CHAPTER 1 INTRODUCTION AND RESEARCH ORIENTATION

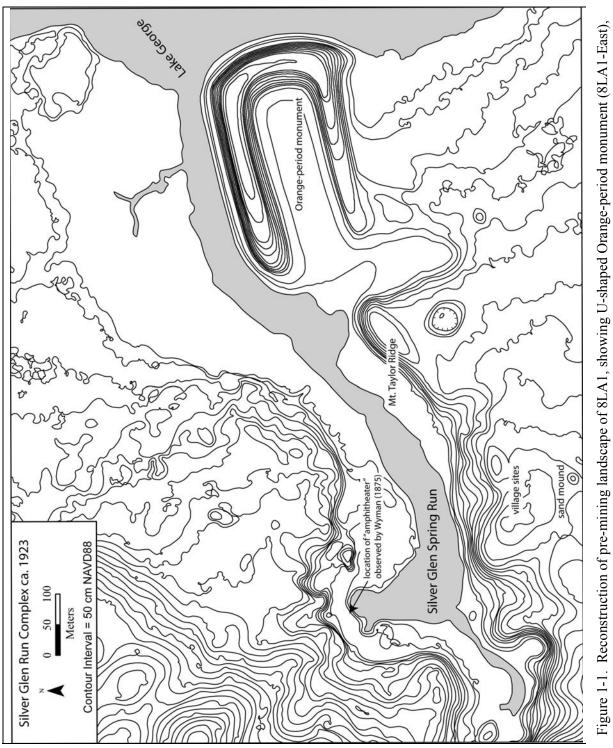
Kenneth E. Sassaman

After a five-season stint on Hontoon Island in Volusia County, the St. Johns Archaeological Field School moved to a locale on the western shore of Lake George known to contain some of the largest prehistoric shell deposits in northeast Florida (Figure 1-1). Owned by the Juniper Club of Louisville, Kentucky, the ca. 1250-hectare property contains the remnants of three or four ancient shell monuments of mid-Holocene age, at least nine hectares of shell-bearing deposits, two late-period sand mounds, and buried, shell-free strata dating to the early Holocene. Its major shellworks were noted repeatedly by naturalists since the mid-nineteenth century (Bartram 1942:44; LeBaron 1884:774; Wyman 1875:38-39), and the antiquarian C. B. Moore (1894:176-177) dug into one of the sand mounds in 1894. Despite this early interest, modern investigations have been lacking, perhaps because most of the large shellworks were eliminated in the early twentieth century by shell-mining operations.

Reported here are the results of the first four seasons of field school investigations at Silver Glen Run (8LA1/8MR3601; hereafter 8LA1). As recorded in the Florida Master Site File (FMSF), 8LA1 is the 7-hectare point of land formed by the confluence of Silver Glen Run with Lake George. This is the extreme northeast corner of the Juniper Club property in Lake and Marion counties, known to club members as "Shell Point." The massive U-shaped shellworks that caught the attention of early observers was mined in 1923 and sold for the sum of \$17,000 (Johnson 1994:43). Notwithstanding this destruction, subsurface and subaqueous remnants of shell deposits remain undisturbed. As at Hontoon Island and scores of other shellworks across the region, mining operations at 8LA1 exposed the basal strata of mounded shell, as well as the underlying evidence of earlier human activities. The St. Johns Archaeological Field School continues its longstanding interest in exploring the origins of monumentality by targeting mined shellworks such as 8LA1.

The remnants of shellworks at Shell Point are but a small portion of diverse, expansive archaeological deposits along the south margin of Silver Glen Run. Field school investigations have included subsurface testing across this locale, resulting in the tentative conclusion that archaeological deposits are continuous from Shell Point west along the run into Marion County. Lacking any clear break in archaeological deposits along this expanse, all areas tested since 2007 are described in this report under the rubric of 8LA1. To simplify discussion of this massive site, the Shell Point portion of 8LA1 is hereafter referred to as 8LA1-East, and its counterpart along the spring run is designated 8LA1-West. We anticipate the need to divide 8LA1 into its Lake and Marion county components following additional subsurface testing.

This report is divided into seven chapters. The balance of this chapter outlines the overarching research goals of the field school, the rationale for establishing long-term investigations at the Juniper Club, and a summary of findings from this first four years of





work. Chapter 2 summarizes the natural and cultural histories of the St. Johns region in general and the Silver Glen Run locale in particular. Results of 2007 and 2010 investigations at 8LA1-East are reported in Chapter 3. The methods and results of reconnaissance survey at 8LA1-West are the subject of Chapter 4, followed by the details of excavations at two loci in this portion of the site in Chapters 5-6. In the closing chapter we summarize the major findings of field schools from 2007-2010 and outline priorities for further investigations.

PROBLEM ORIENTATION OF FIELD SCHOOL PROGRAM

Good ethical practice in American archaeology dictates that archaeological field school training be underwritten by bona fide research programs. That is, field schools cannot be conducted for the sole purpose of student field training. Accordingly, the St. Johns Archaeological Field School continues to be structured by a series of research questions with broad anthropological relevance.

Field school interest in shellworks of the St. Johns River valley is guided by research on ancient monument construction in the greater Southeastern U.S. In recent years, archaeologists working in Louisiana (Saunders et al. 1997), Florida (Russo 1991), and South Carolina (Saunders and Russo 2002) have documented cases of monument construction dating as early as 5500 years ago. These cases predate the more widely known mound-building traditions of the Woodland period by over 3000 years, and the onset of pottery making by at least 1000 years. Our own work at Hontoon Island and vicinity adds to this inventory of early monuments with linear shell ridges that were constructed over habitation sites of the Mount Taylor period (ca. 7300-4600 calibrated radiocarbon years before present [hereafter cal B.P.]) (Randall 2007; Randall and Sassaman 2005; Sassaman and Randall 2012). Because many of these ancient shellworks in the St. Johns drainage continued to be utilized well into the last millennium, when pottery-making cultures of the St. Johns tradition flourished, they have often been misidentified as late-period constructions. All of the four shell ridges we tested on or near Hontoon Island had basal components dating to the Mount Taylor period, most with definitive evidence for shell mounding.

The anthropological significance of these recent findings lies in the contradictions they pose to longstanding perceptions about ancient hunter-gatherer societies. Whereas anthropologists acknowledge an "advanced" level of cultural complexity among certain ethnographic and late-prehistoric hunter-gatherer societies (e.g., Chumash, Calusa, Northwest Coast groups), those of the ancient past are widely regarded as fundamentally "simple" people. In the 1960s and 1970s, the empirical benchmark for "primitive" society was constructed from modern observations of small-scale, mobile huntergatherers, notably those of the Kalahari Desert of southern Africa. Wrongfully conscripted as a baseline for cultural evolution, these icons of hunter-gatherer living became standard analogs for ancient hunter-gatherers. Presumed to be egalitarian in principle, flexible in practice, and never large or stable in numbers, these populations are envisioned as lacking the wherewithal to erect large monuments, or, for that matter, any reason for doing so. The earthen mounds of Louisiana pose the clearest threat to this line of reasoning. They are, without question, intentional constructions that were sited and erected in stagelike fashion with great precision (Clark 2004; Sassaman and Heckenberger 2004). Little is known about the people who erected Louisiana mounds over 5000 years ago, but they appear to have had a lineal, if somewhat indirect, historical relationship to Poverty Point culture, the region's most celebrated mound-building people of the preagricultural era (Gibson 2000). Archaeologists will forever debate the significance of these earthen mounds, but no one can deny that these were monumental events that required engineering skill, orchestrated labor, and material provisioning.

In contrast, shellworks of the Atlantic and Gulf coasts, as well as those along the St. Johns River, are not so obviously monumental. There exists enormous variation in the size, internal structure, and content of shellworks. Because many contain the refuse of everyday living, there is a tendency to regard them as merely "trash heaps" or "shell middens" (e.g., Marquardt 2010). In contrast, the enormous size and formality of certain shellworks bear witness to nondomestic, "ritual" practices that arguably were monumental in purpose. These latter works commonly contain layers of shell, and sometimes sand or muck, that were deposited in massive loads. In some cases, episodes of mounding shell or sand coincide with burial of the dead (e.g., Aten 1999), but in most cases purposes other than human interment were at play because they contain no skeletal remains. Above all, large shellworks almost always encapsulate a variety of deposits, making it difficult to generalize about the process and purpose of their accumulation. And, because shell itself was derived from aquatic species consumed by humans, its use in monument construction is a persistent source of ambiguity.

The advanced level of variation among shellworks poses a great challenge to modern archaeology: How do we recognize monumental acts in archaeological deposits that are, in many respects, similar to those left from routine living? And, if we can make this distinction, what do these acts of monumentality tell us about the social, cultural, and political life of these ancient hunter-gatherers?

What we have learned thus far from investigations into St. Johns River shellworks is that they are best understood as historical (as opposed to evolutionary) phenomena. In regarding shellworks as historical phenomena we invoke two related themes: (1) acts of mound building were precipitated by specific events, and (2) acts of mound building were routinized in ritual practice with reference to such events, either literally or figuratively. It follows that we regard monuments as both "products" of historically situated persons, and as "texts" for interpreting their understanding of the past.

We have observed in several contexts that the "triggering" events for mounding shell (and/or sand/muck) was apparently the abandonment of settlements (Randall 2010; Sassaman and Randall 2012). Insofar as this transformation from "mundane" to "ritual" space occurred at different times across locations in the region, the ultimate cause, if there is one, may have been local ecological change, particularly a change in the spatial relationship between habitation spaces and the wetland habitat from which shellfish and other aquatic resources were obtained. Shellfish apparently were collected for subsistence purposes long before the first shell mound was erected, so its ecological limitations must have affected the sustainability of any given settlement. Confounding this logic is the fact that abandoned sites were often capped by shell in quantities of unprecedented scale.

In other locations across the globe, abandoned settlements were covered with earth or rock in acts of apparent commemoration. One of the better documented cases is the Neolithic frontier of northwest Europe, where long houses became long barrows upon abandonment (Bradley 1998). Importantly, this particular tradition appears to have arisen in the context of cultural encounters between indigenous and "foreign" people. Abandonment, then, may have had little to do with the ecological or economic sustainability of a settlement, and more with the transformations in culture and demographic alignments that encounters precipitate. Indeed, the covering of an abandoned settlement may in some cases mark efforts of certain persons to "erase" or "hide" the material evidence of former settlement (i.e., someone else's history).

Evidence for intercultural encounters in Florida coincident with the onset of monument construction has not been forthcoming. However, no one since the time of James Ford (1969) has been seeking such evidence. The widely held but seldom questioned assumption is that cultural developments in northeast Florida were strictly "homegrown." In order to substantiate this assumption, archaeologists must fine sound evidence for the cultural identities of societies in question. How people express themselves through material practices is the chief means of archaeological inference about culture. This involves mostly the artifacts whose forms and uses take on the qualities of "tradition," as in the traditional way to make a spear point or construct a house. Foodways are also relevant in this respect; however, like subsistence technology, they are constrained by ecological parameters. In this respect, the orthodox perspective on culture history in northeast Florida is that the local Mount Taylor populations initiated a riverine lifestyle involving shellfish harvesting that continued unabated through the late prehistoric era (Miller 1998). The Orange period that followed Mount Taylor at ca. 4600 cal B.P., and the St. Johns period that came after that are widely regarded as local, in situ (evolutionary) developments (Milanich 1994). The addition of pottery at the onset of the Orange period, once thought to signal the intrusion of a foreign people (Ford 1969), has for the last 30+ years been treated as nothing more than the technological intensification one expects of a lifestyle that enabled populations to grow larger and more stationary through time.

The chronology of fiber-tempered Orange pottery developed by Ripley Bullen (1972) exemplifies this in situ, evolutionary development. In his scheme, Orange pottery appears on the scene at about 4600 years ago. In the earliest centuries of its use, Orange pottery was plain and unassuming. By about 4100 years ago, incised Orange pottery became the dominate type, followed a few centuries later by the appearance of spiculate-paste wares of the St. John series. The pottery sequence of preceramic Mount Taylor \rightarrow Orange Plain \rightarrow Orange Incised \rightarrow St. Johns is tacitly accepted by most Florida archaeologists as evidence of historical continuity in northeast Florida.

Recent investigations have brought Bullen's sequence into question. New radiometric dates on soot from Orange Incised pottery shows it to be as old as the oldest plainwares, roughly 4600 cal B.P. (Sassaman 2003a). Additional assays on soot from spiculate-paste wares (St. Johns Plain and Incised) include one as old as the oldest Orange wares (Jenks 2006). Moreover, petrographic analyses of Orange Incised sherds dating to at least 4400 cal B.P. contain sponge spicules (Cordell 2004). Taken together, these observations support the inference that pottery types long-assumed to exist in serial fashion over a 1200-year period were actually coeval over the first few centuries of the fourth millennium B.P.

Now that we know that pottery types once thought to be sequential were actually coeval, we have to think about pottery in something other than chronological terms. Relevant in this regard is the spatial segregation of the earliest forms. Plain fiber-tempered pottery (Orange Plain) is often found in stratified shell midden deposits overlying (prepottery) Mount Taylor deposits (e.g., Sassaman 2003b). The apparent continuity in subsistence, use of space, and overall lifestyle suggests that pottery was simply an addition to a longstanding and persistent cultural tradition (i.e., Mount Taylor with pottery). But other locations with fiber-tempered pottery are dominated by Orange Incised pottery, occasionally in great abundance. Compared to locations dominated by Orange Plain, sites with abundant Orange Incised sherds tend to be larger: the biggest, most complex shellworks along the river, as well as on the coast (Saunders 2004a). The Mouth of Silver Glen Run (8LA1-East) is one such location.

The onset of pottery use in the middle St. Johns River valley was far more than the addition of a durable vessel technology to an existing Mount Taylor inventory. Rather, it marked a major transformation in the cultural landscape. The segregation between locations of plainware and locations of decorated ware is a pattern that would persist for at least two millennia. The segregation has been glossed over the years as the distinction between sacred and secular (e.g., Sears 1973). Whereas this simplistic notion outlived its analytical usefulness long ago, the pattern of spatial segregation is real. When Orange Incised was believed to be a late addition to an existing sequence, the appearance of massive shellworks with abundant Orange Incised pottery was simply the consequence of culture evolution (i.e., societies gradually grow bigger and more complex with time). Now that we know it is as old as the oldest Orange Plain, the onset of pottery in the context of massive monument construction was highly eventful.

The term "event" is used deliberately in this context to suggest that the onset of pottery and the transformation in monumentality that took place about 4600 cal B.P. was the result of population realignments that included the relocation of coastal groups to the middle St. Johns area. Given the pre-existing importation of marine shell by Mount Taylor groups in the middle St. Johns, the immigration of coastal groups was likely predicated on longstanding exchange alliances. No matter the degree of affinity, the influx of new personnel to the middle St. Johns required negotiations with local communities that involved, among other things, rituals at locations of massive shell monuments. Communities had to be "reinvented" out of two or more two distinct "cultures," and ritual at shellworks was apparently integral to this process.

Large Orange-period monuments are typically underlain by shell deposits of Mount Taylor age. Because water levels have risen substantially since Mount Taylor times, much of these submound deposits are now submerged. More commonly, Mount Taylor locations of shell accumulation, including the large, linear ridges noted earlier, were not utilized by groups making and using Orange pottery, plain or incised. Indeed, it appears as if pottery-using communities avoided many, maybe most of the Mount Taylor monuments (Randall and Sassaman 2010). It seems likely that many such locations were stranded from the wetland habitats that supplied all its shell, and thus incapable of supporting either long-term inhabitation or additional construction stages of shell after 4600 cal B.P.

Irrespective of their reoccupation during the Orange period, Mount Taylor shell ridges register an earlier transformation in use, well before the era of pottery. As noted earlier, many locations of Mount Taylor occupation were abandoned and then capped, usually with shell, but sometimes with layers of sand or muck, and occasionally human interments (Aten 1999; Endonino 2010). As we will see in Chapters 5 and 6, shell deposits along Silver Glen Run (8LA1-West) encapsulate these sorts of transformations, dating to as early as ca. 5500 cal B.P.

Potential causes for this transformation in Mount Taylor site use are many. It would appear that in some instances, changing water levels and fluctuations in food availability triggered settlement abandonment (Randall 2007, 2010). Still, as noted earlier, the enormous amount of shell that is often deposited over abandoned settlements causes us to question whether diminished shellfish productivity was a sufficient cause of change, and to consider instead historical factors similar to those hypothesized for the Orange period. Although evidence for population movements during the prepottery period eludes us, Mount Taylor communities of the middle St. Johns were involved in regional exchange networks that reached as far as northern Georgia and Mississippi (Endonino 2010). Such extralocal affiliations and interactions implicate a political economy that had the potential to influence local decision-making. That is, abandonment of Mount Taylor sites may have been precipitated not by local conditions, but by processes operating at a regional scale.

The deposits fronting the south bank of Silver Glen Run (8LA1-West) not only contain evidence for the Mount Taylor transformation, they hold some of the best analytical potential for identifying casual factors in the transformation. Like other first-magnitude springs in Florida, Silver Glen Run may be less vulnerable to local changes in precipitation and temperature compared to other water bodies of the St. Johns Basin (O'Donoughue 2011). It follows that locations along first-magnitude springs, while not necessarily the greatest habitat for shellfish, were among the most predictable locations for collecting aquatic resources and potable water.

Identifying the environmental parameters that enabled the massive harvest of shellfish for monument construction is a core objective of field school research. The abundance of snail shell that exists in such varied stratigraphic contexts, spanning many centuries, even millennia, is a woefully understudied record of paleoenvironment. The

shells of snails and mussels, vertebrate fauna, plant remains, wood charcoal, and other organic remains have been collected in controlled sampling columns of shellworks at nearly all of the St. Johns field school sites. Ultimately, these numerous samples—recovered from contexts of varying age, location, and form—provide a robust database for comparing the relationship between climate (as it affects aquatic habitat) and events of archaeological deposition. In pursuit of this objective, two additional datasets need to be collected: (1) modern control samples of species in question with accompanying data on temperature, water levels, and other relevant microenvironmental data; and (2) proxy data on paleoclimate for the archaeological samples in question. As the most abundant species in shellworks, *Viviparous georgianus* (banded mystery snail) is a good candidate species for intensive study (Blessing 2009, 2010). Another aquatic snail species, *Pomacea* spp. (apple snail), is likewise an excellent candidate because it occurs in discrete depositional lenses throughout shellworks. Analysis of the stable isotopes of these shellfish remains has the potential to provide proxy data on climatic factors that influenced their abundance at any point in time and space.

In sum, two distinct "events" punctuated the long history of inhabitation and monument construction along the St. Johns during the Mount Taylor and Orange periods. The first, termed herein the "Mount Taylor transformation," is the regionwide initiation of monument construction over abandoned settlements. The second, Orange-period transformation is marked by the construction of especially large, complex monuments and the spatial segregation between locations at which plain pottery was deposited and those at which incised pottery was deposited. For both "events," we must determine the extent to which these transformations were coeval across the region and thus precipitated by the same triggers, be they climatic or cultural. This a matter of fine-grained chronology, which requires a great deal of stratigraphic observation and sampling, coupled with independent radiometric age estimates. Of course, timing alone is only a piece of the puzzle, because explaining these events requires robust, multiscalar data on the environmental and cultural contexts in which these events transpired.

The Juniper Club is among the best locations to investigate the onset and transformations of monument construction in northeast Florida. As noted earlier, 8LA1-East was the location of one of the largest Orange Period monuments in the region. Although it was largely destroyed in 1923, its basal components remain largely intact. The antiquity of its Orange Incised pottery was established several years ago when 8LA1 sherds curated at the Florida Museum of Natural History were sampled for soot that was assayed by AMS technique (Sassaman 2003a). Complementing the Orange deposits are remnants of a Mount Taylor ridge (reported in Chapter 5 as Locus A) along Silver Glen Run with a stratigraphic sequence reflecting episodes of dwelling, abandonment, capping, and repeated reoccupation. Additional Mount Taylor, Orange, and late-period St. Johns II deposits extend across 9 ha of "shell fields," to use Wyman's term. On such location, reported in Chapter 6 as Locus B, has provided one of the best records of change in the study area: a basal Mount Taylor component overlain by an assemblage of large shellfish-steaming pits of Orange age, followed by a "capping" event that effectively buried the evidence of earlier activity and created a well-preserved stratified sequence of change. We have some preliminary data on a third locus of investigation along the run (Locus C) that encapsulates the record of aboriginal dwelling long after the Archaic era of shell mounding.

In four seasons of work at the Juniper Club, research objectives have revolved around fundamental archaeological documentation about the extent, internal configuration, and age of the shell deposits that survived mining operations 85 years ago. As the foregoing discussion anticipates, we are especially interested in documenting the archaeological evidence for transformative events in ancient history. The larger environmental and cultural contexts for these events will, of course, provide the inferential basis for knowing how and why they transpired. It follows that our research design is broad reaching, and involves data gathering at multiple scales of resolution.

SUMMARY OF FINDINGS

Chapters 3-6 of this report provide the full details of archaeological investigations at the Juniper Club from 2007-2010. The paragraphs that follow below provide brief summaries of these respective chapters, which are organized by the spatial units noted earlier, started with 8LA1-East, and followed in turn by Loci A-C of 8LA1-West, along the south margin of the spring run. In addition, reconnaissance survey across most of the area shown in Figure 1-1 was conducted in 2007 and 2008 to provide baseline data on the distribution of subsurface deposits

8LA1-East

Field investigations in 2007 at 8LA1-East were divided among three tasks: (1) systematic coring to determine the extent of subsurface shell deposits; (2) limited subsurface testing on the largest of the three islands off of Shell Point; and (3) limited subsurface testing in the presumed location of the south ridge of the U-shaped shellworks Wyman reported in 1875. The results of coring corroborated the general size, shape, and orientation of the shellworks Wyman described in print, as well as sketched in an unpublished drawing located by Asa Randall in the Medical Library archives of Harvard University. Subsurface testing the area of the south ridge was likewise successful in locating basal shell deposits and associated Orange period pottery, but too little was exposed to infer much about the activities or circumstances attending shell deposition. Testing on the largest island at the mouth of the spring run did not locate intact shell deposits but instead suggested that this entire island was redeposited fill from the 1923 shell-mining operation.

Lacking evidence for intact shell strata along the north ridge of the U-shaped shellworks, investigations in 2008 were expanded at Shell Point and at another of the islands at the mouth of the spring run. Neither location proved to contain intact shell deposits, although excavation at Shell Point was halted at the top of the water table, below which intact strata appear to lie. Despite an abundance of large Orange Incised sherds in the test units of island, coring and a radiometric age estimate far too young substantiated the inference that this landform, like the island tested the year before, consisted of fill redeposited during mining operations. Field school efforts in 2010 refocused attention on intact subsurface remains of the south ridge, first observed in 2007 and estimated to date to the latter half of the Orange period, ca. 4000-3800 cal B.P. The application of Ground Penetrating Radar (GPR) by Richard Estabrook of the Florida Public Archaeology Network provided our first remote view of subsurface deposits over a relatively large area of the ridge. Coring and subsurface testing showed that high resistance in the GPR signals was due largely to shell density, but we were unable to find definitive evidence for the purpose of shell deposition or the circumstances under which shell was emplaced. An overall arcuate pattern to dense subsurface shell suggested the presence of a circular or semi-circular village beneath the shell ridge, but direct evidence for architecture and associated features was not observed in 16 m² of controlled excavation. For now the U-shaped shellworks at the mouth of Silver Glen Run evade better definition and explanation, although the results of GPR survey provide hope for improved results in the future.

8LA1-West, Locus A

Originally consisting of a ~200-m-long shell ridge, Locus A of 8LA1-West was severely reduced by mining operations in the 1920s. Like others we have tested in the region, the Locus A ridge was not entirely destroyed. Surviving today are subsurface deposits dating to the Mount Taylor period, as well as mining escarpments along the northern margin of the ridge and in select locations elsewhere. Our strategy in such cases has been to profile escarpments to expose the above-ground layers and then continue the profiles below the present surface in controlled excavation units. In 2007 this process began at two locations in Locus A: at the eastern end of the ridge escarpment and some 90 m to the southwest, along the north edge of the ridge. Revealed in both exposures was complex sequence of basal midden capped by brown sand and then successive, relatively thin strata of crushed shell with artifacts, shallow pits, vertebrate fauna, charcoal and ash, paleofeces, and other indications of domestic living. A radiocarbon assay near the base of the 3-m-deep deposit returned a Mount Taylor age estimate of ca. 6200-5950 cal B.P.

The following summer we opened a larger exposure in one of the only mining escarpments to run perpendicular to the length of the ridge and the spring run. This 6-m-long trench verified the general sequence observed in 2007 and provided two additional radiometric assays: ca. 6300-6100 cal B.P. near the base of the deposit, and ca. 6000-5750 cal B.P. on charcoal approximately 60 cm higher up the profile. The larger exposure enabled us to observe stratigraphic facies not seen in the earlier profiles. Apparent were relationships between primary and secondary deposits, between presumed house platforms and associated refuse, and between emplaced sand and shell. Expansion of the escarpment test at the east end of the ridge was halted after encountering the remains of subadult humans, which were returned to their original location, backfilled and thereafter avoided. Observations to date suggest that the Mount Taylor ridge formed primarily through repeated occupation, although the emplacement of sand and clean shell, and interment of at least subadults points to activities other than domestic living.

8LA1-West, Locus B

A relatively small ridge nose overlooking Silver Glen Run was the locus of intensive activity over the Mount Taylor and Orange periods. Reconnaissance survey in 2007 showed this area, dubbed Locus B, to be fully intact, with stratified shell-bearing deposits extending down at least one meter below the surface. A single test unit excavated that same year revealed a sequence of stacked surfaces with abundant shell, vertebrate fauna, and plain fiber-tempered pottery of the Orange tradition. The following summer Zackary Gilmore commenced with intensive testing of Locus B, a project that carried forward through 2010 to form the basis for dissertation research at the University of Florida. As reported by Gilmore in Chapter 6 of this report, Locus B houses deposits during three successive but fundamentally different episodes of site use (see also Gilmore 2010). Revealed in a total of 45 m² of excavation to date is a basal Mount Taylor component indicative of repeated occupations dating from ca. 5750 to 4600 cal B.P., followed by a period of intensive pit digging activity ca. 4500-4000 cal B.P., and finally a capping event ca. 4000-3800 cal B.P. involving the emplacement of clean shell over the pit-pocked surface. Coincident with the pit activity is the first use of pottery at Locus B,

largely Orange Plain wares. The shell capping event, however, was accompanied by the deposition of incised Orange pottery of the Tick Island variety—a rare curvilinear and zoned-punctated type that deviates both technologically and stylistically from the usual linear incised Orange pottery, such as that found in great abundance along the north ridge of the U-shaped shellworks to the east. Gilmore is investigating the circumstances surrounding the seemingly abrupt transformation of site use at Locus B and will attempt to related these changes with coeval developments at the U-shaped shellworks beyond. Excavations in Locus shave proved to be highly productive and its results original.

8LA1-West, Locus C

A second, larger ridge nose to the immediately west of Locus B and overlooking the spring pool of Silver Glen is home to a late-period component with abundant secondary refuse and promise for an intact village site. Limited testing in 2008 revealed a thick and dense secondary midden on the northern slope of the landform, extending to the spring pool. Pottery of the St. Johns II period (post-A.D. 750 or post-1200 cal B.P.) dominated an assemblage rich in vertebrate fauna and other evidence of intensive activities. Limited testing atop the ridge nose, on the nearest flat ground, revealed subsurface features and other indications of a possible village. About 150 m southeast of this location is an intact sand mound, one of two in the vicinity that was not impacted by antiquarian digging or modern land use. Although we have very little additional information about Locus C, results of testing to date show great promise for an intact St. Johns II period village. Field investigations at Locus C were intensified in 2011. The results of this and the 2008 work are reserved for a follow-up report in the near future.

CONCLUSION

The first four years of archaeological investigations at the Juniper Club substantiate the claim that despite early 20th-century mining operations that removed

large quantities of shell, both intact subsurface and above-ground deposits across a large tract of land hold enormous potential for improving our understanding of pre-Columbian life in the region since at least 6000 years ago. Even greater time depth awaits investigations of subsurface deposits beneath those of Mount Taylor and Orange age. Field schools have provided excellent opportunities for fledging archaeologists to learn the technical aspects of the trade, but they have likewise afforded professionals the opportunity to delve into research questions that are precluded by the strictures of most contract archaeology. Our field school host—the Juniper Club of Louisville, Kentucky—is owed a debt of thanks for its enduring support of this effort.