

Holy Ship! The Inadvertent Discovery of the Oldest Maryland-built Shipwreck



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Discovery! In early April 2015, Maryland State Highways (SHA) were conducting bridge construction work on a section of highway crossing the Nanticoke River. A barge laden with supplies attempted to navigate the fast flowing bend in the river and accidentally struck a wood dolphin piling, sending debris into the river. As the Nanticoke is a heavily trafficked waterway, the Coast Guard ordered hasty removal of the debris. Divers worked with difficulty in the black water to find the partially submerged timbers. After attaching a particularly large wood fragment to the crane's sling, the operators were surprised to pull out a 30+ foot section of keelson with frames still attached. The project escalated quickly, the SHA archaeologists were contacted, and all efforts were made to recover as many timbers as possible before the remains of a historic shipwreck floated out into the Chesapeake Bay.



Recovery of ship timbers from the Nanticoke River



Ship timbers being loaded onto a flatbed truck



Taking a sample for dendrochronology

Dendrochronology: MAC Lab conservators worked closely with dendrochronologists to determine the best timbers and locations to take samples. It is necessary to balance the need for good sample sites, where the sap wood is still intact amongst the degraded fragments, while preserving diagnostic fragments and features that may impact the work of the archaeologists. The results of the dendrochronology analysis indicates that the ship was constructed sometime after 1743 and the white oak was harvested from the eastern shore of the Chesapeake Bay south of Annapolis. This information, together with the study of the ship's construction elements, suggests that this vessel is the oldest known locally built shipwreck in Maryland.

Transportation: The Maryland Archaeological Conservation Laboratory (MAC Lab) was contacted as soon as the SHA archaeologists understood the size and scope of the recovery now underway. The MAC Lab is a State conservation facility, specifically designed with the conservation of shipwrecks and oversized collections in mind. Days after the discovery, the timbers were loaded onto trucks and made their way to the MAC Lab for temporary care and storage. It would be essential to provide a stable and accessible environment for all the timbers as research and information recovery would be necessary to understand the context and importance of this unexpected discovery.

Documentation and Research: Working in collaboration with a Cultural Research Management firm familiar with maritime history and archaeology, each timber underwent a rigorous recording process that included multi-planar scale drawings and laser scanning. Marine archaeologists from across State and Federal agencies were consulted as to the type and construction of the ship. Throughout this multi-week assessment, it was the role of conservators to ensure that the timbers remained in a dark, cool, and wet environment, while also providing access to all manner of researchers and facilitating their various needs and requirements.

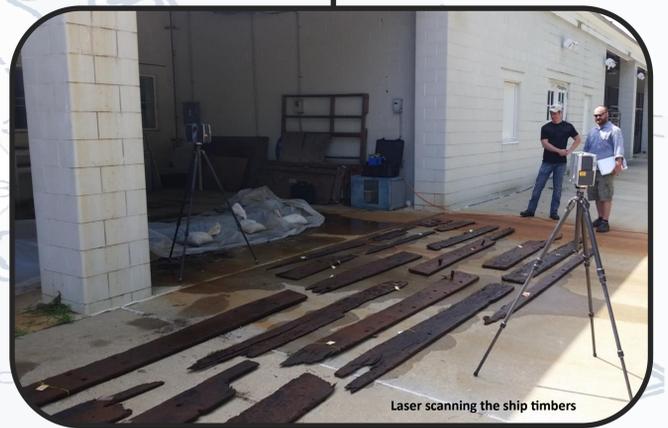


Archaeologists create a scaled drawing of a ship timber



Ship timbers being moved in to the tank

Temporary Stabilization: Due to the unplanned nature of this project, all personnel, financial and physical resources were cobbled together on very short notice. While various researchers required access to the timbers, a staging area with sprinklers and layers of plastic were used to provide protection to the ship remains. However, during the processing of the data acquired and prior to any long term decision making, a more robust system of stabilization was required. With no staff on hand, limited financial resources, and limited by State procurement policies, it was decided to purchase a large above ground swimming pool protected by a carport. The ship timbers were placed in the pool, or tank, and submerged in water. The large volume of water prevented large fluctuations in temperature. A custom cover and carport limited light exposure. A natural sand filtration system assisted in the cleaning of the timbers as well as decreased biological growth. And a custom bubbler system comprised of submersible pumps and perforated PVC pipes disturbed the water's surface to prevent insect breeding in the warm months and ice formation in the winter months.



Laser scanning the ship timbers



Construction of carport over the tank

Future Plans: Most archaeological projects begin after months or years of planning to include recovery strategies, mitigation, conservation planning, curatorial assessments, etcetera. This inadvertent recovery project was fortunate to fall into the remit of Maryland's strong State Historic Preservation Office, which allowed for access to so many resources at short notice. However, before long term decisions can be made, a thorough viability study is required to determine if this is a site worth preserving and to what degree. At the time of this presentation, over a year after the initial recovery, there is still much uncertainty. Should preservation stop at the site report? Will there be selective sampling for conservation? Will the entirety of the wreck be conserved and curated? How should the laser scanning information be used? Where will funding sources come from? How and where will any non-conserved timbers be disposed? How much does public interest weigh in on the decision process? Throughout the decision making process, MAC Lab conservators have been providing advice to all invested parties and disseminating information between researchers while seeing to the daily maintenance of the remains. All archaeological projects depend on collaboration between specialists and, in this case, conservation has become the facilitator to aid this process.



Custom-made bubbler system in the tank

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