with a similar shell density and make up as Feature 1. A small core of

Table 5-2. Stratigraphic Units of Test Unit 1, Gardiner's Point (8LV68).

Stratum	Max. Depth (cm BD)	Munsell Color	Description
I	25	10YR5/2	Grayish brown fine sand with crushed and whole shell
II	65	10YR3/1	Very dark gray fine sand, primarily intact single component midden
III	77	10YR5/1, 4/1	Dark gray fine sand, generally shell free submidden leach zone
IV	108	10YR7/1	Light gray fine sand, shell free
V	110	10YR3/4, 5/3	Dark yellowish brown fine sand, shell free
VI	95	10YR3/1, 4/1	Feature 2, very dark to dark gray fine sand with moderate shell, charcoal rich
VII	100	10YR2/1	Feature 3, black fine sand sparse shell
VIII	90	10YR2/2	Feature 1, very dark brown fine-medium sand with moderate shell

Table 5-2. Inventory of Materials Recovered from Test Unit 1, Gardiner's Point (8LV68).

Level	Pottery		Lithic ¹		Mod. Shell		Unmod. Gastro		Vert. Fauna	Historic	
	ct	wt(g)	ct	wt(g)	ct	wt(g)	ct	wt(g)	wt(g)	ct	wt(g)
A	32	111.9			5	246.3	94	1,442.0	230.3	2	7.0
B	18	46.5			3	129.8	33	2,126.6	86.2	1	0.2
C	19	71.5			3	251.1	60	1,992.2	55.0	1	25.9
D	23	108.8			3	364.3	205	7,782.5	81.9		
E	44	383.7			9	596.7	438	15,218.5	237.7		
F	3	60.1	1	15.8	10	602.7	162	8,231.2	102.1		
G							22	1,295.7	9.0		
Total	139	782.5	1	15.8	33	2,190.9	1014	38,088.7	802.2	4	33.1

¹One piece unmodified coral (24.5g) from Level E, not included in the above table due to space constraints.

charcoal was detected in the center of the feature surrounded by degraded shell; this was the darkest part of the feature. The excavator noted that he did not believe this to be a post. No pottery was recovered but two worked shell objects were collected. Both made from lightning whelk, one appears to be a hammer and the other an awl. Only trace amounts of vertebrate fauna were recovered but a considerable amount of invertebrate shell comprised the feature contents—over 11,000 grams. Additionally, upon flotation of the bulk samples from the shell

midden context, copious amounts of what appeared to be sponge spicules were recovered in both the light and heavy fractions. While the majority of the material was recovered in the light fraction, much of the heavy fraction was also coated in the fiberglass-type material. Consultation with William Marquardt and Neill Wallis of the Florida Museum of Natural History confirmed that the material was not freshwater sponge spicules, often used as pottery temper in St. Johns wares, but instead aragonite needles, the result of the deterioration of Pen shells (Pinnidae family). These types of shell are often found at sites in south Florida, notably the Caloosahatchee area. Marquardt elaborated that sites exposed to heavy bouts of inundation will often have fewer whole pen shells and more of the aragonite needles, the result of the deterioration of the thin walled fragile shells. Pen shells are still harvested today and their meat prepared much like that of conch or whelk, chopped and made into fritters.

Feature 3 was detected first as a concentration of sand-tempered stamped sherds ($n = 24$), likely from two separate vessel lots (these numbers are included in the tally for Level E) (Figure 5-13). After the sherds were removed the area was designated a feature and although it likely started earlier, was recorded as beginning around 82 cmbd (within Stratum III) and continued to 100 cmbd in Stratum IV. The profile of Feature 3 can be seen in Figure 5-10 and measures about 25 cm across and 20 cm deep. The thin, steep profile of Feature 3 suggests it may have been a pit or a post, however the full feature was not exposed as much of it is still in the northeast corner of TU1. As only a small portion of this feature was exposed for excavation, all of the feature matrix recovered was bagged for flotation instead of being partially $\frac{1}{4}$ -inch screened. Only trace amounts of vertebrate and invertebrate fauna were recovered in the flotation sample. No other pottery sherds were recovered from Feature 3 besides those that were collected prior to its definition. Upon analysis of the sherds they appear to be of the Deptford Series; this is commensurate with the date obtained from the base of Stratum II (A.D. 125–255).



Figure 5-13. A sample of the Deptford Series sherds (sand tempered, check stamped) recovered at the top of Feature 3, in TU1, Level E, Gardiner's Point (8LV68). Note the sherds on the left exhibit finer check stamping than sherds on the right, indicating two different paddles.

The charcoal submitted for an AMS age estimate was recovered from the bulk column sample taken from the north wall at the completion of excavation. A total of four bulk samples were collected from the 30 x 30-cm column, one from Stratum I and the other three from Stratum II (labeled A, B, and C, respectively) (Figures 5-12, 5-14). The collection of Bulk #17, Strata IIC, revealed a concentration of hard clam (*Mercenaria* sp.) at the contact between the midden and the submidden leach zone (Stratum III). The bulk samples were processed using a flotation machine and sorted into artifact and vertebrate and invertebrate classes. Detailed analysis is still pending at the time of this writing. Once analyzed, these data will help to inform the role that distal islands played in subsistence economies of local aboriginal populations of the region. As a distal island, Seahorse Key occupies, and likely has occupied, a particular ecological niche in the region. This is most notable already via the invertebrate taxa recovered in the excavation of TU1, discussed in the following section.



Figure 5-14. Photograph of the north wall of Test Unit 1 (8LV68) after the bulk column sample was removed. Note no bulk sample was taken from the submidden context.

Material Culture

Excavation and analysis of TU1 indicates that the deposit consists of a single component midden dating to second and third centuries A.D. (Stratum II, A.D. 125–255). This is a bit earlier than the date range obtained by Borremans (A.D. 500–1200) from her excavations on the eastern side of the same landform. The date achieved by LSA excavation of TU1 is supported by the material culture recovered in excavation. This section provides a review of the material culture collected at Gardiner's Point (8LV68) via excavations at TU1. At this time the vertebrate fauna has yet to be analyzed and thus will not be included in this chapter.

Pottery Assemblage. An assemblage of 139 pottery sherds was recovered from TU1 at Gardiner's Point (Table 5-4). Unlike the pottery at A. B. Midden (8LV65) less than a quarter ($n = 37$) of the sherds are crumb sherds (less than ½-inch maximum diameter). Few sherds were considered eroded and all of them are limestone tempered and were recovered in Level D. The majority of sherds ($n = 90$) were sand tempered, followed by limestone tempered ($n = 48$), with only one spicule-tempered plain body sherd in the collection. The majority of the limestone-tempered sherds were recovered in the upper levels of excavation, although they were present throughout the shell midden deposit. All the limestone-tempered sherds were either plain or too small to determine surface treatment, with exception of one from Level F, where an incised sherd was recovered (Figure 5-15). The incision is very fine and curvilinear in form; no pattern was able to be discerned although the sherd is quite large (6.5 x 5.5 cm). The incision lies across the body of the sherd along its longest axis; orientation of the sherd with respect to its parent vessel is uncertain.

Of the sand-tempered sherds recovered the majority of them by far were recovered in Level E, which is represented by the bottom of Str. II. Twenty-four of these sherds were recovered in the northeast corner of the unit in the area that was to be defined as Feature 3 (see discussion above). In contrast to the limestone-tempered sherds, the sand-tempered sherds are equally plain and decorated; of the 90 sherds, 33 are stamped and 34 are plain (not including the crumb sherds). One of the plain sand-tempered sherds appears to have an incised rim (Figure 5-14h), perhaps linking it to the Weeden Island Series. Of those that are stamped there appears to be at least two different paddles, both of which can be classified as varieties of Deptford Linear Check-Stamped. Twenty-six of the 33 stamped sherds were recovered from Level E, at the base of Stratum II. The presence of Deptford pottery in this stratum nicely corresponds to the radiocarbon assay of A.D. 125–255. One final note regarding the sand-tempered sherds found at Gardiner's Point concerns not the temper or decoration, but the paste of the sherds. Two sherds were made from a micaceous clay, which tends to be less common among sand tempered sherds along the coast (for a recent discussion on micaceous pastes see Wallis et al. 2014). While not common, micaceous clay sources have been identified in the North Florida region, north of the Suwannee River (Zackary Gilmore, personal communication 2015).

Table 5-4. Absolute Frequency of Pottery Sherds Recovered in Test Unit 1 at Gardiner's Point (8LV68), by Unit Level and Temper Type.

Level	-----Limestone-----					-----Sand-----				Spicule	Total
	Plain	Incised	Eroded	Crumb	Subtotal	Plain	Check	Crumb	Subtotal	Plain	
A	14			2	16	5	2	8	15	1	32
B	7			3	10	4		4	8		18
C	5			2	7	7	2	3	12		19
D	2		9	2	13	4	3	3	10		23
E	1				1	8	26	9	43		44
F		1			1	1		1	2		3
Total	29	1	9	9	48	29	33	28	90	1	139



Figure 5-14. Examples of pottery sherds recovered from TU1 at Gardiner's Point (8LV68): (a) sand-tempered check stamped, Deptford Linear Check, Level D, (b) limestone-tempered incised, Level F, (c) sand-tempered plain, Level F, (d) sand-tempered check stamped, Deptford Check Stamped with micaceous paste, Level A, (e) sand-tempered plain, with micaceous paste, Level E, (f) sand-tempered check stamped rim, Deptford Check Stamped, Level C, (g) sand-tempered check stamped rim, Level E, (h) sand-tempered plain, incised rim, Weeden Island Series.

Lithic Assemblage. Only one worked piece of stone was recovered from excavations at Gardiner's Point, a nonlocal, igneous stone plummet (Figure 5-16). The plummet was collected from matrix from Level F as it was being screened. It measures 31.1 mm in height and 21.7 mm wide at its maximum dimension, and weighs 15.8 g. The top of the plummet is tapered and a groove is etched into the neck likely to accept fine cordage to facilitate hanging. The bulb of the plummet is not entirely rounded, as if the object was ground down from a form that was wedge shaped, such as a celt. At this time the material of the object is difficult to determine, possibly igneous, but certainly not from any locations within Florida. Hopefully further excavation at the site will enable further speculation as to the function of this object.



Figure 5-16. Stone plummet recovered in TU1, Level F at Gardiner's Point (8LV68).

Modified Shell Assemblage. A total of 33 modified shell objects were recovered from excavations at Gardiner's Point (Table 5-4). This is more than twice the modified shell objects recovered from the 2-m deep excavation at A. B. Midden (see Chapter 4, Figure 4-6). All worked specimens recovered from TU1 at Gardiner's Point were manufacture from lightning whelk, although *Mercenaria sp.* and other gastropods (tulip shell, pear whelk) were clearly available, including crown conch. Again, as with A. B. Midden, no crown conch hammers were recovered suggesting a different technological assemblage from the one present at Shell Mound (8LV42) where hundreds of Type G crown conch hammers have been recovered (see discussion in Chapter 1).

Of the 33 objects recovered, nine fall within the "UID Modified" category, meaning that the shells were intentionally altered but their function or utility is unknown and their form unrecognized (e.g. Figure 5-17g). Modification in these cases is attributed to being ground, battered, or otherwise shaped. The majority of these objects were recovered in the upper levels of excavation as opposed to those with more determinate forms which were found in Levels E and F, the basal component of Stratum II. The largest category of identifiable forms is the Spoon/Scoop category ($n = 9$) which Marquardt (1992:216) describes as having a smoothed

Table 5-4. Absolute Frequencies of Modified Shell Objects Recovered in Test Excavations of A. B. Midden (8LV68) TU1, by Unit Level and Type. All modified shell objects in this excavation were made exclusively from lightning whelk.

Level	Dipper	Cup	Hammer	Spoon/Scoop	UID Modified	Total
A			1		4	5
B					3	3
C				2	1	3
D	3					3
E	2	3	3 ¹	1		9
F		1	2	6	1	10
Total	5	4	6	9	9	33

¹ Include one columella hammer, all others are hafted hammers.



Figure 5-17. Examples of Modified Shell Recovered in Excavation of Test Unit 1, Gardiner's Point (8LV68): (a) hammer, Level A, (b) dipper, Level C, (c) cup, Level E, (d) columella hammer, Level E, (e) spoon/scoop, Level E, (f) columella awl, Feature 2, (g) UID modified shell, Level F.

lip, a constricted area for use as a handle, and a rounded or rectangular end. The majority of these were found in level F, which corresponds with the base of Stratum II the primary shell midden. Hammers were the next most frequent type ($n = 6$), all of which were made from lightning whelk, and all but one recovered from the base of Stratum II. Five of the hammers were hafted while one in Level E appears to be a Columella hammer—the outer whorl of the shell having been removed (Figure 5-16d). The last two categories Dipper ($n = 5$) and Cup ($n = 4$) serve similar functions but are different in form. Dippers are typically larger than Cups,

and Cups typically lack the section of the siphonal canal that is left on Dippers as a handle. The Dippers were recovered from Levels D and E, while the Cups were collected from Levels E and F. Lastly, from the bulk recovery of Feature 2 in TU1, a lightning whelk awl was recovered (Figure 5-17f).

Unmodified gastropods were collected from TU1 at Gardiner's Point as well, Table 5-5 provides the absolute frequencies and weights of crown conch, lightning whelk, pear whelk, and tulip shell. Similar to the findings at A. B. Midden, crown conchs were not being modified into tools (Type G hammers) at Gardiner's Point, even though they were clearly available, although low in number. Pear whelk and tulip shell were also present but never modified into tools or other objects. Lightning whelk are represented here in large numbers, showing that not all lightning whelk, although the preferred material type, were considered for tool manufacture. It is interesting to note that the levels with the highest number of modified lightning whelk correspond with the highest numbers of unmodified lightning whelk. *Mercenaria sp.* was occasionally used for tool manufacture at other sites, but none at Gardiner's Point appear to have been modified. Unmodified *Mercenaria* were not systematically collected for quantification like the gastropods.

Figure 5-18 is a graphic representation of Table 5-5, using shell weight as the vertical axis. Note the consistency in proportions of unmodified gastropods by level, unlike the ratios of unmodified gastropods from TU1 at A. B. Midden (8VL65) in chapter 4, Figure 4-14. With an AMS age estimate of 1820 ± 30 B.P. (two-sigma calibrated range of A.D. 125–255), this occupation falls in just after Stratum V of TU1 at A. B. Midden (AMS assay of 1940 ± 30 B.P. (two-sigma calibrated range of A.D. 5-125). While nearly coeval, the two sites represent very different practices regarding the deposition (and perhaps collection) of shellfish. While ratios of different gastropods fluctuate overtime at A. B. Midden, the proportions are much more similar at Gardiner's Point. Additionally, gastropods are far more abundant at Gardiner's Point, representing over 14,000 grams in some levels, while at A. B. Midden levels averaged under 2,000 grams of unmodified gastropods.

Table 5-5. Absolute Frequencies and Weights of Unmodified Gastropods Recovered in Test Unit 1, Gardiner's Point (8LV68) TU1, by Unit Level and Species compared to Modified Specimens. Count is representative of MNI as fragments were not considered for this analysis.

Level	Crown Conch		Lightning Whelk		Pear Whelk		Tulip Shell		Modified
	ct	wt(g)	ct	wt(g)	ct	wt(g)	ct	wt(g)	
A	3	144.4	27	858.1	34	140.4	30	299.1	5
B	2	75.6	14	1,463.8	6	101.1	11	486.1	3
C	2	71.8	21	1,161.4	11	218.2	26	540.8	3
D	3	75.4	39	2,738.8	75	1,340.6	88	3,627.7	3
E	3	240.2	86	5,248.7	183	2,371.6	166	7,358.0	9
F	3	138.0	52	4,529.1	51	884.1	56	2,680.0	10
G	1	102.1	12	673.6			9	520.0	
Total	17	847.5	251	16,673.5	360	5,056.0	386	15,511.7	33

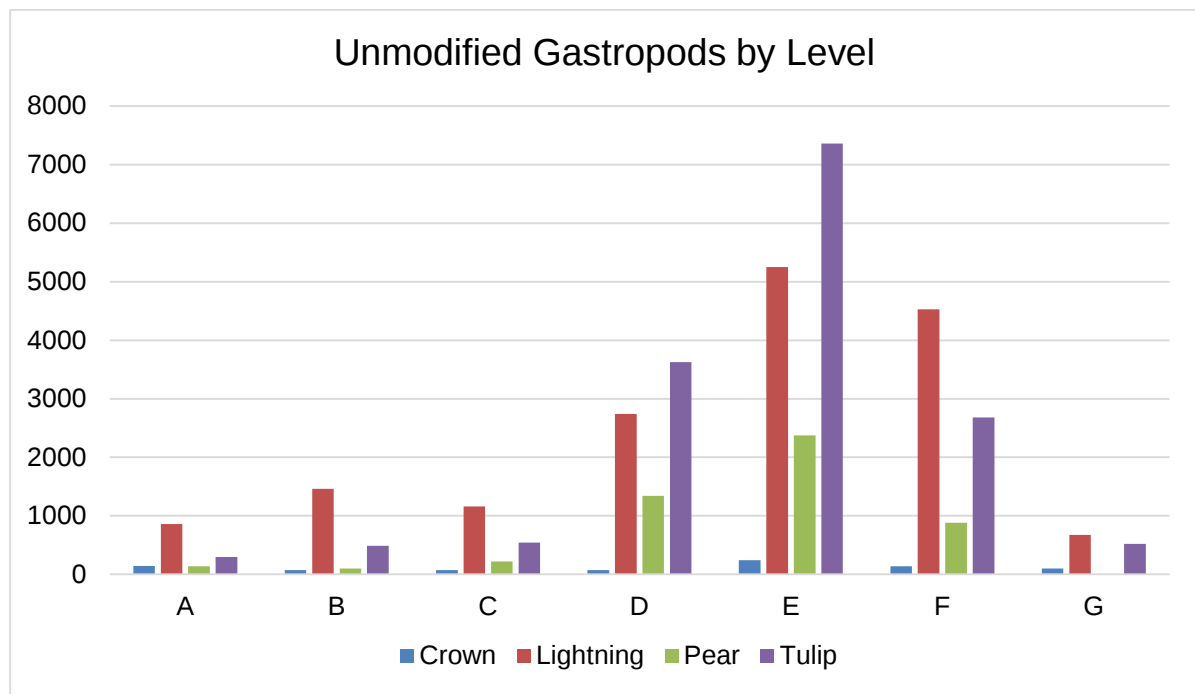


Figure 5-18. Frequency distribution by weight (g) of unmodified gastropods by taxa (crown, lightning, pear, tulip) and level (A–G), Test Unit 1, Gardiner's Point (8LV68).

CONCLUSION

Archaeological investigations of Seahorse Key in 2015 by staff of the Laboratory of Southeastern Archaeology and students of the Lower Suwannee Archaeological Field School, University of Florida, consisted of reconnaissance survey of 8LV64 and the apex of the island, and secondary testing of 8LV68.

Relocation and survey of the Seahorse Key Shell midden (8LV64) helped to determine the integrity and approximate age of the site. Bucket augers placed in the midden confirmed that intact stratigraphy, likely representing a single occupation, is still present at 8LV64 despite former and continued erosion of the site. Surface collection of the adjacent beach face produced sherds from the Weeden Island series, including Wakulla Check Stamped and Ruskin Dentate. Additionally, the recovery of the recycled soapstone object by SKML staff suggests active erosion of the site and encourages further testing to pinpoint the occupation of the site. Only formal, stratigraphic testing of the site will produce firm contextual dates and help to establish the context of this occupation at Seahorse and the function of recovered tools like the soapstone object and the various modified shell objects and lithics.

Survey conducted along the eastern side of the apex of Seahorse Key (Eastern Transect) produced limited material culture. Most shovel tests were negative for material culture except for those immediately adjacent to the lighthouse. These materials are not overly diagnostic, but likely date to the construction and occupations of the Lighthouse from the 18th through 20th centuries. No aboriginal material culture was recovered and sediments consisted of shell-free,

yellow-brown medium to fine sands to a meter in depth. The survey of the summit of the parabolic dune is not complete as of this writing, thus further synthesis awaits completion of the survey with the testing of the Western Transect.

Excavation of Gardiner's Point (8LV68) at the northwestern tip of Seahorse Key revealed a single occupation shell midden dating to the second to third century A.D. (cal. A.D. 125–255). This occupation falls directly in between two dated strata from the nearby A. B. Midden site (8LV65) on North Key. At A. B. Midden, Stratum III (cal A.D. 265–275) and Stratum V (cal A.D. 5–125) are separated by Stratum IV, which is likely coeval with the occupation at Gardiner's Point, although it has yet to be dated. The Deptford series sherds and associated age estimates from Gardiner's Point and A. B. Midden fall neatly within the chronology for Deptford series sherds found within the region. This is a localized range of 400 B.C. to A.D. 400 as assessed by AMS assays in association with Deptford series sherds from recent investigations (Monés et al. 2012; Sassaman et al. 2011, 2013). It is important to note that Deptford series sherds are hardly ever recovered at sites in the greater study area in absence of other pottery types such as limestone- or spicule-tempered wares.

Much more than at A.B. Midden, the collection of gastropods (marine snails) played a large role in the creation of the shell midden at Gardiner's Point. Dominated by tulip shells, TU1 also contained copious amounts of pear and lightning whelk and crown conch in trace amounts. Again, as with A. B. Midden, the only modified gastropods were lightning whelk. Collected unmodified gastropods revealed distinct differences in the proportions of represented taxa, with similar proportions of all four gastropod species represented in all excavated levels bearing shell midden matrix at Gardiner's Point. This is in contrast to the proportions of gastropod taxa recovered at A. B. Midden, where the relative proportions of taxa vary by stratigraphic context. Further analysis of this phenomenon is warranted and may indicate environmental shifts in the region.

Only one stone object was recovered from excavation at Gardiner's Point (TU1, Level F) and its origin is certainly nonlocal. The igneous plummet suggests that weighted technology was important to the inhabitants of the site, as the plummet is grooved to accept cordage and thus was likely hung as a weight, either in an engineering capacity (such as with vertical mapping), in a manufacturing capacity (as with weaving), or in a production capacity (as with net fishing). Special finds are often difficult to characterize with any specificity and only further understanding of the archaeology of the region will help us assess the function of items like this.

Gardiner's Point, like others along the coast within the immediate region, is actively eroding. Fortunately, portions of intact deposits on Seahorse Key have survived the threat of rising seas. Efforts by the Laboratory of Southeastern Archaeology and the Lower Suwannee Archaeological Field School have served to collect data from these disappearing sites, helping to document the precolonial history of the Cedar Keys and the greater Lower Suwannee area.

CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

Survey and testing reported in the foregoing chapters build on the results of five years of the Lower Suwannee Archaeological Survey (LSAS) in its ongoing effort to inventory, sample, rescue, and interpret the archaeological record of coastal dwelling spanning 5,000 years on the northern Gulf coast of Florida. In this concluding chapter we put these most recent results into perspective, and suggest some patterning in occupational sequences project-wide that may pertain to the cultural and social consequences of a changing coast. The particular occupational sequence revealed in recent work dates from the past 2,700 years. Of course, aboriginal coastal dwelling in the study area goes back at least another 2,000 years, and no doubt much more, with earlier evidence inundated by sea levels that have risen tens of meters since humans arrived in the American Southeast during the late Pleistocene. But the terrestrial record available to us dates to only the past 5,000 years, and much of it dates to the first millennium of the common era, when times were especially busy. We find in the study area not only an array of habitation sites of this millennium, but also many earthen and shell mounds, and other terraforming, some of it clearly related to mortuary practice, and much of it associated with places of social gathering.

Summaries of the substantive results of survey and testing were provided in the concluding sections of the foregoing chapters, and need not be repeated here. We instead return to the four research issues discussed in Chapter 1—chronology, sea-level change, terraforming, and intensification—to structure some conclusions and then follow with some recommendations for the next phase of fieldwork.

Chronology

Adding the nine new AMS age estimates reported here to the existing inventory from the LSAS and we have a total of 43. To this we can include another 17 from Garden Patch (Wallis et al. 2015), a major mound center, and, with caution, eight from Borremans' (n.d.) work on the distal islands, for a total of 68 assays. As noted in Chapters 4 and 5 by Mahar, caution in interpreting the results of Borremans is warranted because those assays were obtained from marine shells that were not consistently corrected for fractionation and, even if they were, we lack a local correction for the reservoir effect.

Shown in the bottom portion of Figure 6-1 is the modeled summed probability distribution of all 68 age estimates as calculated with OxCal v 4.2.4 (Bronk Ramsey and Lee 2013). Subsets of this sample population—such as Borremans' assays, or those from mound centers—are disaggregated from the total in the other distributions shown in Figure 2-1, and we consider those in stride as we make some general observations about the overall distribution.

First, we note that the distribution consists of age estimates that span 3,900 years, from 2600 B.C. to A.D. 1300. The probability distributions of individual assays are not evenly distributed across this range. We have far more assays dating to the common era than to the previous 2,600 years. The first seven centuries A.D. was the time of Garden Patch and Shell

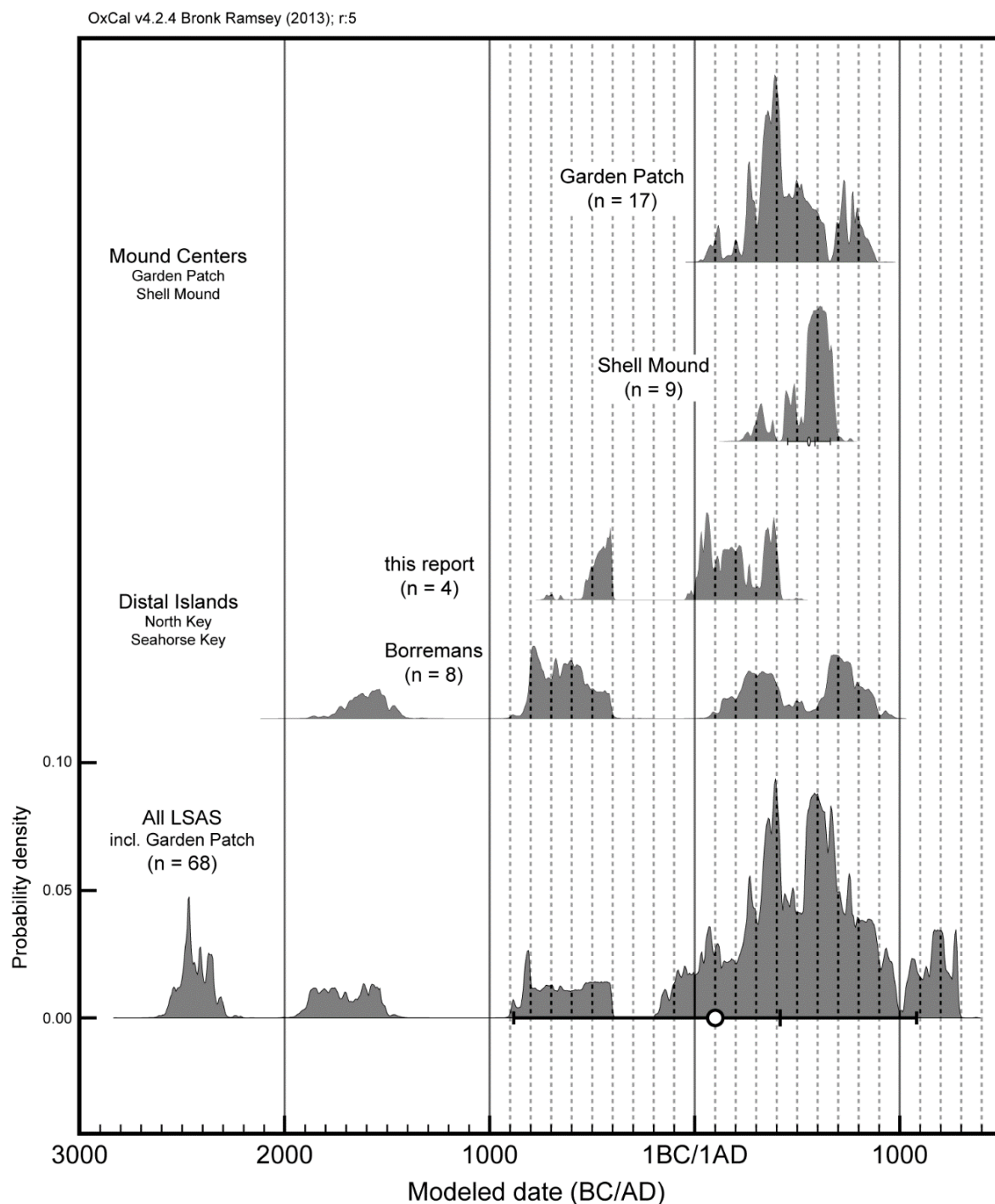


Figure 6-1. Summed probability distributions of all radiometric assays from sites in the project area (bottom), and those for the distal islands, Shell Mound, and Garden Patch. The scale of probability density for Shell Mound and Garden Patch is the same as the one shown for “All LSAS,” but those for the distal islands are shown at 25 percent to adjust for small sample size relative to total time span.

Mound, both sampled more than other sites in the study area, but perhaps not out of stride with their scale of human activity, or the intensity of occupation. This serves to remind us that the probability distributions shown in Figure 6-1 are not proxies for the density of settlement or numbers of people, but rather the probabilities that organic matter we submitted for dating actually dates to the estimated age derived from analysis, which is always a statement of likelihood. We have submitted more samples from sites we have investigated most intensively, and these tend to be the big sites, such as Garden Patch ($n = 17$) and Shell Mound ($n = 9$). For the other 18 sites represented in the population of 68 assays, we have as few as one and as many as seven assays, with an average of 2.4 assays/site ($n = 42$). The goal in sampling for age is to obtain at least two assays from materials retrieved from the basal stratum of each component. In multicomponent sites that are nicely stratified, this amounts to sampling macrostrata; for feature dating, sampling hinges on relating points of origin to buried surfaces, or, more commonly, is driven by the content and integrity of features. The ultimate goal is to ensure that an age estimate from a particular stratigraphic position is duplicated in a parallel context. This goal is not often realized because of limited testing. Again, the approach of the LSAS has been to sample the region extensively; it will take more intensive investigation at smaller sites to reach this goal more consistently.

Despite the pitfalls of overinterpreting biased data, the five earliest age estimates in the distribution (2600–2300 B.C.) come for four different sites spread across the entire coastal expanse of the study area, two possibly with cemeteries, to which we might add a third at McClamory Key (Sassaman et al. 2015). None of the age estimates predates 2600 B.C., although we suspect one or more of the cemeteries may be a few centuries older. What this cluster of early sites shows is that the frequency and integrity of sites on extant coastal lands is not simply a function of time, with occurrences attenuating gradually with age to the point of invisibility. This early cluster of sites is quite the contrast. Many centuries in the intervening time until the common era are not as well represented as those of initial settlement, and we are confident that this is not a sample bias.

This brings us to the second major point, that the summed probability distribution has three, perhaps four major gaps during which extant coastal landforms were not used, at least not in ways that left obvious archaeological evidence. The three obvious gaps are: (1) 2300–1900 B.C.; (2) 1500–900 B.C.; and (3) 400–200 B.C. The fourth possible gap exists in the short span of A.D. 900–1000. Assuming for the moment that these gaps are real, and not a matter of sample error, they signal the abandonment of sites on extant coastal land and relocation elsewhere. This erratic sequence says nothing in particular about the causes of abandonment, nor where people resettled. It also implies nothing in particular about the relative position of sea. If all sites ever occupied on the coast were in fact directly on the coast, literally within, say, 100 m of tidal water, and not too far up tidal creeks, then we would have to conclude that during each of these gaps in Figure 6-1, the coastline was elsewhere, presumably farther west, having perhaps regressed with lower water levels. This conclusion could possibly be wrong. We know, for instance, that sites were sometimes emplaced back from the coast; indeed, two of the major civic-ceremonial centers of ca. A.D. 200–600 (Garden Patch and Crystal River) were positioned a few kilometers landward of the modern coast, and we have no grounds for suggesting a higher-than-present sea-level stand during that interval, or any other time for that matter (Wright et al. 2005). Likewise, the Late Archaic cemeteries just

mentioned have eroded in recent years from the intertidal zone; unless burials were emplaced in the surf over 4,500 years ago they stand as tacit evidence for lower sea levels. How much lower we do not know, but one might conclude based on the composition of Late Archaic middens on extant coastal landforms that the sea was proximate. A reasonable explanation for these mixed signals is that Late Archaic communities positioned themselves landward at locations along tidal creeks that are now truly coastal (McFadden 2015).

These examples of land-use back from the open water of the Gulf of Mexico serve to illustrate that coastal settlement can vary in ways that bias our perspective if we only consider coastal landforms, which has been our tendency. Survey of landforms landward of the current coastline is needed before we start interpreting chronological gaps as evidence of abandonment. The same applies to underwater investigations of now-submerged landforms. The gaps observed in the summed probability distribution of Figure 6-1 are true to the sample of assays we have available to us, but we have yet to examine either landward or submerged landscapes. As we expand the spatial scale of observations to include land outside the immediate study area, we eventually may fill these gaps. Florida and the greater Southeast was never abandoned entirely, but large tracks such as the Lower Suwannee region many have been abandoned temporarily, perhaps in some instances by communities who followed the coastline out with falling sea. Let us now take a look at each of the four gaps individually with the foregoing caveats in mind. Although the first two gaps do not factor into the archaeology of the particular sites reported here, they serve to illustrate the need to put the Lower Suwannee chronology into broader, regional context.

The 2300–1900 B.C. Gap. The first big gap was a time of great activity elsewhere in peninsula Florida and the panhandle. This is the apogee of the Late Archaic Orange period, when fiber-tempered pottery was in vogue. At Silver Glen Run in northeast Florida, for instance, people gathered in large numbers and deposited untold numbers of vessels they brought with them from across Florida (Gilmore 2014). One particular type of pottery at Silver Glen known as Tick Island Incised is a hallmark the last century of this gap. Its context at this site is peculiar: it shows up in a cap of shell that sealed off an assemblage of large pits that Zack Gilmore (2014) argues were used to process food for large gatherings. The assemblage of pits has produced many assays that span the 2300–1900 B.C. gap of the Lower Suwannee.

Despite the lack of assays dating to this four-century gap in the Lower Suwannee, fiber-tempered pottery is not uncommon at sites in the study area. At Bird Island, for instance, Orange Incised pottery has been recovered from contexts estimated to date to the century or two just prior to this gap (McFadden and Palmiotto 2012). Bird Island has also produced a large assemblage of sherds from soapstone vessels, presumably associated with human burials. Soot from one of the sherds produced an AMS age estimate with a two-sigma calibrated range that falls in the last three centuries of the gap (Yates 2000). We have not included this soapstone age estimate in our inventory because of ambiguous context, although the regionwide chronology of this technology is sound (Sassaman 2006). A burgeoning of soapstone vessel technology the Southeast coincides with the development of large-scale social networks and exchange system that culminated in the Poverty Point culture of northeast Louisiana (ca. 1900–1100 B.C.). Incidentally, found out of context at a mainland site at Horseshoe Beach, only about one kilometer west of Bird Island, were sherds of Tick Island Incised.

On balance it would appear that the 2300–1900 B.C. gap in Lower Suwannee chronology is not simply a matter of the coast being uninhabitable but instead a consequence of massive realignments of population as major centers of gathering and exchange emerged at this time. The extent to which realignments were precipitated by climate events remains to be seen, but it is worth noting that coastal communities at this time descended from ancestral communities who dealt with coastal transgression for centuries. A history of enduring change is likely to have encouraged the development of social networks for the relocation of displaced communities landward (Sassaman 2013), although to argue that particular climate events precipitated particular relocation events will require more data than are currently available.

The 1500–900 B.C. Gap. Before we reach the second gap in the chronology, an intervening period of four centuries is populated by a small sample of four assays that involve only two sites: one of the distal islands, A. B. Midden (8LV65) and Deer Island. The A. B. Midden assay was made on one of Borremans' shell samples and thus suffers from the problems noted earlier (in fact, this is the most problematic assay of the group because of a reporting inconsistency in the correction for fractionation). Fiber-tempered pottery was still in vogue during this interval (i.e., 1900–1500 B.C.) but not yet documented at A. B. Midden in sufficient quantity in good context to corroborate the shell assay.

The other three assays of four centuries prior to the second gap are from three different sites on Deer Island, a little over 3 km north of Shell Mound (Monés et al. 2012). One comes from a 50-cm-thick deposit of oyster shell at the north end of the island (8LV76), and two from ephemeral middens at the south end. Only one fiber-tempered sherd was recovered, from the southern-most site; charcoal from the level containing this sherd returned a two-sigma calibrated range of 1880–1760 B.C.

The limited evidence for coastal occupation in the waning centuries of the Orange period lends credibility to the 1500–900 B.C. gap as a period of true abandonment. Depending on which chronologies one consults, this was a general time of upheaval in the greater American Southeast (Kidder 2006; Thomas and Sanger 2010). Certainly by about 1200 B.C. climate had grown cooler and wetter over prior centuries. In some parts of the world this era is known as the Neoglacial, or late Neoglacial. Cooler conditions imply a slowing in the rise and possible regression of sea levels, and wetter conditions imply flooding and changes in salinity of estuaries that received continental run-off. The Mississippi River appears to have experienced massive floods and restructuring during the interval of ca. 1100–700 B.C., contributing evidently to the abandonment of Poverty Point at 1100 B.C. (Kidder 2006).

This second gap in local chronology is likely to be a realistic reflection of local abandonment. If sea level dropped as a consequence of cooler climate, it seems reasonable to hypothesize that coastal settlements were relocated seaward, and are now underwater, as they seem to be at places along the south Atlantic Coast (e.g., Colquhoun and Brooks 1986; DePratter and Howard 1980). Evidence for a regression along the northern Gulf Coast has not been forthcoming (e.g., McFadden 2015; Wright et al. 2005), but clearly the Lower Suwannee region lacks sites of this age in the extant terrestrial record.

At about 900 B.C. we again find evidence for reoccupation, or at least transient use, of extant terrestrial sites in the study area. Some of this evidence, however, is suspect. Three of the six assays that comprise the 900–400 B.C. cluster are from shell that Borremans collected from A. B. Midden. The other three consist of one new assay on charcoal from A. B. Midden (ca. 730–400 B.C.; this report), another from a pit feature at 8LV75 at Deer Island (ca. 760–410 B.C.; Monés et al. 2012), and one from soot of a St. Johns Plain sherd from the mortuary context of Palmetto Mound (ca. 900–800 B.C.; this report). This latter age estimate is especially noteworthy because it may signify the initiation of mortuary practices at Palmetto Mound, although we have to keep open the possibility that the particular vessel from which this assay was taken may have been hierloomed before being deposited.

Given the limited evidence of occupation during this interval, we are justified in adding these centuries to a much longer period of abandonment, ca. 1500–400 B.C., a little more than a millennium, during which time sea level may have been lower than it is today. Sites located in the interior lake area of central Florida, such as Montverde (Austin and Endonino 2011), help to fill this gap and include both marine shell and limestone-tempered pottery of coastal traditions. Interior sites such as this attest to coastal connections of some sort, but we do not know if groups from the coast relocated to the interior during this interval and, if they did, whether such moves were precipitated by changes in coastal environments. The alternative hypothesis, again, is that coastal communities followed a regressive sea westward, and interacted with interior groups in ways that led to transfers of material goods and/or the knowledge to produce them in similar ways.

The 400–200 B.C. Gap. We may also be justified in adding another two centuries to this long period of limited coastal evidence but perhaps not because of continued cool conditions. By about 250 B.C., global climate had transitioned into what is often referred to as the Roman Warm period (ca. 250 B.C.–A.D. 400). How this change in climate was manifested locally is uncertain, but presumably sea level was again on the rise and estuarine habitat lagged behind in adjusting to changes in salinity and sediment. We know that towards the end of the Roman Warm period, from ca. A.D. 200–300, a rapid pulse in sea elapsed, leading to a 2–3-km transgression of sea at Waccasassa Bay (Goodbred et al. 1998). Up to that point, warming climate and rising water may well have led to unstable conditions and greater risk to coastal living. Possible storm-surge deposits at places like Bird Island (McFadden 2015) are among the circumstantial evidence explaining underutilization of the coast at this time.

The record of coastal settlement in the study area is virtually unbroken after about 200 B.C., but not because coastal conditions became stable and unchanging. The warming trend that ensued clearly challenged the permanence of settlement, and we have reasonably good evidence that sites dating from 200 B.C.–A.D. 200 were abandoned as water levels rose. As discussed further below, the third century A.D. was a time of intensive terraforming and the consolidation of settlement at places like Garden Patch, Crystal River, and, a bit later, Shell Mound. By about A.D. 500 climate was again transitioning to generally cooler conditions in what is referred to as the Vandal Minimum (e.g., Marquardt 2010; Walker 2013). But rather than abandon sites and relocating seaward, as earlier communities may have done, those already invested in nonportable infrastructure of marked cultural value (i.e., burial mounds)

may have been compelled to find ways to endure the change without moving, as we discuss further below after reviewing very briefly the final possible gap of our local chronology.

The A.D. 900–1000 Gap. A short gap of one century from A.D. 900–1000 may be sample error, but it is a time of enormous change throughout eastern North America. This is the time when Mississippian chiefdoms rose up in various parts of the lower Midwest and Southeast, first evidently in places like the American Bottom but anticipated in places like the lower Mississippi River valley. Mississippian chiefdoms were agricultural societies and they arose during the Medieval Warm period (ca. A.D. 800–1200), which evidently was conducive to agricultural production. Corn-based agriculture was perhaps never all that important in Florida before Europeans arrived, but at least two Mississippian-influenced polities arose in the greater Gulf coastal area: Safety Harbor (Mitchem 1989) around Tampa Bay, and Fort Walton (Scarry 1980) of the Leon-Jefferson county area of northwest Florida, extending to the coast in the northern Big Bend. Occasional artifacts of these two traditions show up in the study area, and the massive mounds on Way Key that are now largely destroyed may have contained substantial components of this era. However, the study area is actually far from the centers of these two polities, roughly equidistant between them. What we do have instead of local outposts of these polities are sites with complex shell rings and the debris from making disk shell beads. These sites date to the eleventh–thirteenth centuries A.D., when Mississippian chiefdoms throughout the interior Southeast were acquiring lots of shell beads. Were communities of the Lower Suwannee at this time organized expressly to supply their large-scale, land-locked counterparts with beads, and, if so, what does this say about their relationship to more proximate polities that had direct access to shell for making beads? These and related questions will be taken up by Monés in his forthcoming dissertation.

Before moving on to discussion of the other three research domains outlined in Chapter 1, one other observation on our chronology bears mentioning. When sufficient AMS assays are available to construct fine-grained chronologies for particular sites—as Pluckhahn et al. (2015) have done Crystal River, as Wallis et al. (2015) have done for Garden Patch, and as we are close to doing for Shell Mound—we can begin to correlate events across sites. As shown in Figure 6-1, the emergence of Shell Mound as a center of terraforming seems to coincide with the waxing of activity at Garden Patch, and they both appear to be abandoned (only temporarily in the case of Garden Patch) at about A.D. 700. If we compare the chronology of Crystal River to this sequence, we would find it is in lock-step with Garden Patch, both accelerating in activity after about A.D. 200. The point here is that we are in a good position to compare reliable site-specific chronologies in order to make inferences about regional-scale processes, not all of which may be directly traced to climate events of regional import, but indirectly to local communities whose experience with climate events (e.g., storms) reverberated across the region by virtue of displacement, resettlement, and realignment.

Sea-Level Change

Throughout the foregoing discussion of chronology we tacked back and forth between human events, like the occupation or abandonment of a site, and climate events, such as pulses in sea level. It is worth repeating that the former cannot serve as the chronology of the latter; that is, to assign a climate event to the cause of a human event based on the chronology of the

human event is tautological. We need independent evidence of the nature and timing of climate change, and how such change was manifested locally. However, even the best reconstructions of climate and culture history do not provide satisfactory explanation if the method is simply to correlate events, what Robb and Pauketat (2013) refer to disparagingly as “wobble matching.” Rather, we have to put events into historical context, to know how the path dependencies of existing structure influence the perception of change and motivations for intervening (Sassaman and O’Donoghue 2015). As we have seen, the relevant scale for interrogating existing structure (i.e., history) goes beyond the local climate event itself to enfold the social and political networks to which local communities arose, were reproduced, and transformed.

We are in no position yet to make strong inferences about the relationship between changes in sea level and the human presence in the study area beyond the obvious observation that sea level rose since the Ice Age and coastlines transgressed. But they also stood still at times and reversed direction occasionally. How any of this actually affected people in real time is hard to say. The rate, magnitude, and impact of sea level change at time scales relevant to our understanding of human decisions (interventions) is beyond our reach. Perhaps not too far beyond our reach is the purported pulse of sea level at ca. A.D. 200–300, as documented by Goodbred et al. (1998) at Waccasassa Bay. We assume that the 2–3-km transgression of sea that occurred at this time would have been impactful to estuaries and the human communities that had come to depend on them, and it must have drowned places of habitation and other terrestrial activity at or near sea level. As an example then of one potentially impactful climate event, let us consider what archaeological data from the study area has to say about the human response.

Among the more impactful human events of this century was the establishment of two major civic-ceremonial centers. Between A.D. 200 and 300, Garden Patch and Crystal River became locations of mound construction and human interment involving a resident population and probably many others who gathered at special times. As noted in Chapter 1, we have cause to hypothesize that the establishment of these places was influenced by a period of rapid sea-level pulses (perhaps affiliated with storm events), most notably that they are set back from the coast in protected locations. These same places hold material evidence for connections with communities to the interior, perhaps unsurprising given the precedence of such networks in much earlier times. Among those connections were exchanges of objects and presumably persons, and with them ideas about things like building platform mounds or caching pottery with the deceased in mounds. Thus, at A.D. 200, with or without pulses in sea, communities along the gulf coast were participating in widespread networks of ritual practice that clearly influenced the perception of change and prescriptions for dealing with it, an example of the path dependency mentioned earlier. The upshot is that the “event” of A.D. 200–300 was neither a climate event nor a historical event, but rather the convergence of practice and structure, with practice vulnerable to changing physical conditions and structure both constraining and enabling interventions, like defending against change or abandoning a place or practice.

The distal islands may hold the best record of changing physical conditions available to us during this ostensibly critical century. Even without Borremans’ age estimates, the two sites investigated by Mahar (Chapter 4 and 5) have provided enough preliminary evidence to

know that we have available at these sites nicely stratified sequences spanning the first four centuries of the common era. These sites have produced the highest diversity of marine shellfish we have seen at any sites in the study area. If ecological tolerances among some of these taxa vary in ways that allow us to infer habitat shifts from changing proportions in middens, then we may have a good proxy for inferring broader environmental change. Upcoming work on these islands will help to expand sample sizes necessary to address this question (see below).

As mounds were erected at Garden Patch and Crystal River after A.D. 200, occupation of Shell Mound was also getting underway but mounding shell into a large U-shaped ridge would come three centuries later. Terraforming at Shell Mound had its own history, one that also started at A.D. 200 with the first intensive occupation and an associated mortuary mound.

Terraforming

If building mounds and ridges was the way to defend against sea-level rise—literally elevating people above the water—then the construction history of mounds is a proxy for sea level. We might say the same about decisions to occupy relict dunes, as opposed to marsh-level hammocks. *Terraforming* in the broadest sense of the term is to transform something so as to resemble the earth, particularly in regard to supporting humans. Thus, in the literal sense, terraforming is building the infrastructure necessary to sustain life. But it can also be construed as a cosmological practice, materializing core principles of the way the world is believed to be structured, or ought to be structured. This duality of meaning is particularly appropriate in the context of terraforming at A.D. 200: it came at time of climate change that made living at higher elevation less risky and it was informed by belief systems that took shape elsewhere and were shared as ritual practice across vastly different places and among varied communities. To the extent that participation in religion involved social networks whose members convened at mound centers alleviated the risks of coastal living, the cosmology and practicality of terraforming converged. However, terraforming involved infrastructure that was nonportable, and thus we are compelled to ask: Did the emplacement of mounds and other built architecture at places that were vulnerable to sea-level change undermine the intent of terraforming to sustain life?

The answer to this question is likely to vary across different times, places, and people, even within the study area. For now we can only address what we know about the history of terraforming at Shell Mound. The totality of the large, U-shaped shell ridge we see today was not by design, at least not in the material sense, but may have been destined to this form by cultural predispositions about ritual spaces. Palmetto Mound was already receiving bodies and pots by the time the first intensive settlement of Shell Mound occurred at A.D. 200. The ages of two other mounds within 100 m of early settlement—one mortuary, the other presumably—are unknown. From what subsurface testing we have, settlement at this time was at the end of a peninsula formed from the arm of a relict dune, but not on top of the dune. Early settlement appears to have been semicircular, or perhaps just concentrated on either shore of the peninsula.

We do not know how the next century and a half played out, but after about A.D. 450 we have evidence at Shell Mound for intensive occupation of the dune top coupled with the

digging of large pits on the dune slopes and an increasingly structured place but still no massive accumulations of oyster. In fact, as noted earlier, oysters at this time were dominated by those from intertidal habitats, which are generally small. We now know from the pit assemblage of Test Unit 7 that food gathering, processing, and consuming events of considerable scale involved much more than shellfish and small fish, such as deer, rabbit, water birds, and lots of mature mullet. Arguably, much of the activity at Shell Mound at this time may have been geared towards activities at Palmetto Mound, although adequate chronology for the latter eludes us (for now). No matter the intention, the scale of production was beyond household-scale production and clearly reflects episodes of collective activity.

Oyster shell began to accumulate in large quantities about a century later, after about A.D. 550, or a bit later. This took place on top of the dune ridge as well as in an arc going south and then east of the end of the dune arm. The final configuration likely hides individual mounds and ridges of shell that formed and then converged as shell was used to infill low spots. We also know from the excavation of Test Unit 8 that shell also accumulated in small, household-sized rings atop the ridge. Overall it would appear that the massive shell ridge that took form between about A.D. 550 and 650 at Shell Mound capped off a midden and pit assemblage of century-long intensive living atop the dune arm, and an even older midden at lower elevation on either side of the end of the dune. To bring the south ridge up to the elevation of the north ridge, which sat on the dune top, much more shell was needed. Oyster deposited in the ridge at this time is dominated by those from subtidal habitat, generally larger than their intertidal counterparts.

Garden Patch was abandoned, as was Crystal River, at the same time Shell Mound went into a century of terraforming. It might seem reasonable to hypothesize that persons leaving either of these two abandoned centers might have participated in the terraforming of Shell Mound, and they may very well have. However, existing connections with communities of north-central Florida may have more to do with this effort. In this respect, after about A.D. 650 we see relatively limited residence at Shell Mound and wonder then if the site had transitioned into a more-or-less vacant center to which people made regular visits, presumably because of the gravity of Palmetto Mound. Ongoing research by Wallis and Donop will check our suspicion that most of the mortuary activity at Palmetto Mound took place after A.D. 650. Another mortuary mound in the study area, Hughes Mound, dates to this same timeframe and has an assemblage of pots dominated by nonlocal wares (Neill Wallis, personal communication, 2015).

We hypothesize that places of terraforming may have had both practical and ideological value in dealing with environmental risk or uncertainty, but by virtue of being fixed and nonportable, it imposed additional challenges. Our last research domain addresses these challenges from the perspective of subsistence economy and technology.

Provisioning and Sustaining

One can investigate coastal subsistence with the premise that the most relevant scale of analysis is the family or household or one can consider the larger social spheres to which families and household belong. The former can be glossed as the “subsistence economy,” the

latter the “political economy.” Without having to engage in debate about whether any given society has a political economy (they all do!), we imagine it uncontroversial to suggest that the social events of Woodland traditions involving mounds, mortuary ceremonialism, exchange, gifting, and feasts, had an economy that went far beyond families feeding themselves. And we think all would agree that the sort of surplus production involved in provisioning lots of people in particular places increased the risk of failure. Had coastal communities always consisted of small autonomous households capable of fissioning from others and relocating at will, then we would not likely observe much change over the millennia, short of catastrophe perhaps. But we do have all sorts of other social arrangements, some involving seemingly large, sedentary communities at places like Garden Patch and Shell Mound. These same places hosted visitors from elsewhere, apparently convening over large meals involving a variety of foods. The ritual aspects of this political economy also seem to have involved the acquisition of plants and animals for nonhuman consumption.

These and related issues come to fore with results from the 2014 field school excavations of Shell Mound. Oliveira’s analysis of the fish from Feature 25 show that at least 92 mature mullet were deposited in this one pit, along with the assemblage of water birds identified by Goodwin, and a yet-to-be identified assemblage of deer, rabbit, and other mammals, as well as more aquatic taxa. Assuming this assemblage relates to an event, and not the gradual accumulation of household refuse, we are compelled to investigate the social, logistical, and technological constraints on pulling off such a feast. How many people were involved in collecting these resources? How many people was their effort intended to provision? What sort of timeframe was involved? Was this a recurring event, and if so, how often? What sort of technologies were used? Did technologies involve added costs, such as the construction and maintenance of infrastructure? What sort of specialized knowledge was required? Could the practices of the subsistence economy simply be amplified to meet demands of the political economy, or were entirely different practices involved?

These are all questions at the intersection of technology and society and the dissertation research of Mahar. Experiments in alternative mass-capture technologies are revealing the limits to expanding an economy of harvesting small fish. Among the limits are the year-round reliability of nonportable infrastructure, like fish weirs. Quite simply, nonportable infrastructure cannot be used in locations where effective conditions change (e.g., seasonal variations in tidal range). Experiments with other technologies are planned for the near future, but in the meantime this one observation reveals the limitations of a political economy that puts high demands on production in fixed places, like mound centers.

One apparent effort to transcend the limits of production and intensification is being revealed in the research of Jenkins. The oysters that accumulated on top of the midden exposed at the base of Test Unit 8 were possibly cultured, meaning that humans involved themselves in the proliferation and quality of this resource. It is for Jenkins to test this hypothesis with data from Shell Mound and elsewhere, but without giving away the results to date, this may well hold up to testing. Not only does she see a shift in emphasis from intertidal to subtidal oysters at the point when oysters accumulated rapidly and *en masse*, but over the course of the first 50–100 years of accumulation the frequency of a proxy for culling increases then plateaus. It thereafter drops, at a point that is hypothesized to coincide with abandonment of the site as a

place of large-scale residence. Was the practice of culling oysters in subtidal zones lost with the abandonment of Shell Mound? It was a labor-intensive process and required local experience, perhaps impossible to sustain without a core community of knowledgeable fisherfolk. The history of oyster harvesting and deposition at Shell Mound, like the mass-capture of fish, holds great promise for revealing the natural history of these keystone resources as well as a culture history informed by both local and regional-scale processes.

RECOMMENDATIONS

The need for more survey and testing in the study area exceeds our imagination, so for now we close this chapter with an outline of plans for investigations in the forthcoming year. Much of the following is the agenda of the 2015 Lower Suwannee Archaeological Field School.

Shell Mound (8LV42)

The strategy of testing this site throughout has been to sample it extensively in order to fully characterize its subsurface content, structure, and integrity. To date, LSA staff have tested six areas of the site with a combination of 1 x 1-m, 1 x 2-m and 2 x 2-m test units. We propose in the upcoming year to continue extensive testing of Shell Mound, with a focus on areas hitherto unexplored. Also, we propose to expand testing in the area of Test Unit 7, where unusually large pit features were found.

Expanding Test Unit 7. The results of testing in 2014 were especially novel. Test Unit 7 (TU7), on the interior slope of the ridge, intercepted a series of pit features, some quite large (>2-m wide and 1.5 m deep), that were dug into relict dune sands along the northern arm of the ridge. We had long suspected that the interior opening of Shell Mound was the location of a village, and indeed testing in that area has revealed postholes, pit features, and artifact assemblages that support this inference, despite the lack of definitive habitation structures. However, the pits of TU7 went far beyond anything else at Shell Mound. Not only is the size of some of these features unusually large, but they contain assemblages of vertebrate fauna and artifacts unmatched by others at the site. Several pits from the 2014 excavation of TU7 extended into the walls of the unit and were thus left only partially excavated. We propose to open three 2 x 2-m units coterminous with the east and south walls of TU7. This plan will not only enable us to retrieve the unexcavated portions of features documented in TU7, but also provide the necessary perspective to assess whether postholes observed in TU7 fit a broader architectural pattern that may explain the purpose of these massive pits. We suspect that any architecture in this area was not simply domestic but rather related to activities involving large social gatherings and mass consumption of food, perhaps in conjunction with ritual active at the nearby Palmetto Mound (8LV2).

Testing other Locations on Inside Slope of Ridge. The results of TU7 taught us that the interior slopes of Shell Mound (i.e., those that face towards the interior opening), encase archaeological deposits unanticipated by the surface contours of the terrain (i.e., we simply did not expect this much activity on sloping surfaces). To see if the feature assemblage of TU7 is a function of the spatial orientation of interior slopes, we propose to excavate two other test

units in similar locations, one each on the west and south slopes of the interior. Unlike the area of TU7, which is within the relict dune sands of the northern part of the site, the west and south sideslopes are likely to consist mostly of oyster shell. If so, they will have to be excavated down to the substrate to detect subsurface pits. Given the elevation of surfaces in these two locations, shell depth is not expected to exceed 2 m.

Testing Sand Mound at Opening of Ridge. The small sand mound at the opening of the shell ridge has never been tested. We suspect this may be a mortuary mound but we have no intention of digging into the core of it to find out. However, a 1 x 2-m unit placed on the outside edge of the mound ought to be sufficient to document its internal structure and to obtain organic matter at the base of mounded sand (and shell?) to estimate the age of its construction.

Richards Island (8LV137)

Staff of LSA have tested Richards Island twice before (Sassaman et al. 2011), with the results of the most recent work pending in a report by Monés. As a relict parabolic dune, Richards Island consists of an arcuate-shaped elevated landform that encases a variety of archaeological deposits spanning the past 2,000 years, including evidence of intensive habitation in the form of shell rings, ridges, and middens.

A seasonal resident of Cedar Key, Mr. Ed Allen, alerted us in 2013 about the potential for fish traps in the marsh area fronting Richards Island. In March of this year we visited the island with Mr. Allen and began the process of mapping tidal pools and intervening berms that give this location its peculiar configuration. The possibility that these tidal pools were used to harvest fish takes on particular significance in the dissertation project of Mahar.

This summer, as part of Mahar's research, we aim to experiment with fish capture in these tidal pools, under permit with Florida Fish and Wildlife Conservation Commission. In addition, we propose to conduct limited bucket augering of the berms and seawall to determine if deposits are anthropogenic. Larger-scale testing may be required to truly substantiate anthropogenic deposits, if at all present. Just to the north of the tidal pools, in the marsh, is a small hammock that has not yet been tested. We ascertained in March 2015 that the hammock contains archaeological deposits. Given the low elevation of this hammock, it seems likely that any occupation there took place during times of lower sea level. Thus, data from this landform is especially relevant to the larger mission of the LSA to document changing human-environment relationships in the context of changing sea levels. We propose the excavation of a single 1 x 2-m unit in this hammock to get a first glimpse of its content and integrity.

North Key (8LV65, 66a, 66b)

Last summer we tested two of three sites on North Key: A. B. Midden (8LV65) at the south end, and Clam Beach (8LV66a) in the central area. The results from A. B. Midden were especially gratifying. The remnant of a once-larger midden contains at least four components, all nicely stratified in a 1.6-m-thick sequence. The second component of the test unit supplied charcoal that returned a calibrated AMS age estimate of ~700–400 B.C. As discussed earlier, this is at the tail end of a period of several centuries when we lose sight of human occupation

on the coast, presumably because of a regression of sea that either caused people to abandon the region or to follow the coast out and occupy landforms that have since drowned. Either way, data on this critical time are sorely needed to fill in a big gap of Florida's ancient history.

We propose to expand on our initial testing at North Key and to complete some of the work that was proposed, but not completed, last year. First, we propose to conduct reconnaissance survey of the full length of the island with shovel test pits (STPs) placed every 30 m along transects following the basic contours of the landform. It will take about 50 STPs to test the full length of the island. These transects intercept all three sites on the island, but these boundaries are judgmental and in need of refinement. Thus, the STP survey will not only help to locate additional archaeological deposits, but also clarify the extent of existing sites. We know from casual inspection of the interior of North Key last summer that small shell rings and other evidence of habitation exist beyond the edges of shoreline midden.

A 1 x 1-m unit at Clam Beach (8LV66a) was started by not completed last summer. It was backfilled with black plastic lining the excavated portion. This summer we propose expanding this unit to 1 x 2-m site (our stranded test unit) and taking it down to sterile. We can expect from a nearby shovel test to observe at least 1 m of shell midden, thus the larger unit size is not only warranted but necessary.

Finally, we propose to excavate a 1 x 2-m unit in the northernmost site, 8LV66b. The location of this unit will be determined by the results of shovel testing.

Seahorse Key

Several tasks on Seahorse Key were completed last summer and we excavated a 1 x 2-m test unit at Gardiner's Point (8LV68) this past January. At least one additional 1 x 2-m test at Gardiner's Point is needed, on the east side of the site, where Borremanns (n.d.) exposed a stratigraphic sequence vastly different than the one we observed of the west side of the site. In addition, the site on the southeast margin of the island, Seahorse Key Shell Midden (8LV64) requires survey and testing. The boundaries of this site are vague and we have no good sense of the internal configuration and integrity of the deposit on a bluff overlooking the beach. Artifacts, shell, and bone have eroded from the bluff and onto the beach for many years. Surface collections from the beach provide some insight into the components represented but only subsurface testing will provide the sorts of data needed to incorporate this site into our regionwide inventory of dated occupations. Like so many other sites in the region, both of these sites are eroding and must be tested before they are completely gone. We propose two 1 x 2-m units at 8LV64, the locations of which will be determined by shovel testing at 10-m intervals.

Beyond testing extant sites, we propose to conduct reconnaissance survey of the upland units of the island, notably the dune crest that houses the lighthouse and infrastructure of the research station. This process was started last summer during field school but the insects were so numerous and aggressive that students were reassigned to other projects under less hostile conditions. Only the eastern leg of the lighthouse transect was completed. The remainder of

shovel testing along another transect to the west is best accomplished in the winter. At a 30-m interval along transects, it will take about 34 STPs to complete the reconnaissance survey.

CONCLUSION

The fifth year of investigations by the Lower Suwannee Archaeological Survey (LSAS) has brought us to point where we can begin to intelligently discuss culture history and begin to see patterning indicative of a variety of natural and cultural processes. It is abundantly clear, at this point, that our understanding of what happened in the Lower Suwannee region over the past 5,000 years will necessarily involve the goings on elsewhere, because Lower Suwannee communities were always connected to others. It is also clear that we will need lots of independent data on environmental change because the archaeological residues of human-environment relationships vary beyond the local, or the immediate; archaeological data are not always a good proxy for environment and not simply because things moved around a lot. They are not such a good proxy for the local and immediate environment because they embody the experiences of other times and places, and the demands of more than daily needs.

As we get better at characterizing the physical conditions of environment and its change, we must also strive to understand how and why communities of the Lower Suwannee intervened through terraforming and other “engineering” efforts, including mariculture, and under what conditions they invested more in extralocal social networks that diffused risks for failure across the interior Southeast. These are not mutually exclusive interventions, they indeed may be complementary or dialectical. Were social networks a consequence or precondition for civic-ceremonial centers? Did social networks emerge in the context of a community whose sustainability in a given was threatened by changing physical conditions? How powerful was the gravitational pull of ancestral places and cemeteries? Were efforts to defend against failure and to intensify production all about ancestry?

More than anything else, the past five years of the LSAS has taught us that there will be no simple descriptions of, let alone explanations for the response of coastal communities to changes in sea level. Sea level change itself cannot be simplified, it cannot be “smoothed,” and it cannot be extrapolated over much distance. Humans are no less complex in their perception of change and their rationale for doing anything about it, or not. The questions of the LSAS will continue to evolve as data accumulate, exposing each year more of the complexity we are confronting in a rich but threatened record of 5,000 years. We hope that the answers we can provide in the future will be as nuanced as the questions we are now able to pose.

REFERENCES CITED

- Austin, Robert J., and Jon Endonino
2011 *Archaeological Data Recovery at Monteverde, 8LA243: A Terminal Archaic through St. Johns II Site on Lake Apopka, Lake County, Florida*. Southeastern Archaeological Research, Inc., Jonesville, Florida.
- Balsillie, J. H., and J. F. Donoghue
2004 *High Resolution Sea-level History for the Gulf of Mexico since the Last Glacial Maximum*. Florida Geological Survey Report of Investigations No. 103, 66 pp.
- Borremans, Nina Thanz
n.d. Unpublished records of archaeological excavations at North Key and Seahorse Key, Florida, ca. 1989. Records on file, Florida Museum of Natural History, University of Florida, Gainesville.
- Borremans, Nina Thanz, and Michael E. Moseley
1990 *A Prehistoric Site Survey of the Cedar Keys Region of Coastal Levy County, Florida*. Department of Anthropology, University of Florida, Gainesville.
- Bronk Ramsey, C., and S. Lee
2013 Recent and Planned Development of the Program OxCal. *Radiocarbon* 55(2-3):720–730.
- Bullen, Ripley P.
1950 Perico Island: 1950. *The Florida Anthropologist* 3:40–44.

1968 *A Guide to the Identification of Florida Projectile Points*. Florida State Museum, University of Florida, Gainesville.
- Bullen Ripley P., and Edward M. Dolan
1960 Shell Mound, Levy County, Florida. *The Florida Anthropologist* 13:17–23.
- Colquhoun, Donald J., and Mark J. Brooks
1986 New Evidence for the Southeastern U.S. for Eustatic Components in the Late Holocene Sea Levels. *Geoarchaeology* 1:275–291.
- Cordell, Ann S.
2004 Paste Variability and Possible Manufacturing Origins of Late Archaic Fiber-Tempered Pottery from Selected Sites in Peninsular Florida. In *Early Pottery: Technology, Function, Style, and Interaction in the Lower Southeast*, edited by Rebecca Saunders and Christopher T. Hays, pp. 63–104. University of Alabama Press, Tuscaloosa.

DePratter, Chester B., and James D. Howard

- 1980 Indian Occupation and Geological History of the Georgia Coast: A 5000 Summary. In *Excursions in Southeastern Geology: The Archaeology-Geology of the Georgia Coast*, edited by J. D. Howard, C. B. DePratter, and R. W. Frey, pp. 1–65. Georgia Geological Society Guidebook 20.

Donoghue, Joseph F.

- 2011 Sea Level History of the Northern Gulf of Mexico Coast and Sea Level Rise Scenarios for the Near Future. *Climatic Change* 107:17–34.

Dorian, Alan W.

- 1980 *Literature Search and Partial Cultural Resource Inventory of the Chassahowitzka, Cedar Keys, and Lower Suwannee National Wildlife Refuges*. Southeast Archaeology Conservation Center, Florida State University, Tallahassee.

Gall, Daniel G., and Vincas P. Steponaitis

- 2001 Composition and Provenance of Greenstone Artifacts from Moundville. *Southeastern Archaeology* 20:99–117.

Gilmore, Zackary I.

- 2014 *Gathering Places: Histories of Material and Social Interaction at Florida's Late Archaic Shell Mounds*. Ph.D. dissertation, Department of Anthropology, University of Florida, Gainesville.

Goggin, John M.

- 1948 *Some Pottery Types from Central Florida*. Bulletin No. 1. Gainesville Anthropological Association, Gainesville, Florida.

Goodbred, Steven L., Albert C. Hine, and Eric E. Wright

- 1998 Sea-Level Change and Storm Surge Deposition in a Late Holocene Florida Salt Marsh. *Journal of Sedimentary Research* 68:240–252

Hine, Albert C., Daniel F. Belknap, Joan G. Hutton, Eric B. Osing, and Mark W. Evans

- 1988 Recent Geological History and Modern Sedimentary Processes along an Incipient, Low-Energy, Epicontinental-Sea Coastline: Northwest Florida. *Journal of Sedimentary Research* 58:567–579.

Jenkins, Jessica A.

- 2015 *Archaeological Evidence of Oyster Mariculture in the Lower Suwannee Region of Gulf Coastal Florida*. M.A. thesis, Department of Anthropology, University of Florida, Gainesville.

Kelly, Robert L.

- 1995 *The Foraging Spectrum: Diversity in Hunter-Gatherer Lifeways*. Smithsonian Institution Press, Washington, D.C.

Kidder, Tristram R.

- 2006 Climate Change and the Archaic to Woodland Transition (3000–2600 cal B.P.) in the Mississippi River Basin. *American Antiquity* 71:195–231.

McFadden, Paulette S.

- 2015 *Late Holocene Coastal Evolution and Human Occupation on the Northern Gulf Coast of Florida, Horseshoe Cove, Dixie County, Florida*. Ph.D. dissertation, Department of Anthropology, University of Florida, Gainesville.

McFadden, Paulette S., and Andrea Palmiotto

- 2012 *Archaeological Investigations at Bird Island (8DI52), Dixie Country, Florida*. Technical Report 14. Laboratory of Southeastern Archaeology, Department of Anthropology, University of Florida, Gainesville.
- 2013 *Archaeological Investigations at Ehrbar (8LV282), Levy Country, Florida*. Technical Report 17. Laboratory of Southeastern Archaeology, Department of Anthropology, University of Florida, Gainesville.

Marquardt, William H.

- 1992 Shell Artifacts from the Caloosahatchee Area. In *Culture and Environment in the Domain of the Calusa*, edited by William H. Marquardt, pp. 191–227. Monograph 1, Institute of Archaeology and Paleoenvironmental Studies, University of Florida, Gainesville.
- 2010 Mound , Middens, and Rapid Climate Change during the Archaic-Woodland Transition in the Southeastern United States. In *Trend, Tradition, and Turmoil: What Happened to the Southeastern Archaic?*, edited by David Hurst Thomas and Matthew C. Sanger, pp. 253–272. Anthropological Papers 93. American Museum of Natural History, New York.

Menz, Martin W.

- 2012 *The Use-Life and Times of the Type-G Shell Hammer: A Descriptive and Experimental Analysis of Shell Hammers from Roberts Island (8CI41)*. Undergraduate Honors Thesis, Department of Anthropology, University of South Florida, Tampa.

Milanich, Jerald T.

- 1994 *Archaeology of Precolumbian Florida*. University Press of Florida, Gainesville.

Milanich, Jerald T., Ann S. Cordell, Vernon J. Knight, Jr., Timothy A. Kohler, and Brenda J. Sigler-Lavelle

- 1984 *McKeithan Weeden Island: The Culture of Northern Florida, A.D. 200–900*. Academic Press, New York.

Mitchem, Jeffrey M.

- 1989 *Redefining Safety Harbor: Late Prehistoric/Protohistoric Archaeology in West Peninsular Florida*. Ph.D. dissertation, Department of Anthropology, University of Florida, Gainesville.

Monés, Micah P., Neill J. Wallis, and Kenneth E. Sassaman

- 2012 *Archaeological Investigations at Deer Island, Levy County, Florida*. Technical Report 15. Laboratory of Southeastern Archaeology, Department of Anthropology, University of Florida, Gainesville.

NOAA

- 2014 Crystal River to Horseshoe Point. Depth sounding in feet. U.S. Department of Commerce, Washington, D.C.

Nordlie, Frank G., and Dennis C. Haney

- 1998 Adaptations in Salt Marsh Teleosts to Life in Waters of Varying Salinity. *Italian Journal of Zoology* 65:405–409.

O'Donoghue, Jason

- 2009 Limestone-Tempered Ceramics from the North Peninsular Gulf of Florida. Report on file, Laboratory of Southeastern Archaeology, Department of Anthropology, University of Florida, Gainesville.

Palmiotto, Andrea

- 2013 Vertebrate and Invertebrate Fauna. In *Archaeological Investigations at Shell Mound (8LV42), Levy County, Florida: 2012 Testing*. Technical Report 16. Laboratory of Southeastern Archaeology, Department of Anthropology, University of Florida, Gainesville.

Pluckhahn, Thomas J., Victor D. Thompson, and Alexander Cherkinsky

- 2015 The Temporality of Shell-Bearing Landscapes at Crystal River, Florida. *Journal of Anthropological Archaeology* 37:19–36.

Reitz, Elizabeth J., and Elizabeth S. Wing

- 2008 *Zooarchaeology*. Cambridge University Press, New York.

Robb, John and Timothy R. Pauketat

- 2013 From Moments to Millennia: Theorizing Scale and Change. In *Big Histories, Human Lives: Tackling Problems of Scale in Archaeology*, edited by John Robb and Timothy R. Pauketat, pp. 3–34. School for Advanced Research Press, Santa Fe.

Sassaman, Kenneth E.

- 2006 Dating and Explainign Soapstone Vessels: A Comment on Truncer. *American Antiquity* 71:141–156.

- 2013 Ethnoscience of Time and Space in the Late Archaic Southeast. Paper presented at the Annual Meeting of the Southeastern Archaeological Conference, Tampa, Florida.
- 2015 *An Unusual Soapstone Artifact from Seahorse Key Shell Midden (8LV64)*. Report on file, Laboratory of Southeastern Archaeology, Department of Anthropology, University of Florida, Gainesville.
- Sassaman, Kenneth E., John S. Krigbaum, GiNESSA J. Mahar, and Andrea Palmiotto
2015 *Archaeological Investigations at McClamory Key (8LV288), Levy County, Florida*. Technical Report 22. Laboratory of Southeastern Archaeology, Department of Anthropology, University of Florida, Gainesville.
- Sassaman, Kenneth E., Paulette S. McFadden, and Micah P. Monés
2011 *Lower Suwannee Archaeological Survey 2009–2010: Investigations at Cat Island, Bird Island, and Richards Island*. Technical Report 10. Laboratory of Southeastern Archaeology, Department of Anthropology, University of Florida, Gainesville.
- Sassaman, Kenneth E., Paulette S. McFadden, Micah P. Monés, Andrea Palmiotto, and Asa R. Randall
2014 Northern Gulf Coastal Archaeology of the Here and Now. In *New Histories of Pre-Columbian Florida*, edited by N. J. Wallis and A. R. Randall, pp. 143–162. University Press of Florida, Gainesville.
- Sassaman, Kenneth E., GiNESSA J. Mahar, and Mark C. Donop
2014 *Interim Report on Archaeological Investigations at Sites in the Lower Suwannee and Cedar Keys National Wildlife Refuges, Florida*. Report on file, Laboratory of Southeastern Archaeology, Department of Anthropology, University of Florida, Gainesville.
- Sassaman, Kenneth E., and Jason M. O'Donoghue
2015 In the Unlikely Event: Method for Temporizing the Experience of Change. In *The Archaeology of Events: Cultural Change and Continuity in the Pre-Columbian Southeast*, edited by Zackary I. Gilmore and Jason M. O'Donoghue, pp. 25–45. University of Alabama Press, Tuscaloosa.
- Sassaman, Kenneth E., Andrea Palmiotto, GiNESSA J. Mahar, Micah P. Monés, and Paulette S. McFadden
2013 *Archaeological Investigations at Shell Mound (8LV42), Levy County, Florida: 2012 Testing*. Technical Report 16. Laboratory of Southeastern Archaeology, Department of Anthropology, University of Florida, Gainesville.
- Sassaman, Kenneth E., and Neill J. Wallis
2015 Crisis of Opportunity: How Rapid Sea-Level Rise at A.D. 200–300 Relates to the Structural Realignment of Communities of the Northern Gulf Coast of Florida and

- Beyond. Paper presented at the 47th Annual Meeting of the Canadian Archaeological Association, St. Johns, Newfoundland.
- Scarry, John
- 1980 The Chronology of Fort Walton Development in the Upper Apalachicola Valley, Florida. *Southeastern Archaeological Conference Bulletin* 22:38–45.
- Stojanowski, Christopher M., and Glen H. Doran
- 1998 Osteology of the Late Archaic Bird Island Population. *The Florida Anthropologist* 51:139–145.
- Thomas, David Hurst
- 2008 *Native American Landscapes of St. Catherines Island, Georgia*. Anthropological Papers 88. American Museum of Natural History, New York.
- Thomas, David H., and Matthew C. Sanger (editors)
- 2010 *Trend, Tradition, and Turmoil: What Happened to the Southeastern Archaic?* Anthropological Papers 93. American Museum of Natural History, New York.
- Tsoar, Haim, and Dan G. Blumberg
- 2002 Formation of Parabolic Dunes from Barchan and Transverse Dunes along Israel's Mediterranean Coast. *Earth Surface Processes and Landforms* 27:1147–1161.
- Walker, Karen J.
- 1989 Artifacts of a Fishy Nature: Southwest Florida's Prehistoric Marine Fishing Technology. Paper presented at the Annual Meeting of the Southeastern Archaeological Conference, Tampa, Florida.
- 1992 The Zooarchaeology of Charlotte Harbor's Prehistoric Maritime Adaptation: Spatial and Temporal Perspectives. In *Culture and Environment in the Domain of the Calusa*, edited by William H. Marquardt, pp. 265–366. Monograph 1. Institute of Archaeology and Paleoenviromnmetal Studies, University of Florida, Gainesville.
- 2000 The Material Culture of Precolumbian Fishing: Artifacts and Fish Remains from Coastal Southwest Florida. *Southeastern Archaeology* 19:24–45.
- 2013 The Pineland Site Complex: Environmental Contexts. In *The Archaeology of Pienland: A Coastal Soutwest Florida Site Complex, A.D. 50–1710*. Edited by William H. Marquardt and Karen J. Walker, pp. 23–52. Monograph 4. Institute of Archaeology and Paleoenviromnmetal Studies, University of Florida, Gainesville.
- Walker, Karen J., Frank W. Stapor, Jr., and William H. Marquardt
- 1995 Archaeological Evidence for a 1750–1450 BP Higher-Than-Present Sea Level along Florida's Gulf Coast. *Journal of Coastal Research Special Issue* 17:205–218.

Wallis, Neill J., Ann S. Cordell, and James B. Stoltman

- 2014 Foundations of the Cades Pond Culture in North-Central Florida: The River Styx Site (8AL458). *Southeastern Archaeology* 33:168–188.

Wallis, Neill J., and Paulette S. McFadden

- 2013 *Archaeological Investigations at the Garden Patch Site (8DI4), Dixie County, Florida*. Miscellaneous Report 63, Florida Museum of Natural History, University of Florida, Gainesville.

Wallis, Neill J., Paulette S. McFadden, and Hayley M. Singleton

- 2015 Radiocarbon Dating the Pace of Monument Construction and Village Aggregation at Garden Patch: A Ceremonial Center on the Florida Gulf Coast. *Journal of Archaeological Science: Reports* 2:507–516.

Willey, Gordon R.

- 1949 *Archaeology of the Florida Gulf Coast*. Smithsonian Miscellaneous Collections 113. Smithsonian Institution, Washington, D.C.

Wright, Eric E., Albert C. Hine, Steven L. Goodbred Jr, and Stanley D. Locker

- 2005 The Effect of Sea-Level and Climate Change on the Development of a Mixed Siliciclastic-Carbonate, Deltaic Coastline: Suwannee River, Florida, U.S.A. *Journal of Sedimentary Research* 75:621–635.

Yates, Wm. Brian

- 2000 *Implications of Late Archaic Exchange Networks in the Southeast as Indicated by Archaeological Evidence of Prehistoric Soapstone Vessels throughout Florida*. M. A. thesis, Department of Anthropology, Florida State University, Tallahassee.

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APPENDIX A:
CATALOG

ABBREVIATIONS

Add. – Addendum	Mod. – Modified
Assort. Mat. – Assorted Materials	Mrkd. – Marked
Brnstd. – Burnished	Smpl. – Simple
Chk. – Check	Stmp. – Stamped
Comp. – Complicated	Temp. – Tempered
Dent. – Dentate	TU – Test Uni
Feat. – Feature	UID – Unidentifiable
Inc. – Incised	Unmod. – Unmodified
Invert. – Invertebrate	Vert. – Vertebrate
Lmstn. – Limestone	XSimpStp – Cross Simple Stamped

Palmetto Mound 8LV2 – General Excavation

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV2.1.1	A-1	50-74	Lithic	Chert	Flake			1	0.1
8LV2.1.2	A-1	50-74	Lithic	Chert	Shatter			1	0.5
8LV2.2.1	A-2	40-80	Lithic	Chert	Flake			15	1.8
8LV2.2.2	A-2	40-80	Lithic	Chert	UID			2	3.9
8LV2.3.1	A-3	40-70	Pottery	Sand Temp	Body	Plain	Plain	1	2.2
8LV2.3.2	A-3	40-70	Pottery	Sand Temp	Crumb	UID		3	0.7
8LV2.3.3	A-3	40-70	Lithic	Chert	Flake			2	4.6
8LV2.4.1	A-4	50	Lithic	Chert	Flake			1	0.2
8LV2.5.1	A-13	50	UID	UID	UID			3	2.5
8LV2.6.1	B-2	30-50	Pottery	Spicule Temp	Crumb	Plain		1	0.8
8LV2.6.2	B-2	30-50	Pottery	Sand Temp	Crumb	UID		2	1.4
8LV2.7.1	B-4	0-35	Pottery	Spicule Temp	Body	Plain	Painted	3	13.3
8LV2.7.2	B-4	0-35	Pottery	Spicule Temp	Body	Plain	Plain	20	82.9
8LV2.7.3	B-4	0-35	Pottery	Spicule Temp	Crumb	Plain		37	28.6
8LV2.7.4	B-4	0-35	Pottery	Sand Temp	Body	Plain	Plain	14	56.8
8LV2.7.5	B-4	0-35	Pottery	Sand Temp	Body	Incised	Linear	2	3.6
8LV2.7.6	B-4	0-35	Pottery	Sand Temp	Crumb	UID		10	8.9
8LV2.7.7	B-4	0-35	Vert. Fauna						0.9
8LV2.8.1	C-1	30-70	Lithic	Chert	Flake			7	1.7
8LV2.9.1	A-9	0-90	Pottery	Sand Temp	Body	Plain	Plain	86	369.7
8LV2.9.2	A-9	0-90	Pottery	Sand Temp	Rim	Plain	Plain	5	18.7
8LV2.9.3	A-9	0-90	Pottery	Sand Temp	Rim	Incised	Linear	1	4.5
8LV2.9.4	A-9	0-90	Pottery	Sand Temp	Body	Plain	Painted	1	1.6
8LV2.9.5	A-9	0-90	Pottery	Sand Temp	Body	Incised	Linear	5	22.9
8LV2.9.6	A-9	0-90	Pottery	Sand Temp	Body	Incised	Linear/Curvlnr	1	11.4
8LV2.9.7	A-9	0-90	Pottery	Sand Temp	Body	Incised	Linear	4	18.5
8LV2.9.8	A-9	0-90	Pottery	Sand Temp	Body	Stamped	Chk Stmp	6	21.6
8LV2.9.9	A-9	0-90	Pottery	Sand Temp	Body	Stamped	Comp Stmp	2	4.9
8LV2.9.10	A-9	0-90	Pottery	Sand Temp	Crumb			146	122.3
8LV2.9.11	A-9	0-90	Pottery	Spicule Temp	Body	Plain	Plain	7	18.2
8LV2.9.12	A-9	0-90	Pottery	Spicule Temp	Crumb	UID		21	10.6
8LV2.9.13	A-9	0-90	Pottery	Limestone Temp	Body	Plain	Plain	4	12.6
8LV2.9.14	A-9	0-90	Pottery	Limestone Temp	Crumb	UID		1	0.7
8LV2.9.15	A-9	0-90	Pottery	Limestone Temp	Rim	Plain	Plain	2	2.7
8LV2.10.1	D-3	30-60	Pottery	Sand Temp	Rim	Plain	Plain	1	20.9
8LV2.10.2	D-3	30-60	Pottery	Sand Temp	Body	Plain	Plain	3	11.2
8LV2.10.3	D-3	30-60	Pottery	Limestone Temp	Rim	UID		2	8.4
8LV2.10.4	D-3	30-60	Lithic	Chert	Flake			3	1.4
8LV2.11.1	A-10	70	Lithic	Chert	Flake			1	1.6
8LV2.12.1	A-12	40-60	Lithic	Chert	Flake			2	1.4
8LV2.12.2	A-12	40-60	Lithic	Chert	Flake			3	1.1
8LV2.13.1	B-5	50-60	Pottery	Sand Temp	Body	Stamped	Smpl Stmp	3	54.7
8LV2.13.2	B-5	50-60	Lithic	Chert	Flake			3	1.5
8LV2.14.1	B-6	35	Pottery	Sand Temp	Body	UID		1	7.5
8LV2.15.1	C-2	40	Lithic	Chert	Flake			1	0.1
8LV2.16.1	D-4	40-100	Lithic	Chert	Flake			11	1.7
8LV2.17.1	G-2	40	Pottery	Sand Temp	Body	Plain	Plain	1	2.6
8LV2.18.1	G-3	0-19	Pottery	Sand Temp	Body	Plain	Plain	3	14.1
8LV2.18.2	G-3	0-19	Pottery	Sand Temp	Body	Plain	Painted	1	10.0
8LV2.18.3	G-3	0-19	Pottery	Sand Temp	Body	Multiple	Linear/Brnshd	1	2.6
8LV2.18.4	G-3	0-19	Pottery	Lmstn/Sand Temp	Body	Plain	Plain	1	2.7
8LV2.18.5	G-3	0-19	Pottery	Lmstn/Spic Temp	Body	Plain	Plain	1	3.2
8LV2.18.6	G-3	0-19	Pottery		Crumb			7	6.4
8LV2.19.1	G-4	32	Lithic	Chert	Flake			2	2.4
8LV2.20.1	F-3	0-23	Pottery	Sand Temp	Body	Plain	Plain	5	13.5
8LV2.20.2	F-3	0-23	Pottery		Crumb			3	1.1

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV2.20.3	F-3	0-23	Pottery	Sand Temp	Rim	Plain	Painted	1	0.5
8LV2.20.4	F-3	0-23	Invertebrate	Crown Conch	Columella			2	18.8
8LV2.21.1	E-1	50	Lithic	Sandstone	UID	UID		1	25.3
8LV2.22.1	F-4	90	Lithic	Limestone	Flake			1	6.1
8LV2.23.1	E-2	50	Lithic	Chert	Flake			2	0.2
8LV2.24.1	I-1	90	Pottery	Sand Temp	Rim	Stamped	Smpl Stmp	1	15.0
8LV2.25.1	J-1	55-75	Lithic	Chert	Flake			3	2.2
8LV2.26.1	Auger 2	35	Lithic	Chert	Flake			1	0.2
8LV2.27.1	K-1	10-20	Pottery	Sand Temp	Body	Plain	Plain	7	25.6
8LV2.28.1	TU1	B	Pottery	Sand Temp	Body	Plain	Plain	1	2.7
8LV2.28.2	TU1	B	Lithic	Chert	Flake			1	3.6
8LV2.28.3	TU1	B	Historic	Brick	Fragment			1	5.5
8LV2.28.4	TU1	B	Invertebrate	Crown Conch	Hammer			1	46.0
8LV2.28.5	TU1	B	Invertebrate	Mercenaria	UID Modified			1	1.3
8LV2.29.1	TU1	C	Pottery	Sand Temp	Body	Plain	Plain	2	6.1
8LV2.29.2	TU1	C	Pottery	Sand/Mica Temp	Rim	Plain	Plain	2	5.6
8LV2.29.3	TU1	C	Pottery		Crumb			2	1.8
8LV2.29.4	TU1	C	Invertebrate	Crown Conch	UID Modified			1	21.9
8LV2.29.5	TU1	C	Invertebrate	Crown Conch	UID Modified			3	3.2
8LV2.29.6	TU1	C	Invertebrate	Misc. Gastropod	UID Modified			8	3.2
8LV2.29.7	TU1	C	Invertebrate	Misc. Gastropod	Columella			1	1.0
8LV2.29.8	TU1	C	Invertebrate	Misc. Gastropod	Unmodified			1	0.6
8LV2.29.9	TU1	C	Vert. Fauna						1.8
8LV2.30.1	TU1	D	Pottery	Sand Temp	Body	Plain	Plain	6	23.9
8LV2.30.2	TU1	D	Pottery	Grit Temp	Body	Plain	Plain	1	11.9
8LV2.30.3	TU1	D	Invertebrate	Misc. Gastropod	Columella			1	1.9
8LV2.30.4	TU1	D	Invertebrate	Mercenaria	UID Modified			1	76.8
8LV2.30.5	TU1	D	Invertebrate	Misc. Gastropod	UID Modified			5	5.5
8LV2.30.6	TU1	D	Invertebrate	Misc. Gastropod	Unmodified			1	0.1
8LV2.30.7	TU1	D	Vert. Fauna						2.6
8LV2.31.1	TU1	E	Pottery	Sand/Mica Temp	Rim	Plain	Plain	1	5.7
8LV2.31.2	TU1	E	Pottery	Sand/Mica Temp	Podal Support	Plain	Plain	1	22.3
8LV2.31.3	TU1	E	Pottery	Sand Temp	Body	Plain	Plain	3	9.3
8LV2.31.4	TU1	E	Pottery	Grit Temp	Body	Plain	Plain	1	16.1
8LV2.31.5	TU1	E	Invertebrate	Crown Conch	Unmodified			1	16.8
8LV2.31.6	TU1	E	Invertebrate	Crown Conch	UID Modified			1	34.3
8LV2.31.7	TU1	E	Invertebrate	Crown Conch	UID Modified			1	20.4
8LV2.31.8	TU1	E	Invertebrate	Mercenaria	UID Modified			1	29.3
8LV2.31.9	TU1	E	Invertebrate	Misc. Gastropod	Columella			1	42.2
8LV2.31.10	TU1	E	Invertebrate	Crown Conch	Columella			2	4.5
8LV2.31.11	TU1	E	Invertebrate	Misc. Gastropod	Unmodified			1	0.1
8LV2.31.12	TU1	E	Invertebrate	Misc. Gastropod	Unmodified			1	0.1
8LV2.31.13	TU1	E	Invertebrate	Barnacle				1	1.7
8LV2.31.14	TU1	E	Invertebrate	Oyster				1	0.7
8LV2.31.15	TU1	E	Vert. Fauna						0.3
8LV2.32.1	TU1	F	Pottery	Sand Temp	Body	Plain	Plain	8	87.3
8LV2.32.2	TU1	F	Pottery	Sand Temp	Body	Incised	Linear	1	3.4
8LV2.32.3	TU1	F	Pottery	Sand/Mica Temp	Body	Plain	Plain	1	9.4
8LV2.32.4	TU1	F	Pottery	Sand Temp	Body	Plain	Burnished	1	1.5
8LV2.32.5	TU1	F	Pottery	Sand/Lmstn Temp	Body	Plain	Plain	3	29.9
8LV2.32.6	TU1	F	Pottery	Sand/Mica Temp	Body	Stamped	Chk Stmp	1	2.9
8LV2.32.7	TU1	F	Pottery		Crumb			8	2.6
8LV2.32.8	TU1	F	Invertebrate	Crown Conch	UID Modified			5	143.1
8LV2.32.9	TU1	F	Invertebrate	Crown Conch	Unmodified			3	97.8
8LV2.32.10	TU1	F	Invertebrate	Misc. Gastropod	Unmodified			1	0.5
8LV2.32.11	TU1	F	Invertebrate	Crown Conch	UID Modified			1	1.7
8LV2.32.12	TU1	F	Invertebrate	Misc. Gastropod	Unmodified			2	0.1
8LV2.32.13	TU1	F	Invertebrate	Oyster	UID Modified			1	0.7
8LV2.32.14	TU1	F	Vert. Fauna						1.5

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV2.32.15	TU1	F	UID	UID				1	1.2
8LV2.32.16	TU1	F	Historic	Metal (Iron)	UID			1	0.1
8LV2.33.1	TU1	G (Zone A)	Pottery	Limestone Temp	Body	Plain	Plain	1	17.5
8LV2.33.2	TU1	G (Zone A)	Lithic	Chert	Biface Fragment			1	1.2
8LV2.33.3	TU1	G (Zone A)	Invertebrate	Crown Conch	UID Modified			4	79.7
8LV2.33.4	TU1	G (Zone A)	Invertebrate	Crown Conch	Unmodified			1	19.8
8LV2.33.5	TU1	G (Zone A)	Invertebrate	Mercenaria	UID Modified			1	233.3
8LV2.33.6	TU1	G (Zone A)	Invertebrate	Misc. Gastropod	Columella			1	1.4
8LV2.33.7	TU1	G (Zone A)	Invertebrate	Misc. Bivalve	Unmodified			1	5.2
8LV2.33.8	TU1	G (Zone A)	Invertebrate	Misc. Gastropod	Unmodified			1	1.5
8LV2.33.9	TU1	G (Zone A)	Invertebrate	Misc. Gastropod	Unmodified			2	0.1
8LV2.33.10	TU1	G (Zone A)	Invertebrate	Oyster	UID Modified			2	13.4
8LV2.33.11	TU1	G (Zone A)	Invertebrate	Barnacle				5	5.6
8LV2.33.12	TU1	G (Zone A)	Vert. Fauna						1.9
8LV2.34.1	TU1	G	Pottery	Sand Temp	Body	Plain	Plain	19	123.7
8LV2.34.2	TU1	G	Pottery	Sand Temp	Shoulder	Plain	Plain	2	22.2
8LV2.34.3	TU1	G	Pottery	Sand Temp	Body	Plain	Plain	2	4.4
8LV2.34.4	TU1	G	Pottery	Sand/Mica Temp	Body	Plain	Painted/Brnshd	1	1.9
8LV2.34.5	TU1	G	Pottery	Limestone Temp	Body	Plain	Plain	16	56.8
8LV2.34.6	TU1	G	Pottery	Spicule Temp	Body	Plain	Plain	2	4.6
8LV2.34.7	TU1	G	Pottery		Crumb			2	0.6
8LV2.34.8	TU1	G	Invertebrate	Crown Conch	UID Modified			9	240.9
8LV2.34.9	TU1	G	Invertebrate	Misc. Gastropod	Columella			2	7.6
8LV2.34.10	TU1	G	Invertebrate	Misc. Gastropod	Columella			1	10.4
8LV2.34.11	TU1	G	Invertebrate	Mercenaria	UID Modified			1	41.8
8LV2.34.12	TU1	G	Invertebrate	Tulip Shell	UID Modified			1	2.3
8LV2.34.13	TU1	G	Invertebrate	Crown Conch	Unmodified			6	202.3
8LV2.34.14	TU1	G	Invertebrate	Pear Whelk	Unmodified			1	6.3
8LV2.34.15	TU1	G	Invertebrate	Misc. Gastropod	Unmodified			3	1.6
8LV2.34.16	TU1	G	Invertebrate	Misc. Gastropod	UID Modified			2	2.8
8LV2.34.17	TU1	G	Invertebrate	Misc. Gastropod	Unmodified			1	0.1
8LV2.34.18	TU1	G	Invertebrate	Barnacle				7	13.7
8LV2.34.19	TU1	G	Misc. Rock	Limestone	Unmodified			1	39.3
8LV2.34.20	TU1	G	Vert. Fauna						6.6
8LV2.34.21	TU1	G	Historic	Metal (Iron)	UID			10	10.7
8LV2.35.1	TU1	H	Pottery	Sand Temp	Body	Plain	Plain	14	51.0
8LV2.35.2	TU1	H	Pottery	Sand Temp	Rim	Plain	Plain	3	26.1
8LV2.35.3	TU1	H	Pottery	Sand Temp	Shoulder	Plain	Plain	1	23.2
8LV2.35.4	TU1	H	Pottery	Sand Temp	Body	Plain	Burnished	1	10.4
8LV2.35.5	TU1	H	Pottery	Sand/Mica Temp	Body	Plain	Burnished	1	2.2
8LV2.35.6	TU1	H	Pottery	Sand Temp	Body	Plain	Painted	1	1.3
8LV2.35.7	TU1	H	Pottery	Limestone Temp	Body	Plain	Plain	2	5.9
8LV2.35.8	TU1	H	Pottery	Spicule Temp	Body	Plain	Plain	4	3.3
8LV2.35.9	TU1	H	Pottery		Crumb			11	4.5
8LV2.35.10	TU1	H	Invertebrate	Crown Conch	UID Modified			10	207.7
8LV2.35.11	TU1	H	Invertebrate	Crown Conch	UID Modified			1	30.3
8LV2.35.12	TU1	H	Invertebrate	Crown Conch	Hammer			1	55.5
8LV2.35.13	TU1	H	Invertebrate	Crown Conch	Hammer			1	34.8
8LV2.35.14	TU1	H	Invertebrate	Crown Conch	Unmodified			2	47.6
8LV2.35.15	TU1	H	Invertebrate	Misc. Gastropod	Columella			2	8.4
8LV2.35.16	TU1	H	Invertebrate	Mercenaria	UID Modified			6	179.7
8LV2.35.17	TU1	H	Invertebrate	Tulip Shell	UID Modified			2	24.7
8LV2.35.18	TU1	H	Invertebrate	Pear Whelk	UID Modified			2	23.4
8LV2.35.19	TU1	H	Invertebrate	Oyster	UID Modified			1	26.1
8LV2.35.20	TU1	H	Invertebrate	Misc. Gastropod	Unmodified			7	0.3
8LV2.35.21	TU1	H	Invertebrate	Misc. Bivalve	Unmodified			1	0.8
8LV2.35.22	TU1	H	Invertebrate	Misc. Gastropod	Unmodified			3	3.0
8LV2.35.23	TU1	H	Invertebrate	Barnacle				3	6.8
8LV2.35.24	TU1	H	Vert. Fauna						15.5

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV2.35.25	TU1	H	Misc. Rock	Limestone	Unmodified			1	8.0
8LV2.35.26	TU1	H	Historic	Metal (Iron)	UID			4	1.8
8LV2.36.1	TU1	I	Pottery	Sand Temp	Body	Plain	Plain	7	17.1
8LV2.36.2	TU1	I	Pottery	Sand Temp	Shoulder	Plain	Plain	1	9.2
8LV2.36.3	TU1	I	Pottery	Grit Temp	Body	Impressed	UID	3	23.7
8LV2.36.4	TU1	I	Pottery	Limestone Temp	Body	Plain	Plain	7	18.1
8LV2.36.5	TU1	I	Pottery	Spicule Temp	Body	Plain	Plain	1	0.9
8LV2.36.6	TU1	I	Pottery		Crumb			9	4.3
8LV2.36.7	TU1	I	Invertebrate	Crown Conch	UID Modified			13	301.7
8LV2.36.8	TU1	I	Invertebrate	Crown Conch	UID Modified			1	19.5
8LV2.36.9	TU1	I	Invertebrate	Crown Conch	Hammer			5	191.7
8LV2.36.10	TU1	I	Invertebrate	Crown Conch	Unmodified			3	62.9
8LV2.36.11	TU1	I	Invertebrate	Misc. Gastropod	Columella			1	5.4
8LV2.36.12	TU1	I	Invertebrate	Misc. Gastropod	UID Modified			3	0.7
8LV2.36.13	TU1	I	Invertebrate	Mercenaria	UID Modified			6	357.4
8LV2.36.14	TU1	I	Invertebrate	Pear Whelk	UID Modified			2	17.4
8LV2.36.15	TU1	I	Invertebrate	Pear Whelk	Unmodified			3	49.0
8LV2.36.16	TU1	I	Invertebrate	Tulip Shell	Unmodified			1	10.4
8LV2.36.17	TU1	I	Invertebrate	Misc. Gastropod	Unmodified			7	0.4
8LV2.36.18	TU1	I	Invertebrate	Misc. Gastropod	Unmodified			2	0.9
8LV2.36.19	TU1	I	Invertebrate	Misc. Gastropod	Unmodified			2	1.4
8LV2.36.20	TU1	I	Invertebrate	Misc. Bivalve	UID Modified			1	1.7
8LV2.36.21	TU1	I	Invertebrate	Misc. Gastropod	UID Modified			3	16.7
8LV2.36.22	TU1	I	Invertebrate	Barnacle				4	2.4
8LV2.36.24	TU1	I	Vert. Fauna						18.3
8LV2.36.25	TU1	I	Historic	Metal (Iron)	UID			1	0.7
8LV2.38.1	TU1	J	Pottery	Sand Temp	Rim	Impressed	Cord Mrkd	1	3.1
8LV2.38.2	TU1	J	Pottery	Sand Temp	Body	Impressed	Cord Mrkd	4	9.9
8LV2.38.3	TU1	J	Pottery	Sand Temp	Rim	Plain	Plain	1	6.6
8LV2.38.4	TU1	J	Pottery		Crumb			2	0.8
8LV2.38.5	TU1	J	Invertebrate	Crown Conch	UID Modified			10	235.4
8LV2.38.6	TU1	J	Invertebrate	Crown Conch	Hammer			2	97.8
8LV2.38.7	TU1	J	Invertebrate	Crown Conch	Unmodified			5	135.9
8LV2.38.8	TU1	J	Invertebrate	Misc. Gastropod	Columella			1	63.7
8LV2.38.9	TU1	J	Invertebrate	Misc. Gastropod	Columella			2	6.0
8LV2.38.10	TU1	J	Invertebrate	Mercenaria	UID Modified			4	179.9
8LV2.38.11	TU1	J	Invertebrate	UID	UID Modified			1	4.0
8LV2.38.12	TU1	J	Invertebrate	Misc. Gastropod	Unmodified			5	2.5
8LV2.38.13	TU1	J	Invertebrate	Misc. Gastropod	Unmodified			2	0.5
8LV2.38.14	TU1	J	Invertebrate	Misc. Gastropod	Unmodified			9	0.6
8LV2.38.15	TU1	J	Invertebrate	Oyster	UID Modified			2	5.0
8LV2.38.17	TU1	J	Vert. Fauna						12.9

Shell Mound 8LV42 – General Excavation ¼ inch fraction

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.100.1	Auger A	0-50	Pottery	Sand Temp	Rim	Plain	Plain	1	9.3
8LV42.100.2	Auger A	0-50	Historic Pottery	Stoneware				1	2.3
8LV42.100.3	Auger A	0-50	Invertebrate	Crown Conch	UID Modified			1	17.3
8LV42.100.4	Auger A	0-50	Vert. Fauna						5.4
8LV42.101.1	Auger B	0-57	Invertebrate	Misc. Gastropod	Columella			1	0.3
8LV42.101.2	Auger B	0-57	Misc. Rock	Gastrolith				1	1.2
8LV42.101.3	Auger B	0-57	Vert. Fauna						2.5
8LV42.102.1	Auger C	0-120	Lithic	Chert	Flake			2	14.4

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.102.2	Auger C	0-120	Lithic	Chert	Flake			2	1.8
8LV42.102.3	Auger C	0-120	Lithic	Chert	Shatter			2	5.1
8LV42.102.4	Auger C	0-120	Pottery	Limestone Temp	Body	Plain	Plain	2	13.9
8LV42.102.5	Auger C	0-120	Pottery	Limestone Temp	Crumb			1	0.3
8LV42.102.6	Auger C	0-120	Invertebrate	Crown Conch	UID Modified			5	74.0
8LV42.102.7	Auger C	0-120	Invertebrate	Misc. Gastropod	Columella			6	31.5
8LV42.102.8	Auger C	0-120	Invertebrate	Misc. Gastropod	Outer Whorl			1	4.0
8LV42.102.9	Auger C	0-120	Invertebrate	Misc. Gastropod	UID Modified			1	0.7
8LV42.102.10	Auger C	0-120	Vert. Fauna						12.2
8LV42.70.1	Feat. 12		Pottery	Limestone Temp	Body	Plain	Plain	1	9.6
8LV42.70.2	Feat. 12		Pottery	Limestone Temp	Crumb			2	0.7
8LV42.70.3	Feat. 12		Pottery	Sand Temp	Crumb			1	1.2
8LV42.70.4	Feat. 12		Lithic	Chert	Flake			2	1.5
8LV42.70.5	Feat. 12		Vert. Fauna						0.4
8LV42.224.1	Feat. 13		Invertebrate	Oyster					413.5
8LV42.224.2	Feat. 13		Vert. Fauna						71.2
8LV42.224.3	Feat. 13		Invertebrate	Mercenaria	UID Modified			2	10.3
8LV42.224.4	Feat. 13		Invertebrate	Misc. Bivalve					4.7
8LV42.224.5	Feat. 13		Invertebrate	Crown Conch	UID Modified			5	42.9
8LV42.224.6	Feat. 13		Invertebrate	Crown Conch	Columella			2	1.5
8LV42.224.7	Feat. 13		Invertebrate	Crown Conch	Outer Whorl			12	7.8
8LV42.224.8	Feat. 13		Charcoal						9.7
8LV42.224.9	Feat. 13		Charcoal						0.2
8LV42.224.10	Feat. 13		Lithic	Chert	Flake			20	14.6
8LV42.224.11	Feat. 13		Lithic	Chert	Shatter			4	1.1
8LV42.224.12	Feat. 13		Pottery	Limestone Temp	Body	Plain	Plain	4	13.9
8LV42.224.13	Feat. 13		Pottery	Limestone Temp	Crumb			5	1.3
8LV42.223.1	Feat. 13	adden	Pottery	Limestone Temp	Body	Plain	Plain	3	41.0
8LV42.223.2	Feat. 13	adden	Lithic	Chert	Biface			1	15.2
8LV42.113.1	Feat. 13		Pottery	Limestone Temp	Body	Plain	Plain	7	92.7
8LV42.113.2	Feat. 13		Pottery	Limestone Temp	Rim	Plain	Plain	2	21.2
8LV42.113.3	Feat. 13		Pottery	Limestone Temp	Crumb			7	4.0
8LV42.113.4	Feat. 13		Pottery	Sand Temp	Rim	Plain	Plain	1	2.3
8LV42.113.5	Feat. 13		Pottery	Sand Temp	Body	Plain	Plain	1	1.8
8LV42.113.6	Feat. 13		Pottery	Sand Temp	Crumb			3	0.9
8LV42.113.7	Feat. 13		Pottery	Spicule Temp	Body	Plain	Plain	1	0.3
8LV42.113.8	Feat. 13		Invertebrate	Crown Conch	UID Modified			9	49.3
8LV42.113.9	Feat. 13		Invertebrate	Crown Conch	Hammer			1	12.9
8LV42.113.10	Feat. 13		Invertebrate	Crown Conch	Outer Whorl			6	19.8
8LV42.113.11	Feat. 13		Invertebrate	Tulip Shell				1	4.5
8LV42.113.12	Feat. 13		Invertebrate	Misc. Gastropod	UID Modified			1	3.7
8LV42.113.13	Feat. 13		Invertebrate	Misc. Gastropod	Outer Whorl			10	5.8
8LV42.113.14	Feat. 13		Invertebrate	Misc. Gastropod	Columella			33	56.1
8LV42.113.15	Feat. 13		Vert. Fauna						107.9
8LV42.113.16	Feat. 13		Lithic	Chert	Flake			7	20.6
8LV42.113.17	Feat. 13		Lithic	Chert	Shatter			5	2.6
8LV42.207.1	Feat. 13/16		Pottery	Limestone Temp	Body	Plain	Plain	6	55.1
8LV42.207.2	Feat. 13/16		Pottery	Sand Temp	Body	Plain	Plain	4	26.7
8LV42.207.3	Feat. 13/16		Invertebrate	Crown Conch	UID Modified			6	26.9
8LV42.207.4	Feat. 13/16		Invertebrate	Crown Conch	UID Modified			5	70.4
8LV42.207.5	Feat. 13/16		Invertebrate	Misc. Gastropod	Outer Whorl			7	3.6
8LV42.207.6	Feat. 13/16		Invertebrate	Misc. Gastropod	Columella			13	19.3
8LV42.207.7	Feat. 13/16		Vert. Fauna						43.3
8LV42.207.8	Feat. 13/16		Lithic	Chert	Flake			2	0.9
8LV42.207.9	Feat. 13/16		Concretion					1	0.3
8LV42.207.10	Feat. 13/16		Fired Clay					2	0.1
8LV42.206.1	Feat. 17		Pottery	Sand Temp	Body	Plain	Plain	1	3.1
8LV42.206.2	Feat. 17		Invertebrate	Crown Conch	UID Modified			3	20.4
8LV42.206.3	Feat. 17		Invertebrate	Misc. Gastropod	Columella			3	6.4

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.206.4	Feat.17		Invertebrate	Misc. Gastropod	Outer Whorl			2	0.5
8LV42.206.5	Feat.17		Lithic	Chert	Flake			9	11.8
8LV42.206.6	Feat.17		Lithic	Chert	Shatter			1	0.5
8LV42.206.7	Feat.17		Vert. Fauna						12.7
8LV42.157.1	Feat.21 22		Pottery	Sand Temp	Base	Impressed	UID	1	17.8
8LV42.158.1	Feat.21 22		Vert. Fauna						51.5
8LV42.157.2	Feat.21 22		Pottery	Sand Temp	Crumb			4	2.2
8LV42.158.2	Feat.21 22		Invertebrate	Crown Conch	Unmodified			1	21.4
8LV42.157.3	Feat.21 22		Invertebrate	Misc. Gastropod	Unmodified			2	2.1
8LV42.158.3	Feat.21 22		Invertebrate	Lightning Whelk	Unmodified			1	45.7
8LV42.157.4	Feat.21 22		Invertebrate	Misc. Gastropod	UID Modified			2	2.0
8LV42.158.4	Feat.21 22		Invertebrate	Pear Whelk	Unmodified			1	15.2
8LV42.157.5	Feat.21 22		Invertebrate	Misc. Gastropod	Columella			1	0.7
8LV42.158.5	Feat.21 22		Invertebrate	Misc. Gastropod	UID Modified			1	20.5
8LV42.157.6	Feat.21 22		Vert. Fauna						11.5
8LV42.158.6	Feat.21 22		Invertebrate	Barnacle				7	1.5
8LV42.158.7	Feat.21 22		Invertebrate	Misc. Gastropod				15	10.8
8LV42.158.8	Feat.21 22		Lithic	Chert	Flake			1	1.5
8LV42.158.9	Feat.21 22		Invertebrate	Misc. Gastropod	Outer Whorl			15	3.9
8LV42.158.10	Feat.21 22		Pottery	Limestone Temp	Body	Plain	Plain	2	50.7
8LV42.158.11	Feat.21 22		Pottery	Grog Temp	Body	Impressed	Fabric	2	20.2
8LV42.158.12	Feat.21 22		Pottery	Limestone Temp	Body	Stamped	Simp Stmpd	1	9.1
8LV42.158.13	Feat.21 22		Pottery	Sand Temp	Crumb				1.7
8LV42.158.14	Feat.21 22		Pottery	Grog Temp	Body	Impressed	Cord Mrkd	1	5.0
8LV42.158.15	Feat.21 22		Pottery	Sand Temp	Body	Stamped	Chk Stmpd	1	2.9
8LV42.216.1	Feat.25		Vert. Fauna						8.3
8LV42.228.1	Feat.25		Vert. Fauna						152.5
8LV42.216.2	Feat.25		Invertebrate	Crown Conch	UID Modified			5	21.1
8LV42.228.2	Feat.25		Invertebrate	Crown Conch	Unmodified			2	108.9
8LV42.216.3	Feat.25		Invertebrate	Misc. Gastropod	Columella			1	1.2
8LV42.228.3	Feat.25		Invertebrate	Crown Conch	UID Modified			2	16.8
8LV42.216.4	Feat.25		Invertebrate	Crown Conch	Outer Whorl			1	0.6
8LV42.228.4	Feat.25		Invertebrate	Crown Conch	Hammer			1	44.2
8LV42.216.5	Feat.25		Lithic	Chert	Shatter			1	3.4
8LV42.228.5	Feat.25		Lithic	Chert	Flake			18	9.4
8LV42.216.6	Feat.25		Pottery	Spicule Temp	Body	Plain	Plain	3	6.5
8LV42.228.6	Feat.25		Lithic	Chert	Shatter			2	8.7
8LV42.216.7	Feat.25		Pottery	Spicule Temp	Rim	Plain	Plain	1	4.2
8LV42.228.7	Feat.25		Misc. Rock	Limestone				5	39.8
8LV42.216.8	Feat.25		Pottery	Limestone Temp	Body	Plain	Plain	2	9.7
8LV42.228.8	Feat.25		Charcoal	Hickory Nut				3	1.0
8LV42.228.9	Feat.25		Pottery	Limestone Temp	Body	Plain	Plain	2	16.7
8LV42.228.10	Feat.25		Pottery	Limestone Temp	Crumb			8	4.1
8LV42.228.11	Feat.25		Invertebrate	Misc.					277.8
8LV42.228.12	Feat.25		Invertebrate	Oyster					1120.5
8LV42.228.13	Feat.25		Invertebrate	Mercenaria	UID Modified			6	21.7
8LV42.228.14	Feat.25		Invertebrate	Misc. Gastropod	Outer Whorl			11	8.6
8LV42.228.15	Feat.25		Invertebrate	Misc. Gastropod	Columella			4	11.0
8LV42.228.16	Feat.25		Invertebrate	Misc. Gastropod				3	0.9
8LV42.228.17	Feat.25		Invertebrate	Barnacle					3.5
8LV42.228.18	Feat.25		Pottery	Sand Temp	Body	Plain	Plain	2	108.7
8LV42.228.19	Feat.25		Pottery	Sand Temp	Body	UID	Eroded	1	1.5
8LV42.228.20	Feat.25		Pottery	Other (UID)	Body	Plain	Plain	1	9.7
8LV42.227.1	Feat.30		Invertebrate	Crown Conch	Unmodified			4	112.2
8LV42.227.2	Feat.30		Invertebrate	Crown Conch	UID Modified			22	152.8
8LV42.227.3	Feat.30		Invertebrate	Crown Conch	Outer Whorl			26	27.9
8LV42.227.4	Feat.30		Invertebrate	Crown Conch	Columella			20	24.2
8LV42.227.5	Feat.30		Invertebrate	Crown Conch	UID Modified			1	16.4
8LV42.227.6	Feat.30		Invertebrate	Crown Conch	UID Modified			1	24.5

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.227.7	Feat.30		Invertebrate	Crown Conch	Tool			1	15.5
8LV42.227.8	Feat.30		Invertebrate	Crown Conch	Hammer			2	61.5
8LV42.227.9	Feat.30		Invertebrate	Gastrolith	Misc. ID			11	17.8
8LV42.227.10	Feat.30		Pottery	Limestone Temp	Body	Plain	Plain	35	292.3
8LV42.227.11	Feat.30		Pottery	Limestone Temp	Rim	Plain	Plain	5	117.8
8LV42.227.12	Feat.30		Pottery	Sand Temp	Body	Plain	Plain	13	25.2
8LV42.227.13	Feat.30		Pottery	Sand Temp	Body	Stamped	Dentate	2	3.8
8LV42.227.14	Feat.30		Pottery	Sand Temp	Body	Stamped	Simp Stmpd	2	6.3
8LV42.227.15	Feat.30		Pottery	Spicule Temp	Body	Plain	Plain	1	1.6
8LV42.227.16	Feat.30		Pottery	Limestone Temp	Crumb			6	2.0
8LV42.227.17	Feat.30		Pottery	Sand Temp	Crumb			4	1.6
8LV42.227.18	Feat.30		Lithic	Chert	Shatter			36	34.5
8LV42.227.19	Feat.30		Lithic	Chert	Flake			89	137.8
8LV42.227.20	Feat.30		Lithic	Chert	Flake			326	283.0
8LV42.227.21	Feat.30		Lithic	Chert	Flake			6	4.1
8LV42.227.22	Feat.30		Lithic	Chert	Core (Unidirectional)			1	7.1
8LV42.227.23	Feat.30		Lithic	Chert	Core			1	79.1
8LV42.227.24	Feat.30		Lithic	Chert	Shatter			1	0.3
8LV42.227.25	Feat.30		Lithic	Chert	Biface			1	0.6
8LV42.227.26	Feat.30		Lithic	Quartz	Biface Fragment			1	1.2
8LV42.227.27	Feat.30		Misc. Rock	Sedimentary				4	7.7
8LV42.227.28	Feat.30		Misc. Rock	Limestone				14	10.5
8LV42.227.29	Feat.30		Historic	Metal (Iron)				10	7.3
8LV42.227.30	Feat.30		Historic	Brick				4	3.7
8LV42.227.31	Feat.30		Vert. Fauna	Worked Bone				1	0.3
8LV42.227.32	Feat.30		Vert. Fauna						579.0
8LV42.227.33	Feat.30		Charcoal	Wood					32.2
8LV42.227.34	Feat.30		Charcoal	Hickory Nut					0.4
8LV42.75.1	Feat.8		Pottery	Limestone Temp	Body	Plain	Plain	4	22.1
8LV42.91.1	STP 1	0-55	Invertebrate	Crown Conch	Unmodified			2	79.7
8LV42.91.2	STP 1	0-55	Invertebrate	Crown Conch	UID Modified			4	80.0
8LV42.91.3	STP 1	0-55	Invertebrate	Misc. Gastropod	Columella			6	23.1
8LV42.91.4	STP 1	0-55	Invertebrate	Misc. Bivalve	UID Modified			2	38.7
8LV42.91.5	STP 1	0-55	Historic	Glass	Bottle Fragment			2	6.8
8LV42.91.6	STP 1	0-55	Historic	Metal				2	2.0
8LV42.91.7	STP 1	0-55	Vert. Fauna		UID			3	0.6
8LV42.91.8	STP 1	0-55	Pottery	Sand Temp	Body	Plain	Plain	3	9.3
8LV42.91.9	STP 1	0-55	Pottery	Sand Temp	Body	Punctated	UID	1	3.8
8LV42.91.10	STP 1	0-55	Pottery	Sand Temp	Rim	Plain	Plain	1	1.9
8LV42.91.11	STP 1	0-55	Pottery	Sand Temp	Body	Stamped	Chk Stmpd	1	2.0
8LV42.91.12	STP 1	0-55	Pottery	Limestone Temp	Rim	Plain	Plain	3	13.4
8LV42.91.13	STP 1	0-55	Pottery	Limestone Temp	Body	Plain	Plain	8	22.0
8LV42.91.14	STP 1	0-55	Pottery	Spicule Temp	Crumb			1	0.4
8LV42.91.15	STP 1	0-55	Pottery	Limestone Temp	Crumb			4	4.9
8LV42.91.16	STP 1	0-55	Pottery	Sand Temp	Crumb			13	11.5
8LV42.46.1	TU 4	A	Pottery	Limestone Temp	Body	Plain	Plain	17	52.5
8LV42.46.2	TU 4	A	Pottery	Sand Temp	Body	Plain	Plain	2	4.1
8LV42.46.3	TU 4	A	Pottery	Limestone Temp	Crumb			16	11.6
8LV42.46.4	TU 4	A	Invertebrate	Mercenaria	Fragment			7	106.9
8LV42.46.5	TU 4	A	Invertebrate	Crown Conch	Unmodified			5	175.5
8LV42.46.6	TU 4	A	Invertebrate	Crown Conch	Hammer			1	53.3
8LV42.46.7	TU 4	A	Invertebrate	Crown Conch	UID Modified			5	82.4
8LV42.46.8	TU 4	A	Invertebrate	Crown Conch	Columella			3	16.6
8LV42.46.9	TU 4	A	Invertebrate	Crown Conch	Modified Shell			4	123.0
8LV42.46.10	TU 4	A	Invertebrate	Crown Conch	Fragment			2	4.1
8LV42.46.11	TU 4	A	Invertebrate	Lightning Whelk				3	51.5
8LV42.46.12	TU 4	A	Historic	Glass				4	44.1
8LV42.46.13	TU 4	A	Misc. Rock	Limestone	UID			1	10.1
8LV42.46.14	TU 4	A	Historic	Brick				1	105.2

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.46.15	TU 4	A	Historic	Metal	Iron				85.9
8LV42.46.16	TU 4	A	Vert. Fauna						15.6
8LV42.85.1	TU 4	A-F	Pottery	Limestone Temp	Body	Plain	Plain	3	5.2
8LV42.85.2	TU 4	A-F	Pottery	Limestone Temp	Crumb			8	2.5
8LV42.85.3	TU 4	A-F	Lithic	Chert	Shatter			1	0.3
8LV42.85.4	TU 4	A-F	Vert. Fauna						0.9
8LV42.47.1	TU 4	B	Pottery	Limestone Temp	Rim	Plain	Plain	3	10.2
8LV42.47.2	TU 4	B	Pottery	Limestone Temp	Rim	Eroded		1	2.0
8LV42.47.3	TU 4	B	Pottery	Limestone Temp	Body	Eroded		6	17.5
8LV42.47.4	TU 4	B	Pottery	Limestone Temp	Body	Plain	Plain	44	144.3
8LV42.47.5	TU 4	B	Pottery	Sand Temp	Rim	Plain	Plain	1	5.2
8LV42.47.6	TU 4	B	Pottery	Sand Temp	Body	Plain	Plain	6	21.2
8LV42.47.7	TU 4	B	Pottery	Sand Temp	Body	Eroded		3	18.0
8LV42.47.8	TU 4	B	Pottery	Sand Temp	Body	Punctated	Drag and Jab	1	4.8
8LV42.47.9	TU 4	B	Pottery	Sand Temp	Body	Stamped	UID	1	6.0
8LV42.47.10	TU 4	B	Pottery	Spicule Temp	Rim	Plain	Plain	1	2.1
8LV42.47.11	TU 4	B	Pottery	Spicule Temp	Body	Plain	Plain	8	38.4
8LV42.47.12	TU 4	B	Pottery	Sand Temp	Crumb			29	18.5
8LV42.47.13	TU 4	B	Pottery	Spicule Temp	Crumb			1	0.5
8LV42.47.14	TU 4	B	Pottery	Limestone Temp	Crumb			60	46.4
8LV42.47.15	TU 4	B	Historic	Ceramic				8	41.8
8LV42.47.16	TU 4	B	Historic	Metal	Ammo			1	4.1
8LV42.47.17	TU 4	B	Historic	Metal	UID			43	66.1
8LV42.47.18	TU 4	B	Historic	Glass				22	56.8
8LV42.47.19	TU 4	B	Historic	Brick				24	45.8
8LV42.47.20	TU 4	B	Lithic	Chert	Flake			7	19.3
8LV42.47.21	TU 4	B	Lithic	Chert	Uniface			1	21.4
8LV42.47.22	TU 4	B	Misc. Rock	Limestone				4	25.8
8LV42.47.23	TU 4	B	Misc. Rock	Sandstone				1	6.8
8LV42.47.24	TU 4	B	Lithic	Limestone	Abrader			1	23.4
8LV42.47.25	TU 4	B	Invertebrate	Crown Conch	Unmodified			43	750.6
8LV42.47.26	TU 4	B	Invertebrate	Crown Conch	Hammer			5	240.7
8LV42.47.27	TU 4	B	Invertebrate	Misc. Gastropod	Columella			24	121.0
8LV42.47.28	TU 4	B	Invertebrate	Mercenaria	Fragments			16	137.8
8LV42.47.29	TU 4	B	Invertebrate	Mercenaria	Fragment			26	583.3
8LV42.47.30	TU 4	B	Invertebrate	Other Shell	Unmodified			5	19.2
8LV42.47.31	TU 4	B	Vert. Fauna					173	93.1
8LV42.49.1	TU 4	C	Pottery	Limestone Temp	Body	Plain	Burnished	1	2.7
8LV42.49.2	TU 4	C	Pottery	Limestone Temp	Body	Eroded		2	2.7
8LV42.49.3	TU 4	C	Pottery	Limestone Temp	Body	Plain	Plain	43	124.8
8LV42.49.4	TU 4	C	Pottery	Limestone Temp	Rim	Plain	Plain	7	16.8
8LV42.49.5	TU 4	C	Pottery	Spicule Temp	Body	Eroded		3	4.6
8LV42.49.6	TU 4	C	Pottery	Sand Temp	Rim	Plain	Plain	1	4.1
8LV42.49.7	TU 4	C	Pottery	Sand Temp	Body	Eroded		2	8.9
8LV42.49.8	TU 4	C	Pottery	Limestone Temp	Crumb			104	78.6
8LV42.49.9	TU 4	C	Pottery	Sand Temp	Crumb			45	28.8
8LV42.49.10	TU 4	C	Pottery	Spicule Temp	Crumb			3	1.3
8LV42.49.11	TU 4	C	Pottery	Sand Temp	Body	Plain	Plain	5	57.0
8LV42.49.12	TU 4	C	Lithic	Chert	Flake			2	1.9
8LV42.49.13	TU 4	C	Lithic	Chert	Shatter			2	83.1
8LV42.49.14	TU 4	C	Lithic	Chert	Biface			1	10.2
8LV42.49.15	TU 4	C	Misc. Rock	Sandstone				4	72.4
8LV42.49.16	TU 4	C	Misc. Rock	Limestone				1	1.8
8LV42.49.17	TU 4	C	Historic	Brick				22	65.1
8LV42.49.18	TU 4	C	Historic	Ceramic				3	10.2
8LV42.49.19	TU 4	C	Historic	Metal				26	34.7
8LV42.49.20	TU 4	C	Historic	Glass				4	3.9
8LV42.49.21	TU 4	C	Invertebrate	Crown Conch	Unmodified			36	757.2
8LV42.49.22	TU 4	C	Invertebrate	Conch/Whelk	Fragment			61	334.1

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.49.23	TU 4	C	Invertebrate	Hard Clam	Fragment			25	382.1
8LV42.49.24	TU 4	C	Invertebrate	Crown Conch	Hammer			3	225.9
8LV42.49.25	TU 4	C	Vert. Fauna						57.8
8LV42.57.1	TU 4	D	Pottery	Limestone Temp	Body	Plain	Plain	70	261.9
8LV42.57.2	TU 4	D	Pottery	Limestone Temp	Rim	Plain	Plain	9	56.8
8LV42.57.3	TU 4	D	Pottery	Limestone Temp	Body	Eroded		28	82.4
8LV42.57.4	TU 4	D	Pottery	Sand Temp	Body	Plain	Plain	9	41.9
8LV42.57.5	TU 4	D	Pottery	Sand Temp	Rim	Plain	Plain	3	11.1
8LV42.57.6	TU 4	D	Pottery	Sand Temp	Body	Eroded		7	12.5
8LV42.57.7	TU 4	D	Pottery	Spicule Temp	Body	Eroded		4	10.1
8LV42.57.8	TU 4	D	Pottery	Sand Temp	Body	Stamped	Chk Stmpd	1	4.0
8LV42.57.9	TU 4	D	Pottery	Sand Temp	Body	Impressed	Fabric	1	6.8
8LV42.57.10	TU 4	D	Pottery	Limestone Temp	Body	Plain	Burnished	1	1.9
8LV42.57.11	TU 4	D	Pottery	Limestone Temp	Crumb			58	42.3
8LV42.57.12	TU 4	D	Pottery	Sand Temp	Crumb			7	9.1
8LV42.57.13	TU 4	D	Pottery	Spicule Temp	Crumb			2	0.6
8LV42.57.14	TU 4	D	Lithic	Igneous rock	Polished			1	0.7
8LV42.57.15	TU 4	D	Lithic	Chert	Flake			8	6.6
8LV42.57.16	TU 4	D	Misc. Rock	Limestone	Fragment			1	8.5
8LV42.57.17	TU 4	D	Invertebrate	Crown Conch				1	21.7
8LV42.57.18	TU 4	D	Invertebrate	Conch/Whelk				5	83.8
8LV42.57.19	TU 4	D	Invertebrate	Conch/Whelk	Modified Columella			1	11.5
8LV42.57.20	TU 4	D	Historic	Glass				1	1.7
8LV42.57.21	TU 4	D	Historic	Ceramic				1	3.2
8LV42.57.22	TU 4	D	Vert. Fauna						10.1
8LV42.62.1	TU 4	E	Pottery	Limestone Temp	Body	Plain	Plain	65	253.7
8LV42.62.2	TU 4	E	Pottery	Limestone Temp	Body	Eroded		10	37.2
8LV42.62.3	TU 4	E	Pottery	Limestone Temp	Rim	Plain	Plain	5	47.3
8LV42.62.4	TU 4	E	Pottery	Sandstone	Body	Plain	Plain	12	58.4
8LV42.62.5	TU 4	E	Pottery	Sandstone	Body	Eroded		5	16.7
8LV42.62.6	TU 4	E	Pottery	Limestone Temp	Rim	Eroded		1	15.0
8LV42.62.7	TU 4	E	Pottery	Spicule Temp	Body	Plain	Plain	6	26.8
8LV42.62.8	TU 4	E	Pottery	Sand Temp	Rim	Plain	Plain	1	2.3
8LV42.62.9	TU 4	E	Pottery	Sand Temp	Crumb			8	8.0
8LV42.62.10	TU 4	E	Pottery	Spicule Temp	Crumb			2	0.4
8LV42.62.11	TU 4	E	Pottery	Limestone Temp	Crumb			33	19.6
8LV42.62.12	TU 4	E	Lithic	Chert	Flake			20	18.9
8LV42.62.13	TU 4	E	Lithic	Chert	Utilized Flake			1	2.5
8LV42.62.14	TU 4	E	Lithic	Chert	Shatter			1	1.3
8LV42.62.15	TU 4	E	Historic	Glass				1	0.3
8LV42.62.16	TU 4	E	Vert. Fauna						5.0
8LV42.67.1	TU 4	F	Pottery	Limestone Temp	Body	Plain	Eroded	25	73.2
8LV42.67.2	TU 4	F	Pottery	Sand Temp	Body	Plain	Plain	4	10.4
8LV42.67.3	TU 4	F	Pottery	Limestone Temp	Crumb			6	1.3
8LV42.67.4	TU 4	F	Pottery	Fiber Temp	Rim	UID	UID	1	0.3
8LV42.67.5	TU 4	F	Lithic	Chert	Flake			14	8.7
8LV42.67.6	TU 4	F	Misc. Rock	Chert	UID			2	2.6
8LV42.67.7	TU 4	F	Vert. Fauna						1.7
8LV42.45.1	TU 5	A	Pottery	Limestone Temp	Body	UID		4	8.4
8LV42.45.2	TU 5	A	Pottery	Limestone Temp	Rim	Plain	Plain	1	4.8
8LV42.45.3	TU 5	A	Pottery	Limestone Temp	Body	Plain	Plain	24	84.0
8LV42.45.4	TU 5	A	Pottery	Limestone Temp	Crumb			69	58.3
8LV42.45.5	TU 5	A	Pottery	Sand Temp	Body	UID		3	6.7
8LV42.45.6	TU 5	A	Pottery	Sand Temp	Body	Impressed	UID	1	8.5
8LV42.45.7	TU 5	A	Pottery	Sand Temp	Crumb			28	19.2
8LV42.45.8	TU 5	A	Pottery	Spicule Temp	Crumb			1	0.6
8LV42.45.9	TU 5	A	Pottery	Spicule Temp	Body	Plain	Plain	4	9.1
8LV42.45.10	TU 5	A	Lithic	Chert	Flake			1	0.6
8LV42.45.11	TU 5	A	Historic	Metal				1	0.6

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.45.12	TU 5	A	Historic	Metal	Ammo			1	0.7
8LV42.45.13	TU 5	A	Historic	Metal				40	32.4
8LV42.45.14	TU 5	A	Historic	Brick				15	82.1
8LV42.45.15	TU 5	A	Historic	Glass				11	15.8
8LV42.45.16	TU 5	A	Historic Pottery					2	7.3
8LV42.45.17	TU 5	A	Misc. Rock	Limestone				1	173.8
8LV42.45.18	TU 5	A	Misc. Rock	Limestone				6	141.0
8LV42.45.19	TU 5	A	Misc. Rock	Mudstone				2	268.9
8LV42.45.20	TU 5	A	Invertebrate	Hard Clam	Fragment			21	417.9
8LV42.45.21	TU 5	A	Invertebrate	Crown Conch	Unmodified			48	987.9
8LV42.45.22	TU 5	A	Invertebrate	Crown Conch	Hammer			1	21.5
8LV42.45.23	TU 5	A	Invertebrate	Conch/Whelk	Fragment			47	246.1
8LV42.45.24	TU 5	A	Vert. Fauna						53.0
8LV42.66.1	TU 5	A-D	Pottery	Limestone Temp	Rim	Plain	Plain	1	5.6
8LV42.66.2	TU 5	A-D	Pottery	Limestone Temp	Body	Plain	Plain	4	14.3
8LV42.66.3	TU 5	A-D	Pottery	Limestone Temp	Crumb				1.4
8LV42.66.4	TU 5	A-D	Vert. Fauna						1.6
8LV42.84.1	TU 5	A-E	Lithic	Chert	Flake			2	0.3
8LV42.48.1	TU 5	B	Pottery	Limestone Temp	Body	Plain	Plain	52	208.0
8LV42.48.2	TU 5	B	Pottery	Limestone Temp	Body	Eroded		3	6.1
8LV42.48.3	TU 5	B	Pottery	Limestone Temp	Body	Plain	Burnished	1	4.1
8LV42.48.4	TU 5	B	Pottery	Limestone Temp	Rim	Plain	Plain	6	26.7
8LV42.48.5	TU 5	B	Pottery	Spicule Temp	Body	Plain	Plain	1	1.3
8LV42.48.6	TU 5	B	Pottery	Spicule Temp	Body	Eroded		2	3.2
8LV42.48.7	TU 5	B	Pottery	Sand Temp	Body	Plain	Plain	11	35.2
8LV42.48.8	TU 5	B	Pottery	Sand Temp	Body	Eroded		4	22.0
8LV42.48.9	TU 5	B	Pottery	Sand Temp	Body	Impressed	UID	1	2.8
8LV42.48.10	TU 5	B	Pottery	Sand Temp	Rim	Plain	Plain	2	13.9
8LV42.48.11	TU 5	B	Pottery	Spicule Temp	Crumb			1	0.4
8LV42.48.12	TU 5	B	Pottery	Limestone Temp	Crumb			202	150.2
8LV42.48.13	TU 5	B	Pottery	Sand Temp	Crumb			58	34.7
8LV42.48.14	TU 5	B	Lithic	Chert	Flake			9	30.2
8LV42.48.15	TU 5	B	Lithic	Chert	Shatter			1	5.0
8LV42.48.16	TU 5	B	Historic	Brick	Fragments			20	307.0
8LV42.48.17	TU 5	B	Historic	Glass	Fragments			16	23.8
8LV42.48.18	TU 5	B	Historic	Metal				46	46.8
8LV42.48.19	TU 5	B	Historic	Ceramic				5	15.1
8LV42.48.20	TU 5	B	Misc. Rock	Sandstone				2	23.6
8LV42.48.21	TU 5	B	Misc. Rock	Limestone				5	21.5
8LV42.48.22	TU 5	B	Invertebrate	Conch/Whelk	Fragment				418.1
8LV42.48.23	TU 5	B	Invertebrate	Conch/Whelk	Fragment			1	146.2
8LV42.48.24	TU 5	B	Invertebrate	Hard Clam	Fragment			22	178.9
8LV42.48.25	TU 5	B	Invertebrate	Crown Conch	Unmodified			47	956.3
8LV42.48.26	TU 5	B	Invertebrate	Crown Conch	Hammer			8	238.1
8LV42.48.27	TU 5	B	Vert. Fauna						110.5
8LV42.56.1	TU 5	C	Pottery	Limestone Temp	Body	Plain	Plain	107	498.2
8LV42.56.2	TU 5	C	Pottery	Sand Temp	Body	Eroded		5	22.3
8LV42.56.3	TU 5	C	Pottery	Limestone Temp	Body	Eroded		15	74.9
8LV42.56.4	TU 5	C	Pottery	Sand Temp	Body	Plain	Plain	11	68.2
8LV42.56.5	TU 5	C	Pottery	Limestone Temp	Rim	Plain	Plain	13	97.8
8LV42.56.6	TU 5	C	Pottery	Spicule Temp	Body	Eroded		9	18.8
8LV42.56.7	TU 5	C	Pottery	Limestone Temp	Crumb			130	99.0
8LV42.56.8	TU 5	C	Pottery	Sand Temp	Crumb			41	34.0
8LV42.56.9	TU 5	C	Pottery	Spicule Temp	Crumb			2	1.6
8LV42.56.10	TU 5	C	Pottery	Sand Temp	Body	Impressed	UID	1	6.0
8LV42.56.11	TU 5	C	Pottery	Limestone Temp	Rim	Plain	Burnished	1	1.6
8LV42.56.12	TU 5	C	Historic	Metal				27	39.1
8LV42.56.13	TU 5	C	Historic	Brick				5	13.4
8LV42.56.14	TU 5	C	Invertebrate	Crown Conch	Unmodified			20	463.0

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.56.15	TU 5	C	Invertebrate	Conch/Whelk	Fragment			18	98.3
8LV42.56.16	TU 5	C	Invertebrate	Conch/Whelk	Columella			29	140.4
8LV42.56.17	TU 5	C	Invertebrate	Hard Clam	Fragment			14	149.3
8LV42.56.18	TU 5	C	Invertebrate	Hard Clam	Fragment			1	41.3
8LV42.56.19	TU 5	C	Invertebrate	Other Shell				2	0.3
8LV42.56.20	TU 5	C	Invertebrate	Misc. Bivalve	Fragment			1	0.4
8LV42.56.21	TU 5	C	Historic	Glass	Fragment			1	0.2
8LV42.56.22	TU 5	C	Misc. Rock	Limestone	Fragment			8	8.6
8LV42.56.23	TU 5	C	Lithic	Sandstone	Fragment			1	8.5
8LV42.56.24	TU 5	C	Lithic	Chert	Flake			16	41.4
8LV42.56.25	TU 5	C	Lithic	Chert	Biface			1	17.8
8LV42.56.26	TU 5	C	Lithic	Chert	Utilized Flake			1	2.5
8LV42.56.27	TU 5	C	Vert. Fauna						281.5
8LV42.61.1	TU 5	D	Pottery	Limestone Temp	Rim	Plain	Plain	4	9.8
8LV42.61.2	TU 5	D	Pottery	Limestone Temp	Body	Plain	Plain	52	226.6
8LV42.61.3	TU 5	D	Pottery	Sand Temp	Body	Plain	Plain	5	21.8
8LV42.61.4	TU 5	D	Pottery	Limestone Temp	Crumb				24.0
8LV42.61.5	TU 5	D	Pottery	Sand Temp	Crumb				2.7
8LV42.61.6	TU 5	D	Pottery	Fiber Temp	Crumb				0.4
8LV42.61.7	TU 5	D	Invertebrate	Whelk/Conch	Columella			19	60.2
8LV42.61.8	TU 5	D	Invertebrate	Whelk/Conch	Fragment			2	4.6
8LV42.61.9	TU 5	D	Invertebrate	Whelk/Conch	Hammer			2	22.3
8LV42.61.10	TU 5	D	Invertebrate	Mercenaria	Fragment			1	2.2
8LV42.61.11	TU 5	D	Lithic	Chert	Flake			7	10.5
8LV42.61.12	TU 5	D	Historic	Metal (Iron)	UID			14	9.6
8LV42.61.13	TU 5	D	Charcoal		UID				0.9
8LV42.61.14	TU 5	D	Vert. Fauna						154.5
8LV42.61.15	TU 5	D	Misc. Rock		UID				52.7
8LV42.79.1	TU 5	E	Pottery	Limestone Temp	Rim	Plain	Plain	1	8.6
8LV42.79.2	TU 5	E	Pottery	Limestone Temp	Body	Plain	Plain	14	85.0
8LV42.79.3	TU 5	E	Pottery	Limestone Temp	Crumb			4	5.0
8LV42.79.4	TU 5	E	Lithic	Chert	Flake			5	3.8
8LV42.79.5	TU 5	E	Vert. Fauna						24.8
8LV42.50.1	TU 6	A	Invertebrate	Crown Conch	UID Modified			4	60.6
8LV42.50.2	TU 6	A	Invertebrate	Crown Conch	UID Modified			9	75.1
8LV42.50.3	TU 6	A	Invertebrate	Crown Conch	Unmodified			1	7.6
8LV42.50.4	TU 6	A	Invertebrate	Lightning Whelk	UID Modified			2	34.6
8LV42.50.5	TU 6	A	Invertebrate	Mercenaria	UID Modified			25	227.6
8LV42.50.6	TU 6	A	Invertebrate	Misc. Gastropod	Outer Whorl			5	17.3
8LV42.50.7	TU 6	A	Invertebrate	Misc. Gastropod	Columella			4	12.3
8LV42.50.8	TU 6	A	Invertebrate	Barnacle				2	0.6
8LV42.50.9	TU 6	A	Invertebrate	Misc. Gastropod	UID Modified			40	7.5
8LV42.50.10	TU 6	A	Pottery	Limestone Temp	Rim	Plain	Plain	1	2.2
8LV42.50.11	TU 6	A	Pottery	Limestone Temp	Body	Plain	Plain	1	2.2
8LV42.50.12	TU 6	A	Pottery	Spicule Temp	Body	Plain	Plain	2	6.4
8LV42.50.13	TU 6	A	Historic	Metal					198.1
8LV42.50.14	TU 6	A	Historic	Glass					86.2
8LV42.50.15	TU 6	A	Misc. Rock	UID				1	7.6
8LV42.50.16	TU 6	A	Lithic	Chert	Core			1	46.5
8LV42.50.17	TU 6	A	Vert. Fauna						4.1
8LV42.51.1	TU 6	B	Pottery	Limestone Temp	Body	Plain	Plain	10	36.1
8LV42.51.2	TU 6	B	Pottery	Limestone Temp	Crumb			9	6.6
8LV42.51.3	TU 6	B	Pottery	Sand Temp	Body	Plain	Plain	4	22.7
8LV42.51.4	TU 6	B	Pottery	Sand Temp	Crumb			2	2.2
8LV42.51.5	TU 6	B	Lithic	Chert	Shatter			2	3.9
8LV42.51.6	TU 6	B	Invertebrate	Crown Conch	Unmodified			11	274.8
8LV42.51.7	TU 6	B	Invertebrate	Crown Conch	UID Modified			59	1002.1
8LV42.51.8	TU 6	B	Invertebrate	Crown Conch	Hammer			1	51.1
8LV42.51.9	TU 6	B	Invertebrate	Lightning Whelk	UID Modified			2	26.0

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.51.10	TU 6	B	Invertebrate	Mercenaria	UID Modified			64	878.2
8LV42.51.11	TU 6	B	Invertebrate	Pear Whelk	UID Modified			2	5.1
8LV42.51.12	TU 6	B	Invertebrate	Misc. Gastropod				8	32.4
8LV42.51.13	TU 6	B	Invertebrate	Misc. Bivalve				2	6.1
8LV42.51.14	TU 6	B	Invertebrate	Misc. Gastropod	Columella			50	249.6
8LV42.51.15	TU 6	B	Invertebrate	Misc. Gastropod	Outer Whorl			25	73.5
8LV42.51.16	TU 6	B	Historic	Metal	Nail			26	157.6
8LV42.51.17	TU 6	B	Historic	Metal	Fragment			82	45.8
8LV42.51.18	TU 6	B	Historic	Plastic				7	3.9
8LV42.51.19	TU 6	B	Historic	Glass				49	89.0
8LV42.51.20	TU 6	B	Historic Pottery	Earthenware				3	9.4
8LV42.51.21	TU 6	B	Vert. Fauna						12.0
8LV42.51.22	TU 6	B	Misc. Rock	Limestone				4	261.6
8LV42.51.23	TU 6	B	Concretion					1	5.3
8LV42.52.1	TU 6	C	Pottery	Limestone Temp	Body	Plain	Plain	10	37.8
8LV42.52.2	TU 6	C	Pottery	Limestone Temp	Crumb			1	1.0
8LV42.52.3	TU 6	C	Pottery	Sand Temp	Body	Plain	Plain	1	3.8
8LV42.52.4	TU 6	C	Pottery	Sand Temp	Body	Plain	Painted	1	2.1
8LV42.52.5	TU 6	C	Pottery	Sand Temp	Crumb			1	0.7
8LV42.52.6	TU 6	C	Invertebrate	Lightning Whelk	UID Modified			2	43.3
8LV42.52.7	TU 6	C	Invertebrate	Lightning Whelk	Columella			1	57.4
8LV42.52.8	TU 6	C	Invertebrate	Crown Conch	Unmodified			38	1183.3
8LV42.52.9	TU 6	C	Invertebrate	Crown Conch	UID Modified			80	1440.3
8LV42.52.10	TU 6	C	Invertebrate	Crown Conch	Hammer			4	113.9
8LV42.52.11	TU 6	C	Invertebrate	Crown Conch	Modified Shell			2	37.0
8LV42.52.12	TU 6	C	Invertebrate	Crown Conch	Columella			3	26.9
8LV42.52.13	TU 6	C	Invertebrate	Crown Conch	Outer Whorl			11	22.3
8LV42.52.14	TU 6	C	Invertebrate	Tulip Shell	Unmodified			1	26.6
8LV42.52.15	TU 6	C	Invertebrate	Tulip Shell	UID Modified			1	14.0
8LV42.52.16	TU 6	C	Invertebrate	Misc. Gastropod	Unmodified			8	7.5
8LV42.52.17	TU 6	C	Invertebrate	Misc. Gastropod	UID Modified			5	52.0
8LV42.52.18	TU 6	C	Invertebrate	Misc. Gastropod	Outer Whorl			31	74.7
8LV42.52.19	TU 6	C	Invertebrate	Misc. Gastropod	Columella			22	79.2
8LV42.52.20	TU 6	C	Invertebrate	Misc. Bivalve	UID Modified			26	14.3
8LV42.52.21	TU 6	C	Invertebrate	Mercenaria	UID Modified			40	858.5
8LV42.52.22	TU 6	C	Vert. Fauna						41.2
8LV42.52.23	TU 6	C	Lithic	Chert	Shatter			1	65.9
8LV42.52.24	TU 6	C	Misc. Rock	Limestone				8	365.4
8LV42.52.25	TU 6	C	Misc. Rock	Sedimentary				1	107.6
8LV42.52.26	TU 6	C	Historic	Glass				1	1.3
8LV42.52.27	TU 6	C	Historic	Metal (Iron)	Nail			8	4.9
8LV42.53.1	TU 6	D	Pottery	Sand Temp	Body	Plain	Plain	4	30.7
8LV42.53.2	TU 6	D	Pottery	Sand Temp	Crumb			2	3.0
8LV42.53.3	TU 6	D	Pottery	Limestone Temp	Body	Plain	Plain	3	21.2
8LV42.53.4	TU 6	D	Pottery	Limestone Temp	Crumb			3	3.8
8LV42.53.5	TU 6	D	Invertebrate	Crown Conch	Unmodified			13	547.8
8LV42.53.6	TU 6	D	Invertebrate	Crown Conch	UID Modified			60	991.0
8LV42.53.7	TU 6	D	Invertebrate	Crown Conch	UID Modified			8	212.8
8LV42.53.8	TU 6	D	Invertebrate	Crown Conch	Hammer			3	116.6
8LV42.53.9	TU 6	D	Invertebrate	Crown Conch	Columella			4	16.9
8LV42.53.10	TU 6	D	Invertebrate	Crown Conch	Outer Whorl			6	18.0
8LV42.53.11	TU 6	D	Invertebrate	Pear Whelk	UID Modified			2	30.6
8LV42.53.12	TU 6	D	Invertebrate	Tulip Shell	UID Modified			1	12.9
8LV42.53.13	TU 6	D	Invertebrate	Misc. Gastropod	Unmodified			1	1.2
8LV42.53.14	TU 6	D	Invertebrate	Misc. Gastropod	UID Modified			2	18.3
8LV42.53.15	TU 6	D	Invertebrate	Misc. Gastropod	Columella			8	30.3
8LV42.53.16	TU 6	D	Invertebrate	Misc. Gastropod	Outer Whorl			2	4.7
8LV42.53.17	TU 6	D	Invertebrate	Mercenaria	UID Modified			36	1030.1
8LV42.53.18	TU 6	D	Invertebrate	Misc. Bivalve	UID Modified			2	0.5

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.53.19	TU 6	D	Vert. Fauna						41.3
8LV42.53.20	TU 6	D	Lithic	Chert	Flake			2	5.5
8LV42.53.21	TU 6	D	Lithic	Chert	Shatter			1	0.4
8LV42.53.22	TU 6	D	Lithic	Chert	Core			1	62.8
8LV42.53.23	TU 6	D	Misc. Rock	Limestone				2	13.5
8LV42.53.24	TU 6	D	Historic	Glass				1	3.3
8LV42.55.1	TU 6	E	Invertebrate	Crown Conch	UID Modified			3	60.1
8LV42.55.2	TU 6	E	Invertebrate	Misc. Gastropod	Columella			3	12.7
8LV42.55.3	TU 6	E	Invertebrate	Misc. Gastropod	Outer Whorl			1	2.3
8LV42.55.4	TU 6	E	Invertebrate	Mercenaria	UID Modified			2	20.4
8LV42.55.5	TU 6	E	Lithic	Chert	Flake			1	2.6
8LV42.55.6	TU 6	E	Lithic	Chert	Utilized Flake			1	4.1
8LV42.55.7	TU 6	E	Lithic	Chert	Shatter			1	12.6
8LV42.55.8	TU 6	E	Vert. Fauna						9.9
8LV42.72.1	TU 6	F	Invertebrate	Misc. Gastropod	Outer Whorl			1	0.1
8LV42.72.2	TU 6	F	Invertebrate	Misc. Gastropod	Columella			2	8.7
8LV42.73.1	TU 6	G	Invertebrate	Crown Conch	UID Modified			3	70.1
8LV42.73.2	TU 6	G	Invertebrate	Pear Whelk	UID Modified			1	4.8
8LV42.73.3	TU 6	G	Invertebrate	Misc. Gastropod	Columella			2	16.4
8LV42.73.4	TU 6	G	Invertebrate	Misc. Gastropod	Outer Whorl			5	1.9
8LV42.73.5	TU 6	G	Invertebrate	Mercenaria	Unmodified			1	224.2
8LV42.73.6	TU 6	G	Invertebrate	Mercenaria	UID Modified			3	91.3
8LV42.73.7	TU 6	G	Vert. Fauna						1.9
8LV42.73.8	TU 6	G	Misc. Rock	Limestone				1	18.3
8LV42.73.9	TU 6	G	Lithic	Chert	Flake			2	1.4
8LV42.73.10	TU 6	G	Lithic	Chert	Shatter			1	7.2
8LV42.73.11	TU 6	G	Fired Clay					1	2.0
8LV42.77.1	TU 6	H	Invertebrate	Misc. Gastropod	UID Modified			1	0.1
8LV42.77.2	TU 6	H	Vert. Fauna						2.9
8LV42.77.3	TU 6	H	Lithic	Chert	Flake			2	2.6
8LV42.77.4	TU 6	H	Lithic	Chert	Shatter			1	0.4
8LV42.77.5	TU 6	H	Misc. Rock	Limestone				2	18.5
8LV42.78.1	TU 6	I	Invertebrate	Misc. Bivalve	Fragment			1	1.0
8LV42.229.1	TU 7	148-198	Invertebrate	Oyster					41.1
8LV42.229.2	TU 7	148-198	Invertebrate	Mercenaria	UID Modified			2	53.4
8LV42.229.3	TU 7	148-198	Invertebrate	Crown Conch	UID Modified			3	50.2
8LV42.229.4	TU 7	148-198	Invertebrate	Crown Conch	Unmodified			1	17.1
8LV42.229.5	TU 7	148-198	Invertebrate	Misc. Gastropod				1	0.9
8LV42.229.6	TU 7	148-198	Vert. Fauna						112.3
8LV42.229.7	TU 7	148-198	Charcoal						1.9
8LV42.229.8	TU 7	148-198	Lithic	Chert	Flake			19	31.2
8LV42.229.9	TU 7	148-198	Pottery	Limestone Temp	Body	Plain	Plain	7	71.1
8LV42.229.10	TU 7	148-198	Pottery	Limestone Temp	Crumb			4	1.1
8LV42.229.11	TU 7	148-198	Pottery	Limestone Temp	Rim	Plain	Plain	2	1.7
8LV42.229.12	TU 7	148-198	Historic	Metal					21.9
8LV42.103.1	TU 7	A	Invertebrate	Crown Conch	Unmodified			28	597.7
8LV42.103.2	TU 7	A	Invertebrate	Crown Conch	UID Modified			182	1849.4
8LV42.103.3	TU 7	A	Invertebrate	Crown Conch	UID Modified			5	143.9
8LV42.103.4	TU 7	A	Invertebrate	Crown Conch	Tool			2	36.4
8LV42.103.5	TU 7	A	Invertebrate	Crown Conch	Hammer			2	69.2
8LV42.103.6	TU 7	A	Invertebrate	Crown Conch	Hammer			5	178.2
8LV42.103.7	TU 7	A	Invertebrate	Crown Conch	Hammer			1	64.5
8LV42.103.8	TU 7	A	Invertebrate	Crown Conch	Outer Whorl			98	160.2
8LV42.103.9	TU 7	A	Invertebrate	Misc. Gastropod	Columella			315	875.6
8LV42.103.10	TU 7	A	Invertebrate	Misc. Gastropod	UID Modified			138	94.2
8LV42.103.11	TU 7	A	Invertebrate	Tulip Shell	Unmodified			1	16.7
8LV42.103.12	TU 7	A	Invertebrate	Mercenaria	UID Modified			10	74.3
8LV42.103.13	TU 7	A	Invertebrate	Misc. Bivalve	UID Modified			11	25.2
8LV42.103.14	TU 7	A	Invertebrate	Lightning Whelk	Outer Whorl			8	44.1

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.103.15	TU 7	A	Vert. Fauna					833	387.4
8LV42.103.16	TU 7	A	Historic	Glass				30	49.3
8LV42.103.17	TU 7	A	Historic	Metal				26	34.9
8LV42.103.18	TU 7	A	Misc. Rock	Limestone	Unmodified			5	356.4
8LV42.103.19	TU 7	A	Lithic	Chert	Flake			9	6.0
8LV42.103.20	TU 7	A	Lithic	Chert	Shatter			4	1.6
8LV42.103.21	TU 7	A	Pottery	Limestone Temp	Body	Plain	Plain	60	274.2
8LV42.103.22	TU 7	A	Pottery	Spicule Temp	Body	Plain	Plain	5	14.9
8LV42.103.23	TU 7	A	Pottery	Sand Temp	Body	Plain	Plain	15	53.1
8LV42.103.24	TU 7	A	Pottery	Spicule Temp	Rim	Stamped	Chk Stmpd	2	27.6
8LV42.103.25	TU 7	A	Pottery	Limestone Temp	Rim	Plain	Plain	1	2.5
8LV42.103.26	TU 7	A	Pottery	Limestone Temp	Crumb			118	96.3
8LV42.103.27	TU 7	A	Pottery	Sand Temp	Crumb			48	36.4
8LV42.103.28	TU 7	A	Pottery	Spicule Temp	Crumb			1	0.2
8LV42.103.29	TU 7	A	Pottery	Limestone Temp	Body	Stamped	Dentate	1	10.3
8LV42.103.30	TU 7	A	Pottery	Limestone Temp	Body	Plain	Scraped Int.	2	6.4
8LV42.103.31	TU 7	A	Lithic	Limestone	Pebble			1	2.6
8LV42.103.32	TU 7	A	Pottery	Sand Temp	Body	Plain	Burnished	1	2.2
8LV42.103.33	TU 7	A	Pottery	Sand Temp	Body	Impressed	Cord Mrkd	2	12.6
8LV42.108.1	TU 7	B adden	Invertebrate	Crown Conch	UID Modified			8	68.8
8LV42.108.2	TU 7	B adden	Invertebrate	Lightning Whelk	UID Modified			1	38.7
8LV42.108.3	TU 7	B adden	Invertebrate	Misc. Gastropod	Columella			15	34.5
8LV42.108.4	TU 7	B adden	Invertebrate	Misc. Gastropod	Outer Whorl			3	8.4
8LV42.108.5	TU 7	B adden	Invertebrate	Misc. Gastropod				3	2.9
8LV42.108.6	TU 7	B adden	Invertebrate	Misc. Bivalve	UID Modified			1	16.8
8LV42.108.7	TU 7	B adden	Vert. Fauna						17.3
8LV42.108.8	TU 7	B adden	Pottery	Sand Temp	Crumb			3	5.5
8LV42.108.9	TU 7	B adden	Pottery	Sand Temp	Base	Plain	Plain	1	7.1
8LV42.108.10	TU 7	B adden	Pottery	Limestone Temp	Crumb			2	0.5
8LV42.108.11	TU 7	B adden	Lithic	Chert	Flake			3	0.4
8LV42.107.1	TU 7	B NE	Invertebrate	Crown Conch	UID Modified			12	107.1
8LV42.107.2	TU 7	B NE	Invertebrate	Crown Conch	Unmodified			2	58.9
8LV42.107.3	TU 7	B NE	Invertebrate	Crown Conch	Outer Whorl			5	4.8
8LV42.107.4	TU 7	B NE	Invertebrate	Lightning Whelk	UID Modified			1	50.2
8LV42.107.5	TU 7	B NE	Invertebrate	Mercenaria	Modified Shell			1	20.0
8LV42.107.6	TU 7	B NE	Invertebrate	Mercenaria	UID Modified			1	3.5
8LV42.107.7	TU 7	B NE	Invertebrate	Misc. Gastropod	Outer Whorl			1	6.2
8LV42.107.8	TU 7	B NE	Invertebrate	Misc. Gastropod	Columella			8	14.7
8LV42.107.9	TU 7	B NE	Invertebrate	Misc. Gastropod	Unmodified			2	1.0
8LV42.107.10	TU 7	B NE	Lithic	Chert	Flake			1	2.1
8LV42.107.11	TU 7	B NE	Vert. Fauna						78.9
8LV42.107.12	TU 7	B NE	Pottery	Limestone Temp	Body	Plain	Plain	5	27.8
8LV42.107.13	TU 7	B NE	Pottery	Limestone Temp	Rim	Plain	Plain	1	6.8
8LV42.107.14	TU 7	B NE	Pottery	Limestone Temp	Crumb			10	7.6
8LV42.107.15	TU 7	B NE	Pottery	Sand Temp	Crumb			5	7.5
8LV42.107.16	TU 7	B NE	Pottery	Limestone Temp	Body	UID		1	1.8
8LV42.106.1	TU 7	B NW	Invertebrate	Crown Conch	UID Modified			9	108.5
8LV42.106.2	TU 7	B NW	Invertebrate	Crown Conch	Outer Whorl			1	4.9
8LV42.106.3	TU 7	B NW	Invertebrate	Lightning Whelk	UID Modified			1	26.0
8LV42.106.4	TU 7	B NW	Invertebrate	Misc. Gastropod	UID Modified			17	8.6
8LV42.106.5	TU 7	B NW	Invertebrate	Misc. Gastropod	Columella				31.2
8LV42.106.6	TU 7	B NW	Invertebrate	Misc. Bivalve	UID Modified			3	7.9
8LV42.106.7	TU 7	B NW	Vert. Fauna		UID				86.8
8LV42.106.8	TU 7	B NW	Lithic	Chert	Flake			2	4.0
8LV42.106.9	TU 7	B NW	Pottery	Limestone Temp	Body	Plain	Plain	13	153.2
8LV42.106.10	TU 7	B NW	Pottery	Limestone Temp	Rim	Plain	Plain	2	8.4
8LV42.106.11	TU 7	B NW	Pottery	Limestone Temp	Crumb			13	21.1
8LV42.106.12	TU 7	BNW	Lithic	Chert	Shatter			1	7.3

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.104.1	TU 7	B Zone A	Pottery	Limestone Temp	Body	Plain	Plain	50	272.0
8LV42.104.2	TU 7	B Zone A	Pottery	Limestone Temp	Rim	Plain	Plain	2	15.7
8LV42.104.3	TU 7	B Zone A	Pottery	Limestone Temp	Crumb			39	29.8
8LV42.104.4	TU 7	B Zone A	Pottery	Sand Temp	Body	Plain	Plain	6	33.3
8LV42.104.5	TU 7	B Zone A	Pottery	Sand Temp	Crumb			15	8.4
8LV42.104.6	TU 7	B Zone A	Invertebrate	Crown Conch	Unmodified			4	76.8
8LV42.104.7	TU 7	B Zone A	Invertebrate	Crown Conch	UID Modified			34	398.9
8LV42.104.8	TU 7	B Zone A	Invertebrate	Crown Conch	Hammer			3	53.5
8LV42.104.9	TU 7	B Zone A	Invertebrate	Crown Conch	Tool			3	46.8
8LV42.104.10	TU 7	B Zone A	Invertebrate	Crown Conch	Outer Whorl			13	23.8
8LV42.104.11	TU 7	B Zone A	Invertebrate	Lightning Whelk	UID Modified			2	62.4
8LV42.104.12	TU 7	B Zone A	Invertebrate	Lightning Whelk	Outer Whorl			1	128.6
8LV42.104.13	TU 7	B Zone A	Invertebrate	Misc. Gastropod	Outer Whorl			32	15.9
8LV42.104.14	TU 7	B Zone A	Invertebrate	Misc. Gastropod	Columella			139	312.5
8LV42.104.15	TU 7	B Zone A	Invertebrate	Misc. Gastropod	UID Modified			6	2.2
8LV42.104.16	TU 7	B Zone A	Invertebrate	Mercenaria	UID Modified			1	3.2
8LV42.104.17	TU 7	B Zone A	Vert. Fauna						202.2
8LV42.104.18	TU 7	B Zone A	Fired Clay					3	1.3
8LV42.104.19	TU 7	B Zone A	Lithic	Chert	Shatter			7	15.8
8LV42.104.20	TU 7	B Zone A	Lithic	Chert	Flake			5	9.2
8LV42.104.21	TU 7	B Zone A	Misc. Rock	Limestone				14	175.3
8LV42.105.1	TU 7	B Zone B	Invertebrate	Crown Conch	Unmodified			3	67.2
8LV42.105.2	TU 7	B Zone B	Invertebrate	Crown Conch	UID Modified			10	255.7
8LV42.105.3	TU 7	B Zone B	Invertebrate	Crown Conch	Outer Whorl			6	12.7
8LV42.105.4	TU 7	B Zone B	Invertebrate	Misc. Gastropod	Columella			30	82.3
8LV42.105.5	TU 7	B Zone B	Invertebrate	Mercenaria	UID Modified			1	4.7
8LV42.105.6	TU 7	B Zone B	Invertebrate	Misc. Gastropod	UID Modified			10	13.0
8LV42.105.7	TU 7	B Zone B	Vert. Fauna		Unmodified				5.1
8LV42.105.8	TU 7	B Zone B	Lithic	Chert	Flake			1	0.4
8LV42.105.9	TU 7	B Zone B	Pottery	Limestone Temp	Body	Plain	Plain	2	14.1
8LV42.105.10	TU 7	B Zone B	Pottery	Limestone Temp	Crumb			1	11.4
8LV42.105.11	TU 7	B Zone B	Invert	Crown Conch	Tool			1	22.0
8LV42.114.1	TU 7	C N half	Pottery	Limestone Temp	Body	Plain	Plain	15	114.6
8LV42.114.2	TU 7	C N half	Pottery	Limestone Temp	Rim	Plain	Plain	3	35.1
8LV42.114.3	TU 7	C N half	Pottery	Limestone Temp	Crumb			10	13.3
8LV42.114.4	TU 7	C N half	Pottery	Sand Temp	Rim	Plain	Plain	1	5.6
8LV42.114.5	TU 7	C N half	Pottery	Sand Temp	Body	Plain	Plain	8	45.6
8LV42.114.6	TU 7	C N half	Pottery	Sand Temp	Crumb			7	6.8
8LV42.114.7	TU 7	C N half	Pottery	Spicule Temp	Body	Plain	Plain	1	3.3
8LV42.114.8	TU 7	C N half	Invertebrate	Crown Conch	Unmodified			4	33.6
8LV42.114.9	TU 7	C N half	Invertebrate	Crown Conch	UID Modified			23	164.7
8LV42.114.10	TU 7	C N half	Invertebrate	Crown Conch	Outer Whorl			5	7.4
8LV42.114.11	TU 7	C N half	Invertebrate	Misc. Gastropod	Columella			34	59.4
8LV42.114.12	TU 7	C N half	Invertebrate	Misc. Gastropod	Outer Whorl			14	9.2
8LV42.114.13	TU 7	C N half	Invertebrate	Mercenaria	UID Modified			1	23.7
8LV42.114.14	TU 7	C N half	Lithic	Chert	Flake			15	28.8
8LV42.114.15	TU 7	C N half	Lithic	Chert	Shatter			2	0.8
8LV42.114.16	TU 7	C N half	Misc. Rock	Limestone				5	12.6
8LV42.114.17	TU 7	C N half	Vert. Fauna						145.9
8LV42.114.18	TU 7	C N half	Charcoal	Hickory Nut				1	0.2
8LV42.115.1	TU 7	C S half	Pottery	Limestone Temp	Body	Plain	Plain	9	48.6
8LV42.115.2	TU 7	C S half	Pottery	Limestone Temp	Crumb			2	6.6
8LV42.115.3	TU 7	C S half	Pottery	Sand Temp	Body	Plain	Plain	4	26.7
8LV42.115.4	TU 7	C S half	Pottery	Sand Temp	Body	UID	Eroded	1	3.1
8LV42.115.5	TU 7	C S half	Pottery	Sand Temp	Body	Incised	Linear	1	1.8
8LV42.115.6	TU 7	C S half	Pottery	Sand Temp	Crumb			12	4.1
8LV42.115.7	TU 7	C S half	Invertebrate	Crown Conch	UID Modified			18	172.9
8LV42.115.8	TU 7	C S half	Invertebrate	Crown Conch	Outer Whorl			7	16.4
8LV42.115.9	TU 7	C S half	Invertebrate	Misc. Gastropod	UID Modified			6	23.2

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.115.10	TU 7	C S half	Invertebrate	Misc. Gastropod	Outer Whorl			33	10.3
8LV42.115.11	TU 7	C S half	Invertebrate	Misc. Gastropod	Columella			73	175.1
8LV42.115.12	TU 7	C S half	Vert. Fauna						116.0
8LV42.115.13	TU 7	C S half	Lithic	Chert	Flake			25	19.8
8LV42.115.14	TU 7	C S half	Lithic	Chert	Shatter			3	2.9
8LV42.115.15	TU 7	C S half	Charcoal	Hickory Nut				1	0.1
8LV42.201.1	TU 7	C SE	Vert. Fauna						5.8
8LV42.201.2	TU 7	C SE	Lithic	Chert	Flake			2	8.5
8LV42.201.3	TU 7	C SE	Pottery	Limestone Temp	Body	Plain	Plain	2	18.3
8LV42.120.1	TU 7	C Zone A	Pottery	Limestone Temp	Body	Plain	Plain	7	44.1
8LV42.120.2	TU 7	C Zone A	Pottery	Limestone Temp	Crumb			2	2.1
8LV42.120.3	TU 7	C Zone A	Invertebrate	Crown Conch	UID Modified			14	123.0
8LV42.120.4	TU 7	C Zone A	Invertebrate	Crown Conch	Outer Whorl			4	2.8
8LV42.120.5	TU 7	C Zone A	Invertebrate	Misc. Gastropod	Columella			18	35.9
8LV42.120.6	TU 7	C Zone A	Misc. Rock	Limestone				4	7.5
8LV42.120.7	TU 7	C Zone A	Misc. Rock	Sedimentary				1	9.4
8LV42.120.8	TU 7	C Zone A	Lithic	Chert	Flake			1	7.2
8LV42.120.9	TU 7	C Zone A	Vert. Fauna						15.4
8LV42.120.10	TU 7	C Zone A	Charcoal	Hickory Nut				1	0.3
8LV42.202.1	TU 7	C Zone B	Vert. Fauna						10.8
8LV42.202.2	TU 7	C Zone B	Invertebrate	Crown Conch	UID Modified			4	14.6
8LV42.202.3	TU 7	C Zone B	Pottery	Limestone Temp	Body	Plain	Plain	1	6.3
8LV42.202.4	TU 7	C Zone B	Pottery	Limestone Temp	Crumb			1	0.4
8LV42.202.5	TU 7	C Zone B	Pottery	Sand Temp	Body	Stamped	Simp Stmpd	1	8.1
8LV42.202.6	TU 7	C Zone B	Pottery	Sand Temp	Crumb			1	1.3
8LV42.202.7	TU 7	C Zone B	Pottery	Spicule Temp	Crumb			3	0.1
8LV42.202.8	TU 7	C Zone B	Charcoal	Hickory Nut				1	0.2
8LV42.208.1	TU 7	C adden	Vert. Fauna						30.8
8LV42.208.2	TU 7	C adden	Invertebrate	Crown Conch	Columella			3	5.0
8LV42.208.3	TU 7	C adden	Invertebrate	Crown Conch	Outer Whorl			1	7.8
8LV42.208.4	TU 7	C adden	Lithic	Chert	Flake			10	11.7
8LV42.208.5	TU 7	C adden	Invertebrate	Misc. Bivalve				4	108.1
8LV42.208.6	TU 7	C adden	Invertebrate	UID				5	1.4
8LV42.208.7	TU 7	C adden	Pottery	Sand Temp	Body	Plain		6	18.6
8LV42.208.8	TU 7	C adden	Pottery	Limestone Temp	Body	Plain		2	3.8
8LV42.208.9	TU 7	C adden	<1/8" Assorted Material						0.7
8LV42.220.1	TU 7	D	Pottery	Limestone Temp	Body	Plain	Plain	37	260.6
8LV42.220.2	TU 7	D	Pottery	Limestone Temp	Rim	Plain	Plain	3	30.4
8LV42.220.3	TU 7	D	Pottery	Limestone Temp	Crumb			21	16.6
8LV42.220.4	TU 7	D	Pottery	Sand Temp	Body	Plain	Plain	7	28.6
8LV42.220.5	TU 7	D	Pottery	Sand Temp	Body	Stamped	Chk Stmpd	1	8.5
8LV42.220.6	TU 7	D	Pottery	Sand Temp	Body	Impressed	UID	3	11.4
8LV42.220.7	TU 7	D	Pottery	Sand Temp	Body	Incised	UID	1	2.7
8LV42.220.8	TU 7	D	Pottery	Sand Temp	Rim	Plain	Plain	1	4.1
8LV42.220.9	TU 7	D	Pottery	Sand Temp	Crumb			16	16.7
8LV42.220.10	TU 7	D	Pottery	Spicule Temp	Body	Plain	Plain	1	7.5
8LV42.220.11	TU 7	D	Invertebrate	Crown Conch	UID Modified			15	139.4
8LV42.220.12	TU 7	D	Invertebrate	Crown Conch	Unmodified			1	0.4
8LV42.220.13	TU 7	D	Invertebrate	Crown Conch	UID Modified			2	34.5
8LV42.220.14	TU 7	D	Invertebrate	Crown Conch	Hammer			1	20.5
8LV42.220.15	TU 7	D	Invertebrate	Misc. Gastropod	Outer Whorl			9	6.4
8LV42.220.16	TU 7	D	Invertebrate	Misc. Gastropod	Columella			13	19.0
8LV42.220.17	TU 7	D	Invertebrate	Tulip Shell	UID Modified			1	13.5
8LV42.220.18	TU 7	D	Invertebrate	Misc. Bivalve	UID Modified			2	34.2
8LV42.220.19	TU 7	D	Invertebrate	UID	Fragment			7	0.9
8LV42.220.20	TU 7	D	Lithic	Chert	Flake			73	74.6
8LV42.220.21	TU 7	D	Lithic	Chert	Flake			11	45.5
8LV42.220.22	TU 7	D	Lithic	Chert	Shatter			4	3.3
8LV42.220.23	TU 7	D	Lithic	Chert	Shatter			3	6.8

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.220.24	TU 7	D	Vert. Fauna						438.7
8LV42.220.25	TU 7	D	Misc. Rock	Limestone				5	3.2
8LV42.220.26	TU 7	D	Misc. Rock	Limestone				1	21.5
8LV42.220.27	TU 7	D	Misc. Rock	Quartz	Modified			1	1.4
8LV42.220.28	TU 7	D	Concretion					15	20.5
8LV42.220.29	TU 7	D	Charcoal	Hickory Nut				5	0.5
8LV42.220.30	TU 7	D	Charcoal	Wood					8.9
8LV42.220.31	TU 7	D	Fired Clay					1	0.1
8LV42.221.1	TU 7	E	Pottery	Limestone Temp	Body	Plain	Plain	9	83.9
8LV42.222.1	TU 7	E	Vert. Fauna						12.6
8LV42.221.2	TU 7	E	Pottery	Limestone Temp	Rim	Plain	Plain	2	15.4
8LV42.222.2	TU 7	E	Invertebrate	Crown Conch	UID Modified			2	11.5
8LV42.221.3	TU 7	E	Pottery	Limestone Temp	Crumb				4.6
8LV42.222.3	TU 7	E	Pottery	Sand Temp	Body	Plain	Plain	2	4.6
8LV42.221.4	TU 7	E	Pottery	Sand Temp	Body	Plain	Plain	2	3.8
8LV42.222.4	TU 7	E	Pottery	Limestone Temp	Body	Plain	Plain	2	2.8
8LV42.221.5	TU 7	E	Pottery	Sand Temp	Crumb			5	6.1
8LV42.222.5	TU 7	E	Pottery	Limestone Temp	Crumb			2	0.4
8LV42.221.6	TU 7	E	Invertebrate	Lightning Whelk	UID Modified			1	16.5
8LV42.222.6	TU 7	E	Lithic	Chert	Flake			4	12.3
8LV42.221.7	TU 7	E	Invertebrate	Crown Conch	Unmodified			1	24.5
8LV42.222.7	TU 7	E	Lithic	Chert	Shatter			1	0.7
8LV42.221.8	TU 7	E	Invertebrate	Crown Conch	UID Modified			5	47.7
8LV42.221.9	TU 7	E	Invertebrate	Misc. Gastropod	Outer Whorl			2	0.5
8LV42.221.10	TU 7	E	Invertebrate	Misc. Gastropod	Columella			1	0.6
8LV42.221.11	TU 7	E	Lithic	Chert	Biface			1	0.9
8LV42.221.12	TU 7	E	Lithic	Chert	Biface			1	7.9
8LV42.221.13	TU 7	E	Lithic	Chert	Flake			57	63.7
8LV42.221.14	TU 7	E	Lithic	Chert	Shatter			8	5.6
8LV42.221.15	TU 7	E	Misc. Rock	Limestone				4	1.4
8LV42.221.16	TU 7	E	Concretion					2	0.5
8LV42.221.17	TU 7	E	Charcoal	Wood					1.8
8LV42.221.18	TU 7	E	Charcoal	Hickory Nut					0.4
8LV42.221.19	TU 7	E	Vert. Fauna						105.3
8LV42.226.1	TU 7	E Adden	Invertebrate	Oyster					1227.1
8LV42.226.2	TU 7	E adden	Invertebrate	Other Shell					163.0
8LV42.226.3	TU 7	E adden	Invertebrate	Mercenaria	UID Modified			12	24.9
8LV42.226.4	TU 7	E adden	Invertebrate	Misc. Gastropod	Columella			3	6.3
8LV42.226.5	TU 7	E adden	Invertebrate	Misc. Gastropod	Outer Whorl			5	2.1
8LV42.226.6	TU 7	E adden	Invertebrate	Barnacle					2.4
8LV42.226.7	TU 7	E adden	Invertebrate	Crown Conch	Unmodified			1	22.8
8LV42.226.8	TU 7	E adden	Invertebrate	Crown Conch	UID Modified			5	76.6
8LV42.226.9	TU 7	E adden	Vert. Fauna						175.9
8LV42.226.10	TU 7	E adden	Lithic	Chert	Flake			89	121.9
8LV42.226.11	TU 7	E adden	Lithic	Chert	Shatter			55	70.8
8LV42.226.12	TU 7	E adden	Lithic	Chert	Biface			1	20.5
8LV42.226.13	TU 7	E adden	Pottery	Spicule Temp	Body	Plain	Plain	1	20.1
8LV42.226.14	TU 7	E adden	Pottery	Limestone Temp	Body	Plain	Plain	8	34.8
8LV42.226.15	TU 7	E adden	Pottery	Limestone Temp	Rim	Plain	Plain	1	27.8
8LV42.226.16	TU 7	E adden	Pottery	Limestone Temp	Crumb			9	11.0
8LV42.226.17	TU 7	E adden	Pottery	Sand Temp	Body	Impressed	Cord Mrkd	3	18.2
8LV42.226.18	TU 7	E adden	Pottery	Sand Temp	Body	Plain	Plain	3	10.8
8LV42.226.19	TU 7	E adden	Pottery	Sand Temp	Body	UID	Eroded	2	7.9
8LV42.226.20	TU 7	E adden	Pottery	Spicule Temp	Crumb			1	1.4
8LV42.226.21	TU 7	E adden	Pottery	Other (UID)	Body	Plain	Plain	1	41.9
8LV42.225.1	TU 7		Charcoal	Wood					49.2
8LV42.225.2	TU 7		Charcoal	Hickory Nut					4.5
8LV42.225.3	TU 7		Invertebrate	Crown Conch	Outer Whorl			88	84.7
8LV42.225.4	TU 7		Invertebrate	Misc. Gastropod	Columella			42	60.5

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.225.5	TU 7		Invertebrate	Misc. Gastropod	Outer Whorl			4	29.5
8LV42.225.6	TU 7		Invertebrate	Misc. Gastropod	Unmodified			27	34.5
8LV42.225.7	TU 7		Invertebrate	Crown Conch	Unmodified			12	376.3
8LV42.225.8	TU 7		Invertebrate	Crown Conch	UID Modified			4	112.7
8LV42.225.9	TU 7		Invertebrate	Crown Conch	UID Modified			105	672.1
8LV42.225.10	TU 7		Invertebrate	Crown Conch	Tool			2	59.4
8LV42.225.11	TU 7		Invertebrate	Crown Conch	Hammer			1	67.8
8LV42.225.12	TU 7		Pottery	Limestone Temp	Body	Plain	Plain	89	967.9
8LV42.225.13	TU 7		Pottery	Sand Temp	Body	Plain	Plain	17	78.4
8LV42.225.14	TU 7		Pottery	Limestone Temp	Rim	Plain	Plain	8	109.3
8LV42.225.15	TU 7		Pottery	Sand Temp	Rim	Plain	Plain	4	16.6
8LV42.225.16	TU 7		Pottery	Spicule Temp	Body	Plain	Eroded	3	7.5
8LV42.225.17	TU 7		Pottery	Limestone Temp	Crumb			19	9.0
8LV42.225.18	TU 7		Pottery	Sand Temp	Crumb			18	6.8
8LV42.225.19	TU 7		Pottery	Sand Temp	Body	UID	Eroded	2	9.8
8LV42.225.20	TU 7		Pottery	Sand Temp	Body	Stamped	Dentate	1	2.3
8LV42.225.21	TU 7		Pottery	Sand Temp	Body	Plain	Plain	1	9.4
8LV42.225.22	TU 7		Pottery	Spicule Temp	Body	Plain	Painted	2	17.9
8LV42.225.23	TU 7		Lithic	Chert	Flake			96	82.3
8LV42.225.24	TU 7		Lithic	Chert	Flake			18	47.4
8LV42.225.25	TU 7		Lithic	Chert	Shatter			16	17.0
8LV42.225.26	TU 7		Lithic	Quartz	Shatter			1	1.1
8LV42.225.27	TU 7		Lithic	Sedimentary	Hammerstone			1	55.1
8LV42.225.28	TU 7		Lithic	Chert	Biface Fragment			1	7.2
8LV42.225.29	TU 7		Misc. Rock	Limestone				9	6.6
8LV42.225.30	TU 7		Historic	Metal				1	0.9
8LV42.225.31	TU 7		Vert. Fauna						-
8LV42.121.1	TU 8	A	Invertebrate	Crown Conch	Unmodified			7	270.6
8LV42.121.2	TU 8	A	Invertebrate	Crown Conch	Tool			1	68.1
8LV42.121.3	TU 8	A	Invertebrate	Crown Conch	Tool			2	86.9
8LV42.121.4	TU 8	A	Invertebrate	Crown Conch	Unmodified			18	506.9
8LV42.121.5	TU 8	A	Invertebrate	Crown Conch	UID Modified			80	807.2
8LV42.121.6	TU 8	A	Invertebrate	Tulip Shell	Unmodified			3	67.6
8LV42.121.7	TU 8	A	Invertebrate	Misc. Gastropod	Columella			52	1618.1
8LV42.121.8	TU 8	A	Invertebrate	Lightning Whelk	UID Modified			1	21.2
8LV42.121.9	TU 8	A	Invertebrate	Misc. Gastropod	UID Modified			15	18.3
8LV42.121.10	TU 8	A	Invertebrate	Misc. Gastropod	Outer Whorl			18	136.6
8LV42.121.11	TU 8	A	Pottery	Limestone Temp	Rim	Plain	Plain	1	34.0
8LV42.121.12	TU 8	A	Pottery	Limestone Temp	Rim	Plain	Plain	3	11.3
8LV42.121.13	TU 8	A	Pottery	Limestone Temp	Body	Plain	Plain	12	37.7
8LV42.121.14	TU 8	A	Pottery	Spicule Temp	Crumb			2	1.0
8LV42.121.15	TU 8	A	Pottery	Limestone Temp	Crumb			40	31.4
8LV42.121.16	TU 8	A	Pottery	Sand Temp	Body	Plain	Plain	3	3.9
8LV42.121.17	TU 8	A	Historic	Metal					1017.0
8LV42.121.18	TU 8	A	Historic Pottery	Earthenware	Body			25	140.2
8LV42.121.19	TU 8	A	Historic	Glass	Body				268.3
8LV42.121.20	TU 8	A	Historic	Plastic	Button			1	3.2
8LV42.121.21	TU 8	A	Misc. Rock	Limestone	Unmodified			16	210.7
8LV42.121.22	TU 8	A	Lithic	Chert	Flake			2	3.2
8LV42.121.23	TU 8	A	Lithic	Chert	Shatter			1	1.4
8LV42.121.24	TU 8	A	Misc. Rock	Sedimentary				4	13.3
8LV42.121.25	TU 8	A	Vert. Fauna		Unmodified				127.4
8LV42.121.26	TU 8	A	Vert. Fauna		Bead			1	0.0
8LV42.123.1	TU 8	A-B	Historic	Glass	Bottle Fragment			7	32.4
8LV42.123.2	TU 8	A-B	Historic	Metal				10	29.7
8LV42.123.3	TU 8	A-B	Vert. Fauna						30.1
8LV42.123.4	TU 8	A-B	Historic Pottery					1	1.7
8LV42.123.5	TU 8	A-B	Misc. Rock	Limestone				1	3.7
8LV42.123.6	TU 8	A-B	Invertebrate	Crown Conch	Unmodified			1	41.7

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.123.7	TU 8	A-B	Invertebrate	Misc. Gastropod	Columella			1	2.7
8LV42.123.8	TU 8	A-B	Invertebrate	Crown Conch	UID Modified			6	96.4
8LV42.123.9	TU 8	A-B	Invertebrate	Pear Whelk	UID Modified			1	5.9
8LV42.123.10	TU 8	A-B	Invertebrate	Misc. Gastropod	UID Modified			2	1.3
8LV42.128.1	TU 8	A-D	Invertebrate	Crown Conch	Unmodified			1	28.9
8LV42.128.2	TU 8	A-D	Invertebrate	Crown Conch	UID Modified			5	95.7
8LV42.128.3	TU 8	A-D	Invertebrate	Misc. Gastropod	UID Modified			2	5.6
8LV42.128.4	TU 8	A-D	Invertebrate	Barnacle				19	11.7
8LV42.128.5	TU 8	A-D	Invertebrate	Misc. Bivalve	UID Modified			1	2.6
8LV42.128.6	TU 8	A-D	Misc. Rock	Limestone				2	53.8
8LV42.128.7	TU 8	A-D	Vert. Fauna						72.4
8LV42.128.8	TU 8	A-D	Historic Pottery	Earthenware				1	17.7
8LV42.128.9	TU 8	A-D	Historic	iron				12	51.5
8LV42.128.10	TU 8	A-D	Historic	Glass				1	0.9
8LV42.128.11	TU 8	A-D	Pottery	Limestone Temp	Body	Plain	Plain	5	33.7
8LV42.128.12	TU 8	A-D	Pottery	Limestone Temp	Rim	Plain	Plain	1	11.6
8LV42.128.13	TU 8	A-D	Pottery	Limestone Temp	Crumb			3	4.1
8LV42.135.1	TU 8	A-E	Pottery	Limestone Temp	Crumb			1	0.4
8LV42.135.2	TU 8	A-E	Invertebrate	Crown Conch	UID Modified			2	34.8
8LV42.135.3	TU 8	A-E	Invertebrate	Crown Conch	Columella			3	4.6
8LV42.135.4	TU 8	A-E	Vert. Fauna						2.8
8LV42.135.5	TU 8	A-E	Historic	Metal	Fragment			4	0.1
8LV42.144.1	TU 8	A-H	Historic Pottery	Earthenware				1	7.4
8LV42.148.1	TU 8	A-K	Invertebrate	Crown Conch	Unmodified			8	269.8
8LV42.148.2	TU 8	A-K	Invertebrate	Crown Conch	UID Modified			22	552.8
8LV42.148.3	TU 8	A-K	Invertebrate	Crown Conch	UID Modified			1	21.4
8LV42.148.4	TU 8	A-K	Invertebrate	Crown Conch	UID Modified			3	118.0
8LV42.148.5	TU 8	A-K	Invertebrate	Crown Conch	Hammer			1	37.1
8LV42.148.6	TU 8	A-K	Vert. Fauna						119.0
8LV42.148.7	TU 8	A-K	Invertebrate	Barnacle					64.5
8LV42.148.8	TU 8	A-K	Invertebrate	Misc. Gastropod	UID Modified			3	18.9
8LV42.148.9	TU 8	A-K	Misc. Rock	Limestone				5	259.6
8LV42.148.10	TU 8	A-K	Pottery	Limestone Temp	Body	Plain	Plain	5	24.6
8LV42.148.11	TU 8	A-K	Pottery	Limestone Temp	Rim	Plain	Plain	1	20.2
8LV42.148.13	TU 8	A-K	Pottery	Limestone Temp	Crumb			1	0.6
8LV42.151.1	TU 8	A-M	Pottery	Sand Temp	Body	Plain	Plain	5	42.9
8LV42.151.2	TU 8	A-M	Pottery	Sand Temp	Crumb			7	7.0
8LV42.151.3	TU 8	A-M	Pottery	Limestone Temp	Body	Plain	Plain	2	13.4
8LV42.151.4	TU 8	A-M	Pottery	Limestone Temp	Rim	Plain	Plain	1	11.9
8LV42.151.5	TU 8	A-M	Pottery	Limestone Temp	Crumb			3	2.1
8LV42.151.6	TU 8	A-M	Invertebrate	Crown Conch	UID Modified			1	52.0
8LV42.151.7	TU 8	A-M	Invertebrate	Crown Conch	UID Modified			13	195.4
8LV42.151.8	TU 8	A-M	Invertebrate	Crown Conch	Outer Whorl			3	12.3
8LV42.151.9	TU 8	A-M	Invertebrate	Misc. Gastropod	Unmodified			6	4.1
8LV42.151.10	TU 8	A-M	Invertebrate	Misc. Gastropod	Columella			4	10.5
8LV42.151.11	TU 8	A-M	Invertebrate	Misc. Bivalve	UID Modified			2	3.6
8LV42.151.12	TU 8	A-M	Vert. Fauna						73.2
8LV42.151.13	TU 8	A-M	Misc. Rock	Limestone				124	1362.8
8LV42.151.14	TU 8	A-M	Concretion					16	3.7
8LV42.151.15	TU 8	A-M	Historic	Metal					3.7
8LV42.154.1	TU 8	A-O	Pottery	Limestone Temp	Rim	Impressed	Cord Mrkd	1	7.7
8LV42.154.2	TU 8	A-O	Pottery	Limestone Temp	Body	Impressed	UID	1	18.6
8LV42.154.3	TU 8	A-O	Pottery	Limestone Temp	Rim	Plain	Plain	1	5.0
8LV42.154.4	TU 8	A-O	Pottery	Limestone Temp	Body	Plain	Plain	4	15.0
8LV42.154.5	TU 8	A-O	Pottery	Limestone Temp	Crumb			5	2.5
8LV42.154.6	TU 8	A-O	Pottery	Sand Temp	Body	Plain	Plain	4	7.8
8LV42.154.7	TU 8	A-O	Pottery	Sand Temp	Crumb			3	1.5
8LV42.154.8	TU 8	A-O	Invertebrate	Crown Conch	Unmodified			4	162.7

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.154.9	TU 8	A-O	Invertebrate	Crown Conch	UID Modified			8	26.3
8LV42.154.10	TU 8	A-O	Invertebrate	Crown Conch	UID Modified			1	22.4
8LV42.154.11	TU 8	A-O	Invertebrate	Crown Conch	Outer Whorl			7	12.1
8LV42.154.12	TU 8	A-O	Invertebrate	Tulip Shell	UID Modified			1	16.6
8LV42.154.13	TU 8	A-O	Invertebrate	Pear Whelk	Outer Whorl			2	0.4
8LV42.154.14	TU 8	A-O	Invertebrate	Misc. Gastropod	Unmodified			6	4.1
8LV42.154.15	TU 8	A-O	Invertebrate	Misc. Gastropod	Columella			14	18.9
8LV42.154.16	TU 8	A-O	Invertebrate	Misc. Gastropod	Outer Whorl			17	42.4
8LV42.154.17	TU 8	A-O	Misc. Rock	Limestone				4	10.3
8LV42.154.18	TU 8	A-O	Concretion					4	0.4
8LV42.154.19	TU 8	A-O	Charcoal	Wood					4.8
8LV42.154.20	TU 8	A-O	Vert. Fauna						76.5
8LV42.162.1	TU 8	A-S	Invertebrate	Crown Conch	Unmodified			3	71.2
8LV42.162.2	TU 8	A-S	Invertebrate	Crown Conch	UID Modified			2	95.1
8LV42.162.3	TU 8	A-S	Invertebrate	Crown Conch	Hammer			1	39.3
8LV42.162.4	TU 8	A-S	Invertebrate	Misc. Gastropod	Outer Whorl			13	33.9
8LV42.162.5	TU 8	A-S	Invertebrate	Misc. Gastropod	Columella			12	30.5
8LV42.162.6	TU 8	A-S	Invertebrate	Misc. Gastropod				8	7.3
8LV42.162.7	TU 8	A-S	Invertebrate	Barnacle					10.7
8LV42.162.8	TU 8	A-S	Vert. Fauna						103.3
8LV42.162.9	TU 8	A-S	Pottery	Sand Temp	Body	Stamped	Simp Stp	6	56.2
8LV42.162.10	TU 8	A-S	Pottery	Sand Temp	Body	Stamped	XSimpStp	5	41.1
8LV42.162.11	TU 8	A-S	Pottery	Limestone Temp	Body	Plain	Plain	3	7.2
8LV42.162.12	TU 8	A-S	Pottery	Limestone Temp	Crumb			2	1.8
8LV42.162.13	TU 8	A-S	Pottery	Sand Temp	Body	Plain	Plain	1	2.3
8LV42.162.14	TU 8	A-S	Pottery	Sand Temp	Crumb			9	11.3
8LV42.162.15	TU 8	A-S	Pottery	Sand Temp	Rim	Stamped	XSimpStp	1	2.4
8LV42.162.16	TU 8	A-S	Pottery	Grog Temp	Body	UID	UID	1	2.0
8LV42.162.17	TU 8	A-S	Pottery	Sand Temp	Body	UID	Eroded	1	5.3
8LV42.164.1	TU 8	A-T	Pottery	Sand Temp	Body	Plain	Plain	1	9.1
8LV42.164.2	TU 8	A-T	Pottery	Sand Temp	Body	Stamped	Simp Stmpd	1	5.3
8LV42.164.3	TU 8	A-T	Pottery	Sand Temp	Crumb			1	1.7
8LV42.164.4	TU 8	A-T	Pottery	Limestone Temp	Rim	Plain	Plain	1	2.3
8LV42.164.5	TU 8	A-T	Invertebrate	Lightning Whelk	UID Modified			3	59.2
8LV42.164.6	TU 8	A-T	Invertebrate	Crown Conch	UID Modified			3	18.3
8LV42.164.7	TU 8	A-T	Invertebrate	Crown Conch	Unmodified			3	74.7
8LV42.164.8	TU 8	A-T	Invertebrate	Crown Conch	Hammer			1	39.4
8LV42.164.9	TU 8	A-T	Invertebrate	Misc. Gastropod	Unmodified			1	4.1
8LV42.164.10	TU 8	A-T	Invertebrate	Misc. Gastropod	UID Modified			1	2.7
8LV42.164.11	TU 8	A-T	Invertebrate	Misc. Gastropod	Columella			1	2.3
8LV42.164.12	TU 8	A-T	Invertebrate	Mercenaria	UID Modified			2	20.3
8LV42.164.13	TU 8	A-T	Misc. Rock	Sedimentary				1	9.2
8LV42.164.14	TU 8	A-T	Vert. Fauna						14.4
8LV42.189.1	TU 8	A-W	Pottery	Sand Temp	Body	Stamped	Simp Stmpd	1	9.0
8LV42.189.2	TU 8	A-W	Pottery	Sand Temp	Body	Plain	Plain	2	6.9
8LV42.189.3	TU 8	A-W	Pottery	Limestone Temp	Body	Plain	Plain	1	2.3
8LV42.189.4	TU 8	A-W	Invertebrate	Crown Conch	UID Modified			1	25.3
8LV42.189.5	TU 8	A-W	Invertebrate	Crown Conch	Outer Whorl			2	1.6
8LV42.189.6	TU 8	A-W	Invertebrate	Pear Whelk	UID Modified			2	3.9
8LV42.189.7	TU 8	A-W	Invertebrate	Misc. Gastropod	UID Modified			7	2.6
8LV42.189.8	TU 8	A-W	Invertebrate	Misc. Gastropod	Columella			2	4.4
8LV42.189.9	TU 8	A-W	Charcoal	Wood					0.3
8LV42.189.10	TU 8	A-W	Vert. Fauna						32.3
8LV42.122.1	TU 8	B	Historic	Metal (Iron)	UID				6.9
8LV42.122.2	TU 8	B	Historic	Glass					270.5
8LV42.122.3	TU 8	B	Vert. Fauna						388.0
8LV42.122.4	TU 8	B	Lithic	Chert	Shatter			1	2.4
8LV42.122.5	TU 8	B	Lithic	Chert	Flake			4	5.3
8LV42.122.6	TU 8	B	Misc. Rock	Limestone				16	52.7

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.122.7	TU 8	B	Misc. Rock	Sedimentary				2	24.5
8LV42.122.8	TU 8	B	Misc. Rock	UID	Pebble			1	0.5
8LV42.122.9	TU 8	B	Historic Pottery	Earthenware	Rim			1	90.7
8LV42.122.10	TU 8	B	Historic Pottery	Earthenware	Body			1	2.6
8LV42.122.11	TU 8	B	Historic Pottery	Sandstone				13	75.5
8LV42.122.12	TU 8	B	Historic Pottery	UID				15	60.8
8LV42.122.13	TU 8	B	Invertebrate	Crown Conch	Unmodified			17	431.1
8LV42.122.14	TU 8	B	Historic	Metal (Iron)	Nail				78.1
8LV42.122.15	TU 8	B	Historic	Metal (Iron)	Fragment				1054.6
8LV42.122.16	TU 8	B	Historic	Metal (Iron)	Fragment				145.4
8LV42.122.17	TU 8	B	Invertebrate	Misc. Gastropod	Columella			46	158.8
8LV42.122.18	TU 8	B	Invertebrate	Tulip Shell	UID Modified			2	24.2
8LV42.122.19	TU 8	B	Invertebrate	Pear Whelk	Unmodified			1	37.0
8LV42.122.20	TU 8	B	Invertebrate	Misc. Bivalve	UID Modified			3	9.8
8LV42.122.21	TU 8	B	Invertebrate	Misc. Gastropod				17	19.3
8LV42.122.22	TU 8	B	Invertebrate	Crown Conch	Hammer			1	32.7
8LV42.122.23	TU 8	B	Invertebrate	Lightning Whelk	Outer Whorl			1	55.9
8LV42.122.24	TU 8	B	Invertebrate	Misc. Gastropod	Outer Whorl			17	50.1
8LV42.122.25	TU 8	B	Invertebrate	Lightning Whelk	UID Modified			1	27.2
8LV42.122.26	TU 8	B	Invertebrate	Crown Conch	UID Modified			93	1104.0
8LV42.122.27	TU 8	B	UID						37.0
8LV42.122.28	TU 8	B	Pottery	Limestone Temp	Body			7	25.1
8LV42.122.29	TU 8	B	Pottery	Limestone Temp	Rim	Plain	Plain	1	9.2
8LV42.122.30	TU 8	B	Misc. Rock	Mudstone				1	2.3
8LV42.122.31	TU 8	B	Pottery	Sand Temp	Crumb			28	15.5
8LV42.122.32	TU 8	B	Pottery	Limestone Temp	Crumb			36	27.0
8LV42.122.33	TU 8	B	Pottery	Spicule Temp	Crumb			1	0.5
8LV42.124.1	TU 8	C	Pottery	Limestone Temp	Body	Plain	Plain	9	36.7
8LV42.124.2	TU 8	C	Pottery	Limestone Temp	Crumb			33	28.9
8LV42.124.3	TU 8	C	Pottery	Sand Temp	Body	Plain	Plain	1	4.9
8LV42.124.4	TU 8	C	Pottery	Sand Temp	Crumb			2	4.8
8LV42.124.5	TU 8	C	Invertebrate	Lightning Whelk	Columella			2	62.3
8LV42.124.6	TU 8	C	Invertebrate	Crown Conch	Unmodified			16	453.6
8LV42.124.7	TU 8	C	Invertebrate	Crown Conch	UID Modified			77	1085.4
8LV42.124.8	TU 8	C	Invertebrate	Crown Conch	UID Modified			8	306.2
8LV42.124.9	TU 8	C	Invertebrate	Crown Conch	Tool			2	45.8
8LV42.124.10	TU 8	C	Invertebrate	Crown Conch	Hammer			1	55.3
8LV42.124.11	TU 8	C	Invertebrate	Crown Conch	Hammer			1	25.0
8LV42.124.12	TU 8	C	Invertebrate	Crown Conch	Outer Whorl			5	16.6
8LV42.124.13	TU 8	C	Invertebrate	Crown Conch	Columella			2	24.8
8LV42.124.14	TU 8	C	Invertebrate	Tulip Shell	Unmodified			1	21.5
8LV42.124.15	TU 8	C	Invertebrate	Pear Whelk	Unmodified			1	15.1
8LV42.124.16	TU 8	C	Invertebrate	Pear Whelk	UID Modified			1	13.6
8LV42.124.17	TU 8	C	Invertebrate	Misc. Gastropod	Columella			46	120.6
8LV42.124.18	TU 8	C	Invertebrate	Misc. Gastropod	UID Modified			7	15.0
8LV42.124.19	TU 8	C	Invertebrate	Misc. Gastropod	Unmodified			2	4.8
8LV42.124.20	TU 8	C	Invertebrate	Misc. Gastropod	Outer Whorl			10	48.6
8LV42.124.21	TU 8	C	Invertebrate	Mercenaria	UID Modified			2	36.5
8LV42.124.22	TU 8	C	Lithic	Chert	Shatter			4	33.8
8LV42.124.23	TU 8	C	Lithic	Chert	Flake			2	1.7
8LV42.124.24	TU 8	C	Charcoal	Wood					26.2
8LV42.124.25	TU 8	C	Misc. Rock	Limestone				16	56.3
8LV42.124.26	TU 8	C	Misc. Rock	Mineral				1	3.3
8LV42.124.27	TU 8	C	Misc. Rock	UID	Pebble			1	0.5
8LV42.124.28	TU 8	C	Historic Pottery					18	121.9
8LV42.124.29	TU 8	C	Historic	Glass				54	276.8
8LV42.124.30	TU 8	C	Historic	Brick				8	21.3
8LV42.124.31	TU 8	C	Historic	Metal					1075.9
8LV42.124.32	TU 8	C	Vert. Fauna						585.5

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.126.1	TU 8	D Zone A	Pottery	Sand Temp	Body	Plain	Plain	4	31.8
8LV42.126.2	TU 8	D Zone A	Pottery	Sand Temp	Crumb			8	6.2
8LV42.126.3	TU 8	D Zone A	Pottery	Limestone Temp	Crumb			24	23.6
8LV42.126.4	TU 8	D Zone A	Invertebrate	Crown Conch	Unmodified			6	153.7
8LV42.126.5	TU 8	D Zone A	Invertebrate	Crown Conch	Hammer			1	51.3
8LV42.126.6	TU 8	D Zone A	Invertebrate	Crown Conch	UID Modified			5	182.0
8LV42.126.7	TU 8	D Zone A	Invertebrate	Crown Conch	Hammer			2	69.5
8LV42.126.8	TU 8	D Zone A	Invertebrate	Crown Conch	UID Modified			68	981.4
8LV42.126.9	TU 8	D Zone A	Invertebrate	Lightning Whelk	UID Modified			3	192.8
8LV42.126.10	TU 8	D Zone A	Invertebrate	Pear Whelk	UID Modified			2	16
8LV42.126.11	TU 8	D Zone A	Invertebrate	Mercenaria	UID Modified			1	7.9
8LV42.126.12	TU 8	D Zone A	Invertebrate	Misc. Gastropod	Unmodified			1	0.3
8LV42.126.13	TU 8	D Zone A	Invertebrate	Misc. Gastropod	UID Modified			9	27.7
8LV42.126.14	TU 8	D Zone A	Invertebrate	Misc. Gastropod	Columella			17	80.6
8LV42.126.15	TU 8	D Zone A	Invertebrate	Misc. Gastropod	Outer Whorl			16	124.3
8LV42.126.16	TU 8	D Zone A	Lithic	Chert	Flake			2	14.9
8LV42.126.17	TU 8	D Zone A	Misc. Rock	Sedimentary				1	2.7
8LV42.126.18	TU 8	D Zone A	Misc. Rock	Limestone				8	84.0
8LV42.126.19	TU 8	D Zone A	Charcoal	Wood					5.4
8LV42.126.20	TU 8	D Zone A	Historic	Metal					126.6
8LV42.126.21	TU 8	D Zone A	Vert. Fauna						325.6
8LV42.126.22	TU 8	D Zone A	Pottery	Limestone Temp	Body	Plain	Plain	10	47.4
8LV42.126.23	TU 8	D Zone A	Pottery	Limestone Temp	Rim	Plain	Plain	1	2.0
8LV42.126.24	TU 8	D Zone A	Pottery	Spicule Temp	Body	Plain	Plain	2	7.9
8LV42.126.25	TU 8	D Zone A	Pottery	Spicule Temp	Crumb			2	0.8
8LV42.126.26	TU 8	D Zone A	Historic	Glass					94.9
8LV42.126.27	TU 8	D Zone A	Historic	Brick				1	4.9
8LV42.126.28	TU 8	D Zone A	Historic Pottery					3	13.0
8LV42.129.1	TU 8	D ZnA,add	Pottery	Limestone Temp	Crumb			3	3.1
8LV42.129.2	TU 8	D ZnA,add	Invertebrate	Crown Conch	Unmodified			1	35.5
8LV42.129.3	TU 8	D ZnA,add	Invertebrate	Crown Conch	UID Modified			1	16.5
8LV42.129.4	TU 8	D ZnA,add	Invertebrate	Misc Gastropod	Columella			1	0.3
8LV42.129.5	TU 8	D ZnA,add	Vert. Fauna						5.8
8LV42.129.6	TU 8	D ZnA,add	Historic	Metal				5	0.4
8LV42.127.1	TU 8	D Zone B	Pottery	Limestone Temp	Body	Plain	Plain	9	34.0
8LV42.127.2	TU 8	D Zone B	Pottery	Limestone Temp	Crumb			4	5.6
8LV42.127.3	TU 8	D Zone B	Pottery	Sand Temp	Body	Stamped	Comp Stmp	2	17.3
8LV42.127.4	TU 8	D Zone B	Pottery	Sand Temp	Crumb			1	1.0
8LV42.127.5	TU 8	D Zone B	Invertebrate	Crown Conch	Unmodified			36	609.7
8LV42.127.6	TU 8	D Zone B	Invertebrate	Crown Conch	UID Modified			4	134.4
8LV42.127.7	TU 8	D Zone B	Invertebrate	Crown Conch	UID Modified			36	609.7
8LV42.127.8	TU 8	D Zone B	Invertebrate	Crown Conch	Outer Whorl			2	2.1
8LV42.127.9	TU 8	D Zone B	Invertebrate	Tulip Shell	UID Modified			1	18.7
8LV42.127.10	TU 8	D Zone B	Invertebrate	Pear Whelk	UID Modified			1	22.9
8LV42.127.11	TU 8	D Zone B	Invertebrate	Misc. Gastropod	Unmodified			11	6.4
8LV42.127.12	TU 8	D Zone B	Invertebrate	Misc. Gastropod	UID Modified			5	0.6
8LV42.127.13	TU 8	D Zone B	Invertebrate	Misc. Gastropod	Columella			1	0.8
8LV42.127.14	TU 8	D Zone B	Invertebrate	Misc. Gastropod	Outer Whorl			2	36.8
8LV42.127.15	TU 8	D Zone B	Vert. Fauna						124.4
8LV42.127.16	TU 8	D Zone B	Invertebrate	Misc. Bivalve	UID Modified			1	1.8
8LV42.127.17	TU 8	D Zone B	Misc. Rock	Limestone				7	29.9
8LV42.130.1	TU 8	E Zone A	Invertebrate	Crown Conch	Hammer			3	161.1
8LV42.130.2	TU 8	E Zone A	Invertebrate	Crown Conch	Tool			1	24.9
8LV42.130.3	TU 8	E Zone A	Invertebrate	Crown Conch	UID Modified			45	563.2
8LV42.130.4	TU 8	E Zone A	Invertebrate	Crown Conch	Unmodified			8	173.2
8LV42.130.5	TU 8	E Zone A	Invertebrate	Tulip Shell	Unmodified			1	22.4
8LV42.130.6	TU 8	E Zone A	Invertebrate	Mercenaria	UID Modified			5	98.3
8LV42.130.7	TU 8	E Zone A	Invertebrate	Misc. Gastropod	Columella			20	76.8
8LV42.130.8	TU 8	E Zone A	Invertebrate	Misc. Gastropod	Outer Whorl			10	26.2

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.130.9	TU 8	E Zone A	Invertebrate	Misc. Gastropod	UID Modified			25	16.8
8LV42.130.10	TU 8	E Zone A	Invertebrate	Barnacle				4	2.9
8LV42.130.11	TU 8	E Zone A	Invertebrate	Misc. Bivalve	UID Modified			2	8.2
8LV42.130.12	TU 8	E Zone A	Vert. Fauna						96.3
8LV42.130.13	TU 8	E Zone A	Misc. Rock	Limestone				4	321.5
8LV42.130.14	TU 8	E Zone A	Lithics	Chert	Biface			1	6.7
8LV42.130.15	TU 8	E Zone A	Lithics	Chert	Shatter			3	15.7
8LV42.130.16	TU 8	E Zone A	Historic	Glass				5	28.1
8LV42.130.17	TU 8	E Zone A	Historic	Earthenware				3	21.7
8LV42.130.18	TU 8	E Zone A	Pottery	Limestone Temp	Body	Plain	Plain	13	57.4
8LV42.130.19	TU 8	E Zone A	Pottery	Limestone Temp	Rim	Plain	Plain	2	6.0
8LV42.130.20	TU 8	E Zone A	Pottery	Limestone Temp	Crumb			42	35.1
8LV42.130.22	TU 8	E Zone A	Pottery	Sand Temp	Crumb			1	0.7
8LV42.130.23	TU 8	E Zone A	Pottery	Spicule Temp	Body	UID		1	2.2
8LV42.131.1	TU 8	E Zone B	Invertebrate	Crown Conch	Unmodified			5	151.7
8LV42.131.2	TU 8	E Zone B	Invertebrate	Crown Conch	UID Modified			25	384.9
8LV42.131.3	TU 8	E Zone B	Invertebrate	Crown Conch	UID Modified			2	25.0
8LV42.131.4	TU 8	E Zone B	Invertebrate	Crown Conch	Hammer			1	42.4
8LV42.131.5	TU 8	E Zone B	Invertebrate	Lightning Whelk	UID Modified			1	239.2
8LV42.131.6	TU 8	E Zone B	Invertebrate	Tulip Shell	UID Modified			1	37.6
8LV42.131.7	TU 8	E Zone B	Invertebrate	Misc. Gastropod	UID Modified			33	27.7
8LV42.131.8	TU 8	E Zone B	Invertebrate	Misc. Gastropod	Outer Whorl			3	4.9
8LV42.131.9	TU 8	E Zone B	Invertebrate	Misc. Gastropod	Columella			3	10.7
8LV42.131.10	TU 8	E Zone B	Invertebrate	Mercenaria	UID Modified			1	33.3
8LV42.131.11	TU 8	E Zone B	Invertebrate	Misc. Bivalve	UID Modified			7	10.1
8LV42.131.12	TU 8	E Zone B	Invertebrate	Barnacle				58	47.3
8LV42.131.13	TU 8	E Zone B	Vert. Fauna						135.5
8LV42.131.14	TU 8	E Zone B	Pottery	Limestone Temp	Body	Plain	Plain	8	85.3
8LV42.131.15	TU 8	E Zone B	Pottery	Limestone Temp	Crumb				1.5
8LV42.131.16	TU 8	E Zone B	Misc. Rock	Limestone				4	138.6
8LV42.132.1	TU 8	E Zone C	Invertebrate	Crown Conch	Unmodified			4	89.4
8LV42.132.2	TU 8	E Zone C	Invertebrate	Crown Conch	UID Modified			11	218.1
8LV42.132.3	TU 8	E Zone C	Invertebrate	Crown Conch	Hammer			1	87.7
8LV42.132.4	TU 8	E Zone C	Invertebrate	Crown Conch	UID Modified			1	39.7
8LV42.132.5	TU 8	E Zone C	Invertebrate	Misc. Gastropod	UID Modified			70	26.1
8LV42.132.6	TU 8	E Zone C	Invertebrate	Crown Conch	Outer Whorl			1	6.3
8LV42.132.7	TU 8	E Zone C	Invertebrate	Barnacle				27	14.7
8LV42.132.8	TU 8	E Zone C	Vert. Fauna						78.0
8LV42.132.9	TU 8	E Zone C	Lithic	Chert	Flake			1	0.5
8LV42.132.10	TU 8	E Zone C	Pottery	Limestone Temp	Body	Plain	Plain	3	28.5
8LV42.132.11	TU 8	E Zone C	Pottery	Limestone Temp	Rim	Plain	Plain	1	2.1
8LV42.132.12	TU 8	E Zone C	Pottery	Sand Temp	Crumb			1	0.5
8LV42.132.13	TU 8	E Zone C	Invertebrate	Misc. Gastropod	Columella			1	1.5
8LV42.132.14	TU 8	E Zone C	Historic	Brick				1	3.4
8LV42.132.15	TU 8	E Zone C	Pottery	Limestone Temp	Crumb			1	2.5
8LV42.133.1	TU 8	E Zone D	Vert. Fauna						121.6
8LV42.133.2	TU 8	E Zone D	Misc. Rock	Limestone				3	9.3
8LV42.133.3	TU 8	E Zone D	Invertebrate	Misc. Gastropod				7	2.1
8LV42.133.4	TU 8	E Zone D	Invertebrate	Crown Conch	Unmodified			3	112.2
8LV42.133.5	TU 8	E Zone D	Invertebrate	Crown Conch	UID Modified			7	34.9
8LV42.133.6	TU 8	E Zone D	Invertebrate	Crown Conch	Tool			2	56.2
8LV42.133.7	TU 8	E Zone D	Invertebrate	Misc. Gastropod	Columella			1	0.5
8LV42.133.8	TU 8	E Zone D	Invertebrate	Misc. Gastropod	Outer Whorl			1	0.6
8LV42.133.9	TU 8	E Zone D	Invertebrate	Barnacle					40.9
8LV42.133.10	TU 8	E Zone D	Charcoal	Wood					3.2
8LV42.133.11	TU 8	E Zone D	Invertebrate	Misc. Bivalve	Fragment			1	0.3
8LV42.133.12	TU 8	E Zone D	Invertebrate	UID	Fragment				4.7
8LV42.133.13	TU 8	E Zone D	Pottery	Limestone Temp	Body	Plain	Scraped Int.	2	21.1

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.133.14	TU 8	E Zone D	Pottery	Limestone Temp	Body	Plain	Plain	3	19.0
8LV42.133.15	TU 8	E Zone D	Pottery	Limestone Temp	Body	Plain	Plain	1	20.8
8LV42.133.16	TU 8	E Zone D	Pottery	Sand Temp	Body	Plain	Plain	2	9.3
8LV42.133.17	TU 8	E Zone D	Pottery	Limestone Temp	Crumb			2	0.5
8LV42.133.18	TU 8	E Zone D	Vert. Fauna					1	0.4
8LV42.134.1	TU 8	F Zone A	Invertebrate	Misc. Gastropod	Unmodified			7	167.9
8LV42.134.2	TU 8	F Zone A	Invertebrate	Misc. Gastropod	Columella			13	40.5
8LV42.134.3	TU 8	F Zone A	Invertebrate	Misc. Gastropod	UID Modified			39	492.7
8LV42.134.4	TU 8	F Zone A	Invertebrate	Misc. Gastropod	UID Modified			1	29.4
8LV42.134.5	TU 8	F Zone A	Invertebrate	Lightning Whelk	Columella			1	4.8
8LV42.134.6	TU 8	F Zone A	Invertebrate	Lightning Whelk	UID Modified			1	9.1
8LV42.134.7	TU 8	F Zone A	Invertebrate	Misc. Gastropod	Hammer			1	26.3
8LV42.134.8	TU 8	F Zone A	Invertebrate	Misc. Gastropod	Outer Whorl			3	3.7
8LV42.134.9	TU 8	F Zone A	Invertebrate	Tulip Shell	Unmodified			1	11.7
8LV42.134.10	TU 8	F Zone A	Invertebrate	Misc. Gastropod	UID Modified			5	9.2
8LV42.134.11	TU 8	F Zone A	Vert. Fauna						56.5
8LV42.134.12	TU 8	F Zone A	Invertebrate	UID				4	0.9
8LV42.134.13	TU 8	F Zone A	Historic	Stoneware				2	23.8
8LV42.134.14	TU 8	F Zone A	Lithic	Chert	Flake			2	4.5
8LV42.134.15	TU 8	F Zone A	Misc. Rock	Limestone				2	57.5
8LV42.134.16	TU 8	F Zone A	Pottery	Limestone Temp	Body	Plain	Plain	7	25.3
8LV42.134.17	TU 8	F Zone A	Pottery	Sand Temp	Body	Plain	Plain	2	3.5
8LV42.134.18	TU 8	F Zone A	Pottery	Sand Temp	Crumb			6	3.5
8LV42.134.19	TU 8	F Zone A	Pottery	Limestone Temp	Crumb			18	4.3
8LV42.136.1	TU 8	F Zone B	Invertebrate	Crown Conch	Unmodified			11	308.1
8LV42.136.2	TU 8	F Zone B	Invertebrate	Crown Conch	UID Modified			32	483.5
8LV42.136.3	TU 8	F Zone B	Invertebrate	Crown Conch	Modified Shell			1	29.7
8LV42.136.4	TU 8	F Zone B	Invertebrate	Crown Conch	Modified Shell			1	42.2
8LV42.136.5	TU 8	F Zone B	Invertebrate	Crown Conch	Hammer			1	47.8
8LV42.136.6	TU 8	F Zone B	Invertebrate	Lightning Whelk	UID Modified			1	96.4
8LV42.136.7	TU 8	F Zone B	Invertebrate	Mercenaria	UID Modified			1	149.0
8LV42.136.8	TU 8	F Zone B	Invertebrate	Tulip Shell	Unmodified			1	8.1
8LV42.136.9	TU 8	F Zone B	Invertebrate	Misc. Gastropod	Columella			5	18.7
8LV42.136.10	TU 8	F Zone B	Invertebrate	Misc. Gastropod	UID Modified				14.6
8LV42.136.11	TU 8	F Zone B	Invertebrate	Misc. Gastropod	Outer Whorl			6	10.7
8LV42.136.12	TU 8	F Zone B	Invertebrate	Barnacle					31.2
8LV42.136.13	TU 8	F Zone B	Vert. Fauna						170.7
8LV42.136.14	TU 8	F Zone B	Lithic	Chert	Flake			4	22.5
8LV42.136.15	TU 8	F Zone B	Misc. Rock	Limestone				4	5.4
8LV42.136.16	TU 8	F Zone B	Misc. Rock	Chert				1	19.3
8LV42.136.17	TU 8	F Zone B	Pottery	Limestone Temp	Body	Plain	Plain	6	34.2
8LV42.136.18	TU 8	F Zone B	Pottery	Limestone Temp	Crumb			7	7.2
8LV42.136.19	TU 8	F Zone B	Pottery	Limestone Temp	Body	UID	Eroded	2	18.1
8LV42.136.20	TU 8	F Zone B	Pottery	Sand Temp	Body	Plain	Plain	1	3.0
8LV42.137.1	TU 8	F Zone C	Vert. Fauna						32.2
8LV42.137.2	TU 8	F Zone C	Invertebrate	Crown Conch	UID Modified			4	104.3
8LV42.137.3	TU 8	F Zone C	Invertebrate	Crown Conch	Unmodified			2	9.6
8LV42.137.4	TU 8	F Zone C	Invertebrate	Misc. Gastropod				17	2.4
8LV42.137.5	TU 8	F Zone C	Invertebrate	Barnacle				16	10.1
8LV42.137.6	TU 8	F Zone C	Charcoal						0.3
8LV42.137.7	TU 8	F Zone C	Pottery	Limestone Temp	Body	Plain	Plain	2	9.5
8LV42.137.8	TU 8	F Zone C	Pottery	Sand Temp	Body	Plain	Plain	1	1.9
8LV42.137.9	TU 8	F Zone C	Misc. Rock	Limestone				1	2.1
8LV42.138.1	TU 8	F Zone D	Vert. Fauna						90.9
8LV42.138.2	TU 8	F Zone D	Invertebrate	Crown Conch	Unmodified			1	30.5
8LV42.138.3	TU 8	F Zone D	Invertebrate	Crown Conch	UID Modified			7	110.6
8LV42.138.4	TU 8	F Zone D	Invertebrate	Crown Conch	UID Modified			1	25.1
8LV42.138.5	TU 8	F Zone D	Invertebrate	Crown Conch	Outer Whorl			1	4.8
8LV42.138.6	TU 8	F Zone D	Invertebrate	Crown Conch	Columella			1	0.6

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.138.7	TU 8	F Zone D	Invertebrate	Barnacle				52	38.8
8LV42.138.8	TU 8	F Zone D	Charcoal						2.2
8LV42.138.9	TU 8	F Zone D	Invertebrate	Misc. Gastropod				4	0.1
8LV42.138.10	TU 8	F Zone D	Invertebrate	Misc. Bivalve				11	2.4
8LV42.138.11	TU 8	F Zone D	Pottery	Limestone Temp	Rim	Plain	Plain	1	2.7
8LV42.138.12	TU 8	F Zone D	Pottery	Limestone Temp	Body	Plain	Plain	4	45.4
8LV42.138.13	TU 8	F Zone D	Pottery	Sand Temp	Body	Plain	Plain	2	2.4
8LV42.138.14	TU 8	F Zone D	Pottery	Spicule Temp	Body	Plain	Plain	1	2.0
8LV42.138.15	TU 8	F Zone D	Pottery	Limestone Temp	Crumb			2	0.6
8LV42.138.16	TU 8	F Zone D	Misc. Rock	Limestone				1	6.4
8LV42.140.1	TU 8	G Zone A	Pottery	Limestone Temp	Body	Plain	Plain	2	12.5
8LV42.140.2	TU 8	G Zone A	Pottery	Limestone Temp	Crumb			1	1.8
8LV42.140.3	TU 8	G Zone A	Invertebrate	Crown Conch	Unmodified			5	135.4
8LV42.140.4	TU 8	G Zone A	Invertebrate	Crown Conch	UID Modified			4	63.4
8LV42.140.5	TU 8	G Zone A	Invertebrate	Crown Conch	Outer Whorl			1	0.5
8LV42.140.6	TU 8	G Zone A	Invertebrate	Tulip Shell	Unmodified			1	14.1
8LV42.140.7	TU 8	G Zone A	Vert. Fauna						29.3
8LV42.139.1	TU 8	G Zone B	Invertebrate	Crown Conch	Unmodified			30	835.5
8LV42.139.2	TU 8	G Zone B	Invertebrate	Crown Conch	UID Modified			51	680.7
8LV42.139.3	TU 8	G Zone B	Invertebrate	Crown Conch	Columella			7	20.9
8LV42.139.4	TU 8	G Zone B	Invertebrate	Crown Conch	Outer Whorl			4	6.1
8LV42.139.5	TU 8	G Zone B	Invertebrate	Crown Conch	UID Modified			2	64.7
8LV42.139.6	TU 8	G Zone B	Invertebrate	Crown Conch	UID Modified			1	47.6
8LV42.139.7	TU 8	G Zone B	Invertebrate	Crown Conch	Tool			2	83.4
8LV42.139.8	TU 8	G Zone B	Invertebrate	Crown Conch	Hammer			1	50.6
8LV42.139.9	TU 8	G Zone B	Invertebrate	Barnacle					23.8
8LV42.139.10	TU 8	G Zone B	Vert. Fauna						155.7
8LV42.139.11	TU 8	G Zone B	Pottery	Limestone Temp	Body	Plain	Plain	13	49.5
8LV42.139.12	TU 8	G Zone B	Pottery	Sand Temp	Body	Plain	Plain	1	3.5
8LV42.139.13	TU 8	G Zone B	Pottery	Sand Temp	Rim	Plain	Plain	2	4.2
8LV42.139.14	TU 8	G Zone B	Charcoal						1.0
8LV42.139.15	TU 8	G Zone B	Misc. Rock	Limestone				4	75.6
8LV42.139.16	TU 8	G Zone B	Invertebrate	Mercenaria	Fragment			1	7.5
8LV42.139.17	TU 8	G Zone B	Invertebrate	Misc. Bivalve				1	1.3
8LV42.139.18	TU 8	G Zone B	Invertebrate	Misc. Gastropod				10	51.2
8LV42.139.19	TU 8	G Zone B	Invertebrate	Pear Whelk	UID Modified			1	39.1
8LV42.141.1	TU 8	G Zone C	Pottery	Limestone Temp	Rim	Plain	Plain	1	18.9
8LV42.141.2	TU 8	G Zone C	Pottery	Limestone Temp	Crumb			1	0.8
8LV42.141.3	TU 8	G Zone C	Pottery	Limestone Temp	Body	Plain	Plain	1	4.7
8LV42.141.4	TU 8	G Zone C	Pottery	Sand Temp	Crumb			3	1.6
8LV42.141.5	TU 8	G Zone C	Invertebrate	Crown Conch	Unmodified			1	11.2
8LV42.141.6	TU 8	G Zone C	Invertebrate	Crown Conch	UID Modified			10	109.4
8LV42.141.7	TU 8	G Zone C	Invertebrate	Crown Conch	UID Modified			2	92.9
8LV42.141.8	TU 8	G Zone C	Invertebrate	Crown Conch	UID Modified			2	36.8
8LV42.141.9	TU 8	G Zone C	Invertebrate	Misc. Gastropod	Unmodified			3	1.8
8LV42.141.10	TU 8	G Zone C	Invertebrate	Misc. Gastropod	UID Modified			2	0.5
8LV42.141.11	TU 8	G Zone C	Invertebrate	Misc. Gastropod	Outer Whorl			4	0.7
8LV42.141.12	TU 8	G Zone C	Invertebrate	Tulip Shell	Columella			1	0.7
8LV42.141.13	TU 8	G Zone C	Vert. Fauna						59.3
8LV42.141.14	TU 8	G Zone C	Lithic	Chert	Shatter			1	4.7
8LV42.141.15	TU 8	G Zone C	Misc. Rock	Limestone				1	0.7
8LV42.142.1	TU 8	G Zone D	Vert. Fauna						166.3
8LV42.142.2	TU 8	G Zone D	Invertebrate	Barnacle					55.3
8LV42.142.3	TU 8	G Zone D	Invertebrate	Crown Conch	Unmodified			4	140.2
8LV42.142.4	TU 8	G Zone D	Invertebrate	Crown Conch	UID Modified			5	89.8
8LV42.142.5	TU 8	G Zone D	Invertebrate	Crown Conch	UID Modified			1	54.9
8LV42.142.6	TU 8	G Zone D	Invertebrate	Crown Conch	Columella			4	8.8
8LV42.142.7	TU 8	G Zone D	Invertebrate	Crown Conch	Outer Whorl			1	2.3
8LV42.142.8	TU 8	G Zone D	Invertebrate	Lightning Whelk	Outer Whorl			1	37.2

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.142.9	TU 8	G Zone D	Invertebrate	Misc. Gastropod	Columella			1	13.3
8LV42.142.10	TU 8	G Zone D	Invertebrate	Oyster					57.0
8LV42.142.11	TU 8	G Zone D	Charcoal						0.8
8LV42.142.12	TU 8	G Zone D	Pottery	Limestone Temp	Body	Plain	Plain	1	2.5
8LV42.142.13	TU 8	G Zone D	Pottery	Limestone Temp	Crumb			1	0.3
8LV42.142.14	TU 8	G Zone D	Pottery	Sand Temp	Crumb			1	0.3
8LV42.142.15	TU 8	G Zone D	Misc. Rock	Limestone				1	2.3
8LV42.142.16	TU 8	G Zone D	Misc. Rock	Sandstone				1	1.1
8LV42.143.1	TU 8	H	Invertebrate	Crown Conch	Unmodified			33	999.4
8LV42.143.2	TU 8	H	Invertebrate	Crown Conch	UID Modified			55	935.0
8LV42.143.3	TU 8	H	Invertebrate	Crown Conch	Hammer			4	215.1
8LV42.143.4	TU 8	H	Invertebrate	Crown Conch	Hammer			1	46.1
8LV42.143.5	TU 8	H	Invertebrate	Crown Conch	UID Modified			2	59.2
8LV42.143.6	TU 8	H	Invertebrate	Crown Conch	Tool			1	33.9
8LV42.143.7	TU 8	H	Invertebrate	Crown Conch	Hammer			1	54.4
8LV42.143.8	TU 8	H	Invertebrate	Lightning Whelk	UID Modified			2	386.7
8LV42.143.9	TU 8	H	Invertebrate	Lightning Whelk	Unmodified			1	29.7
8LV42.143.10	TU 8	H	Invertebrate	Lightning Whelk	Columella			1	60.6
8LV42.143.11	TU 8	H	Invertebrate	Pear Whelk	UID Modified			2	71.0
8LV42.143.12	TU 8	H	Invertebrate	horse conch	Columella			1	63.3
8LV42.143.13	TU 8	H	Invertebrate	Mercenaria	UID Modified			1	80.1
8LV42.143.14	TU 8	H	Invertebrate	Misc. Gastropod	Columella			10	30.4
8LV42.143.15	TU 8	H	Invertebrate	Misc. Gastropod				20	23.6
8LV42.143.16	TU 8	H	Invertebrate	Barnacle					127.9
8LV42.143.17	TU 8	H	Vert. Fauna						453.5
8LV42.143.18	TU 8	H	Lithic	Limestone	Core (Amorphous)			1	74.1
8LV42.143.19	TU 8	H	Misc. Rock	Limestone				5	15.4
8LV42.143.20	TU 8	H	Pottery	Limestone Temp	Body	Plain	Plain	15	116.9
8LV42.143.21	TU 8	H	Pottery	Spicule Temp	Body	Plain	Plain	3	28.7
8LV42.143.22	TU 8	H	Pottery	Sand Temp	Body	Plain	Plain	1	5.8
8LV42.143.23	TU 8	H	Pottery	Limestone Temp	Crumb			5	9.7
8LV42.143.24	TU 8	H	Pottery	Sand Temp	Body	UID		1	6.1
8LV42.145.1	TU 8	I	Pottery	Limestone Temp	Rim	Plain	Plain	3	21.2
8LV42.145.2	TU 8	I	Pottery	Limestone Temp	Body	Plain	Plain	13	121.1
8LV42.145.3	TU 8	I	Pottery	Limestone Temp	Crumb			10	7.9
8LV42.145.4	TU 8	I	Invertebrate	Lightning Whelk	UID Modified			3	86.9
8LV42.145.5	TU 8	I	Invertebrate	Crown Conch	Unmodified			23	750.4
8LV42.145.6	TU 8	I	Invertebrate	Crown Conch	UID Modified			57	923.6
8LV42.145.7	TU 8	I	Invertebrate	Crown Conch	UID Modified			7	213.8
8LV42.145.8	TU 8	I	Invertebrate	Crown Conch	UID Modified			4	140.7
8LV42.145.9	TU 8	I	Invertebrate	Crown Conch	UID Modified			1	31.1
8LV42.145.10	TU 8	I	Invertebrate	Crown Conch	Hammer			2	135.1
8LV42.145.11	TU 8	I	Invertebrate	Crown Conch	Columella			1	2.7
8LV42.145.12	TU 8	I	Invertebrate	Pear Whelk	UID Modified			1	15.2
8LV42.145.13	TU 8	I	Invertebrate	Tulip Shell	UID Modified			1	21.2
8LV42.145.14	TU 8	I	Invertebrate	Misc. Gastropod	Unmodified			9	23.8
8LV42.145.15	TU 8	I	Invertebrate	Misc. Gastropod	UID Modified			10	10.1
8LV42.145.16	TU 8	I	Invertebrate	Misc. Gastropod	Outer Whorl			5	0.4
8LV42.145.17	TU 8	I	Invertebrate	Misc. Gastropod	Columella			6	24.3
8LV42.145.18	TU 8	I	Lithic	Chert	Shatter			1	8.4
8LV42.145.19	TU 8	I	Misc. Rock	Limestone				9	59.5
8LV42.145.20	TU 8	I	Vert. Fauna						345.9
8LV42.146.1	TU 8	J	Pottery	Limestone Temp	Body	Plain	Plain	6	36.7
8LV42.146.2	TU 8	J	Pottery	Sand Temp	Body	Plain	Plain	1	5.6
8LV42.146.3	TU 8	J	Pottery	Sand Temp	Rim	Plain	Plain	1	5.5
8LV42.146.4	TU 8	J	Pottery	Limestone Temp	Crumb			1	0.7
8LV42.146.5	TU 8	J	Pottery	Spicule Temp	Body	Plain	Plain	1	13.0
8LV42.146.6	TU 8	J	Invertebrate	Lightning Whelk	UID Modified			2	104.8
8LV42.146.7	TU 8	J	Invertebrate	Crown Conch	Unmodified			27	857.4

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.146.8	TU 8	J	Invertebrate	Crown Conch	UID Modified			45	1062.5
8LV42.146.9	TU 8	J	Invertebrate	Crown Conch	UID Modified			4	138.0
8LV42.146.10	TU 8	J	Invertebrate	Crown Conch	Hammer			4	226.0
8LV42.146.11	TU 8	J	Invertebrate	Crown Conch	Hammer			1	58.9
8LV42.146.12	TU 8	J	Invertebrate	Pear Whelk	UID Modified			1	13.7
8LV42.146.13	TU 8	J	Invertebrate	Misc. Gastropod	UID Modified			10	37.5
8LV42.146.14	TU 8	J	Invertebrate	Misc. Gastropod	Unmodified			2	1.7
8LV42.146.15	TU 8	J	Invertebrate	Misc. Gastropod	Outer Whorl			11	3.4
8LV42.146.16	TU 8	J	Vert. Fauna						307.3
8LV42.146.17	TU 8	J	Misc. Rock	Limestone				4	7.3
8LV42.146.18	TU 8	J	Concretion					1	0.3
8LV42.147.1	TU 8	K	Invertebrate	Crown Conch	Unmodified			34	1045.7
8LV42.147.2	TU 8	K	Invertebrate	Crown Conch	UID Modified			33	1268.3
8LV42.147.3	TU 8	K	Invertebrate	Crown Conch	UID Modified			3	140.2
8LV42.147.4	TU 8	K	Invertebrate	Crown Conch	UID Modified			41	805.0
8LV42.147.5	TU 8	K	Invertebrate	Crown Conch	Hammer			12	576.5
8LV42.147.6	TU 8	K	Invertebrate	Crown Conch	Tool			2	45.8
8LV42.147.7	TU 8	K	Invertebrate	Crown Conch	Outer Whorl			2	4.7
8LV42.147.8	TU 8	K	Invertebrate	Pear Whelk	Unmodified			1	48.6
8LV42.147.9	TU 8	K	Invertebrate	Lightning Whelk	Hammer			1	97.3
8LV42.147.10	TU 8	K	Invertebrate	Lightning Whelk	Tool			2	539.7
8LV42.147.11	TU 8	K	Invertebrate	Misc. Gastropod	UID Modified			4	28.4
8LV42.147.12	TU 8	K	Invertebrate	Tulip Shell	Unmodified			9	2.6
8LV42.147.13	TU 8	K	Invertebrate	Misc. Gastropod	UID Modified				4.8
8LV42.147.14	TU 8	K	Invertebrate	Barnacle					2.5
8LV42.147.15	TU 8	K	Vert. Fauna						404.2
8LV42.147.16	TU 8	K	Misc. Rock	Limestone				5	47.6
8LV42.147.17	TU 8	K	Pottery	Limestone Temp	Crumb			9	10.7
8LV42.147.18	TU 8	K	Pottery	Limestone Temp	Rim	Plain	Plain	1	30.4
8LV42.147.19	TU 8	K	Pottery	Limestone Temp	Body	Plain	Plain	7	72.3
8LV42.149.1	TU 8	L	Invertebrate	Crown Conch	Unmodified			21	579.0
8LV42.149.2	TU 8	L	Invertebrate	Crown Conch	UID Modified			37	509.6
8LV42.149.3	TU 8	L	Invertebrate	Crown Conch	UID Modified			1	21.8
8LV42.149.4	TU 8	L	Invertebrate	Crown Conch	UID Modified			2	37.1
8LV42.149.5	TU 8	L	Invertebrate	Crown Conch	Hammer			2	117.2
8LV42.149.6	TU 8	L	Invertebrate	Crown Conch	Tool			1	31.2
8LV42.149.7	TU 8	L	Invertebrate	Misc. Gastropod	Columella			12	35.1
8LV42.149.8	TU 8	L	Invertebrate	Misc. Gastropod	Outer Whorl			15	27.6
8LV42.149.9	TU 8	L	Invertebrate	Tulip Shell	Unmodified			1	25.0
8LV42.149.10	TU 8	L	Invertebrate	Misc. Gastropod	UID Modified			2	20.8
8LV42.149.11	TU 8	L	Invertebrate	Lightning Whelk	Unmodified			1	32.7
8LV42.149.12	TU 8	L	Invertebrate	Lightning Whelk	UID Modified			1	171.7
8LV42.149.13	TU 8	L	Invertebrate	Mercenaria	UID Modified			3	187.9
8LV42.149.14	TU 8	L	Invertebrate	Misc. Gastropod				46	12.8
8LV42.149.15	TU 8	L	Invertebrate	Misc. Bivalve	Unmodified			2	8.5
8LV42.149.16	TU 8	L	Invertebrate	Barnacle					36.8
8LV42.149.17	TU 8	L	Vert. Fauna						287.1
8LV42.149.18	TU 8	L	Misc. Rock	Limestone				20	357.7
8LV42.149.19	TU 8	L	Pottery	Sand Temp	Rim	Punctated	UID	3	17.2
8LV42.149.20	TU 8	L	Pottery	Sand Temp	Crumb			7	5.1
8LV42.149.21	TU 8	L	Pottery	Limestone Temp	Body	Plain	Plain	17	89.6
8LV42.149.22	TU 8	L	Pottery	Limestone Temp	Rim	Plain	Plain	2	5.4
8LV42.149.23	TU 8	L	Pottery	Limestone Temp	Crumb			40	42.6
8LV42.149.24	TU 8	L	Pottery	Limestone Temp	Body	UID	UID	1	3.4
8LV42.150.1	TU 8	M	Pottery	Limestone Temp	Body	Plain	Plain	8	75.8
8LV42.150.2	TU 8	M	Pottery	Limestone Temp	Crumb			12	14.3
8LV42.150.3	TU 8	M	Pottery	Sand Temp	Rim	Impressed	Cord Mrkd	2	33.4
8LV42.150.4	TU 8	M	Pottery	Sand Temp	Body	Impressed	Cord Mrkd	7	49.8
8LV42.150.5	TU 8	M	Pottery	Sand Temp	Body	Stamped	Comp Stmp	2	29.8

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.150.6	TU 8	M	Pottery	Sand Temp	Body	Stamped	Linear Dent	2	14.4
8LV42.150.7	TU 8	M	Pottery	Sand Temp	Rim	Plain	Plain	2	3.4
8LV42.150.8	TU 8	M	Pottery	Sand Temp	Body	Plain	Plain	9	42.0
8LV42.150.9	TU 8	M	Pottery	Sand Temp	Crumb			25	18.7
8LV42.150.10	TU 8	M	Pottery	Spicule Temp	Body	Plain	Painted	1	2.3
8LV42.150.11	TU 8	M	Pottery	Limestone Temp	Body	Plain	Shell Scraped	1	9.3
8LV42.150.12	TU 8	M	Invertebrate	Crown Conch	Unmodified			9	248.0
8LV42.150.13	TU 8	M	Invertebrate	Crown Conch	UID Modified			3	58.3
8LV42.150.14	TU 8	M	Invertebrate	Crown Conch	UID Modified			39	424.0
8LV42.150.15	TU 8	M	Invertebrate	Crown Conch	Hammer			1	48.1
8LV42.150.16	TU 8	M	Invertebrate	Crown Conch	Outer Whorl			2	8.7
8LV42.150.17	TU 8	M	Invertebrate	Pear Whelk	UID Modified			2	20.6
8LV42.150.18	TU 8	M	Invertebrate	Tulip Shell	UID Modified			1	19.4
8LV42.150.19	TU 8	M	Invertebrate	Misc. Gastropod	Unmodified			46	25.8
8LV42.150.20	TU 8	M	Invertebrate	Misc. Gastropod	UID Modified			22	27.6
8LV42.150.21	TU 8	M	Invertebrate	Misc. Gastropod	Outer Whorl			38	68.3
8LV42.150.22	TU 8	M	Invertebrate	Misc. Gastropod	Columella			13	41.5
8LV42.150.23	TU 8	M	Invertebrate	Other Shell	Fragment			35	15.8
8LV42.150.24	TU 8	M	Invertebrate	Misc. Bivalve	UID Modified			3	17.8
8LV42.150.25	TU 8	M	Invertebrate	Mercenaria	UID Modified			16	46.8
8LV42.150.26	TU 8	M	Invertebrate	Barnacle					5.2
8LV42.150.27	TU 8	M	Misc. Rock	Limestone				7	10.1
8LV42.150.28	TU 8	M	Misc. Rock	Igneous rock				3	122.5
8LV42.150.29	TU 8	M	Concretion					30	10.2
8LV42.150.30	TU 8	M	Lithic	Sedimentary	Shatter			1	29.3
8LV42.150.31	TU 8	M	Lithic	Chert	Shatter			3	14.4
8LV42.150.32	TU 8	M	Misc. Rock	Sedimentary				160	1755.8
8LV42.150.33	TU 8	M	Charcoal						7.9
8LV42.150.34	TU 8	M	Vert. Fauna						282.4
8LV42.150.35	TU 8	M	Invertebrate	Crown Conch	Hammer			1	53.6
8LV42.152.1	TU 8	N	Pottery	Limestone Temp	Rim	Plain	Plain	1	2.4
8LV42.152.2	TU 8	N	Pottery	Limestone Temp	Body	Plain	Plain	0	48.2
8LV42.152.3	TU 8	N	Pottery	Limestone Temp	Body	Impressed	Cord Mrkd	1	5.3
8LV42.152.4	TU 8	N	Pottery	Limestone Temp	Body	UID	UID	1	7.2
8LV42.152.5	TU 8	N	Pottery	Limestone Temp	Crumb			25	33.2
8LV42.152.6	TU 8	N	Pottery	Sand Temp	Rim	Plain	Plain	1	4.7
8LV42.152.7	TU 8	N	Pottery	Sand Temp	Body	Plain	Plain	2	38.2
8LV42.152.8	TU 8	N	Pottery	Sand Temp	Body	Plain	Plain	2	6.3
8LV42.152.9	TU 8	N	Pottery	Sand Temp	Base	Stamped	UID	1	14.2
8LV42.152.10	TU 8	N	Pottery	Sand Temp	Base	Plain	Plain	1	22.6
8LV42.152.11	TU 8	N	Pottery	Sand Temp	Body	Stamped	Simp Stmpd	1	3.1
8LV42.152.12	TU 8	N	Pottery	Sand Temp	Body	Impressed	Cord Mrkd	13	101.2
8LV42.152.13	TU 8	N	Pottery	Sand Temp	Crumb			24	32.9
8LV42.152.14	TU 8	N	Pottery	Spicule Temp	Rim	Plain	Plain	1	8.3
8LV42.152.15	TU 8	N	Invertebrate	Crown Conch	Unmodified			10	302.7
8LV42.152.16	TU 8	N	Invertebrate	Crown Conch	UID Modified			53	614.4
8LV42.152.17	TU 8	N	Invertebrate	Crown Conch	UID Modified			1	24.1
8LV42.152.18	TU 8	N	Invertebrate	Crown Conch	UID Modified			1	43.9
8LV42.152.19	TU 8	N	Invertebrate	Crown Conch	Hammer			5	186.3
8LV42.152.20	TU 8	N	Invertebrate	Crown Conch	Hammer			3	99.9
8LV42.152.21	TU 8	N	Invertebrate	Crown Conch	Outer Whorl			2	12.0
8LV42.152.22	TU 8	N	Invertebrate	Tulip	Unmodified			3	45.1
8LV42.152.23	TU 8	N	Invertebrate	Tulip	UID Modified			3	47.2
8LV42.152.24	TU 8	N	Invertebrate	Pear Whelk	UID Modified			4	47.4
8LV42.152.25	TU 8	N	Invertebrate	Lightning Whelk	UID Modified			1	93.0
8LV42.152.26	TU 8	N	Invertebrate	Misc. Gastropod	Unmodified			59	32.1
8LV42.152.27	TU 8	N	Invertebrate	Misc. Gastropod	UID Modified			57	44.4
8LV42.152.28	TU 8	N	Invertebrate	Misc. Gastropod	Outer Whorl			49	65.6
8LV42.152.29	TU 8	N	Invertebrate	Misc. Gastropod	Columella			43	69.8

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.152.30	TU 8	N	Invertebrate	Misc. Gastropod	Fragments			55	26.7
8LV42.152.31	TU 8	N	Invertebrate	Misc. Bivalve	UID Modified			17	21.7
8LV42.152.32	TU 8	N	Invertebrate	Mercenaria	UID Modified			10	29.7
8LV42.152.33	TU 8	N	Invertebrate	Barnacle				23	4.5
8LV42.152.34	TU 8	N	Lithic	Chert	Shatter			4	24.2
8LV42.152.35	TU 8	N	Lithic	Chert	Flake			2	4.2
8LV42.152.36	TU 8	N	Concretion					13	8.5
8LV42.152.37	TU 8	N	Misc. Rock	Limestone				4	1.6
8LV42.152.38	TU 8	N	Misc. Rock	Coral				1	5.1
8LV42.152.39	TU 8	N	Misc. Rock	Mudstone				53	846.0
8LV42.152.40	TU 8	N	Vert. Fauna						269.7
8LV42.152.41	TU 8	N	Vert. Fauna		Worked			2	7.2
8LV42.152.42	TU 8	N	Charcoal						18.1
8LV42.153.1	TU 8	O	Invertebrate	Crown Conch	Unmodified			12	348.1
8LV42.153.2	TU 8	O	Invertebrate	Crown Conch	UID Modified			21	378.3
8LV42.153.3	TU 8	O	Invertebrate	Crown Conch	UID Modified			2	126.7
8LV42.153.4	TU 8	O	Invertebrate	Crown Conch	Hammer			3	170.2
8LV42.153.5	TU 8	O	Invertebrate	Crown Conch	Hammer			1	57.7
8LV42.153.6	TU 8	O	Invertebrate	Crown Conch	Tool			2	80.1
8LV42.153.7	TU 8	O	Invertebrate	Pear Whelk	UID Modified			6	57.0
8LV42.153.8	TU 8	O	Invertebrate	Pear Whelk	Outer Whorl			18	8.8
8LV42.153.9	TU 8	O	Invertebrate	Misc. Gastropod	Outer Whorl			76	170.4
8LV42.153.10	TU 8	O	Invertebrate	Misc. Gastropod	Columella			52	105.0
8LV42.153.11	TU 8	O	Invertebrate	Misc. Gastropod				150	107.2
8LV42.153.12	TU 8	O	Invertebrate	Barnacle					27.9
8LV42.153.13	TU 8	O	Invertebrate	Mercenaria	UID Modified			1	4.6
8LV42.153.14	TU 8	O	Misc. Rock	Coral				3	112.9
8LV42.153.15	TU 8	O	Lithic	Chert	Core			1	34.6
8LV42.153.16	TU 8	O	Misc. Rock	Limestone	UID			4	15.1
8LV42.153.17	TU 8	O	Misc. Rock	Sandstone	Pebble			1	3.1
8LV42.153.18	TU 8	O	Misc. Rock	UID	UID			1	31.6
8LV42.153.19	TU 8	O	Vert. Fauna						521.8
8LV42.153.20	TU 8	O	Vert. Fauna	Worked Bone	Bone Pin			1	2.9
8LV42.153.22	TU 8	O	Pottery	Limestone Temp	Rim	Impressed	Fabric	1	28.7
8LV42.153.23	TU 8	O	Pottery	Sand Temp	Body	Stamped	Chk Stmpd	3	44.1
8LV42.153.24	TU 8	O	Pottery	Sand Temp	Rim	Plain	Plain	2	13.9
8LV42.153.25	TU 8	O	Pottery	Limestone Temp	Rim	UID	Incised	1	18.8
8LV42.153.26	TU 8	O	Pottery	Grog Temp	Body	Impressed	Fabric	18	106.9
8LV42.153.27	TU 8	O	Pottery	Sand Temp	Body	Plain	Plain	6	72.1
8LV42.153.28	TU 8	O	Pottery	Limestone Temp	Body	Plain	Plain	7	44.5
8LV42.153.29	TU 8	O	Pottery	Limestone Temp	Crumb			9	15.9
8LV42.153.30	TU 8	O	Pottery	Sand Temp	Crumb			8	9.8
8LV42.153.31	TU 8	O	Pottery	Grog Temp	Crumb			9	6.4
8LV42.153.32	TU 8	O	Pottery	Sand Temp	Body	Impressed	Fabric	1	9.4
8LV42.153.33	TU 8	O	Pottery	Sand Temp	Body	Impressed	Cord Mrkd	2	19.4
8LV42.153.34	TU 8	O	Misc. Rock	Sedimentary				1	14.9
8LV42.153.35	TU 8	O	Pottery	Sand Temp	Body	Plain	Plain	2	9.8
8LV42.153.36	TU 8	O	Pottery	Sand Temp	Body	UID	UID	1	2.8
8LV42.153.37	TU 8	O	Pottery	Limestone Temp	Rime	Plain	Plain	1	3.2
8LV42.153.38	TU 8	O	Pottery	Grog Temp	Body	UID	UID	1	6.5
8LV42.155.1	TU 8	P	Pottery	Sand Temp	Rim	Impressed	Cord Mrkd	1	17.4
8LV42.155.2	TU 8	P	Pottery	Sand Temp	Body	Impressed	Cord Mrkd	2	9.7
8LV42.155.3	TU 8	P	Pottery	Sand Temp	Body	Plain	Plain	4	16.1
8LV42.155.4	TU 8	P	Pottery	Sand Temp	Crumb			7	5.5
8LV42.155.5	TU 8	P	Pottery	Sand Temp	Body	Impressed	Cord Mrkd	2	30.1
8LV42.155.6	TU 8	P	Pottery	Limestone Temp	Body	Plain	Plain	1	6.1
8LV42.155.7	TU 8	P	Pottery	Limestone Temp	Rim	Plain	Plain	1	5.8
8LV42.155.8	TU 8	P	Pottery	Limestone Temp	Crumb			2	1.5

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.155.9	TU 8	P	Invertebrate	Crown Conch	Unmodified			3	106.5
8LV42.155.10	TU 8	P	Invertebrate	Crown Conch	Hammer			2	105.1
8LV42.155.11	TU 8	P	Invertebrate	Crown Conch	Hammer			1	26.0
8LV42.155.12	TU 8	P	Invertebrate	Crown Conch	UID Modified			1	57.8
8LV42.155.13	TU 8	P	Invertebrate	Crown Conch	UID Modified			27	130.1
8LV42.155.14	TU 8	P	Invertebrate	Pear Whelk	UID Modified			12	16.5
8LV42.155.15	TU 8	P	Invertebrate	Tulip Shell	UID Modified			2	10.4
8LV42.155.16	TU 8	P	Invertebrate	Misc. Gastropod	Unmodified			39	24.5
8LV42.155.17	TU 8	P	Invertebrate	Misc. Gastropod	UID Modified			5	2.3
8LV42.155.18	TU 8	P	Invertebrate	Misc. Gastropod	Columella			30	49.2
8LV42.155.19	TU 8	P	Invertebrate	Misc. Gastropod	Outer Whorl			26	57.3
8LV42.155.20	TU 8	P	Lithic	Chert	Shatter			1	0.2
8LV42.155.21	TU 8	P	Charcoal	Wood					8.0
8LV42.155.22	TU 8	P	Vert. Fauna						210.6
8LV42.155.23	TU 8	P	Invertebrate	UID	Bead			1	0.7
8LV42.155.24	TU 8	P	Misc. Rock	Limestone				2	2.4
8LV42.156.1	TU 8	Q	Pottery	Sand Temp	Base	Impressed	Cord Mrkd	2	44.6
8LV42.156.2	TU 8	Q	Pottery	Sand Temp	Body	Impressed	UID	1	21.9
8LV42.156.3	TU 8	Q	Pottery	Sand Temp	Rim	Impressed	UID	1	26.3
8LV42.156.4	TU 8	Q	Pottery	Sand Temp	Body	Plain	Plain	10	68.4
8LV42.156.5	TU 8	Q	Pottery	Sand Temp	Crumb			6	3.2
8LV42.156.6	TU 8	Q	Invertebrate	Lightning Whelk	UID Modified			2	12.9
8LV42.156.7	TU 8	Q	Invertebrate	Crown Conch	Unmodified			2	49.5
8LV42.156.8	TU 8	Q	Invertebrate	Crown Conch	UID Modified			24	191.9
8LV42.156.9	TU 8	Q	Invertebrate	Lightning Whelk	Columella			1	5.7
8LV42.156.10	TU 8	Q	Invertebrate	Crown Conch	Hammer			2	71.0
8LV42.156.11	TU 8	Q	Invertebrate	Crown Conch	UID Modified			1	16.0
8LV42.156.12	TU 8	Q	Invertebrate	Crown Conch	UID Modified			1	21.8
8LV42.156.13	TU 8	Q	Invertebrate	Crown Conch	UID Modified			1	26.3
8LV42.156.14	TU 8	Q	Invertebrate	Crown Conch	Outer Whorl			2	1.1
8LV42.156.15	TU 8	Q	Invertebrate	Pear Whelk	UID Modified			2	14.3
8LV42.156.16	TU 8	Q	Invertebrate	Misc. Gastropod	Unmodified			46	25.5
8LV42.156.17	TU 8	Q	Invertebrate	Misc. Gastropod	UID Modified			12	14.5
8LV42.156.18	TU 8	Q	Invertebrate	Misc. Gastropod	Columella			19	30.7
8LV42.156.19	TU 8	Q	Invertebrate	Misc. Gastropod	Outer Whorl			10	5.8
8LV42.156.20	TU 8	Q	Invertebrate	Misc. Bivalve	UID Modified			2	1.4
8LV42.156.21	TU 8	Q	Invertebrate	UID	Fragment			8	3.5
8LV42.156.22	TU 8	Q	Lithic	Chert	Shatter			3	2.6
8LV42.156.23	TU 8	Q	Lithic	Chert	Flake			1	0.1
8LV42.156.24	TU 8	Q	Misc. Rock	Limestone				4	1.6
8LV42.156.25	TU 8	Q	Misc. Rock	Coral				3	0.5
8LV42.156.26	TU 8	Q	Concretion					4	3.2
8LV42.156.27	TU 8	Q	Vert. Fauna						424.5
8LV42.156.28	TU 8	Q	Charcoal	Wood					14.4
8LV42.156.29	TU 8	Q	Charcoal	Hickory Nut					0.6
8LV42.160.1	TU 8	R	Invertebrate	Crown Conch	Unmodified			3	156.6
8LV42.160.2	TU 8	R	Invertebrate	Crown Conch	UID Modified			12	259.7
8LV42.160.3	TU 8	R	Invertebrate	Crown Conch	UID Modified			6	136.7
8LV42.160.4	TU 8	R	Invertebrate	Crown Conch	Hammer			1	28.8
8LV42.160.5	TU 8	R	Invertebrate	Crown Conch	Tool			2	77.0
8LV42.160.6	TU 8	R	Invertebrate	Tulip Shell	Unmodified			1	12.6
8LV42.160.7	TU 8	R	Invertebrate	Pear Whelk	Unmodified			1	11.6
8LV42.160.8	TU 8	R	Invertebrate	Misc. Gastropod				32	30.6
8LV42.160.9	TU 8	R	Invertebrate	Misc. Gastropod	Columella			14	64.7
8LV42.160.10	TU 8	R	Invertebrate	Misc. Gastropod	Outer Whorl			10	15.2
8LV42.160.11	TU 8	R	Invertebrate	Barnacle					28.0
8LV42.160.12	TU 8	R	Vert. Fauna						320.0
8LV42.160.13	TU 8	R	Pottery	Limestone Temp	Body	Plain	Plain	4	14.4
8LV42.160.14	TU 8	R	Pottery	Grit Temp	Body	Impressed	Cord Mrkd	6	52.5

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.160.15	TU 8	R	Pottery	Limestone Temp	Rim	Impressed	Fabric Impr	1	3.1
8LV42.160.16	TU 8	R	Pottery	Sand Temp	Body	Plain	Burnished	2	9.4
8LV42.160.17	TU 8	R	Pottery	Sand Temp	Body	Plain	Plain	6	56.4
8LV42.160.18	TU 8	R	Pottery	Sand Temp	Crumb			5	6.5
8LV42.160.19	TU 8	R	Lithic	Chert	Shatter			1	11.4
8LV42.160.20	TU 8	R	Lithic	Chert	Core (Amorphous)			1	8.9
8LV42.161.1	TU 8	S	Invertebrate	Crown Conch	Unmodified			2	80.8
8LV42.161.2	TU 8	S	Invertebrate	Crown Conch	UID Modified				166.6
8LV42.161.3	TU 8	S	Invertebrate	Crown Conch	UID Modified			4	111.6
8LV42.161.4	TU 8	S	Invertebrate	Crown Conch	UID Modified			1	62.3
8LV42.161.5	TU 8	S	Invertebrate	Crown Conch	Hammer			4	189.7
8LV42.161.6	TU 8	S	Invertebrate	Misc. Gastropod	Columella			6	24.5
8LV42.161.7	TU 8	S	Invertebrate	Misc. Gastropod	Outer Whorl			8	14.5
8LV42.161.8	TU 8	S	Invertebrate	Misc. Gastropod				16	19.1
8LV42.161.9	TU 8	S	Invertebrate	Barnacle					31.3
8LV42.161.10	TU 8	S	Vert. Fauna						237.5
8LV42.161.11	TU 8	S	Lithic	Chert	Flake			1	1.4
8LV42.161.12	TU 8	S	Pottery	Sand Temp	Body	Stamped	Simp Stmpd	9	51.6
8LV42.161.13	TU 8	S	Pottery	Sand Temp	Body	Stamped	Chk Stmpd	4	42.3
8LV42.161.14	TU 8	S	Pottery	Sand Temp	Body	Plain	Plain	2	7.8
8LV42.161.15	TU 8	S	Pottery	Sand Temp	Body	Plain	Plain	1	15.8
8LV42.161.16	TU 8	S	Pottery	Sand Temp	Rim	Plain	Plain	1	6.1
8LV42.161.17	TU 8	S	Pottery	Limestone Temp	Body	Plain	Plain	1	7.5
8LV42.161.18	TU 8	S	Pottery	Sand Temp	Crumb			2	2.1
8LV42.161.19	TU 8	S	Pottery	Sand Temp	Body	UID	Eroded	1	4.1
8LV42.163.1	TU 8	T	Pottery	Sand Temp	Body	Stamped	Simp Stmpd	10	82.6
8LV42.163.2	TU 8	T	Pottery	Sand Temp	Crumb			1	1.7
8LV42.163.3	TU 8	T	Pottery	Sand Temp	Body	Stamped	Simp Stmpd	4	52.9
8LV42.163.4	TU 8	T	Pottery	Sand Temp	Body	Plain	Plain	14	73.6
8LV42.163.5	TU 8	T	Pottery	Sand Temp	Crumb			23	23.2
8LV42.163.6	TU 8	T	Invertebrate	Crown Conch	UID Modified		Plain	1	57.9
8LV42.163.7	TU 8	T	Invertebrate	Crown Conch	UID Modified			7	24.4
8LV42.163.8	TU 8	T	Invertebrate	Crown Conch	Outer Whorl			1	2.5
8LV42.163.9	TU 8	T	Invertebrate	Tulip Shell	UID Modified			1	0.5
8LV42.163.10	TU 8	T	Invertebrate	Mercenaria	UID Modified			2	63.3
8LV42.163.11	TU 8	T	Invertebrate	Misc. Bivalve	UID Modified			1	0.4
8LV42.163.12	TU 8	T	Invertebrate	Misc. Gastropod	Unmodified			5	3.5
8LV42.163.13	TU 8	T	Invertebrate	Misc. Gastropod	UID Modified			1	0.2
8LV42.163.14	TU 8	T	Invertebrate	Misc. Gastropod	Columella			9	14.0
8LV42.163.15	TU 8	T	Invertebrate	UID				1	0.0
8LV42.163.16	TU 8	T	Lithic	Chert	Flake			1	0.1
8LV42.163.17	TU 8	T	Misc. Rock	UID				1	0.5
8LV42.163.18	TU 8	T	Charcoal	Wood					10.6
8LV42.163.19	TU 8	T	Vert. Fauna						66.6
8LV42.186.1	TU 8	U	Invertebrate	Crown Conch	Unmodified			1	24.2
8LV42.186.2	TU 8	U	Invertebrate	Crown Conch	UID Modified			3	23.3
8LV42.186.3	TU 8	U	Invertebrate	Misc. Gastropod	UID Modified			4	0.7
8LV42.186.4	TU 8	U	Invertebrate	Misc. Gastropod	Columella			2	5.8
8LV42.186.5	TU 8	U	Invertebrate	Misc. Gastropod	Outer Whorl			1	0.3
8LV42.186.6	TU 8	U	Invertebrate	Mercenaria	UID Modified			3	12.8
8LV42.186.7	TU 8	U	Invertebrate	Barnacle					1.5
8LV42.186.8	TU 8	U	Lithic	Chert	Flake			2	0.5
8LV42.186.9	TU 8	U	Vert. Fauna						10.9
8LV42.186.10	TU 8	U	Pottery	Sand Temp	Body	Stamped	Chk Stmpd	1	12.0
8LV42.186.11	TU 8	U	Pottery	Sand Temp	Body	Stamped	Simp Stmpd	1	5.0
8LV42.186.12	TU 8	U	Pottery	Sand Temp	Crumb			2	3.8
8LV42.188.1	TU 8	W	Vert. Fauna						1.8
8LV42.188.2	TU 8	W	Invertebrate	Barnacle					0.1
8LV42.188.3	TU 8	W	Lithic	Chert	Flake			1	0.1

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.188.4	TU 8	W	Pottery	Limestone Temp	Crumb			1	0.4
8LV42.93.1	TU 9	A	Pottery	Limestone Temp	Body	Plain	Plain	16	58.3
8LV42.93.2	TU 9	A	Pottery	Limestone Temp	Rim	Plain	Plain	3	31.3
8LV42.93.3	TU 9	A	Pottery	Limestone Temp	Body	Incised	Linear	1	2.6
8LV42.93.4	TU 9	A	Pottery	Limestone Temp	Crumb			33	24.0
8LV42.93.5	TU 9	A	Pottery	Spicule Temp	Body	Plain	Plain	2	25.2
8LV42.93.6	TU 9	A	Pottery	Sand Temp	Crumb			2	1.2
8LV42.93.8	TU 9	A	Invertebrate	Crown Conch	Unmodified			16	481.1
8LV42.93.9	TU 9	A	Invertebrate	Crown Conch	UID Modified			8	319.8
8LV42.93.10	TU 9	A	Invertebrate	Crown Conch	UID Modified			5	152.2
8LV42.93.11	TU 9	A	Invertebrate	Crown Conch	UID Modified			39	679.0
8LV42.93.12	TU 9	A	Invertebrate	Crown Conch	Hammer			2	74.3
8LV42.93.13	TU 9	A	Invertebrate	Crown Conch	Tool			5	142.5
8LV42.93.14	TU 9	A	Invertebrate	Lightning Whelk	UID Modified			2	123.8
8LV42.93.15	TU 9	A	Invertebrate	Crown Conch	Outer Whorl			3	13.0
8LV42.93.16	TU 9	A	Invertebrate	Misc. Gastropod	UID Modified			19	57.4
8LV42.93.17	TU 9	A	Invertebrate	Misc. Gastropod	Columella			30	240.5
8LV42.93.18	TU 9	A	Invertebrate	Misc. Gastropod	Outer Whorl			6	6.6
8LV42.93.19	TU 9	A	Invertebrate	Mercenaria	UID Modified			4	376.2
8LV42.93.20	TU 9	A	Invertebrate	Mercenaria	UID Modified			1	27.5
8LV42.93.21	TU 9	A	Historic	Glass				4	3.1
8LV42.93.22	TU 9	A	Vert. Fauna						30.8
8LV42.97.1	TU 9	A-D	Invertebrate	Crown Conch	Hammer			1	33.7
8LV42.97.2	TU 9	A-D	Invertebrate	Crown Conch	UID Modified			9	99.3
8LV42.97.3	TU 9	A-D	Invertebrate	Misc. Gastropod	Columella			2	4.7
8LV42.97.4	TU 9	A-D	Invertebrate	Crown Conch	Outer Whorl			6	6.5
8LV42.97.5	TU 9	A-D	Invertebrate	Mercenaria	UID Modified			1	3.6
8LV42.97.6	TU 9	A-D	Vert. Fauna						4.1
8LV42.97.7	TU 9	A-D	Pottery	Limestone Temp	Crumb			2	2.4
8LV42.97.8	TU 9	A-D	Pottery	Sand Temp	Crumb			1	1.1
8LV42.303.1	TU 9	A-I	Invertebrate	Crown Conch	Unmodified			11	354.5
8LV42.303.2	TU 9	A-I	Invertebrate	Crown Conch	UID Modified			27	442.1
8LV42.303.3	TU 9	A-I	Invertebrate	Crown Conch	UID Modified			6	219.8
8LV42.303.4	TU 9	A-I	Invertebrate	Crown Conch	Hammer			4	190.7
8LV42.303.5	TU 9	A-I	Invertebrate	Tulip Shell	UID Modified			1	16.3
8LV42.303.6	TU 9	A-I	Invertebrate	Tulip Shell	Unmodified			3	12.8
8LV42.303.7	TU 9	A-I	Invertebrate	Lightning Whelk	UID Modified			1	31.2
8LV42.303.8	TU 9	A-I	Invertebrate	Lightning Whelk	UID Modified			1	35.2
8LV42.303.9	TU 9	A-I	Invertebrate	Misc. Gastropod	Columella			3	10.3
8LV42.303.10	TU 9	A-I	Invertebrate	Misc. Gastropod	Outer Whorl			5	7.7
8LV42.303.11	TU 9	A-I	Vert. Fauna						31.0
8LV42.303.12	TU 9	A-I	Misc. Rock	Limestone				1	1.5
8LV42.303.13	TU 9	A-I	Pottery	Limestone Temp	Crumb			2	3.2
8LV42.303.14	TU 9	A-I	Pottery	Spicule Temp	Crumb			2	1.3
8LV42.94.1	TU 9	B	Pottery	Limestone Temp	Body	Plain	Plain	26	97.4
8LV42.94.2	TU 9	B	Pottery	Limestone Temp	Rim	Plain	Plain	1	4.1
8LV42.94.3	TU 9	B	Pottery	Limestone Temp	Crumb			53	45.2
8LV42.94.4	TU 9	B	Pottery	Sand Temp	Crumb			4	4.2
8LV42.94.5	TU 9	B	Pottery	Spicule Temp	Body	Plain	Plain	1	2.2
8LV42.94.6	TU 9	B	Lithic	Chert	Flake			1	0.9
8LV42.94.7	TU 9	B	Invertebrate	Crown Conch	Unmodified			35	972.3
8LV42.94.8	TU 9	B	Invertebrate	Crown Conch	UID Modified			87	1015.4
8LV42.94.9	TU 9	B	Invertebrate	Crown Conch	Hammer			3	99.7
8LV42.94.10	TU 9	B	Invertebrate	Crown Conch	UID Modified			3	63.5
8LV42.94.11	TU 9	B	Invertebrate	Crown Conch	UID Modified			2	89.7
8LV42.94.12	TU 9	B	Invertebrate	Misc. Gastropod	Columella			80	368.5
8LV42.94.13	TU 9	B	Invertebrate	Crown Conch	Outer Whorl			31	59.6
8LV42.94.14	TU 9	B	Invertebrate	Crown Conch	Hammer			8	232.6

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.94.15	TU 9	B	Invertebrate	Lightning Whelk	Outer Whorl			4	78.1
8LV42.94.16	TU 9	B	Invertebrate	Misc. Gastropod	Unmodified				48.5
8LV42.94.17	TU 9	B	Vert. Fauna						45.8
8LV42.94.18	TU 9	B	Historic	Glass	Fragment			2	5.6
8LV42.95.1	TU 9	C	Pottery	Limestone Temp	Body	Plain	Plain	25	100.4
8LV42.95.2	TU 9	C	Pottery	Limestone Temp	Crumb			18	18.7
8LV42.95.3	TU 9	C	Pottery	Sand Temp	Body	Plain	Plain	2	9.4
8LV42.95.4	TU 9	C	Pottery	Sand Temp	Node	Plain	Plain	1	3.5
8LV42.95.5	TU 9	C	Pottery	Sand Temp	Crumb			4	1.9
8LV42.95.6	TU 9	C	Pottery	Spicule Temp	Body	Plain	Plain	1	3.8
8LV42.95.7	TU 9	C	Pottery	Spicule Temp	Crumb			2	1.0
8LV42.95.8	TU 9	C	Fired Clay		Crumb			1	0.6
8LV42.95.9	TU 9	C	Invertebrate	Crown Conch	Unmodified			29	613.8
8LV42.95.10	TU 9	C	Invertebrate	Crown Conch	UID Modified			76	1101.8
8LV42.95.11	TU 9	C	Invertebrate	Crown Conch	Hammer			3	111.9
8LV42.95.12	TU 9	C	Invertebrate	Crown Conch	UID Modified			1	12.3
8LV42.95.13	TU 9	C	Invertebrate	Misc. Gastropod	Columella			56	209.4
8LV42.95.14	TU 9	C	Invertebrate	Misc. Gastropod	Outer Whorl			23	66.5
8LV42.95.15	TU 9	C	Invertebrate	Lightning Whelk	Unmodified			1	64.0
8LV42.95.16	TU 9	C	Invertebrate	Tulip Shell	Unmodified			1	21.9
8LV42.95.17	TU 9	C	Invertebrate	Pear Whelk	Unmodified			1	10.7
8LV42.95.18	TU 9	C	Invertebrate	Misc. Gastropod				4	2.7
8LV42.95.19	TU 9	C	Invertebrate	Mercenaria	UID Modified			1	18.6
8LV42.95.20	TU 9	C	Lithic	Chert	Flake			1	4.6
8LV42.95.21	TU 9	C	Misc. Rock	Sedimentary				1	3.0
8LV42.95.22	TU 9	C	Historic	Glass				2	1.6
8LV42.95.23	TU 9	C	Vert. Fauna						69.4
8LV42.96.1	TU 9	D	Invertebrate	Crown Conch	Unmodified			70	1835.5
8LV42.96.2	TU 9	D	Invertebrate	Crown Conch	UID Modified			145	2177.1
8LV42.96.3	TU 9	D	Invertebrate	Crown Conch	Hammer			8	236.2
8LV42.96.4	TU 9	D	Invertebrate	Crown Conch	Hammer			2	50.1
8LV42.96.5	TU 9	D	Invertebrate	Misc. Gastropod	Unmodified			16	84.0
8LV42.96.6	TU 9	D	Invertebrate	Lightning Whelk	Unmodified			2	77.9
8LV42.96.7	TU 9	D	Invertebrate	Tulip Shell	Unmodified			2	24.4
8LV42.96.8	TU 9	D	Invertebrate	Pear Whelk	Unmodified			2	45.3
8LV42.96.9	TU 9	D	Invertebrate	Misc. Gastropod	Outer Whorl			52	144.0
8LV42.96.10	TU 9	D	Invertebrate	Misc. Gastropod	Columella			64	199.1
8LV42.96.11	TU 9	D	Invertebrate	Misc. Bivalve	UID			52	663.9
8LV42.96.12	TU 9	D	Misc. Rock	Sedimentary				1	2.4
8LV42.96.13	TU 9	D	Historic	Metal (Iron)	UID			3	11.8
8LV42.96.14	TU 9	D	Lithic	Chert	Flake			1	43.4
8LV42.96.15	TU 9	D	Vert. Fauna						241.0
8LV42.96.16	TU 9	D	Pottery	Limestone Temp	Body	Plain	Plain	44	197.8
8LV42.96.17	TU 9	D	Pottery	Spicule Temp	Body	Plain	Plain	11	40.1
8LV42.96.18	TU 9	D	Pottery	Spicule Temp	Rim	Plain	Plain	2	11.4
8LV42.96.19	TU 9	D	Pottery	Limestone Temp	Rim	Plain	Plain	1	19.1
8LV42.96.20	TU 9	D	Pottery	Spicule Temp	Rim	Stamped	Chk Stmpd	3	30.2
8LV42.96.21	TU 9	D	Pottery	Spicule Temp	Body	Stamped	Chk Stmpd	7	20.2
8LV42.96.22	TU 9	D	Pottery	Sand Temp	Body	Stamped	Chk Stmpd	1	2.4
8LV42.96.23	TU 9	D	Pottery	Sand Temp	Body	Plain	Plain	1	2.7
8LV42.96.24	TU 9	D	Pottery	Spicule Temp	Crumb			12	10.7
8LV42.96.25	TU 9	D	Pottery	Sand Temp	Crumb			5	4.3
8LV42.96.26	TU 9	D	Pottery	Limestone Temp	Crumb			46	49.1
8LV42.96.27	TU 9	D	Fired Clay					1	1.6
8LV42.98.1	TU 9	E	Invertebrate	Crown Conch	Unmodified			58	1442.3
8LV42.98.2	TU 9	E	Invertebrate	Lightning Whelk	Unmodified			1	25.3
8LV42.98.3	TU 9	E	Invertebrate	Crown Conch	UID			178	2931.1
8LV42.98.4	TU 9	E	Invertebrate	Lightning Whelk	UID			1	47.9
8LV42.98.5	TU 9	E	Invertebrate	Crown Conch	UID			1	20.3

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.98.6	TU 9	E	Invertebrate	Crown Conch	UID			2	52.9
8LV42.98.7	TU 9	E	Invertebrate	Crown Conch	Hammer			1	58.3
8LV42.98.8	TU 9	E	Invertebrate	Crown Conch	Hammer			5	180.7
8LV42.98.9	TU 9	E	Invertebrate	Crown Conch	Hammer			5	130.6
8LV42.98.10	TU 9	E	Invertebrate	Crown Conch	Hammer			6	298.6
8LV42.98.11	TU 9	E	Vert. Fauna						562.9
8LV42.98.12	TU 9	E	Human Remains					1	0.7
8LV42.98.13	TU 9	E	Invertebrate	Misc. Gastropod	Columella			97	284.0
8LV42.98.14	TU 9	E	Invertebrate	Misc. Gastropod	Columella			2	7.6
8LV42.98.15	TU 9	E	Invertebrate	Misc. Gastropod	Columella			16	22.0
8LV42.98.16	TU 9	E	Invertebrate	Misc. Gastropod	Outer Whorl			93	185.4
8LV42.98.17	TU 9	E	Invertebrate	Mercenaria	UID			37	1143.0
8LV42.98.18	TU 9	E	Invertebrate	Misc. Gastropod	UID			36	53.0
8LV42.98.19	TU 9	E	Invertebrate	Misc. Bivalve	UID			8	19.0
8LV42.98.20	TU 9	E	Invertebrate	Tulip Shell				2	21.3
8LV42.98.21	TU 9	E	Misc. Rock	Igneous rock				2	2.1
8LV42.98.22	TU 9	E	Misc. Rock	Limestone				4	103.5
8LV42.98.23	TU 9	E	Lithic	Chert	Flake			1	1.0
8LV42.98.24	TU 9	E	Pottery	Limestone Temp	Crumb			60	61.3
8LV42.98.25	TU 9	E	Pottery	Sand Temp	Crumb			18	13.8
8LV42.98.26	TU 9	E	Pottery	Spicule Temp	Crumb			11	12.5
8LV42.98.27	TU 9	E	Pottery	Limestone Temp	Rim	Plain	Plain	7	74.7
8LV42.98.28	TU 9	E	Pottery	Limestone Temp	Body	Plain	Plain	36	1706.0
8LV42.98.29	TU 9	E	Pottery	Sand Temp	Body	Plain	Plain	7	54.8
8LV42.98.30	TU 9	E	Pottery	Sand Temp	Body	Plain	Scraped	1	12.3
8LV42.98.31	TU 9	E	Pottery	Sand Temp	Rim	Stamped	Dentate	1	4.7
8LV42.98.32	TU 9	E	Pottery	Spicule Temp	Body	Plain	Plain	12	47.0
8LV42.98.33	TU 9	E	Pottery	Spicule Temp	Rim	Plain	Plain	1	3.0
8LV42.98.34	TU 9	E	Pottery	Spicule Temp	Body	Stamped	Chk Stmpd	4	32.5
8LV42.98.35	TU 9	E	Pottery	Spicule Temp	Body	UID	Eroded	3	8.2
8LV42.98.36	TU 9	E	Invertebrate	Crown Conch	Fragment			50	89.3
8LV42.99.1	TU 9	F	Invertebrate	Crown Conch	Unmodified			32	816.3
8LV42.99.2	TU 9	F	Invertebrate	Crown Conch	UID Modified			180	2554.0
8LV42.99.3	TU 9	F	Invertebrate	Crown Conch	UID Modified			7	186.8
8LV42.99.4	TU 9	F	Invertebrate	Crown Conch	UID Modified			2	33.6
8LV42.99.5	TU 9	F	Invertebrate	Crown Conch	Tool			2	1134.0
8LV42.99.6	TU 9	F	Invertebrate	Crown Conch	Hammer			7	272.0
8LV42.99.7	TU 9	F	Invertebrate	Lightning Whelk	UID Modified			2	244.4
8LV42.99.8	TU 9	F	Invertebrate	Pear Whelk	UID Modified			3	8.9
8LV42.99.9	TU 9	F	Invertebrate	Tulip Shell	UID Modified			10	115.4
8LV42.99.10	TU 9	F	Invertebrate	Misc. Gastropod	Columella			70	206.5
8LV42.99.11	TU 9	F	Invertebrate	Misc. Gastropod	Outer Whorl			66	126.4
8LV42.99.12	TU 9	F	Invertebrate	Misc. Gastropod				34	53.0
8LV42.99.13	TU 9	F	Invertebrate	Mercenaria	UID Modified			6	31.5
8LV42.99.14	TU 9	F	Vert. Fauna						215.5
8LV42.99.15	TU 9	F	Lithic	Igneous rock	UID			1	7.3
8LV42.99.16	TU 9	F	Lithic	Sedimentary	UID			1	6.0
8LV42.99.17	TU 9	F	Pottery	Spicule Temp	Body	Stamped	Chk Stmpd	9	40.1
8LV42.99.18	TU 9	F	Pottery	Spicule Temp	Rim	Stamped	Chk Stmpd	1	2.2
8LV42.99.19	TU 9	F	Pottery	Limestone Temp	Body	Plain	Plain	14	68.4
8LV42.99.20	TU 9	F	Pottery	Limestone Temp	Rim	Plain	Plain	2	9.8
8LV42.99.21	TU 9	F	Pottery	Sand Temp	Body	UID	Eroded	2	8.3
8LV42.99.22	TU 9	F	Pottery	Limestone Temp	Crumb			16	14.0
8LV42.99.23	TU 9	F	Pottery	Spicule Temp	Crumb			6	4.4
8LV42.99.24	TU 9	F	Pottery	Sand Temp	Crumb			2	1.2
8LV42.300.1	TU 9	G	Pottery	Limestone Temp	Body	Plain	Plain	9	66.8
8LV42.300.2	TU 9	G	Pottery	Limestone Temp	Crumb			4	2.0
8LV42.300.3	TU 9	G	Pottery	Sand Temp	Body	Plain	Plain	12	39.6
8LV42.300.4	TU 9	G	Pottery	Sand Temp	Crumb			7	8.6

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.300.5	TU 9	G	Pottery	Spicule Temp	Body	Plain	Plain	3	4.7
8LV42.300.6	TU 9	G	Pottery	Spicule Temp	Body	Stamped	Chk Stmpd	2	10.9
8LV42.300.7	TU 9	G	Invertebrate	Crown Conch	Unmodified			47	1254.3
8LV42.300.8	TU 9	G	Invertebrate	Crown Conch	Hammer			2	93.7
8LV42.300.9	TU 9	G	Invertebrate	Crown Conch	Hammer			4	263.9
8LV42.300.10	TU 9	G	Invertebrate	Crown Conch	UID Modified			5	200.2
8LV42.300.11	TU 9	G	Invertebrate	Crown Conch	UID Modified			1	32.7
8LV42.300.12	TU 9	G	Invertebrate	Crown Conch	UID Modified			165	3365.9
8LV42.300.13	TU 9	G	Invertebrate	Lightning Whelk	Unmodified			1	50.1
8LV42.300.14	TU 9	G	Invertebrate	Pear Whelk	UID Modified			4	45.9
8LV42.300.15	TU 9	G	Invertebrate	Tulip Shell	Unmodified			7	97.1
8LV42.300.16	TU 9	G	Invertebrate	Tulip Shell	UID Modified			8	102.7
8LV42.300.17	TU 9	G	Invertebrate	Misc. Gastropod	Unmodified			1	1.2
8LV42.300.18	TU 9	G	Invertebrate	Misc. Gastropod	UID Modified			4	3.6
8LV42.300.19	TU 9	G	Invertebrate	Misc. Gastropod	Outer Whorl			38	100.0
8LV42.300.20	TU 9	G	Invertebrate	Misc. Gastropod	Columella			27	123.0
8LV42.300.21	TU 9	G	Invertebrate	Misc. Bivalve	UID Modified			1	2.0
8LV42.300.22	TU 9	G	Pottery	Limestone Temp	Rim	Plain	Plain	1	6.0
8LV42.300.23	TU 9	G	Charcoal	Wood					12.4
8LV42.300.24	TU 9	G	Vert. Fauna						110.0
8LV42.301.1	TU 9	H	Vert. Fauna						115.2
8LV42.301.2	TU 9	H	Invertebrate	Crown Conch	Unmodified			58	2190.3
8LV42.301.3	TU 9	H	Invertebrate	Crown Conch	UID Modified			125	3494.9
8LV42.301.4	TU 9	H	Invertebrate	Crown Conch	Tool			1	38.5
8LV42.301.5	TU 9	H	Invertebrate	Crown Conch	Hammer			6	261.8
8LV42.301.6	TU 9	H	Invertebrate	Crown Conch	UID Modified			1	39.1
8LV42.301.7	TU 9	H	Invertebrate	Crown Conch	UID Modified			1	54.0
8LV42.301.8	TU 9	H	Invertebrate	Crown Conch	Tool			2	92.4
8LV42.301.9	TU 9	H	Invertebrate	Misc. Gastropod	Outer Whorl				64.4
8LV42.301.10	TU 9	H	Invertebrate	Misc. Gastropod	Columella			9	38.9
8LV42.301.11	TU 9	H	Invertebrate	Lightning Whelk	UID Modified			1	8.9
8LV42.301.12	TU 9	H	Invertebrate	Pear Whelk				3	35.7
8LV42.301.13	TU 9	H	Invertebrate	Tulip Shell				5	120.4
8LV42.301.14	TU 9	H	<1/8" Assort. Mat.						211.2
8LV42.301.15	TU 9	H	Pottery	Limestone Temp	Rim	Plain	Plain	2	12.2
8LV42.301.16	TU 9	H	Pottery	Spicule Temp	Body	Stamped	Chk Stmpd	1	5.6
8LV42.301.17	TU 9	H	Pottery	Sand Temp	Body	Impressed	Cord Mrkd	1	14.6
8LV42.301.18	TU 9	H	Pottery	Sand Temp	Crumb			1	1.3
8LV42.301.19	TU 9	H	Invertebrate	Misc. Gastropod				1	1.0
8LV42.301.20	TU 9	H	UID						90.8
8LV42.301.21	TU 9	H	Misc. Rock	Limestone				1	0.6
8LV42.301.22	TU 9	H	Charcoal	Hickory Nut					0.3
8LV42.301.23	TU 9	H	Invertebrate	Misc. Gastropod					1.3
8LV42.302.1	TU 9	I	Pottery	Sand Temp	Rim	Plain	Scraped Int	1	18.3
8LV42.302.2	TU 9	I	Pottery	Sand Temp	Body	Plain	Scraped Int	1	31.2
8LV42.302.3	TU 9	I	Pottery	Sand Temp	Body	Plain	Scraped Int	1	5.7
8LV42.302.4	TU 9	I	Pottery	Sand Temp	Body	Plain	Plain	5	22.8
8LV42.302.5	TU 9	I	Pottery	Sand Temp	Crumb			1	1.1
8LV42.302.6	TU 9	I	Pottery	Sand Temp	Body	Stamped	Chk Stmpd	1	73.8
8LV42.302.7	TU 9	I	Pottery	Sand Temp	Body	Stamped	Chk Stmpd	2	16.0
8LV42.302.8	TU 9	I	Pottery	Sand Temp	Body	Stamped	Dentate	1	12.2
8LV42.302.9	TU 9	I	Pottery	Sand Temp	Body	Stamped	Comp Stmp	2	30.9
8LV42.302.10	TU 9	I	Invertebrate	Crown Conch	Unmodified			12	534.5
8LV42.302.11	TU 9	I	Invertebrate	Crown Conch	UID Modified			88	2830.1
8LV42.302.12	TU 9	I	Invertebrate	Crown Conch	UID Modified			1	77.2
8LV42.302.13	TU 9	I	Invertebrate	Crown Conch	UID Modified			1	6.4
8LV42.302.14	TU 9	I	Invertebrate	Crown Conch	Hammer			4	160.9
8LV42.302.15	TU 9	I	Invertebrate	Crown Conch	UID Modified			1	58.6
8LV42.302.16	TU 9	I	Invertebrate	Crown Conch	UID Modified			4	97.7

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.302.17	TU 9	I	Invertebrate	Crown Conch	Outer Whorl			3	39.5
8LV42.302.18	TU 9	I	Invertebrate	Misc. Gastropod	UID Modified			1	32.9
8LV42.302.19	TU 9	I	Invertebrate	Lightning Whelk	UID Modified			2	172.0
8LV42.302.20	TU 9	I	Invertebrate	Tulip Shell	Unmodified			3	29.1
8LV42.302.21	TU 9	I	Invertebrate	Tulip Shell	UID Modified			3	14.8
8LV42.302.22	TU 9	I	Invertebrate	Pear Whelk	UID Modified			1	10.2
8LV42.302.23	TU 9	I	Invertebrate	Mercenaria	UID Modified			1	5.0
8LV42.302.24	TU 9	I	Invertebrate	Misc. Bivalve	UID Modified			2	4.8
8LV42.302.25	TU 9	I	Invertebrate	Misc. Gastropod	UID Modified			7	4.7
8LV42.302.26	TU 9	I	Invertebrate	Misc. Gastropod	Outer Whorl			7	29.8
8LV42.302.27	TU 9	I	Invertebrate	Misc. Gastropod	Columella			6	9.5
8LV42.302.28	TU 9	I	Misc. Rock	Coral				1	22.0
8LV42.302.29	TU 9	I	Vert. Fauna						57.2
8LV42.302.30	TU 9	I	Charcoal	Hickory Nut					22.4
8LV42.302.31	TU 9	I	Charcoal	Wood					1.6
8LV42.302.32	TU 9	I	Botanical	Seeds					2.8
8LV42.304.1	TU 9	I add.	<1/8" Assort. Mat.						5.8
8LV42.304.2	TU 9	I add.	Misc. Rock	Limestone	Pebble			1	22.7
8LV42.304.3	TU 9	I add.	Invertebrate	Misc. Gastropod	Columella			10	38.2
8LV42.304.4	TU 9	I add.	Invertebrate	Misc. Gastropod	Unmodified			4	107.5
8LV42.304.5	TU 9	I add.	Invertebrate	Misc. Gastropod	UID Modified			8	144.4
8LV42.304.6	TU 9	I add.	Vert. Fauna						4.5
8LV42.304.7	TU 9	I add.	Invertebrate	UID					0.5
8LV42.304.8	TU 9	I add.	Pottery	Sand Temp	Body	Plain	Plain	1	6.5
8LV42.304.9	TU 9	I add.	Pottery	Sand Temp	Body	Impressed	Cord Mrkd	1	6.7
8LV42.305.1	TU 9	J	Invertebrate	Crown Conch	Unmodified			1	9.0
8LV42.305.2	TU 9	J	Invertebrate	Misc. Gastropod	Modified Shell			2	26.3
8LV42.305.3	TU 9	J	Invertebrate	Misc. Gastropod	Columella			4	4.8
8LV42.305.4	TU 9	J	Invertebrate	Misc. Gastropod	Outer Whorl			1	1.4
8LV42.305.5	TU 9	J	Vert. Fauna						16.7
8LV42.305.6	TU 9	J	Lithic	Chert	Flake			1	0.4
8LV42.305.7	TU 9	J	Lithic	Chert	Shatter			1	10.4
8LV42.305.8	TU 9	J	Pottery	Sand Temp	Body	Plain	Plain	1	9.3
8LV42.305.9	TU 9	J	Pottery	Sand Temp	Body	Stamped	Chk Stmpd	2	13.0
8LV42.305.10	TU 9	J	<1/8" Assort. Mat.						1.6

Shell Mound 8LV42 – Piece Plots

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.111.1	Feat. 15/PP1		Pottery	Limestone Temp	Rim	Plain	Plain	1	47.9
8LV42.116.1	TU7/PP1	C	Lithic	Chert	Biface			1	7.5
8LV42.117.1	TU7/PP2	C	Lithic	Chert	Core			1	47.0
8LV42.118.1	TU7/PP3	C	Invertebrate	Lightning Whelk	Dipper Vessel			1	81.2
8LV42.119.1	TU7/PP4	C	Invertebrate	Lightning Whelk	Dipper Vessel			1	75.4
8LV42.125.1	TU8/PP1	C	Pottery	Limestone Temp	Rim	Plain	Plain/Mend Hole	1	25.7
8LV42.199.1	TU8/PP1	M	Misc. Rock	Sedimentary	UID			7	262.6

Shell Mound 8LV42– 1/8-inch water screened fraction

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.112.1	Feat. 13		<1/8" Assort.						136.5
8LV42.112.2	Feat. 13		Invertebrate	UID	Fragment				58.1

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.112.3	Feat. 13		Invertebrate	Oyster					894.8
8LV42.112.4	Feat. 13		Invertebrate	Crown Conch	Unmodified			1	35.9
8LV42.112.5	Feat. 13		Invertebrate	Crown Conch	UID Modified			5	59.9
8LV42.112.6	Feat. 13		Invertebrate	Misc. Gastropod	Outer Whorl			8	8.7
8LV42.112.7	Feat. 13		Invertebrate	Misc. Gastropod	Columella			9	11.9
8LV42.112.8	Feat. 13		Invertebrate	Mercenaria	Modified Shell			1	10.5
8LV42.112.9	Feat. 13		Invertebrate	Mercenaria	UID Modified			2	3.1
8LV42.112.10	Feat. 13		Charcoal	Wood					6.7
8LV42.112.11	Feat. 13		Vert. Fauna						111.5
8LV42.112.12	Feat. 13		Lithic	Chert	Flake			3	4.8
8LV42.112.13	Feat. 13		Pottery	Limestone Temp	Body	Plain	Plain	4	2.3
8LV42.112.14	Feat. 13		Pottery	Sand Temp	Rim	Plain	Plain	1	14.0
8LV42.112.15	Feat. 13		1/8" Vert.						72.3
8LV42.112.16	Feat. 13		1/8" Invert.						111.7
8LV42.112.17	Feat. 13		1/8" Charcoal						9.8
8LV42.219.1	Feat. 13	Center	<1/8" Assort.						37.5
8LV42.219.2	Feat. 13	Center	1/8" Invert.						23.3
8LV42.219.3	Feat. 13	Center	1/8" Vert.						22.8
8LV42.219.4	Feat. 13	Center	1/8" Charcoal						3.9
8LV42.219.5	Feat. 13	Center	1/8" Concretion					4	0.4
8LV42.219.6	Feat. 13	Center	1/8" Pottery					4	0.1
8LV42.219.7	Feat. 13	Center	1/8" Lithic	Chert				10	0.3
8LV42.219.8	Feat. 13	Center	1/8" Lithic	Quartz				1	0.0
8LV42.219.9	Feat. 13	Center	Invertebrate	Oyster					157.1
8LV42.219.10	Feat. 13	Center	Invertebrate	Misc. Bivalve					4.0
8LV42.219.11	Feat. 13	Center	Invertebrate	Crown Conch	UID Modified			1	21.4
8LV42.219.12	Feat. 13	Center	Invertebrate	Mercenaria	Tool			2	25.5
8LV42.219.13	Feat. 13	Center	Invertebrate	Misc. Gastropod				2	4.9
8LV42.219.14	Feat. 13	Center	Vert. Fauna						18.6
8LV42.219.15	Feat. 13	Center	Charcoal						1.4
8LV42.219.16	Feat. 13	Center	Pottery	Limestone Temp	Body	Plain	Brushed	1	7.5
8LV42.219.17	Feat. 13	Center	Pottery	Limestone Temp	Body	Plain	Plain	3	8.9
8LV42.219.18	Feat. 13	Center	Pottery	Limestone Temp	Rim	Plain	Plain	2	23.9
8LV42.219.19	Feat. 13	Center	Pottery	Limestone Temp	Crumb			2	0.3
8LV42.219.20	Feat. 13	Center	Lithic	Chert	Flake			7	15.0
8LV42.110.1	Feat. 14		<1/8" Assort.						41.8
8LV42.110.2	Feat. 14		1/8" Vert.						63.9
8LV42.110.3	Feat. 14		1/8" Invert.						41.8
8LV42.110.4	Feat. 14		1/8" Concretion						1.5
8LV42.110.5	Feat. 14		1/8" Charcoal						1.5
8LV42.110.6	Feat. 14		1/8" Pottery						1.9
8LV42.110.7	Feat. 14		1/8" Lithic						0.9
8LV42.110.8	Feat. 14		Invertebrate	Oyster					761.1
8LV42.110.9	Feat. 14		Invertebrate	Misc. Bivalve					12.6
8LV42.110.10	Feat. 14		Invertebrate	Crown Conch	UID Modified			4	19.7
8LV42.110.11	Feat. 14		Invertebrate	Crown Conch	Outer Whorl			7	8.6
8LV42.110.12	Feat. 14		Invertebrate	Crown Conch	Columella			4	10.2
8LV42.110.13	Feat. 14		Invertebrate	Misc. Gastropod					4.3
8LV42.110.14	Feat. 14		Vert. Fauna						78.8
8LV42.110.15	Feat. 14		Invertebrate	Lightning Whelk	UID Modified			1	40.4
8LV42.110.16	Feat. 14		Lithic	Chert	Flake			22	16.4
8LV42.110.17	Feat. 14		Lithic	Chert	Shatter			1	0.2
8LV42.110.18	Feat. 14		Lithic	Chert	Biface Fragment			1	0.5
8LV42.110.19	Feat. 14		Pottery	Limestone Temp	Body	Plain	Plain	10	65.3
8LV42.110.20	Feat. 14		Pottery	Limestone Temp	Rim	Plain	Plain	1	4.5
8LV42.110.21	Feat. 14		Pottery	Limestone Temp	Crumb	Plain	Eroded	12	6.8
8LV42.110.22	Feat. 14		Pottery	Sand Temp	Crumb	Plain	Eroded	3	0.6
8LV42.110.23	Feat. 14		Pottery	Sand Temp	Body	Plain	Plain	1	2.1
8LV42.109.1	Feat. 15		<1/8" Assort.						

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.109.2	Feat. 15		Vert. Fauna						393.8
8LV42.109.3	Feat. 15		Pottery	Limestone Temp	Rim	Plain	Plain	1	23.3
8LV42.109.4	Feat. 15		Pottery	Limestone Temp	Body	Plain	Plain	22	208.4
8LV42.109.5	Feat. 15		Pottery	Limestone Temp	Crumb				11.2
8LV42.109.6	Feat. 15		Invertebrate	Crown Conch	Unmodified			6	161.6
8LV42.109.7	Feat. 15		Invertebrate	Crown Conch	UID Modified			23	294.2
8LV42.109.8	Feat. 15		Invertebrate	Crown Conch	UID Modified			4	83.8
8LV42.109.9	Feat. 15		Invertebrate	Crown Conch	Hammer			1	73.4
8LV42.109.10	Feat. 15		Invertebrate	Crown Conch	Outer Whorl			4	5.0
8LV42.109.11	Feat. 15		Invertebrate	Lightning Whelk	UID Modified			1	20.5
8LV42.109.12	Feat. 15		Invertebrate	Lightning Whelk	Outer Whorl			1	20.1
8LV42.109.13	Feat. 15		Invertebrate	Mercenaria	UID Modified			4	12.1
8LV42.109.14	Feat. 15		Invertebrate	Misc. Bivalve	UID Modified			18	24.2
8LV42.109.15	Feat. 15		Invertebrate	Misc. Gastropod	Columella			12	18.5
8LV42.109.16	Feat. 15		Invertebrate	Misc. Gastropod	Fragment			164	59.4
8LV42.109.17	Feat. 15		Invertebrate	Misc. Gastropod	Unmodified			5	3.2
8LV42.109.18	Feat. 15		Invertebrate	Misc. Gastropod	UID Modified			7	2.7
8LV42.109.19	Feat. 15		Invertebrate	Barnacle				26	5.7
8LV42.109.20	Feat. 15		Misc. Rock	Limestone				8	10.1
8LV42.109.21	Feat. 15		Charcoal	Wood				34	3.8
8LV42.109.22	Feat. 15		Lithic	Chert	Flake			1	0.3
8LV42.109.23	Feat. 15		Lithic	Chert	Shatter			1	0.8
8LV42.109.24	Feat. 15		1/8" Vert.						257.3
8LV42.109.25	Feat. 15		1/8" Invert.						351.4
8LV42.109.26	Feat. 15		1/8" Charcoal	Wood					5.0
8LV42.109.27	Feat. 15		1/8" Pottery	Limestone Temp	Crumb				0.9
8LV42.109.28	Feat. 15		1/8" Lithic						0.2
8LV42.109.29	Feat. 15		Invertebrate	Oyster					
8LV42.211.1	Feat. 16		<1/8" Assort.						7.8
8LV42.211.2	Feat. 16		1/8" Charcoal	Wood					1.4
8LV42.211.3	Feat. 16		1/8" Vert.	Bone	Unmodified				7.0
8LV42.211.4	Feat. 16		1/8" Invert.						1.7
8LV42.211.5	Feat. 16		1/8" Lithic	Chert				1	0.0
8LV42.211.6	Feat. 16		1/8" Misc. Rock	Quartz				1	0.0
8LV42.211.7	Feat. 16		Charcoal	Wood				4	0.5
8LV42.211.8	Feat. 16		Vert. Fauna					31	6.1
8LV42.211.9	Feat. 16		Pottery	Limestone Temp	Crumb			3	0.8
8LV42.211.10	Feat. 16		Invertebrate	Oyster				9	14.5
8LV42.211.11	Feat. 16		Lithic	Chert	Flake			4	5.0
8LV42.209.1	Feat. 18		<1/8" Assort.						12.9
8LV42.209.2	Feat. 18		1/8" Invert.						15.8
8LV42.209.3	Feat. 18		1/8" Vert.						20.6
8LV42.209.4	Feat. 18		1/8" Concretion						0.8
8LV42.209.5	Feat. 18		1/8" Charcoal	Wood					2.1
8LV42.209.6	Feat. 18		Invertebrate	Oyster					118.4
8LV42.209.7	Feat. 18		Invertebrate	Misc. Bivalve					4.1
8LV42.209.8	Feat. 18		Invertebrate	Misc. Gastropod					2.7
8LV42.209.9	Feat. 18		Invertebrate	Crown Conch	Columella			1	3.8
8LV42.209.10	Feat. 18		Vert. Fauna						9.3
8LV42.209.11	Feat. 18		Charcoal	Wood					1.0
8LV42.209.12	Feat. 18		Lithic	Chert	Flake			2	0.5
8LV42.209.13	Feat. 18		Pottery	Limestone Temp	Crumb	UID	Eroded	1	0.3
8LV42.218.1	Feat. 20		<1/8" Assort.						9.8
8LV42.218.2	Feat. 20		1/8" Vert.						10.7
8LV42.218.3	Feat. 20		1/8" Invert.						3.3
8LV42.218.4	Feat. 20		1/8" Charcoal	Wood					1.6
8LV42.218.5	Feat. 20		1/8" Lithic						0.8
8LV42.218.6	Feat. 20		Vert. Fauna						6.0
8LV42.218.7	Feat. 20		Invertebrate	Oyster					39.2

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.218.8	Feat. 20		Invertebrate	Crown Conch	UID Modified			2	76.6
8LV42.218.9	Feat. 20		Invertebrate	Crown Conch	Columella			1	2.2
8LV42.218.10	Feat. 20		Pottery	Limestone Temp	Body	Plain	Plain	2	17.2
8LV42.218.11	Feat. 20		Pottery	Sand Temp	Body	Stamped	Simp Stmp	1	2.3
8LV42.218.12	Feat. 20		Pottery	Limestone Temp	Body	Plain	Eroded	2	1.5
8LV42.218.13	Feat. 20		Charcoal	Wood					1.2
8LV42.218.14	Feat. 20		Lithic	Chert	Flake			9	4.4
8LV42.159.1	Feat. 22		<1/8" Assort.						
8LV42.159.2	Feat. 22		Invertebrate	Mercenaria	UID Modified				283.1
8LV42.159.3	Feat. 22		Invertebrate	Misc. Bivalve	UID Modified				242.8
8LV42.159.4	Feat. 22		Invertebrate	Tulip Shell	UID Modified			1	16.6
8LV42.159.5	Feat. 22		Invertebrate	Pear Whelk	UID Modified			2	33.5
8LV42.159.6	Feat. 22		Invertebrate	Crown Conch	Unmodified			9	254.0
8LV42.159.7	Feat. 22		Invertebrate	Crown Conch	UID Modified			8	183.8
8LV42.159.8	Feat. 22		Invertebrate	Crown Conch	UID Modified			2	95.3
8LV42.159.9	Feat. 22		Invertebrate	Crown Conch	Hammer			1	63.8
8LV42.159.10	Feat. 22		Invertebrate	Misc. Gastropod	Outer Whorl				163.7
8LV42.159.11	Feat. 22		Invertebrate	Misc. Gastropod	Unmodified			20	15.8
8LV42.159.12	Feat. 22		Vert. Fauna						253.2
8LV42.159.13	Feat. 22		Invertebrate	Oyster	Whole, Left				
8LV42.159.14	Feat. 22		Invertebrate	Oyster	Whole, Right				
8LV42.159.15	Feat. 22		Invertebrate	Oyster	Fragment				
8LV42.159.16	Feat. 22		Invertebrate	Barnacle					141.5
8LV42.159.17	Feat. 22		Invertebrate	Misc.					41.9
8LV42.159.18	Feat. 22		Charcoal	Wood					6.8
8LV42.159.19	Feat. 22		Invertebrate	Misc. Gastropod	Columella				28.4
8LV42.159.20	Feat. 22		Lithic	Chert	Flake			2	8.3
8LV42.159.21	Feat. 22		Lithic	Chert	Shatter			2	0.7
8LV42.159.22	Feat. 22		Misc. Rock	Limestone				1	5.3
8LV42.159.23	Feat. 22		Misc. Rock	Coral				1	1.1
8LV42.159.24	Feat. 22		Pottery	Sand Temp	Body	Plain	Plain	2	3.0
8LV42.159.25	Feat. 22		Pottery	Limestone Temp	Rim	Impressed	Cord Mrkd	1	9.4
8LV42.159.26	Feat. 22		Pottery	Limestone Temp	Body	Plain	Plain	1	3.3
8LV42.159.27	Feat. 22		Pottery	Limestone Temp	Crumb			6	5.8
8LV42.159.31	Feat. 22		1/8" Invert.	Misc. Gastropod					3.2
8LV42.159.32	Feat. 22		1/8" Invert.		Fragment				2492.2
8LV42.159.33	Feat. 22		1/8" Lithic					1	0.1
8LV42.215.1	Feat. 24		Invertebrate	Oyster					578.7
8LV42.215.2	Feat. 24		Vert. Fauna						146.3
8LV42.215.3	Feat. 24		Charcoal						2.7
8LV42.215.4	Feat. 24		Lithic	Chert	Flake			11	32.4
8LV42.215.5	Feat. 24		Misc. Rock	Limestone	Unmodified			5	2.7
8LV42.215.6	Feat. 24		Invertebrate	Crown Conch	UID Modified			6	62.4
8LV42.215.7	Feat. 24		Invertebrate	Crown Conch	Unmodified			2	39.3
8LV42.215.8	Feat. 24		Invertebrate	Misc. Gastropod	Outer Whorl			4	2.8
8LV42.215.9	Feat. 24		Invertebrate	Misc. Gastropod	UID Modified				10.9
8LV42.215.10	Feat. 24		Invertebrate	Misc. Bivalve	UID Modified				8.2
8LV42.215.11	Feat. 24		Invertebrate	Mercenaria	Unmodified			1	10.8
8LV42.215.12	Feat. 24		Invertebrate	Misc. Bivalve	UID Modified				79.3
8LV42.215.13	Feat. 24		Pottery	Limestone Temp	Body	Plain	Plain	4	32.0
8LV42.215.14	Feat. 24		Pottery	Limestone Temp	Body	Plain	Plain	2	10.3
8LV42.215.15	Feat. 24		Pottery	Limestone Temp	Crumb			2	1.4
8LV42.215.16	Feat. 24		<1/8" Assort.						115.9
8LV42.215.17	Feat. 24		Lithic	Chert	Flake			7	0.4
8LV42.215.18	Feat. 24		Charcoal	Hickory Nut				2	0.2
8LV42.215.19	Feat. 24		Invertebrate	Misc. Bivalve					89.4
8LV42.217.1	Feat. 25		Charcoal	Wood					4.0
8LV42.217.2	Feat. 25		Charcoal	Hickory Nut					0.0
8LV42.217.3	Feat. 25		Invertebrate	Misc. Bivalve					3.2

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.217.4	Feat. 25		Vert. Fauna						4.9
8LV42.217.5	Feat. 25		Lithic	Chert	Flake			11	0.7
8LV42.217.6	Feat. 25		Pottery	Sand Temp	Crumb	UID	Eroded	1	0.1
8LV42.217.7	Feat. 25		Misc. Rock	Quartz				1	1.0
8LV42.165.1	Feat. 26		1/8" Vert.						1.2
8LV42.165.2	Feat. 26		1/8" Charcoal						0.4
8LV42.165.3	Feat. 26		1/8" Invert.						11.4
8LV42.165.4	Feat. 26		Pottery	Sand Temp	Body	Stamped	Simp Stmp	2	16.3
8LV42.165.5	Feat. 26		Invertebrate	Crown Conch	UID Modified			1	2.0
8LV42.165.6	Feat. 26		Invertebrate	Crown Conch	Outer Whorl			1	0.9
8LV42.165.7	Feat. 26		Invertebrate	Misc. Gastropod	Unmodified			2	0.3
8LV42.165.8	Feat. 26		Invertebrate	Misc. Gastropod	UID Modified			1	0.5
8LV42.165.9	Feat. 26		Invertebrate	Mercenaria	UID Modified			1	1.7
8LV42.165.10	Feat. 26		Invertebrate	Misc. Bivalve	UID Modified			6	2.2
8LV42.165.11	Feat. 26		Invertebrate	Barnacle				13	3.1
8LV42.165.12	Feat. 26		Invertebrate	Oyster					924.8
8LV42.165.13	Feat. 26		Vert. Fauna						1.2
8LV42.184.1	Feat. 27		<1/8" Assort.						157.2
8LV42.184.2	Feat. 27		1/8" Charcoal						3.2
8LV42.184.3	Feat. 27		1/8" Vert.						20.3
8LV42.184.4	Feat. 27		1/8" Invert.						264.5
8LV42.184.5	Feat. 27		Invertebrate	Oyster					2693.2
8LV42.184.6	Feat. 27		Invertebrate	Oyster					1363.0
8LV42.184.7	Feat. 27		Invertebrate	Oyster					45.0
8LV42.184.8	Feat. 27		Invertebrate	Crown Conch				1	25.3
8LV42.184.9	Feat. 27		Invertebrate	Crown Conch				1	29.8
8LV42.184.10	Feat. 27		Invertebrate	Crown Conch				1	16.0
8LV42.184.11	Feat. 27		Charcoal	Wood					1.2
8LV42.184.12	Feat. 27		Invertebrate	Barnacle					73.4
8LV42.184.13	Feat. 27		Vert. Fauna						33.5
8LV42.184.14	Feat. 27		Invertebrate	Oyster					1269.1
8LV42.184.15	Feat. 27		Invertebrate	Misc. Bivalve					18.4
8LV42.184.16	Feat. 27		Invertebrate	UID	Fragment				50.5
8LV42.184.17	Feat. 27		Invertebrate	Crown Conch	UID Modified			1	3.7
8LV42.184.18	Feat. 27		Invertebrate	Misc. Gastropod				2	1.0
8LV42.184.19	Feat. 27		Pottery	Sand Temp	Body	Plain	Plain	1	3.5
8LV42.204.1	TU 7	C Zn A	<1/8" Assort.						143.5
8LV42.204.2	TU 7	C Zn A	1/8" Invert.						118.8
8LV42.204.3	TU 7	C Zn A	1/8" Vert.						32.9
8LV42.204.4	TU 7	C Zn A	1/8" Charcoal						3.7
8LV42.204.5	TU 7	C Zn A	1/8" Lithic						0.4
8LV42.204.6	TU 7	C Zn A	1/8" Pottery						0.0
8LV42.204.7	TU 7	C Zn A	Invertebrate	Oyster					1657.3
8LV42.204.8	TU 7	C Zn A	Invertebrate	Crown Conch	Unmodified			5	79.4
8LV42.204.9	TU 7	C Zn A	Invertebrate	Crown Conch	UID Modified			16	268.1
8LV42.204.10	TU 7	C Zn A	Invertebrate	Crown Conch	Columella			13	39.4
8LV42.204.11	TU 7	C Zn A	Invertebrate	Crown Conch	Outer Whorl			6	10.1
8LV42.204.12	TU 7	C Zn A	Invertebrate	Crown Conch	Modified Shell			2	131.9
8LV42.204.13	TU 7	C Zn A	Invertebrate	Mercenaria				2	113.9
8LV42.204.14	TU 7	C Zn A	Invertebrate	Misc. Bivalve					8.0
8LV42.204.15	TU 7	C Zn A	Invertebrate	Misc. Gastropod					18.7
8LV42.204.16	TU 7	C Zn A	Invertebrate	Lightning Whelk	Outer Whorl			1	19.3
8LV42.204.17	TU 7	C Zn A	Vert. Fauna						34.1
8LV42.204.18	TU 7	C Zn A	Charcoal						2.0
8LV42.204.19	TU 7	C Zn A	Lithic	Chert	Shatter			1	0.4
8LV42.204.20	TU 7	C Zn A	Lithic	Chert	Flake			3	1.4
8LV42.204.21	TU 7	C Zn A	Pottery	Limestone Temp	Body	Plain	Plain	3	13.0
8LV42.204.22	TU 7	C Zn A	Pottery	Limestone Temp	Crumb	Plain	Eroded	4	1.6

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.203.1	TU 7	C Zn B	<1/8" Assort.						105.8
8LV42.203.2	TU 7	C Zn B	1/8" Invert.						105.4
8LV42.203.3	TU 7	C Zn B	1/8" Vert.						29.5
8LV42.203.4	TU 7	C Zn B	1/8" Charcoal						2.6
8LV42.203.5	TU 7	C Zn B	1/8" Pottery						0.4
8LV42.203.6	TU 7	C Zn B	1/8" Lithic						0.1
8LV42.203.7	TU 7	C Zn B	1/8" Concretion						0.8
8LV42.203.8	TU 7	C Zn B	Invertebrate	Oyster					1600.6
8LV42.203.9	TU 7	C Zn B	Invertebrate	Misc. Bivalve					24.5
8LV42.203.10	TU 7	C Zn B	Invertebrate	Mercenaria	UID Modified			1	24.3
8LV42.203.11	TU 7	C Zn B	Invertebrate	Lightning Whelk	Outer Whorl			3	25.9
8LV42.203.12	TU 7	C Zn B	Invertebrate	Crown Conch	UID Modified			7	76.2
8LV42.203.13	TU 7	C Zn B	Invertebrate	Crown Conch	Columella			3	8.2
8LV42.203.14	TU 7	C Zn B	Invertebrate	Crown Conch	UID Modified			1	50.6
8LV42.203.15	TU 7	C Zn B	Invertebrate	Crown Conch	Tool			1	42.6
8LV42.203.16	TU 7	C Zn B	Vert. Fauna						33.5
8LV42.203.17	TU 7	C Zn B	Invertebrate	Crown Conch	Unmodified			3	62.5
8LV42.203.18	TU 7	C Zn B	Invertebrate	Crown Conch	Hammer			1	49.5
8LV42.203.19	TU 7	C Zn B	Pottery	Limestone Temp	Body	Plain	Plain	7	74.0
8LV42.203.20	TU 7	C Zn B	Pottery	Limestone Temp	Crumb			1	0.5
8LV42.203.21	TU 7	C Zn B	Pottery	Sand Temp	Body	Plain	Plain	1	2.8
8LV42.203.22	TU 7	C Zn B	Pottery	Sand Temp	Body	Incised	UID	1	2.2
8LV42.203.23	TU 7	C Zn B	Pottery	Spicule Temp	Body	Plain	Plain	1	1.1
8LV42.203.24	TU 7	C Zn B	Lithic	Chert	Flake			2	0.6
8LV42.203.25	TU 7	C Zn B	Charcoal	Wood					1.3

Shell Mound 8LV42– Flotation

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.234.1	Feat. 14		<1/8" Assort. Mat.						75.6
8LV42.234.2	Feat. 14		1/8" Invertebrate						26.5
8LV42.234.3	Feat. 14		1/8" Vert. Fauna						18.9
8LV42.234.4	Feat. 14		1/8" Charcoal						1.8
8LV42.234.5	Feat. 14		1/8" Lithic					3	0.2
8LV42.234.6	Feat. 14		Invertebrate	Oyster					261.8
8LV42.234.7	Feat. 14		Pottery	Limestone Temp	Body	Plain	Plain	4	15.3
8LV42.234.8	Feat. 14		Vert. Fauna					42	10.1
8LV42.234.9	Feat. 14		Invertebrate	Misc. Bivalve				3	3.1
8LV42.234.10	Feat. 14		Charcoal	Wood				3	0.4
8LV42.234.11	Feat. 14		Charcoal	Hickory Nut				1	0.0
8LV42.234.12	Feat. 14		Invertebrate	Crown Conch	UID Modified			2	11.0
8LV42.234.13	Feat. 14		Invertebrate	Crown Conch	Outer Whorl			1	2.5
8LV42.234.14	Feat. 14		Misc. Rock	Sedimentary	Pebble			1	2.9
8LV42.234.15	Feat. 14		Lithic	Chert	Flake			1	0.8
8LV42.231.1	Feat. 15		<1/8" Assort. Mat.						621.3
8LV42.231.2	Feat. 15		1/8" Invertebrate						144.9
8LV42.231.3	Feat. 15		1/8" Vert. Fauna						74.4
8LV42.231.4	Feat. 15		1/8" Charcoal	Wood					6.0
8LV42.231.5	Feat. 15		1/8" Concretion						2.5
8LV42.231.6	Feat. 15		1/8" Pottery						0.3
8LV42.231.7	Feat. 15		1/8" Lithic						0.2
8LV42.231.8	Feat. 15		Invertebrate	Oyster					1287.5
8LV42.231.9	Feat. 15		Vert. Fauna						63.5
8LV42.231.10	Feat. 15		Invertebrate	Crown Conch	Unmodified			14	419.7
8LV42.231.11	Feat. 15		Invertebrate	Crown Conch	UID Modified			10	139.6

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.231.12	Feat. 15		Invertebrate	Crown Conch	Columella			5	8.6
8LV42.231.13	Feat. 15		Invertebrate	Crown Conch	Outer Whorl			32	27.2
8LV42.231.14	Feat. 15		Invertebrate	Misc. Gastropod				7	19.2
8LV42.231.15	Feat. 15		Invertebrate	Misc. Bivalve				122	32.7
8LV42.231.16	Feat. 15		Invertebrate	Crown Conch	Hammer			1	57.0
8LV42.231.17	Feat. 15		Invertebrate	Crown Conch	Tool			1	30.2
8LV42.231.18	Feat. 15		Invertebrate	Lightning Whelk	UID Modified			1	222.3
8LV42.231.19	Feat. 15		Invertebrate	Merceneria				3	594.2
8LV42.231.20	Feat. 15		Invertebrate	Barnacle				2	2.6
8LV42.231.21	Feat. 15		Charcoal	Wood					1.8
8LV42.231.22	Feat. 15		Pottery	Limestone Temp	Body	Plain	Plain	11	80.7
8LV42.231.23	Feat. 15		Pottery	Limestone Temp	Rim	Plain	Plain	2	12.4
8LV42.231.24	Feat. 15		Pottery	Limestone Temp	Crumb	UID	Eroded	6	3.1
8LV42.231.25	Feat. 15		Pottery	Sand Tempered	Body	Plain	Plain	1	1.8
8LV42.231.26	Feat. 15		Lithic	Chert	Flake			2	1.9
8LV42.231.27	Feat. 15		Misc. Rock	Limestone				1	0.0
8LV42.214.1	Feat. 17		<1/8" Assort. Mat.						214.1
8LV42.214.2	Feat. 17		1/8" Invertebrate						88.4
8LV42.214.3	Feat. 17		1/8" Vert. Fauna						11.4
8LV42.214.4	Feat. 17		1/8" Charcoal						0.6
8LV42.214.5	Feat. 17		1/8" Lithic						0.2
8LV42.214.6	Feat. 17		1/8" Pottery						0.1
8LV42.214.7	Feat. 17		Invertebrate	Crown Conch	Unmodified			2	93.5
8LV42.214.8	Feat. 17		Vert. Fauna						8.5
8LV42.214.9	Feat. 17		Lithic	Chert	Flake			1	0.4
8LV42.214.10	Feat. 17		Pottery	Limestone Temp	Crumb			1	0.1
8LV42.214.11	Feat. 17		Invertebrate	Barnacle					1.6
8LV42.214.12	Feat. 17		Invertebrate	Oyster					3307.5
8LV42.214.13	Feat. 17		Invertebrate	Misc. Bivalve					11.0
8LV42.212.1	Feat. 19		<1/8" Assort. Mat.						119.4
8LV42.212.2	Feat. 19		1/8" Vert. Fauna						29.9
8LV42.212.3	Feat. 19		1/8" Invertebrate						21.4
8LV42.212.4	Feat. 19		1/8" Charcoal						1.9
8LV42.212.5	Feat. 19		1/8" Lithic						0.5
8LV42.212.6	Feat. 19		1/8" Concretion						0.8
8LV42.212.7	Feat. 19		Vert. Fauna						20.3
8LV42.212.8	Feat. 19		Invertebrate	Oyster					308.2
8LV42.212.9	Feat. 19		Invertebrate	Crown Conch	UID Modified			3	28.7
8LV42.212.10	Feat. 19		Invertebrate	Crown Conch	Modified Shell			1	77.1
8LV42.212.11	Feat. 19		Lithic	Chert	Flake			13	27.2
8LV42.212.12	Feat. 19		Pottery	Limestone Temp	Rim			2	122.8
8LV42.212.13	Feat. 19		Pottery	Limestone Temp	Body			3	58.2
8LV42.212.14	Feat. 19		Charcoal	Wood					0.6
8LV42.212.15	Feat. 19		Concretion						0.2
8LV42.213.1	Feat. 23		<1/8" Assort. Mat.						48.1
8LV42.213.2	Feat. 23		1/8" Vert. Fauna						8.8
8LV42.213.3	Feat. 23		1/8" Invertebrate						25.6
8LV42.213.4	Feat. 23		1/8" Charcoal						0.6
8LV42.213.5	Feat. 23		1/8" Lithic						0.3
8LV42.213.6	Feat. 23		1/8" Pottery						0.1
8LV42.213.7	Feat. 23		Invertebrate	Oyster					753.6
8LV42.213.8	Feat. 23		Vert. Fauna						6.7
8LV42.213.9	Feat. 23		Invertebrate	Misc. Bivalve					6.2
8LV42.213.10	Feat. 23		Invertebrate	Crown Conch	UID Modified			2	6.0
8LV42.213.11	Feat. 23		Lithic	Chert	Flake			4	2.1
8LV42.213.12	Feat. 23		Charcoal						0.3
8LV42.230.1	Feat. 24		<1/8" Assort. Mat.						31.7
8LV42.230.2	Feat. 24		1/8" Invertebrate						3.8
8LV42.230.3	Feat. 24		1/8" Vert. Fauna						0.7

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.230.4	Feat. 24		1/8" Charcoal	Wood					0.2
8LV42.230.5	Feat. 24		Invertebrate	Oyster					347.9
8LV42.230.6	Feat. 24		Invertebrate	Misc. Bivalve					9.4
8LV42.230.7	Feat. 24		Invertebrate	Crown Conch	Outer Whorl			5	2.0
8LV42.230.8	Feat. 24		Invertebrate	Lightning Whelk	Outer Whorl			1	6.1
8LV42.230.9	Feat. 24		Invertebrate	Crown Conch	Columella			1	1.4
8LV42.230.10	Feat. 24		Invertebrate	Crown Conch	Tool			1	15.5
8LV42.230.11	Feat. 24		Invertebrate	Crown Conch	UID Modified			2	3.6
8LV42.230.12	Feat. 24		Vert. Fauna						22.6
8LV42.230.13	Feat. 24		Charcoal	Wood					0.8
8LV42.230.14	Feat. 24		Lithic	Chert	Flake			2	1.6
8LV42.230.15	Feat. 24		Pottery	Limestone Temp	Body	Plain	Plain	4	23.7
8LV42.236.1	Feat. 25A		<1/8" Assort. Mat.						73.1
8LV42.236.2	Feat. 25A		Vert. Fauna						15.3
8LV42.236.3	Feat. 25A		Vert. Fauna						8.6
8LV42.236.4	Feat. 25A		Lithic	Chert	Flake			4	2.3
8LV42.236.5	Feat. 25A		Lithic	Chert				6	0.2
8LV42.236.6	Feat. 25A		Charcoal						2.5
8LV42.236.7	Feat. 25A		Invertebrate	Oyster					121.9
8LV42.236.8	Feat. 25A		Pottery	Limestone Temp	Body	Plain	Plain	1	9.9
8LV42.236.9	Feat. 25A		Pottery	Sand Tempered	Crumb			2	0.2
8LV42.236.10	Feat. 25A		Light Fraction						9.6
8LV42.237.1	Feat. 25B		<1/8" Assort. Mat.						115.4
8LV42.237.2	Feat. 25B		1/8" Vert. Fauna						28.4
8LV42.237.3	Feat. 25B		1/8" Invertebrate						54.2
8LV42.237.4	Feat. 25B		1/8" Charcoal						3.2
8LV42.237.5	Feat. 25B		1/8" Pottery						0.4
8LV42.237.6	Feat. 25B		1/8" Lithic						0.1
8LV42.237.7	Feat. 25B		Vert. Fauna						26.6
8LV42.237.8	Feat. 25B		Charcoal						2.8
8LV42.237.9	Feat. 25B		Charcoal	Hickory Nut					0.6
8LV42.237.10	Feat. 25B		Invertebrate	Oyster					278.8
8LV42.237.11	Feat. 25B		Invertebrate	Misc. Bivalve					6.8
8LV42.237.12	Feat. 25B		Invertebrate	Crown Conch	UID Modified			2	13.2
8LV42.237.13	Feat. 25B		Invertebrate	Misc. Gastropod	Columella			1	0.4
8LV42.237.14	Feat. 25B		Invertebrate	Misc. Gastropod	Outer Whorl			5	2.4
8LV42.237.15	Feat. 25B		Invertebrate	Crown Conch	Outer Whorl			9	7.1
8LV42.237.16	Feat. 25B		Invertebrate	Misc. Gastropod				6	3.7
8LV42.237.17	Feat. 25B		Lithic	Chert	Flake			2	3.7
8LV42.237.18	Feat. 25B		Lithic	Chert	Shatter			1	0.2
8LV42.237.19	Feat. 25B		Pottery	Sand Tempered	Crumb			1	0.0
8LV42.237.20	Feat. 25B		Light Fraction						9.7
8LV42.238.1	Feat. 25C		<1/8" Assort. Mat.						115.4
8LV42.238.2	Feat. 25C		1/8" Vert. Fauna						23.1
8LV42.238.3	Feat. 25C		1/8" Invertebrate						40.2
8LV42.238.4	Feat. 25C		1/8" Charcoal						3.2
8LV42.238.5	Feat. 25C		1/8" Lithic						0.1
8LV42.238.6	Feat. 25C		1/8" Pottery						0.2
8LV42.238.7	Feat. 25C		1/8" Misc. Rock						0.1
8LV42.238.8	Feat. 25C		Vert. Fauna						28.6
8LV42.238.9	Feat. 25C		Invertebrate	Oyster					108.0
8LV42.238.10	Feat. 25C		Invertebrate	Misc. Bivalve					13.4
8LV42.238.11	Feat. 25C		Invertebrate	Crown Conch	Outer Whorl			8	3.6
8LV42.238.12	Feat. 25C		Invertebrate	Misc. Gastropod	Columella			1	0.6
8LV42.238.13	Feat. 25C		Charcoal	Wood					1.7
8LV42.238.14	Feat. 25C		Lithic	Chert	Flake			3	0.2
8LV42.238.15	Feat. 25C		Pottery	Limestone Temp	Rim	Plain	Plain	1	42.6
8LV42.238.16	Feat. 25C		Pottery	Limestone Temp	Body	Plain	Plain	1	2.7
8LV42.238.17	Feat. 25C		Pottery	Sand Tempered	Body	Plain	Plain	1	2.1

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.238.18	Feat. 25C		Light Fraction						9.9
8LV42.239.1	Feat. 25D		<1/8" Assort. Mat.						103.3
8LV42.239.2	Feat. 25D		1/8" Invertebrate						76.6
8LV42.239.3	Feat. 25D		1/8" Vert. Fauna						24.4
8LV42.239.4	Feat. 25D		1/8" Charcoal						1.7
8LV42.239.5	Feat. 25D		1/8" Lithic						0.3
8LV42.239.6	Feat. 25D		1/8" Pottery						0.4
8LV42.239.7	Feat. 25D		Charcoal	Wood					0.3
8LV42.239.8	Feat. 25D		Invertebrate	Crown Conch	Outer Whorl			2	2.6
8LV42.239.9	Feat. 25D		Vert. Fauna						18.8
8LV42.239.10	Feat. 25D		Pottery	Limestone Temp	Body	Plain	Plain	1	54.2
8LV42.239.11	Feat. 25D		Lithic	Chert	Flake			2	5.0
8LV42.239.12	Feat. 25D		Invertebrate	Merceneria				3	5.2
8LV42.239.13	Feat. 25D		Invertebrate	Oyster					291.8
8LV42.239.14	Feat. 25D		Invertebrate	Misc. Bivalve					44.5
8LV42.239.15	Feat. 25D		Invertebrate	Barnacle					0.6
8LV42.239.16	Feat. 25D		Pottery	Sand Tempered	Crumb			1	0.7
8LV42.239.17	Feat. 25D		Light Fraction						8.2
8LV42.240.1	Feat. 25E		<1/8" Assort. Mat.						123.9
8LV42.240.2	Feat. 25E		1/8" Vert. Fauna						16.2
8LV42.240.3	Feat. 25E		1/8" Lithic						0.2
8LV42.240.4	Feat. 25E		1/8" Charcoal						1.6
8LV42.240.5	Feat. 25E		1/8" Pottery						0.3
8LV42.240.6	Feat. 25E		1/8" Misc. Rock						0.1
8LV42.240.7	Feat. 25E		1/8" Misc. Rock	Quartz					0.1
8LV42.240.8	Feat. 25E		1/8" Invertebrate						62.2
8LV42.240.9	Feat. 25E		Pottery	Limestone Temp	Body	Plain	Plain	1	4.7
8LV42.240.10	Feat. 25E		Pottery	Limestone Temp	Crumb			2	3.3
8LV42.240.11	Feat. 25E		Lithic	Chert	Flake			1	0.5
8LV42.240.12	Feat. 25E		Lithic	Chert	Shatter			1	0.4
8LV42.240.13	Feat. 25E		Invertebrate	Oyster	UID Modified				256.8
8LV42.240.14	Feat. 25E		Invertebrate	Misc. Bivalve	UID Modified				17.2
8LV42.240.15	Feat. 25E		Invertebrate	Misc. Gastropod	UID Modified				0.9
8LV42.240.16	Feat. 25E		Charcoal	Wood				3	0.5
8LV42.240.17	Feat. 25E		Vert. Fauna						20.6
8LV42.240.18	Feat. 25E		Light Fraction						7.0
8LV42.166.1	Feat. 26		<1/8" Assort. Mat.						271.0
8LV42.166.2	Feat. 26		1/8" Vert. Fauna						31.7
8LV42.166.3	Feat. 26		1/8" Invertebrate						171.9
8LV42.166.4	Feat. 26		1/8" Charcoal						8.5
8LV42.166.5	Feat. 26		1/8" Concretion						2.4
8LV42.166.6	Feat. 26		Invertebrate	Oyster					861.8
8LV42.166.7	Feat. 26		Invertebrate	Mercenaria				3	29.7
8LV42.166.8	Feat. 26		Invertebrate	Crown Conch	UID Modified			3	34.6
8LV42.166.9	Feat. 26		Invertebrate	Crown Conch	Columella			2	4.5
8LV42.166.10	Feat. 26		Invertebrate	Crown Conch	Outer Whorl			3	3.5
8LV42.166.11	Feat. 26		Invertebrate	Misc. Gastropod				3	3.1
8LV42.166.12	Feat. 26		Invertebrate	Barnacle					2.5
8LV42.166.13	Feat. 26		Invertebrate	Misc. Bivalve					15.6
8LV42.166.14	Feat. 26		Vert. Fauna						10.2
8LV42.166.15	Feat. 26		Charcoal	Wood					6.8
8LV42.166.16	Feat. 26		Pottery	Sand Tempered	Body	Plain	Plain	1	2.5
8LV42.166.17	Feat. 26		Lithic	Sedimentary	Flake			1	0.9
8LV42.233.1	Feat. 30		<1/8" Assort. Mat.						70.8
8LV42.233.2	Feat. 30		1/8" Invertebrate						44.0
8LV42.233.3	Feat. 30		1/8" Vert. Fauna						16.4
8LV42.233.4	Feat. 30		1/8" Charcoal	Wood					0.6
8LV42.233.5	Feat. 30		1/8" Lithic						0.3
8LV42.233.6	Feat. 30		Invertebrate	Oyster					294.8

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.233.7	Feat. 30		Vert. Fauna						13.3
8LV42.233.8	Feat. 30		Invertebrate	Misc. Bivalve					10.5
8LV42.233.9	Feat. 30		Invertebrate	Crown Conch	UID Modified			1	8.4
8LV42.233.10	Feat. 30		Invertebrate	Crown Conch	Outer Whorl			9	4.4
8LV42.233.11	Feat. 30		Invertebrate	Misc. Gastropod					1.2
8LV42.233.12	Feat. 30		Charcoal	Wood					0.3
8LV42.233.13	Feat. 30		Lithic	Chert	Flake			8	1.5
8LV42.233.14	Feat. 30		Lithic	Chert	Shatter			1	0.3
8LV42.233.15	Feat. 30		Lithic	Sedimentary	Hammerstone			1	79.3
8LV42.235.1	Feat. 30A		<1/8" Assort. Mat.						169.8
8LV42.235.2	Feat. 30A		1/8" Vert. Fauna						77.0
8LV42.235.3	Feat. 30A		1/8" Invertebrate						56.4
8LV42.235.4	Feat. 30A		1/8" Charcoal	Wood					1.6
8LV42.235.5	Feat. 30A		1/8" Pottery						0.3
8LV42.235.6	Feat. 30A		1/8" Lithic						0.2
8LV42.235.7	Feat. 30A		1/8" Charcoal						0.1
8LV42.235.8	Feat. 30A		Vert. Fauna						72.3
8LV42.235.9	Feat. 30A		Invertebrate	Oyster					290.3
8LV42.235.10	Feat. 30A		Invertebrate	Crown Conch	Unmodified			1	31.9
8LV42.235.11	Feat. 30A		Invertebrate	Crown Conch	UID Modified			3	67.6
8LV42.235.12	Feat. 30A		Invertebrate	Crown Conch	Outer Whorl			2	2.1
8LV42.235.13	Feat. 30A		Invertebrate	Misc. Gastropod					1.6
8LV42.235.14	Feat. 30A		Invertebrate	Misc. Bivalve					36.6
8LV42.235.15	Feat. 30A		Charcoal	Wood				4	1.1
8LV42.235.16	Feat. 30A		Pottery	Limestone Temp	Body	Plain	Plain	2	38.9
8LV42.235.17	Feat. 30A		Pottery	Limestone Temp	Crumb	UID	Eroded	1	0.4
8LV42.235.18	Feat. 30A		Lithic	Chert	Flake			1	0.2
8LV42.235.19	Feat. 30A		Lithic	Chert	Biface			1	6.8
8LV42.59.1	Feat. 7	62-93	Light Fraction						
8LV42.59.2	Feat. 7	62-93	<1/8" Assort. Mat.						
8LV42.59.3	Feat. 7	62-93	1/8" Invertebrate						
8LV42.59.4	Feat. 7	62-93	1/8" Vert. Fauna						
8LV42.59.5	Feat. 7	62-93	1/8" Fired Clay						
8LV42.59.6	Feat. 7	62-93	1/8" Charcoal						
8LV42.59.7	Feat. 7	62-93	Charcoal						
8LV42.59.8	Feat. 7	62-93	Vert. Fauna						
8LV42.59.9	Feat. 7	62-93	Invertebrate	Merceneria					
8LV42.59.10	Feat. 7	62-93	Invertebrate	Crown Conch					
8LV42.59.11	Feat. 7	62-93	Invertebrate	Oyster					
8LV42.59.12	Feat. 7	62-93	Invertebrate	UID	Fragment				
8LV42.89.1	TU 4	Strat II	Light Fraction						
8LV42.89.2	TU 4	Strat II	<1/8" Assort. Mat.						
8LV42.89.3	TU 4	Strat II	1/8" Invertebrate						
8LV42.89.4	TU 4	Strat II	Historic	Metal					
8LV42.89.5	TU 4	Strat II	Concretion						
8LV42.89.6	TU 4	Strat II	1/8" Vert. Fauna						
8LV42.89.7	TU 4	Strat II	1/8" Charcoal						
8LV42.89.8	TU 4	Strat II	Invertebrate	Crown Conch	Fragment				
8LV42.89.9	TU 4	Strat II	Lithic	Chert	Flake				
8LV42.89.10	TU 4	Strat II	Historic	Metal					
8LV42.89.11	TU 4	Strat II	Charcoal						
8LV42.89.12	TU 4	Strat II	Pottery		Crumb				
8LV42.89.13	TU 4	Strat II	Invertebrate	Oyster	Fragment				
8LV42.89.14	TU 4	Strat II	Invertebrate	UID					
8LV42.89.15	TU 4	Strat II	Invertebrate	Misc. Gastropod					
8LV42.90.1	TU 5	Strat II	Light Fraction						
8LV42.90.2	TU 5	Strat II	<1/8" Assort. Mat.						
8LV42.90.3	TU 5	Strat II	1/8" Charcoal						
8LV42.90.4	TU 5	Strat II	1/8" Invertebrate						

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.90.5	TU 5	Strat II	1/8" Vert. Fauna						
8LV42.90.6	TU 5	Strat II	Vert. Fauna						
8LV42.90.7	TU 5	Strat II	Invertebrate	Crown Conch					
8LV42.90.8	TU 5	Strat II	Invertebrate	Oyster					
8LV42.90.9	TU 5	Strat II	Invertebrate	UID	Fragment				
8LV42.90.10	TU 5	Strat II	Invertebrate	Misc. Gastropod	Columella				
8LV42.90.11	TU 5	Strat II	Pottery	Sand Tempered	Crumb				
8LV42.90.12	TU 5	Strat II	Charcoal						
8LV42.90.13	TU 5	Strat II	Fired Clay						
8LV42.88.1	TU 6	Strat II	Light Fraction						7.3
8LV42.88.2	TU 6	Strat II	<1/8" Assort. Mat.						57.6
8LV42.88.3	TU 6	Strat II	1/8" Invertebrate						
8LV42.88.4	TU 6	Strat II	1/8" Concretion						0.5
8LV42.88.5	TU 6	Strat II	Concretion						0.4
8LV42.88.6	TU 6	Strat II	Invertebrate	Crown Conch					31.8
8LV42.88.7	TU 6	Strat II	Invertebrate	Oyster					
8LV42.88.8	TU 6	Strat II	Invertebrate	UID	Fragment				63.3
8LV42.86.1	TU 6	Strat III	Light Fraction						
8LV42.87.1	TU 6	Strat III	Light Fraction						65.8
8LV42.86.2	TU 6	Strat III	<1/8" Assort. Mat.						
8LV42.87.2	TU 6	Strat III	<1/8" Assort. Mat.						
8LV42.86.3	TU 6	Strat III	1/8" Invertebrate						
8LV42.87.3	TU 6	Strat III	1/8" Vert. Fauna						
8LV42.86.4	TU 6	Strat III	1/8" Fired Clay						
8LV42.87.4	TU 6	Strat III	Vert. Fauna						
8LV42.86.5	TU 6	Strat III	1/8" Charcoal						
8LV42.87.5	TU 6	Strat III	Invertebrate	Misc. Bivalve					
8LV42.86.6	TU 6	Strat III	1/8" Invertebrate		Fragment				
8LV42.87.6	TU 6	Strat III	Invertebrate	Misc. Gastropod					2.7
8LV42.86.7	TU 6	Strat III	1/8" Vert. Fauna						
8LV42.87.7	TU 6	Strat III	Invertebrate	Lightning Whelk	Fragment				14.0
8LV42.86.8	TU 6	Strat III	Invertebrate	Oyster					
8LV42.87.8	TU 6	Strat III	1/8" Invertebrate		Fragment				1863.0
8LV42.86.9	TU 6	Strat III	Charcoal						
8LV42.87.9	TU 6	Strat III	1/8" Fired Clay						0.1
8LV42.86.10	TU 6	Strat III	Vert. Fauna						
8LV42.87.10	TU 6	Strat III	1/8" Invertebrate						
8LV42.86.11	TU 6	Strat III	Invertebrate	Barnacle					
8LV42.87.11	TU 6	Strat III	Invertebrate	Barnacle					0.5
8LV42.86.12	TU 6	Strat III	Invertebrate	Misc. Bivalve					
8LV42.87.12	TU 6	Strat III	Invertebrate	Oyster					
8LV42.86.13	TU 6	Strat III	Invertebrate	Crown Conch					
8LV42.87.13	TU 6	Strat III	Invertebrate	UID					745.2
8LV42.86.14	TU 6	Strat III	Invertebrate	Crown Conch	Tool				
8LV42.87.14	TU 6	Strat III	Invertebrate	Crown Conch					104.4
8LV42.86.15	TU 6	Strat III	Invertebrate	Merceneria					
8LV42.87.15	TU 6	Strat III	Invertebrate	Merceneria					31.8
8LV42.86.16	TU 6	Strat III	Invertebrate		Fragment				
8LV42.87.16	TU 6	Strat III	Pottery	Sand Tempered	Body				39.8
8LV42.87.17	TU 6	Strat III	Fired Clay						5.7
8LV42.232.1	TU 7	XVII	<1/8" Assort. Mat.						132.3
8LV42.232.2	TU 7	XVII	1/8" Vert. Fauna						24.0
8LV42.232.3	TU 7	XVII	1/8" Invertebrate						45.0
8LV42.232.4	TU 7	XVII	1/8" Charcoal						3.8
8LV42.232.5	TU 7	XVII	1/8" Concretion						3.0
8LV42.232.6	TU 7	XVII	1/8" Lithic						70.1
8LV42.232.7	TU 7	XVII	1/8" Pottery						0.1
8LV42.232.8	TU 7	XVII	Invertebrate	Oyster					249.2
8LV42.232.9	TU 7	XVII	Invertebrate	Merceneria				1	465.7

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.232.10	TU 7	XVII	Invertebrate	Misc. Bivalve					15.3
8LV42.232.11	TU 7	XVII	Invertebrate	Crown Conch	Unmodified			2	69.4
8LV42.232.12	TU 7	XVII	Invertebrate	Crown Conch	UID Modified			1	7.0
8LV42.232.13	TU 7	XVII	Invertebrate	Crown Conch	Outer Whorl			4	10.3
8LV42.232.14	TU 7	XVII	Invertebrate	Crown Conch	Columella			1	0.9
8LV42.232.15	TU 7	XVII	Invertebrate	Lightning Whelk	Hammer			1	107.8
8LV42.232.16	TU 7	XVII	Vert. Fauna						17.8
8LV42.232.17	TU 7	XVII	Charcoal						5.2
8LV42.232.18	TU 7	XVII	Lithic	Chert	Flake			2	0.2
8LV42.232.19	TU 7	XVII	Pottery	Limestone Temp	Rim	Plain	Plain	1	41.3
8LV42.232.20	TU 7	XVII	Pottery	Limestone Temp	Body	Plain	Plain	3	34.7
8LV42.200.1	TU 8	VIII	<1/8" Assort. Mat.						309.4
8LV42.200.2	TU 8	VIII	1/8" Invertebrate						187.3
8LV42.200.3	TU 8	VIII	1/8" Vert. Fauna						28.4
8LV42.200.4	TU 8	VIII	1/8" Concretion						18.4
8LV42.200.5	TU 8	VIII	1/8" Charcoal						2.9
8LV42.200.6	TU 8	VIII	Vert. Fauna						12.5
8LV42.200.7	TU 8	VIII	Invertebrate	Oyster					513.5
8LV42.200.8	TU 8	VIII	Invertebrate	Misc. Bivalve					15.3
8LV42.200.9	TU 8	VIII	Invertebrate	Misc. Gastropod					4.1
8LV42.200.10	TU 8	VIII	Invertebrate	Barnacle					0.5
8LV42.200.11	TU 8	VIII	Charcoal						0.9
8LV42.200.12	TU 8	VIII	Concretion						2.1
8LV42.200.13	TU 8	VIII	Misc. Rock	Limestone				5	2.2
8LV42.200.14	TU 8	VIII	Pottery	Sand Tempered	Crumb			2	1.0
8LV42.307.1	TU 9	IV	Light Fraction						
8LV42.307.2	TU 9	IV	<1/8" Assort. Mat.						
8LV42.307.3	TU 9	IV	Vert. Fauna						12.0
8LV42.307.4	TU 9	IV	Invertebrate	Barnacle					0.8
8LV42.307.5	TU 9	IV	Invertebrate	Misc. Gastropod					25.4
8LV42.307.6	TU 9	IV	Pottery	Limestone Temp	Body	Plain	Plain	1	2.7
8LV42.307.7	TU 9	IV	Pottery	Limestone Temp	Crumb			1	0.2
8LV42.307.8	TU 9	IV	Invertebrate	Misc. Bivalve					8.0
8LV42.307.9	TU 9	IV	Invertebrate	Misc. Gastropod	Columella			1	1.0
8LV42.307.10	TU 9	IV	Invertebrate	Crown Conch	Unmodified			1	28.3
8LV42.307.11	TU 9	IV	Invertebrate	Crown Conch	UID Modified			1	66.7
8LV42.307.12	TU 9	IV	Invertebrate	Merceneria				3	111.6
8LV42.307.13	TU 9	IV	Invertebrate	Oyster					3944.2
8LV42.307.14	TU 9	IV	1/8" Vert. Fauna						23.4
8LV42.307.15	TU 9	IV	1/8" Invertebrate						368.4
8LV42.307.16	TU 9	IV	1/8" Charcoal						0.2
8LV42.307.17	TU 9	IV	1/8" Pottery					1	0.1
8LV42.309.1	TU 9	V	Light Fraction						
8LV42.309.2	TU 9	V	<1/8" Assort. Mat.						
8LV42.309.3	TU 9	V	1/8" Vert. Fauna						11.8
8LV42.309.4	TU 9	V	1/8" Charcoal						0.9
8LV42.309.5	TU 9	V	1/8" Invertebrate						185.4
8LV42.309.6	TU 9	V	Invertebrate	Oyster					1436.9
8LV42.309.7	TU 9	V	Vert. Fauna						13.3
8LV42.309.8	TU 9	V	Invertebrate	Crown Conch					57.3
8LV42.309.9	TU 9	V	Invertebrate	Merceneria					6.7
8LV42.309.10	TU 9	V	Invertebrate	Misc. Gastropod	Columella				6.2
8LV42.309.11	TU 9	V	Invertebrate	Misc. Gastropod	Fragment				0.9
8LV42.309.12	TU 9	V	Invertebrate	Misc. Bivalve					169.6
8LV42.309.13	TU 9	V	Invertebrate	Barnacle					0.3
8LV42.309.14	TU 9	V	Charcoal						0.0
8LV42.310.1	TU 9	VI	Light Fraction						
8LV42.310.2	TU 9	VI	<1/8" Assort. Mat.						
8LV42.310.3	TU 9	VI	1/8" Vert. Fauna						4.0

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV42.310.4	TU 9	VI	1/8" Invertebrate						47.4
8LV42.310.5	TU 9	VI	1/8" Charcoal						3.0
8LV42.310.6	TU 9	VI	Vert. Fauna					14	3.2
8LV42.310.7	TU 9	VI	Charcoal	Hickory Nut				5	0.9
8LV42.310.8	TU 9	VI	Invertebrate	Oyster					342.4
8LV42.310.9	TU 9	VI	Invertebrate	Misc. Bivalve				5	10.6
8LV42.310.10	TU 9	VI	Invertebrate	Crown Conch	Fragment			1	1.2
8LV42.308.1	TU 9	VII lower	Light Fraction						
8LV42.308.2	TU 9	VII lower	<1/8" Assort. Mat.						
8LV42.308.3	TU 9	VII lower	Invertebrate	Oyster					4036.4
8LV42.308.4	TU 9	VII lower	Vert. Fauna						6.6
8LV42.308.5	TU 9	VII lower	Invertebrate	Barnacle					8.8
8LV42.308.6	TU 9	VII lower	Invertebrate	Misc. Bivalve					4.2
8LV42.308.7	TU 9	VII lower	Invertebrate	Misc. Gastropod					0.7
8LV42.308.8	TU 9	VII lower	Invertebrate	Misc. Gastropod					0.7
8LV42.308.9	TU 9	VII lower	Invertebrate	Misc. Gastropod					0.4
8LV42.308.10	TU 9	VII lower	Pottery	Sand Tempered	Crumb				0.0
8LV42.308.11	TU 9	VII lower	Invertebrate	Crown Conch	UID Modified			7	208.9
8LV42.308.12	TU 9	VII lower	Invertebrate	Crown Conch	Unmodified			5	179.5
8LV42.308.13	TU 9	VII lower	1/8" Invertebrate						201.7
8LV42.308.14	TU 9	VII lower	1/8" Vert. Fauna						8.5
8LV42.308.15	TU 9	VII lower	1/8" Invertebrate	Barnacle					9.4
8LV42.308.16	TU 9	VII lower	1/8" Charcoal						0.0
8LV42.308.17	TU 9	VII lower	1/8" Pottery					1	0.0
8LV42.306.1	TU 9	VII upper	<1/8" Assort. Mat.						
8LV42.306.2	TU 9	VII upper	Light Fraction						
8LV42.306.3	TU 9	VII upper	1/8" Vert. Fauna						16.5
8LV42.306.4	TU 9	VII upper	1/8" Concretion						0.3
8LV42.306.5	TU 9	VII upper	1/8" Botanical						0.0
8LV42.306.6	TU 9	VII upper	1/8" Charcoal						0.0
8LV42.306.7	TU 9	VII upper	1/8" Invertebrate						359.7
8LV42.306.8	TU 9	VII upper	Fired Clay						0.0
8LV42.306.9	TU 9	VII upper	Vert. Fauna						16.8
8LV42.306.10	TU 9	VII upper	Invertebrate	Oyster					4471.5
8LV42.306.11	TU 9	VII upper	Invertebrate	Crown Conch	Unmodified			7	164.4
8LV42.306.12	TU 9	VII upper	Invertebrate	Crown Conch	UID Modified			3	76.9
8LV42.306.13	TU 9	VII upper	Invertebrate	Misc. Gastropod	Fragment			6	8.1
8LV42.306.14	TU 9	VII upper	Invertebrate	Tulip Shell	Unmodified			1	30.2
8LV42.306.15	TU 9	VII upper	Invertebrate	Misc. Bivalve				12	4.4
8LV42.306.16	TU 9	VII upper	Invertebrate	Barnacle				36	12.4

A. B. Midden 8LV65 – General Excavation

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV65.2.1	Auger 1		Pottery	Sand Temp	Body	Stamped	Chk Stmpd	1	16.9
8LV65.2.2	Auger 1		Pottery	Sand Temp	Body	Plain	Plain	1	5.4
8LV65.2.3	Auger 1		Pottery	Sand Temp	Crumb			6	5.2
8LV65.2.4	Auger 1		Pottery	Limestone Temp	Body	UID	Eroded	3	9.7
8LV65.2.5	Auger 1		Pottery	Limestone Temp	Crumb			2	2.2
8LV65.2.6	Auger 1		Invertebrate	Pear Whelk	UID Modified			2	9.1
8LV65.2.7	Auger 1		Invertebrate	Lightning Whelk	Columella			2	46.9
8LV65.2.8	Auger 1		Invertebrate	Misc. Gastropod	Columella			8	40.7
8LV65.2.9	Auger 1		Invertebrate	Misc. Gastropod	Outer Whorl			10	16.2
8LV65.2.10	Auger 1		Invertebrate	Misc. Gastropod	Unmodified			4	8.0

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV65.2.11	Auger 1		Invertebrate	Tulip Shell	UID Modified			1	0.2
8LV65.2.12	Auger 1		Misc. Rock	Sedimentary				2	5.8
8LV65.2.13	Auger 1		Vert. Fauna						7.4
8LV65.1.1	TU 1	A	Pottery	Limestone Temp	Body	Plain	Plain	3	21.3
8LV65.1.2	TU 1	A	Pottery	Limestone Temp	Crumb			14	20.0
8LV65.1.3	TU 1	A	Pottery	Sand Temp	Body	Stamped	Chk Stmpd	1	4.7
8LV65.1.4	TU 1	A	Pottery	Sand Temp	Body	Plain	Plain	1	2.4
8LV65.1.5	TU 1	A	Pottery	Sand Temp	Body	Eroded	Eroded	5	22.0
8LV65.1.6	TU 1	A	Pottery	Sand Temp	Crumb			3	1.6
8LV65.1.7	TU 1	A	Invertebrate	Crown Conch	Unmodified			15	371.3
8LV65.1.8	TU 1	A	Invertebrate	Whelk	Unmodified			11	498.1
8LV65.1.9	TU 1	A	Invertebrate	Pear Whelk	Unmodified			28	335.3
8LV65.1.10	TU 1	A	Invertebrate	Tulip Shell	Unmodified			28	600.0
8LV65.1.11	TU 1	A	Invertebrate	Misc. Gastropod	Outer Whorl			32	182.5
8LV65.1.12	TU 1	A	Invertebrate	Misc. Gastropod	Columella			93	577.6
8LV65.1.13	TU 1	A	Invertebrate	Misc. Gastropod				28	67.0
8LV65.1.14	TU 1	A	Invertebrate	Coral					1.7
8LV65.1.15	TU 1	A	Vert. Fauna						101.3
8LV65.1.16	TU 1	A	Pottery	Limestone Temp	Body	UID	Eroded	6	25.4
8LV65.4.1	TU 1	A-B	Pottery	Limestone Temp	Body	UID	Eroded	1	2.7
8LV65.4.2	TU 1	A-B	Invertebrate	Tulip Shell	UID Modified			5	85.4
8LV65.4.3	TU 1	A-B	Invertebrate	Pear Whelk	UID Modified			4	27.2
8LV65.4.4	TU 1	A-B	Invertebrate	Crown Conch	UID Modified			2	87.1
8LV65.4.5	TU 1	A-B	Invertebrate	Misc. Gastropod	UID Modified			6	33.8
8LV65.4.6	TU 1	A-B	Pottery	Spicule Temp	Rim	Stamped	Chk Stmpd	1	3.2
8LV65.4.7	TU 1	A-B	Vert. Fauna						4.8
8LV65.11.1	TU 1	A-G	Pottery	Limestone	Body	UID	Eroded	1	6.5
8LV65.11.2	TU 1	A-G	Pottery	Limestone	Body	Plain	Plain	1	4.8
8LV65.11.3	TU 1	A-G	Invertebrate	Lightning Whelk	UID Modified			2	187.3
8LV65.11.4	TU 1	A-G	Invertebrate	Crown Conch	Unmodified			1	40.5
8LV65.11.5	TU 1	A-G	Invertebrate	Crown Conch	UID Modified			1	25.8
8LV65.11.6	TU 1	A-G	Invertebrate	Pear Whelk	Unmodified			1	44.5
8LV65.11.7	TU 1	A-G	Invertebrate	Pear Whelk	UID Modified			3	48.4
8LV65.11.8	TU 1	A-G	Invertebrate	Pear Whelk	Outer Whorl			1	5.1
8LV65.11.9	TU 1	A-G	Invertebrate	Tulip Shell	UID Modified			2	5.9
8LV65.11.10	TU 1	A-G	Invertebrate	Misc. Gastropod	Unmodified			5	17.8
8LV65.11.11	TU 1	A-G	Invertebrate	Misc. Gastropod	UID Modified			4	54.7
8LV65.11.12	TU 1	A-G	Invertebrate	Misc. Gastropod	Outer Whorl			1	15.9
8LV65.11.13	TU 1	A-G	Vert. Fauna						66.1
8LV65.3.1	TU 1	B	Pottery	Limestone Temp	Body	UID	Eroded	7	44.3
8LV65.3.2	TU 1	B	Pottery	Limestone Temp	Rim	UID	Eroded	3	35.3
8LV65.3.3	TU 1	B	Pottery	Limestone Temp	Crumb			6	8.5
8LV65.3.4	TU 1	B	Pottery	Spicule Temp	Body	Plain	Plain	2	51.5
8LV65.3.5	TU 1	B	Pottery	Spicule Temp	Crumb			2	1.0
8LV65.3.6	TU 1	B	Pottery	Sand Temp	Body	Stamped	Comp Stmp	1	5.8
8LV65.3.7	TU 1	B	Pottery	Sand Temp	Body	Stamped	Chk Stmpd	1	1.3
8LV65.3.8	TU 1	B	Pottery	Sand Temp	Body	UID	Eroded	5	19.3
8LV65.3.9	TU 1	B	Pottery	Sand Temp	Crumb			15	13.5
8LV65.3.10	TU 1	B	Invertebrate	Whelk	Unmodified			9	404.3
8LV65.3.11	TU 1	B	Invertebrate	Whelk	Columella			5	247.0
8LV65.3.12	TU 1	B	Invertebrate	Crown Conch	Unmodified			15	409.1
8LV65.3.13	TU 1	B	Invertebrate	Crown Conch	UID Modified			19	199.8
8LV65.3.14	TU 1	B	Invertebrate	Tulip Shell	Unmodified			32	637.2
8LV65.3.15	TU 1	B	Invertebrate	Pear Whelk	Unmodified			35	292.0
8LV65.3.16	TU 1	B	Invertebrate	Misc. Gastropod	Columella			81	639.6
8LV65.3.17	TU 1	B	Invertebrate	Misc. Gastropod	Outer Whorl			76	458.6
8LV65.3.18	TU 1	B	Invertebrate	Misc. Gastropod	Unmodified			46	207.0
8LV65.3.19	TU 1	B	Invertebrate	Coral	Unmodified			2	5.9
8LV65.3.20	TU 1	B	Misc. Rock	UID				1	13.9

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV65.3.21	TU 1	B	Misc. Rock	Sedimentary				1	1.8
8LV65.3.22	TU 1	B	Vert. Fauna						217.0
8LV65.3.23	TU 1	B	Pottery	Limestone Temp	Body	UID	Eroded	4	17.0
8LV65.5.1	TU 1	C	Pottery	Limestone Temp	Body	UID	Eroded	21	164.3
8LV65.5.2	TU 1	C	Pottery	Limestone Temp	Rim	UID	Eroded	3	20.4
8LV65.5.3	TU 1	C	Pottery	Limestone	Crumb			18	17.5
8LV65.5.4	TU 1	C	Pottery	Sand Temp	Body	UID	Eroded	8	37.1
8LV65.5.5	TU 1	C	Pottery	Sand Temp	Body	Stamped	Comp Stmp	1	4.8
8LV65.5.6	TU 1	C	Pottery	Sand Temp	Crumb			11	6.5
8LV65.5.7	TU 1	C	Pottery	Spicule Temp	Crumb			4	3.2
8LV65.5.8	TU 1	C	Invertebrate	Lightning Whelk	Unmodified			1	184.9
8LV65.5.9	TU 1	C	Invertebrate	Lightning Whelk	UID Modified			2	72.7
8LV65.5.10	TU 1	C	Invertebrate	Lightning Whelk	Columella			2	154.8
8LV65.5.11	TU 1	C	Invertebrate	Lightning Whelk	Outer Whorl			1	20.2
8LV65.5.12	TU 1	C	Invertebrate	Crown Conch	Unmodified			2	80.4
8LV65.5.13	TU 1	C	Invertebrate	Crown Conch	UID Modified			10	108.2
8LV65.5.14	TU 1	C	Invertebrate	Crown Conch	UID Modified			1	21.6
8LV65.5.15	TU 1	C	Invertebrate	Crown Conch	Outer Whorl			1	6.8
8LV65.5.16	TU 1	C	Invertebrate	Tulip Shell	Unmodified			5	119.1
8LV65.5.17	TU 1	C	Invertebrate	Tulip Shell	UID Modified			20	117.3
8LV65.5.18	TU 1	C	Invertebrate	Tulip Shell	Outer Whorl			2	16.8
8LV65.5.19	TU 1	C	Invertebrate	Pear Whelk	Unmodified			6	90.3
8LV65.5.20	TU 1	C	Invertebrate	Pear Whelk	UID Modified			20	178.5
8LV65.5.21	TU 1	C	Invertebrate	Misc. Gastropod	Unmodified			33	48.5
8LV65.5.22	TU 1	C	Invertebrate	Misc. Gastropod	Columella			43	219.4
8LV65.5.23	TU 1	C	Invertebrate	Misc. Gastropod	Outer Whorl			41	200.5
8LV65.5.24	TU 1	C	Invertebrate	Mercenaria	UID Modified			1	12.7
8LV65.5.25	TU 1	C	Invertebrate	UID				3	1.6
8LV65.5.26	TU 1	C	Vert. Fauna						214.4
8LV65.6.1	TU 1	D	Pottery	Limestone	Body	UID	Eroded	8	53.2
8LV65.6.2	TU 1	D	Pottery	Limestone Temp	Crumb			9	13.6
8LV65.6.3	TU 1	D	Pottery	Sand Temp	Body	UID	Eroded	3	10.4
8LV65.6.4	TU 1	D	Pottery	Sand Temp	Body	Incised	Eroded	1	5.9
8LV65.6.5	TU 1	D	Pottery	Sand Temp	Crumb			4	4.2
8LV65.6.6	TU 1	D	Pottery	Spicule Temp	Crumb			1	0.5
8LV65.6.7	TU 1	D	Invertebrate	Lightning Whelk	UID Modified			5	234.2
8LV65.6.8	TU 1	D	Invertebrate	Lightning Whelk	Columella			3	65.0
8LV65.6.9	TU 1	D	Invertebrate	Lightning Whelk	Outer Whorl			2	105.8
8LV65.6.10	TU 1	D	Invertebrate	Tulip Shell	UID Modified			8	123.9
8LV65.6.11	TU 1	D	Invertebrate	Tulip Shell	Columella			6	60.1
8LV65.6.12	TU 1	D	Invertebrate	Pear Whelk	UID Modified			9	83.7
8LV65.6.13	TU 1	D	Invertebrate	Pear Whelk	UID Modified			3	39.4
8LV65.6.14	TU 1	D	Invertebrate	Pear Whelk	Unmodified			1	9.8
8LV65.6.15	TU 1	D	Invertebrate	Crown Conch	Unmodified			2	49.4
8LV65.6.16	TU 1	D	Invertebrate	Crown Conch	UID Modified			11	239.3
8LV65.6.17	TU 1	D	Invertebrate	Misc. Gastropod	UID Modified			16	35.0
8LV65.6.18	TU 1	D	Invertebrate	Misc. Gastropod	Columella			24	110.6
8LV65.6.19	TU 1	D	Invertebrate	Misc. Gastropod	Outer Whorl			18	168.8
8LV65.6.20	TU 1	D	Misc. Rock	Coral				1	24.4
8LV65.6.21	TU 1	D	Vert. Fauna						156.0
8LV65.6.22	TU 1	D	Pottery	Limestone Temp	Rim	UID	Eroded	1	5.2
8LV65.7.1	TU 1	E	Pottery	Limestone Temp	Rim	UID	Eroded	1	3.4
8LV65.7.2	TU 1	E	Pottery	Limestone Temp	Body	UID	Eroded	9	45.9
8LV65.7.3	TU 1	E	Pottery	Limestone Temp	Crumb			2	1.5
8LV65.7.4	TU 1	E	Invertebrate	Whelk	Unmodified			1	125.6
8LV65.7.5	TU 1	E	Invertebrate	Whelk	UID Modified			1	60.3
8LV65.7.6	TU 1	E	Invertebrate	Whelk	UID Modified			2	30.8
8LV65.7.7	TU 1	E	Invertebrate	Crown Conch	UID Modified			10	179.7
8LV65.7.8	TU 1	E	Invertebrate	Crown Conch	Outer Whorl			1	3.7

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV65.7.9	TU 1	E	Invertebrate	Tulip Shell	Unmodified			1	13.0
8LV65.7.10	TU 1	E	Invertebrate	Tulip Shell	UID Modified			8	31.7
8LV65.7.11	TU 1	E	Invertebrate	Tulip Shell	Columella			3	66.7
8LV65.7.12	TU 1	E	Invertebrate	Pear Whelk	UID Modified			5	62.5
8LV65.7.13	TU 1	E	Invertebrate	Misc. Gastropod	Unmodified			6	10.1
8LV65.7.14	TU 1	E	Invertebrate	Misc. Gastropod	Columella			11	64.8
8LV65.7.15	TU 1	E	Invertebrate	Misc. Gastropod	Outer Whorl			13	276.7
8LV65.7.16	TU 1	E	Invertebrate	Mercenaria	UID Modified			2	128.6
8LV65.7.17	TU 1	E	Vert. Fauna						82.8
8LV65.8.1	TU 1	F	Pottery	Limestone Temp	Body	UID	Eroded	3	19.6
8LV65.8.2	TU 1	F	Pottery	Limestone	Crumb			1	0.8
8LV65.8.3	TU 1	F	Pottery	Sand Temp	Body	Plain	Plain	1	3.4
8LV65.8.4	TU 1	F	Invertebrate	Crown Conch	Unmodified			1	36.5
8LV65.8.5	TU 1	F	Invertebrate	Crown Conch	UID Modified			9	326.3
8LV65.8.6	TU 1	F	Invertebrate	Pear Whelk	UID Modified			1	36.5
8LV65.8.7	TU 1	F	Invertebrate	Pear Whelk	UID Modified			7	125.2
8LV65.8.8	TU 1	F	Invertebrate	Tulip Shell	UID Modified			11	228.3
8LV65.8.9	TU 1	F	Invertebrate	Lightning Whelk	UID Modified			4	220.6
8LV65.8.10	TU 1	F	Invertebrate	Lightning Whelk	Columella			1	108.0
8LV65.8.11	TU 1	F	Invertebrate	Lightning Whelk	Tool			1	81.0
8LV65.8.12	TU 1	F	Invertebrate	Misc. Gastropod	Columella			10	143.1
8LV65.8.13	TU 1	F	Invertebrate	Misc. Gastropod	Outer Whorl			5	87.4
8LV65.8.14	TU 1	F	Invertebrate	Misc. Gastropod	UID Modified			17	21.4
8LV65.8.15	TU 1	F	Invertebrate	UID	UID			2	8.6
8LV65.8.16	TU 1	F	Invertebrate	Coral				1	1.6
8LV65.8.17	TU 1	F	Vert. Fauna						146.1
8LV65.9.1	TU 1	G	Invertebrate	Lightning Whelk	UID Modified			3	190.2
8LV65.9.2	TU 1	G	Invertebrate	Igneous rock	Columella			1	108.5
8LV65.9.3	TU 1	G	Invertebrate	Pear Whelk	UID Modified			8	106.5
8LV65.9.4	TU 1	G	Invertebrate	Pear Whelk	Unmodified			2	35.3
8LV65.9.5	TU 1	G	Invertebrate	Pear Whelk	Tool			1	26.8
8LV65.9.6	TU 1	G	Invertebrate	Crown Conch	UID Modified			6	190.6
8LV65.9.7	TU 1	G	Invertebrate	Tulip Shell	Unmodified			2	159.4
8LV65.9.8	TU 1	G	Invertebrate	Tulip Shell	UID Modified			5	159.1
8LV65.9.9	TU 1	G	Invertebrate	Misc. Gastropod	Outer Whorl			1	12.4
8LV65.9.10	TU 1	G	Invertebrate	Misc. Gastropod	Columella			4	39.9
8LV65.9.11	TU 1	G	Invertebrate	Misc. Gastropod				3	5.2
8LV65.9.12	TU 1	G	Invertebrate	Mercenaria	UID Modified			1	72.9
8LV65.9.13	TU 1	G	Vert. Fauna						77.4
8LV65.15.1	TU 1	G-J	Invertebrate	Pear Whelk	Unmodified			3	78.1
8LV65.15.2	TU 1	G-J	Invertebrate	Pear Whelk	UID Modified			1	14.9
8LV65.15.3	TU 1	G-J	Invertebrate	Tulip Shell	Unmodified			1	0.2
8LV65.15.4	TU 1	G-J	Invertebrate	Tulip Shell	UID Modified			4	126.9
8LV65.15.5	TU 1	G-J	Invertebrate	Lightning Whelk	Unmodified			2	297.2
8LV65.15.6	TU 1	G-J	Invertebrate	Lightning Whelk	UID Modified			6	385.5
8LV65.15.7	TU 1	G-J	Invertebrate	Misc. Gastropod	Unmodified			2	0.9
8LV65.15.8	TU 1	G-J	Invertebrate	Misc. Gastropod	Outer Whorl			8	77.1
8LV65.15.9	TU 1	G-J	Invertebrate	Misc. Gastropod	Columella			3	4.0
8LV65.15.10	TU 1	G-J	Invertebrate	Misc. Bivalve	Unmodified			1	6.3
8LV65.15.11	TU 1	G-J	Invertebrate	Lightning Whelk	Modified Shell			2	208.4
8LV65.15.12	TU 1	G-J	Invertebrate	Mercenaria	Modified Shell			2	27.9
8LV65.15.13	TU 1	G-J	Invertebrate	Mercenaria	UID Modified			2	13.8
8LV65.15.14	TU 1	G-J	Vert. Fauna						37.2
8LV65.12.1	TU 1	H	Pottery	Sand Temp	Body	Plain	Plain	1	2.1
8LV65.12.2	TU 1	H	Invertebrate	Tulip Shell	Unmodified			2	108.4
8LV65.12.3	TU 1	H	Invertebrate	Tulip Shell	Unmodified			6	247.0
8LV65.12.4	TU 1	H	Invertebrate	Tulip Shell	Outer Whorl			1	3.4
8LV65.12.5	TU 1	H	Invertebrate	Crown Conch	Unmodified			2	80.7
8LV65.12.6	TU 1	H	Invertebrate	Crown Conch	UID Modified			10	288.0

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV65.12.7	TU 1	H	Invertebrate	Lightning Whelk	Unmodified			1	45.6
8LV65.12.8	TU 1	H	Invertebrate	Lightning Whelk	UID Modified			11	888.6
8LV65.12.9	TU 1	H	Invertebrate	Lightning Whelk	Tool			3	252.0
8LV65.12.10	TU 1	H	Invertebrate	Lightning Whelk	Columella			1	12.8
8LV65.12.11	TU 1	H	Invertebrate	Pear Whelk	Unmodified			5	110.0
8LV65.12.12	TU 1	H	Invertebrate	Pear Whelk	UID Modified			15	358.4
8LV65.12.13	TU 1	H	Invertebrate	Pear Whelk	UID Modified			3	73.8
8LV65.12.14	TU 1	H	Invertebrate	Misc. Gastropod	Outer Whorl			6	36.4
8LV65.12.15	TU 1	H	Invertebrate	Misc. Gastropod	Columella			2	7.8
8LV65.12.16	TU 1	H	Invertebrate	Misc. Gastropod	Unmodified			4	6.4
8LV65.12.17	TU 1	H	Invertebrate	Mercenaria	UID Modified			1	168.1
8LV65.12.18	TU 1	H	Misc. Rock	Coral				1	71.2
8LV65.12.19	TU 1	H	Vert. Fauna						171.6
8LV65.13.1	TU 1	I	Pottery	Limestone Temp	Body	UID	Eroded	2	10.4
8LV65.13.2	TU 1	I	Pottery	Sand Temp	Body	Plain	Plain	1	3.1
8LV65.13.3	TU 1	I	Pottery	Spicule Temp	Body	Plain	Plain	1	4.0
8LV65.13.4	TU 1	I	Pottery	Limestone Temp	Crumb			1	0.8
8LV65.13.5	TU 1	I	Invertebrate	Tulip Shell	Unmodified			5	198.5
8LV65.13.6	TU 1	I	Invertebrate	Tulip Shell	UID Modified			7	295.1
8LV65.13.7	TU 1	I	Invertebrate	Pear Whelk	Unmodified			4	54.2
8LV65.13.8	TU 1	I	Invertebrate	Pear Whelk	UID Modified			8	110.0
8LV65.13.9	TU 1	I	Invertebrate	Lightning Whelk	Unmodified			3	235.4
8LV65.13.10	TU 1	I	Invertebrate	Lightning Whelk	UID Modified			9	801.9
8LV65.13.11	TU 1	I	Invertebrate	Lightning Whelk	Tool			2	218.6
8LV65.13.12	TU 1	I	Invertebrate	Lightning Whelk	Tool			2	61.8
8LV65.13.13	TU 1	I	Invertebrate	Crown Conch	UID Modified			6	222.3
8LV65.13.14	TU 1	I	Invertebrate	Misc. Gastropod	Outer Whorl			11	193.1
8LV65.13.15	TU 1	I	Invertebrate	Misc. Gastropod	Columella			11	97.7
8LV65.13.16	TU 1	I	Invertebrate	Misc. Gastropod	UID Modified			4	33.3
8LV65.13.17	TU 1	I	Invertebrate	Misc. Bivalve	UID Modified			1	5.2
8LV65.13.18	TU 1	I	Invertebrate	Mercenaria	UID Modified			4	160.9
8LV65.13.19	TU 1	I	Vert. Fauna						147.2
8LV65.13.20	TU 1	I	Invertebrate	Lightning Whelk	Outer Whorl			2	11.8
8LV65.13.21	TU 1	I	Pottery	Sand Temp	Body	Stamped	Chk Stmpd	3	11.7
8LV65.13.22	TU 1	I	Pottery	Sand Temp	Crumb			1	0.7
8LV65.14.1	TU 1	J	Pottery	Sand Temp	Body	Stamped	Comp Stmp	1	9.7
8LV65.14.2	TU 1	J	Pottery	Sand Temp	Crumb			1	0.7
8LV65.14.3	TU 1	J	Invertebrate	Lightning Whelk	Unmodified			1	158.1
8LV65.14.4	TU 1	J	Invertebrate	Lightning Whelk	UID Modified			4	300.1
8LV65.14.5	TU 1	J	Invertebrate	Crown Conch	Unmodified			5	164.8
8LV65.14.6	TU 1	J	Invertebrate	Crown Conch	UID Modified			1	52.7
8LV65.14.7	TU 1	J	Invertebrate	Tulip Shell	Unmodified			1	61.2
8LV65.14.8	TU 1	J	Invertebrate	Tulip Shell	UID Modified			3	125.2
8LV65.14.9	TU 1	J	Invertebrate	Pear Whelk	Unmodified			2	49.3
8LV65.14.10	TU 1	J	Invertebrate	Pear Whelk	UID Modified			1	15.9
8LV65.14.11	TU 1	J	Invertebrate	Misc. Gastropod	Unmodified			3	12.6
8LV65.14.12	TU 1	J	Invertebrate	Misc. Gastropod	UID Modified			1	3.0
8LV65.14.13	TU 1	J	Invertebrate	Misc. Gastropod	Columella			3	4.8
8LV65.14.14	TU 1	J	Invertebrate	Misc. Gastropod	Outer Whorl			17	69.4
8LV65.14.15	TU 1	J	Invertebrate	Mercenaria	UID Modified			7	325.6
8LV65.14.16	TU 1	J	Vert. Fauna						11.5
8LV65.16.1	TU 1	K	Invertebrate	Lightning Whelk	UID Modified			1	65.4
8LV65.16.2	TU 1	K	Invertebrate	Lightning Whelk	Outer Whorl			1	14.5
8LV65.16.3	TU 1	K	Invertebrate	Misc. Gastropod	Unmodified			1	0.1
8LV65.16.4	TU 1	K	Invertebrate	Misc. Gastropod	UID Modified			1	0.1
8LV65.16.5	TU 1	K	Invertebrate	Misc. Gastropod	Columella			2	3.1
8LV65.16.6	TU 1	K	Invertebrate	Mercenaria	UID Modified			2	30.8
8LV65.16.7	TU 1	K	Invertebrate	UID				1	7.9
8LV65.16.8	TU 1	K	Vert. Fauna						3.8

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV65.17.1	TU 1	L	Pottery	Spicule Temp	Body	Incised	Cross	1	9.8
8LV65.17.2	TU 1	L	Pottery	Spicule Temp	Body	Plain	Plain	2	17.9
8LV65.17.3	TU 1	L	Pottery	Spicule Temp	Crumb			1	0.1
8LV65.17.4	TU 1	L	Pottery	Limestone Temp	Rim	Plain	Plain	1	27.1
8LV65.17.5	TU 1	L	Invertebrate	Lightning Whelk	UID Modified			1	192.4
8LV65.17.6	TU 1	L	Invertebrate	Lightning Whelk	Columella			3	24.9
8LV65.17.7	TU 1	L	Invertebrate	Tulip Shell	UID Modified			2	64.4
8LV65.17.8	TU 1	L	Invertebrate	Tulip Shell	Columella			11	66.6
8LV65.17.9	TU 1	L	Invertebrate	Misc. Gastropod	UID Modified			2	0.8
8LV65.17.10	TU 1	L	Invertebrate	Misc. Gastropod	Columella			6	24.5
8LV65.17.11	TU 1	L	Invertebrate	Misc. Gastropod	Outer Whorl			36	18.4
8LV65.17.12	TU 1	L	Invertebrate	Mercenaria	UID Modified			1	130.1
8LV65.17.13	TU 1	L	Vert. Fauna						17.0
8LV65.17.14	TU 1	L	Misc. Rock	Coral				4	1.1
8LV65.18.1	TU 1	M	Pottery	Limestone Temp	Rim	Plain	Plain	1	23.5
8LV65.18.2	TU 1	M	Pottery	Limestone Temp	Body	UID	Eroded	1	3.6
8LV65.18.3	TU 1	M	Pottery	Limestone Temp	Crumb			4	0.5
8LV65.18.4	TU 1	M	Invertebrate	Lightning Whelk	Tool			2	101.7
8LV65.18.5	TU 1	M	Invertebrate	Lightning Whelk	UID Modified			3	261.8
8LV65.18.6	TU 1	M	Invertebrate	Lightning Whelk	Columella			7	145.3
8LV65.18.7	TU 1	M	Invertebrate	Tulip Shell	UID Modified			11	424.1
8LV65.18.8	TU 1	M	Invertebrate	Tulip Shell	Columella			4	33.3
8LV65.18.9	TU 1	M	Invertebrate	Pear Whelk	UID Modified			1	22.3
8LV65.18.10	TU 1	M	Invertebrate	Misc. Gastropod	UID Modified			1	0.2
8LV65.18.11	TU 1	M	Invertebrate	Misc. Gastropod	Outer Whorl			58	581.1
8LV65.18.12	TU 1	M	Invertebrate	Misc. Gastropod	Columella			14	67.0
8LV65.18.13	TU 1	M	Invertebrate	Mercenaria	UID Modified			14	384.3
8LV65.18.14	TU 1	M	Vert. Fauna						16.1
8LV65.19.1	TU 1	N	Pottery	Limestone Temp	Rim	Plain	Plain	1	28.7
8LV65.19.2	TU 1	N	Pottery	Limestone Temp	Body	Plain	Plain	3	7.7
8LV65.19.3	TU 1	N	Invertebrate	Lightning Whelk	Unmodified			1	74.6
8LV65.19.4	TU 1	N	Invertebrate	Lightning Whelk	UID Modified			22	1057.6
8LV65.19.5	TU 1	N	Invertebrate	Lightning Whelk	Columella			7	71.4
8LV65.19.6	TU 1	N	Invertebrate	Lightning Whelk	Outer Whorl			3	102.7
8LV65.19.7	TU 1	N	Invertebrate	Pear Whelk	UID Modified			2	28.0
8LV65.19.8	TU 1	N	Invertebrate	Crown Conch	UID Modified			1	7.0
8LV65.19.9	TU 1	N	Invertebrate	Tulip Shell	UID Modified			24	550.1
8LV65.19.10	TU 1	N	Invertebrate	Tulip Shell	Columella			4	35.0
8LV65.19.11	TU 1	N	Invertebrate	Misc. Gastropod	UID Modified			7	30.1
8LV65.19.12	TU 1	N	Invertebrate	Misc. Gastropod	Columella			7	293.8
8LV65.19.13	TU 1	N	Invertebrate	Misc. Gastropod	Outer Whorl			115	215.7
8LV65.19.14	TU 1	N	Invertebrate	Mercenaria	UID Modified			7	211.5
8LV65.19.15	TU 1	N	Vert. Fauna						19.1
8LV65.20.1	TU 1	O	Invertebrate	Lightning Whelk	UID Modified			2	304.8
8LV65.20.2	TU 1	O	Invertebrate	Misc. Gastropod	Columella			10	110.3
8LV65.20.3	TU 1	O	Invertebrate	Misc. Gastropod	Outer Whorl			12	70.4
8LV65.20.4	TU 1	O	Invertebrate	Misc. Gastropod	UID Modified			3	18.2
8LV65.20.5	TU 1	O	Invertebrate	Tulip Shell	Unmodified			1	35.2
8LV65.20.6	TU 1	O	Vert. Fauna						22.8
8LV65.21.1	TU 1	P	Lithic	Chert	Shatter			7	5.3
8LV65.21.2	TU 1	P	Invertebrate	Misc. Gastropod	Columella			17	115.1
8LV65.21.3	TU 1	P	Invertebrate	Misc. Gastropod	Outer Whorl			28	31.1
8LV65.21.4	TU 1	P	Invertebrate	Misc. Gastropod	UID Modified			1	1.5
8LV65.21.5	TU 1	P	Invertebrate	Pear Whelk	UID Modified			1	0.5
8LV65.21.6	TU 1	P	Vert. Fauna						17.3
8LV65.22.1	TU 1	Q	Lithic	Chert	Flake			2	15.1
8LV65.22.2	TU 1	Q	Lithic	Chert	Flake			2	24.2
8LV65.22.3	TU 1	Q	Invertebrate	Misc. Gastropod	Outer Whorl			17	10.0
8LV65.22.4	TU 1	Q	Invertebrate	Misc. Gastropod	Columella			5	20.2

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV65.22.5	TU 1	Q	Invertebrate	Misc. Gastropod	Unmodified			2	13.9
8LV65.22.6	TU 1	Q	Vert. Fauna						8.0
8LV65.22.7	TU 1	Q	Charcoal	Wood				2	0.8
8LV65.23.1	TU 1	R	Invertebrate	Misc. Gastropod	Outer Whorl			1	0.7
8LV65.23.2	TU 1	R	Vert. Fauna						2.2

A. B. Midden 8LV65 – Piece Plots

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV65.10.1	TU1/PP1	G	Vert. Fauna					1	10.1
8LV65.34.1	TU1/PP1	III	Lithic	Chert	Flake			1	7.8

A. B. Midden 8LV65 - Flotation

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV65.33.1	TU 1	I	< 1/8" Assort. Mat.						89.3
8LV65.33.2	TU 1	I	1/8" Invertebrate						178.2
8LV65.33.3	TU 1	I	1/8" Vert. Fauna						2.4
8LV65.33.4	TU 1	I	1/8" Lithic					1	0.1
8LV65.33.5	TU 1	I	Pottery	Limestone Temp	Body	UID	Eroded	1	5.8
8LV65.33.6	TU 1	I	Lithic	Chert	Shatter			1	4.7
8LV65.33.7	TU 1	I	1/8" Concretion						1.7
8LV65.33.8	TU 1	I	Vert. Fauna						3.4
8LV65.33.9	TU 1	I	Invertebrate	Mercenaria				10	83.3
8LV65.33.10	TU 1	I	Invertebrate	Lightning Whelk	Columella			1	6.3
8LV65.33.11	TU 1	I	Invertebrate	Crown Conch	Columella			1	3.2
8LV65.33.12	TU 1	I	Invertebrate	Misc. Gastropod				2	0.7
8LV65.33.13	TU 1	I	Invertebrate	Misc. Bivalve					395.4
8LV65.33.14	TU 1	I	Invertebrate	Oyster					1558.1
8LV65.25.1	TU 1	II	Light Fraction						
8LV65.25.2	TU 1	II	<1/8 " Assort. Mat.						
8LV65.25.3	TU 1	II	Invertebrate	Crown Conch	UID Modified			1	12.7
8LV65.25.4	TU 1	II	Invertebrate	Pear Whelk	UID Modified			3	31.3
8LV65.25.5	TU 1	II	Invertebrate	Misc. Bivalve	UID Modified			208	146.2
8LV65.25.6	TU 1	II	Invertebrate	Misc. Gastropod	UID Modified			6	129.0
8LV65.25.7	TU 1	II	Invertebrate	Misc. Gastropod	UID Modified			27	87.0
8LV65.25.8	TU 1	II	Invertebrate	Mercenaria	UID Modified			8	115.6
8LV65.25.9	TU 1	II	Invertebrate	Barnacle					2.4
8LV65.25.10	TU 1	II	Invertebrate	Oyster					
8LV65.25.11	TU 1	II	Vert. Fauna						16.8
8LV65.25.12	TU 1	II	1/8" Invertebrate						221.1
8LV65.25.13	TU 1	II	1/8" Invertebrate						4.5
8LV65.25.14	TU 1	II	1/8" Vert. Fauna						5.6
8LV65.25.15	TU 1	II	1/8" Charcoal						0.2
8LV65.25.16	TU 1	II	1/8" Botanical						0.1
8LV65.25.17	TU 1	II	1/8" Concretion						0.1
8LV65.25.18	TU 1	II	Invertebrate	Oyster	Whole, Left			28	514.1
8LV65.25.19	TU 1	II	Invertebrate	Oyster	Whole, Left			72	654.3
8LV65.25.20	TU 1	II	Invertebrate	Oyster	Whole, Right			22	186.0
8LV65.26.1	TU 1	III	Light Fraction						
8LV65.26.2	TU 1	III	< 1/8" Assort. Mat.						144.9
8LV65.26.3	TU 1	III	Invertebrate	Mercenaria				11	218.9

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV65.26.4	TU 1	III	Invertebrate	Misc. Bivalve				152	148.2
8LV65.26.5	TU 1	III	Invertebrate	Misc. Gastropod	Unmodified			2	1.8
8LV65.26.6	TU 1	III	Vert. Fauna						10.3
8LV65.26.7	TU 1	III	Invertebrate	Misc. Gastropod	Outer Whorl			2	6.8
8LV65.26.8	TU 1	III	Invertebrate	Misc. Gastropod	Columella			1	1.2
8LV65.26.9	TU 1	III	Invertebrate	Misc. Gastropod	UID Modified			5	22.6
8LV65.26.10	TU 1	III	Invertebrate	Oyster	Fragment				1923.5
8LV65.26.11	TU 1	III	1/8" Vert. Fauna						5.5
8LV65.26.12	TU 1	III	1/8" Charcoal						0.4
8LV65.26.13	TU 1	III	1/8" Invertebrate						209.0
8LV65.26.14	TU 1	III	Oyster					101	553.4
8LV65.26.15	TU 1	III	Oyster					157	993.3
8LV65.26.16	TU 1	III	Oyster					33	389.6
8LV65.27.1	TU 1	IV	Invertebrate	Oyster	Whole, Left			103	1848.6
8LV65.27.2	TU 1	IV	Invertebrate	Oyster	Whole, Left			126	1788.4
8LV65.27.3	TU 1	IV	Invertebrate	Oyster	Whole, Right			13	59.2
8LV65.27.4	TU 1	IV	Light Fraction						21.0
8LV65.27.5	TU 1	IV	< 1/8" Assort. Mat.						63.0
8LV65.27.6	TU 1	IV	1/8" Invertebrate						67.1
8LV65.27.7	TU 1	IV	1/8" Vert. Fauna						0.6
8LV65.27.8	TU 1	IV	1/8" Charcoal						0.1
8LV65.27.9	TU 1	IV	Invertebrate	UID	Fragment				38.9
8LV65.27.10	TU 1	IV	Invertebrate	Oyster	UID Modified			335	768.6
8LV65.27.11	TU 1	IV	Invertebrate	Crown Conch	UID Modified			3	60.0
8LV65.27.12	TU 1	IV	Invertebrate	Tulip Shell	UID Modified			1	104.7
8LV65.27.13	TU 1	IV	Invertebrate	Pear Whelk	UID Modified			3	44.9
8LV65.27.14	TU 1	IV	Invertebrate	Lightning Whelk	UID Modified			1	43.4
8LV65.27.15	TU 1	IV	Invertebrate	Misc. Bivalve				40	187.3
8LV65.27.16	TU 1	IV	Vert. Fauna					1	0.1
8LV65.27.17	TU 1	IV	Invertebrate	Barnacle				1	0.7
8LV65.24.1	TU 1	V	Light Fraction						
8LV65.24.2	TU 1	V	< 1/8" Assort. Mat.						
8LV65.24.3	TU 1	V	1/8" Invertebrate						186.1
8LV65.24.4	TU 1	V	1/8" Vert. Fauna						2.6
8LV65.24.5	TU 1	V	1/8" Pottery						0.1
8LV65.24.6	TU 1	V	1/8" Charcoal						0.2
8LV65.24.7	TU 1	V	Invertebrate	Oyster					1168.1
8LV65.24.8	TU 1	V	Invertebrate	Tulip Shell	UID Modified			1	58.9
8LV65.24.9	TU 1	V	Invertebrate	Crown Conch	Outer Whorl			1	0.7
8LV65.24.10	TU 1	V	Invertebrate	Misc. Gastropod	Outer Whorl			9	5.5
8LV65.24.11	TU 1	V	Invertebrate	Mercenaria	UID Modified			3	2.1
8LV65.24.12	TU 1	V	Invertebrate	Misc. Bivalve	Unmodified			3	27.0
8LV65.24.13	TU 1	V	Invertebrate	Misc. Bivalve	UID Modified			39	37.0
8LV65.24.14	TU 1	V	Invertebrate	UID	Fragment				7.0
8LV65.24.15	TU 1	V	Vert. Fauna						1.3
8LV65.24.16	TU 1	V	Oyster					59	924.5
8LV65.24.17	TU 1	V	Oyster					60	485.7
8LV65.24.18	TU 1	V	Oyster					132	697.5
8LV65.28.1	TU 1	VII	< 1/8" Assort. Mat.						79.2
8LV65.28.2	TU 1	VII	1/8" Vert. Fauna						1.9
8LV65.28.3	TU 1	VII	1/8" Charcoal						0.2
8LV65.28.4	TU 1	VII	1/8" Invertebrate						19.2
8LV65.28.5	TU 1	VII	Invertebrate	Tulip Shell	Unmodified			1	94.5
8LV65.28.6	TU 1	VII	Invertebrate	Tulip Shell	UID Modified			3	96.9
8LV65.28.7	TU 1	VII	Invertebrate	Lightning Whelk	UID Modified			6	357.4
8LV65.28.8	TU 1	VII	Invertebrate	Mercenaria	UID Modified			6	137.1
8LV65.28.9	TU 1	VII	Invertebrate	Oyster	UID Modified			115	153.8
8LV65.28.10	TU 1	VII	Invertebrate	Misc. Gastropod	Columella			3	27.6
8LV65.28.11	TU 1	VII	Invertebrate	Misc. Gastropod	Outer Whorl			7	13.4

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV65.28.12	TU 1	VII	Invertebrate	Misc. Bivalve	UID Modified			57	54.4
8LV65.28.13	TU 1	VII	Invertebrate	UID	Fragment				6.4
8LV65.28.14	TU 1	VII	Vert. Fauna						3.5
8LV65.28.15	TU 1	VII	Misc. Rock	Limestone				1	10.1
8LV65.28.16	TU 1	VII	Light Fraction						5.7
8LV65.32.1	TU 1	VIII	< 1/8" Assort. Mat.						81.0
8LV65.32.2	TU 1	VIII	1/8" Vert. Fauna	Bone					6.8
8LV65.32.3	TU 1	VIII	1/8" Invertebrate						1.8
8LV65.32.4	TU 1	VIII	1/8" Charcoal						0.5
8LV65.32.5	TU 1	VIII	1/8" Lithic					1	0.1
8LV65.29.1	TU 1	XII	Invertebrate	Oyster	Fragment				1805.3
8LV65.29.2	TU 1	XII	Invertebrate	Oyster	Whole, Right			98	595.2
8LV65.29.3	TU 1	XII	Invertebrate	Oyster	Whole, Left			40	437.8
8LV65.29.4	TU 1	XII	Invertebrate	Oyster	Whole, Left			155	1214.2
8LV65.29.5	TU 1	XII	Light Fraction						41.1
8LV65.29.6	TU 1	XII	< 1/8" Assort. Mat.						319.0
8LV65.29.7	TU 1	XII	Invertebrate	Mercenaria	UID Modified			22	104.5
8LV65.29.8	TU 1	XII	Invertebrate	Misc. Bivalve	UID Modified				171.5
8LV65.29.9	TU 1	XII	Invertebrate	Lightning Whelk	UID Modified			2	119.5
8LV65.29.10	TU 1	XII	Invertebrate	Lightning Whelk	Columella			1	52.3
8LV65.29.11	TU 1	XII	Invertebrate	Pear Whelk	Unmodified			1	11.4
8LV65.29.12	TU 1	XII	Invertebrate	Tulip Shell	UID Modified			1	7.4
8LV65.29.13	TU 1	XII	Invertebrate	Misc. Gastropod	Unmodified			8	7.4
8LV65.29.14	TU 1	XII	Invertebrate	Misc. Gastropod	Columella			2	2.0
8LV65.29.15	TU 1	XII	Invertebrate	Misc. Gastropod	Outer Whorl			5	18.2
8LV65.29.16	TU 1	XII	Vert. Fauna						4.9
8LV65.29.17	TU 1	XII	1/8" Vert. Fauna						9.1
8LV65.29.18	TU 1	XII	1/8" Charcoal						0.2
8LV65.29.19	TU 1	XII	1/8" Fired Clay						0.1
8LV65.29.20	TU 1	XII	1/8" Invertebrate						269.7
8LV65.30.1	TU 1	XIII	Light Fraction						32.2
8LV65.30.2	TU 1	XIII	< 1/8" Assort. Mat.						349.6
8LV65.30.3	TU 1	XIII	Pottery	Limestone Temp	Rim	UID	Eroded	1	3.1
8LV65.30.4	TU 1	XIII	Pottery	Limestone Temp	Body	UID	Eroded	3	11.9
8LV65.30.5	TU 1	XIII	Pottery	Limestone Temp	Crumb			2	3.2
8LV65.30.6	TU 1	XIII	Pottery	Sand Temp	Body	UID	Eroded	1	9.5
8LV65.30.7	TU 1	XIII	Invertebrate	Oyster	Whole, Left			40	486.6
8LV65.30.8	TU 1	XIII	Invertebrate	Oyster	Whole, Left			154	1188.1
8LV65.30.9	TU 1	XIII	Invertebrate	Oyster	Whole, Right			103	483.3
8LV65.30.10	TU 1	XIII	Invertebrate	Oyster	Fragment				1975.5
8LV65.30.11	TU 1	XIII	1/8" Vert. Fauna						8.2
8LV65.30.12	TU 1	XIII	1/8" Invertebrate						352.9
8LV65.30.13	TU 1	XIII	1/8" Invertebrate	Misc. Gastropod	Unmodified			12	0.2
8LV65.30.14	TU 1	XIII	1/8" Charcoal						0.5
8LV65.30.15	TU 1	XIII	1/8" Botanical					4	0.0
8LV65.30.16	TU 1	XIII	Invertebrate	Misc. Bivalve					258.5
8LV65.30.17	TU 1	XIII	Invertebrate	Pear Whelk				1	3.1
8LV65.30.18	TU 1	XIII	Invertebrate	Mercenaria					188.3
8LV65.30.19	TU 1	XIII	Invertebrate	Crown Conch	Unmodified			1	34.6
8LV65.30.20	TU 1	XIII	Invertebrate	Misc. Gastropod	Columella			2	3.0
8LV65.30.21	TU 1	XIII	Invertebrate	Tulip Shell				1	1.1
8LV65.30.22	TU 1	XIII	Invertebrate	Misc. Gastropod	Outer Whorl				28.8
8LV65.30.23	TU 1	XIII	Vert. Fauna						13.4
8LV65.30.24	TU 1	XIII	Invertebrate	Barnacle				4	0.5
8LV65.30.25	TU 1	XIII	Invertebrate	Misc. Gastropod				1	0.4

Clam Beach 8LV66a – General Excavation

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV66A.10.1	Auger A		Pottery	Limestone Temp	Body	Plain	Plain	1	12.0
8LV66A.10.2	Auger A		Pottery	Limestone Temp	Crumb			2	2.8
8LV66A.10.3	Auger A		Invertebrate	Lightning Whelk	Unmodified			1	147.8
8LV66A.10.4	Auger A		Invertebrate	Lightning Whelk	UID Modified			2	205.9
8LV66A.10.5	Auger A		Invertebrate	Lightning Whelk	Columella			2	44.7
8LV66A.10.6	Auger A		Invertebrate	Lightning Whelk	Outer Whorl			2	43.5
8LV66A.10.7	Auger A		Invertebrate	Crown Conch	Unmodified			1	13.2
8LV66A.10.8	Auger A		Invertebrate	Crown Conch	UID Modified			4	140.0
8LV66A.10.9	Auger A		Invertebrate	Crown Conch	Outer Whorl			1	7.5
8LV66A.10.10	Auger A		Invertebrate	Pear Whelk	UID Modified			4	32.5
8LV66A.10.11	Auger A		Invertebrate	Pear Whelk	Outer Whorl			3	3.7
8LV66A.10.12	Auger A		Invertebrate	Tulip Shell	UID Modified			1	23.6
8LV66A.10.13	Auger A		Invertebrate	Tulip Shell	Columella			3	29.2
8LV66A.10.14	Auger A		Invertebrate	Misc. Gastropod	UID Modified			2	3.6
8LV66A.10.15	Auger A		Invertebrate	Misc. Gastropod	Outer Whorl			30	164.3
8LV66A.10.16	Auger A		Vert. Fauna						4.5
8LV66A.1.1	STP 1	0-45	Pottery	Limestone Temp	Rim	Plain	Plain	2	48.1
8LV66A.1.2	STP 1	0-45	Pottery	Limestone Temp	Body	Plain	Plain	21	102.8
8LV66A.1.3	STP 1	0-45	Pottery	Limestone Temp	Body	Stamped	Chk Stmp	1	5.0
8LV66A.1.4	STP 1	0-45	Pottery	Limestone Temp	Crumb			18	13.8
8LV66A.1.5	STP 1	0-45	Pottery	Sand Tempered	Body	Plain	Plain	11	71.7
8LV66A.1.6	STP 1	0-45	Pottery	Sand Tempered	Crumb			14	15.0
8LV66A.1.7	STP 1	0-45	Pottery	Sand Tempered	Body	Punctated	Drag and Jab	1	1.6
8LV66A.1.8	STP 1	0-45	Pottery	Sand Tempered	Body	UID	Eroded	1	2.7
8LV66A.1.9	STP 1	0-45	Pottery	Spicule Tempered	Body	Plain	Plain	1	7.2
8LV66A.1.10	STP 1	0-45	Lithic	Chert	Flake			3	5.1
8LV66A.1.11	STP 1	0-45	Lithic	Chert	Shatter			3	5.2
8LV66A.1.12	STP 1	0-45	Lithic	Chert	Shatter			1	3.0
8LV66A.1.13	STP 1	0-45	Invertebrate	Merceneria	UID Modified			3	69.2
8LV66A.1.14	STP 1	0-45	Invertebrate	Lightning Whelk	UID Modified			6	387.9
8LV66A.1.15	STP 1	0-45	Invertebrate	Lightning Whelk	Columella			3	291.9
8LV66A.1.16	STP 1	0-45	Invertebrate	Crown Conch	UID Modified			7	175.9
8LV66A.1.17	STP 1	0-45	Invertebrate	Crown Conch	Unmodified			1	46.9
8LV66A.1.19	STP 1	0-45	Invertebrate	Pear Whelk	UID Modified			6	9.0
8LV66A.1.20	STP 1	0-45	Invertebrate	Misc. Gastropod	Unmodified			1	18.9
8LV66A.1.21	STP 1	0-45	Invertebrate	Misc. Gastropod	Unmodified			5	7.4
8LV66A.1.22	STP 1	0-45	Invertebrate	Misc. Gastropod	Columella			86	454.4
8LV66A.1.23	STP 1	0-45	Invertebrate	Misc. Gastropod	Outer Whorl			48	519.2
8LV66A.1.24	STP 1	0-45	Invertebrate	Misc. Gastropod	UID Modified			5	67.9
8LV66A.1.25	STP 1	0-45	Invertebrate	Misc. Gastropod	UID Modified			1	15.4
8LV66A.1.26	STP 1	0-45	Invertebrate	Misc. Bivalve	Unmodified			1	1.2
8LV66A.1.27	STP 1	0-45	Invertebrate	UID	UID Modified			1	3.0
8LV66A.1.28	STP 1	0-45	Vert. Fauna						107.1
8LV66A.1.29	STP 1	0-45	Charcoal	Wood				3	0.2
8LV66A.1.30	STP 1	0-45	Misc. Rock	Igneous rock				2	8.6
8LV66A.1.31	STP 1	0-45	Historic	Glass				1	6.7
8LV66A.1.32	STP 1	0-45	Historic	Metal	Nail			2	4.7
8LV66A.1.33	STP 1	0-45	Historic	Metal	Fragment			2	2.7
8LV66A.1.34	STP 1	0-45	Historic	Plastic				3	3.2
8LV66A.1.35	STP 1	0-45	Misc. Rock	Limestone				2	4.2
8LV66A.1.36	STP 1	0-45	Misc. Rock	Coral				1	0.2
8LV66A.5.1	STP 1	45-100	Pottery	Sand Tempered	Body	Plain	Plain	1	2.5
8LV66A.5.2	STP 1	45-100	Pottery	Sand Tempered	Crumb			1	0.7
8LV66A.5.3	STP 1	45-100	Invertebrate	Lightning Whelk	Unmodified			2	184.1
8LV66A.5.4	STP 1	45-100	Invertebrate	Lightning Whelk	UID Modified			3	130.9
8LV66A.5.5	STP 1	45-100	Invertebrate	Lightning Whelk	Columella			4	136.1

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV66A.5.6	STP 1	45-100	Invertebrate	Crown Conch	UID Modified			3	67.9
8LV66A.5.7	STP 1	45-100	Invertebrate	Crown Conch	Outer Whorl			2	17.1
8LV66A.5.8	STP 1	45-100	Invertebrate	Tulip Shell	UID Modified			6	150.2
8LV66A.5.9	STP 1	45-100	Invertebrate	Tulip Shell	Unmodified			1	10.1
8LV66A.5.10	STP 1	45-100	Invertebrate	Tulip Shell	Columella			5	36.1
8LV66A.5.11	STP 1	45-100	Invertebrate	Pear Whelk	Unmodified			2	25.5
8LV66A.5.12	STP 1	45-100	Invertebrate	Pear Whelk	UID Modified			4	54.2
8LV66A.5.13	STP 1	45-100	Invertebrate	Pear Whelk	Columella			7	34.7
8LV66A.5.14	STP 1	45-100	Invertebrate	Misc. Gastropod	Unmodified			1	17.1
8LV66A.5.15	STP 1	45-100	Invertebrate	Misc. Gastropod	Columella			7	34.7
8LV66A.5.16	STP 1	45-100	Invertebrate	Misc. Gastropod	Outer Whorl			11	45.9
8LV66A.5.17	STP 1	45-100	Invertebrate	Misc. Bivalve	UID Modified			1	0.5
8LV66A.5.18	STP 1	45-100	Vert. Fauna						27.8
8LV66A.5.19	STP 1	45-100	Fired Clay					1	0.1
8LV66A.2.1	STP 2	0-5	Invertebrate	Lightning Whelk	UID Modified			1	216.3
8LV66A.3.1	TU 1	A	Pottery	Spicule Tempered	Rim	Plain	Plain	1	11.3
8LV66A.3.2	TU 1	A	Pottery	Sand Tempered	Rim	Stamped	Comp Stmp	1	12.8
8LV66A.3.3	TU 1	A	Pottery	Sand Tempered	Rim	Plain	Plain	1	3.5
8LV66A.3.4	TU 1	A	Pottery	Sand Tempered	Body	Plain	Plain	7	27.8
8LV66A.3.5	TU 1	A	Pottery	Sand Tempered	Crumb			3	4.1
8LV66A.3.6	TU 1	A	Pottery	Limestone Temp	Body	Plain	Plain	9	46.3
8LV66A.3.7	TU 1	A	Pottery	Limestone Temp	Crumb			2	3.2
8LV66A.3.8	TU 1	A	Lithic	Chert	Shatter			3	4.5
8LV66A.3.9	TU 1	A	Lithic	Chert	Flake			1	0.7
8LV66A.3.10	TU 1	A	Invertebrate	Crown Conch	Unmodified			1	36.0
8LV66A.3.11	TU 1	A	Invertebrate	Crown Conch	UID Modified			4	76.5
8LV66A.3.12	TU 1	A	Invertebrate	Lightning Whelk	UID Modified			3	101.0
8LV66A.3.13	TU 1	A	Invertebrate	Lightning Whelk	Columella			1	33.2
8LV66A.3.14	TU 1	A	Invertebrate	Pear Whelk	Unmodified			1	12.4
8LV66A.3.15	TU 1	A	Invertebrate	Pear Whelk	UID Modified			7	89.0
8LV66A.3.16	TU 1	A	Invertebrate	Tulip Shell	Unmodified			1	19.2
8LV66A.3.17	TU 1	A	Invertebrate	Tulip Shell	UID Modified			7	60.4
8LV66A.3.18	TU 1	A	Invertebrate	Misc. Gastropod	Columella			17	105.0
8LV66A.3.19	TU 1	A	Invertebrate	Misc. Gastropod	Outer Whorl			12	63.5
8LV66A.3.20	TU 1	A	Invertebrate	Misc. Gastropod	Unmodified			4	13.8
8LV66A.3.21	TU 1	A	Vert. Fauna						80.4
8LV66A.9.1	TU 1	A-D	Invertebrate	Lightning Whelk	UID Modified			2	215.2
8LV66A.9.2	TU 1	A-D	Invertebrate	Pear Whelk	UID Modified			1	13.5
8LV66A.9.3	TU 1	A-D	Invertebrate	Misc. Gastropod	Fragment			4	1.6
8LV66A.9.4	TU 1	A-D	Invertebrate	Merceneria	UID Modified			1	35.8
8LV66A.9.5	TU 1	A-D	Vert. Fauna					3	1.1
8LV66A.9.6	TU 1	A-D	Pottery	Limestone Temp	Body	Plain	Plain	1	7.6
8LV66A.4.1	TU 1	B	Pottery	Limestone Temp	Body	Plain	Plain	6	24.0
8LV66A.4.2	TU 1	B	Pottery	Limestone Temp	UID	UID	Eroded	1	9.6
8LV66A.4.3	TU 1	B	Pottery	Limestone Temp	Body	Stamped	UID	1	3.4
8LV66A.4.4	TU 1	B	Pottery	Limestone Temp	Crumb			12	9.3
8LV66A.4.5	TU 1	B	Pottery	Sand Tempered	Body	Plain	Plain	1	5.5
8LV66A.4.6	TU 1	B	Pottery	Sand Tempered	Crumb			1	0.3
8LV66A.4.7	TU 1	B	Invertebrate	Lightning Whelk	Unmodified			2	208.8
8LV66A.4.8	TU 1	B	Invertebrate	Lightning Whelk	UID Modified			7	525.0
8LV66A.4.9	TU 1	B	Invertebrate	Lightning Whelk	Columella			7	61.3
8LV66A.4.10	TU 1	B	Invertebrate	Crown Conch	Unmodified			4	206.8
8LV66A.4.11	TU 1	B	Invertebrate	Crown Conch	UID Modified			2	29.8
8LV66A.4.12	TU 1	B	Invertebrate	Tulip Shell	Unmodified			2	128.5
8LV66A.4.13	TU 1	B	Invertebrate	Tulip Shell	UID Modified			8	38.5
8LV66A.4.14	TU 1	B	Invertebrate	Tulip Shell	Columella			3	21.9
8LV66A.4.15	TU 1	B	Invertebrate	Pear Whelk	Unmodified			2	64.1
8LV66A.4.16	TU 1	B	Invertebrate	Pear Whelk	UID Modified			12	89.2
8LV66A.4.17	TU 1	B	Invertebrate	Misc. Gastropod	Unmodified			13	14.1

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV66A.4.18	TU 1	B	Invertebrate	Misc. Gastropod	UID Modified			14	33.1
8LV66A.4.19	TU 1	B	Invertebrate	Misc. Gastropod	Outer Whorl			52	211.9
8LV66A.4.20	TU 1	B	Invertebrate	Misc. Gastropod	Columella			9	14.9
8LV66A.4.21	TU 1	B	Invertebrate	Merceneria	UID Modified			7	227.1
8LV66A.4.22	TU 1	B	Invertebrate	Misc. Bivalve	Unmodified			1	0.4
8LV66A.4.23	TU 1	B	Invertebrate	Misc. Bivalve	UID Modified			5	19.8
8LV66A.4.24	TU 1	B	Vert. Fauna						380.5
8LV66A.4.25	TU 1	B	Pottery	Spicule Tempered	Crumb			1	0.5
8LV66A.4.26	TU 1	B	Lithic	Chert	Flake			1	0.2
8LV66A.4.27	TU 1	B	Lithic	Chert	Shatter			1	1.6
8LV66A.4.28	TU 1	B	Misc. Rock	Limestone				4	16.5
8LV66A.6.1	TU 1	C	Pottery	Limestone Temp	Body	Plain	Plain	3	8.5
8LV66A.6.2	TU 1	C	Pottery	Limestone Temp	Crumb			8	8.7
8LV66A.6.3	TU 1	C	Pottery	Sand Tempered	Body	Plain	Plain	1	4.1
8LV66A.6.4	TU 1	C	Pottery	Sand Tempered	Crumb			6	4.1
8LV66A.6.5	TU 1	C	Invertebrate	Lightning Whelk	Unmodified			2	491.2
8LV66A.6.6	TU 1	C	Invertebrate	Lightning Whelk	UID Modified			5	291.1
8LV66A.6.7	TU 1	C	Invertebrate	Lightning Whelk	Columella			9	100.2
8LV66A.6.8	TU 1	C	Invertebrate	Lightning Whelk	Outer Whorl			2	44.0
8LV66A.6.9	TU 1	C	Invertebrate	Crown Conch	Unmodified			1	16.3
8LV66A.6.10	TU 1	C	Invertebrate	Tulip Shell	Unmodified			2	21.6
8LV66A.6.11	TU 1	C	Invertebrate	Tulip Shell	UID Modified			6	180.1
8LV66A.6.12	TU 1	C	Invertebrate	Tulip Shell	Columella			5	52.4
8LV66A.6.13	TU 1	C	Invertebrate	Pear Whelk	Unmodified			1	40.0
8LV66A.6.14	TU 1	C	Invertebrate	Pear Whelk	UID Modified			3	29.5
8LV66A.6.15	TU 1	C	Invertebrate	Misc. Gastropod	Unmodified			5	7.3
8LV66A.6.16	TU 1	C	Invertebrate	Misc. Gastropod	UID Modified			7	9.3
8LV66A.6.17	TU 1	C	Invertebrate	Misc. Gastropod	Columella			16	64.3
8LV66A.6.18	TU 1	C	Invertebrate	Misc. Gastropod	Outer Whorl			25	126.3
8LV66A.6.19	TU 1	C	Invertebrate	Merceneria	UID Modified			11	112.5
8LV66A.6.20	TU 1	C	Vert. Fauna						59.0
8LV66A.6.21	TU 1	C	Charcoal	Hickory Nut				3	0.2
8LV66A.6.22	TU 1	C	Pottery	Sand Tempered	Body	UID	Eroded	1	5.0
8LV66A.7.1	TU 1	D	Invertebrate	Crown Conch	UID Modified			5	232.3
8LV66A.7.2	TU 1	D	Invertebrate	Lightning Whelk	Unmodified			8	728.2
8LV66A.7.3	TU 1	D	Invertebrate	Lightning Whelk	UID Modified			1	51.1
8LV66A.7.4	TU 1	D	Invertebrate	Lightning Whelk	UID Modified			16	1443.9
8LV66A.7.5	TU 1	D	Invertebrate	Pear Whelk	Unmodified			3	63.7
8LV66A.7.6	TU 1	D	Invertebrate	Pear Whelk	UID Modified			7	116.7
8LV66A.7.7	TU 1	D	Invertebrate	Tulip Shell	UID Modified			4	37.4
8LV66A.7.8	TU 1	D	Invertebrate	Misc. Gastropod	Columella			12	102.9
8LV66A.7.9	TU 1	D	Invertebrate	Misc. Gastropod	Outer Whorl			12	77.9
8LV66A.7.10	TU 1	D	Invertebrate	Misc. Gastropod	Unmodified			8	70.9
8LV66A.7.11	TU 1	D	Invertebrate	Merceneria	UID Modified			1	96.3
8LV66A.7.12	TU 1	D	Vert. Fauna						22.1
8LV66A.7.13	TU 1	D	Pottery	Limestone Temp	Rim	Plain	Plain	2	24.9
8LV66A.7.14	TU 1	D	Pottery	Limestone Temp	Body	Plain	Plain	2	13.4
8LV66A.7.15	TU 1	D	Pottery	Limestone Temp	Crumb			2	0.4
8LV66A.7.16	TU 1	D	Pottery	Sand Tempered	Body	Plain	Plain	3	10.4

Gardiner's Point 8LV68 – General Excavation

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV68.1.1	TU 1	A	Pottery	Limestone Temp	Body	Plain	Plain	14	61.7
8LV68.1.2	TU 1	A	Pottery	Limestone Temp	Crumb			2	1.4
8LV68.1.3	TU 1	A	Pottery	Sand Tempered	Body	Plain	Plain	4	15.3
8LV68.1.4	TU 1	A	Pottery	Sand Tempered	Body	Stamped	Chk Stmp	1	2.4
8LV68.1.5	TU 1	A	Pottery	Sand Tempered	Body	Stamped	Chk Stmp	1	6.5
8LV68.1.6	TU 1	A	Pottery	Sand Tempered	Crumb			7	10.1
8LV68.1.7	TU 1	A	Pottery	Sand Tempered	Base	Plain	Plain	1	11.6
8LV68.1.8	TU 1	A	Pottery	Sand Tempered	Crumb	Stamped	Chk Stmp	1	0.7
8LV68.1.9	TU 1	A	Pottery	Spicule Tempered	Body	Plain	Plain	1	2.2
8LV68.1.10	TU 1	A	Botanical					1	0.4
8LV68.1.11	TU 1	A	Historic	Metal	Nail			1	6.7
8LV68.1.12	TU 1	A	Historic	Metal	Rivet			1	0.3
8LV68.1.13	TU 1	A	Invertebrate	Misc. Gastropod				4	4.4
8LV68.1.14	TU 1	A	Invertebrate	Misc. Gastropod	Fragment				42.5
8LV68.1.15	TU 1	A	Invertebrate	Misc. Gastropod	Columella			13	57.2
8LV68.1.16	TU 1	A	Invertebrate	Misc. Gastropod	UID Modified			1	4.8
8LV68.1.17	TU 1	A	Invertebrate	Misc. Gastropod	Outer Whorl			53	149.9
8LV68.1.18	TU 1	A	Invertebrate	Mercenaria	UID Modified			5	108.7
8LV68.1.19	TU 1	A	Invertebrate	Pear Whelk	Columella			12	34.5
8LV68.1.20	TU 1	A	Invertebrate	Pear Whelk	Fragment			1	0.4
8LV68.1.21	TU 1	A	Invertebrate	Pear Whelk	UID Modified			22	105.9
8LV68.1.22	TU 1	A	Invertebrate	Crown Conch	Unmodified			2	94.1
8LV68.1.23	TU 1	A	Invertebrate	Crown Conch	UID Modified			1	50.3
8LV68.1.24	TU 1	A	Invertebrate	Lightning Whelk	Outer Whorl				867.2
8LV68.1.25	TU 1	A	Invertebrate	Lightning Whelk	Modified Shell			4	165.2
8LV68.1.26	TU 1	A	Invertebrate	Lightning Whelk	Columella			13	242.0
8LV68.1.27	TU 1	A	Invertebrate	Lightning Whelk	UID Modified			14	616.1
8LV68.1.28	TU 1	A	Invertebrate	Lightning Whelk	Hammer			1	81.1
8LV68.1.29	TU 1	A	Invertebrate	Tulip Shell	UID Modified			20	248.5
8LV68.1.30	TU 1	A	Invertebrate	Tulip Shell	Fragment			14	32.8
8LV68.1.31	TU 1	A	Invertebrate	Tulip Shell	Columella			10	50.6
8LV68.1.32	TU 1	A	Invertebrate	Misc. Bivalve				1	3.6
8LV68.1.33	TU 1	A	Vert. Fauna						230.3
8LV68.1.34	TU 1	A	Charcoal	Wood				1	0.1
8LV68.2.1	TU 1	B	Pottery	Limestone Temp	Body	Plain	Plain	7	23.1
8LV68.2.2	TU 1	B	Pottery	Limestone Temp	Crumb	Plain	Plain	3	3.8
8LV68.2.3	TU 1	B	Pottery	Sand Tempered	Body	Plain	Plain	2	6.5
8LV68.2.4	TU 1	B	Pottery	Sand Tempered	Crumb	Plain	Plain	4	5.0
8LV68.2.5	TU 1	B	Pottery	Sand Tempered	Body	Plain	Plain	1	3.8
8LV68.2.6	TU 1	B	Pottery	Sand Tempered	Rim	Plain	Plain	1	4.3
8LV68.2.7	TU 1	B	Historic	Slag				1	0.2
8LV68.2.8	TU 1	B	Charcoal	Wood				17	0.4
8LV68.2.9	TU 1	B	Vert. Fauna						86.2
8LV68.2.10	TU 1	B	Invertebrate	Misc. Bivalve	UID			22	15.7
8LV68.2.11	TU 1	B	Invertebrate	Misc. Gastropod	Unmodified			2	16.5
8LV68.2.12	TU 1	B	Invertebrate	Mercenaria	UID Modified			4	57.0
8LV68.2.13	TU 1	B	Invertebrate	Crown Conch	Unmodified			2	75.6
8LV68.2.14	TU 1	B	Invertebrate	Lightning Whelk	Modified Shell			2	43.9
8LV68.2.15	TU 1	B	Invertebrate	Lightning Whelk	Columella			5	327.0
8LV68.2.16	TU 1	B	Invertebrate	Lightning Whelk	Outer Whorl			3	162.2
8LV68.2.17	TU 1	B	Invertebrate	Lightning Whelk	Modified Shell			1	85.9
8LV68.2.18	TU 1	B	Invertebrate	Misc. Gastropod	Fragment				172.6
8LV68.2.19	TU 1	B	Invertebrate	Lightning Whelk	UID Modified			6	679.3
8LV68.2.20	TU 1	B	Invertebrate	Tulip Shell	Unmodified			4	173.3
8LV68.2.21	TU 1	B	Invertebrate	Tulip Shell	UID Modified			7	312.8
8LV68.2.22	TU 1	B	Invertebrate	Lightning Whelk	Unmodified			3	457.5

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV68.2.23	TU 1	B	Invertebrate	Pear Whelk	UID Modified			6	101.1
8LV68.3.1	TU 1	C	Pottery	Sand Tempered	Crumb			3	3.0
8LV68.3.2	TU 1	C	Pottery	Sand Tempered	Body	Plain	Plain	6	28.0
8LV68.3.3	TU 1	C	Pottery	Sand Tempered	Body	Stamped	Chk Stmp	1	2.3
8LV68.3.4	TU 1	C	Pottery	Sand Tempered	Rim	Stamped	Chk Stmp	1	5.8
8LV68.3.5	TU 1	C	Pottery	Sand Tempered	Rim	Plain	Incised Rim	1	5.2
8LV68.3.6	TU 1	C	Pottery	Limestone Temp	Crumb			2	3.9
8LV68.3.7	TU 1	C	Pottery	Limestone Temp	Body	Plain	Plain	2	9.7
8LV68.3.8	TU 1	C	Pottery	Limestone Temp	Body	Plain	Plain	2	9.7
8LV68.3.9	TU 1	C	Pottery	Limestone Temp	Rim	Plain	Plain	1	3.9
8LV68.3.10	TU 1	C	Historic	Metal (Lead)	Shot			1	25.9
8LV68.3.11	TU 1	C	Invertebrate	Misc. Bivalve				5	4.8
8LV68.3.12	TU 1	C	Invertebrate	Misc. Gastropod				2	3.7
8LV68.3.13	TU 1	C	Invertebrate	Misc.				11	6.0
8LV68.3.14	TU 1	C	Vert. Fauna						55.0
8LV68.3.15	TU 1	C	Invertebrate	Tulip Shell	Unmodified			4	183.2
8LV68.3.16	TU 1	C	Invertebrate	Tulip Shell	UID Modified			22	357.6
8LV68.3.17	TU 1	C	Invertebrate	Pear Whelk	Unmodified			2	43.1
8LV68.3.18	TU 1	C	Invertebrate	Pear Whelk	UID Modified			9	175.1
8LV68.3.19	TU 1	C	Invertebrate	Lightning Whelk	Unmodified			3	293.8
8LV68.3.20	TU 1	C	Invertebrate	Lightning Whelk	UID Modified			9	643.5
8LV68.3.21	TU 1	C	Invertebrate	Lightning Whelk	Tool			1	102.4
8LV68.3.22	TU 1	C	Invertebrate	Lightning Whelk	Scoop/Spoon			2	148.7
8LV68.3.23	TU 1	C	Invertebrate	Lightning Whelk	Columella			9	224.1
8LV68.3.24	TU 1	C	Invertebrate	Lightning Whelk	Outer Whorl			10	366.2
8LV68.3.25	TU 1	C	Invertebrate	Crown Conch	UID Modified			2	71.8
8LV68.3.26	TU 1	C	Invertebrate	Mercenaria	UID Modified			3	63.7
8LV68.3.27	TU 1	C	Invertebrate	Misc. Bivalve	UID Modified			2	4.8
8LV68.3.28	TU 1	C	Invertebrate	Misc. Gastropod	UID Modified				395.9
8LV68.4.1	TU 1	D	Invertebrate	Pear Whelk	Unmodified			16	368.2
8LV68.4.2	TU 1	D	Invertebrate	Pear Whelk	UID Modified			59	972.4
8LV68.4.3	TU 1	D	Invertebrate	Tulip Shell	Unmodified			23	1373.8
8LV68.4.4	TU 1	D	Invertebrate	Tulip Shell	UID Modified			65	2253.9
8LV68.4.5	TU 1	D	Invertebrate	Lightning Whelk	Unmodified			14	1237.1
8LV68.4.6	TU 1	D	Invertebrate	Lightning Whelk	UID Modified			25	1501.7
8LV68.4.7	TU 1	D	Invertebrate	Lightning Whelk	Dipper Vessel			3	364.3
8LV68.4.8	TU 1	D	Invertebrate	Misc. Gastropod	Unmodified			7	2.8
8LV68.4.9	TU 1	D	Invertebrate	Misc. Bivalve	Fragment				6.6
8LV68.4.10	TU 1	D	Invertebrate	Misc. Gastropod	Outer Whorl				131.9
8LV68.4.11	TU 1	D	Invertebrate	Misc. Gastropod	Fragment				77.9
8LV68.4.12	TU 1	D	Invertebrate	Misc. Gastropod	UID Modified			5	169.4
8LV68.4.13	TU 1	D	Invertebrate	Misc. Gastropod	Columella			51	471.6
8LV68.4.14	TU 1	D	Invertebrate	Misc. Gastropod	UID Modified				329.9
8LV68.4.15	TU 1	D	Invertebrate	Crown Conch	Unmodified			3	75.4
8LV68.4.16	TU 1	D	Vert. Fauna						81.9
8LV68.4.17	TU 1	D	Invertebrate	Mercenaria	UID Modified			1	26.6
8LV68.4.18	TU 1	D	Pottery	Limestone Temp	Body	UID	Eroded	9	39.4
8LV68.4.19	TU 1	D	Pottery	Limestone Temp	Body	Plain	Plain	1	8.5
8LV68.4.20	TU 1	D	Pottery	Limestone Temp	Rim	Plain	Plain	1	5.0
8LV68.4.21	TU 1	D	Pottery	Limestone Temp	Crumb			2	3.3
8LV68.4.22	TU 1	D	Pottery	Sand Tempered	Body	Impressed	Cord Mrkd	1	12.1
8LV68.4.23	TU 1	D	Pottery	Sand Tempered	Body	Stamped	Chk Stmp	2	18.7
8LV68.4.24	TU 1	D	Pottery	Sand Tempered	Crumb			3	4.3
8LV68.4.25	TU 1	D	Pottery	Sand Tempered	Body	Plain	Plain	2	9.1
8LV68.4.26	TU 1	D	Pottery	Sand Tempered	Body	Plain	Plain	2	8.4
8LV68.5.1	TU 1	E	Invertebrate	Lightning Whelk	Unmodified			18	1841.3
8LV68.5.2	TU 1	E	Invertebrate	Pear Whelk	Unmodified			22	443.8
8LV68.5.3	TU 1	E	Invertebrate	Tulip Shell	Unmodified			40	3203.3
8LV68.5.4	TU 1	E	Invertebrate	Lightning Whelk	UID Modified			56	3096.2

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV68.5.5	TU 1	E	Invertebrate	Pear Whelk	UID Modified			161	1927.8
8LV68.5.6	TU 1	E	Invertebrate	Tulip Shell	UID Modified			126	4154.7
8LV68.5.7	TU 1	E	Invertebrate	Misc. Bivalve				7	5.6
8LV68.5.8	TU 1	E	Invertebrate	Misc. Gastropod				13	170.0
8LV68.5.9	TU 1	E	Invertebrate	Mercenaria	UID Modified			14	806.9
8LV68.5.10	TU 1	E	Invertebrate	Crown Conch	Unmodified			2	165.2
8LV68.5.11	TU 1	E	Invertebrate	Crown Conch	UID Modified			1	75.0
8LV68.5.12	TU 1	E	Invertebrate	Lightning Whelk	Outer Whorl			29	443.9
8LV68.5.13	TU 1	E	Invertebrate	Lightning Whelk	Columella			12	311.2
8LV68.5.14	TU 1	E	Invertebrate	Lightning Whelk	Columella			1	119.2
8LV68.5.15	TU 1	E	Invertebrate	Lightning Whelk	Hammer			2	117.8
8LV68.5.16	TU 1	E	Invertebrate	Lightning Whelk	Shell Cup			3	144.8
8LV68.5.17	TU 1	E	Invertebrate	Lightning Whelk	Dipper Vessel			2	199.8
8LV68.5.18	TU 1	E	Invertebrate	Lightning Whelk	Scoop/Spoon			1	15.1
8LV68.5.19	TU 1	E	Invertebrate	Misc. Gastropod	Fragment				757.1
8LV68.5.20	TU 1	E	Invertebrate	Misc. Gastropod	Columella			105	362.7
8LV68.5.21	TU 1	E	Vert. Fauna						237.7
8LV68.5.22	TU 1	E	Invertebrate	Misc. Gastropod	Fragment			4	37.7
8LV68.5.23	TU 1	E	Lithic	Coral	Fragment			1	24.5
8LV68.5.24	TU 1	E	Pottery	Limestone Temp	Body	Plain	Plain	1	12.9
8LV68.5.25	TU 1	E	Pottery	Sand Tempered	Body	Plain	Plain	1	1.2
8LV68.5.26	TU 1	E	Pottery	Sand Tempered	Crumb			7	10.6
8LV68.5.27	TU 1	E	Pottery	Sand Tempered	Rim	Plain	Plain	1	8.1
8LV68.5.28	TU 1	E	Pottery	Sand Tempered	Body	Plain	Plain	6	26.1
8LV68.5.29	TU 1	E	Pottery	Sand Tempered	Body	Stamped	Chk Stmp	4	32.7
8LV68.7.1	TU 1	F	Invertebrate	Lightning Whelk	Unmodified			15	1751.1
8LV68.7.2	TU 1	F	Invertebrate	Lightning Whelk	UID Modified			25	2491.0
8LV68.7.3	TU 1	F	Invertebrate	Tulip Shell	Unmodified			14	962.1
8LV68.7.4	TU 1	F	Invertebrate	Tulip Shell	UID Modified			35	1653.7
8LV68.7.5	TU 1	F	Invertebrate	Pear Whelk	Unmodified			10	194.1
8LV68.7.6	TU 1	F	Invertebrate	Pear Whelk	UID Modified			35	657.2
8LV68.7.7	TU 1	F	Vert. Fauna						102.1
8LV68.7.8	TU 1	F	Pottery	Limestone Temp	Body	Incised	Curvilinear	1	44.7
8LV68.7.9	TU 1	F	Pottery	Sand Tempered	Body	Plain	Plain	1	13.5
8LV68.7.10	TU 1	F	Pottery	Sand Tempered	Crumb			1	1.9
8LV68.7.11	TU 1	F	Charcoal	Wood				1	0.2
8LV68.7.12	TU 1	F	Invertebrate	Lightning Whelk	columella			2	115.6
8LV68.7.13	TU 1	F	Invertebrate	Misc. Gastropod	Unmodified			4	15.5
8LV68.7.14	TU 1	F	Invertebrate	Lightning Whelk	Scoop/Spoon			6	395.4
8LV68.7.15	TU 1	F	Invertebrate	Misc. Bivalve	Fragment			4	4.3
8LV68.7.16	TU 1	F	Invertebrate	Mercenaria	Fragment			2	3.2
8LV68.7.17	TU 1	F	Invertebrate	Lightning Whelk	Columella			6	189.9
8LV68.7.18	TU 1	F	Invertebrate	Crown Conch	UID Modified			2	66.7
8LV68.7.19	TU 1	F	Invertebrate	Lightning Whelk	UID Modified			6	97.1
8LV68.7.20	TU 1	F	Invertebrate	Lightning Whelk	Modified Shell			1	57.6
8LV68.7.21	TU 1	F	Invertebrate	Lightning Whelk	Outer Whorl			13	327.2
8LV68.7.22	TU 1	F	Invertebrate	Lightning Whelk	Worked Shell			1	34.1
8LV68.7.23	TU 1	F	Invertebrate	Crown Conch	Unmodified			1	71.3
8LV68.7.24	TU 1	F	Lithic	Igneous rock	Sinker/Plummet			1	15.8
8LV68.7.25	TU 1	F	Invertebrate	Tulip Shell	UID Modified			7	64.2
8LV68.7.26	TU 1	F	Invertebrate	Pear Whelk	UID Modified			6	32.8
8LV68.7.27	TU 1	F	Invertebrate	Misc. Gastropod	Fragment			51	241.3
8LV68.7.28	TU 1	F	Invertebrate	Tulip Shell	Fragment			2	8.2
8LV68.12.1	TU 1	G	Vert. Fauna					20	9.0
8LV68.12.2	TU 1	G	Invertebrate	Misc. Gastropod	Fragment			17	100.3
8LV68.12.3	TU 1	G	Invertebrate	Tulip Shell	Unmodified			4	334.5
8LV68.12.4	TU 1	G	Invertebrate	Tulip Shell	UID Modified			5	185.5
8LV68.12.5	TU 1	G	Invertebrate	Lightning Whelk	Columella			6	148.8
8LV68.12.6	TU 1	G	Invertebrate	Lightning Whelk	Outer Whorl			5	160.4

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV68.12.7	TU 1	G	Invertebrate	Lightning Whelk	UID Modified			6	524.8
8LV68.12.8	TU 1	G	Invertebrate	Crown Conch	UID Modified			1	102.1
8LV68.12.9	TU 1	G	Invertebrate	Mercenaria	UID Modified			1	94.9
8LV68.8.1	Feat. 1		Vert. Fauna					14	6.2
8LV68.8.2	Feat. 1		Invertebrate	Pear Whelk	UID Modified			1	20.4
8LV68.8.3	Feat. 1		Invertebrate	Lightning Whelk				1	82.3
8LV68.10.1	Feat. 2		Vert. Fauna					12	3.0
8LV68.10.2	Feat. 2		Charcoal	Hickory Nut				1	0.2
8LV68.10.3	Feat. 2		Invertebrate	Misc. Gastropod	Columella			1	4.1
8LV68.10.4	Feat. 2		Invertebrate	Tulip Shell	Unmodified			2	163.5
8LV68.10.5	Feat. 2		Invertebrate	Pear Whelk	Unmodified			1	47.8
8LV68.10.6	Feat. 2		Invertebrate	Pear Whelk	UID Modified			1	15.0
8LV68.10.7	Feat. 2		Invertebrate	Lightning Whelk	UID Modified			2	92.7
8LV68.10.8	Feat. 2		Invertebrate	Lightning Whelk	Columella			1	6.3
8LV68.10.9	Feat. 2		Invertebrate	Lightning Whelk	Modified Shell			1	129.7

Gardiner's Point 8LV68 – Piece Plots/Surface Collection

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV68.6.1	Item 1	E	Pottery	Sand Tempered	Crumb			2	0.5
8LV68.6.2	Item 1	E	Pottery	Sand Tempered	Rim	Stamped	Chk Stmp	1	25.5
8LV68.6.3	Item 1	E	Pottery	Sand Tempered	Body	Stamped	Chk Stmp	21	266.1
8LV68.18.1	Surf. Coll.	Surface	Pottery	Limestone Temp	Body	Plain	Plain	4	27.9
8LV68.18.2	Surf. Coll.	Surface	Pottery	Sand Tempered	Body	Plain	Plain	6	55.7
8LV68.18.3	Surf. Coll.	Surface	Pottery	Grog Tempered	Rim	UID	UID	1	25.5
8LV68.18.4	Surf. Coll.	Surface	Invertebrate	Lightning Whelk	Cutting Edge Tool			1	171.9

Gardiner's Point 8LV68 - Flotation

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV68.9.1	Feature 1		Light Fraction						
8LV68.9.2	Feature 1		< 1/8" Assort. Mat.						215.3
8LV68.9.3	Feature 1		1/8" Vert. Fauna						23.8
8LV68.9.4	Feature 1		1/8" Invertebrate						250.1
8LV68.9.5	Feature 1		1/8" Fired Clay					10	0.5
8LV68.9.6	Feature 1		1/8" Charcoal					2	0.0
8LV68.9.7	Feature 1		Vert. Fauna						26.0
8LV68.9.8	Feature 1		Invertebrate	Misc. Bivalve				69	25.4
8LV68.9.9	Feature 1		Invertebrate	Mercenaria				14	185.7
8LV68.9.10	Feature 1		Invertebrate	Misc.					127.8
8LV68.9.11	Feature 1		Invertebrate	Barnacle				8	1.0
8LV68.9.12	Feature 1		Invertebrate	Misc. Gastropod	Unmodified			8	2.4
8LV68.9.13	Feature 1		Invertebrate	Misc. Gastropod	Outer Whorl			27	69.3
8LV68.9.14	Feature 1		Invertebrate	Misc. Bivalve					715.9
8LV68.9.15	Feature 1		Invertebrate	Oyster					1059.4
8LV68.9.16	Feature 1		Invertebrate	Tulip Shell	Unmodified			3	352.1
8LV68.9.17	Feature 1		Invertebrate	Lightning Whelk	UID Modified			3	226.5
8LV68.9.18	Feature 1		Invertebrate	Lightning Whelk	Columella			1	41.9
8LV68.9.19	Feature 1		Invertebrate	Misc. Gastropod	UID Modified			2	4.1
8LV68.11.1	Feature 2		Light Fraction						
8LV68.11.2	Feature 2		< 1/8" Assort. Mat.						2846.5
8LV68.11.3	Feature 2		1/8" Vert. Fauna						45.7

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV68.11.4	Feature 2		1/8" Charcoal						0.0
8LV68.11.5	Feature 2		1/8" Concretion		Unmodified				0.4
8LV68.11.6	Feature 2		1/8" Misc. Rock	Sand Tempered	Crumb			22	1.1
8LV68.11.7	Feature 2		1/8" Invertebrate						682.6
8LV68.11.8	Feature 2		1/8" Misc. Gastropod		Unmodified			13	0.8
8LV68.11.9	Feature 2		1/8" Misc. Bivalve		Unmodified			1	0.0
8LV68.11.10	Feature 2		Vert. Fauna						32.8
8LV68.11.11	Feature 2		Invertebrate	Oyster					4075.6
8LV68.11.12	Feature 2		Invertebrate	Barnacle				15	2.5
8LV68.11.13	Feature 2		Invertebrate	Misc. Gastropod	UID Modified				119.9
8LV68.11.14	Feature 2		Invertebrate	Misc. Gastropod	Unmodified			19	5.0
8LV68.11.15	Feature 2		Invertebrate	Misc. Gastropod	Fragment				97.9
8LV68.11.16	Feature 2		Invertebrate	Misc. Bivalve	Fragment				475.8
8LV68.11.17	Feature 2		Invertebrate	Pear Whelk	Unmodified			8	180.4
8LV68.11.18	Feature 2		Invertebrate	Pear Whelk	UID Modified			3	52.1
8LV68.11.19	Feature 2		Invertebrate	Pear Whelk	Fragment			1	2.0
8LV68.11.20	Feature 2		Invertebrate	Crown Conch	Unmodified			1	32.0
8LV68.11.21	Feature 2		Invertebrate	Tulip Shell	Unmodified			4	238.6
8LV68.11.22	Feature 2		Invertebrate	Tulip Shell	UID Modified			7	311.7
8LV68.11.23	Feature 2		Invertebrate	Tulip Shell	Columella			1	1.7
8LV68.11.24	Feature 2		Invertebrate	Tulip Shell	Fragment			2	8.3
8LV68.11.25	Feature 2		Invertebrate	Lightning Whelk	Unmodified			1	116.2
8LV68.11.26	Feature 2		Invertebrate	Lightning Whelk	UID Modified			1	36.0
8LV68.11.27	Feature 2		Invertebrate	Lightning Whelk	Columella			1	11.5
8LV68.11.28	Feature 2		Invertebrate	Lightning Whelk	Outer Whorl			2	22.5
8LV68.11.29	Feature 2		Invertebrate	Mercenaria					1837.9
8LV68.13.1	Feature 3		Light Fraction						
8LV68.13.2	Feature 3		< 1/8" Assort. Mat.						25.5
8LV68.13.3	Feature 3		Invertebrate	Oyster					92.4
8LV68.13.4	Feature 3		Invertebrate	Mercenaria					16.4
8LV68.13.5	Feature 3		Invertebrate	Misc. Gastropod	Fragment				10.2
8LV68.13.6	Feature 3		Invertebrate	Misc. Bivalve					23.7
8LV68.13.7	Feature 3		Vert. Fauna						0.3
8LV68.13.8	Feature 3		1/8" Invertebrate						23.2
8LV68.13.9	Feature 3		1/8" Vert. Fauna						2.8
8LV68.13.10	Feature 3		1/8" Misc. Gastropod						0.0
8LV68.13.11	Feature 3		1/8" Charcoal						0.0
8LV68.14.1	Sub Col. 1		< 1/8" Assort. Mat.						
8LV68.14.2	Sub Col. 1		Light Fraction						
8LV68.14.3	Sub Col. 1		Pottery	Limestone Temp	Crumb			1	2.0
8LV68.14.4	Sub Col. 1		Pottery	Sand Tempered	Rim	Plain	Plain	1	6.6
8LV68.14.5	Sub Col. 1		Vert. Fauna						55.7
8LV68.14.6	Sub Col. 1		Invertebrate	Barnacle				16	2.5
8LV68.14.7	Sub Col. 1		Invertebrate	Misc. Gastropod	Unmodified			7	3.7
8LV68.14.8	Sub Col. 1		Invertebrate		Fragment				153.7
8LV68.14.9	Sub Col. 1		Invertebrate	Mercenaria					905.4
8LV68.14.10	Sub Col. 1		Invertebrate	Misc. Bivalve					701.1
8LV68.14.11	Sub Col. 1		Invertebrate	Misc. Gastropod	Columella			9	20.7
8LV68.14.12	Sub Col. 1		Invertebrate	Lightning Whelk	UID Modified			2	88.6
8LV68.14.13	Sub Col. 1		Invertebrate	Tulip Shell	UID Modified			2	23.9
8LV68.14.14	Sub Col. 1		Invertebrate	Oyster					4577.2
8LV68.14.15	Sub Col. 1		1/8" Invertebrate						1239.9
8LV68.14.16	Sub Col. 1		1/8" Invertebrate	Misc. Gastropod	Unmodified			14	0.9
8LV68.14.17	Sub Col. 1		1/8" Vert. Fauna						64.7
8LV68.14.18	Sub Col. 1		1/8" Charcoal						0.4
8LV68.14.19	Sub Col. 1		1/8" Fired Clay					4	0.1
8LV68.14.20	Sub Col. 1		1/8" Lithic					3	0.2
8LV68.14.21	Sub Col. 1		1/8" Botanical					2	0.0
8LV68.14.22	Sub Col. 1		1/8" Invertebrate					1	0.0

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface Treatment	Decoration	Count (n)	Weight (g)
8LV68.15.1	Sub Col. 2		< 1/8" Assort. Mat.						290.0
8LV68.15.2	Sub Col. 2		1/8" Invertebrate						329.4
8LV68.15.3	Sub Col. 2		1/8" Vert. Fauna						11.5
8LV68.15.4	Sub Col. 2		Lithic	Quartz	Shatter			1	0.0
8LV68.15.5	Sub Col. 2		1/8" Pottery						0.0
8LV68.15.6	Sub Col. 2		1/8" Charcoal						0.0
8LV68.15.7	Sub Col. 2		Invertebrate	Oyster					4001.6
8LV68.15.8	Sub Col. 2		Invertebrate	Mercenaria				65	299.7
8LV68.15.9	Sub Col. 2		Invertebrate	Barnacle				6	0.9
8LV68.15.10	Sub Col. 2		Invertebrate	Tulip Shell	Columella			7	37.8
8LV68.15.11	Sub Col. 2		Invertebrate	Tulip Shell	UID Modified			2	76.7
8LV68.15.12	Sub Col. 2		Invertebrate	Lightning Whelk	Fragment			2	18.4
8LV68.15.13	Sub Col. 2		Invertebrate	Misc. Gastropod	Unmodified			4	1.5
8LV68.15.14	Sub Col. 2		Invertebrate	Misc. Gastropod	Fragment				146.0
8LV68.15.15	Sub Col. 2		Invertebrate	Pear Whelk	Unmodified			1	34.8
8LV68.15.16	Sub Col. 2		Invertebrate	Misc. Bivalve	Fragment				300.3
8LV68.15.17	Sub Col. 2		Vert. Fauna						25.9
8LV68.15.18	Sub Col. 2		Pottery	Sand Tempered	Body	Plain	Plain	2	9.3
8LV68.16.1	Sub Col. 3		< 1/8" Assort. Mat.						427.8
8LV68.16.2	Sub Col. 3		Vert. Fauna						11.5
8LV68.16.3	Sub Col. 3		Pottery	Sand Tempered	Crumb			1	0.8
8LV68.16.4	Sub Col. 3		Lithic	Limestone	Flake			1	19.1
8LV68.16.5	Sub Col. 3		Misc. Rock	Limestone	UID			2	0.3
8LV68.16.6	Sub Col. 3		Invertebrate	Barnacle				2	0.3
8LV68.16.7	Sub Col. 3		Invertebrate	Misc. Bivalve				1	0.0
8LV68.16.8	Sub Col. 3		Invertebrate	Misc. Bivalve	Fragment				56.5
8LV68.16.9	Sub Col. 3		Invertebrate	Mercenaria					372.7
8LV68.16.10	Sub Col. 3		Invertebrate	Oyster					1500.7
8LV68.16.11	Sub Col. 3		Invertebrate	Misc. Gastropod	Unmodified			7	3.6
8LV68.16.12	Sub Col. 3		Invertebrate	Misc. Gastropod	UID Modified			1	1.8
8LV68.16.13	Sub Col. 3		Invertebrate	Misc. Gastropod	Unmodified			2	0.7
8LV68.16.14	Sub Col. 3		Invertebrate	Misc. Gastropod	Fragment				141.4
8LV68.16.15	Sub Col. 3		Invertebrate	Pear Whelk	Fragment			2	0.6
8LV68.16.16	Sub Col. 3		Invertebrate	Pear Whelk	Columella			6	20.8
8LV68.16.17	Sub Col. 3		Invertebrate	Pear Whelk	Unmodified			1	23.4
8LV68.16.18	Sub Col. 3		Invertebrate	Pear Whelk	UID Modified			7	203.8
8LV68.16.19	Sub Col. 3		Invertebrate	Tulip Shell	Fragment			5	4.6
8LV68.16.20	Sub Col. 3		Invertebrate	Tulip Shell	UID Modified			7	11.3
8LV68.16.21	Sub Col. 3		Invertebrate	Tulip Shell	Unmodified			1	46.1
8LV68.16.22	Sub Col. 3		Invertebrate	Lightning Whelk	Fragment				62.4
8LV68.16.23	Sub Col. 3		Invertebrate	Lightning Whelk	UID Modified			3	81.8
8LV68.16.24	Sub Col. 3		Invertebrate	Lightning Whelk	Scoop/Spoon			1	24.0
8LV68.16.25	Sub Col. 3		1/8" Vert. Fauna						45.1
8LV68.16.26	Sub Col. 3		1/8" Fired Clay					3	0.1
8LV68.16.27	Sub Col. 3		1/8" Charcoal						0.5
8LV68.16.28	Sub Col. 3		1/8" Lithic	Limestone				21	1.5
8LV68.16.29	Sub Col. 3		1/8" Invertebrate	Misc. Gastropod				5	0.2
8LV68.16.30	Sub Col. 3		1/8" Invertebrate	Misc.	Fragment				231.5
8LV68.17.1	Sub Col. 4		Light Fraction						
8LV68.17.2	Sub Col. 4		< 1/8" Assort. Mat.						613.1
8LV68.17.3	Sub Col. 4		1/8" Invertebrate						269.9
8LV68.17.4	Sub Col. 4		1/8" Vert. Fauna						29.1
8LV68.17.5	Sub Col. 4		1/8" Misc. Gastropod					3	0.2
8LV68.17.6	Sub Col. 4		1/8" Lithic	Limestone				11	0.6
8LV68.17.7	Sub Col. 4		1/8" Fired Clay					27	1.0
8LV68.17.8	Sub Col. 4		1/8" Charcoal						1.8
8LV68.17.9	Sub Col. 4		Invertebrate	Mercenaria	Unmodified			2	566.6
8LV68.17.10	Sub Col. 4		Invertebrate	Mercenaria	UID Modified			168	2955.8
8LV68.17.11	Sub Col. 4		Invertebrate	Misc. Bivalve	UID Modified				117.6

Cat. Number	Prov.	Level	Material	Material Type	Form	Surface		Count (n)	Weight (g)
						Treatment	Decoration		
8LV68.17.12	Sub Col. 4		Invertebrate	Tulip Shell	UID Modified			1	8.7
8LV68.17.13	Sub Col. 4		Invertebrate	Tulip Shell	Fragment			1	6.5
8LV68.17.14	Sub Col. 4		Invertebrate	Misc. Gastropod	Operculum			1	0.3
8LV68.17.15	Sub Col. 4		Invertebrate	Misc. Gastropod	UID Modified			1	6.4
8LV68.17.16	Sub Col. 4		Invertebrate	Misc. Gastropod	Fragment				64.9
8LV68.17.17	Sub Col. 4		Invertebrate	Tulip Shell	Unmodified			1	107.2
8LV68.17.18	Sub Col. 4		Invertebrate	Lightning Whelk	Outer Whorl			1	5.9
8LV68.17.19	Sub Col. 4		Invertebrate	Lightning Whelk	UID Modified			7	320.4
8LV68.17.20	Sub Col. 4		Invertebrate	Lightning Whelk	Unmodified			2	307.5
8LV68.17.21	Sub Col. 4		Invertebrate	Pear Whelk	UID Modified			4	57.5
8LV68.17.22	Sub Col. 4		Invertebrate	Misc. Gastropod	Unmodified			3	1.2
8LV68.17.23	Sub Col. 4		Vert. Fauna					50	12.0
8LV68.17.24	Sub Col. 4		Charcoal	Wood				2	0.1
8LV68.17.25	Sub Col. 4		Invertebrate	Oyster					1462.7

APPENDIX B:
RADIOCARBON DATA

Prov.	Material	Beta Lab Number	Measured 14C Age BP	13C/12C Ratio (o/oo)	Conventional 14C Age BP	2-sigma Cal AD/BC	2-sigma Cal BP
<u>8LV2</u>							
TU1 Feat. 1 (intrusive root?)	charcoal	392621	210 ± 30	-27.9	160 ± 30	AD 1664–1709 AD 1718–1889 AD 1912–1950+	286–241 232–61 38–post 0
St. Johns Plain sherd	soot	394978	2670 ± 30	-24.7	2670 ± 30	BC 890–875 BC 845–800	2840–2825 2795–2750
St. Johns Check- Stamped sherd	soot	394977	730 ± 30	-25.2	730 ± 30	AD 1255–1290	695–660
<u>8LV42</u>							
TU7 Str. XXe	charcoal	392622	1530 ± 30	-25.2	1530 ± 30	AD 425–600	1405–1305
TU8 Str. III	charcoal	392623	1480 ± 30	-25.4	1470 ± 30	AD 545–645	1405–1305
TU8 Str. Va	charcoal	392624	1530 ± 30	-25.9	1520 ± 30	AD 430–490 AD 510–515 AD 530–605	1520–1460 1440–1435 1420–1325
TU9 Str. V	charred nutshell	411466	1790 ± 30	-26.1	1770 ± 30	AD 180–190 AD 215–340	1770–1760 1735–1610
<u>8LV65</u>							
TU1 Str. III	charcoal	392619	1690 ± 30	-26.0	1690 ± 30	AD 265–275 AD 330–420	1685–1675 1620–1530
TU1 Str. V	charcoal	392618	1930 ± 30	-24.6	1940 ± 30	AD 5–125	1945–1825
TU1 Str. VII	charcoal	392620	2440 ± 30	-27.5	2400 ± 30	BC 730–690 BC 660–650 BC 540–400	2680–2640 2610–2600 2490–2350
<u>8LV68</u>							
TU1 Str. II	charcoal	408514	1800 ± 30	-23.8	1820 ± 30	AD 125–255 AD 300–315	1825–1695 1650–1635