

Stem to Stern

A Newsletter for our Maritime Studies Alumni and Friends



JANUARY
2017
VOLUME 33

PROGRAM IN MARITIME STUDIES | THOMAS HARRIET COLLEGE OF ARTS AND SCIENCES | EAST CAROLINA UNIVERSITY | GREENVILLE NC

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Stem to Stern

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

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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.

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

FRONT COVER: Allyson Ropp and Madeline Roth working on recording BISC-029.
(Photo: Courtesy of NPS)

BACK COVER: Hull section of the Atlanta
(Photo: Sophie Stuart)

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– Martha Mihich



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-Thank you

From the Editorial Staff: **From the Editorial Staff:**

Another year has passed by rather quickly for the Program of Maritime Studies. This year's newsletter focuses on the many achievements of current and past students. Students this past year have worked or interned from the Great Lakes to Albania. Recent graduates, and our honorable founders, have published books and articles. Early in the semester we welcomed 17 new maritimers to Eller House during our annual Welcome Aboard party, and we look forward to offering these new students exciting and rewarding opportunities. Putting together this year's *Stem to Stern* was fun and rewarding, and I hope that you enjoy reading it as much as I enjoyed putting it together. 🍷
– Martha Mihich

Stem to Stern was my first glimpse of the Program of Maritime Studies here at ECU, so to be its Assistant Editor has been an interesting adventure. Being plugged in to the variety of research and work done by the faculty and students is always exciting, and being able to help share those experiences with others is equally engaging. I am glad to have had the chance to work here, and look forward to hearing about the adventures of my own cohorts as well as those to come. 🍷
– Ian Harrison

From the Quarterdeck: **From the Quarterdeck:**

It was a good year to be underwater, especially given the country's political tenor and resultant airwaves banter. And it turned out to be a very good year for us. General university budget cuts have halted and our program continues to produce more professional archaeologists than any other (land or underwater); combined with Anthropology, ECU has led for several years in producing RPA Archaeologists. Our students and professors continue to generate outstanding research projects and publications while accomplishing ambitious projects on a shoe string. And the number and qualifications of applicants to the program continues to rise and amazingly all accepted applicants this year are qualified for Graduate Scholar Award status!

Field Schools demonstrated our diversity in interest and our logistical reach with another split summer Field School. Dr. Jen McKinnon took half of the crew to Florida to continue research on the "Pillar Dollar" wreck site, while I and my students escaped the heat by heading to Wisconsin and Lake Michigan to work with the WSHS (Wisconsin State Historical Society) on the wreck of the Passenger Freight Propeller Atlanta. These summer projects were punctuated by our fall Field Research in Maritime History's return to Costa Rica under Drs. Lynn Harris, Nathan Richards, and Jason Raupp, to continue examining

wreck remains there.

Between and amongst our field efforts, the university has generously opened new space for us on main campus to move our artifact conservation facilities. Once again I am teaching at and directing the facility. My book (*The Archaeologist's Manual for Conservation*, 2004) continues to enjoy widespread readership, including the latest Arabic translation. Though compact, the new laboratory will carry on our tradition of non-toxic, minimal intervention, artifact conservation for both land and water recovered material. Students enrolled in conservation will identify, stabilize and treat a broad spectrum of artifacts while learning hands on treatment techniques with archaeologically recovered artifacts.

Individual success notwithstanding, in my mind a large part of our success definitely comes from our team approach to classroom teaching and fieldwork. Everything we do circles back to the team concept including our grant acquisitions aimed almost entirely at promoting our field and classroom teaching. Dr. Lynn Harris is leading the way with another National Center for Preservation Technology and Training Award, which will support additional field work. She also leads the way in international outreach joined by colleagues from the History Department (Drs. Dennard and Wilburn) with her

summer classes in International Studies Abroad in South Africa. Our newest team member Dr. Jason Raupp is tearing it up in his efforts to organize our field equipment, enabling field crews to more easily, and at a moments notice, take to the field. Karen Underwood, my very own Radara O'Reilly, has been instrumental in cobbling enough of our donated and administrative accounts together, and combining them with funding from Associate Dean Todd Berry, to buy a new, beautiful, 15 passenger van for the program. While David Stewart continued his excellent teaching tenure as the Richard Steffy distinguished professor for 2016.

In all it has been an exciting and busy year with a great cast of characters here at the Program. I cannot think of a better more energetic crew of faculty and students to continue into the future. And this will be a future of bigger and better discoveries with more profound international and domestic ties beginning with our old friends at the National Museum of Bermuda, the N.C. Coastal Studies Institute, the Thunder Bay National Marine Sanctuary, the National Park Service, and the Wisconsin Historical Society. So read on and enjoy the Program's exploits for 2016, as the saying goes, "time flies....." and we are having fun! 🍷

– Dr. Bradley Rodgers

Maritimers on the Road: 2016 Conference

SHA CONFERENCE -

49th Annual Conference on Historical and Underwater Archaeology

Last January, 30 East Carolina University students and faculty went to Washington, D.C. for the 49th annual Society for Historical Archaeology Conference. This year's theme was "A Call to Action: The Past and Future of Historical Archaeology." It was chosen to mark the 100 year anniversary of the creation of the National Park Service and the 50 year anniversary of the National Historic Preservation Act. Conference organizers encouraged participants to consider the importance of the preservation and interpretation of archaeological resources to a larger historical narrative.

Many students participated in a symposium on ECU's fall field school in Costa Rica. Working with Dr. Lynn Harris and Dr. Nathan Richards, ECU students Jeremy Borelli, Mellissa Price, Hannah

Piner, Katherine Clevenger, Allyson Ropp, Emily Schwalbe, Kelsey Dwyer, Adewale Oyediran, Devin Urban, and Bryan Rose showcased the work ECU did that fall, as well as their research interests. The Maritime Students Association provided funding for many of the students. In addition to the symposium, several students, including Lauren Christian, Sydney Swierenga, and Mitchell Freitas, presented posters and papers at other sessions on a variety of topics, ranging from small watercraft to modern use of historical lighthouses.

The 2016 SHA conference was held at the historic Omni Shoreham Hotel in downtown D.C. With its convenient location near the Smithsonian National park and subway stations, students were able to explore a number of the historic buildings and places the city is home to. These sites included the Smithsonian, the National Mall, and several museums. In addition to the numerous symposiums, students could participate in round table luncheons, covering topics from jobs in nautical archaeology, to race and the SHA. As D.C. is very close to Greenville,

North Carolina, many students who were not presenting were able to attend. ECU students made a good impression and showing throughout the conference, not only by presenting insightful papers and posters, but also as diligent volunteers.

The 2016 SHA conference was the second largest in the organization's history. This exceptionally large conference gave ECU students the opportunity to meet a number of important maritime archaeologists, while continuing to demonstrate ECU's dedication to quality scholarship and professional attitudes. Students networked with potential future colleagues, learned about new and exciting developments in archaeology, and considered important topics on how archaeology can be used to challenge or support larger historical narratives. This conference was a resounding success, allowing graduate students to enjoy our nation's capital and a professional conference. Many students are looking forward to attending the 2017 SHA conference, held in Fort Worth, Texas. 🚗

– Martha Mihich

ECU Maritimers Receive Awards and Internships

Stem to Stern is pleased to announce news of the following awards and internships:

Sophia Stuart – R. N. Lokken Scholarship in Early American History and Paul Murray Graduate Scholarship in History

Olivia Thomas – William Hamlin and Mary Quaife Tuttle Graduate Scholarship in European History

Tyler Caldwell – William Hamlin and Mary Quaife Tuttle Graduate Scholarship in European History

Lauren Christian – Henry C. Ferrell Jr. Graduate Scholarship in History

Janie Knutson – Lawrence F. Brewster Fellowship in History

Carlos Miguel Barber – Barbara and Matthew Landes Graduate Fellowship in History

Dorothy Sprague – Barbara and Matthew Landes Graduate Fellowship in History

Trevor Hough – Evelyn and Joseph Boyette Graduate Fellowship in History

Allyson Ropp – Phi Alpha Theta IN

Sara Spatafore – Tony Papalas History Prize

Katherine Clevenger – Marine Technology Society's ROV Scholarship

Annie Wright – Marine Technology Society Scholarship

Maritime Studies Association:

A Continuing Tradition



PHOTO: JANIE KNUTSON

New and old Maritimers mingling at this year's Welcome Aboard party.

This past year, the Maritime Studies Association (MSA) hosted a number of events, meetings, and workshops, and assisted students in furthering their academic and professional goals. MSA provides funding for conferences, social platforms for graduate students to relax, and opportunities for networking and professional development. This year was no different from years past, in which students participated in a wide range of activities.

The year kicked off in August with the joint Maritime Studies department and MSA's "Welcome Aboard" party. New students were welcomed with a party hosted at Eller House, providing an opportunity to meet and greet with Maritime Studies and history faculty and staff, as well as other current students. Additionally, students participated in the annual Tar River Float, in which students and faculty come together for a fun, leisurely afternoon of floating down the Tar River in inner tubes.

In October, students participated in Archaeology Day at the North Carolina Seafood Festival, volunteering at the NOAA Monitor National Marine Sanctuary booth. Students assisted in outreach activities with the public, involving North Carolina's underwater and maritime cultural heritage. Additionally, Dr. Brad Rogers hosted MSA's annual Halloween party, where students, faculty, and staff gathered for a night of costumed fun.

The fall semester came to a conclusion with the annual Christmas party, hosted at Crossbones Tavern, where students celebrated the conclusion of another successful semester.

The spring semester kicked off with a bang at the annual Society for Historical Archaeology conference in Washington DC in January. ECU students presented on a wide variety of maritime topics, ranging from various thesis topics to symposiums on summer field school work in Costa Rica. SHA is an important event for Maritime Studies students, as it provides countless networking opportunities with other members of the field, as well as a platform for students to present their research.

In February, new MSA officers were elected. The officers for the 2016-2017 school year are:

- President- Annie Wright
- Vice President- Trevor Hough
- Treasurer- Tyler Caldwell
- Secretary- Tyler Ball
- Historian- Janie Knutson
- Development Director- Sean Cox

In April, MSA hosted its annual fundraiser, Seabiscuits and Bitters. This was graciously hosted at the home of graduate director Dr. Jennifer McKinnon, and staff archaeologist Dr. Jason Raupp. Local businesses donated a large collection of prizes, and staff, faculty, and students gathered for an evening of games and fun. The

money made from this event allows MSA to continue supporting students in their endeavors.

Over the course of the year, MSA hosted several different professional workshops that allowed students to fine tune their skills in specific areas. Adam Parker hosted a remote sensing workshop at Eller House that allowed students to practice their magnetometer skills. Additionally, Jeremy Borrelli and Adam Parker conducted a GIS workshop. In March, MSA hosted Dr. Kotaro Yamafune from Texas A&M University for a photogrammetry workshop. Dr. Yamafune's recently completed PhD provides a step-by-step guide to photogrammetry for various underwater archaeological sites. He hosted a three day workshop, in which students learned how to take photos and videos for photogrammetry, and various processing techniques using Photoscan and Photoshop.

MSA would like to thank our meeting speakers over the course of the year, including Phil Hartmeyer and John Bright of the NOAA Thunder Bay National Marine Sanctuary, Joshua Marano of Biscayne National Park, Hannah Piner Fleming of the USS Monitor Foundation, and Dr. Chris Begley of Transylvania University.

Additionally, thank you to our students and Maritime faculty and staff for a wonderful and productive year. MSA looks forward to continuing the support of our students in the coming year! 🍷

– Annie Wright



PHOTO: CROSSBONES TAVERN STAFF

Maritimers enjoying the Christmas Party hosted by Crossbones Tavern in Greenville, North Carolina.

On the Job - Summer Internship Studying the *H.L. Hunley*

In 1864, *HL Hunley* became the first submarine to sink an enemy vessel when it torpedoed the Union blockader USS *Housatonic* in Charleston harbor. Shortly thereafter *Hunley* also sank, killing its entire crew, and remained submerged for the next 150 years.

In 2000 the submarine was raised from the water, and today scientists continue to record and conserve the significant artifacts at the Warren Lasch Conservation Center (WLCC) in North Charleston, South Carolina.

This summer I had the opportunity to work as an archaeology intern on the continued recording of the Civil War submarine. It was a unique experience in large part because so few vessels have been entirely removed from the water, and can be continually and thoroughly studied like *Hunley*. My work on the project focused on using 3D technologies to add to the site plan. I had the opportunity to learn new equipment, such as structured light scanning that we used to create models of artifacts removed from the submarine. I was

also able to apply skills I learned in school to the work environment, including making Agisoft Photoscan photogrammetry models of hull sections and artifacts, and incorporating them into a Rhino 3D site plan. A large part of my job was to use a

combination of previously collected in situ points and photographs alongside new models of the removed pipes and pumps to recreate the submarine's unique ballast system in the site plan. Figuring out how everything pieced together and would have

photogrammetry sections of interior hull to previous models, and made schematics of the forward pump, among other small assignments.

One of the most interesting parts about working at the WLCC was the

wide range of scientists who have come together to find the best way to preserve *Hunley*. Conservators, chemists, and archaeologists all cooperate and contribute their areas of expertise to ensure the best decisions are made for preservation and continued study.

I had a personal interest in the research as well. My thesis work focuses on the material culture study of Civil War blockade runners, so it was fascinating to see how so many disciplines have coordinated to better understand this important time in United States history. I have enjoyed studying how technology changed dramatically during the Civil War, particularly in ship construction techniques, of which *Hunley* is a great example. There is still a good deal of work and research to be done on the project, and it will be interesting to see how it progresses over the next few years knowing that I was able to contribute to the work- if only for a few

months! I would like to thank Clemson University and the Friends of the Hunley as well as everyone at the WLCC for making this summer's opportunity possible.



– Emily Schwalbe



PHOTO: STEPHEN ATKINSON

Emily Schwalbe records an artifact from the *H.L. Hunley* using structured light scanning.

looked before the submarine sank and the artifacts were concreted was an interesting challenge. Putting the parts together and aligning them was almost like solving a 3D puzzle. I also helped align models of bench sections in the site plan, superimposed

On the Job - Working in Biscayne National Park

Following ECU's Summer Field School, I got the opportunity to continue working with the National Park Service in Biscayne National Park. I came in as a volunteer underwater archaeologist to aid Chuck Lawson, the cultural resource manager, and Josh Marano, the archaeological technician, along with the other volunteers and interns for the summer.

Upon returning to the park in the middle of June, I stepped into another shipwreck excavation. Instead of pristine sand and a large ballast on the hull structure like Pillar Dollar, this wreck sits on a reef covered in large corals and coral rubble, most of which was either raked off the site or clogged our dredge. Once removed, the coral revealed a large expanse of ship structure in two sections of the site as well as various artifacts. These artifacts consisted of copper, muntz metal, and glass fragments along with a few pieces of ceramic and bone. As the project continued, I not only got to practice my skills at mapping a portion of the site, but also helped begin conservation on some of the smaller artifacts and took photographs. The site was

Josh to know what is happening to their sites, both from natural and cultural factors. A large portion of the assessments this year were anchors scattered at varying depths throughout the park. An initiative has been started to get basic recordings of the anchors, so I became very familiar with the many anchor flukes jutting out of the seafloor. The assessments also took me up to Stiltsville to look at a wreck right nearby one of the houses. The wreck was teeming with lobsters and a shark, but was in such a fascinating location near Miami and did not seem to be visited much.

At the end of July, I got to participate in the lobster mini season taking place in South Florida. We patrolled some of the most culturally significant wrecks in the park, like English China and HMS *Fowey*, to ensure that these wrecks were not being destroyed for the purposes of catching lobster. I also got to work with Dave Conlin and Jessica Keller from the National Park Service Submerged

Resources Center and David Gadsby from NPS Washington Support Office, who came to aid the Youth Diving With a Purpose group. For a week, we spent time helping the youth conduct metal detecting surveys along a reef line looking for remnants of shipwrecks.

The final project of the summer took me to a broken hull steel wreck in 60 feet of water to finishing mapping the sections that were left from the previous summer's work. The

first day on the wreck was simply mapping a section using baseline offset to complete the drawing. The second day was much more interesting. As Josh worked on one end, I worked on the other making a line drawing of the bow jutting out of the sand, as well as a plan view of the deck as if it was standing. While these are not hard tasks,



Allyson Ropp mapping a section of BISC-029.



Allyson Ropp taking a wood sample from a frame on BISC-029.

completely uncovered for mapping and photography, including the creation of a 3D photogrammetric model of the site.

At the end of the project, we moved to doing condition assessments of the numerous sites across the park. There are over 70 submerged sites within the park boundaries. These assessments allow Chuck and

I spent the entire dive in a staring contest with a massive moray eel living in the bow, who looked very much like I was invading his space.

Working with the National Park Service was an amazing experience. Not only did I get lots of underwater time working in various conditions on various projects honing my archaeological skills, but I also got to learn about a variety of practices for managing submerged sites. I received conservation experience on a variety of artifact types, learned about public outreach and education initiatives to make the sites and reports available to the public, and gained insight into the inner workings of the National Park Service system. Along the way, I met some amazing people, saw some amazing sites in both good and bad dive conditions, and put to use all the skills and tools I have learned during my time at ECU! 🐠

- Allyson Ropp

On the Job - Wisconsin Historical Maritime Preservation

This summer, I had the honor of working with the Wisconsin Historical Society's Maritime Preservation Program. The University of Wisconsin Sea Grant Institute provided the WHS with a grant to host a summer field school on the steamer *Atlanta*. This funding also allowed for a Sea Grant fellow who would assist Wisconsin's underwater archaeologists Tamara Thomsen and Caitlin Zant (an ECU alumni) with their 2016 field season. As the Underwater Archaeology fellow, my primary focus was assisting ECU maritime students and staff with the 2016 field school. I aided the students in the mapping and drawing of *Atlanta's* site plan. I was then charged with gathering the vessel's historical and archaeological information to write the nomination for the National Register of Historic Places. Tammy and Caitlin not only guided me through preparing the nomination for the *Atlanta*, but made every effort to introduce me to every aspect of Wisconsin Underwater Archaeology.

My first week as a fellow I had the opportunity to sit in on meetings with representatives of the National Oceanic and Atmospheric Association (NOAA) to discuss the environmental impact statements and management plans for the proposed

Wisconsin NOAA sanctuary. These meetings showed me the importance of environmental and archaeological legislature in the management of environmental and cultural resources.

To be able to do underwater archaeology one must first find shipwrecks. Shipwreck

Sister Islands in Green Bay we found the remains of what seems to be an abandoned fish tug. On this site I was able to try my hand at annotated drawing. I had only produced site plans by using scale mapping techniques learned on past field schools.

Wisconsin underwater archaeologists use the faster and easier method of annotated mapping, drawing a mud map and writing down every measurement. This became a little confusing once Caitlin and I attempted to create the site plan, but with her assistance I began to understand and prefer this method to drawing to scale.

Management and preservation is the focus of Wisconsin underwater archaeologists, and I was able to participate in some of the many ways Tammy and Caitlin do this. I spent two days learning about buoy maintenance in the Apostle Islands. There I dove on the vessels *Ottawa*, *Sevona*, *Noquebay*, *Finn McCool*, and *Lucerne*, putting buoys on all but one. My 100th dive, on the *Lucerne*, was spent digging buoy chain out of 2 feet of sand. These buoys provide easy visibility and secure anchoring, while preventing unnecessary anchor damage. A primary management goal is the nomination of every shipwreck to the state and national Register of Historic Places. I learned the nomination process while writing the nomination for the shipwreck *Atlanta* and assisting in the nomination for the barque *Tubal Cain*. When I first began my fellowship I was fortunate enough to witness the nomination of two vessels to the State Register during the State Historic Review Board meeting. In August, I was able to actually present the nomination for the shipwreck *Alaska* to the State Review Board. I had written this nomination for my Cultural Resource Management class the year before and, with a push from Tammy and Caitlin, was able to present my work.

Wisconsin underwater archaeologists participate in a plethora of community outreach opportunities. Outreach brings awareness, interest, and pride in Wisconsin's



Tori Sailing on the S/V Denis Sullivan.

PHOTO: TORI KIEFER

hunters, government agencies, retired ladies with propeller planes, and many others who come across possible sites share the location with Wisconsin underwater archaeologists. We visited those sites to determine their contents and acquire their exact location. Caitlin, Tammy, and I investigated many possible sites in Sheboygan, Green Bay, and around Detroit and Plum Islands using their 1970s Boston Whaler and side scan sonar. The Sheboygan survey proved unsuccessful, but surveys in Green Bay produced multiple vessel fragments. Between Detroit and Plum Island, we possibly discovered the wreckage of the schooner *H.M. Scove*. Near Pilot Island we rediscovered a shipwreck that former archaeologists had mapped, but had been forgotten over time.

South of the

continued on page 19...



PHOTO: JOHN BRODHANN

Jim Draeger (Wisconsin SHPO) and Tori Kiefer with the Wisconsin Historic Preservation Review Board certification of nomination for the shipwreck *Alaska*.





Running the Hyper-Diver at Middle Island Sinkhole

PHOTO: NOAA/TBNMS

On the Job - Thunder Bay National Marine Sanctuary

During late June and early July, a team comprised of maritime archaeologists from NOAA's Thunder Bay National Marine Sanctuary and Monitor National Marine Sanctuary, the State of Michigan, Maritime graduate students Katherine Clevenger and Anne Wright, and ECU's Dive Safety Officer Jason Nunn conducted light technical diving operations on shipwrecks within the recently expanded boundaries of Thunder Bay National Marine Sanctuary. Diving operations were conducted from the TBNMS 50-foot R/V *Storm* and the 30-foot R/V 3011. The first project consisted of mapping the wooden steam barge *W.P. Thew*, which sank quickly in 1909 after a collision with the freighter *William Livingston*. The machinery and deck equipment were not salvaged at the time and still remain visible. Several baselines were laid on the site after photos were taken in order to produce a three-dimensional scaled model, and the wreck was mapped using baseline offsets.

After recording *W.P. Thew*, the team transitioned into technical diving depths (130 to 250 foot depths) and began shooting footage of *Pewabic* for a three-dimensional scaled model and Catlin

panoramas. The closed circuit rebreather team consisted of ECU alums Russ Green (2002) and Joseph Hoyt (2008) and dive safety officer Jason Nunn. In addition to a rebreather team, an open circuit team, comprised of ECU alums John Bright (2012), Philip Hartmeyer (2014), and Wayne Lusardi (1998), conducted technical dives in order to meet all project goals.

The graduate students facilitated this project by acting as safety divers and meeting the technical teams upon their ascent at predetermined decompression stops. The safety divers relieved the technical teams of any equipment that was no longer needed and carried spare gas mixes.

The latter half of July was spent

continued on page 15...



Members of the Middle Island Sinkhole dive team. From left to right: Philip Hartmeyer, Katherine Clevenger, John Bright, Anne Wright

PHOTO: MAVA GOMES

In the Field - Team Cheese takes Wisconsin

“Team Cheese,” made up of students and staff from both ECU and the Wisconsin Historical Society, spent the later part of May and early June 2016 working on the *Atlanta* shipwreck located about 12 miles off the coast of Sheboygan, Wisconsin. The field school was centered around a phase 1, non-disturbance, archaeological project with the goal of creating a detailed site map of *Atlanta* for the Wisconsin Historical Society, who would then publish and add it to their records. Upon arrival in Wisconsin, bad weather prevented the team from going out on the water for several days. This allowed time, however, to practice the necessary skills such as setting up and putting in the baseline, along with using the theodolite and taking distance measurements with it. After several days of this training and conducting research on the history of *Atlanta*, part of the team was finally able to make it out to the site and set up the baseline for the project.

The average water temperature on site was about 46 degrees Fahrenheit, making it difficult to stay on the shallow wreck for long periods of time. The shallow water did, however, make it easy to swap out tanks between dives and quickly get back to the site to continue drawing the map. Caitlin Zant, one of the staff archaeologists for the Wisconsin Historical Society, and Tori Kiefer, an ECU Maritime student interning with WHS, were very helpful throughout the project as either boat or dive support, helping the team work as effectively as possible in the harsh conditions.

In all, the almost 190 feet of *Atlanta* were mapped in less than 10 days. The site contains a variety of artifacts from the ship as well as modern objects that have floated to the site. The ship itself was fairly intact, but imbedded deep in the sand, so parts of it were difficult to see or record. An interesting piece of the ship was the many long, thin, strips of metal that project leader Dr. Bradley Rodgers believes to be



Team Cheese gathered after a successful public outreach in Manitowoc, Wisconsin.

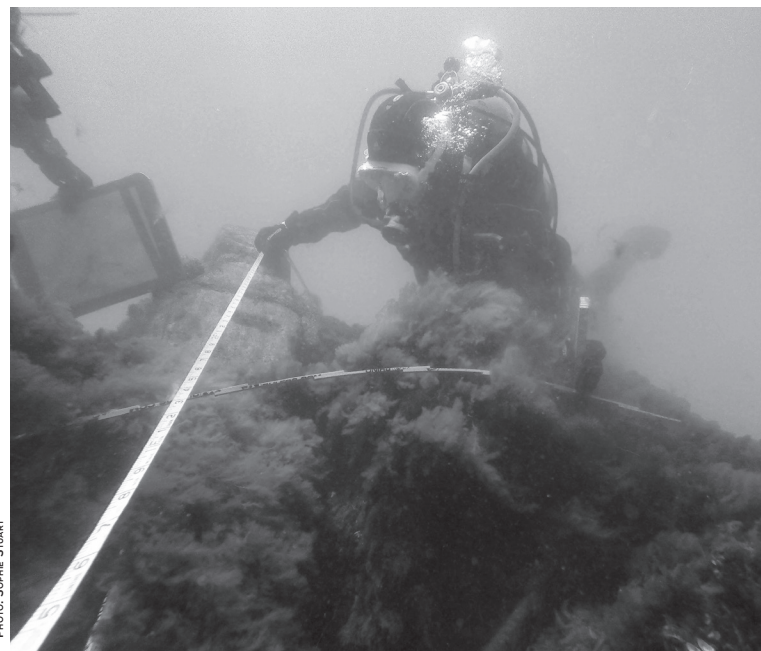
the remnants of a cantilever construction, which was commonly used on bridges rather than ships. In addition to the artifacts, the site was littered with pipes, wood, and pieces of metal sheeting from the ship, most likely the result of an earlier excavation which ended with the divers blowing up the engine room after extracting the boilers and other pieces that could be repurposed. The debris field was definitely an obstacle when it came to measurements, and challenged the team to discern which pieces of wood and metal to map, and which pieces to leave out. The majority of both the stem and stern-post were intact and were measured and added to the site plan after all the other drawings had been completed. Since the ship was still intact for the most part, there was very little debris outside of the ship itself, the team was able to spend their time focusing on the details and measurements within the shipwreck.

When the project was coming to a close, the team also got the unique experience of sharing their work and the site plan with the public at an event held at

the Wisconsin Maritime Museum in Manitowoc. Students and staff set up stations explaining the project, the site plan, and the equipment used, to over one hundred enthusiastic community members. This was a great experience because it allowed the students to gain hands-on experience sharing the work they had conducted with the people who had the shipwreck in their backyard but knew very little about it. The team also got a chance to speak with a local reporter about the project and were featured in an online article, as well as a video segment on CNN News.

The project was concluded back in Greenville where the students inked the site map so that it could be published. The experience as a whole was incredible and Team Cheese persevered through bad weather, sickness, and very cold water in order to produce a beautiful site map of *Atlanta*. The future desire for the project is to go back and do a phase 2 or 3 excavation, if possible, to dig deeper into the sand to see the extent of the preservation of the ship and what else can be learned from what hides below. 🐟

– Sophie Stuart



Lauren Christian and Bryan Scott Rose map a section of *Atlanta*'s hull.

In the Field - Photogrammetry on Terrestrial Artifacts

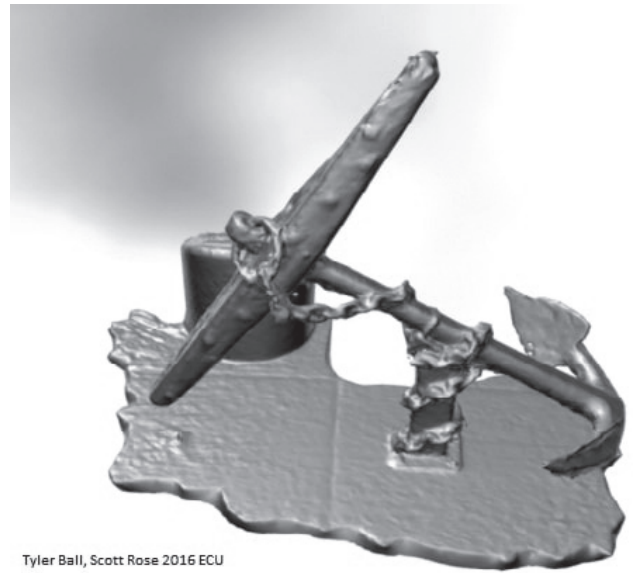
During the ECU 2016 Summer Field School in Sheboygan, Wisconsin, Photogrammetric 3-D models were created to help preserve some of the artifacts on land that reflect the area's significant maritime cultural heritage and history. This also allowed us to develop our familiarity with photogrammetry techniques and recording methods. The team was comprised of students Tyler Ball, Tyler Caldwell, and crew chief Scott Rose.

Photogrammetry is the process of analyzing 3-D models on a metric level by taking several high quality pictures around the desired object from many different overlapping angles. Archaeologists use this method to distinguish any noticeable changes on the object being examined and analyzed. Photogrammetry is becoming a popular methodology in the archaeological world today, because it allows archaeologists to ask and answer new, and previously unanswerable, questions.

Our team created three different models from maritime objects that have been raised from the depths and reestablished in the community as learning tools for the public. Scott was the lead photogrammetry expert in the team, so he proceeded to teach us new and interesting techniques about the program used to create 3D models. My projects consisted

of creating 3D models of a windlass from *Lottie Cooper*, and an iron anchor; Tyler Caldwell recreated a difficult model of the *Lottie Cooper's* Stern.

The team quickly learned how many factors go into creating a presentable 3-D model. Some of the challenges faced include: unwanted shadows from the time lapse, needing or lacking photos to overlap one another, differences in image quality and camera settings, and the order and range photos were taken. Shadows can make problems for 3-D models that gather points from similar and differing points from a photo to distinguish the many different angles and views of the model. The shadows can change in a matter of seconds or over the entire course of the photographic taking process. When some pictures contain shadows and others of the same angle do not, the software program's algorithm either tries to connect the points missing or does not



Tyler Ball, Scott Rose 2016 ECU

The photogrammetry model of an unidentified anchor in Sheboygan, Wisconsin.

include them at all. As a result, the shadows will create a distorted version of the 3-D model. One method for taking good pictures for a photogrammetry model is to use a tarp or flat object to block out the sun from casting unwanted shadows. This is also beneficial for gaining in depth details of the surface being recorded. These were all fixable issues and good lessons learned for what to be aware of during the photo taking process.

While we initially faced a number of issues while collecting the photos for the models, a few days of hard work proved successful. Waiting for the final models to finish rendering was particularly nerve-racking, though. What if we still did not have enough usable photos to complete the model? In the end, completing the 3-D models provided a better understanding of the drawbacks and benefits of photogrammetry. The models were so comprehensive that we were able to make out details that were previously unseen on the original artifacts. This will prove useful in understanding the conservation needs of highly exposed artifacts and with more practice we hope to find other areas that will benefit from these tools. 🐦

– Tyler Ball



Tyler Ball Scott Rose 2016 ECU

The photogrammetry model of *Lottie Cooper's* windlass.

In the Field - Summer Field School in Biscayne National Park

This summer, the first year students (now second years) completed their primary field expedition with ECU. Six students and two crew chiefs, under the tutelage of Dr. Jennifer McKinnon headed to Biscayne National Park in the Florida Keys to continue work on the Pillar Dollar shipwreck archaeological site. The shipwreck was pillaged during and after the 1960s, primarily because of the presence of supposed Spanish pillar dollar coins. Despite heavy looting activity and removal of artifacts, a large number of ship timbers remain in excellent condition, providing a tantalizing glimpse into the construction of the vessel.

This project was a continuation of the 2014 ECU field school. Dr. McKinnon's goal was for the students to learn basic underwater excavation techniques and understand more about the timbers, as well as the construction and origin of the ship.

The first few days of the project were difficult; high winds and a small watercraft advisory made it unsafe for the boats to venture out to the site. Somehow the students made do, as living on an island in the Florida Keys is such a hardship. The students passed the time constructively by cleaning the boat, researching the shipwreck, and swimming.

After a day or two the winds died down, and with the advisory lifted the team was able to hit the ground running, or in this case, hit the water. The students primarily worked in teams of three, with each student doing two dives per day. In addition to ECU divers, several interns and staff from Biscayne National Park pitched in, so there were often over ten divers on rotating shifts working on the dredge excavation. With so many people, the team quickly made up for lost time and completed Dr. McKinnon's excavation goals a day or two early.

After mapping the newly exposed units, the team reserved half a day for data collection to create a photogrammetric 3D model of the site. Following the workflow



The Biscayne Team!

Photo: Chuck Clovis

laid out by Dr. Kotaro Yamafune, the team attempted to take both photo and video of the site using multiple cameras of varying quality. This process involved setting out a number of black and white coded targets and swimming in a crisscross pattern across the site continuously taking photos or video. Once data collection for the 3D model was finished, Dr. McKinnon granted everyone a much needed break and the team packed up and headed to the mainland for the weekend. The trips to the mainland, however, were not all play. While researching the shipwreck, the team discovered photos of an anchor that was removed from the site and displayed on a nearby key. Thus, some students under the guidance of Dr. McKinnon took a short trip to record the anchor for a formal illustration.

Upon returning to the research station, Dr. McKinnon announced that the team would continue to excavate beyond the original intended units because the National Park Service graciously offered to take care of backfilling the site, so that excavation and mapping could continue as long as possible.

The standard field work anecdote is that the most interesting objects or features are found on the very last day of excavation,

and this project was no different. Towards the far eastern end of the site in the very last unit, the team uncovered a large concretation that contained a significant amount of bone, likely all animal. Other than taking measurements and photographs, the team did not have enough time for a detailed examination of the bone concentration this field season.

On the last day of work, the team finished mapping the timbers, cleaned up the area, and conducted a final photogrammetric scan of the site. The data from the original scan yielded an incomplete model, and the team came to the conclusion that they did not use a sufficient number of coded targets on the site. Learning from this mistake, the crew placed more targets over the entire

area and conducted another systematic scan of the shipwreck with both photo and video.

Since the final scan of the site took place on the last day, there wasn't enough time to begin processing the data to create the model while in Florida. Furthermore, the crew would not have a second chance to recapture the photos if the model was incomplete. As a result, there was a significant amount of pressure to collect viable data and images.

With the field work and excavation complete, the ECU students bid farewell to Biscayne National Park and headed home to North Carolina to begin post processing work. Many students worked on specific aspects of the project. Trevor Hough and Olivia Thomas focused on the historical background and origin of the shipwreck, building on data collected during the 2014 excavation. Though the vessel has yet to be identified, the findings, as noted in the site report, support the hypothesis that the ship contained Spanish cargo, but may or may not be a Spanish-built ship. Dorothy Sprague was able to collect extensive measurements and angles of the timbers in order to begin a digital hull reconstruction of the ship. Mr. Hough's and Ms. Thomas's

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In the Field - Fall Field School in Costa Rica

A fundamental problem of cultural resource management, particularly maritime heritage management, is that there are far more resources – known and unknown – than there are archaeologists to manage them. So, as much as we archaeologists may want to see ourselves as specialists, if we truly want to monitor cultural heritage on a global scale, we need to accept the support of non-specialist community members. With this in mind, ECU's Maritime Studies program partnered its fall field school experience with a local youth diving foundation in Costa Rica, the *Centro comunitario de buceo Embajadores y Embajadoras del Mar del Caribe Sur* (Community Center of the Diving Ambassadors the Southern Caribbean), started by María Suárez Toro in 2015 to train youth divers in protecting marine ecosystems and underwater cultural heritage.

Local legend indicates that two Danish slave trading vessels were wrecked in Cahuita Bay, north of Puerto Viejo, Costa Rica, in 1710: the *Fredericus IV* and *Christianus V*. One was scuttled and the other burned during a mutiny supported by the slaves on board. Following the uprising the ships were both destroyed and the slaves released. There are variations and contradictions between the story and

the historical record, but the account has become an important part of the maritime culture of Costa Ricans in the Limon province, many of whom are of mixed racial descent (Amerindian, African, and Spanish). Since 2015, ECU has been supporting the community in efforts to identify shipwrecks in Cahuita Bay to meaningfully link the myths and history.

Much of the bay is protected, part of a national park that primarily covers the waters in and around the bay. The seabed teems with life, and the lush reefs of the bay were clearly the undoing of several ships, with a number of sites in the area still unidentified. For this project we focused on the "Brick Site", aptly named for the substantial cargo of yellow bricks that are scattered among cannons and coral. While the shipwreck remains are fairly well protected by the MINAE, there are risks posed by an expanding tourism industry which brings snorkelers and divers near the sites. Additionally, there is a grassroots demand from the community to identify the wrecks and provide confirmation of the local legend.

For 10 days in Cahuita, Dr. Lynn Harris and Dr. Nathan Richards led ECU students in an effort to gather additional data about the sites and build local capacity to monitor

shipwrecks in the bay. Using the Nautical Archaeology Society curriculum, 12 Costa Ricans between the ages of 15 and 37 were taught the basics: baseline offset, trilateration, mapping, artifact tagging, and artifact illustration. The four-day training included classroom work, dry practice on a beach, and additional practice in a pool prior to the arrival of the trainees on site. A week of dives and additional training followed, in which important features were identified and mapped, the dimensions of the site expanded, and key diagnostic artifacts recovered.

Even more importantly, the program had a profound impact on the youth involved. Puerto Viejo and Cahuita sit along a key transit line for narcotics and human trafficking, and until the 1990s, Limon Province was the most impoverished in the nation. This community project not only provided key support for the preservation of cultural heritage, but it gave a renewed sense of purpose to many in the community – both participants and others – which has the potential to expand jobs in the region and give area minority groups a stronger voice when dealing with national authorities. For a fall field project, this was quite an accomplishment indeed. 🌿

– Sean Cox



ECU Maritimers with their Costa Rican partners early in the project.

PHOTO: CARE OF ECU MARITIME STUDIES: EXPEDITION COSTA RICA

Theses Defended IN 2015/2016

Daniel J. Bera, “Cultural Factors of Shipwreck Site Formation: An Examination of Ferrous Shipwrecks on the Outer Banks.”

Charles S. Bowdoin, “Waterways of Innovation: The Marine Technological Advancements of America’s Prohibition Era.”

Ryan J. Bradley, “Where Were the Whalers? An Investigation of the Archaeological, Historical, And Cultural Influences of North Carolina Whaling.”

Baylus C. Brooks, “Proprietaries, Privateers, and Pirates: America’s Forgotten Golden Age.”

Kaitlin Clothier, “Making Land with Pirates.”

Jeremy Eamick, “The Shifting Sands: A Study of the Maritime Cultural Landscape of New Bern, North Carolina.”

Chelsea Hauck, “Postmortem Archaeology: Reinterpreting Salvaged Sites using the CSS *Neuse* as a Case Study.”

Bernard James Howard, “Navigating Historical Waters: A Study of the Pilots and Original Settlers of Ocracoke Island.”

Robin Croskery Howard, “Surgery at Sea: An Analysis of Shipboard Medical Practitioners and Their Instrumentation.”

Joseph Thaddeus Lengieza, “Vernacular in Curves: The Mythologizing of the Great Lakes Whaleback.”

Ivor Mollema, “Technology and Empire: Comparing Dutch and British Maritime Technologies During the Napoleonic Era (1792-1815).”

Nicholas J. Nelson-DeLong, “War on the Chesapeake: Artifact Analysis of a War of 1812 Flotilla Ship.”

Jeffrey B. O’Neill, “The Technological and Cultural Context of the North Carolina Shad Boat.”

Adam K. Parker, “Dash at the Enemy: The Use of Modern Naval Theory to Examine the Battlefield at Elizabeth City, North Carolina.”

Mateusz Polakowski, “Warships of the First Punic War: An Archaeological Investigation and Contributory Reconstruction of the Egadi 10 Warship from the Battle of the Egadi Islands (241 B.C.).”

Melissa R. Price, “Intellectual Treasure Hunting: Measuring Effects of Treasure Salvors on Spanish Colonial Shipwreck Sites.”

Thunder Bay continued from page 10

facilitating scientific research at the Middle Island Sinkhole, located approximately 2 miles offshore at a depth of 23 meters. The Sinkhole is an incredibly unique anaerobic environment with a purple cyanobacteria growing in the presence of the sulfate-rich groundwater that flows from a nearby alcove. Chemists, biologists, and geologists from the University of Michigan, Harvard University, the Max Planck Institute, as well as several other universities came to Thunder Bay National Marine Sanctuary to collect samples and data of the cyanobacteria, sediment, and groundwater. Two dive teams were created, with the first consisting of three closed circuit rebreather divers and the second made up of three open circuit divers.

The first phase of the project consisted of deploying lines in a spider web pattern emanating from the groundwater source to the area where the mat of cyanobacteria is located, thereby allowing divers to communicate to the scientists where samples came from and equipment was placed. Core samples of various sizes were taken of the cyanobacteria and the thick sediment layer. Divers deployed numerous pieces of equipment that measured: groundwater flow rate at the alcove, light sensitivity, and electrical current of the cyanobacteria. Equipment was then placed that deprived the cyanobacteria of a continuous supply of sulfate-rich groundwater. Facilitating this project and working with so many scientists was an extraordinarily rewarding experience. A big thanks goes to Thunder Bay National Marine Sanctuary and Jason Nunn for this incredible opportunity. 🐙

– Katherine Clevenger

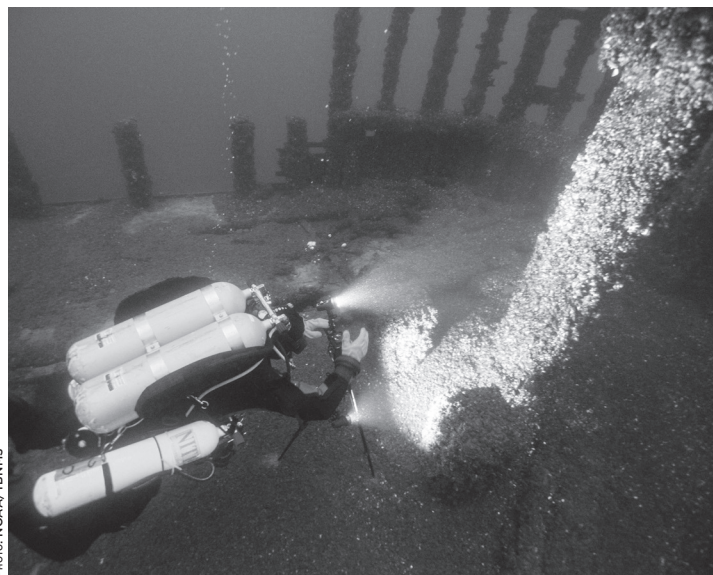


Photo: NOAA/TBNMS

Shooting Catlin panoramas on *Pewabic*

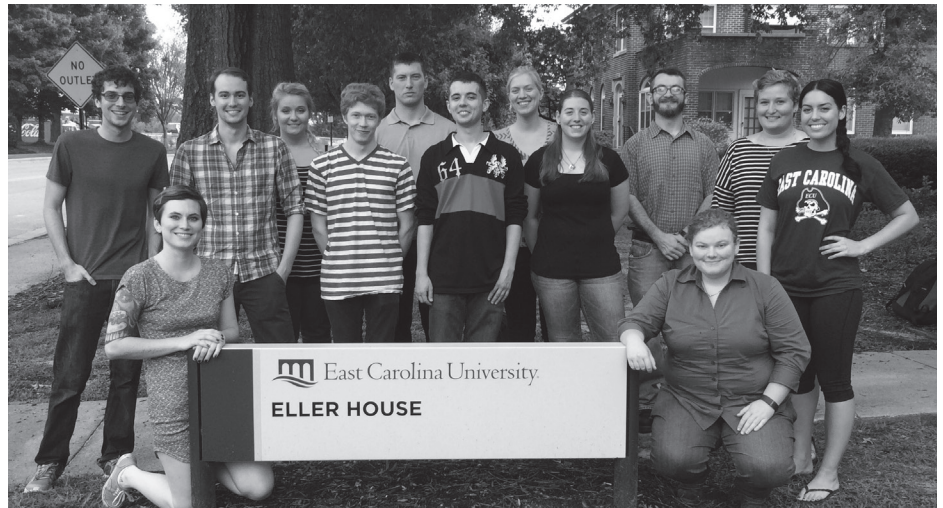
Ahoy Mates! Welcome to ECU

New MA Students in the Program for Maritime Studies

Samantha Bernard is originally from Illinois but grew up in the Rio Grande Valley of Texas. She graduated from the University of Texas Pan-American with a BA in Anthropology and a MA in Interdisciplinary Studies. As an undergraduate student, she was first introduced to terrestrial archaeology while working on artifact analysis in Casma, Peru. Later, as a graduate student she worked in battlefield archaeology, historical public outreach, and eventually was introduced to the world of maritime archaeology. After two summers spent in Bermuda doing fieldwork, her interests in maritime studies were cemented. Current research interests include maritime culture, public outreach, and conservation of material culture.

Katrina Bunyard is a first year graduate student in the Maritime Studies program. She recently graduated from the University of Arizona in Tucson with a B.S. in Anthropology (focus in archaeology). Graduate school marks the first time she has lived outside of Arizona. Katrina wanted to be an archaeologist since second grade, but still doesn't know how the maritime field initially caught her interest. She has had a wide variety of experience, primarily related to terrestrial archaeology, including a field school on a Spanish mission, an internship with the National Park Service, study abroad in Greece and numerous volunteer and internship experiences in museums. Interested in anything and everything related to maritime archaeology, one of her major challenges will be to narrow down those interests. She is eager to learn and excited to work with some of the best in the field, both faculty and students.

Andrianna Dowell is originally from San Diego, California. She graduated cum laude from San Diego State University with a BA in Communication and Marketing. Growing up in a modern maritime



The new first year students outside Eller House. From left to right, front row: Samantha Bernard, Katrina Bunyard. Back row: Ian Harrison, Connor McBrian, Sara Parkin, Tim Smith, Stephen Lacey, George Huss, Maddie Roth, Stephanie Soder, Paul Gates, Anna D'Jernes, Andrianna Dowell. Not pictured: Elise Twohy, Courtney Stoner, Ryan Marr

society instilled a passion and intrigue for underwater archaeology early on. Her first experience with archaeology however would be a terrestrial field school in Guatemala, excavating the ancient Maya city of Ucanal, and a field project in San Diego excavating a prehistoric Native American site. Her research interests in maritime archaeology include gender roles and feminist theory in maritime culture, as well as public outreach efforts and coastal cultural resource management.

Anna "Slim" D'Jernes is one of the few North Carolinians in the program. She was born in Chapel Hill and grew up just outside Raleigh in the heart of state. Following high school, Anna's love of colorful leaves and cool weather led her to Appalachian State University in Boone, NC. There she earned degrees in both English and Women's Studies while hiking and exploring as much as possible with her dingo, Ada. After spending the summer floating down the New River, she made the move to Greenville and began her studies at East Carolina University. Anna hopes to combine her love of salty sea tales and gender theory in order to research constructions of gender and sexuality in seafaring communities and their subsequent portrayal in literature. Her future is bright, and very much subject to change.

Paul Willard Gates was born in Boise, Idaho and spent a majority of his life in South Eastern Pennsylvania. Growing up in a rural area, Paul spent most of his time outside exploring the ruins of an 18th century farm on his family's land. His fascination with exploring old structures and finding artifacts was influential in his personal and educational development. He has a B.A. in History and M.S. in Historic Preservation from The University of Vermont. Paul was employed at the Lake Champlain Maritime Museum as a conservation technician with experience in archaeological diving, collections management, public outreach, education, research, and blacksmithing. Understanding the importance of preserving Lake Champlain's underwater cultural resources, Paul aspires to augment the current roster of underwater historic preserves by investigating the research potential of Lake Champlain's submerged archaeological sites. In doing this, it fulfills not only his own curiosity of what lies beneath the waters of Lake Champlain, but the greater mission of serving the public by sharing the rich history of the region. Paul has previous experience in other museums in Pennsylvania and Vermont, the nonprofit sector, terrestrial archaeology, and Emergency Medical Services.

PHOTO: CARE OF IAN HARRISON

Ian Harrison is originally from Ann Arbor, Michigan. He completed his undergraduate studies at Michigan State University, obtaining a BS in Anthropology and a BA in Geography and GIS. At Michigan State, Ian conducted a variety of historic and prehistoric archaeology in Michigan and Wisconsin, as well as South Africa and Botswana. Following graduation he worked as a CRM archaeologist on projects throughout the Midwest, before eventually coming to ECU to pursue a career in Maritime Archaeology. With geographic interests in both the Great Lakes and South Africa, Ian is primarily interested in the transition from sail to steam and the advent of iron shipbuilding. Having worked with social media outreach for the Michigan State Campus Archaeology Program, and now on the Stem-to-Stern team here at ECU, Ian hopes to continue his future research with a focus on community engagement and public archaeology.

George Huss, as an Air Force brat, has always had trouble telling people where he's from, but if asked he would claim Honolulu, HI as his home. George graduated from the University of Hawaii at Manoa with a Bachelors of Arts in Anthropology, Minor in History, and Marine Option Program Certificate in Maritime Archaeology. While at UH, George worked under Dr. Hans Van Tilburg, who is the Maritime Heritage Coordinator for NOAA's National Marine Sanctuaries in the Pacific. George participated in UH's annual Maritime Archaeology Survey Techniques Course where he helped survey a supposed Landing Ship Medium. Following the survey he coauthored the site report and was able to narrow down the LSMs identity. After graduation he moved to North Carolina where he worked in cultural resource management. His academic interests are utilizing 3D imaging systems and researching shipwrecks in the Caribbean and those of the US Coast Guard and Navy. In his spare time George serves in the USCG Reserves as a Marine Science Technician. Outside of the Coast Guard he enjoys scuba diving, camping, and traveling.

Stephen Lacey did his undergraduate studies at the University of New Brunswick and Ball State University. After graduation he worked as an Archeological Technician at the Black Hills and Tombigbee National Forests. Most of his research centers on Colonialism, Mercantilism and World Systems Theory in the Atlantic Sphere during the 18th century. Primarily he is interested in the smuggling, distribution and production of munitions during the American Revolution. Other areas of interest are: Society and Warfare, Trade networks, Industrialization, Lifeways, Trade specialization, Dendroarchaeology, Remote Sensing, GIS and 3-D Technologies.

Ryan Marr, most powerful memories from youth center around trips to various museums and historical sites. Whether visiting nearby Revolutionary War encampments or touring ancient Sufi mosques, he knew that he wanted to play an active role in historical preservation. After travelling internationally he became aware of the need for maritime cultural conservation efforts worldwide, especially within unstable regions, and this has proven to be the driving force behind his continued studies. The critical role that nautical development has served throughout history in combination with the emphasis on field work drew him to the maritime studies program here at ECU. His interests outside of maritime archaeology include recreational flying, foreign languages, and anything involving the outdoors. He received his B.S from Embry-Riddle Aeronautical University in Prescott, AZ with a major in Global Security and Intelligence Studies and a minor in History. As of now, the focus of his research will center around the maritime history of East Africa and more specifically the cultural profile of life aboard the slave ships that utilized the markets of Zanzibar and the Tanzanian coastline. After completion of his MA, he will be applying for the PhD program in Coastal Resource Management.

Connor McBrien graduated from Iowa State University in 2013 with a bachelor's degree in history. In undergrad he focused on studying Chinese Cold War history and Roman maritime history. He discovered maritime archaeology after

being introduced to it by his professors and friends and quickly moved to Washington, DC to intern in the field. Connor's first unpaid internship was at NOAA's Office of National Marine Sanctuaries studying Civil War wrecks off the coast of the Outer Banks. His second internship was with the Navy's Underwater Archaeology Branch where he mainly conducted archival and historical research on World War II wreck sites. His research interests are focused on industrial maritime history and developments in steam power as well as cultural resource management. Connor enjoys going to hockey games, playing bocce, billiards, kayaking, rock climbing, and scuba diving when he can.

Sarah M. Parkin is a graduate student in the Maritime Studies program with interests in cartography, classics, architecture, and art history. Prior to enrolling at East Carolina University, she was a volunteer on the Redstone Federal Arsenal, conducting contracted CRM work on base. Other employment experience in the field include positions at the Archaeological Research Laboratory (ARL) and the Bass Forensic Center in Knoxville, TN. This is also where she earned her BA in Archaeology from the University of Tennessee in 2014. While at UT, visiting lecturer and Director of the ARL Dr. Hollenbach briefly introduced the concept of underwater archaeology during her seminar and the idea stuck; Dr. Hollenbach later encouraged Sara to pursue an advanced degree in the field while they worked together at the ARL. Sara's interests outside of archaeology involve creating graphic word art, metal/wire sculpture, and complex textiles. Diving, hiking, and being anywhere near the water fills most of her spare time. After completing her Master's degree at ECU, Sara hopes to work in the field of underwater archaeology. She is particularly interested in interpretation and conservation of wreck sites and hopes to work either with a private archaeological firm or the National Park Service.

Maddie Roth first became interested in maritime archaeology after discovering the vibrant maritime history of Lake Champlain in her hometown of Shelburne,

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Biscayne National Park continued from page 13

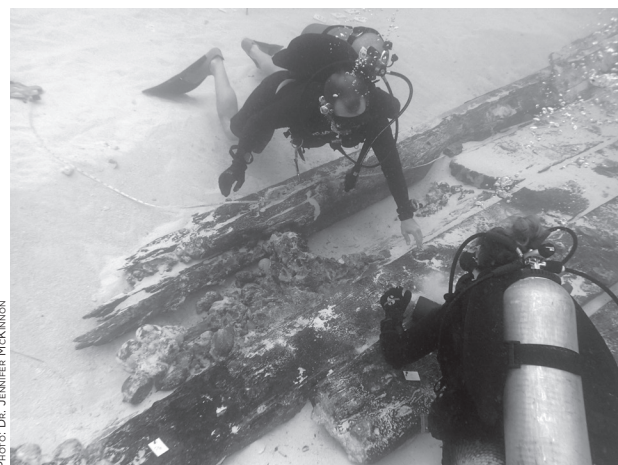
historical analysis combined with the ship reconstruction and future analysis of both the timbers and artifacts will hopefully provide more insight into Spanish trade during the eighteenth century, as well as the wreck's identity. Ms. Sprague will be presenting her findings at the Society for Historical Archaeology conference this winter.

In addition to the historical research, team members also worked on creating a 3D model of the site. Kristina Fricker managed the digital data for the project and plans to use some of the photographs from individual units for a photogrammetric project this fall. She then passed this data to Sean Cox who spent several days processing the images and video captured during the last photogrammetric scan and produced a draft

model of the Pillar Dollar Shipwreck, which is now available for viewing on Sketchfab. A digital representation of the site has a variety of potential applications, as such, Annie Wright plans to 3D-print this model for a public outreach project this fall.

Overall, the summer 2016 expedition to Biscayne Bay National Park was a successful field season. The team worked hard to complete their excavation goals, gathered a significant amount of data on the Pillar Dollar Shipwreck, and learned invaluable archaeological skills and methodologies that will serve them well in their future careers.

Special thanks to: Dr. Jennifer Mckinnon, our fearless leader; Jason Nunn, our Diving Safety Officer who made sure we



Unit 9 Level 4 concretion: Annie Wright and Jason Raupp cleaning the timbers and concretion in preparation for a photogrammetric scan.

lived through the project; Jason Raupp, our staff archaeologist who had to fly halfway across the country to join us; and Biscayne National Park staff and interns, without whom the project could have never happened. 🙏

– Kristina Fricker

SPOTLIGHT ON MARITIMERS, PAST AND PRESENT

- **Dr. William Still** (Founder): Dr. Still has released a new book this year, "Victory without Peace: The United States Navy in European Waters, 1919-1924." Focusing on the development of the US Navy and their involvement in peacekeeping activities after the Treaty of Versailles. This is Dr. Still's third book on the American Navy in European waters.
- **Dr. Gordon Watts** (Founder): Dr. Watts has released a new book this year, "Shipwrecked: Bermuda's Maritime Heritage." This is a full-color coffee table book, focusing on artifacts from Bermuda, terrestrial and maritime sites, and archaeological drawings. Published by the National Museum of Bermuda Press, Dr. Watts hopes that it will generate interest and appreciation for Bermuda's rich Maritime history.
- **Baylus Brooks** ('16): Baylus Brooks has published a new book this year, "Quest for Blackbeard: The True Story of Edward Thache." Using recently uncovered documents, Baylus challenges several previous notions of the famous pirate, trying to get at a more accurate depiction.
- **Melissa Price** ('16): From March to April, Melissa served as a multibeam mapping technician onboard NOAA ship *Okeanos Explorer*. The goal of the project was to map seamounts and guyots in the Pacific Ocean between the Marshall Islands and Guam. The bathymetric data will be used to select future ROV dive sites in the hopes of furthering our understanding of the geology and marine biology of the deep ocean.
- **Sean Cox** (Current Maritimer): This past summer Sean worked as a project maritime archaeologist for the 2016 Albanian Marine Science Expedition. A collaboration between the National Coastal Agency, Albanian Center for Marine Research, and Deep Blue Explorers, the project focused on assessing coastal ecology and underwater heritage at risk from looting, coastal development and pollution. During the expedition, Sean and other divers found evidence for ancient sea level change, Greek and Roman trade, modern environmental data, and noted that the archaeological site of Triport include much larger submerged remains than previously documented.
- **Katie Clevenger** and **Annie Wright** (Current Maritimers): Katie and Annie spent five weeks at Thunder Bay National Marine Sanctuary assisting as a safety technical diver and research diver for their 2016 summer field season. They were safety divers for several archaeological mapping projects, and assisted with the mapping of the *W.P. Thew*. Additionally, they worked as research divers for a biology/geology/chemistry project entitled the Middle Island Sinkhole Expedition. They collected core samples, algae samples, and deployed equipment.

Wisconsin continued from page 8

maritime history. This interest brings more people sharing information and more volunteers helping Tammy and Caitlin manage and protect so many sites. I was allowed the opportunity to give presentations on Shipwrecks of Door County to campers, hikers, and park employees at Potawatomi and Whitefish Dunes State Parks. I also saw outreach through the opening of a new maritime heritage exhibit at the Wisconsin Maritime Museum. Caitlin and Tammy collaborated with the museum to share shipwreck information, photos, and artifacts with the public.

The most exciting outreach

opportunity, and my favorite experience, was my week long sail on the 19th century re-creation of a three masted schooner, *Denis Sullivan*. For six days I sailed on the vessel participating in hoisting the sails, manning the helm, and even pulling up the anchor. This sail was also a workshop that brought educators from all over Wisconsin and Minnesota to share Great Lakes literacy in schools through science. On this trip I presented five lectures on various Wisconsin shipwrecks to the educators and crew, while learning more about invasive species, water quality, importance of fresh water, celestial navigation, and the physics of sailing.

Not only did I learn the duties and responsibilities of a Wisconsin Underwater

Archaeologist, I was able to witness the unique relationship between the Wisconsin people, the underwater archaeologist, and the maritime cultural resources. The Maritime Preservation Program is grant funded so Tammy and Caitlin must raise every penny to manage almost 1,000 miles of Great Lakes coastline and find, document, and preserve over 700 presumed shipwrecks. This is quite a daunting task. Fortunately, these ladies are able to do so with the collaboration of institutions like UW Sea Grant and East Carolina University along with the help of many willing volunteers. I am certainly appreciative of these collaborations and the opportunity to intern for the WHS Maritime Preservation program. 🐚

– Victoria Kiefer

Ahoy Mates! continued from page 17

Vermont. She followed this newfound passion to Maryland where she became involved with several colonial archaeology projects while studying at St. Mary's College of Maryland. Brief forays into marine biology and conservation ecology led her to a love of diving and sparked an interest in collaborative approaches to submerged resource management. After graduating with a degree in Anthropology, she spent some time pursuing a variety of interests before moving to south Florida to further explore cultural resource management. An internship with the National Park Service led her to East Carolina University where she hopes to continue researching south Florida maritime heritage and public outreach. Her other research interests include Dutch colonization, Atlantic frontiers, and identity construction. In her free time, Maddie enjoys cooking, diving, hiking, and skiing.

Tim Smith obtained his undergraduate degree from the University of Evansville in Evansville, Indiana. He majored in Archaeology and Art History, and minored in History and Internet Technologies. At UE he obtained a background in classical archaeology by studying the Near East, Greeks, and Romans. During undergrad

he attended three field schools, two terrestrial excavations in Jezreel Israel, and one underwater excavation in Bermuda. After the Bermuda excavation he knew that he wanted to become an underwater archaeologist. He does not yet know exactly what he will study for his thesis but is considering something to do with the French navy during the reign of Napoleon. He does know that he wants to earn his masters here at ECU in maritime studies, and hopes to go on to get his PHD and become an underwater archaeologist.

Steph Soder hails from a small town on the Pennsylvania-Maryland border. While completing her Bachelor's degree in Criminal Justice with a minor in Anthropology at York College, she discovered a love of diving. She decided to travel to Cambodia for an underwater research expedition, surveying for seahorses and implementing sustainability projects. After graduation, Steph sustained her traveling addiction by working as a hospital security guard. Since then, she has completed bioarchaeology digs at Spike Island, Ireland and Blue Creek, Belize. She hopes to focus on Pacific warfare of the 20th century, with a special interest in osteology. In her spare time, she loves to get lost, go camping, and go diving.

Courtney Stoner was born and raised in Wichita, Kansas where she graduated magna cum laude from Wichita State

University with a B.A. in Anthropology. Her interest in maritime archaeology stems from a deep love of the sea in conjunction with her love of anthropology and archaeology. She is excited to further her education in the Maritime Studies program here at ECU and have the opportunity to combine her passions into a lifelong career. While her interests are vast, Courtney hopes to focus her attention on 18th and 19th century ship construction and conservation techniques. She also aspires to become a certified scuba instructor in her free time. Her outside interests include reading, spending time with friends and family, and enjoying time in the water.

Elise Twohy became interested in history and maritime archaeology at a very young age when she stumbled upon a book about the *Titanic* in her school library. From that moment on she absolutely devoured any and all material pertaining to ships and shipwrecks that she could get her hands on (and this was done in a relatively short amount of time as South Dakota does not have an overabundance of maritime-related literature). Her fascination with maritime archaeology culminated in a visit to the Denver Museum of Natural History where an exhibition on the *Whydoh* cemented her future career plans. She received her bachelor degree at South Dakota State University in history and political science.

Where are our Maritimers now? - 2016

A

James Allan, (1987) PhD – Lecturer, St Mary's College of California, Moraga, CA and Vice President, William Self Associates, Orinda, CA

Evguenia Anichtchenko (2004) – Historian, Alaska Office of History and Archaeology, Anchorage, AK

Ray Ashley, (1996) PhD – Executive Director, San Diego Maritime Museum and Professor of Public History, University of California at San Diego, CA

Melissa Ashmore (2012) – Inventory Specialist, Cabela's; Volunteer Specialist, Antelope Island State Park, Syracuse, UT

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) – Vice President of Cultural Resources, Environmental Corporation of America, Alpharetta, GA

David Beard (1989) – Director, Museum of the Gulf Coast, Port Arthur, TX

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

Daniel J. Bera (2015) – Museum Specialist, Naval History and Heritage Command, Richmond, VA

Jemison Beshears (2001) – Antique firearms specialist, Greg Martin Auctions, San Francisco, CA

Jacob Betz (2004) – PhD candidate, Department of History, University of Chicago, IL

Saxon Bisbee (2012) – Nautical Archaeologist & Vessel Manager, Northwest Seaport Maritime Heritage Center, Seattle, WA

Samuel Blake (2006) – Archaeologist, Southeastern Archaeological Research, Inc., Jacksonville, NC

Jeremy R. Borrelli (2015) – Archaeologist/*Queen Anne's Revenge* Conservator, North Carolina Department of Natural and Cultural Resources, Greenville, NC

Jeffrey Bowdoin (2012) – Curator, Naval History and Heritage Command, Washington, DC

Ryan J. Bradley (2015) – Instructional Consultant, UNC Coastal Studies Institute, Manteo, NC

Matthew Brenckle (2004) – Research Historian, USS *Constitution* Museum, Charlestown, MA

John Bright (2012) – Maritime Archaeologist, NOAA Thunder Bay National Marine Sanctuary, Alpena, MI

Baylus C. Brooks (2016) – O'Brien, FL

Dan Brown (2013) – RPA, Analyst, Oceaneering International, Inc., Hanover, MD

Robert Browning (1980) PhD – Retired Historian, United States Coast Guard, Washington, DC

Darryl Byrd (1998) – Linthicum Heights, MD

C

Peter Campbell (2009) – PhD candidate, University of Southampton, United Kingdom

Frank Cantelas (1995) – Maritime Archaeology Program Officer, NOAA Office of Ocean Exploration and Research, Silver Spring, MD

Jodi Carpenter (2007) – Oceaneering, Nottingham, MD

Chris Cartellone (2003) PhD – Senior Nautical Archaeologist, AECOM, Germantown, MD

Tane Casserley (2005) – Research Coordinator, NOAA's Monitor National Marine Sanctuary, Newport News, VA

Joe Cato (2003) – Raleigh, NC

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

Brian T. Clayton (2005) – Deep Sea Acoustic Surveyor, Fugro Chance, Houston, TX

Wendy Coble (1998) – Defense POW/MIA Accounting Agency, Joint Base Pearl Harbor Hickam, HI

Patrick Cole (1993) – Writer, Barcelona, Spain

Edwin Combs (1996) PhD – Assistant Professor, Miles College, Birmingham, AL

Michael Coogan (1996) – Manager, Strategic Planning, Northrop Grumman IT, Herndon, VA

Amy (Mitchell) Cook (1994) PhD – Associate Professor and Chair, Department of History, University of West Florida, Pensacola, FL

David Cooper (1998) – Branch Chief, Cultural Resources, Apostle Island National Lakeshore, Bayfield, WI

Diane Cooper (1995) – Museum Technician, San Francisco Maritime National Historical Park and Curator, USS *Pampanito*, San Francisco, CA

Annalies Corbin (1995) PhD – President & CEO, PAST Foundation, Columbus, OH

Lee Cox (1985) – Director, Dolan Research, Inc., Newtown Square, PA

Stephanie Croatt (2013) – Curator, *Battleship* Texas State Historic Site, La Porte, TX

D

Michelle Damian (2010) PhD – Assistant Professor, Monmouth College, Monmouth, IL

Claire Dappert (2005) PhD – Historic Research Archaeologist, Illinois State Archaeological Survey, Prairie Research Institute, University of Illinois, Urbana-Champaign, IL

Kara Davis (2015) – Maritime Archaeologist, R.C. Goodwin & Associates, Inc., Frederick, MD

James P. Delgado (1986) PhD – Director, Maritime Heritage Program, Office of National Marine Sanctuaries, NOAA, Silver Spring, MD

Alena Derby (2002) – Pilates Instructor and Personal Trainer, CORE Pilates Studio, Nantucket, MA

Robert Dickens (1998) – DVM, Cary, NC

Stephen Dilk (2012) – Contract Archaeologist, Colorado and Wyoming

Jeff DiPrizito (2001) – High School teacher, Hudson, NH

Brian Diveley (2008) – Senior Archaeologist, CH2M HILL, Seattle, WA

Tricia Dodds (2009) – Associate State Archaeologist and State Parks Diver, Maritime Heritage Program, California State Parks, Borrego Springs, CA

Wade Dudley (1998) PhD – Teaching Professor, Department of History, East Carolina University, Greenville, NC

Stan Duncan (1994) – Regional Sales Consultant, NUS Consulting Group, Inc., Oak Ridge, TN

E

Justin R. Edwards (2015) – History Teacher, Riverside High School, Williamston, NC

Rita Folse Elliott (1988) – Education Coordinator & Research Associate, The LAMAR Institute, Savannah, GA

Scott Emory (2000) – Cockeysville, MD

Jeff Enright (1999) – Maritime Project Manager/Senior GIS Specialist, SEARCH, Pensacola, FL

Jenna (Watts) Enright (2000) – Austin, TX

F

Sabrina S. Faber (1996) – Chief of Party, Promoting Youth Civic Engagement

Kim (Eslinger) Faulk (2005) – Project Manager – Marine Archaeology, GEMS – A Forum Energy Technologies Company, Houston, TX

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. (1987) PhD – Associate Professor, UNC-Wilmington, Wilmington, NC

Kevin Foster (1991) – Washington, DC

Chelsea R. Freeland (2014) – Editor, Richmond, VA

Joe Friday (1988) – Sergeant, Greenville Police Department, Greenville, NC

Adam Friedman (2008) PhD – Institute Fellow, Eshelman Institute for Innovation, UNC Eshelman School of Pharmacy, Chapel Hill, NC

Don Froning (2007) – Archaeologist, Scientific Consultant Services, Inc., Honolulu, HI; Lecturer, Windward

Community College, Kaneohe, HI

G

Stephanie Gandulla (2014) – Media and Outreach Coordinator, Thunder Bay National Marine Sanctuary, Alpena, MI

Veronica Garrett (2008) – Streetlight Records, Santa Cruz, CA

Kate Goodall (2003) – Chief Operating Officer, S&R Foundation, 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, *Maryland Dove*; Adjunct Professor of History, St. Mary's College of Maryland, St. Mary's City, MD

Cathy (Fach) Green (2003) – Program Manager, Great Lakes Bay-Watershed Education and Training (B-WET) Program, NOAA Office of National Marine Sanctuaries, Cascade, WI

Russ Green (2002) – Regional Coordinator, Proposed Wisconsin-Lake Michigan National Marine Sanctuary, NOAA Office of National Marine Sanctuaries, Cascade, WI

Jeffrey Groszkowski (2007) – Firefighter/Apparatus Operator, New Hanover County Fire Services, Wilmington, NC

H

Richard Haiduven (2003) – Contract Archaeologist, Miami, FL

Stephen Hammack (2007) – DPhil candidate, Institute of Archaeology/ St. Cross College, University of Oxford, UK

Phil Hartmeyer (2014) – Maritime Archaeologist, Thunder Bay National Marine Sanctuary, Alpena, MI

Lynn B. Harris (1988) PhD – Associate Professor, East Carolina University, Greenville, NC

Margaret Harris (2004) – Southern California

Ryan Harris (2006) – Nautical Archaeologist, Parks Canada, Ottawa, Ontario, Canada

Heather Hatch (2006) PhD – Collections Cataloger, University Art Galleries Department, Texas A&M University, College Station, TX

Jeanette Hayman (2011) – RPA, Archaeologist, Environmental Science Associates, Seattle, WA

Theresa Hicks (2012) – Operations Manager, Inland Seas Institute, Juneau, AK

Robert Holcombe (1993) – Retired, Naval Historian and Curator, Port Columbus Civil War Naval Center, Columbus, GA

Thomas W. Horn (2014) – Dive Specialist, Florida International University's Aquarius Reef Base, Miami, FL

Joshua Howard (2004) – Independent Researcher, Portland, OR

Robin Croskery Howard (2016) – Conservation Technician, North Carolina Museum of History, Raleigh, NC

Nathaniel Howe (2011) – Executive Director, Northwest Seaport (tugboat *Arthur Foss* and Lightship No. 83 *Swiftsure*), Seattle, WA

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) – Vice President of Project Development and Government Relations, Magnum Energy, Salt Lake City, UT

Brian Jaeschke (2003) – Registrar, Mackinac Island State Park Commission, Mackinac Island, MI

John O. Jensen (1992) PhD – Lecturer in Maritime History, Sea Education Association, Woods Hole, MA

Doug Jones (2007) – Marine Archaeologist, Bureau of Ocean Energy Management (BOEM), New Orleans, LA

Jennifer Jones (2012) – PhD student, Coastal Resources Management, East Carolina University, Greenville, NC

Rick Jones (1996) – Building Contractor, Morehead City, NC

K

John Kennington (1995) – Communications Officer, Campus Services, Georgia Institute of Technology, Atlanta, GA

Sara C. Kerfoot (2015) – Biological Science Technician, Isle Royale National Park, Houghton, MI

Kurt Knoerl (1994) PhD – Director, The Museum of Underwater Archaeology; Adjunct Faculty, George Mason University and Northern Virginia Community College, Warrenton, VA

Nadine Kopp (2012) – Project Archaeologist, Paterson Group, Ottawa, ON

Mike Krivor (1998) – Maritime Project Manager/Principal Investigator, Southeastern Archaeological Research, Inc., Pensacola, FL

David Krop (2008) – Conservation Branch Head, Naval History and Heritage Command, Richmond, VA

B

Danielle LaFleur (2003) – Historic Sites Curator, Lakeshore Museum Center, Muskegon, MI

Marshall Lamm (2012) – Curator, North Carolina Baseball Museum, Wilson, NC

Matthew Lawrence (2003) – Maritime Archaeologist, Stellwagen Bank National Marine Sanctuary, Scituate, MA

Adam Lehman (2006) – Whitsett, NC

Amy Leuchtmann (2011) – Maritime Archaeologist, HDR, Inc., Ann Arbor, MI

Wayne Lusardi (1998) – Michigan's State Maritime Archaeologist, Thunder Bay National Marine Sanctuary, Alpena, MI

M

Morgan MacKenzie (2011) – Archaeologist, Dovetail Cultural Resource Group, Fredericksburg, VA; Sub-Contractor/Maritime Archaeologist, Dolan Research, Inc., Newtown Square, PA

Richard Mannesto (1993) – Great Lakes Shipwreck Historical Society, Sault Ste. Marie, MI

Joshua Marano (2012) – Archaeologist, Biscayne National Park, Homestead, FL

Eleftheria Mantzouka (2004) – Montessori Teacher, Durham, NC

Tom Marcinko (2000) – South Carolina Department of Natural Resources, Charleston, SC

Jacqueline Marcotte (2011) – Maritime Archaeologist, Environmental Science Associates, Seattle, WA

Amy Jo (Knowles) Marshall (1996) – Grants Management Officer, BLM Nevada State Office, Reno, NV

Timothy Marshall (1999) – Heritage Program Manager, Humboldt-Toiyabe National Forest, Sparks, NV

Deborah Marx (2002) – Maritime Archaeologist, Maritime Heritage Program, NOAA's Office of National Marine Sanctuaries, Scituate, MA

Roderick Mather, (1990) PhD – Professor of Maritime History and Underwater Archaeology, Chair of the Department of History, University of Rhode Island, Kingston, RI

Christopher McCabe (2007) – University of Rhode Island, College of the Environment and Life Sciences, Kingston, RI

Peter McCracken (1999) – Electronic Resources Librarian, Cornell University; Co-Founder and Publisher, ShipIndex.org, Ithaca, 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 (1997) PhD – Assistant Professor of History, Campbell University, Buies Creek, NC and Adjunct Professor of History, U.S. Merchant Marine Academy, King's Point, NY

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

Valerie (Rissel) Mims (2012) – Marketing Coordinator, Craven Arts Council and Gallery, New Bern, NC

Robert Minford (2012) – GIS Analyst/Policy Planning Specialist, Virginia Department of Transportation, Richmond, VA

Calvin Mires (2005) PhD – Faculty, Bridgewater State University, Bridgewater, MA

Ivor Mollema (2015) – Archaeologist, SEARCH, Inc., Pensacola, FL

Kimberly E. Monk (2003) PhD – Research and Teaching Fellow, University of Bristol, England

David Moore (1989) – Curator of Nautical Archaeology, North Carolina Maritime Museum, Beaufort, NC

James Moore (2003) PhD – Marine Archaeologist, Bureau of Ocean Energy

Management (BOEM), Sterling, VA

R. Scott Moore (1992) PhD – Professor and Chair, Department of History, Indiana University of Pennsylvania, Indiana, PA

Shawn Holland Moore (1998) – Director of Alumni Programs, East Carolina Alumni Association, East Carolina University, 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) – Director, Underwater Archaeology Branch, Kure Beach, NC

N

Nicholas J. Nelson-DeLong (2015) – Archaeological Technician, NOAA; BOEM Collaborative Archaeology Survey for the Kitty Hawk Wind Energy Area, Manteo, NC

Sam Newell (1987) – Retired Pitt County Schools, Contract History Consultant, Greenville, NC

Kevin Nichols (2002) – Intelligence Research Specialist, Department of the Army; PhD student, Wayne State University, Detroit, MI

O

Christopher 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

Jana Otte (2014) – Social Studies Teacher, P. S. Jones Middle School, Washington, NC

P

Jason Paling (2003) – PhD student, Department of Anthropology, State University at Albany, Albany, NY

Harry Pecorelli III (2003) – Stantec, Charleston, SC

Martin Peebles (1996) – ER Nurse, St. Petersburg, FL

Jacqueline Piero (2004) – “enjoying life,” Newark, DE

Andrew Pietruszka (2005) PhD – Forensic Archaeologist, Joint POW/MIA Accounting Command, Joint Base Pearl

Harbor – Hickam, HI
Mike Plakos (2003) – Senior Technical Analyst, U.S. Navy, Washington, DC
Mateusz Polakowski (2016) – Brooklyn, NY
Larkin Post (2007) – Gartley & Dorsky Engineering & Surveying, Camden, ME
Sarah Milstead Post (2007) – Program Manager, Cornerstones of Science, Brunswick, ME
Darren Poupore (2004) – Chief Curator, Biltmore Estate, Asheville, NC
Sami (Seeb) Powers (2007) – National Park Service, Denver, CO
Edward Prados (1993) – Country Director, AMIDEAST, Aden/Sana'a, Yemen
Franklin Price (2006) – Senior Archaeologist, Florida Bureau of Archaeological Research, Tallahassee, FL
Melissa R. Price (2015) – Senior Archaeologist, Florida Bureau of Archaeological Research, Tallahassee, FL
James R. Pruitt (2015) – Staff Archaeologist, Historic Preservation, Commonwealth of the Northern Mariana Islands

R

Coral Rasmussen (1993) – Archaeologist, NAVFAC Pacific, Pearl Harbor, HI
John Ratcliffe (2012) – Research Associate, Know History Historical Services, Ottawa, Ontario, Canada
Eric Ray (2009) – Lead Interpretive Planner, Texas Parks and Wildlife, Austin, TX
James R. Reedy, Jr. (1987) – Contract Archaeologist, Beaufort, NC
Phillip Reid (1998) – PhD Candidate, Memorial University of Newfoundland, St. John's, NL/Wilmington, NC
William A. Robie, Jr. (1993) – Atlantic Beach, NC
Todd Robinson (1998) – International Baccalaureate Program History Instructor, James Island Charter High School, Charleston, SC
Bradley Rodgers (1985) PhD – Professor and Director, Program in Maritime

Studies, East Carolina University, Greenville, NC
Jason Rogers (2004) PhD – Senior Project Archaeologist, Northern Land Use Research, Inc., and Alaska Maritima, Anchorage, AK
Filippo Ronca (2006) – Nautical Archaeologist, Parks Canada, Ottawa, Ontario, Canada
Matthew Russell (1995) PhD – Archaeologist, William Self Associates, Inc., Orinda, CA

S

William Sassorossi (2015) – Maritime Archaeologist, Monitor National Marine Sanctuary, Newport News, VA
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
Laura Kate Schnitzer (2012) – Archaeologist, New South Associates, Stone Mountain, GA
Ralph Lee Scott (1979) – Professor, Curator of Printed Books and Maps, Joyner Library, East Carolina University, Greenville, NC
R. Laurel Seaborn (2014) – PhD student, Department of History, University of New Hampshire, Durham, NH
Benjamin Siegel (2011) – International Project Archaeologist and I Cultural Heritage Consultant, Environmental Resource Management, Washington, DC
Lucas S. Simonds (2014) – Reporter, *The Times-Leader*, Grifton, NC
Joshua Smith (1997) PhD – Professor, Department of Humanities, U.S. Merchant Marine Academy, & Interim Director, American Merchant Marine Museum, Kings Point, NY
Lindsay Smith (2010) – Maritime & Project Archaeologist, SWCA Environmental Consultants, Houston, TX

Jon Travis Snyder (2006) – Middle School Level Lead and Math Instructor, Montessori School of Denver, Denver, CO; Instructor, Guitar Construction, Red Rocks Community College, Lakewood, CO
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) – State Underwater Archaeologist, SC Institute of Archaeology & Anthropology, Columbia, SC
Joyce Steinmetz (2010) – PhD student, Coastal Resources Management, East Carolina University, Greenville, NC
Gregory O. Stratton (2015) – Archaeological Dive Supervisor and Dive Safety Officer, North Carolina Underwater Archaeology Branch, Kure Beach, NC

T

Bruce Terrell (1988) – Chief Historian and Maritime Archaeologist, NOAA National Marine Sanctuaries Maritime Heritage Program, Silver Spring, MD
William H. Thiesen (1993) PhD – Atlantic Area Historian, United States Coast Guard, Portsmouth, VA
Matthew Thompson (2010) – Maritime Archaeologist, Thompson Maritime Consulting, Lumberton, NC, DPhil Candidate, University of Oxford
Hans Van Tilburg (1995) PhD – Maritime Heritage Coordinator, Office of National Marine Sanctuaries, Program Pacific Islands Region, HI
Ray Tubby (2000) – Nautical Archaeologist, SEARCH, Inc., Pensacola, FL
Lex Turner (1999) – Psychiatric Nurse Practitioner - PCMH, Greenville, NC
Kenneth Tyndall (1988) – New Bern, NC

V

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

continued on back page...

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!

W

John Wagner (2010) – Recreation Technician, United States Forest Service, Eagle, CO

Daniel Warren (1998) – Senior Marine Archaeologist and Houston Asst. Geosciences Manager, C & C Technologies An Oceanering International Company, Houston Office, Houston, TX

Sarah Waters (1999) – Education Coordinator, NOAA 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 – Director, WestHall Heritage Research & Consulting, Toronto, Ontario, Canada

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

David Whipple (1993) – Alexandria, VA
Heather White (2004) – Director of Library Project Development, Joyner Library, East Carolina University, Greenville, NC

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

Elizabeth Whitfield (2005) – Owner, TriBella Multisport, Denver, CO

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

Stephen Williams (2004) – Owner, PACC Consulting, LLC., Sanibel, FL

Adriane Askins Wise (2000) – Command Historian, US Army Medical Department Center and School, Health Readiness Center of Excellence (AMEDDC&S), Joint Base San Antonio - Fort Sam Houston, TX

Nicole Wittig (2013) – Conservator, Center for Integrated Research on the Environment, Missoula, MT

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

Steve Workman (2002) PhD – Associate Dean for Admissions and Administration, Virginia Tech Carilion School of Medicine, Roanoke, VA

Jeneva Wright (2015) – Archaeologist, Submerged Resources Center, National Park Service, Lakewood, CO

Elizabeth Wyllie (2012) – Seattle, WA

Y

Wilson York (2007) – Teacher, The Paideia School, Atlanta, GA

Z

Caitlin N. Zant (2015) – Maritime Archaeologist, Wisconsin Historical Society, Madison, WI