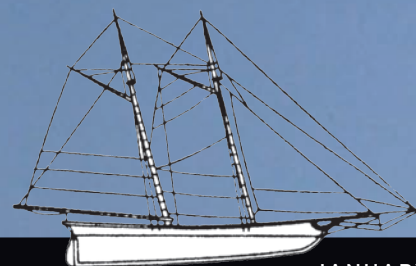


Stem to Stern

A Newsletter for our Maritime Studies Alumni and Friends



JANUARY
2018
VOLUME 34

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

35th Anniversary Edition

Maritime Studies Anniversary Celebration	3
From the Editorial Staff / Director	4
Summer Field School in Bermuda	5
Fall Field School in Outer Banks	6
Fall Field School in Costa Rica	7
Biscayne National Park: The Guerro Project	8
Traditional Shipbuilding in Tanzania	9
South Africa: Heritage at Risk	10
Maritime Studies Association	12
Digital WWII Heritage in the Pacific	13
Research Methods with Civil War Blockade Runners	14
Research Spotlight: Cannon Carriages	14
Research Spotlight: Grenades	16
Research Spotlight: Religion and Life at Sea	17
Ahoy Mates! Welcome to ECU	18
Where are our Maritimers now?	19



Stem to Stern

... a newsletter of East Carolina University's
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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: A traditionally constructed Dhow sailing passengers and cargo to the island of Zanzibar, Tanzania. (Photo: Ian Harrison)

BACK COVER: The coral reefs off the island of Bermuda. (Photo: Ian Harrison)

Thank you for your support!

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-Thank you

35 Years: the Maritime Studies Anniversary Celebration

Celebrating 35 years since the inception of the Program in Maritime Studies, staff and faculty collaborated with the Department of History and the Maritime Studies Association to host an alumni reunion. The Maritime Studies Program kicked off its 35th Anniversary Celebration on October 27th, with an alumni conference held in the Mendenhall Great Rooms. Program speakers included: Chelsea Rachele Freeman, Dr. Phillip Reid, Dr. T. Kurt Knoerl, Dr. Salvatore Mercogiano, Jim Spirek, Dr. Hans Van Tilburg, Wendy Coble, Dr. Anne Merriman, Christopher Olson, and Dr. William Thiesen. Each discussed their research and career paths following graduation from the ECU Program in Maritime Studies, the hurdles crossed to get there, and future of the field. Although each story was that of success following incredible determination and perseverance, speakers made a point of offering advice to current students on the skills, training, and steps necessary to attain their professional and career goals.

Later that day, Maritime staff, faculty, students, and alumni transitioned to the football stadium club level for a joint talk by some of the program's current and former directors. Current director Dr. Bradley Rodgers was joined by former directors Dr. Larry Babits and Dr. William (Bill) Still. Together they discussed the early years of the Program in Maritime Studies, the many struggles and problems it faced over the years, as well as some of the reasons behind its ultimate progress and success. The directors fielded a number of questions from the audience, recalling tales of where the idea for the program first came from (an interesting story unto itself), reminisced of the politics and policies that shaped its course over the years, as well as speculated about its future, attempting to find the best path forward in the program's next 35 years.

The day finished with a trip to Winslow's Tavern, where everyone met for dinner and drinks. Not only was it a great opportunity to catch up with old friends, it offered current students an excellent opportunity to meet some of the program alumni in a more

informal setting.

Festivities continued the following day at the residence of Dr. Jen McKinnon and Dr. Jason Raupp with a brunch hosted by the Maritime Studies Association. Once again, students and faculty had the opportunity to mingle with ECU Maritime alumni, while graduates old and new swapped stories of their years in the program and continuing work in the field. Thanks to donations and T-shirt



From left to right, Brad Rodgers, Bill Still, and Larry Babits presenting on the panel of former and current directors.

sales, the Maritime Studies Association was able to raise over \$600, which will go to support workshops and training for Maritime students, as well as student travel to this year's SHA conference in New Orleans.

Following brunch, alumni traveled off campus to the nearby Queen Anne's Revenge Lab for a tour of the conservation facility by QAR conservators Kimberly Kenyon and Jeremy Borelli. Housing the ship belonging to the infamous Pirate Blackbeard, ECU alumni examined many of the artifacts and cannons excavated from the site, and saw the facilities that not only host many of the program's methods classes, but host numerous internships and research opportunities for current maritime students as well.

The weekend closed out with Dr. Bradley Rodgers' Spooky Halloween Party. The party garnered famous visitors such as Rosie the Riveter, Bonnie and Clyde, and even a crew member from the Starship Enterprise. Anglerfish bumped elbows with gladiators. Witches sat around the fire with Ghostbusters and pirates. Even Esteban of Team Zissou managed to make peace with the Jaguar Shark in order to attend the festivities. In short, the 35th Anniversary Celebration ended just as it should have: with students, professors, and alumni coming together to strengthen the unique familial bonds that have become a hallmark of the program. Though all students of the program leave Greenville to continue to grow and develop, it is clear that the importance of bonding with and building up each successive generation of Maritimers will continue to be an emphasis for many years to come.



– Ian Harrison and Joel Cook



Maritime students, faculty, and alumni tour the QAR lab.

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

This has truly been an incredible year for the Program in Maritime Studies, and putting together its issue of *Stem to Stern* has been an equally wonderful experience. Students and faculty alike have worked or interned across the globe, researching maritime heritage everywhere from the Outer Banks to Italy and Tanzania. With each passing day and each new project, this class of students has become more and more like the professional archaeologists they aspire to be; and with the acceptance of ten new Maritimers into the family, we can be certain that there will be many more great things to come. As such, this year's issue focuses on those projects and achievements, and highlights some of the exciting research that is being conducted within the program. I hope you enjoy reading the stories of these adventures as much as I did putting them together. 🍷

– Ian Harrison

Being able to work as Assistant Editor on *Stem to Stern* exposed me for the first time to the level of work required to be successful in the Maritime Studies program. I was awestruck by the amount of detail my fellow Maritimers put into their work and encouraged by the mutual support they showed each other in accomplishing their goals. I immediately noticed the solidarity and the family atmosphere within the program, and I am thrilled to continue working with my classmates and the world class faculty here in the Program in Maritime Studies. 🍷

– Joel Cook

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

It's hard to believe yet another year has passed. Like pages of a good book you don't notice how fast they turn. Our celebration of the 35th Anniversary of the founding of the Program in Maritime Studies is a reminder of how fast this time has flown. But it is also a time to review just how well Bill and Gordons' vision of the Program has actually manifest. I missed the first year of our program's existence in 1982, but have seen the rest of the history of this program in vivid technicolor, as they used to say in the years of real film. The attendance at the 35th Anniversary Celebration of 80 alumnae, students, faculty and guests, attests to the affection many still hold for their experience here. For many of us the decision to join the program became a nodal point in life, changing forever the course and outcome of our lives. Program alumns have gone on to become academics and teachers, cultural resource managers, consulting researchers, NPO managers, museum managers, curators, contractors, archivists, librarians, conservators, and a myriad of other historical and archaeological professions. I have witnessed that the maritime family is alive and doing well, and I am proud of all their far ranging accomplishments. And even though Maritimers have rapidly gone on to bigger and better jobs (which

we are exceedingly proud of), they seem to remember their time and friendships in Maritime Studies as something very special. They also seem to carry with them a sort of reverence for the easy going quest for excellence that this program engenders; a formula for success not often found in other academic settings.

This year seems to be something of a break out year for the Program both internationally and at home with the program joining UNESCO's UNITWIN program, while signing new agreements with the DPAA (Defense POW/MIA Accounting Agency), the National Museum of Bermuda and our own N.C. State DOT. Projects in 2017 were conducted in Costa Rica, Guam, The Commonwealth of the Northern Mariana Islands, Italy, Tanzania, South Africa, and Bermuda, as well as the OBX of North Carolina. The university has continued to facilitate our move and has also expanded our conservation facility to a beautifully renovated multi room complex in the Ragsdale Building in the center of campus. Quite frankly the changes and logistic concerns resulting from all of these projects, facility moves, and organizational relationships, are nearly impossible to comprehend in detail, and serve to remind me of how far the program has come from our double

wide trailer days!

Sadly, this September we said good bye to our own Dr. John Tilley (1950 – 2017). Dr. Tilley became instrumental in introducing Museum Studies to the History Department, while demanding excellence from his students in the classroom. His ship modeling, rigging, and drawing skills were truly impressive and his book *The British Navy in the American Revolution* (1987), demonstrated his commanding use of language and historic research. He was a good and gentle humanitarian, step father, and fine colleague. He was also one of the finest professors I had the pleasure of taking a class from.

In all, this was an amazingly productive year with new international projects and brand new discoveries piling up, such as those made in the Pacific, Bermuda, and our own OBX. This year's new sites run the temporal gamut from the early 17th century to WWII, truly an exciting venue for any archaeologist or student of archaeology. So again, as I do every year, please read and enjoy 2017 in review, an exciting and sometimes perplexing array of research that will keep us busy for years to come. 🍷

– Bradley Rodgers, PhD
Program Director

In the Field - Summer Field School in Bermuda

The sunny skies and aquamarine waters of Bermuda served as the backdrop for the 2017 summer field school. Beginning in the middle of May, students studied a shipwreck within a bay on the west end known as Ely's Harbor. Known as the Morgan's Island Wreck, the site represents salvage efforts by local wreckers and consists mainly of exposed (and some partially buried) disarticulated ship timbers scattered over a discreet area of the seabed. The wreck was last observed by Dr. Brad Rodgers in 2007, but its identity has long remained a mystery.

Working in two large teams, the students painstakingly recorded every timber under the tutelage of Dr. Rodgers, Dr. David Stewart, and Dr. Jason Raupp. This involved snorkeling carefully above the wreck to map sections of a pre-made grid and free diving when necessary to take measurements. Dive Safety Officer Jason Nunn provided surface support while maintaining site safety protocol. Local student Xander Cook and National Museum of Bermuda (NMB) Curator Dr. Deborah Atwood assisted with recording and public relations. While one team worked on site in the morning, the other team drafted their sketches onto the site plan back in the NMB Library. The teams would then switch activities for the afternoon, thus creating a continuous workflow. Other field school activities included assisting third-year graduate student Katie Clevenger with the development of photogrammetric models of cannon and bastions positioned around the museum grounds. Photogrammetry requires hundreds of overlapping photographs of the same object from 360 degree angles. Once the necessary photos are collected, software is used to combine them into a seamless 3D model of the object, which can be manipulated and viewed from all angles.

By the end of the two weeks in the field, the students completed mapping the entire site, took several samples from the timbers to determine construction materials, and recovered a small number of artifacts that were found to be in peril of being lost. Recovered artifacts included lead

sheathing with copper nails, a pottery sherd, and a cannon truck wheel; these were transferred to NMB for conservation and curation.

While the students put in many hours to get this project completed in time, they were also allotted some time off over the two-week field course. Students spent evenings at the museum's dormitory/field house, which allowed them to explore the extensive grounds of NMB. Dr. Atwood also provided students with a behind-the-scenes tour of the museum exhibits and old Naval Dockyards Prison known as Casemates. Occurring simultaneously in Bermuda was the 35th America's Cup, which gave students the opportunity to watch the foiling AC45 sailing vessels practice along the Great Sound. On their one day off, students enjoyed sightseeing around the towns of Hamilton and St. George's, scuba diving around the reef, and partaking in the world-famous Bermuda Swizzle.

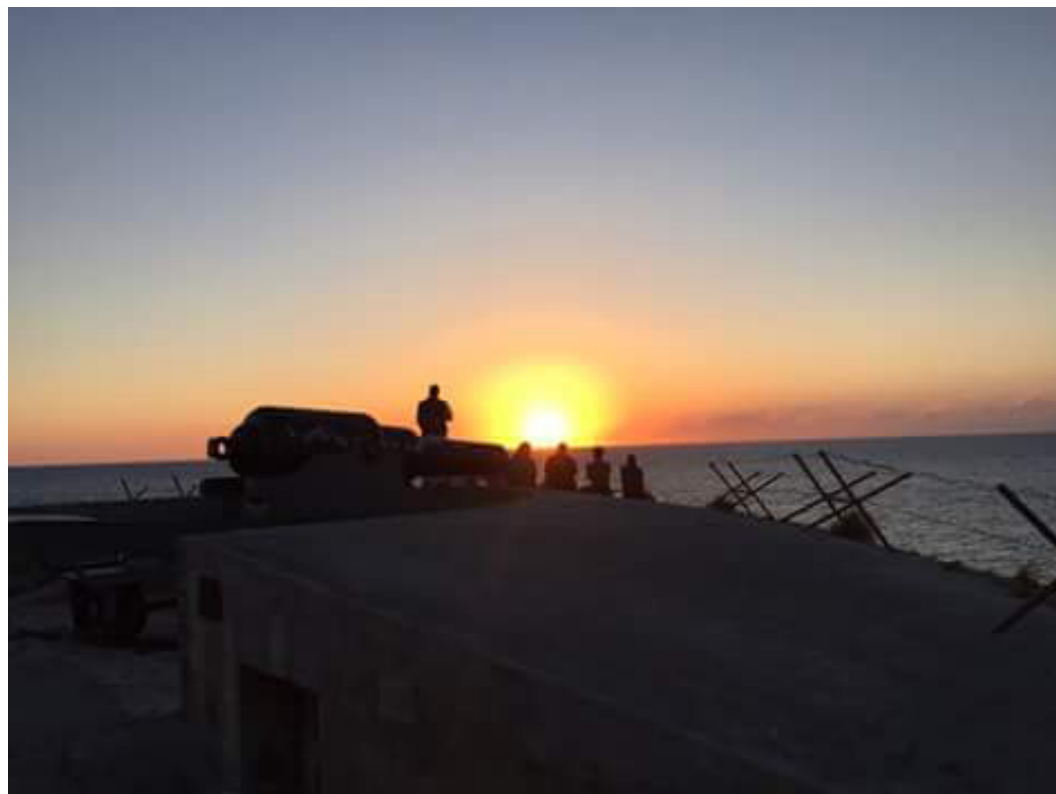
Upon completion of field data collection, students returned to Greenville for another two weeks of post-processing and



Students and Faculty gather on the steps to the Commissioner's house for a class photo.

further research. Working out of the ECU Western Research Campus at the former Voice of America Station, students focused on finalizing the overall site plan. The penciled site plan completed in Bermuda was overlain with a sheet of Mylar for tracing. Supervised by the two crew chiefs, first year maritimers painstakingly traced each individual timber onto the Mylar using micron pens, shading and stippling to show the direction of grain, differentiate between materials, and indicate seabed type. To

continued on page 12...



The famous Bermuda sunset as seen from the ramparts of the National Museum.

In the Field - Fall Field School in Outer Banks

During the month of September, graduate students Samantha Bernard, Katrina Bunyard, Paul Gates, George Huss, Andrianna Dowell, Connor McBrian, Tim Smith, Stephanie Soder, and Elise Twohy worked with Dr. Nathan Richards out of the UNC Coastal Studies Institute (UNC CSI) on the Pappy's Lane Shipwreck Project. The project was supported by the North Carolina Department of Transportation (NCDOT). Located in the Pamlico Sound near Rodanthe, North Carolina, the vessel is significantly deteriorated and is close to the area of the Bonner Bridge extension project. Dr. Nathan Richards served as the principal investigator with John McCord as the co-principal investigator. East Carolina University's Dive Safety Officer (DSO) Jason Nunn assisted the project as a boat captain and ensured the safety of all people involved on the project. Dr. Erin Field and students Cody Garrison and Kyra Price from ECU's Department of Biology conducted bio-corrosion studies on the bacteria living on the shipwreck. NCDOT archaeologists Matt Wilkerson and Paul Mohler also came out to view the operation.

The Pappy's Lane Shipwreck Project followed a multi-stage approach. The steps include tasks to assess the site's significance and potentially identify it, record the vessel before any potential impacts from bridge construction occur, and ground-truth anomalies near the wreck

that may be associated with the vessel and which may also impede bridge construction. For the past seven years Dr. Richards has periodically examined the site during teaching and research activities. He relied on historic documentation such as ship blueprints, vessel typologies, aerial photography, and other forms of research to identify the wreck. Dr. Richards has also worked with other agencies on this project. This includes UNC CSI's previous NCDOT-funded interdisciplinary grant related to the nearby Rodanthe-Stumpy Point Emergency Ferry channel project from 2015 to 2017. Additionally, survey work was conducted by an archaeology consulting agency, Panamerican Consultants, in 2016. The latter suggested that the Pappy's Lane Wreck be considered eligible for nomination for listing on the National Register of Historic Places.

Due to the potential for impacts to this site by bridge construction and the vessel's potential inclusion in the National Register of Historic Places, it enacted



Dr. Richards surveying the stern end of the Pappy's Lane wreck.

Section 106. Section 106 of the National Historic Preservation Act of 1966 necessitates an investigation be done before federal agencies undertake any work on the site, such as construction. The investigations review the possible effects on historic properties.

While the field school was met with obstacles such as hurricanes and other adverse weather, the students persisted and accomplished the tasks given to them. The first week of the field school began with preparation for fieldwork, which included gathering equipment, methodology overview, establishing our baseline and units of measurement, task division, and a general review of what to expect. It

was anticipated that we would run into certain difficulties such as drafting inaccuracies, measuring error, and fatigue from working under tough site conditions such as cold water, heavy wind, and low visibility. However, the graduate students pressed on and made significant progress in taking accurate measurements. The measurements allowed for a highly-detailed plan of the site to be made.

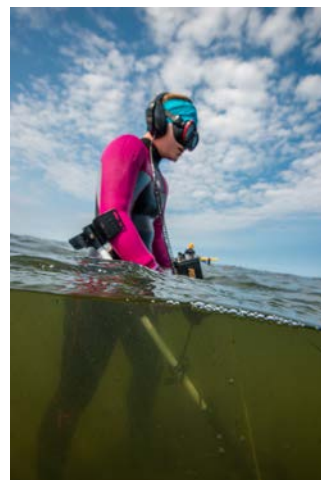
The second week included lectures on total station and



Dr. Field (left) and Kyra Price (right) taking core samples from the Pappy's Lane wreck.



Paul Gates (left) and George Huss (right) taking Total Station GPS points on the Pappy's Lane wreck.



Samantha Bernard conducting a metal detecting survey.

continued on page 15...

In the Field - Fall Field School in Costa Rica

Under the direction of Dr. Lynn Harris, six Maritime Studies students - Anna D'Jernes, Ian Harrison, Stephen Lacey, Ryan Marr, Sara M. Parkin, and Maddie Roth - along with ECU staff archaeologist Dr. Jason Raupp, dive safety officer Mark Keusenkothen, and QAR conservator Kim Kenyon, journeyed to the Caribbean coast of Costa Rica for a 2017 Fall Field School. The field school had a heavy focus on public archaeology and community engagement. In collaboration with the Centro Comunitario de Buceo Embajadores y Embajadoras del Mar and local community leader Maria Suarez Toro, the ECU team taught Nautical Archaeology Society classes in the Cahuita and Puerto Viejo communities. Participants in the NAS courses learned how to draw mud maps, take offset and trilateration measurements, organize searches, and conduct research projects of their own. One evening, participants even partook in an impromptu "blackout dive" during a practice recording session on dry land.

In addition to the main NAS coursework, Kim Kenyon gave an artifact illustration workshop to record artifacts donated by community members. The artifacts were catalogued, measured, photographed, and then illustrated by NAS participants.

All of the participants' newly acquired skills were applied in the field on two sites previously mapped by the 2015 and 2016 ECU field schools, the Cannon Site and the Brick Site. Both located off of Cahuita Point in the Cahuita National Park. The NAS participants got a hands-on lesson in cannon recording using a proforma, as well as experience in gathering trilateration data from the Cannon Site.

The ECU team, in tandem with NAS participants, taught practical survey methods by conducting multiple swim-line and

towboarding surveys to look for new sites and artifacts. Towboarding was a popular activity among the NAS participants, and it has since been incorporated into the Costa Rican team's search and survey procedures.

As part of their NAS training, participants worked on recording small craft used

Viejo. To do so, a group of ECU students and staff members explored the communities and took note of the unique maritime cultural symbolism depicted in local artwork. ECU students worked to document the many murals painted on buildings and signs throughout the area. The murals depict

fishermen, boats, the nearby coastline, religious symbols, and women. Icons and symbolism associated with Rastafarian religion and Caribbean culture are common themes in the local artwork. The combination of Latin American and Caribbean cultural symbols in Cahuita and Puerto Viejo's artwork highlights the diversity of the communities and the inhabitants of the region.

A mural in Cahuita, for example, portrays a crucified Jesus. In the background of the mural, the artist painted Cahuita's coastline with a manger visible in the surrounding jungle. Jesus is

depicted as a black man, or possibly a black woman, and the three magi in the manger are also black. Additionally, hyenas and cheetahs were painted in the jungle bordering the coastline. This blend of maritime, religious, and multi-cultural symbols in the mural's non-traditional depiction of the passion of the Christ provided the ECU team a glimpse into Cahuita's unique, diverse culture. Exploring the communities and documenting the local artwork enabled the ECU team to add to current research regarding southern Caribbean Costa Rican culture.

ECU team members wish to extend their gratitude to the community for embracing them, and congratulate the NAS students on their certifications. ECU's Program in Maritime Studies looks forward to future collaborations with the Costa Rican team and wishes them the best of luck with their research and heritage protection program in Cahuita and Puerto Viejo. 🐠

- Anna D'Jernes and Sara Parkin



The Costa Rica NAS class assembles for a group picture in Cocles.

by Cahuita and Puerto Viejo community members. The data gathered by the participants was part of a study of the maritime culture in the region. A large percentage of the working population in these communities is employed in the fishing industry. As a result, boat-building traditions in the area consist of a wide range of craft designs and decorations. A group consisting of both NAS participants and ECU students took photographs and measurements to document the local fishing vessels. Furthermore, participants recorded the construction methods of a traditional Jamaican dugout vessel used by local fishermen and conducted oral interviews with boat builders. As a result, the Costa Rican and ECU team was able to learn more about maritime traditions in Costa Rica's Caribbean coast, and specifically those of Cahuita and Puerto Viejo.

One of the goals of Expedition Costa Rica 2017 was to observe and document local maritime culture in Cahuita and Puerto

In the Field -

Biscayne National Park: The *Guerrero* Project

I was fortunate to have been selected as the Latino Heritage Intern for Biscayne National Park this past summer. Working jointly with the National Park Service, NOAA, and University of Miami on a multi-agency archaeological survey in search of *Guerrero*, a ship thought from historical evidence to have run aground within the park. I was supervised by Biscayne National Park's archaeologist Joshua Marano (ECU Maritime Studies alum) and worked alongside American Conservation Experience intern Arlice Marionneaux for an immersive, educational, and adventurous eight weeks in South Florida.

With the help of the Submerged Resources Center team (SRC) and the South East Archaeological Center (SEAC), I was immediately instructed and tested on proper SCUBA procedures to earn my National Park Service's employee dive certification. Very similar to ECU's AAUS Scientific Diving course, this rigorous examination included practical dive exercises as well as written tests. This qualification enabled me to properly and safely dive for research and project purposes.

As the objective of our project was to locate the 19th century pirate-slaver, *Guerrero*, the majority of our work involved conducting magnetometer surveys. Using National Park Service vessels, our team of eight drove hundreds of miles in Biscayne

Bay in an effort to pick up as many significant magnetic anomalies as possible. The anomalies were then translated onto our GPS devices, and our team was tasked with "jumping" them: doing a visual check on the site using SCUBA or free diving to inspect the magnetic anomaly in hopes of discovering historical objects. A few sites proved promising in our search for the wreck, and we were fortunate to conduct a preliminary excavation with dredging operations.

Furthermore, I was involved with public outreach and education efforts throughout the park. The public was introduced to our search for *Guerrero* with the showing of a documentary about the historical and cultural importance of the wreck, followed by a Q&A with NPS and our lead researchers. Biscayne also hosted a week-long youth program in partnership with Diving With a Purpose. The program was designed for young adults from all over the nation to participate in an intensive one week field school which introduced them to a variety of experiences that correlate with real-world underwater archaeological work. The program also helped to instill a deep appreciation and understanding of the necessity to study and protect our country's submerged cultural heritage. I was tasked with overseeing the underwater operations and identifying artifacts, which enabled my



PHOTO: SUZANNA PERSHORN

Adrianna Dowell inspects a carronade.

colleagues and I a chance to contribute to this educational experience.

My summer at Biscayne National Park provided a chance for me to actively learn and participate in a high-profile archaeological project which hoped to contribute a more in-depth and accurate portrait of the fantastic and tragic story of those involved in the wrecking of *Guerrero*. The skills I have learned at ECU through the Maritime Studies program were instrumental in my successful summer internship, and I will greatly cherish my time working with an incredible team of talented and experienced divers, researchers, and archaeologists. 🐠

– Adrianna Dowell

ECU Maritimers Receive Awards and Internships

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

Steph Soder – Admiral Ernest M. Eller Graduate Fellowship in Modern Naval History

Elise Twohy – Barbara and Matthew Landers Graduate Fellowship in History

Ryan Marr – Barbara and Matthew Landers Graduate Fellowship in History

Andrianna Dowell – Evelyn and Joseph Boyette Graduate Fellowship in History

Ian Harrison – Lawrence F. Brewster Graduate Fellowship in History

Maddie Roth – Roy N. Lokken Memorial Scholarship

Sean Cox – Roy N. Lokken Memorial Scholarship

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

In the Field - Traditional Shipbuilding in Tanzania

Over the course of my first year in the Maritime Studies program I worked with Dr. Lynn Harris to establish a research plan to investigate traditional watercraft within the Tanga region of Tanzania. I was intrigued how a traditional means of vessel construction had perpetuated through colonization, technological evolution, and shifting economic demands.

After satisfying all logistical considerations with the help of Dr. Elianza Mjema from the University of Dar es Salaam, I was fortunate enough to be joined on my expedition by four other ECU students:

Ian Harrison, Maddie Roth, Sean Cox, and Stephen Lacey.

To best illustrate the historical record of Tanzanian indigenous craft I decided to focus on ethnographic research as the mainstay of the research effort. I was proficient in Swahili after having previously lived in Tanzania for over eight months. Through open ended interviews I hoped to learn more about the influences, both cultural and economic, that affected the evolution of craft design. My target population was anyone involved with the watercraft, though we eventually narrowed our scope to the master craftsmen themselves. The information collected through these interviews would be complimented by photo, video, and small vessel recording data to provide a more immersive experience.

Upon arrival in Tanzania, our team met up with Dr. Mjema and his students in a small fishing village located in the district of Tangani. It was there we began our research and truly became familiar with the maritime life ways so common along the coast of East Africa. We were able to observe and record all aspects of the villagers' interactions with the ocean and the roles each individual embraced in order to sustain the community. Our team was able to discover, document, and participate in almost every aspect of daily life within the village from rope production to vessel construction.

The fishermen and their families were eager to share their local histories and describe how they contributed to the greater communal dynamic. Numerous vessel types were beached onshore, thus allowing unfettered access for vessel recording and photography collections during low tide. The

older fishermen took us out fishing and allowed us to assist in hauling the massive drag nets produced by the younger fishermen and women. A master ship builder, or *mfundi*, was constructing a large ocean-going dhow for a local merchantman and described the traditional Swahili

style of vessel construction in detail. The excitement demonstrated when I described in Swahili my desire to create a permanent historical record of their prized craft was incredibly motivating and granted us access to other nearby villages to gain a greater research scope. The generosity and welcoming nature of the people of Tangani left an indelible mark on us all.

After a week of collections in Tangani we proceeded on to other local fishing villages and ship repair locales within sailing distance of our original site. These other small villages provided unique perspectives on ship repair techniques and materials, differing fishing methodologies, and insight from the participants themselves on possible future research. Maddie Roth continued to assist with the ethnographic interviews while Sean Cox collected innumerable for 3-D models. Ian Harrison and Stephen Lacey acted as the small vessel recording team and proved to be the favorites among the fishing crews.

Next, we headed further south to Pangani, our original research focus. While we recorded numerous dhows of differing origins, the most unique aspect of this

particular investigation was the interview we conducted with a *mfundi* who had lived in Pangani his entire life. Born into an Omani family, the *mzee*, or elder, had learned to construct vessels in the traditional manner from his father. He remained in Pangani during the period of colonization by the British after the First World War until Tanzanian independence in 1961. His insight proved incredibly valuable concerning the colonial influence upon Swahili vessel design as he had worked with a British military officer and learned how to build fiberglass speedboats for foreign customers. He was very familiar with the history of the indigenous vessels and patiently fielded my numerous inquiries. Before heading to Zanzibar to collect data for a comparative analysis, the team organized a sailing trip on a traditional dhow, piloted by sailors from the very place we were headed, Nungwi.

We concluded our expedition by crossing over to Zanzibar in a motorized *sampa*, or small fishing craft with a flat-bottomed hull for shallow water work. The history of dhows and the sail-borne trade from Zanzibar have been well documented for

generations and I wanted to see first-hand if any significant differences were apparent when compared to the unrecorded mainland designs. I was fortunate enough to interview an *mfundi* at a local construction site who was able to show and describe vessel designs I had not encountered on

the mainland, including that of a speedboat formed with European lines but constructed in the traditional Swahili manner.

Our expedition to Tanzania was an absolute success and I am incredibly grateful to the team and for all the extra effort proffered by both Dr. Lynn Harris and Dr. Elianza Mjema. I only hope that this research effort will shed light on a maritime tradition worthy of further study, and help protect the cultural heritage of our newfound colleagues.

— Ryan D. Marr



PHOTOS: IAN HARRISON
Ryan Marr (right) learns traditional shipbuilding from a master craftsman.



Ryan Marr assists with boat construction using traditional tools at a Tangani Shipyard.



Ian Harrison documents the remains of a WWII RADAR station at Cape Point, South Africa.

PHOTO: LYNN HARRIS

In the Field - South Africa: Heritage at Risk

This summer, I accompanied Dr. Lynn Harris' field school to Cape Town, South Africa to conduct my thesis research on the historic remains of WWII sites along the Cape Coast. Arriving in mid-June, conditions during the temperate South African winter were perfect for hiking out into the veld. Traveling with a group of ECU Biology students to share accommodations and split travel costs, our team spent the first few days in Cape Town exploring local museums and historical sites, before departing in a rented van to explore the Cape Peninsula.

During the Second World War, the threat of German submarines to Allied shipping lanes passing through the Cape of Good Hope prompted the fortification of South Africa's principal harbors. To accomplish this, a series of RADAR stations, observation posts, and gun batteries were constructed along the coast to track and intercept potential threats. Upon the conclusion of the war however, these

emplacements were largely abandoned. In the years since, environmental and cultural processes have resulted in significant degradation of these sites. As such, the focus of our research was to create a visual and documentary record of the sites as they stand today. With little hope that these historic structures will receive the necessary conservation, our team attempted to create a record that will preserve the knowledge of these sites for future generations, and may serve as a baseline for tracking further degradation over the coming years.

As it happened, many of these WWII structures were located within South Africa's National Parks, offering viable research targets for both the History and Biology field teams. The first of these was located on Robben Island, a UNESCO World Heritage Site famous for the imprisonment of Nelson Mandela, but also host to an extensive network of WWII fortifications. Following the tour of Mandela's prison, Dr. Harris and I were able to document several of the gun foundations and bunkers used to track ships coming into and out of Cape Town harbor.

Over the next week our team moved on to Cape Point National Park where they split again to survey the area's many natural and cultural features. In total there were three RADAR sites and observation posts

built at the tops of large mountains within the park. Due to the geography of the Cape Peninsula, the stations were constructed to cover each of the major fields of view: the Atlantic Ocean, Southern Ocean, and Indian Ocean. After an extended hike out to the site, not only was the team able to record and document the site itself, but the addition of biology personnel allowed for the identification of plant and animal activity on the sites which gave a greater understanding of the biological site formation processes active in the area.

At the end of the two week field course I remained behind to continue surveying and documenting structures. Utilizing a combination of archival records, local knowledge, and satellite imagery, I was able to relocate and document several sites in the towns of Glencairn, Simonstown, Hout Bay, and Kommetjie that had been lost from public knowledge. I hope that this data and the subsequent report to be submitted to the South African Heritage Resource Agency (SAHRA) will be of use in making future conservation plans and decisions for these important pieces of World War II history. As an archaeological project it was an incredible experience, and I am eternally grateful to Dr. Lynn Harris and the Program in Maritime Studies for making it happen. 🐧

— Ian Harrison



PHOTO: IAN HARRISON

Scala Battery, a WWII gun battery in the hills above Simons Town, South Africa.



Catching up with the Maritime Studies Association

MSA was created to provide students with extra-curricular opportunities including conference funding, workshops, field experience, and social networking. In the past, we have been conference oriented—last year ten of our students presented their research at the annual Society for Historical Archaeology (SHA) meeting in Fort Worth, TX. This year we will continue offering conference support, however our main focus is to provide training

and workshops to supplement coursework. Social events are also a long standing MSA tradition which help to bring students, staff, faculty, and alumni together.

We welcomed new students with our annual Welcome Aboard party, co-hosted with the Program, in early September. The 35th anniversary event, too, assisted MSA with meeting these goals. Alumni and students were able to meet, socialize, and make valuable connections. Furthermore, the 35th Anniversary helped raise much needed funds through donations and swag sales to assist students traveling to this year's SHA conference in New Orleans, LA.

Current MSA officers include Madeline Roth (President), Sara Parkin (Vice President), Ian Harrison (Treasurer), Steph Soder (Secretary), Sam Bernard (Historian), and Paul Gates (Community Liaison).

Our first act together was to co-host our annual fundraiser Seabiscuits and Bitters with the outgoing MSA officers last April. The night's festivities—including music, food, and silent auction—helped raise over \$800 for the Association. This



PHOTO: SAMANTHA BERNARD

Maritime students gather at an MSA meeting.

money will be used over the course of the 2017-2018 school year to bring speakers on campus and offset event/workshop costs.

This year looks promising for the Maritime Studies Association. We are looking forward to continuing past traditions while forging some new. Many thanks to the Program and its many alumni that have supported us in this endeavor.

— Madeline Roth and Ian Harrison



Maritime students gather at an MSA meeting.

Bermuda continued from page 5

ensure accuracy, students reviewed photographs and videos taken on site to compare to the final site drawing. Once finished, the inked site plan was scanned and edited digitally for inclusion in a final project report. While work on the site plan progressed, students also teamed up to conduct historical research on different subjects related to the potential construction and origin of the shipwreck. Research topics included Bermuda early history, Dutch shipbuilding, hawsehole development, cannon truck design, greenheart wood, and prefabricated shipbuilding.

Although the exact identity of the shipwreck has yet to be determined, ship construction features and material evidence

indicate a 17th century to 18th century origin. Students in Dr. Rodger's Fall 2017 ship construction class will attempt use the data collected to build models and further study the wreck. Additional archival research and archaeological investigation seems to be a necessity to achieve a better understanding of this shipwreck, the vessel's construction, how it came to its final resting place in Ely's harbor, and the wrecking/salvage activities that have occurred.

The Bermuda field school presented students with an amazing opportunity to conduct a pre-disturbance survey of a potentially significant shipwreck site. They honed skills and practiced techniques through archaeological recording, drafting, and historical research. The 2017 summer field school also enabled every student to

participate in the fall field schools in Costa Rica and North Carolina's Outer Banks. Additionally, the school afforded them an opportunity to live and work in an incredibly beautiful and historic setting, while broadening their cultural horizons and establishing deeper networking connections.

— Steph Soder and Connor McBrien



PHOTO: JASON RAUPP

From left to right, Samantha Bernard, Stephen Lacey, Dr. Rodgers, Ann Djernes, and Paul Gates draw the final site plan.

Portside - Digital WWII Heritage in the Pacific

This past summer marked the 75th anniversary of the Battle of Midway, fought at Midway atoll between Japanese and American forces in June 1942 (Figure 1). Considered at the time to be a turning point for the Pacific theater, the battle has since been the subject of numerous articles, books, artwork, and even a 1976 blockbuster movie starring Charlton Heston. While these sources have kept the battle at the forefront of WWII history, the remote nature of the battle (Midway is located 1300 miles northwest of Honolulu, HI) severely limits its public outreach. Furthermore, although WWII facilities at the atoll are preserved as part of the Midway Atoll National Wildlife Refuge, Battle of Midway National Memorial, and Papahānaumokuākea Marine National Monument (PMNM), many of the wrecks from the battle (e.g. aircraft, carriers, and cruisers) are spread over hundreds of miles of open ocean and are thus, inaccessible.

Given the significance of the battle, researchers from the National Oceanic and Atmospheric Administration (NOAA), the National Park Service (NPS), SEARCH Inc., and the Program in Maritime Studies have been collaborating on digital outreach materials to commemorate the battle and, more importantly, make the history and archaeology of the battle available to the public. In June 2017, I began working with Dr. Jennifer McKinnon and PMNM Maritime Heritage Program Coordinator (and ECU alum) Dr. Kelly Keogh to build digital content around the main battle narrative. We chose to use Story Maps, an online program designed to work with Esri's ArcGIS mapping software, because it displays both interactive geospatial data and static text and images. Our goal was to present the battle at various geographic scales—the atoll itself, the larger carrier battle, and global WWII heritage today. We began collecting personal narratives, images, war reports, and secondary sources to build the story content.

As the project progressed, interactive maps became the best way to illustrate the battle because they gave decisions made by commanders and aviators a spatial context which could then be interpreted for the reader (Figure 2). Combined with images and firsthand accounts, these maps conveyed the significance of the battle and the sheer scale of WWII warfare in the Pacific. Furthermore, hyperlinks and other content could be added to these maps, illustrating the breadth of WWII heritage accessible online.

Currently, the Story Maps program is in the beta phase of testing. While the program is free to use, it is still under construction. Nevertheless, the Story Maps platform has proven itself a powerful tool for conveying historical and geospatial data to a global audience. Regarding Midway, Story Maps has opened new avenues of digital outreach and offers a way to actively engage with WWII heritage in the Pacific (Figure 3). To see the finished Story Maps product, visit the Papahānaumokuākea Marine National Monument website at (<https://www.papahānaumokuākea.gov/>). — Madeline Roth



Figure 1. Diorama of Japanese air attack on Midway created by Norman Bel Geddes.

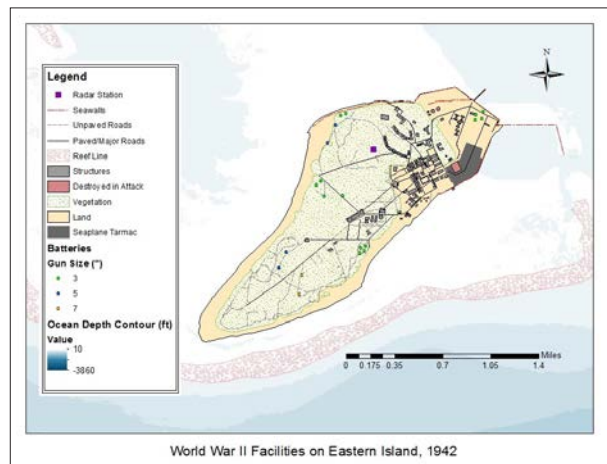


Figure 2. WWII Facilities on Eastern Island (Midway atoll) ca. 1942.

The WWII Heritage of Midway Atoll

Battle of Midway

The Battle Begins

At 0440H on 4 June 1942, twenty seven B-17 Flying Fortress bombers (accompanied by four B-26 'Marauder' patrol bombers and six TBF Avengers) took off from Midway to locate the Japanese fleet. Just over an hour later, the radar station at Midway picked up 108 Japanese aircraft at a distance of 93 miles. While the B-17s were the first to catch sight of the impending aircraft, they did not deviate from their course.

B-17 and B-26: US Air Force Photographs, TBF Avenger: US Naval History and Heritage Command Photograph.

By 0550H, Brewster F2A Buffalo fighter pilots were sitting on the tarmac at the atoll, waiting for takeoff. Vectored out 10 miles to the west and told to orbit, the F2A fighters were soon joined by Consolidated PBV Catalina seaplanes and Grumman F4F Wildcat fighters. In the air by 0600H, US pilots soon caught their first glimpse of the Japanese squadrons, comprised of Nakajima BSN Type 97 'Kate' bombers, Alchi D3A Type 99 'Val' bombers, and Mitsubishi A6M Type 0 'Zero' fighters.

Figure 3. Finished Story Maps Content

Portside - Research Methods with Civil War Blockade Runners

Though it is important to refresh, the summer is also important for continued research. This was a lesson I learned this summer while working with Dr. Barto Arnold, a maritime archaeology professor from Texas A&M University. I was assigned the responsibility of assisting him with his final site report for a project that he has been working on for almost twenty years. As he continued research in the archives back in Texas, I read through all his previous research and writing, compiling the information into a final paper. The process was interesting to experience, as I had never understood the continuous steps involved in an archaeological project of this magnitude. Research does not end with the publication of a paper, in fact it continues for years afterwards and opens more doors for further research.

I came across Dr. Arnold's name in my own thesis research. His work on Civil War blockade runners correlates directly with my own. The primary source information most used in doing my research was one of

his main sources and in which he provides an introduction to *The Civil War Adventures of a Blockade Runner* by William Watson. Dr. Arnold's research revolves around *Denbigh*, a steamer used for blockade running in the Gulf of Mexico during the American Civil War. Through archival research, he was able

own complicated process which takes time and patience.

Since my research is also based in Civil War history and follows the life of a blockade runner in the Gulf of Mexico, I am using Dr. Arnold's research practices as a model for my own project. With a better understand-

ing of the research journey, the rest of my summer was spent on my thesis work. My research has provided me with a basic understanding of the life span of *Rob Roy*, a centerboard schooner most likely built in New Orleans prior to its life as a blockade runner. Emails and calls were exchanged between ar-

chivists in New Orleans and some information was available online, but most archival research will correlate with this year's upcoming SHA Conference. I now have a trail to follow that could lead me down a very interesting path of research and will hopefully open up more potential leads. This summer taught me that good research is about making connections. 📧

— Samantha Bernard



ECU students drafting ship designs at the Coastal Studies Institute.

to find the origins of *Denbigh*, including information about the company that built the iron-hulled paddle steamer. *Denbigh* began as a coastal passenger steamer in Liverpool and ended its journey in Galveston, Texas as a blockade runner. Background research is not the only important step in this kind of project. There is also excavation, analysis, synthesis, conservation, and finally, sharing one's findings with others. Each step has its

Portside - Research Spotlight: Cannon Carriages

Independent research is one of the most exciting opportunities available to students in the Maritime Studies Program. Students get to design, implement, and report upon a project of their choosing while working with ECU's world class faculty. My project centers around the often overlooked naval gun carriage, with the goal of examining its presence in the historical and archaeological records. In the end, I hope to develop tools that allow archaeologists to make preliminary identification of carriage and gun types from fragments found in archaeological contexts. Naval cannon carriages were necessary as they provided some control over recoil, and prevented the force of discharge from destroying the cannon and ship. The

cannon carriage was invented shortly following the cannon itself, and up until the sixteenth century there were several varieties with two or four wheels (trucks), or sliders.

The truck carriage from the sixteenth century through the mid nineteenth came to dominate the realm of naval gun mountings. In the 300 years of its existence the truck carriage remained virtually unchanged, much to the collective irritation of naval inventors and innovators in the eighteenth and nineteenth centuries. Despite their best efforts, the archaic, unmechanized wooden truck carriage outperformed several prototypes, and persisted until the force produced by cannons finally exceeded the

wood's fail point. A truck carriage was constructed in proportion to its gun, and would not be produced until the cannon was delivered. Though they weighed less than metal carriages, wooden carriages could easily exceed 1000 pounds.

Naval gunnery treatises such as John Muller's: *A Treatise of Artillery* (1768) provide lists of proportions between the cannon and the truck carriage it rested on. These treatises were also written to lament the lack of advancement in naval carriages in a time when the rest of artillery technology was changing rapidly. Utilized in conjunction with secondary sources such as Spencer Tucker's *Arming the Fleet*,

continued on page 17...

Outer Banks

continued from page 6

metal detector applications, establishing the overall site plan view, historic research pertaining to the site, and continuing to take measurements. Using historic research to help identify the vessel, Dr. Richards reviewed a wide variety of iron and steel hulled construction plans. The possible identity of the vessel essentially led the field crew on a chase ranging from late-nineteenth century US Coast Guard buoy tenders to amphibious assault craft -- all which may have been converted into the barge that ended its days in the Pamlico Sound.

In addition to surveying the site, the photography skills of John McCord were utilized to take a wide variety of photos ranging from general site to in situ photos, while also recording ECU graduate students as they drafted the overall site plan and interviewed several students for the development of public outreach products. Perhaps one of the greatest photographic assets John McCord provided was aerial photos. Using his DJI Phantom 4 drone, John captured aerial photographs and video, which proved beneficial in interpreting the site.

The third week the team began to draft and started importing more of the data from site sketches on to the overall site plan. Perhaps one of the proudest moments was seeing how little error the team encountered as each group started aligning their sketches. After seeing that, the team began to discuss and prepare for underwater excavation operations using an underwater dredge. The technology utilized in underwater excavation vastly differs from terrestrial excavation. Excavation teams were divided into two scuba divers and one dredge spoil handler.

During the final week of the 2017 Fall Field School, graduate students finished up with drafting the site plan of the Pappy's Lane Shipwreck. Any questions of misaligning features, non-identified vessel parts, and other general observations that needed review were written down on a list to be re-examined in the field. In doing this, it helped to mitigate error and solved issues with the site plan. Students were introduced to Rhinoceros, a three-dimensional modeling program. This will be used in their final paper for the project. Along with reviewing historic resources such as marine insurance registers, graduate students wrapped up all remaining site work. This included more dredging, plotting cross section profiles of dredged areas, metal detection, trilateration of the vessel's frames, and measuring the frames with a total station.

The students had an amazing experience and learned a lot. The Fall Field School in Rodanthe provided an excellent set of foundational skills that will be heavily utilized by these archaeologists in their future careers. This project would not have been possible without the help of the North Carolina Department of Transportation, the UNC Coastal Studies Institute, and East Carolina University. Special thanks goes to Dr. Nathan Richards, Dr. Erin Field, John McCord, Jason Nunn, and the Pappy's Lane shipwreck crew. 🐚

– Paul Willard Gates and George Martin Huss

Theses Defended IN 2016-2017

Lauren Christian, “Adaptive Legacy: The Transition of Lighthouses from Symbols of Political-Economical Statements to Icons of Cultural Identity.”

Mitchell Freitas, “Reassessing the Cape Hatteras Minefield: An Examination Of North Carolina Coastal Defenses During the Second World War.”

Ian Hazel, “Press Gang Revisited: Polarization, Nuance, and the Study of Impressment in the Royal Navy.”

Patrick Forrest Herman, “Bessie and the Manigaults: Reconstructing a Plantation Boat and Antebellum Boating Culture in South Carolina Rice Counrty.”

Elizabeth Pratt Marlowe, “The Bower Yet Remains: Historical and Archaeological Analyses of Anchor Design Trends in the Long Nineteenth Century.”

Morgan Pierce, “The False Dichotomy: Jamaican Maroons as Resistance Fighters and Colonial Enforcers.”

Hannah E. Piner, “The Sled, the Litter, and the Plot: Finding Connections Between Mundane Material Culture from World War II's USS *North Carolina*.”

Allyson Genevieve Ropp, “The Pirates of the Pamlico: A Maritime Cultural Landscape Investigation of the Pirates of Colonial North Carolina and Their Place in the State's Cultural Memory.”

Aja Rose, “A Case Study of Six Montefortino Helmets from the Battle of the Egadi Islands (241 B.C.).”

William J. Schilling IV, “Trade Secrets: A Historical, Archaeological, and Archaeometric Study of Greek Colonization in the Dalmatian Islands.”

Emily Anne Schwalbe, “The Predicament of Traditional Femininity: A Gender Material Culture Analysis of Civil War Blockade Runners.”

Allison Nicole Miller Simonds, “Who Are You? An Archaeological Examination of the Human Remains Associated with VASA.”

Sara Spatafore, “Vada Volaterrana: A Comparison of Roman Harbors and their Place within Mediterranean Connectivity.”

Portside - Research Spotlight: Grenades

For my thesis, I am comparing cast iron hand grenades from three collections dating between 1700 and 1750 AD. Mainly, this will determine whether statistical analysis can be used to create a taxonomy. The first collection is at *Queen Anne's Revenge* (QAR) laboratory in Greenville, and is undergoing various stages of conservation. Two collections, those of the 1715 and 1733 plate fleet wrecks, are housed in the Florida Bureau of Archaeological Research (BAR) Collections and Conservation Laboratory in Tallahassee. Both facilities were more than willing to give access to these collections but of course wanted dates well in advance. With summer field school in Bermuda, my enrollment at Lighthouse Archaeological Maritime Program (LAMP), and assisting with Ryan Marr's research in Tanzania, I had only two available weeks in which to gather data.

Ultimately the months of prior planning, combined with a little luck, allowed for my visits to occur in that window.

First, I went to the QAR to document their collection. Erik Ferrell, one of the conservators at the QAR, helped to refine my measuring approach and basic troubleshooting of pesky enigmas. A total of six grenades were available to measure on site, while X-ray analysis of concretions indicate another twelve grenades. This places the potential number of the collection at twenty-four. One apparent issue was how to measure interior volume. Since some grenades were still stored in solution it was

easy to measure volume using distilled water, whereas fully conserved grenades had to be measured using glass spheres. Both measurements were later converted to a common volume with comparable grains of gunpowder.

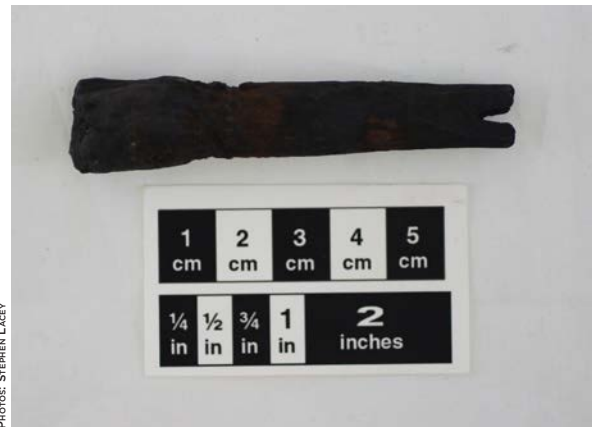
For my second week, I went to the 1715 and 1733 collections at the BAR. A total of fourteen grenades are spread amongst six sites for the 1715 fleet wrecks and thirty-four grenades are on three of the 1733 fleet wrecks. Unforeseen issues that arose during the previous week were considered and planned for, which made the work flow seamlessly. Sizes, weights, and features from these collections are distinguishable from the QAR collection. Even more

noticeable are four types of grenade fuses, where only one is present in the QAR collection.

With all the data gathered, I can now begin analysis. Aside from interior volume, exterior volume, average thickness, casting seams, distribution on the site, and fuse diameters are additional contributing factors. If this method proves amenable, the study can then be expanded in size geographic location, nationality, material type, and date range. Eventually, we can ask more general questions about when standardization occurred, factors that determined material selection, how grenades were stored on ship, and the conscious split between naval and land grenades. My intent is to work towards replication and detonation to record lethality, blast effects on the body, and blast effects on a vessel.



— Stephen Lacey



Fuse plug with a wedge tip from Corrigan's Wreck, 1715 plate fleet.



Fuse plug from Cabin Wreck, 1715 plate fleet.



A grenade with a secondary hole from *San Felipe*, 1733 plate fleet



A casting spur on a grenade from Corrigan's Wreck, 1715 plate fleet.

Portside - Research Spotlight: Religion and Life at Sea

After writing a prospectus in the spring semester for our Methods course, I began preliminary research into the practice of Catholicism onboard Spanish colonial vessels with an emphasis in the geographic region of Florida. The Spanish empire was the first European power to establish permanent settlements on several of the Caribbean islands and the coasts of North America. This colonialist spirit was sponsored and supported by the fervent Catholic faith that permeated all aspects of life in newly unified Spain. The distance between Spain and the colonies led to differences in lifestyles and customs, but the preeminence of the Catholic faith remained tantamount. My research examines artifacts and historical sources associated with the practice of Catholicism at sea and on land by Spanish colonial sailors and colonists based on material evidence gathered from shipwrecks and terrestrial sites dating from the late 15th to 18th centuries. While this is a large expanse of time, the availability of material culture will ultimately help to narrow the scope of my research.

Although the major element of this research is focused on material culture derived from wrecks and terrestrial sites and which

are housed in Floridian archives, the historical record is just as important. The historical record offers immense aid to archaeologists attempting to study religion and how reli-



Portrait of Alvar Nunez, The Account Alvar Nunez Cabeza de Vaca's Relacion, Martin Favata, and Jose Fernandez 1993.

gious practices were conducted aboard transoceanic voyages. These historical accounts can be used to corroborate the material culture evidence recovered from archaeological excavations or to simply provide context in how material culture was utilized in rituals. I will be examining recovered material culture and using my own knowledge of Catholic religious practices in addition to information contained within the historical record to interpret the use of objects in religion. Fortunately,

Catholicism is heavy in material culture such as rosary beads, crucifixes, jewelry, implements for use during the Mass, and a myriad of other objects.

A major catalyst to my own research is the overall lack of archaeological projects focused on the role of religion in the maritime sphere. The general hesitancy to use archaeology as a tool to study religion is rooted in the fact that ancient religion is nearly impossible to understand using only material culture, because this would lead to speculation and overgeneralizations that force modern

perspective onto ancient belief systems. While this is a credible concern, archaeology can, and should be used to study the development of historical religions that are still in existence today. For example, many modern religions have distinct material culture tied with their beliefs that mirror items used in religious practices of the past, and this past material culture can be studied in relation to modern equivalents. Religion, as a vehicle of social and cultural change, needs to be studied in greater detail because it is a basic human condition just as the search for food and shelter.

As I continue to conduct greater research on this topic, I look forward to connecting the dots of information contained within the historical record and the material culture in order to create a narrative that showcases the importance and practice of religion onboard the colonial vessels of the Spanish Catholic Monarchy. ✍️

— Elise Twohy



Rosery beads

PHOTO: ELISE TWOHY

Cannon Carriages continued from page 14

Fredrick Leslie Robertson's *The Evolution of Naval Armament*, or the *Mariner's Mirror* article "Old Naval Gun Carriages" by J.D. Moody, they provide most of the historical background on the naval gun carriage. Additional information may also come from official records such as those belonging to the British Board of Ordnance, which is responsible for all things gunnery on both land and sea. The bulk of my efforts,

however, will be directed at studying the carriages pulled from museum inventories.

By generating lists of proportions and measurements it may be possible to evaluate the purported homogeneity of the truck carriage, and to see how closely manufacturing followed published guidelines. Another goal is to develop a basic typology of earlier carriage types. Several sites which cannon carriages (or pieces of carriages) have been discovered, including: Molasses Reef, Highborn Cay, *Vasa*, *Mary Rose*, *Batavia*, *La Belle*, and *Kronan*. Museum ships such as the HMS *Victory*, the U.S.S. *Constitution*,

Constellation, and *Niagara* also have the potential to reveal valuable information. Finally, several museums in the United States, the United Kingdom, Sweden, and Denmark contain large collections of guns and gun carriages. It is hoped that I will be able to track down most U.S. based carriages. The naval gun carriage does not enjoy the popularity of the cannon amongst researchers, yet without it, the cannon would not have developed into the weapon which would forever change the face of naval combat and ship design. ✍️

— Katrina Bunyard

Ahoy Mates! Welcome to ECU

New MA Students in the Program in Maritime Studies

Jack Adamson is originally from Hickman County, Tennessee. Jack pursued his Bachelor's degree in History from Austin Peay State University. While there, he interned at the Pratt Museum of the 101st Airborne and later spent a summer studying abroad in France, Germany, and Austria focusing on the Holocaust and European studies. Following graduation in 2013, he was employed in the cattle industry and later the construction industry, specifically in special inspections, where he developed numerous technical, managerial, and operational skills. He eventually decided to return to academia to pursue his Master's Degree and enrolled in ECU's Maritime Studies program. He has a passion for all facets of military history from ancient to modern but is especially interested in the World Wars. In the future, Jack hopes to become a successful field archaeologist and, in later years, return to academia as a professor.

Joel Cook is a first year graduate student in the Maritime Studies program. He graduated from Fayetteville State University with a BA in History and a BS in Intelligence Studies. He spent time working as an intern for the National Park Service at Cowpens National Battlefield before coming to East Carolina. Joel is conducting research on West African Naval Warfare, but also has a deep interest in the development of the African slave trade and the Middle Passage. He is also an active living historian and member of both the award-winning Sons and Daughters of Ham and the Hannibal Guards.

Emily DiBiase is a first-year student in the Maritime Studies program at ECU. She grew up in York, Pennsylvania and earned a BA in Archaeology from Lycoming College in Williamsport, Pennsylvania. There, Emily trained in terrestrial archaeology. She dug at the site of Idalion in Cyprus for two seasons, one as a supervisor. She has also worked for the York County Heritage Trust cataloging and organizing documents and for the Charlotte Museum of History doing a study of mid-century modern architecture. As far as



First year maritime students gather outside of the Eller house. Photographed from left to right: Luke Lebras (back left), Joshua Vestal, Ryan Miranda, Jack (Gus) Adamson (back right), Kendra Lawrence (middle), Aleck Tan (front left), Patrick Smith, Emily DiBiase, Molly Trivelpiece, and Joel Cook (front right).

maritime archaeology goes, she has a broad interest, but Emily is especially fascinated with the ancient Mediterranean.

Luke LeBras received his bachelor's degree in anthropology from the University of Connecticut and is continuing his education in the Maritime Studies Program. At the University of Connecticut Luke's undergraduate studies primarily focused on archaeology and history. He was a part of multiple terrestrial excavations and research projects in New England, including Paleoamerican lithic analyses, colonial battlefield surveys, and cultural resource management surveys of Archaic and Woodland period sites. In addition to his work on terrestrial projects, Luke was a scientific diver and archaeologist in the 2017 season of the Black Sea Maritime Archaeology Project, and in the 2016 season of the Rockley Bay Research Project.

Ryan Miranda is second-year graduate student in the Maritime Studies program. He is originally from Farmington, Connecticut. Ryan received his BA in Anthropology from Washington College in Chestertown, MD. His interest in history and archaeology began at a young age with his father's arms and armor collection and during his undergraduate career continued with multiple field schools. Ryan's interest shifted to maritime archaeology during a class at Washington College. His interests include Naval weaponry and maritime histories of the ancient world, Vikings, and the US and Royal Navy. Outside

of archaeology, Ryan enjoys reading, music, playing sports, and being on the water as a rower and under the water as a diver.

Patrick Smith is a first-year student in the Program in Maritime Studies. Patrick was born and raised in Wilmington, Delaware, but has lived in Cameron, NC for many years. He graduated cum laude from Liberty University with a BS in Criminal Justice: Criminal Psychology Cognate, with a minor in Strategic Intelligence. He became interested in maritime archaeology at a young age when the first children's books on the discovery of the Titanic were published. Patrick became encouraged to apply for ECU's Maritime Studies Program after being reintroduced to scuba diving through Task Force Dagger, a nonprofit organization that supports wounded, ill or injured military special operations members and their families. His primary interests are the WWI and WWII eras and the Age of Sail.

Aleck Tan is a graduate student in the Maritime Studies program. Originally from the Philippines, she has moved around the US since she was young, but feels at home anytime she is in the water. Aleck received her BA in Anthropology from Humboldt State University in Arcata, California, where she fell in love with archaeology, mapping, and SCUBA diving. Her background includes conducting remote sensing and GIS research projects, conducting fieldwork in Belize, and working in CRM in northern California. Aleck is interested in mapping techniques

Where are our Maritimers now?

2017

and the management of underwater cultural heritage in Southeast Asia. In her spare time, Aleck enjoys swimming, being outdoors, baking, traveling, and spending time with her dog Cookie.

Molly Trivelpiece is a first year Maritime Studies student from Virginia and received her undergraduate degree in Anthropology from Longwood University. For the past few years Molly has participated in and supervised an underwater archaeology field school in Florida and has worked on-site in North Carolina as well. After dabbling in terrestrial cultural resource management work, she decided to continue with her love of maritime themed projects and further her education at ECU.

Joshua Vestal is currently enrolled in the Maritime Studies program. He graduated from Lincoln Memorial University with a BA in History. He has participated in terrestrial and maritime field schools focused on the Roman era, but is also interested in naval aspects of World War II in the Pacific.

Kendra Lawrence is a first year Maritime Studies student. She graduated from the University of Wisconsin-Milwaukee with a BA in Anthropology and minors in History and Religious Studies. Growing up on a steady diet of National Geographic magazines and visits to The Henry Ford Museum, it should not have been a surprise when she declared for Archaeology instead of business or engineering. Her love of maritime worlds was sparked when she learned to sail at fourteen, and soon thereafter became infatuated with sailing ships of all kinds. During her undergraduate career she became involved with the S/V Denis Sullivan as a volunteer and deckhand. This involvement sparked research questions about how tall ship programs, history, and underwater archaeology can be better integrated for mutually supportive ends, including public outreach and education. Outside of academics, Kendra strives to stay active with rugby, football, and martial arts. She is perpetually seeking opportunities work on or near the waterfront, especially crewing sailboats of all shapes and sizes to continue developing her skills. Future career goals include working in the tall ship industry or maritime museums to support education and outreach.

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) – Executive Director, USS KIDD Veterans Museum, Baton Rouge, LA

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; Preceptor, Harvard Writing Program, Cambridge, MA

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

Charles S. Bowdoin (2016) –

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) – Research Coordinator, NOAA Thunder Bay National Marine Sanctuary, Alpena, MI

Baylus C. Brooks (2016) – Poseidon Historical Publications, 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) – Research Fellow, British School at Rome

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

Lauren Christian (2017) –

Robert Church (2001) – Senior Marine Archaeologist, C & C Technologies Survey

Services, Inc., Lafayette, LA

Brian T. Clayton (2005) –

Kaitlin Clothier (2016) –

Wendy Coble (1998) – Agency Disinterment Manager, Plans and Policy Division, Defense POW MIA Accounting Agency, Arlington, VA

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

Kathryn L. Cooper (2014) –

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

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

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



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) – Underwater Program Manager, Defense POW/MIA Accounting Agency, Washington, DC

James P. Delgado (1986) PhD – Senior Vice President, SEARCH, Inc., Jacksonville, FL

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



Jeremy Eamick (2015) –

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Scott Emory (2000) – Cockeysville, MD

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

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



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

David Fictum (2015) –

Hannah (Piner) Fleming (2017) – Material Culture Specialist, Conservation Department, The Mariners' Museum and Park, Newport News, VA

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) – Nautical Archaeologist, R.C. Goodwin & Associates/USDOT Maritime Administration, Washington, DC

Mitchell Freitas (2017) –

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



Stephanie Gandulla (2014) – Maritime Archaeologist, Thunder Bay National Marine Sanctuary, Alpena, MI

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

Kate Goodall (2003) – Co-Founder and CEO of Halcyon, 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



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

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Heather Hatch (2006) PhD – Coordinator at Sustainable Archaeology: Western, Museum of Ontario Archaeology, London, Ontario, Canada

Chelsea Hauck (2016) –

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

Ian Hazel (2016) –

Patrick F. Herman (2017) – Stadium Retail and Events Manager, Seattle Seahawks, 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

Bernard James Howard (2016) –

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

Robin Croskery Howard (2016) – Objects Conservator, Ah-Tah-Thi-Ki Museum, Clewiston, FL

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

Joseph Hoyt (2008) – Maritime Archaeologist, NOAA National Marine Sanctuaries, Newport News, VA

Michael D. Hughes (2003) – Project Manager, SAIC, Washington, DC



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 – Assistant Professor, Department of History, University of West Florida, Pensacola, FL

Doug Jones (2007) – Marine Archaeologist, Bureau of Ocean Energy

Management (BOEM), New Orleans, LA
Jennifer Jones (2012) PhD – Joyner Library, East Carolina University, Greenville, NC

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



John Kennington (1995) –

Communications Officer, Campus Services, Georgia Institute of Technology, Atlanta, GA

Sara C. Kerfoot (2015) – Archaeologist, Green Mountain National Forest, Rutland, VT

Kurt Knoerl (1994) PhD – Assistant Professor, Department of History, Armstrong State University, Savannah, GA

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



Danielle LaFleur (2003) – Lead Support for Personnel and Administration, Lansing Community College, Lansing, MI

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Matthew Lawrence (2003) – Maritime Archaeologist, Florida Keys National Marine Sanctuary, Key Largo, FL

Adam Lehman (2006) – Whitsett, NC

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Jason Lowris (2000) –

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



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

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Zachary T. Mason (2014) –

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Christopher McCabe (2007) – Coastal Archaeologist and Supervising GIS Specialist, Applied History Lab, University of Rhode Island, Kingston, RI

Peter McCracken (1999) – Electronic Resources Librarian, Cornell University; Co-Founder and Publisher, ShipIndex.org, Ithaca, NY

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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

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Department of Transportation, Richmond,
VA

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MA

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Archaeologist, Florida Bureau of
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Archaeology, Trent University, Peterborough,
Ontario, Canada

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 Scholarships and Signature Programs, East
Carolina Alumni Association, East Carolina
University, Greenville, NC

Stuart Morgan (1985) – Public
Information Director, South Carolina
Association of Counties, Columbia, SC

Tyler Morra (2012) –

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



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



Christopher Olson (1997) – Nautical
Archaeologist, Maritime Historian,
Operations Director, and Co-Founder,
Maritime Heritage Minnesota, St. Paul, MN

Jeffrey B. O'Neill (2016) – Vanceboro, NC
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



Jason Paling (2003) – Teaching Lecturer,
Plymouth State University, Adjunct Professor,
Rivier University and Nashua Community
College, Director of the Hamontun
Archaeological Project in Guatemala
and Co-direct of the Ranch Ojo de Agua
Underwater Project in Chiapas, Mexico and
Chiquilistagua Archaeological Project in
Nicaragua

Adam K. Parker (2015) – Maritime
Archaeologist, SEARCH, Inc., Washington,
DC

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

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

Whitney Petrey (2014) –

Morgan Pierce (2016) –

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

Andrew Pietruszka (2005) PhD
– Underwater Archaeologist, Coastal
Observing R&D Center, Scripps Institution
of Oceanography, University of California San
Diego, La Jolla, CA

Mike Plakos (2003) – Senior Technical
Analyst, U.S. Navy, Washington, DC

Mateusz Polakowski (2016) –
PhD student, University of Southampton,
United Kingdom

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) –
Anthropologist Planner, Intermountain
Region Planning, National Park Service,
Lakewood, CO

Edward Prados (1993) – Country
Director, AMIDEAST, Aden/Sana'a, Yemen

Franklin Price (2006) – Archaeologist III
and Diving Safety Officer, 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



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) – Independent Scholar,
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

Allyson Genevieve Ropp (2016)
– Underwater Archaeologist, Lighthouse
Maritime Archaeology, St. Augustine, FL.

Aja Rose (2017) –

Lauren A. Rotsted (2015) –

Matthew Russell (1995) PhD –
Archaeologist, William Self Associates, Inc.,
Orinda, CA



Stephen Sanchagrin (2014) –

William Sassorossi (2015) – Maritime
Archaeologist, Monitor National Marine
Sanctuary, Newport News, VA

John Schaefer (1994) – Schoolteacher,
Washington, NC; PhD student, UNC Chapel
Hill

William J. Schilling IV (2017) –

James Schmidt (1991) – Nautical
Archaeologist, Naval Historical Center,
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Robert Schneller (1986) PhD – Historian,

Naval Historical Center, Washington DC
Laura Kate Schnitzer (2012) – Archaeologist, New South Associates, Stone Mountain, GA

Emily Anne Schwalbe (2016) – Archaeologist, Clemson University Restoration Institute, Warren Lasch Conservation Center, North Charleston, SC

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

Allison Nicole Miller Simonds (2017) – **Lucas S. Simonds (2014)** – Historian/Archival Researcher, Historic Preservation, Commonwealth of the Northern Mariana Islands

Jessica Smeeks (2014) –

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) –

Sara Spatafore (2017) – Teaching Instructor, East Carolina University Department of History, Study Abroad Program, Certaldo, Italy

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



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

Bradley D. Thorson (1982) – **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



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John Wagner (2010) – Fitness Supervisor, Montrose Recreation District, Montrose, CO

Daniel Warren (1998) – Senior Marine Archaeologist and Houston Asst. Geosciences Manager, C & C Technologies An Oceaneering 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 – Senior Historian, Letourneau Heritage Consulting
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

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Nicole Wittig (2013) – Cultural Resources Specialist, Center for Integrated Research on the Environment, Cheyenne, WY

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

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



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

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