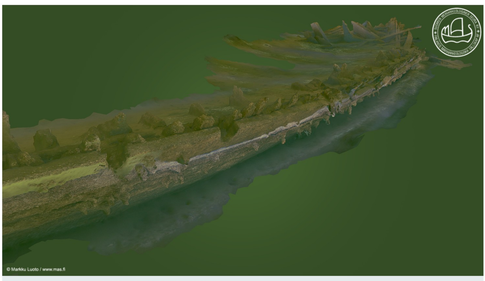


Lehmäsaari west bank 1 (Kotka) MVID#2442

The wreck appears to be related to another wreck some twenty meters further north, possibly originally the stern of a ship about 43m long, as structures suggestive of a rudder are found in this wreck. There is a suitable description in written sources of a ship that was wrecked on the western shore of Lehmäsaari during the Second Battle of Ruotsinsalmi in 1790.

Location (WGS84) and date of last inspection: Lat: 60° 25.179 N, Lon: 26° 58.895 E // August 26, 2023

Depth & length & direction: about 4-11m, about 20m, keel line about 60°/240°

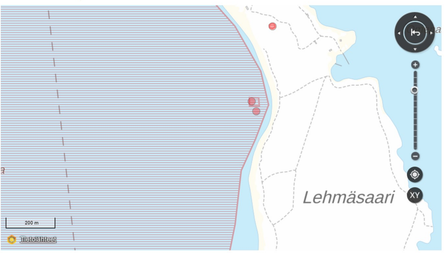
Research team and rapporteur: MAS research expedition 08/2023, Markku Luoto

Research data: https://masdownload.mikrojebe.fi/kehte/2442_Lehmasaaren_Jansiranta-1/

Link to the Ancient Relics Register: https://www.kyppi.fi/palveluikkuna/mjreki/read/asp/r_kohde_det.aspx?KOHDE_ID=244…

Link to this page: https://www.mas.fi/fi/julkaisut/hylkykhätt-merialue/lehmasaaren-lansiranta-1

Location on the map in relation to other ancient remains



Research measures performed

The purpose of the study was to supplement the 3D ontology of Baltic Sea wrecks collected by the Finnish Maritime Archaeological Society. The wreck was located according to the coordinates in the Kyppi.fi service of the Finnish National Board of Antiquities, which were very accurate. Markku Luoto filmed the wreck with stereo FHD/4k video from a distance of about a meter, so the resolution of the image is more accurate than that of the human eye from a similar distance. In addition, other MAS explorers filmed the artifacts in the wreck with high-resolution photographs. The quality of the wood material was observed from many different points on the wreck and also from the flow trace of a sample taken for radiocarbon dating. The dating sample was radiocarbon dated using the so-called AMS method, the results and interpretation of which can be read in the adjacent diagram. Markku Luoto created a 3D model of the wreck based on 7685 images and containing over 21 million polygons, approximately 300MB in size. The version uploaded to Sketchfab had to be reduced to about a third of full resolution.

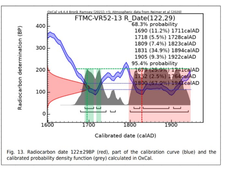
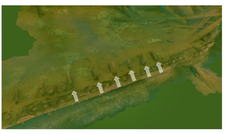


Fig. 13. Radiocarbon date 122±29BP (red), part of the calibration curve (blue) and the calibrated probability density function (grey) calculated in OxCal.

Description of the item

The wreck lies at a depth of about 4-11m on a steep sandy slope, with sand covering about 2/3 of the wreck. The keel line of the wreck is northeast-southwest, with the stern on the southwest side. The stern has been identified by the rudder hinges preserved in the stern coaming and other parts typical of the stern of a ship. The total length of the wreck area is about 20m and about 5m at its widest, but as most of the wreck is buried in sand, it is difficult to estimate the actual dimensions. The left or port side of the wreck rises 1-2m from the bottom and is distinguished by debris and structures resembling oar holes. No other artifacts were located on the wreck, except for one pulley bollard.

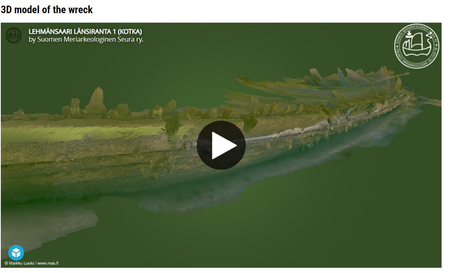
Preliminary interpretation



Our companions' preliminary interpretation is that this is most likely a rowing ship that was wrecked in the Second Battle of the Swedish Strait in 1790 (also), or rather a part of it, which may well be related to another wreck located only a couple of dozen meters to the north (***MVID#1121***). The structures of the wrecks have certain similarities, such as a flat-seam structure, structures indicating wreckage on the inner sides (marked by arrows in the accompanying image), and the building material, which in both seems to be mainly softwood. The radiocarbon age difference between the samples taken from the shelves is only about 13 years. According to historical sources, this could be parts of the wreck of a Russian ship named Tikhvin, built in 1775, because it was 43m long and these wrecks (MVID# 1121 and 2442) indicate a ship of the same size in terms of their total length. In this case, we would consider this part of the wreck (MVID#2442) to be the stern of the ship based on the rudder hinges and other structural elements indicating the stern, and the more northern part (MVID#1121) to be the bow of the ship, since the latter part has lighter structures at the western end that could indicate the ship's neck.

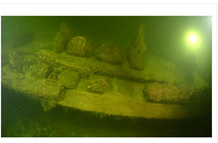
We interpret the radiocarbon dating as meaning that the wood material (cellulose) in the sample is most likely from the turn of the 17th/18th centuries or the early 18th century, with the maximum probability falling in the 1690s.

3D model of the wreck



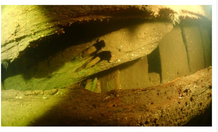
LEHMÄNSAARI WEST ISLAND 1 (KOTKA) by Finnish Maritime Archaeology Society on Sketchfab

Pictures of the wreck



Reinforcements at regular intervals between the ruins could indicate support structures for the cannon slide carriages.

There are structures indicating debris on the port side of the wreck approximately every 50-60cm, meaning they are probably too close together to be just supports for deck beams.



A so-called pulley bollard, which still has pulley rollers in place

A hole in the side, thought to be the oar hole, which is located every couple of meters

Page last updated 26.03.2024

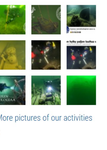
Page history in PDF files:

lehmasaaren_lansiranta-1_mvid2442_2024-03-26_mas.fi_.pdf

Contact information
- all club communication channels

3D models in Sketchfab
- a showcase of the wrecks we modeled

MAS portal
- the club's open data repository, approx. 18TB



More pictures of our activities »