

10-2011

Quarterly Reporter - October 2011

South Carolina Institute of Archaeology and Anthropology--University of South Carolina

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Things You Need to Know:

- 2011 Quarter 3 Reports Due by October 10, 2011
- SDAMP October Lecture Series
- October is Archaeology Month!
- Please Report Online!

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

2011 Field Training Course Part I

By SDAMP

The SDAMP Underwater Archaeology Field Training Course was held July 23-24 at the Fort Johnson Marine Resource Center on James Island in Charleston. We had 10 students in attendance. Students came from as far as Virginia and as local as James Island. Almost all of our students were current hobby divers. Each student came with a great enthusiasm for learning about maritime archaeology. On Saturday, we spent the morning in the classroom learning the types of wreck sites common to South

Carolina and the basic techniques needed to observe and record sites. In the afternoon, we moved outside (into a sweltering environment) to practice those skills on a mock shipwreck site complete with wreck, artifact scatter, and enough triangulation opportunities to make their heads spin. Students rotated around the site to various stations practicing a multitude of mapping techniques. They all did an excellent job understanding and implementing their newfound proficiency with recording a site.

Each student made us very proud. Sunday did not go quite as planned when an unforeseen circumstance made us quickly have to rearrange our diving location. Despite a very rocky start to the morning, four students and two frazzled instructors managed to prevail against the odds and make it out to the Strawberry wreck site on the Cooper River. The Strawberry Wreck is thought to be a British Revolutionary War gunboat. Although some technique work was lost since we did not have the controlled

(Continued on page 2)



2011 FTC students



Students in the classroom

Quarterly Reports due by October 10, 2011

October Quarterly Reports

This is a reminder that your 3rd quarter 2011 reports are due by October 10, 2011. These reports should cover all of the collecting you have done between July 1st and September 30th of this year.

Please file your artifact reports using our new online system.

You can submit forms online at:
<http://src6.cas.sc.edu/sdamp>

(Note: If this is the first time you are filing on this system, you will need to create a new password by clicking the link below the sign-in boxes).

All report forms can be

found on our website at:

www.cas.sc.edu/sciaa/mrd/sdamp_hdl_forms.html

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

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

Your *fossil* report forms

should be sent to:
Chief Curator of
Natural History
301 Gervais St.
Columbia, SC 29201

Make sure that you file reports with both agencies even 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:

www.cas.sc.edu/sciaa/mrd/sdamp_hdl_forms.html

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

Field Training Course (Continued from page 1)

environment of a training pond, this site made the day even better for the students. They were able to dive on an actual site and discover the real issues archaeologists must face when trying to record a site. Even though the day was a success and everyone had fun, most students felt they were happy to leave the underwater work to the archaeologists and not quit their day jobs.

We scheduled a make-up session in August for the students who missed

the Sunday class in July. It just so happened that this was the day Irene was scheduled to whack us. We kept a close eye on the storm that week and especially that morning, but the students wanted to risk it and we were more than happy to oblige. Three students joined us, again on Strawberry Wreck, to finish their training. It was a little on the windy side that day, but visibility was pretty good. We measured, drew and discussed the wreck site and spent about

three hours total underwater working on the wreck. It turned out to be a gorgeous afternoon and all the students went home tired but with a sense of accomplishment. They did a great job. We are so proud of all of our 2011 FTC grads. You guys are amazing!■

2011 FTC students mapping a mock shipwreck site



2011 FTC recording a mock wreck



Upcoming Events

SDAMP Lecture Series
Because October is Archaeology Month here in SC, we have decided to team up with the Charleston County Library to bring you a Maritime Archaeology Lecture Series. Each Wednesday night in October there will be a guest speaker presenting on his or her expertise in the field of maritime archaeology. Lectures are free and open to the public at the Charleston County Library downtown. For more information on the lecture series, see page 4.

Archaeology Field Day
To celebrate Archaeology Month, the Archaeology Society of South Carolina will be sponsoring the 24th annual Archaeology Field Day. The event

will be held at Lynches River County Park in Florence County, SC on Sat. Oct. 29 from 10AM-4 PM. It is free and open to all. Bring your artifacts for identification in the Artifact ID Tent. This event will focus on various aspects of archaeological research being conducted in South Carolina, particularly the Johannes Kolb site located on the Great Pee Dee River in Darlington County. Offered, will be an array of living history demonstrations, exhibits, educational hands-on activities, and poster presentations and lectures that span the entire prehistoric and historic occupations throughout time in South Carolina. Bring the whole family.

For more information, please visit:
<http://www.assc.net/events/fall-field-day>.

SDAMP Wing Night
The next Wing Night will be Thursday, October 27th at Wild Wing Café in Mt Pleasant, SC. Bring artifacts, fossils, family, and friends for a fun night of wings and great dive stories.

SDAMP Oyster Roast!
We will be hosting our first ever Oyster Roast this November 19th from 4-7pm at Fort Johnson in Charleston. This is an event to raise awareness for the needs of maritime heritage in South Carolina. Much more information to come soon!

SDAMP Wants You!
We are planning to be more involved with divers over the coming year. This means we would like to do more diving and interacting with you one-on-one! We would like you to contact us about sites you have found or artifact collections we could come look at. If you are interested or know of someone who might be, give us a call or email us so we can arrange a time to meet. We look forward to hearing from you!

There will be many more events throughout the year. Please continue to read the *Quarterly Reporter*, emails, and our website for information about upcoming events and volunteering opportunities.■

SDAMP Wing Nights

We have been incredibly pleased with the turnouts to SDAMP Wing Nights! We would like to sincerely thank those of you that have been able to make it out to Wing Night. It is fantastic to see so many of you come to support each other and us at Wing Night. We were not sure if anyone would turn up at all when we started this tradition, but have been overwhelmed by the attendance each month. We would like to continue this event for

many months to come. Wing Night was created as a forum to meet us, meet other divers, see artifacts and fossils, have them identified, and just have a good time. We feel that we have created just that and hope you feel the same way. If you haven't been able to make it out to a Wing Night yet, please join us on October 27th. We would love to have you bring your friends and family to see what our program is all about and, of course, to drool

all over other peoples' finds.

We understand that it's a long way to come for many of you. We would be open to the possibility of hosting a Wing Night in the more central location of Columbia. Let us know what you think and if you would be able to make it if we had Wing Night in Columbia once a quarter.


Again, thank you to everyone who has made it out to a Wing Night.

We love our Hobby Divers!■

SDAMP Wing Night

Join the SDAMP crew and other hobby divers for a fun night of wings, drinks, crazy dive stories, and meeting a great group of people! Feel free to bring a few of your finds from over the years for a show and tell and we will try to help you identify your artifacts and drool over your fossils. Friends and family are welcome.

Date: 6:30pm-9:00pm
Place: Wild Wing Café, Mt. Pleasant, SC
Who: All Hobby Divers, Family and Friends!



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 gave a presentation to Social Dive Club in Greenville, SC about the Sport Diver Program.
- The second SDAMP Underwater Archaeology Field Training Course was held on July 23-24 in

Charleston. For more info see page 1-2.

- SDAMP's monthly Wing Night was held on the 28th. Eight people attended with LOTS of artifacts and fossils.

August

- A make-up session for the FTC Part I was held on the 27th. Three students and the SDAMP crew braved Irene at the Strawberry Wreck on the Cooper River to record the site.
- The Maritime Research Division dove in the Pee Dee River at Mars Bluff to measure Civil War cannon muzzle lengths. Visibility was surprisingly good!
- SDAMP hosted their fourth Wing Night on the 31st. It was the

biggest turn out yet. Twenty divers and friends joined us for another fun night of wings and dive stories!

September

- SDAMP's very own Carl Naylor celebrated his birthday (he won't say how when or how old!).
- SDAMP staff helped a visitor identify 4000 year old axe heads that had been found in an old trailer!
- The Maritime Research Division dove offshore Charleston from the 19th-23rd. This fieldwork is part of the American Battlefield Protection Program ongoing project.
- Monthly Wing Night was held on the 28th.

Upcoming...

October

- Maritime Archaeology Lecture Series (see page below for details)
- Archaeology Field Day on October 29th. See Upcoming Events above for more info.

November

- SDAMP Oyster Roast November 19th from 4pm-7pm. Tickets are \$35. Contact Ashley Deming for more details.
- The SDAMP office will be closed November 24-25 for Thanksgiving.

December

- Offices will be closed from December 22, 2011 thru January 3, 2012.■

Maritime Archaeology Lecture Series

We are pleased to announce SDAMP's first ever Maritime Archaeology Lecture Series. SDAMP is teaming up with the Charleston County Library to feature a guest speaker each Wednesday night in October. Lecturers will present on a variety of maritime archaeology related topics from their work in South Carolina. Presentations will range from SCIAA projects to the *H.L. Hunley*. This series offered in celebration of Archaeology Month in South Carolina.

When: Each Wednesday night in October

Where: Charleston County Library (Main)
Cost: FREE

Lecture Details:

October 5th
"The Day the Johnboat Went Up the Mountain: Stories From My Twenty Years in South Carolina Archaeology," by Carl Naylor (*Author, SDAMP, SCIAA, University of South Carolina*)

October 12th
"Artifacts Found Aboard the *H.L. Hunley* Submarine: Conservation and Analysis," by Johanna Rivera (*Conservator, HL Hunley Project, Warren Lasch Conservator Center, Clemson*)

University)

October 19th
"Pulses and Pings: The Heartbeat of Remote Sensing in Archaeology," by Dr. Scott Harris (*Geology, College of Charleston*)

October 26th
"The Archaeology of Civil War Naval Operations at Charleston Harbor, 1861-1865," by Jim Spirek (*Maritime Research Division, SCIAA*)

Please join us in celebrating Archaeology Month!■

Maritime Archaeology Lecture Series

The Sport Diver Archaeology Management Program and the Charleston County Library are teaming up to bring you an amazing lecture series about maritime archaeology in South Carolina. Come hear presenters from the South Carolina Institute of Archaeology and Anthropology, the College of Charleston, and the *H.L. Hunley* conservation team. The lectures will take place each Wednesday night in October in celebration of Archaeology Month.

Where: Charleston County Public Library
Date: Each Wednesday in October
Time: 6:30pm-7:30pm
Cost: FREE

Lecture Details

October 5, 2011
"The Day the Johnboat Went Up the Mountain: Stories From My Twenty Years in South Carolina Maritime Archaeology," presented by Carl Naylor (*Author, Sport Diver Archaeology Management Program, SCIAA*)

October 12, 2011
"Artifacts Found Aboard the *H.L. Hunley* Submarine: Conservation and Analysis," presented by Johanna Rivera (*Conservator, HL Hunley Project, Warren Lasch Conservator Center, Clemson University*)

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October 26, 2011
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Hosted by the Sport Diver Archaeology Management Program and the Charleston County Library

Diver Safety

Are You *Really* Ready to Dive?

By Dan Orr, President, Divers Alert Network (DAN)

I recently read about a double fatality occurring in 45 feet of water that was triggered by one diver running out of air (OOA) on a second dive of the day. A second diver came to his aid and began providing air using her additional second stage (or octopus). While they shared a single air supply, they both struggled, without success, to jettison the OOA diver's weights integrated into his BCD. As they continued to struggle with the weights and were sinking to the bottom, the OOA diver pushed his rescuer away and towards the surface just as she was about to run out of air. A third diver was seen coming to the OOA diver's aid but, along with the OOA diver, they did not survive. This tragic loss of life could have been prevented by what we addressed in the first safety article: proper monitoring of your

breathing gas supply. This tragedy also clearly points out another significant safety issue, problems with equipment. In this particular case, failure of the OOA diver and others in the water with him to understand how to jettison the weights from a weight-integrated BCD, clearly turned a difficult but manageable out of air emergency into a multiple loss of life.

The previous safety articles addressed triggering events identified in DAN's review of nearly 1,000 recreational diver fatalities occurring between 1992 and 2003. These triggering events, running out of breathing gas (41%) and entrapment (21%), turned an otherwise unremarkable dive into a tragedy. From the DAN fatality data that was analyzed, 15% of the fatalities were labeled 'equipment problems.' In my way of

thinking, 'equipment problems' implies that there is some inherent design problem which caused the equipment to fail when the diver needed it. I don't believe that is the issue at all. In my nearly 50 years of being a certified active diver and instructor, there have been very few instances that I am aware of where a diver's equipment has failed to perform due to an inherent design flaw. Most often, it is the diver's failure to prepare, configure or use the equipment properly. Dr. George Harpur of Tobermory, Ontario, told me that in all the diver fatality inquests he has conducted, "*We were not able to document a single case where equipment malfunction caused a problem. It was the diver's response to the problem that caused the pathology.*" In other words, user error was the culprit.

As indicated above, of the nearly 1,000 diver fatalities the DAN Researchers analyzed, 15% of the triggering events were identified as problems with equipment. To put this critical safety issue into proper perspective, that means that nearly 150 divers could be alive today, if they had been able to

successfully manage an equipment-related issue that occurred during a dive! Nearly 150 divers might be alive today if they or the divers they were with during the dive could have solved whatever the equipment-related issue was that transformed an enjoyable diving experience into a tragedy! Certainly, in the accident cited above, those two divers could be alive today if they had been familiar with how to jettison weights from their particular BCD! When was the last time you and your diving partner took a close look at your diving equipment and thought through how you would deal with a problem with that piece of equipment if it occurred once you were in or under the water? When was the last time that you and your diving partner practiced removing and dropping your weights? When was the last time you and your diving partner really thought through all the possible things that could go wrong during a dive and talked about ways to solve those problems and then actually practiced them? How many times have you used a piece of equipment that has some new design feature and looked at it

(Continued on page 7)



(Photo courtesy of DAN)

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

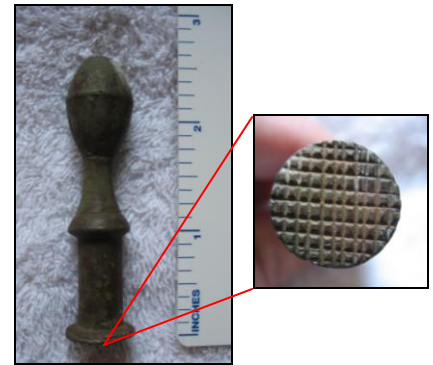
Carolina's past. Feel free to include images that can be used with your article.

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 ■



What is it? Email your answer to sdamp@sc.edu

2011 Field Training Course: A Student Perspective

We asked a few of our students to let us know what they thought about the 2011 Field Training Course. Here is what they said:

"Long before sunrise on Saturday, July 23, Ken Allen, my son Corey Benson and I piled into our car and headed to Charleston from the Up-State. After a lot of coffee and few doughnuts, we arrived at Fort Johnson on James Island to participate in the SDAMP Underwater

Archaeology Field Training Course, conducted by Ashley Deming and Carl Naylor. We had a great morning session learning about mapping submerged wrecks and the types of human artifacts we might find. In the afternoon we spent time doing dry dives on land, practicing the mapping and measuring skills we learned in the morning. We also were able to employ our new knowledge on different recognized types of

artifacts. The day was long, hot, but a lot of fun.

The next day, we went out on the SDAMP pontoon boat on the Cooper River to dive the Strawberry shipwreck site; an 18th century British gun boat. We divided into teams and measured and mapped different parts of this historic wreck. It was awesome to dive on a wreck 200 to 300 years old. Thinking about the people that built the boat and sailed the boat such a long time ago, brought the past to the present. That's cool! I look forward to another SDAMP sponsored archeology workshop and dive adventure in the future." –Eric Benson

"The Field Training Course Part 1 was an entertaining and enlightening experience. The Saturday class session covered everything from ship construction and vessel

typology, to transits and trilateration. I'm still learning from the FTC Manual we were given. The Sunday dive experience was awesome! We dove the Strawberry Shipwreck, a Revolutionary War gunboat. She is resting twenty feet below the surface she once fought for 235 years ago. Remnants of her still proudly display the metal sheathing and tacks that once protected her hull." – Shawn Smith

"The Field Training course is a well rounded course of study that helped me better understand underwater archaeology methodology and why it is so important. After completing this course I now have an appreciation for all the hard work and diligence it takes to properly document an underwater archeology site." – Ken Allen ■



**FTC students
Eric and Corey
Benson
recording
artifacts under
a grid frame**

Ready to Dive? (continued from page 5)

thinking, 'that can't be that difficult to use,' but really not know how it works? Well, believe me, in the midst of a crisis underwater, is not the time to learn how something works.

You and your diving companions should spend time practicing the critical

skills in managing an emergency. These skills, including air sharing, weight management and rescue procedures are complex psychomotor skills that must be practiced and reinforced frequently to become 'learned' skills. Mastering a skill once does not make it a 'learned' skill. That requires repetition and maintenance for the skills to be learned and maintained. If critical diving and emergency skills are not practiced and reinforced regularly, it is highly unlikely that they will work when your life or someone else's life requires quick action in an emergency.

My advice is that prior to initiating a dive, you and your diving

partner conduct a thorough pre-dive buddy equipment check and familiarization so that each of you *knows your buddy's equipment as well as you do your own*. If there is anything different about how you or your diving partner use your equipment or have your equipment configured, it is best to stop, discuss and evaluate the situation before initiating a dive. It is important for you to develop and reinforce a pre-dive ritual that involves equipment configuration and checking; dive plan review; hand signal review; diver separation protocol review and emergency situation review including how to jettison weights efficiently and how to

manage an out-of-breathing gas procedure review. The use of a checklist to assist in this ritual is highly recommended. Nothing we do in this life is without risk. We can manage risk with *"proper training, thorough preparation, and the effective application of knowledge and skill"* ("Scuba Diving Safety" by Dan Orr and Eric Douglas). We all agree that diving is like nothing else on earth. To make the most of your diving opportunities, make every dive like it was preparing you for the next, not like it was going to be your last!

For more information on DAN visit:
www.DAN.org ■



**The Divers
Alert
Network**

NEW! Connection Section



Have you been searching for a dive buddy that shares similar diving interests with you in South Carolina? Maybe you are from out of state and were hoping you could partner up with someone in South Carolina who could show you the ropes? Perhaps you just want to meet some divers in your area who are ready to hop in the water when you are. Look no further! Connection Section is the stop for you! This is a brand new section in our

newsletter. SDAMP wanted another way for divers to connect to one another. In this section, we will feature the contact info and a short profile of an individual or a group that are looking for dive buddies. Maybe you will meet your diving soul mate!

Our first diver submission is Captain Mike Gallagher. Gallagher is from the Charleston area and is looking for a dive buddy or two that like to go river diving. Although he dives mainly in the Cooper,

he would be interested in other rivers as well. Gallagher is a certified USCG boat captain with his own boat. If you are willing to split the boat gas money, Gallagher will be happy to take you on his boat for some great dives. He likes to go diving on Thursdays and Fridays, but he does have a flexible schedule. If you would like to go diving with Gallagher, you can reach him by phone at 843-425-9832 or through email at livingtodive@aol.com

Hobby Diver David Paynter is looking for a diver or divers that would be willing to show or tell him the ropes on fossil diving in the Edito River. He wants to know where to put in, equipment needed etc. David is based out of Columbia, SC. You can contact David at 803-556-2229 or d66paynter@aol.com

If you are interested in meeting a dive buddy, email a brief profile and your contact info to: sdamp@sc.edu ■

Conservation Corner

Basic Care for Artifacts and Fossils Recovered From Fresh Water Sites

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

As mentioned in previous articles, artifacts that were found underwater and exposed to air can quickly deteriorate if precautions are not taken. Once the deterioration process has started it is very hard to stop it. Unless these artifacts are conserved, there is little that one can do. However, we can provide some mitigation measures to recently excavated artifacts.

Care of artifacts must start in the field. It is best to keep an artifact in an environment which closely resembles the one in which it was found. When artifacts or fossils have been retrieved from the water, they must be kept wet until further examination can be made. This can be

accomplished placing the artifact in re-sealable polyethylene bags (Ziploc) or sealed plastic containers filled with fresh water. Damp paper towels should not be used to wrap artifacts as they can grow mould if left for too long. Plastic wrap (Saran) can also be used to keep the artifact damp.

Cleaning

Brush off loose sediment, soil, or corrosion under fresh running water. Use a fine stainless steel brush on iron, or a fine brass brush on copper or brass. Care must be taken of not eliminating features, tool marks or some corrosion products that could have remains of the artifact's original surface. Use soft brushes or

toothbrushes for organics or materials that are more fragile.

Note: If artifacts have been removed from brackish water (metals and ceramics specifically) before drying it keep them in a container filled with tap water for a couple of weeks. Change the water every other day to eliminate any salts that may remain in the surface.

Drying

Metal objects, with no attached wooden parts can often be air-dried soon after recovery. Iron artifacts however will begin to corrode if not conserved properly. Methods such as soaking in alkaline solutions or even electrolysis can be performed but it is not recommended if you do not have experience with it.

Organic materials and fossils (bones or teeth) must be slowly dried. Uncontrolled drying may cause the artifacts to suffer irreversible damage such as shrinkage, cracking or delamination.

After cleaning, place the dampened artifact in a sealed plastic bag or container. After a



Johanna Rivera
Conservator

couple of days, puncture the bag or container making small holes. The artifact will slowly dry in this way. Unless treated professionally, waterlogged artifacts such as a wood or leather will shrink and crack. Slow drying could sometimes mitigate this problem, but damage will occur regardless.

Once artifacts are cleaned and dried, they must be kept in a dry environment away from sunlight and heat.

In the next Conservation Corner, find out how to store and display your collection.

Note: When retrieving artifacts, make sure you are up to date with your Hobby Diver License and that you document and report the findings in an appropriate manner.■



A properly conserved rice hook and an improperly conserved hoe

From Gunboat to Garbage Can: The Conservation of a Cannonball *Part 3*

By Ashley Deming, Maritime Archaeologist, SDAMP Manager

The cannonball has now undergone the electrolysis process for 7 months. After the first four months, I removed the ball from the solution, removed any of the active corrosion present and rinsed it thoroughly. I noticed a few soft spots that were a little deeper than I would like. I cleaned them out gently using dental tools to remove all of the soft particulates from the rest of the harder iron. The spots turned out to be more like holes resembling a vampire bite (Figure 1). Each hole was about 1 inch deep toward the center of the ball. I was pretty worried about this, so I gave our cannonball conservation expert Freddie Clark a call. He assured me that this sort of thing happens all the time. Some areas just corrode differently

to others depending on the age, material, and what conditions it was in underwater. Feeling slightly reassured that I hadn't caused this development, I finished cleaning the ball and resetting the wire attachments. I rotated the hose clamp about 45° to expose the areas that were underneath during the previous three months. This must be done each time the solution and attachments are changed out.

There certainly was a lot of corrosion happening to my anode (stainless steel trashcan). It had completely disintegrated due to rusting. The ends of my wires were fried and I had to replace the alligator clips holding everything together at least twice over the first three months of electrolysis.

For some reason, the 26-gallon plastic garbage can we were using for the tank got very soft and sprung a slow leak at the bottom. I had to replace all of these components. I replaced the connections with new copper wiring and steel clips, Carl and I screwed three steel sheets together to create a ring to serve as the new anode, and Freddie Clark donated a 30-gallon plastic drum to our cause (Figure 2). Thanks, Freddie! I changed out the solution for a fresh batch and placed the cannonball back in for another three month treatment.

Over the following three months, the amount of corrosion off the ball significantly decreased. The steel plates held up well as did the clips (Figure 3). This leads me to believe that the iron of the cannonball is becoming more stable. I made sure to check in on the set up at least once a week to make sure all of the wires and clips were still attached and it was still running happily at ½ an amp. Thanks to the new white plastic drum, I could really see the ball in the solution to monitor its progress. The sodium carbonate and water solution should remain clear during the electrolysis process. If at any time



Figure 2
Our new, non-leaking 30-gallon drum

it becomes cloudy, the balance of the chemicals is off and the solution should be changed to correct the problem.

At the end of these three months, the ball was removed from the solution for the third round of cleaning and solution change. There was very little flaking off of corrosion

(Continued on page 10)



Figure 1
Vampire bite soft spots



Figure 3
New steel anode ring and rust build up after a 3-month period of electrolysis

Cannonball *Part 3* (continued from page 9)



Figure 4
New soft spot at 7 months

during this cleaning phase. I first rinsed the ball in fresh water to remove the thin black film that forms on the ball during the process.

I also used a soft toothbrush to remove the white particulate matter that formed as a result of the solution. I continued to use dental tools to gently remove any sloughing pieces of active corrosion.

Unfortunately, I did notice a couple more soft spots similar to the "vampire bites" of the previous cleaning stage. Figure 4 shows the deepest of these spots. The hole extends towards the center of the ball about an inch deep. I did my best to

clean out all the active corrosion. I am still hoping for the best. These relatively small areas are very solid around them, so they may not affect the surrounding iron much more than they already have. When the electrolysis process is complete, we will most likely use a wax solution to fill these holes to protect from any further corrosive activity.

Once the ball was clean, the solution was changed as well as

the copper wire and the clips. The hose clamp was rotated about 45°. I kept the steel plates the same as they still had enough good metal to use. We may have to change these in the middle of the next three months if it looks like we are not getting a good connection any longer... *Read more about the conservation process in the next issue.* ■



Cannonball immediately after brought up



After initially corrosion removed



After 1-month cleaning



After 4-month cleaning



After 7-month cleaning

Hobby Diver of the Quarter

This section of the newsletter is devoted to the hobby diver who goes 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 2011 goes to Bottom Time Scuba Club, LLC. The Bottom Time Scuba Club has always been

strong supporters of our program and invited us up to Florence to present to the club on numerous occasions. We really enjoyed spending time with all of the club members and their enthusiasm for diving, our program, and maritime archaeology in South Carolina. We were very sorry to hear that Bottom Time Scuba Club has recently disbanded. However, that didn't stop them

from supporting our program by donating a brand new digital projector for our education and outreach programs. Their generosity and continued support has been overwhelming. We wish all of the previous members good luck in their diving adventures and hope they stay in touch. Thank you, Bottom Time Scuba! You were truly an inspiration to dive clubs everywhere! ■

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, University of South Carolina.

Ashley Deming- Chief Editor

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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

I would like to thank all of the hobby divers who filed their reports last quarter. We are up to 60%! Although it isn't quite as high as we want it and we have a ways to go, we have made an increase of 10% from the previous quarter. Great work guys and keep it up! If you still need to file your Quarter 2 2011 artifact reports, do it. You can file them online using our easy new online filing system.

That brings me to my next topic. We are asking that everyone please try to

use the online system to file their reports. The system makes it fast and easy for you to file. No more stamps or trying to write in tiny letters to fit it all in. You also don't have to worry about whether or not we got it. Once you click submit, you will see that green banner at the top of your screen letting you know your report has been created. It also helps us to keep better track of who has filed, when, and gives us a quick and easy way to look at your report info all in one place.

We will always

accept reports in the paper form, but we are strongly encouraging you to use the online system. I hope that we will see at least 90% of our reports for Quarter 3 2011 filed using the online system. Let's save paper, stamps, and gas be filing online!

If you have not used the online system before and/or have questions about it, please don't hesitate to contact me and I will walk you through it. Let's work together to preserve South Carolina's past one report at a time!■



**Your SDAMP Staff
Ashley Deming
&
Carl Naylor**

Useful Website Information

For more information on

SDAMP: www.cas.sc.edu/sciaa/mrd/sdamp.html

MRD: www.cas.sc.edu/sciaa/mrd/mrd_index.html

SCIAA: www.cas.sc.edu/sciaa

SCIAA publication *Legacy*: www.cas.sc.edu/sciaa/legacy.html