MARITIME ARCHAEOLOGICAL AND HISTORICAL SOCIETY

MAHSNEWS

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Virginia's Underwater Archaeology Program – Underway and Making Way!

by Brendan Burke

In July of 2021, after a thirty-year hiatus, the Virginia Department of Historic Resources (VDHR) breathed new life into its legacy Underwater Archaeology Program. Initial program successes were pioneered by Dr. John Broadwater, whose research and dedication to Virginia's submerged past brought us the amazing excavation of the *Betsy*. This ship was part of a line of vessels sunk at Yorktown to protect Cornwallis's army during the Siege of Yorktown in 1781. In 1973, the Yorktown Shipwrecks group was listed on the National Register of Historic Places as well as the Virginia Landmarks Registry. It was the first submerged site on both registers, and this year we celebrate 50th anniversary of the listings. As the first State Underwater Archaeologist, Dr. Broadwater established a firm foundation for the program from which the citizenry still benefits.

Here in 2023, we look toward a bright future in Virginia's underwater and maritime archaeology. The Underwater Archaeology Program at VDHR is tasked with being a responsive archaeology unit within the Division of State Archaeology. Working in tandem with regional offices and fellow agencies, our program covers the entire Commonwealth of Virginia. This includes 2.14 million acres of state submerged bottomlands from offshore waters to mountain rivers and streams that once hosted inland navigations. It is not surprising that our research has a broad focus and includes saltwater sites, such as a nine-log bugeye on the Eastern Shore, to a site inside a mountain that was intended to take canal boats through the Blue Ridge and Allegheny Mountains.

Exposed at low tide are the early elements from Virginia's oyster aquaculture business. This plank-on-frame bugeye was part of the McAnge fleet that started planting and harvesting oysters when the wild populations were in decline during the late 19th century. The site was documented by VDHR as part of a maritime landscape study on the Nansemond River, west of Norfolk, known as the Nansemond Ghost Fleet. All photos by Brendan Burke/VDHR.

The program consists of Brendan Burke, Virginia State Underwater Archaeologist, and Assistant State Underwater Archaeologist Jill Schuler. Burke returned to Virginia after fourteen years working as Assistant

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Notes from the Prez – Steven Anthony

Great News! The MAHS Board has voted to start diving again. This decision is based in large part on the recent announcements by the Director General of WHO and the U.S. CDC. Both have declared that as of mid-May 2023, the COVID-19 public health emergency will no longer be in effect. These announcements reflect the improvement in public health conditions and that the risk of contagion while diving is significantly reduced.

Most scuba divers are vaccinated now, and those who do become infected generally do not experience life threatening symptoms as before. However, there are some who remain in the high-risk category. These divers are 50 years of age and older and/or are immunocompromised. Divers in this category remain at a higher risk of experiencing severe symptoms from COVID-19 infection and must carefully consider this risk before participating in diving and non-diving activities.

Hopefully, MAHS members will follow our recommendations for returning to diving after a long layoff which we described in the Prez Notes in the Fall edition of *MAHSNEWS*. If you missed that post, please reread that issue for an update on recommended safety procedures for getting back in the water. MAHS will be following RSTC and DAN medical guidelines for all our diving activities.

The MAHS Field School for June 2023 is postponed for now. However, MAHS is proceeding with plans for a field school later this year. One idea is to return to Garlick's Landing on the Pamunkey River to complete a survey we started many years ago. Updates on this effort will be reported to members by MAHSmail.

On other fronts, Jim Smailes, MAHS Secretary/ Treasurer, represented MAHS at the annual SHA Conference on Historical Archaeology in Lisbon, Portugal, in early January of this year. I participated in the online annual Board Meeting of the Advisory Council for Underwater Archaeology in January as well.

On January 28, MAHS commenced its 35th Annual Introductory Course in Underwater Archaeology. Wow! Where did the time go? Anyway, we have a great class, and the students are working on their final exams now. This is a wonderful group with students hailing from all over the country, including Texas, Florida, Maine, Pennsylvania, Georgia, and of course the District of Columbia, Maryland, and Virginia. They are all looking forward to participating in the field school.

Finally, in April of this year MAHS learned about a Bahamian treasure hunting permit that was issued to Carl Allen and Allen Expeditions. This permit was issued after a long period when no Bahamian permits were issued and it represents a disappointing turn of events by the Bahamian government.

In the 1990's MAHS opposed permits issued by the Virginia Marine Resources Commission and the U.S. Army Corps of Engineers authorizing Sea Hunt, Inc., to salvage the Spanish *LaGalga* and *Juno* shipwrecks. We persuaded the Kingdom of Spain to begin protecting their shipwrecks which they had previously refused to do. In a watershed decision, litigation was taken all the way to the U.S. Supreme Court.

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MAHSNEWS is the official publication of the Maritime Archaeological and Historical Society (MAHS), a non-profit educational organization dedicated to preserving our global maritime heritage.

MAHSNEWS will consider articles and notices for publication which enhance public awareness and appreciation of maritime history, archaeology, and heritage preservation.

Director of Research at the Lighthouse Archaeology Maritime Program (LAMP) in St. Augustine, Florida. There, he worked with a team to locate and excavate historic shipwreck sites around the nation's oldest port. One such wreck was the Storm Wreck, a vessel that came to grief while transporting loyalists and military goods out of Charleston, South Carolina, at the end of the American Revolutionary War. Burke also documented the historic maritime trades and community surrounding commercial shrimping, including the largest purpose-built wooden boatbuilding industry in the United States. That work culminated in the book *Shrimp Boat City*. Ms. Schuler originally comes from Canada but spent much of her time growing up in France and Raleigh, North Carolina. She is a recent graduate of the Maritime Studies Program at East Carolina University and completed her thesis research on comparative analysis of historic shipwreck sites, including the *Betsy* (44YO088).

During the past year the team worked with several contract survey crews to complete sections of river survey throughout the state. These surveys are part of a grant program funded by the Emergency Supplement to the Historic Preservation Fund. Supplemental funding was provided in response to damage done by hurricanes Michael and Florence, which both ravaged portions of the state in 2018. As a result, nearly 6.7% of the state's inland rivers are being surveyed. The surveys will create baseline data for various physiographic regions and apply additional technologies to the rivers to locate and document sites. From LiDAR interrogation of bankline

Jill Schuler and Brendan Burke stand at the Esk site on Parramore Island on the Eastern Shore. Ongoing research at the site has not only documented how the wreck is disintegrating but how its components are migrating down the coastline.

Taken on the New River, this photograph shows the VDHR team at work documenting areas above historic dams that may have inundated cultural features such as fish weirs. A small side imaging unit is kayak-deployable to scan the most remote areas.

features to documenting fish weirs and navigational sluices, the river survey has more than doubled, or even tripled, the number of sites within the survey areas. Much of this work has been done as a continuation of work started by the Virginia Canals & Navigations Society under the direction of Dr. William Trout, some of which began during the 1960s.

One of our more unique projects is the Marshall Tunnel Complex, research that takes us deep into the Virginia mountains. In 1854, the James River & Kanawha Canal Company began work on its Third Division. Having successfully completed a canal from Richmond to Lynchburg and up to Buchanan, the Third Division intended to take canal commerce through the Blue Ridge and up to the front range of the Alleghenies. As part of a grand scheme called the "Great Central Water Line," a continuous canal would ultimately connect the James River Basin with the Mississippi via the Greenbriar, Kanawha, and Ohio rivers. Initially conceived during the 18th century, the works required several canal tunnels and locks to raise boats over and through the mountains. The first, and very short, tunnel was completed above Buchanan in 1855 and work progressed on the longer Marshall Tunnel. Designed to be nearly 1,800 feet long, the tunnel was driven through dolomitic limestone and hard clay from both sides of the mountain. When slow progress threatened to exceed project deadlines and budget, a center shaft was started from which lateral tunnel faces could be driven. At its peak in 1856, four simultaneous working faces were expected to progress a foot each day. Work carried on throughout the night as tunnel workers were unaffected by the rise and fall of the sun. Labor on the project

The Bull Cove Bugeye Site is shown here with a VDHR research team in the background. This vessel has eroded from the shoreline as an old inlet at Bull Cove on the Virginia Eastern Shore has opened. This vessel was completely buried two years ago.

This small ferry came from the uppermost reaches of the Maury River in Rockbridge County. Likely washed from its moorings by a flood, it was dashed against these 19th-century bridge pilings and was exposed after the removal of the Jordan's Point Dam. It is a rare example of a Shenandoah Valley small ferry and retains its iron rings used to fasten it to an overhead cable.

included enslaved workers owned or leased by contractors as well as hired immigrant labor, primarily victims fleeing a famine-wracked Ireland.

In December of 1856, finances ran out for the company and work was ordered to cease. As with previous financial interruptions, the canal company anticipated a restart to the work when shareholders approved a bond initiative, but no such thing occurred. When Chief Engineer Edward Lorraine left the site on January 1, 1857, it was as though a ghost town began forming. Two partially finished locks, an incomplete dam, a quarry, labor camps, and half-finished canal ditches marked the progress. Two portals into the mountain contained the tools and footprints of the laborers. Dr. Trout visited the site in the late 1960s and again in 1983 to document the tunnel operations. He published his findings in the *Atlas of the Upper James*, but the site remained private and off limits to researchers until 2022.

At the invitation of the property owners, the Underwater Archaeology Program team from VDHR made three research trips to the site. On each occasion particular features of the complex have been the topic of survey and documentation. In December of 2022, a collaborative team from the Florida Public Archaeology Network, DATA Investigations LLC, and VDHR spent a week inside the eastern portal photo documenting and laser-scanning the incomplete tunnel. This project was funded by a grant from the VDHR Threatened Sites Fund. More than 10,000 photographs and two billion laser points were collected and modelled into a 3D rendition of the tunnel that retains 2-mm accuracy. Features of particular interest inside the tunnel include the terraced working face, where tunneling methods from the mid-19th century may be documented in detail. Footprints remain in the solidified mud from the laborers in December of 1856. Paths for their muck carts remain as a network for getting rubble out of the tunnel. A ledge for the towpath remains on the north side as do the drill marks and tool marks from a transformative period in tunneling technology when black powder gave way to dynamite, and the hand drill surrendered to the pneumatic drill. In the flooded western portal, a wooden mucking rail cart remains upside down in its watery grave where it will be studied later by the team.

The project is a hybrid study of terrestrial features within a maritime landscape. Our training and abilities, paired with strategic partnerships to attract specific technologies, bring a comprehensive approach to the complexities of the resource group. Upcoming planned activities include a mapping exercise of the flooded western portal to document tools and construction features, the location of the labor camps, and continued documentation of in-water features within the James River that relate to construction of the Third Division. Study of these types of sites is important to document and interpret inland maritime infrastructure of the United States and its relationships to broader economies.

On the Eastern Shore, the team has spent time documenting six wreck sites and deploying Shipwreck Tagging Archaeology Management Program (STAMP) tags to wreckage that is migratory, or about to become migratory. We have documented a wooden sailing vessel that was likely a bugeye or schooner wrecked on Assateague Island with intact copper ice guards, a rare find. Our work also continues with annual monitoring of

the *Esk* site, a well-known wreck on Paramore Island that is managed by The Nature Conservancy. Upcoming trips to the Eastern Shore are planned for 2023 to document additional abandoned vessels and provide outreach programming at the Chincoteague History Museum.

Last October, the team was dispatched to the banks of the Potomac River to identify a waterfront feature encountered by the Fairfax County Park Authority. A stone wall, now submerged at the river's edge, was determined to be a previously unidentified sluice constructed during the late 18th century by the Potowmack Company. Inundated by a later downstream dam, the stone wall is unique for its crude but well-engineered structure. The site is almost perfectly intact, which is rare for this type of feature given the intense riverine environment.

Outreach is a primary goal for the Underwater Archaeology Program, and this spring we have a series of scheduled outreach events that include presentations on the history of the James River followed by history walks to visit and explore the urban maritime landscape at the Falls of the James. The walks will also include a river cleanup, so that participants leave with not only an enhanced knowledge of their cultural setting but also a cleaner environment. These events are supported by the Chesapeake Bay Restoration Fund. Members of the team have also spoken at events or venues throughout the Commonwealth, at least once per month, as well as participating in the State Fair of Virginia.

Virginia has a rich maritime history in the Atlantic Ocean, Chesapeake Bay, its tidal rivers, and upland rivers and streams. We appreciate the work done by MAHS in the past within our waters, particularly work in the Pamunkey River, and we look forward to future such endeavors. Involving avocationals in our work is important, as our team is limited in scope and ability. Partnerships in all forms are a critical way to push the field forward as we seek to document and preserve a shared maritime past. The opportunities for discovery are many and there is much yet to be learned. We look forward to upcoming discoveries of ours, and yours.

Nearly completely intact along the south bank of the Potomac River is a sluice wall at Riverbend Park in Fairfax County. Constructed by the Potowmack Company during the late 18th century, the stone wall was hidden in plain sight until documented by VDHR archaeologists along with archaeologists from the Fairfax County Park Authority.

See also:

The Upper James River Atlas: Rediscovering River History in the Blue Ridge and Beyond, *by William E. Trout. Virginia Canals & Navigations Society. Lynchburg, Virginia. Second Printing, 2004.*

To reach the VDHR Underwater Archaeology Program email Brendan Burke at: brendan.burke@dhr.virginia.gov. ⚓

The Ship Graveyards of Curtis Bay and Creek

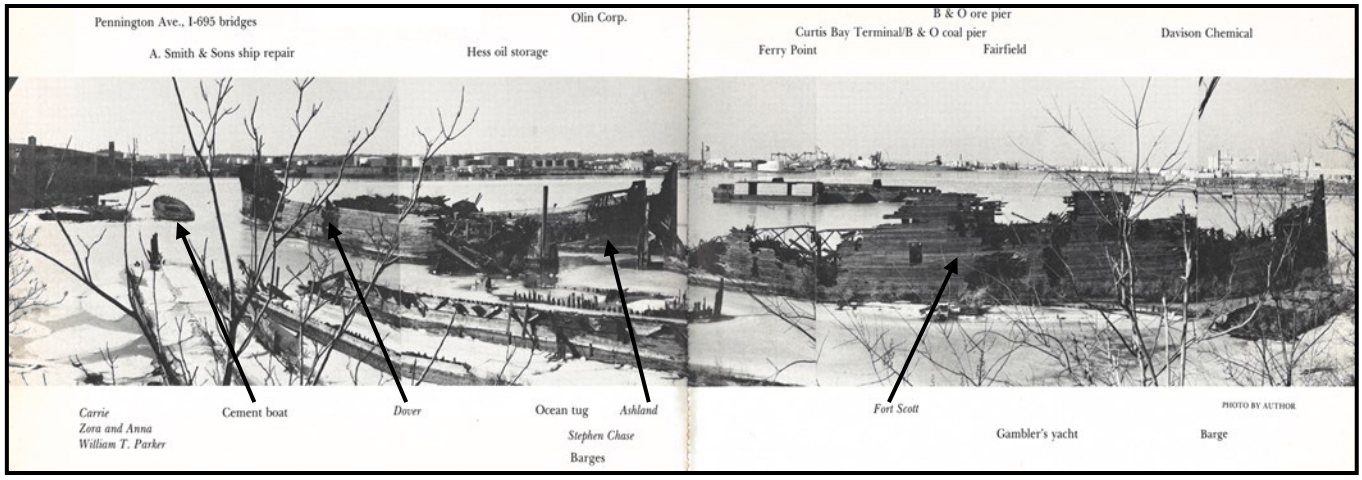
by Susan B. Langley

Anyone who has driven the Route 695 Beltway around the east side of Baltimore and who has not been in such heavy traffic that they could glance away, is likely to have noticed hulks of vessels protruding from the waters of Curtis Creek. This is one of several ship graveyards in this industrial area and is a relatively common sight in any older port city: New York City has the Arthur Kill ship graveyard at Staten Island; and Providence, Rhode Island, has the Green Jacket Shoal ship graveyard to name just two others. This article will look at some of the more interesting vessels found in three such graveyards located in Curtis

Bay and Curtis Creek on the North and West sides of Hawkins Point.

The first assemblage of hulls includes 14 U.S. Shipping Board-Emergency Fleet Corporation (USSB-EFC) vessels, built for the U.S. Merchant Marine to carry supplies to beleaguered Allies during WWI. These are part of the same fleet represented by the more than 100 hulls within the Mallows Bay-Potomac River National Marine Sanctuary. When the U.S. entered WWI in 1917, the USSB-EFC was created and charged with building 1,000 wooden steamships in 18 months. At the time of the armistice ending the war, 93 companies had been contracted to build wooden or composite vessels, but only 96 vessels had been delivered. Of these, about three-quarters had been carrying cargo but none had made it to the European theatre of war. The return and sale of surplus modern steel-hulled ships with petroleum powered engines made disposal of the wooden steamship fleet problematic. The ships varied in length based on which of 10 possible plans was used in construction, but the composite design developed by Theodore Ferris was the most common.

Baltimore with Hawkins Point indicated in the white square. Base map, Google Earth, 2023.



Panoramic view of Walnut Cove on Hawkins Point, with several of the vessels in the Curtis Bay ship graveyard visible. Image from Baltimore Harbor, A Picture History*, by Robert Keith, Johns Hopkins Press, Baltimore, 1985.*

The so-called Ferris vessels ranged from 268 to 281 feet 6 inches in length. They were too slow to carry perishable products and too large to try to fill with cargo to make them cost-effective to operate for the post-war coasting trade. As efforts to dispose of the fleet began, there was more success in selling small numbers of vessels to individual companies than in selling the entire fleet. After three calls for bids, however, the remaining ships not sold individually were sold to the Western Marine and Salvage Company for the cost of one ship. A handful of vessels remain today in Virginia in the James River while more than 30 are scattered in Texas rivers (including some metal and ferrocement hulls from other shipbuilding programs of the USSB). Some of the vessels in Curtis Creek were part of the initial smaller sales. The 14 hulls at the north end of Hawkins Point were part of a subsequent sale by the salvage company and were brought to Curtis Bay from the James River in December 1929. They were purchased by the Davison Chemical Company (now the W.R. Grace Company), located on Hawkins Point, with the intent of using them as a bulkhead along the shore. The area between the hulls and the shore was to be backfilled with earth to create additional land on which the company planned to build employee housing. Unfortunately, the onset of the Great Depression prevented this plan from reaching fruition.

Also on the north side of Hawkins Point lie the remains of the steamboat *District of Columbia*. As the twilight of the steamboat era loomed, Baltimore's Old

The ferrocement vessel General George Gibson, *center left; the* Dover *behind it; and the* Fort Scott *to the right, in 2018. Photo by the author.*

Bay Line steamboat company had three vessels. The *City of Norfolk* had been built in 1911 and was the last of the vessels to operate, steaming from Norfolk to Baltimore on Friday, April 13, 1962, when the company folded. This vessel was taken to New Jersey for scrapping in 1966, despite a fire when it was struck by lightning. The *City of Richmond* was built in 1913 and made its last trip in 1959, sinking off South Carolina while being towed to the Virgin Islands to serve as a restaurant. The *District of Columbia* was the youngest of the ships, having been built in 1924, but had been held in reserve as a back-up vessel from 1957 until 1962. It was sold to Massachusetts and operated as a ferry between Boston and Provincetown between 1962-1963. The vessel was then purchased, renamed *Chesapeake*, and returned to Baltimore with the intention of turning it into a restaurant and hotel. The owners could not meet the costs of the conversion to U.S. Coast Guard safety standards, and it sat idle until it was essentially destroyed by a fire in 1969. The hull was towed to Curtis Bay, and while its position seems to indicate it may have sunk prematurely, the event was not recorded. In the mid-1990s, and without a permit, the portion of the vessel standing above the water was removed to the water level, allegedly for aesthetic reasons, thereby creating a hazard to navigation and the need to keep a barge moored over it.

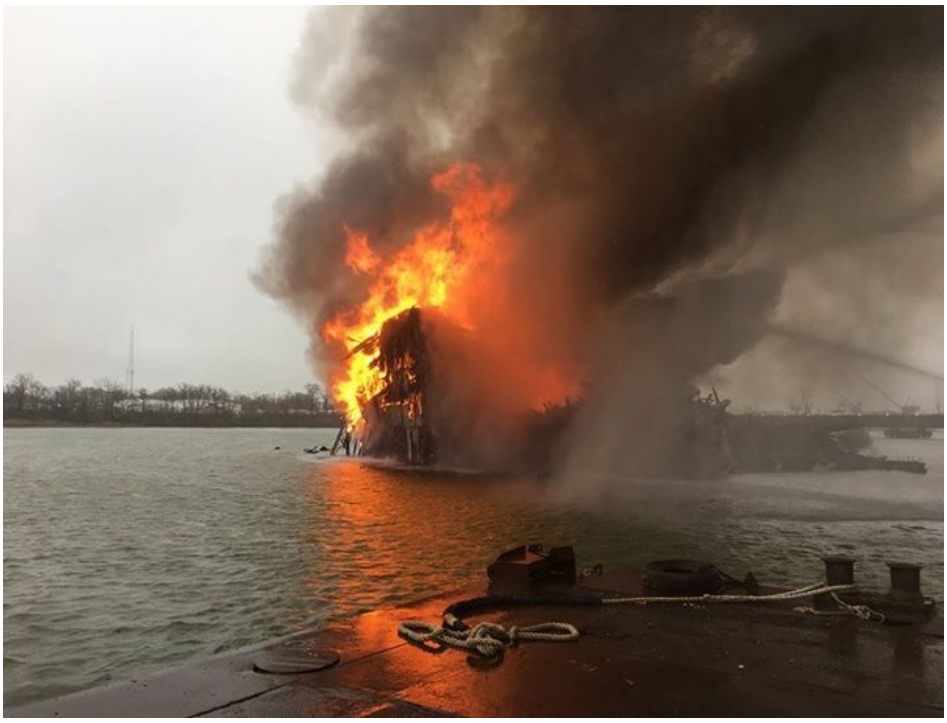
The ship graveyard visible to the north of Route 695 is located in Walnut Cove. There are at least 11 vessels in the cove and probably more, but only six of the most interesting are discussed here. The three largest, *Dover*, *Ashland*, and *Fort Scott,* are USSB-EFC ships that the Davison Chemical Company purchased in 1919 and were used to haul pyrite ore from Cienfuegos, Cuba. It was not a cost- effective endeavor, and by 1923 the ships were laid up in the cove where they remain its most salient feature. Immediately in front of the *Dover* is a ferrocement hull. It is one of only 10 such vessels built for the Army by the Newport Shipbuilding Company in Wilmington, North Carolina, between 1919 and 1921, all named for Revolutionary or Civil War generals. The vessel has been misidentified in print and online as the *General Morgan Lewis*, but is almost certainly the *General George Gibson*, according to Erlend Larsen Bonderud, who has carried out extensive research on the identity of the vessel. Fortunately, the *Gibson* was the one vessel that was photo-documented during its construction, and these images are held by the Cape Fear Museum of History and Science in Wilmington. Immediately in front of the ferrocement hull is a centerboard box, best visible at low tide and the only element above water of the 3-masted schooner *William T. Parker*. The *Parker* was built in 1891 in Milford, Delaware, and at 105 feet in length was small for the coastal trade it undertook. It had a reputation for bad luck as it grounded often, and in 1915 it was abandoned by its crew off North Carolina when its crew thought it was sinking. There is a story, often repeated but never sourced, that it sailed—or more likely drifted—as far north as Maine and back before it was recovered off the mouth of the Chesapeake Bay and

The centerboard box of the William T. Parker *is circled with the* General George Gibson *to the right and the bow of the* Dover *behind the* Gibson. *Photo by the author.*

brought to Baltimore. It was repaired and stayed in service until 1935 when it was rammed by a steamer off Bloody Point and was towed back to Baltimore, where it was deemed unrepairable. It was moored off Locust Point, in the Patapsco River, and served as a home and carpentry shop for a further seven years before eventually being towed to Curtis Creek. It remained there, occupied until it literally rotted out from underfoot in the 1950s. Frequently referred to as the Chesapeake's *Mary Celeste*, the most interesting aspect of its history cannot seemingly be demonstrated: the proof that it actually travelled as far as Maine.

The fifth vessel to be considered from this group is the four-masted schooner *Katherine May*. Built in 1919, it was too late to profit from the war effort but did carry cargo from Norfolk to Lisbon. When the Depression hit, it was stranded in Bermuda, where it was co-registered with Halifax, Nova Scotia. It finally found a cargo of scrap iron for Baltimore, but once there could find no cargo to leave. It was abandoned at Woodall's Yard where it settled at the pier and was sold in 1941 for $405 to cover its debts. The new owner floated it and towed it to Curtis Creek where he declined $10,000 cash to hold out for a better wartime offer. The latter did not materialize, and in the meantime, the person who had made the first offer was murdered in his Baltimore hotel room and the money that had been offered stolen. The *Katherine May* is beside the *Ashland*, the latter recognizable by its distinctive bow. Other vessels in this assemblage include two tugboats (*Runner* and *Southern*), the centerboard schooners *Stephen Chase*, *Zora and Anna* (the oldest vessel here, built in 1855), and the *Carrie*. Many of these were vessels brought to the A. Smith and Sons Ship Repair facility across Curtis Creek from Walnut Cove, determined to be unrepairable, and disposed of with the abandoned Davison vessels.

The final graveyard to be considered is to the south of the Route 695 Beltway, across Curtis Creek from the U.S. Coast Guard Yard on Hawkins Point. There are more than seven vessels here, but two are of particular interest. One is another USSB-EFC ship, launched at Quantico on the Potomac River as Hull 303, then named *Abra*, and finally renamed *Portland* by the Davison Chemical Company when it was purchased. When Donald Shomette was writing his volume on the USSB-EFC ships, he interviewed Garnett Arnold, who was over 100 years of age at that time. Arnold had worked on the construction of the *Abra* as a youth until he found it more profitable to provide alcohol to his co-workers. His memory was sharp, and he provided many details about the vessel. On April 6, 2017, one of the vessels in this group, possibly the *Portland*, caught fire. The cause may have been determined, but requests for a copy of the report went unanswered. A firefighter who was present at the time attended a presentation on this subject generously shared his photographs from the event.



Fire in Curtis Creek. The vessel is likely the Portland *(ex.* Abra*).*
Photo: S. Russell, Baltimore City Fire Department.

The final vessel considered is the steamer *Emma Giles*, the remains of which were last photographed on the mud in this area, but which is not currently visible. Built in Baltimore in 1887 and christened by the young daughter of a company executive for whom it was named, it was the sweetheart of the city. Its paddlewheel box sported a carved central semi-rondel showing a bee skep and the motto "Busy as a Bee." The last passengers disembarked in 1936, and by 1938, *Emma Giles* was stripped down to almost a barge and hauled lumber from Baltimore to New York City for a decade. It then sat at Quarantine Point for several years before being moved to serve as a bulkhead at Locust Point. Finally in 1951, *Emma Giles* was towed to Curtis Creek and burned to recover as much metal as possible from its composite construction. When the vessel died, so too did Emma Giles Parker at the age of 81. Only one of the other vessels in this assemblage is identified: the metal-hulled four-masted schooner *Conemaugh* (ex. *Lornty*, ex. *Atlas*), whose hull was significantly reduced by scrapping activities in 1982.

Vessels that have been identified have been added to the Maryland database of historic properties. The USSB-EFC vessels qualify for the National Register of Historic Places, but the 14 acting as a bulkhead require investigation to determine whether they have been abandoned or transferred to W.R. Grace when it acquired the Davison Chemical Company. If the company retains ownership, they would have to agree to the nomination of the vessels. The other, non-USSB, identified vessels will require additional evaluation to determine their eligibility for the National Register, but most would likely qualify. The southernmost graveyard requires additional investigation of the unidentified vessels there. The highly industrial nature of the area coupled with a nearby sewage treatment facility that frequently overflows or experiences releases of untreated sewage makes the area particularly hazardous for diving and is a consideration in investigating the vessels.

Planned research at the Hawkins Point ship graveyards includes consideration of vessels in the area that are not part of a "graveyard" grouping. The remains of the noted four-masted schooner *Purnell T. White*, for example, are located off the east side of the point. Also, an interview with Capt. Jerry Smith is planned. Not only does he have a vast store of maritime knowledge about the area, he relatively recently stepped down as the President of Smith Shipyard, which is the current name of the A. Smith and Sons Ship Repair, now more than 100 years old. The company was contracted to build 8 Ferris design USSB-EFC vessels and may have archival photographs or other materials. Of these Ferris designs, *Aquasco* was not completed, *Barilla* was completed as a barge, and *Pimlico* and *Tomapeake*, as well as four other unnamed hulls, were all cancelled.

I would encourage downloading and use of the free Google Earth app to zoom in and explore the area or other ship graveyards like those in New York and Rhode Island. A surprising number of submerged and semi-submerged vessels are visible in many coves and slips. Not all are historically significant, but it is an interesting exercise.

Further reading the author suggests:

Chesapeake Circle*, by Robert Burgess. Cornell Maritime Press: Cambridge, 1965.*

Baltimore Harbor, A Picture History*, by Robert Keith. Johns Hopkins Press: Baltimore, 1985.*

Ghost Fleet of Mallows Bay and Other Tales of the Lost Chesapeake*, D.G. Shomette. Tidewater Publishers, Centreville, Maryland, 1996.*

Susan Langley is Maryland State Underwater Archaeologist. ⚓

A Brief Report on U.S. Legislation Pertaining to Ocean Management: 117th Congress (2021-2022) Second Session 118th Congress (2023 -2024) First Session

compiled by Anne Giesecke

Each year, as an advocate for environmental and cultural resource matters related to the world's oceans, I study the work of the U.S. Congress, including legislation passed and newly introduced bills, for potential impacts on ocean management.

The United States Congress meets in two-year sessions, the terms coinciding with the terms of the elected members of the House of Representatives.

117th Congress (2021-2022)

During the 117th Congress in 2021, more than 700 Bills and Resolutions were introduced in the Congress, House of Representatives (H.R.) and the Senate (S.), that dealt with ocean management. The Bills listed on the following pages became law.

American Fisheries Advisory Committee Act

Public Law No: 117-121 (05/12/2022)

This bill directs the National Oceanic and Atmospheric Administration (NOAA) to establish the American Fisheries Advisory Committee. The committee must provide advice to NOAA on an existing program that awards grants for fisheries research and development projects, such as projects concerning fisheries science or recreational fishing. S.497.

Ocean Shipping Reform Act of 2022

Public Law No: 117-146 (06/16/2022)

This act revises requirements governing ocean shipping to increase the authority of the Federal Maritime Commission (FMC) to promote the growth and development of U.S. exports through an ocean transportation system that is competitive, efficient, and economical. S.3580.

Great Lakes Fish and Wildlife Restoration Reauthorization Act of 2022
Public Law No: 117-287 (12/27/2022)

This act reauthorizes through FY2028 the Great Lakes Fish and Wildlife Restoration Act of 1990. H.R. 5973.

National Defense Authorization Act
Public Law No: 117-263. H.R. 7776

The final defense bill included the **Restoring Resilient Reefs Act**, which was authored by U.S. Sens. Brian Schatz, D- Hawaii, and Marco Rubio, R- Fla. The act increases funding for the National Oceanic and Atmospheric Administration's Coral Reef Program from $16 million to $45 million annually. It also authorizes $12 million in annual state block grants to support state efforts to manage and restore coral reefs, and $4.5 million annually for Pacific and Atlantic coral reef cooperative institutes.

In a long-awaited victory for sharks across the globe, the **Shark Fin Sales Elimination Act** is part of the National Defense Authorization Act. This critical measure prohibits the commercial trade of shark fins and products containing shark fins in the United States. The act makes it illegal to possess, buy, or sell shark fins or any product containing shark fins, except for certain dogfish fins. A person may possess a shark fin that was lawfully taken consistent with a license or permit under certain circumstances.

Withholding of Certain Information about Sunken Military Crafts H.R. 7776 Sec. 1027.

This amendment allows service secretaries to withhold information about the location of sunken military ships and aircraft from public disclosure. Scrappers are filing Freedom of Information Act requests to get the locations of sunken ships to remove the steel for its scrap value illegally.

118th Congress (2023 -2024) First Session

You can contact your Congressional Representatives and Senators to comment on these subjects and Bills.

H.R.470 and S.22—**West Coast Ocean Protection Act of 2023**

To amend the Outer Continental Shelf Lands Act to permanently prohibit the conduct of offshore drilling on the outer Continental Shelf off the coast of California, Oregon, and Washington.

H.R.676—**Coastal Communities Ocean Acidification Act of 2023**

To amend the Federal Ocean Acidification Research And Monitoring Act of 2009 to require the Secretary of Commerce, acting through the Administrator of the National Oceanic and Atmospheric Administration, to collaborate with State and local governments and Indian Tribes on vulnerability assessments related to ocean acidification, research planning, and similar activities.

H.R.1482—**To provide guidance for and investment in the upgrade and modernization of the National Oceanic and Atmospheric Administration Weather Radio All Hazards network.**

H.R.1196—**To require the Administrator of the National Oceanic and Atmospheric Administration to establish a grant program to benefit coastal habitats, resiliency, and the economy.**

H.R.1461—**To direct the Secretary of Agriculture and the Administrator of the National Oceanic and Atmospheric Administration to carry out a study on coastal seaweed farming, issue regulation relating to such farming, and establish an Indigenous seaweed farming fund.**

H.R.872 — **Federally Integrated Species Health Act or the FISH Act**

This bill gives the Fish and Wildlife Service (FWS) the sole authority to protect endangered or threatened species that are anadromous species (species of fish that spawn in fresh or estuarine waters and that migrate to ocean waters) or catadromous species (species of fish that spawn in ocean waters and migrate to fresh or estuarine waters). Currently, the FWS shares this authority with the National Marine Fisheries Service.

H.R.1196—**Don Young Restoration Grants for Coastlines and Fisheries Act of 2023**

To require the Administrator of the NOAA to establish a grant program to benefit coastal habitats, resiliency, and the economy.

H.R.886 and S.318—**Save Our Seas 2.0 Amendments Act**

To amend the Save Our Seas 2.0 Act to improve the administration of the Marine Debris Foundation, to amend the Marine Debris Act to improve the administration of the Marine Debris Program of the National Oceanic and Atmospheric Administration.

H.R.913 and S.373—**RISEE Act of 2023**

To modify the disposition of certain outer Continental Shelf revenues and to open Federal financial sharing to heighten opportunities for renewable energy.

H.R.325—**Harmful Algal Bloom Essential Forecasting Act**

To amend the Harmful Algal Bloom and Hypoxia Research and Control Act of 1998 to clarify that during a lapse in appropriations certain services relating to the Harmful Algal Bloom Operational Forecasting System are excepted services under the Anti-Deficiency Act.

H.R.897—**Alabama Underwater Forest National Marine Sanctuary and Protection Act**

To provide for the establishment of the Alabama Underwater Forest National Marine Sanctuary to protect an ancient cypress forest dating back 50,000 to 70,000 years that has been exposed in the Gulf of Mexico off the Alabama coastline.

H.R.583 and S.49 **American Shores Protection Act of 2023**

This bill extends a moratorium on oil and gas drilling in the Gulf of Mexico through June 30, 2032, and expands the moratorium to include the South Atlantic Planning Area and the Straits of Florida Planning Area.

According to the United Nations News March 4-5, 2023

Over 190 countries agree on "world-changing" ocean treaty.

Secretary-General António Guterres has congratulated UN member countries for finalizing a text to ensure the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction, calling it a "breakthrough" after nearly two decades of talks.

The agreement reached by delegates of the Inter-governmental Conference on Marine Biodiversity of Areas Beyond National Jurisdiction, better known by its acronym BBNJ, is the culmination of UN-facilitated talks that began in 2004.

Already being referred to as the 'High Seas Treaty', the legal framework would put more money into marine conservation and covers access to and use of marine genetic resources.

While the final text has been agreed to by members of the United Nations, it is expected that it will take years to be formally adopted by the member states and then come into force.

The treaty enables the protection of marine life through the establishment of protected areas on the "high seas" and other conservation measures. The "high seas" are the areas of the oceans beyond the 200 nautical mile limit from the shores of nations.

Other United States Federal Agency Announcements

National Oceanic and Atmospheric Administration (NOAA) National Marine Sanctuaries

The information in this report is taken from https://sanctuaries.noaa.gov. You are encouraged to become more informed and take a position on these sanctuary proposals.

Proposed Lake Ontario National Marine Sanctuary

In April 2019, in response to a community-based sanctuary nomination, NOAA announced its intent to designate a new national marine sanctuary in New York's eastern Lake Ontario and the Thousand Islands region of the St. Lawrence River.

On July 7, 2021, after analyzing feedback from the public, stakeholders, federally recognized nations and tribes, and New York agencies, NOAA chose to move forward with the boundary alternative that encompasses 1,724 square miles of eastern Lake Ontario waters and bottomlands adjacent to Jefferson, Oswego, Cayuga, and Wayne counties in the state of New York. The proposed boundary is a 1,724 square-mile area containing 43 known shipwrecks, including the historic schooner *St. Peter*, and one aircraft.

Proposed Hudson Canyon National Marine Sanctuary

NOAA's Office of National Marine Sanctuaries is in the early stages of the process to designate a new national marine sanctuary off the coast of New York and New Jersey. The proposed designation is based on a 2016

nomination by the Wildlife Conservation Society. Hudson Canyon is the largest submarine canyon along the U.S. Atlantic coast and is one of the largest in the world. Beginning approximately 100 miles southeast of New York City, the canyon extends about 350 miles seaward, reaches depths of 2 to 2.5 miles, and is up to 7.5 miles wide. Hudson Canyon's grand scale and diverse structure—steep slopes, firm outcrops, diverse sediments, flux of nutrients, and areas of upwelling—make it an ecological hotspot for a vast array of marine wildlife.

https://sanctuaries.noaa.gov/hudson-canyon/

Proposed Chumash Heritage National Marine Sanctuary

The Northern Chumash Tribal Council (NCTC) submitted the sanctuary nomination in July 2015. The area proposed for sanctuary designation, adjacent to San Luis Obispo and Santa Barbara counties, would recognize Chumash tribal history in the area and protect an internationally significant ecological transition zone, where temperate waters from the north meet the subtropics, providing a haven for marine mammals, invertebrates, sea birds, and fishes.

The proposed area stretches along 156 miles of coastline, encompassing approximately 7,000-square miles from Santa Rosa Creek, near the town of Cambria, San Luis Obispo County, south to Gaviota Creek in Santa Barbara County, and extends offshore to include Santa Lucia Bank, Rodriguez Seamount, and Arguello Canyon.

Proposed Papahānaumokuākea Marine National Monument

In December of 2020, Congress directed NOAA to initiate the process to designate Papahānaumokuākea Marine National Monument as a national marine sanctuary under the National Marine Sanctuaries Act.

Hanohano Nā ʻĀina Kūpuna: Honoring Papahānaumokuākea as Kūpuna (Ancestral) Islands

Hanohano Nā ʻĀina Kūpuna is a tribute to Papahānaumokuākea as a sacred ancestral place to kanaka ʻōiwi (Native Hawaiians) who honor this extensive seascape as an area where all life emerged and evolved from, and to which spirits return after death. Weaving together the past, present, and future, their legacy is foundational to guiding Native Hawaiian engagement in the active protection and management of Papahānaumokuākea. In moving forward with sanctuary designation, the goal is to continue to honor their legacy and vision towards ensuring the permanency of lasting protection of this place for future generations. Sanctuary designation will provide another layer of protection to continue honoring this place and will not diminish any existing protections.

Dr. Giesecke is an archaeologist, diver, and ocean advocate who works with sport divers and the cultural resource community to monitor and influence state and federal legislation that affects cultural resources and the oceans.

Material for this article was adapted from the public web site www.congress.gov ⚓

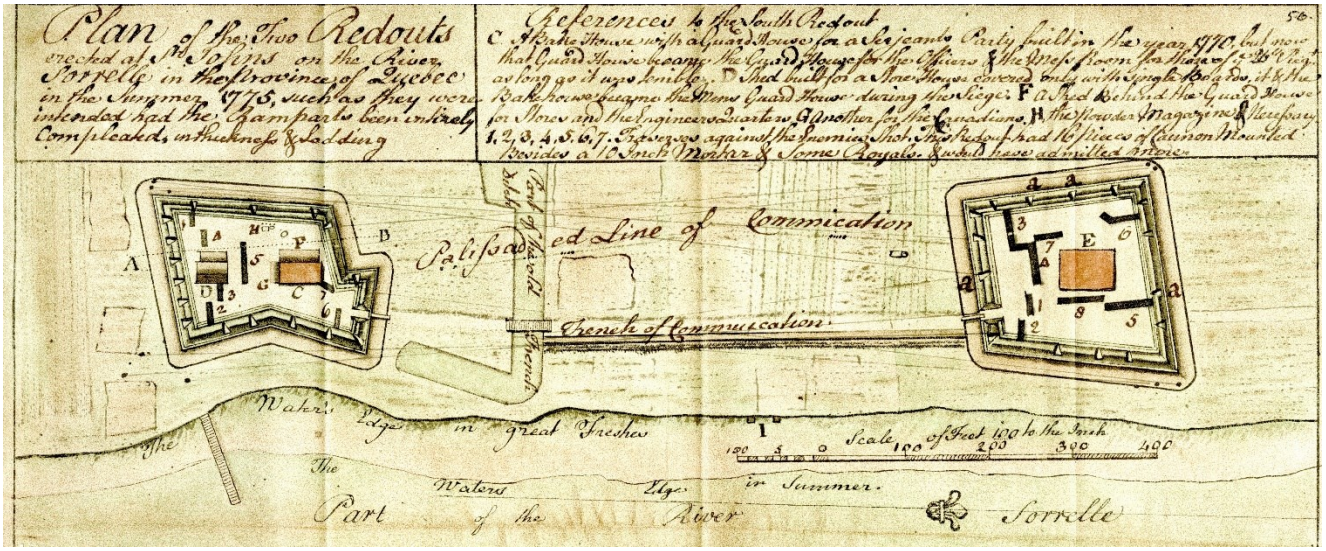
Underwater Archaeology at Fort Saint-Jean, Quebec

by Marijo Gauthier-Bérubé

Celebrating its 350th anniversary in 2016, the Fort Saint-Jean Museum (FSJM) in Québec, Canada, initiated the Saint-Jean Survey Project. The project originated as a three-year research program to document the riverbed next to the historical sector of the fort as a complement to terrestrial excavations ongoing since the 1980s. After three successful years, the project was renewed through 2025 to work on a shipwreck that was discovered and provisionally dated from the late 18th century or early 19th century.

Since its construction by the French in 1666 during the Iroquois War, Fort Saint-Jean has witnessed a long military occupation that continues up to today. Occupation first started when the Carignan-Sallières regiment of France built forts along the Richelieu River to lead the war within Iroquois territory. This first fort was burned down in 1672, and it was not until 1748 that a second fort was built. The second fort was built to protect Montréal from the British forces to the south. In 1756, a shipyard was constructed and manned by about 20 carpenters who built schooners, barges and small, lateen-sailed chebecs. Unfortunately, the fort was abandoned and set on fire at the approach of the British forces in 1760. Some structures of the French shipyards were discovered during the field school of the Université Laval (Quebec City) between 2009 and 2016.

A third fort was built in 1775 at the start of the American War of Independence and was completed in



Fort Saint-Jean site plan during the summer of 1775. This is the third fort, which was completed in 1776, and shows two redoubts connected by a communications trench. Library and Archives Canada, NMC-2771.

1776, along with two redoubts and a second shipyard. Numerous ships were built in the same summer, and multiple maps mention shipyard storage buildings, boathouses, and piers. A shipyard was maintained until the end of the 18th century when the fort began losing its importance at the expense of Fort Lennox, which was closer to the new American border.

Despite the end of the shipbuilding activities, piers continued to appear on maps until the early 20th century. In 1953, major modifications changed the configuration of the area. The banks of the river were backfilled, and a concrete wall was erected, covering and/or destroying most of the remaining structures.

First Phase: 2016-2018

During the summer of 2016, the FSJM appointed archaeologists to undertake a 10-day underwater archaeological survey near the historical fort and shipyards zones in the Richelieu River. The result of the first year was the discovery of two new sites, BhFh-13 and BhFh-14, and the rediscovery of BhFh-9, a wharf that had been previously excavated in 1980. Over the course of 2017, the project included work for the newly created non-profit Institut de Recherche en Histoire Maritime et Archéologie Subaquatique (IHRMAS) to continue documentation of the three sites and to take samples for the identification of wood species. The sites were more exposed than they had been in 2016, which led to the discovery of a ship's stem and some buried timbers at BhFh-14 on the last day of the project. It was then hypothesized that the site could have been a pier where part of an old ship had been used to backfill the structure.

Summer 2018 was the last year of the three-year program. Along with work on site BhFh-9, the most important objective was to open two units on BhFh-14 to understand the relationship between the different structures. A 2-meter x 2-meter unit was opened at the end of the stem where we estimated the keel should be, if one were present. No structure was visible, but we saw different layers of wood waste, probably from the different shipyard activities during the 18th and 19th centuries. However, since the site is in shallow water, it is subject to a strong current and the seasonal ice movement that likely moves artifacts around. These effects can be so strong that one of the wooden pilings of site BhFh-9 was moved from its place during the winter of 2018, probably due to the ice.

The different pilings at site BhFh-14 had previously been interpreted as part of a pier because of their disposition, wood species (eastern hemlock, *Tsuga canadiensis*), and evidence from old maps. They were also barely visible at the surface of the riverbed. The second unit was placed further east to understand the organization of the wooden pilings and determine whether they were related to the isolated stem. However, as we started excavating we quickly saw that the wooden pilings were not part of a landing stage but were in fact futtocks. The wood under the sediment was dramatically different from the section at the surface: below the deteriorated timbers exposed at the surface, we could see perfectly preserved wood underneath.

Second Phase: 2023-2025

In 2021, a new diving program was put in place to observe the changes in the condition of the site since 2018. We knew the current and ice could impact the site, and we wanted to see the effects. The observations could also be used to decide how the second phase of the project could be conducted.

Unsurprisingly, the site had changed, but to a larger extent than what we had anticipated. More futtocks were

Visual survey of the riverbank conducted in 2016. Photo by Marijo Gauthier-Bérubé, IRHMAS.

observed to the south, adding 5 meters to the length of the hull structure at its south end. We also documented the position of the stem, finding it to be slightly different than in 2018, indicating that it was slowly sliding off. New wooden structures were observed, although it was not possible to document if they are related to the shipwrecks or just debris that had become stuck in the sediment through time.

These observations showed the importance of conducting additional archaeological work, including more excavation. This new phase will start in September 2023. We are planning to open a trench to follow several futtocks where we estimate the master frame could be located. Another unit should be opened to the south to evaluate the condition of the hull and possibly locate remains associated with the stern area. Additionally, the wood will be sampled for dendro-chronology analysis.

Shipwreck Identification

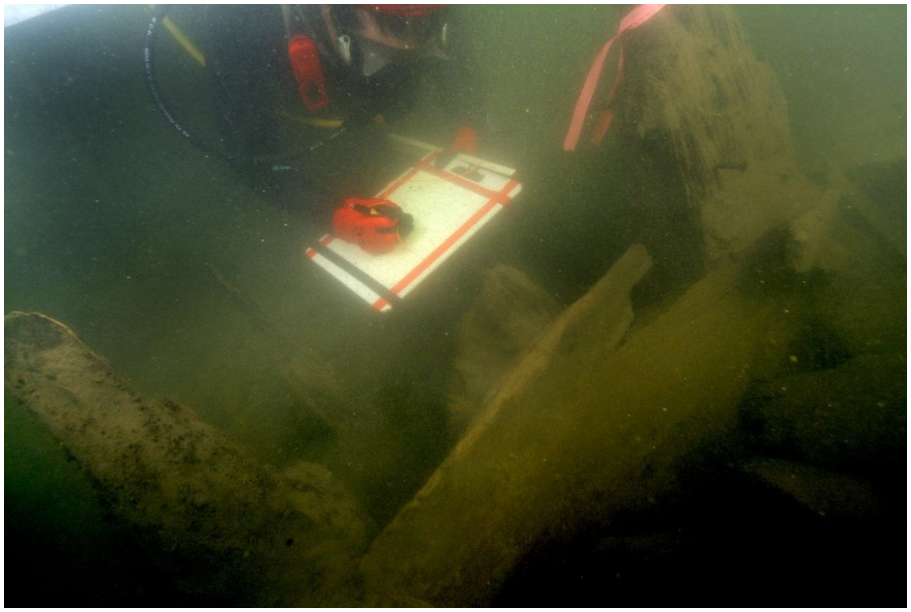
With so little information available as to the structure of the hull, it is not an easy task to formulate a hypothesis on the nature of the wreck. Various types of ship have navigated the Richelieu River since the 17th century. Archival documents are numerous for the end of the 18th century, especially after the first attempt by the newly formed United States of America to invade the northern British colony in 1775 and then a second time in 1812. Because of its involvement in the two events, Fort Saint-Jean witnessed many ships anchoring along its banks, some of which were left to rot on their anchorage.

Our first assessment of the vessel's stem led us to envision a sturdy construction and thus that the vessel was possibly military, but it is too soon to tell more. As for the part of the hull we have observed thus far, it has a square hull shape with large, robust frames. Only further excavation will help us to understand the site and its features and to move toward a more precise identification of the wreck.

The Richelieu River played an important role in the colonial period, acting as a sort of highway between the Saint-Lawrence River and Lake Champlain. Few shipwrecks from the region have been studied, and this would be the first time a wreck is associated with the different historical events of Fort Saint-Jean has been documented. Our hope is to be able to go back and bring further light to this exciting new discovery.

This project was made possible thanks to the Directorate of History and Heritage of the National Defense, Government of Canada.

Marijo Gauthier-Bérubé is a maritime archaeology scholar in Quebec, Canada, who works at the Fort Saint-Jean Museum and the Institut de Recherche en Histoire Maritime et Archéologie Subaquatique. She recently started a postdoctoral position at the Université du Québec à Rimouski. ⚓



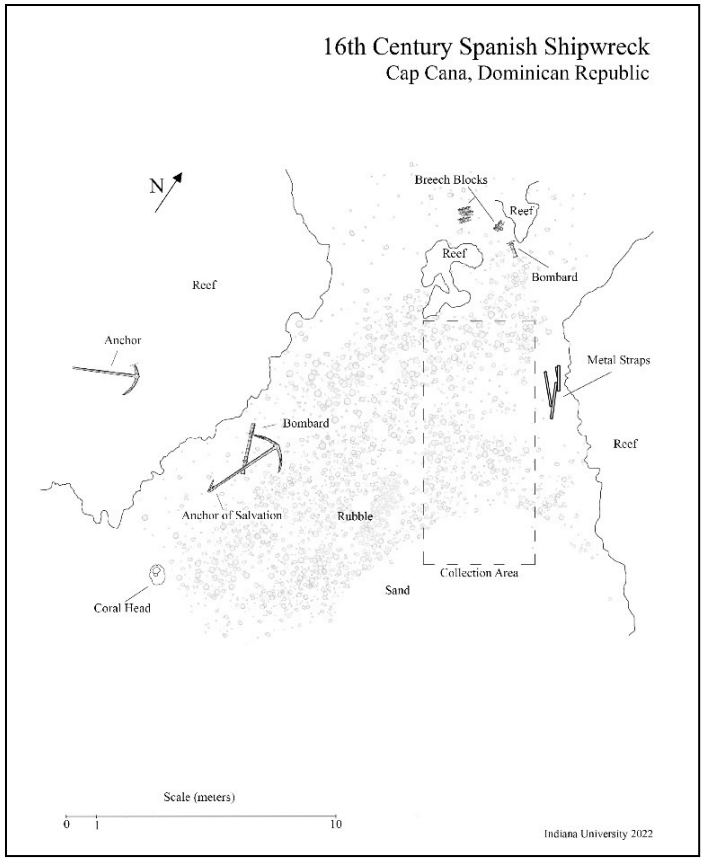
Diver documenting futtocks in 2018. Photo by Mathieu Mercier-Gingras, IRHMAS.

Ongoing Indiana University Underwater Archaeological Investigations of a 16th-Century Shipwreck in the Dominican Republic

by Sarah Muckerheide

Underwater archaeologists from Indiana University's (IU) Center for Underwater Science are investigating a 16th-century shipwreck off the eastern coast of the Dominican Republic. This shipwreck site represents a rare example of an incoming European vessel during the early colonization of the Americas. Examples of the vessel's cargo include horseshoes, nails, pewter dinnerware, mortar-and-pestles, and nested weight sets and scales, all imported to support European occupation and profitable colonization. IU is currently documenting and excavating the site with goals of determining the ship's identity, exploring its significance within the history of American colonization and early globalization, and creating a long-term management strategy for the site. Although the shipwreck was previously disturbed by commercial salvage, many in situ deposits and large wrought iron artifacts remain, allowing researchers to document anchors and artillery pieces that have been in place for over 450 years. This article highlights preliminary results of archaeological investigations at the shipwreck site as well as ongoing artifact research efforts aiming to reveal the vessel's identity.

Indiana University scientific divers documented the condition of the 16th-century shipwreck site over multiple dives during the 2022 field season. Artifacts exposed on the site and significant biological features were photographically documented. Locational information was recorded for large in situ artifacts such as anchors, bombards, and breech blocks. Using GoPro cameras, divers collected more than 3,000 photos that were processed with Agisoft Metashape software, generating a highly accurate 3D model of the anchor of salvation (a large anchor used in emergencies), and a full site orthomosaic. This orthomosaic was used to create a very accurate site map. The high density of artifacts found simply by observation and light excavation led divers to conduct a remote sensing survey of the site. A handheld pipe tracker magnetometer and a handheld metal detector were employed to conduct this survey. Targeted anomalies were identified for further investigation. Through non-invasive surface search and hand-fanning, portable artifacts were collected for conservation and further research. Among the artifacts were horseshoes, an ax head, a deck ring, ceramics, pieces of pewter and bronze, a belt buckle, a glass handle, and a piece of wood with a square nail hole. Additionally, an airlift supplied via scuba tanks was tested for excavation in the sandy areas of the site.



Map of the site of a 16th-century shipwreck off the eastern coast of the Dominican Republic.

This Spanish merchant vessel was traveling heavily armed with artillery, evidenced by bombards and breech blocks present around the site. Bombards are breech-loaders, with the shot and powder loaded into the back of the artillery, not the front or muzzle end. This configuration allowed for faster and more efficient firing onboard a ship, as multiple breech blocks could be prepared in advance with powder and shot for rapid reloading. One breech block on the site still has a lifting ring attached that would have been used to place it into the bombard before firing.

The assemblage of artifacts recovered from the site is important in the ways that it can provide context for the early colonization of the Americas. The contents of this ship and its multi-national cargo were selected deliberately in the 16th century to facilitate Spanish colonization of the New World, and the diversity of the cargo illustrates international trade during the period.

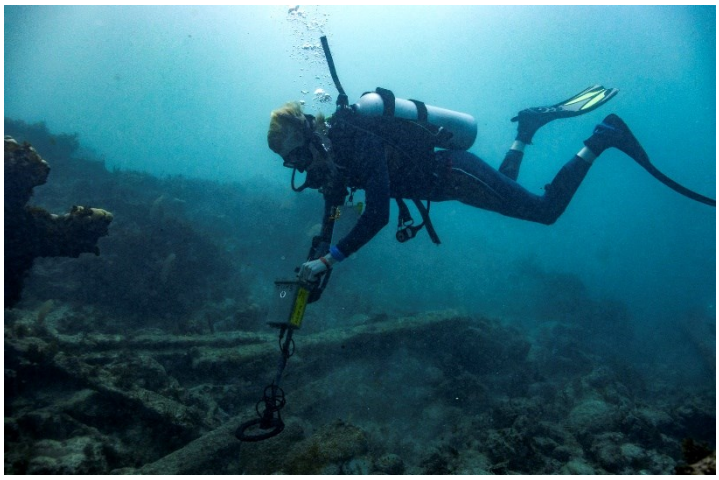
Artifacts recovered from the site, such as pewter, nested weight sets, straight pins, horseshoes, lead customs seals, and sundials, are important trade items

that demonstrate the transport of objects throughout Europe for use in the Americas.

Over 100 nested weight sets were recovered from the shipwreck during commercial salvage. Used for measuring goods and coins against standard weights, most of the sets consisted of a case with seven weights that stacked perfectly inside. These weight sets were likely produced in Nuremberg, in present day Germany. During this period, Nuremberg had a monopoly on their production and export, part of a system of import-export. Nuremberg did not have copper or zinc mines (the main components of brass) and thus imported the metals and in turn exported highly refined products throughout Europe, including Spain, Portugal, Prussia, Amsterdam, England, Italy, Greece, Turkey, and Nordic countries. Nuremberg brass products were desired by colonial powers due to their high-quality production and, importantly for weight sets, their standardization. Each weight set has a maker's mark punched into the lid. A large, highly decorative weight set in the collection has a distinctive maker's mark—a bird—which has been matched to Nuremberg coppersmith, Albrecht Weinmann, who produced weight sets from 1541-1558.

Hundreds of pieces of pewter dinnerware, including porringers, octagonal platters, and plates also have been previously recovered from this site. The pieces are stamped with a large variety of maker's marks, but of particular interest is a Tudor Rose mark flanked by "TC". The same mark was found on pewter plates from the *Mary Rose,* King Henry VIII's flagship, which sank in 1545 in the Solent, off Portsmouth, England. Pewter being exported from England often bore the Tudor Rose with a crown over it, marking the piece as highly refined and of high quality. The pewter and nested weight sets from this shipwreck are important indicators of trade within Europe in the 16th century and reveal that high-quality goods were coming from Europe to be traded and used for colonization in the Americas.

Indiana University's Living Museums of the Sea model aims to conserve underwater cultural heritage in situ through the creation of marine protected areas. These "shipwreck parks" emphasize the cultural alongside the biological, promoting sustainable sources of tourism. In line with this model, IU performed coral monitoring and restoration on *Acropora palmata* (Elkhorn coral) colonies on the site. Elkhorn coral is a critically endangered species, and IU conducted an initial biological assessment, identifying many large, healthy colonies on the site and performing a qualitative health analysis. During that investigation, a branch of an Elkhorn colony growing on the fluke of an anchor had broken off. IU researchers fragmented the branch into four pieces and secured the fragments to substrate using nylon cable ties. IU will monitor these four fragments, along with the remaining coral growing on the anchor and other healthy colonies around the site, terming them Biological Monitoring Stations.



Diver surveying the site with a metal detector. All photos by Indiana University Center for Underwater Science.

The author tests the ability of an airlift system to excavate in the sand beds located on the site.

The author examining a surface collected horseshoe on site in May 2022, representing some of the first horses in the Americas.

Above: Maker's mark (circled) on the lid of a large nested weight set, dated to 1541-1558 from Nuremburg. This weight set is currently on exhibit in the Museo Atarazanas Reales in Santo Domingo. Below: Nested weight set.

Access to the shipwreck is currently restricted to research, but the site will be designated as a Living Museum in the Sea in the future. The site is located in less than 30 feet of water, so it can be accessible to most recreational divers. However, site conditions do vary: during the IU research period we experienced 2-5 foot waves on the surface and significant surge on the reef ledge. The site has many large, visible artifacts such as anchors, bombards, and breech blocks, which should remain in situ so that visitors can more accurately interpret the shipwreck.

The opportunity for the public and the community to view such an early, significant shipwreck should not be overlooked. In order to facilitate the establishment of a Living Museum in the Sea, however, a few important measures must be undertaken. Small portable artifacts need to be collected from the site for their protection, conservation, and for future research. Mooring buoys and an interpretive plaque should be placed on the site to facilitate visitor access. And efforts should continue toward identifying the vessel in order to enhance the public's historical interpretation of the site and place the ship within a precise colonial context.

For further reading:

Before the Mast: Life and Death Aboard the *Mary Rose*. Archaeology of the *Mary Rose*: Volume 4*, by J. Gardiner, and M.J. Allen. The Mary Rose Trust Ltd., Portsmouth, England, 2005.*

Establishing Marine Protected Areas in the Dominican Republic: A Model for Sustainable Preservation, *by F. H. Hanselmann and C.D. Beeker. ACUA Underwater Archaeology Proceedings 2018. Society for Historical Archaeology. Columbus: PAST Foundation, 2008.*

Computer Vision Photogrammetry as a Tool for Three-Dimensional Archaeological Recording of a Sixteenth Century Spanish Shipwreck in the Dominican Republic, *by K. M.Hawley, M. M. Maus, C.D. Beeker, and S.I. Haskell. ACUA Underwater Archaeology Proceedings 2008. Edited by Susan Langley and Victor Mastone. Columbus: PAST Foundation, 2018.*

Die Merkzeichen der Nürnberger Rotschmiede, *by H.P. Lockner. Deutscher Kunstverlag, 1981*.

Sarah Muckerheide is an incoming graduate student in Anthropology and a research assistant for the Center for Underwater Science at Indiana University. ⚓

Book Review

Clotilda: The History and Archaeology of the Last Slave Ship

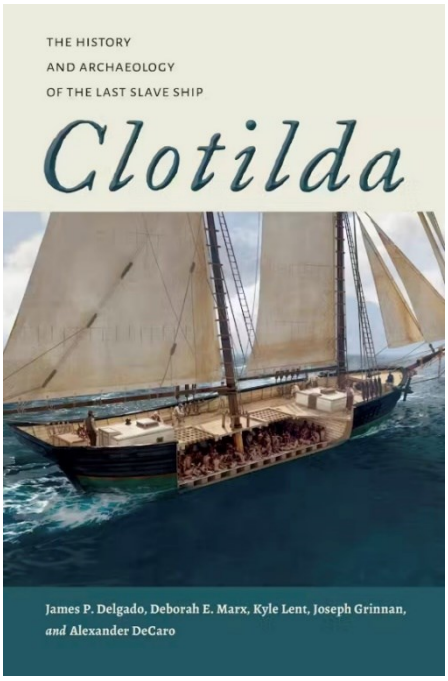
by James P. Delgado, Deborah E. Marx, Kyle Lent, Joseph Grinnan, and Alexander DeCaro
(University Alabama Press, 2023)

reviewed by Dennis Knepper

Over the past few years, news reports about the slave ship *Clotilda* have been circulated enough that many are now familiar with the story. The culmination of the reporting, at least from an archaeological perspective, may be a slim but comprehensive volume published this year by the University of Alabama Press entitled "*Clotilda*, The History and Archaeology of the Last Slave Ship." Written by James P. Delgado and four others integral to the research team, the book describes the history and archaeological investigation of what has become one of the most infamous vessels in American history.

Clotilda was a two-masted schooner built and owned in the mid-19th century by Alabama businessmen. It sailed as a commercial merchant schooner that carried cargos of lumber, sugar, flour, beef, and other commodities. The vessel's final cargo included—possibly not for the first time— human beings, Africans sold as

slaves by the king of Dahomey (now Benin) and shipped across the Atlantic for re-sale in the United States. The schooner arrived on the Gulf Coast of Alabama off Mobile Bay on July 6, 1860. The crew offloaded its 'cargo' somewhere along the Mobile River, sank the vessel, and burned it to the waterline to hide it.



Delgado clearly and systematically lays out the details of a three-year project that positively identified the remains of *Clotilda*. The search began with a review of the known background of the event, including research into the history of Mobile and it's long-running connection, both indirect and direct, with the slave trade. Building on this research, the team assessed hearsay evidence regarding wrecks in a backwater channel of the Mobile River north of the city that contains a ship graveyard, following up with extensive remote sensing and comparative physical analysis to narrow the list of possible vessels in that area. *Clotilda* was described as an atypical Gulf schooner, with a wider hull and deeper hold than most of its kind, making it suited to ocean voyages both in sailing characteristics and the ability to carry sufficient cargo for profitability. Confirmation of its identity in the river was aided by discovery of the ship's official certificate of registry and enrollment from 1855, which included detailed measurements that helped identify the wreck. Additional critical information came from residents of Africatown, the Mobile community founded by some of the ship's former captives after the Civil War. The project made use of the oral histories of the community and in turn provided the residents with the kinds of tangible evidence that archaeology can produce.

Delgado is well-known in the maritime archaeology community, currently serving as a Senior Vice President with SEARCH, a cultural resource management company based in Florida and an adjunct professor of archaeology at Simon Fraser University. He was formerly the founding head of the Maritime Heritage Program at the National Park Service and has served as director of maritime heritage within NOAA's National Marine Sanctuaries Office. Co-authors include Deborah E. Marx, a maritime archaeologist specializing in 19th-century ship construction, and Kyle Lent, Joseph Grinnan, and Alexander DeCaro, archaeologists and specialists in remote sensing survey techniques with Delgado's firm.

"*Clotilda*, The History and Archaeology of the Last Slave Ship," is a fine example of collaborative research, as Delgado's team joined with on-going work conducted by the Alabama Historical and the Slave Wrecks Project, the latter an initiative of the Smithsonian National Museum of African American History and Culture, George Washington University, and the National Park Service. Delgado ably describes the in-depth research, careful and thorough field work, and community engagement that the project entailed. The text is short, at 180 pages, but it concentrates a wealth of information, presenting the story in a well-organized, highly readable, and clearly written narrative that informs on many levels—history, archaeological research, and deep meaning for the community closely connected with the historical events. It is a masterful work bringing to light one of the final episodes in a base and reprehensible part of our past. ⚓

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continued from page 2

The shipwrecks remain preserved in situ to this day, and Sea Hunt is no longer in business. Similarly, when MAHS learned that Odyssey Marine Explorations, Inc., intended to salvage the HMS *Victory*, we sounded the alarm to English Heritage, and ultimately the Joint Nautical Archaeology Policy Committee became involved. The HMS *Victory* also remains undisturbed to this day, and Odyssey Marine Explorations is no longer in the treasure hunting business.

Now MAHS intends to go back to the contacts it developed in the *LaGalga*/*Juno* fight to request that the Kingdom of Spain step in and exercise its sovereign immunity over all Spanish wrecks in Bahamian waters and the neighboring Florida Straits. Like Odyssey and Sea Hunt before it, this will hopefully put an end to Allen Explorations and stop, once and for all, the plunder of Spanish shipwrecks – at least in North America. Reports on these events will be posted in *MAHSNEWS* as well. Stay tuned!

See you on the water,

Steven Anthony
President

MARITIME ARCHAEOLOGICAL AND HISTORICAL SOCIETY

Statement of Ethics

The Maritime Archaeological and Historical Society is organized for the purpose of enhancing public awareness and appreciation of the significance of submerged cultural resources and the science of maritime archaeology. In pursuit of this mandate, members may come into contact with unique information and cultural material associated with terrestrial and underwater sites containing evidence of the history of humankind. To protect these sites from destruction by commercial salvors and amateur souvenir hunters, the Society seeks to encourage its members to abide by the highest ethical standards. Therefore, as a condition of membership and pursuant to Article 2, Section 1 (A) of the bylaws, the undersigned executes this statement of ethics acknowledging adherence to the standards and policies of the Society, and further agrees as follows:

1. To regard all archaeological sites, artifacts and related information as potentially significant resources in accordance with federal, state, and international law and the principles and standards of contemporary archaeological science.
2. To maintain the confidentiality of the location of archaeological sites.
3. To excavate or otherwise disturb an archaeological site solely for the purpose of scientific research conducted under the supervision of a qualified archaeologist operating in accordance with the rules and regulations of federal or foreign governments. Artifacts shall not be removed until their context and provenience have been recorded and only when the artifact and related data have been designated for research, public display or otherwise for the common good.
4. To conduct oneself in a manner that protects the ethical integrity of the member, the archaeological site and the Society and prevents involvement in criminal violations of applicable vandalism statutes.
5. To observe these standards and aid in securing observance of these standards by fellow members and non-members.
6. To recognize that any member who violates the standards and policies of the Society shall be subject to sanctions and possible expulsion in accordance with Article 2, Section 4 of the bylaws.

Signature _____ Date

MARITIME ARCHAEOLOGICAL AND HISTORICAL SOCIETY
PO Box 44382, L'Enfant Plaza, Washington, D.C. 20026

Application for Membership

Membership in the Maritime Archaeological and Historical Society is open to all persons interested in maritime history or archaeology whether or not they are divers. Members of MAHS have first preference for enrollment in all courses and other activities and projects of the Society. To join MAHS, please sign the Statement of Ethics above and send it to MAHS along with your check and this application form. You may also submit dues via our website at http://www.mahsnet.org/membership.php.

Name (print) _____

Address _____

City_____ **State** _____ **Zip** _____

Phone
(H) _____ **(O)** _____ **(FAX)** _____

E-mail _____

DUES ENCLOSED

____ **$30**
____**Individual**
____ **$35 Family**
____ **$50 Sponsor**
____ **$100 Patron**

Skills (circle): research/dive/video/communications/writing/first aid/other:

_____

General membership meetings of the Maritime Archaeological and Historical Society are held on a bi-monthly basis, the second Tuesday of each month. Meetings are conducted by Zoom Technology starting at 7:30 pm EST. See the Meeting Schedule posted on our website at https://www.mahsnet.org/meetings.php for more information.

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