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Legacy

South Carolina Institute of Archaeology and Anthropology

Health and Warfare in the Prehistoric Southeast

By Charles Cobb

Nashville, Tennessee is well known for country music, meat & threes, and other core traits of Southern culture. Well before the arrival of Europeans the region around Nashville was home to another important dimension of our heritage: the impressive mound center sites that we attribute to the so-called Mississippian culture. These large towns were sprinkled throughout the Southeast after about A.D. 1000 (Fig. 1). The populations of these communities could number into the thousands, made possible by extensive agricultural systems focused on maize, beans, and squash.

The Nashville region witnessed a slow increase in the number of Mississippian communities starting around A.D. 1050, followed by an explosive growth around A.D. 1200. Several years ago, Professor Dawnie Steadman, a colleague of mine now at the University of Tennessee, and I initiated a long-term project examining patterns of prehistoric health and warfare in the area. With funding from the National Science Foundation, we have examined a sample of 1600 human skeletons from a number of

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Fig. 1: Artist's rendering of Mississippian town of Etowah, Georgia. (SCIAA photo)

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Director's Note

By Steven D. Smith
SCIAA Associate Director

Congratulations to Charlie Cobb and Chester DePratter for winning this year's prestigious Gordon R. Willey Prize for their significant article on Colonowares published in the journal *American Anthropologist* (see page 9). What better illustration can there be of the Institute's continuing influence on North American archaeology?

Glad you asked. This issue of *Legacy* provides several examples, including Adam King's research in Mississippian iconography (page 2). Al Goodyear updates us on the activities of the Southeastern Paleoamerican Survey (page 10). Jim Legg discusses his research on the 77th Division's "Lost Battalion" in WWI (page 13), James Spirek and Ashely Deming updates us on the on-going *Pee Dee* Cannon project (page 16) and public outreach (page 21). Furthermore Keith Stephenson and George "Buddy" Wingard relate their community-oriented work at Graniteville (page 22), and our wandering archaeologist Chris Gilliam finds himself this time on the

Hawaiian Islands (page 26). These articles testify to the Institute's broad research interests and expertise, including research affiliate Drew Ruddy (page 20).

I would like to also point out an important article by Chester DePratter on the critical importance of archaeological curation and the crisis we struggle with in our profession. The general lack of attention to the proper care and maintenance of our material data base is the 'elephant in the room' that we do not like to acknowledge. It is not difficult to



Fig. 1: Steve Smith (right) points out the sap or siege trench dug by the Americans during the siege of Fort Motte. Note the clearly defined profile of the sap in the excavation trench. (Photo by Rebecca Shepard)

get the general public interested in our field work. New discoveries are always good headlines. Those with a keen interest in archaeology will also volunteer to help us with cleaning and analyzing artifacts. But it is much, much more difficult to find volunteers for curation work and nearly impossible to acquire the necessary funds to care and maintain the collections, once a particular project is finished. Yet, critical comparative research like that described by Chester is simply impossible, if collections from previous excavations are not in good condition, are not maintained, or are not accessible. Curation is not glamorous work. It is painstaking and slow, but it is the foundation of the daily work of all archaeologists, and it needs greater attention and funding here at the institute and across the nation.

In the final pages of this issue, I draw your attention to the sad loss of one of our founding fathers. Traveling across the state, I often meet people who will tell me that they played an important role in the creation of the Institute. No doubt there were many, but Nick Zeigler more than just played a role. He worked with the state legislature to create the institute and was a vocal champion and defender of Stan South's digs at Charles Town Landing. His sons, Benjamin and Belton remain friends of the Institute, although they wisely chose to pursue law rather than archaeology.

On a final note, James Legg and I are currently in the field at Fort Motte, as part of our continuing research into the siege of Fort Motte, May 6 through 12, 1781. In the 2013 field season, our focus was on assisting graduate student Rebecca Shepard in her research into the relationship between Charleston and the backcountry during the late 18th century, as exemplified by the Brewton/Motte families. We made several important discoveries, which I will relate in the next issue of *Legacy*. But for now, let me tease you with this picture of me describing the sap or siege trench the Americans dug during the battle to a group of visitors at our public day event on May 25, 2013 (Fig. 1).

MISSISSIPPIAN, From Page 1

sites. This research has revealed evidence for trauma related to conflict, metabolic disorders (due to problems like protein deficiency), and infectious diseases such as tuberculosis.

Most of the towns in this area of Tennessee were fortified, and one of our hypotheses is that chronic conflict may have limited the mobility of people. This may have restricted the range of territory from which they could draw resources, undermining their diet and health.

Recently, Dr. Steadman and I have received funding from the Wenner Gren Foundation to focus more closely on one of the key villages in the locality, known as Averbuch (Fig. 2). The skeletal series exhibits some of the worst health in the region, in addition to evidence for violent death. We are now looking at other lines of evidence to investigate the causes of the upsurge in warfare and decline in health. Although we are in the middle of our research, we do have some intriguing results.

We have run a number of radiocarbon dates from the site, with some interesting results. In the late 1300s,

about a century or so after the town was established, a wooden fortification was built around it. Apparently, this was constructed fairly rapidly as it ran across the top of one of the cemeteries. Then people appear to have withdrawn into the confines of the palisade. Around A.D. 1450, Averbuch was abruptly abandoned, along with the rest of the region.

What could have caused such dramatic events? One answer may be climatic deterioration. Several studies based on tree rings now demonstrate that there were several severe droughts throughout large portions of the Southeast in the 1300s. Although other factors were likely affecting Mississippian towns as well, it is possible that agricultural systems were under increasing stress with the decline in rainfall. Thus, competition for resources may have instigated a chain reaction of social responses where, ultimately, there were no winners.

As archaeological research is now demonstrating, issues of climate change and food security were just as important 600 years ago as they are today.

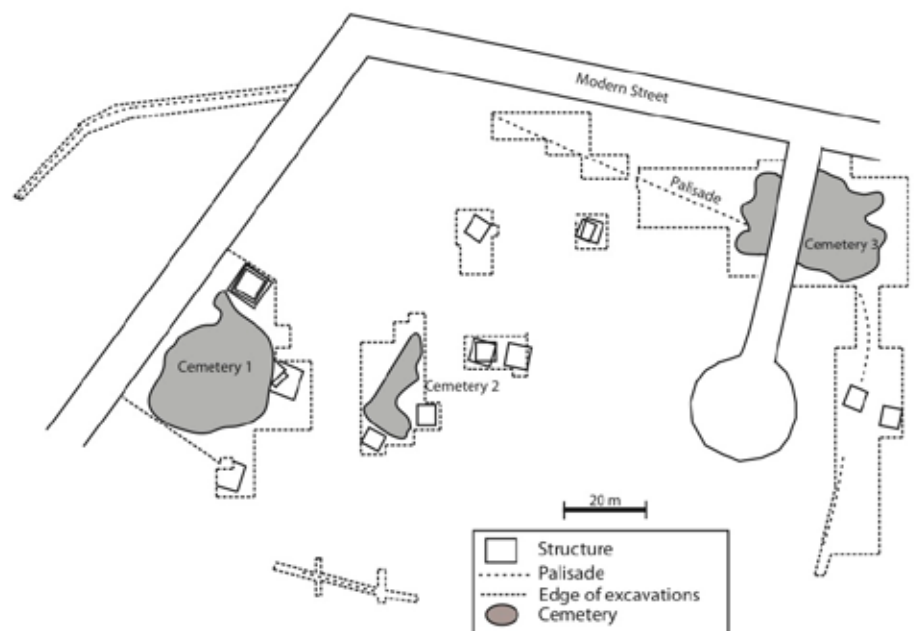


Fig. 2: Features revealed through excavations at Averbuch, Tennessee. (SCIAA photo)

Research Division

The Lord of Death on the Savannah River

By Adam King

The Hollywood site is a Mississippian period (AD 900-1600) mound town located on the Savannah River near present-day Augusta, Georgia. Excavations conducted there by Henry Reynolds in 1889 have become part of the lore and knowledge of Southeastern archaeology since the publication of Thomas's *Mound Builders* volume in 1894 (Thomas 1894). During his investigation of Mound B, Reynolds uncovered two distinct mound surfaces on which were laid human remains and elaborate objects now known to be part of a widespread set of ritual themes and artistic styles called the Southeastern Ceremonial Complex. It is those objects—

open, tooth-filled mouth (Fig. 1). Closer inspection of the image shows that the eyes have a three-pointed surround and a series of parallel lines extending from the nose to the edges of the plate. Enough details of this image are present to connect it thematically to a fairly widespread set of images dating to the Mississippian period found from the caves of Missouri and pottery of the Central Mississippi Valley eastward to northern Georgia and the Hollywood site. The same theme seems to have its roots in the Middle Woodland period, and it has persisted into the present as it appears in current Native American art and belief.



Fig. 1: Copper Underwater Panther plate from Hollywood site. (Photo by Adam King)

embossed copper, celts made of copper, and foreign pottery that is engraved, painted, or shaped into effigies—that have captured the interest of archaeologists for over a century. Those objects and their dating more recently have shown that Hollywood, and in particular the rituals conducted at Mound B, played a foundational role in the formation of Mississippian societies of the middle Savannah Valley of South Carolina and Georgia (King and Stephenson 2012).

One of the most interesting objects found in the Mound B deposit is a small embossed copper plate cut into the shape of a face with wide eyes and an

Fig. 2 presents an image engraved on a ceramic bottle found at the Berry site in Arkansas. Note the eyes with trefoil eye surround, bulbous nose, toothy mouth, and parallel markings. The same figure appears in the round as the famous limestone cat pipes found at Moundville and the Lower Mississippi Valley.

Two other small copper plates very similar to the Hollywood example were found at Etowah (Fig. 3) and eastern Tennessee completing a set of three that likely were made by the same hand.

George Lankford (2006) identifies this figure as the Underwater Panther, a supernatural inhabiting Native American beliefs from the Prairie Plains to Great Lakes and Atlantic Ocean. From contemporary beliefs and ethnographic accounts, we learn that the Underwater Panther inhabits one of the three realms of the Native American cosmos—the Underwater or Beneath World that lies

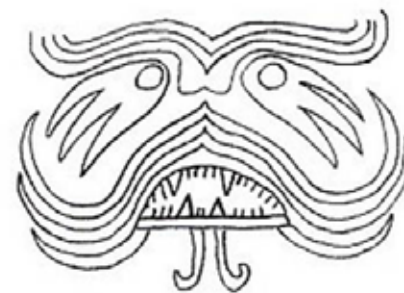


Fig. 2: Engraved Underwater Panther on a ceramic bottle. (From Reilly 2004, Drawing by Terry Childs)

under the ground and under water. It is a realm of chaos and death, but is also the place from which the powers of growth, regeneration, and life come in the form of water, souls, and the power to influence both. The Underwater Panther is one vision of the lord of this realm. At night, this realm switches places with the Above World and becomes the night sky. In that night sky is visible the Milky Way, conceived of as the Path of Souls by many people throughout the Americas. The Lord of Death occupies a place along that path, and when there has wings.

There are many descriptions of the Underwater Panther and even more images of it in European written history, Native American oral history, and Native American art. Probably the most famous image and description came from Father Jacques Marquette. While traveling among Native Americans of the Mississippi River in 1673, Marquette encountered and described two images of the Underwater Panther painted on a limestone bluff overlooking the Mississippi River near present-day Alton, Illinois in 1673. Below is Marquette's description of the painting:

While Skirting some rocks, which by Their height and length inspired awe, We saw upon one of them two painted monsters which at first made Us afraid, and upon Which the

*boldest savages dare not Long rest their eyes.
They are as large As a calf; they have Horns on
their heads Like those of a deer, a horrible look,
red eyes, a beard Like a tiger's, a face somewhat
like a man's, a body Covered with scales, and so
Long A tail that it winds all around the Body,
passing above the head and going back between
the legs, ending in a Fish's tail. Green, red,
and black are the three Colors composing the
Picture. Moreover, these 2 monsters are so
well painted that we cannot believe that any
savage is their author; for good painters in
France would find it difficult to reach that place
Conveniently to paint them.*

In his master's thesis recently completed at Texas State University, Alex Corsi (2012) discovered that the Hollywood Underwater Panther plate was part of an elaborate headdress that likely was constructed by covering a leather cap and bone or wooden frame with feathers. Around the base of the headdress was placed a ring of small ornaments made of copper in the shape of arrowheads. The Underwater Panther image was likely mounted on the forehead in the center of the headdress as shown in Fig. 4. The Underwater Panther plate found at Etowah was mounted in a similar headdress, and it seems likely that the same can be assumed for the plate from eastern Tennessee.

You might wonder why a person would want a headdress bearing the image of the Lord of Death. Keep in mind that these headdresses were part of



Fig. 3: Copper Underwater Panther plate from Etowah. (Drawing by James Ducan)



Fig. 4: Hollywood Underwater Panther headdress. (Reconstruction by Alexander Corsi)

regalia—special dress often with emblems of a particular role or office—worn by important people. Possession of such regalia might be an indicator of elevated social standing, but it is clear that this standing was derived from control of ritual. In other words, the regalia indicates an important role in particular rituals. In this case, those rituals likely dealt with the realm of the dead. Remember that the realm of the dead was not only the place where the souls of the deceased went, but it was a place that also contained the powers of growth, water, and even the return of souls to living bodies. For agriculturalists and people interested in the continuation of their family line (through the return of souls), the realm of the dead was a place with very important powers. Native American narratives are filled with stories of people seeking out and receiving gifts of power from the Underwater Panther and his avatar the Great Serpent (Lankford 2006).

References Cited

Corsi, Alexander D.
2012 *Reverence for the Dead: Identifying and Interpreting Patterns in Mortuary Objects within the Hollywood Mound Site*. Unpublished Master's thesis, Department of Anthropology,

Texas State University, San Marcos, TX.

King, Adam, and Keith Stephenson
2012 Archival Research of the Hollywood Mound Site. *Early Georgia* 40(1):87-101.

Lankford, George E.
2006 *The Great Serpent in Eastern North America*. In *Ancient Objects and Sacred Realms: Interpretations of Mississippian Iconography*, edited by F. K. Reilly and J. Garber: 107-135. University of Texas Press, Austin.

Reilly, F. Kent, III
2004 *People of Earth, People of Sky: Visualizing the Sacred in Native American Art of the Mississippian Period*. In *Hero, Hawk, and Open Hand: American Indian Art of the Ancient Midwest and South*, edited by R. F. Townsend and R. V. Sharp: 125-137. Art Institute of Chicago, Yale University Press, New Haven.

Thomas, C.
1894 *Report of the Mound Exploration of the Bureau of Ethnology*. Introduction by B.D. Smith. Smithsonian Institution Press, Washington, D.C. 1985 Facsimile ed. Originally published 1894, Annual Report 12, Bureau of American Ethnology, Smithsonian Institution, Washington, D.C.

On The Importance of Proper Curation of Collections

By Chester B. DePratter

“What will you do with all these things you are digging up?” is a reasonable question. I have been asked this question many times by landowners, school children, and members of the public visiting my field projects. When I explain that they will be carefully cleaned, studied, catalogued, then stored in the storage facility where they are housed by SCIAA’s curator, Sharon Pekrul, I inevitably get the follow-up question: “Won’t they be put on display in a museum?” Then I have to explain that most of what we find is not museum quality, but that it will be important for future research. It is easy to tell that this answer is not completely satisfying to the inquisitors, but they seem satisfied that at least some of the collection may ultimately end up on display somewhere.

As archaeologists, we have many obligations, and one of the more important of those has to do with the proper curation of the materials we recover. I have always taken that as a given, but it is only in the past few years that my own research has demonstrated to me just how important curation is.

In 2009, Charlie Cobb and I received a National Science Foundation grant to

study the 17th and 18th century Native American occupation of the Savannah River valley. The various native groups who inhabited the valley during this period were all immigrants who originated in homelands scattered across the eastern United States.

Thus, Charlie and I needed to learn about the Westo who came from western Pennsylvania, the Shawnee from Kentucky or Ohio, the Yuchi from eastern Tennessee, the Apalachee from panhandle Florida, the Apalachicola from southwestern Georgia and southeastern Alabama, and the Chickasaw who came from Mississippi. We also needed to see as many collections as we could from prior archaeological work along the Savannah River.

Our research has taken us on many road trips to view collections. At



Fig. 2: Charlie Cobb, Kim Wescott, and Chester DePratter contemplating Shawnee pottery at the William S. Webb Museum of Anthropology, University of Kentucky. (SCIAA photo)

Mississippi State University in Starkville, MS, we studied a large collection of Chickasaw material salvaged from destruction during a hospital expansion several years ago. At the Mission San Luis State Historical Site in Tallahassee, Florida, we spent a couple of days looking at pottery made by the local Apalachee Indians who were forcibly relocated to the Savannah River valley in 1703 and 1704. At the University of Kentucky, we looked at Shawnee material excavated over the past several decades. At the Waring Laboratory of Archaeology at the University of West Georgia in Carrollton, we looked at Creek Indian pottery relating to the Apalachicola and their origins as well as Shawnee pottery excavated near Augusta, Georgia. At the National Park Service Southeastern Archaeological Center in Tallahassee, Florida, we examined collections from the Macon Trading Post that was occupied by Creek Indians between 1690 and 1715. At the Smithsonian Institution collections storage facility in Washington, D.C., we studied collections made from sites along the Savannah River in the first half of the 20th century. At the University of Georgia Laboratory of Archaeology, we looked at Apalachicola collections that were excavated in the 1950s. Even with all of



Fig. 1: A red filmed bowl made by the Apalachee Indians in the early years of the 18th century. (Photo courtesy of the Mission San Luis, Tallahassee, Florida)

this collections research, there is still more to be done in relation to our Savannah River project.

Another of my projects involves the study of pottery sherds that were used as tools. In pursuing this research, I have studied Waring Laboratory collections made by a University of West Georgia archaeologist in 2006 and 2007 and material from another site that was excavated in the late 1940s. At the University of Georgia Laboratory of Archaeology, I examined a huge collection made by Works Progress Administration (W.P.A.) crews in the Savannah, Georgia, area in the late 1930s and early 1940s. The Fernbank Museum in Atlanta contained collections from St. Catherine's Island, Georgia, that were excavated in the late 1970s by crews from the American Museum of Natural History. Several large collections critical to my research are housed at SCIAA; some I have already seen, and the remainder I will get to analyze in the coming months.

The point of this list of visited repositories is that research by Charlie Cobb and me on our Savannah River Project and by me on the sherd tool study, would not have been possible were it not for the proper curation of collections by the various repositories involved. The conditions of these various collections

are not all equal, however. Some were stored unwashed in deteriorating paper bags for decades before they were properly processed and curated, and thus, there has been some loss of information and mixing of parts of those collections. Some collections are so overly curated that the study of the artifacts from one six-inch level in one ten-foot square might require opening a hundred or more small ziploc bags, making reanalysis a slow and laborious process. In some repositories, we were allowed open access to collections, and at others we had to submit requests weeks or even months in advance of our visits. At one repository, the curator wanted us to wear white cloth gloves as we examined pottery sherds, but that would have made analysis impossible given the need to feel the sherd surfaces during analysis, and it would have served no preservation purpose.



Fig. 4: Chester DePratter at SCIAA examining abraders in a collection from Thoms Creek site in Charleston County, South Carolina. (Photo by James Legg)

Not all collections end up in proper repositories where they will be available for future study. I tracked down one collection of material excavated in 1979 relevant to my sherd tool study that was stored in the spare bedroom of its excavator. Unfortunately, the records relating to those excavations have been lost, and a large number of "eroded sherds" that may well have included many sherd tools had been discarded. I was able to obtain that collection for analysis, and I now will be able to prepare the remaining material for proper curation, so it will be readily accessible to others in the future. I also know that there are many important collections stored in garages, sheds, storage units, and in small local museums that may not be accessible for study in the future, which will be a real loss to the field of archaeology. For example, a small contract archaeology firm in another state lost many site collections, including some important ones from South Carolina, when a hurricane destroyed a rented storage building. As another example, I recently visited a small museum that is being closed. This museum contains important archaeological collections that will now be dispersed or perhaps even discarded. Such loss of collections is, unfortunately, not all that uncommon given the multitude of small repositories that house archaeological materials.



Fig. 3: Christine DePratter assisting Chester DePratter at the University of Georgia Laboratory of Archaeology in analysis of abraders from the Fort Center site, Florida. (University of Georgia at Athens photo)



Fig. 5: Exterior of the Antonio J. Waring Laboratory of Archaeology, West Georgia University, which holds collections relevant to both abrader and Savannah River projects. (Photo by Ashley Smallwood)

With modern standards for curation of collections and development of up-to-date repositories with climate control, security, and proper shelving, the cost of collections curation in perpetuity becomes quite expensive. In addition to standards for repositories, there are also standards for level of analysis, methods of cataloguing, thickness of plastic bags, labeling of artifacts, and on and on. These are all necessary for proper curation, but the head of one small contracting firm told me recently that his company now spends more on curation than it does on collections analysis.

In talking to a collections curator about the issue of loaning out materials to museums and historical societies for display purposes, I learned that there is a risk involved. Small museums and historical societies do not always have proper security, so there are notable examples of collections being stolen out of display cases or storerooms. Museums and historical societies often have a high turnover rate among directors and employees, so materials on loan from larger repositories are not always properly tracked. Thus, when an exhibit is removed from display, artifacts might not necessarily be returned to the lender. This is especially troubling when it is the finest artifacts from a collection that are usually selected for exhibit. Keeping track of

artifacts out on loan is just one of the many important jobs of curators.

A final example of the importance of curated collections, involves the Yamasee Indians. I have had a long-term interest in the Yamasee Indians who moved from what is today coastal Georgia to Port Royal Sound on the southern frontier of South Carolina in 1684. In 1686, they were attacked by Spaniards and driven north to the banks of the Ashepoo and Combahee Rivers. Several years ago, a graduate student and I used plats to find and test excavate several Yamasee sites on the Ashepoo River, though we did not find any related sites on the Combahee. Recently, I was in the Charleston Museum looking at collections relating to my coastal South Carolina interests, and one collections drawer contained large sherds of Yamasee pottery from the Combahee River that had been

donated in 1973 by an anonymous diver. Once I was back at SCIAA, I found that SCIAA divers had worked on the site in 1975 and that our curation facility contains a large collection of material from the site. Now because of that chance discovery of Yamasee sherds donated to the Charleston Museum 40 years ago, I will, in June, take a crew to the coast to work on both the land and underwater portions of this important Yamasee site.

So what about SCIAA and our curation of state collections? We have a huge collection housed in a building containing approximately 7,000 sq ft. of floor space. This curation facility has recently been expanded and upgraded, but it is still far from a perfect facility. A larger staff and a fair amount of money are needed to reprocess and repackage older collections. The collections are of tremendous value and interest to researchers now, and that will continue into the future. So a major investment in continued care and curation of South Carolina's archaeological heritage is much needed. Curation of collections in perpetuity is a costly proposition, but it is a worthwhile endeavor critical to preserving our state's archaeological heritage for future generations of archaeologists who will have new research questions and new analytical techniques.



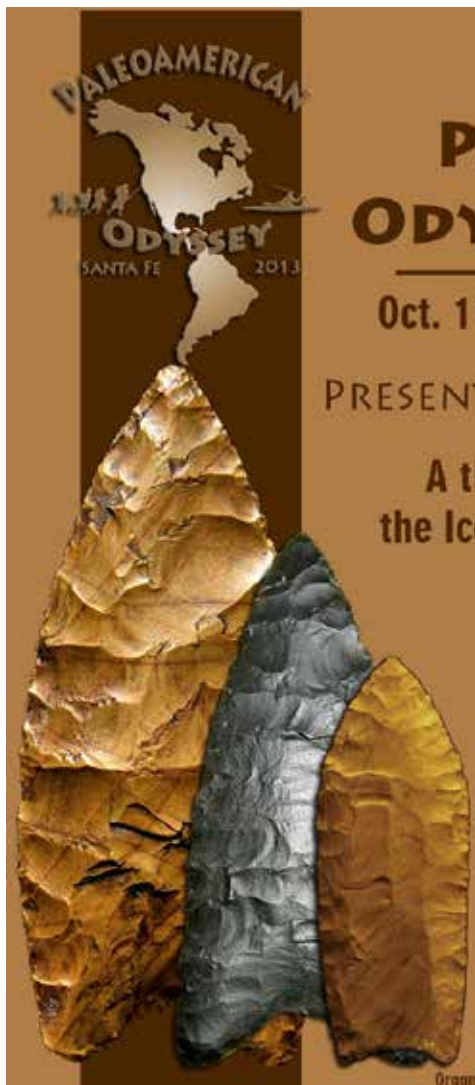
Fig. 6: Sherd of Refuge Simple Stamped pottery from the W.P.A.—excavated Deptford site with one edge used as an abrader. (Photo by Chester DePratter at the University of Georgia Laboratory of Archaeology)

Two Special Announcements

Gordon R. Willey Prize Awarded to Charles Cobb and Chester DePratter

This year's Gordon R. Willey Prize is awarded to Charles Cobb and Chester DePratter for their article entitled *Multisited Research on Colonowares and the Paradox of Globalization*. Each year the Archaeology Division of the American Anthropological Association (AAA) awards the Willey prize to an outstanding archaeology paper published within the last three years in the journal *American Anthropologist*.

Named after Professor Gordon R. Willey, who served as President of the AAA in 1961, the award recognizes a distinguished archaeologist. It encourages archaeologists to pursue Willey's well-known maxim (even if he did not first pen it!) that archaeology is anthropology, or it is nothing.



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Update on the 2012-2013 Activities of the Southeastern Paleoamerican Survey

By Albert C. Goodyear

Fieldwork commenced in late March of 2012 as usual for the field school at Topper, which we offer the University of Tennessee undergraduates during their spring break. In the week prior to their arrival, several of the volunteer staff helped with a field study being conducted by Dr. Josh Feinberg of the Geology Department of the University of Minnesota who studies magnetism in rocks (Fig. 1). We were interested in him studying the magnetic stability of the Pleistocene terrace sediments using his methodology to see if there was any evidence of natural disturbances that might affect the archaeological stratigraphy. He also took samples to search for the presence of a worldwide event known as the Laschamp Geomagnetic Excursion, which dates around 40,000 years ago. If present, this would be like a radiocarbon date for the Pleistocene terrace, which currently has a date of around 50,000 or more radiocarbon years. To obtain intact samples for these studies, we had to literally saw out the



Fig. 1: Dr. Joshua Feinberg taking sediment samples of the Pleistocene terrace for rock magnetism studies at the University of Minnesota Department of Geology. (Photo by Jean Guilleux)

blocks of sediment in stratigraphic order to be sent to his lab. Not trusting commercial shipping to get them there intact, Rooney Floyd and Tom Cofer rented a van and personally drove them up to his lab in Minneapolis. Jean Guilleux worked tirelessly for several days cutting out the soil blocks placing them in wooden boxes (Fig. 2) sealed with plaster of Paris to prevent cracking. With the help of Derek Anderson, Josh also got samples of the sediments surrounding the Clovis occupation on the Hillside to search for any magnetic disturbances around the Clovis layer. This is a study of the Younger Dryas Boundary (YDB), which is suspected to have experienced an extraterrestrial impact in the form of a comet. In the fall of 2012, an article was published in the *Proceedings of the National Academy of Sciences* by several of us (LeCompte et al. 2012) including a restudy of the Topper site, which replicated the original Firestone et al. 2007 study. The results of Josh Feinberg's studies will be presented at the *Paleoamerican Odyssey* conference in October of 2013 at Santa Fe, New Mexico (See Page 9 in this issue of *Legacy*).

Other geoscience work was conducted by Dr. John Foss who described the soil morphology in the Pleistocene sands and the profiles containing Clovis on the Hillside. Dr. Scott Harris and his geology class from the College of Charleston came at the end of



Fig. 2: Jean Guilleux and Josh Feinberg as the proud owners of the Pleistocene terrace sediments ready to be shipped to Minnesota. (Photo courtesy of Jean Guilleux)

March to take core samples from below our present excavations in the Pleistocene terrace. Specifically, we wanted to know if an unusual black clay layer was present this far east toward the Hillside, a layer that has remarkably well preserved plant remains and pollen. It was found here by the vibra core at the same depth as to the west. If a human occupation was present at Topper during the time the clay layer was deposited, it is possible that wooden artifacts might be preserved. This clay layer where Dr. Harris vibra cored is close to the chert deposits on the escarpment where, if humans were present, would facilitate stone and wooden artifacts being deposited in the clay. During the week-long field school with the Tennessee students, they assisted Doug Sain's excavations in the Pleistocene terrace extending one-meter units to the 50,000-radiocarbon level. They also assisted Derek Anderson who supervised excavations in the Clovis levels on the Hillside. Andrew Weidman, a graduate student at Tennessee, also continued his excavations at a nearby Clovis site (38AL228) in both March and May to increase his excavated Clovis lithic assemblage for his Masters thesis. Andrew

successfully defended his thesis in the spring of 2013 (Weidman 2013).

In May and June of 2012, the annual Allendale Paleoamerican Expedition

was held with a large number of registrations from the public. Among the goals in 2012 were to continue digging deeper in the Pleistocene terrace to recover as many definitive artifacts as possible in the range of the 50,000 depths (Fig. 3). Doug Sain supervised this work, which is part of his doctoral

dissertation at the University of Tennessee. Clovis excavations on the Hillside directed by Derek Anderson continued yielding a large number of Clovis bifaces, blades, and cores in the 4 X 4-meter unit. A relatively large number of formalized unifacial tools were also recovered compared to previous Hillside Clovis units suggesting perhaps a special activity area. Dr. Joe Gingerich (Fig. 4) who visited the dig this year spent a couple of weeks helping out with the Hillside excavations.

The first two weeks of the Expedition were devoted to underwater data recovery from the Charles site (38AL135) on Smith Lake Creek (Fig. 5) with the assistance of the Maritime Archaeology Division's Sport Diver Program led by Ashley Deming and her staff. Similar to the Big Pine Tree site upstream, the Charles site is a multicomponent quarry-related site with Clovis represented by manufacturing rejects such as point preforms and macroblades (Fig. 6). Artifacts from all time periods were recovered including a number of Early Archaic notched points and Edgefield scrapers (Fig. 7). Previous excavations on the remaining land portion of Charles demonstrated that most of the site has collapsed into Smiths Lake Creek. We wanted to increase our sample of definitive Clovis artifacts to confirm this

as another Clovis quarry and related site. Charles is the third Clovis quarry on the Clariant property counting Big Pine Tree and Topper.



Fig. 3: Classic bend break artifact from the Pleistocene terrace with well-preserved chert due to moist sediments. (Photo by Paula Zitzelberger)

Chris Moore, Dr. Randy Daniel, Dr. Joe Gingerich, Dr. David G. Anderson, and Dr. Barbara Purdy, and Tyler Retherford, graduate student of Dr. William Andrefsky from Washington State University. Tyler spent the entire dig with us and was of great help. We have been fortunate over the years to have guest speakers of this quality to provide additional education to our volunteers, support staff, and students.

Laboratory studies with Beth Bell and Joe Wilkinson continued in 2012 and 2013 in preparation for the 2013 international conference in Santa Fe, New Mexico, October 17-19th entitled *Paleoamerican Odyssey* (www.paleoamericanodyssey.com). Myself, along with Doug Sain, Megan Hoak King, Derek Anderson, and M. Scott Harris, have been invited to present a 30-minute paper on the preClovis occupation of Topper. By the time of this conference, we should have completed studies of the various flake tools and cobble cores and tools from both the Pleistocene sands and the terrace below. We are also expecting to

The first week of the Expedition was treated to a fish fry at the home of Mary and Ron Lucas at their historic house in Blackville known as the Maloney House. Ron caught a few hundred pounds of Santee catfish, which he filleted and fried to our great satisfaction. Visiting archaeologists who gave evening talks include Dr.

have the new OSL dates on the preClovis sediments back by then as well. One exciting new development with Clovis at Topper was the radiocarbon dating of charcoal associated with the dense floors of Clovis artifacts on the Hillside. An assay on a charred piece of softwood yielded a date of 10,958 +/- 65 yrs BP (AA100294) or 12,841 +/- 62 calendar years ago. This is a perfect date for the expected age of Clovis in North America. We believe this is the first precise radiocarbon date on associated Clovis artifacts yet from the Southeast. This charcoal sample was obtained by Sarah Walters who is working on her Masters at the University of Tennessee concerning charred botanical remains from the Hillside. Plans are underway to get more AMS radiocarbon dates to replicate this date and see if there might be earlier dates, which could say something about Clovis origins. Funds are being sought for five more dates, which cost \$600 each. For those interested in helping radiocarbon



Fig. 4: Dr. Joe Gingerich consulting with Lorene Fisher during his visit to Topper in 2012. (Photo by Paula Zitzelberger)

date Clovis at Topper these donations would be fully tax-deductible gifts to the University of South Carolina.

Starting in 2013, as we were getting ready to begin signing up people for the May-June Expedition, we received word that Clariant had been sold to SK Capital. We were given permission to



Fig. 5: Dredging operations at the Charles site, 38AL135, in Smiths Lake Creek. (Photo by Paula Zitzelberger)

come anyway in the spring and summer as the transfer of ownership will occur in June 2013. But also in late in January, we received word that Tom Pertierra, who is the Director of SEPAS DSO, had fallen seriously ill. Tom provides the equipment and logistical support to run our excavations and has made himself indispensable to our field operations. In recent years, he has stayed in the camp full time and made things work with increasingly large groups of volunteers and students. Given that there was no way to carry out fieldwork without him, I decided to cancel the spring and summer Expedition. This is the first time since 1996 we have not had an Expedition down to the Clariant sites, so it wasn't an

easy decision. Tom is recovering now at his home in Greenville, Florida, and we hope that he is back with us as soon as he is able.

Where we are now is concentrating on lab work for the preClovis presentation at the *Paleoamerican Odyssey*

conference in Santa Fe, New Mexico using the new labs the College of Arts and Sciences at the University of South Carolina has provided us. Last year, Tom Pertierra set up a fund with the University Educational Foundation known as the Paleoamerican Materials Analysis Fund to receive donations to carry out the backlog of artifact analysis so necessary for cataloging and publishing. Tom made generous contributions to it as have other people that have allowed continuous work through part time staffing. Our plan is to continue lab work through the rest of this year and the next. As this lab gets stable funding that will provide a manager, we hope to have some of the volunteers help out with analysis, as many have

offered to do. Several of the Allendale volunteers have expressed an interest in attending the *Paleoamerican Odyssey* conference being held October 16-20, 2013 (see announcement on Page 9). Besides the 30-minute paper on the preClovis at Topper, at least three other papers/posters will also be presented. Topper should be well represented as an early human site in the Americas.

Thanks to everyone who has helped bring us to this place in the search for the earliest Paleoamericans. Special thanks go to Darrell Barnes of Yesterday's Restaurant in Columbia for donating food stuffs and freezer storage, Bill Kanefelt of Colonial Packaging for donating numerous plastic field and lab bags, Reid Boylston of Reid's Food Lion in Barnwell, and Mike Morrow of Hilda Catering. And as we close out a chapter in the history of research at these important sites, we must recognize the very significant role that Clariant Corporation has played since 1996 in sponsoring and in many ways facilitating archaeology on their property. Clariant and Sandoz before that were exemplary corporate partners and stewards. We look forward to working with the new owners, SK Capital, who is forming the company Archroma to carry on the work at the Martin Plant.

References

LeCompte, M.A., A.C. Goodyear, M.N. Demitroff, D. Batchelor, E. K. Vogel, C. Mooney, B. N. Rock, and A.W. Seidel. 2012 Independent Evaluation of Conflicting Microspherule Results from Different Investigations of the Younger Dryas Impact Hypothesis. *Proceedings of the National Academy of Sciences of the United States of America*, Vol. 109, Issue: 44, Pages E2960-E2969 DOI: 10.1073/pnas.1208603109. OCT 30 2012.

Weidman, Andrew
2013 *Clovis Lithic Manufacturing Variability at the Allendale Chert Quarries: A Preliminary View from 38AL228, Allendale County, South Carolina*. Unpublished Master Thesis, Department of Anthropology, University of Tennessee, Knoxville, TN.

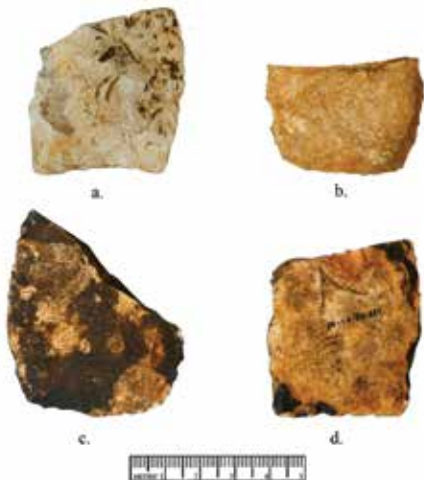


Fig. 6: Clovis point preforms from dredging at the Charles site, 38AL135. (SCIAA photo by Skyler Evans)



Fig. 7: Various Early Archaic projectile points recovered from dredging at the Charles site, 38AL135. (SCIAA photo by Skyler Evans)

A Visit with the Lost Battalion

By James Legg

Regular readers may recall that in 2009 I was fortunate to work with the Sergeant York Project in the Argonne Forest in northern France (see *Legacy*, Vol. 14, No. 1, March 2010, pages 18-22). Last fall, I returned to the Argonne to work for several days on another project related to the American Meuse-Argonne Offensive of 1918.

After the successful completion of the Sergeant York field work in 2009, one of the principals in that project, my old friend Brad Posey, proposed a new research effort. His "Lost Battalion Project" would examine the site of the other great legend of Americans in the Meuse-Argonne, the epic stand of a portion of the 77th Division after it was cut off and surrounded deep behind German lines (see page 15). The Lost Battalion siege position, or "pocket," had never received archaeological attention of any sort, but its location was well known, and it had been worked over by illegal relic hunters for decades. Posey's original plan was to document the physical features remaining on the site (fighting positions, shell holes, etc.), and to salvage whatever remnant remained of the artifacts with a systematic, piece-plotted metal detecting survey. His research proposal to the French archaeological authorities was accepted, but permission from the private

owner of the site was denied. However, the owners and managers of all of the various properties in a huge tract of the Argonne Forest to the south of the Lost Battalion position soon granted access. This area included everything from the southern edge of the Lost Battalion position, about 1,800 meters south to the vicinity of the 77th Division front on October 1st 1918. The new research design for the project necessarily excluded the Lost Battalion site proper, but was otherwise far more ambitious. The project has been underway for more than three years, with Brad Posey and assorted volunteers travelling from Germany to work over holidays and long weekends; volunteers have also come from Great Britain and the U.S. Permitting, oversight, and support have been provided by Yves Desfossés, the regional archaeologist for the Champagne-Marne. Yves has received Posey's draft reports and collections from the first two years of work. Recently he provided high-resolution LIDAR mapping of the area that reveals every shell hole, entrenchment, and bunker.

The project area was the scene of perhaps a dozen small-unit actions immediately proceeding, and during, the Lost Battalion siege and relief. Posey's new plan was to define and document these various engagements with metal

detector survey, with the goal of finally figuring out who did what and where, during this remarkably confused interval. To suggest that the Americans and Germans were victims of the "fog of war" is an understatement, given that the maneuvering and fighting took place in a dense forest, often at night, and involved units that were typically lost and out of communication. I was

initially skeptical that any sort of coherent picture would emerge, and predicted a generalized, essentially anonymous scatter of battle artifacts throughout the project area. The results to date have proven me entirely wrong.

Several factors have contributed to the clarity of the results to. First, like the Sergeant York site, the Lost Battalion project area is somewhat removed from the static Western Front, and there was no fighting there before or after the events of October 1st to 7th, 1918. Second, the firefights were relatively small and discrete, and they were scattered over a large area—there is no general clutter of artifacts. Third, while the Lost Battalion position itself has been heavily collected, the project area to the south appeared to be nearly undisturbed when work began in 2009. Finally, the American and German historical sources for the Lost Battalion affair are unusually rich. These include not only official records, such as reports, messages, and trench maps, but also a large body of participant testimony. One of the most useful sources has been the records and grave maps documenting the removal of temporary burials from the battlefield in the several years after 1918—most of the dead were identified, and most were buried at or near where they fell (their empty grave features are still visible). This allows the correlation of certain events known to have caused particular casualties with modern locations. Artifacts marked with individual or unit identifications have also offered significant clues—these have included American collar insignia, marked canteens and mess kits, and a German ID tag.

I was finally able to make an appearance in October 2012, when I joined Brad Posey for a round of fieldwork. In spite of regular rain, we managed to accomplish some coverage in an area where part of an American company was pinned down about 20 meters in front of a German trench, near the western edge



Fig. 1: Brad Posey with a German M1917 rifle grenade. (Photo by James Legg)



Fig. 2: The complete collection from an individual American rifleman's firing position. These .30'06 rifle cartridges and stripper clips were recovered from an area about a meter in diameter. The very limited dispersion suggests that the rifle was fired from a prone position, not surprising under the circumstances. (Photo by James Legg)

of the Argonne Forest. Earlier, Posey had found evidence for several American casualties in this location, each marked by a grouping of uniform and equipment artifacts. When I visited, the goal was to

finish defining the American position. We found discrete clusters of fired American cartridge cases in a rough line paralleling the trench, each cluster representing the firing position of an individual rifleman

or light machine gunner (riflemen were represented by U.S. .30'06 cases, machine gunners by French 8mm cases). Also along this line were fragments from several German hand grenades. Beyond the left (west) flank of the American line, we found a German firing position, including numerous fired and unfired 7.92mm cartridges and the cap from a German stick grenade. This suggested an effort by the Germans to turn the American flank. Elsewhere, I detected a nearly complete bandolier of 55 (of 60) U.S. .30'06 cartridges.

The Lost Battalion fieldwork continues this spring, and at this stage, is perhaps half finished. There is still some hope that the siege "pocket" site itself might be accessed and documented, but there is still plenty of ground to cover in the existing project area. In any case, the project is already an outstanding contribution to battlefield archaeology. The clarity of the data is remarkable, and I have no doubt that Brad Posey will be able to demonstrate for the first time who did what and where, in that part of the Argonne Forest in early October 1918.



Fig. 3: Documentation photos of live ammunition, including a bandolier-load of U.S. .30'06 rifle cartridges, and unfired French M1916 VB rifle grenades (as used by the American Expeditionary Force) from the location of an American casualty. Unfired small arms ammunition and live ordnance cannot be retained, much less taken back across the German border for lab work, so these materials are documented on site. (Photo by James Legg)

Siege in the Argonne

By James Legg

Like Sergeant York's 82nd Division, the 77th Division was engaged in the great Meuse-Argonne Offensive, the largest and final AEF (American Expeditionary Force) offensive of the Great War. The Meuse-Argonne began on September 26th, 1918 and raged until the end of the war on November 11th. About 1.2 million Americans eventually participated in the offensive, of whom about 27,000 were killed and 96,000 were wounded, gassed, or otherwise disabled.



Fig. 1: Major Charles Whittlesey in 1918. In 1921, Whittlesey attended the dedication ceremonies for the new Tomb of the Unknown Soldier in Arlington National Cemetery. Shortly thereafter he booked passage on a holiday cruise to Cuba. On the first night at sea, Whittlesey had drinks in the bar, said goodnight, then stepped outside, and jumped overboard. (National Archives)

The 77th Division was comprised of draftees, most from New York, many of them recent immigrants. On September 26, 1918, they found themselves on the far left (west) flank of the American front in the Meuse-Argonne Offensive, attacking north within the dense, hilly, and well-defended Argonne Forest. After a good start on the 26th, the 77th made little progress for the remainder of September. The division suffered heavy casualties, and there was significant confusion in communication and command. Neither side had a clear picture of what was going on, and neither side was able to maintain

a continuous front line. It was in this environment that a fresh Allied surge began on the morning of October 2nd.

On the left of the 77th Division advance, was a command consisting of elements of two battalions of the 308th Infantry Regiment, led by Major Charles Whittlesey. In civilian life, Whittlesey was a Wall Street attorney. By nightfall, his force had skirmished its way through, and well beyond, the confused German front without encountering a main line of resistance. The Americans crossed a deep, east-west ravine and dug in for the night on the northern slope. Meanwhile, the French division attacking to Whittlesey's left, and the 307th Infantry Regiment on his right, were unable to make comparable penetrations. On October 3rd, the Germans re-established their front line well to the south, and the "Lost Battalion" was trapped.

The Germans lay siege to the position for five days, raking it with rifle and machinegun fire, showers of grenades and trench mortar shells, and, finally, flame throwers. The defenders suffered terribly from thirst and hunger, and there was no helping the wounded. The low point was probably when Allied artillery blasted the Americans with an accurate and sustained barrage. Whittlesey received and rejected a formal surrender demand from the enemy. The siege was well underway before the 77th Division command figured out what had happened, much less exactly where Whittlesey was located. The response was disjointed and ineffective, resulting in a series of firefights along the German front, but there was no relief for the Lost Battalion. Finally, American progress to the east of the Argonne Forest compelled the Germans to abandon their front facing the 77th Division, and on October 8th relieving units reached Whittlesey's position.

About 550 Americans were trapped in the pocket. When relief arrived, 190 of them were able to

walk out. Another 190 lay wounded in the position, along with 107 dead. Sixty-three men were missing. In the context of 77th Division operations, the Lost Battalion affair was a costly fiasco that contributed nothing to the Allied advance. The story quickly caught the popular imagination, however, and it was certainly a propaganda victory. Whittlesey and three others were awarded the Medal of Honor for the action. For many years, the Lost Battalion held legendary status rivaling that of Sergeant York, but as the centennial of the Great War looms, it is now nearly gone from the national memory.

Further Reading

DesFosses, Yves, Alain Jaques and Gilles Prilaux

2009 *Great War Archaeology*. Editions Ouest-France, Rennes.

Johnson, Thomas M. and Fletcher Pratt
2000 *The Lost Battalion*. University of Nebraska Press, Lincoln.

Laplander, Robert
2006 *Finding the Lost Battalion: Beyond the Rumors, Myths, and Legends of America's Famous WWI Epic*. The American Expeditionary Foundation, Waterford, Wisconsin.

Lengel, Edward
2008 *To Conquer Hell: The Meuse-Argonne, 1918*. Henry Holt Company, New York.



Fig. 2: A view in the Argonne Forest in October, 2012, 94 years after the Meuse-Argonne Offensive. (Photo by James Legg)

Maritime Research Division

Update on Mars Bluff Navy Yard / CSS *Pee Dee* Cannons Investigations

By James D. Spirek

We are still working to document and to prepare for the recovery of three cannons that were thrown overboard by the CSS *Pee Dee* in the Great Pee Dee River at the Mars Bluff Navy Yard during the waning days of the Civil War (Fig. 1). The armament of the Confederate gunboat consisted of two Brooke rifles, a 6.4-inch, and a 7-inch, and a 9-inch Dahlgren smoothbore. These guns were the premiere naval weapons of the Civil War. Until recently, we had only verified the presence of two of the three cannons—the 6.4-in Brooke rifle and the 9-in Dahlgren smoothbore.

These two cannons were found a number of years ago by the CSS *Pee*

of munitions associated with the two Brooke guns, but interestingly none for the Dahlgren. These items are now on display at the South Carolina Civil War Museum in Myrtle Beach operated by Gragg (Fig. 2). Joe Beatty, MRD archaeological technician, and I recently visited the museum and were impressed with the artifacts and interpretive materials that Ted and his wife Connie have created for the exhibit. I would suggest that if you are in Myrtle Beach, visit the museum, and take a look at this important Civil War naval collection. Gragg has also published a book entitled *Guns of the Pee Dee: The Search for the Warship CSS Pee Dee's Cannons* that relates

cesium magnetometer, the remains of the 7-inch cannon remained obscured by sand, trees, and other magnetic debris. That is, until the adjacent landowners, Glenn Dutton and Rufus Perdue, decided to take advantage of extremely low-water to give it a go and search for the cannon themselves. Observing two piling stumps further in the stream that only appear at very low river levels, the pair deployed a metal detector and searched around that area. Noting a magnetic disturbance that corresponded in length to a large object, the men recorded their findings on a map of the site, and alerted us to its potential discovery.

On 4 December 2012, the MRD deployed to verify the discovery of the 7-inch Brooke rifle. Gathering together our crew and volunteers (Ted Gragg, Bob and Chad Butler, David and Cody Freeman), and assisted by Glenn Dutton and Rufus Perdue, we located the object with our metal detector and immediately excavated several feet of sand to find the muzzle of the cannon. The cannon lays parallel to the river with its muzzle pointed upriver. Next, we inserted a GoPro Hero2 underwater camera down the bore of the cannon and noted the rifling was in excellent condition. As mentioned above, the elusive nature of the cannon was puzzling because of the lack of a large magnetic presence, especially as the mass of iron weighs approximately 15,000 pounds. Another factor obscuring its location was that it was thrown a bit further into the stream, rather than nearer the riverbank like the other two. We had planned to systematically weed through a number of large magnetic anomalies along the shoreline and towards the river channel in the future to search for the gun, but were saved the time and expense by the landowners' discovery of the gun.

Now that all three cannons are

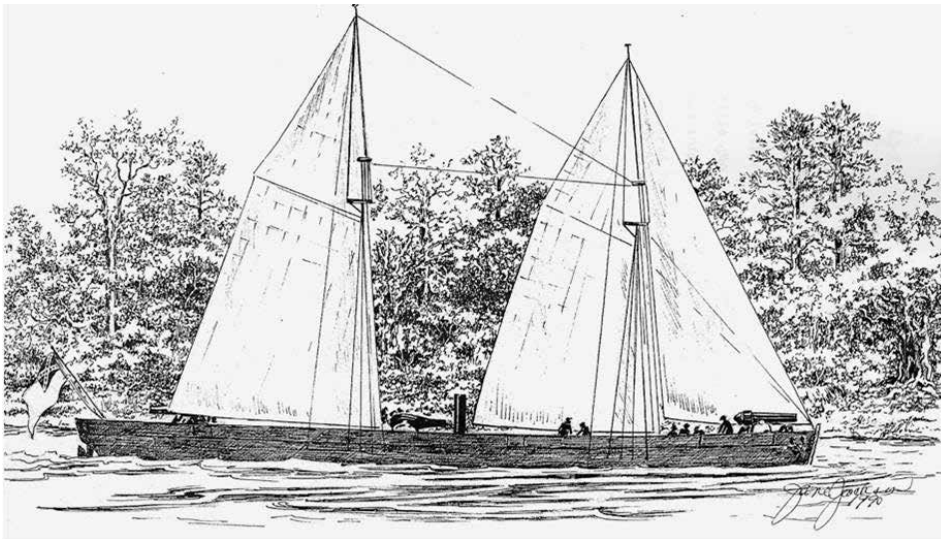


Fig. 1: Modern rendering of CSS *Pee Dee*. (Drawing by)

Dee Research and Recovery Team led by Ted Gragg and Bob Butler. Their group was originally licensed by the Maritime Research Division through an Intensive Survey License that evolved into a Data Recovery License to investigate the river bottom alongside the abandoned navy yard. Besides discovering and documenting the two cannons, the group recorded and recovered a number of artifacts, including carpenter and shipbuilding tools and other sundry items. They also recovered a number

the team's odyssey to investigate the remains of the gunboat, armament, and the navy yard.

An archaeological conundrum developed during the course of these investigations in that each caliber shell for the Brooke rifles was present but the physical remains of the 7-inch cannon proved elusive (Fig. 3). Despite methodically searching the waterfront, and along the apparent line of the two other jettisoned cannons, with physical probing, excavation, and deploying a



Fig. 2: Display of navy yard tools, parts of a cook stove, and other sundry items recovered from the waterfront of the Mars Bluff Navy Yard. (SCIAA photo)

accounted for, there still remains one mystery—where did the Dahlgren come from? The pedigree's of the two Brooke rifles are known, both cast in Selma, AL and shipped directly to the Mars Bluff Navy Yard to arm the gunboat in 1864. Markings on the trunnions and breech of the Dahlgren indicate it was cast in Fort Pitt, PA in mid-1862 (Fig. 4). According to research undertaken by Dr. Larry Babits, now retired director of the Program in Maritime Studies at East Carolina University, posited that the gun was captured from one of three Union gunboats due to the manufacture of the Dahlgren in mid-1862. Two of the Union gunboats were out west, which seemed unlikely for the Dahlgren to have come that far due to the railroad logistics at that time in the war. Whereas the Confederate salvage of the 9-inch battery, consisting of five 9-inch Dahlgren smoothbores, off the rammed and sunk USS *Southfield* on the Roanoke River at Plymouth, NC seemed a more viable candidate, particularly as



Fig. 3: A 7-inch Brooke rifle at the Washington Navy Yard. (SCIAA photo)

the railroad logistics were conducive for transporting the gun to Mars Bluff.

Dr. Babits' research indicating that the USS *Southfield* seemed the most viable candidate for the Confederates to obtain a captured 9-inch Dahlgren intrigued me greatly, considering that I had written

my graduate thesis on the remains of the gunboat while a student at ECU. I immediately poured over my notes to see if I had come across any information



Fig. 4: Underwater image of the 9-inch Dahlgren smoothbore in the river. (SCIAA photo)

on the markings on the *Southfield* guns. When reviewing my notes associated with a Confederate attack on Union army and naval forces in Plymouth in December 1862, in which the *Southfield* was disabled,

I hit paydirt. The captain of *Southfield*, responding to an inquiry of the conduct of the gunboat during the attack, listed each of his guns along with their markings. Perusing the markings of the five 9-inch guns indicated that they were cast before the war had commenced, and therefore did not

match the one in the river. A glimmer of hope was revived when correspondence concerning the armament of the gunboat in early 1864 indicated that two 9-inch Dahlgren guns were headed to *Southfield* to replace two damaged guns. On 30 March 1864, the guns arrived in Plymouth and were immediately placed aboard the gunboat. If the *Pee Dee* Dahlgren gun is from the *Southfield*, then it must be one of these two that arrived just in time for its penultimate engagement with the CSS *Albemarle* that destroyed the Union gunboat in the early morning hours of 18 April 1864.

The MRD intends to launch a research foray at the National Archives in Washington, DC, to answer these questions using Union navy correspondence, as well as to gather information from Confederate

correspondence, relating to the identity of this 9-inch Dahlgren. In the meantime, we are finalizing the necessary material requested by the U.S. General Services Administration, the Federal agency that owns this historic property on behalf of the American public, to obtain an indefinite loan to display the cannons at the new Florence County Museum. Additionally, we are preparing information to create a Request For Proposal to recover, conserve, and transport the cannons. We hope to raise the cannons in late fall 2013. These research activities are funded by a Drs. Bruce & Lee Foundation grant and are greatly appreciated. Look to upcoming issues of *Legacy* for updates on this project.

Recording the Beginnings of South Carolina River Diving

By Drew Ruddy, SCIAA Research Associate, Hobby Diver #0246

The serenity along the rural banks of the Ashley River was disrupted by the sudden starting of a Navy diving compressor. Nine divers on a 50-foot vessel were members of the Explosive Ordnance Disposal Unit 2 stationed at the Charleston Naval Mine Force Command. It was April 1960, and the State of South Carolina had recently acquired the lands on which sat the 18th century Fort Dorchester and the site of the colonial town established there in the late 1690s. The divers stretched a line across the river and ran a search pattern in the tannic stained waters. They hoped to find pilings from the 18th century bridge as well as cannon that had been reportedly jettisoned during the American Revolution.

Dr. Lawrence Lee, history professor at the Citadel, supervised a work force on the banks comprised of inmates from

the South Carolina State Penitentiary. They worked on clearing land and performing some excavation work as directed by Dr. Lee. The State had aspirations of establishing a new state park.

Reports of the outcome of the two-week diving expedition are

sketchy, but newspaper articles suggest that no cannon were discovered, but a wheel that may have come from a gun



Fig. 2: 18th century onion bottle found by Drew Ruddy at Colonial Dorchester. Photo by Drew Ruddy)

carriage was salvaged. A possible cannon ramrod is reported.

By the mid-1960s, Dorchester was a newly established state park and SCUBA diving was becoming an endeavor embraced by a bold few. The earliest report of any divers searching for submerged antiquities was at Dorchester.

An article in the Charleston newspaper dated September 1966, describes the recoveries of 18th century artifacts by the Amberjacks, a ten-member SCUBA club. Perhaps the most significant find of the era was made by Jim Batey of the Charleston Aqua Raiders SCUBA club when he recovered an intact 18th century

pewter tankard. It had a hole in the side, which naturally sparked imaginations to create a tale of a drunken tavern patron shooting the tankard with a flintlock pistol. The tankard was restored by Colonial Williamsburg where it is on display.

My lifelong diving partner, Steve Howard, and I met in our SCUBA certification course at the Charleston YMCA in 1967. We spent many hours of our earliest artifact hunting expeditions scouring the bottom of the Ashley River at Dorchester. Still one of my most exciting finds was the recovery of my first early 18th century onion bottle at this site about a year after my certification.

In 1973, the first SC State Underwater Archaeologist, Alan Albright, came onboard, and it was decided that the Dorchester waterfront should be closed to diving until an assessment could be made of the site's archaeological potential. In 1976, SCIAA conducted an underwater survey under the direction of Alan Albright and Ralph Wilbanks. It was decided that although a great deal of archaeological potential probably lay buried in the sediments of the Ashley, the site could be reopened to diving by the hobby diver.

Over the ensuing 45 years of



Fig. 1: 18th century pewter tankard found at Dorchester by Jim Batey. (SCIAA photo)



Fig. 3: Remains of the colonial cribbed dock at Fort Dorchester. (Photo by Drew Ruddy)

friendship and diving, Steve Howard and I have recognized that hobby divers have made important discoveries that deserve to be recorded for the sake of future archaeologists, researchers, and persons interested in the preservation of South Carolina heritage. For several years, we have been working on the South Carolina Artifact Documentation Project. To date, we have photographed about 30 collections of divers' recoveries ranging from fossils, Native American, and historic materials.

In the past year, the South Carolina Artifact Documentation Project has worked with Dorchester State Historic Site archaeologist Larry James to try to recover information about the early diving and finds of this site where South Carolina artifact diving began. Having learned of a collection of 12 boxes of artifacts donated to the Charleston Museum by 1960's diver John Berg, we enlisted the help of SCIAA archaeologist Ashley Deming and archaeological technician Carl Naylor. With the oversight of Charleston Museum archaeologist, Martha Zierden, we photographed and typed the artifact collection.

Steve and I also recognize that the personalities and stories of the divers themselves are an important part of South Carolina heritage. We have been

conducting video interviews as an oral history documentation project. In the past months, archaeologist Larry James has interviewed Steve and me as early

Dorchester divers. Ralph Wilbanks and Jim Reed were interviewed discussing the 1976 SCIAA underwater project. Larry also did an interview on the river with Billy Judd regarding the construction and usage of the crib docks of Colonial Dorchester.

The South Carolina Artifact Documentation Project wishes to assist the archaeologists in preserving the underwater heritage of the Dorchester Colonial Historic Site and in doing so, preserve stories of South Carolina's first artifact divers.

The South Carolina Artifact Documentation Project welcomes the opportunity to photograph artifact collections and to conduct video interviews to record the stories of South Carolina heritage diving. If you are interested in participating in this project, please contact us.

Drew Ruddy drewruddy@aol.com; Steve Howard sh7seas@aol.com



Fig. 4: Life-long diver partners and founders of the South Carolina Artifact Documentation Project Drew Ruddy (left) and Steve Howard (right). (Photo courtesy of Drew Ruddy)

Archaeologist of the Year Awarded to Drew Ruddy

By **Ashley M. Deming**—Sport Diver Archaeology Management Program, Maritime Research Division, SCIAA

Each year, the Office of the State Archaeologist grants an award to one avocational archaeologist for conducting exemplary work in South Carolina archaeology. This year, we were very excited to see the award given to one of our hobby divers. The honor of the 2013 Archaeologist of the Year Award goes to Mr. Drew Ruddy (Hobby License #0246).

Drew has been participating with SCIAA's Maritime Research Division since the early 1970s by volunteering and taking on his own projects to further the study of underwater archaeology and maritime history in the state of South Carolina. He has participated in archaeological research on the Allendale Paleoindian Expedition, Willtown Bluff, and at Colonial Dorchester State Historic Site. Currently, Drew (along with his life-long diving partner Steve Howard) is working on a photographic catalog of various diver collections around the state and conducting an oral history project to record the history of diving in South Carolina (The South Carolina Artifact Documentation Project). Additionally, Drew is working in conjunction with the Sport Diver Archaeology Management Program, the Charleston Museum, and Colonial Dorchester State Historic Site to identify and catalogue artifacts that came from an early surface collection survey in the Ashley River at Fort Dorchester. Drew has much of his own collection in various museums around the state and is pursuing a hobby diver artifact traveling exhibit project.

Drew is an exceptional volunteer and researcher who is continually furthering the understanding of South Carolina history. His work is instrumental in this endeavor, and he strives to make all acquired information available for other researchers and the public. He is an asset to the state and archaeology.

Congratulations, Drew! You deserve it!



Fig. 1: Drew Ruddy behind the wheel of his diving boat. Photo courtesy of Drew Ruddy)



Fig. 2: Drew Ruddy gearing up for a dive in South Carolina waters. (Photo courtesy of Drew Ruddy)

Artifact Identification Workshop

By Ashley M. Deming

Each year the Maritime Research Division's Sport Diver Archaeology Management Program (SDAMP) offers two Artifact Identification Workshops to the public as part of their education and outreach initiatives. These one-day workshops are aimed at the sport diver community, but are appropriate for anyone interested in learning more about South Carolina artifacts. The workshop focuses on how to identify and date artifacts using a diagnostic approach to field identification. This is something that everyone can do. With some simple descriptions, artifacts can be identified in a manner useful to both hobby collectors and archaeologists. This workshop is designed to help collectors



Fig. 1: (L to R): Darcy Templeton, Alec Blalock, and Bill McNutt identify artifacts at the Artifact Workshop at SCIAA Headquarters in Columbia. (SCIAA photo by Ashley Deming)

better understand and identify artifacts so that they can appreciate their collections even more from an archaeological and historical context, but also to report finds more accurately to archaeologists and researchers.

The workshop features a mixture of lectures and activities designed to help identify some of the types of artifacts found in South Carolina. SDAMP staff gives lectures and lead hands-on sessions about bottles, historic ceramics, Native



Fig. 2: (L to R): Phil Jones and Charlotte Martinez attend Artifact Identification Workshop. (SCIAA photo by Ashley Deming)

American pottery and projectile points, and other historic cultural material.

Workshop students have the opportunity to get real, practical experience in identifying and understanding a variety of cultural materials.

Workshops are open to a maximum of 15 students to make sure that each student has the

opportunity to work one-on-one with instructors and get the most out of the day. The workshops are highly interactive and students work in groups to identify the archaeological material during the hands-on sessions.

SDAMP will

be offering a workshop Saturday, August 31, 2013 in Columbia, SC. The cost for the workshop is \$35 per person and includes an identification guide handbook. For more information, please email SDAMP at sdamp@sc.edu or call (843) 762-6105.

The Sport Diver Archaeology Management Program is the public education and outreach branch of the Maritime Research Division of the

South Carolina Institute of Archaeology and Anthropology at the University of South Carolina. The program is managed in Charleston from a facility at the Fort Johnson Marine Resource Center. In addition to extensive public education and outreach initiatives, SDAMP manages the Hobby Diver License program (the program licenses hobby collectors for retrieving artifacts and fossils from State waters and reviews licensee reports regarding artifact finds), manages two maritime heritage trails, and functions as a custodian for all submerged cultural resources in South Carolina.



Fig. 3: (L to R): Jim Dunlap, Dennis Coco, and Roy Neeley attend the Artifact Workshop in Columbia. (SCIAA photo by Ashley Deming)

Savannah River Archaeology Research

Research in the Graniteville Historic District

By Keith Stephenson and George Wingard

This past year, we initiated archaeological research in Graniteville, South Carolina primarily focusing on its industrial beginnings during the antebellum period. In 1976, the area that encompassed the original mill town at Graniteville was nominated to the National Register of Historic Places as the Graniteville Historic District. Our project involves a community-oriented outreach plan designed to include interested citizens in the historic neighborhood (Fig. 1). We actively encourage residents to participate directly in the fieldwork and discovery of their own early mill town heritage. The general archaeological objective is to gain a better understanding of the cultural landscape of the mill workers' households by identifying specific locations of outbuildings, wells, and subsistence garden-plots. Our specific agenda is to illustrate the welfare of each house's inhabitants during the 19th century on the basis of artifact types recovered from individual household middens.

The South Carolina State Legislature granted a corporate charter to industrialist William Gregg for the Graniteville Manufacturing Company on December 15, 1845. Gregg was born in Monongalia County, present day West Virginia in 1800. He apprenticed as a watchmaker and silversmith from 1814 until 1823. In 1824, he began a successful jewelry business in Columbia, SC and in 1838 moved to Charleston where he continued the business of jeweler and silversmith in the firm of Hayden, Gregg, and Company. During this time, Gregg realized the need for industry in the Deep South, a region almost completely an economy of aristocratic plantation agriculture dependent on slavery and cotton. His vision was to develop the manufacturing of textiles at an industrial scale based not on the labor of enslaved blacks, but rather drawn from the majority class of white subsistence farmers. Gregg's philosophical inclination was to raise the economic standard of living for poor white families

while at the same time industrializing the South to lessen reliance on textiles imported from New England or Europe.

During March 1846, the Graniteville Manufacturing Company bought almost 11,000 acres in the Sand Hills physiographic province of Horse Creek Valley (then the Edgefield District, now Aiken County) to ensure and protect the water rights for the company (Downey 1999; Mitchell 1928:49). Along the banks of Horse Creek, Gregg designed a model "mill village" centered on a two-and-one-half storied textile mill some 350 X 50 feet in dimension with two front towers each enclosing a staircase. Atop the northernmost tower still hangs a large brass-bell that when sounded during the 19th century regimented the daily progression of labor activity. Gregg himself seems to have designed the mill after the fashion of those in New England, and had the facility constructed of locally quarried blue granite. When completed in 1849, the mill was fronted by a large commons consisting of a courtyard lawn with trees, shrubs, flowers, and trimmed gravel sidewalks all centered on a spouting, spring-fed water fountain. The cohesiveness of the mill village is supported by the outward uniformity of building construction. Structures with similar materials, dimensions, and plans appear throughout the village. Differences in the outward appearances of buildings were primarily based on the setting of the house site and the social standing of its intended inhabitant. In his 1849 President's Report to the stockholders, Gregg stated that the village consisted of an academy, a hotel, two churches (Methodist and Baptist denominations), several stores, 10 boarding houses, 11 supervisors' houses, and 40 workers' cottages. All buildings were constructed of native long-leaf pine in the Gothic Revival style, especially popular during

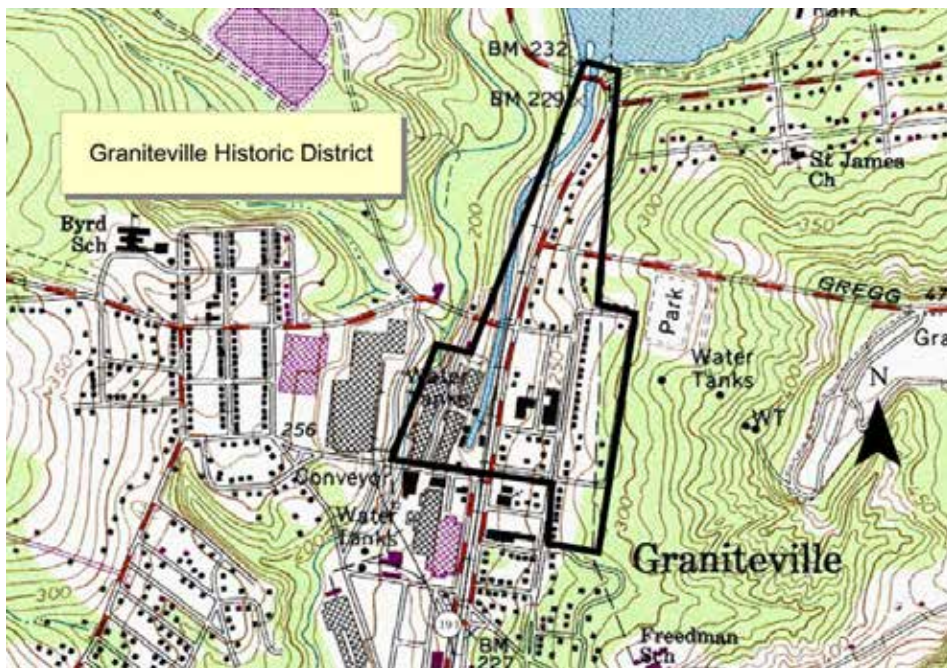


Fig. 1: Location of Graniteville Historic District (USGS 7.5' Series Graniteville Quad. 1964, Photorevised 1971). (SCIAA Illustration by George Wingard)

this era in rural settings. Each worker's cottage featured architectural symmetry with a fireplace serving two central rooms and two attic rooms. Exterior elements included steep gable roofs, vertical board and batten siding, carved vergeboard or bargeboard that decorated the gable and eave roofline, and matching hood-mold trim over the front center window. According to biographer Broadus Mitchell (1928), "William Gregg brought into existence the first typical Southern cotton-mill village." By so doing, Gregg created a pattern that would be emulated by numerous textile mill proprietors of "company towns" throughout the Deep South.

In the early 1900s, a Superintendent of the Graniteville Manufacturing Company, seemingly with intent, destroyed many of the mill's original records, ledgers, and documents. Despite this loss, numerous—albeit contradictory—narratives have been published detailing the economic history of Gregg's Graniteville textile enterprise. What we have learned from these documents is that Gregg established a division of labor among family members. Compulsory attendance at the academy was expected of children until the age of 12, after which the teenagers, mostly females, would begin employment in the factory. Young boys, if not engaged in millwork, doubtless assisted their fathers in farming the family subsistence plot. Married women with families would attend to the domestic responsibilities of household maintenance activities. So, the textile mill operated primarily with female labor, a pattern that had been established in the textile mills of southern New England.

Surviving archival records from the mill contain little about the everyday lives of the workers. Archaeology as a materialist science is particularly well suited to address the issue regarding the daily life of mill operatives and their families. Since the Graniteville Company was in operation until 2006, no archaeology has ever been conducted at Graniteville to reveal the contextual



Fig. 2: Gothic Revival Style cottage constructed ca. 1846 at House Lot No. 15. (SCIAA photo by George Wingard)

record of this mill town until this project. Thus, the material condition of the mill laborers that occupied Graniteville during the 19th century remains undocumented. Our purpose is to recover artifacts and identify cultural features that will chronicle early proletariat existence in one of the Deep South's hallmark working-class communities. Since an obvious gap exists between the destroyed early documentary history and the 19th-century

archaeological deposits at Graniteville, our theoretical concern involves the political economy of Graniteville and its influence on working-class domestic life there. In other words, we are not so much focusing on the industrial archaeology of textile manufacture at Graniteville, but rather a social archaeology, to better understand the social relations of production between the capitalist objective at Graniteville and the standard of living of the resident labor



Fig. 3: Post mold in bottom right corner of shovel test at House Lot No. 11. (SCIAA photo by George Wingard)

force.

Twenty-three operatives' cottages still stand along Gregg Street, otherwise known as Blue Row (Fig. 2). Originally, these structures were painted with a decorative slate-blue wash presumably to match the blue-colored granite of the mill. According to an 1850 letter by Gregg, each worker's cottage had "from an acre to an acre and a half of ground attached to it." Currently, each house lot is about one quarter acre in extent. Apparently, during the mid-20th century, the back portion of each original lot was sub-divided for housing development. Other than the construction of a concrete sidewalk and curb lined with oak trees, the proposed subdivision never materialized. Our archaeological efforts thus far have focused on testing the immediate yard around each house. Eventually, we plan to expand sampling to include those undeveloped lots that were part of the original household landscape.

William Gregg was meticulous in designing his mill town and personally managed all aspects of its construction. All workers' cottages were built according

to identical specifications in dimension and each precisely spaced apart from one another. So we expect—based on this consistency in architecture and arrangement—that the array of outbuildings, privies, wells, gardens, and animal pens will be exactly the same for each house-yard. This landscape patterning should prove evident through cultural feature locations and non-random artifact distributions. While excavation at each individual worker's row house offers the opportunity to study single families over time, testing at multiple house-yards holds the promise of being able to make comparisons among households. In turn, this will allow us to characterize any diversity throughout the entire neighborhood for the latter 19th century.

To date, we have surveyed four house lots excavating a total of 124 50 X 50 centimeter-shovel test pits on five-meter grids. About 25 potential cultural features have been encountered, with most being possible post molds (Fig. 3). We have tentatively scheduled at least three house lots for further survey during the remainder of 2013. Presently, we are

engaged in the inventory and classification of recovered items. This information will allow us to generate data analyses of specific artifact patterns for each yard. These archaeological signatures, coupled with the location of recorded cultural features, will be employed to guide further testing and, eventually, the location of large block excavations.

For purposes of our discussion here, we focused on two of the lots surveyed so far and these are recorded as House Lots Number 11 and 15 (Fig. 4). The mill house structures were built in alignment with the plane of the hill-slope, so little if any disturbing activity occurred to the original ground surface. However, during remodeling and upgrades during the 1920s when kitchens were added to the original structures, the hill-slope was graded to accommodate the added-room structure thus, severely disturbing any 19th century archaeological deposits primarily in the midsections of each house lot. For this reason, our work primarily focused on the front and back portions of each lot.

A standard grid was overlaid on each lot with the datum consistently established off the front-center pier of each house. All shovel test pits were excavated on a five-meter grid across these yards. Our survey efforts have recovered just over 3,500 artifacts, but interestingly only about 15 percent date to the 19th century.

At this point, we note that the bulk of recovered 19th-century materials primarily include personal items, architectural hardware and tools, food storage and serving-ware containers, and home-heating/cooking fuel resources, such as coal. Especially evident are children's toys, school items (fragments of writing slate and slate pencils), personal adornment items, patent medicine bottles, as well as stoneware and refined earthenware vessels. These objects are associated with a personal use of space in the immediate yard area. Eventually, as we excavate the back portions of each original house yard, we expect to detect more generalized trash middens, as well as the location of privies, garden plots, and animal pens.

Ultimately, our research will expand to include the yards of boarding houses and particularly those of mill supervisors. The variety of artifact types recovered will point to any differences in affluence between the households of operatives and supervisors residing there. Through this socio-anthropological study, we will attain a deeper understanding of the social relations between the mill operatives and their supervisors. Please visit our Graniteville Archaeological Project page on Facebook for further details and updates on this research.

References Cited

Downey, Thomas M.
1999 "Riparian Rights and Manufacturing in Antebellum South Carolina: William Gregg and the Origins of the "Industrial Mind." *Journal of Southern History* 65 (1):77-108.

Mitchell, Broadus
1928 *William Gregg: Factory Master of the Old South*. The University of North Carolina Press, Chapel Hill.

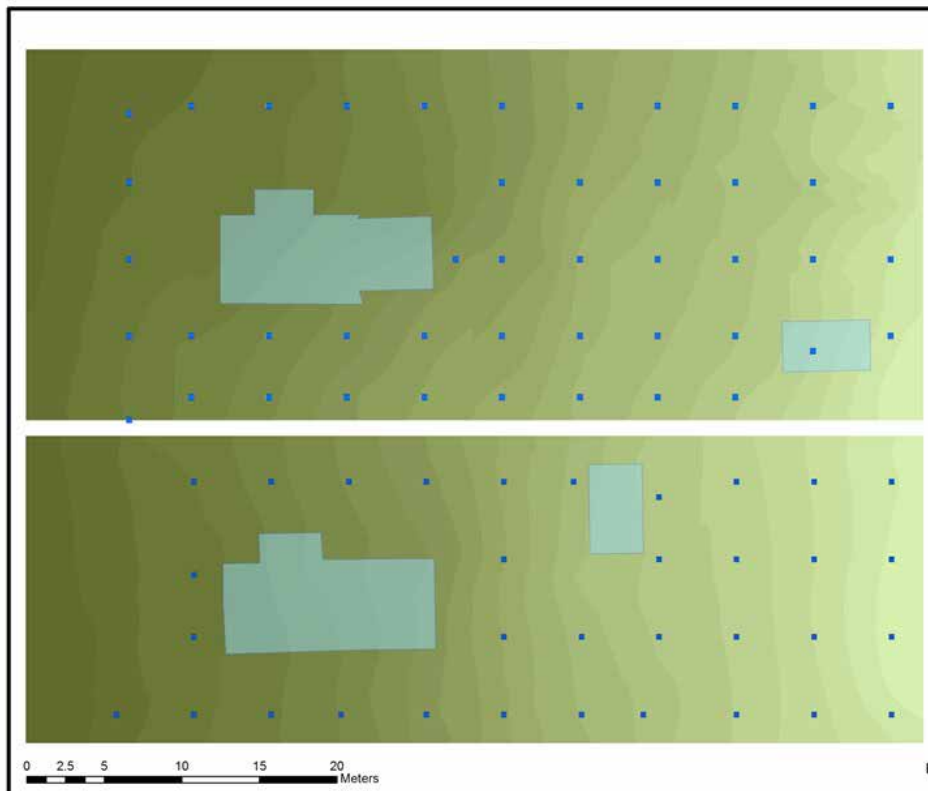


Fig. 4: House Lots Number 11 (upper) and 15 (lower) showing mill house, shed, and shovel test pit locations. (SCIAA illustration by Chris Thornock)



Fig. 5: The historic Graniteville Mill designed and built by William Gregg was constructed between 1846 and 1848. (SCIAA photo by George Wingard)

Going Polynesian in Hawai'i: Natural and Cultural Landscapes of the Big Island

By J. Christopher Gillam

The Hawaiian Islands may be best known for historic Pearl Harbor and Waikiki Beach on O'ahu, but the early story, mo'olelo, of the islands begins with its geologic and natural wonders and the ancient Polynesians that occupied them beginning around A.D. 800-1,000 (Anderson and Sinoto 2002; Tuggle and Spriggs 2000)—many centuries before Europeans began crossing the world's



Fig. 1: Two types of basalt lava flows, 'A'a (rough) and Pāhoehoe (smooth). (Photo by Christopher Gillam)

oceans. In April, the 2013 Society for American Archaeology's (SAA) annual conference was held in Honolulu, O'ahu, offering a rare opportunity to learn firsthand about Hawaiian natural history, geology, and Polynesian culture.

In the week ahead of the conference, I trekked across the Big Island of Hawai'i, with my ohana (family) in tow, to explore its magnificent natural and cultural landscapes. The natural beauty of the island is spectacular, but in both developed and some rural areas you can be overwhelmed by non-native plants and animals. Songbirds and butterflies from around the globe pleasantly flutter by and mongoose zip across lawns and roads, the latter brought to control mice and rats that are themselves historic additions. Feral goats and donkeys are often seen clamoring about the lowland lava fields and midland forests. Urban and suburban areas are awash with invasive plant species—trees, shrubs, and

flowers—your perennial favorites are surely there.

From an economic perspective, only koa is considered a high-valued native wood, prized mainly for musical instruments and fine furnishings. In rural areas, the economic benefits of non-native tree farming in the mid-20th century radically changed the landscape, with species of fast-growing eucalyptus and pine for construction timbers and many edible-fruit trees, e.g. guava, mango, tangerine, papaya, and macadamia (Little and Skolmen 1989). The invasive species are predominantly in the low- and mid-elevation lands (below 3,000-foot or 900-meters amsl), the same areas most suitable for human habitation in the past and present.



Fig. 2: The Pu'ukoholā Heiau, built by Kamehameha I in 1790, is one of the last temples constructed before European influence changed Hawaiian traditional life and religion. (Photo by Christopher Gillam)

In broader context, the introduction of invasive plant and animal species is nothing new to Hawai'i. The introduction of beneficial species dates back to the arrival of the first Polynesian inhabitants over a millennium ago (Little and Skolmen 1989; Tuggle and Spriggs 2000).



Fig. 3: Dry-stone construction using basalt boulders provided the foundation of traditional Hawaiian architecture, the house wall foundations at Lapakahi State Park. (Photo by Christopher Gillam)

Chickens, boar, and dogs are the most notable introductions from the animal kingdom. Coconut palm, banana, sweet potato (a late arrival, indirectly from the Americas, ca. A.D. 1,400), taro, sugarcane, and bottle gourd are a few notable plants, though not an exhaustive list. In addition, native Hawaiians were accomplished at aquaculture, building waterway control systems with sluice gates for artificial fish ponds and tidal fish traps at settlements along the shore. By the time Capt. James Cook voyaged to the archipelago in 1778, the natural landscape of the lowlands had already been transformed into a cultural one by nearly a millennium of human occupation.

The cultural landscapes of ancient Hawai'i dotted its coastlines and extended inland from the sea to its highland volcanic peaks in governed districts known as, Ahupua'a (James 1995). Hawaiian society was stratified, with the Ali'i (chiefs) on top, followed by Kahuna Nui (priests), Koa (warriors), Kahuna (skilled workers, e.g. Kahuna Ho'okele, a navigator), and Kama'āina (common folk). Most of the remnant cultural landscape today consists of dry-stone architecture, temple platforms and other structures made of



Fig. 4: Ki'i, wooden deity statues, stand guard over the mausoleum at Pu'uhonua o Hōnaunau National Historic Park. (Photo by Christopher Gillam)

water-worn basalt boulders, lying along the coast on smooth basalt lava flows, or Pāhoehoe (Fig. 1), adjacent to natural bays, coves, and beaches suitable for landing their sailing canoes. Heiau were temple platforms built to honor the gods and housed religious ceremonies related to warfare, human sacrifice, farming, fishing, ocean-going, and the practice of medicine (Fig. 2). Kuapā were stone walls used to create artificial ponds, or Loko, in lowlands to farm fish and enclose tidal fish traps. Stone walls were also used to define Ali'i canoe landing sites, create harbor-like coves, house walls, and terraces for agriculture to support daily life (Fig. 3). Thick walls (ca. 17 feet or five meters)

were also used at some religious sites to separate Heiau and royal courtyards from more common areas of such sites. Also at royal sites, Hōlua stone slides for wood sledding competitions often extended for several hundred feet (ca. 50 meters) from the land

into the sea. Ahu were large rock cairns that served communal needs and often marked the boundary between formal

Ahupua'a districts on the landscape. Ala, native trails, also criss-crossed the landscape often paralleling the shore and/or extending inland within and between Ahupua'a, with some improved trails in areas of rough basalt, or 'A'ā, lava flows.

Many significant sites are well preserved and open to the public as national and state parks. Two excellent national parks are located just a few minutes' drive from the popular destination town of Kailua-Kona. These include the royal grounds and warrior



Fig. 5: A green sea turtle waits for the tide to return in a large tidal pool that also served as natural fish trap at Pu'uhonua o Hōnaunau, thus the old adage, "when the tide is out, the table is set." (Photo by Chris Gillam)

refuge of Pu'uhonua o Hōnaunau, to the south, and the fishing village and ponds of Kaloko-Honokōhau, to the north. Pu'uhonua o Hōnaunau is quite spectacular with many temple and dwelling reconstructions and Ki'i wooden statues that stand guard over a royal mausoleum (Fig. 4). Where the lava flow meets the surf, you can

observe tropical fish, sea urchins, and the occasional green sea turtle that get trapped in the natural cavities that form tidal pools (Fig. 5). The fishing village of Kaloko-Honokōhau is just a few miles north of Kailua-Kona and features a Heiau temple, large fish traps, petroglyphs, large fishponds with operating Mākāhā (sluice gate water management systems), Hōlua slide, Ala (native trails), and incredible beaches that are off the beaten path and dotted with green sea turtles sunning along the shore (Fig. 6).

While most of these magnificent sites are protected as national and state parks, some have witnessed extensive development. The most notable one that I encountered was Keauhou, the 1960's Keauhou Beach Hotel was built in the middle of this now National Register of Historic Places (NRHP) site. The Keauhou site has three Heiau, numerous rock walls and house platforms, a royal pond, cavern,



Fig. 6: Native Hawaiian architecture extended into the sea, the 'Ai'ōpio fish traps and seawall of the fishing village at Kaloko-Honokōhau National Historic Park. (Photo by Christopher Gillam)

petroglyphs, canoe landing, tidal wall, and other features. The hotel was closed in October 2012 and will be demolished for the creation of an educational center by the Kamehameha Schools' (KS) charitable trust (Fig. 7). Unfortunately, other nearby ruins not on the NRHP register have also been developed or destroyed due to the popularity of the adjacent Kahalu'u Bay Beach Park, one of the best places on the Big Island to snorkel.

From an ideological perspective, the most intriguing sites may be those featuring petroglyphs, or Ki'i Pohaku, that are common on the ancient Pāhoehoe and



Fig. 7: The 1960's Keauhou Beach Hotel, soon to be demolished, temporarily dominates the NRHP site of Keahou at Kahalu'u Bay; a Heiau platform is at right near the shore. (Photo by Christopher Gillam)



Fig. 9: Abstract dots, circles, rectangles and clusters of these forms dominate the petroglyphs at Pu'u Loa on the ancient Puna coastal trail of Hawai'i Volcanoes National Park. (Photo by Christopher Gillam)

'A'a lava fields, on large boulders, and on cavern walls. These sites are typically found near the coast, adjacent to and between settlements, on the dry, exposed lands of the islands (Cox 1970). Although the age of these sites and meanings are difficult to determine, there is quite a lot of variation between and within sites that suggests a long tradition of abstract

forms also occur, but are few in comparison to the more abstract forms (Fig. 10).

While at first the quest for Polynesian Hawai'i seemed a bit daunting on the modern landscape, thanks to responsible land and cultural resource management efforts in recent

decades, many aspects of ancient Hawaiian life can still be experienced firsthand today. The national and state parks of the Big Island of Hawai'i are particularly spectacular and can be experienced over a few short days, but take your time if you have the chance, and you'll gain more than just some rays on the beach (not that there's anything wrong with that!). If traveling with children, I highly recommend participating in the National Park Service's Junior

Cox, J. H. (with E. Stasack)
1970 *Hawaiian Petroglyphs*. Bishop Museum Press, Honolulu.

James, V.
1995 *Ancient Sites of Hawai'i: Archaeological Places of Interest on the Big Island*. Mutual Publishing, Honolulu.

Little, E. L., Jr., and R. G. Skolmen
1989 *Common Forest Trees of Hawaii (Native and Introduced)*. *Agricultural Handbook No. 679*, USDA Forest Service, Washington, DC.

Tuggle, H. D. and M. Spriggs
2000 *The Age of the Bellows Dune Site O18, O'ahu, Hawai'i, and the Antiquity of Hawai'ian Colonization*. *Asian Perspectives* 39(1-2): 165-88.



Fig. 8: Ki'i Pohaku, native Hawaiian petroglyphs, are common features on the landscape; thousands of stick figures representing birdmen, warriors, families, and so on, dominate the art at Puakō Petroglyphs State Park. (Photo by Christopher Gillam)

art. For example, at the magnificent Puakō Petroglyphs State Park, over 3,000 petroglyphs occur on Pāhoehoe and 'A'a lava flows. Most of these are considered to be an "early" form featuring linear stick figures (Fig. 8). Similar petroglyphs occur at Kaloko-Honokōhau. At Volcanoes National Park, the Pu'u Loa petroglyphs on the Puna native trail (ala) are dominated by dots, circles, rectangles and clusters of these forms (Fig. 9). Poho, the dots or circular depressions, are believed to have commemorated the birth and/or life of individuals. Stick figures and other

Ranger Program, "Mahalo nui loa" to all of the rangers and kahunas that shared their knowledge with us during our stay! Aloha nui loa!

References Cited

Anderson, A. and Y. H. Sinoto
2002 *New Radiocarbon Ages of Colonization Sites in East Polynesia*. *Asian Perspectives* 41(2): 242-57.



Fig. 10: Stick figures and other forms also occur at Pu'u Loa, demonstrating the long and dynamic tradition of abstract art on the islands. (Photo by Christopher Gillam)

Senator Eugene Noel “Nick” Zeigler, SCIAA Advocate, Dies

By Steven D. Smith

The SCIAA lost an early advocate and long-time friend on October 8, 2012.

Eugene Noel “Nick” Zeigler, Jr. died in Florence at the age of 91. Zeigler had a long and very distinguished career that included establishing the Institute and sponsoring legislation creating the South Carolina Arts Commission.

Senator Zeigler was born in Florence on July 20, 1921, graduated High School in 1938, and attended the University of the South in Sewanee, Tennessee. He received a B.A. in 1942. During World War II, he was commissioned as an officer in the Navy, served on four aircraft carriers, and was among the first to go ashore at Hong Kong and Nagasaki, Japan. After the war, he entered Harvard Law School and was awarded a J.D. in 1949. He was active in law up until 2007. He was best known in South Carolina for his civic service beginning in 1960 when he was elected to the South Carolina House of Representatives. He was elected a State Senator in 1966. He was also an early civil rights advocate and worked toward the desegregation of public schools. He sponsored legislation to create Francis Marion College in 1970 and even taught Political Science there while still in the Senate. Zeigler was the Democratic Party’s nominee to the U.S. Senate in 1972, losing to Strom Thurmond, and in 1974, ran unsuccessfully for Governor. He was Chancellor of the Episcopal Diocese of South Carolina for over 20 years. His awards were numerous, including the Order of the Palmetto (2003), Governor’s Award in Humanities (2004), and honorary degrees from the University of South Carolina and Francis Marion University.

Zeigler’s lifetime accomplishments could fill several pages, but for us at SCIAA, he is best remembered for his interest in history and archaeology that began as a young man. He was an avid collector of Native American artifacts from the Pee Dee and Lowcountry regions of South Carolina, as well as the mountains

of North Carolina. Part of his collection became the foundation for establishing the Florence County Museum in 1936.

In the course of his life, he would publish six books on local Florence county history. While at law school in Boston, Zeigler’s interest in archaeology led him one day to drop in at the Peabody Museum. There he met acclaimed archaeologist Philip Phillips, and the next thing he knew he was volunteering to assist Phillips one afternoon a week. After graduation, Phillips invited him on



Young Nick Zeigler peers through an engineer’s level while on survey with Philip Phillips in Mississippi in 1949 (Williams 1970:30).

a field trip to Mississippi in 1949. Despite enjoying “one of the most memorable experiences of my life,” Zeigler managed to study enough to pass the bar upon return to South Carolina (Zeigler 1970:31). Zeigler later noted that those two months were his swan song as an archaeologist (Zeigler 2008:89). Still, he maintained close friendships with Southeastern archaeologists like Phillips, Antonio J. Warring, and Anne King Gregorie. In 1953, he published, produced, and directed *The Cult*, a play about a Mississippian archaeologist.

After working in the legislature to create the SCIAA, Zeigler kept a close eye on its development. He served on the

South Carolina Tricentennial Commission, and as part of their plans, they sponsored the first archaeological exploration of Charles Towne Landing. This project brought Stanley South to South Carolina and the Institute. Stanley’s work became quite controversial when his excavations revealed a Native American Mississippian ceremonial center where the Commission planned to build a pavilion for the 300 year celebration. Zeigler was the only Commissioner to support relocating the pavilion, but was unable to vote on the matter, being delayed in a state legislative hearing at the time of the vote. Zeigler later was quoted in *The State* newspaper that, “This is typical of our 300 years of history. The red man is getting the short end of the stick.” (*The State*, Friday August 8, 1969). Zeigler later lost an animated and sincere appeal, in which both South and then State Archaeologist Dr. Robert Stephenson testified, by a vote of 10-4. Zeigler recalled that: “In one stormy session, Tom Pope had a handful of beads the archaeologists had uncovered and said it was not worth moving the pavilion for such trifles as these. I replied that there was more information in that handful of beads than in the pavilion planned for the site” (Zeigler 2008:223). Zeigler’s passion for archaeology in that fight comes through in a scrapbook he kept of newspaper articles highlighting his career. Many of the articles are about the fight over the pavilion, but there is another article about a dig in Georgia. The article does not mention Zeigler, but his handwritten notes in the margins reads: “Glad they had no 300 Centennial Commission.”

Zeigler remained a friend of the Institute and archaeology throughout his life, but he was wise enough not to let his son’s grow up to be archaeologists. Stanley South wrote in his 2005 book, *An Archaeological Evolution*:

Senator Nick Zeigler, who had been so supportive of our effort to save the Native American ceremonial center, said his 15

See ZEIGLER, Page 32

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ZEIGLER, From Page 29

year-old son, Belton, wanted to become an archaeologist. The Senator wanted him to become a lawyer, but asked if I would take him on as a crew member so he could learn what archaeologists do. I agreed and was impressed with his performance. One day I saw his hands were bandaged and asked what happened. He removed the bandage and showed me the bloody blisters he had gotten as a result of the previous day's shoveling. He hadn't complained, but his hands were in bad shape...I put him on laboratory work until his hands healed. He was liked by the crew, who threw him in the alligator pond to celebrate his birthday. Belton later dug with me at Ninety Six.

Some years later, Senator Zeigler called to thank me for providing that experience for Belton, who had just graduated from Amherst. After having been exposed to archaeology, he had decided to become an attorney—not an archaeologist, which pleased the Senator.

Later still, Senator Zeigler called and said he had another teenage son, Ben, who wanted to become an archeologist, but again, the father preferred that he become a lawyer. I agreed to take him on the crew at Santa Elena, where he, also, did well with the shovel. Ben graduated from Harvard Law School. Archaeological work had created another attorney! When he graduated, Senator Zeigler again called me and thanked me for doing my part in helping his sons become lawyers. (South 2005:221).

Still, Nick Zeigler's gene for archaeology and history was passed down to his sons. Ben Zeigler continues to be a great friend to the Institute. As the first Chair of the Francis Marion Trail Commission, Ben invited me to be their archaeologist in their attempt to find archaeological sites associated with Francis Marion. This work led to the excavation of the Marion's Dunham's Bluff campground

across from Snow's Island and finding a number of others like Wadboo Plantation campground, Parker's Ferry battlefield, and Jacksonboro. Ben Ziegler also led the fight to protect the guns of the Civil War gunboat CSS *Pee Dee*, and was instrumental in SCIAA acquiring a grant from Bruce and Lee Foundation to locate and the raise those guns. Coincidentally, Nick Zeigler had begun the research for these guns in the 1950s, when, as Commandant of the Sixth Naval Reserve District, he arranged for U.S. Navy divers to make an ultimately unsuccessful search of the Pee Dee River.

The Dunham's Bluff site had a special place in the heart for Nick Zeigler. As many readers of *Legacy* know, Dunham's Bluff is the location of a rare archaeological feature, a redoubt built by Francis Marion's men. Nick's interest in Francis Marion and archaeology got him invited by a Florence physician, L. M. Lide, to visit his hunting camp at Ben Port Lake, adjacent to Dunham's Bluff. While there, Zeigler's guide was Dr. Lide's daughter, Anne, who took him to the redoubt. Zeigler recalled that while "feverishly probing this feature, I looked up suddenly and saw Anne looking at me. It was one of those penetrating glances that goes to one's heart, and I fell in love with her at that moment" (Ziegler 2008:95). Nick would later marry Anne. We can thank Anne for saving the Dunham's Bluff redoubt, but the SCIAA will miss the support of Nick Zeigler.

References Cited

- Zeigler, Eugene
2008 *When Conscience and Power Meet: A Memoir*. University of South Carolina Press, Columbia, SC.
- 1970 Comments, In Stephen Williams, Philip Phillips, *Lower Mississippi Survey, 1940-1970*, Peabody Museum of Archaeology and Ethnology, Cambridge, Massachusetts.
- South, Stanley
2005 *An Archaeological Evolution*. Springer Science + Business Media, Inc., New York.
- The State Newspaper*, August 8, 1969.



Senator Eugene Noel "Nick" Zeigler. (Photo courtesy of Belton Zeigler)