

ONE-ARMED WOODEN ANCHORS



Two one-armed wooden anchors (OAA) were discovered in the submerged ancient city of Thonis-Heracleion. The anchors were well preserved in the clayish environment of the ancient canals at the site.

Wooden anchors are a rarer find in Thonis-Heracleion. It seems probable that they were left in the harbour by foreign ships, especially as there is

archaeological evidence for such vessels. The ceramic assemblages associated with both finds allow dating the contexts of their discovery to a period ranging from the end of the 5th to the first half of the 4th century BC.

Description

Anchor inv. 21378 was found in the northern part of the Central Port at a general depth of 7 m. It was covered by a layer of sandy sediment, some 0.6 m thick. It was lying flat with its arm down and embedded in the bottom. The shank-arm was cut from a single crotch-timber and measures 1.53 m in length.

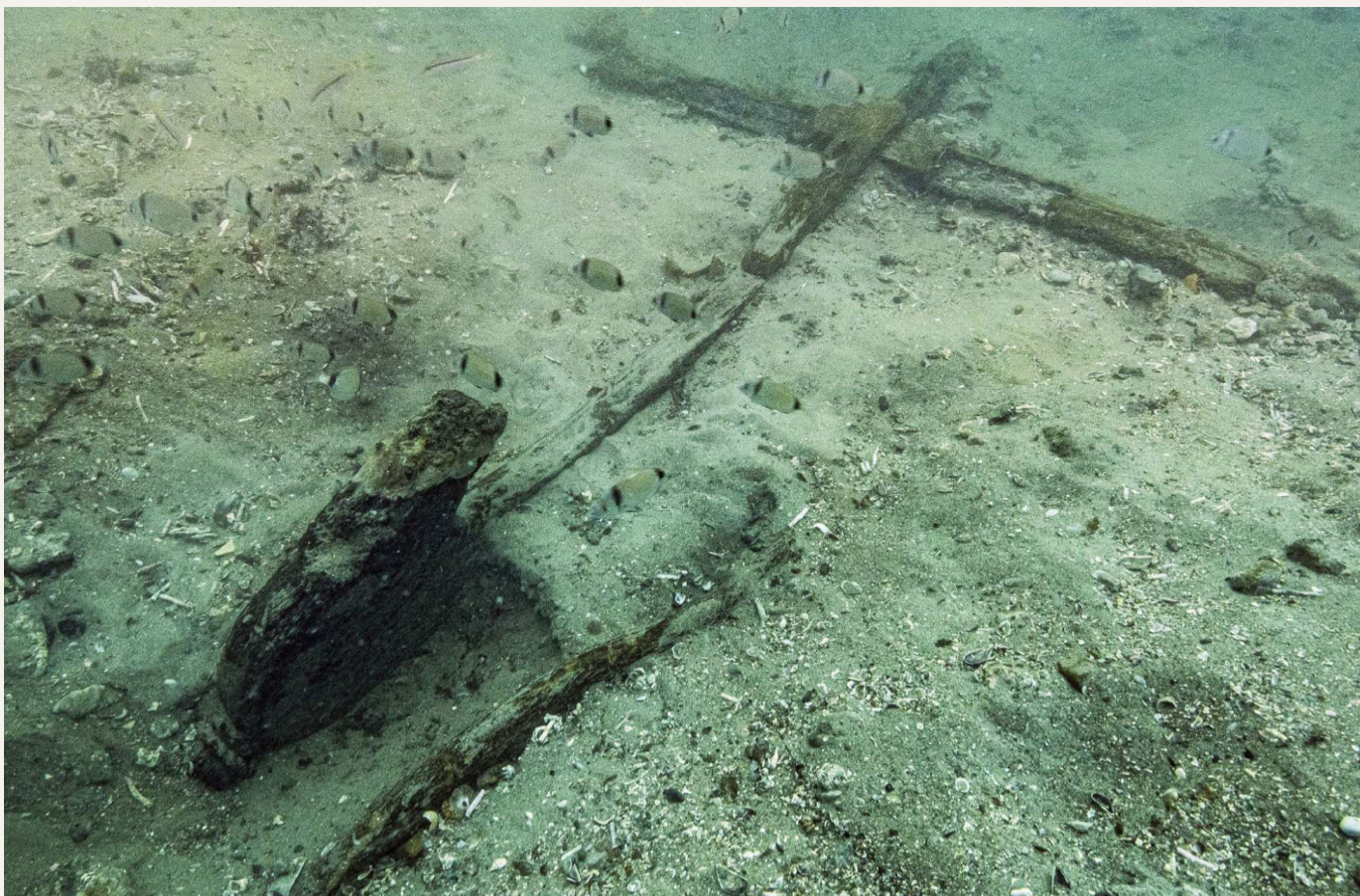


Wooden Anchor inv. 21378 in situ.

The upper extremity of the shank-arm was completely preserved showing an opening for the cable. The stock and the arm were completely preserved too and thus the only missing element of the anchor was a metal tooth at the extremity of the arm.

Anchor inv. 22567 was found in the city's Grand Canal close to one of the jetties and is 1.69 m long. When found, the anchor was covered by a very thin layer of sand, some 5–10 cm thick, and the tip of its arm was protruding from the sediment. The wood was eroded and fragile, while some parts of the stock were missing, showing the lead cores inside.

The anchor was lying flat on the bottom with its single shank-arm pointing towards the surface. The anchor was complete except for the tip of the arm, which was partially broken. The sea-floor side of the crown was excavated carefully to confirm that a second arm indeed never existed.



Anchor inv. 22567 in situ after the cleaning. Perspective view.

First evidence for pine wood in construction of anchors

The shank-arm of Thonis-Heracleion Anchor inv. 22567 was also fabricated with evergreen oak, while the shank-arm of Anchor inv. 21378 – with a species of deciduous oak.

More interesting is that the stocks of both Thonis-Heracleion anchors were cut from pine wood, and this is the first evidence for the use of this wood in the construction of ancient wooden anchors.

One Armed Anchors (OAA)

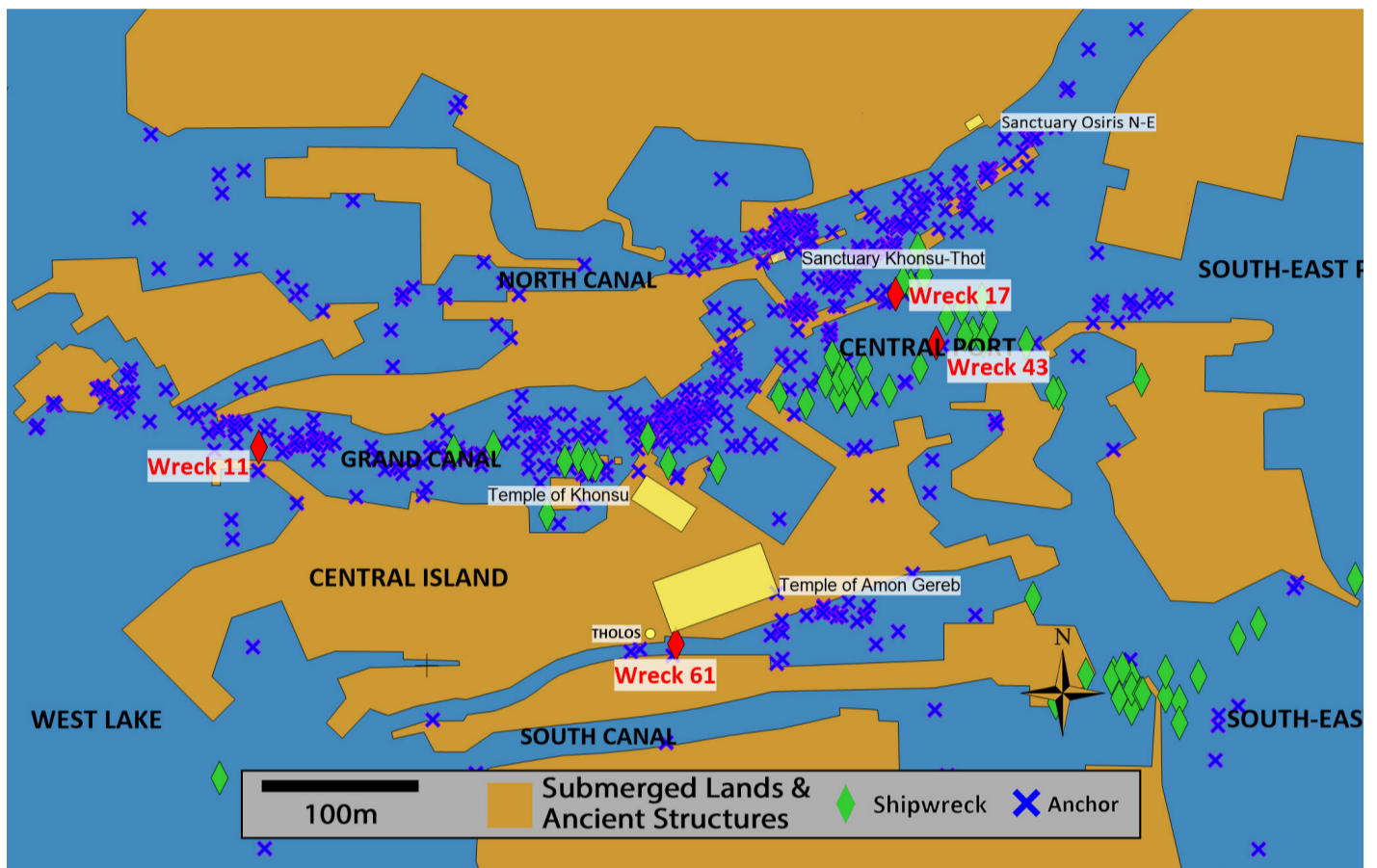
The wooden OAA inv. 21378 and inv. 22567 provide the first archaeological evidence for the use of this type of anchor in an ancient Egyptian environment before the beginning of the Ptolemaic Period.

The OAA would have been very convenient on rivers or in coastal lagoons like that of Thonis-Heracleion. The construction of these anchors is best paralleled by the anchor from the Ma'agan Michael shipwreck. These anchors were probably used by small vessels of foreign origin but this hypothesis needs further research.

The reason for using the OAA was probably the fact that it 'reduces the risk that the anchoring lines of a ship will entangle the anchor, lift it, or damage it'(Rosen & Galili, 2006, p. 13).

More than **800 ancient anchors** of different types discovered in Thonis-Heracleion testify to intensive shipping,

and the use of OAA must have been particularly advantageous. Another interest was ease of manufacture (Rosen & Galili, 2006, p. 13) and ease of handling on board.



Map showing the reconstructed area of Thonis-Heracleion with the positions of anchors and shipwrecks ©IEASM

Objects: Wood, Maritime Museum Alexandria (Inv 21378, Inv 22567)

Source:

Alexander Belov & Sabine Laemmel (02 Sep 2024): Two One-Armed Wooden Anchors from Egypt from the 5th–4th Centuries BC and their Ceramic Contexts, *International Journal of Nautical Archaeology*, DOI: 10.1080/10572414.2024.2388518

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