

Ponding and Preservation

Archaeologists excavated four ship hull remnants along the Alexandria waterfront - one from the Hotel Indigo Site (44AX229) and three from the Robinson Landing Site (44AX235). Over 200 years ago, Alexandrians repurposed these old merchant ships to create new land along the Potomac River.

Caring for Waterlogged Wood

Waterlogged wood poses unique preservation challenges. These objects keep their shape and structural integrity if they remain wet. If they dry without conservation, the wood will warp, shrink, and crack.



Ship timbers stored in swimming pools at a City facility.

The City first preserved the timbers by storing all four ship remnants in pools of water. For over five years, Alexandria Archaeology staff, interns, and volunteers changed the water each month to reduce biological growth like algae, mold, and mildew. Pools provided a short-term solution, but longer-term options were needed, and the four ships embarked on two different stabilization journeys.

The Preservation Journey

The ship from the Hotel Indigo Site was stored in water before being sent to Texas A&M University for conservation. The three remaining ship remnants from the Robinson Landing Site have embarked on a different stabilization journey: preservation in Ben Brenman Pond.



Archaeologists and scientific divers submerged the wrapped and tagged timbers in Ben Brenman Pond.



Archaeologists removing timbers from temporary storage in pools of water.

Moving giant ships requires teamwork. Archaeologists, conservators, and divers worked together to wrap each timber in protective material, transport them, and then submerge and secure the timbers to a grid on the bottom of the pond. This medium-term storage solution stabilizes the timbers with less human intervention required.

Alexandria Archaeology will continue to monitor these important artifacts, ensuring that they have not shifted or deteriorated. This preserves the possibility of future study and conservation.



Where did the ships go?

The four ship hull remnants are on different stabilization journeys. The ship from the Hotel Indigo Site was conserved, and the three ships from the Robinson Landing Site were preserved. Conservation and preservation both slow the deterioration of an object, but they aren't the same process.

	Conservation	Preservation
Ships	Hotel Indigo Ship (44AX229, Feature 53)	Robinson Landing Ships (44AX235, Features 155, 159, & 200)
Method	Mechanical and chemical alteration: Iron is removed, water in the wood is replaced with a waxy substance, and the wood is freeze dried	Maintains existing state: Environmental conditions are controlled and the wood is kept wet by submerging the timbers in water
Goals	Timbers are stable and can be stored, studied, and exhibited without keeping them wet	Less cost and allows for future study and conservation

Below: Digital models of the ships from the Robinson Landing and Hotel Indigo Sites.

