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FEATURED TOP STORY TOPICAL

LAKE MENDOTA

A 5,200-year-old canoe was among 6 found in Lake Mendota this year

Barry Adams | Wisconsin State Journal



he secrets of Lake Mendota continue to be revealed.

The latest cache of ancient canoes discovered in the spring includes one estimated to be around 5,200 years old. It is now the oldest dugout canoe recorded from the Great Lakes region and the third-oldest in eastern North America, according to the Wisconsin Historical Society.

But the six canoes, some with remnants up to 9 feet long, discovered in June and made public Wednesday have a deeper story to tell about the Native Americans living along the shoreline of what is now Shorewood Hills.

Archaeologists, researchers and historians now believe that the ancient people, the predecessors to the Ho-Chunk, may have been actively managing the forest from which they built the dugout canoes using fire, stones and shells.



This wood remnant from a dugout canoe is believed to be about 1,700 years old and was found in lake Mendota this spring near Shorewood Hills. TAMARA THOMSEN

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■ Watch now: A 1,200-year-old dugout canoe is raised from Lake Mendota

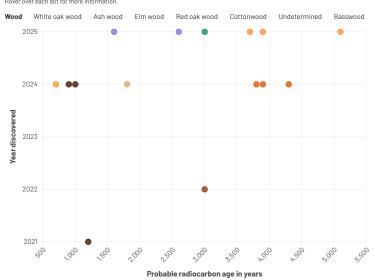
The red oak used to build the 5,200-year-old canoe and another that was estimated at 700 years old showed signs of tyloses, according to an analysis by the U.S. Department of Agriculture's Forest Products Lab in Madison. That's the same chemical mechanism used to keep wine or whiskey from leaking from a barrel, although barrels are typically made from white oak, which is less porous, according to researchers.

In all, three of the six found this spring were made from red oak and one was made from basswood. Scientists could not determine the wood type of two others.

The secrets of Lake Mendota

Six more dugout canoes were found in Lake Mendota this spring, the oldest of which is about 5,200 years old. To date, 16 canoes have been discovered since 2021.

Hover over each dot for more information.



Source: Wisconsin Historical Society

Made with Flourish • Create a scatter plot

Tamara Thomsen, the marine archaeologist at the Historical Society who has been leading dives to the site on an underwater ridge on Lake Mendota's south side, said tyloses is formed by stress and can increase wood's resistance to water and rot, and make a canoe more buoyant.

One theory is that the Native American people either purposefully damaged the trees or knowingly selected distressed trees that they knew would be better suited for boat building.

"If you think about how slow oaks grow, that would mean that someone was managing this forest for generations before the tree was harvested," Thomsen said. "They weren't just walking through a forest and decided that was the tree they were going to take and cut it down to make a canoe out of it. They were selectively managing trees that were probably near the shoreline."



Ancient finds

The discovery of more canoes in the 9,781-acre lake marks another spectacular find that began in 2021,

Tamara Thomsen discovered a 5,200-year-old dugout canoe in June in Lake Mendota. The canoe is made of red oak and is older than the Great Pyramid of Giza.

TAMARA THOMSEN

when Thomsen, who also owns a Madison dive shop and lives on the lake in the Spring Harbor neighborhood, discovered a 15-foot canoe that radio carbon dating estimated was 1,200 years old. In 2022, Thomsen found a second canoe estimated to be around 3,000 years old.

Both were carefully removed from the lake and are undergoing a multi-year preservation treatment that began in 2024 that uses polyethylene glycol (PEG) to stabilize the wood. The treatment is expected to conclude next year but will require the canoes to be transported from the State Archive Preservation Facility on Madison's East Side to Texas A&M University to undergo a freeze-drying process that finalizes their preservation and leaves the canoes in a stable, solid structure.

In September, the Historical Society was awarded a \$113,912 grant from the Save America's Treasures grant program of the National Park Service in the Department of Interior, to help pay for the preservation process. The 1,200-year-old canoe is slated to be a main exhibit at the 100,000-square-foot Wisconsin History Center now under construction on Capitol Square and scheduled to open in late 2027.



Complete coverage: Ancient canoes in Lake Mendota Barry Adams | Wisconsin State Journal

In May 2024, another eight canoes were found and brings to 16 the number of canoes that have now been found in the lake. The fragments found in 2024 and this past spring remain in the lake and are marked by GPS coordinates and pink underwater flags, Thomsen said.

Area broadens

The most recent discovery, aided by the churning of the lake bottom either by boats or storms, also expands the cache site, which is now defined from the mooring field near the Shorewood Hills boathouse to the golf course at Blackhawk Country Club.

There are likely many more canoes in Madison-area lakes, according to Thomsen, but searches she has done in Lake Mendota on or near steep drop-offs at Frautschi and Picnic points and off Governor's Island have turned up empty.

"That doesn't mean they're not there. They're not exposing themselves quite yet," Thomsen said. "You just have to be patient and keep looking."



This map shows the locations of where 16 canoes have been found beginning in 2021 between the Shorewood Hills shoreline and Spring Harbor. WISCONSIN HISTORICAL SOCIETY

The largest remnants found in June range in size from 4.5 to 9 feet long and are about 18 inches wide. They may have been up to 15 feet long when first constructed, Thomsen said. The remnants show signs of gouging and burn marks while one of the canoes, estimated to be about 3,800 years old, was found upside down with three netsinkers, similar to the seven net-sinkers found with the 1,200-year-old canoe discovered and raised in 2021.



This 3,800-year-old canoe made from a red oak tree was found upside down in Lake Mendota near Shorewood Hills. On top of the canoe sits stones used to weigh down fishing nets.

All of the canoes were likely built for fishing and hunting but were also likely used for transportation at a time when the lake levels were lower prior to white settlement and the construction of dams on the Yahara River at Tenney Park and in McFarland and Stoughton.

'Deeply connected'

Thomsen has been working with Sissel Schroeder, a professor of anthropology at UW-Madison and with the First Nations of Wisconsin to chart the locations of the canoes that were likely not owned by individuals but shared among members of communities and stored at designated points.

"This project gives us a meaningful opportunity to gain a deeper perspective on our heritage and our ancestors," Bill Quackenbush, tribal historic preservation officer for the Ho-Chunk Nation said in a press release. "The canoes remind us how long our people have lived in this region and how deeply connected we remain to these waters and lands."

The first canoe discovered in 2021 was in about 28 feet of water between the mooring field and the golf course on what was likely an ancient shoreline. Searches were expanded in that area and then moved toward the golf course where there has been more erosion and which has now doubled the size "of this canoe parking lot," Thomsen said.

She dove the area several times this past June, when the lake offers a window of water clarity suitable for searches.

The 5,200-year-old canoe, found closer to the golf course, was likely crafted sometime around 3000 BC, before the Great Pyramid of Giza was built in Egypt and around the time of the invention of writing in Sumer. The canoe helps further put in context just how long people have been calling what is now known as Madison their home.



This baggie contains small fragments from what was later determined through radio carbon dating to be a 5,200-year-old dugout canoe. The fragments were shipped to a lab in Miami for dating.

SISSEL SCHROEDER

"It tells a story," Thomsen said of the canoe. "The more that we find, the more information we get and the more we can tell a clear story of that site."