

Volume 22 • January 2007

In this Issue:

- 2 From the Editor / From the Director
- 3 Farewell to Frank Cantelas
- 4 Maritimers Make Their Mark at 2006 Conferences:
 - SHA and NASOH Reports
 - ISBSA11 Conference
 - Log Boat Conference
- 5 Preserving Local History: Small Boat Recording in Currituck County
- 6 Investigating a Great Lakes Bulk Carrier: Summer Field School on *Continental*
- 8 Exploring Down the River: Fall Field School in Washington, NC
- 10 Weathering the Great Lakes: Sailing Aboard the US Brig *Niagara*
- 11 The Roanoke-Perquimans Survey 2006
- 12 Adventures within the *Monitor's* Turret
- 13 Jamestown Island's Submerged History
- 14 Submerged Summer: An Internship with the NPS Submerged Resources Center
- 16 Maritime Heritage Survey in the NWHI Marine National Monument
- 17 Maritime Studies Theses and Scholarship Winners



- 17 Lecture Series Commemorates Anniversary
- 18 Maritime Program Welcomes New MA Students
- 18 MSA Activities
- 20 "Where Are They Now?"
- 22 About the Association / MSA Apparel Offers
- 24 Maritime Notes



Whether hanging high or swimming low ... you'll feel worlds away, caught in the moment.



... a newsletter of East Carolina University's Program in Maritime Studies

Core Faculty: Lawrence E. Babits, PhD, Director Nathan Richards, PhD Bradley A. Rodgers, PhD David J. Stewart, PhD

Contributing Faculty: Wade Dudley, PhD Michael A. Palmer, PhD Carl E. Swanson, PhD

Adjunct Faculty: Annalies Corbin, PhD Charles Ewen, PhD

Office Manager: Karen Underwood

E*ditor:* Michelle Damian

Co-Editor: Sarah Riggs

Published annually by the Program in Maritime Studies, East Carolina University. Readers are encouraged to submit information and news to the editor. Any suggestions or comments should be directed to the editor. We look forward to hearing from you.

If you would like to receive a free subscription to *Stem to Stern*, please telephone 252-328-6097, fax 252-328-6754, or write:

> Stem to Stern Program in Maritime Studies Admiral Ernest M. Eller House East Carolina University Greenville, NC 27858-4353

Please visit the ECU Martime Studies website at www.ecu.edu/maritime for additional news and information about the program. A digital copy of this newsletter can be viewed on line.

2,500 copies of this public document were printed at a cost of \$2,754.15, or \$1.10 per copy. Printed on recycled paper.

From the Editor: itor

One of the most exciting things about the Program in Maritime Studies is the variety of projects in which our students, faculty, and alumni are involved. From diving the chilly Great Lakes to North Carolina rivers, investigating battleships in Hawai'i or vernacular watercraft in Currituck County, planning thesis research around topics in England or Japan, and presenting our findings to regional, national, or worldwide audiences at conferences and online, we all have the opportunity to take advantage of a wide range of experiences during our time here. The past year has seen all these projects and more come to fruition. We continue to reach out to new audiences to promote this exciting field through activities such as expanding our online presence and visiting community schools to introduce schoolchildren to maritime archaeology and history. The program continues to change and grow, bidding farewell to some long-time Maritime personnel and welcoming others. The pages that follow highlight some of the accomplishments and endeavors of Maritimers present and past, always keeping our eyes on the future. Ψ

– Michelle Damian



It is almost beyond belief that another year has sailed by. We've been so busy; the year was a blur of fast moving images starting with the Society for Historical Archaeology meeting where numerous west coast alumni welcomed us to Sacramento. Within a week of returning, students were off to Currituck County recording small boats under Paul Fontenoy's (1995) direction. Their housing and food were provided by long time Program supporters Barbara and Wilson Snowden. Then, there was the Log Boat Conference in Beaufort orchestrated by Paul Fontenoy. All this transpired during the spring while we were in class and many first-year students were scrambling to complete dive training.

For many of us, summer sessions were a relief from the hectic schedule. For others, it meant field work in Wisconsin, so that Joe Hoyt had data for his thesis. Two new students went off on the Niagara for a sail that saw windless days punctuated by squalls. Others were interns at the Mariners Museum working in the Monitor's turret, and the National Park Service Submerged Resources Center. All the while, Nathan and a crew of assistants were gearing up to conduct field research under the aegis of a \$50,000.00 NOAA Ocean Exploration grant.

The summer wasn't even over when we got back into the classroom again with a new crop of students. At the same time, we were faced with a major crisis. Frank Cantelas (1995) resigned to take employment with NOAA. Frank's departure sent shock waves rippling through the Program because he was the ombudsman who handled virtually all problems with aplomb, alacrity and wit. As we tried to complete reports due "yesterday," Frank's absence was noted repeatedly and for the last time, we were able to say, "It's all Frank's fault." We will definitely miss him because he was such a good teacher of students.

The fall field school went off without too many hitches even though our dredging raised "bad" oil from one wreck. Several students used weekends for day sails on the periauger, North Carolina's colonial boat that ECU students helped research. The North Carolina Maritime History Council's annual meeting was in Southport this year.

Thanks to the efforts of Dean Alan White, Associate Dean Todd Berry and History Chair Mike Palmer, our budget was finally increased so that we can upgrade equipment and conduct field operations more safely with well maintained equipment. The Eller House seminar room is slated to be a smart classroom with all the appurtenances for high tech presentations. These improvements are the result of cooperative work between faculty members and I'm certainly glad that Nathan, Brad, Dave and, yes, Frank too, were here to make a significant impact on our teaching, research and administrative load. Without their assistance, and the aid of some 20 student assistants, much of what we achieved in the past year would not have been possible.

Students also accomplished a great deal this year. They gave papers at SHA, NASOH, and NC Maritime History Council meetings. The MSA expanded their outreach into local schools. More importantly, eight students completed their theses, always a sign of progress.

With the arrival of new University administrative personnel, there has been a shift toward completing theses in a timely fashion. This shift meant that any extended time period after entering the Program would not be viewed favorably. They want our students to graduate and get on with their lives instead of putting off the thesis. At present, it is difficult to read this change, but the possibility of obtaining more than one extension past a sixth year is not very good. Our non-graduates have been informed of this in bulk mailings on two occasions and there should be an influx of theses early next year. While we are sympathetic, especially to those who were called back to active military service, there are others who have not been very dutiful in proceeding toward thesis completion. We will try to argue for people, but the non-alumni have to put forth that effort in the first place.

Now we are looking forward to a new year. This promises to be even busier and that means hard work and great fun for all concerned. $\mathring{\cup}$

- Dr. Larry Babits



Frank Cantelas in Alaska.

Farewell...

Reflections as we bid Frank *adieu*...

Frank Cantelas, a long time stalwart of the Maritime Program, left East Carolina and took a position with NOAA. Frank entered ECU in Fall 1989 with five other students. Frank went on to serve as the principal investigator for the Maple Leaf Project and produced outstanding work on this Civil War vessel. Spin offs from his work changed the way terrestrial archaeologists view unfired bullets on Civil War battlefields.

Frank was more than just a graduate student initially hired to do something the faculty did not understand or want to do. He was a superb writer of grant applications and understood how the state and Federal systems worked. Frank was the main reason we obtained grants and his track record for grants versus applications was very high.

He was our ombudsman who took care of anything that came up, usually in record time. Our computer lab is the result of Frank diligently filling out forms and applying for annual upgrades since 1996. Our remote sensing equipment has been improved through Frank's constant analysis of capability and understanding of new technology. He kept things running and it may be surprising for some of you to know that there actually was a time when Frank didn't know how to operate a magnetometer. On that project, we found the field school site because fishermen had tied off trail tape above the wreck. It really did happen. Since then, Frank became the expert in our remote sensing and countless students can attest to the quality of instruction they received from him.

Frank not only operated the equipment, he underwent a barrage of questions every spring and summer as new students turned to him for information about grant applications, budgets, and, once in the field, how to actually operate something they had only seen in the classroom. Frank was wonderfully patient through all this. His sense of humor carried him through some incredibly odd situations as he worked around operator errors and student foibles.

Frank worked on the Great Lakes, in Alaska, Washington, Florida, Cyprus, and numerous other places, always responding to calls from others. His own research had to be coupled to Program field projects and student thesis topics, but he made the most of it. He worked his way through a backlog of projects to see them completed, even while backing up new student and faculty research.

When students came in from the field and began writing, Frank helped organize their data and guided many through the initial throes of birthing their theses. He served on numerous committees as the "technological expert." One reason many students do so well is the solid training they got from Frank, both in his office and in the field.

When I interviewed for my position at East Carolina, Frank was there. Talking with him and other students convinced me to give up tenure and an impending full professorship to come to Greenville. I wanted to be part of what Frank and his classmates were doing because it was such interesting work. Frank was a major part of that research and I've never regretted joining forces with him.

We're going to miss Frank in many ways. We are already seeking to hire a person to fill his position, but have asked for an Archaeologist I position to supplement his replacement. No one could reasonably be expected to do what Frank did routinely. He is not irreplaceable but it will take more than one person to wear his many hats. We already feel the stress of coping with administrative matters without him. And this time, we can't just say, "It's all Frank's fault!" \downarrow

> Good luck and fair winds, Frank. – Dr. Larry Babits

MARITIMERS MAKE THEIR MARK AT 2006 ANNUAL CONFERENCES

Society for Historical Archaeologists "Life on the Edge"

This past year Maritime faculty and students presented their research at four annual professional conferences. In January, Maritimers traveled west to Sacramento, California, to attend the Society for Historical Archaeologists' (SHA) conference, *Life on the Edge*. In commemoration of the 100th anniversary of the Antiquities Act, the conference highlighted pioneering efforts reflected by the historic record "on the edges of empires, oceans, disasters, technologies, innovations, partnerships, and cultures."

Maritime's contribution to this topic reflected a wide array of research interests. Dr. Rodgers presented a compendium of his lifelong research on Great Lakes vernacular craft. Drs. Richards and Stewart discussed the nuances of their respective investigations in vessel abandonment and mortuary practices. Further,

student presenters Franklin Price, Brian Diveley, Sami Seeb and Tiffany Pecoraro also represented East Carolina with presentations on individual thesis work and personal research.

ECU students, faculty, and alumni gather at the NASOH conference.

In between listening to presenters, attendees were entertained by a reception held at the Sacramento Masonic Lodge and tours to wineries and downtown San Francisco. Another notable source of entertainment for archaeologists was the members of another gathering held at the same hotel. Adding to the eclectic California scenery, a regional biker rally provided additional color to the late night revelries of the gathering of professional archaeologists.



In June, Maritimers left eastern North Carolina again, heading north to Manitowoc, Wisconsin. This time the conference was the North American Society for Oceanic History's (NASOH) Charting the Inland Seas: Recent Studies in Great Lakes Research. The annual conference was hosted by the Wisconsin Maritime Museum in conjunction with the Canadian Nautical Research Society and North American members of the Society for Nautical Research (UK). In addition to the beautiful waterfront reception in Manitowoc, archaeologists were treated to a tour of the Roger's Street Fishing Village in nearby Two Rivers, staging grounds for the Maritime Program's 2006 summer field school.

Dr. Stewart and field school student Michelle Damian presented their work on integrating PhotoModeler software with

underwater site documentation. Crew chiefs Sami Seeb and Tiffany Pecoraro also gave individual presentations on Great Lakes vessel adaptations. The four participated alongside

Maritime alumni Deidra O'Regan (2001) from the National Maritime Historical Society and Jeff Gray (1998), Russ Green (2002), and Kathy Green (2003) from NOAA's Thunder Bay National Marine Sanctuary. In addition to participating in the lively professional debates typical to the conference, Michelle Damian, Tiffany Pecoraro, and Sami Seeb were also generously awarded NASOH Chad Smith Travel Grants. Ψ

– Tiffany Pecoraro and Brian Diveley



The 11th triennial session of ISBSA was held in Mainz, Germany, in September. While Mainz might not seem a typical place for an underwater conference, it is situated on the Rhine River and has a long history of boat traffic dating before the Roman era and extending to the present. The local Seafaring Museum has full scale reproductions of Roman vessels and models of most craft the staff have excavated.

The 11th ISBSA only had two ECU papers, and for some reason, few TAMU papers as well. Larry Babits presented a paper on the periauger and Jason Rogers (2004) gave a paper on log boats in the Czech Republic. Jason is still based in Alaska and probably traveled farther than anyone else. He is now a PhD student at Exeter University, studying with Dr. Robert van den Noort.

ISBSA is a very important conference for students and researchers alike. It meets every third year and is largely seen as a European conference. However, that is not necessarily true as there were papers on watercraft from the Pacific and Indian oceans, as well as Egyptian and North American vessels. Students and alumni would be well advised to consider future conferences as they provide an outstanding opportunity to meet and discuss research with the senior underwater leadership as well as younger underwater archaeologists who will be the field's future. \downarrow

– Dr. Larry Babits



Log Boat Conference

"YEEHAW!" We were underway in a three log canoe from the Chesapeake Bay Maritime Museum. A small crew including Waldemar Ossowsky, from the Centralne Museum Morskie, Gdansk, Poland, and I were finishing off the last minutes of the Log Boat Conference held at the North Carolina Maritime Museum by helping take the canoe to its trailer.

memory.

It seems somewhat strange to start

a report about a conference with

its last event, but that was one of

the best parts and it stuck in my

Paul Fontenov (1995), the North

Carolina Maritime Museum host-

ed an international conference on

log boats during the spring.

People came from Hungary,

Poland, and England as well as

Through the efforts of



Dr. Waldernar Ossowsky

both US coasts to present their log boat research. The conference gave us a chance to meet up with Waldemar, an underwater archaeologist who played a key role in the excavation of the General Carleton of Whitby, a British collier that sank in 1785. Clothing from this vessel was the subject of Matt Brenckle's (2004) thesis and Waldemar had hosted us in Gdansk during spring break 2004. Waldemar's doctoral dissertation was on Polish log boats and he is one of the recognized experts in the field.

The conference began with bad weather that precluded any long sails but Waldemar and I did get a few hours aboard the periauger before attending the opening night reception. Friday was spent giving papers, including one by Jessica Curci of the CRM program and another by Lynn Harris (1988). The papers showed the diversity of research dealing with log boats around the world.

Saturday included more papers and a tour of the North Carolina Maritime Museum's small boat collection. A banquet followed with social activity and cross fertilization. Sunday, ended the conference, and Waldemar and I returned to Greenville.

Monday was back to work for me but Waldemar visited Joyner Library and explored its holdings. On Tuesday he gave a presentation to the Maritime Studies Association before returning to Poland. $\mathring{\cup}$

– Dr. Larry Babits

Preserving Local History: Small Boat Recording in Currituck County

In the Spring Semester 2006, four students from the Maritime Studies Program took a class on Small Boat Recording through the auspices of the North Carolina Maritime Museum. Taught by Dr. Paul Fontenoy (1995), students spent one weekend at the Museum's watercraft center learning techniques used for lofting and creating construction drawings.

Two following weekends were spent in Currituck County recording seven small locally built vessels. We measured the lines of each craft, examining internal construction details, planking patterns, and evidence of repair. Each student was then responsi-



ble for taking the measurements and sketches created over the weekend workdays and turn them into both lines and construction drawings.



Adam Friedman and Annie Tock record the details of the vessel.

The finished products were then given to the Currituck Historical Society.

Not only was the learning experience a tremendous asset for the students, all of whom were about enter their first field school, but the three weekends created a plethora of memories that live on almost a year later. My getting the Maritime van stuck in the mud after a rainstorm seems to be the one most often referred to! Since the first weekend in Currituck, Michelle Damian has become well recognized for her skills in measuring things in tight quarters and upside down. The "A-team" of Adam Friedman and Annie Tock battled hornets and faced down black widow spiders that had set up housekeeping in one boat. Obviously, the work of a Maritime Archaeologist does not have to be underwater to be exciting! \checkmark

- Amy Leuchtmann

Michelle Damian fits into a very small space to take a measurement.

Field Schools

SUMMER FIELD SCHOOL 2006 ... Investigating a Great Lakes Bulk Carrier:

Summer on the Continental

From May 29th through June 27th the Maritime Program conducted the 2006 summer field school in Two Rivers, Wisconsin. Principal investigator Dr. Brad Rodgers chose the site of the bulk carrier *Continental* for a phase-two, pre-disturbance survey. This would augment years of Rodgers' research on Great Lakes shipping. The project's objectives included detailed documentation of the vessel's structure as well as the machinery on board.

Continental was built in 1882 at Cleveland, Ohio, by master carpenter George Presley for the Republic Iron Co. of Marquette, Michigan.¹ As students quickly learned, *Continental* was a very large vessel, measuring 244.7' long with a 36.4' beam, giving the freighter 1,506.67 gross tons.² In 1884, the vessel was fitted with a fore and aft compound steam engine built by Globe Ironworks of Cleveland which provided 600 horsepower at 84 rpm.³ This machinery still rests within the remains of *Continental*, allowing a rare opportunity to study this type of propulsion in detail. After 22 years of service on the lakes, *Continental* settled into the archaeological record on 12 December 1904 and began evolving toward the site we investigated this summer.

Participating first year students from the Maritime Program included Michelle Damian, Tricia Dodds, Joe Hoyt, Amy Leuchtmann, Adam Friedman, and Annie Tock. Two students from outside the program attended as well: Stephen Sanchagrin, a Geography student at East Carolina and Sarah Newman from Yale University. Second year students Sami Seeb and Tiffany Pecoraro served as crew chiefs to aid PI- Dr. Brad Rodgers and CO-PI Dr. David Stewart. With the addition of Mark Keusenkothen as the diving safety officer it was an able team for the job. ECU Maritime Program alum Keith Meverden (2005) along with Tamara Thomson of the Wisconsin Historical Society aided in the successful completion of this project.

> "We enjoyed surprisingly decent weather, with only a few blowout days."



Continental's compound engine looms over the wreck.

After an arduous road trip from Greenville, we arrived in the quaint little fishing village of Two Rivers, Wisconsin, and immediately began preparing for work. Tamara and Keith had arranged for our accommodations. Students were divided between two houses, and a third was ready for the professors and the DSO. Our base of operations was established in the Rogers Street Fishing Village Museum. This museum is dedicated to showcasing Two Rivers' role in the fishing industry, as well as other aspects of Lake Michigan maritime history. One building was specifically a shipwreck exhibit, with audiovisual and artifact displays pertinent to local shipwrecks. We set up our drafting center there. A unique style of disseminating information engaged interested parties as we acted as a "living exhibit;" drafting the vessel's site plan in a room open to the public. We held two separate open houses, during which interested parties could come in and witness the process of archaeological documentation. Though it was a small venue, there was a solid turnout. People were able to ask questions and interact with students and professors. This was our best attempt to incorporate and introduce them to what is ultimately THEIR resource.

The museum had several other buildings, one of which served to store our equipment, as it was convenient to the river where our research vessel was docked. To transport the team onto site we had ECU's newest vessel, a 25' Tomcat and a small Boston Whaler, the R/V *Dawn Treader* provided by the Wisconsin Historical Society. These vessels provided an ample platform for our operations. Over a one month period, we enjoyed surprisingly decent weather, with only a few blowout days. Visibility on the site fluctuated greatly from less than two feet to up to forty feet or more, but was typically around ten feet. The lake temperature, being in the 40's, was somewhat cooler than many divers were accustomed to but did not present a great issue.

Initial work on the site proceeded slowly, as field schools do, but soon everyone settled into a rhythm and began working with greater efficiency. Traditional baseline offsets and trilateration were used for documenting at a scale of 1"=2'. Significant portions of the hull collapsed outward (particularly on the port side), so a complex baseline with two kinks, or "dog legs" was used. Students were assigned ten foot sections of the wreck; on completion they moved to the next remaining section.

This ship was, and is, truly enormous. Over the course of the project, we identified many interesting construction techniques used on *Continental*. There were large preserved sections of thwart-ship ceiling planking and, as the sides of the hull now lay flat, an exquisite view of built-in ceiling arches was clearly evident. Longitudinal arches were common on this type of vessel, but being incorporated into the ceiling planking was unusual. With persistent hard work and the wise tutelage of our advisors, every visible scantling was recorded with a high degree of accuracy and detail. The next step is, of course, to interpret our findings and tie everything into a larger picture.

A sincere debt of gratitude is owed to the Wisconsin Historical Society and the Rogers Street Fishing Village Museum for all their assistance in making this project a successful endeavor. Without their aid and their professionalism, the documentation of *Continental* would not have been possible. \downarrow

– Joe Hoyt

 ² Courtesy of C. Patrick Labadie Collection. Abstract of Enrollments.
 ³ Ibid.



Ceiling arches on the inner hull.

"This ship was, and is, truly enormous."

¹ Herman G. Runge Collection. Milwaukee Public Library. Ship Information and Data Record #126016.

Field Schools

The 2006 Fall Field School took place close to home in nearby Washington, North Carolina, on the Pamlico River. Beginning in the 18th Century, Washington functioned as a port for riverine, coastal, and bluewater shipping, and we were eager to see what material culture we could discover to shed more light on Washington's maritime history. Under the direction of our principal investigators, Dr. David Stewart and Calvin Mires (2005), five students investigated vernacular watercraft at two sites on the Pamlico River.

The first site (Site A) is located near the south shore opposite the Washington waterfront. Previous sidescan sonar surveys done by ECU's Maritime Studies Program had revealed the remains of a centerboard vessel, and additional reconnaissance performed earlier this year had divulged several other sunken vessels and a wooden pier or wharf. The second site (Site B) was a centerboard vessel below Washington at Washington Park.

Site A was the first site investigated. Our plan was to search for additional vessels and then record all vessels located using both hand and computerized mapping methods. For the computerized mapping, the students learned a new skill using the program Site Recorder, which can produce a computerized site plan. In limited visibility, we spent the first week of field school performing reconnaissance, discovering six vessels and a



Tricia Dodds, Adam Friedman, and Calvin Mires hook up the dredge.



pier. Before recording could commence, we had to dredge to sufficiently expose the hulls. An oil-based substance was uncovered after the dredging began. Water quality experts visited the site the next day to test the water, but, until the test results came back, the water toxicity of Site A was unknown. We quickly changed plans and agreed to cease disturbing the site. Our new plan was to nondestructively examine the site for the remainder of the day, and we hand-recorded basic dimensions of exposed timbers on the six vessels.

Moving on to Site B, we were still in good spirits and hoping to practice more of our skills on the Washington Park wreck, a 60-foot long centerboard vessel. Our original plan was to hand map the vessel in a few days; now our intent was to

> record it using both hand and computerized mapping methods over the next two weeks. Our new strategy was a Phase III investigation of the site in which controlled digging, recording, and artifact registration took place. Since the vessel was buried under more sand than originally anticipated, the extra time now permitted the necessary dredging to take place. After almost a week of challenges encountered with the dredge, we finally exposed enough of the hull to lay the baseline and begin mapping. We continued dredging the remainder of the vessel, assigning ten-foot sections on one side along the baseline to hand map.

> For the next week, the team rotated between dredging and hand mapping while performing occasional work on Site Recorder as well. Our hard work was rewarding in the end, for, upon completion of the last week, the group had succeeded in fully recording the vessel's hull with hand and computerized mapping.



Divers establish datum points for Site Recorder on Site B.

We worked throughout the rest of the semester to produce a site plan, reconstruct the vessel through lines drawings and construction details, and catalog and study the artifacts retrieved before returning most of them to the site.

Overall, while this field school did not adhere to the original plan, we still realized our original goals, making the project a success. We set out to record vernacular watercraft near Washington while enhancing our field skills. We achieved

all of this, although not in the way that we intended. Despite unexpected delays and challenges, however, we still managed to obtain useful information that can reveal clues about vernacular watercraft and Washington's past maritime culture. Looking back, perhaps learning to adjust to unexpected situations while still producing results was the most valuable skill learned.

On that note, a special thanks is owed to the North Carolina Estuarium, the City of Washington, and Chris and Ashley Padgett for providing support to make this field school possible. Also, Mark Keusenkothen, our dive safety officer, deserves our thanks for looking out for us, keeping us safe, and assisting our archaeological research when he was not obligated. We are greatly appreciative to all for aiding us on our project. $\mathring{\downarrow}$

– Tricia Dodds and Dave Stewart

"Looking back, perhaps learning to adjust to unexpected situations while still producing results was the most valuable skill learned from this field school."



Joe Hoyt, Michelle Damian, and Amy Leuchtmann (left to right) map the shoreline of Site A.

ED. NOTE – For more information about the fall field school, see the students' field journals online on the "Project Journals" section of the Museum of Underwater Archaeology: www.uri.edu/mua. Weathering the Great Lakes. . .

Sailing Aboard the U.S. Brig *Niagara*

As an incoming student to the Maritime Program at ECU, I started my education in true nautical fashion: aboard a ship. I arrived in Erie, Pennsylvania, the homeport of the U.S. Brig *Niagara*, where I met with Dr. Larry Babits and Jeremy Eamick, who had made the long trip from Greenville. Through this experience I learned much more about nineteenth century sailing than I ever could have from a traditional course or book. Since I am primarily interested in the War of

1812, this was an incredible chance to learn about the ships of this period and to better understand the lives of sailors by becoming one.

Niagara participated in the Tall Ships Challenge organized by the American Sail Training Association. With a fleet of other tall ships, we sailed to Cleveland, Bay City, Green Bay and Chicago, travelling through Lakes Erie, Michigan, and Huron. While in port, we gave ship tours to the approximately 4,000 people who passed across our decks each day. While each port was exciting, not only for the showers, bars, supply of fresh fruit, and the chance to catch up on sleep, it was also a chance to meet sailors from all the other ships and learn about their experiences. However, the true excitement came when we were out on the lakes under full sail.

Our first day out on Lake Erie introduced us to stormy weather, which we became well acquainted with over the course of the voyage. While attempting to become comfortable with the rocking motion of the boat in the waves, my inexperienced land legs swayed across the deck instead of walking the straight path I intended. This first day was filled with confusion and frustration as I hauled on lines without knowing their purpose. However, during the three day sail to Cleveland, I slowly began to become accustomed to sailing terms and I learned the difference between a clewline (used to haul the lower corners of the sail to the yard), a leechline (used to haul in the vertical edges of a sail), and the buntlines (lines attached at the lower mid portion of a sail to haul it up) and their location on the pinrails. Fully understanding what was taking place as we were sailing was a gradual process, and it was not until I got off the ship in Chicago that I could answer commands such as "clew up" or "clew down" with the proper actions.

Over the course of the month that I spent on board, I came to truly understand the phrase 'dark and stormy nights'.



In total, there were four severe storms requiring all hands on deck. We encountered the first storm in the middle of the night while anchored on our way to Bay City, Michigan, where winds suddenly reached speeds of 30 knots, but with little rain. Next, while docked in Green Bay, Wisconsin, we experienced sudden rain, thunder, lightning, and 50 knot winds that overturned festival tents and compelled us to lead out extra dock lines and prepare to drop anchor while in port. But the two storms that we passed through while underway to Chicago were by far the most frightening and exciting. During the first, I was awakened from my hammock to the sound of yelling on deck and severe rain. After quickly gathering my rain gear, I emerged from the berth deck to confusion. It was so dark that you could hardly see in front of you until the sky was lit up with the flash of lightning. The second storm occurred two days later, on our way into Chicago. This time I was awake for the storm, as I had the 4 to 6 AM watch. The yellow glow of the sky in the distance prepared us for the fury that was to come. As the storm hit, the rest of the crew were awakened to furl all sails in the pouring rain.

The storms that I experienced while sailing on the *Niagara* taught me to appreciate the suddenness with which bad weather could arise and further respect the hardships that sailors faced in the nineteenth century. With modern technology for detecting weather patterns, we were prepared for these storms ahead of time. Without such equipment, sailors would have required many more skills to read the changing weather and could not be forewarned of impending storms. While modern technologies provided great advantages sailing aboard *Niagara*, most things are still completed by traditional means allowing one to experience the life of the sailor as it was in 1813. \downarrow

– Nadine Kopp

Working amid a heat wave . . .

Roanoke-Perquimans Survey furthers APES Study

This past August, Dr. Lawrence Babits, Dr. Nathan Richards, Frank Cantelas, Adam Friedman, Amy Leuchtmann, and Matthew De Felice, of the ECU Program in Maritime Studies, conducted riverine surveys of the Roanoke and Perquimans Rivers. The project, supported by a grant from NOAA,



Sonar image of the suspected *Commerce* shipwreck site.

furthered investigation of the Albemarle-Pamlico Estuarine System (APES), a large-scale survey began by the Program in 1994. The fieldwork, aside from fulfilling NOAA grant obligations, provided data for two masters theses – one drawing from the Roanoke, the other from the Perquimans.

Commerce shipwreck site. Data was collected via remote-sensing devices. The program's Marine Sonics 600 Hz

side scan sonar produced visual images from sonic wave returns of the river bottom. Through this technology, submerged trees and mud contours were detected, and, yes, a few traces of human activities were found. On the Roanoke, for example,

the sonar produced some well-defined images of vessels assumed to be barges. Of particular note was a vessel found by near Williamston. Its location, near the channel and now abandoned docks, suggests that it may be the *Commerce*, though this is still unconfirmed. Franklin Price (2006), who also worked on the Roanoke, learned of the *Commerce* through historical records.

The brand new Geometrics G882 magnetometer proved its worth by detecting multiple strong magnetic anomalies. The magnetometer operates by passively detecting subtle changes in the Earth's magnetic field. When the magnetic sensor, mounted in a towfish, passes close to a wrecked vessel, abandoned refrigerator, or any other object containing ferrous material, the magnetic field fluctuates. This fluctuation is recorded as data, which can be processed and graphically analyzed to identify targets of potential or definite archaeological importance. Of course, the first week of survey occurred during the heat wave that affected the entire country. Temperatures, unmitigated by wind, were routinely in the 100s. The Roanoke is a meandering and narrow river and the high bank inhibits breeze. In addition, sonar scanning required a speed of no more than 4.5 knots, or about walking pace. In these conditions, the crew tested the hypothesis that one can sweat Gatorade. Yes, it's true.

During the Roanoke phase of the survey, time was found for public outreach. Dr. Richards gave a short talk on the survey to the Plymouth Historical Society. This meeting between local residents and ECU archaeologists proved beneficial for all. Open discourse simultaneously informed the citizens of Plymouth of the surveying activities and allowed them to contribute their knowledge of industrial activities, locations of wrecks and riverine structures, and other historical knowledge to the project.

Future work on this project will involve processing of raw data and insertion of the finished data into an ArcGIS database. The database will allow overlays of sonar images, magnetic targets, and historical maps into an effective tool of regional thematic research and predictive modeling.

Many thanks are owed to Harry Thompson of the Port o' Plymouth Museum for arranging our food and lodgings in Plymouth, and to Ken Ries, who graciously hosted us in Hertford for the duration of the Perquimans component. The entire survey served as a useful and educational experience by detecting tangible traces of history while providing the hands-on learning environment that remote-sensing techniques require. \downarrow

– Adam Friedman



Amy Leuchtmann monitors the side scan.

"Yes, it's true. One can sweat Gatorade!"



Photomosaic of the inside of *Monitor's* turret.

A crash course in conservation. . .

Adventures within the Monitor's Turret

When the *Monitor* National Marine Sanctuary provided two short term summer contract positions with the National Oceanic and Atmospheric

Administration (NOAA), maritime students Tiffany Pecoraro and Brian Diveley signed on for a crash course in conservation. Beginning in July, the two student archaeologists participated in a number of preservation projects conducted by *Monitor* conservation staff at the Mariners' Museum in Newport News, Virginia. Starting with an examination of dredge spoil from past excavations, the two rapidly worked their way through three weeks of excavations within the famed vessel's turret, as well as provided support for ongoing conservation efforts and archaeological documentation of other site artifacts.

NOAA's *Monitor* National Marine Sanctuary was the first of thirteen designated National Marine Sanctuaries. It protects the wreck of the well-known Civil War ironclad, U.S.S. *Monitor*. The vessel is best known for its March 9, 1862 battle with the Confederate ironclad, C.S.S. *Virginia*, in Hampton Roads, VA. This was the first battle between armored vessels. Shortly after, while in transit to join the newly formed North Atlantic Center. The center is a newly designed interactive museum exhibit where conservation efforts can be observed alongside museum attractions and other portions of the vessel on display in the museum.

Ongoing turret documentation provided the principal backdrop for Diveley and Pecoraro's work this past summer. The objective was to investigate previously unexcavated sections, particularly those where the vessel's Dahlgren guns had been removed, as well as areas previously inaccessible due to the presence of human remains. As sections of the turret were excavated, artifacts were mapped in-situ and a photographic record created for future analysis. Much of the excavation entailed breaking apart concretions to reveal artifacts. After removal from the turret, concretions and sediment were wet screened to uncover any additional artifacts and conservation efforts initiated. Over the course of the investigation many small artifacts were recovered, including several buttons, sections of organic fabrics, wooden crank handles, four copper bullet casings for a carbine, and a variety of unidentified artifacts.

In addition to excavating, other conservation tasks were performed. Piecing together over 1,200 digital images taken in 2002, Diveley built a composite image of the turret's exterior. The completed image will be used for a comparison against

future documentation of

spent her additional time

the turret. Pecoraro

assisting conservators

David Krop and Susan

Grieve creating casts of

artifacts from concretion "molds" as well as the

turret's interior features. Taken as a whole, the

experience gained by both

maritimers proved to be unparalleled to that of

any typical summer job.

With that said, special

thanks should be given

to Sanctuary Superintendent David Alberg

who provided support for

the positions and to all

Mariners' Museum

Blockading Squadron, *Monitor* was lost at sea off the North Carolina coast. In 1975, over a century later, *Monitor* was discovered three miles off Cape Hatteras. In order to protect the remains of the historic vessel, the first National Marine Sanctuary was created.

As part of an overall site management plan, sections of the vessel were recovered for conservation in 2002. Since that time, NOAA has worked collaboratively with the Mariners' Museum to conserve



Excavating in the Monitor's turret.

the recovered artifacts. Of particular importance is the vessel's unique rotating gun turret. The turret is currently housed within a 95,000 gallon tank inside the recently constructed Monitor conservation staff who contributed their considerable knowledge and experience. $\mathring{\cup}$

– Tiffany Pecoraro and Brian Diveley

Overcoming snags along the way. . .

Jamestown Island's Submerged History

On December 20, 1606, three ships, *Susan Constant, Discovery*, and *Godspeed*, set sail from London, England, for the New World. Five months later, passengers onboard the ships disembarked on Jamestown Island, Virginia, and established the first permanent English colony in the New World. 2007 marks Jamestown Island's 400th anniversary and Colonial National Historic Park is gearing up for next year's celebrations. These include archaeological investigations that continue to find new and exciting sites on Jamestown Island and playing host to the SHA Conference. During July, I had the privilege to participate in an underwater survey circumnavigating the island's historic waterways.

In agreement with National Park Service archaeologist Andrew Veech, of Colonial National Historical Park, BRS (owned by Steve Bilicki), along with Steve Brock (Indiana University of Pennsylvania undergraduate student) and I, conducted a Phase I pre-disturbance survey to locate and map cultural features off Jamestown Island. Our main objective was to provide the NPS with a complete assessment of Jamestown Island's submerged cultural resources. The equipment included side-scan sonar and magnetometer operated from the 25-foot Parker research vessel, *Big Blue*. The ten day survey began on July 5, 2006.



Jodi Carpenter and Steve Bilicki monitor the sonar.

Unfortunately, as with most surveys, we encountered snags along the way. One snag, a submerged branch, broke the prop on *Big Blue* and there was an unfortunate incident with a low



Andrew Veech and Jodi Carpenter examine a shoreline site.

bridge and the boat's antenna. The survey was unable to utilize the magnetometer due to an equipment failure. This equipment failure was likely due to damage incurred during shipment as was evidenced by the UPS "oops" tape. We also managed to lose the tail of the sonar fish, but thanks to Bilicki, Veech, and Home Depot, a new tail was rigged and we were able to complete the survey.

The preliminary results showed 70 plus anomalies and over 25 vessels. The Back River and Thorofare appeared to be a dumping ground for barges. Some sites, including a multibarge site, were along the island's shoreline and clearly visible during low tide. The survey also identified a centerboard schooner (appearing on the Ray Marine map as pilings) and what appeared to be an older wreck. The survey team also discovered several landings and wharfs, ballast piles, and at least one prehistoric oyster midden eroding into the river. All in all, there was no blinking while watching the computer screen or something would be missed!

The waters in the James River and Thorofare are brown and silty. With no-visibility conditions, ground-truthing was limited to shallow sites. Our number one safety precaution was, as Bilicki made clear, "if you get into trouble–stand up!" We ground-truthed several barges, the centerboard schooner, and two ballast piles. One ballast pile was along the shoreline so Veech and I walked there, knee deep in mud the entire way (thank you Andrew for pulling me out when I got stuck!).

Overall, the survey was fun, and an educational journey into Jamestown Island's historic past. I would like to thank the National Park Service for housing part of the survey team. I had the fortune to stay with Andrew and his fiancée, Trisha, who fixed us great meals and put up with our antics. We appreciated them going above and beyond the call of duty. Many thanks to the Jamestown Yacht Basin for allowing free use of their boat ramp. I also want to thank the team's undergraduate assistant Steve Brock for the hours he had to stay in the berth recording data. Lastly, a big thanks to Steve Bilicki for keeping cool when everything seemed to wrong, giving all of us a great learning experience, and making it a little bit of fun too. \downarrow

– Jodi Lee Carpenter

Internships

Submerged Summer:

An Internship with the National Park Service Submerged Resources Center

As an underwater archaeology student, I have had the not so distinct privilege of being accustomed to paying project directors and universities to be an active participant on underwater field projects.

When I got a phone call from Dave Conlin with the Submerged Resources Center (SRC), I didn't understand the concept of actually being paid to assist them on two projects in Hawaii. It seemed too good to be true. The Submerged Resources Center is a division of the National Park Service, responsible for assisting parks with the management, preservation, and protection of submerged resources within national parks.

The first project was the USS *Arizona* National Memorial in Pearl Harbor. The attack on the *Pennsylvania* class battleship, sunk on December 7, 1941, killed over a thousand men and provided the catalyst for involving the United States in World War II. SRC had three goals for the summer's work: to monitor artifacts on deck, to monitor any structural movement, and to gauge the quantity of oil leaking from the sunken vessel. My assignment specifically concerned monitoring the artifacts. SRC maintains a catalogue of *in situ* artifacts on



Sami Seeb and NPS archaeologist Jim Bradford trilaterate artifacts on the deck of the USS Arizona.



Sami Seeb starboard of one of the three guns in the USS Arizona's number one gun turret.

the wreck's exposed deck. Along with comprehensive site maps including positional information, the catalogue contains detailed artifact descriptions, updates on the condition of artifacts from year to year, and hotlinks to photos of each artifact.

I was responsible for relocating artifacts using maps and trilaterated positions, checking their condition, and recording locations and descriptions for any newly discovered artifacts.

The task took the entire two weeks with at least four people working together at any given time. From galley tiles to coke bottles, desk fans, and medicine cabinets, the variety of artifacts scattered on the deck were a vivid reminder of the tragic and abrupt end of nearly 1100 lives lost on that December day.

"Diving on the Arizona was a truly humbling experience . . . "

One of the most amazing moments working on the *Arizona* took place above water. The aircraft carrier USS *Ronald Reagan* was in Pearl Harbor at the end of an extended Pacific cruise. The carrier came to Pearl Harbor to pick up crew members' families who had the honor of sailing back to California aboard the ship. On the day of *Ronald Reagan's* departure, we ended diving operations just before the tugs arrived to move the vessel out of the harbor. We continued to work on the Memorial as the carrier silently floated by. All hands were on deck with their family members and every sailor aboard the vessel saluted as they passed the memorial. Diving on the *Arizona* was a truly humbling experience, and that moment was further testament of the site's significance in American history.

After finishing the planned monitoring of USS Arizona, we relocated equipment and personnel to Kaloko-Honokōhau National Historical Park (KAHO), a park with rich prehistoric, contact period, and historic maritime history.

The project's goal was to assist with documenting the 'Ai'ōpio Fishtrap, a 1.7 acre pond, consisting of a stone and coral wall forming an artificial enclosure along a naturally curving shoreline. The fish trap remained in use until modern times when it fell into disrepair. KAHO recently initiated a rehabilitation project which required site documentation before submitting rehabilitation plans to the State Historic Preservation Office.

'Ai'ōpio Fishtrap sits in the southwest corner of the Honokōhau area of KAHO, three miles north of Kailua-Kona on the Island of Hawaii. The fish trap is along the southeast shoreline of Honokōhau Bay.

'Ai'ōpio contains a wall connecting the curving shore line and four rectangular enclosures within the wall which may have been used as holding pens for netted fish. 'Ai'ōpio is a loko kuapa type fish trap, meaning the builders created the wall to trap fish as opposed to using only natural shoreline features or an inland pond. The current condition of the 'Ai'ōpio Fishtrap represents both natural and human site formation processes. Wave action and seasonal weather damaged wall sections over time. Additionally, recent occupants of the Honokōhau Bay shoreline dismantled a section of wall, creating a gap to allow canoe access to the ocean.

The goal of the SRC work was to document the wall's current condition and analyze data to calculate the volume necessary to rehabilitate it. To accomplish this, SRC used a Trimble 8 differential GPS system with millimeter accuracy. We documented structurally intact wall sections and the rubble scatter from wall fall, taking positional points every few feet along. We also took topographic points on top of the wall, and along man made alignments of rocks within the pool itself.

In addition to GPS positioning, we used PhotoLink, a software program enabling us to link digital images, both terrestrial and submerged, to corresponding GPS points. Using the points and images, we created a map of the wall and have begun calculating the volumetrics of the wall fall. To augment the documentation of the damage, we also mapped visible base stones in the gap that indicate the original width of the wall at that position. We also drew scaled profiles of intact wall sections to get a better understanding of traditional construction methods. A technical report on the project is currently underway.

The Hawaii projects presented me with two drastically contrasting sites. The sites varied significantly, each offering a unique and valuable field experience (spending a month in Hawaii wasn't too bad either). $\mathring{\cup}$

– Sami Seeb



Contact period petroglyph found in Kaloko-Honokōhau NHP.



"Heritage work in the remote Pacific Islands is difficult, but well worth the effort."

. . in the NWHI Marine National Monument

One July 23rd the NOAA ship Hi'ialakai returned to Honolulu following a 28-day research cruise to the Northwestern Hawaiian Islands. The multidisciplinary expedition included six maritime archaeologists with NOAA's National Marine Sanctuary Program, accompanying a benthic mapping team to Kure and Pearl and Hermes Atoll. This has been a great field season for discoveries and research into the maritime heritage of our nation's newest marine national monument. The team this year included: Brenda Altmeier (Florida Keys NMS), Dr. Kelly Gleason (2001) (Pacific Islands Region NMS), Tane Casserley (1998) (Maritime Heritage Program NMS), Lindsey Thomas (Hollings program intern from the University of Georgia), Robert Schwemmer (West Coast Region NMS), and Dr. Hans Van Tilburg (1992) (Pacific Islands Region NMS). Three of the six archaeologists are products of East Carolina University's Maritime Studies Program.

Heritage work in the remote Pacific Islands is difficult, but well worth the effort. The resources in these remote atolls are truly special, unique examples unseen in any other part of the world. Non-excavation survey of the 19th century New Bedford whaler *Parker* (preliminary ID), lost during a violent storm in

1842, is complete. The artifact distribution tells of a ship being carried completely into the atoll, whaling equipment spilling from the deck at the reef crest, and the vessel breaking apart in the shallows of the lagoon. Survey of the British whaler *Pearl*, lost in 1822, is also complete. Artifacts at this site are quite deteriorated, but the ship's large iron try-pots rest upon copper hull sheathing on the seafloor. The equipment fell through decaying timbers where the vessel lay trapped in the coralline substrate.

The wreck of the USS *Saginaw* at Kure Atoll captures our Civil War-era presence in the Pacific. In extremely difficult surf zone conditions, the team discovered and photographed this gunboat's major elements. The bow and stern Parrott rifled pivot guns,

broadside cannon, steam oscillating engine, mast rigging, paddle-wheel shafts and flanges, etc. capture the nature of this transitional vessel of the old steam navy. The site investigation completes the story of the wreck and survivors, castaway on the world's most remote atoll in 1870.

The initial survey of the iron hulled sailing ship *Dunnottar Castle* was a bonus. The 258-foot British collier was lost in 1886 while bound for California from Australia. The site is a complete assemblage of a late-19th-century commercial carrier, an incredible heritage resource from the days of the sailing ships such as the *Falls of Clyde, Balcalutha,* and *Star of India,* when our maritime commerce was driven by steel masts and canvas, wind power and human hands. Finally, the team worked on the identification of an unknown motor vessel wrecked at Pearl and Hermes Atoll, a maritime mystery. The Japanese "Oshima" design anchors date the site after 1918, and electrical components point to construction in Hong Kong. Further research into written documents is needed to solve the mystery of this site.

These wreck sites are the homes for many species of fish and invertebrates now, and like the natural resources that surround them, they deserve the protection and preservation

> provided them by the State of Hawaii, the U.S. Fish and Wildlife Service, and NOAA's National Marine Sanctuary Program. With the creation of the Northwestern Hawaiian Island Marine National Monument, we now have the capacity to inventory and research these and other historic treasures, and promote appreciation of these significant heritage resources through public outreach and education. $\mathring{\Psi}$

Dr. Hans Van Tilburg
 Principal Investigator
 NOAA National Marine Sanctuary Program
 Pacific Islands Regional Office



Parrott 30-pdr pivot gun from the Saginaw.



Maritime students sailing periauger.

THESES DEFENDED IN 2006:

- Samuel Blake, "A Comparative Study of the Effectiveness of German Submarine Warfare on the Eastern Seaboard of the United States in the World Wars."
- **Ryan Harris**, "Chalupa No. 2: A Comparative Study of 16th Century Basque Whaleboat Construction From Examples Excavated at Red Bay, Labrador."
- Heather Hatch, "Arrrchaeology: Investigating Piracy in the Archaeological Record."
- Adam Lehman, "The Privateers of the War of 1812: A Study of the Impact of American Federal Legislation and Policies Regarding American Private Armed Vessels."
- Franklin Price, "Conflict and Commerce: Maritime Archaeological Site Distribution as Cultural Change on the Roanoke River, North Carolina."
- Filippo Ronca, "The Historical and Archaeological Investigation of the *Selah Chamberlain*, a 19th-Century Great Lakes Bulk Carrier."
- Jon Travis Snyder, "Washington, North Carolina's 19th Century Coasting Trade and the Historical and Archaeological Investigation of the Schooner *Star*."
- Kathy Southerly, "Landscapes in Transition: Redbanks Landing on the Tar River, Greenville, North Carolina."

SCHOLARSHIP WINNERS:

PAUL MURRAY FELLOWSHIP: Michelle Damian

- R.N. LOKKEN SCHOLARS: Tricia Dodds, Anthony Dunn, Adam Friedman, and Wilson York
- Admiral Eller Prizewinner: Monica Ayhens \downarrow



Lecture Series Commemorates 25th Anniversary

To commemorate its twenty-fifth anniversary, the Program in Maritime Studies is hosting a lecture series featuring a number of distinguished scholars throughout the 2006-2007 academic year. The series will begin in mid-November, with a lecture by Rosemary McConkey of the Centre for Maritime Archaeology, University of Ulster, Coleraine. McConkey will discuss her current research into Northern Ireland's maritime cultural landscapes. Cutting-edge research will also be the focus of a talk this coming January by Dr. Mark Staniforth of Flinders University in Australia, who will talk about the archaeology of whaling.

The Program has been at the forefront of maritime archaeology since the field's emergence as an academic discipline in the 1970s. In addition to highlighting current research, two speakers will look back over the history of academic maritime archaeology and discuss future directions. Dr. George F. Bass founded Texas A&M University's Nautical Archaeology Program, and is often regarded as the "Father of Underwater Archaeology." Dr. Richard Gould of Brown University has been involved with maritime archaeology for more than two decades, and is widely known for his anthropological approach to maritime studies.

As Stem to Stern goes to press, the full slate of twenty-fifth anniversary speakers has not yet been set, so there is the possibility that other scholars will be added to this distinguished list. Check the Program website for announcements regarding speaker dates and times – all current students and alumni are invited to attend. ψ

– Dr. David Stewart

Ahoy Mates! Welcome to ECU to ECU

New MA Students in the Maritime Studies Program

Melissa Ashmore received her BS in Archaeological Studies from the University of Wisconsin - LaCrosse in May 2006. In summer 2005, she participated in a field school through Illinois State University on Grand Island, Michigan. She also logged 50+ hours in the lab of the Mississippi Valley Archaeological Center. Her interests lie in the 1600's Spanish fleets and in 1700's piracy in the Spanish Main. She enjoys reading science fiction/fantasy and doing anything outdoors from camping to horseback riding.

Monica Ayhens, originally a native of sunny California, received her bachelor's degree in Ancient Greek from DePauw University in 2000. She spent nearly six years in Denver, Colorado (except for five months in Heidelberg, Germany), where she worked at the Tattered Cover, one of the nation's largest independent bookstores. Her current research interest is the Royal Navy during the Napoleonic Wars. In her much-coveted spare time, she likes to fold origami, read books that aren't on a class list, and fiddle about in the kitchen. She's rumored to make a mean lobscouse.

Jeremy Eamick is from Tucson, Arizona. He graduated from ECU with a dual History and Anthropology major this past semester. He actually enjoys studying economic history, which is why he is looking into naval store productions from 1700-1790. His interest in maritime topics came from his brother, a Navy Seal who took him scuba diving when he was 12. For enjoyment he prefers relaxing around a fire and camping. He has never worked in the archeology field yet, but he hopes that changes soon.

Lisa "Veronica" Garrett has a BA in History, Politics, and Geography from Humboldt State University in northern California. Originally from Massachusetts, she has been living in Santa Cruz, California, for most of the last decade. Finally deciding not to work dead-end jobs in a touristindustry beach town any longer, she entered ECU to further her aims of maritime museum work. Her areas of research interest include European expansion in the Age of Discovery,



From left to right: Lisa "Veronica" Garrett, Monica Ayhens, Seth Walton, Melissa Ashmore, Jeremy Eamick, Stephanie Wuebbles, Seth Warburton, Sarah Riggs, Nadine Kopp.

specifically Portuguese developments in cartography and navigation, as well as Portuguese contact with the Americas, privateering, and piracy. In her spare time, she enjoys reading and watching films or old spy TV shows while knitting.

Nadine Kopp is from Toronto, Ontario, Canada. She received her BA from Wilfrid Laurier University in Waterloo, Ontario, in Archaeology and Anthropology. She has worked on native and historic archaeological sites throughout Ontario and has also excavated in Bermuda in partnership with the Bermuda Maritime Museum. Her interests include War of 1812 sites. In her free time she enjoys watching hockey, baking and kayaking.

Sarah Riggs graduated from UNC-Greensboro in 2005 with a BA in Anthropology and minor in Classical Civilizations. While trying to choose a career path, she spent time answering phones and filing documents only to stumble upon a position in CRM. Realizing how happy she was spending long hours in the sun to uncover the past, she decided to further her pursuit of archaeology. Her current research interests include subcultures within ocean dependent communities. Sarah likes to set aside time for knitting, fencing, zombie movies, and photography.

Seth Walton graduated with a BA in globalization and politics in 2002 and an MPA in 2003 from the University of Colorado at Denver. He has worked and traveled extensively throughout the Americas. He wants to use his time here to provide equitable benefit and access to cultural resources for third world peoples. He has worked for the State of Colorado as a Legislative Performance Auditor and still moonlights as a management and performance improvement consultant for nonprofit organizations. He enjoys diving, sailing, traveling, dry-stack stone masonry, good music, and fixing broken things. Eventually, he hopes to complete a circumnavigation of the world on a sailboat.

Seth Warburton was born in Boalsburg, Pennsylvania, which is recognized in central Pennsylvania as also being the birthplace of Memorial Day. He graduated from The Pennsylvania State University in 2004 with a BS in Meteorology. Seth then spent the next two years as an Americorps volunteer in the state of New Hampshire, teaching children about the environment and building trails in that state's wilderness areas. Seth hopes to continue his hobbies of fly-fishing and cooking while learning about maritime history here at ECU.

Stephanie Wuebbles is from Pittsburgh, Pennsylvania. In 2006, she received her Bachelor's in History from Kent State University, minoring in Geography. She has worked at the Hancock County History Museum in New Cumberland, West Virginia, as a docent and cataloger since 2004. Her specific focus is the culture surrounding transatlantic steamships from 1840-1920, especially British steamship companies. In her spare time, she enjoys writing fiction, watching BBC movies, and studying Scottish history. $\mathring{\Psi}$

2005 • MARITIME STUDIES ASSOCIATION ACTIVITIES • 2006



The Maritime Studies Association (MSA) enjoyed another eventful year and is eager to continue its social and educational activities in 2006 - 2007. In addition to the annual Halloween and blackout parties, in spring 2006 we carried out the first "Seabiscuits and Bitters" fundraiser, inspired by British naval meals represented in the Patrick O'Brian *Master and Commander* novels. MSA members recreated period dishes for a potluck dinner ranging from lobscouse to kedgeree to the omnipresent ship's biscuit, and conducted a variety of "shipboard games." We ended the academic year with a modified regatta, using kayaks and inflatables to wage a water fight along the Tar River.

Drs. David Stewart and Heidi Luchsinger with son Atticus as a Pumpkin Patch at the Halloween party.

MCA has also been striving to enhance the educational opportunities available for our members. The spring 2006 speaker series brought Susanne Grieve (Conservator, NOAA Monitor Marine Sanctuary), Dr. David Long (ECU Department of History), and Dr. Waldemar Ossowski (Maritime Archaeologist/Curator, Polish Maritime Museum) to Eller House for lectures.



Sampling shipboard fare at the MSA Seabiscuits and Bitters night.



MSA members show pirate pride as they float down the Tar River.

Finally, MSA has begun increasing efforts to reach out to the community to promote awareness of our field. We have developed written curriculum for a short class, introducing maritime archaeology and targeted at middle school students. Our goal is to use engaging hands-on exercises to familiarize students with the concept of investigating past cultures through the objects left behind. We hope to expand the curriculum in the future to teach the class to younger and older students as well.

MSA is excited about getting students and faculty involved in all aspects of our activities. For the most updated information, please visit us on the web: www.ecu.edu/msa. \downarrow

– Michelle Damian

In the 2006 - 2007 academic year, we will supplement the PMS 25th Anniversary Speaker Series with hands-on activities. We have sailed the recreated periauger in Perquimans County waters, and plan to visit nearby maritime museums. In addition, we intend to arrange workshops ranging from terrestrial surveys to effective use of computer software to enhance research capabilities.



Michelle Damian and Amy Leuchtmann help a middle school student try on scuba gear at a MSA Outreach Program.

Where Are Our Maritimers Now? - 2006 Are They Now? Where

James Allan, Ph.D. – Lecturer, St Mary's College of California, Moraga, CA

(A

- Evguenia Anichtchenko Museum of the Aleutians, Unalaska, AK
- Ray Ashley, Ph.D. Executive Director, San Diego Maritime Museum and Professor of Public History, University of California at San Diego, CA
- Paul Avery University of Maine Law School, Orono, ME

T

David Baumer – Newport News, VA

Sam Belcher – Medical Technologist (ASCP), Laboratory Supervisor at Central Baptist Hospital; and Ph.D student, University of Kentucky, Lexington, KY

Kathryn Bequette – Director, Maritime Archaeology and Research, OELS, Westminster, CO, and consultant with Denver Ocean Journey Aquarium

Jemison Beshears – Antique firearms specialist, Greg Martin Auctions, San Francisco, CA

- Jason Betz Ph.D student, Department of History, University of Chicago, IL
- Matthew Brenckle USS Constitution Museum, Charlestown, MA

Robert Browning, Ph.D. – Historian, US Coast Guard, Washington, D.C.

 $(\beta$

Frank Cantelas – Maritime Archaeologist, NOAA Office of Ocean Exploration, Silver Spring, MD

Tane Casserley – Maritime Archaeologist, NOAA's Maritime Archaeology Center, Newport News, VA

Robert Church – Nautical Archaeologist, C&C Technologies Survey Services Inc., Houston Office, Houston, TX.

Wendy Coble – Aviation Archaeology Specialist, Naval Historical Center, Washington, DC

Patrick Cole – Writer, Barcelona, Spain

Edwin Combs, Ph.D. – Visiting Assistant Professor, Mississippi State University, Mississippi State, MS

Michael Coogan – Manager, Strategic Planning, Northrop Grumman IT, Herndon, VA

- David Cooper Resource Manager, Grand Portage National Monument, MN
- Diane Cooper Consultant for the San Francisco Maritime National Historic Park, CA Lee Cox – Contract Nautical Archaeologist,

Dolan Research, Philadelphia, PA

D

- Claire Dappert PhD. Program, Flinders University, Australia
- James P. Delgado Director, Institute of Nautical Archaeology, Texas A&M, College Station, TX
- Jeff DiPrizito High School teacher in New Hampshire
- Wade Dudley, Ph.D. Visiting Assistant Professor, Department of History, East Carolina University, Greenville, NC

Stan Duncan – Regional Sales Consultant, NUS Consulting Group, Inc., Oak Ridge, TN

Scott Emory – Maritime Archaeologist, McCormick, Taylor and Associates, Cherry Hill, NJ

8

Jeff Enright – Austin, TX

Jenna (Watts) Enright – Nautical Archaeologist, PBS&J, Austin, TX

Kim Eslinger – Marine Archaeologist, C&C Technologies, Houston, TX

Sabrina S. Faber – Fulbright Coordinator, AMIDEAST, Sana, Yemen

Rita Folse Elliott – Curator of Exhibits and Archaeology, Coastal Heritage Society, Savannah, GA

F

Richard Fontanez – Contract Archaeologist, Puerto Rico

Paul Fontenoy, Ph.D. – Curator of Maritime Research and Technology, NC Maritime Museum, Beaufort, NC

Chris E. Fonvielle, Jr., Ph.D. – Assistant Professor, UNC-Wilmington, Wilmington, NC

Kevin Foster – Chief, National Maritime Heritage Program, Washington, DC

Joe Friday – Sergeant, Greenville Police Department, Greenville, NC

G

Kate Goodall – Development Manager, American Association of Museums, Washington, DC

Amy (Rubenstein) Gottschamer – Real estate broker, Santa Fe, NM, and Lawrence, KS

- Jeff Gray Manager, NOAA Thunder Bay National Marine Sanctuary, Alpena, MI
- Joe Greeley Curator and Nautical Interpreter, St Mary's City, MD

Cathy (Fach) Green – Education and Outreach Coordinator, Thunder Bay National Marine Sanctuary and Underwater Preserve, Alpena, MI

Russ Green – Maritime Archaeologist, NOAA Thunder Bay National Marine Sanctuary and Underwater Preserve, Alpena, MI

H Carland N

Richard Haiduven – Contract Archaeologist, Miami, FL

Wesley K. Hall – Director, Mid-Atlantic Technology, Wilmington, NC

Lynn B. Harris, Ph.D. – Professor, College of Charleston, Charleston, SC

Ryan Harris, Ph.D. – Underwater Archaeologist, Parks Canada Underwater Archaeology Service, Canada

Heather Hatch – Ph.D. student, Texas A&M University

- Robert Holcombe Retired, Senior Naval Historian and Curator, Port Columbus Civil War Naval Center, Columbus, GA
- Joshua Howard Ph.D. candidate, Ohio State University, Columbus, OH
- Michael D. Hughes Logistics firm, Washington, DC

J

Claude V. Jackson – Museum Curator, St. Louis, MO

- Brian Jaeschke Curator, Mackinac Island State Historic Parks, MI
- John O. Jensen, Ph.D. Lecturer in Maritime History, Sea Education Association, Woods Hole, MA

Rick Jones - Building Contractor, Greenville, NC

K

- **John Kennington** Manager, Borders Books, Atlanta, GA
- Kurt Knoerl Managing Director, The Museum of Underwater Archaeology, and Ph.D. student, George Mason University, Fairfax, VA

Mike Krivor – Maritime Project Manager/ Principal Investigator, Southeastern Archaeological Research, Inc., FL

B

Danielle LaFleur – Collections and Technology Manager, Muskegon County Museum, Muskegon, MI

Matthew Lawrence – Maritime Archaeologist, Stellwagen Bank National Marine Sanctuary, Scituate, MA

Wayne Lusardi – Maritime Archaeologist and research coordinator , NOAA Thunder Bay National Marine Sanctuary, Alpena, MI



Richard Mannesto – Great Lakes Shipwreck Historical Society, Sault Ste. Marie, MI Eleftheria Mantzouka – Underwater Archaeologist, Athens, Greece, Ph.D. candidate, University of Southampton, UK

Are They Now? Where Are They Now? Where Are They

Amy Jo (Knowles) Marshall – Curator, Wrangell-St. Elias National Park & Preserve, Copper Center, AK

Timothy Marshall – Cultural Resources Specialist/Post Historian Ft. Wainwright, Fairbanks, AK

Deborah Marx – Maritime Archaeologist, Stellwagen Bank National Marine Sanctuary, Scituate, MA

Coral Magnusson – International Archaeological Research Institute, Honolulu, HI.

Tom Marcinko – South Carolina Department of Natural Resources, Charleston, SC

Roderick Mather, Ph.D. – Associate Professor, Department of History, University of Rhode Island

Peter McCracken – Reference Librarian, University of Washington, Seattle, WA

John McWatters – Ph.D. candidate, Bowling Green State University, OH

Phillip H. McGuinn – Deputy Public Affairs Officer with U.S. Submarine Forces, Norfolk, and Naval Reserve Captain, U.S. Northern Command, Colorado Springs, CO

Salvatore Mercogliano, Ph.D. – Instructor, Central Carolina Community College, Adjunct, Campbell University, and Adjunct, US Merchant Marine Academy

Ann Merriman – Ph.D. candidate, University College London: Minnesota Transportation Museum, Site Administrator

Keith Meverden – Underwater Archaeologist, State Historical Society of Wisconsin

David Miller – Okinawa, Japan

Calvin Mires – Ph.D. candidate, East Carolina University

Amy Mitchell, Ph.D. – Assistant Professor, University of West Florida, Pensacola, FL

Kimberly E. Monk – Ph.D. candidate, University of Bristol, England

David Moore – Curator of Nautical Archaeology, North Carolina Maritime Museum, Beaufort, NC James Moore – Ph.D. candidate, University of

Rhode Island, Narragansett, RI

Scott Moore, Ph.D. – Assistant Professor, Indiana University of Pennsylvania

Shawn Holland Moore – Volunteer and Community Partner Coordinator, ECU Volunteer and Service-Learning Center, Greenville, NC

Stuart Morgan – Public Information Director, South Carolina Association of Counties

Jeff Morris – Owner/Senior Scientist Azulmar Research LLC and Geomar Research, LLC

John W. (Billy Ray) Morris – Ph.D. candidate, University of Florida

X

- Adrienne (Askins) Neidinger Archaeologist, Submerged Resources Center, National Park Service
- Sam Newell NC public school teacher, Greenville, NC

Kevin Nichols – Department of the Army and Ph.D. student, Wayne State University, Detroit, MI

0

Chris Olson – Curator, Minnesota Transportation Museum, Railroad and Minnnetonka Divisions

Deirdre O'Regan – Editor, *Sea History* Magazine and Instructor, Seamester Program, Long Island University

Mike Overfield – RUST Program, NOAA, Silver Springs, MD

\mathcal{P}

Jason Paling – Teacher, Nashua, NH

Harry Pecorelli – Sub-Oceanic Technologies, Inc., Charleston, SC

Martin Peebles – Archaeological Illustrator, St. Petersburg, FL

Jacqueline Piero - "enjoying life," Boston, MA

Andrew Pietruszka – Ph.D. candidate, Syracuse University

Mike Plakos – Oceaneering and Office of Naval Intelligence, Washington, D.C.

Darren Poupore – Curator, Biltmore Estates, Asheville, NC

Edward Prados – Director of AMIDEAST, Aden, Yemen

\mathcal{R}

- James R. Reedy, Jr. Contract Archaeologist, Beaufort, NC
- Phillip Reid Consultant, Wilmington, NC

Todd Robinson – Librarian, Medical College of South Carolina, Charleston, SC

Jason Rogers – Archaeologist, Alaska Maritima, Dutch Harbor, Alaska; PhD student, University of Exeter, England

Filippo Ronca – Underwater Archaeologist, Parks Canada Underwater Archaeology Service, Canada

Matthew Russell – Submerged Resources Center, National Park Service, Santa Fe, NM; PhD Candidate, UC Berkeley

S

John C. Schaefer – Ph.D. student, University of North Carolina at Chapel Hill, NC

James Schmidt - Nautical Archaeologist,

Naval Historical Center, Washington, DC Robert Schneller, Ph.D. – Historian, Naval Historical Center, Washington DC

- Joshua Smith, Ph.D. US Merchant Marine Academy, Kings Point, NY
- Chris Southerly Archaeologist/Field Director/ Diving Safety Officer, NC Underwater Archaeology Branch - Queen Anne's Revenge Shipwreck Project, Kure Beach, NC
- Kathy A.W. Southerly Catlin Engineers and Scientists, Wilmington, NC

James Spirek – Underwater Archaeologist, SC Institute of Archaeology & Anthropology, Columbia, SC

T

- Bruce Terrell Maritime Historian and Maritime Archaeologist, NOAA, Washington, D.C.
- William H. Thiesen, Ph.D. Assistant Director and Curator, Wisconsin Maritime Museum
- Hans Van Tilburg, Ph.D. Maritime Heritage Coordinator, NOAA's National Marine Sanctuary Program Pacific Islands Region, HI
- Ray Tubby Nautical Archaeologist, Tidewater Atlantic Research, Washington, NC

Lex Turner – Psychiatric Nurse, PCMH, Greenville, NC

 \mathcal{T}

Daniel Warren – Senior Marine Archaeologist and Houston Asst. Geosciences Manager, C & C Technologies, Inc. Houston Office, Houston, TX.

Sarah Waters – Instructor, Seamester Program, Long Island University, NY

Gordon P. Watts, Ph.D. – Retired from ECU 2001, Director, Tide Water Atlantic Research and International Institute of Maritime Archaeology, Washington, NC

Wilson West, Ph.D. – Historian, US Coast Guard, Portsmouth, VA

- Robert Westrick Director, Maritime Archaeological Research Institute, Vero Beach, FL
- Heather White Education & Exhibits Director, Community Council for the Arts, Kinston, NC

Scott Whitesides – Contract Archaeologist, Utah

- Elizabeth Whitfield Evergreen, CO
- Kimberly Williams Teacher, Hillsborough Community College, Tampa, FL
- Stephen Williams Ph.D. candidate, Antioch New England Graduate School, Keene, NH
- Sarah Wolfe Curator, Museum of Aviation, Warner Robins, GA
- Steve Workman Ph.D. candidate, ECU Coastal Resources Management Program

Is your information correct? Are you altogether missing? Give us an update by emailing our program secretary at underwoodk@ecu.edu ↓

Maritout the Association and MSA Apparel

The purpose of the Maritime Studies Association is to assist students working toward the completion of a degree in Maritime Studies at ECU. Membership in MSA is open to students, staff, and faculty of East Carolina University. Neither enrollment in the Program nor registration in Maritime Studies classes is a prerequisite for joining MSA. Anyone with an interest in maritime history and/or underwater research is encouraged to participate.

We are pleased to again offer the opportunity to SHOW YOUR PRIDE in the Program in Maritime Studies through wearing maritime apparel. Orders from our local distributor, Monograms Plus, will be made in spring and fall. T-shirts, polos, hooded sweatshirts, jackets, and fleece throws are available for purchase. Each item is embroidered with the program's compass logo (see graphic above order form). If you would like to support MSA by purchasing maritime apparel, please fill out this form and return it to the address provided before **April 1**, **2007**, to be in time for our spring order.

Thank you for your support!

Picture	Description	Colors	Sizes	Cost
	18500 Gildan Heavyweight Blend 7.75 oz Hooded Sweat 50/50 cotton/polyester with no fill Two needle hood, shoulders, armholes, cuffs, pouch, and waistband No center crease 1x1 athletic rib with Lycra Double-lined hood with matching drawstring	Forest green, sports grey, red, navy	S, M, L, XL, XXL	MSA Members: \$26 Non-MSA-members: \$28
	 5509BC Outer Banks Nylon Pack-Away Jacket 2.2 oz. 100% nylon taffeta Two-color, pieced lightweight jacket with hidden hood Front storm flap with full zipper and hidden snaps Encased elastic cuffs and bottom hem Water-repellent polyurethane coating Jacket folds to bag with adjustable straps 	Bright Red/Navy, Bright Royal/ Navy, Gold/ Navy, Pine Green /Navy	S, M, L, XL, XXL	MSA Members: \$36 Non-MSA-members: \$38
· Cu	2000L Gildan Ultra Cotton Ladies T-Shirt 6.1 oz. 100% preshrunk cotton Taped shoulder to shoulder No center crease Narrower neck rib Two needle neck, sleeves, and hem	Navy, red, sports grey, forest green	S, M, L, XL, XXL	MSA members: \$16 Non-MSA members: \$20
	2030 Gildan Ultra Cotton Heavyweight T-shirt 6.1 oz. 100% preshrunk cotton Taped shoulder to shoulder No center crease Narrower neck rib Two needle neck, sleeves, and hem	Navy, red, sports grey, forest green	S, M, L, XL, XXL	MSA members: \$16 Non-MSA members: \$20

Picture	Description	Colors	Sizes	Cost
20	2100 Outer Banks Pique Golf Shirt 24000B Outer Banks Ladies Pique Golf Shirt	Pine Green, Bimini Blue, Wine	S, M, L, XL, XXL, 3XL	MSA Members: \$25 Non-MSA members: \$27
ALC: N	6.5 oz. 100% combed cotton			
Sec. March	Fashion Collar and Welt cuffs			
No Ke 1	Two white pearl buttons			
	Taped neck			
1.1	Tubular with two needle hem			
	815T Jerzeez 9oz. Super Sweats Fleece	Oxford Grey	-	MSA Members: \$24
A. 10	50/50 Cotton/Poly			Non-MSA-members: \$26
	Single-Ply fleece			
Alia	Pill free			
15 -	Rounded corners			
And a	3-needle overedge stitching			
	Measures 60"L x 48"W			

Logo (embroidered)

INCLUDE CHECK WITH ORDER FORM.

Mail to: Maritime Studies Association c/o Amy Leuchtmann East Carolina University Maritime Studies Program • Eller House Greenville, NC 27858-4353

Questions?: Phone: 252-328-6097 (department) E-mail: acl0221@ecu.edu (Amy)

ORDER FOR

* All prices are subject to change. Please verify current price before ordering by going to <u>www.ecu.edu/maritime</u> and clicking on the *Order MSA Apparel* tab.

PROGRAM IN

IME ST

UDIES

UNIVERSITY

	Style #	Description	Color	Size	Price	
	Example: 18500	Gildan Hooded Sweat	Navy	Large	\$ 28.00	
SHIPPING AND					\$	
HANDLING:					\$	
f unable to pick						
ip your items at					\$	
Eller House,					\$	
please include					\$	
\$5.00 for the first item and					\$	
\$1.00 for each					\$	
ddditional item						
for priority					\$	
shipping.					\$	
			Shipping and Handling	(if applicable)		
				Total	\$	
Name:						
Address:					e all checks payab	
Phone: Email Address:			Marit	Maritime Studies Associa		



Cytem to Cytern Program in Maritime Studies Admiral Ernest M. Eller House East Carolina University Greenville, NC 27858-4353