Greetings!

We hope that this finds you well and healthy during the COVID-19 pandemic. We know that the pandemic has put a hold on many fieldwork projects but we are happy to share students’ research. In this edition, we have some great articles covering topics such as: a historic port in Washington, NC, personal possessions from 16th-century shipwrecks, shipwreck survivor camps from the 1733 Spanish galleon fleet, and the integration of underwater cultural heritage into the UN Decade of Ocean Science.

Thank you to everyone for submitting articles and for reading our student newsletter!
From its foundation in 1776 until the early twentieth century, the river town of Washington, NC was the commercial and economic focal point of Beaufort County and the greater Tar/Pamlico River system. Its bustling port primarily exported tar, pitch, turpentine, rosin, boards, scantling, staves, shingles, furs, tobacco, and many other raw materials through the colonial and antebellum periods (Paschal 1976:4). In the aftermath of the Civil War, the town slowly embraced the trend of industrialization sweeping through the south. Lumber mills began to appear along both banks of the Pamlico River accompanying the town’s ever-present shipping industry. Shortly thereafter, railroad companies, like the Jamesville and Washington Railroad and Lumber Co. and the Atlantic Coast Line Railroad, acquired waterfront lots to combine trade via steamship with the expanding railroad network in the state (Worthy 1976:66). Despite the shift from exporting naval stores and agricultural products to lumber, the port continued to provide necessary supplies to the isolated communities of eastern North Carolina.

Unfortunately, the increasing presence of railroads foretold the demise of Washington. Once a viable network of roads and railroads crisscrossed inland North Carolina, regional river ports like Washington became unprofitable and unnecessary. Additionally, with recent renovations to the historical waterfront, the town’s working port was no longer a prominent physical feature along the Pamlico River. My thesis research is focused on understanding how the port developed through two centuries of existence, its role in the development of the Tar/Pamlico Region, as well as the inter- and intra-harbor trade relationships which sustained the community.

Prior to the COVID-19 pandemic, two field surveys were conducted along the Washington shoreline at sites related to the historic port of Washington. From November 1-3, 2019, a team of East Carolina University (ECU) faculty and graduate students collected field data from an unidentified waterfront structure along the southern shoreline of the Pamlico River. The survey combined snorkeling transect survey lanes with Total Station position fixing to accurately record the approximately 30x16 m site. Termed ‘Site A’, the shoreline survey uncovered large quantities of brick, ballast stone, and evidence of a rectangular dock structure buried underneath the riverbed (FIGURES 1 and 2). Historical maps indicate that this site corresponded with a windmill, but do not provide any further information regarding industry or ownership (FIGURE 3).

In early March 2020, another group of ECU students and faculty returned to Washington to survey an additional site further up the Pamlico River from ‘Site A’. Situated adjacent to the current NC HWY 17 Business Bridge, the remains of two piers from the nineteenth century S.R. Fowle & Son Lumber Mill rest just below the waterline. Repeating the same survey methodology, the team recorded submerged

FIGURE 1 and 2. (L) Brick and (R) ballast stones discovered at ‘Site A’, Washington, NC. Photo credit: Will Nassif.
pilings as well as other cultural material present in the 16x20 m survey area (Cover page). The team discovered large quantities of modern brick amongst driftwood and the remnant pilings.

Unfortunately, due to the COVID shutdown and research restrictions, field work activities had to be postponed until later in the summer. The plan is to return to the Fowle site to finish recording the deeper pilings, seen above, with the RTK positioning system. Legacy sonar data and drone photography will be used to record and illustrate the Eureka Lumber Mill log pool, another link to Washington’s historic port. Located approximately 0.5 mi further upriver from downtown Washington, the mill’s log pool has slowly succumbed to nature and deteriorated (FIGURE 5 and 6). Partially submerged in the Pamlico River are dozens of pilings and structural components of the log pool used to ‘catch’ log rafts floated up and down the river system.

Each of these sites are links to historic industries which cultivated the town of Washington, as well as the smaller communities along the Tar/Pamlico River. Historical data obtained from Fowle company ledgers and sales records, similar materials from other prominent Washington shipping interests from the nineteenth century, and state financial records will provide clarity on the port’s development through time in response to economic trends. In tandem with the archaeological record, historical data will emphasize the external factors which contributed to the port’s growth over time, as well as emphasizing the economic differences which led to the varying construction methods of Washington’s waterfront installations.

-William Nassif, East Carolina University
nassifw12@students.ecu.edu

References
Paschal, Herbert

Worthy, Pauline M.
Pensacola, Florida, well known for its sandy white beaches and proximity to the Gulf of Mexico, is also home to the University of West Florida and the site of the Tristán de Luna y Arellano expedition of 1559-1561. This site is the earliest multi-year European colonial settlement ever archaeologically identified in the United States. Three shipwrecks from the expedition known as the Emanuel Point wrecks are also just offshore from this site. Over the last 30 years, there has been a great deal done to study the archaeological and nautical history of sixteenth-century shipwrecks in Pensacola Bay. To ascertain more about the people on this expedition and the artifacts they left behind, I delved into the study of the personal possessions brought by the crew and passengers on the ships of the Tristán de Luna y Arellano expedition of 1559.

This analysis steered the research into looking at artifacts of unique circumstances such as an ivory manicure set, but also simple things like rosary beads, to showcase the wide range of personal items one finds on a shipwreck. Additionally, to incorporate a more concise look into this area of study, the window of study for shipwrecks and their artifacts was expanded to incorporate similar shipwrecks from 1554-1564. In pursuit of this goal, a grant was obtained in 2018 through the University of West Florida Archaeology Institute to allow me to travel to Corpus Christi, Texas, to perform research at the Corpus Christi Museum of Science and History. Once there, I was able to narrow my focus to three specific 1554 shipwrecks: the San Esteban, Espíritu Santo, and Santa María de Yciar, otherwise known as the Padre Island wrecks. These new wrecks provided me with a plethora of new artifacts to compare, such as astrolabes and enema syringes, as well as direct access to the original microfiche archives of the Padre Island shipwrecks (FIGURE 1).

Next, I traveled to the Florida Keys to
examine the 1564 *Santa Clara*, formerly known as the St. John’s Bahamas wreck. Hence, another grant awarded in 2019 from the Pensacola Archaeological Society, which allowed me to gain access to the Mel Fisher Maritime Museum that was housing the *Santa Clara* collection. Here, I looked at the diverse collection of artifacts from the ongoing conservation of the shipwreck, which included crossbows, straight pins, decorative fasteners, and even a pair of scissors. Finally, I talked with Corey Malcom, one of the original investigators of the wreck and the local expert on nautical history. He provided first-hand accounts on how the wreck was not only identified and discovered, but what artifacts stood out to him as ideal candidates to compare with the Emanuel Point and Padre Island wrecks.

Lastly, my concluding research into personal possessions has led to working with Dr. John Worth at the University of West Florida to track some of the earliest artifacts found on the Emanuel Point I wreck with portable x-ray fluorescence (pXRF) to determine what metals we were looking at (FIGURE 2). Specifically, this means that we used a non-destructive analytical technique to determine the elemental composition of materials. The pXRF analysis determines the interaction of a sample by measuring the photon energy displacement signature given off by the weight when it is excited by the primary x-ray source. An electron then breaks off to be picked up by the pXRF scanner and provides a reading of brass, for instance. Furthermore, this distinctive signature has presently led me to the Detroit Institute of Arts (DIA) to use pXRF to compare the makeup and manufacturing origin of the scale weights within their collection to those found on the Emanuel Point I shipwreck and corresponding Luna Settlement. A unique connection may allow us to further tie artifacts from the shipwrecks found in the New World to their artisans and places of manufacture throughout the Old World. In the end, conclusions gathered through an in-depth study of personal possessions like the scale weights will help further contribute to a comprehensive understanding of the average seaman and his identity among fellow crew members aboard sixteenth-century vessels.

-Brandon Herrmann, University of West Florida
blh45@students.uwf.edu
On Friday the thirteenth of July 1733, the New Spain Fleet, set sail from Havana harbor for its return voyage to Spain. After being sighted off the coast of the Florida Keys the following day, the sky darkened and the wind shifted sharply, causing the waves to swell and pound against the hulls of the fleet. Lieutenant-General Torres, the commander of the fleet, ordered his captains to turn back to Havana and to sail as close to the wind as possible, but it was too late. By nightfall, most of the ships had been driven westward and scattered, sunk, or swamped along 80 miles of the Florida Keys reef (Florida’s Bureau of Archaeological Research, Division of Historical Resources [BAR, DHR] 2005) (FIGURE 1). Today, thirteen of the 22 vessels that set sail that fateful Friday are located within the Florida Keys National Marine Sanctuary (FKNMS) and Biscayne National Park (BISC). Unfortunately, the ordeal was far from over for the remaining survivors of the fleet. With more than a thousand stranded crewmen, passengers, and soldiers, limited provisions and the severe lack of fresh water daunted the survivors. The summer heat was intense, and the humidity was suffocating. The blistering sun scorched their exposed flesh during the day and “hordes of voracious mosquitoes descended on the castaways in the evening” (Viele 2001:13). Although a few barrels of raw flour were recovered from a small sloop that had managed to survive the shallow reef, it was distributed in small rations that did little to alleviate their growing hunger. The burning thirst was barely allayed by the brackish waters they found in the few sinkholes scattered throughout the Keys (Viele 2001:13).

After locating the wrecked vessels and surviving crew members of the fleet, Spanish officials in Havana mounted a rescue expedition outfitting nine vessels with supplies, food, and salvage equipment to provide relief to the survivors (Smith and Dunbar 1977). The salvage teams used specially equipped vessels and free-diving Indians and African slaves to recover wrecked cargo (Smith 1988:95). Spanish authorities extensively salvaged the shipwrecks for several years, recording their progress and detailing the locations of the wrecks on various maps (FIGURE 2).

Despite the fleet’s well-documented history, very little research has focused on the salvage camps and shipwrecked survivors who sought refuge along the Florida coast after wrecking. Research on shipwreck survivor camps is a unique branch
of maritime archaeology that provides intimate insight into the lives of the surviving sailors before, during, and after traumatic and sometimes devastating incidents at sea. My research seeks to understand the meaning and interpretation of the shipwreck survivor camps of the 1733 fleet within the overarching Spanish maritime culture.

While records indicate that there were several survivor camps, past archaeological surveys have identified the location of only one camp located on Tavernier Key, Florida (BAR, DHR 2004). Therefore, my research will involve examining the Tavernier Key survivor camp and the closest associated 1733 wreck (or shipwrecks, time permitted). Surveys of the survivor camp and wrecks will not only provide updated site information, but it will also address the distance and relationship between the wrecks and the campsite. The intention of this research is to collect data related to shipwreck survival and how cultural or behavioral aspects affect the material nature of these sites. Through archival and geographical data, I can also determine a correlation between available resources, the wrecks, and the salvage bases.

The fieldwork component for this research is projected to take place during East Carolina University’s Program in Maritime Studies 2020 fall field school. With the onset of the coronavirus, SARS-Co-2 or COVID-19, which has caused a worldwide pandemic, execution of any fieldwork associated with this research may potentially be impacted. Depending on the potential severity of the virus and its influences on traveling, university permission, and student safety, my thesis may need to be amended to facilitate my research goals. Fortunately, there are many avenues of research to peruse in the case of the 1733 fleet and its shipwrecked survivors.

For more information regarding the fleet, here’s a link to the 1733 Spanish Galleon Heritage Trail.

-Amber Cabading, East Carolina University cabadinga18@students.ecu.edu

References


FIGURE 2. Spanish salvage chart indicating the locations of the 1733 shipwrecks (BAR, DHR 2004).
The crossover between cultural heritage and environmental conservation is not a new concept, however, it has garnered renewed attention in the light of the United Nations’ Decade of Ocean Science for Sustainable Development (2021-2030). This initiative calls for a collaboration among all oceanographic sciences to promote research that will help protect our oceans (Decade of Ocean Science 2020).

Unfortunately, underwater cultural heritage (UCH) has not been sufficiently represented in the current design and outline for the Decade. This is an odd oversight as some of the main literature produced regarding the initiative acknowledges the need for societal support. Vladimir Ryabinin, a major proponent of the Decade, states that societal acceptance is an important measure of the Decade’s success (Ryabinin et al. 2019:5). This sentiment is echoed and expanded upon by maritime archaeologists such as Jon Henderson who argues that even the most impressive research will not have lasting effects if local individuals are not consulted and do not feel connected to the research being conducted. He states “as long as the importance of cultural heritage is not recognized as a critical and valuable knowledge base, sustainable development initiatives in the marine zone will be less likely to succeed and, worse, will undermine the identities and well-being of coastal communities” (Henderson 2019:2).

By engaging with local communities who feel a sense of connection to UCH sites, researchers will have a group of stewards who are dedicated to the preservation of these areas. With the education and call to action of groups such as local dive shops, researchers will be able to ensure that the conservation strategies developed through
this Decade of Ocean Science are continuously implemented over a long period of time. Through the engagement of local communities and the development of plans to protect the areas locals find important, researchers will be able to meet some important goals of the Decade, such as Sustainable Development Goal (SDG) 14 which aims to “conserve and sustainably use the oceans, seas, and marine resources for sustainable development” (Decade of Ocean Science 2020).

Our oceans are a vital resource that humanity cannot afford to lose, however impactful change cannot be made by a small handful of scientists. In order to create a serious shift in the management and preservation of our oceans, local communities must become engaged with the movement. One way this can be done is by relating the goals of the Decade to local communities’ maritime heritage. By demonstrating that the protection of UCH, such as shipwreck sites, can benefit both the economic and environmental resources of an area, researchers will see the greatest impact of their work.

In the immortal words of everyone’s favorite bumbling pirate Jack Sparrow, “if you were waiting for the opportune moment, that was it.” There will never be a better time to save our underwater cultural heritage than now. By developing conservation plans that are impactful and beneficial to local communities, we can begin to effect that change. If we let the “opportune moment” slip by, there may be no heritage for future generations to protect.

For more information, please visit Ocean Decade Heritage Network.

-Andrea Yoxsimer, East Carolina University
yoxsimer19@students.ecu.edu

References

Decade of Ocean Science

Henderson, Jon


UPCOMING CONFERENCES

Society of Historical Archaeology Virtual Conference. 6-9 January 2021. https://sha.org/conferences/


💬 Remember, we are always looking to highlight student research and projects! Simply email grad-rep@acuaonline.org for more information on how to submit your article.

Please follow us on our Advisory Council on Underwater Archaeology Facebook page and on Instagram at acua_social. We hope to hear from you soon!
On June 22, 2020, ACUA adopted the ACUA Statement on Anti Racism:

Individual and systemic racism continues to cause suffering in BIPOC communities nationally and internationally. Countless lives have been harmed and destroyed as shown in these senseless events. We support and join those who have responded to these tragedies with cries for justice and requests for immediate change, both of which are long overdue.

As archaeologists/anthropologists we recognize our own racist colonial beginnings and history in our discipline. We also recognize as a result of that history there is a considerable lack of diversity in our field generally, and in underwater archaeology specifically. The ACUA has made statements dedicated to promoting professional ethics and combating discrimination and harassment and intimidation in the field of underwater archaeology. As members of ACUA we reaffirm our commitment to working towards meaningful and long-lasting change. Our responsibilities must go beyond statements to include action and systemic changes to our organization and discipline.

To that end, the ACUA is dedicated to the following actions and broad initiatives:

1) Form a diversity and equity committee tasked with tracking racial justice, diversity, and equity issues, particularly with regard to continuing to diversify the board.

2) Fundraise for diversity scholarships to support minority students.

3) Identify and promote underwater archaeology projects that address diversity in the historical narrative and champion scholarship that explores voices that have been subdued, silenced, undermined, and condemned through centuries of systemic racism, violence, white supremacy, and bigotry.

ACUA is committed to leveraging the board and working in partnership with SHA in order to examine and adopt concrete actions and statements that support inclusivity, diversity, and equity. We will continue to hold ourselves accountable so that this is a sustained and lasting commitment to eradicating racism and promoting diversity in our profession.

1 http://acuaonline.org/about-the-acua/ethics-statement/

