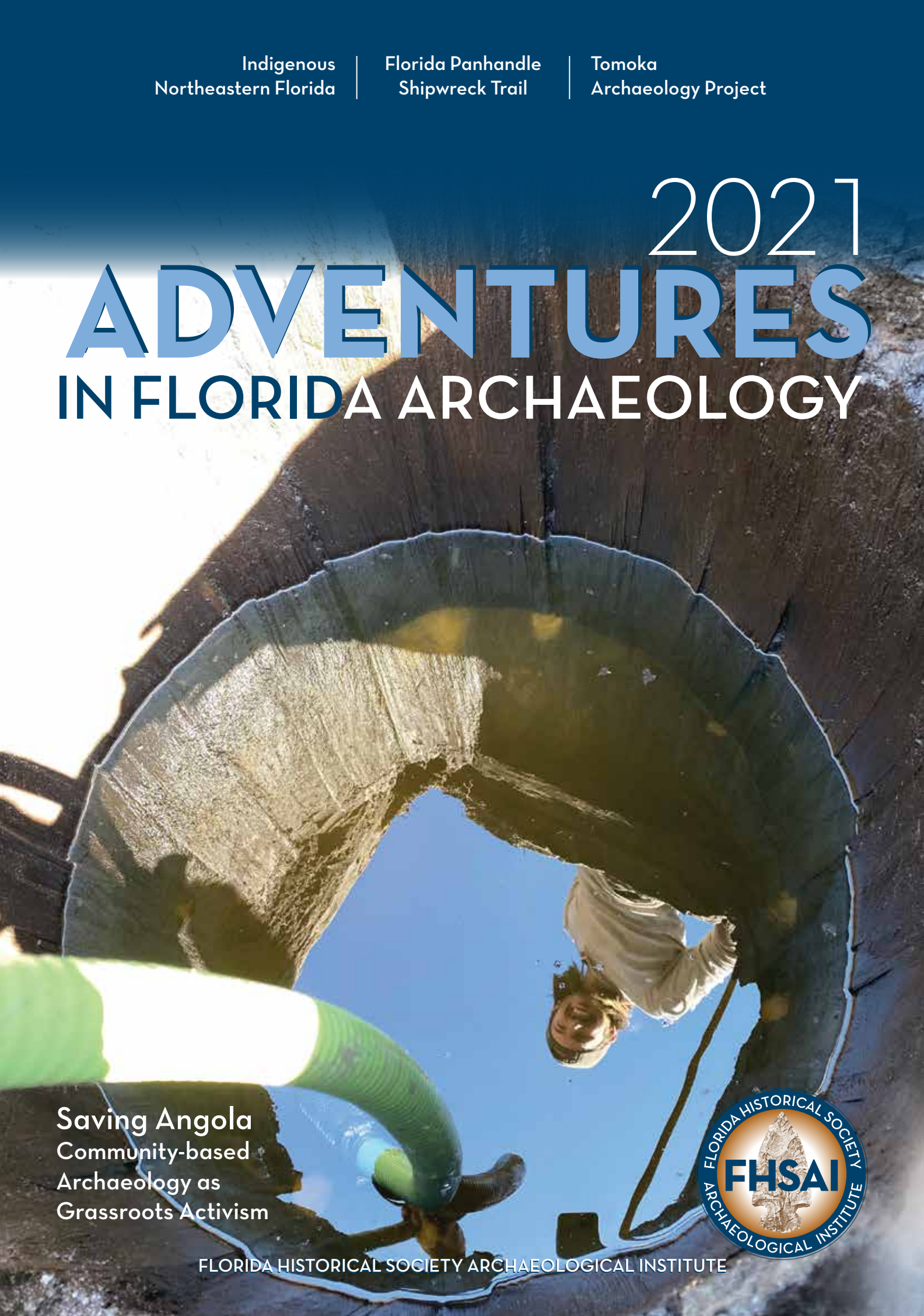
Indigenous Northeastern Florida | Florida Panhandle Shipwreck Trail | Tomoka Archaeology Project

2021 ADVENTURES IN FLORIDA ARCHAEOLOGY



Saving Angola
Community-based Archaeology as Grassroots Activism

FLORIDA HISTORICAL SOCIETY ARCHAEOLOGICAL INSTITUTE

EDITORS' NOTE

ANNE V. STOKES, PH.D.
FLORIDA HISTORICAL SOCIETY BOARD OF DIRECTORS AND CEO OF SEARCH

KC SMITH
FLORIDA HISTORICAL SOCIETY BOARD OF DIRECTORS

As with everything in the past year, the covid pandemic upended archaeological research. Field schools were cancelled or postponed; contract firms worked on fewer infrastructure projects; and research-related travel came to a halt. However, while archaeologists worldwide groused about the pandemic's effects, the pause in field studies actually allowed folks to catch up on lab work, think about new ways to interpret data, and delve further into the link between history and archaeology.

In the fifty-plus years since Ivor Noël Hume proposed that "Archaeology is the handmaiden of history"—subsequently a much-debated concept within both disciplines, we have come to realize that archaeology and history go hand in hand. Archaeology makes history more tangible and reveals that literary and popular notions of historic events can be misleading. As Uzi Baram notes in his article about the Angola site, "History is written by the winners." Archaeology can support or refute historic documents. Even if the records are accurate, we only get the big picture, not the details. Archaeology supplies the context and the details.

Keith Ashley used Laudonnière's words to design a strategy to locate and interpret the Mocama town of Sarabay. He notes that, "Combining archaeology and historiography allows for a more nuanced reframing of conventional historical narratives based mostly on uncritical readings of biased and static descriptions and observations of Native peoples written by European chroniclers." Melissa Price reminds us that maritime heritage trails in Florida inspire modern explorers to learn about and protect our precious history—a lesson that also applies to terrestrial sites. The Gulf Coast Digital History Project highlighted by KC Smith is a wonderful resource for researchers.

Fred Gaske's article illustrates how a seemingly unimportant artifact can tell a rich story and add new interpretation to a site. It also illustrates the importance of context within history and archaeology. The stencil plate's significance would have been lost had it been found on a roadside. Through context, Jon Endonino used excavated artifacts and ecofacts to propose a St. Johns River Valley origin for the Tomoka mound builders more than 50 km away.

Endonino also notes the changing environments that pre-contact and protohistoric populations experienced as sea level rise altered food resources and required inhabitants to adapt. The effect of sea level rise and other natural forces on archaeological remains also is shown at Clint's Scallop Hole, a 3,000-year-old site that is four miles offshore. The work there by Morgan Smith and Shawn Joy reconfirms that the state's submerged cultural heritage must be documented and protected. Nancy White's research on St. Vincent Island on Paleo to late prehistoric sites—which also reflect sea-level change—additionally reminds us that offhand historical comments, as were made when Narváez and crew stopped to "steal Indian canoes and food," enhance our archaeological interpretations.

We thank the researchers who contributed to this issue and everyone who protects, curates, and interprets our state's irreplaceable cultural heritage. We hope you enjoy this issue of the magazine.

SHARE YOUR RESEARCH AND PROJECTS IN *Adventures in Florida Archaeology*

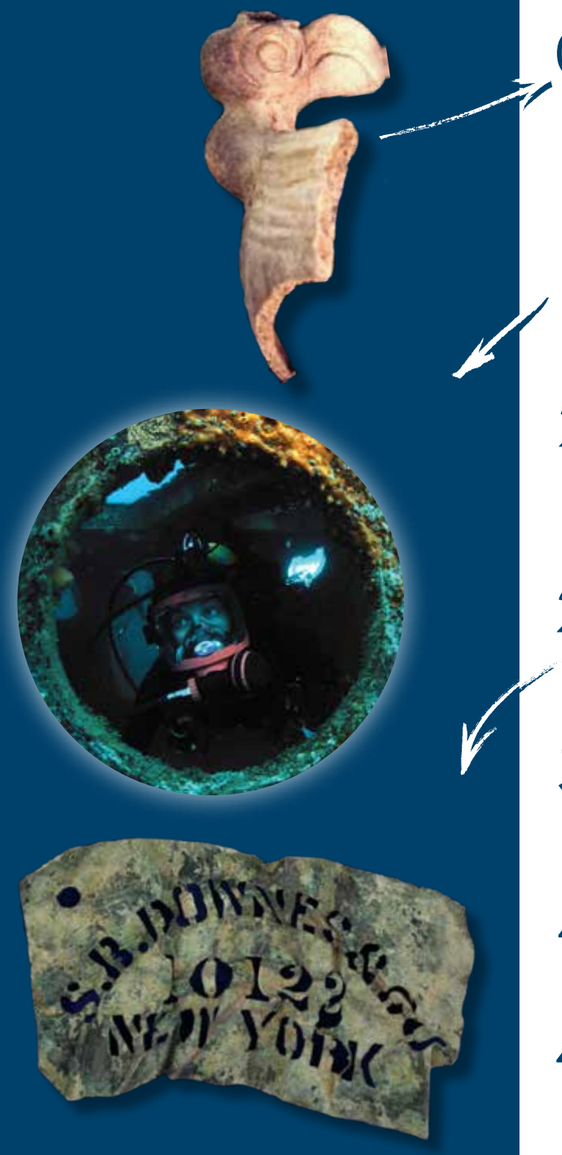
We welcome feature articles and regional news that focus on academic research, CRM projects, new technologies, artifacts, historic sites and museums, and other aspects of archaeological study. Abstracts for proposed articles are due by November 15; finished articles and images are due by January 15. For information and submission details, contact coeditors **Dr. Anne Stokes, anne@searchinc.com**, or **KC Smith, kcsmith614@hotmail.com**.

ON THE COVER

A barrel well was among the important features uncovered during excavation of the Angola site in Bradenton. Once cleared of soil, water seeped into the well as it had in the past, reflecting the image of a modern archaeologist. *Courtesy of Sherry Robinson Svekis*

BACK COVER

NOAA archaeologists record two shipwreck sites in the Florida Keys National Marine Sanctuary. *Courtesy of Brenda Altmeier (top) and Matt Lawrence (bottom)*



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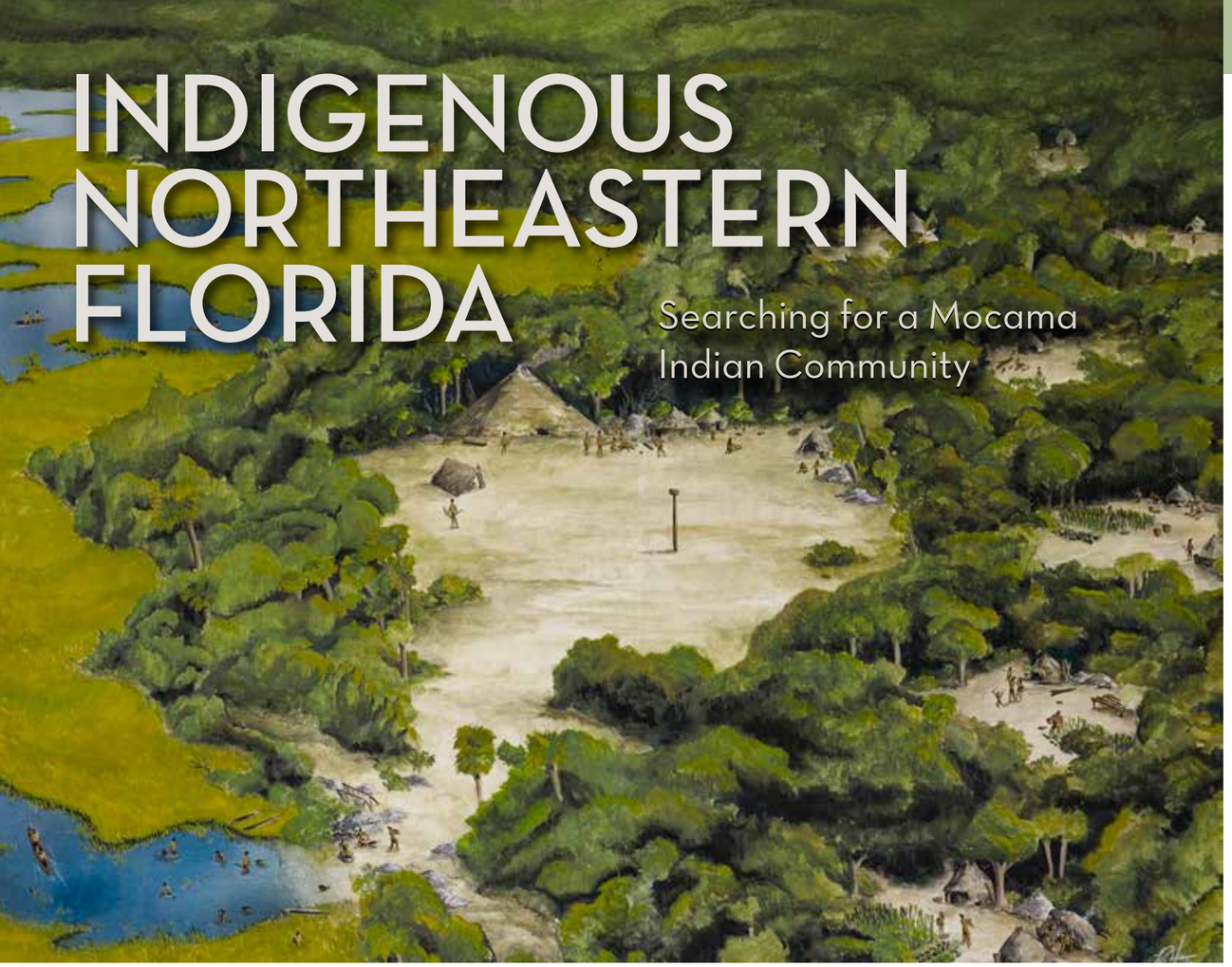
INDIGENOUS NORTHEASTERN FLORIDA

Searching for a Mocama Indian Community

Keith Ashley



"I was advised by some of our company, who regularly went hunting in the woods near the villages, that in the village of Saranai [Sarabay], situated two leagues from our fort [Caroline] on the other side of the [St. Johns] river...there were fields of ripened grain in a very abundant crop"[1]

"...the village of Sarravahi [Sarabay]...was about a league and a half from our fort [Caroline] and on an arm of the [St. Johns] river. It had been my custom to send them [colonists] there each day to get clay for brick and mortar for our houses"[2]

These brief passages, penned in 1564 by René Laudonnière, signal the earliest known written references to the Mocama (Timucua) town of Sarabay. The French commander of the *La Caroline* (Fort Caroline) colony goes on to identify "King Saranay" (Sarabay) as among other Mocama leaders who visited Jean Ribault and presented "him with presents according to their custom" on his 1565 return to Florida.[3] Three years before, Ribault had briefly reconnoitered the entrance to the St. Johns River and met with Indians on both sides of the river, before heading north to establish the garrison of Charlesfort on present-day Parris Island, South Carolina.

The French *La Caroline* settlement, established near the mouth of the St. Johns River, lasted only fifteen months, being supplanted by the Spanish in 1565 after a rather bloody eviction. Mentions of Sarabay in the Spanish documents of *La Florida* are sparse, but we know the community rested less than a mile from the Fort George Island Mocama town of Alimacani and mission San Juan del Puerto, where it fell under the ministering circuit of Fray Francisco Pareja. In a letter to the crown in 1602,

LEFT: Titled "Castillo and proximities of Pilijiriba, 1703," this map depicts "Isla de Sarabay" (Sarabay Island). *Courtesy of the University of Florida Digital Collections, George A. Smathers Libraries*

FAR LEFT: Rob Hough created this artistic interpretation of a Mocama Town for a Timucua-Mocama art contest sponsored by the Public Trust Environmental Legal Institute of Florida in 2010. *Courtesy of Warren Andersen*

Pareja wrote that Sarabay was one-quarter of a league from San Juan. This is the last known archival reference to the Mocama town, but the name Sarabay survives on some maps to denote the island known today as Big Talbot.

But exactly where is Sarabay on the modern landscape of northeastern Florida?

That was the question I and my colleagues Buzz Thunen and Vicki Rolland posed in 1998, as we initiated a shovel test survey of the south end of Big Talbot Island. As early as the late 1960s, local avocational archaeologist William Jones had suggested Sarabay was located there after finding "Indian pottery" and a piece of majolica on the surface of a dirt road. Today, this area is known as the Armellino site, and it lies mostly within Big Talbot Island State Park.

Moving through dense forest in 1998, we dug more than 550 shovel tests over a three-month period. Those on the Armellino site stood out because many contained Indigenous San Pedro and San Marcos pottery. It was around this time that archaeologists working in northeastern Florida began equating the recently defined, grog-tempered San Pedro ware with the 16th-century Mocama-speaking Timucua of northeastern Florida and southeastern Georgia. San Marcos, on the other hand, has long been affiliated with the contact and mission-period Guale Indians of coastal Georgia. However, more recent research now shows that during the 17th-century, Mocama pottery production underwent a shift from San Pedro to San Marcos wares. But why is a question we still have not fully answered.

Following on the heels of our survey, Buzz, Vicki, and I returned to the Armellino site along with students from the University of North Florida (UNF). The 1998 UNF field school began with the excavation of four scattered 1 x 2-m units, each placed adjacent to a shovel test that had yielded either large numbers of artifacts or possible subsurface features. The first three units produced modest quantities of broken pots, oyster shells, and animal bones, but not much else. However, the fourth unit captured our attention for the remainder

ABOVE: Features revealed in Block A in 1999 included a wall trench structure in the southwest section, view to north. *Courtesy of UNF Archaeology Lab*

LEFT: Although the pot previously had been damaged by plowing, a San Marcos jar with a giant Atlantic cockle inside was among the exciting finds in Block A in 1998. *Courtesy of UNF Archaeology Lab*

ABOVE: A postmold (foreground) and a pit (background) were among the features revealed in the east wall of Block A in 1998. *Courtesy of UNF Archaeology Lab*

RIGHT: UNF field school students Ejvind Sorensen, Sarah Parker, Ian King, and Rodney Collazo excavate in Block C in 2021, view to the west. *Courtesy of UNF Archaeology Lab*

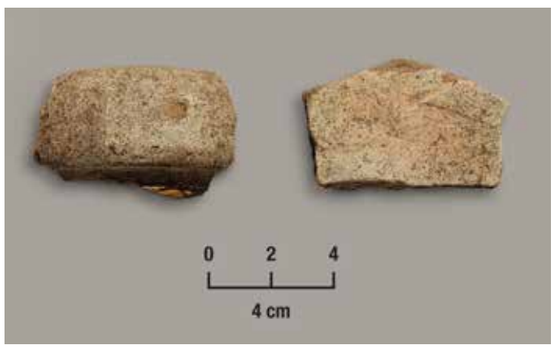
BELOW: The 1998 excavation of Block A yielded a fragment of a Native-made, incised effigy tobacco pipe bowl. According to archaeologist Dennis Blanton, it represents a Citico-style pipe with a face and bared teeth (ear is depicted). *Courtesy of Robert Thunen*

of the summer and continued to do so into the following summer (1999). What began as a shovel test with a small soil discoloration, over the course of two summers, became a large excavation block (A-B) consisting of twenty-three 1 x 2-m units covering an 8 x 7-m area.

Considering both the 1998 and 1999 field seasons, an impressive collection of artifacts and features was excavated. Of note was that small stain in a shovel test, which through expanded excavations, proved to be a section of a wall trench structure (Figure 3). About one-fourth of the building was exposed in the excavation block, with its full size estimated at 6.5 m in diameter. An area of mottling within the arc of the wall trench is thought to represent an entranceway to a wood and thatch structure.

Along the inside wall of the building, about 10 cm from the shovel test that led to block excavations, we encountered a nearly complete San Marcos jar with cane punctations along its rim. I shudder to think what would have happened to the pot if we had placed our shovel test just a few centimeters to the south. Inside the vessel was a complete giant Atlantic cockle shell with a small square perforation.

The pot laid on its side, about 40 cm below the surface. Its upper section seemed to have been hit, shattered, and dispersed by a colonial plow blade. Argh! This would not be the only time we would curse plowing, because its impact was extensive, reaching depths of 30 to 50 cm. In addition to the wall trench, we exposed a bewildering array of pits and possible postmolds at the plowzone-subsoil interface, although unambiguous structural patterning was wanting.



In 1998–99, archaeologists recovered more than 1,200 San Pedro sherds and 18 olive jar fragments from Block A-B. Shown here are San Pedro sherds (left) and olive jar fragments (right). *Courtesy of Robert Thunen*

No clay plaster or daub was associated with the wall trench structure, which appeared to be an unusual building technique for the Indigenous peoples of northeastern Florida. However, structural evidence on Mocama sites is sparse or indirect, typically consisting of individual postmolds of undetermined alignments. The size of the Sarabay building suggests a rather large domestic building or a specialized facility, perhaps for storage or kitchen related activities.

Midden contexts and several pit features contained burnt corn cobs and kernels. Radiometric assays on two specimens date the corn to no earlier than 1450. These results, corroborated by radiocarbon dating of corn on other northeastern Florida sites, bolsters our belief that maize was a late addition to a predominately estuary-marsh-oriented subsistence economy. As hard as it might be for some to believe, the Timucua may have adopted corn farming for the first time less than a century prior to Juan Ponce de León dropping anchor along the Atlantic seaboard of *La Florida* in 1513.

In addition to several thousand Native potsherds, UNF students picked modified animal bones, shell artifacts, and a small handful of lithic items from well-worn shaker screens. European goods included pieces of olive jar, wrought iron nail fragments, and a brass scabbard tip, likely of Spanish origin. Whether these were acquired via trade or gift exchange is unknown, but what is clear is that the area we excavated postdates 1562. The scabbard piece and olive jar sherds further imply a post-1587 date, and the San Marcos wares are undoubtedly 17th century. So, what we appear to have is a section of Sarabay occupied between at least 1560 and 1620.

Now fast forward twenty-one years to fall 2020.

Social distancing and wearing masks in the muggy Florida months of August through October are not conducive to block excavations, but that's what must be done when excavating during a pandemic. UNF's 2020 summer field school was cancelled because of the COVID outbreak, but was moved successfully to the fall semester. Field time was limited to three days a week, with most of the twelve students spending only one or two days a week on site. Despite these restrictions, exhilarated and highly motivated students excavated twenty-one 1 x 2-m units and one 1 x 1-m square. All but one unit was combined to form an irregular shaped block with maximum length of 18 m and width of 5 m.

Block C, as we called it, lies less than 20 m northeast of Block A-B. In fact, it intersected a portion of a 1 x 3-m

LEFT & ABOVE: Pottery fragments recovered from Block C in 2021 included an olive jar fragment, a sherd of San Marcos Line Block Stamped with a central dot (left), and a sherd of San Marcos overstamped (right). *Courtesy of UNF Archaeology Lab*

ABOVE: A large postmold in the east wall was a major feature in Block C in 2021. *Courtesy of UNF Archaeology Lab*

unit dug in 1999 to sample a San Pedro shell midden. That testing yielded a piece of Spanish olive jar and a fragment of Mexican Red Painted earthenware. The shell deposit laid at the eastern end of Block C, and plowing had severely fragmented and crushed oyster shells in the midden. The more robust quahog clam shells—of which there were many more than usual—fared better. Animal bone was disappointingly scarce, particularly when compared to the bone-rich shell middens affiliated with earlier Woodland and Mississippian period occupations in other parts of the island.

We devoted three days a week to fieldwork, and some students spent portions of the other two days working—in masks at socially accepted distances—in the UNF Archaeology Lab. A laboratory methods class began the arduous task of analysis, which should be completed by late spring (2021). As was the case two decades ago, San Pedro pottery dominates the ceramic collection, but is closely followed by San Marcos. Additional olive jar fragments from the 2020 field school bring our total to more than 30. Students also uncovered our first piece of majolica, a fragment of Sevilla Blue on Blue, with an early production date of 1550–1640.

For many students, the most attention-grabbing artifact was an Archaic stemmed point of the Marion type (ca. 4000–6000 BC). What made the find more exciting was its recovery within a seemingly secure contact/early mission period context. As UNF student Ian King is quoted as saying, "Oh, the story it must have to wind up in this site." While thousands of years earlier it may have served as a projectile point or knife, its meaning may have been reconceptualized among the Mocama who came to possess it. Perhaps it came to symbolize their ancestors or an ancient past with a presence and status beyond the ordinary.

Students working diligently under pandemic conditions exposed more pits and possible postmolds at the midden-subsoil interface, but distinctive patterns continue to elude us. Our excavations to date have included numerous shovel tests, two 1 x 1-m squares and forty-nine 1 x 2-m units. While on the surface this may seem like extensive excavation, it isn't—especially considering the size of the Armellino site, which measures some 800 x 250 m. In truth, we have only begun to scratch the surface.

The lack of broad-scale testing is exactly what drew us back to the Armellino site. The 2020 field season represents the first of a proposed multiyear investigation designed to open expansive areas in the hopes of revealing clues to the physical layout of a Mocama community. Currently, we lack any real understanding of what the main contact-era Native settlements in northeastern Florida looked like.

If we are to take the few vague and purportedly eyewitness European descriptions at face value, then Mocama settlements should include circular domiciles and associated storehouses. At their center, we should find a council house fronting a plaza and ball field, with chiefly residences nearby—a formal layout suggestive of a town rather than a village. In the future, we hope to unearth the remains of domestic houses and other place-making features. Uncovering the community council house would be terrific, but that's akin to finding the proverbial needle in a haystack.

ABOVE, LEFT: UNF student Ian King trowels near the south end of Block C in 2021. *Courtesy of UNF Archaeology Lab*

Through the years, our research has benefitted from the unwavering support of Big Talbot Island State Park, Friends of Talbot Islands State Parks, North Florida Land Trust, and Timucuan Parks Foundation. As the UNF Archaeology Lab moves forward with the Mocama Archaeological Project—our long-term study of the social histories and cultures of northeastern Florida's Indigenous populations, I am joined by my UNF colleague and historian Dr. Denise Bossy. Her expertise in cross-cultural relations between Indigenous peoples and Europeans adds a vital dimension to our ongoing research on the region's long-term Indigenous history, a history in which entanglement with Europeans is but one point on a continuum that covers more than 10,000 years.

Combining archaeology and historiography allows for a more nuanced reframing of conventional historical narratives based mostly on uncritical readings of biased and static descriptions and observations of Native peoples written by European chroniclers. We also believe serious attention must be given to how precontact circumstances shaped the contours of colonial realities of Native Americans living in northeastern Florida, and beyond. Local conditions and histories are crucial to explaining the diverse responses to European colonization. As Denise puts it, "One of our main aims is to decolonize the study of Franciscan missions, combining our respective expertise in archaeology and history to recover a vast understanding of Indigenous northeastern Florida."

We wrapped up fieldwork in November. On our final day, students packed my small Tacoma truck to the gills with all sorts of equipment. As I drove along the island's dusty dirt road, I heard a faint voice emanating from a side trail, "See you next year." To which I replied, "I sure hope so."

Dr. Keith Ashley is an archaeologist and assistant professor of anthropology in the Department of Sociology, Anthropology, and Social Work at the University of North Florida.

Bibliography

Bennett, Charles E., trans. 2001. *Three Voyages René Laudonnière*. Tuscaloosa: The University of Alabama Press.

Notes

1. Charles Bennett, trans., 2001, *Three Voyages René Laudonnière* (Tuscaloosa: The University of Alabama Press), 139.
2. Ibid., 96.
3. Ibid., 156.

From Paleo-Indian to Protohistoric

St. Vincent Island's Enduring Native Occupation

Nancy Marie White

ABOVE, RIGHT: Location of St. Vincent Island in northwest Florida's Apalachicola delta. *Map compiled by Nancy White*

ABOVE: St. Vincent Island topography shows lower, older beach ridges at the northeast side. *Lidar image by Jeff DuVernay*

RIGHT: Shell midden deposits more than 2 m thick, from Pickalene midden area of St. Vincent's north shore, were photographed in the 1970s; considerably less remains today. *Photo courtesy of Frank Stapor*

St. Vincent Island is the closest barrier island to the mainland in the Apalachicola delta region of northwest Florida. Indian Pass, at its northwest end, is only 500 m wide, and surely must have been named for the multitude of prehistoric Native American archaeological sites around it. At the southeast end of St. Vincent, West Pass separates it from Little St. George Island. Triangular and wide, not long and thin like most barrier formations, St. Vincent Island is made of more than 100 dune/beach ridges at least 1–2 m high and 30 m apart, that formed over the past 4,000–5,000 years. Historically, the island's wealthy owners used it as a hunting preserve, importing exotic game such as the huge Asian Sambar deer that remain today. In 1968, the US government bought it to be a National Wildlife Refuge. The island's southeast tip has some historic sites—19th-century structures, vague outlines of short-lived Civil War Fort Mallory (8Fr359), and a submerged, nameless shipwreck (8Fr56). But prehistoric shell middens line the north and east shores; their artifacts, continually washing out, have been collected—illegally—by the thousands over the decades.

Florida State University (FSU) investigators recorded archaeological sites on the island in the 1960s and '70s. James Miller surveyed in 1978 in advance of proposed facilities construction. In 1981, Chad Braley excavated at the Paradise Point site (8Fr71) on the northeast edge, where a human burial had been exposed. As erosion escalated, the Supporters of St. Vincent, the local volunteer group, saw federal managers struggling with cultural resources protection and requested my help. In summer 2009, with University of South Florida (USF) field school students, supervisor graduate student Elicia Kimble, and volunteers, I surveyed the 12,358-acre island and tested the St. Vincent 5 site (8Fr364). We returned in 2010 to test at Paradise Point. Kimble later wrote her MA thesis on the project. Public archaeology included outreach to collectors. One was Jerry Cauthen, who had picked up artifacts for twenty-five years, and who came to realize it was illegal; but he had kept notes and a computer database of sites. Long after our fieldwork ended, he donated his entire collection (thirty boxes we retrieved from Mississippi, where he had moved). He died in 2019, but left a great scientific legacy.

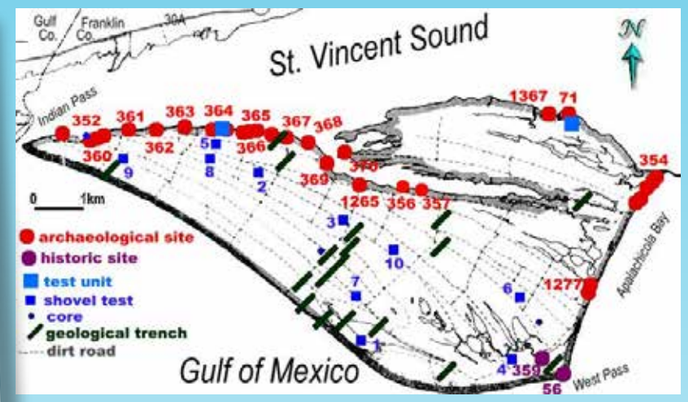
Our field tasks were surface collection, shovel testing, and doing one core that was useless when loose sand refused to stay in the metal tube. Adventures included bringing the old USF truck over every morning on the government barge, getting it horribly stuck nowhere near any tree to help winch it out, and losing its four-wheel drive mechanism in the middle of the project! The island's sand roads were full of mud holes and other obstructions, including a huge alligator snapping turtle that wanted to chomp off a shovel handle (or finger) as we eased it gently aside. But we covered a lot of land and found nothing cultural in the interior, where earlier geological trenches also had not encountered any artifacts or shell deposits. We concluded that native peoples had not lived in the interior of the island or on the Gulf shores, only on the sheltered bayshores, where there was more food and easier transportation by water. Through the millennia, they accumulated linear shell middens, more than 2 m thick, as measured in the 1970s. However, recent storms have been more destructive, churning up midden materials and redepositing them back on the shores or washing them away completely, leaving mostly the back sides of sites. Reasons for the increased erosion probably relate to recent climate change and human action. But so far, it is unknown specifically why archaeological sites that have sat there for at least 2,000 years are suddenly disappearing. Our first task was to describe what was left.

We documented 19 aboriginal sites. Though oysters and other seafood were available in any bay waters, the richest sites were near oyster reefs—Pickalene Bar at the north shore and Dry Bar off the northeast tip of the island. At St. Vincent 5 site (8FR364; also Pickalene midden), we dug a 1 x 1-m test unit in arbitrary 10-cm levels. It had undisturbed Middle-to-Late-Woodland oyster-shell midden extending a meter deep, with black sand devoid of shell continuing another 10 cm below that, atop the natural white beach sand. The four diagnostics among the check-stamped and plain potsherds were two Keith Incised and two Swift Creek Complicated-Stamped. A radiocarbon date on charcoal from Level 4 was cal A.D. 870–1010, in the Late Woodland period. Level 10 was dated to cal A.D. 560–660, in the Middle Woodland Period. The dates suggest that the 60 cm of deposits between these two levels took about 330 years to accumulate, averaging 18 cm of garbage per century. The abundant faunal remains were analyzed by Rochelle Marrinan and her FSU paleonutrition class to determine **Woodland** diets. Eighty percent of the biomass and 92 percent of the individual animals represented were ray-finned fish, especially mullet, but also drum, catfish, seatrout, and gar. Other bones were of birds, chameleon, crab,

ABOVE: Students dig a 50-cm-square shovel test in the interior of St. Vincent Island. Head nets were crucial to protect against summer insects. *Photo by Nancy White*

LEFT: Shell midden in 2010 at St. Vincent Island Ferry site (8Fr352), near the dock entrance to the island, shows how diminished the cultural deposits have become in the last forty years—and how modern garbage accumulates. *Photo by Nancy White*

BELOW: Stratigraphy at Pickalene midden area, 1970s, shows a later oyster-shell midden layer overlying blue-gray clay that indicates higher sea-level stand than at present. *Photo courtesy of Frank Stapor*



ABOVE: Geologist Joe Donoghue maps on top of the upper shell midden at Paradise Point. *Photo by Nancy White*

ABOVE, RIGHT: Image depicts the locations of archaeological sites and excavations on St. Vincent Island. Site numbers are given without the "8Fr" prefix for Florida and Franklin County. *Map compiled by Nancy White*

ABOVE, RIGHT:Geologist Frank Stapor pounds in pipe to take a horizontal core for an OSL date from the upper midden at Paradise Point. Dark gray clay below indicates high sea-level stand. Nancy White (in heavy jacket) measures the depth. *Photo by Elicia Kimble*

land and sea turtle, deer, rabbit, rat, and, surprisingly, whale or dolphin. Invertebrates were mostly oyster, but included conch, whelk, ark shells, marsh periwinkle, and terrestrial snails.

Investigations at Paradise Point were more limited. The site was difficult to reach, requiring an airboat (or wading 700 m), and the work needed complex scheduling around winter tides and limited daylight. Geologists Joe Donoghue and Frank Stapor joined the expedition because they had long been investigating St. Vincent Island's beach ridge formations to interpret sea-level fluctuations in the Gulf of Mexico. We exposed a 1-m shoreline profile showing 60 cm of upper shell midden overlying the 20-cm-thick, blue-gray clay stratum with no artifacts that resulted from a sea-level stand higher than at present. Below that was a lower shell midden dated by Braley to A.D. 630–700. The tide came in quickly, drowning the lower midden in our test, but we sampled the upper midden with a horizontal core for optimally stimulated luminescence (OSL) dating, which requires sand grains not exposed to sunlight since burial. The date returned, A.D. 1400, fits well with the Fort Walton ceramics of the upper midden. Donoghue also obtained other radiocarbon dates on shell from the upper midden at A.D. 1180 and from the lower midden at A.D. 450 and 520. The work supported the hypothesis that a sea-level high-stand of approximately .7 m ***above*** the present occurred sometime between 1,300 and 1,000 years ago.

Far earlier human communities at St. Vincent sites are also known from artifacts washing out of deeper deposits. The oldest are **Paleo-Indian** projectile points, up to 14,000 years old, left by Ice-Age people at a time when sea level was some 100 m lower, and St. Vincent was not an island but 150 km inland. The island's modern shoreline could have been riverbank then because the Pleistocene Apalachicola River flowed farther to the west. Four sites produced 21 Paleo-Indian points: fluted/unfluted Clovis, Santa Fe or Simpson, Suwanee, and others. These are not eroded or water-worn, and some are of translucent, unweathered chert, meaning they were well buried until recent exposure. Paleo-Indian evidence has been scarce in the region outside of the upper-middle portions of the Apalachicola drainage. St. Vincent Island's ancient points mean revision of the earliest settlement picture for the region. The first people must have moved along continually, covering the whole landscape, and the reason so few Paleo-Indian sites are known from the lower valley and coast is that they are deeply buried by more recent delta formation.

Preceramic Archaic artifacts from St. Vincent Island sites are points such as Early Archaic Bolen, Hardaway/Lost Lake corner-notched types, Middle Archaic Benton and other stemmed types, and Florida Archaic Stemmed, attributable to Middle or Late Archaic. They indicate long habitation (probably continuing on riverbanks) while the island was still mainland and throughout the period during which sea level rose and the island was taking shape. At present, we cannot tell if there was a hiatus in occupation around 4,000–5,000 years ago after sea-level rise and before or during the island's formation. **Ceramic Late Archaic** sites are represented by the earliest pottery, made of clay mixed with Spanish moss fibers, now dated between 2500 and 500 B.C. (and so ugly only an archaeologist could love it). Of the total 551 fiber-tempered sherds (5.3 kg), three were found during our survey, and the rest were in Cauthen's collection. These numbers show how intensively some sites were occupied (not to mention the difference between professional and avocational knowledge). Other Late Archaic objects are chert microtools and a tiny disk bead of red Mississippi-valley jasper, which indicate relationships with Late Archaic Poverty Point cultures in northeast Louisiana and long-distance social interconnection along the Gulf.

Early Woodland (500 B.C.–A.D. 350) evidence at St. Vincent Island sites includes diagnostic Deptford Simple-Stamped and Linear Check-Stamped ceramics, as well as generic check-stamped pottery. **Middle Woodland** sites had both Swift Creek Complicated-Stamped and early Weeden Island Incised, Punctated, and Plain pottery, typical for this region. Middle Woodland (A.D. 350–700) was the time of the greatest elaboration of burial-mound building and a fascination with fancy and exotic material culture. Though no mounds are known on St. Vincent Island, exotic artifacts recovered include quartz crystal pendants, a soapstone pipe, a galena cube, a cut mica fragment, and 44 greenstone

LEFT PAGE, TOP LEFT: Late Archaic artifacts from St. Vincent Island—a fiber-tempered sherd, chert microtool, and jasper bead. *All photos by Nancy White*

LEFT PAGE, BOTTOM LEFT: Middle Woodland exotic artifacts from St. Vincent Island—soapstone pipe and quartz crystal pendant.

LEFT PAGE, RIGHT: Middle Woodland pottery from St. Vincent Island; all are Swift Creek Complicated-Stamped (two with drilled holes for repair) except the lower left, which is Weeden Island Incised.

THIS PAGE: Late prehistoric Fort Walton Incised carinated bowl fragment and ceramic bird-effigy head from St. Vincent Island.

celt fragments, all imported from great distances. **Late Woodland** (A.D. 700–1000) materials were harder to identify, with few artifact types diagnostic for the region, just mostly check-stamped and plain ceramics.

Late prehistoric **Fort Walton**-period components are the most abundant on St. Vincent Island (14 sites). Diagnostics are Fort Walton Incised and Point Washington Incised ceramics, including rim effigies. These groups apparently did not farm like their contemporaries upriver, but continued collecting wild resources, mostly aquatic species, like their ancestors did, as evidenced in the continuous record of the shell middens. Coastal Fort Walton people were the first to encounter Old World invaders. The 1528 expedition of Pánfilo de Narváez landed near Tampa and trekked north through the peninsula to Tallahassee. Then, sick and starving, they went to the coast near St. Marks and ate their horses while building boats to sail away. Some of Narváez's crew sailed west seven days through Apalachicola Bay, according to chronicler Álvar Núñez Cabeza de Vaca (Mr. Cow's Head), one of the four known survivors. They approached St. Vincent, "an island close to the mainland," stopped there to steal Indian canoes and food, then entered "a strait," clearly Indian Pass, through which they passed to emerge at the open ocean and continue their historic journey. The Spaniards, other Europeans, and Africans of this expedition certainly left artifacts—and germs, beginning the end of local native societies.

Fort Walton material culture disappeared by about 1650. It is unknown which historic Native Americans came to St. Vincent after that, though colonial mission sources in Tallahassee mention names of native groups like the Chine, who were coastal dwellers. Mission-period Indians near the region include an unknown group who made Lamar pottery, sloppy grit-tempered, complicated-stamped vessels that occasionally are found on St. Vincent Island, and that may represent people fleeing from the violent destruction of the Spanish missions by the English and *their* Indian allies in the early 1700s. Decades later, Creeks-becoming-Seminoles moved into the region, leaving a few sherds of their distinctive Chattahoochee Brushed pottery and early historic gunflints.

Explaining the successive Native American cultures on St. Vincent Island was part of the project's public archaeology component. We also aimed to help management of the cultural resources by establishing a monitoring program, training volunteers to photograph and document in situ the artifacts washing out of the shores without picking them up. Additional recommendations were for better signs, more public education, and other policies to help protect the sites. Recent storm events, including 2018's Hurricane Michael that devastated the entire region, and slower processes such as sea-level rise, continue to take away the archaeological record.

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Bibliography

Balsillie, James H., and Joseph F. Donoghue. 2004. *High Resolution Sea-Level History for the Gulf of Mexico Since the Last Glacial Maximum*. Florida Geological Survey Report of Investigation No. 103, Tallahassee.

Braley, Chad O. 1982. *Archaeological Testing and Evaluation of the Paradise Point Site (8Fr91), St. Vincent National Wildlife Refuge, Franklin County, Florida*. Report to the Southeast Region, U. S. Fish and Wildlife Service. Southeastern Wildlife Services, Inc., Athens, Ga.

Covey, Cyclone, trans. 1961. *Cabeza de Vaca's Adventures in the Unknown Interior of America* (translation of the 1537 work by Álvar Núñez Cabeza de Vaca). New York: Collier Books.

Kimble, Elicia. 2012. *Archaeological Survey and Testing on St. Vincent Island, Northwest Florida*. MA thesis, Department of Anthropology, University of South Florida, Tampa. Electronic document, http://scholarcommons.usf.edu/etd/4349/, accessed May 20, 2015.

Miller, James J., John W. Griffin, and Mildred L. Fryman. 1980. *Archeological and Historical Survey of St. Vincent National Wildlife Refuge, Florida*. Cultural Resource Management, Inc., Tallahassee.

Stapor, Frank W., and William F. Tanner. 1977. Late Holocene Mean Sea Level Data from St. Vincent Island and the Shape of the Late Holocene Mean Sea Level Curve. In *Coastal Sedimentology*, edited by William F. Tanner, pp. 35–68. Department of Geology, Florida State University, Tallahassee.

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. In *Holocene Cycles. Climate, Sea Levels, and Sedimentation. Journal of Coastal Research* Special Issue 7:205–218.

White, Nancy Marie, and Elicia Kimble. 2016. Paleo-Indian Through Protohistoric on St. Vincent Island, Northwest Florida. *Florida Anthropologist* 69:184–204.

FLORIDA PANHANDLE SHIPWRECK TRAIL

A Bridge between the Archaeological and Artificial

Melissa R. Price

All images courtesy of the Florida Bureau of Archaeological Research

One of the nation's most popular dive sites, the aircraft carrier USS *Oriskany,* more than 900 feet long, was sunk twenty-two miles south of Pensacola in 2006. The depth ranges from 80 to 212 feet, allowing divers with different skills to have a unique shipwreck experience.

Background

The Florida Panhandle Shipwreck Trail (Trail) was launched in 2012 in response to the 2010 Deepwater Horizon oil spill in the Gulf of Mexico. Following the spill, the Panhandle experienced a dramatic drop in tourism. As a result, the Florida Department of State, Bureau of Archaeological Research (BAR), used funds from a Coastal Management Program grant to create a diving trail in an effort to boost the tourism economy (Smith 2014). With assistance and input from local waterfront communities, the shipwreck Trail was modeled after one in the Florida Keys. The twelve chosen wrecks are situated offshore of Pensacola, Destin, Panama City, and Port St. Joe.

Pensacola is well represented in terms of Trail wrecks: *San Pablo*, Three Coal Barges, *Pete Tide II*, *YDT-14*, and USS *Oriskany* represent various time periods, from World War II to the late 1970s. Perhaps the most well-known of these wrecks is the USS *Oriskany* aircraft carrier, the largest artificial reef in the world, which had an exciting service in the Pacific Theater during the Korean and Vietnam Wars. Panama City also enjoys ample representation on the Trail, maintaining quite a few World War II-era vessels as well. USS *Strength*, USS *Accokeek*, and USS *Chippewa* (a minesweeper and two tugboats, respectively) collectively served in Okinawa, Iwo Jima, the Caribbean, and Newfoundland. Other wrecks include *Black Bart,* an offshore oilfield supply vessel from the late 1970s, and two Florida Aquatic and Marine Institute (FAMI) tugboats sunk in 2003 as artificial reefs. Destin and Port St. Joe have one Trail-included vessel each. *Miss Louise* is a small tug with an abundance of marine life and a resident sea turtle. *Vamar*, a steamer, enjoyed an adventurous service, traveling to Antarctica in 1928 and heading to Cuba in 1942 before sinking under mysterious conditions in twenty-five feet of water.

Since its inception, the Trail has enjoyed marked success and is promoted via a website, Facebook page, popular articles, billboards, informational rack cards, and Trail passports that serve as souvenirs and are used to record completed dives. Yearly distributions of the Gulf Tourism and Seafood Promotional Fund have been used to provide logoed shirts, stickers, koozies, and mask straps to participating dive shops and to generate interest in the Trail at various events.

Artificial versus Archaeological

Most of the Trail wrecks were sunk intentionally as artificial reefs. Unlike Florida's southeast coast, the Gulf of Mexico primarily has a sandy bottom with limited natural hard bottom and few reef-building corals. In this environment, artificial reefs provide an oasis of high-quality habitats within expansive sand-bottom areas, attracting marine life and divers alike. The process for implementing artificial reefs is science based and ocean safe. Chosen reef structures must be durable, free of toxins, stable during storm events, and made to last at least twenty years (Ansley et al. 2004). Concrete, steel vessels, and construction material such as culverts, pilings, bridge spans, and scrap metal all have served as artificial reefs. However, the high relief and complex structure provided by steel vessels create an alluring habitat for fish and an exciting experience for scuba divers. For this reason, wrecks-become-artificial-reefs not only enhance the ecosystem and divert pressure from diving and fishing away from natural reefs, but they also ultimately boost the tourism economy.

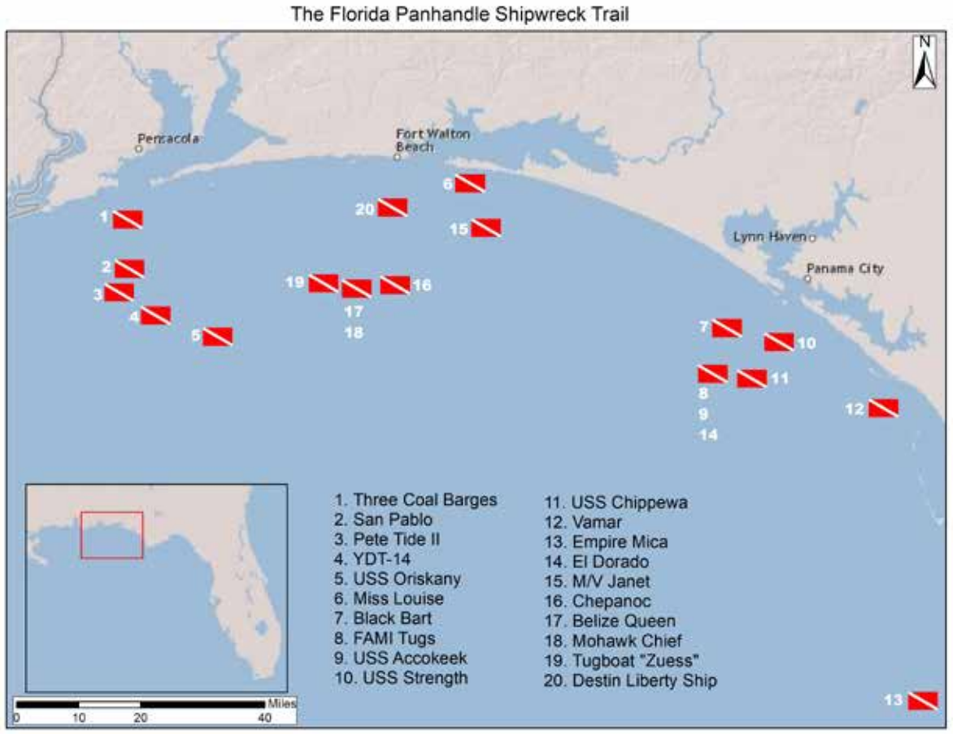
Furthermore, as artificial reefs, the Trail wrecks were given a new life after their initial service, allowing them to continue telling their stories. These monuments beneath the sea preserve aspects of Florida's fascinating maritime history, thereby facilitating education through recreation. And education leads to preservation. The wrecks provide a bridge between the artificial and archaeological—they inadvertently educate the public

about why it is important to preserve and protect submerged cultural resources and underwater environments. The Trail reminds us to "take only pictures, and leave only bubbles," stressing minimal impact diving and fostering the notion that, if everyone took something from a wreck or dive site for their own, there would be nothing left for other divers or generations to enjoy. Given that dive shops in the Panhandle rely on artificial reefs to attract business, it is no wonder that local stakeholders want to foster a sense of stewardship and respect for the wrecks in their offshore backyards. Using the Trail wrecks as a springboard, the notion of stewardship can be expanded to all shipwrecks, regardless of how they came to rest on the seafloor, as well as to other types of submerged sites, such as prehistoric shell middens, habitation areas, and harbors. Furthering this dialogue is something BAR has been fostering for many years.

Bridging the Gap

This dialogue was exemplified during BAR's attendance at the Diving Equipment and Marketing Association (DEMA) Show in 2019 (Price and Mollema 2019). The DEMA Show represents the largest gathering of dive professionals and diving industry individuals worldwide. Hundreds of exhibitors are attracted to DEMA each year and include scuba equipment manufacturers, ocean researchers, and scuba diving businesses. Here, BAR staff disseminated information about the Trail, Department of State, the Bureau's archaeological programs, and protection of submerged archaeological resources. Staff found that the Trail served as a jumping off point from which visitors asked other questions about preservation, laws related to metal detecting, and what to do if a diver discovers a site. Using the Trail, staff were able to discuss protection of submerged archaeological resources with the diving community. Positive and effective outreach and engagement with this audience is necessary to foster stewardship of all submerged resources, not just artificial reefs. Misconceptions about preservation and ownership can lead to removal of artifacts or structural elements from shipwrecks, to their detriment. At DEMA, staff were able to shift the narrative to one of shared custodianship and protection in the context of the Trail. The Trail also offered an opportunity to draw a connection to other archaeological sites by highlighting the maritime history of the Gulf and the importance of leaving sites intact, not only to preserve their integrity, but also to ensure that other divers and future generations can enjoy them. Through the Trail, these issues are brought to the forefront, providing a bridge to larger discussions about underwater archaeology in general.

Launched in October 1945, USS *Oriskany* was one of the few Essex-class aircraft carriers completed after World War II. It could carry up to 103 aircraft. Known by a variety of nicknames—Mighty O, the O-boat, and the Big Risk, the vessel was named after the Battle of Oriskany, August 6, 1777, a significant and very bloody conflict in New York during the American Revolution.



The Panhandle Shipwreck Trail currently includes twelve shipwreck sites in the Gulf of Mexico, stretching eastward from Pensacola to Port St. Joe.

Promoting Access to the Deep

While the Trail is not totally archaeological in nature, it can educate the public about those types of sites that aren't widely visible or easily accessible. Submerged sites are often "out of mind," but the Trail is one way in which underwater archaeology can be made relevant to the wider public. In considering this concept, BAR staff recognized a need for high-quality video footage of the Trail wrecks for distribution among the non-diving community. As a result, in 2018 staff worked closely with a production team to create a series of promotional videos and 360-degree immersive experiences that could be shared across a variety of platforms. For this project, BAR's underwater archaeologists joined a production team in Pensacola, Panama City, and Destin to dive and collect video footage on eight of the twelve wrecks (Price 2018). The dives were followed with topside interviews with archaeologists, who discussed the history of the wrecks, their importance to the local economy, how they fit within the overall Trail, and what it was like to dive on them. The videos were (and still are) hosted on a website, *floridapanhandledivetrail.com*, and shared on Facebook. Public response to the footage was phenomenal. The videos encouraged members of the diving community to share their own experiences on these wrecks, and much attention was drawn to diving opportunities in the Panhandle. The Facebook page also fostered networking with other divers and provided a platform for submission of personal photographs, videos, and stories. People who actually served on some of the WWII-era vessels were able to comment about their experiences and see what the vessels looked like after years on the seafloor. The photos included in this article are a result of the 2018 videography project, which also led to opportunities to publish in well-regarded diving magazines (Price 2019a, 2020). The 360-degree immersive experiences were particularly valuable to non-divers, because viewers could virtually experience the wrecks as if they were diving themselves. The high-quality media brought renewed interest in the Trail and ultimately sparked suggestions for an expansion.

The Way Forward

Because the Destin and Fort Walton Beach areas have only one wreck on the Trail, local stakeholders requested an expansion to bring more tourism to the area. A number of candidates were suggested by community members, and after discussions with dive shops, DEMA Show 2019 attendees, and the Florida Fish and Wildlife Conservation Commission, eight additional vessels were chosen (Price 2019b).

Offshore of Destin, five tugboats will be included on the Trail website and outreach materials—Tugboat "Zuess," *Mohawk Chief* at Sand Dollar Complex #7, *Chepanoc* at Starfish Reef, *Belize Queen* at Bob Reay Reef, and M/V *Janet* at Fish Haven #6. Most of the tugboats were sunk with accompanying concrete artificial reef structures, which add to divers' underwater experiences. Another addition in this area is the Destin Liberty Ship, also known as *Thomas Hayward*. History enthusiasts will appreciate a visit to this World War II-era Liberty Ship, which was active until 1949 and transported allied troops from the United States to Europe. Another historical addition to the Trail includes *Empire Mica*, accessible via Panama City, Port St. Joe, or Mexico Beach. During World War II, this British tanker carried fuel for the Royal Air Force before being torpedoed by a German U-boat, twenty-one miles south of Cape San Blas. While much of the upright structure has since deteriorated due to time and Coast Guard test bombing, the wreck offers a fascinating story and draws many divers to this area, which is why it was chosen. A final and unique addition was quite recently deployed on the seafloor—*El Dorado*, a modern luxury cruise liner that washed ashore in October 2018 after the devastating Hurricane Michael. Accessible via Panama City, it was donated as an artificial reef by the vessel's owner, allowing Bay County to reap the benefits for years to come, much to the enjoyment of divers and marine life alike. *El Dorado* provides a reminder of Florida's long history with the destructive forces of hurricanes, but also illustrates how an unfortunate situation can lead to opportunity and positive outcomes.

After the success of the first videography project, BAR staff again will join a production team to collect video footage on at least six of the new additions. In a continuing effort to "bridge the gap," BAR will expand the Trail narrative in the next video series to include a discussion of the difference between archaeological shipwrecks and artificial reefs, the types of archaeological sites distributed throughout Florida's Panhandle, and the importance of protecting submerged sites in Florida. It also will discuss the fact that historical wrecks that become artificial reefs are a great way to preserve Florida's cultural resources and make them accessible to the public. Including historical wrecks on the Trail is one way to protect vessels with a significant history. Exhibited in their underwater environment, they gain a new purpose, especially considering that many of these vessels already had multiple lives throughout their service. Vessels that sunk catastrophically, such as *Vamar* and *Empire Mica*, illustrate the complexities of studying an archaeological shipwreck. In visiting the wrecks, divers can appreciate the challenge of identifying various structural components on an actual archaeological site. These wrecks also challenge the notion that submerged sites should be recovered completely to ensure their protection. Instead, they are examples of successful approaches to *in situ* preservation and interpretation.

ABOVE: After servicing offshore oil rigs in the Gulf for many years, *Pete Tide II* became an artificial reef in 1993. Resting in 100 feet of water, the vessel is 166 feet long.

ABOVE & LEFT:
A 143-foot fleet tug, USS *Accokeek* hauled in ships for maintenance before being transferred to the US Navy diving school in Panama City for salvage and ordinance training. She was sunk in 2000, coming to rest in 100 feet.

There is engagement and interest in underwater archaeology, but there are also misconceptions. As cultural resource managers, we are responsible for active outreach and education that prioritize protection of our shared cultural heritage. The Florida Panhandle Shipwreck Trail is the synthesis of recreational, ecological, and heritage tourism, and it promotes responsible visitation to and management of artificial reefs and historic wrecks.

Interested in Diving the Wrecks?

There is something for everyone on the Trail, from divers with an open-water certification to those who have technical training. Visit *floridapanhandledivetrail.com* to learn about the fascinating histories of each of these vessels and to locate participating dive shops on the "Trail Partners" page. You also can follow us on Facebook (@*FloridaPanhandleShipwreckTrail*) for updates on Videography Project 2.0. Though it was postponed due to the pandemic, when it is safe to return to travel and diving, BAR will continue with a new video series. For those interested in a virtual experience, all of the 2018 videos can be found at *https://www.youtube.com/channel/UCdnz20Jg_zshN7aD3j9sbfw/videos*. The 360-degree immersive experiences are best viewed on a mobile device to gain the full effect.

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ABOVE: *Miss Louise*, 95 feet long, was a push tug that was sunk in 1997 as an artificial reef. Resting upright on a sandy bottom, the wreck is in 60 feet of water.

LEFT: A World War II minesweeper, USS *Strength* saw action in the Pacific Theater and later served as a training hulk for Navy salvage divers. Sunk in 1987, she lay on her side until Hurricane Opal righted her in 1995. Eighty feet deep, the ship is in two sections, stretching about 185 feet long.

Bibliography/Notes

Ansley, Henry, C., Michael Bailey, Dennis Bedford, Mel Bell, Mike Buchanan, Les Dauterive, Jon Dodrill, Bill Figley, Jim Francesconi, Stevens R. Heath, Bill Horn, Rick Kasprzak, Chris LaPorta, Vin Malkoski, Robert M. Martore, Michael H. Meier, Keith Mille, Richard Satchwill, Dale Shively, Frank Steimle, Jeff Tinsman. 2004. *Guidelines for Marine Artificial Reef Materials*, Second Ed., No. 121. A Joint Publication of the Gulf and Atlantic States Marine Fisheries Commissions.

Price, Melissa. 2018. Florida Panhandle Shipwreck Trail Videography Project. On file at the Florida Division of Historical Resources, Bureau of Archaeological Research, Tallahassee. Revised, March 2019.

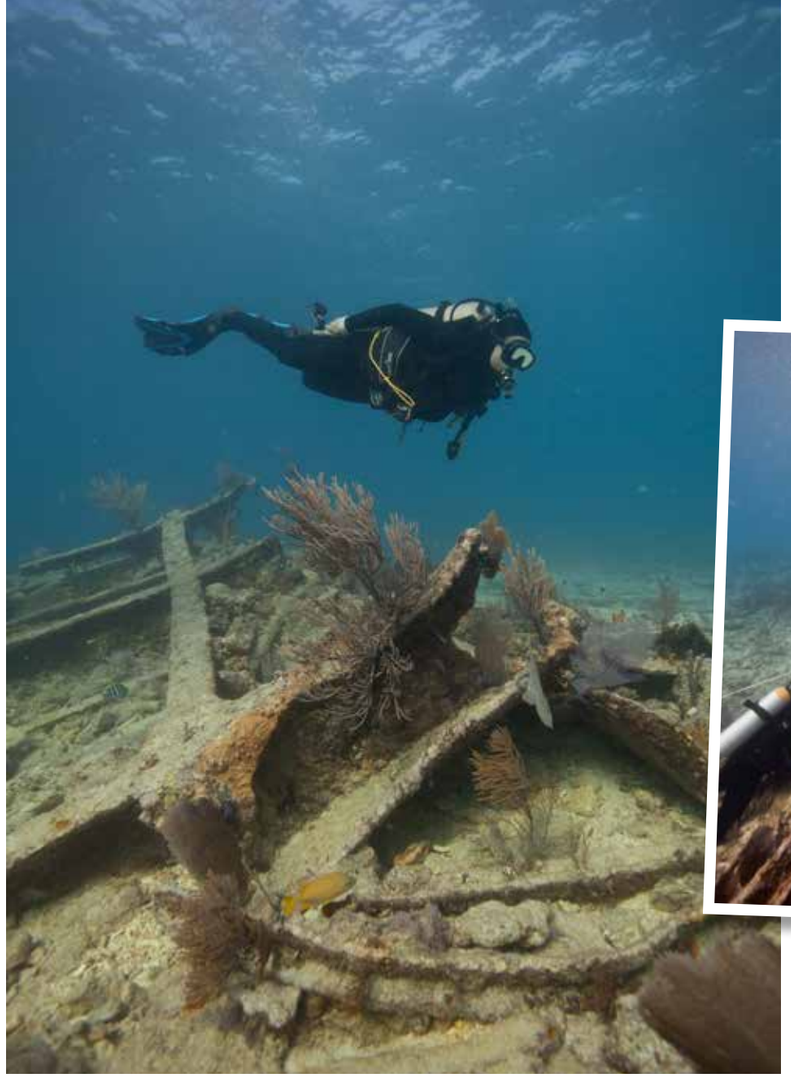
----------. 2019a. The Florida Panhandle Shipwreck Trail. *NAUI SOURCES*, 58–61; flipbooks.naui.org/179461/179953/209988/NAUIQ119/index.html?page=58.

----------. 2019b. Florida Panhandle Shipwreck Trail Expansion Proposal. On file at the Florida Division of Historical Resources, Bureau of Archaeological Research, Tallahassee.

----------. 2020. The Florida Panhandle Shipwreck Trail. *X-Ray Mag*, 99:6–10; xray-mag.com/content/florida-panhandle-shipwreck-trail.

Price, Melissa and Ivor Mollema. 2019. DEMA Show 2019: Post Conference Report. On file at the Florida Division of Historical Resources, Bureau of Archaeological Research, Tallahassee.

Smith, Lindsay S. 2014. The Florida Panhandle Shipwreck Trail: Promoting Heritage Tourism in the Digital Age. In *Between the Devil and the Deep: Meeting Challenges in the Public Interpretation of Maritime Cultural Heritage*, Della A. Scott-Ireton, editor, pp. 109–118. New York: Springer.



LEFT: A NOAA archaeologist surveys the remains of the *City of Washington*. *Courtesy of Bill Goodwin*

BELOW: NOAA archaeologists map the *Hannah M. Bell* shipwreck site. *Courtesy of Matt Lawrence*

Compiled by KC Smith

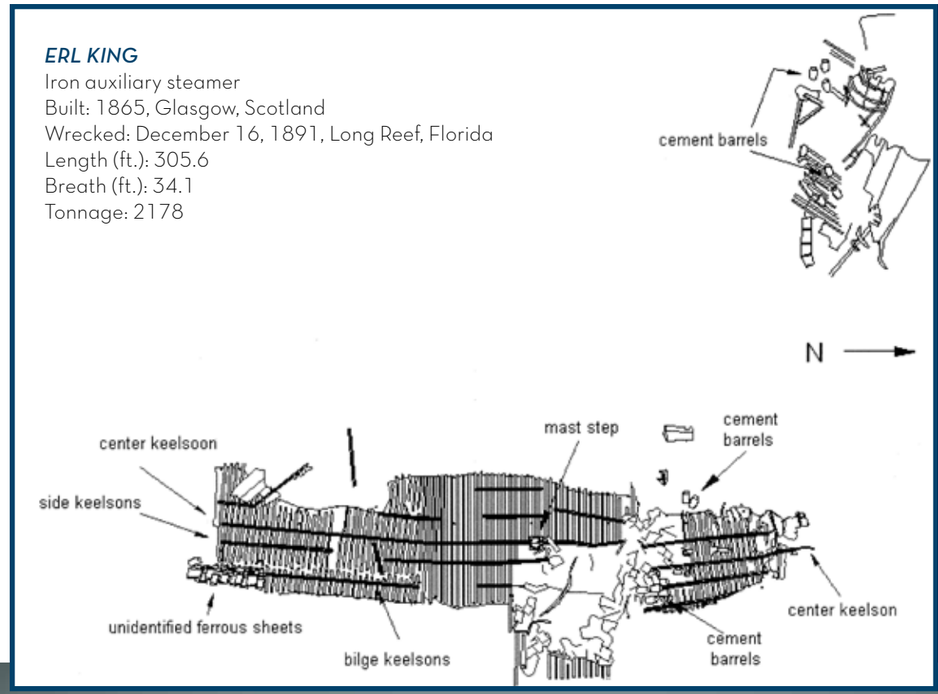
DEEP DIVE INTO MARITIME HERITAGE

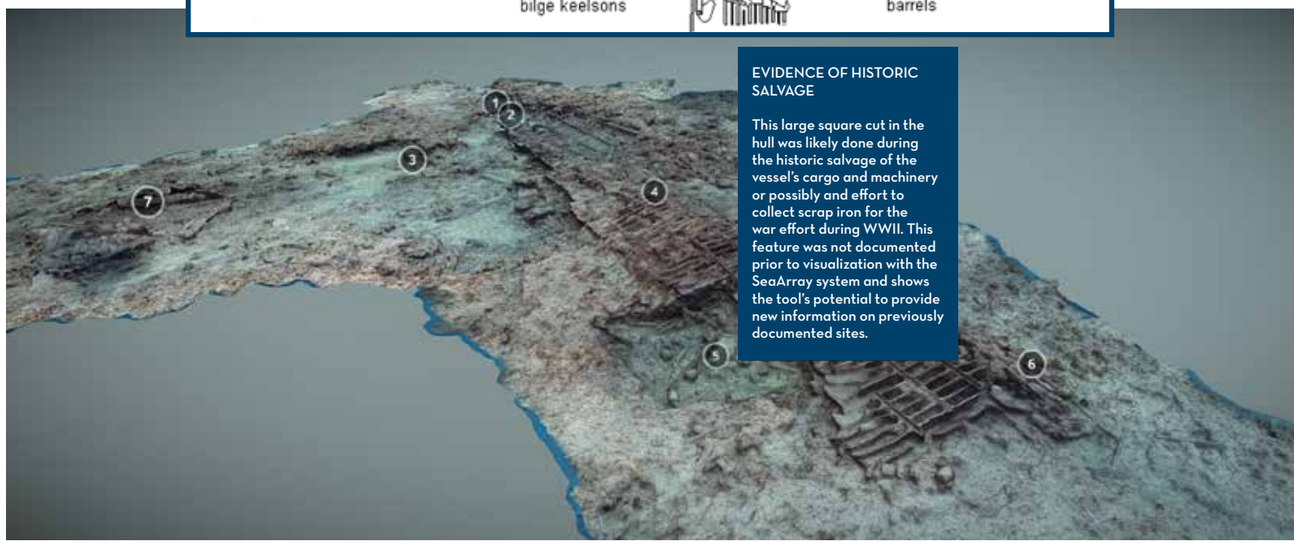
Archaeological and Historical Resources in Florida

The Panhandle Shipwreck Trail is not the only way to explore Florida's maritime heritage. Several other resources, all free, offer actual or digital options for scholars and aficionados.

BAR Preserves and Trails

In 1987, underwater archaeologists with the state's Bureau of Archaeological Research (BAR) began a public education program about submerged cultural resources by producing publications and making sites accessible. The statewide **Underwater Archaeological Preserves Program** identified twelve shipwrecks of varying types and time periods that were interpreted for divers and snorkelers with a brochure, underwater plaque, and laminated site map. Local involvement in site selection and promotion was an essential part of the project. In a similar effort, the underwater team worked with the Florida Keys National Marine Sanctuary to create the **1733 Spanish Galleon Trail**, highlighting the history and wrecks from one of Florida's three, infamous treasure fleet disasters. The remains of thirteen vessels, long-since relieved of their booty, were recorded archaeologically, then described in a brochure for the public. The **Florida Maritime Heritage Trail** offered a more comprehensive perspective with six brochure/poster sets about lighthouses, historic ports, coastal forts, historic shipwrecks, coastal environments, and coastal communities. Each Heritage Trail component described the history and maritime importance of a selection of representative sites throughout the state. Printed materials for the three programs no longer are available, but digital versions are provided at *museumsinthesea.com*; *info.flheritage.com/galleon-trail/*; and *info.flheritage.com/maritime-trail/*.



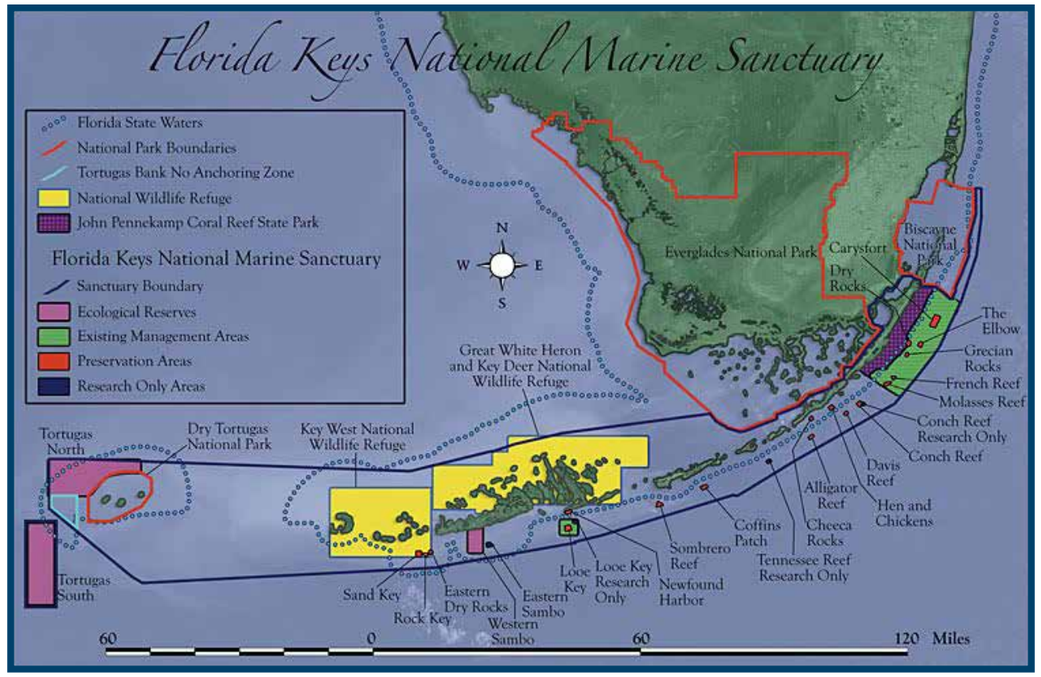


TOP: A site plan of *Erl King* made by avocational archeologists and digitized in AutoCAD in the late 1990s lacks detail required for effective management. This often is the highest level of documentation for historic wrecks because of the time and cost to have a team of archeologists map large sites by hand. *Courtesy of Biscayne National Park*

BELOW: Even at low resolution, underwater photogrammetry produces accurate renditions of sites that more effectively document changes over time and also help with site interpretation when used for tours, movies, and interactive site plans. *Courtesy of Biscayne National Park*

Florida Keys National Marine Sanctuary Shipwreck Trail

Human history is tied to the ocean. Clues to our past lie hidden among Florida's coral reefs. Over centuries, thousands of ships have wrecked while navigating the dangerous waters along the Florida Keys. Investigating shipwrecks reveals their legacy for current and future generations. From beneath the waves come stories of peril, opportunity, and endurance of the human spirit. In recognition of these unique stories, nine sites covering three broad periods of maritime history are included in the Florida Keys National Marine Sanctuary Shipwreck Trail. The sites are found at varying depths to give visitors of all skill levels a chance to explore. Visiting the trail provides context for understanding the Keys' maritime heritage. Divers, snorkelers, and even folks who don't want to get wet can read about the vessels, download site maps, take a virtual tour, or view a 3D model of a wreck at the FKNMS website, *floridakeys.noaa.gov/shipwrecktrail/*. Individuals who wish learn about or participate in site documentation or monitoring should contact the Florida Public Archaeology Network (*www.flpublicarchaeology.org*) or Diving With a Purpose (*divingwithapurpose.org*) to investigate citizen-science initiatives.—*Courtesy of Brenda Altmeier, FKNMS maritime heritage coordinator*



Nine shipwrecks from different time periods comprise the FKNMS Shipwreck Trail. An underwater guide is available for each location, providing the wreck and mooring buoy positions, history, site map, and information about the local marine life. LEFT: *Courtesy of Brenda Altmeier, NOAA;* RIGHT: *Both images courtesy of Matt Lawrence, NOAA*

Biscayne National Park Maritime Heritage Trail

Although the park was established because of its natural history, its cultural heritage is represented by 160 known archaeological sites, of which 120 are underwater. About eighty are identified as shipwrecks, ranging in time and type from a Spanish galleon, British warships, eighteenth- and nineteenth-century merchant ships, and twentieth-century pleasure yachts. Over the years, Biscayne National Park has partnered with universities, nonprofit organizations, and advocacy groups to archaeologically document or monitor shipwrecks in park waters. The Maritime Heritage Trail in Biscayne Bay offers six wrecks for public exploration. The locations currently are interpreted with a downloadable brochure that provides a short history, historic and modern images, a map of the ship remains on the seabed, and GPS coordinates. However, park staff presently are updating and enhancing the information about the six sites. Mooring buoys have been installed at each location because access is by boat only. For additional information, explore the details at *www.nps.gov/bisc/learn/historyculture/maritime-heritage-trail.htm.—Courtesy of Joshua Marano, National Park Service maritime archeologist*

Photos courtesy of Biscayne National Park

TOP: An NPS Submerged Resources Center archeologist uses SeaArray to document the wreck of *Mandalay* in Biscayne National Park. SeaArray is a custom-built, high definition multicamera array to record submerged cultural and natural resources in 3D. The system has revolutionized site documentation and allows resource managers to gather data quickly and accurately for assessing damage from storms, looting, or other accidents.

ABOVE: *Mandalay* was stranded on Long Reef shortly after wrecking on New Year's Day, 1966.

Gulf Coast Digital History Project

A bountiful archive of maritime heritage resources awaits researchers who explore the Gulf Coast Digital History Project website. This clearinghouse of primary and secondary sources, mostly from the nineteenth and twentieth centuries, includes thousands of digitized photos, maps, and historic documents; a curated selection of books and articles about the region's maritime history; and links to other archival holdings, publications, and resources in the collections of the numerous partners. Led by the University of West Florida Digital Humanities Lab, the interdisciplinary project was established to strengthen research, teaching, and learning for academic and lay audiences. The project was funded primarily by a National Park Service Maritime Heritage Grant and various UWF departments, with support from regional museums, historical societies, archives, and the organizations that are partners. Although the project currently focuses on the maritime heritage of the northwest Florida panhandle, project coordinators hope to expand the depth and geographic breadth of the collection to include libraries, archives, and museums throughout the Gulf coast region. The site is accessed at *uwf.edu/gulfhistoryproject*.

Photographs and historic documents are among the resources available on the Digital History website.

ABOVE: This image is from a photographic collection depicting activities in the Port of Pensacola, ca. 1970s. *Courtesy of Gulf Coast Digital History Project*

LEFT: Burrel S. Lewis's Citizen Seaman's Identification Card included such details as nationality, place of birth, father's place of birth, and a photo. *Courtesy of Gulf Coast Digital History Project*

THE DOWNES & CO. STENCIL PLATE

A Small Artifact with a Big History

Frederick P. Gaske

Among the thousands of artifacts recovered during a 1994 archaeological survey of Goodwood Museum & Gardens in Tallahassee by the Florida State University (FSU) Department of Anthropology, there was one described in the survey report as a "metal plate with inscription." Actually, it is a copper or copper alloy stencil plate used for marking agricultural produce shipping crates and barrels. Measuring approximately 8 inches long by 5 inches high, it is inscribed with "S.B. DOWNES & CO/10122/NEW YORK." This seemingly insignificant artifact provides a tangible link to the history of Goodwood in the late 1800s and early 1900s, and has a national connection relating to an important 1901 US Supreme Court decision. It came to the author's attention in 2012, after FSU transferred the 1994 survey artifacts to the Florida Department of State, Bureau of Archaeological Research (BAR), and a staff member called his attention to the stencil plate.

Goodwood History and Archaeology

The property known today as Goodwood Museum & Gardens was occupied for several hundred years by Native Americans prior to its occupation by Anglo Americans in the 1830s. These new owners established a cotton and corn plantation that encompassed 3,300 acres by 1870. However, by the late 1800s, Goodwood had ceased to be a large-scale agricultural enterprise due to the difficulties in maintaining profits without an enslaved workforce. Its owners began selling portions of the estate to meet their debts. In 1885, all that remained was 160 acres, and the property was transformed into an elegant country estate. With the death of its last private owner in 1990, the property was bequeathed to a private not-for-profit foundation to preserve its remaining acreage as a house museum and public park. Today, some twenty acres, with the 1840s main house and sixteen other historic structures that range in date from the 1830s to the 1910s, remain from the original estate.

As part of the restoration efforts undertaken in the 1990s to open the estate to the public, Goodwood received a matching historic preservation grant from the Florida Division of Historical Resources in 1994 to conduct a thorough archaeological survey of the property. Project work included broadscale testing through systematic shovel tests across the property, excavation of twenty-eight test units, a metal detector survey, and intensive auger surveys in two areas. More than 27,000 artifacts, ranging in date from the prehistoric to the modern eras, were recovered.

Stencil Plate Artifact

Stencil plates such as the one recovered at Goodwood were used to mark fruit and vegetable shipping crates and barrels with the name and address of the firm to whom the produce was consigned—in this particular case, the S. B. Downes & Company of New York. It was a common practice for the dealer to furnish a stencil plate to the grower. The notation 10122 on the stencil refers to the crate number. In consignments of more than one crate or barrel, each one was numbered so that it could be matched with its shipping invoice upon arrival at its destination.

ABOVE: The S. B. Downes & Company stencil plate, 1893–1911, was among thousands of artifacts recovered at Goodwood Museum & Gardens in 1994. *Courtesy of the Florida Bureau of Archaeological Research*

The building that currently houses the Goodwood Visitors Center originally was constructed in the 1830s as a kitchen. In the 1910s, it was refurbished and expanded for use as a guest cottage. The Downes stencil plate was found beneath the floor. *Courtesy of Goodwood Museum and Gardens*

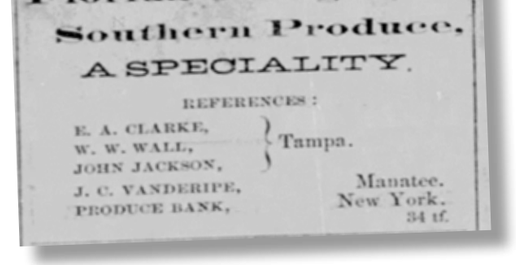
This artifact was discovered during the excavation of a test unit beneath the current floor of the westernmost room of the Old Kitchen building (now the Visitors Center). One of the four extant, original Goodwood structures constructed in the 1830s–40s, this detached kitchen building had a basement in which the excavation uncovered the remnants of a collapsed, domed root cellar. Subfloor root cellars such as this were used for long-term storage of vegetable crops and other foods intended for household consumption or for sale on the market in later months when higher prices could be obtained. They ideally provided a constant temperature between 32 degrees and 40 degrees Fahrenheit through extremes of outside hot and cold weather. As such, this is a logical place for an agricultural shipping stencil plate to be recovered.

S. B. Downes & Company

The S. B. Downes & Company was an agricultural produce commission merchant business. A commission merchant is an agent (or middleman) who sells the produce for the owner direct to retail establishments such as stores, vendors, peddlers, and hotels in return for a commission on the gross sale of the consignment. This was a common arrangement for Southern farmers wanting to sell their produce in Northern markets. Based in New York City, the S. B. Downes & Company was in business from 1868 to 1912. It dealt in agricultural products such as fruit, vegetables, dairy products, and poultry. Trade journals of the period show that the company was active throughout the Caribbean and the American South, and it advertised extensively in Southern newspapers, including Florida.

Downes v. Bidwell

The S. B. Downes & Company was also at the center of a significant early twentieth-century US Supreme Court decision known as *Downes v. Bidwell*. In 1900, the company was charged an import duties tax (or tariff) by the Port of New York customs collector, George R. Bidwell, on a shipment of oranges from the Territory of Puerto Rico. The island recently had been acquired by the United States as a result of the 1898 Spanish-American War, and was subject to the federal law known as the Foraker Act of 1900, which had replaced military rule and established civilian government in the territory. The Act authorized duties on imported Puerto Rican goods similar to those levied on goods from foreign countries. This meant that the territory was being treated differently than other areas in the US, as no import duty at all would have been charged on goods originating elsewhere in the United States.


ESTABLISHED 1868.

Commission House
OF
S. B. DOWNES & CO.
189 Read Street N. Y.
Florida Oranges.
Southern Produce.
A SPECIALITY.

REFERENCES:

E. A. CLARKE,
W. W. WALL,
JOHN JACKSON,
J. C. VANDERIPE,
PRODUCE BANK,
} Tampa.

Manatee.
New York.
34 tf.

S. B. Downes & Company advertised in publications throughout the South, such as this advertisement in *The Weekly Tribune*, Tampa, Fla., on October 27, 1877. *Courtesy of Frederick P. Gaske*

THE MINNEAPOLIS JOURNAL.

THE OPINIONS IN THE DOWNES CASE

Wherein It Is Finally Settled That the Constitution Does Not Necessarily Follow the Flag.

The Journal yesterday gave a very full synopsis of the United States supreme court's decision on the De Lima case. The opinion in the Downes' case was the most important of the others that were decided, since it settled the point that the constitution does not necessarily follow he flag.

It was Justice Brown who delivered the opinion of the court in the case of Downes vs. Collector Bidwell of the port of New York, in which suit was brought by Downes to recover back

ritories acquired by purchase or conquest only when and so far as congress shall so direct.

"Notwithstanding its duty to 'guarantee to every state in this union a republican form of government' congress did not hesitate in the original organization of the territories of Louisiana, Florida, the Northwest territory and its subdivision of Ohio, Indiana, Michigan, Illinois and Wisconsin and still more recently in the case of Alaska, to establish a form of government bearing a much greater

LEFT: On May 28, 1901, the *Minneapolis Journal* commented on the *Downes v. Bidwell* decision, noting that "...the Constitution Does Not Necessarily Follow the Flag." *Courtesy of Frederick P. Gaske*

LEFT: A maker's mark on the stencil plate bore the name of "R. Ross & Son, 90 Park Place, NY." *Courtesy of the Florida Bureau of Archaeological Research*

BELOW: In this 1898 photograph of the Goodwood main house, the woman on the right is believed to be Elizabeth Arrowsmith. *Courtesy of the State Archives of Florida, Florida Memory*

Under protest, the company paid the taxes of $659.35, a not insubstantial amount in those days, and received its 576 boxes of oranges. That very same day, Samuel B. Downes, "doing business under the firm name S. B. Downes & Company," filed suit in federal circuit court challenging the constitutionality of the duties tax. This claim was rejected by the circuit court, and the case was appealed to the US Supreme Court. In a narrow 5–4 decision in 1901, the Court ruled against Downes and upheld the lower court ruling. In essence, it decided that the Constitution does not necessarily apply to US territories, often described as to whether the Constitution "follows the flag." Although largely forgotten today, *Downes v. Bidwell* drew huge crowds to the Court hearings and received extensive national newspaper coverage.

Downes v. Bidwell is considered the most important of the "Insular Cases" of the early 1900s, a series of Supreme Court rulings dealing with the status of US territories acquired during the Spanish-American War. It dealt with the question of how constitutional protections and rights apply to those living in those US territories, and its most enduring effect is its definition of a diminished level of citizenship for territorial subjects of the United States. As such, it is considered by many as one of the most controversial decisions of the Supreme Court since the 1857 *Dred Scott* case. Its implications and effects are still debated to this day by constitutional and legal scholars.

R. Ross & Son Stencil Company

The name of the company that produced the stencil plate is stamped on its front, upper right-hand corner. This maker's mark reads R. ROSS & SON/90 PARK PLACE NY. Richard J. W. Ross was born in 1830 on the island of St. Thomas in the Danish West Indies. He served in the British Army during the Crimean War of 1853–56 and the Union Army during the American Civil War of 1861–65. Following his military service, he settled in New York City, where he established a stencil cutting company in 1873. In 1886, the company relocated its operations to 90 Park Place in New York, where it remained until 1911 before again moving to another location in the city. In 1893, Richard Ross was joined in the business by his eldest son, Henry Morris Ross, and the company was renamed R. Ross & Son. Richard died in 1901, but his son maintained the business under the same name. The R. Ross & Son Company was in business until at least the 1920s.

Stencil Plate Dating and Goodwood Agriculture

The R. Ross & Son Company was located at 90 Park Place in New York from 1893 to 1911, and the S. B. Downes & Company was also in operation during those years. Based on the maker's mark, the stencil plate dates to the Arrowsmith period of Goodwood ownership (1885–1911). By the time Goodwood was purchased in 1885 by an affluent couple from England, William and Elizabeth Arrowsmith, its acreage had decreased from 3,300 acres in 1870 to 160 acres, and it had ceased to be a large-scale farming enterprise. William Arrowsmith died only eight months after purchasing Goodwood, but his widow Elizabeth continued to live there until she sold the property in 1911 to another widow, Mrs. Alexander (Fanny) Tiers. Although the Arrowsmiths used Goodwood primarily as a country estate, some agricultural uses persisted. There was a thirty-acre pear orchard, as well as several acres of pecan trees and grapefruit trees, on the property. Information regarding agricultural uses of Goodwood during the Arrowsmith period of ownership is limited. However, the stencil plate indicates that some income from the property may have been generated by the sale of agricultural produce during their ownership.

Goodwood Artifacts

In 1972, Goodwood was listed in the National Register of Historic Places, one of the earliest properties in Florida so designated, but it remained in private ownership until 1990, when the estate was transferred to a nonprofit organization. It was opened to the public as Goodwood Museum & Gardens following extensive research and restorations in the 1990s. Important aspects to the understanding and interpretation of Goodwood's history were provided by the 1994 archaeological survey and subsequent archaeological investigations conducted on the property. Today, the artifacts recovered from Goodwood are professionally curated by the Florida Bureau of Archaeological Research, where they are accessible to scholars, museums, and other researchers. There is still much to learn from them as demonstrated by the Downes & Co. stencil plate. Initially described merely as a "metal plate with inscription," further research revealed that it had a complex history and associations that can more fully tell the story of Goodwood and our nation.

Frederick P. Gaske is the former director of the Florida Division of Historical Resources and state historic preservation officer, and the former executive director of Goodwood Museum & Gardens. He extends sincere thanks to BAR Senior Archaeologist Marie Prentice with the Collections and Conservation Section for bringing the Downes stencil plate to his attention.

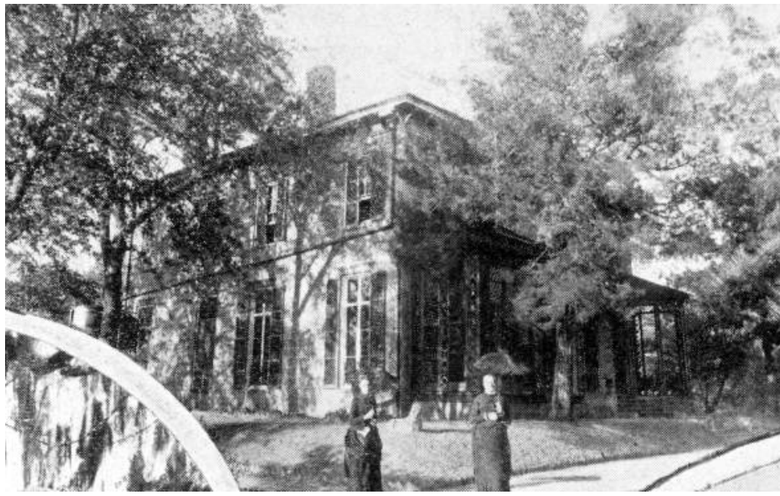
Selected Bibliography

Full bibliographic information for this article is available by request from the author at fgaske@hotmail.com.

Beall, Walli. 2015. *The Seasons of Goodwood*. Tallahassee, Fla.: Published by the author.

Rogers, William Warren, and Erica R. Clark. 1999. *The Croom Family and Goodwood Plantation; Land, Litigation, and Southern Lives*. Athens, Ga.: The University of Georgia Press.

Sterner, Matthew A., and Glen H. Doran. 1995. "Goodwood Plantation: A Study in Southern Plantation Life." Tallahassee, Fla.: Department of Anthropology, Florida State University. Unpublished manuscript on file at the Florida Master Site File, Florida Division of Historical Resources, Tallahassee.



SAVING ANGOLA

Community-based Archaeology as Grassroots Activism

Uzi Baram

This article is Part I of a two-part feature about community activism and the archaeology of Manatee Mineral Spring. Part II will appear in Adventures in Florida Archaeology *in spring 2022.*

It was cause for celebration when, in February 2019, the City of Bradenton announced that a small park in northeast Bradenton would become the eastern terminus for Riverwalk, a successful recreational and entertainment district along the Manatee River. The park already was a historic site, with cultural landscapes that began in pre-Columbian times and moved forward to embrace an early nineteenth-century maroon community and an 1840s pioneer settlement that became the Village of Manatee and, eventually, the City of Bradenton. Plans included signage about the history of the site, which is located near Manatee Mineral Spring, a natural feature used by countless people over time before it was capped in the 1980s. The Riverwalk expansion meant that more residents and visitors would learn the history and heritage of the region while enjoying views of the Manatee River. In addition, Reflections of Manatee Inc., a small but determined, nonprofit historic preservation organization, likely would increase visitation to its three historic houses with exhibits.

For more than two decades, Reflections of Manatee volunteers have organized public heritage events on the property, and in 2013, the organization installed twelve interpretative signs about the varied histories by the spring. Nonetheless, while the new gazebo was pretty, the nearby sugar cane field was interesting, and the Black Bead-Cats Claw Tree was a National Champion Native Tree, few people had reason to come to the park. The proposed landscape plan showed Manatee Mineral Spring flowing into a pond and streaming into the Manatee River, with lagoons to address rising sea levels. It was a beautiful vision for a renewed park—an image of spring waters being released, decades after the spring had been capped.

However, as the archaeologist who announced that traces of the early nineteenth-century maroon community of Angola rested underground near the spring, I was concerned. Would the archaeological record be destroyed by the transformation of the park landscape?

Luckily, the material record has been recovered and saved, through excavations funded by the City of Bradenton. More than a decade of public education programs contributed to grassroots support for archaeological excavations that led to saving Angola. Some activities brought large crowds to the park, and others attracted only a handful. Some received broad media coverage, and others were enjoyed only by those who attended. The point is, partners offered grassroots support for archaeological excavation and analysis that led to the study and saving of Angola.

FAR LEFT: In 2013, Reflections of Manatee installed interpretative signs at the park, including one titled "Angola: A Haven of Freedom" that described the maroon community. *Courtesy of Uzi Baram*

LEFT: Members of the public enjoyed a tour of the site as part of the public education program. *Courtesy of Karen Willey*

LEFT: Funding from the City of Bradenton facilitated extensive excavation at Manatee Mineral Spring in January 2020. *Courtesy of Kimley-Horn*

Community-based archaeology: radical openness

I teach at a residential liberal arts college, where faculty members write narrative evaluations for undergraduates in their courses, and undergraduates are offered research opportunities. Because this spirit of intellectual adventure opens possibilities, I was able to create and direct the New College Public Archaeology Lab (NCPAL) as a place of "radical openness." I took that expression from bell hooks, the black feminist intellectual who used it for a 1989 essay about space and location. In practice, this meant that NCPAL projects across Sarasota and Manatee counties would confront and expose racism and inequities in all aspects of the archaeological process—from background research and collaborative approaches to creating a research design to encouraging public observation and participation in excavations and laboratory work, as well as partnerships and creativity for representing insights and findings. The concept of radical openness shifts research to a future tense, encouraging participants to find ways to contribute to removing silences and preserving heritage, so archaeology can offer possible, productive futures for all. "Looking for Angola" became the hallmark project for this approach at NCPAL.

FAR LEFT: The New College Public Archaeology Lab serves as the processing lab for the excavated materials.

LEFT: Map showing the movement of freedom-seeking people across Florida.

RIGHT: Many of the ceramic and glass fragments found around Manatee Mineral Spring were of British origin.

BOTTOM, RIGHT: The Back to Angola festival helped to energize community interest in the site.

Images courtesy of Uzi Baram

Angola on the Manatee River: The Search and Recognition

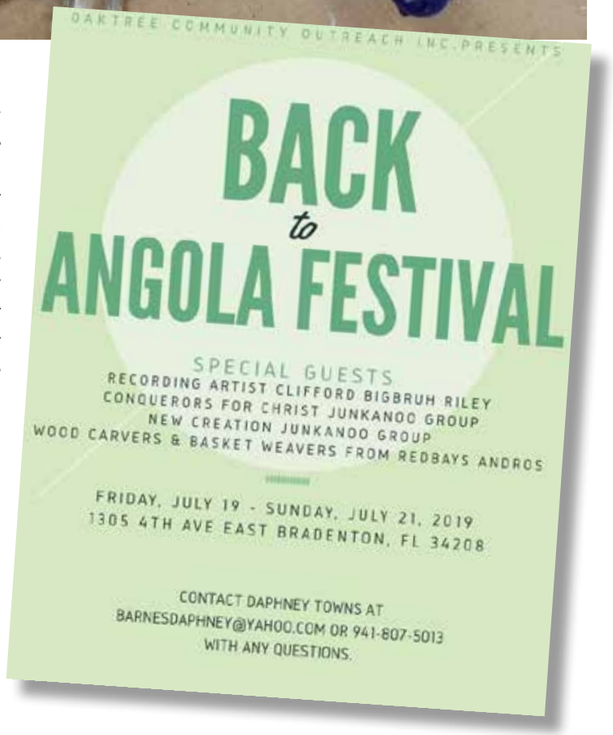
The cliché about history is that it has been written by the winners. The courageous, determined people who resisted enslavement by escape and uprising rarely are found in the archival record, especially in their own voice. In the first two decades of the nineteenth century, Spanish *La Florida* offered a haven for self-emancipated people of African heritage and their allies who fought the United States and its slave regime. The history of Fort Mose is pieced together by archival and archaeological evidence. The US military and congressional accounts are the main sources for the July 1816 destruction of the maroon stronghold on the Apalachicola River at Prospect Bluff. US army records for the 1818 Battle of Suwannee document the maroon hamlets associated with the Seminole settlement Bowlegs Town. However, for the haven at the Manatee River, there are only scraps of archival evidence of the community destroyed in an unauthorized slave raid in summer 1821. Historian Canter Brown Jr. and anthropologist Rosalyn Howard were able to analyze those archives and learned that some maroons had escaped the destruction, eventually finding liberty in the British Bahamas. Dr. Brown published his findings in a 1990 *Tampa Bay History* article and Dr. Howard in 2013 in *Florida Historical Quarterly*.

Meanwhile, journalist and community activist Vickie Oldham wanted the history to be better known and created an interdisciplinary research team to find the location of the maroon community; hence, the Looking for Angola project was born. The team included Dr. Brown; Professor Terrance Weik, with his experience on maroon sites; Dr. Howard, who performed participant-observation research with Black Seminoles in the Bahamas; Louis Robinson of the Manatee County Schools; and me.

Fifteen years ago, the information on Angola—a name found in the Spanish Land Claims records for the area by the Manatee River, then known as the Oyster River—offered only hints of what the community was like. Historical archaeology provided a pathway that united the documentary record, archaeological investigations, historical geography, and collaboration with descendants, all of which suggested traces of Angola by Manatee Mineral Spring in east Bradenton, on the south side of the Manatee River. The model for the marronage has its origins starting in the 1770s as a small interior settlement partnered with Cuban fishing ranchos on the Gulf coast. With the destruction of the Prospect Bluff fort in 1816, British ships brought some survivors to safety at Angola while others escaped south to Bowlegs Town. After the 1818 clash with US military forces at Suwannee, even more survivors came, and the community, spread across the south side of the Manatee River and down to Sarasota Bay, may have numbered more than 700 occupants. These maroons regarded themselves as British subjects, as promised at the Prospect Bluff fort. The material evidence around Manatee Mineral Spring consisted of late eighteenth- to early nineteenth-century British mass-produced goods. With the destruction of the Prospect Bluff community, some of the inhabitants were taken into captivity; others escaped to the interior, later contributing to the uprising known as the Second Seminole War (1835–42); and others reached the British Bahamas, where their descendants have lived in freedom on Andros Island.

Looking for Angola ensured that public outreach centered all of the research. The program began with a public presentation in 2005, during which project scholars asked the 200 people attending the Florida Humanities Council-funded event what they prioritized. The answer was educating the children. That feedback sustained an array of programs. Initially, a shovel test pit strategy was employed, but I decided to use remote sensing and strategically chosen excavation units. The results came together in 2014, with a research report—now on file with the Florida Department of State Master Site File—that demonstrated the presence of the early nineteenth-century maroon community by the Manatee Mineral Spring in east Bradenton.

The archaeological success inspired Daphney Towns, a Bahamian from Andros Island who lives in Bradenton, to create a Back to Angola festival in July 2018 that brought her kin and friends from Red Bays, Andros Island in the Bahamas, to celebrate their ancestors on the land where they found liberty. That first festival led to a second Back to Angola Festival in July 2019, for what seemed like a promising annual event, but the COVID-19 pandemic canceled plans for 2020. However, media attention for Back to Angola festivals



ABOVE & LEFT: Realizing that excavation at Manatee Mineral Spring would yield evidence of Angola and other historical settlements, Bradenton city officials agreed to sponsor the excavation. *Photos courtesy of Uzi Baram*

animated a successful application to the Network to Freedom, the National Park Service Underground Railroad commemoration, for Manatee Mineral Spring. In addition, community support and funding allowed Reflections of Manatee Inc., to open a visitors' center. Its inaugural exhibit focused on the early nineteenth-century, freedom-seeking people on the Manatee River. The combination of the festivals, visitors' center, and Network to Freedom designation took the community-based program to a lively, empowering level, with local residents and descendants coming together to honor the history of this group of maroons. The public archaeology program had met its goal of breaking the silence over the history of maroons on the Manatee River.

In February 2019, local officials announced that Riverwalk, a 1.5-mile-long park on the south side of the Manatee River, operated by the City of Bradenton and the nonprofit Realize Bradenton, would be expanded to Manatee Mineral Spring. Open since 2012, Riverwalk is a popular strolling and gathering place, and its expansion was widely welcomed. The plans included uncapping the spring and allowing its waters to flow into a pond and then to the river along with other water features. However, the good news spawned a big question: What would become of the adjacent archaeological record, with its potential insights into the Angola community?

Meeting the Challenge: The Groundwork with Reflections of Manatee Inc.

After hearing about the potential transformation of the landscape by Manatee Mineral Spring, I turned to statewide colleagues for advice and support. With the park owned by the city, would there be any excavation? In 2016, a contract archaeology firm conducted a Phase I survey right next to the park and concluded that there were no significant remains.

Founded in 1997, Reflections of Manatee Inc., had purchased the land by Manatee Mineral Spring to protect against its potential development. By organizing an assortment of festivals, historic demonstrations, archaeological training, and tours, Reflections combined research and public outreach to encourage interest—initially, in the 1840s Village of Manatee, the Seminole War era-Branch Fort, and the 1860s Curry family households. With the Looking for Angola program, the organization added the maroon history in its outreach and also expanded interest in the pre-Columbian Native American heritage on the land.

LEFT: Among the features recovered was a relatively intact barrel well.

BELOW: This unusual G-shaped belonging may have been placed ritually in a small pit under the floor of a structure.

Photos courtesy of Uzi Baram

My small-scale excavations with New College of Florida students and the Time Sifters Archaeology Society, the regional chapter of the Florida Anthropological Society, were met with gracious hospitality, including lemonade and peanut butter sandwiches. Each excavation welcomed community members to ask questions and the local media to document the work, with a surprisingly large number of newspaper and television stories for our excavations in 2008, 2009, and 2013. I made sure to share results with community members and the media, which I know today was a wise move. At the onset of our work, I was making transparent the process of asking research questions; trying to understand why we were recovering early nineteenth-century, British mass-produced goods; and weighing competing interpretations. New College students came into the New College Public Archaeology Lab, opened in 2010, and contributed to the process of making sense of the geographic, archival, and excavation evidence. If I was wrong about the finds indicating maroons closely aligned with the British military, many would know.

A productive consequence of radical openness became the teamwork among community members and organizations to locate a solution. Constructive conversations during spring 2019 convinced the city manager and the city commissioners that the potential for recovering material remains of Angola as well as the other settlements by the spring was worthwhile. An agreement between Reflections of Manatee Inc. and the City of Bradenton, along with the community interest and media stories, led to the city funding excavations to recover the history by Manatee Mineral Spring. Even after the local newspaper reported the cost, public responses were only positive. That productive spirit led to support from landscape architects that included survey information and drone footage.

Excavations and Lab Analysis

In 2019, the Manatee Mineral Spring park consisted of a historical marker, heritage interpretation signage for the many histories of the property, a round concrete cap over the spring, a gazebo, and a grassy field. But the excavations were urban archaeology, needing to go through the previous twentieth-century urban neighborhood that had grown from the 1840s pioneering Village of Manatee. I led a superb team with Sherry Robinson Svekis as field director; a field crew of Jonathon Barkmeier, Gabriel Castaldi, Jessica Gantzer, Amy Gatenbee, Kelsi Kuehn, Jean Louise Lammie, and Heidi Miller (all from the University of South Florida anthropology program), Mary Maisel, Nicholas Frech (who brought experience with the descendant community), and Jason Brown, an Andros Island descendant, who joined us from his home in Atlanta. Richard West of Wetland Management Services provided expert backhoe work; Robert Bowers was our surveyor, and Jeff Williams provided site security. In addition, Jeff and Trudy Williams of Reflections of

LEFT: An open house during the excavation drew hundreds of visitors.

BELOW: Media coverage was vital to creating public interest and support.

Photos courtesy of Uzi Baram

Manatee Inc. offered local history and information about the specifics of the property; and local residents, including Jeff Moore, provided insights into the material record for the property. For more than a month, we excavated down to the water table, carefully recording the stratigraphy and associated finds and plotting the many features revealed by shovel scraping.

Predictably, the excavations were complicated, with intrusions and the challenges of the rising water table. The stratigraphy is complex, but the layers of cultural landscapes were visible through the central areas of excavation. For archaeologists, the postmolds were obvious evidence of former structures on the property; for the general public, the one major visible feature was a barrel well—once cleared of soil, the waters flowed upward as they had centuries ago. Ongoing analysis might provide a date at the early nineteenth century. The presence of a well so close to the spring is perplexing, but that is one of the joys of archaeology—figuring out the materiality of a cultural landscape.

Most features were postmolds, evidence of wooden structures. On the floor of one potential structure, deep down in the stratigraphy, two separate small pits contained, respectively, a flaked glass half-projectile point and an ornament. We are intrigued by the finds, suggestive of ritual placement. Nearby, a rectangular feature contained a complete skeleton of a dog. Field analysis suggests the presence of many more mammals, including cow, pig, and opossum, as well as marine life.

Most of the findings relate to the Village of Manatee, the successor settlement to the Angola maroon community. Funding from the Florida Division of Historical Resources facilitated lab work by Sherry Robinson Svekis, Jean Louise Lammie, and Mary Maisel under my supervision at the New College Public Archaeology Lab along with volunteers. The finds include ceramics dating from the eighteenth to twentieth century, clay tobacco pipe fragments—a wide range of buttons, glass bottles and many glass fragments some of which were flaked, and metal items consisting mostly of nails, but also some materials that are still being studied for identification. A complete catalogue is being compiled as part of the report for the Florida Master Site File.

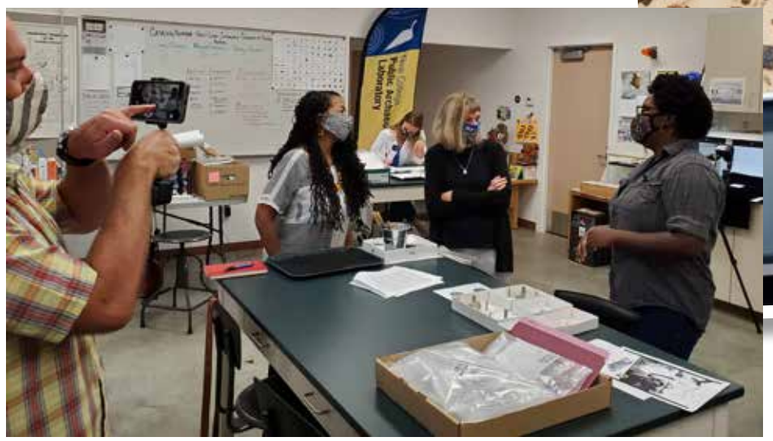
Exhibiting Findings, with Community Partners

During the January 2020 excavations, the project invited media outlets to report on the research process, and we organized events that included a successful Martin Luther King Jr. Day open house. The number of media stories was impressive, disseminating information about the excavations and initial findings. Anticipating lab work at New College Public Archaeology Lab, I had hoped to have an open lab for Time Sifters members as well as students, faculty, and staff at New College of Florida; however, the COVID-19 pandemic restricted access. As the reasonable alternative, videos produced by several community partners and social media shared the process of research, and journalists again reported on the community-based effort.

RIGHT: Thousands of small metal objects were recovered during the excavation.

BELOW: To facilitate access to the lab work, the Florida Public Archaeology Network–West Central Region created a video available online.

Photos courtesy of Uzi Baram



We were lucky that the excavations were completed in the last month of the *annus horribilis* of 2020. The report on the excavations and initial lab analysis is on file with the Florida Master Site File in Tallahassee, and I have given several virtual presentations on what the research team has found out about daily life for the early nineteenth-century, freedom-seeking people on the Manatee River. There is much more the research team and its supporters are doing to disseminate the general history, the heritage, and the specific findings. And the research continues, with scholarly promise of more and expansive insights into the lives of the maroons by Manatee Mineral Spring. The support from descendant and local communities and academics who are mindful of racism, both at universities and beyond, has been crucial to recovering a haven of resistance to slavery and ensuring the saga of freedom from under the streets of Bradenton is widely shared. Radical openness facilitates good research.

Dr. Uzi Baram is professor of anthropology and founding director of the New College Public Archaeology Lab at New College of Florida in Sarasota. Professor Baram focuses research and pedagogy on identity issues involving race and ethnicity, legacies of colonialism, and the intersections of archaeology and heritage tourism.

Bibliography

Baram, Uzi. 2012. Cosmopolitan Meanings of Old Spanish Fields: Historical Archaeology of a Maroon Community in Southwest Florida. *Historical Archaeology* 46(1):108–122.

----------. 2014. *The Historical Archaeology of Looking for Angola at 8Ma103: Excavations and Public Outreach by the Manatee Mineral Spring, Manatee County, Florida*. Report on the Public Anthropology Program Looking for Angola as an Update to 8Ma103, prepared for Reflections of Manatee Inc. On file with the Florida Master Site File, Tallahassee.

Brown, Jr., Canter. 1990. The 'Sarrazota, or Runaway Negro Plantations': Tampa Bay's First Black Community, 1812–1821. *Tampa Bay History* 12:5–19.

Howard, Rosalyn. 2013. "Looking for Angola": An Archaeological and Ethnohistorical Search for a Nineteenth Century Florida Maroon Community and Its Caribbean Connections. *Florida Historical Quarterly* 92(1):32–68.

Millett, Nathaniel. 2013. *The Maroons of Prospect Bluff and Their Quest for Freedom in the Atlantic World*. Gainesville: University Press of Florida.

Weik, Terrance. 2013. *The Archaeology of Antislavery Resistance*. Gainesville: University Press of Florida.

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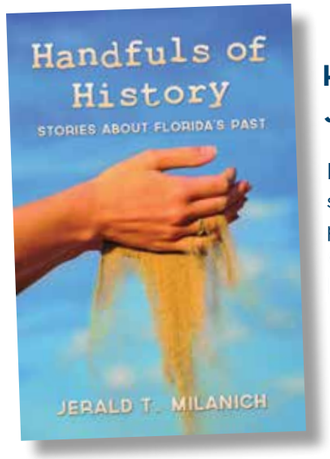

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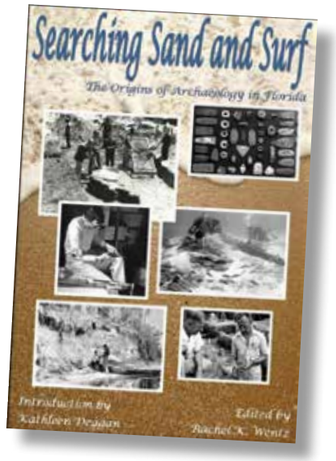

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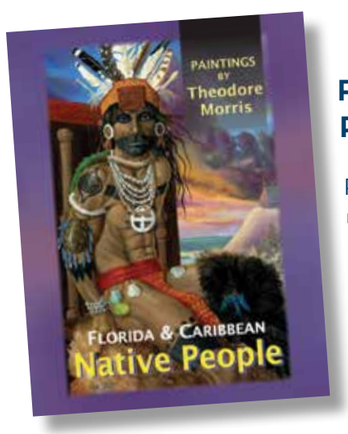

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LIFE AND DEATH AT WINDOVER: EXCAVATIONS OF A 7,000-YEAR-OLD POND CEMETERY

Rachel K. Wentz $14.95

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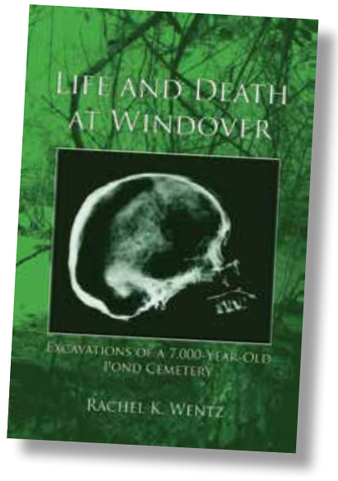
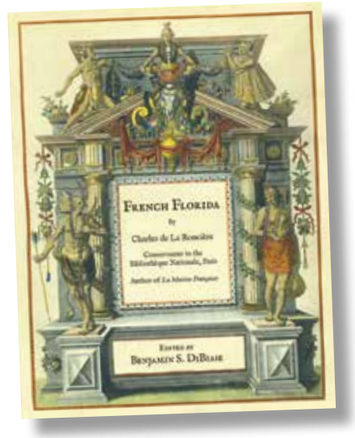




FRENCH FLORIDA

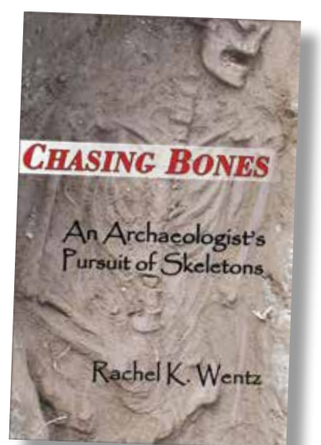
Benjamin DiBiase $39.95 (8.5 x 11 color)

The first English translation of French historian Charles de La Roncière's *Florida Française: Scénes de la Vie Indienne* (1928), this book provides a fascinating narrative history of the first French settlements in Florida, along with hand-colored reproductions of Dutch engraver Theodore de Bry's famous images of Indian life.

CHASING BONES: AN ARCHAEOLOGIST'S PURSUIT OF SKELETONS

Rachel K. Wentz $14.95

Former FPAN East Central Region Director Rachel K. Wentz did most of her graduate work focusing on the ancient skeletons from Florida's Windover site, but in this book she also takes us to fascinating archaeological sites in England, Italy, Ukraine, and the Caribbean before coming back to Florida.



CLINT'S SCALLOP HOLE

A Prehistoric Quarry in Apalachee Bay

Morgan F. Smith and Shawn Joy

In 2017, we received an exciting email from Joe Davis, a biologist at the Florida Fish and Wildlife Conservation Commission (FWC). The email title was "Unrecorded quarry site in the [Apalachee] bay." Good enough for me! Apparently, Clint Peters, an off-duty FWC official with a watchful eye, observed what he thought were artifacts while scalloping with his family. Peters reported them to Davis, who reached out to us. Davis is an active steward of the region with whom we have worked on previous excavations, including the prehistoric Ryan-Harley and Page-Ladson sites. We instantly replied to Joe that we wanted to see the site to record it for the Florida Master Site File. The subsequent adventure (and misadventures) to locate it would add to a new and currently unfolding chapter to push the studies of submerged precontact resources off Florida's Gulf coast.

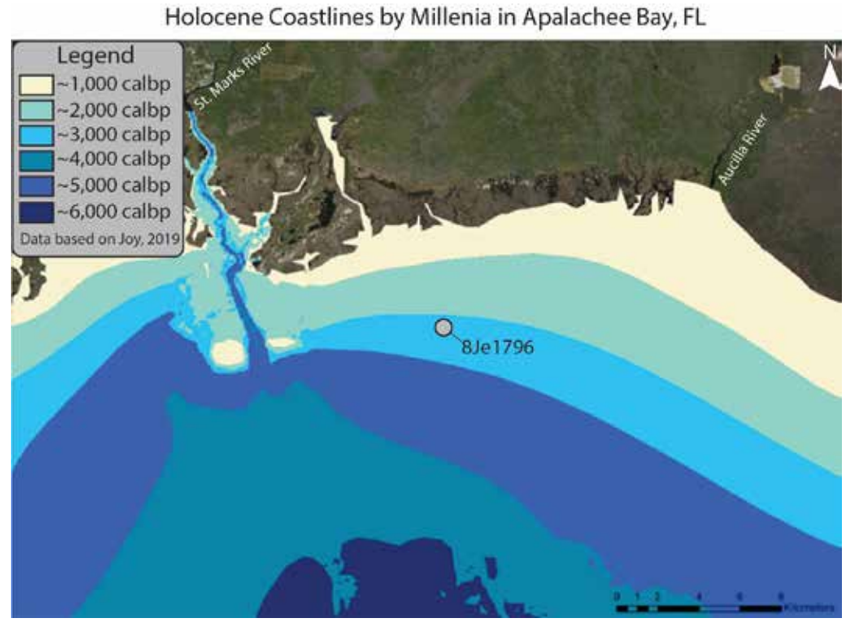
With regard to underwater archaeology or, more specifically, submerged prehistory, research on the Florida Gulf coast is not new by any means. Pioneering efforts to locate offshore archaeology in the region were made in the 1980s by Dr. Michael Faught and Jim Dunbar (now Dr. Dunbar), among others, at landmark sites such as Fitch, Ontolo Reef, J&J Hunt, and Ray Hole Springs. Precise work conducted by Drs. Jessica Cook-Hale and Ervan Garrison continued in the 2010s at the Econfina Channel site. Research by the

All images courtesy of the Archaeological Research Cooperative

LEFT, TOP & BOTTOM: In 2019, researchers mapped and collected nearly 400 artifacts.

LEFT, MIDDLE: Researchers suspect the area around Clint's Scallop Hole is densely covered with lithic debris.

RIGHT: Map shows the location of Clint's Scallop Hole relative to major sea level and coastal changes over the last 6,000 years.



Florida Bureau of Archaeological Research, directed by Dr. Ryan Duggins, has laid the foundation for next-generation offshore archaeological capabilities at the remarkable Manasota Key Offshore site.

However, the report from Joe Davis about this new quarry site was nuanced in several regards.

- The locality promised a hitherto unknown site that had neither been collected nor looted. The material at the site was as it has been deposited at the time of occupation, with the exception of taphonomic issues.
- The locality promised extensive lithic material. In fact, surveys later demonstrated that the landscape ranks among the densest offshore archaeological site complexes yet studied in North America in terms of the sheer number of artifacts.
- The timing was right. Efforts were underway to find an "anchor" in the now-inundated offshore landscape to better understand these areas as an outgrowth of extensive archaeological efforts at inland submerged sites in Florida.

In 2018, Adam Burke and I (Morgan) set out in a small, twelve-foot Jon boat to undertake an explorative journey to the site, located about four miles offshore and about ten miles from the nearest boat launch. The journey out almost forced a retreat; weather was poor and seas were choppy. However, once we arrived close to the GPS coordinates of the site, the seas laid down nicely. The time was now to find the site.

For a terrestrial archaeologist, or even an underwater archaeologist who works inland, following GPS coordinates to a site is simple enough. Such sites often have simple directions; you follow a road to a site, and you orient yourself from the landmarks. However, offshore, there are no landmarks, and conditions beneath the sea change constantly. Sea grasses grow and fade. Sand deposits wax and wane. Visibility can range from greater than fifteen meters to less than one meter. These conditions may seem trivial, but at sea, they can render survey confusing at best and ineffective at worst. While we had been given GPS coordinates for the proposed site location, these data had a high degree of inaccuracy—as much as thirty meters.

We began a quick survey of the area in systematic transects. Several transects with no results forced us to move farther offshore, and nearly an hour into the survey, we were close to surrendering. As is typical, on the last survey transect we agreed to conduct, we found the site, named Clint's Scallop Hole, or 8Je1796 officially, after the original citizen who reported the site along proper channels.

We reported our exciting discovery to the Florida Bureau of Archaeological Research (BAR), which issued a 1A-32 permit for a surface survey of the site. In 2019, we returned to Clint's Scallop Hole with students from Florida State University, Texas A&M University, and the Universidad de la Republica (Uruguay) and collected

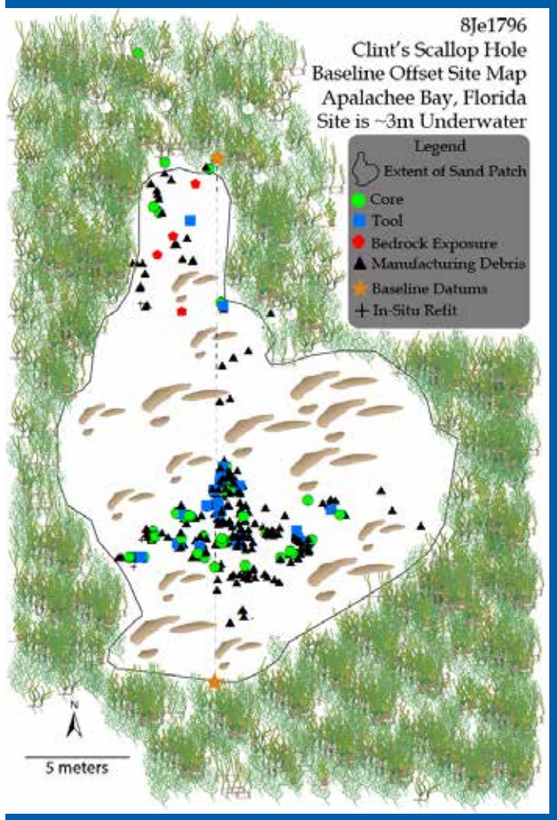
394 lithic artifacts, measuring 67,104 grams. Survey of the site was conducted with a baseline/offset mapping strategy in which two permanent datums are established in a north/south axis across the site. A measuring tape strung between these two datums serves as the "y" axis or baseline, and the location of artifacts off the baseline, measured with a second tape, is the offset coordinate. As each artifact is labelled individually, this allows for a rapid and efficient way to map a site.

Both BAR and FWC made official visits to the site to discuss the significance of inundated landscapes in Florida's past. The site is almost completely bound by seagrass and is contained in a sandy patch with a few scattered limestone outcroppings that are of low relief—less than 1 m above the seafloor. The substrate covering the site is fine quartz marine sands. No other artifact or material types were observed during fieldwork. Among the artifacts we did collect, 308 are typed as manufacturing debris (debitage), 62 are cores, and 26 are tools. In addition, we recorded six bedrock exposures of chert. Based on the material assemblage (exclusively lithic material), overall lack of finished tools, extensive manufacturing debris and cores, as well as the bedrock exposures of mined chert, this site is classified as a bedrock quarry extraction site. The aforementioned weight of the artifacts is important, because materials at a primary stone extraction site are expected to be heavier than artifacts recovered at other types of sites, such as base or hunting camps, because artifacts would be reduced from bedrock chert on-site. The chert type provisionally has been typed as Suwannee chert.

Artifact distributions in GIS demonstrate that the site is divided into two primary activity areas (loci). When examined by artifact type, it is evident that there is a primary extraction area in the northern portion of the site, where relatively little manufacturing debris and few cores are present. With regard to artifact weight, the northern loci contains a greater concentration of bedrock exposures, and the majority of artifacts are larger. In the southern loci, smaller weights are far more frequent, and overall, the weight classes are more equally represented.

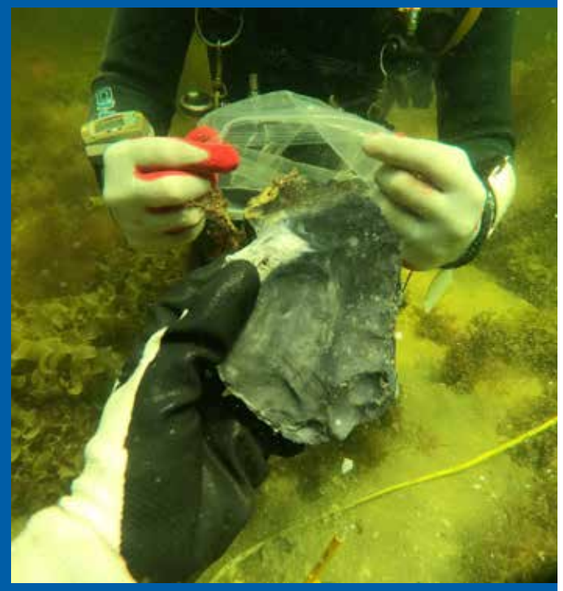
The archaeological materials present demonstrate that the site represents a bedrock quarry of Suwannee chert. A modelled date of inundation for the site is approximately 3,000 cal BP, providing a terminus ante quem age for the assemblage, assuming the resource was not exploited following inundation. Our survey consisted of surface collection of artifacts and thus may be a biased sample. However, we believe this sample is largely representative of the site as a whole.

Divers recorded the location of artifacts relative to a baseline they set from one end of the site to the other.



Map shows the distribution of artifact types recovered and observed at the site.

The fact that artifacts from around the site could be refitted together indicates the area is little altered since its use by prehistoric people.



Some recovered artifacts were early-stage tools and cores that had been minimally reduced, such as the biface preform shown here.

The dense concentration of lithic material would render precise excavation difficult, as the substrate overlying the Suwannee limestone bedrock is thin (less than 15 cm was observed in multiple exposed areas). Overall, the preservation of two distinct artifact loci at the site, as well as the ability for the research team to physically refit artifacts back together from around the site, indicates that the site has been minimally altered following its initial use by prehistoric people. No diagnostic artifacts were recovered from the site, which is not uncommon for quarry sites, where the primary activity is the reduction of cores and cobbles into more portable tool blanks and preforms. This behavior is borne out in several lines of evidence at 8Je1796. First, approximately 80 percent of the lithic assemblage collected in our survey represents manufacturing debris. The remaining 20 percent of the assemblage consists primarily of early-stage tools and cores that have been minimally reduced. This is likely due to the fact that the objective products produced on-site were subsequently removed offsite. Further, 64 percent of artifacts recovered from the site weigh more than 50 grams, demonstrating that the majority of reduction on-site related to primary reduction of cores, which is underscored by the high degree of core reduction flakes and cores in the assemblage. Additionally, the high degree of debris/shatter and broken flakes, as well as the concentration of low- and medium-quality material on-site, indicates that later reduction, including that on high-quality materials extracted from the quarry, was performed offsite.

With regard to the technology present, an interesting aspect of the site is the small but significant proportion of true blades and blade-like flakes, and well as a single exhausted blade core of high-quality material. Additionally, during the initial site visit, a late-stage adze preform was found. Several fragments of unifaces, including two exhausted uniface fragments and a single early-stage unifacial preform, were found during the survey of the site. Blades and unifacial tools more commonly are found in Paleoindian and Early Archaic assemblages, but the evidence from 8Je1796 is not completely conclusive due to a lack of unequivocal diagnostic artifacts and an overall limited sample. 8Je1796 also has insecure geologic context. The substrate of the site is less than 25 cm of sediment overlying Suwannee limestone bedrock.

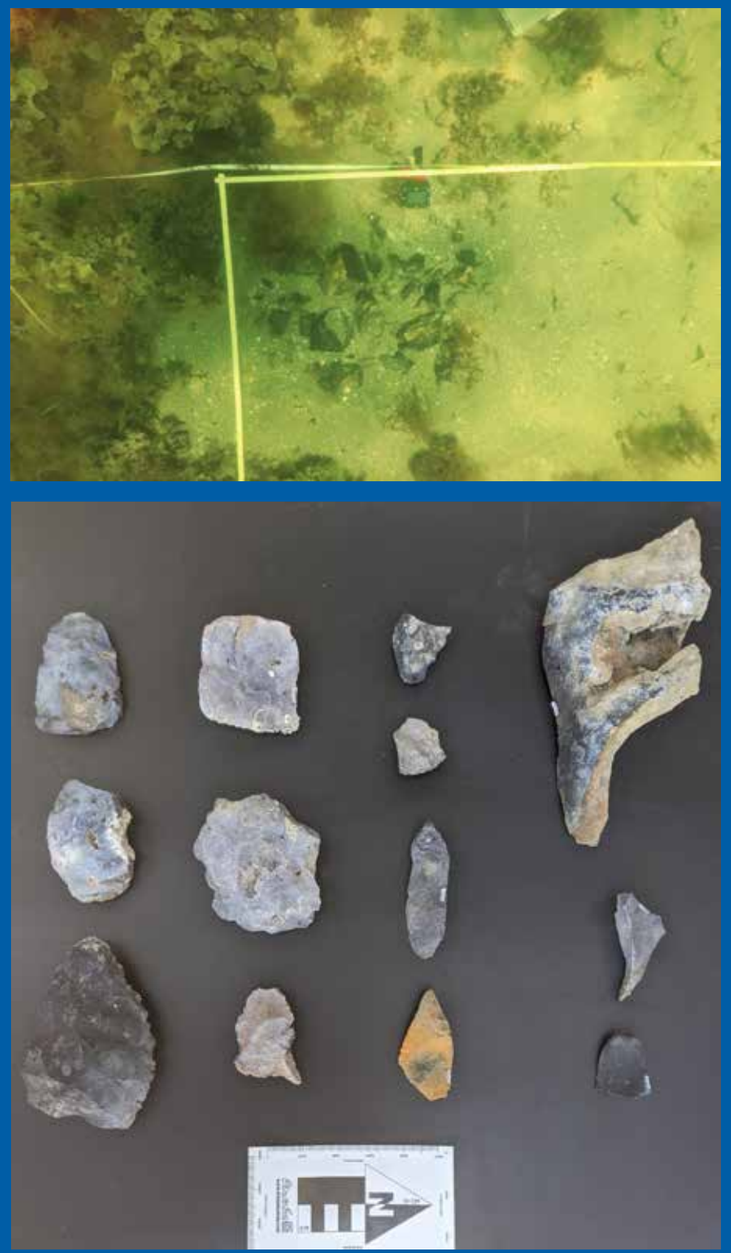
Attempts to extract sediment cores were abandoned due to the shallow nature of the site and the density of lithic artifacts, which made coring difficult. 8Je1796 appears to have survived marine transgression around 3,000 cal BP with minimal damage to the site, which is indicated by in-situ refits and flintknapping stations. Furthermore, 8Je1796 provides a useful datapoint on the submerged landscape of Apalachee Bay.

Expectations of hunter-gatherers make 8Je1796 useful as an anchor in the landscape to model locations of future sites. Survey dives at five other sandy patches in the area around 8Je1796 all revealed lithic artifacts, demonstrating that the archaeological potential of the surrounding area is high and may contain associated campsites that may have more secure context and more diverse artifact assemblages that can be used to better understand the prehistoric use of Apalachee Bay.

Currently, artifacts from 8JE1796 are being processed by students at the University of Tennessee, Chattanooga. Return trips to the locality are planned for the summer of 2021.

Dr. Morgan Smith is an assistant professor of anthropology at the University of Tennessee, Chattanooga, who specializes in the Late Pleistocene peopling of the Americas, hunter-gatherer groups, prehistoric adaptations to climate change, and the archaeology of underwater landscapes.

Shawn Joy is a board member of the Archaeological Research Cooperative and the Geotechnical and Submerged Precontact Division Leader at SEARCH Inc. Joy received his MS from Florida State University, where his research focused on geoarchaeology and sea-level rise in the Gulf of Mexico.



LEFT, TOP: Accumulations of lithic debris and broken flakes suggest that prehistoric peoples partially reduced cobbles before carrying them elsewhere for final manufacture.

LEFT: Archaeologists suspect that nearby sites may yield dense artifact deposits like those recovered from Clint's Scallop Hole.

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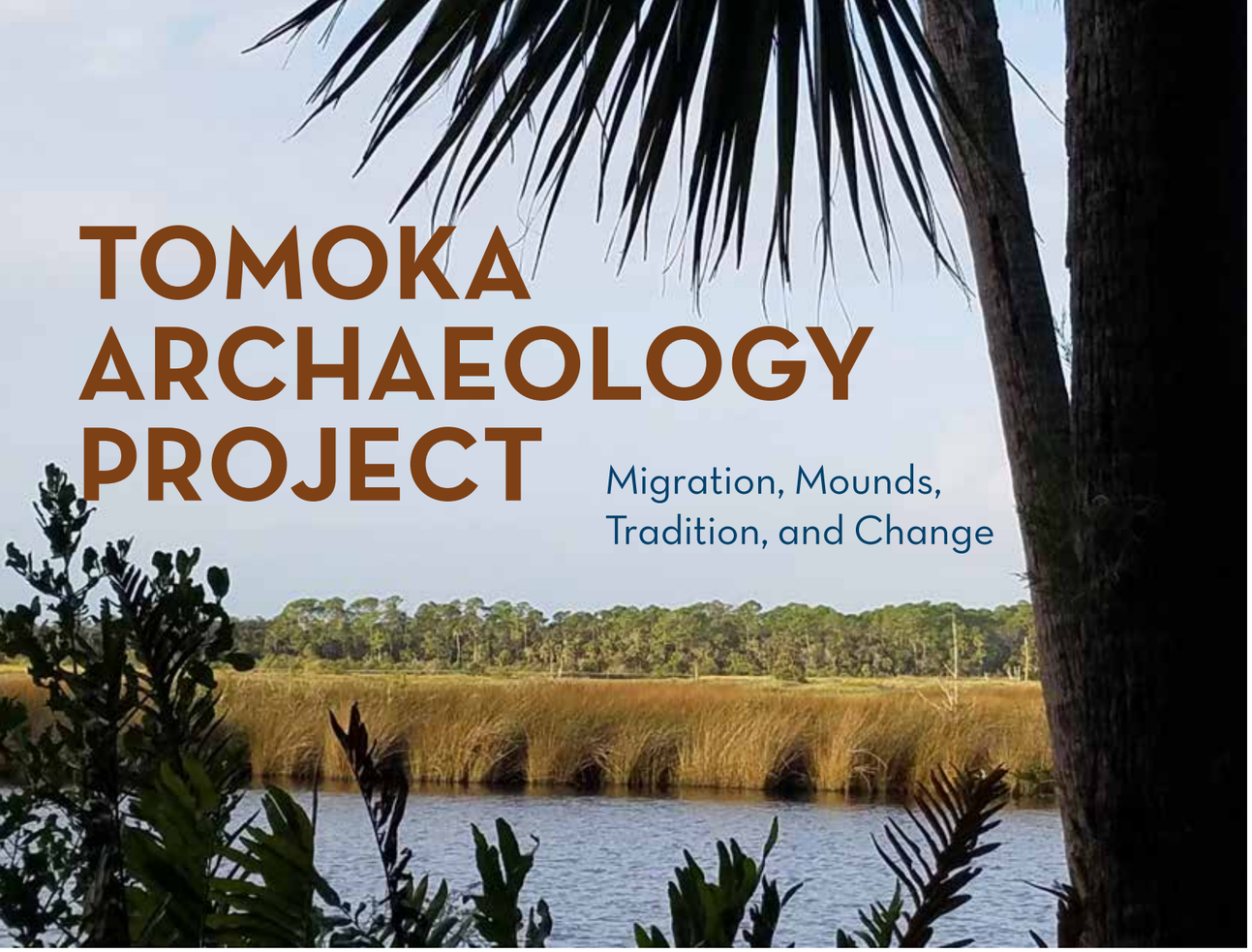


TOMOKA ARCHAEOLOGY PROJECT

Migration, Mounds, Tradition, and Change

Jon C. Endonino

Mounds and monuments built by North America's original inhabitants capture and occupy the landscape of popular imagination. They have been immortalized in the writings of naturalists, scientists, and amateur archaeologists. Mounds of earth and shell along Florida's northeast coast and the St. Johns River attracted considerable attention for more than two centuries. Today, mounds of earth and shell built by our continent's first inhabitants still hold in awe many who behold them.

Wonderment like that is what drew me to mounds in my career as an archaeologist. My curiosity was piqued and my imagination seized by images and descriptions of mounds and the artifacts within them, preserved for posterity in writings by those early explorers and amateur archaeologists. First and foremost among them was Clarence Moore and, later, A. E. Douglass. Consequently, my research in Florida has focused on Late Archaic earthen mounds and the culture that created them—Mount Taylor and, more specifically, the Thornhill Lake phase of Mount Taylor, 5,600–4,700 years ago, which was defined in part by the construction of sand burial mounds. I have spent the past eighteen years working at sites that Moore and Douglass visited and excavated at the Thornhill Lake and Tomoka mound complexes. Tomoka has been the focus of my work for the past seven years and has taken my research in unexpected and new, but familiar and exciting directions.

The Tomoka Archaeology Project (TAP) was the product of my prior research into the Late Archaic mortuary mounds at the Thornhill Lake site, located in the middle of the St. Johns River Valley near Sanford. Similarities in the bannerstones recovered from Thornhill by Moore and those found by Douglass at Tomoka are striking. The largest mounds at both sites produced identical bannerstone types and radiocarbon ages that are essentially contemporary, which begs the question—"Are they related?" Culturally, the answer is "yes." Both possess sand mortuary mounds, "exotic" stone artifacts in the mounds, participation in long-distance exchange (as indicated by bannerstones and stone beads), and the presence of microlithic tools, all of which are characteristic of the Thornhill Lake phase. Through my work at Tomoka, I have come to believe that the people who inhabited Tomoka and built the sand mounds originate in the St. Johns River Valley

All images courtesy of Jon Endonino

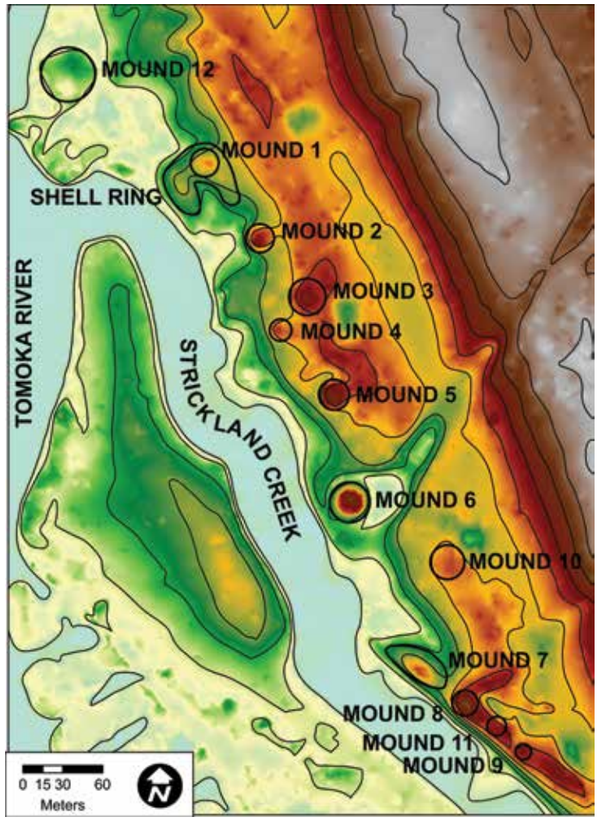
LEFT: Map shows the location of the Tomoka and Thornhill Lake mound complexes in relation to each other and within the Florida peninsula.

BELOW: Pictured are bannerstones from Mound A (rows 1–2) and Mound B (row 3) and polished stone beads (row 4). All objects except the broken bannerstone in row 2 were associated with burials.

FAR LEFT: Across the marsh and the tree line in the background lies the Tomoka River. At one time approximately 200 meters of marsh separated the Tomoka Mound Complex from the Tomoka River. Dredging purportedly for mosquito control in the 1950s created Strickland Creek which now separates the site from the marsh.

(St. Johns hereafter). Perhaps they were even members of the group that built the mounds at Thornhill Lake. At the very least, they belonged to a mound-building community or communities. The TAP's research at Tomoka has provided information to support the St. Johns origin for the mound-builders at Tomoka.

The Tomoka Mound and Midden Complex is located within Tomoka State Park and is situated atop a weathered Pleistocene dune ridge that once bordered the marshes on the west side of the Tomoka peninsula. For more than a kilometer, the site stretches north-south along the ancient dune. Shell deposits ranging in width from 20 to 100 m and reaching more than a meter in depth characterize most of the site. But it is largely inconspicuous. More obvious are the mounds and ridges built of earth and shell. Prehistoric and historic occupations were encountered during our work and included Mount Taylor, Orange (but with a twist!), St. Johns I and II, Contact, and Territorial periods. Fortunately, the Thornhill Lake phase and "Orange" occupations were easily distinguished from later ones based on shell species. Thornhill Lake phase and "Orange" were characterized by Donax clams with an admixture of different freshwater mollusks. Everything after was dominated by oyster and hard clam to the exclusion of both Donax and freshwater mollusks. While the later occupations are intriguing and worthy of research in their own right, in what follows I focus on the Thornhill Lake phase and the mounds, discussing other occupations as necessary.



FAR LEFT: Map shows the location of mounds and other cultural and natural features in the core of the Tomoka site.

LEFT: The largest mound feature at Tomoka, Mound 6, yielded the bannerstones and pendant during Douglass's excavation. It is also the youngest Thornhill Lake phase mound; the bannerstones indicate its construction likely ended around 4,700 years ago.

LEFT: The most common freshwater mollusks at Tomoka are the Banded Mysterysnail (top right), Florida Apple Snail (top left), and freshwater River Mussel (bottom).

Previous work estimated that there were from seven to nine mounds at Tomoka. Through the efforts of the TAP, twelve were identified and investigated. Six mounds were determined to be for human burial—Mounds 2, 3, 5, 6, 8, and 9. Of these, four mounds (2, 5, 6, and 8) were associated with the Thornhill Lake phase and date from approximately 4850–4700 cal BP. The remaining two mounds (3 and 9) were dated to the St. Johns I period, 3330–1830 cal BP. Six mounds were identified as "midden mounds" (1, 4, 7, and 10–12), and investigations produced no evidence of burials and distinctive sand zones, largely shell-free, that are typical for burial mounds. One exciting discovery was a previously unidentified shell ring at the northern end of the site that, interestingly, also served as the platform for Mound 1. Other topographic features included ridges composed of shell and, in one instance, shell was emplaced atop a natural sand ridge to enhance its ridge-like quality and increase its height. Several depressions also occurred somewhat closely to the mounds and may have served as borrow pits, furnishing sand for their construction. However, as these have not yet been tested, it remains possible that they were actually natural depressions associated with solution of the underlying Anastasia limestone. Future investigations may yet resolve this mystery.

In most ways, the Tomoka Complex is a lot like other Middle to Late Archaic sites on the Atlantic coast between 6,000 and 4,000 years ago. Extensive use of Donax clams is evident from the abundance of their durable and conspicuous shells at most sites. Marine and estuarine fishes constituted the bulk of the diet, supplemented by mammals, reptiles, and occasionally birds. Plant-based foods included hickory, acorn, grape, and other edible and medicinal botanicals, most of which we haven't yet identified. Stone tools were infrequent, but shell, bone, and shark teeth were more than worthy substitutes for stone, making up most of the tools found. In terms of artifacts, it is not unfair to say that preceramic Archaic coastal sites are modest, and that's being kind. While Tomoka is like most other Archaic sites in coastal northeast Florida, a few features do set it apart. One of these features provided clues that Tomoka mound builders were migrants to the coast. Results from the past seven years of TAP fieldwork and analysis hold the keys to understanding the complex history of the site and the relationships between these people, their neighbors, and the environment.

Evidence for human presence was earliest on the South Ridge. Moderate-density Donax middens dated 5050 cal BP stand out from other deposits located north, mainly northward of an area around Mounds 6 and 10. Additional dates from 5280–5000 cal BP from the southern half of the site seem to confirm that the occupation first occurred there. Shell deposits associated with the earliest inhabitation tend to lack freshwater shell generally and, when it is present, tends to be highly fragmented and few in number, consisting mainly of freshwater mussel and occasionally apple snail. We observed this in Mound 7, in the midden underlying Mound 8, and on the South Ridge. Freshwater mollusks, although few in number, indicate that the Tomoka River and its associated marshes were a freshwater ecosystem when the site initially was occupied. Pollen data from sediment samples beneath and within the Donax midden support this conclusion. In the oyster-dominated St. Johns I and II period strata, freshwater marsh grass species are absent; only salt-tolerant species are present and indicate brackish conditions in the Tomoka River and Basin after about 3800 cal BP. I believe that the occupation of the site south of Mound 6 was associated with local groups indigenous to the coast. Mounded deposits formed only on the South Ridge and at Mound 7. Otherwise, midden was relatively thin, not more than 50 or 60 cm in thickness, distributed along the dune ridge inland and east of the marsh edge for 20 to 50 m. This occupational pattern seems to have persisted for about a century or slightly longer.

Changes were afoot by 4950 cal BP. Shell was being deposited for the first time as far north as Mound 4. Freshwater shell, notably the banded mystery snail, was collected and deposited along with Donax and was found at the lowest levels in Mounds 3, 4, and 5. Mystery snail was common to frequent in both mounded

ABOVE: Layers in Unit 17 represent the natural dune deposits and earliest evidence for human occupation at the site, some 5,050 years ago, characterized by the very dark gray and dark brown, shell-filled sediments above the light brown dune sands. A zone relatively free of shell and artifacts separates the shell-bearing, Thornhill Lake phase deposits from the topmost layer, which produced evidence for Contact and Colonial Native American presence and early nineteenth-century artifacts.

LEFT: Bone tools were common, fashioned into decorative items such as bone pins (E-G) and functional forms like awls (A, B). Manufacturing debris (C, D) and shark teeth (H) also were found.

BELOW: Mound 5 stratigraphy shows the typical sequence of shell and earth layers illustrating the architectural grammar of the Thornhill phase. A shell platform was constructed (note basket loads of shell visible in the wall), and on top of it at least two separate episodes of mound building occurred, indicated by the contrasting brown and dark gray colored sand.

and non-mounded Thornhill Lake phase contexts. In fact, banded mystery snail is diagnostic of the Thornhill Lake phase at Tomoka. Sand mortuary mounds were constructed between 4900 and 4700 cal BP based on a combination of radiometric dates and culturally/temporally diagnostic artifacts (bannerstones). Mounds 2 and 5 essentially were contemporary in their construction, dated 4864–4827 cal BP and 4867–4830 cal BP, respectively. All in all, the data available indicate the construction of sand mortuary mounds occurred within a relatively brief period, two centuries or less.

Building mortuary mounds, the bannerstones in Mound 6, and the available radiometric dates are clear evidence for the Thornhill Lake phase at Tomoka. A St. John's origin is borne out by details related to mound construction. In the middle St. Johns, they frequently are constructed on top of older, mounded shell deposits variously described as "nodes" and "platforms." Likely this was done to make reference to those who came before and create a connection to, and continuity with, the past. Placing sand mounds on top of older, mounded shell deposits is part of the architectural "grammar" of mortuary mound construction during the Thornhill Lake phase.

At Tomoka, Mounds 2, 5, 6, and 8 were constructed on top of low mounds composed largely of Donax and banded mystery snail shell dated from 4960–4450 cal BP, and most were constructed between 4860–4810 cal BP. Mound 2, the northernmost mortuary mound, diverges from its contemporaries in an interesting way. Unlike the others, Mound 2 was constructed atop, and entirely enveloped within, a very discrete Donax and mystery snail mound. Sediment characterization survey immediately around Mound 2 failed to detect deposits containing even moderate amounts of shell, frequently none. Considering what we currently know, it seems that a discreet shell mound was created specifically so that Mound 2 could be constructed to "authorize" it. So discreet was this mounded shell that an excavation unit in the southern slope did not intersect any shell deposits. However, it did encounter the original ground surface underneath the mound fill. This was unusual, but nevertheless familiar. Mound 2 illustrated in stark terms the architectural grammar of Thornhill Lake mortuary mounds in the St. Johns. Given the absence of a preexisting shell mound upon which to locate Mound 2, it appears the builders rapidly constructed a localized shell deposit before mound construction commenced to remain faithful to the architectural grammar. Could a sand mound have been built without a shell mound?

Yes, of course. And yet, in a location with no previous shell deposits, they chose to first deposit a discrete shell mound and build Mound 2 on top of it. This example represents a forceful and direct link between the mound builders at Tomoka and those within the St. Johns at Thornhill Lake and elsewhere. Sand mortuary mounds and the deliberate selection (or construction) of shell mounds as loci for construction aren't the only things that demonstrate the St. Johns origins of the mound-builders at Tomoka. They also shared a distinctive cooking technology.

Excavations in the Thornhill Lake phase shell deposits produced numerous fragmented items that initially were believed to be fractured clay cooking objects. A subsequent analysis of several hundred individual specimens determined that they were, in fact, limestone. Anastasia Formation limestone occurs naturally in the immediate vicinity of Tomoka, composed of crushed shell and sand, and much famed for its use in constructing the Castillo de San Marcos and many other colonial- and territorial-period structures across Atlantic northeast Florida. The limestone fragments used by the site's inhabitants were not of this material, but something else. Similar material occurs in the vicinity of Edgewater, some thirty miles south, and likely would have been transported to Tomoka by canoe via the Halifax River. Dense concentrations of thermally damaged and fractured limestone were in shell deposits with the highest concentrations of artifacts and food remains, especially Mounds 1 and 4. A majority of the fire-cracked limestone was found in the northern half of the site, much like banded mystery snail shells. What is significant about these apparent cooking stones used in "stone boiling" is that there are no other cases of this cooking technique at contemporary sites on the coast. Here, stone boiling is a foreign practice, but not in the St. Johns. However, fragmented and thermally fractured limestone has been observed at more than one site in the St. Johns. At Bluffton, Ripley Bullen observed dense concentrations of burned limestone in a large hearth feature in preceramic layers of the midden. Bluffton also has a Thornhill Lake phase sand mortuary mound. I believe this is a convincing connection and strong evidence for the St. Johns origins for the Tomoka mound builders. Migrants from the St. Johns to Tomoka brought their culture and their ways of thinking and doing things with them. That's not something you leave behind.

Rapid mound building, following the traditional architectural grammar for constructing burial mounds, and material culture and technologies foreign to the coast, when taken together, indicate a St. Johns origin for the Tomoka mound builders. Based on the similarities between Thornhill Lake and Tomoka, I believe that the case can be made that a group or segment of a group indigenous to the St. Johns migrated to the Atlantic coast, possibly enabled by previously established relationships of blood or association with coastal groups. Prior to their arrival, coastal dwellers made only occasional use of Tomoka and, when they did, it was concentrated in the south, on the highest point of the old relict dune ridge. Culturally, they didn't build mounds of sand for burial, collect freshwater mollusks in significant numbers, or cook with heated stones. In material terms, the sudden appearance of these foreign practices—mound building, banded mystery snail collection and consumption, and cooking with heated stones—distinguish the St. Johns migrants from the local population among whom they lived and interacted, yet remained distinct.

Mound-building and associated ritual carried on from 4950 to 4700 cal BP. Based on the available data from the mounds, none were constructed after 4700 cal BP. Sand mortuary mound-building apparently stopped, and the reasons are uncertain. However, the descendants of the St. Johns migrants and local coastal folk continued to utilize the site for ritual purposes. Possibly these were for mound burial, but they didn't involve constructing new mounds, and probably they were reusing the older ones. Nevertheless, they continued to deposit shell, mainly north of Mound 4 at the north end of the site. Excavations revealed mixed Donax and freshwater shell along with fractured rock dating from about 4500 to 4200 cal BP. Dates in this range traditionally are associated with the Orange period. Despite the dates, not one crumb of the distinctive pottery tempered with Spanish moss has been recovered over the past seven years of field work. Striking is the discovery of a ring-shaped shell deposit

ABOVE: Thousands of limestone fragments were found in non-mound shell deposits and shell deposits beneath Thornhill Lake phase mortuary mounds. Their size and appearance suggest they were heated in a fire and dropped into a cool liquid. Repeated quenching caused them to fragment until they were too small to be usable. Stone boiling was used to cook soups and stews in organic containers before the invention of pottery.

at the north end of the site. This feature somehow had gone unnoticed prior to our work, doubtless because of the dense vegetation and its relatively low topographic relief. Mound 1 sits at its northern side and forms the apex of the shell ring, initiating after 4800 cal BP based on identical dates from the base of the ring and Mound 1. Dates associated with ring formation are on the order of 4450 to 4200 cal BP and are indisputably Orange period in age. This makes sense. Orange period groups on the northeast coast of Florida constructed shell rings, and those rings contained an abundance of fiber-tempered pottery. The Tomoka shell ring does not. What, then, could this mean?

I believe the Tomoka shell ring represents the Thornhill Lake phase descendants. Tied by history to Tomoka and continuing traditional practices of their forebears, they continued to collect freshwater mollusks for use in ritual contexts, cooked with heated stones, and continued monumental construction with shell. Monuments were no longer sand mortuary mounds, but shell rings like their pottery-making neighbors. Banded mystery snail was still collected and used from 4600–4200 cal BP, but they were fewer in number and smaller in size compared to the period from 4900–4600 cal BP, making up

ABOVE: A shell vessel with evidence of use over a fire was found adjacent to a thermal feature (hearth) at the base of a shell ridge near Mound 5. Residue analysis of its contents indicated it was used to brew an herbal tea associated with later Thornhill lake phase rituals.

TOP: Test Unit 12 within the shell ring, excavated by Sean Norman and Renae Steinberger, provided evidence, including freshwater mollusks from 4500-4300 cal BP, for ritual use of the site after construction of sand mortuary mounds had ceased.

approximately five percent of the shell from the ridge northwest of Mound 5. That ridge was established between 4577–4439 cal BP and was completed between 4530–4427 cal BP, formed over a period of twelve to fifty years. Two shell cups used to brew herbal teas from waxy-leaved, aromatic plants were found at the base of this ridge in association with a hearth feature, and one was found at the very top of the shell deposit. Rituals occurring at Tomoka after 4500 cal BP retain echoes of an ancestral past; mounded features were still important but the meanings had changed. I believe that the Tomoka group had adapted to a new social landscape. The construction of the shell ring reflects a negotiation of identity in that new context. Although they adopted the monumental architecture of their Orange pottery-making neighbors, they appear to have actively resisted the adoption or use of pottery for about 500 years. Continued collection and consumption of freshwater mollusks represents the persistence of that ancestral practice of the first migrants from the St. Johns. Tradition is a powerful force. Resisting the adoption of a new and arguably beneficial technology while continuing the use of ritual spaces and foodways is indicative of the strong influence that tradition had on them.

However powerful the forces that prompted the community, tied through time and tradition to Tomoka, to differentiate themselves from their neighbors, they nevertheless were subject to powers greater than tradition—the forces of nature. Specifically, the Atlantic Ocean and sea-level rise. Mystery snails and other freshwater mollusks would have been the first to go when saltwater intruded into the Tomoka Basin and River system, and they appear to be locally extinct after 4200 cal BP. A transition from fresh to brackish ecosystems occurred, and shell deposits are dominated by oyster after 3330 cal BP. Freshwater marsh grass pollen is absent in the oyster-bearing shell deposits, only brackish and saline tolerant species persisted. I believe that the disappearance of the banded mystery snail and other changes to the landscape and ecology resulting from sea level rise was not only an impact experienced physically in the world around them, but also perceptually and spiritually. Along with influences from their social world, ecological realignment was a tipping point, nudging them toward choices that departed from tradition. And so the descendants of those migrants from the St. Johns, once distinct, became indistinguishable from their neighbors. At least indistinguishable archaeologically. Instead of standing out, they blended in, assimilated through new ways of living and being.

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Bibliography

Bullen, Ripley P. 1955. Stratigraphic Tests at Bluffton, Volusia County, Florida. *The Florida Anthropologist* 8:1–16.

Douglass, A. E. 1882. A Find of Ceremonial Axes in a Florida Mound. *American Antiquarian and Oriental Journal* 4:100–109.

----------. 1885. Some Characteristics of the Indian Earth and Shell Mounds on the Atlantic Coast of Florida. *The American Antiquarian* 7:74–83.

Endonino, Jon C. 2017. The Thornhill Lake Phase: Classifying Goggin's Unclassified Complex. *The Florida Anthropologist* 70(3):108–120.

----------. 2008. The Thornhill Lake Archaeological Research Project: 2005–08. *The Florida Anthropologist* 61: 149–165.

Endonino, Jon C., Sean Norman, Thaddeus Bissett, Steven England, and Candace Robinette. 2019. Tomoka Archaeology Project Stage 1. Technical Report 1, Laboratory of Archaeology, Department of Anthropology, Sociology, and Social Work, Eastern Kentucky University. Report on file, Florida Division of Historical Resources, Tallahassee.

Endonino, Jon C., Arlene Fradkin, Lee Newsom, Sean Norman, Kendall Jackson, Tracy Lovingood, Linda Scott Cummings, Paul Miller, Kelsey Tuggle, and Steven England. 2020. Tomoka Archaeology Project Phase 2: Paleoenvironmental Reconstruction, Subsistence, and Chronology. GARI Report 19-2/Technical Report 2, Laboratory of Archaeology, Department of Anthropology, Sociology, and Social Work, Eastern Kentucky University. Report on file, Florida Division of Historical Resources, Tallahassee.

Moore, Clarence B. 1894a. Certain Sand Mounds of the St. Johns River, Florida. Part I. *Journal of the Academy of Natural Sciences of Philadelphia* 10:4–128.

----------. 1894b. Certain Sand Mounds of the St. Johns River, Florida. Part II. *Journal of the Academy of Natural Sciences of Philadelphia* 10:129–246.

Piatek, Bruce J. 1994. The Tomoka Mound Complex in Northeast Florida. *Southeastern Archaeology* 13(2):109–118.

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