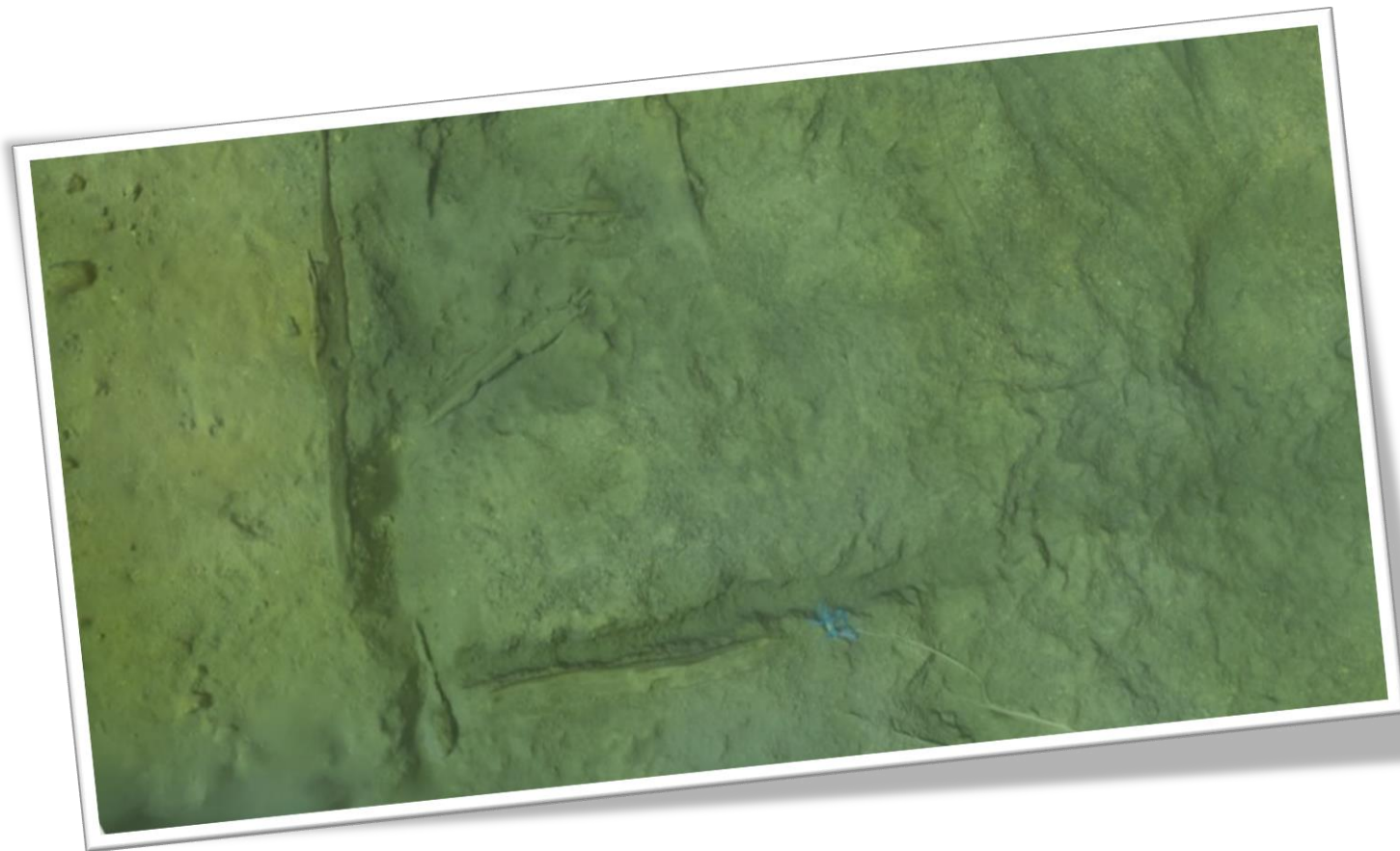


Maritime Archaeological Society  
of Finland

## Excavation Report Potential new wrecksite at Porkkala Wreck Park



Maritime Archaeological Society of Finland report against Finnish Heritage Agency's research permit **MV/01304/2024** regarding a potentially new wrecksite at Kirkkonummi, Stora Träskö, near "Limisauhylky" MVID#1000039839. Methods included intrusive test excavation, hence the permit – even if nothing was found.

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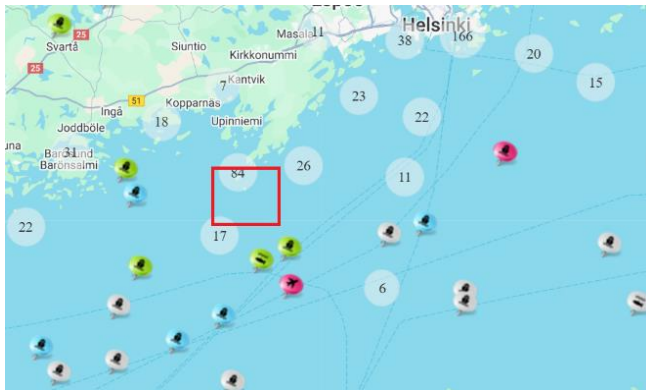


# Potential Wrecksite Excavation Report

By D. Cleasby, Leading Maritime Archaeologist, Maritime Archaeological Society of Finland (MAS.Fi)

## Project Background

Permission was gained from the Finnish Heritage Agency in spring 2024 to excavate an unknown feature/set of features in the Träskö island area. It was discovered in 2022 when the diver trail linking the wrecks of Tynnyrihylky (MVID#1185), Alku (MVID#1186) and Limisaumahylky (MVID#1000039839) was being completed. It was situated at 59°57.454' N 24°22.281' E



*Images 1 & 2. Hylt.net, with Träskön island wrecks' shown*

On the diver trail circuit between Limisaumahylky and Alko, several timbers were seen some 5-10 metres or more to the south-east of Limisaumahylky. They appeared to be planks jutting out from a sand bank and perpendicular to it. This sand bank rose from a depth of 17m up to 12m, covering a large rocky ridge and was presumably deposited by currents from the more open sea to the south-west. Gentle hand clearing seemed to indicate that these timbers extended further under the sandbank, seemed firmly in place but to an unknown depth.



*Image 3.*

*Plank jutting out of lower section of the sandbank*



Sounding probes were employed that in places showed firmer surfaces some 2 metres beneath. However, it was impossible to determine if this was due to the underlying rocky ridge or to cultural objects.

This prompted two research questions. Was there a wreck under the sand bank? Was it part of Limisaumahylky or a separate new wreck? The first answer could only be determined by further exploration of the sand bank, which would require a research license and all the necessary planning for a trial excavation. Whether they were part of the same wreck was a much harder determination to make.

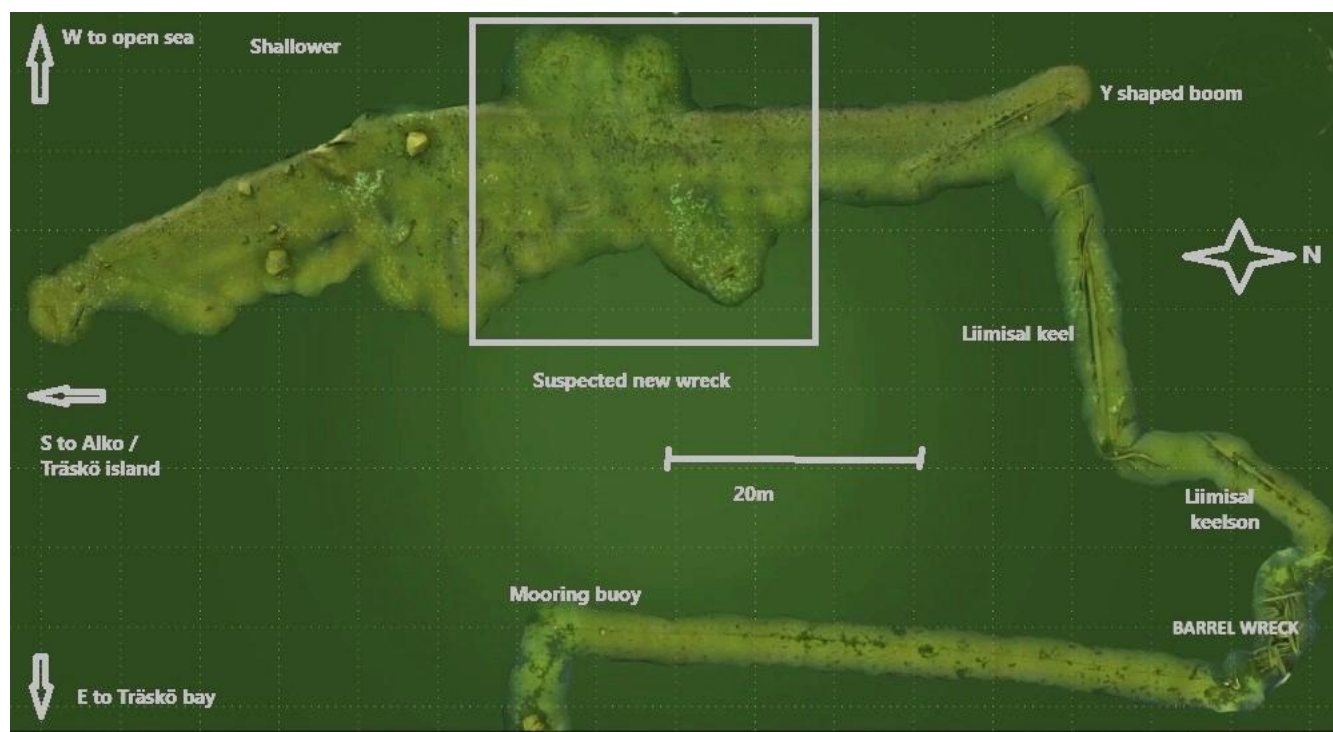


Image 4. An image from a 3D model of all three wrecks with the potential new wrecksite on the top

The two sites, if our new timbers can yet be considered a site, are separated by 15-20 metres distance and shallower depth of 2-3 metres, which does not indicate a particularly tight context for them to be from the same wreck, but the presence of the ridge and the sandbank could conceivably provide a set of factors that indicate they were from the same wreck. A vessel could have been wrecked on the rocky ridge nearby which is largely invisible until winds from the south-west cause wave tufts to appear.

The south-west winds and currents moving around from Träskö island may well have caused substantial undersea movement of both broken wreckage to both positions, while also causing the sand and silt bank to form, which would cover timbers in the new area, but not have enough momentum to





reach slightly further towards the bay. Without a detailed understanding of the site formation processes at play it is difficult to say anything with any certainty. In addition, the fact that there are several wrecks close by, rather than these two sets of finds being the only ones in an otherwise isolated cultural setting, makes it more likely they are different sites in a place where wrecking was a more likely event.

Certainly, this area is as likely a place for wrecking to occur as any, since the large, submerged rock nearby represented a sizeable hazard for a boat's crew with poor knowledge of the area. In addition, the strong currents around the north-western side of the island, witnessed several times while diving the area, had the power to drive any vessel onto this hazard, particularly if the crew were trying to navigate a tight line into the inviting waters of the sheltered bay.

At this stage it seemed more likely that they were from separate vessels due the distance between but also the new timbers were smaller planks, while those in Limisaumahylky seemed much bulkier and did not contain any clinker frames for which Limisaumahylky was named. However, to firmly determine if they were related could only be achieved by taking accurate samples from both, using dendrochronological sampling to determine their ages and even provenance. If the tree ring sample has insufficient rings to date using dendrochronological analysis, then samples could be taken from any rings that survive

for the radiocarbon 'wiggling' technique. Radiocarbon dating samples from Limisaumahylky taken in 2020 from one clinker-shaped timber provided dating ranges from AD1300-1370 (<1380) and AD1440-1530 (<1570), while a radiocarbon sample taken from the likely keelson indicated a range from 1460-1640 (<1610). Two samples had been taken by drilling for tree ring analysis dating, but it was not possible to date the samples, and there was insufficient rings for the 'wiggling' technique.

The logical step was to conduct a trial excavation of this new area to see if first there was more structure, rather than these being simply disarticulated planks, and to expose potential core timbers for dendrochronological sampling. It is also worth asking what the significance of the long timber, a ship's boom with a yoke was that sits between the two areas. Its thickness seemed closer to the thickness of the timbers on Limisaumahylky and at the same depth and relative plateau as Limisaumahylky. However, due to its proximity to both, it seemed logical that this could be sampled if a trial excavation should occur and with sufficient time.





## Methodology

A research license was granted by the Finnish Heritage Agency to excavate the site in the late spring of 2024. Members of the MAS fieldwork team had already gained practice earlier in the year on the Hamnholmarna wreck using the water dredge and so were ready for this event. The plan was relatively simple. The team would carefully excavate around several of the exposed timbers to see if they were connected to more structure. This would allow an estimation whether it constituted a separate wreck or fragments. If the core structure of a wreck was identified, then dendrochronological sampling could be employed.

An essential element of the fieldwork was the careful positioning of the dive boat over the site. It required being anchored far enough away from the large, submerged hazard mentioned, as well as from the shore, in an area that could still be exposed to wave motion that made safe diving difficult. It also required an uninhibited route for the hoses of the water pump to run to the water dredge below. If the hoses became kinked they could, and several times did, work their way loose due to the pressure build up in those kinked sections. The hoses could also run under the boat and cause a snagging incident that prevented the boat being moved quickly in an emergency. Determining the positioning of the water dredge itself underwater in relation to the dive boat was also important. The water dredge exhaust should in ideal circumstances be located down current so that the spoil does not blow back over the excavated area. That positioning of the dredge also needed to be considered when the dredge was moved from one spot to another. A clear route between the place where the water pump was located and the spot to excavate took some fine tuning but ultimately allowed excavation of several relevant areas.

The areas to be excavated were selected in order of priority as only 2 days could be allocated to this initial investigation. The previous photogrammetry model of 2022 allowed the team to identify timbers that might lead to deeper underlying structure. However, it was quite possible that these timbers had now shifted down the slope or been covered with silt. If they had shifted it could indicate that they were less likely to be part of a structure.



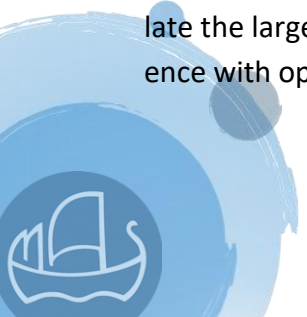


Image 5. Section of photogrammetry 3D model, showing the surveyed area before any intrusive research

Based up this model the following set of priority 'targets' were set, A-D, which would depend on what was visible. Exact coordinates had not been taken of their previous positions. They could have been calculated from taking measurements and bearings from the model but since the significance of each exposed timber had not been proven their exact position was not considered to be paramount and it was expected there would be several targets still visibly available. The central area to the bank, shown below as A-C was designated as the first priority as there were several timbers in proximity and the concentration of darker silt / sand perhaps indicated more timber near the surface.

## Fieldwork

It took some time to get the dive platform in position on both days of diving, especially since the area was partially exposed to the currents and wind from the south-west, but the weather held quite well. Risk assessments were carried out on the site, the weather on both days and the task at hand. It took some time to set up a reasonably straight and effective orientation of the dive boat housing the water pump, through the hoses extending down from it, and down towards the water dredge nozzle, so that the hoses did not become kinked. Kinking did occur at one point stopping suction and disconnecting some of the hose connections and provided useful insights. Once a good alignment was set it allowed the heavy nozzle and plastic tubing, which was both weighted and buoyant where required, to stay in place but also be moved when the excavated area needed to go deeper, move to another space, or underwater currents changed direction, requiring the exhaust tubing to deposit silt down current. This position was changed occasionally within a dive and reset for the second day. Diving was carried out in pairs with one carefully excavating with the nozzle, while the other supervised safety, helped manipulate the larger dredge apparatus and checked the spoil heap for isolated finds. All divers gained experience with operating the excavation end.





*Images 6 & 7.*

*Surface timbers pointing towards a new wrecksite in the area.*

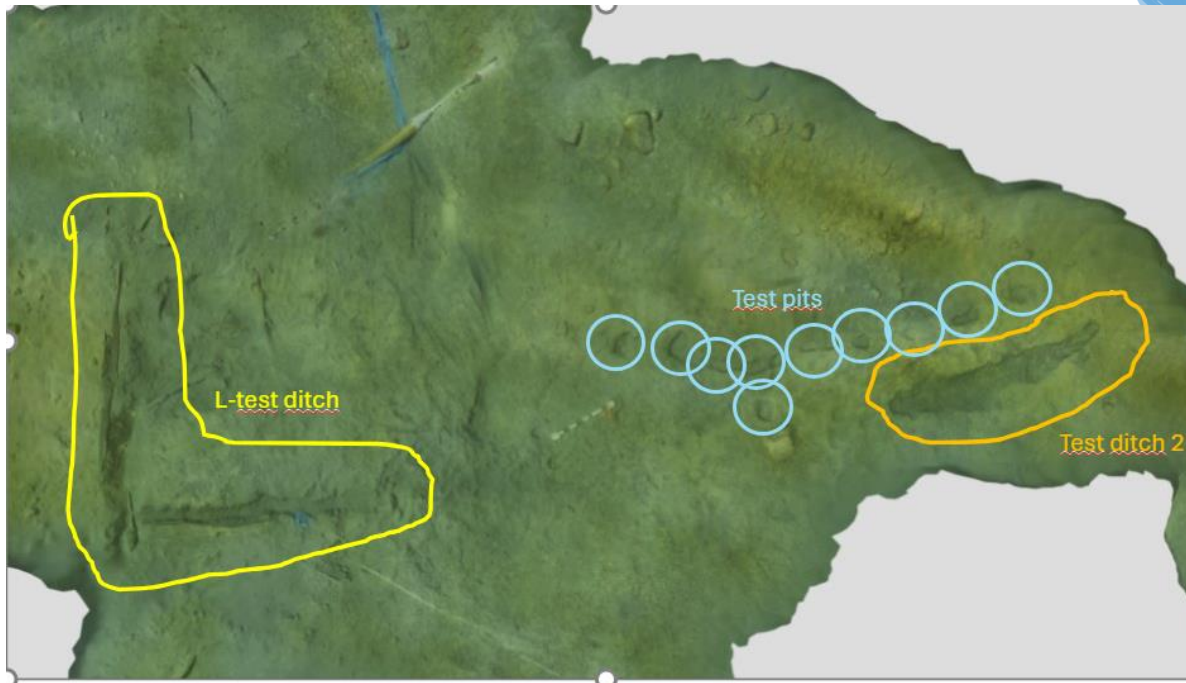


*Image 8. Clinker timber, bottom left on the image*

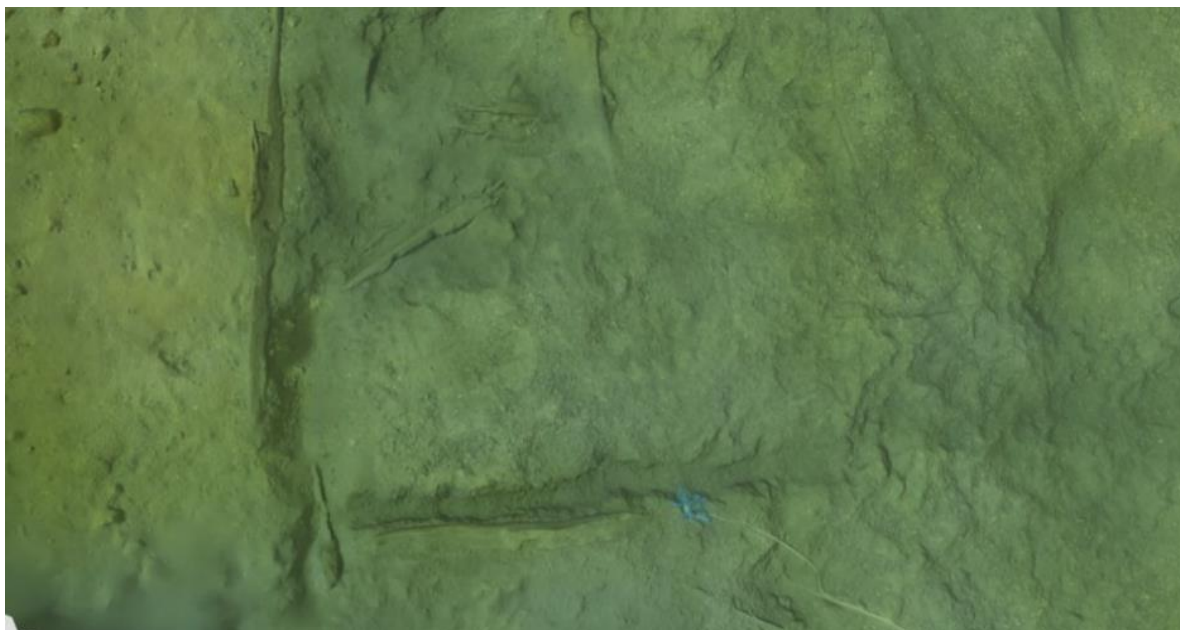
## Results

Due to the relative shortness of time a L-shaped test ditch was excavated, about 3-4 meters in each direction in the central area selected, but apart from the original parts that stand out on the bottom, no larger structural entity was found (see model below). Several test pits and a second ditch were dug in the area, closer to Limisaumahylky but no elements closer to any structure were found. The clinker timber in the bottom left side of the model image was gently handled and it moved so easily without any friction that it was unlikely to be part of any hidden structure. Consequently, no dating samples were taken.





Rendered model: <https://sketchfab.com/3d-models/shipwreck-stora-traskon-kaivausalue-dc7fdd0a289e420180173448b855c833>  
Color shaded model: <https://sketchfab.com/3d-models/shipwreck-stora-traskon-kaivausalue-shaded-cdbbdc5132454f6d801b623250393049>



Images 9 & 10. L-shaped ditch excavated, enlarged from image above, depicting survey area with test ditches and pits.

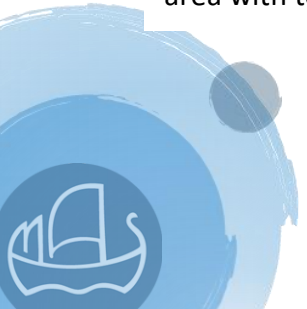




Image 11. Shallow test pits and second ditch from enlarged image in 3D model

## Conclusion

The question whether there was a wreck under the sediment could not be answered, and therefore whether it was a separate wreck to Limisaumahylky. Although no new data was gained valuable team experience was gained in the technique of excavating. This had been a slightly different problem to that at Hamnholmarna earlier in the year where a boat's structure was clearly visible and aims more defined. The feeling within the team is that there may yet be structure under the sandbank yet to be discovered, so the team may well revisit the site in the future. It would also make a reasonable site for training in excavation techniques where there is less risk of damaging a proven site.

Espoo 30. 5. 2025, on behalf of the Maritime Archaeological Society of Finland,

David Cleasby, Leading Maritime Archaeologist | Markku Luoto, Chairman

PS. There is a Finnish language version of this report being created 08/2025. This and the Finnish language reports – as well as all the other reports on the same wrecksite – can be found at [www.mas.fi](http://www.mas.fi) and at [mas.mikrojebe.fi](http://mas.mikrojebe.fi).

