

Sport Diver Archaeology Management Program

Maritime Research Division
South Carolina Institute of Archaeology and Anthropology
University of South Carolina

Quarterly Reporter

"Helping to preserve and protect South Carolina's maritime heritage through research, education, and public outreach."

October 2013

Volume 4, Issue 3

Things You Need to Know:

- 2013 Quarter 3 Reports Due by October 10, 2013
- October Lecture Series on the 2nd, 9th, 16th, & 23rd
- 3rd Annual Oyster Roast on November 16, 2013

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2013 Field Training Course Part II

By SDAMP

In July of this year, SDAMP and four students continued work to excavate and record a beached wreck on Hilton Head Island. This project is Part II of the SDAMP Field Training Course that focuses on teaching divers how to measure and record underwater sites. This particular site was chosen for its exposed nature at low tide as it makes teaching both excavation and recording techniques more accessible to instructors and students.

Carl Naylor and Ashley Deming acted as the instructors for this project. The students, all of which had already completed Part I training, were Don Davis, Rick Presnell, Alex Frank, and Thomas Weinheimer.

Ashley and Carl went to the site prior to the

students to set up the 3m x 3m measured grid over the site. The grid was secured using rebar, trailer tie-downs, and zip ties. The grid needed to be secure enough to maintain its structure through the weeks tide cycles.

The students arrived at Waddell Mariculture Center that afternoon and were taken through a review of basic measuring techniques using a mock site. They then received a briefing on the site with a plan for the following day.

Before the site could be opened for a new excavation area, we needed to remove all fill from the previous year and the sandbags demarcating the end of the 2012 season. Once this was completed, we began new excavations in the two foremost

excavations units (A and F). We uncovered quite a bit of charcoal in unit A from what appear to be disarticulated timbers. We also uncovered some rope in this unit. After many photographs, we excavated and removed a couple of broken sections for further study, but left quite a bit uncovered to remain excavated in the future.

Once both units were cleared enough to see a considerable amount of unrecorded structure, the students set to work measuring and recording.

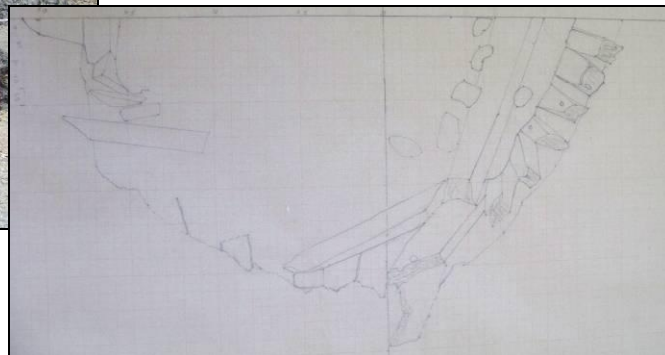
Besides the rope, two small glass shards were recovered, but these artifacts may not be associated with the wreck.

The students created a very nice site plan (below) and we are looking forward to the 2014 season when we hope to answer the many as yet unanswered questions surrounding this wreck. ■

Below: 2013 site plan of the Hilton Head Island Wreck.



Above: FTC Part II students (L to R) Thomas Weinheimer, Alex Frank, Rick Presnell, Don Davis



October Quarterly Reports

This is a reminder that your 3rd quarter 2013 reports are due by October 10, 2013. These reports should cover all of the collecting you have done between July 1st and September 30th of 2013.

versions of the forms. We will no longer be accepting outdated versions.

Curator of Natural History
301 Gervais St.
Columbia, SC 29201

Artifact Reports

Your *artifact* reports should be filed online or may be sent to:

Artifact Report Forms
PO Box 12448
Charleston, SC 29422

You may also fax forms to: (843) 762-5831
Email forms to us at: sdamp@sc.edu

Fossil Reports

Your *fossil* report forms should be emailed to Dave Cicimurri at: dave.cicimurri@scmuseum.org

Or mailed to:

Make sure that you file reports with both agencies even if you have not done any collecting. If you have not done any collecting, just tick the box that reads "No Recoveries Made This Quarter" and send it to the appropriate agency.

If you have any questions regarding reports, please visit our website at: artsandsciences.sc.edu/scia/mrd/sdamp_hdl_forms.html

Or give us a call at: (843) 762-6105. ■

Please file your artifact reports using our online system. You can submit forms online at: src6.cas.sc.edu/sdamp (Note: If this is the first time you are filing on this system, you will need to activate your account by following the directions on the home page).

All report forms can be found on our website at: artsandsciences.sc.edu/scia/mrd/sdamp_hdl_forms.html

Please use the newest



Quarterly Reports due by October 10, 2013

ASSC Fall Field Day

By Olivia Adams, SDAMP Intern, College of Charleston

Fall Field Day was held on Saturday 21st from 9am-4pm at Santee State Park. This event seeks to celebrate the history and prehistory of South Carolina and teach the public about archaeology. The event was definitely a

success. There was a great turn out, with a wide range of people from all different backgrounds. There was also no shortage of activities and tables for visitors to explore. Kids could try their hand at writing underwater, at the SDAMP table, although a number of adults were eager to give it a try as well. There were also demonstrators who were teaching about Native American technologies, as well as using those technologies themselves. The sound of flint knapping was a persistent

noise the whole day. Catawba potter Little Bear was showing different types of pottery and even working on some so participants could get a glimpse into the process. There were tables from SCAPOD, Fort Dorchester, the South Carolina Historical Society, and of course ASSC. Archaeologists David Jones, Rebecca Sheppard, Stacey Young, and few other volunteers were digging test units giving participants a great look at archaeology in action. Professor Leland Ferguson

led a tour of the Fort Watson Indian Mound located in the park. As the day was winding down visitors were able to enjoy a performance from the Edisto Singers, a traditional Native American drum and dance group. The weather was beautiful and it was an amazing day to experience history and archaeology. Many thanks to everyone who came out, we look forward to next year! For more information on how to become more involved with ASSC, visit www.assc.net ■



Upcoming Events

October Lecture Series

SDAMP and the Charleston County Public Library are teaming up again to bring you our 3rd annual Lecture Series each Wednesday night in October. The theme this year is “Our Own Backyard”- Public Archaeology: An Underwater Perspective. The lectures feature presentations on SC underwater archaeology projects for the public and by the public. Please see page 4 for details on the upcoming lectures.

Stone Fleet Research

For two weeks this fall, the Maritime Research Division (MRD) will be conducting remote sensing research off the coast of Charleston. MRD is researching the first and second Stone Fleets that were used as part of the Union blockade of Charleston Harbor during the Civil War. For more information on this project, please see page 8.

Oyster Roast

SDAMP is thrilled to announce we will be having

our 3rd Annual Oyster Roast on November 16, 2013. Tickets are on sale now so don't wait! Contact us at sdamp@sc.edu for more information on how to order your tickets today! More information on the oyster roast may be found on page 6 of this newsletter.

Wing Nights

SDAMP will not be hosting wing nights again until January 2014 due to the Lecture Series, Oyster Roast, and the upcoming holiday season. Join us

again in the new year for more great wing nights.

Please continue to read the *Quarterly Reporter*, emails, our website, and follow us on [Facebook](#) for information about upcoming events and volunteering opportunities. ■

SDAMP News

It is important to us that our Hobby Divers are aware of the education and outreach we do throughout the year. We hope to keep you updated on all that we are involved in so that you too will get involved.

Remember that **SDAMP** is on [Facebook](#)! Leave a message on our wall!

July

- **SDAMP** and four Field Training Course Part II students continued to excavate and record the beached shipwreck on Hilton Head Island. See page 1 for more details on how the 2013 season went.
- Volunteers George and David Pledger and Doug Boehme took Ashley Deming up to the Black River Project survey area to conduct some pre-survey work. They rescued a stranded kitten in the

process!

- Wing Night was held at Kickin' Chicken on James Island on July 31st.

August

- **SDAMP** and MRD staff along with the aid of many volunteers conducted a two week project in Black Mingo Creek and at Brown's Ferry. The Black River Project was a volunteer based project funded by the Archaeological Research Trust (ART). More information on this project can be found on page 7.
- Ashley Deming presented about the Black River Project to the ART Board and Georgetown community/organization members on August 24.
- Wing Night was held on August 28th for around 20 people.
- **SDAMP** conducted an Artifact Identification Workshop in Columbia for

seven students.

September

- **SDAMP** gained two College of Charleston interns, Olivia Adams and Jeremy Miller. Olivia and Jeremy will be helping with the education and outreach as well as artifact cataloguing.
- Carl's Retirement Wing Night in Columbia was well attended and Carl gave a humorous presentation about his time with **SDAMP**.
- Carl Naylor gave a presentation regarding underwater archaeology in the Charleston area to 75 members of the Daniel Island Historical Society on September 17th.
- **SDAMP** exhibited at ASSC Fall Field Day on the 21st to discuss maritime archaeology with visitors.
- Carl Naylor retired on September 30th.

Upcoming...

October

- The Lecture Series will take place October 2nd, 9th, 16th, and 23rd. See page 4 for details.
- MRD will conduct remote sensing research October 7-11.

November

- The **SDAMP** Oyster Roast will be held on November 16th from 6-9pm at Fort Johnson Marine Resource Center in Charleston. See page 6 for more details on the oyster roast and how to purchase tickets.
- The **SDAMP** office will be closed November 28th & 29th for the Thanksgiving holiday.

December

- The **SDAMP** Office will be closed December 23rd through January 1st in observance of the winter holiday season. ■

October Lecture Series

By SDAMP

The Sport Diver Archaeology Management Program (SDAMP) and the Charleston County Library are teaming up to offer our 3rd annual lecture series about maritime archaeology. The lectures will take place each Wednesday night in October in celebration of Archaeology Month. The theme this year for South Carolina Archaeology Month and the lecture series is public archaeology. Lectures will consist of underwater archaeology projects for the public, with the public, and by the public. Come hear presenters talk about their work in South Carolina waters ranging from early ferryboats to a Cold War fallout shelter. We hope you will join us for these free lectures about South Carolina archaeology in "Our Own Backyard."

October 2, 2013
"The Black River Project,"
 presented by *Ashley M. Deming* (SDAMP manager, Maritime Research Division, SCIAA)
 For two weeks in August 2013 SDAMP and ten volunteers conducted a community-based survey project in Black Mingo Creek and at Brown's Ferry in Georgetown County, SC. The team found, surveyed, and recorded a variety of historic sites, two ferryboats, and artifacts that help to tell the story of the rich maritime history of a largely understudied area.

October 9, 2013
"The Mars Bluff Naval Shipyard: Backyard Archaeology in the Pee Dee,"
 presented by *Jim Spirek* (State Underwater Archaeologist, Maritime Research Division, SCIAA)
 Led by private initiative, with oversight by the

Maritime Research Division, a group of divers and amateur historians investigated the land and underwater components at Mars Bluff, which led to the discovery of three cannons, along with a number of other artifacts associated with the shipyard. One constant factor in the search for the three guns and other components of the CSS Pee Dee and shipyard has been the drive by local citizens. This presentation will focus on the partnerships forged between SCIAA, volunteers, and other groups to undertake the historical and archaeological process that will culminate in the recovery of the cannons for display at the Florence County Museum accompanied by other artifacts from CSS Pee Dee and the Mars Bluff Naval Shipyard.

of archaeology students opened, explored and excavated this soggy mid-20th Century time-capsule for a documentary film that will premiere at the Arkhaios Archaeology and Cultural Heritage Film Festival on Hilton Head Island this October. Originally constructed during the Cold War by a nuclear engineer employed at the U.S. Government's Savannah River Plant weapons facility, this underground family-sized bunker and its contents reveal a great deal about the rampant local fears of a devastating nuclear attack.

October 23, 2013
"Lost in Legend: Never Let the Facts get Lost in the Legend,"
 presented by *Bruce Orr* (SDAMP volunteer, local author/historian)
 The folklore surrounding a person, place, or event often overshadows the facts to the point that they are quite literally lost in legend. Using historical terrestrial and maritime archaeology the organization, Lost in Legend, uncovers the history behind the haunting, the people behind the places, and the facts behind the folklore. Lectures are each Wednesday night from 6:30pm-7:30pm at the Charleston County Public Library (Main) and are free and open to the public. ■

October 16, 2013
"Crawl Out Through the Fallout: A backyard time capsule in the shadow of the Bomb Plant," presented by *Nate Fulmer* (SDAMP volunteer)
 College of Charleston Anthropology alumnus and SDAMP volunteer Nate Fulmer reports on his work inside a recently unsealed Cold War-era family fallout shelter located in the backyard of his sister's home in western Aiken County. This summer, he led a team of archaeology students, opened and excavated this soggy mid-20th Century time capsule for a documentary film that will premiere at the Arkhaios Archaeology and Cultural Heritage Film Festival on Hilton Head Island this October. Originally constructed during the Cold War by a nuclear engineer employed at the U.S. Government's Savannah River Plant weapons facility, this underground family-sized bunker and its contents reveal a great deal about the rampant local fears of a devastating nuclear attack.

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Wednesday Nights **6:30 p.m. - 7:30 p.m.**
 Charleston County Public Library (Overseas)

October 2, 9, 16, & 23
 Email: sdamp@sc.edu or call: 853-752-6105 for more details.

CCPL CHARLESTON COUNTY PUBLIC LIBRARY
UNIVERSITY OF SOUTH CAROLINA College of Arts and Sciences

August Artifact Identification Workshop

By SDAMP

On August 31st, SDAMP held its second artifact workshop of the year at the SCIAA building in Columbia, SC. The workshop was attended by seven students, each with their own interests in the underwater world. Some were divers, while others were simply interested in the vast underwater past that South Carolina has to offer.

The workshop features a mixture of lectures and activities designed to help identify some of the types of artifacts found in South Carolina. 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 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.

Students did an excellent job of working together to identify the artifacts they were given. We even had a great time with the speed dating event

at the end of the day where students were tested on the knowledge they learned in a quick-fire test on a variety of artifacts.

We are very proud of our 2013 August workshop students and they should be very proud of themselves for a job well

done. Congrats, students, on your accomplishments! We hope to see some of this knowledge come through on our upcoming artifact reports.

The next Artifact Identification Workshop will be offered in Charleston in the spring. ■



August 2013 Artifact Workshop students (L to R) Carrie Miller, Mark Hall, Barbara Cole

The Arkhaios Cultural Heritage and Archaeology Film Festival

By Jean Guilleux

Hilton Head Island, SC: The Arkhaios Cultural Heritage and Archaeology Film Festival has been created to become an annual event, a part of the South Carolina Archaeology Month, taking place on Hilton Head Island, SC. It is intended to showcase the discovery of past cultures gained from archaeological research, and illustrated by documentary films. Each documentary will be introduced to the audience by the producer/film-maker or an expert from academia. The Festival is a free event open to the public.

The Arkhaios Cultural

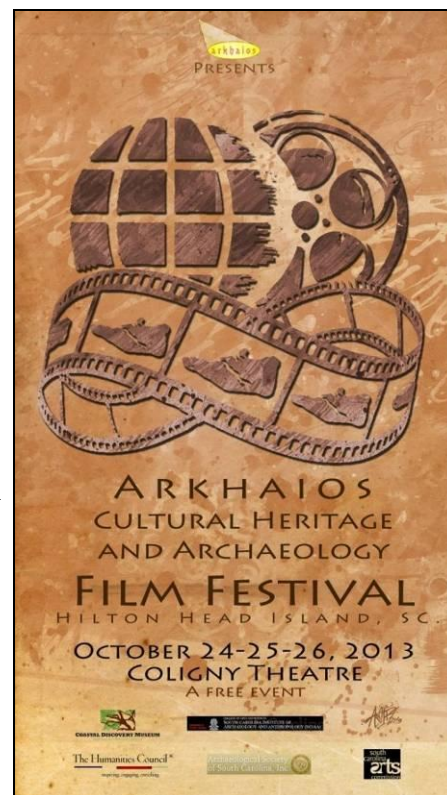
Heritage and Archaeology Film Festival will also encourage initiatives and exchanges between the different players of the world of archaeological films. And finally, the festival aims to trigger the interest of the South Carolinian film-makers to apply their art to the State history.

The Festival is affiliated with the Coastal Discovery Museum of Hilton Head and the South Carolina Institute of Archaeology and Anthropology (SCIAA) of the University of South Carolina.

Festival Format and Schedule - The selected

films are presented over three days, October 24-25-26, 2013, Thursday through Saturday, from 1:30pm to 6:00pm at the Coligny Theatre on Hilton Head, SC. The festival attendees will select the "Audience Favorite Award" winner.

For more information, please visit the film festival [Facebook](#) page or the Coastal Discovery Museum webpage at www.coastaldiscovery.org/arkhaios.pdf. ■



3rd Annual Oyster Roast

By SDAMP

The Sport Diver Archaeology Management Program (SDAMP) will be hosting its 3rd Annual Maritime Heritage Awareness Oyster Roast this November. This event is to help raise awareness of the needs of maritime heritage in the state of South Carolina. There are multitudes of underwater archaeological sites all over the state that range from 4,000-year-old canoes to 20th century tugboats. The many waterways served as the roads of their time and experienced early settlements, wars, agricultural growth, and technological advancements. The waters of South Carolina and the sites they hold can answer many questions about our past as Americans and as people.

The mission of the Maritime Research Division is to protect these incredible cultural and natural resources, learn from them, and share that information with all those

interested in the past. The SDAMP Maritime Heritage Awareness Oyster Roast serves as a platform in the pursuit of this mission. Whether those needs be financial, material, or volunteered labor, anyone can get involved with the program and the preservation of South Carolina heritage on any level. Get involved and talk with archaeologists and other members of the public about what this state can do to further the protection, preservation, and education regarding our very own maritime heritage resources. Join us November 16, 2013 from 6-9pm in Charleston for an evening of fun, entertainment and presentations about the maritime archaeology our great state of South Carolina has to offer. Tickets are on sale now for \$20 per person. Oysters, chili (with vegetarian option), dessert, and iced tea will be provided, but feel free to

bring a cooler with beverages of your choice. Contact Ashley Deming at 843-762-6105 or deming@sc.edu for more information. Ticket order forms and payment must be received by November 8, 2013. Tickets will not be sold at the event.

SDAMP Maritime Heritage Awareness Oyster Roast

Date: November 16, 2013

Time: 6pm-9pm

Where: Fort Johnson Marine Resource Center, James Island, Charleston, SC

Cost: \$20pp ■



2012 SDAMP Maritime Heritage Awareness Oyster Roast

Hobby Diver of the Quarter

This section of the newsletter is devoted to the hobby diver(s) who go above and beyond the call of duty. He/she has submitted excellent reports, been an exceptional volunteer, has gone out of their way to preserve cultural and/or natural heritage in the state, or has

been a general inspiration to other licensees, the public, or us.

Each quarter we will pick a licensee that resembles one or more of these noteworthy traits. Hopefully, it will be you! If you know of someone who fits some or all of these categories and would like to

nominate them, please send us a brief email of who and why you think they should be Hobby Diver of the Quarter.

The honor of Hobby Diver of the Quarter for Quarter 3 2013 goes to diver Jimmy Armstrong (#3794).

Jimmy has been

involved with the SDAMP for a number of years. He has written articles for the newsletter, attended workshops, and also been an active volunteer with for us on a variety of projects.

Jimmy can often be seen diving in South Carolina waters, especially in the

(Continued on page 7)

Hobby Diver (Continued from page 6)

Congaree River with his avid dive buddy and previous Hobby Diver of the Quarter, Catherine Sawyer.

Jimmy and Catherine both came out with us on Week 2 of the Black River Project to help us record the ferryboats at Brown's

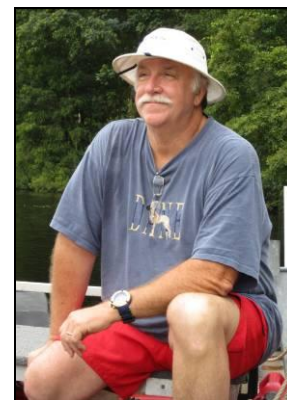
Ferry. Although, a new experience for both divers, they did a great job of measuring and recording one of the ferry boats in some tough conditions.

Jimmy is currently working with a local Columbia group and SCIAA to study a number

of barges, ferries, and maritime structures in the Congaree River.

We look forward to working with Jimmy more in the future of some great SC archaeology.

Thank you, Jimmy! You are truly an inspiration to us all! ■



**Hobby Diver of the Quarter
Jimmy Armstrong**

2013 Black River Project

By Ashley Deming

For the first two weeks in August of this year, the Maritime Research Division and a number of volunteers conducted an archaeological survey of Black Mingo Creek and two potential ferryboats at Brown's Ferry in Georgetown and Williamsburg counties. The project sought to answer some questions regarding known and unknown historical sites in Black Mingo Creek and to record the two known vessels at a historic ferry landing. Our research included hobby diver reports both oral and written, SCIAA staff recollections of past visitations and assessments as well as field notes, South Carolina State Site Files, and oral histories of local

inhabitants in the area.

We conducted this survey through remote sensing and diving operations using the help of many wonderful volunteers from the academic and sport diving community.

Week 1 focused solely on a stretch of Black Mingo Creek. This area ran from the mouth at the Black River up to where it became impossible to go any farther (roughly 13 miles upriver). We were lucky enough to be put up by two amazing hobby divers Caroline and Bobby Woodward who also shared their extensive knowledge and collections of artifacts and sites in the creek. Our other volunteers that week were hobby divers Bruce Orr and Gus Dunlap,



Black River Project volunteers Bruce Orr (left) and Cody James (right) reviewing the side scan sonar data in Black Mingo Creek

University of West Florida underwater archaeology student Cody James, and Dr. Scott Harris and two students from the College of Charleston.

We used side scan sonar to try to locate known and unknown sites, but our equipment acted up, so we got straight onto the diving. We used location information from a variety of sources to choose our dive spots. Divers made recoveries of a small sample set of artifacts from each site to study as well as to be used for museum exhibits and educational purposes.

We found a variety of

artifacts that speak to many different periods of occupation and use along and on Black Mingo Creek. These artifacts are consistent with our research of the extensive use of the creek throughout time.

We discovered several new sites, including two shipwreck sites and what we believe is a historic landing site that was used from at least the late 19th century through the mid-20th century. Black Mingo Creek has a wealth of information and we hope to conduct more survey there in the future.

(Continued on page 11)

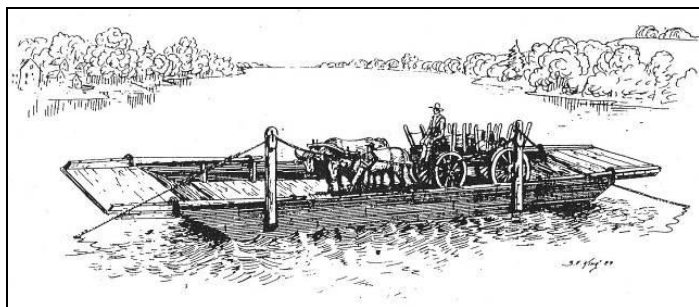


Illustration of a rope ferry similar to the type found at Brown's Ferry

Feature Hobby Diver Article

Each quarter we would love to feature one or two articles by you, the hobby diver. Your article can be about an artifact or fossil you found, your collection, your research, your experience with the program, a humorous diving anecdote, or just something interesting that

relates to South Carolina's past. Feel free to include images that can be used with your article.

You should submit your articles to SDAMP for review and editing. Once we have approved your article, we will do our best to get it into the next issue of the *Quarterly Reporter*. If

your article is accepted, we will contact you to let you know.

We want to hear from you, so get writing! Submit your articles to: sdamp@sc.edu ■

2013 Black River Project crew post processing at the end of the day



A Week on the Black River

By Catherine Sawyer, Hobby Diver #4913

After slogging around in the mud and muck at Allendale for three years I was finally promoted to the big leagues—diving with SDAMP on the Black River Project. This would be my first experience with true underwater archaeology. Don't get me wrong—I enjoy the no viz diving at the Big Pine Tree site. I especially enjoy seeing all the artifacts that area has produced. This project was going to be a little bit different though. The goal was to map the two shipwrecks in the vicinity of the Brown's Ferry area. Although it is called the Black River, there would hopefully be a little bit of visibility for us divers to be able to navigate the site.

I met the dive team on Monday morning at the boat landing. The usual

crew was there—Ashley Deming, Carl Naylor and Joe Beatty along with State Underwater Archaeologist Jim Spirek. The volunteers were myself, Jimmy Armstrong, Nate Fulmer, Bruce Orr and Rick Presnell. We were all anxious to get on the boat and hit the water. Lucky for us you could have thrown a rock from the boat landing and hit our dive site!

We took a little time running the side scan sonar to get an idea of what was on the bottom. After that, we all took turns diving to see the layout of the site. The remains of the ferry are broken up and some pieces are scattered around the edges of the main wreck area. I managed to find what looks like a 1970's Ford truck a little way downstream from the site

while exploring. Actually, I ended up a bit underneath it! With only a foot or so of viz it's easy to run into things!

The rest of the week seemed to go by really fast. We took measurements of the wreck and made notes of the interesting features including the pulley wheel that identified this as a ferry. We also found

another wreck, which could be a second ferry or another type of ship. It was different for me to spend an entire week diving the same site. I saw something new on every dive and learned a little bit about underwater archaeology. For me the Black River Project was a real adventure! ■



Black River Project crew (L to R): Nate Fulmer, Joe Beatty, Catherine Sawyer, Carl Naylor, Jimmy Armstrong, Jim Spirek

Charleston Harbor Stone Fleets Survey

By James D. Spirek, State Underwater Archaeologist, Maritime Research Division, SCIAA

On two separate occasions and locations in 1861 and 1862, the Union navy sank a total of 29 ex-whaling and merchant vessels in an

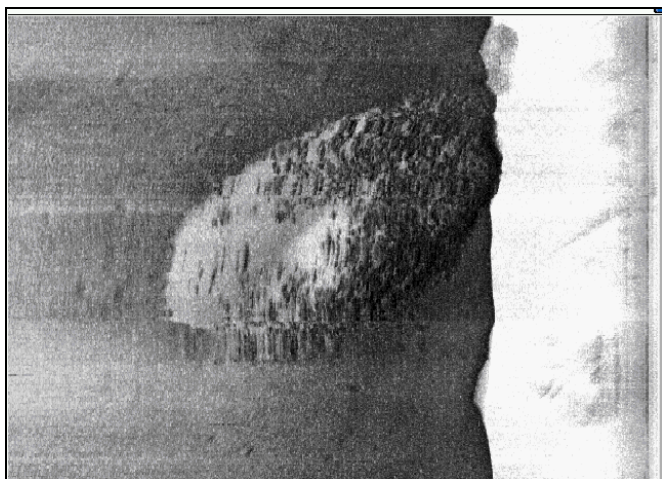
effort to block the two main entrances into Charleston Harbor during the Civil War. These obstructions were intended

to frustrate the passage of blockade runners bringing war materiel and other sundry products from Europe and returning laden

with cotton, rice, and naval stores. The ships broke apart and washed ashore, a new channel supposedly

(Continued on page 9)

Stone Fleets (Continued from page 8)



Sonogram of a First Stone Fleet ballast mound (courtesy of SCIAA)

scoured out, and blockade runners bypassed the obstructions with minimal diversion from their preferred route through Maffitt's Channel along Sullivan's Island. Over the years, the vessels reportedly slipped under the "quicksands" at the bar and eventually faded into the historical and archaeological record of South Carolina.

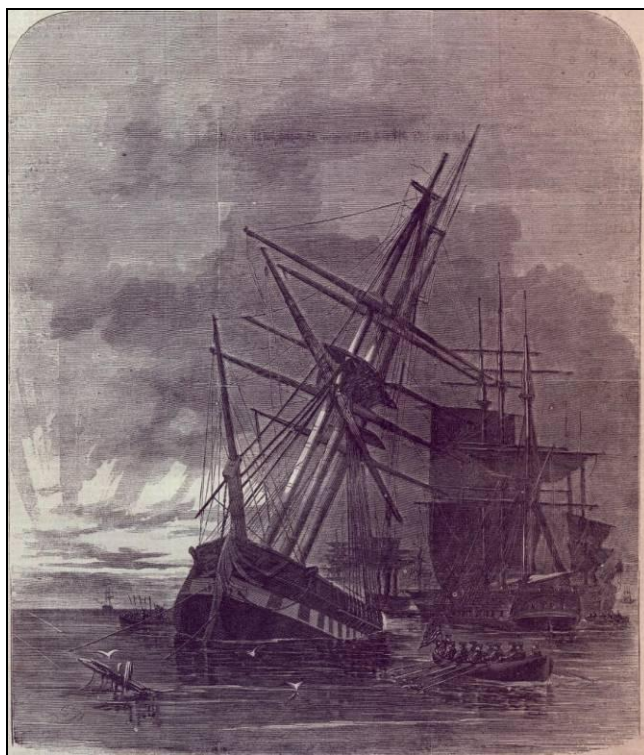
Working under an American Battlefield Protection Program grant from the National Park Service from 2008-2011, the Maritime Research Division conducted several remote sensing operations to locate the two stone fleets, as well as other naval casualties of the conflict. At the bar of the Main Ship Channel, MRD detected 15 ballasts mounds clustered together, along with a few other wrecks, indicating the position of the First Stone Fleet (n=16) sunk in late December 1861. MRD and volunteers dove on five of the sites and documented

visible features which included rocks, wood structure, and fasteners protruding out of the sand. Meanwhile, the Second Stone Fleet (n=13), sunk at the entrance to Maffitt's Channel in early January 1862, eluded detection, although several ballast mounds were located. Due to the size of the rocks, some quite large, and quarried as well, suggests these wrecks might relate to the building of the stone jetties, and specifically wrecked during the 1885 hurricane. A subsequent foray using private funds, located a couple of other potential shipwrecks, but unfortunately "lumpy" seas prevented survey operations until a later date.

Earlier this year the MRD prepared and received a National Park Service Historic Preservation Fund grant administered by the South Carolina Department of Archives and History to continue our stone fleet research. The grant will

fund another effort to locate the Second Stone Fleet, to document each of the 29 vessels once all the fleets are accounted for, and to nominate the two stone fleets to the National Register of Historic Places as National Register Districts. Currently, we are conducting historical research on the 45 vessels that comprised the entire stone fleet sent south to Savannah and Charleston. Interesting details of these ship's histories are emerging relating to their whaling and merchant days. As we are in the bicentennial years of the War of 1812, one of the vessels sunk in the First Stone Fleet, *Rebecca Sims*, had been captured by the British navy in 1812 and sent to Port Royal, Jamaica

as a prize and its crew imprisoned. Following a court finding in their favor they were released and sailed to New York City with recently freed American merchant sailors and officers of the USS *Vixen* that had been captured during a fierce sea battle with a British warship. The ship's histories interweaved with the archaeological record will provide for a more complete interpretation of the events that eventually led to their scuttling off Charleston Harbor. Ultimately, the project will serve to broaden our understanding of the maritime archaeological legacy in the rivers and coastal waters of South Carolina. ■



Harper's Weekly illustration of the sinking of the First Stone Fleet.

Greetings from New SDAMP Intern!

By Olivia Adams, SDAMP Intern, College of Charleston

Hello everyone! My name is Olivia Adams, and I am the SDAMP fall intern. I am a junior at the College of Charleston, in the honors college, studying Archaeology and Anthropology. I am really excited to be working here



**SDAMP Fall intern
Olivia Adams**

this semester, and helping SDAMP with their public archaeology programs. As a rule of thumb, I am pretty generally interested in just about everything; a long list that includes anthropology, ancient Southeast Asian temples, practicing yoga, painting and photography, reading anything, riding horses, hiking, stand up paddle boarding, canoeing, sewing, and pretty much anything I can get my hands into.

Most of my background is in historic archaeology of the Low Country. I have had the pleasure of working on a number of digs in South Carolina with the

State Parks, at sites including Hampton Plantation and Charles Towne Landing. I also was able to work with College of Charleston faculty at Dixie Plantation during 2012-2013 excavations. I was also very lucky to be able to travel to France for a month and participate with a prehistoric excavation there. I am very excited to add working with SDAMP as part of my experience as well. I wanted to work on an internship where I would have a good opportunity to continue to use my archaeological training but have an opportunity to learn how to

work in outreach and public archaeology, something that is not often taught in a classroom. SDAMP is a great choice for that because the nature of their work means that they are working one on one with the public on a daily basis. I also have a love of the water and paddle sports, so I was drawn to SDAMP because of their connection with maritime history and culture. I look forward to helping out with a variety of projects and working with the sport diving community. It is going to be a great year!■

SDAMP Welcomes Jeremy Miller

By Jeremy Miller, SDAMP Intern, College of Charleston

Jeremy is currently a senior at the College of Charleston majoring in Archaeology and Art History. Jeremy requested to work with SDAMP “in order to continue professional growth, refine archaeological skills, and introduce underwater archaeological methodology to [his] personal skill set.” In addition to studying at the College of Charleston, Jeremy served as an Army Infantry Non-commissioned officer, completing six years of honorable service. He holds an Associate’s of Art degree from Trident Technical College, as well as took additional bachelor’s courses through the American Military

University. Jeremy works on several projects locally and abroad with College of Charleston Professors, specifically projects concerning Roman fortifications in the 1st and 2nd Century A.D. in Romania, research concerning the Near East, and various projects in North America, majority of which are in South Carolina. As a Charleston local, Jeremy has had the opportunity to grow up with these sites, and has therefore developed more appreciation for the local sites and the unique culture and history of the Lowcountry. While volunteering with SDAMP, Jeremy will be working to formulate a

database to catalog artifacts and finds sent to the Charleston office by sport hobby divers. Jeremy will be working to photograph, analyze, bag, and curate the artifact collections. To compliment this task, Jeremy will also be working alongside intern Olivia Adams to conserve much of the metallic objects in the collections.

Jeremy’s areas of interest include landscape archaeology, the study of spatial and ideological landscape and relations, ancient landscapes, military sites of all periods, battlefield and conflict archaeology, ancient near-eastern studies, explorative archaeology, and colonial America studies.■



**SDAMP Fall intern
Jeremy Miller**

Black River (Continued from page 7)

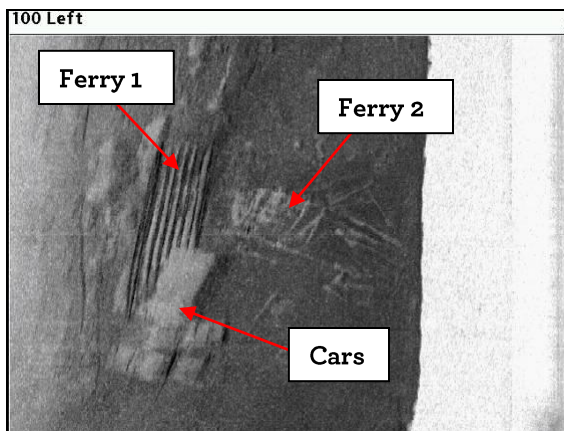
Week 2 was spent at Brown's Ferry locating and recording two vessels that are believed to be ferryboats. These vessels were noted by SCIAA staff when the Brown's Ferry Vessel (now in the Georgetown Rice Museum) was excavated and again in the 80s and 90s on brief surveys of the area. Besides knowing the existence of these vessels, little had been done to study the vessels or the historic ferry landing.

The Week 2 team included MRD staff, Nate Fulmer, Bruce Orr, Rick Presnell, Catherine Sawyer, and Jimmy Armstrong.

We conducted side scan sonar to define the

area and came up with an excellent picture of the site (right). The image shows both ferryboats as well as what turned out to be three cars (1 upside-down Buick, 1 Camero, and a truck).

The site was extremely disorienting as the water was very dark with lots of particulates and the current was high. We spent at least one day becoming familiar with the sites before we began to record each one. Once we felt comfortable with our orientation, we laid a baseline on Ferry 2 to begin recording. In addition to the use of dive slates and measuring tapes, we also took many underwater photos and



Sonar image of the two Brown's Ferry ferryboats and submerged cars

video to record the site.

We discovered that Ferry 2 had two disarticulated (unattached) stanchions with pulley wheels (see illustration on page 7). This definitely made it a ferryboat. While Ferry 1 is probably a ferry, we are still not certain.

This project was a huge success from the volunteer and community involvement to the research conducted. Many thanks to all of our volunteers and to the ART Board for giving us the grant! We hope to return in future seasons to continue investigating. ■

Carl Naylor Retires

By Ashley Deming, SDAMP

After 26 years of service, Maritime Research Division Archaeological Technician Carl Naylor has retired.

Carl started his career with SCIAA in 1987 as a diver for the Underwater Archaeology Management Program (UAMP). His role has morphed overtime to include diving, boat captaining, hobby license management, publication editor, group historian/researcher, public

education and outreach, author, and general jack-of-all-trades. Carl has done it all here and I, for one, am glad I had the opportunity to work with someone so knowledgeable about South Carolina history and archaeology.

When I first came onboard with SCIAA in 2010, Carl really showed me the ropes. He introduced me to many divers and professional

archaeologists who have helped me immensely these past four years.

If it wasn't for Carl, our little trailer office here at Fort Johnson would have been a whole lot less enjoyable. Carl was always quick with a joke or a historical fact.

I have come to think of Carl as a friend as well as a colleague and it has been a pleasure working with him. I know many of you have

come to feel the same way and that was evident at Carl's Retirement Wing Night in Columbia where we had an attendance of around 50 people. It's obvious he has made a positive impact on many lives.

Thank you for everything, Carl. Enjoy retirement! ■



Diver Safety

Diving Safety . . . A Culture

By Dan Orr, Industry Consultant and President Emeritus, Divers Alert Network (DAN)

Regardless of whether the focus of your diving activity is the pursuit of scientific data to enhance the body of knowledge about the underwater world or purely recreational in the pursuit of experiences not available to our land bound friends, we want to make sure that all dives are done safely. There is no amount of scientific data or unique experiences worth someone's life or health. In order to maximize our productivity or enjoyment, there are a few simple things we should consider.

1. Prepare yourself, your partner(s) and your equipment with a checklist and a pre-dive ritual

One of the most important things that came from Rebreather Forum 3.0 in 2012 was identifying the value of having a checklist (<http://rubicon-foundation.org/News/rf3-consensus>). The consensus statement acknowledged that checklists should be rigorously followed pre and post-dive when diving rebreathers. The use of checklists, however, should be considered an essential part of all forms of diving. In previous articles, I've discussed the 'triggering events' in diving fatalities that were identified by DAN's analysis of over 1,000 diving fatality

records. In reviewing those things that transformed an unremarkable dive into a tragedy, approximately 63% were either directly or indirectly related to problems with diving equipment. The use of a pre-dive checklist coupled with a consistent pre-dive ritual that each diver and buddy follow each and every time they dive could, potentially, reduce equipment-related issues that would initiate a cascade of events resulting in injury or death to one or more members of a dive group. If you are an individual who is trained and properly equipped to dive solo, and this article is not intended to be pro or con on that particular issue, the pre-dive process using a pre-dive ritual and checklist is equally important.

2. Dive your experience, not your C-card

Make sure that you and your diving companions are fully qualified for the dive you are about to make. Just being certified is simply not enough for all diving situations. Your accumulated diving experiences, which includes all the skills and knowledge derived from them, will give you the skills to effectively manage the requirements of many diving situations. It is common in science diving

programs for divers to be 'qualified' to certain depths. These qualifications are based upon training and experience and help to reduce the number of diving accidents occurring in science diving programs. While no such qualification limitations exist in most areas of the recreational diving world, each and every diver must consider their past experiences and determine whether or not what they learned from past dives can allow them to meet any potential challenges on dives they are about to make. It is far better to make those decisions prior to signing up for a dive but it is never too late to 'call' a dive if you feel the diving conditions may be beyond your ability. Never let someone talk you into a dive that may be beyond your capability.

3. Be situational awareness.

Every diver should be constantly aware of circumstances that could increase your risk during a dive. Your dive plan was based upon conditions and circumstances being pretty much as planned. When things don't go as planned, you must be prepared to modify your dive to mitigate any increased risks. Working harder than anticipated during a dive

because of stronger currents than anticipated, increased drag because of poor buoyancy control or carrying extra equipment or having to swim faster to keep up with a buddy or dive leader, could have a direct impact on your safety. Other circumstances such as accidentally diving deeper or staying longer at depth than expected could also have a direct impact on your safety. Being constantly aware of your situation (*situational awareness*) during the dive will allow you to make necessary modifications in your dive to mitigate any increased risk. Knowing that increased workload, deeper diving and increased bottom time can result in increased inert gas absorption, modifying your dive plan by reducing your bottom time, diving shallower and/or increasing your safety stop can help to mitigate increased risk. Many divers, especially older divers or those who would like to give themselves a level of increased safety, choose to use a Nitrox blend with their dive computers or dive tables as though they were using air. Using Nitrox blends as air has become increasingly popular for divers wishing to reduce their risks.

(Continued on page 13)

Diver Safety (Continued from page 12)

4. Learn from each and every dive.

Each and every dive should be a learning experience. Divers should discuss their dives focusing on what went right and what went wrong. By doing this, they learn from each dive and are constantly improving their approach to future diving experiences.

5. Promote and perpetuate a culture of diving safety.

The way to see real improvement in diving safety is for each and every diver to commit to making the sport better and safer. This can be accomplished by creating and perpetuating a 'culture of diving safety'. By definition

a "Culture of Diving Safety" is the enduring value and priority placed on diver safety by every diver at every level of certification and experience. In order to work, it must include divers at all levels. Individual divers and buddy groups must commit to personal responsibility for safety. We must all

preserve, enhance and communicate safety concerns and actively learn from past mistakes and the mistakes of others, applying safe behaviors based on lessons learned. Be safe and do your part to create and promote a culture of diving safety! Safety is everyone's responsibility. ■

Conservation Corner

Conserving a Small Fragment of Textile from the Hilton Head Wreck

By Johanna Rivera, Conservator, HL Hunley Project, Warren Lasch Conservator Center, Clemson University

Continuing with the conservation of artifacts from the Hilton Head wreck beached near Sea Spines Plantation (*Quarterly Reporter* volume 4:2 11-12), SDAMP manager Ashley Deming brought a small fragment of waterlogged textile to the WLCC for its conservation.

The textile was found sandwiched between the stempost and a pine plank that used to be attached to the stempost. Normally we would expect to find textile fragments in between planks to help with sealing and acting as caulking, but mysteriously, this fragment was found on the outside of the stempost.

The textile is most likely wool measuring 5.2 x 1.8 cm approx. It was covered with iron corrosion products probably coming from nearby nails that rusted away. The first step was to identify the material and its degree of fragility so as to draft a feasible

treatment for that specific textile.

After identifying the fragment as wool, different cleaning techniques were discussed. Since the textile was too small and fragile to apply any type of mechanical treatment, it was found that using chemicals was the best and safest way to remove the iron stains.

According to the literature¹, chemicals used to clean fabrics with a pH zone between 5 and 10 is safe for most fabrics, while low pH, below 3, may damage cellulose based fibers; and high pH solutions, above 10, may damage wool and other proteins. The extent of the damage will depend on both the deterioration of the fibers and the duration, temperature and type of chemical solution use. Falling within this pH zone does not mean that no chemical damage will occur to the textile, only that the

damage will be at a minimum. If a protein fiber is exposed to pH values well below or well above this range the material would be more vulnerable.

The chemical chosen to clean this wool fragment works by attracting the iron corrosion products from the textile, and dissolving it into the solution. The fragment was only soaked

in the chemical for a couple of days, as long term treatment could also affect the fibers. The goal of this treatment was to remove as much of the iron as possible but not all of it since a lot of this iron was found to provide some structural support to the much degraded fibers. After the treatment bath, the textile was rinsed for a

(Continued on page 14)



Warren Lasch Conservator Center
Conservator, Johanna Rivera
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Conservation Corner (Continued from page 13)

couple of weeks to remove as much as the chemical as possible. Since the textile was also waterlogged, it needed to be dried by means of sublimation. The textile fragment was frozen at a very low temperature

allowing the ice to sublimate rather than evaporate (transition of water directly from solid ice to the gas phase without passing through an intermediate liquid phase, which could potentially damage fibers and produce

shrinkage). This process is very slow allowing the fibers to adjust to their new dry state. Once the treatment was complete, the textile was mounted on conservation grade foam and stored dried away from light. ■

¹ Jenssen, V. "Conservation of wet organic artifacts excluding wood". In "Conservation of Marine Archaeological Objects". Editor Colin Pearson. Butterworths. Page 141



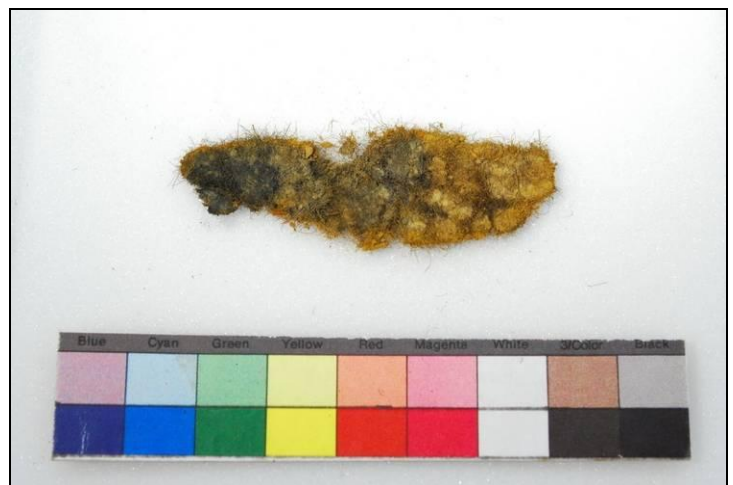
The stempost of the Hilton Head Island wreck (photo courtesy of SDAMP)



Close-up of the stempost area where sample fabric was taken. Note the draft mark and planking. (photo courtesy of SDAMP)



Textile fragment before conservation. Notice the iron corrosion products and an another unidentified material (brown in color) completely covering the wool.



Textile fragment after cleaning and drying. The iron corrosion products has been mostly eliminated and now a white/yellowish layer can be observed both covering the fabric and in-between fibers. This layer is most likely caulking used to waterproof certain parts of a vessel. More analysis will be necessary in order to identify the type of caulking.



Geoarchaeology

Bulls Scarp Research Project

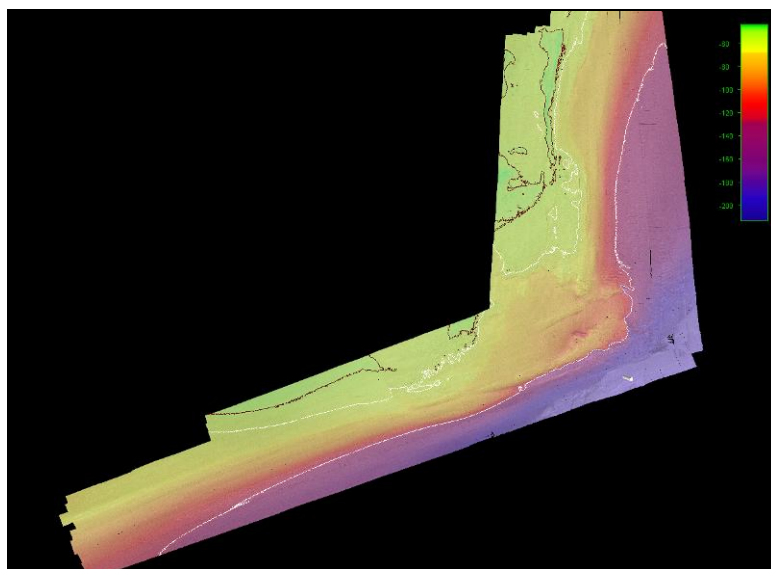
By Dr. M. Scott Harris, Geology, College of Charleston

Bulls Scarp, 120 kilometers east of Charleston, South Carolina, sits on the edge of the continent. During the last glacial maximum when sea level was low and mammoths and saber tooth cats roamed the landscape, this rocky exposure stood 80 meters above the ocean with small rivers and valleys entering the sea from its flanks. The modern rivers of the coastal plain continued another 100 kilometers to the ocean, across what used to be a cool dry landscape with little vegetation, emptying into a coastal zone and estuaries being touched by the southward drift of cold currents and icebergs from the North. In 2011, the College of Charleston seafloor mapping group gathered detailed multibeam bathymetric data and remotely operated video observations from this region, detailing the

large sand waves at the bottom of gulf stream, and the ancient iceberg scours that formed from these grounded blocks of ice escaping from the collapsing glaciers far to the north. In a recent article in the journal, *Geomorphology*, Dr. M. Scott Harris of the College of Charleston and his colleagues present their initial scientific findings on the paleolandscapes and implications of this ancient landscape to our cultural heritage. The importance of this ancient precipice is two-fold. First, it causes a deflection in the modern gulf stream and creates eddies, influencing the drift of heat and organisms in the Southeastern United States. Second, this landscape sat exposed from approximately 60,000 years ago until about 11,000 years ago, with rich marine resources and vantages that would likely have supported

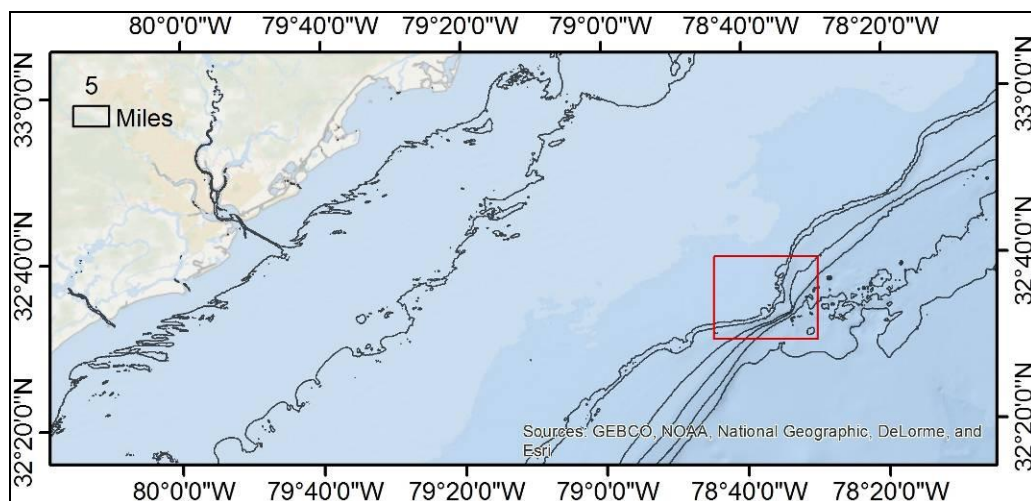
any Paleoamerican population taking advantage of the ancient coastal landscape, fresh water springs, and food sources. Led by Dr. Harris, the College of Charleston faculty, students, and research partners continue to study this region, and are

currently putting together a major interdisciplinary expedition to Bulls Scarp, to further study and understand the cultural, geological, oceanographic, and biological nature of this unique structure along the Southeast U.S. shelf edge. ■



Multibeam image of Bulls Scarp
(image courtesy of the College of Charleston)

Location of Bulls Scarp off the coast of South Carolina
(map courtesy of the College of Charleston)



The Sport Diver Archaeology Management Program

The *Quarterly Reporter* is a quarterly newsletter from the Sport Diver Archaeology Management Program (SDAMP), part of the Maritime Research Division of the South Carolina Institute of Archaeology and Anthropology at the University of South Carolina.

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Letters to the Editors

If you have something that you would like to say about the program or have questions that you think others like yourself would like to have answered, look no further. This section of the newsletter is just for you. Send in your

questions, comments, and concerns and we will post them here. You can also send in comments responding to letters from other hobby divers. Ashley and Carl will respond to your comments and answer your questions for all to

read.

Just like your artifact report forms, you can email, fax, or send your letters to SDAMP. We look forward to hearing from all of you. ■

Notes from the Editor

Everyone has been doing a great job so far getting both fossil and artifact reports in. Let's keep up the momentum!

Dave Cicimurri has asked that you be patient with this quarter's reports and his responses to questions as he will be out of the country until October 15th. If your emailed report bounces back due to his mailbox being full, please resubmit your report after October 15th. He is doing everything he can to try and make fossil reporting as easy as he can, but needs your understanding as he is all on his own in this. Speaking of being on one's

own... By now, all of you should have heard of Carl Naylor's retirement. We will be filling Carl's position, but it looks like that may not be until January 2014. We are sad to see Carl go, but really looking forward to a new chapter in SDAMP's story.

While we wait for Carl's replacement, I will be on my own in the office with limited help from my amazing interns. This means that our response time to your questions, concerns, etc. will be a little slower than usual. Please be patient with us during this time of transition. We are remaining very busy this fall with all of our

education and outreach and the additional research projects with the rest of the Maritime Research Division staff, but will stay committed to bringing you the highest level of service we can.

We hope to see you at many of our events this fall including our lecture series and our oyster roast. Keep an eye out for all of our emails with info on our events and don't forget to like us on [Facebook](#) so you can stay up to date with all the great things happening with us and with archaeology around the state this fall! ■



**SDAMP Manager
Ashley Deming
&
State Underwater
Archaeologist
Jim Spirek**

Useful Website Information

For more information on

SDAMP: <http://artsandsciences.sc.edu/sciaa/mrd/sdamp.html>

MRD: http://artsandsciences.sc.edu/sciaa/mrd/mrd_index.html

SCIAA: <http://artsandsciences.sc.edu/sciaa/>

SCIAA publication *Legacy*: <http://artsandsciences.sc.edu/sciaa/legacy.html>



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