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Thank You! Nena Powell Rice, Editor, (803) 331-3431 Cell, (nrice@sc.edu).

VOL. 23, No. 1, July 2019

Search of Old St. Augustine, Florida

By Chester B. DePratter

St. Augustine, Florida, was first settled by Spanish colonists in 1565, a year before founder Pedro Menéndez de Avilés established Santa Elena on South Carolina's Parris Island. Santa Elena was abandoned in 1587, but St. Augustine has grown and prospered through the centuries. Its stone fort, Castillo de San Marcos, was built between 1672 and 1698 after Charleston was settled by England.

In the first century of its occupation, St. Augustine moved twice. The first settlement existed for a year on the mainland, and then Menendez chose to relocate the town and its protective fort to Anastasia Island across the river from the present-day city. The Anastasia Island settlement, occupied for only six years, has never been found. In late-April 2019, I initiated a search on Anastasia Island to find that lost town. I contracted with Stacey Young and a crew from SCIAA's Applied Research Division to spend two weeks digging shovel tests in a likely location. Results of this search project will be included in the next issue of *Legacy*. This project was supported by private donors who were interested in helping solve the mystery of old St. Augustine.



Figure 1: Castillo de San Marcos, St. Augustine. (SCIAA photo)

Legacy is the magazine of the SC Institute of Archaeology and Anthropology, College of Arts and Sciences, University of South Carolina Legacy will be published twice in 2019

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Director's Notes By Steven D. Smith SCIAA Director

Spring and summer means fieldwork, and this issue of *Legacy* highlights a lot of recent fieldwork by SCIAA, from last fall 2018 through May 2019. As this is being written, the Applied Research Division (ARD), is assisting at Mulberry Plantation (see: Adam King, Gail Wagner, and Chris Judge's article on pages 14-17), after having assisted Chester DePratter in the search for St. Augustine's second settlement (see front page). For the third consecutive year, I was fortunate to be able to return to Ninety Six National Historic Site to teach an archaeological field school. Two years ago, the USC Department of Anthropology class, ANTH 322, "Field Methods in Archaeology," conducted test excavations and metal detecting at the pre-Revolutionary War Gouedy's Trading Post. In May 2018, we were granted permission by the National Park Service to test excavate inside the 1781 British-built Star Fort, and in May 2019, we returned to the Star Fort. The five-member class was joined by 16 young people from the Southeastern Conservation Corps. With a total of 21 students, it was quite a zoo for a while, but thanks largely to ARD, Director Stacey Young, and Charlie Leedecker, a retired professional archaeologist who joined me in instruction, we were able to keep it under some semblance of order. Jim Legg also joined us and assisted in metal detecting, while Jon Leader ran his gradiometer outside the fort on the battlefield directly in front of the fort.

Two field seasons at the Star Fort have revealed that the fort has suffered much erosion, but there are still large areas of the interior where intact features and surfaces remain. In May 2018, for example, we revealed

a large shallow pit full of ceramics, food bone, and other refuse in the center of the fort. Surrounding that feature, however, the top soils were pretty much gone and little was found. During both seasons in 2018 and 2019, we were able to expose small sections of the interior fort construction consisting of burned vertical and horizontal posts. These features are aligned with the parapets and are the remains of the revetments or firing steps. We also sampled the defensive ditches but found very little. While these units were disappointing, we did find two more six-pounder solid shot cannon balls; we now have a total of nine solid shot. Two of our collection are British made, but the British did not have six-pounder cannon so, they must have been captured ammunition fired by the Americans. Iron canister balls and lead shot were also recovered. One interesting find, was an unfired .69 caliber musket ball resting on three buck shot. This was undoubtedly a complete cartridge; the paper and powder having long ago deteriorated. Jim Legg also lead a metal detecting crew in a search for overshots fired from the fort and recovered a British canister ball far behind the American siege trenches. In May 2018, it rained a little or a lot every day. In May 2019, we had no rain at all, and the crew enjoyed record breaking high temperatures for South Carolina. Nevertheless, it was a great season with an inspired, fun, class who worked hard. We thank National Park Service Staff, Sarah Cunningham, Chief of Resources and Facilities, Gray Wood, tractor operator, and volunteers Mark Hudson, Heathley Johnson, and Arnold Stone for their support.



Figure 1: ANTH 322 and volunteers on the final day at Ninety Six. (Front Row, Left to Right): Josh Becknell, Unidentified, Jesse Howard, Sara Rogers, and Katy Self. (Back Row, Left to Right): Tim Pieper, Gray Wood, Mark Hudson, and Charlie Leedecker. (Photo by James B. Legg)

New for Spring 2019

Partisans, Guerillas, and Irregulars



Historical Archaeology of Asymmetric Warfare

Edited by Steven D. Smith and Clarence R. Geier

6 x 9 • Hardcover 272 pages ISBN: 978-0-8173-2020-1 \$49.95

CONTRIBUTORS

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Partisans, Guerillas, and Irregulars Historical Archaeology of Asymmetric Warfare Edited by Steven D. Smith and Clarence R. Geier

Essays that explore the growing field of conflict archaeology

Within the last twenty years, the archaeology of conflict has emerged as a valuable subdiscipline within anthropology, contributing greatly to our knowledge and understanding of human conflict on a global scale. Although archaeologists have clearly demonstrated their utility in the study of large-scale battles and sites of conventional warfare, such as camps and forts, conflicts involving asymmetric, guerilla, or irregular warfare are largely missing from the historical record.

Partisans, Guerillas, and Irregulars: Historical Archaeology of Asymmetric Warfare presents recent examples of how historical archaeology can contribute to a better understanding of asymmetric warfare. The volume introduces readers to this growing study and to its historic importance. Contributors illustrate how the wide range of traditional and new methods and techniques of historiography and archaeology can be applied to expose critical actions, sacrifices, and accomplishments of competing groups representing opposing philosophies and ways of life, which are otherwise lost in time.

The case studies offered cover significant events in American and world history, including the French and Indian War, the American Revolution, Indian wars in the Southeast and Southwest, the Civil War, Reconstruction, Prohibition, and World War II. All such examples used here took place at a local or regional level, and several were singular events within a much larger and more complex historic movement. While retained in local memory or tradition, and despite their potential importance, they are poorly, and incompletely addressed in the historic record. Furthermore, these conflicts took place between groups of significantly different cultural and military traditions and capabilities, most taking on a "David vs. Goliath" character, further shaping the definition of asymmetric warfare.



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Naritime Research Shipwrecks of America's Lost Century Symposium By James D. Spirek

Scarcely two months elapsed after the discovery of the New World before its unfamiliar shores claimed its first shipwreck, the nao Santa Maria, the largest of Columbus' three ships, while exploring along the north coast of the island of Hispaniola. Many other shipwrecks were soon to follow over the course of the 16th century-the victims of accidents, storms, warfare, scuttling, and by a myriad array of other hazards and perils. On the coast of South Carolina, there are two intriguing, yet undiscovered shipwrecks from this time period-the Chorruca, the flagship of the Lucas Vázquez de Ayllón's expedition lost in 1526, and Le Prince, a French corsair wrecked after a successful voyage of raiding and trading along the Spanish Main and West Indies in 1577. Other shipwrecks along the southeastern U.S. coastline from this time period include four vessels associated with the disastrous Jean Ribault expedition to provide relief to the French at Fort Caroline that were destroyed during a storm near Cape Canaveral, Florida in 1565. These and other shipwrecks that explored, contested,

exploited, conveyed, and colonized the New World during the 16th century formed the focus of a day-long symposium bringing together 11 eminent maritime historians and nautical archaeologists at the Center for the Arts located at the downtown campus of the University of South Carolina Beaufort on April 5, 2019.

In acknowledgement of Santa Elena's role on the periphery of Spain's empire in the New World, conceived in part to protect the sea routes carrying treasures and products back to Spain, the Santa Elena Foundation wished to explore the maritime world of the 16th century. Consequently, I was asked by the Foundation and readily agreed to organize and invite a group of scholars to explore this fascinating time period through the maritime lens of seafaring and shipwrecks. The Foundation also wanted to build upon the success of the first scholar's conference convened in 2016. That conference was organized by Dr. Chester DePratter, who assembled a group of distinguished historians and archaeologists to discuss the historical context and archaeological

Figure 1: Symposium presenters (left to right): Dr. Don Keith, Barto Arnold, Chuck Meide, Dr. Brad Loewen, Dr. John Bratten, Dr. Eugene Lyon, James Spirek, Dr. Roger Smith, Dr. Paul Hoffman, Dr. Corey Malcom, Christopher Allen, Dr. Larry Rowland. (Not pictured: Professor Carla Rahn Phillips.) (Photo courtesy of Santa Elena Foundation)

remains associated with Santa Elena, established on present-day Parris Island in 1566, and on other sites located in La Florida. This inaugural conference coincided with the 450th anniversary of the founding of Santa Elena, and although ultimately abandoned in 1587, the archaeological remains of the Spanish settlement, as well as the earlier 1562 French fortification of Charlesfort, attest to the geopolitical importance of Santa Elena during the 16th century by Spain, France, and later England to control and contest claims to the vast territory known as La Florida.

Over the course of the day, the scholars presented their research and findings centered on the historical and archaeological record that illuminates this oft-forgotten period in American history through the symposium entitled, Shipwrecks of America's Lost Century. The symposium began with a general overview of Spanish and European seafaring during the 16th century and then moved chronologically from earlier to later shipwrecks and seafaring ventures. Santa Elena and La Florida provided a touchstone for several of the presentations that centered on Spanish and French colonizing efforts along the southeastern United States coastline. Dr. Paul Hoffman, professor emeritus of history at Louisiana State University, Baton Rouge, discussed the Lucas Vázquez de Ayllón's expedition in 1526 to colonize along the southeastern coast, and suggested a probable wrecking site of the flagship, Chorruca, near Winyah Bay. Two presentations, one by Dr. Roger Smith, recently retired after many years as the state underwater archaeologist at the Florida Division of Historical Resources, and the other by Dr. John Bratten, professor at the University of West Florida, focused on the historical and archaeological investigations of three shipwrecks and the land-site associated



Figure 2: State Underwater Archaeologist James Spirek delivering opening statements for the daylong symposium. (Photo courtesy Corey Malcom)

with the 1559 Tristán de Luna y Arellano expedition that landed in present-day Pensacola but had as an ultimate aim to move overland to Santa Elena. Chuck Meide, director of the Lighthouse Archaeological Maritime Program at the St. Augustine Lighthouse & Maritime Museum, recounted the disastrous outcome of the French naval force under the command of Jean Ribault sent to provide relief to Fort Caroline that was wrecked off Cape Canaveral in 1565. My presentation focused on our continued efforts to locate the French corsair Le Prince that wrecked on the shoals at the entrance to Port Royal Sound, which prompted the Spanish to reestablish Santa Elena to hunt down the survivors in 1577. Dr. Corey Malcom, director of archaeology at the Mel Fisher Maritime Museum, focused on a 1564 shipwreck in the Bahamas, the galleon Santa Clara, that was owned by Pedro Menéndez de Avilés, just before he founded St. Augustine and Santa Elena.

Other symposium topics explored the larger New World maritime frontier focusing on shipwrecks associated with the early discovery of the Caribbean, treasure fleets, whaling, and general seafaring practices. Dr. Donald Keith, president of Ships of Discovery and a research affiliate at the Turks & Caicos National Museum, discussed the pioneering research on several early Spanish shipwrecks in the Caribbean. Barto Arnold, director of Texas Operations at the Institute of Nautical Archaeology at Texas A&M University and former state marine archaeologist of Texas, presented on three wrecks of the 1554 New Spain fleet carrying treasure and other products along the Texas coast. Dr. Brad Loewen, a professor at the Université de Montréal, spoke about the early Basque whaling industry and the wreck of the whaler San Juan, sunk on the Labrador coast in 1565. Although not physically present at the symposium, Professor Carla Rahn Phillips, professor emerita at the University of Minnesota-Twin Cities and a faculty research affiliate at the University of Texas-Austin, recorded an overview of 16th century Spanish and European seafaring, including vessel types, instrumentation, and navigation during the Age of Discovery. The day's proceedings commenced with a brief tribute to the honorary chair, Dr. Eugene Lyon, noted Santa Elena and La Florida historian, by Dr. Larry Rowland, professor emeritus at the University of South Carolina Beaufort. Soon an edited video of the symposium proceedings will be uploaded for viewing online.

Besides participating in the symposium, other scheduled events for the program participants included time for fellowship, sightseeing, and honoring



Figure 3: Scholars and guests at the Charlesfort monument on Parris Island. (Photo courtesy of Santa Elena Foundation)



Figure 4: Group of scholars waiting to board the replica *nao Santa Mari*a for the Sip-n-Sea event at the Beaufort waterfront. (SCIAA image)

the work of Dr. Lyon. Everyone arrived in Beaufort the day before the event, got refreshed, and then assembled for the Scholar's Conclave at Bricks on Boundary for an al fresco dinner and drinks on the patio. Two receptions, one immediately following the symposium, and one held the next day aboard the replica nao Santa Maria allowed for mingling with Foundation board members and guests. Having the reception aboard the resurrected Santa Maria, the first European shipwreck in the Americas, was quite appropriate and keeping with the theme of the symposium. The scholars also found a nice local watering hole after the scheduled events to unwind and reminiscence about past projects, swap stories, and update each other on current projects. Everyone also hopped aboard the shuttle and "Silver Bullet" to visit Santa Elena on Parris Island where a tour of the archaeological site was led by Dr. Steven Wise, director of the Parris Island Museum, who was assisted by a Foundation docent and a former archaeologist who had worked with Dr. Stanley South during the early phases of the excavations. Next the group visited the museum to see the Santa Elena exhibit and other displays about the history of the Marines and Parris Island and environs. The sightseeing adventure concluded at the Santa Elena History Center where

the reading room was dedicated to Dr. Lyon in recognition of his support for the organization and scholarship related to Santa Elena, La Florida, and Columbus' voyage of discovery. Following a catered lunch, everyone viewed the exhibits outlining the historical and archaeological progression at Santa Elena/Parris Island that included earlier occupancy by Native Americans, the French at Charlesfort in 1562-1563, and the Spanish from 1566 to 1587. Essentially, the complementary educational and social events with the symposium provided the scholars with a greater awareness of Santa Elena during the 16th century that was served with a great big helping of "Beaufort hospitality!"

As one may surmise, many organizations and individuals assisted to undertake and ensure the success of this event. Dr. Andy Beal and the Santa Elena Foundation Board through their leadership are commended for providing public educational opportunities related to the history and archaeology of Santa Elena, La Florida, and other aspects of the New World during the 16th century through these forums and the Santa Elena History Center. I would specifically like to draw attention to Megan Meyer, the executive director, and Chris Allen, board member, for their behind the scenes efforts on the logistical front to

organize this event and social activities and to arrange for the scholars travel to Beaufort, as well as to Tedi Bright for administering the social media campaign drawing awareness to the event. The Osher Lifelong Learning Institute at USCB sponsored the symposium as part of their mission to provide continuing educational opportunities to interested folks, as well as to the Center for the Arts staff for ensuring the smooth operation of the technical aspects during the symposium. The symposium received generous sponsorship by the South Carolina Humanities through a major grant to assist in funding the conference, as well as from an anonymous donor. Dr. Larry Rowland, professor emeritus at USCB, launched the symposium by welcoming the scholars and audience, as well as to acknowledge the scholarship of Santa Elena and La Florida by the honorary chair of the symposium, Dr. Eugene Lyon. Of course, a special thanks is due to my colleagues for agreeing to participate in this special event and sharing their expertise and knowledge with the audience. Additionally, colleagues at SCIAA, particularly Dr. Chester DePratter, provided guidance and advice in organizing this program and Ryan Bradley for assisting in planning the symposium, and to our director, Dr. Steve Smith for his support of our research and educational efforts. And finally, I would also like to thank the audience members for their attention and interest in the subject. We look forward to the third installment of these forums delving into the history and archaeology of Santa Elena and the New World during the 16th century.



Search Resumes for Le Prince By Ryan Bradley and James Spirek

The Maritime Research Division (MRD) returned to the waters of Port Royal Sound in the Fall of 2018, to resume the search for Le Prince. Pleasant weather allowed for four days of survey before forced off the water by high seas and sustained winds brought about by the outer bands of Hurricane Michael near the end of the week. Despite the brevity of the search, the team was able to contribute to the survey coverage area first delineated with the onset of the investigation of the whereabouts of *Le Prince* back in the early 2000s. Le Prince, one of the earliest and most noted causalities of the perilous shoals off Port Royal, was a French corsair, which entered these waters fresh off a cruise trading and raiding Spanish towns and shipping in the Caribbean when it struck the shoals and sank back in 1577. This exciting potential submerged archaeological site represents one of South Carolina's earliest historical shipwrecks and could offer insights to 16th century French seafaring and ship construction.

The MRD team deployed a cesium magnetometer and side-scan sonar as part of its remote sensing ensemble in the hopes of detecting the 441-year old wreck. A one and a half-square mile area was



Figure 2: Jim Spirek and Ryan Bradley heaving the magnetometer sensor overboard the survey vessel. (SCIAA photo)

covered by the team over the four-day stretch. Water depths ranged from seven to 30 feet depending upon the tide. Overall, we have now completed nearly threequarters of the 24-square mile high priority area covering the offshore shoals at the entrance to Port Royal Sound.

The Division was accompanied for one of the survey days by two USC Columbia undergraduate students, Fred Dau and Angelo Allison, so the communication majors could collect film footage for a mini-documentary Dau is developing. The mini-documentary features MRD members describing official duties, research projects, and the mission and purpose of SCIAA and MRD. Look for it on our YouTube channel during the coming months.

Funding for this project to continue the search for the French shipwreck and to advance the story of Santa Elena was provided by the generosity of our colleague, Dr. Chester DePratter, SCIAA research professor. We hope to continue a more sustained effort to locate the French shipwreck and other casualties on the shoals with public and private funds in the coming years.



Figure 1: MRD crew surveying offshore. (SCIAA photo)



Figure 3: The survey team, (left to right): Angelo Allison, Jim Spirek, Ryan Bradley, Nate Fulmer, and Fred Dau. (SCIAA photo)

Follow Up on the SUBMERGED Educational Programming By Ryan Bradley

Beginning in mid-February 2019, members of the Maritime Research Division (MRD) hit the road and travelled to nearly every corner of the state bringing the world of underwater archaeology and the maritime history of South Carolina to 8th grade classrooms through the educational programming called SUBMERGED: Underwater Archaeology in South Carolina. Twenty-one schools were visited from as far west as Greer Middle School located north of Greenville and Fairforest Middle School in Spartanburg, to the eastern region of Whittemore Park in Conway, and Rosemary Middle School in Georgetown and everywhere in between. Nate Fulmer of the Charleston office visited classrooms throughout the lowcountry bringing the history of Robert Smalls and the search of the ship he once piloted, Planter, to Robert Smalls Middle School in Beaufort County, and the story of the Little Landing Shipwrecks to Berkeley Middle School in Monck's Corner. Programming was adapted for schools to offer regional specific stories and lessons from local history and archaeology.

Funded by a grant awarded by the South Carolina Humanities, the MRD was able to purchase two outreach kits



Figure 2: Underwater archaeologist Nate Fulmer, from the Charleston office, teaching SUBMERGED class. (SCIAA photo)

that furnished these travelling educators with the tools they needed to bring South Carolina maritime history alive, as well as cover the cost of travelling over 3,000 miles in a period of nine weeks. The program looked to dispel misperceptions about underwater archaeologists, provide an overview of the methods and technology employed by the MRD at SCIAA, and discuss examples of known wrecks and sites throughout the state, as well as

those still eluding discovery. By the end of the project, MRD staff had spoken in front of more than 3,000 students in 131 classrooms, at schools from 14 counties.

The educational programming SUBMERGED: Underwater Archaeology in South Carolina, doesn't end with the conclusion of these class visits. This is just the start of establishing relationships with educators throughout the state to bring underwater archaeology and the maritime history of South Carolina into classrooms and making it part of the regular social studies curriculum. Participating teachers completed evaluation forms designed to provide constructive feedback about the program and offer suggestions for improvement. As this program develops, lesson plans and educational resources will be made available on the MRD website so that teachers can access this information and augment their lesson plans with updated information, activities and videos.



Figure 1: State Underwater Archaeologist, Jim Spirek teaching SUBMERGED class. (SCIAA photo)



Figure 3: Underwater archaeologist Ryan Bradley from the Columbia SCIAA office teaching SUBMERGED class. (SCIAA photo)



Figure 4: One of the SUBMERGED classes with Ryan Bradley. (SCIAA photo)



Students Dive in for Maritime Archaeology Internships at MRD Charleston Field Office

By Nate Fulmer

In recent years, the SCIAA MRD Charleston Field Office has collaborated with the College of Charleston anthropology and archaeology programs to offer internship opportunities for students interested in pursuing a career in maritime archaeology. Since relocating the office to the Warren Lasch Conservation Center in 2018, I've had the pleasure of hosting two very promising CofC students who deserve special recognition for their efforts in helping us advance our mission to preserve and protect South Carolina's maritime heritage through research, management, public education, and outreach.

Alaina Foster is a graduating senior at the College of Charleston who completed a 120-hour credited internship with us last December 2018. Alaina is pursuing a bachelor's degree with a dual major in anthropology and archaeology. During her time in the office, Alaina primarily worked on the GIS database for Hobby License reports and helped advance an ongoing effort to visualize over four decades of recovery reports. In addition to her work with the GIS database, Alaina participated in site visits, 3D scanning of artifacts, and daily office operations. One of the major highlights of her experience was assisting us with final measurements of the Pee Dee cannons after conservation



Figure 2: Summer 2019 MRD intern Maggie Berlin rediscovers the lost art of typewriting at the Charleston Field Office as she creates license cards for members of the diving public. (Photo by Nate Fulmer)

here at the Lasch lab (Figure 1). This spring, Alaina landed a part-time gig in the lab at Brockington & Associates where she continues to hone her professional development.

Maggie Berlin is currently working alongside me on a volunteer basis during her break from classes at the College of Charleston this summer. Maggie is a rising junior triple-majoring in History, Archaeology, and Historic Preservation. In addition to pursuing the trifecta major, she's also a member of the CofC women's soccer team. Maggie is enthusiastic about maritime archaeology and eager to learn everything she can during her time here as she develops her plans to



Figure 1: Fall 2018 MRD intern Alaina Foster assists State Underwater Archaeologist Jim Spirek during an inspection of the VI.4-inch double-banded Brooke rifle that was recovered from the Great Pee Dee River in 2015. (Photo by Nate Fulmer)

pursue graduate studies. She only recently joined the team, but she dove right in without hesitation during our busiest season for Hobby Licenses and had way too much fun learning to operate the Panasonic electric typewriter to create license cards (Figure 2). Besides getting her feet wet by assisting with day-to-day operations this summer, Maggie will be involved with all other aspects of the job, including site assessment, report review, artifact documentation, historical research, 3D scanning and printing, and our preparations for the much-anticipated return of the conserved Pee Dee guns to Florence County.

The overarching goal of our internships is to provide a professional engagement and mentorship for young scientists who wish to pursue a career in this field. As Alaina and Maggie look ahead to the next stages of their academic and professional development, the MRD team thanks them for their respective contributions to our mission through their work here at the Charleston Field Office. I have thoroughly enjoyed hosting each of these very driven young women and wish each of them the best in their future endeavors.

For information about Fall 2019 internship opportunities or volunteering at the MRD Charleston Field Office, please contact Nate Fulmer at <u>fulmern@sc.edu</u>.

Research Cobble Cluster Features and the Occupation of 38AK155 By Adam King

At first glance, 38AK155 is not a very memorable site. It is a relatively large (225 X 175 meters) artifact scatter located on a small ridge that gently slopes to a rank 2 drainage (Figure 1). That small creek runs into a much larger creek, Upper Three Runs Creek, in the Upper Coastal Plain of Aiken County. Testing in 1993 and block excavations conducted in 2003 by the Savannah River Archaeological Research Program show that the site was occupied from the Middle Archaic through Historic periods, with the Middle Woodland Deptford and Late Woodland Savannah I phase occupations being the most intense.

Digging a little deeper into the site's archaeological record presents something of a puzzle. During the 2003 investigations, two large blocks were excavated at 38AK155. The West Block consisted of 120 one-meter square test units excavated to 60 centimeters below ground surface and the east block (20 meters downslope) was comprised of 92 one-meter square test units. The West Block produced a fairly high density of artifacts, especially considering it investigated a small portion of an upland artifact scatter. In the block, SRARP crews recovered 5,045 pottery sherds and 30,869 flaked stone artifacts. Even more interesting is that this concentration of human activity took place on a landform that is not particularly wellsuited to long-term habitation because it is relatively small and gently sloping.

Without question, the aspect of the site's archaeological record that makes it most noteworthy is the presence of large quantities of quartzite cobbles. As Sassaman (1993) has argued elsewhere, these cobbles were readily available in the nearby creek and its banks. In total, crews recovered 164 kilograms (362 pounds) of cobbles and cobble fragments scattered throughout excavation levels in the West Block. In addition to these scattered cobbles, crews recorded 25 features in the West Block that consisted of clusters of



Figure 1: Map of Pre-2003 Investigations at 38AK155. (Drawing by Adam King)

cobbles (Figure 2). These clusters varied considerably in size (20 to 140 centimeters wide) and number of cobbles (6 to 100), but all appear to be surface deposits. None of the features were contained in pits with visible outlines and most were no deeper than 10 centimeters (about two courses of cobbles piled on top of one another).

At the nearby site 38AK157, Sassaman (1993) recorded 12 cobble cluster features in 418 square meters of excavations, where they were interpreted to be in-situ hearths associated with Early and Middle Woodland period structures. In a block almost one-fourth the size at 38AK155, SRARP excavators recorded twice as many cobble cluster features. Given their concentration in such a small area, it is unlikely that the cobble cluster features at 38AK155 represent hearths associated with individual structures. This especially seems to be the case given that so many more cobbles deposited not as features, but just as general refuse.

All of the rocks in the cobble cluster features have been altered by heat (reddened, cracked, and broken) and the majority of those found in the levels show the same alterations. By combining experimental archaeology and detailed analyses Sassaman (1993) was able to argue that these cobbles had been altered during stone boiling.

Similar kinds of features are found across the state, most dating to the Woodland period. At 38AK155, securely dating these features is difficult. Very few artifacts were found in direct association with the cobbles. Because the cobbles were deposited on exposed surfaces and not in pits, the artifacts found near them could have been deposited with the cobbles or during any time after they were dumped. Given this, the best opportunity to assign dates to the cobble clusters comes from the distribution of diagnostic artifacts recovered from 10-centimeter excavation



Figure 2: Feature 15, West Block (Photo by Adam King)

levels. All excavation levels in the West Block contain some mix of Early Woodland through Mississippian diagnostics. The cobble cluster features are distributed from Levels B through F, but the majority were recorded in Levels D, E, and F. In those levels, the most common pottery wares have surface treatments assigned to the Middle Woodland Deptford phase (check stamped, linear check stamped, simple stamped, and cordmarked). At the same time, the most common formal biface type is the Late Woodland to Mississippian small triangular, followed by Early Woodland stemmed/notched types, and the Middle Woodland Yadkin. Taken together, it appears that the bulk of the occupation in Levels D through E date

to the Middle Woodland (Deptford phase) and Late Woodland (Savannah I phase) periods. Unfortunately, it is not possible to assign dates to individual features.

In attempt to refine our understanding of the dating of these features, and the primary occupation of the West Block, I submitted materials from the West Block for radiocarbon dating. Thanks to funding from SCIAA's Archaeological Research Trust (ART), six samples of calcined animal bone were submitted to the University of Georgia's Center for Applied Isotope Studies where the bioapatite in the bone was dated using AMS radiocarbon dating methods (Table 1). The samples were intentionally selected from proveniences and levels where features were recorded. The dates generally fit reasonably well with the predominance of Middle Woodland diagnostics, as most dates cluster reasonably close to 0CE with single dates near the beginning and end of the Deptford phase.

One sample returned a later date that fits within the range of dates returned on cordmarked pottery of the Savannah I phase. This fits with the predominance of triangular projectiles recovered in all levels of the West Block and likely also shows that some of the cordmarked pottery recovered in the block was made during the Savannah I phase.

Based on the information collected from 38AK155, the cobble cluster features likely represent piles of rocks deposited

Site	Level	UGA #	Sample	Cal Years BP	STD	Median AD	2STD
38AK155	С	40933	AK155P411LC	1880	25	118CE	71-214CE
38AK155	D	40934	AK155P297LD	1480	25	587CE	545-637CE
38AK155	D	40935	AK155O257LD	1930	25	71CE	22-127CE
38AK155	D	40936	AK155P273LD	1070	20	982CE	948-1018CE
38AK155	D	40937	AK155P365LD	2290	25	380BCE	402-357BCE
38AK155	E	40932	AK155P262LE	1890	25	107CE	59-178CE

Table 1. AMS Radiocarbon Dates from Bone Samples in the West Block

on exposed surfaces after use. The rocks were used primarily for stone boiling during the Middle Woodland period. With some idea as to when these features were created and how, the next piece of the puzzle is to determine what was being boiled so intensively. One line of evidence that may shed some light on this comes from analyses of flotation samples collected within and outside of these features by Mary Theresa Bonhage-Freund (personal communication, May 2019). Unfortunately, very few charred botanicals were recovered in the flotation samples, and the vast majority that were recovered consisted of wood charcoal. The only clue to the function of the features comes from the presence of a small number of hickory and acorn shell fragments.

Neither kind of shell was very abundant, but their presence may indicate that the site was used as a nut processing location. Both acorns and hickory nuts were processed by Native Americans historically by boiling. The acorns were either roasted then shelled and boiled or simply shelled and boiled to make them edible. Hickory nuts also were processed by boiling, but for a different reason. Hickory shells are thick, and the meat is divided among a number of small interior compartments, making it almost impossible to pick out by hand. Instead the nuts, shell and all, were smashed and boiled. During the boiling, oils were extracted from the meat and the meat and oil were separated from the shell. The former floated to the top and could

be skimmed off, while the shell would sink to the bottom of the vessel. Given the processing methods of both nuts, it could be expected that only a few shells would actually ever be charred to preserve in the archaeological record.

Intensive stone boiling of nuts would explain the large quantities of pottery found at a site where long-term habitation was unlikely. It also helps explain why so many heat-altered cobbles were found in general levels and as cobble cluster features. Among the ground stone artifacts found in the West Block are three stones with u-shaped impressions that could have been used as "nutting stones" or anvils to crack open nuts. In addition, 10 of the 17 cobble tools recovered in the block have been battered or pecked on at least one edge. These may have been used as the hammers for cracking nut shells but could also have been used for any number of activities.

While the idea that 38AK155 was used as a nut processing location during the Middle Woodland period seems plausible, the evidence to support the interpretation is not as compelling as it could be. Part of the problem derives from the fact that there is no clear separation between the occupations at the site. Therefore, it is difficult to isolate the stone and pottery assemblages that are directly associated with the cobble clusters. Information about the types of vessels used and the kinds of stone tools made could help evaluate the idea.

In the absence of associated artifact assemblages, I have begun exploring another line of evidence that may help me evaluate the nut processing hypothesisabsorbed residues. Substances held in relatively low-fired ceramics, like those recovered from 38AK155, can be absorbed into the matrix of the vessel or adsorbed to the uneven surface. Many of these residues persist in the archaeological record and can be detected chemically using mass spectrometry. Thanks to funding from ART, I have submitted six sherds from 38AK155 to Elenora Reber of the University of North Carolina Wilmington for residue analysis. Reber's specialty is identifying lipids absorbed into vessels that can reveal information about the kinds of foods and other substances containers one held. These six sherds represent a pilot study that can be used to evaluate my nut processing hypothesis. With some luck, the results may help us figure out a little more of the puzzle presented by 38AK155.

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New Investigations at the Mulberry Site (38KE12) By Adam King, Gail E. Wagner, and Chris Judge

The Mulberry site is a large Mississippian period mound town located on the east bank of the Wateree River in Kershaw County, near Camden, South Carolina (Figure 1). Historical descriptions indicate the site may have had as many as 10 earthen mounds ringed by an enclosure and possible embankment (Blanding 1848). Archaeological investigations in the late 19th century identified three mounds (Mounds A, B, and C), but no evidence of the embankment or enclosure (Thomas 1894). Today, only Mound B remains largely intact. Mound C was bulldozed in 1953 (Wagner 2002), and the majority of Mound A has been washed away by the Wateree River.

The first excavations by a professional

archaeologist were conducted at Mulberry by Henry Reynolds on behalf of Cyrus Thomas and the Smithsonian Institutes' Moundbuilders project (Thomas 1894). Mounds A and C were trenched, but Reynolds died before a full reporting of the project could be done. In 1952, renowned Georgia archaeologist A.R. Kelly was asked to complete salvage excavations in an area south of Mound A where human remains were eroding from the riverbank (Kelly 1974). Beginning in the 1970s, archaeologists from the University of South Carolina conducted limited testing at the site and by the late 1970s held field schools intermittently until 2002. In 1998, additional fieldwork was conducted at Mulberry with funding by the National



Figure 1: Plan Map of the Mulberry site. (Drawing by Adam King)

Geographic Society (Cable et al. 1999).

Recently the Wateree Archaeological Research Project (WARP) at the University of South Carolina was granted funds by Duke Energy to capture information from Mulberry's Mound A before it is lost to the river completely. That project was developed in conjunction with Native American communities and is overseen by a review committee comprised of professional archaeologists and Native Americans. It is directed by Gail Wagner and Adam King of the University of South Carolina and managed by Chris Judge of USC Lancaster's Native American Studies Center. In the summer of 2018, WARP completed the first field season of this project, where our objective is to capture information about the construction history, function, and engineering of Mound A at Mulberry and explore the mound's relationship to the rest of the Mound Precinct.

Mounds and the Mound Precinct

The fieldwork began with the excavation of a 1 X 6-meter trench on the flank of the Mound A remnant. A single 1 X 3-meter trench had been excavated into the flank of Mound A in 1985, and the riverbank had been cut back and profiled in two separate occasions. Our work was intended to augment the information already gathered with new datable material and macro and microbotanical samples. Based on previous work, it appears that construction began on Mound A around 1,300 CE, up to a century or more after Mulberry was first occupied around 1,200 CE (DePratter 1985). The initial construction of the mound consisted of a series of thin soil deposits. Whether or not these represent individual stages is still to be determined. At a point in the history of the mound, it was significantly expanded both vertically and laterally with the addition of a single large construction episode. Diagnostics recovered in Mound A excavations suggest the feature was used at least into the 16th century.



Figure 2: West Profile of Mound A Trench. (Photo courtesy of Adam King)

The results of the 2018 work are still being analyzed, but there are some details that we have been able to add to Mound A's construction history. It appears that several structures were built in the Mound A area that may have been destroyed before construction commenced. At least one may date to the Belmont Neck phase (1,275 to 1,325CE). Our trench encountered the thin construction layers recorded previously in the riverbank profiles and showed them to be sloping to the southeast (Figure 2). This confirms the inference that a later expansion of the mound extended it laterally. The southern edge of this platform was cut by a large pit that extended through the mound and into the pre-mound levels. The pit was filled with soils containing Town Creek phase (1,375 to 1,425 CE) diagnostics, restoring the southern flank of the mound. It is worth suggesting that this pit and subsequent filling were part of the southward expansion of the mound apparent in the riverbank profiles. If this is the case, then it may be that the expansion took place during or after the Town Creek phase.

At Mound B, the WARP crew reopened a 10 X 1-meter trench excavated into the mound's east flank in 1982. Our objective was again to collect datable material and micro and macrobotanical samples. Based on the 1982 work, construction began on Mound B around 1,450 CE and the feature continued to be used into the 17th century (DePratter 1985). Until the data generated in 2018 are analyzed, we cannot add anything new to that interpretation. However, we can add some interesting details about how the mound was built. According to Sarah Sherwood's (personal communication, 2018) interpretation of the Mound B profile, the step-like structure visible in Figure 3 was created by stacking upside-down sod blocks. The stepped area was then filled with additional soil and faced to create the sloping surface of the mound. Presumably this technique was used to create a more stable mound flank, and it represents a construction method not commonly known in the Deep South.

In the Mound C vicinity, a block was excavated that expanded a test unit opened by Wagner in 2002. At that time, Wagner thought she had found the edge of the trench excavated by Reynolds through Mound C. Those additional units revealed that the feature encountered was likely a borrow pit, possibly the source of fill for Mound C. Pottery sherds found in the creek where Mound C was bulldozed suggest it was built around 1,450 CE (Judge 1985). Our excavations recovered no new information that could help refine our understanding of Mound C.

Geophysical Anomalies

As part of the summer 2018 fieldwork, Chet Walker (Archaeo-Geophysical Associates, LLC of Austin, TX) conducted ground-penetrating radar and gradiometer surveys in cleared areas at Mulberry. The gradiometer produced the best results, and those are presented in Figure 4. It is important to remember that the gradiometer measures subtle variations in magnetism, which can be caused by changes in the texture, density, and composition of soil, as well as the presence of voids, refilled intrusions, and rocks. It is also important to understand that the gradiometer measures magnetic variation up to two meters below the surface and conflates that information into a flat image. The data shown in Figure 4 is a twodimensional image of a three-dimensional archaeological record.

By far, the most striking aspect of these data is the concentration of anomalies on and in the vicinity of Mound B. This includes upwards of a dozen potential structures along with linear anomalies that may represent other architectural features. We do not know precisely what these magnetic anomalies represent, but clearly Mound B was a very busy place. Also note that much of the periphery of Mound B is outlined by a series of linear anomalies. The trench excavated into Mound B bisected one of these and it lines up nicely with the sod-block structure recognized by Sarah Sherwood. This suggests that the entire periphery of Mound B was constructed using the same sod block arrangement.

The area to the east of Mound B, in the vicinity of Mound C, also contains a high density of magnetic anomalies. Included among those are six potential structures along with a series of linear anomalies. As with those in Mound B, the latter could be architectural features. On the extreme eastern edge of this area, are two large rectangular to square anomalies. The northernmost of the two is quite complex with circular and linear anomalies within it. The southernmost is only partially captured but could be as large. Although the topographic data collected do not clearly show any elevation changes at these locations, it is possible these anomalies represent construction features or architecture associated with two of the small mounds that supposedly once encircled the Mound Precinct.

Evidence of 16th Century Spanish Visits

Depratter et al. (1983) many years ago argued that the Mulberry site was the most likely location of the capital of the Native American polity visited by de Soto and Pardo in the 16th century called Cofitachequi. Since then, others have marshaled arguments contradicting that inference (cf. Waddell 2005). While in many people's minds the Mulberry site still seems to be the most likely location of Cofitachequi, definitive evidence of a 16th century Spanish presence has not been recovered in archaeological context from the site.

In an effort to find that evidence, SCIAA archaeologists Steve Smith, Jim Legg, Chester DePratter, and Heathley Johnson conducted metal detector surveys on a small part of the site. Their efforts were focused on portions of the village area west of the Mound Precinct that were not planted in pine trees. The village area was chosen because historical accounts indicate that de Soto's army occupied a large part of the village during their stay in the town of Cofitachequi. Also, the village area is located far enough away from the Wateree River that flood deposits are thinner, making it more likely that metal detecting can penetrate soils accumulated since the 16th century.

Unfortunately, most of the known village area at Mulberry was planted in pine trees in the 1980s. The low vegetation that has grown up between the rows of pines makes metal detecting impracticable. Fortunately, staff of Mulberry Plantation cleared between rows of pines creating four lanes that could be surveyed. These areas along with an open area adjacent to the village were surveyed systematically using metal detectors.

The Mulberry site was part of an operating plantation in the 19th century. A barn was located on the summit of Mound B and cabins of enslaved workers were positioned between Mounds A and B. Given this, it was expected that metal of various types would be present on the site. Those expectations were met, as various fragments of metal were recovered. Among the objects found were a series of cut nails (Figure 5). While it is difficult to make a positive identification from a few nails, Jim Legg and Heathley Johnson (personal communication, 2018), both of whom have worked extensively with 16th century iron artifacts, have suggested there are three that could date to that era. Once the pine plantation covering the village area is harvested, more metal detector surveys will be done. Also, excavation units will be placed over areas where potential 16th century artifacts were found. We hope these efforts will help

us determine if Mulberry was de Soto's Cofitachequi.

New Observations and Inferences

While the results of our 2018 field work are still being analyzed and will be augmented by another summer field season in 2019, there are a few things we learned that are worth noting. Our work in the Mound C vicinity suggests that there may not be much left of the mound after it was bulldozed over a half a century ago. The metal detector surveys turned up some hints of a possible 16th century Spanish presence, while the gradiometer surveys have begun to reveal just how complex the Mississippian record of Mulberry really is. This is especially the case with Mound B, where a wide variety of different kinds of magnetic anomalies were detected. In one instance, an anomaly was correlated with one of our trench profiles, revealing that sod blocks were used in the construction of stable mound flanks.

At Mound A, our excavations have helped confirm and possibly refine our understanding of the mound's



Figure 3: South Profile of Mound B Trench. (Photo courtesy of Adam King)



Figure 4: Preliminary Interpretation of Gradiometer Data. (Map courtesy of Adam King)

construction. One of the more interesting inferences is that the substantial expansion of Mound A that the inhabitants of Mulberry undertook may have happened sometime after 1,425 CE. This brings us to an event that may connect a wide number of features in the Mound Precinct. Based on earlier excavations, Mulberry's inhabitants began building Mound B at roughly the same time. Additionally, pottery recovered in the creek from the razing of Mound C suggest its primary period of use was during the first half of the 15th century. Taken together, this dating points to a major restructuring of Mulberry's Mound Precinct through a set of construction events-the significant expansion of Mound A and the construction of Mounds B and C. It is worth noting that this correlates with the end of the occupation of the nearby Adamson site (38KE11), which may have been the primary mound town in this part of the Wateree Valley during the 14th and early part of the 15th centuries. It is possible that the expansion in the Mound Precinct at Mulberry signals the shifting of the center of power in the central Wateree as Adamson was eclipsed by the Mulberry site. We readily admit that there is a lot more work to do to understand these events clearly.

Future Plans

Our summer 2018 excavations were the first field season of a multi-year project. Our investigations will continue in the summer of 2019 at both Mounds A and B as we gather more information on their timing of use, functions, and construction history. Geoarchaeological investigations will continue off-site and on the river bank as well. We also hope to test village areas where potential 16th century nails were found and explore some of the complex magnetic anomalies recorded. As our work continues, we will share our findings.

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Figure 5: Possible Spanish Nails Recovered in Metal Detector Survey. (Photo by Adam King)

De Soto in Mississippi—Chicasa Project Update By James Legg

After a gap of 16 months, Steve Smith, Chester DePratter and I returned to Starkville, Mississippi, on February 27 2019 for six days of metal detecting field work designed to improve our understanding of the mysterious 16th century European component there. Once again, we worked with former SCIAA director Charlie Cobb of the University of Florida, and Brad Lieb, Chickasaw Nation Archaeologist. This was our fifth brief field season devoted to the project since June, 2015. (Three previous *Legacy* articles have traced the progress of our de Soto research in Mississippi—see references, below). As before, the latest work was funded by the Chickasaw Nation, who continue to support research that may shed light on their own distant past.

Regular readers will recall that what we are looking at is an assemblage of about 100 early iron and brass artifacts scattered over an area of several hundred acres of farmland just north of Starkville, Mississippi. The iron objects are mostly small celt or adze tool forms made on small fragments of barrel bands, horse shoes, and axes. The tool collection certainly predates the flow of trade goods into the interior South in the 17th century, and the manner in which the metal is reworked suggests craftsmen unfamiliar with the material. Given that Starkville is approximately where de Soto's expedition spent the winter of 1540-41, we have suggested that the unusual metal assemblage may be the result of contact between the Spanish and the Chicasa (Chicksasaw). De Soto spent most of the winter at the principal Chicasa town, also called Chicasa, before abusive behavior by the Spanish resulted in a battle with their native hosts. The Chicasa attacked de Soto's camp at night and were repulsed after heavy fighting during which most of the town was burned and much of the European material still possessed by the Spanish was lost. The Spanish moved to the adjacent town of Chicasilla, where they refurbished their surviving equipment and fought another engagement with the Chicasa before continuing their march to the Mississippi River and beyond.

When we began finding unusual metal artifacts in 2015, we speculated that we might actually be at or very near one of the two towns occupied by the Spanish. As we added to the collection from the original 2015 site (22OK778/779), we found that we had only a few un-altered metal objects, including an arquebus ramrod tip, a small cannon ball, and several nails that are entirely consistent with a 16th century Spanish origin. There was no dense concentration of European artifacts that might suggest burned houses containing



Figure 1: Charlie Cobb detecting on a landform near site 22OK778/779 that proved negative for 16th century metal artifacts. (Photo by James Legg)

Spanish arms and equipment. The iron tools were intensively re-worked and curated, and they were thinly distributed over a large area. While 16th century Native American houses were certainly present on the site, we concluded that we were probably not working in one of the two towns occupied by de Soto's army. Rather, we had probably found a contemporary settlement where the inhabitants had enough contact with the Spanish in 1540-41 to acquire a supply of metal tools and scraps that may have been re-worked and used for decades to come.

This tentative interpretation raised two important questions. First, was the assemblage we recovered from 22OK778/779 in fact something exceptional, or might it be fairly typical of 16th century Native American sites in the interior South? This was a question closely related to our field method, as large-area metal detector survey is not something that is normally attempted on comparable 16th century sites. Perhaps any number of other contemporary sites would yield similar assemblages if subjected to intensive metal detecting. The second major question follows the first, that is, if 22OK778/779 is indeed exceptional and resulted from close contact with the Spanish, then where are the two sites actually occupied by de Soto?

We have essentially answered the first question by conducting metal detector survey on several sites within 20 miles or so of 22OK778/779 which have 16th century components, including two mound complexes (Butler Mound and Lyon's Bluff). We found nothing remotely comparable to the assemblage from 22OK778/779. The second question remains unanswered, but we have finally sampled all of the landforms adjacent to the original site. This year we gained access to an area we have sought to explore since 2015-a larger, higher ridge immediately to the west of 22OK778/779 that we imagined might reveal Chicasa



Figure 2: Chester DePratter detecting on site 22OK850., just southeast of site 22OK778/779. Charlie Cobb previously found a probable Spanish nail at this site, and this year we found three additional early metal artifacts. (Photo by James Legg)

or Chicasilla. Like the other adjacent landforms, that ridge did yield several pertinent metal artifacts, but nothing like the original concentration. It appears that 22OK778/779 is indeed the center of the known occurrence of our strange artifact assemblage.

The Stark Farms property that includes 22OK778/779 is currently for sale for non-agricultural development. Additional metal detecting there would certainly add to the collection and refine the distribution map and given the threat to the site we will probably devote one more trip to additional coverage on and around 22OK778/779. It is likely, however, that we have learned most of what we can from metal detecting. There has been conventional block and feature excavation on the site including University of Mississippi field schools conducted in 2016 and 2018 by Tony Boudreaux, with the involvement of Charlie Cobb and University of Florida students. Tony and Charlie will conduct additional field work

in 2019, and that approach may now be the best chance for learning more about the European component at 22OK778/779. XRF elemental analysis of our metal artifacts is another approach that may help us sort things out. Testing of the original 2015 collection indicated that the iron used was at least not inconsistent with early 16th century continental Spanish iron, as opposed to later 16th century Spanish colonial iron. Definitive findings will require using the same XRF device, device settings, and operator on our entire collection, as well as on a judicious selection of iron artifacts from other early (and later) Spanish contexts.

As always, "further work is indicated," but in this case the absence of a decisive result to date has not discouraged unusually thorough reporting (below).

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Figure 3: A small celt or adze made on a flat scrap of iron. The right end of the artifact has a sharply ground bit, while the left end was an irregular break that has been hammered flat. Partially reworked tools such as this one are the most abundant type in the Stark Farms iron assemblage. This example was the only artifact found on a commanding landform just west of 22OK778/779. (Photo by James Legg)



Figure 4: Steve Smith with a freshly recovered ground iron celt from 22OK850. (Photo by James Legg)

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Figure 5: The ground iron celt found by Steve Smith. This remarkable artifact was made on a thick piece of iron laboriously shaped by grinding in the manner of a prehistoric stone celt. We have found only one other example of this hybrid technology, which may represent the first ironworking by people entirely unfamiliar with the material. (Photo by James Legg)

South Carolina Archaeology Book

ARCHAEOLOGY IN SOUTH CAROLINA *Exploring the Hidden Heritage of the Palmetto State* **Edited by Adam King**

Adam King's Archaeology in South Carolina contains an overview of the fascinating archaeological research currently ongoing in the Palmetto State and features essays by twenty scholars studying South Carolina's past through archaeological research. The scholarly contributions are enhanced by more than one hundred black-and-white and thirty-eight color images of some of the most important and interesting sites and artifacts found in the state.

South Carolina has an extraordinarily rich history encompassing some of the first human habitations of North America as well as the lives of people at the dawn of the modern era. King begins the anthology with the basic hows and whys of archaeology and introduces readers to the current issues influencing the field of research. The contributors are all recognized experts from universities, state agencies, and private consulting firms, reflecting the diversity of people and institutions that engage in archaeology.

The volume begins with investigations of some of the earliest Paleo-Indian and Native American cultures that thrived in South Carolina, including work at the Topper Site along the Savannah River. Other essays explore the creation of early communities at the Stallings Island site, the emergence of large and complex Native American polities before the coming of Europeans, the impact of the coming of European settlers on Native American groups along the Savannah River, and the archaeology of the Yamasee, a people whose history is tightly bound to the emerging European society.

The focus then shifts to Euro-Americans with an examination of a long-term project seeking to understand George Galphin's trading post established on the Savannah River in the eighteenth century.

The volume concludes with the recollections of a life spent in the field by South Carolina's preeminent historical archaeologist Stanley South, now retired from the South Carolina Institute of Archaeology and Anthropology at the University of South Carolina.

Archaeology in South Carolina

Exploring the Hidden Heritage of the Palmetto State



Adam King is a research associate professor in the South Carolina Institute of Archaeology and Anthropology and special projects archaeologist for the Savannah River Archaeological Research Program at the University of South Carolina. King has conducted research in the Southeast since 1987 and specializes in the Mississippian period and the political economies of chiefdoms. He is the author of *Etowah: The Political History of a Chiefdom Capital*.

March 2015, 304 pages, 38 color and 103 b&w illus.

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Investigation of a Old Bridge and Road on Property of Judy Bramlett in Travelers Rest, South Carolina By Lamar Nelson

On April 1, 2019, I was contacted by Nena Powell Rice asking me to help her friend and Past Board Member of the Archaeological Research Trust (ART), Esther Gerard, to identify an old road and bridge on adjacent property to her near Travelers Rest, South Carolina. The reason was to date an old concrete bridge and find information on its past history. I contacted Esther Gerard and met her on April 19, 2019. After a brief meeting, we crossed the road, and met land, and bridge owner Judy Bramlett and her brother Stanley Grumbles. We discussed her long history of living on the property, and she asked for my help on when the bridge was built, and information on the road. We all went back to the home of Esther and Larry Gerard, and I recorded information to use in my research from deeds and maps she had brought with her.

Research

Using many internet and map sources, I was able to gather enough information to conclude the date, timeline, and names of the old road crossing the bridge and nearby road.

Dixie Highway

The road and bridge were part of the Dixie Highway, first planned in 1914 to connect the Midwest to the Southern U.S. The highway was part of the national auto trail system. The roads were built from 1915 to 1929. The promoter of the project was businessman Carl G. Fisher. It was overseen by the Dixie Highway Association, and funded by individuals, businesses, local governments ,and states. It was disbanded in 1927, when the U.S. Route System took over, and roads became state roads. The Dixie Highway was marked by a red stripe, with the letters DH, usually with a white stripe above, and below mostly on utility poles. The Carolina Division connecting the eastern division at Knoxville Tennessee, to Waynesboro, Georgia was approved in May 1918. The Dixie Highway was marked in several locations in western North Carolina with granite pillars by the Daughters of the



Figure 1: Judy Bramlett, Stanley Grumbles, Esther Gerard, and Lamar Nelson standing near the old Dixie Highway and bridge. (Photo courtesy of Lamar Nelson)

Confederacy. Each of the seven pillars has a bronze plaque in honor of Robert E. Lee. One pillar can be found on the South Carolina state line. Another monument can be found in downtown Greenville, South Carolina. The Dixie Highway System created a detailed map of the route in 1915.

U.S. Route in South Carolina

The Dixie Highway was later changed to the U.S. Route 25. It became part of the U.S. numbering system following the Dixie Highway. Highway 25 was completed on November 11, 1926. It runs through cities entering North Augusta, going northwest through Edgefield , Greenwood, and Greenville, turning north at Travelers Rest to the North Carolina line. It travels 140.6 miles across South Carolina. Its total route is 750 miles from Brunswick, Georgia to the Ohio state line, at Covington Kentucky.

Conclusion

The bridge and old road bed located on the property of Judy Bramlett was part of the Dixie Highway System built from 1915-1929. The poured concrete bridge would have been built around 1918, after the Carolina Division was approved. The bridge includes an arch under the bridge where a small stream of spring water flows underneath. The bridge measures 11 feet, 10 inches long, and 18 feet, 6 inches wide. It includes a sidewall 21 inches high, and 12 inches thick. When highway 25 was approved, and extended through South Carolina, the road was moved to its current location in 1929. The bridge is of historical importance, and should be preserved, along with the old roadbed. I suggest that brush be removed from the area, highlighting its design, and that a historical marker be located beside the bridge. Its early construction date makes the bridge at least 100 years old, and historically important.



Figure 2: Stanley Grumbles, Esther Gerard, Lamar Nelson, and Judy Bramlett standing on old road bed and bridge. (Photo courtesy of Lamar Nelson)



Figure 3: Detail of the old bridge. (Photo by Lamar Nelson)



Figure 4: Detail of old bridge on original Dixie Highway. (Photo by Lamar Nelson)

SCAPOD: Looking to the 10th Anniversary and Beyond

By: South Carolina Archaeology Public Outreach Division, Inc

Do you remember the first time you got excited about archaeology? The sense of adventure that it inspired in you? Were you with a school group or perhaps with your family on vacation? Did you share it with others in a college classroom or at a community event? Recall that feeling of the first time you discovered people from a distant time connected to you in the present. That moment while looking at an artifact or feature where you experienced the connection that this place or this object was meaningful to someone-just like you—long ago. Maybe you were watching a demonstration, and it dawned on you just how "cool" it was that someone could make a tool out of things found in the environment around them.

That sense of discovery, inspiration, experience, and connection is among the most basic ties that bind people together in a culture. Because archaeology provides us with the ability to form a tangible connection with the past, it becomes incredibly meaningful to how we perceive our relationship with the past. These ideas influence what cultural features and spaces get preserved for the future shaping not only our perception of the past but also the



Figure 2: Pottery re-fit activity at SCDNR's Johannes Kolb Site. (Photo courtesy of SCAPOD)

futures' perception of us. The wonderful part about the connection that archaeology provides us is that it doesn't have to be limited to when you are young—it can happen at any age, again and again. Some of us came to love archaeology as children, but a lot of us came to appreciate archaeology later in life. Regardless, all of us that love archaeology, understand



Figure 1: Public Day at Barnwell Archaeological Research Project. (Photo courtesy of SCAPOD)

the fundamental beauty of discovery, inspiration, experience, and connection to the past.

A shared passion for archaeology is what inspired the creation of the South Carolina Archaeology Public Outreach Division (SCAPOD) in 2010. SCAPOD was born out of the ideas and passions of three archaeology students at the University of South Carolina. It started with a simple conference paper talking about the need for more archaeology outreach in schools, and eventually it grew into a 501(c)(3)organization with a mission to encourage knowledge of South Carolina's cultural heritage and archaeology through dynamic programming. Our board of directors still include the three original co-founders, but now includes several other professionals interested in helping promote SCAPOD's mission.

Today, SCAPOD offers a wide variety of programs designed to encourage future and long-lasting support for archaeology in South Carolina. Over the past nine years, SCAPOD has been involved in a variety of different partnerships with historical and archaeological entities such as SCIAA, the Southeastern Archaeology



Figure 3: Site Tour at SCDNR's Ft. Frederick site in Beaufort County, SC. (Photo courtesy of SCAPOD)

Conference (SEAC), the Archaeological Society of South Carolina (ASSC), the South Carolina State Museum, Historic Columbia Foundation, the South Carolina Department of Natural Resources Heritage Trust Program and more. These partnerships have greatly diversified our programmatic capabilities. We have held programs with people of all ages in schools, museums, and libraries, at archaeology public days, through archaeology site tours, at STEM festivals, at civic talks, and beyond.

SCAPOD is Growing and Needs Your Help

Until now, SCAPOD has been solely managed and run on primarily a volunteer basis by its board of directors and cofounders. For the past nine years, all marketing, planning, administration, program development, and execution has fallen on the shoulders of these dedicated individuals. The SCAPOD board of directors has decided that it is time for the non-profit to move into its next phase of growth. SCAPOD is currently seeking to expand by hiring an Executive Director to manage our growing non-profit. The only catch? Well, it is extremely hard to procure funding for the grassroots purposes we need. SCAPOD has the potential to grow to be a viable work experience opportunity for archaeology students interested in outreach, but we need the solid platform of a paid leadership position in order to make this happen. Most nonprofit grants and foundation funding are reserved for specific program creation and presentation. Finding public resources to fund a paid director position for two years in order to grow the organization is much more difficult. That is why we are asking for your help. Your tax deductible donation will help SCAPOD reach the goal of hiring an Executive Director, allowing us to grow and expand to reach people throughout the state of South Carolina.

You may ask yourself, why give? Let me take a moment to chat with you about why SCAPOD is important and integral to cultural preservation in South Carolina.

SCAPOD Can Help You Rediscover Adventure

People spend a lot of time and money trying to recreate the thrill of discovery. One beauty of archaeology is that it gives you the opportunity to discover over and over again: in the field, in the lab, through a site tour. There is so much potential for adventure through archaeology! SCAPOD programs help facilitate that discovery through original programming and partnerships with other organizations throughout the state.

Some of SCAPOD's programs are geared towards bringing you close to the archaeological experience through guided tours of active sites. Many archaeological projects in the state have partnered with SCAPOD to provide visitors a tour that not only informs you of the cultural significance but also gives you a detailed description of the current excavation. Those who come to these tours are likely to



Figure 4: Wattle You Build Next activity from SCAPOD's Archaeology in the Classroom Series. (Photo courtesy of SCAPOD)



Figure 5: Archaeology in the Classroom Program at Forest Heights Elementary in Columbia, SC. (Photo courtesy of SCAPOD)

experience something new each time they visit. Your donation would help SCAPOD hire an Executive Director to manage our growing programs as well as secure future funding and expand program delivery.

SCAPOD Can Help You Inspire Adventure

SCAPOD's Archaeology in the Classroom series are designed to bring quality archaeological programming to the schools of South Carolina. These programs use archaeology as a tool for teaching about anthropology and our shared cultural heritage. Programs include an overview of the archaeological profession with hands-on activities that reinforce archaeological concepts. Lessons and activities are tailored to each class in order to deliver an archaeology program that meets the student's needs and interests.

Archaeology in the Classroom programs have been funded from a variety of sources including grants from South Carolina Humanities Council, Target, and private donations from Midlands Gives and other individuals. These funds help provide free Archaeology in the Classroom programs to schools, giving students, many of whom are low-income, the opportunity to experience a diverse range of cultural programming. Most of the schools we have provided programs for are Title 1 schools with a large low-income demographic. Every year, the demand for *Archaeology in the Classroom* increases, far outpacing the availability in both funds and staffing.

SCAPOD has partnered with the national program, Project Archaeology, to help educate teachers in using archaeology lessons in the classroom. Project Archaeology uses archaeological inquiry to foster understanding of past and present cultures, improve social studies and science education, and enhance citizenship education to help preserve our archaeological legacy. Two of SCAPOD's co-founders have attended Project Archaeology's Master Teacher workshop and learned how to teach others how to use the Project Archaeology curricula. SCAPOD's partnership with Project Archaeology and the South Carolina Department of Natural Resources (SCDNR) provides South Carolina teachers a rare opportunity for earning professional development credit for attending free teacher workshops.

SCAPOD has many other large-scale programs in development, waiting for the next level of growth. *Afterschool Archaeology* will bring archaeological experiences similar to *Archaeology in the Classroom* to afterschool programs across the state. *Archaeology in the Library* is tailored to fit the needs of public libraries in the state and the wide range of ages and experiences of their patrons. These programs are currently undergoing testing with a series such as *We Dig Library Books*, where children excavate artifacts that represent their favorite books. We are also hoping to develop a series of *Summer Archaeology Camp* activities and classes that can be used with partner organizations to enrich their summer curricula.

When you give to SCAPOD, you give a child an opportunity to be inspired, just like you were. Who knows—that child could go on to become an archaeologist who transforms our view of the world.

SCAPOD Can Help You Experience Adventure

SCAPOD has many different types of volunteer opportunities. We do depend on countless volunteer hours to help with preparing program materials, writing lesson plans, and presenting programs. We also have digital needs, such as blog and social media posts. If you're artistic, we can always use archaeological themed drawings and sketches to use in developing new materials. Regardless of what you do, volunteering with SCAPOD is a unique opportunity to give back to your community. If you're a student, or just looking for a new experience, think of it as a creative addition to your resume.

Although we focus on things from the past, SCAPOD also looks to the future. We are quite active in the digital realm. From Facebook, Twitter and Instagram, to our website, SCAPOD keeps us all connected with what is going on in the state when it comes to archaeology. Our website contains everything from lesson plan to use in your classroom to a detailed explanation of cultural preservation laws. We even have a children's section with archaeology coloring sheets waiting to be printed off and colored!

Giving to SCAPOD means that you allow us to keep the creative juices flowing, finding new ways to spread the love of archaeology.



Figure 6: Project Archaeology Teacher Workshop lesson plan activity. (Photo courtesy of SCAPOD)

SCAPOD Can Help You Share Adventure

Archaeology is a shared experience, just like the past cultures we study. When we talk about it, we are making the site, artifact, or feature meaningful in a whole new way. SCAPOD's mission of preservation causes us to think not only about the past, but also about the cultural reflection that archaeology provides. It allows us to better understand ourselves and our community because we experience it together.

If you would like to know more about SCAPOD and our programming, please visit our website at <u>www.scapod.org</u>. You can also find us on Facebook and Instagram.

We hope that you are inspired to help SCAPOD grow to the next level! Donations can be made securely online at <u>www.</u> <u>scapod.org/donate</u> OR you can send by mail to: 105 Oak Lane Cayce, SC 29033. All donations to SCAPOD are tax-deductible.



Figure 7: Sand stratigraphy activity at ASSC Fall Field Day. (Photo courtesy of SCAPOD)

New Books

Early Human Life on the Southeastern Coastal Plain

EDITED BY ALBERT C. GOODYEAR AND CHRISTOPHER R. MOORE

"Explores the current diversity of academic thought on the early human occupation of the American Southeast."—ERVAN GARRISON, author of *Techniques* in Archaeological Geology

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Bringing together major archaeological research projects from Virginia to Alabama, this volume explores the rich prehistory of the Southeastern Coastal Plain. Contributors consider how the region's warm weather, abundant water, and geography have long been optimal for the habitation of people beginning 50,000 years ago. They highlight demographic changes and cultural connections across this wide span of time and space.

New data are provided here for many sites, including evidence for human settlement before the Clovis period at the famous Topper site in South Carolina. Contributors track the progression of sea level rise that gradually submerged shorelines and landscapes, and they discuss the possibility of a comet collision that triggered the Younger Dryas cold reversion and contributed to the extinction of Pleistocene megafauna like mastodons and mammoths. Essays also examine the various stone materials used by prehistoric foragers, the location of chert quarries, and the details stone tools reveal about social interaction and mobility.

This volume synthesizes more than fifty years of research and addresses many of today's controversial questions in the archaeology of the early Southeast, such as the sudden demise of the Clovis technoculture and the recognition of the mysterious "Middle Paleoindian" period.

EARLY HUMAN LIFE ON THE SOUTHEASTERN COASTAL PLAIN



Edited by Albert C. Goodyear and Christopher R. Moor

434 pp. | 6 ½ x 9 ¼ 95 b/w illus., 33 maps, 22 tables ISBN 978-1-68340-034-9 Hardcover \$125.00 **\$75.00**

ALBERT C. GOODYEAR is a retired research affiliate at the South Carolina Institute of Archaeology and Anthropology and director of the Southeastern Paleoamerican Survey. CHRISTOPHER R. MOORE is a geoarchaeologist with the Savannah River Archaeological Research Program.

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Legacy, Vol. 23, No. 1, July 2019

PREHISTORIC CHIPPED STONE TOOLS OF SOUTH CAROLINA

by Tommy Charles and Christopher R. Moore



PIEDMONT ARCHAEOLOGICAL STUDIES TRUST: P.A.S.T.

This book is a comprehensive field guide to prehistoric chipped stone tools of South Carolina based on over 350 private artifact collections from across the state. Filled with dozens of full-color photographs, maps and diagrams, this book is a must have resource for both the professional and amateur archaeologist. The book documents almost four decades of the Statewide Collectors Survey, initiated in 1979 by the South Carolina Department of Archives and History and the South Carolina Institute of Archaeology and Anthropology. This work is a major contribution to the study of Native American artifacts in particular and understanding of the state's prehistory in general. You may order the book on Amazon.

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Stan South was a larger-than-life figure that played a prominent role in the field of historical archaeology in the United States and beyond, mainly focusing on investigating the most important historical and archaeological sites in South and North Carolina for nearly 60 years. His passing on March 20, 2016, brought to an end a life and career filled with scholarship and accomplishment.

To honor Stan's many years of work, SCIAA has established The Stanley South Student Archaeological Research Fund to support undergraduate and graduate student research in archaeology by the University of South Carolina students. To endow the Stanley South Student Scholarship Fund, we need to raise \$25,000. Contributions can be made online by visiting: https://giving.sc.edu/givenow.aspx, or by check made payable to the USC Educational Foundation and mailed to: SCIAA—Stan South Fund, 1321 Pendleton Street, University of South Carolina, Columbia SC 29208. You may also use the insert envelop in this issue of Legacy. Thank you so much for your support!

