

CHAPTER 7 CONCLUSIONS AND RECOMMENDATIONS

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Four summers of fieldwork at Silver Glen Run has resulted in a fairly detailed account of archaeological sites spanning some 6000 years. Property of the Juniper Club fronting Silver Glen Run once contained some of the largest, most complex shell deposits in northeast Florida. Although mining operations in 1923 compromised much of this archaeological record, intact deposits exist beneath the extant ground surface, as well as in escarpments left after mining shell. Moreover, the landforms fronting Silver Glen Run include several landforms that contain stratified archaeological deposits unaffected by mining. One such location, known to us as 8LA1-West Locus B, contains a remarkable record of intensive activity dating from ca. 5700 to 3800 years ago. Another ridge nose, Locus C, houses the remains of a village site dating to the 14th century. Additional archaeological deposits are pervasive in this part of the Juniper Club property; indeed, the land fronting Silver Glen Run is essentially one continuous archaeological site, with components distributed differentially but linked together in a more-or-less continuous occupational history. The land today continues to have great significance for individuals who appreciate its deep record of human occupation. The St. Johns Archaeological Field School has benefited immensely from the stewardship of the land by the Juniper Club and the opportunity it has provided to bring the ancient history of this land to light.

In this concluding chapter we summarized briefly the results of four field sessions at 8LA1 and follow with some general observations and recommendations for further work at this site, as well as other portions of the Juniper Club property. This report has been restricted to field school efforts dating from 2007 to 2010. Field school was also conducted in 2011 and is planned for the upcoming summer of 2012. Thus, this report is but the first installment in a series of reports. Likewise, graduate students who have been drawing on field school investigations in their doctoral research will issue additional information in their respective dissertations. The first of these is expected to be completed in 2013 (Zackary Gilmore, on Locus B), followed by another in 2014 or slightly later (Elyse Anderson, on Locus C).

SUMMARY OF INVESTIGATIONS

Since the first field school along Silver Glen Run in 2007, a major focus has been on detecting the remnants of a massive U-shaped shell deposit reported at the mouth of the run in 1875 by Jeffries Wyman of Harvard's Peabody Museum. All above-ground shell from this once ~8-m-tall deposit was removed in 1923, leaving a relatively flat surface to the east of the club house. Field school investigations at what is known as 8LA1-East in 2007, 2008, and 2010 were only partially successful in documenting the below-ground footprint of the U-shaped deposit. Coring and test-unit excavation across much of the area revealed a great deal of subsurface disturbance, particularly along the shoreline of Silver Glen Run, the presumed location of the north ridge of the U-shaped deposit. Small islands at the mouth of the run believed to be intact remnants of the shell

deposit proved to be redeposited fill, apparently emplaced to create fish habitat. Other major disturbances at the mouth of the run relate to the construction of a slip and loading ramp for the mining operation.

The south ridge of 8LA1-East was likewise severely reduced by mining, although augering and limited excavation in 2007 provided good evidence for its position and orientation. Subsurface deposits observed in the profiles of several test units suggested that shell along the south ridge was emplaced directly over the existing (natural) ground surface. Subsurface shell in some locations of the south ridge appears to have been placed over inorganic sands, the natural substrate of the landform. Throughout the area of the south ridge, shell-filled pits extended below the old surface, into the sands below. Ground Penetrating Radar (GPR) deployed in 2010 offered evidence for a circular or arcuate arrangement of such features. Circular villages of Orange age are not unexpected for the region, but we were frustrated that subsurface testing failed to reveal domestic features expected of a village occupation (e.g., hearths, house floors, post holes, etc.). It remains possible that the entirety of 8LA1-East was devoted to ritual activities that simply did not involve the sorts of domestic features and refuse we expect from intensive dwelling. Irrespective of the actual function of the south ridge, the combined efforts of subsurface testing confirms that it was added after the formation of the north ridge and that this activity resulted in a concentration of Orange Plain pottery in the former area and Orange Incised pottery in the latter area. We suspect that people of multiple cultural traditions were involved in the construction and use of the U-shaped deposit, some perhaps with roots on the coast, where circular or arcuate settlements were common during the Orange period.

Investigations to the west of 8LA1 began in 2007 with reconnaissance survey. This area contains the remnants of a 200-m-long shell ridge that was mined, along with several sites with well-stratified midden deposits of varying age and composition, all in reasonably good shape. Systematic shovel testing along property fronting Silver Glen Run shows that subsurface archaeological deposits are distributed widely across the 11.6-ha survey tract. Some 80 percent of the 238 shovel test pits (STPs) excavated in the tract yielded pre-Columbian artifacts and/or anthropogenic shell deposits, the latter observed in 133 STPs. Shell density varied markedly, with dense subsurface shell coinciding with the footprint of the mined Mount Taylor shell ridge designated Locus A, but occurring also across the terrace slopes of Loci B and C and in their respective shell domes to the south, forming the apex of adjacent ridge noses. Several areas devoid of shell were also encountered. Most noteworthy is a small shell void at the apex of Locus C, to the far west of the survey tract. Ongoing work in this location is providing evidence for a St. Johns II-period village with a presumed central plaza, apparently kept clean of shell.

Subsurface pre-Columbian artifacts, like shell, are distributed widely across the survey tract, revealing spatial patterning indicative of distinct archaeological components. Pottery sherds are generally absent in Locus A, the location of the Mount Taylor shell ridge. The oldest pottery, that of the Orange series, is concentrated in Loci B and C, largely in the shell nodes of each locus, but also in the downslope portion of Locus C. St. Johns pottery is likewise distributed across Loci B and C, with especially dense

occurrences in the downslope aspects of both loci. Check-stamped St. Johns pottery is concentrated in Locus C and especially in the shell-free ridge nose to the west of Locus C. In sum, reconnaissance survey of 8LA1-West shows that the entire expanse of land fronting the spring run contains intact subsurface deposits. Variation in the composition and density of subsurface shell and artifacts enables us to subdivide 8LA1-West into three loci (A, B, and C), each the subject of secondary testing, and Locus B the target of block excavation.

Shell-mining escarpments of the ridge at Locus A encase up to 3 m of stratified deposits. Six 2 x 2-m test units excavated in 2007 and 2008 were distributed across three widely-spaced locations of the ridge to reveal a consistent sequence of basal midden, accretional shell and sand, house mounds and associated midden accumulation, and possibly a final cap of sand. Seven AMS assays on charcoal from various layers of the ridge indicate that all deposition took place over a three-to-five-century period of the Mount Taylor phase, ca. 6300-5750 cal BP. Communities appear to have resided on this ridge as it accumulated, eventually constructing house mounds and imposing a formal spatial order to the placement of sand, shell, and the outputs of daily living. A major finding at Locus A is the use of sand as a medium of mounding. During this time frame, sand was used in conjunction with shell for purposes that were clearly mortuary (Aten 1999). Evidently, the emplacement of sand at Locus A did not involve human interments (the two subadult humans uncovered and then reburied at the east end of the ridge are an exception, and are not typical of Mount Taylor mound burials involving the emplacement of sand [Aten 1999; Endonino 2010]). The use of sand at Locus A may have been simply practical, for instance, in the construction of small houses mounds, but if so, it was pervasive, because sand strata up to 40 cm thick were observed in all profiles exposed to date. The volume of sand emplaced on the ridge is estimated to be a minimum of 2000 m³. One potential source for the sand is the depression 50 m to the south of the ridge, a presumed sinkhole. At ca. 2500 m³, the displaced volume of the depression is comparable to the minimal amount of sand deposited on the ridge. That the depression is indeed a sinkhole is speculative and awaits investigation.

The most intensive excavations of the field school have been conducted at Locus B, a relatively small, but complex shell-bearing site to the west of Locus A. Topographic mapping, auger testing, and a total of 45 m² of test unit excavations were conducted between 2007 and 2010, the last three years under the direction of Zackary Gilmore. After the first year of testing, we assumed the site to be an Orange-period habitation, but as the project continued in successive years, we came to understand it as a place whose function and meaning changed repeatedly over nearly a millennium spanning the late preceramic (Mount Taylor) and early ceramic (Orange) periods (ca. 5700-3800 cal BP). The earliest occupation resulted in stratified midden deposits similar to those at Locus A. With the introduction of pottery at ca. 4600 cal BP came a flurry of food processing activity involving massive pits, lots of them. While the pits in some cases were evidently shellfish steaming facilities, others have fill and other attributes that evoke a sense of ritual practice. After about five to six centuries, pit digging and infilling ceased and the site was capped with a thick mantle of shell. Contained in the shell cap are Orange-period sherds of the Tick Island variety, a unique regional variant appearing at about

4000 years ago. Coincident with these developments is the construction and use of the large U-shaped shell deposit at 8LA1-East.

In the concluding section of the chapter on Locus B (Chapter 6), Gilmore puts the results of Locus B into regional perspective. Much of the archaeological record of Locus B has no parallel in the documented literature, but some of its elements gain significance in the context of happenings elsewhere, notably on the coast. The argument need not be repeated here, but we note that Gilmore's ongoing study of pottery from Locus A and 8LA1-East involves sourcing analyses that have good potential to identify the provenance of clays used to make pots, and with that, the geographic origins of communities participating in large-scale gatherings, such as those imagined for 8LA1-East.

Finally, limited testing at Locus C in 2008 documented the presence of a St. Johns II period (ca. 600 years ago) midden at the top of the ridge nose, a presume village site. It is bounded to the north, toward the spring boil, by a 2-m thick, organic-rich midden spanning the past 300 years. Because testing of Locus C did not begin in earnest until the summer of 2011, the results are not included in this report, but will be included in a later installment. More intensive testing at Locus C is scheduled for 2012 and perhaps beyond, and will figure prominently in the dissertation project underway by Elyse Anderson.

DISCUSSION

The major goals of field school investigations in the first two years were to locate all archaeological resources in the Juniper Club property fronting Silver Glen Run and to begin to assess the age and composition of each component through controlled stratigraphic testing. In 2009 a limited crew of experienced excavators, including field school supervisors, focused efforts on more detailed testing of Locus B in support of dissertation research of Zackary Gilmore. As this work continued in 2010 we ramped up efforts to document the subsurface remains of the south ridge at 8LA1-East, deploying for the first time Ground Penetrating Radar (GPR). The combined efforts through 2010 amount to 238 shovel tests across 8LA1-West, 119 m² of excavation in four areas of 8LA1, about 1200 m² of GPR survey in a portion of the south ridge at 8LA1-East, and scores of cores and augers in a variety of contexts. As field work progressed, research questions evolved to encompass more than simply finding, characterizing, and dating archaeological remains. However, the basic goal of characterizing subsurface deposits at 8LA1 remains an ongoing project. The site is a large, complex amalgam of many distinct components, some stratified in vertical sequences, others distributed differentially across varied landforms paralleling the spring run. Above all, 8LA1 is an anthropogenic landscape, whose surface contours and subsurface layers are the product of human activity, much of it involving the deliberate emplacement of shell, sand, and other materials.

To date, 28 age estimates have been obtained on charcoal or soot samples from a wide variety of contexts at 8LA1. Figure 7-1 shows all age estimates as two-sigma calibrated date ranges, ordered by time from oldest (left) to youngest (right) and divided

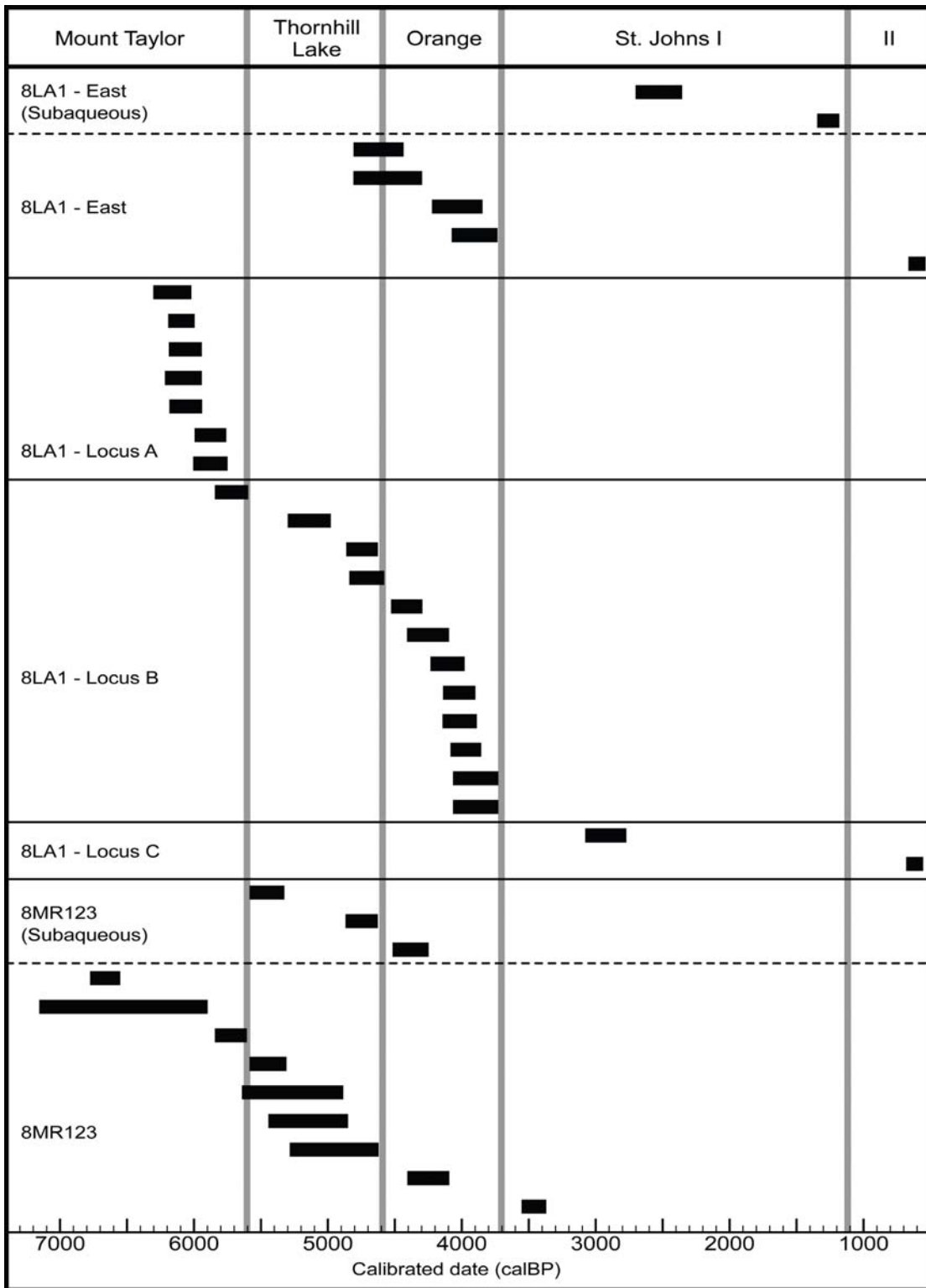


Figure 7-1. Two-sigma age estimate ranges on AMS assays from carbon samples from sites 8LA1 and 8MR123, subdivided into components and showing culture-historical divisions of regional chronology.

vertically from west (bottom) to east (top) along the run. Included at the bottom are age estimates obtained for 8MR123, the site surrounding the spring pool of Silver Glen on property of the U.S. Forest Service. Investigations at 8MR123 led by Asa Randall in 2010 incorporated field school students in the reconnaissance stage of fieldwork. Figure 7-1 is taken from Randall's report to the Forest Service (Randall et al. 2011).

As seen in Figure 7-1, human activity in the greater Silver Glen Run locality was more-or-less continuous from about 7000 to 3700 years ago. We know from shovel tests results and surface collections that occupation of the locality stretches back well before this time, evidently as much as 10,000 years based on the occasional occurrence of Early Archaic bifaces and unifaces, as well as heavily patinated flakes. However, archaeological deposits predating 7000 years ago have not presented themselves in any of our excavations to date. Apparently, shellfish were not collected and deposited in any significant fashion until this time and without the addition of shell to archaeological matrix, the residues of human activity are far less conspicuous and less well preserved.

The intensive and widespread practice of collecting shellfish and depositing their shells in mounds, middens, and pits after 7000 BP resulted a dramatic and highly visible archaeological record. As we have seen, much of this remains encased deep under the ground, particularly the output of infilling large pits at Locus B and Locus C. After about 3700 BP intensive shellfish collecting and shell depositing appears to have waned. This is more-or-less the end of the Orange period and the beginning of the St. Johns period. Sherds of this later period are common at many locations along the spring run, as they are throughout northeast Florida. That we have yet to encounter intact deposits of the St. Johns I period (ca. 3700-1100 cal B.P.) is perhaps not too surprising considering the tops of shell deposits have been truncated by mining, and any occupation of surfaces that have been plowed or otherwise altered in the modern era would have displaced St. Johns materials from near-surface contexts. The one deeply buried context for a St. Johns I component came from the downslope midden of Locus C. Two other AMS assays for deposits of this time period came from subaqueous contexts at 8MR123, as well as an additional terrestrial context at that site, in this case from an "upland" landform away from the spring pool. As work progresses at 8LA1 we are likely to encounter better contexts for St. Johns I deposits, closing the apparent gap in the radiocarbon record between Orange and St. Johns II.

Well preserved archaeological deposits dating to the St. Johns II period are encased in the portion of 8LA1-East known as Locus C (technically, this portion of the site extends into Marion County and is recorded in the Florida Master Site Files as 8MR3601). As mentioned repeatedly in this report, concentrated work on this location began in only 2011, and we have plans continue that project in 2012 and perhaps beyond. What information we have to this point suggests that Locus C was a circular or semi-circular village with a small central plaza and a massive downslope midden that capped earlier deposits. We suspect that the sand mound to the southeast of Locus C dates to this village occupation (~13th century). One other AMS assay of this timeframe came from the apparent burned post in the south ridge of 8LA1-East. Placed in what appears to be a basin-shaped deposit of white sand, the post does not appear to be associated with a

structure and its function remains uncertain. Given the frequency of St. Johns II check-stamped pottery in the water fronting 8LA1-East, as well as the spring pool of 8MR123, we are assured that occupation of the area during this interval was substantial, even beyond the village site at Locus C.

A few other observations of occupational chronology are noteworthy. Enough dates are currently available to suggest that the Mount Taylor occupation of Locus B was initiated at the same time Locus A was abandoned. As with the transformations in site use Gilmore outlines for Locus B, patterns of site use across the area seem to suggest that abandonments and relocations involved more than simply finding a better place to make a living. Indeed, the proximity of Loci A and B make it hard to imagine that access to food and water resources was ever significantly different between the two, nor is there any reason to suspect that Locus A became uninhabitable due to flooding or any other catastrophic events. The changes appear instead to be cultural choices and may have had little to do with the material conditions or uninhabitability of either location. We hasten to add, however, that the post-Mount Taylor use of Locus A remains elusive. We suggested in Chapter 5 that the cap on top of the shell ridge at Locus A was emplaced as the site was abandoned, but we simply do not have the data to substantiate this assertion.

Another coincidence may be seen in the transformation of the shell ridge at 8LA1-East into a U-shaped monument and the shell cap emplaced over the Orange-period pit assemblage at Locus B. This occurred at about 4000 years ago, when the south ridge was apparently constructed. This activity appears to have been conducted by people using Orange Plain pottery like that documented in pit features at Locus B. How the deposition of Tick Island Incised pottery in the shell cap at Locus B relates to construction of the south ridge is unknown, for we have yet to locate pottery of this type in the south ridge. Ongoing research on the provenance of these various wares by Gilmore has the potential to solve this puzzle.

A lingering frustration in field school research has been the lack of solid evidence for Orange-period habitation sites. Our assumption that Locus B was a village of this age has not been realized. We remain optimistic that good evidence for Orange-period habitation will one day be located at 8LA1-East, the locus of an enormous assemblage of Orange Incised pottery, as well as the Orange Plain noted earlier at the south ridge. To date, however, nearly all incidences of Orange Incised pottery have come from underwater and the redeposited islands at the mouth of Silver Glen Run. The upland landform of 8MR123 holds potential too for an Orange-period village, and the recent GPR survey of the bait field of Locus B at 8LA1-West offers suggestive evidence for a circular arrangement of subsurface features, another possible village. Solid evidence for places of dwelling during the Orange period are likely to be forthcoming, although we have seen enough of Orange-period at 8LA1 to know that what appears to be habitation is often specialized activity that may have had little to do with day-to-day living.

RECOMMENDATIONS

The first four years of investigations at Juniper Club property along Silver Glen Run have been enormously productive, as we have learned a great deal about an area that was not much more than a footnote in the accounts of 19th-century naturalists and antiquarians. And yet, as is the case in archaeology generally, our work has led to new questions as basic issues of chronology and site function are resolved. There is indeed much more that can be done. We are often asked by club members how long we plan on working on the property, and the answer has always been: “As long as you’ll have us.”

Short- and long-range goals for future fieldwork can be itemized. First, we have yet to open a large enough area of Locus A to reveal spatial relationships among different types of deposits (e.g., house mounds, primary deposition, secondary deposition, features, etc). Because most of the upper portion of the shell ridge at Locus A was removed by mining, the only option for block excavation is the floor of the mining pit. Upwards of one meter of stratified deposits are known to exist in certain locations of the mining pit, offering opportunities for examining more than simply the “basement” of the ridge. In some locations, GPR may prove useful, although the density of tree roots and near-surface concreted midden will no doubt obscure any patterning of subsurface cultural features. Nonetheless, the aim in opening a large horizontal area, or multiple areas of Locus A is to collect direct evidence for the spatial arrangement of dwelling during the Mount Taylor phase, and with it paleoenvironmental data from secure feature contexts.

Second, large-scale testing at Locus C initiated in 2011 ought to continue until we have sufficient data to reconstruct the size and configuration of the presumed St. Johns II village overlooking the spring pool, including data on architecture, duration of occupation, and seasonal variations in activities. UF graduate student and field school teaching assistant Elyse Anderson is leading efforts to locate good contexts at Locus C for the differential use and deposition of animal remains. Going beyond the usual zooarchaeological questions about seasonality and ecology, Anderson is developing a strong case for religious beliefs (i.e., animism) that involved, among other things, ritualized treatment of animal bones. Locus C contains abundant pit features with good bone preservation, as well as a 1.5-m thick downslope midden chock full of animal bone, plant remains, pottery, and other materials. Ultimately, data on the differential treatment of animal bones in pits and middens will help to inform broader aspects of St. Johns ritual, such as the use of sand burial mounds and effigy vessels.

Third, it is time to break way from 8LA1 and begin to explore the greater archaeological record of the Juniper Club. At least two other shell mounds are known from the property, one at the mouth of Little Juniper Creek, and another to the west on a terrace overlooking wetlands paralleling Lake George. Neither of these mounds has been tested, and both appear to be fully intact. We are compelled for ethical reasons to leave these mounds alone, but basic information on chronology and function are needed to establish their significance in the broader context of regional archaeology. Again, remote sensing is recommended, in conjunction with limited subsurface testing. To start,

however, we need to conduct reconnaissance using either augers or shovel tests to establish the depth and extent of each deposit.

The same terrace edge on which one of these mounds lies is in need of full-scale reconnaissance survey. We have traveled the dirt road paralleling the terrace edge with Resident Manager Gene Nelson, who pointed out several surficial shell deposits. It would appear that most, if not all such occurrences of shell are recent emplacements, usually to enhance the traction of steep grades along the road. However, not all such occurrences may be recent, and irrespective of that, we expect to find evidence for subsurface remains lacking shell, including one dating to the early Holocene, before shellfish were collected and deposited in mounds. We are compelled to survey this terrace edge whether or not it proves to contain intact subsurface deposits because sound knowledge of where sites are not to be found is just as important as its counterpart, and, equally important, field school students need experience in basic reconnaissance survey, which is what most will spend the majority of their time doing if they find employment in cultural resource management.

Long-range goals run the gamut from more reconnaissance survey to more intensive excavation. Regarding reconnaissance, there remains a need to expand survey of 8LA1-West beyond the southern boundary and into the adjoining “uplands.” The dense lithic assemblages found in the uplands of 8MR123 (Randall et al. 2010) may have parallels south of 8LA1-West. There is also a need to test the wetlands in the interior of club property, as well as the southern boundary of the property along Juniper Run. As for additional excavation, we have unresolved questions about the subsurface composition of the south ridge at 8LA1-East and the bait field of Locus B. Likewise, the nature of saturated deposits along the south margin of the spring run, the shoreline of Lake George, and below the water table of Shell Point remains unknown. On the north side of the run, saturated deposits date predominantly to the Thornhill Lake and Orange periods (Randall et al. 2011). A likely parallel may be found in Lake George proper, as well as the basal aspects of the north ridge at 8LA1-East. We suspect, but have never investigated the likelihood that the massive north ridge recorded by Wyman in 1875 was constructed over an existing Mount Taylor shell ridge. Delving into these deeper deposits will likely require a draw down of the water table, something that is both economically and politically challenging, and thus not to be undertaken without good cause and without the full endorsement by those charged with stewardship of the land and its water.

The archaeological record bounded by property of the Juniper Club is truly spectacular. Much of it was compromised by land-use practices that today seem irresponsible but in their time were necessary and commonplace. Field school investigations show that much can be learned from sustained efforts to locate and characterize the remnants of deposits long ago mined for shell. Field school efforts have also succeeded in locating subsurface deposits along the spring run that were unaffected by mining operations and prove to be unprecedented in the extant literature of northeast Florida archaeology. The partnership between the Juniper Club and the University of Florida to bring this record to light in the hopes of better understanding the ancient past has been exceptionally fruitful and hopefully will continue for years to come.

