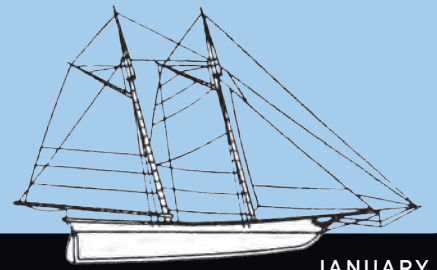


East Carolina University

Stem to Stern

A Newsletter for our Maritime Studies Alumni and Friends



JANUARY
2011
VOLUME 27

PROGRAM IN MARITIME STUDIES | EAST CAROLINA UNIVERSITY | GREENVILLE NC

Maritimes investigate North Carolina's oldest wreck... story on page 15

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Photo: Steve Sullivan



Stem to Stern

... a newsletter of East Carolina University's
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Stem to Stern

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Please visit the ECU Maritime Studies Web site at www.ecu.edu/maritime for additional news and information about the program. A digital copy of this newsletter can be viewed on line at <http://www.ecu.edu/maritime/publications>

ON OUR COVER:

Watercraft recorded in Plymouth, North Carolina, during this year's small boat recording class led by Dr. David Stewart.
Photo: Dan Brown

Inset: Calvin Mires, John Wagner, and John Bright ascend after a dive on *Dixie Arrow* during NOAA's 2010 Battle of the Atlantic Expedition.
Photo: Steve Sellers

2,000 copies of this public document were printed at a cost of \$3,368.06 or \$1.684 per copy. ASC-000924 (11/10)



Read about the journey to Namibia, a desert shipwreck and settlement on page 10.

A jackal guards the remains of *Eduard Bohlen*, one of the sites visited during this summer's research trip to Namibia.

Photo: Tom Horn

From the Editorial Staff:

This year's *Stem to Stern* chronicles a busy and exciting year for ECU's Maritime Studies Program. ECU students, faculty, and staff spent the past year traveling the world, from Africa to Sweden, and to North Carolina's own Outer Banks, pursuing a diverse array of maritime research interests.

During the intervening year, the Program recorded watercraft spanning four centuries, including the oldest surveyed vessel in North Carolina. The Program continued its partnership with *Vasa* museum, completing an ambitious multifaceted recording project. Students and faculty traveled to historic whaling communities and diamond mines in Namibia, and also documented sites in South Africa. The Program investigated watercraft throughout the Carolinas, including remote sensing off the North Carolina coast, small boat recording in Plymouth, North Carolina, and excavation in South Carolina's Pee Dee and Cooper Rivers. Students continued to pursue an impressive variety of thesis research topics. Our conservation lab is as busy as ever, thriving under the tutelage of conservator Susanne Grieve.

Partnerships with State and Federal agencies facilitated cutting edge research and offered students, faculty, and staff opportunities to gain unique field experience. During the past year, the Program incorporated additional campus facilities. Expanding into ECU's West Research Campus, the Maritime Studies Program now has new classroom, office, lab, and storage space.

This past year the Program was represented at scholarly conferences across the nation. The Maritime Studies Association welcomed its upcoming leaders, promising to continue its integral role in fostering and fueling educational opportunities for Maritime Studies students. The fall of 2010 welcomed a large class of incoming students into the Program. Hailing from diverse backgrounds and interests, these newcomers insure the Program will remain a leading Maritime Studies institution as we move into another eventful year. 🐾

— John Bright

I encourage anyone who has read this far to continue. The following pages are filled with the actions and ideas of many people, including the newest cohort comprised of sixteen very eager students. There is not a single person associated with the Program in Maritime Studies that is not entirely devoted to its cause. I cannot help but feel that this is the essential link which has brought us to this time and this place. Please read all that we have accomplished in this past year, and that which we aspire to in this upcoming year. Our spirit is unequivocally contagious. 🐾

— Leland Geletka

From our Director:

Here it is, well into the fall and time to get *Stem to Stern* to press. It seems as if the Maritime Program is expanding; it is certainly going to more distant and more varied locations.

The year began with a welcome trip to SHA in warm, sunny Florida. This time, Florida was neither sunny nor warm. Nevertheless, Maritimers presented numerous papers and were involved with several panels, as symposia discussants and session organizers. The generosity of several exhibitors, especially the University Press of Florida, added to our Ruppé Library holdings with texts specific to several different student projects. We are very grateful to Meredith Babb for providing these resources. University Press of Florida has provided a publishing venue for several maritime works, including Dr. Nathan Richards' work on Ship Graveyards.

A smaller number of Maritimers than usual went to other meetings including the WOAM conference here at ECU, NASOH, and the Triennial Maritime Heritage Conference in Baltimore. We are still suffering from the impact of the banking crisis at all levels. We spent more money than authorized, meaning we spent everything as nothing was swept back up. We are back to operating very close to allowable limits and once again, being asked to do more with less. Bill and Gordon would be proud.

I was lucky because there was a Maritime Conference in Alexandria, Egypt, that proved interesting and was back to back with a Battlefield Conference in Vienna, Austria. The country names are included because both Alexandria and Vienna are towns in Northern Virginia and it might be confusing. Prior to the meeting, I went to see the Pyramids, the Egyptian Museum, and experienced Cairo traffic. Then, in Alexandria, I was in a session with friends from maritime studies programs in Australia and Europe. The trip back was the "dreaded train ride" Mona Russell warned me about. I missed my train and had to ride in the non-seating space between two cars as Allah's gift to the other

20 men who traveled on the cheap. It is fun to talk about now, but wasn't my choice at the time.

The Blue Shield Battlefield Conference in Vienna was a presentation on saving significant cultural materials in war zones. My paper was the outsider view, saying that the armies were creating sites that were also worthy of study, even if they impacted monuments.

The summer 2010 field school on the Outer Banks recorded what might be the oldest ship found in North Carolina waters. The Corolla Wreck drew the most attention and was featured in ECU's alumni Magazine and in Archaeology Magazine thanks to Marion Blackburn. ECU photographer Forest Croce created a masterful portrait of Brad in one view of the wreck. Another had Nat Howe posing as a "project leader" in the background while Katie Cooper and Stephanie Gandulla recorded timbers. This wreck will be Dan Brown's thesis topic.

Dr. Lynn Harris took a Summer Abroad class to South Africa and Namibia at the same time as the *Vasa* project. Bran Mims, of all people, was a hero daring to chase, and then challenge, a jackal about ownership of Susanne's Grieve's hat. The *Vasa* crew set records, both for quantity and accuracy of data collected. That project is winding down although many theses are still being researched.

Work continued at Mars Bluff. In July, the river was fifteen feet lower and the current slower. Many lines laid by the 2009 field school were still there and proved to be a real problem in both navigating the site and hampering movement. They have now been removed. Three or four fence posts are still in place. The IX Dahlgren was reburied and couldn't be seen but the 6.4 inch Brooke was still muzzle up, out of the mud, with about six feet extended toward the surface.

The 7 inch Brooke was the focus of this summer effort. The gun's location was assumed to be under a big magnetic anomaly with the greatest difference between positive and negative readings. That particular area

turned out to have a lot of angle iron on the bottom but not enough to produce the magnetic readings, even when probing revealed a dense lens of iron slag under it. SCIAA went back for a few days in September and still couldn't find it. Joe Beatty did find a new number on the IX Dahlgren ("IX in No 318") and it conflicts with the number on the breech. The saga of this gun continues.

In the September visit, they found the remains of what is probably the CSS *Pee Dee* downstream from Mars Bluff. It is in a very badly shattered condition but fully worthy of a thesis. If the thesis were a comparison between the *Pee Dee* and the Chicod Creek wreck, it would be a significant contribution to Confederate shipbuilding knowledge.

In September the triennial Maritime Heritage conference was held in Baltimore. This meeting gave me the chance to sail about the Liberty ship *John Brown* and tour several other original ships. One ship was the USS *Constellation* where I spent the better part of a day asking questions about how cannon could be jettisoned so as to better understand how the CSS *Pee Dee's* guns could end up in their current positions. The tour provided additional information about the USS *Otsego's* material culture and much food for thought about living history interpretation of ships.

More importantly, the conference allowed alumni, students and faculty to reconnect. Students Stephanie Gandulla, Joyce Steinmetz, and Laurel Seaborne got to meet with alumni Bill Thiessen (1993), Bob Browning (1980), Frank Cantelas (1995), Hans Van Tilberg (1995), and Dave Krop (2008). Students also got to meet with representatives of university presses about publishing theses.

We are still steadily graduating our students and putting them into solid jobs; Eric Ray, Lindsay Smith, and John Wagner come right to mind. As these students left, a new class came in, full of enthusiasm and wide scope research ideas that will soon be narrowed down to something that can be completed in the not so distant future.

continued on page 4...

If you would like to continue receiving Stem to Stern, please send in the enclosed pre-addressed, pre-paid envelope and let us know. All you have to do is insert a card with your name, address, and current professional position. If you want to send a donation to support the program, a specific project, or Stem to Stern, please feel free to do so.

-Thank you

From our Director: continued

There were several changes implemented over the past year for the future. Assistantships are now competitive and used to reward students who do well. In the past, some students on assistantship felt they could slide by but now, students without assistantships are being considered for support at the expense of those who are not doing well academically. The other major change is that there is increased administrative pressure being brought to bear to finish before five years. Those who leave without defending their theses are very much in jeopardy and extensions are no longer routine.

We are filing a request for inclusion so as to be part of the University planning process to have a doctoral program. If the RFI is not done this year, then it will be some five years

before the process can be restarted. In conjunction with the PhD proposal, we are continuing to look for a Maritime campus. One semi-official administrative response was, "Get the land first, then it'll happen." The problem is that without an expanded physical plant, the doctoral proposal is dead in the water. This is not a chicken or egg proposition, they are parallel and integral parts of the program's future.

Dave and Heidi have a new baby girl, Katrina, who arrived 16 August. Fil Ronca and Ryan Harris also have additions to their families.

At Baltimore, Bill Still was talking up a 30th anniversary reunion for NASOH in Norfolk the week after Mother's Day.

A special note of thanks needs to be

included for all those who put checks in the envelopes. The money more than covered the cost of including the envelopes and added a little something to our foundation account. We are very grateful for your support.

A final word. It is my intention to fully retire in June 2012 unless there are problems with the search. This change is being announced now so that students owing me a thesis can finish, the transition will be smooth and an international search made to find a well qualified person as director (administrator) and teacher. If you know of likely candidates, please let me know so we can put them on the list for receiving an announcement when this goes through. ☺

– Larry Babits

Maritimers on the Road: 2010 Conferences

A 30th anniversary reunion of East Carolina University Program in Maritime Studies at North American Society for Oceanic History is tentatively scheduled for Friday night.

HERITAGE CONFERENCE -

Maritime Staff, Students, and Alumni Meet in "Charm City"

From 15–19 September 2010, historians and archaeologists from all over the world met in Baltimore for the Ninth Maritime Heritage Conference. This meeting of maritime minds, held every three years, showcased topics ranging from restoring historic lighthouses to virtually recreating historic vessels.

Presentations focused on the conference theme, *The Maritime Nexus: Reconnecting Landsmen with Their Seagoing Heritage*. Maritime archaeologists explored this concept by relaying intriguing fieldwork data while historians investigated both wartime naval engagements and the role of naval history in education. Museum curators

broadened the program by sharing experiences with exhibit design, fundraising, and social media.

Held in the Hyatt Regency adjacent to Baltimore's Inner Harbor, the conference's workshops and sessions were complemented by evening receptions aboard such noteworthy vessels as USS *Constellation*, SS *John W. Brown*, and USCG Barque *Eagle*. Other highlights included a luncheon with best-selling author and National Maritime Alliance Award winner Clive Cussler and a book launch for *Maritime Maryland - A*

History by Dr. William S. Dudley, noted naval and maritime historian.

ECU's Program in Maritime Studies was well represented, with at least twenty-five Maritimers present. Attendees included first-year students and alumni, with the majority either presenting papers or moderating in sessions.

The National Maritime Historical Society did an excellent job of achieving its mission of "preserving and perpetuating the maritime history of the United States" at the Ninth Maritime Heritage Conference. Keep an eye on www.seahistory.org to make sure you don't miss the tenth! ☺

– Stephanie Gandulla



PHOTO: LARRY BABITS

ECU Students, Faculty, and Alumni attend the Maritime Heritage Conference in Baltimore.

NCMHC CONFERENCE -

ECU Maritimers Travel to New Bern for the North Carolina Maritime History Council Conference

Despite torrential rains and flooding throughout the region, ECU Maritime Studies students attended the North



PHOTO: NAT HOWE

Theresa Hicks presented at the NCMHCC in New Bern, North Carolina.

Carolina Maritime History Council Conference in New Bern, NC, on October 1st and 2nd. Presentations given at the gathering focused on coastal maritime history as well as current preservation projects. Sarah Watkins-Kenny of the QAR lab gave a detailed, hour long presentation covering recent excavations and conservation work on the Beaufort Inlet wreck, believed to be Blackbeard's *Queen Anne's Revenge*. During the next hour, Theresa Hicks of the Program in Maritime Studies presented her thesis research regarding the wreck and wharf structure on the Bowling Farm Site, recorded during the 2009 Fall Field School. Both presentations were impressive, generating significant interest and enthusiasm at the conference and reinforcing ECU's reputation for solid, original research. Numerous prominent figures of the NC maritime history world were also in attendance including host Paul Fontenoy (1995), Richard Lawrence, Joseph Schwarzer, and Dr. William Still—founder of the ECU Program in Maritime Studies. 🐚

- Nat Howe

SHA CONFERENCE - ECU Presence Remains Strong at the Society for Historical Archaeology Conference

The Society for Historical Archaeology held its 43rd annual conference at Amelia Island Plantation, Jacksonville, Florida. Those expecting a welcome respite from

the bitter cold snap hovering over the East Coast were welcomed to a beautiful little island populated with villas and palm trees—and sub freezing temperatures. Though the sound of the waves was alluring, the waters remained untested.

The theme of this year's conference was *Coastal Connections: Integrating Terrestrial and Underwater Archaeology*. With over 900 people in attendance, ECU students, faculty, and alumni made a resounding presence. Joe Hoyt (2008) presented on the HMT *Bedfordshire* and co-presented on the Battle of the Atlantic Expedition, while Dr. James Delgado (1986), NOAA's new Director of the Maritime Heritage Program, gave a presentation on the *Sub Marine Explorer*, a Civil War era sub found on the coast of Panama. Two ECU professors, four students, and one recent graduate all presented at a symposium on Confederate shipbuilding. Topics included a possible blockade-runner, the wooden gunboat program, southern shipyards, ordnance, ironclad construction, and a chief naval architect.

Dr. Larry Babits presented his research on mid-18th century Fort Dobs, North Carolina, along with co-authoring two other Civil War presentations. Dr. Lynn Harris (1988) gave a presentation on Confederate shipyards in the Carolinas, while Peter Campbell (2010) made a presentation on Confederate diamond-hull ironclads. Others included Stephanie Gandula's presentation on the CSS *Pee Dee's* artillery, and Laura-Kate Schnitzer reported on a *Porter*-class gunboat in the Pee Dee River. Jennifer Jones gave a presentation on John L. Porter, one of the chief naval architects

for the Confederacy. Student presentations were not limited to the Civil War symposium. Joyce Steinmetz presented her paper on deep-water shipwrecks and commercial fishing and trawling, while Nat Howe gave a presentation on west coast lumber schooner *Wawona*.

Wherever one turned, ECU affiliates were there, presenting, volunteering at the desks and bookroom, or attending lectures and discussions. Several students comprised what was deemed the most successful volunteer initiative to date. The bookroom was popular as usual; several students took advantage of discount prices to purchase required textbooks, while others found deals in their areas of interest. University Press of Florida generously donated editions to the Ruppé Library in Eller House.

ECU participants enjoyed catching up with old friends, classmates, and colleagues. The conference bar and restaurants were packed, and the opening reception and awards dance were quite popular. ECU students and staff attended a small reception hosted by the assistant director of the Maryland Maritime Archaeology Program and hosted fellow nautical archaeology students from Texas A&M and West Florida University.

The upcoming SHA will be in Austin, Texas, with the theme *Boundaries and Crossroads in Action: Global Perspectives in Historical Archaeology*. Many students and staff plan to present with the intention to continue representing the academic excellence of the Program in Maritime Studies and East Carolina University. 🐚

- Daniel Brown



PHOTO: ROB MIRONO

ECU Students pose for a photo in the hotel room.

Maritimers on the Road: 2010 Conferences continued

AIC AND WOAM CONFERENCES -

Maritimers Attend the American Institute for Conservation (AIC) Conference and the International Council of Museums Conference on Wet Organic Archaeological Material (WOAM)

The 38th Annual Meeting of the American Institute for Conservation (AIC) was held in Milwaukee, WI, in May and was attended for the first time in several years by Maritime Studies students Nicole Wittig and Kate Schnitzer. The AIC is an organization dedicated to preserving historic, artistic, and cultural works. Presentations were organized according to ten sub-groups including architecture, paintings, textiles, books, and photographs. There was also a general session for papers focusing on theory and ethics in conservation. Archaeological materials did not have a dedicated session of their own; consequently, Schnitzer and Wittig sought out papers of particular archaeological interest. ECU conservator Susanne Grieve presented in the Wooden Artifacts Session about treating lignum vitae sheaves from USS *Monitor*. Maritimers listened to presentations on topics including Alaskan waterlogged basketry,

a set of composite tools from a Roman shipwreck, and 3D prototyping of ancient pottery. They also attended the Bruker dinner meeting where they learned about portable XRF, FT-IR, and Raman spectroscopy for conservators. The last event, and one of the most intriguing, was the Archaeological Discussion Group, co-chaired by Susanne Grieve. The primary focus was a discussion on ways to strengthen the relationship between conservators and field archaeologists. As archaeology students studying conservation, Wittig and Schnitzer were pleased to see such a willingness to integrate the two fields for an interdisciplinary approach. It was decided that one of the best ways to reach out to archaeologists was through conferences like the annual meeting of the Society for Historical Archaeology (SHA).

At the end of May, Schnitzer, Wittig, and ECU Public History graduate student Emily Powell volunteered at the International Council of Museums Conference on Wet

Organic Archaeological Material (WOAM). Unlike AIC, the WOAM presentations were completely focused on archaeological material from marine environments, and the papers tended to be more treatment specific than those at AIC. One of the most exciting aspects of WOAM was its location in ECU's backyard. Conservators from around the world gathered in Greenville to discuss *in situ* preservation and reburial, retreatment of previously conserved artifacts, and new analytical techniques. Attendees were able to tour the *Queen Anne's Revenge* Conservation Lab and encouraged to participate in heritage based day trips, such as Pettigrew State Park to see the pre-Columbian dugout canoes in Lake Phelps. May was a busy, informative, and fun month for the conservation students. Schnitzer and Wittig submitted an abstract for a poster which will hopefully be accepted for the 2011 AIC Annual Meeting. 📖

– LK Schnitzer

Phi Alpha Theta History Honor Society

The Phi Alpha Theta History Honor Society held its biennial national convention in San Diego during January 2010. In attendance were undergraduate and graduate students from over 100 American collegiate institutions. Topics ranged the entire spectrum of historical studies, including military, social, and economics. Representing East Carolina's History Department and Program in Maritime Studies, Marshall Lamm presented a paper, *Civil War Amphibious Operations in North Carolina*. East Carolina University was also represented by Maritime Studies alum and University of Alabama PhD. student Monica Ayhens (2009), who gave a paper, *The Storms of Controversy: Naval Medical Advocacy and Venereal Disease in the Late Eighteenth-Century Royal Navy*. The next convention is scheduled for January 2012, in Orlando, Florida. The East Carolina University chapter of Phi Alpha Theta also presented numerous undergraduate and graduate papers at the Carolina's regional convention. The previous convention was held in April 2010 at Coastal Carolina University in Myrtle Beach, South Carolina. East Carolina University will be returning for the 2011 regional convention at Francis Marion University in Florence, SC. 📖

– Marshall Lamm

Theses Defended IN 2010

- Michelle Damian**, "Archaeology Through Art: Japanese Vernacular Craft in Late Edo-Period Woodblock Prints."
- Eric Ray**, "Fire in the Hold: Construction and Use of the 1628 Swedish Warship *Vasa's* Galley."
- Lindsay Smith**, "At the Crossroads: Maritime Systems in Transition and the Elizabeth City Ships' Graveyard, North Carolina."
- Joyce Steinmetz**, "Examining Mid-Atlantic Ocean Shipwrecks and Commercial Fish Trawling & Dredging."
- Matthew Thompson**, "The *Bohemian Girl* Project: A Steam Launch Study."
- John Wagner**, "Waves of Carnage: A Historical, Archaeology, and Geographical Study of the World War II Battle of the Atlantic in North Carolina Waters."

Local Watercraft: Small Boat Recording in Plymouth, North Carolina

During the Spring 2010 semester, six students enrolled in HIST 6885 joined Dr. Dave Stewart in Plymouth, NC, to record vessels housed at the Roanoke River Lighthouse and Maritime Museum. The course was designed to teach students the entire process of small boat recording, from leveling and measuring through final drafting. Working in teams of two, the students were able to completely record three vessels while Dr. Stewart recorded a fourth.

The students began by leveling each boat in such a manner that the backbone structure could be measured as an offset from a level baseline. Measuring off stations set up at intervals from stem to stern, the hull shape was taken by another series of baseline-offset measurements. All these measurements were then combined to produce line drawings.

A second baseline ran parallel with the centerline above the vessel. From this, construction features such as frames and thwarts were recorded. Once each timber's dimension and position was found, a complete construction drawing was made in the drafting lab. The entire process took several weekends of recording in Plymouth, followed by many hours drafting in our new lab at ECU's West Research Campus.

A small flat bottomed fishing boat, two larger sound boats and a Chesapeake Bay skipjack sailboat were recorded. They were



Nat Howe pausing during HIST 6885 Small Boat Recording class in Plymouth, North Carolina.

PHOTO: DAN BROWN

all from the last century and donated to the museum by locals. Many boats in the collection also showed conversion to gasoline power in a regular manner.

The boats recorded were but a small sample of the many vessels housed at the museum. This should provide ample opportunity for maritime students to learn small boat recording in the future.

Special thanks go to Harry Thompson and the helpful staff at the Port O' Plymouth Museum. 🙏

– Jeff O'Neill



Saxon Bisbee taking measurements along the stern of a vessel.



Will Schilling taking offset measurements with a folding rule.

PHOTO: NAT HOWE

PHOTO: DAN BROWN

Maritime Studies Association: 2010 and Onward

The Maritime Studies Association (MSA) thrived in the 2009-2010 academic year with continued support from the Graduate & Professional Student Senate. During the spring semester, MSA members traveled to St. Augustine, Florida, for the annual Society for Historical Archaeology Conference. MSA once again held the Seabiscuits & Bitters Social, hosted by Dr. Stewart. The event featured traditional maritime food and beverages, a raffle made possible by the generosity of local businesses, live music, and games such as bobbing for rats! MSA members also participated in museum tours, workshops, and numerous public outreach events. The academic year culminated in the annual Blackout Training Social and MSA officer elections. During the Fall of 2010, MSA hosted the annual Welcome Aboard Party for the incoming first year students.

MSA compiled and defended an annual budget for the forthcoming year; something not accomplished in several years. These funds will aid travel to conferences, organization activities, and supplies.

In addition to administrative planning, MSA organized several activities for its student members. The first was a field trip to the conservation lab at the Mariners' Museum in Newport News, Virginia. David

Krop (2008) treated MSA members to a behind the scenes look at the conservation of materials from USS *Monitor*. MSA also organized a workshop led by Kurt Knoerl (1994) of the Museum of Underwater Archaeology in the application of Adobe Photoshop for archaeologists. Lastly, MSA members planned and participated in six public outreach events. During the course of the year, MSA officers and members visited children ages 5-15 at science fairs, open houses, and classrooms.

Following the annual Blackout Training Social, MSA held officer elections and new officers took the reigns for the 2010-2011 year. Serving to represent and support the Maritime Studies Association during the 2010-2011 year are:

President: Dan Brown

Vice President: Katie Cooper

Treasurer: Danny Bera

Assistant Treasurer: Jeff O'Neill

Secretary: Nat Howe

These officers hope to increase MSA membership, build upon funding groundwork laid last year, as well as extend public outreach to classrooms around and beyond the Greenville area. MSA also expects to bring in guest speakers and continue supplying students, faculty, and staff with program apparel. There are plans

for workshops in Photoshop, Rhino, and various other software systems. Some exciting trips have been planned. These include travel to Washington, DC, to visit the Library of Congress and the National Archives. MSA intends to fund more students who plan on presenting at conferences, representing some of the best academics ECU has to offer.

Students can look forward to another rollicking Halloween Social, and perhaps even a Holiday Social in December. Sea Biscuits and Bitters will take place in the spring, along with the annual Blackout Training Social. There are plans to get MSA involved in the Freeboot Fridays this Fall, the Pirate Fest in the Spring, and the annual spring Wooden Boat Show in Beaufort, North Carolina. Plans to overhaul the MSA website are underway. It is the vision of this year's officers to highlight the excellent work of the Program in Maritime Studies by representing at conferences, conducting public outreach, and community involvement. The program is one of three in the nation that produces nautical archaeologists, something about which Greenville and ECU can be proud. It is our intention to stir up some of that pride and excitement, and have some fun along the way. 🍀

– Nicole Wittig and Daniel Brown

ShipIndex.org - Offering Access to ECU Students, Faculty, Staff, and Alumni



Peter McCracken (1998) and his brother Mike have started <http://ShipIndex.org>, a website that helps researchers locate information

about specific vessels. Over 140,000 citations are freely available, and the premium database contains over 1.38 million citations (and growing) from over 200 different books, journals, CD-ROMs, databases,

online resources, and more. Individuals can find illustrations or passenger and crew lists, and can also be notified when new citations are added for the ships of interest to them. Between links to free online resources and links to print resources in Google Books, nearly 85% of the citations link to the resource they mention.

The site offers both institutional and individual subscriptions to the premium database. East Carolina was among the earliest institutional subscribers to ShipIndex.org, and as such, current ECU students can access this valuable tool. Other universities,

maritime museums, and public libraries are subscribing to the service. Individuals can also subscribe; ECU alums without institutional access can use the coupon code "ECUALUM" to receive a discount when subscribing. The discount is valid through May 31, 2011, and the discount remains in effect for as long as an individual continues subscribing to the site. Mike and Peter were two of the four founders of Serials Solutions, a library services company that is now used by thousands of public and academic libraries around the world, including ECU. 🍀

– Peter McCracken (1998)

2010 ECU's Partnership with NOAA's Battle of the Atlantic Expedition Continues

NOAA's ongoing Battle of the Atlantic (BOA) Expedition completed its third year of fieldwork during the summer of 2010. Year one focused on documenting three German U-boats lost off the North Carolina coast. Year two made national headlines documenting Allied casualty HMT *Bedfordshire* and conducting a remote sensing survey culminating in the discovery of patrol craft YP-389. The third year continued research on Allied casualties, visiting merchant vessels *E.M. Clark*, *Manuela*, *Empire Gem*, *Dixie Arrow*, and US Navy Tug *Keshena*.

NOAA's *Monitor* National Marine Sanctuary maintained partnerships with East Carolina University, University of North Carolina's Coastal Studies Institute, NOAA's National Center for Coastal Ocean Science, Cooperative Institute for Ocean Exploration, Research & Technology/University of North Carolina at Wilmington, Bureau of Ocean Energy Management, Regulation and Enforcement, and Renaissance Computing Institute.

The 2010 BOA fieldwork was comprised of two separate components. In the first, NOAA divers worked with divers from Cooperative Institute for Ocean Exploration, Research & Technology and University of North Carolina at Wilmington, completing technical diving surveys on *E.M. Clark*, *Manuela*, and *Empire Gem*. Sites were documented by means of photographic and video surveys. The first



PHOTO: STEVE SELLERS

Coastal Studies Institute's John McCord videos Allied vessel remains during NOAA's 2010 Battle of the Atlantic Expedition.

phase of the Battle of the Atlantic Project concluded with a visit to USS *Monitor*.

During phase two, ECU faculty Nathan Richards, Calvin Mires (2005), Steve Sellers and student John Bright joined the project to assist with mapping *Dixie Arrow* and US Navy Tug *Keshena*. UNC Coastal Studies Institute researchers John McCord and Dave Sybert completed high definition filming on each site, while scientists from NOAA's National Center for Coastal Ocean Science conducted biological assessments.

Dixie Arrow was an unescorted tanker traveling in the vicinity of Cape Hatteras when, on the afternoon of 26 March 1942, two torpedoes from *U-71* struck the tanker's starboard side. Eleven of *Dixie Arrow's* officers and crew perished in the attack, with 22 survivors rescued by USS *Tarbell*. The site rests in 100 feet of water with bow, boiler, engine, and stern sections intact. *Dixie Arrow* is also teeming with marine life, including schooling fish and large sand tiger sharks.

Nearly two months after *U-71* sank *Dixie Arrow*, allied convoy KS-520 was attacked by *U-576*. On 15 July 1942, the damaged *U-576* was en route to Europe when it encountered the merchant convoy. Instead

of fleeing, the U-boat released a full bow salvo at merchant vessels *Bluefields*, *Chilore*, and *J.A. Mowinckel*. *Bluefields* immediately sunk, while *Chilore* and *J.A. Mowinckel* were partially damaged. Merchant vessel *Unicoi*, also in KS-520, returned fire, reportedly ramming the German submarine. Two aerial depth charges released by Kingfisher aircraft sealed the fate of *U-576*, sinking the submarine with all hands lost.

In the aftermath of the convey battle, US Navy tug *Keshena* was dispatched to assist the damaged merchant vessels around the Hatteras minefield and back to Norfolk. During the voyage, however, *Keshena* strayed into the minefield, hit a mine and sank. *Keshena* remains an impressive archaeological site in 90 feet of water. Abounding with marine life, many vessel features remain intact including bow machinery, boilers, condensers, and steering gear at the vessel's stern.

Looking forward to 2011, NOAA's Battle of the Atlantic Expedition plans to continue its partnership with ECU and the Program in Maritime Studies, offering faculty and students opportunities to participate in cutting edge research. 🐟

—John Bright



PHOTO: STEVE SELLERS

ECU's Calvin Mires records the remains of US Navy Tug *Keshena* during NOAA's 2010 Battle of the Atlantic Expedition.

Namibia, Summer 2010

During July and August 2010, Dr. Lynn Harris, Susanne Grieve, Kate Schnitzer, Brown Mims, Jennifer Jones, Tom Horn, and University of Toronto Master's student Elaine Wyatt journeyed to Namibia, Africa, in order to study a desert shipwreck and settlement. Students experienced maritime cultural heritage in a unique and dynamic desert environment while exploring selected historic sites including shipwrecks, whaling communities, and diamond mines.

The project focused on recording two wooden surfboats and *Eduard Bohlen*, an iconic symbol of the country's renowned Skeleton Coast. The surfboats were found at Meob Bay; students studied their possible connection to whaling or diamond mining industries. Namibia's once illustrious whaling industry and its long diamond mining occupation provided the historical backdrop for the maritime cultural landscape. Students visited whale graveyards and mapped the Grillenberger diamond mining camp, examining building architecture and surrounding rubbish piles.

Students used basic surveying techniques to document boat and ship construction, while examining the dynamics of desert site formation processes affecting heritage preservation. Sample materials were taken from the vessels and the field survey produced scaled site maps. The 99 meter long *Eduard Bohlen*, an early 20th century iron freighter, presented quite a challenge after recording the smaller surfboats. While recording the vessels, students compared present site conditions to those of previous



Group shot at *Eduard Bohlen* (left to right) Brown Mims, Susanne Grieve, Walter, Tom Horn, Kate Schnitzer, Dr. Lynn Harris, Elaine Wyatt, and Jennifer Jones.

PHOTO: LARRY ROUTLEDGE

expeditions, estimating the extent of material deterioration.

Members of the Windhoek Underwater Club joined ECU's summer abroad participants on the expedition, assisting in research, recording, drafting, and artifact recovery. Together, students participated in lectures to the Windhoek Underwater Club and Namibian Scientific Council. Presentations detailed experiences, interests, and expertise of the Program in Maritime Studies at East Carolina, highlighting conservation, GIS applications, survey methods, and specific site studies.

Though academically demanding, the project also featured many lighthearted moments. The Namibian field project included traversing sand dunes in a harnessed buggy,

camping with amenities, eating kudu jerky and antelope stew, dipping into the cold African Atlantic, warding off curious jackals, and connecting with Namibian participants who provided expert knowledge of the country's history, heritage, environment, and politics. Connections made with members of the Windhoek Underwater Club promoted future collaboration with ECU's Program in Maritime Studies.

Special thanks to those who made this wonderful experience possible for ECU students, faculty, and staff. The project participants would like to acknowledge Theo Schoeman, Susan Martens, and Gunter and Julia von Schumann for their preparations and support.

— Jennifer Jones



Susanne Grieve and Elaine Wyatt take measurements of *Eduard Bohlen*, while Kate Schnitzer and Tom Horn tackle the stern.



Brown Mims and Tom Horn take measurements on *Eduard Bohlen*.

PHOTOS: JENNIFER E. JONES

Man the Gundeck! ECU Returns to VASA

This summer ten hardy ECU Maritime Studies students stepped forward to ‘man the gundeck’ of the royal Swedish warship, *Vasa*. The detailed 3D mapping of the legendary warship, lost in Stockholm harbor on its maiden voyage in 1628 and raised in 1961, is still underway and *Vasa* Museum called upon ECU once again to get the job done. This summer’s project was the third field project ECU Maritime Studies students have conducted onboard the ship, continuing a partnership that has been in motion since 2007. This year’s focus was the upper gundeck and the officers’ cabins.

In three short weeks, the ECU team generated hundreds of detailed drawings, took thousands of hand measurements, and recorded 10,848 data points with tripod-mounted Total Station survey units. In the process, the students learned volumes about integrating high-tech and low-tech recording methods and data management on large-scale projects, while also getting an unparalleled chance to study first-hand 17th century Northern European ship construction.

Better still, the project was directed by Dr. Fred Hocker, an excellent instructor and one of the foremost experts in the fields of nautical archaeology and ship construction. Dr. Hocker is the head of research for *Vasa* Museum and is responsible for organizing all archaeological and historical research on the ship. In 2007, Hocker and ECU’s Dr. David Stewart established a partnership between the two institutions and brought five ECU students to Stockholm to record *Vasa*’s beakhead and figurehead. ECU returned with another team of students in the summer of 2009 to record the lower gundeck, where 28 of *Vasa*’s 24-pounder cannon were once positioned. This year Hocker and Stewart expanded the scope of the project to capture an entire gundeck and the ornate officers’ cabins in the towering stern castle. To assist Hocker, veterans of past ECU-*Vasa* projects Nathaniel Howe and Lindsay Smith returned to serve as crew chiefs.

After an initial orientation to the ship, crawling through every deck and cabin onboard the enormous vessel, the students were divided into two recording teams. One team recorded the port side of the gundeck while the other worked on starboard. Each

cabins and continued the process of detailed mapping, consistently accurate to less than 2mm. As the work wrapped up ahead of schedule, a team was sent into the poop cabin—the smallest and highest compartment in the stern castle—to record it, though it was not originally considered feasible as part of the 2010 project. This kind of productivity has been the hallmark of ECU’s work on *Vasa* and has given the maritime studies program a fantastic reputation with the staff and administration in Stockholm.

During the three weeks in Stockholm, accommodations were provided by the museum aboard the 1915 icebreaker *Sankt Erik* and the 1941 minesweeper *M20*. Both vessels are docked at the pier in front of the museum right in the heart of Stockholm harbor. For students of maritime history, better housing could not be imagined. Evenings were spent sitting on the fantail of the icebreaker watching a remarkable range of historic yachts and workboats of every type and description scurry past the skyline of the old city (the full range extended from a Norwegian fishing skiff with a squaresail to a jet-turbine powered missile

continued on page 16...



ECU crew poses with Dr. Fred Hocker aboard *Vasa*.

team was broken down into sub-teams operating the Total Station unit, taking hand measurements, or doing detail draw-

*“This kind of productivity has been the hallmark of ECU’s work on *Vasa*...”*

ings. This was nautical archaeology on an industrial scale!—and given the size and complexity of the ship, it was absolutely necessary. As tasks were checked off, extra hands were formed into a third Total Station sub-team, greatly accelerating the recording work and paving the way for the *Vasa* Museum all-time record of nearly 11,000 hand-picked data points in a single project.

During the third week on site, the recording crews moved into the officers’ cabins and the steerage compartment, arranged on two decks in the narrow stern castle aft. Each team took a pair of



The Swedish Warship *Vasa*.

On the Job -

Maritime Archaeology in Thunder Bay National Marine Sanctuary

Thunder Bay National Marine Sanctuary (TBNMS) lies nestled in the northwest corner of Lake Huron. NOAA's thirteenth of fourteen National Marine Sanctuaries, TBNMS encompasses 448 square miles, and is the only fresh water Sanctuary. It is estimated that some 200 shipwrecks are in the sanctuary, representing over 100 years of Great Lakes maritime history and ship construction. As a recipient of a Cooperative Institute for Limnology and Ecosystems Research (CILER) Fellowship, I spent three summer months working towards the sanctuary's goals of research, education, and resource preservation with a talented group of archaeologists, historians, and outreach specialists.

The Great Lakes Maritime Heritage Center, located in Alpena, Michigan, is the heart of the Sanctuary and features interactive exhibits, a shipwreck artifact gallery, and scientific research facilities. The Center also houses the State of Michigan's conservation lab, the repository for the state's maritime and underwater artifacts. With approximately 60,000 annual visitors, the Great Lakes Maritime Heritage Center is significantly increasing public awareness of Great Lakes maritime heritage resources.

Thunder Bay is a lively place in the summer and there is always something happening; whether it is the popular Fourth of July Maritime Festival, live broadcasts from shipwrecks, or cutting edge autonomous underwater vehicle (AUV) research. With this perpetual activity, I was able to participate in a number of different areas of maritime heritage. Outreach activities took me all over northern Michigan to libraries, festivals, and other local events. At each location, I was part of a small team that presented information about NOAA's sanctuary system and particulars about Thunder Bay. Other outreach excursions included leading snorkeling tours of near shore wrecks for youth and adult groups, and assisting with guided tours and interpretation at the Heritage Center. One outreach project I spearheaded was the sanctuary's e-newsletter, *Thunderstruck*. This new publication describes educational and research projects and involves the community, both local and global, by encouraging interested parties to volunteer, track projects, and take actions to improve their

own maritime environment.

Mooring buoys are one more important component of community outreach at Thunder Bay and I assisted in deploying a number of them on local wrecks. These buoys provide easier access to shipwrecks and encourage kayakers, snorkelers, and divers to visit and learn about their maritime heritage. With a diverse ecosystem that includes both biological and cultural resources, TBNMS enjoys opportunities to host various field research projects. I participated topside in the exciting "Live Dive" from the shipwreck *Montana* (1914). This was an interactive broadcast that involved TBNMS divers communicating with viewers all over the world from 65 feet below the waves of Lake Huron.

Tasked with protecting resources, TBNMS also engages in regular reconnaissance fieldwork. Michigan State Archaeologist Wayne Lusardi (1998) and I were deployed on *Nordmeer*, a German oil freighter that ran aground in 1966, to investigate a reported oil leak. We discovered the source and reported its location to the U.S. Coast Guard, showcasing positive, interagency relationships.

Exhibit design was another aspect of my time at Thunder Bay. I co-designed a traveling exhibit about *Pewabic* (1865), one of the most tragic shipwrecks in the history of Thunder Bay, and one that well illustrates Great Lakes' maritime heritage. In the shipwreck artifact gallery, I began the process of elaborating interpretation and improving labels and signage. Finally, I designed and developed a mobile education cart for the Heritage Center's exhibit space.

With such diverse work experiences, the CILER Fellowship in Maritime Archaeology was an excellent complement to two years in ECU's Program in Maritime Studies. I was able to put to use many learned concepts and truly understand firsthand the value of our maritime cultural resources.

Visit Thunder Bay National Marine Sanctuary:

<http://thunderbay.noaa.gov/>

[http://www.facebook.com/](http://www.facebook.com/ThunderBayShipwrecks)

ThunderBayShipwrecks 

— Stephanie Gandulla



PHOTO: TANE CASEBLY

A diver examines the boiler of Thunder Bay wreck *Montana*.



PHOTO: RPM NAUTICAL FOUNDATION

Archaeology Around the World

Opportunities to visit world class sites are rare, but the author was recently given the chance to work on several over the course of a few months. Hired as a visiting research scholar at the Clemson Conservation Center, I helped employ state of the art equipment to document the famous Confederate submarine *HL Hunley*. When this position ended, I headed to the southern coast of Greece to work on the oldest known underwater city near the small island of Pavlopetri.

University of Nottingham's Dr. Jon Henderson and the Greek Ephorate of Underwater Antiquities, Elias Spondylis, directed the second field season documenting this exceptional city. Dating to the Late Neolithic and early Bronze Age, the city sank below the waves about the time of the Trojan War. This early sinking date is significant, since later civilizations' building and development never disturbed the city's original streets or foundations. Sophisticated technology, some still under development, was used to document the stone foundations in minute detail.

The author then traveled to Albania to work with the Albanian National Trust, the Albanian Institute of Archaeology, and RPM Nautical Foundation, who are surveying the country's entire coastline. The former communist government outlawed scuba equipment, so the project's divers are the first individuals to explore Albania's submerged cultural resources. The rocky coastline is littered with wrecks dating from the 5th century BCE through the Second World War. RPM Nautical Foundation, a 501(c)(3) nonprofit under George Robb and Dr. Jeff Royal, brought state of the art equipment to the survey, such as research vessel *Hercules*, multibeam, and an ROV for deepwater wrecks. As I departed for the United States, RPM Nautical Foundation was on its way to Sicily, where they discovered their second bronze warship ram.

In the United States, the author surveyed several midwestern caves as part of an ongoing long term research project with the 501(c)(3) nonprofit Cave Archaeology Investigation and Research Network (CAIRN). Caves represent some of the most

extreme and difficult, but potentially very rewarding, sites for archaeologists. Despite the personal risks of cave diving, preservation in caves can be phenomenal, especially for organic artifacts. Archaeologists have only examined a handful of the springs, sinkholes, cave lakes, siphons, and sumps located in North America, many of which were significant as prehistoric and historic ritual areas and water sources.

As head of CAIRN's underwater unit, I focused my research on watercraft and ritual use, such as one Missouri cave containing six to twelve canoes, located deep in the cave's "dark zone." Several vessels proved to be catamarans, a Native American vessel type that had never been seen before. The calm, cold cave lake environment protected the vessels in a way that dynamic river and marine environments normally cannot. Opportunities to work on sites of international significance are rare on their own, let alone several over a couple months. The author has been fortunate and hopes to continue working with each group in the future. 🐬

– Peter Campbell (2009)

Summer Field School 2010

The Shipwrecks of the Outer Banks

Broken hulls, splintered masts, and cargo littering isolated beaches of the Eastern United States were ubiquitous sights prior to the 20th century. For millennia, a sailor's only recourse in case of disaster lay with the solemn duty of his fellow seamen to provide assistance. While wrecks upon the high seas often meant imminent death, the prospect of wrecking upon a deserted shoreline held little hope of rescue. The shifting shoals and barrier islands of North Carolina's Outer Banks epitomized the dangers of an unpredictable and isolated shoreline. Since vessels first starting plying these waters, the coast of North Carolina has become the final resting place for many vessels, earning its nickname: the Graveyard of the Atlantic. During the



Students examine the remains of a vessel at the Nags Head Town Complex.

summer of 2010, this same coastline was the site of the Program in Maritime Studies Summer Field School.

Between 22 May and 23 June 2010, nine East Carolina University students traveled to North Carolina's Outer Banks to participate in the Program's annual training. The project, titled *The Shipwrecks of the Outer Banks*, was led by Dr. Nathan Richards and Dr. Brad Rodgers (1985), with additional support from staff archaeologist Calvin Mires (2005) and ECU's Dive Safety Officer Mark Keusenkothen. Made possible through generous contributions from both the National Oceanic and Atmospheric Administration (NOAA) and the University of North Carolina's Coastal Studies Institute (UNC CSI), this project included the survey and recording of multiple wreck sites in the vicinity of Oregon Inlet, North Carolina.

Goals of the 2010 summer field school were three-fold. Research work centered on both beached wrecks and submerged site recording. The third goal was participation in daily public outreach events. Due to the dynamic environment of the Outer Banks, this tripartite approach established a field work contingency should inclement conditions occur at any one site. This organizational structure also provided students an opportunity to develop a skill set for working with both submerged and terrestrial sites while directly conveying a research product to the community.

A total of nine sites, five submerged and four terrestrial, were documented during the field school. Of the submerged sites, detailed site plans were completed for *Oriental* (1862) and *Strathairly* (1891). UNC CSI provided assistance with on site photography and filming, heavily utilized at public outreach events and posted on their website (<http://csi.northcarolina.edu/>). Students became intimately familiar with conducting underwater searches, recording, and remote sensing.

Students also had an opportunity to develop their skills ashore as they excavated and recorded the remains of both identified and unidentified beached vessels. The most high profile work involved documenting the remains of what has been dubbed "the Corolla wreck." This site washed ashore



Stephen Dilk digs sand at the O'Keefe site.



Dr. Nathan Richards maps the bow of *Oriental*.

near Corolla, NC, in December 2009 and quickly generated a large amount of enthusiasm amongst locals. The vessel, potentially the oldest found in North Carolina, was removed from the beach to prevent its destruction. After conducting extensive documentation through photography, digital recording, and hand drawings, the vessel was moved to the Graveyard of the Atlantic Museum in Hatteras, NC, for future display.

While fieldwork was being conducted, some students participated in outreach events, directly involving the public in our work along the coast. On each terrestrial site, an information booth was established for beachgoers to visit and watch the students work. Several more formal lectures were held to present results of our fieldwork to interested members of the public. Talks were held at the North Carolina Aquarium at Roanoke Island, the Jockey's Ridge State Park in Nags Head, and the Graveyard of the Atlantic Museum in Hatteras.

By the project's conclusion, students produced more than twenty detailed sketches including site plans and isometric drawings. Data from this field school will be utilized in several potential theses that will further research on North Carolina's coast. Without the generosity and support from NOAA's *Monitor* National Marine Sanctuary, UNC's Coastal Studies Institute, Roanoke Island Festival Park, and the Outer Banks Dive Center, the summer 2010 field school would not have been such a resounding success. 🙏

— Joshua Marano

Ship Wrecks and Alligators

ECU Fall Field School in Charleston, South Carolina

To begin the 2010 fall semester, nine students from East Carolina University's Program in Maritime Studies sallied forth to take on the annual Fall Field School. Led by Dr. Lynn Harris, Dr. David Stewart, Dive Safety Officer Mark Keusenkothen, and Director of Conservation Suzanne Grieve, these intrepid scholars traveled to South Carolina to record four different vessels; two underwater and two on land.

On August 30th, the faculty, students, and staff left Greenville and arrived at scenic Rice Hope Plantation Inn on the Cooper River in Monck's Corner, South Carolina. This plantation, dating back to 1696, was a base of operations for the entirety of the project, and offered a picturesque view of Cooper River. A nearby landing provided ready access to the river and the two underwater sites.

The next day work began in earnest. After negotiating the extreme tidal changes along that stretch of river, the crew arrived 500 meters up river at the first site of the project: the Strawberry Wreck. Named for the nearby Strawberry Ferry landing site, the Strawberry Wreck was a purported Revolutionary War shipwreck. On the Cooper River, local legend has it that Colonel Wade Hampton and a small contingent of local militia attacked and defeated a much larger group of British soldiers, burning as many as four British boats along the way.

South Carolina Institute of Anthropology and Archaeology (SCIAA) had completed previous work on the Strawberry Wreck, in which they recovered ship's guns, leading many to believe Strawberry was a gunboat. The lead sheathing of the vessel still showed evidence of a British "Broad Arrow" stamp which also points to British supply or repair at some point in its career afloat.

After tagging the frames and separating the wreck into several more manageable sections, the students utilized several different methods of data collection such as baseline offsets, trilateration, and goniometer measurements to create a detailed site plan, construction drawings, and cross sections of the vessel. As a result of these examinations, it was discovered that there are numerous areas

of charring on the frames and deck planking pointing to fire as a possible contributing factor to the vessel's fate.

The second week of Fall Field School brought the crew to Charleston, South Carolina, for land-based small boat recording. The crew enjoyed the hospitality of Pepe and Cindy Hernandez of Mt. Pleasant, who graciously opened up their lovely home to us.

The crew was split into two separate teams under the supervision of Dr. Harris



USS *Clamagore* at Patriot's Point, Charleston, South Carolina.

and Dr. Stewart. Dr. Stewart's team recorded *Bessie*, a plantation boat on display at the Charleston Museum. Dr. Harris's team recorded *Accommodation*, a plantation boat on display at National Historic Landmark Middleton Place Plantation. Throughout the week, both teams diligently worked to record their respective craft using both high-tech and low-tech methods.

Both *Bessie* and *Accommodation* are excellent examples of 19th century vernacular craft that would have been utilized in transporting people and goods between plantations and markets on the waterways of South Carolina. Both had evident repairs and alterations that would have been made to extend the working life of the boats, both of which were used well into the 20th century.

During the third and final week of fieldwork, the crew returned to Rice Hope Plantation and the Cooper River. The fourth vessel the crew investigated was the Pimlico Wreck, 500 meters farther up river from the Strawberry site. This sailing vessel

was large and presumably intended for off-shore operations.

The focus of work on the Pimlico was to dredge and record the buried port side of the wreck. Due to the size of the wreck, conditions on site, and remaining project time, it was decided to uncover only certain diagnostic areas of the vessel and record any structural elements thus viewable. Students recorded information on framing patterns and dimensions, drawings of two mast steps, construction features along the keelson, as well as artistic site plans to supplement the previous plans generated by SCIAA.

All of the crew's work on the Cooper River would not have been complete without a little interaction with the local wildlife. Alligators were a fairly common sight on the river and, at times, took an interest in the archaeologists. On several occasions, divers were recalled because of too much interest shown by the alligators. The crew was also privileged to see two 12 foot alligators caught during the brief South Carolina alligator hunting season. They were even able to view the entire hunting process for one of the 12-foot behemoths.

The end of 2010 Fall Field School brought all the crew back to Greenville safe and sound with a plethora of data. The future of this body of work is very bright as it provides the possibility of theses, conference papers, journal articles and presentations; all the product of hard work by the faculty, staff and students of the Program in Maritime Studies. 🌿

– Danny Bera



Dr. Dave Stewart guides students recording the plantation vessel *Bessie*.



Joshua Marano operates a total station during the 2010 *Vasa* recording project.

PHOTO: NAT HOWE

torpedo boat). The students also absorbed a bit of Swedish culture with a few of our hosts from the museum. They encountered such traditions as pickled herring, jumping and shouting during the World Cup (even though Sweden wasn't playing), and best of all, *bastu*—the Swedish sauna that rejuvenated the recording teams at the end of each day spent crouching on *Vasa's* hard, oak decking. Admittedly, as far as nautical archaeology projects go it cannot be said that life in Stockholm was rough by any standard, but the *bastu* was not to be missed.

For ECU students, our partnership with *Vasa* Museum is an incredibly valuable educational opportunity. The ship alone is an utterly unparalleled teaching tool—an

entire intact 17th century double gundeck warship that is 95% original timber. Yet, beyond the ship, working at *Vasa* Museum is also an opportunity to work with and learn from some of the most skilled and accomplished nautical archaeologists in the field. The chance to meet and talk to people like Dr. Hocker and the numerous other world-renowned scholars who routinely call at *Vasa* Museum is beyond measure. Although the *bastu* has hardly cooled down since the ECU team left Stockholm, excitement is already building on both sides of the Atlantic over the next ECU-*Vasa* Museum project and planning for *Vasa* 2011 is already well underway. 📖

– Nathaniel Howe

Current Thesis Activity Corolla Wreck - A 17th Century Mystery

During the 2010 Summer Field School, no wreck stirred up more media interest than the Corolla Wreck. Then located in Corolla, North Carolina, media met ECU Maritime students during their recording of the wreck. When the wreck first appeared near Duck in 2008, the NC Underwater Archaeology Branch (UAB) tagged the hull remains. The vessel reappeared several times throughout 2009. Its intertidal vanishing act continued, and in early 2010 concerned citizens contacted the State of North Carolina, believing the wreck possibly dated to the early 17th century. This would make it one of the oldest shipwrecks on the Eastern Seaboard of the United States, and the oldest wreck surveyed in North Carolina.

Unsatisfied with state efforts, local citizens took matters into their own hands and towed the wreck from the intertidal zone to preserve what remained of the hull. The ECU Program in Maritime Studies was contacted by the state and the wreck became the first site studied during the field school led by Dr. Nathan Richards and Dr. Brad Rodgers (1985).

Initial investigations revealed a 35 ft. by 17 ft. section of hull, comprised of 10 frames, outer hull planking, and forward scantling presumed to be an apron. Photo documentation of the wreck before it was towed ashore revealed ceiling planking and the disarticulated "apron" still present, along with a forward section of the keel and the hull remains.



PHOTO: NAT HOWE

Daniel Brown takes measurements of the Corolla Wreck.

During ECU's recording of the wreck, the keel section washed ashore near Oregon Inlet and was transported to the Graveyard of the Atlantic Museum in Hatteras. Under the direction of Dr. Brad Rodgers, students

recorded the hull remains, created scaled drawings of the scantlings and a site map. Many of the wreck's features suggested it was a Western European vessel from the 1600s. While some features suggested English construction, others indicate their contemporary rivals, the Dutch, may have built it.

In July 2010, the Department of

Transportation, in conjunction with the Graveyard of the Atlantic Museum and the UAB, transported the wreck on a flatbed truck to Hatteras. The wreck now resides at the Graveyard of the Atlantic Museum, pending an addition to house this unique find. Daniel Brown, a second year graduate student in the Maritime Program, will tackle the plethora of questions surrounding this mysterious wreck and its appearance

on the Outer Banks. Questions include the hull's construction, dendrochronology, vessel size and tonnage, its use and origin, and site formation. 📖

– Daniel Brown

Eagles Island Ship's Graveyard

Home to a variety of industries since the 1700s, Eagles Island housed a significant portion of the infrastructure powering many Wilmington enterprises including the naval stores industry, turpentine stills, cotton compresses, shipyards, towing, ship-breaking, marine railways, railroads, and an Army Corps of Engineers yard. These commercial activities, and many others, marked a major transshipment point through which commodities were imported and exported.

Eagles Island is important to North Carolina history because it is a repository of archaeological information on economic and technological change within both Wilmington and the Atlantic maritime system. The prosperity of Eagles Island has always been tied to the maritime prominence of Wilmington. As the city's importance waned, Eagles Island decayed with it. Once a bustling area, Eagles Island succumbed to

overgrowth and vegetation. Only by investigating the industrial remains on the island can we fully understand the systemic relationship between Eagles Island, Wilmington, and the greater Atlantic maritime community.

To date, ECU Maritime Studies students have spent two weekends surveying Eagles Island, both land and adjacent waters. Students in Dr. Richards' Basic Field Methods class investigated terrestrial property parcels and cataloged visible archaeological remains. Students from Dr. Richards' Advanced Field Methods class conducted magnetometer and side-scan sonar surveys of the Brunswick and Cape Fear rivers surrounding the island.



Joshua Marano measures a vessel in the Cape Fear River's inter tidal zone at Eagles Island, North Carolina.

Maritime Studies student Rob Minford stepped forward to process and analyze the resulting data set. With it, Rob hopes to answer questions regarding the social, economic, and technological processes at the center of Eagles Island's rise and subsequent decline. 🐟

– Rob Minford

The Spatial Analysis of Weather and Coastal Communities

The state of North Carolina has had a long history of intense weather events physically, economically, and socially affecting the coastline and interior. Severe weather events left their physical signatures on the coastal environment of North Carolina, and in turn affected shifts in economic and social aspects of the coastal communities throughout the state. Jennifer Jones plans to study the long-term impacts of natural disasters on settlement patterns, social systems, local economic viability, and resource exploitation, and the explanation of loss versus survivability in different communities. In relation to these questions, Jennifer will seek to find spatial patterns associated with natural disaster impacts, as well as archaeological evidence of the disasters and their consequences. The methodology for this project combines historical research and archaeological investigations into historic weather events and their physical impacts on North Carolina's coastal communities. This will be achieved by building on available data sets accounting for environmental changes, and the cultural data regarding the historical tracking of known weather events, wreck and land site surveys, and geographical and environmental data. 🐟

– Jennifer Jones

ECU Maritimers Receive Awards

Stem to Stern is proud to share the news of the following awards:

STUDENT AWARDS:

| | |
|--|----------------------------|
| SCEP Internship at The National Park Service Submerged Resources Center; Denver, Colorado | John Bright |
| Richard C. Todd Scholarship | Baylus Brooks |
| Cooperative Institute for Limnology and Ecosystems Research, Thunder Bay National Marine Sanctuary; Alpena, Michigan | Stephanie Gandulla |
| Bodo Nischan Memorial Scholarship in History | Stephanie Gandulla |
| Thomas W. Rivers Scholarship | Stephanie Gandulla |
| Research Internship at the Foundation for Coast Guard History; Washington, DC | Rob Minford |
| Conservation Internship at Country Doctor Museum; Bailey, North Carolina | Whitney Rose Minger |
| Museum Internship at The Museum of America and the Sea, Mystic Seaport; Mystic, Connecticut | Emily Powell |
| Conservation Internship at the Institute of Nautical Archaeology; Bodrum, Turkey | Nicole Wittig |

The MSA apparel order form is no longer available through Stem to Stern. We do know, however, that everyone needs Program in Maritime Studies apparel! Please visit the Program's website <http://www.ecu.edu/maritime/> or call 252-328-6097 for ordering information.

Virginia

In 1937, the Smithsonian's Historic American Merchant Marine survey recorded schooner *Virginia* in Florida. They measured the cypress keel and frames, drew the sails, and produced the only set of plans for the historic ship. Flash-forward to 2010, *Virginia* is once again the focus of survey efforts. My thesis focuses on comparison of data produced via total station and light detection and ranging (LIDAR). The data from these systems will be integrated into 3-D models and developed into virtual plans of *Virginia*.

Total station and LIDAR differ in how data is collected. Total stations record the angle and distance to a point. LIDAR gathers point information from scattered light using laser pulses. The output of each survey will be quantitatively different. A total station survey garners between 1,000 and 2,000 points while LIDAR captures literally millions of data points. Thus, a station model will resemble the outline of the vessel while

LIDAR draws an entire picture.

The application of data gathered will be twofold. First, models will serve as a virtual representation of the vessel's current state. Such information will make possible an analysis of ship construction details and distinguish between what I am loosely calling "old" ship parts (1865-1930's) and "new" components (1930's-present). Ascertaining these details will inform the staff of the Civil War Naval Museum, the institution managing the vessel, in their efforts to restore the schooner to its 1865 form. Any elements requiring removal during restoration can first be tested virtually. In this way I hope to model restoration procedures before they are physically performed.

I will present the culmination of this

year's surveys at the Society for Historical Archaeology's annual conference in January. This presentation will build upon my paper from last year's conference covering the issues of restoring a historic ship that has been modified from its original form. All of this would not be possible without the contributions of others. I would like to take this opportunity to thank several individuals. Stephanie Gandulla and Valerie Rissel for the preliminary total station survey in March 2010, Dr. Fred Hocker whose instruction on the *Vasa* project clarified the ship recording process, Dr. Thad Wasklewicz from ECU's Geography Department for volunteering his time and LIDAR equipment, and Bruce Smith, executive director, and Jeffery Seymour, curator, of the Civil War Naval Museum. 🙏

– Nicole Wittig



PHOTO: VALERIE RISSEL

Stephanie Gandulla operating the total station nestled inside the cozy interior of the *Virginia*.

Battlefield Analysis of the North Carolina Coast during the Second World War

After America's entry into the Second World War in December of 1941, German U-Boats stalked and attacked merchant vessels off the United State's coast with astonishing success. Due to North Carolina's coastal geography and its strategic position along east coast shipping lanes, it naturally became a focal point for Germany's merchant raiding. Since 2008, NOAA's *Monitor* National Marine Sanctuary has orchestrated a major state and federal partnership

to conduct annual summer fieldwork off the North Carolina coast, documenting both Allied and Axis casualties. John Wagner's 2010 thesis "Waves of Carnage: A Historical, Archaeological, and Geographic Study of the World War II Battle of the Atlantic in North Carolina Waters," utilized this data to recreate the battle in a GIS. Wagner was able to delineate the battle's boundaries and centers of action throughout the conflict.

On 14 July 1942, Allied convoy KS-520 left Norfolk, Virginia for its destination in Key West, Florida. KS-520 was comprised of 19 merchant vessels and five military escort vessels. Nearly 36 hours after departure, on the evening of 15 July, the convoy was rocked by the explosion of four torpedoes from German *U-576*. Three merchant vessels, *Bluefields*, *J.A. Mowinkel*, and *Chilore* were struck within a matter of minutes. The convoy's military escorts, in concert with two Kingfisher aircraft, unleashed depth charge attacks on the presumed position of the enemy submarine; *U-576* was never seen

again. In subsequent days, attempts were made to rescue the crews of the torpedoed merchant craft, while their damaged hulks were towed through the dangerous waters of the Hatteras minefield.

In the summer of 2010, East Carolina University's Dr. Nathan Richards (Maritime Studies) and Dr. Tom Allen (Geography) were awarded a Department of the Interior American Battlefield Protection Program grant to document the KS-520 convoy battle. Working with the state and federal partnerships established by NOAA's *Monitor* National Marine Sanctuary and building on the spatial data analysis started by John Wagner, this thesis seeks to adapt the terrestrial battlefield survey techniques utilized by the Department of the Interior to a naval engagement. Using KS-520 as a case study, it is hoped the survey protocols developed will enable the historical and archaeological documentation of American naval battlefields, thus making America's naval history accessible to the public in much the same way as terrestrial Revolutionary War and Civil War sites. 🙏

– John Bright



PHOTO: UNC COASTAL STUDIES INSTITUTE
John Bright records the stern of US Navy tug *Keshena*, lost off the North Carolina Coast during the Battle of the Atlantic in the Second World War. UNC Coastal Studies Institute's John McCord films.

Ahoy Mates! Welcome to ECU. Ahoy Mates!

New MA Students in the Maritime Studies Program

Charles Bowdoin is originally from Georgia and earned a bachelor's degree from Eastern Michigan University. After graduating, he spent four years traveling the Midwest and Southeast as an archaeological technician where he realized he would prefer to study maritime archaeology with a particular interest in Nelson's Navy.

Baylus Brooks has been constantly redefining his existence. He despises convention. Education was the key to tearing apart the old and introducing the new. Born in Fayetteville, NC, he transferred to Florida as a teen and let St. Augustine develop the brine in his pirate blood! Recently returning to the Old North State, he naturally drifted eastward to Greenville and ECU. There he flourished, finding his niche. He interests are colonial North Carolina, unconventional writing, planting a pirate flag firmly in the state, and striving to break down old barriers to history.

Erin Burnette was raised in a military family and lived overseas most of her life. She lived in England, Germany, Utah, North Carolina, South Carolina, and Virginia. Living overseas spawned her interest in all things history and archaeology. She now lives in Goode, VA. She did her undergraduate work at Coastal Carolina University where she received a BS in Marine Science with a minor in art history. While there she specialized in genetics. Her interests include artifact conservation and British history. Eventually, she would like to teach either history or marine science at a university level.

David Buttarro is a native of Derry, New Hampshire. He completed a BS in history with a minor in digital communications at Clarkson University, Potsdam, NY, in 2009. He is pursuing a particular interest in Civil War naval actions, and the influence of sea power through trade and war. An Eagle Scout since 2005, he enjoys camping, fishing, reading, video games, and war games of all description.

Robin Croskery is a Greenville, NC, native. She recently graduated magna cum laude from ECU with a BA in Anthropology. She has previous archaeological experience working at the Squire's Ridge Site, a relic sand dune containing prehistoric remains in Edgecombe County, North Carolina. She is interested in 16th-19th century British naval warfare and maritime trade including topics such as the British East India Company.

Leland Geletka is from Indiana, PA. It was here that he attended IUP and eventually earned a BA in Economics and Anthropology/Archaeology. He spent a year in Dortmund, Germany, adding to the lengthy time of his undergraduate experience, and it all turned out well in the end. He spent the last few years in the hot, cold, dirty, prehistoric, muddy,



First year students pose outside Eller House: (Back, L to R) Leland Geletka, Angus McKellar, Tom Horn, David Buttarro. (Front, L to R) Jana Otte, Samantha Halstead, Nicole Silverblatt, Laurel Seaborn, Erin Burnette, Chelsea Hauck, Robin Croskery, Baylus Brooks. Not pictured: Charles Bowdoin, Roger Russell, Stephen Sanchagrin, Lindsay Scott.

PHOTO: LARRY BAHRIS

grumpy, resourceful, invigorating, difficult, historic, enjoyable, wild, friendly, educational world of CRM where he was a part of all phases of investigation in the Great Basin, Eastern Woodlands, and Northern Plains.

Samantha Halstead recently graduated from Washington University in St. Louis with a BA in Anthropology and Environmental Studies, but she originally hails from the Great Lakes region. She has been on terrestrial archaeological digs in Peru, Belize, and Mississippi, but has always longed for the sea. She is interested in Caribbean trade, piracy, and ship construction. She knits in her (non-existent) spare time.

Chelsea Hauck grew up in Mystic, CT, and graduated from Goucher College in 2010 with a BA in Peace Studies. She twice had the opportunity to study abroad; in Roatan, Honduras, for Tropical Marine Biology and in Siena, Italy, for a service learning experience. Chelsea has volunteered as a docent at Mystic Aquarium and Institute for Exploration since 2004. In 2006 her hard work at the MAIFE paid off when she was granted the position of Student Host in Dr. Robert Ballard's Expedition to Santorini. Chelsea speaks Italian and loves playing soccer.

Tom Horn is originally from Los Angeles, California. He received his BA in Anthropology from the University of Hawai'i at Manoa. He participated in archaeological field schools all over the world. His research interests include Pacific and African maritime archaeology and the advancement

of the underwater sciences. Outside his new home in Greenville, you can find him in the surf, diving, backpacking, or fishing.

Angus McKellar hails from Chapel Hill, North Carolina. He served on the aircraft carrier *Harry S. Truman* as a Machinist's Mate and afterward attended UNC-Greensboro where he majored in history. He served in the Peace Corps in Honduras, where he first learned to dive. He is an avid reader and enjoys working out.

Jana Otte was born and raised in Wheeling, WV, and graduated from West Liberty State College with a BA in Social Studies Education. She moved to Pittsburgh, PA, where she spent the next four years working at the Carnegie Science Center in downtown Pittsburgh as an educator and a supervisor. She takes part in 18th century maritime living history and reenactment events along the east coast as well as being an avid reader of historical non-fiction. She is interested in the Atlantic coasts of the United States and France during the 18th century, with particular focus on piracy and privateering.

Roger Russell was born and raised near New Bern, North Carolina. He earned his BA in History in 1994 and for a short time taught US History and Civics at Washington High School in Beaufort County. In 2000, Russell earned a masters degree in Library Science from North Carolina Central University and began working at the Laupus Health Sciences Library at ECU. His interest in North

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New MA Students

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Carolina history and love of the ocean have persisted and he hopes to study coastal and barrier island whaling/fishing settlements in NC. He is also interested in WWII history and the role of New Bern and the Neuse River. He lives in Vanceboro and enjoys spending time with his son and daughter as well as doing anything outdoors.

Stephen Sanchagrin was born and raised in rural western North Carolina. His love for all things maritime started as a young child hearing stories of his grandfather's adventures sailing the Great Lakes as well as watching *Victory at Sea*. He graduated from ECU with a BS in Applied Geography, and minored in Coastal and Marine Studies. Stephen's interest in maritime archeology grew as he participated in the 2006 summer field school and completed an internship with the Program in Maritime Studies. His research interests include GIS in maritime archaeology and Great Lakes bulk shipping. In his free time Stephen enjoys a variety of outdoor activities including backpacking, surfing, snowboarding, and traveling; all of which he does with his supportive wife and two dogs.

Lindsay Scott was born and raised in Fort Smith, Arkansas. She graduated from the University of Arkansas in 2009 with a Marketing/Management degree from the Walton College of Business. Lindsay spent time working as a Resident Assistant for the University of AR, Marketing Director for Rouse Jewelry, Lifeguard for an Air National Guard Base, PADI Divemaster for both the University of AR and Ocean Impact Scuba Shop, and a brief stint as a Marketing Assistant for an international materials company.

Laurel Seaborn grew up aboard a fifty-foot ketch on the west coast of British Columbia, Canada. After earning a BEEd at University of Victoria, she soon ditched teaching, (except as a sailing instructor) and ran away to sea. Since then, she worked her way up from deckhand to bosun to first mate and eventually, captain aboard sailing vessels and tall ships. Her training from Old Salts included how to tie tremendous knots, climb rigging, drink dark rum without snorting, and tell tall tales. From captaining charter sailboats in Nicaragua to sailing for Hollywood movies on a full-rigged ship in the Mediterranean, she kept her focus on boats that float ... until now. She wants to follow in the wake of Anne Bonney and Mary Read, or at least holiday in Jamaica sometime soon.

Nicole Silverblatt is from Scottsdale, AZ. She received a BA in history from Arizona State University in 2003 and an MAEd in secondary education in 2006. Nicole spent the next four years teaching high school social studies to at-risk students at the Scottsdale district alternative school (think *Dangerous Minds*, but with more drugs and less violence). Her current research interests include 20th century naval warfare and naval aviation. In her free time, Nicole enjoys reading, watching cheesy eighties movies, hiking, and traveling. 🐾



Photo: Nat Howe

Stephen Dilk prepares for a dive on *Oriental*, a 19th century merchant vessel. In the background, the steam cylinder of *Oriental* extends above the surface of the waters off Pea Island, North Carolina.

STUDENT PUBLICATIONS

Duryea, Scott

2010 William Pitt, the Bank of England, and the 1797 Suspension of Specie Payments: Central Bank War Finance During the Napoleonic Wars. *Libertarian Papers* 2:1-17.

Gandulla, Stephanie

2010a Maritime Links from a Pee Dee River, South Carolina Archaeological Site. *Proceedings from Ninth Maritime Heritage Conference*. Baltimore, MD.

2010b Review of *Fatal Journey: The Final Expedition of Henry Hudson*, Peter C. Mancall. *The Nautilus: A Maritime Journal of Literature, History and Culture*.

Ratcliffe, John

2010a Review of *Beneath the Inland Seas: Michigan's Underwater Archaeological Heritage*, John R. Halsey and Wayne R. Lusardi. *Historical Archaeology* 44(4):153-54.

2010b Review of *Captain Cook's War and Peace: The Royal Navy Years 1755-1768*, John Robson. *Nautical Research Journal* 55(3):188-89.

Steinmetz, Joyce

2010 Miss Betty J: An Archaeological and Historical Investigation of a North Carolina Commercial Fishing Vessel. *Nautical Research Journal* 55(3):161-176.

Where are our Maritimers now?

Where are our Maritimers now? - 2011

A

- James Allan, (1987) PhD** – Lecturer, St Mary's College of California, Moraga, CA; Vice President, William Self Associates, Orinda, CA
- Evguenia Anichtchenko (2004)** – Curator of History Education, Anchorage Museum of History and Art, Anchorage, AK
- Ray Ashley, (1996) PhD** – Executive Director, San Diego Maritime Museum and Professor of Public History, University of California at San Diego, CA
- Paul Avery (1998)** – Auckland War Memorial Museum, Auckland, New Zealand
- Monica Ayhens (2009)** – PhD student, University of Alabama, Tuscaloosa, AL

B

- David Baumer (1991)** – Virginia Beach, VA
- Dina Bazzill (2007)** – Principal Investigator, Environmental Corporation of America, Alpharetta, GA
- David Beard (1989)** – Executive Director, Boyertown Museum of Historic Vehicles, Boyertown, PA
- Sam Belcher (2002)** – Medical Technologist (ASCP), Laboratory Supervisor, Central Baptist Hospital; PhD student, University of Kentucky, Lexington, KY
- Kathryn Bequette (1992)** – Director, Maritime Archaeology and Research, OELS, Westminster, CO; consultant with Denver Ocean Journey Aquarium
- Jemison Beshears (2001)** – Antique firearms specialist, Greg Martin Auctions, San Francisco, CA
- Jacob Betz (2004)** – PhD candidate, Department of History, University of Chicago, IL
- Samuel Blake (2006)** – Archaeologist, Southeastern Archaeological Research, Inc., Jackson, NC
- Matthew Brenckle (2004)** – Research Coordinator, USS *Constitution* Museum, Charlestown, MA
- Robert Browning (1980) PhD** – Historian, United States Coast Guard, Washington, DC
- Darryl Byrd (1998)** – Linthicum Heights, MD

C

- Peter Campbell (2009)** – Underwater Archaeologist, CAIRN, St. Louis, MO
- Frank Cantelas (1995)** – Maritime Archaeology Program Officer, NOAA Office of Ocean Exploration and Research, Silver Spring, MD
- Jodi Carpenter (2007)** – Environmental/Historical Preservation Specialist, FEMA, Gaithersburg, MD
- Chris Cartellone (2003)** – PhD student, Texas A & M, College Station, TX
- Tane Casserley (2005)** – Maritime Archaeologist, NOAA's Maritime Heritage Program, Alpena, MI
- Joe Cato (2003)** – Raleigh, NC
- Robert Church (2001)** – Senior Marine Archaeologist, C & C Technologies Survey Services, Inc., Lafayette, LA
- Brian T. Clayton (2005)** – MA student, Department of Geography, East Carolina University, Greenville, NC
- Wendy Coble (1998)** – Historian, J2 Intelligence Directorate, Joint Personnel Accounting Command, Hickam AFB, HI
- Patrick Cole (1993)** – Writer, Barcelona, Spain

- Edwin Combs (1996) PhD** – Assistant Professor, Miles College, Starkville, MS
- Michael Coogan (1996)** – Manager, Strategic Planning, Northrop Grumman IT, Herndon, VA
- David Cooper (1998)** – Branch Chief, Cultural Resources, Apostle Island National Lakeshore, Bayfield, WI
- Diane Cooper (1995)** – Consultant, San Francisco Maritime National Historic Park, San Francisco, CA
- Annalies Corbin (1995) PhD** – Executive Director, PAST Foundation, Columbus, OH
- Lee Cox (1985)** – Director, Dolan Research, Inc., Newtown Square, PA

D

- Michelle Damian (2010)** – PhD student, University of Southern California, Los Angeles, CA
- Claire Dappert (2005) PhD** –
- James P. Delgado (1986)** – Director, Maritime Heritage Program, NOAA, Washington, DC
- Alena Derby (2002)** – Lake Worth, FL
- Robert Dickens (1998)** – DVM, Cary, NC
- Jeff DiPrizito (2001)** – High School teacher, Hudson, NH
- Brian Diveley (2008)** – Senior Archaeologist, CH2M HILL, Seattle, WA
- Tricia Dodds (2009)** –
- Wade Dudley (1998) PhD** – Teaching Associate Professor, Department of History, East Carolina University, Greenville, NC
- Stan Duncan (1994)** – Regional Sales Consultant, NUS Consulting Group, Inc., Oak Ridge, TN

E

- Scott Emory (2000)** – Cockeysville, MD
- Jeff Enright (1999)** – Maritime Principal Investigator/GIS Specialist, Southeastern Archaeological Research, Inc., North Gulf Coast Office, Pensacola, FL
- Jenna (Watts) Enright (2000)** – Nautical Archaeologist, PBS&J, Austin, TX
- Rita Folse Elliott (1988)** – Curator of Exhibits and Archaeologist, Coastal Heritage Society, Savannah, GA

F

- Kim (Eslinger) Faulk (2005)** – Marine Archaeologist, Geoscience Earth and Marine Services, Houston, TX
- Sabrina S. Faber (1996)** – Regional Programs Consultant, AMIDEAST, Sana, Yemen
- Patrick Fleming (1998)** – Raleigh, NC
- Richard Fontanez, MD (2001)** – Contract Archaeologist, Director of Instituto de Investigaciones Costaneras, and Hyperbaric Medicine Facilities, Medical Center, Puerto Rico
- Paul Fontenoy (1995) PhD** – Curator of Maritime Research and Technology, NC Maritime Museum, Beaufort, NC
- Chris E. Fonvielle, Jr. (1989) PhD** – Associate Professor, UNC-Wilmington, Wilmington, NC
- Kevin Foster (1991)** – Chief, National Maritime Heritage Program, Washington, DC
- Joe Friday (1988)** – Sergeant, Greenville Police Department, Greenville, NC
- Adam Friedman (2008)** – PhD student, University of North Carolina, Chapel Hill, NC

- Don Froning (2007)** – Marine Corps Forces Pacific, Camp H. M. Smith, HI

G

- Veronica Garrett (2008)** – Streetlight Records, Santa Cruz, CA
- Kate Goodall (2003)** – Assistant Director for Institutional Advancement, American Association of Museums, Washington, DC
- Amy (Rubenstein) Gottschamer (1995)** – Real estate broker, Santa Fe, NM, and Lawrence, KS
- Jeff Gray (1998)** – Superintendent, NOAA Thunder Bay National Marine Sanctuary, Alpena, MI
- Joe Greeley (2000)** – Site supervisor for the Maryland Dove, St Mary's City, MD
- Cathy (Fach) Green (2003)** – Special Projects Coordinator, NOAA Thunder Bay National Marine Sanctuary, Alpena, MI
- Russ Green (2002)** – Assistant Superintendent, NOAA Thunder Bay National Marine Sanctuary, Alpena, MI
- Jeffrey Groszkowski (2007)** – Fallston, MD

H

- Richard Haiduven (2003)** – Contract Archaeologist, Miami, FL
- Wesley K. Hall (1993)** – Director, Mid-Atlantic Technology, Wilmington, NC
- Stephen Hammack (2007)** – Archaeologist, Robins AFB, Warner Robins, GA
- Lynn B. Harris (1988) PhD** – Assistant Professor, Maritime Studies, East Carolina University, Greenville, NC
- Margaret Harris (2004)** – Education Program Director, San Francisco Maritime National Historical Park, San Francisco, CA
- Ryan Harris (2006)** – Nautical Archaeologist, Parks Canada, Ottawa, Ontario, Canada
- Heather Hatch (2006)** – PhD student, Texas A&M University, College Station, TX
- Robert Holcombe (1993)** – Retired, Naval Historian and Curator, Port Columbus Civil War Naval Center, Columbus, GA
- Joshua Howard (2004)** – Research Historian, Office of Archives and History, Raleigh, NC
- Joseph Hoyt (2008)** – Maritime Archaeologist, NOAA National Marine Sanctuaries, Newport News, VA
- Michael D. Hughes (2003)** – Project Manager, SAIC, Washington, DC

J

- Claude V. Jackson (1991)** – Museum Curator, St. Louis, MO
- Tiffany (Pecoraro) James (2007)** – Environmental Services Director, Magnum Energy, Salt Lake City, UT
- Brian Jaeschke (2003)** – Registrar, Mackinac Island State Historic Parks, Mackinac Island, MI
- John O. Jensen (1992) PhD** – Lecturer in Maritime History, Sea Education Association, Woods Hole, MA
- Doug Jones (2007)** – Nautical Archaeologist, PBS&J, Austin, TX
- Rick Jones (1996)** – Building Contractor, Palmyra, VA

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Where are our Maritimers now? continued from page 21

K

- John Kennington (1995)** – Assistant Director of Operations, BuzzCard Center, Georgia Institute of Technology, Atlanta, GA
- Kurt Knoerl (1994)** – Managing Director, The Museum of Underwater Archaeology; PhD student, George Mason University, Fairfax, VA
- Mike Krivor (1998)** – Maritime Project Manager/Principal Investigator, Southeastern Archaeological Research, Inc., Pensacola, FL
- David Krop (2008)** – Conservation Project Manager, USS *Monitor*, Mariners' Museum, Newport News, VA

L

- Danielle LaFleur (2003)** – Collections and Technology Manager, Lakeshore Museum Center, Muskegon, MI
- Matthew Lawrence (2003)** – Maritime Archaeologist, Stellwagen Bank National Marine Sanctuary, Scituate, MA
- Adam Lehman (2006)** – Whitsett, NC
- Jason Lowris (2000)** –
- Wayne Lusardi (1998)** – Michigan State Maritime Archaeologist, Thunder Bay National Marine Sanctuary, Alpena, MI

M

- Coral Magnusson (1993)** – Archaeological Research Institute, Honolulu, HI
- Richard Mannesto (1993)** – Great Lakes Shipwreck Historical Society, Sault Ste. Marie, MI
- Eleftheria Mantzouka (2004)** – Underwater Archaeologist, Athens, Greece.
- Tom Marcinko (2000)** – South Carolina Department of Natural Resources, Charleston, SC
- Amy Jo (Knowles) Marshall (1996)** – Curator, Wrangell-St. Elias National Park & Preserve, Copper Center, AK
- Timothy Marshall (1999)** – Zone Archaeologist, Tongass National Forest, Craig, AK
- Deborah Marx (2002)** – Maritime Archaeologist, Stellwagen Bank National Marine Sanctuary, Scituate, MA
- Roderick Mather, (1990) PhD** – Associate Professor, Department of Archaeological Oceanography, University of Rhode Island, Kingston, RI
- Christopher McCabe (2007)** – Deputy State Archaeologist, Georgia DNR, Coastal Underwater Archaeology Field Station, Savannah, GA
- Peter McCracken (1999)** – Co-Founder and Director, ShipIndex.org, Trumansburg, NY
- Phillip H. McGuinn (2000)** – Deputy Public Affairs Officer, U.S. Submarine Forces, Norfolk, VA; Naval Reserve Captain, U.S. Northern Command, Colorado Springs, CO
- Salvatore Mercogliano (1998) PhD** – Assistant Professor of History, Campbell University, Buies Creek, NC
- Ann Merriman (1996) PhD** – Nautical Archaeologist, Maritime Historian, Administrative Director, and Co-Founder, Maritime Heritage Minnesota, St. Paul, MN
- Keith Meverden (2005)** – Underwater Archaeologist, State Historical Society of Wisconsin, Madison, WI

- David Miller (2005)** – Instructor, Craven Community College, Havelock, NC
- Calvin Mires (2005)** – Staff Archaeologist and PhD student, East Carolina University, Greenville, NC
- Amy Mitchell-Cook (1994) PhD** – Assistant Professor, University of West Florida, Pensacola, FL
- Kimberly E. Monk (2003)** – PhD student, Bristol University, England
- David Moore (1989)** – Curator of Nautical Archaeology, North Carolina Maritime Museum, Beaufort, NC
- James Moore (2003)** – PhD student, University of Rhode Island, Kingston, RI
- Scott Moore (1992) PhD** – Associate Professor and Chair, Department of History, Indiana University of Pennsylvania, Indiana, PA
- Shawn Holland Moore (1998)** – Community Partner Coordinator, ECU Volunteer and Service-Learning Center, Greenville, NC
- Stuart Morgan (1985)** – Public Information Director, South Carolina Association of Counties, Columbia, SC
- Jeff Morris (2000)** – Owner/Senior Scientist, Azulmar Research, LLC and Geomar Research, LLC, Port Republic, MD
- John W. (Billy Ray) Morris (1991)** – Owner and Director, South Eastern Archaeological Services, Inc., St. Augustine, FL

N

- Adrienne (Askins) Neidinger (2000)** –
- Sam Newell (1987)** – Public school teacher, Greenville, NC
- Kevin Nichols (2002)** – Intelligence Research Specialist, Department of the Army; PhD student, Wayne State University, Detroit, MI

O

- Chris Olson (1997)** – Nautical Archaeologist, Maritime Historian, Operations Director, and Co-Founder, Maritime Heritage Minnesota, St. Paul, MN
- Deirdre O'Regan (2001)** – Editor, SEA HISTORY; Vice President National Maritime Historical Society, Pocasset, MA

P

- Jason Paling (2003)** – PhD student, Department of Anthropology, State University at Albany, Albany, NY
- Harry Pecorelli III (2003)** – Sub-Oceanic Technologies, Inc., Charleston, SC
- Martin Peebles (1996)** – Archaeological Illustrator, St. Petersburg, FL
- Jacqueline Piero (2004)** – “enjoying life,” Newark, DE
- Andrew Pietruszka (2005)** – PhD student, Syracuse University, Syracuse, NY
- Mike Plakos (2003)** – Senior Technical Analyst, U.S. Navy, Washington, DC
- Larkin Post (2007)** – Gartley & Dorsky Engineering & Surveying, Camden, ME
- Sarah Milstead Post (2007)** – Program Manager, Maine Coast Heritage Trust, Rockport, ME
- Darren Poupore (2004)** – Chief Curator, Biltmore Estates, Asheville, NC

- Edward Prados (1993)** – Country Director AMIDEAST, Sana, Yemen
- Franklin Price (2006)** – Senior Archaeologist, Florida Bureau of Archaeological Research, Tallahassee, FL

R

- Eric Ray (2009)** – *La Belle* researcher, Corpus Christi Museum of Science and History, Corpus Christi, TX
- James R. Reedy, Jr. (1987)** – Contract Archaeologist, Beaufort, NC
- Phillip Reid (1998)** – Consultant, Wilmington, NC
- William A. Robie, Jr. (1993)** – Atlantic Beach, NC
- Todd Robinson (1998)** – History Department Instructor and Head Soccer Coach, James Island Charter High School, Charleston, SC
- Bradley Rodgers (1985) PhD** – Professor, Program in Maritime Studies, East Carolina University, Greenville, NC
- Jason Rogers (2004) PhD** – Archaeologist, Cultural Resource Consultants; Alaska Maritima, Anchorage, AK
- Filippo Ronca (2006)** – Nautical Archaeologist, Parks Canada, Ottawa, Ontario, Canada
- Matthew Russell (1995)** – Submerged Resources Center, National Park Service, Denver, CO; PhD student, UC Berkeley, CA

S

- John Schaefer (1994)** – Schoolteacher, Washington, NC; PhD student, UNC Chapel Hill
- James Schmidt (1991)** – Nautical Archaeologist, Naval Historical Center, Washington, DC
- Robert Schneller (1986) PhD** – Historian, Naval Historical Center, Washington DC
- Ralph Lee Scott (1979)** – Professor, Curator of Printed Books and Maps, Joyner Library, East Carolina University, Greenville, NC
- Sami Seeb (2007)** – Submerged Resources Center, National Park Service, Denver, CO
- Joshua Smith (1997) PhD** – U.S. Merchant Marine Academy, Kings Point, NY
- Lindsay Smith (2010)** –
- Jon Travis Snyder (2006)** – MFA student, ECU Program in Wood Design, Greenville, NC
- Chris Southerly (2003)** – Chief Archaeologist & Diving Supervisor, NC Underwater Archaeology Branch, Kure Beach, NC
- Kathy A.W. Southerly (2006)** – Assistant Dive Safety Officer, NC Aquarium at Fort Fisher, Kure Beach, NC
- James Spirek (1993)** – Underwater Archaeologist, SC Institute of Archaeology & Anthropology, Columbia, SC
- Joyce Steinmetz (2010)** – PhD student, Coastal Resource Management, East Carolina University, Greenville, NC

T

- Bruce Terrell (1988)** – Chief Historian and Maritime Archaeologist, NOAA National Marine Sanctuary Program, Silver Spring, MD
- William H. Thiesen (1993) PhD** – Atlantic Area Historian, United States Coast Guard, Portsmouth, VA

Matthew Thompson (2010) – Nautical Archaeologist, Greenville, NC

Bradley D. Thorson (1982) –

Hans Van Tilburg (1995) PhD – Maritime Heritage Coordinator, NOAA National Marine Sanctuary Program Pacific Islands Region, HI

Ray Tubby (2000) – Nautical Archaeologist, PBS&J, Austin, TX

Lex Turner (1999) – Psychiatric Nurse Practitioner - ECU Physicians, Greenville, NC

Kenneth Tyndall (1988) – New Bern, NC

V

Christopher Valvano (2007) – PhD student, Michigan State University, Lansing, MI

W

John Wagner (2010) – Maritime Archaeologist, NOAA Office of National Marine Sanctuaries, Silver Spring, MD

Daniel Warren (1998) – Senior Marine Archaeologist and Houston Asst. Geosciences Manager, C & C Technologies Survey Services, Inc. Houston Office, Houston, TX

Sarah Waters (1999) – Education Coordinator, Thunder Bay National Marine Sanctuary, Alpena, MI

Gordon P. Watts (1975) PhD – Retired from ECU 2001; Director, Tidewater Atlantic Research and International Institute of Maritime Archaeology, Washington, NC

Andrew Weir (2007) – Cultural Resources Group, Jackson, MI

Wilson West (1985) PhD – Ministry of Citizenship and Immigration, Province of Ontario, Toronto, Canada

Robert Westrick (2001) – Marine Archaeologist, C & C Technologies Survey Services, Inc., Lafayette, LA

David Whipple (1993) – Alexandria, VA

Heather White (2004) – Director of Education & Outreach, Emerge Gallery & Art Center, Greenville, NC

Scott Whitesides (2003) – Archaeologist/Curator, Golden Spike National Historic Site, Brigham City, UT

Elizabeth Whitfield (2005) – “living life to the fullest and loving it,” Lakewood, CO

Kimberly Williams (2000) – History Professor, Hillsborough Community College, Tampa, FL

Stephen Williams (2004) – Program and Finance Manager, Netstar-1, Inc., Chestertown, MD

Sarah Wolfe (2001) – Exhibit Registrar, George Washington’s Mount Vernon, Mount Vernon, VA

Steve Workman (2002) PhD – Director of Admissions and Assistant Professor, Virginia Tech Carilion School of Medicine, Roanoke, VA

Y

Wilson York (2007) – PhD student, Emory University, Atlanta, GA



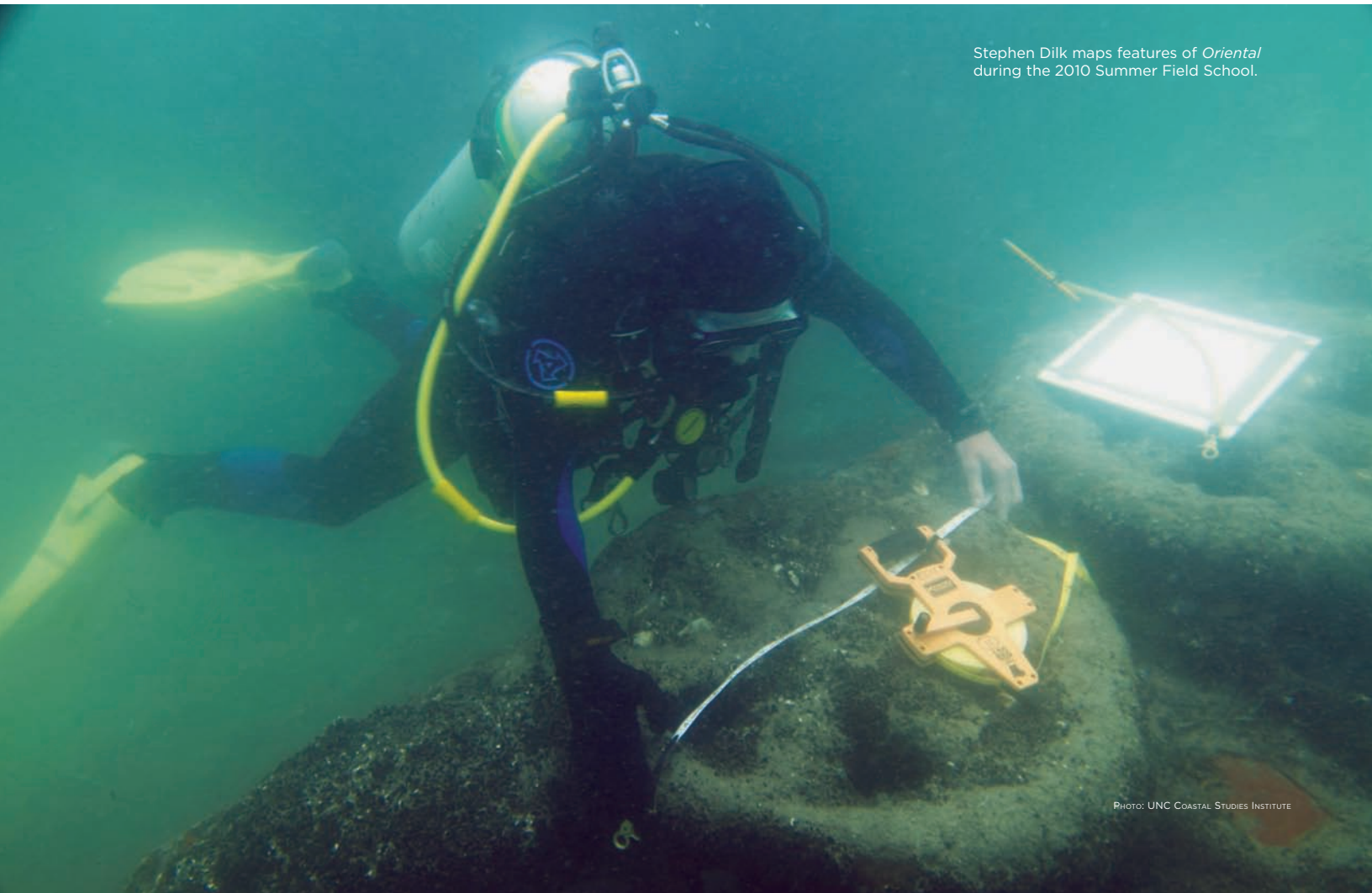
PHOTO: UNC COASTAL STUDIES INSTITUTE

Danny Bera and Will Schilling map the engine of *Oriental*.

MARITIME STUDIES GRADUATES!

Please let us know if your name is not on the list or if we need to update your current status.

We would love to hear from you!



Stephen Dilk maps features of *Oriental* during the 2010 Summer Field School.