Near Pimlico Barge

Anchor Placed On Cooper River Trail

by Carl Naylor

What is undoubtedly one of the oldest anchors any of us has seen in a long time (other than some of those rusting away in front of many Lowcountry seafood restaurants) has been recovered from offshore waters and placed on the Cooper River Underwater Heritage Trail.

The anchor was recovered by shrimpers off of Beaufort earlier this year and donated to the South Carolina Institute of Archaeology and Anthropology.

The anchor is 2.53 meters in length (almost 8 ft.) which, if it were a ship's main anchor or "bowser," would indicate it was used on a vessel about 60 feet in length.

It also has a wooden stock which would indicate a date probably in the eighteenth century since at the beginning of the nineteenth century wooden stocks were replaced by iron ones on anchors of this size.

After recording the anchor's measurements we placed the anchor into the Cooper River near the Pimlico Barge wreck using a crane and crew donated by Hightower Construction Company of North Charleston.

To visit the anchor find the towing ring on the inshore end of the barge and follow the yellow line to the anchor placed there last year. Another yellow line runs from this anchor to the new anchor.

Hightower Construction Crew Hoists Anchor For Placement in Cooper River
Volunteers Needed To Assist In Cooper River Trail Maintenance

by Lynn Harris
Summer is here, and with it the diving season. On any given weekend, one can see more dive flags on the Cooper River than fishing poles.

The Flotsam and Jetsam

The Flotsam and Jetsam is a quarterly publication of the Underwater Archaeology Division of the South Carolina Institute of Archaeology and Anthropology at the University of South Carolina.

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The Flotsam and Jetsam welcomes submissions from the diving community. We are especially interested in photos and information on artifacts you collect. Send your articles, suggestions, ideas, and questions about hobby diving related topics that interest you to: The Flotsam and Jetsam, SCIAA Underwater Archaeology Division Office, P.O. Box 12448, Charleston, SC, 29422.

And this year the Sport Diver Archaeology Management Program expects a record number of divers visiting the Cooper River Underwater Heritage Trail.

Unfortunately, now in its second year of existence, the trail is already showing signs of wear. Although our staff does periodic trail inspections it would be a great help if the diving community could report maintenance problems to us as well. The sooner we get out there and fix the problems, the better.

Also, river divers who have time available on weekdays and are interested in helping our staff with maintenance operations on the Cooper River Underwater Heritage Trail please contact our Charleston office at (843)762-6105. Tasks involve replacing rusty hardware, clearing weeds off the down lines, securing monuments and replacing plaques. Apologies for any inconvenience missing trail components may have caused divers visiting the trail recently. This past year has been a learning experience about the range of maintenance problems we can

(continued on page 12)

The Bottom Line Letters To The Editor

Cannon Could Be Stern Gun From Chicora or Palmetto State

Dear Editor:
I read with interest in the most recent issue of Flotsam & Jetsam about the recovery of artifacts believed to have come from one of the Charleston ironclads. I have a very keen interest in Confederate ironclads (it was my thesis subject at East Carolina University) and these artifacts are potentially quite important for what they might tell us about certain aspects of the Charleston ironclads.

For example, it is not known with certainty the precise types of guns carried by any of the Charleston squadron vessels. Apparently no squadron ordnance reports survive, and surviving unofficial accounts are contradictory at best. Based on what I have found in Confederate naval records, I would say that the gun recovered (if indeed a rifled and banded 32-pdr.) probably was the stern pivot gun of either the Chicora or Palmetto State.

The recovery of the copper-plated hull section is significant because it has generally been believed that the shortage of copper plate in the South precluded its use on purpose-built warships, and only those ironclads that were converted from existing ships, like the Virginia and possibly the Manasses, had coppered bottoms.

The recovered propeller might also give some clues as to the ironclad to which it belonged, but I have not seen a photograph or any dimensional data. Would it be possible to get that information?

This is quite an important "find" and I would be most appreciative if you could advise me of any additional information on these artifacts that might come to light—particularly cannon markings, data on the propeller, etc.

Bob Holcombe
Curator/Naval Historian
Port Columbus Civil War Naval Center
Columbus, GA
Shipwreck Found On Kiawah Beach

by Lynn Harris

In May, Barbara Winslow reported a large shipwreck that had recently become exposed on a Kiawah Island beach to SCIAA. She explained that a recent storm and strong wind conditions had resulted in some unusual beach changes. Because the shipwreck might disappear again, she suggested we should visit the site as soon as possible. Two days later, armed with tape measures and cameras, we ventured out to Kiawah Island. Robert Bush from the Engineering Department at USC-Columbia and former SCIAA field school student, accompanied the weekend expedition.

The vessel lies upside down with the keel facing skywards. Seawater seeped up around the perimeter of timbers. Frames, outer hull and inner planking and limber holes were clearly visible. The wreckage is 41 feet in length and around 14 feet in breadth. Fastenings included iron bolts and treenails. Both treenails and metal spikes were used in combination well into this century. Treenails were better for transverse stress, but metal held best against separate strains. Judging by the scantlings (measurements) and what appeared to be machine cut wood, it is likely to date to the 1800s and was used for coastal trade. Analysis of the woods used in the construction will yield further light on the origins of this ship. For example: Was it American built? If so, was it built from woods that were locally available in South Carolina?

Barbara undertook some preliminary historical research and came up with a few names of shipwrecks that went aground on Kiawah that may match this wreck. These included the Two Brothers, the Raven, and the Ann. Barbara’s research peaked our interest and summer (continued on page 12)

Kiawah Island Steeped in Beauty and History

by Rich Jagisch

Driving down State Road 700 towards Kiawah the scenery transforms from pluff mud and marsh to sand and palm trees then finally to huge shady oak trees that make a ceiling over the road. The beauty of Kiawah Island and the fact that it is a present day resort are only the surface of this island’s historical past.

In 1699, Kiawah was claimed by its first European inhabitant, a man named George Raynor. Raynor was the captain of a ship called the Royal Jamaica and was also rumored to be a pirate. Kiawah had always been a mysterious place because of the tales of ghosts and Indian spirits that haunt the island, and Raynor’s shady past fit well with the island’s history.

As the island became more settled, the pastures of cattle and hogs shifted to fields of cotton and rice. Kiawah’s land owners became wealthy individuals with the planting of these cash crops, and the need to clear fields created a huge demand for a labor. Slaves filled this need and became the backbone of Kiawah’s agricultural production.

In the late eighteenth century the island was deeded to the Vanderhorst family who owned the island until 1950. During the late eighteenth century and early nineteenth century the island experienced rapid growth in agriculture with cotton and rice farming. The Vanderhorsts eventually became the second wealthiest planters in Charleston, according to property values of Charleston planters published in 1860. Kiawah’s role as an agricultural producer came at the expense of having a large slave labor force. According to census figures taken in 1800 there were 13 white (continued on page 10)
Many participants of SCIAA’s Underwater Archaeology Field Training Course (FTC) share the knowledge of underwater archaeology with fellow divers. Wendy Mills, a Charlotte school teacher and FTC graduate, is passing it along to her students.

The North Carolina Blumenthal Performing Arts Center hired Mills to present a two-day program on underwater archaeology in the middle schools of Charlotte in March. Students from Alexander Graham Middle School, Crestdale Middle School, and Mt. Holly Middle School participated in the program.

Mills began her program with a brief history of scuba diving and underwater archaeology. She also asked them what famous pirate ship was sunk off the North Carolina coast. Some of the students knew the name of the vessel, the Queen Anne’s Revenge, and most knew the name Blackbeard, the vessel’s infamous captain. She also showed the students how to use navigational tools such as dividers, compasses, and parallel rules.

After that she took the students outside where they worked on a mock up of a shipwreck. Teams of students drew a rough site plan and recorded artifacts through triangulation and offset measurements. The students then went back where the teams compared their “findings.”

Mills then showed the students how to identify artifacts. Each student team had a bag of artifacts to work with. She began with a discussion on the three types of ceramics (earthenware, stoneware, and porcelain) and asked each team to hold up an example of each. She then discussed other forms of artifacts with the students, showing them such things as pipe stems and bowls, prehistoric stone tools, and bottles.

“This was one of the most rewarding experiences I have had in a long time,” Mills said, adding that she was only able to do it “because of the class I took in Underwater Archaeology with the South Carolina Institute of Archaeology and Anthropology.”
Right: Wendy Mills Instructs A Group Of Students On How To Record Artifacts Using A One-Meter Grid Which Has Been Offset From A Baseline

Left: A Pair Of Students Triangulate Artifacts Using Two Datum Points and Metric Tapes As Another Student Records The Measurements.

Right: Going Over Results Of Shipwreck Mapping Exercise With A Pair Of Middle School Students
North Augusta Hobby Diver
Records Sites in Savannah River

by Lynn Harris

Darryl Boyd, a hobby diver from North Augusta has contributed some very interesting information about underwater sites he discovered in the Savannah River. As a former SCIAA field training course student, in addition to being a professional draftsman, Darryl was able to produce excellent maps of the site locations and photographs of his finds.

The Savannah is a river shared by South Carolina and Georgia. The waterway was named after the Savannah or Shawnee Indians who controlled much of the river and its tributaries. The Spanish called the river “Rio Dulce.” In 1735 Augusta was settled at the English colonial head of navigation on the Savannah River. Maritime commerce was carried by an assortment of vessels—canoes, barges, small sloops, schooners, steamers, and large ships involved in the coastal and oceanic. Like most rivers along the southern Atlantic seaboard, the Savannah River is shallow, causing navigational hazards from the very beginning of the settlement. Wrecks and other obstructions were additional navigational problems to steam powered vessels.

The sites recorded by Darryl represent a cross-section of the history of the Savannah River. The Native American pottery he found includes a whole pot and sherds from a soap stone bowl. Other interesting pottery is of an early historic vintage, possibly Spanish. It is not similar to anything we find or have looked at previously and requires further investigation. A barge that Darryl recorded on the Georgia side of the river is similar to the nineteenth-century examples we have in South Carolina. Barges were the most ubiquitous craft of the southeastern rivers. These

(continued on page 12)

Above: A grapple found in Savannah River
(Drawing of barge and all photos by Darryl Boyd)

Above: Portion of a colonoware bowl.

Below: What appears to be a crude earthenware pot.
Above: Savannah River barge as recorded and drawn by Darryl Boyd (Hobby License #2691)

Right: Decking and a portion of the stern of barge.

Below: Side planking of barge covered with growth and sediment after years at the bottom of the Savannah River.
Research Links Artifacts From Blackbeard's Flagship To Charleston

By David D. Moore

When the term “shipwreck” is uttered these days around Charleston, the Lowcountry, or anywhere else in South Carolina for that matter, chances are that the discussion concerns the current recovery project on the Confederate submarine H.L. Hunley. However, when this same term is mentioned around the Morehead City/Beaufort vicinity, Down East area, or the rest of North Carolina, the conversation usually entails something associated with the current archaeological investigation on Blackbeard’s suspected flagship Queen Anne’s Revenge.

Shipwreck Site 0003BUI was located off Beaufort Inlet in November 1996 by Intersal, Inc., working under the auspices of the North Carolina Department of Cultural Resources. It was immediately suspected that the site might represent the remains of Blackbeard’s long lost flagship due to the location of the wreck, size and number of cannon and anchors recorded on the bottom, and the dating of artifacts recovered from the site. Two artifacts, a bronze bell and small iron cannon, bore the dates 1709 and 1713 respectively, effectively dating the site very comfortably to the early eighteenth century. Blackbeard abandoned the Queen Anne’s Revenge after running aground in June 1718.

Blackbeard was at the height of his piratical career when he lost his flagship at Beaufort Inlet 282 years ago this month. He had four ships, including Stede Bonnet’s sloop Revenge, and somewhere between 300 and 400 pirates under his command. He had recently completed a successful campaign plundering prized through the Caribbean that included the capture of the French slave ship Concord in November 1717 which became his flagship. In one of his more daring exploits, the pirate and his crew blockaded the bustling port of Charleston where he took many of the ships leaving and entering over a two week period on late May—early June 1718. In addition to plundering these prizes of anything of value, Blackbeard held a number of Charleston citizens hostage, including South Carolina Grand Council member Samuel Wragg and his young son William. In exchange for the safe return of his hostages, the pirate demanded a chest of medicines which was soon delivered.

Following his successful blockade of Charleston harbor, Blackbeard and company sailed north to Beaufort Inlet where both the Queen Anne’s Revenge and a smaller sloop Adventure were run aground and lost. It was here that the notorious pirate captain split up his company, took everything of value, and made off in a small unidentified sloop after marooning a number of his men near the inlet. Stede Bonnet returned soon after from Bath (the seat of government in Proprietary North Carolina) where he had been sent by Blackbeard to claim

Small Cannon
(drawning by David D. Moore)

This small cast-iron one pounder bears the date "1713" and foundry marks "IEC." The initials probably represent the Swedish gunfounder Jasper Ehrencreutz whose foundry was manufacturing cannon between 1689 and 1750.
Blackbeard

the recently issued King’s pardon. He found his own sloop Revenge still anchored in the harbor, but Blackbeard, many of his men, and all of the captured plunder were gone.

Bonnet and the men who remained loyal to him went looking for Blackbeard toward the north, but failing to locate him, continued on to take a number of prizes off the Capes of Delaware and Virginia. After a few weeks, they reversed course and sailed back south again to North Carolina and eventually ducked into the Cape Fear River to careen or clean the lower hull of the sloop. During this period, many pirates, including well known brigands Charles Vane and Richard Worley, were particularly active off the South Carolina coast. In response, South Carolina government officials undertook significant efforts to pursue any reported piratical activity and, while tracking down reports of Vane, trapped Bonnet in his Cape Fear lair. Following a six hour battle, Bonnet and his surviving crew were captured and returned to Charleston for trial. Though hoping to take Blackbeard or Vane, officials were just as happy with taking Bonnet. Not only had Bonnet been with Blackbeard during his recent blockade of the South Carolina port, but Bonnet had also taken a number of ships off Charleston a year earlier, before he had begun his association with the notorious pirate commander. Bonnet and most of his crew were subsequently tried during a highly publicized trial, convicted, and sentenced to hang. They were eventually buried somewhere near White Point in late 1718.

So, both Blackbeard and Stede Bonnet had an association with Charleston and the Lowcountry. In fact, project archaeologists are operating on the premise that at least some of the material likely to be recovered from the site may have originated from some of the prizes captured off Charleston. One pewter platter, already recovered, conserved, and currently on display at the North Carolina Maritime Museum, bears the marks of a London manufacturer. But, surprisingly, it also bears the initials or monogram “BAS” with the “S” indicating a surname, surmounted over the “B” and “A,” signifying the first names of some unknown eighteenth century couple.

I have made two trips to Charleston since March to conduct research at the excellent historical repositories available there, including the Charleston Museum, the South Carolina Historical Society, and the Charleston Library Society. I have found several names of persons, including Benjamin Sumner, Bonham Samm, Barnard Schencking, and Benjamin Simons, who were living in Charleston in the early eighteenth century and whose initials fit the pewter platter, but unfortunately none of these gentlemen had wives whose name began with an “A.” So the search continues for the mysterious couple whose tableware may have been absconded by the notorious pirate Blackbeard.

Research also continues for information and documents associated with the South Carolina activities of Blackbeard and/or Stede Bonnet and any of their associates and adversaries. Though much data has been located and compiled over the years since this research project began back in the early 1980s and most of the appropriate repositories combed for clues pertaining to these men, there always remains the potential for locating previously unknown letters, reports, etc., in unpublished family papers and local genealogical efforts. Anybody knowing of any such information or wishing to contribute to this research project is urged to contact me at (800) 728-2284.

Editor’s note: David D. Moore is the coordinator of the Maritime Archaeology Program for the North Carolina Maritime Museum and currently the archaeological director for the Queen Anne’s Revenge Shipwreck Project.

One of the most significant, yet mysterious artifacts recovered from the site, this bronze bell bears the date 1709. It is still not clear whether the bell represents the original ship's bell or was taken as plunder from one of Blackbeard’s earlier prizes.
Field Training Course Set For August

Have you ever wanted to participate in an underwater archaeology project? Perhaps you simply want to learn more about the field of underwater archaeology? Then the Underwater Archaeology Field Training Course may be for you.

The next course is scheduled for August 2 through 6, 2000. Classroom and pool sessions will take place during the first three days. These will be held at SCIAA headquarters in Columbia and at the University of South Carolina pool. The fourth and fifth days of the course will be the open water session on the Cooper River near Charleston.

Offered by the Sport Diver Archaeological Management Program at the South Carolina Institute of Archaeology and Anthropology (a part of the University of South Carolina), the Underwater Archaeology Field Training Course provides students with a comprehensive overview of the field of underwater archaeology, with an emphasis on the underwater sites encountered in South Carolina waters.

Classroom topics include discussions on the principles of underwater archaeology, the methods used in performing underwater surveys and site interpretations, and the basics of ship construction. In addition, classroom lectures cover artifact identification and conservation and the laws governing artifact and fossil collection. During the pool session, students practice the skills they have learned in the classroom on a simulated shipwreck site.

During the open water session, participants accompany Institute staff on a visit to several actual shipwrecks. Students will conduct a preliminary site survey of the wreck, followed by more detailed recording of the vessel timbers and associated artifacts, with results submitted for inclusion in the South Carolina Archaeology Site File Inventory.

Although the course is primarily for divers, non-divers are welcome to take the course and participate in the same exercises as the divers, only on land.

Instructors for the course are mostly Institute staff, but outside experts, such as staff members of the South Carolina State Museum, are often called on to present segments of the course.

Divers must be experienced in low-visibility river diving, and must provide their own accommodations and dive gear, including tanks.

A minimum of ten students is required. For more information about the Underwater Archaeology Field Course contact Lynn Harris or Carl Naylor at (843) 762-6105. To register for the course please fill out registration form on page 11 and mail to us as soon as possible.

Kiawah (continued from page 3)

settlers and 113 slaves on the island as opposed to 5 white settlers and 52 slaves in 1790. These figures show how much need for labor there was in island production as well as the amount of growth.

Also, the island's natural reserve of live oak trees was an excellent source for shipbuilding, and there are numerous sales receipts for timber being harvested on the island. In May of 1815 the Vanderhorst family contracted with Rivers and Saltus, a Charleston shipbuilding company, to have a schooner named Two Brothers built using live oak from the Vanderhorst property. In the contract the vessel was said to be specifically designed to transport live oak timbers. The agreement also contracted the use of Vanderhorst's slaves to be used in building the schooner. The Vanderhorst family received the completed vessel in early winter of 1815 and it served the Vanderhorsys by delivering goods produced on the island to Charleston and as general transport.

Historical records point out that the Vanderhorsys used several vessels to carry timber, cotton, and rice to market including two schooners and probably several smaller plantation boats. Another transport schooner, named the Kiawah, was lost with her cargo of 3,000 bushels of rough rice; an account of the sinking is documented in Ann M. Vanderhorst's 1859-60 diary.

The Vanderhorst's lost several ships with the Kiawah being only one. After researching the Vanderhorst papers it seems that the Kiawah and Two Brothers were lost in the waters around the island and currently SCIAA has been informed of a new site on Kiawah that may be the wreckage of one of these ships.

While researching this article I used sources located in Charleston. I spent time in the tightly guarded documents of the South Carolina Historical Society. My research there centered on the Vanderhorst Family Papers which were extensive and provided abundance of information. I also used South Carolina Historical Magazine for Ship Registers and List Of Charleston Planters In 1860. The Charleston Courier was used where possible for actual accounts of shipwrecks.

Editor's note: Richard Jagisch, a junior History major at Furman University, has joined the Underwater Archaeology Division office in Charleston for a summer internship. He is pursuing an undergraduate degree in History at Furman and plans to conduct research with SCIAA on the history of local sea islands and maritime shipbuilding. Rich is a native of Florida and a certified diver with experience in both Florida's freshwater springs and Gulf waters. Rich is also an underwater photographer and he is anxious to experience South Carolina's diving for the first time.
**Registration Form - 2000**  
**SCIAA Underwater Archaeology**  
**Field Training Course I**

Name: ___________________  Hobby Diver License no. (if any): ____________

Address: ____________________________________________________________
__________________________________________________________
__________________________________________________________

Occupation: ___________________  Fax Number: ___________________

Phone Number: ____________

Brief resume of diving experience: _______________________________________
__________________________________________________________
__________________________________________________________

Reasons for attending this fieldschool: ______________________________________
__________________________________________________________

Speciality areas in underwater archaeology or maritime history that interest you:
__________________________________________________________

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**The first part of the five-day course will be offered from August 2-August 4 at the Columbia Office of SC Institute of Archeology and Anthropology. For the second (open water) part, students will dive on archaeological sites in Cooper River near Charleston. Applicants should be experienced in low visibility river diving for this session. All divers are required to provide their own diving equipment and scuba tanks. Equivalent exercises will held on land for non-divers. The total cost of the course is $150. A deposit of $70 is required to register by July 17, 2000. The check should be made out to SCIAA and sent to P.O. Box 12448, Charleston, SC 29422.**

**Note:** A minimum of ten students is required to run this course. There is a possibility that the course will be cancelled if there are not enough applicants by the July 17 deadline.
Savannah (continued from page 6)

vernacular watercraft were used as ferries, as nineteenth-century workboats on rice plantations and as phosphate mines workboats. In the twentieth century industrial craft for building projects along the rivers were used.

Editors note: Last year Georgia created the first full-time position for a State Archaeologist. David Crass, formerly of SCIAA, is employed in this position. Together with Ronnie Rogers from the Georgia State Historic Preservation office who has worked on some SCIAA projects and attended our field school, Dr. Crass is working on a management plan for Georgia submerged cultural resources.

Wreck (continued from page 3)

internship student from Furman University, Rich Jagisch, further investigated her leads and explored some background history about maritime activity on the island. This information will be used for his term paper and a report to be filed with SCIAA. As Barbara warned, the Kiawah shipwreck has covered up again. If it uncovers again, we hope to conduct some more detailed work on the site with the help of the local Kiawah community.

Volunteers (continued from page 3)

anticipate in the future.

For example, during the first few months of the trail opening we were aghast to see that our huge, mooring buoys had shrunk dramatically and were semi-submerged. Fortunately, it was a manufacturing defect and the supplier, Curd Enterprises, Inc., of Mount Pleasant, speedily gave us replacements. During the replacement time we used a motley selection temporary buoys to mark sites.

Other problems include the theft of the marker plaque from the Pimlico barge, downline chains wrapping around the monuments at low tide, a cracked mooring buoy on the Pimlico sailing ship, mud and silt catchment between the plaque and the plastic cover, and rusty hardware on the riverbed guidelines.

Another suggestion was to increase the lifespan by closing the trail and removing the mooring buoys during the winter months. Every summer or spring the trail would be reopened when the bulk of the river diving starts up again. Let us hear from you if you have any other good ideas about trail management. We hope this venture can be a joint effort between our office and the diving community!