

Rare masthead from ancient shipwreck found in northern Israel

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Rare masthead from ancient shipwreck found in northern Israel
(photo credit: RONY LEVINSON)

A masthead found in a shipwreck off northern Israel sheds light on sailing and shipbuilding during the Late Antiquity period, according to a paper just published in the International Journal of Nautical Archaeology.

Maayan Cohen, a PhD candidate at the department of maritime civilizations at the University of Haifa, and Dr. Deborah Cvikel, a researcher at the Leon

Recanati Institute for Maritime Studies and a senior lecturer at the department of maritime civilizations – both at the University of Haifa – are the authors of the paper, titled, “Rigging of the Ma’agan Mikhael B shipwreck (7th–8th centuries AD): new finds.”

“This masthead is such a unique find,” Cohen told *The Jerusalem Post*. “I can’t express how rare this discovery is.”

The masthead in question is an unattached hook-shaped masthead fitting with sheaves that was discovered and retrieved during the 2019 underwater excavation season of the Ma’agan Michael B shipwreck from the mid-7th–mid-8th centuries CE.

It is such a groundbreaking discovery because it is the first time in the underwater archaeology world that a masthead has been discovered in the context of a shipwreck, Cohen said.

“It was found in situ, inside the wreck,” she said. “There’s no doubt it’s from the wreck.”



The discovery of this well-preserved masthead has implications in many fields.

“This proves that the iconographic evidence is reliable,” she said, since [illustrations](#) from the period show ships with similar mastheads and lateen-rigged sails.

In the paper, Cohen and Cvikel also write about remnants of sails and ropes found at the shipwreck. The artifacts discovered in the shipwreck were preserved through nearly 15 centuries because they were covered in sand, which kept out oxygen and seawater which would have destroyed them.

Removing the sand and extricating the artifacts from the shipwreck was delicate, time-consuming work, and it took over three years of diving to bring out the finds so they could be studied.



The [shipwreck](#) is located just off the shoreline at Kibbutz Ma'agan Michael, where two currents meet, which created challenging conditions for the divers.

Each artifact yielded information that can help unravel mysteries of this era. The bits of the sails found were made of very high-quality sheep wool, and the wooden timbers found were covered in matting, both of which show that “someone took very good care of this ship.”

While the researchers cannot yet say for certain who was sailing the ship, they have learned quite a bit about what the sailors did on board, based on what they found.

They believe it was a ship that engaged in maritime trade which had a route that went throughout the Levant and most likely included Egypt, Cyprus and Israel.

They found clay bricks that indicated that the crew was cooking, and they also discovered what they believe to be game pieces.

“This shipwreck gives us important information about daily life on board a ship in Late Antiquity,” Cohen said.

It also gives important information about shipbuilding techniques, which underwent a key transition in the second half of the first millennium. Ships were built using what is called shell-first construction, and shipbuilding then switched to frame-based construction. This ship, which is frame based,

“shows that frame-based construction was used earlier than was thought, and that this transition also took place in large ships that sailed in open waters,” Cohen said.

Researchers are working to uncover more information from this shipwreck, and Cohen said they hope to create a 3D model of the ship that would eventually be shared with the public.

“We have a lot more work to do,” she said.