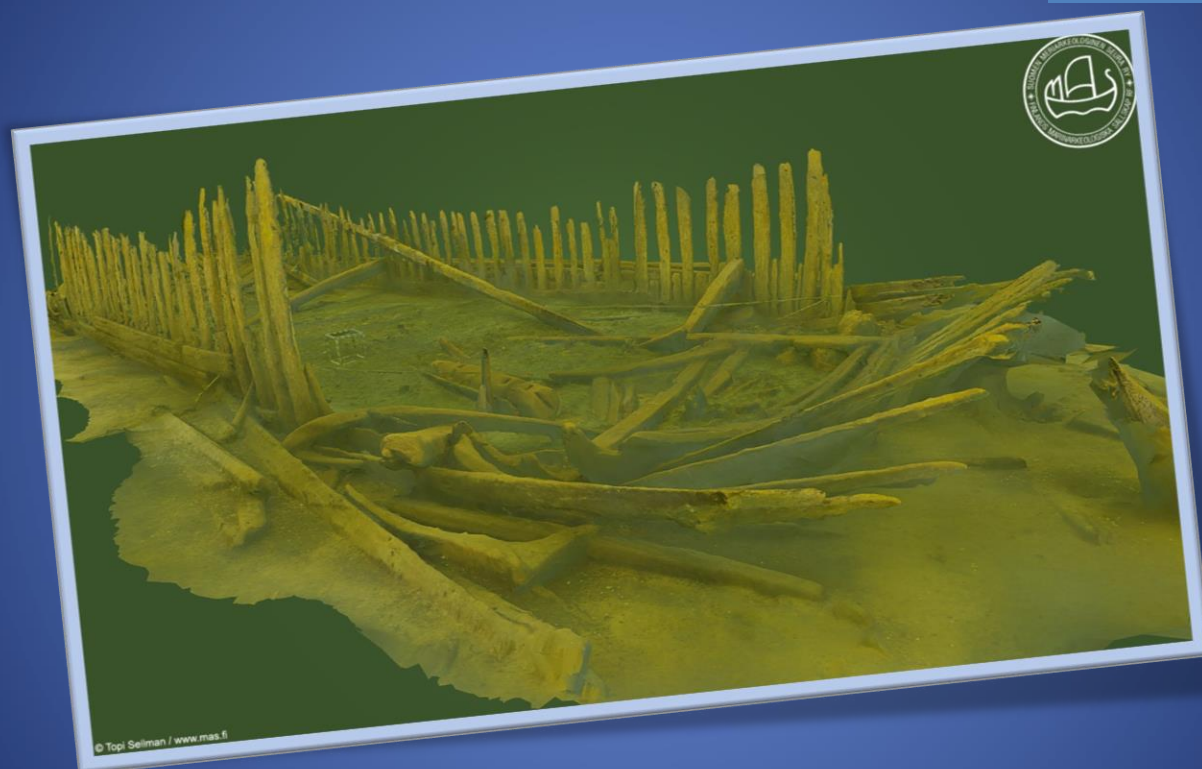




2023



ANNUAL REPORT 2023

Annual report of the Finnish Maritime Archaeological Society for 2023

Version 1.2 / Board of Directors 15. 3. 2024 / Annual Meeting 27. 3. 2024



2021 United Nations Decade
2030 of Ocean Science
for Sustainable Development



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valtuuskunta



United Nations
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The Protection of
the Underwater
Cultural Heritage



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ANNUAL REPORT

The year 2023 was the 28th year of operation of the Finnish Maritime Archaeological Society ([MAS](#)). In accordance with its statutes, the purpose of the Society's activities is to promote maritime archaeological research, education and hobby activities. In order to fulfil its purpose, the Society conducts maritime archaeological research, organises training and seminars, and presents statements on issues concerning the field. The Society maintains contacts with its various stakeholders by participating in the activities of domestic and international organisations and scientific communities. For promoting the knowledge of maritime archaeology, the Society carries out publication and information activities.

MAS is the first and so far the only Finnish scientific society accredited by UNESCO. In addition, our society is a member of the Federation of Finnish Learned Societies ([TSV](#)) and a community member of the Finnish Divers' Association ([SL](#)). The Society is a non-profit association and has a police collection permit and a preliminary decision by the tax authorities on tax-exempt donations. In 2023, the Society had approximately 203 individual members and seven community members.

ACTIVITIES 2023

As in previous years, the focus of the Society's activities was on the implementation of field work camps and expeditions, as well as on organizing an active training and seminar program. At the beginning of the Board's term of office, the continuation of the strategy decided in 2019 (Figure 1) and compliance with the Charter of the Board of Directors drawn up in 2020 were confirmed. The projects initiated by the previous Government concerning IKUWA7, Porkkala Wreck Park, 3D ontology of Baltic wrecks and studies of wrecks in the Archipelago Sea were also confirmed as operational objectives in 2023 at the Board's first meeting, i.e. constitutive meeting, on 18.1.2023.



Figure 1. The main directions and strategic objectives of the Marine Archaeological Society defined in 2019

UNESCO ACCREDITS THE MARINE ARCHAEOLOGICAL SOCIETY

The Convention for the Protection of Underwater Cultural Heritage adopted by the United Nations Educational, Scientific and Cultural Organization (UNESCO) in 2001 will be recognized at its ninth meeting in June 2023 in Paris as the first Nordic institution of the Finnish Maritime Archaeological Society! At the UNESCO Convention meeting, only two new NGOs were accredited, of which the Finnish Maritime Archaeological Society had the honour of being the second. Our Society is also the first UNESCO-accredited scientific society in Finland.



Figure 2. Our vice-chairman Vesa Saarinen thanks the secretary of the convention, Ulrike Guerin, who brought the matter to the attention of the NGO representatives of the meeting.

The UNESCO Convention for the Protection of Underwater Cultural Heritage has quite strict criteria for accrediting NGOs, and accreditations are not automatically renewed, but must be earned. In the history of the Convention, only 15 NGOs have been accredited for achieving UNESCO's underwater cultural heritage conservation goals. The accreditation of the Finnish Maritime Archaeological Society was even a bit of a surprise in the sense that Finland, as a state, has still not ratified the UN Convention for the Protection of the Underwater Cultural Heritage, which was generally accepted already in 2001.

The Convention for the Protection of the Underwater Cultural Heritage is an international agreement. As its name suggests, its main objective is to protect underwater cultural heritage, i.e. archaeological sites such as shipwrecks, buildings or other remnants of human activity from looting, destruction and unauthorised exploitation. In addition, the agreement aims to promote cooperation between states in the conservation and management of underwater cultural heritage.

The Finnish Maritime Archaeological Society will actively promote the ratification of the Convention also in Finland.

IKUWA7

The articles in the conference proceedings were submitted ready for publication by the end of the year with the help of a grant from the Weisell Foundation for this purpose. During spring 2024, the publication will be folded and produced by the publisher. The estimated release date is June 2024.

DAYS OF MARITIME HISTORY

No Maritime History Days were held in 2023, but planning for the 2024 Maritime History Days began already in spring 2023. The next Maritime History Days will be held in Jyväskylä in March 2024.

DAYS AND NIGHT OF SCIENCE



Figure 3. Our chairman Markku Luoto at the Science Days panel discussion.

Our society was actively involved in the Science Days on 11-13 January 2023. On the opening day, our chairman represented us in a panel discussion on the implementation of open science in scientific societies held in Porthania's large lecture hall. Immediately afterwards, we held a joint press conference with representatives of the Department of Computer Science of the University of Helsinki on opening [inventoitu.fi](https://www.inventoitu.fi) and [sukellusilmoitus.fi](https://www.sukellusilmoitus.fi) services to the public.

At the Night of Science on 12 January, we held one of the most popular performances of the evening in the auditorium of the House of Sciences. In addition, we had an information point about our club's activities at the "parade ground" in the lobby of the House of Science and Letters. On 13 January, our chairman and vice-chair represented us at the reception of the Days of Science at the Natural History Museum. All in all, we reached hundreds of people and gained a lot of new followers on our social media accounts.

EDUCATION

International Nautical Archaeology Society (NAS) courses were held in 2023 in both spring (15.4.) and fall (9.12.). The NAS Intro courses had a total of nearly forty participants. Fieldwork portions of Part I&II courses were recorded during the fieldwork camp.

The content of the NAS-Intro course includes a two-hour training held by a representative of the Finnish Heritage Agency on the significance of legislation on underwater cultural heritage for divers and research in the field, as well as the role of the licensing authority in supervising it. Completion of the course is the minimum requirement for participation in the club's invasive fieldwork activities.

On 22-23 April, our society, together with the Finnish Divers' Association and the Sinks project, organised an international seminar on scientific diving in Suomenlinna. Representatives of various underwater research fields from several countries were present. We heard presentations about the dangers of removing ghost nets as well as the challenges of cooperation between professionals and volunteers in different countries.

Based on the discussions, we can be proud and satisfied with our excellent cooperation between our various stakeholders here in Finland.



Figures 4 and 5. In the upper picture, David Cleasby teaches documentation at a fieldwork camp. The lower picture shows participants in a scientific diving seminar in Suomenlinna.

PORKKALA WRECK PARK

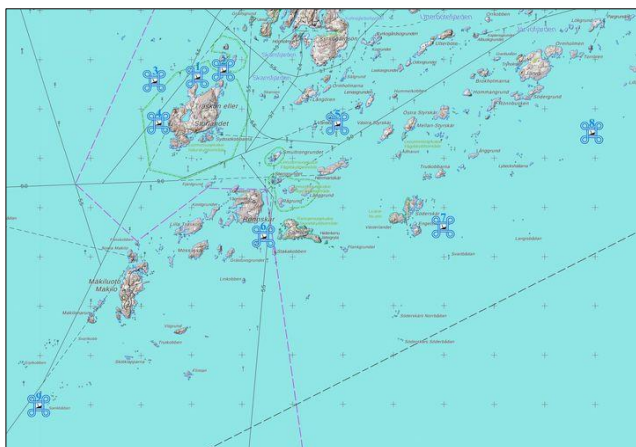


Figure 6. Porkkala Wreck Park sites on the map

In 2023, Porkkala Wreck Park focused mainly on maintaining existing sites during six different day trips. Approximately 10 m of new chain was attached to the oldest mooring buoys in Träskönlahti, installed in 2018, to their most worn parts, which had worn only a few millimetres thick at their thinnest in five years. The chains were originally made of 13 mm galvanized steel. In addition, broken guide ropes and flag buoys at various sites were repaired. Porkkala Wreck Park now covers 11 wrecks with various "park furniture" that are presented on the wreckpark.eu website.

ARCHIPELAGO SEA WRECK PARK

Based on the good experiences gained from the implementation of the Porkkala wreck park in 2018–2022, we have started replicating the same concept for wrecks in the Archipelago Sea, as they are our most endangered targets for international antique thieves, for example. For example, valuable antiques have been stolen from the famous Borstö 'treasure ship' between our expeditions and our unique common cultural heritage has been destroyed at the same time.

Like the Porkkala wreck park, the aim is not only to "park" wreck sites with guide ropes and boards for divers, but also to establish a home site and social media presence for the Archipelago Sea Wreck Park. Diverse image, video and 3D material of the wreck park sites will be produced there. They offer the general and international public the opportunity to literally imitative virtual diving experiences at our numerous world-famous wreck sites in the Archipelago Sea without the visitor having to learn to dive or travel to the site.

The Archipelago Sea Wreck Park protects the so-called wreck parks located in the area. protected wreck sites by increasing local knowledge and interest in the area's underwater cultural heritage and by providing locals with an anonymous, non-governmental channel to report suspicious activity. The project to establish the wreck park is multi-year and is mainly carried out by volunteers – with the support of our stakeholders, of course.



Figure 7. A 3D model of the wreck of Vrouw Maria, which enables virtual diving on the wreck with different devices. The aim is to have the model displayed in museums in

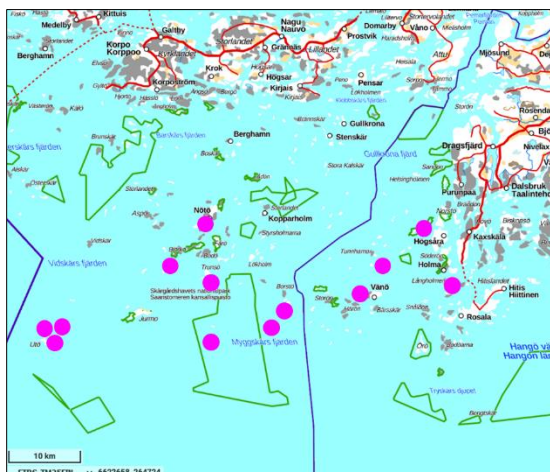


Figure 8. Sites studied during the 2023 expeditions and camp in the southern Archipelago Sea.

The Finnish Heritage Agency and the Otto A. Malmi Foundation have started to support the establishment of the Archipelago Sea Wreck Park. It is hoped that the grant they have granted would act as an enabling catalyst in the same way, as the funding granted to Porkkala Wreck Park in its early stages, which ultimately represented only a fraction of the funding raised by the park.

In 2023, two larger "business trips" were made to map park sites. First, a four-day expedition was carried out in May, during which the sites east of Börstö were studied. On another occasion, wrecks in the southwestern Archipelago Sea were surveyed extensively during a nine-day field work camp. Both events and their results are described in the following.

ARCHIPELAGO SEA EXPEDITION

As has already become a tradition, our society made an expedition to the Archipelago Sea on Ascension Day 18-21 May. In addition to our flagship DSV Stella, we relied on DSV Agonus from our member clubs Salon Simppujen and Trunsön Nuottamaja from Keep the Archipelago Tidy ry, because it made our operations much easier when we were able to have dinner and sauna in slightly more spacious spaces.

We spent most of our May expedition at the wreck of Börstö-1 (MVID#1648), when the weather was favourable, as major changes and extensive looting had been observed in the wreck the previous autumn. Under the leadership of the Finnish Heritage Agency's maritime archaeologists, visible artefacts were salvaged from the wreck, which have been looted year after year between our expeditions.

The wreck of Börstö plays a central role in Riikka Alvik's doctoral dissertation, so we will have more in-depth information about the discoveries and their significance once it is completed. However, the best part of the expedition was Riga's broad understanding of the typology of the objects raised and how extensively she was able to verbalise it to the enthusiasts involved.

Most of the salvaged items appear to have been personal utensils of the ship's crew and passengers. We are eagerly waiting to see if they will shed additional light on the identification of the vessel from various sources.

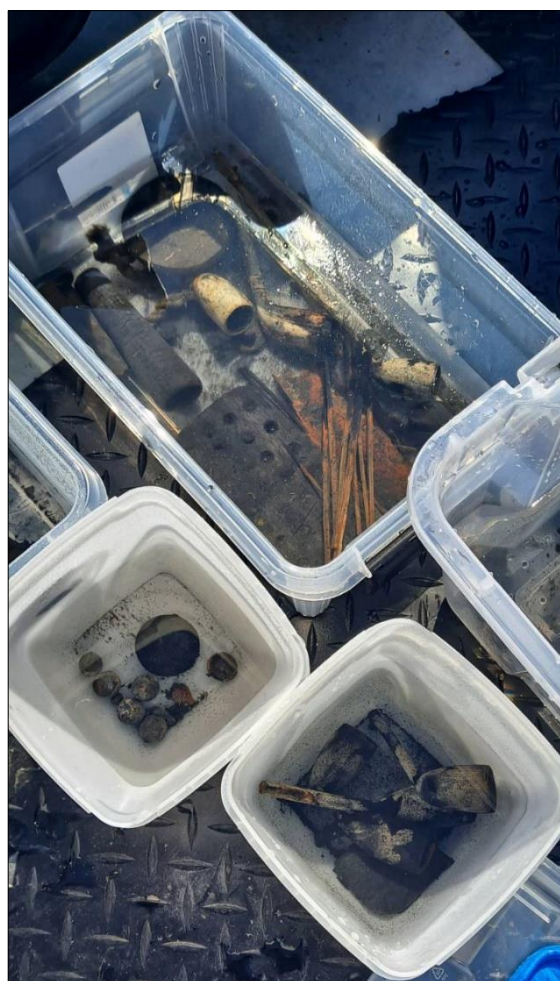
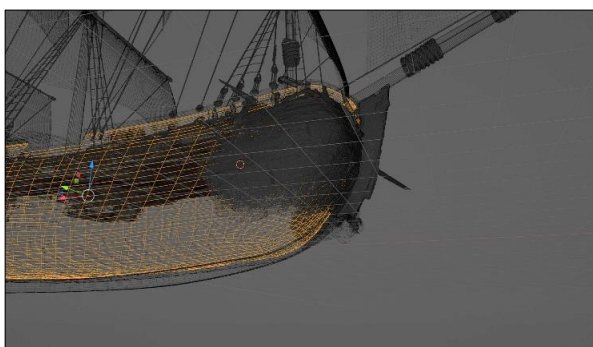


Figure 9. Items salvaged from Börstö-1 wreck such as musket balls, glasses, chalk pipes and a book.



Figures 10 and 11. The external modelling of the wreck (top image) is starting to be completed and will be utilised in the reconstruction at Ninma Oy (bottom

The long-discussed "researcher exchange" with NAS was also launched during an expedition in May, when Jon Parlour from England signed up. The volunteers' tasks continued where they left off the previous autumn, i.e. photogrammetric photography supporting 3D modelling continued, some assisted in lifting objects and documenting them, and some continued cleaning up the rope jungle that still surrounded the wreck.

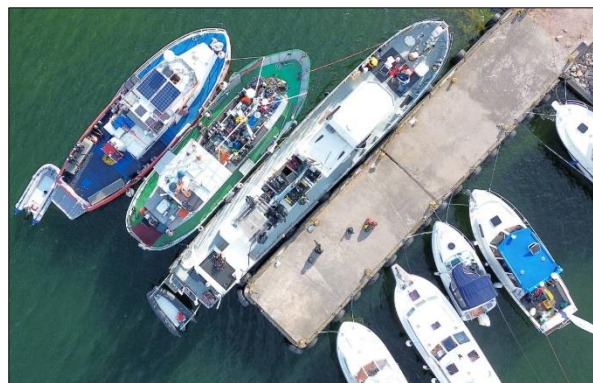
At the time of writing, the creation of a 3D model of the wreck is still ongoing, but according to an enlightened estimate, about 90% of the wreck was photographed. However, photogrammetric survey of the hold has not even begun yet. Even external modelling may be challenged by the numerous changes that have taken place in the wreck, which make it difficult to combine material collected in different years to create an overall picture.

A total of more than 20 volunteers participated in the expedition, contributing tens of thousands of euros worth of working time and equipment.

ARCHIPELAGO SEA FIELD WORK CAMP

One of the highlights of 2023 was our fieldwork camp, which has been held since 2018 without exception, at the turn of June and July 30.6.–9.7. The field work camp was held for the first time in the Archipelago Sea, with Trunsö again serving as the main base. In addition to our flagship DSV Stella, our research squadron consisted of DSV Maija from the Finnish Divers' Association, DSV Deko from H2O, DSV Vuoksi from Nousu ry and several private vessels of our companions that served as connecting and auxiliary boats. All in all, a great maritime archaeological fleet, although no new tonnage record was set this year.

We left for the camp from Kasnäs. The first site was the wreck of Hamnholmarna (MVID#1516), the wood material of which is tentatively radiocarbon dated to the 1200s. University of Helsinki doctoral student, marine archaeologist Yann Irissou studied the sedimentary layer covering the wreck by sonalim and estimated its thickness to be no more than 20-30 cm, which is good news for further research, such as excavate the wreck for modelling.



Figs. 12 and 13. Higher up and below, marine archaeologist Yann Irissou analysed the sediment layer of the wreck of Hamn-holmarna using sonda.

One of the goals of the camp was to produce sound data from diving for the control buoy installed by Luode Consulting on the wreck of Borstö-1, so we headed to Borstö next, except for H2O's Deko, which was still making its way from the Eastern Gulf of Finland. The second objective, led by marine archaeologist David Cleasby, was to salvage clearly visible objects from the wreck of Borstö-1 that could not be salvaged during the May expedition. In addition, old ropes around the wreck still had to be cleaned up and new guide cords had to be deepened next to the wreck.

As the weather was favorable at the beginning of the camp, we succeeded in most of the tasks, although photographing the masts turned out to be quite challenging. We were also able to save most of the visible objects. However, there is no cause for rejoicing, as there is another sailor's coffin on deck and a third in the hold, which unfortunately are just waiting for the wreck bandits.



Figure 14. Apparently a booklet with German text found in a travel chest in the cover cabin.



Figs. 15 and 16. Above are MAS volunteers in IKUWA shirts and below is the camp dinner. Now that research activities are starting to run smoothly, the social aspect needs to be developed in order to get new faces involved.

After a favorable start, the worst storm of the summer arose, lasting for several days – not to mention that in many places it messed up visibility for the rest of the camp. Thus, for example, Vrouw Maria (MVID#1658) achieved practically nothing when the shooting distance was around half a meter.

Due to the storm, Deko and his team stayed first in Hanko and then in Kasnäs in a safe haven for several days. Similarly, other larger support vessels spent a couple of days in the port of Trunsö due to rough seas.

On the shallower Vuoksi River, however, we weaved the shelters of islands and rocks every day to explore some secondary object, most of which produced some kind of model. Preliminary radiocarbon dating of these sites did not produce any surprises, but rather confirmed the stories and notes of local residents. Based on the results, it can probably be concluded that, at least in the Archipelago Sea, the accuracy of memory data dating back to the early 1800s or even the late 1700s is more the rule than the exception.

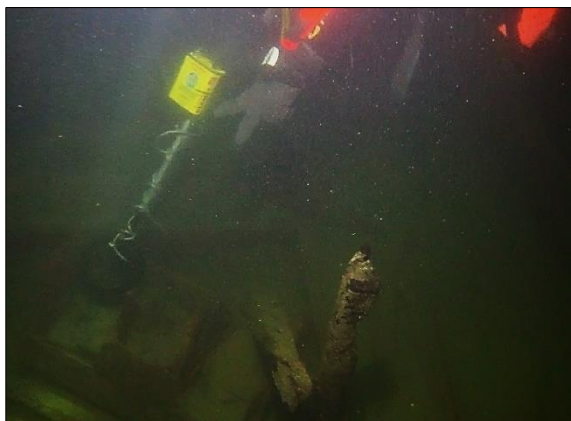


Figure 17. After rescuing the visible objects, Borstö-1 wreckage was mapped with a metal detector to identify looting risk targets. Two fingers mean a metal signal that is not iron, but not precious metal, but copper, for example.

As secondary objects, wrecks were mapped from Nötö (MVID#1660), Trunsö (MVID#1651), Björkö (MVID#1662 and MVID#1663), although neither can be found in the coordinates reported in Kyppi, and Utö (MVID#2267, MVID#1665 and MVID#1000037474), where the wreck MVID#1680, which is not found in the coordinates reported in Kyppi, was also searched.

The preliminary radiocarbon dating of the wood material of the studied wrecks dates back to the 1800s on all wrecks, regardless of the type of wood, except for the wreck of Trunsö, for which no dating sample was taken, because it can be dated fairly reliably to the early 1900s based on its structure.

All in all, more than 30 of our volunteer members participated in the summer fieldwork camp and they contributed hundreds of thousands of euros worth of time and equipment to our research and the establishment of the Archipelago Sea Wreck Park.

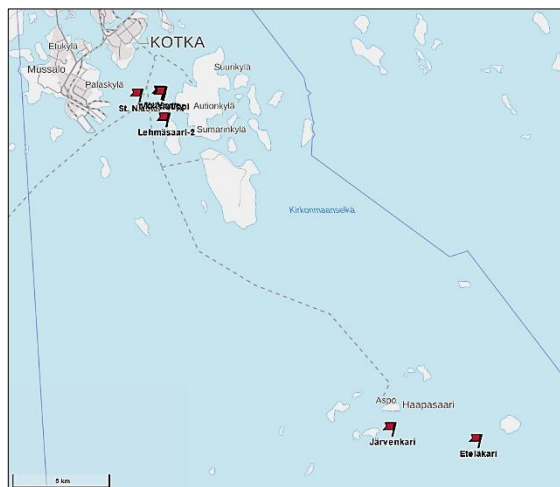
EASTERN GULF OF FINLAND EXPEDITION

This year's expedition in August 25-28 took place in the eastern Gulf of Finland, to the wrecks of the Haapasaari Islands and Ruotsinsalmi in Kotka. The trip was made with the support of DSV Stella and Maija. In addition, our member Faster was an auxiliary boat. In addition to our members, there were a couple of NAS reinforcements again: Alistair Cott from England and Giulia Grimaldi from Italy. Both also fared well in the poor visibility of St. Nicholas and said that it was not much different from the conditions of the wrecks studied in the English estuaries.

The aim of the trip was to study and model wrecks that had previously only been superficially observed, as well as to make check dives to St. Nikolai and other wrecks from the battles of Ruotsinsalmi to see if there were any details or artefacts that needed more detailed modelling.

When the weather was favorable, we decided to start with the outermost wreck, i.e. the Eteläkari wreck (MVID#1000022856), which is deeper than the preliminary information indicated, i.e. the wreck reaches up to a depth of 42 m.

Figures 18 and 19. On the map, the destinations of the August expedition in Haapasaari and Ruotsinsalmi. In the bottom photo, objects raised on the wreck of Eteläkari, i.e. "waiting to be stolen".



A carving sample was taken from the wreck of Eteläkari, which revealed the wood as oak and preliminarily dated the wood material of the wreck most likely to the 1700s. The wreck is full of soft bulk cargo, of which we did not get a sample this time. A 3D model of the wreck was only made of a part of the port side, which is still standing.

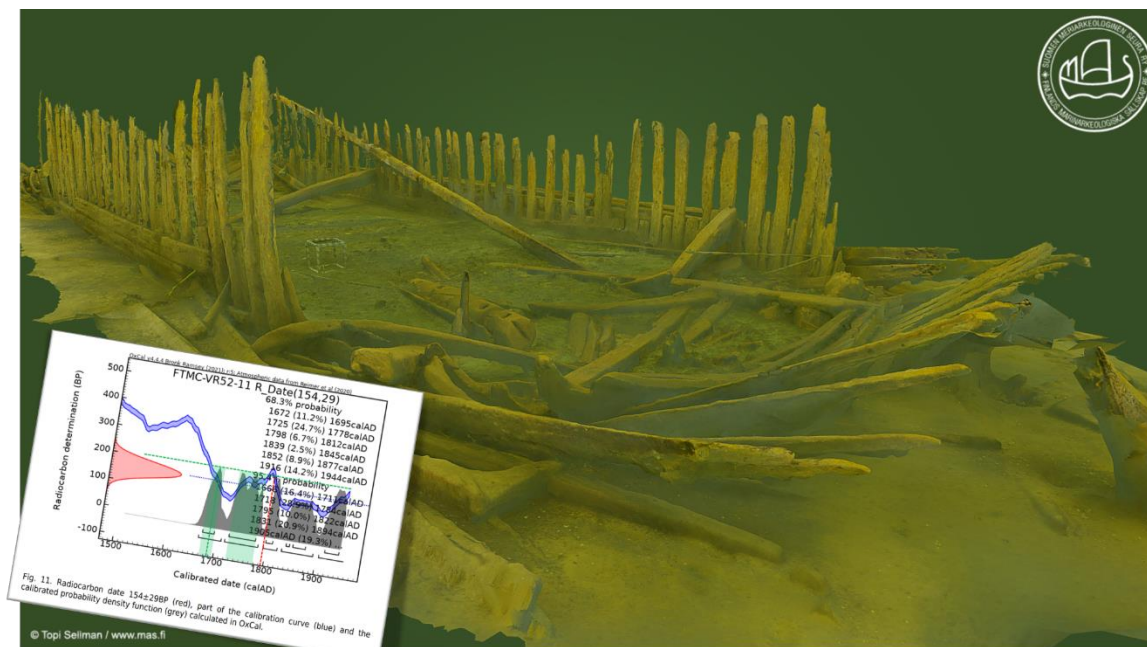


Figure 20. 3D model of the wreck of Järvenkari and Oxcal-calibrated preliminary radiocarbon dating.

As the wind picked up, we moved to the Järvenkari wreck (MVID#1131), where we were able to make a good 3D model and take a preliminary radiocarbon dating of the carving sample, which also most likely goes to the 1700s. The wreck of Järvenkari is interesting in terms of its structure, as a similar ship built of thin plank-like arches has not been encountered before. The initial "radiocarbon footprint" of the wreck is very similar to that of the wrecks on Lehmäsaari, so it may be that the ship was part of the Russian fleet that participated in the naval battles in Ruotsinsalmi.

The wreck homepage: <https://www.mas.fi/fi/julkaisut/hylkykohteet-merialue/jarvenkari-haapasaaret-mvid1131>

A few tens of meters outside the wreckage, an oval metal object was located, which aviation enthusiasts have identified as a Soviet FAB100 aerial bomb from the Second World War. The bomb was reported to the Kymenlaakso police and asked to exercise caution when dismantling it for not damaging the wreck.

As the storm got worse and worse and the forecast became really gloomy, we decided to evacuate to the port of Kotka, where the Maritime Centre Vellamo kindly offered us berths. From there, we inspected the wreck of St. Nikolai (MVID#1108), where, despite the non-existent visibility, we could see that there are still coins and other loose items in the wreck such as buckles for shoes and belts, musket and cannon balls, bottles, etc. There is already a 3D model of the wreck commissioned by the Finnish Heritage Agency, so no attempt was made to model it.

Next, we focused on modelling and sampling the wrecks on the western side of Lehmäsaari (MVID#1121 and MVID#2442), from which we were able to make fairly good 3D models and take carving samples for radiocarbon dating. The MAS homepage of the wrecks are:

<https://www.mas.fi/fi/julkaisut/hylkykohteet-merialue/lehmasaaren-lansiranta-1>

<https://www.mas.fi/fi/julkaisut/hylkykohteet-merialue/lehmasaari-lansiranta-2>

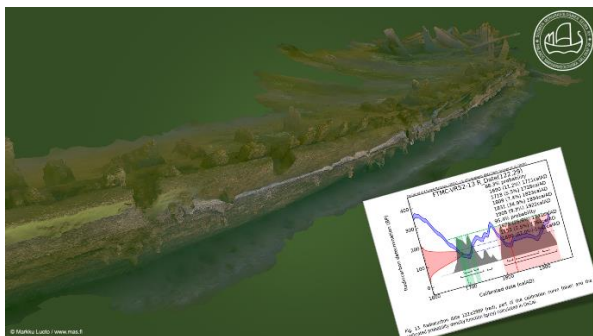


Figure 21. Lehmäsaari west shore 1 – image of a 3D model from the side of the port towards the stern and of the Oxcal calibration.

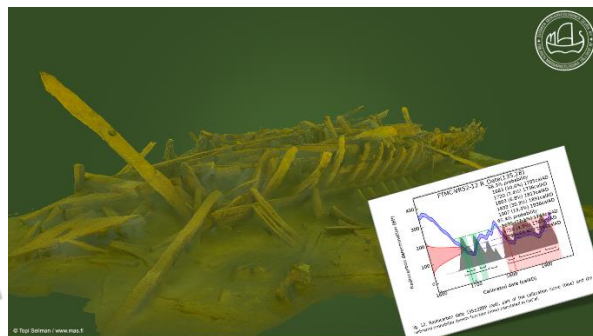


Figure 22. Lehmäsaari West Shore 2 – image of a 3D model from the side of the port towards the stern and Oxcal calibration.

The wrecks on the west side of Lehmäsaari have been catalogued separately, but they seem like the halves of a single wreck, i.e. The "one" appears to be the stern half of the ship and the "two" the bow side. The preliminary interpretation of our members who participated in the expedition is, that these are most likely the halves of a ship that was shipwrecked in the second naval battle of Ruotsinsalmi in 1790.

The structures have certain similarities, such as a flat-seam structure, and the building material (coniferous). Even the radiocarbon age difference in the dating samples taken from the shelves is only about 13 years. According to historical sources, these could be parts of the wreck of a Russian ship called "Tikhvin", completed in 1775, because the ship was 43 m long and these wrecks (MVID# 1121 and 2442) refer to a ship of the same size in total length.

On the last day of the expedition, we made inspection dives to the sites on the north side of Lehmäsaari: Cannon Sloop (MVID#1116), Dinghy Wreck (MVID#1114) and St. Maria (MVID#1109), the first two of which have already been modeled by the Finnish Heritage Agency. The remains of St. Mary are spread over such a wide area that modelling it by means of photogrammetry would require a study of its own. The cannon on the gliding platform of the dinghy wreck was modelled separately because of its uniqueness.



Figure 23. Dinghy wreck can-

BALTIC SEA 3D WRECKSITE ONTOLOGY

The Maritime Archaeological Society has chosen the formation of a 3D ontology of the wrecks of the Baltic Sea as the society's own research strategy. In this context, ontology refers to its information science semantics and significance for researchers in the field, for whom it enables them to define an enlightened field of research, classify observations and, at best, identify the general principles behind them. By the 3D ontology of wrecks, we mean the photogrammetric imaging of underwater cultural heritage sites and the creation of a virtual 3D model of the site based on it, as well as the taking of a preliminary, scientific dating sample. Our research activities can rightly be called basic research in the field, which provides preliminary answers to the questions of what, where and when.

At the time of writing, the Finnish Heritage Agency's Ancient Relics Register contains 2389 underwater cultural heritage sites, of which 1816 are shipwrecks. Unfortunately, the Ancient Relics Register The

target data is so incomplete or even contains false information that it cannot be used to form an enlightened understanding of the feasibility of many research topics – let alone content analyses. Our research strategy also aims to remedy this problem through active exchange of information with the Finnish Heritage Agency.

Naturally, we have started with sites in the Gulf of Finland and the Archipelago Sea, which are located in Finland's territorial waters, but in accordance with the principles of open science, we share the results of our work internationally and try to inspire our sister societies in different parts of the Baltic Sea to join us. For the sake of the accessibility of the research results, we have started to set up a separate homepage for each wreck site investigated by MAS, where a summary of all observations and data types related to the site will be collected, as well as links to scientific source materials in the MAS portal and the Ancient Relics Register.

During 2023, our club's volunteer divers collected material to complement the 3D ontology of the wrecks from 23 different wreck sites, eight of which are still in the process of AMS radiocarbon dating and four of which are still in 3D modeling. The most significant result of our research strategy so far is probably the identification of the Hamnholmarna wreck (MVID#1516) as being from the Middle Ages and thus one of the oldest wreck finds in Finland. All in all, our companions have already made 3D models of more than 150 wrecks in the Gulf of Finland and the Archipelago Sea.

WRECK MODELING SERVICE

To support the implementation of its research strategy and based on the encouraging results of previous years, the Society's Board decided to continue the Society's remote IT services. The modeling server, which was acquired in 2021, was upgraded to a 32-core power processor last year. With this and two powerful 3D graphics cards, the server can handle even the most demanding modeling tasks in a tolerable amount of time.

For the time being, only the Agisoft Metashape software is used in the modeling, for which our club as an academic institution has received a much cheaper Academic license.

The club's modeling server is available to all companions, and it has already been used by about twenty companions. All the most demanding processing of materials, i.e. materials containing tens of thousands of images, such as Borstöl and working on Vrouw Maria's models, has been done in cooperation with the MAS 3D server.

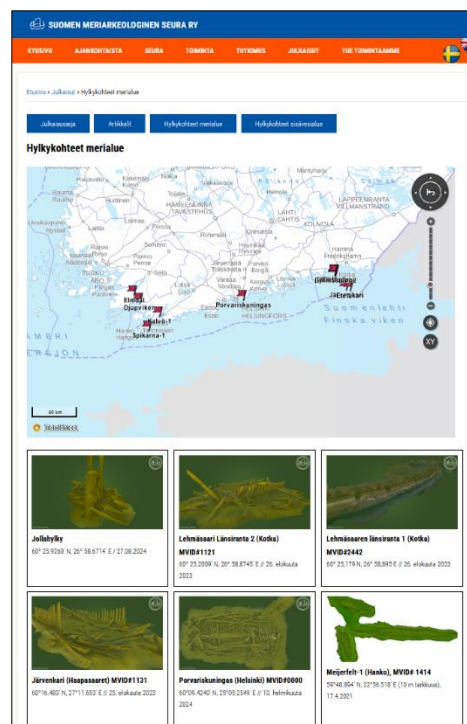


Figure 24. The index page of the wrecks' homepage www.mas.fi site.



Figure 25. Companions have access to a powerful modelling computer remotely from almost any device.

OPEN SCIENCE, DATA AND PUBLIC DATA REPOSITORIES

MAS team is committed to complying with the "open science policy" (avointiede.fi) defined by the Ministry of Culture and Education, the Academy of Finland and the Federation of Finnish Learned Societies, which means that all data collection, processing and production related to the Society's activities are open to everyone and that both source materials and results are openly available. Internationally, this policy is known as "Creative Commons".

In practice, this means that AV, side-view echo, geo-spatial data and other material taken in the club's operations must be delivered to the club's open data repository with shared copyrights. To share information, we have set up [a MAS portal](https://mas.mikrojebe.fi) where club members and partners can download materials and where everyone can freely download materials for non-commercial use. The source materials of all 3D modelled wrecks are available in the portal.

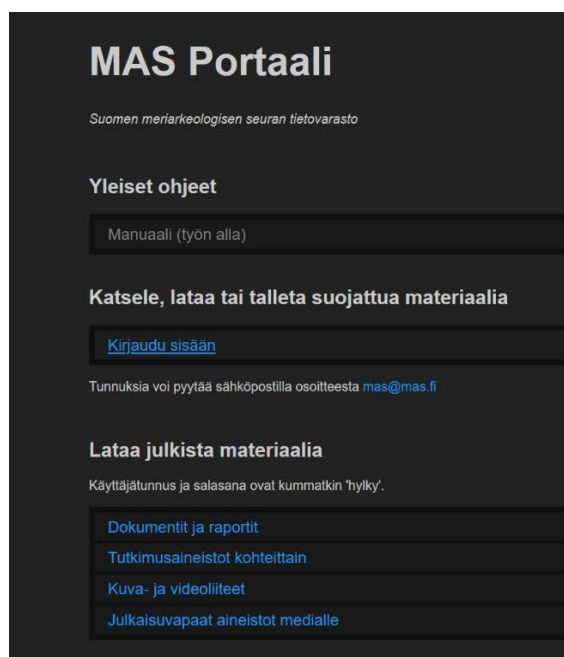


Figure 26. MAS-portal (<https://mas.mikrojebe.fi>)

For the general public, our modelling activities can be seen, for example, through Sketchfab (<https://sketchfab.com/mas-fi/models>), where they can virtually dive into wrecks by following the annotations made on the models, i.e. virtual signs. Models uploaded to Sketchfab can also be freely 3D printed or included on your own pages. The goal is to supplement the wreck site articles on the society's website (mas.fi) so that each modeled wreck would have a home page to which all research information related to the wreck would be linked.

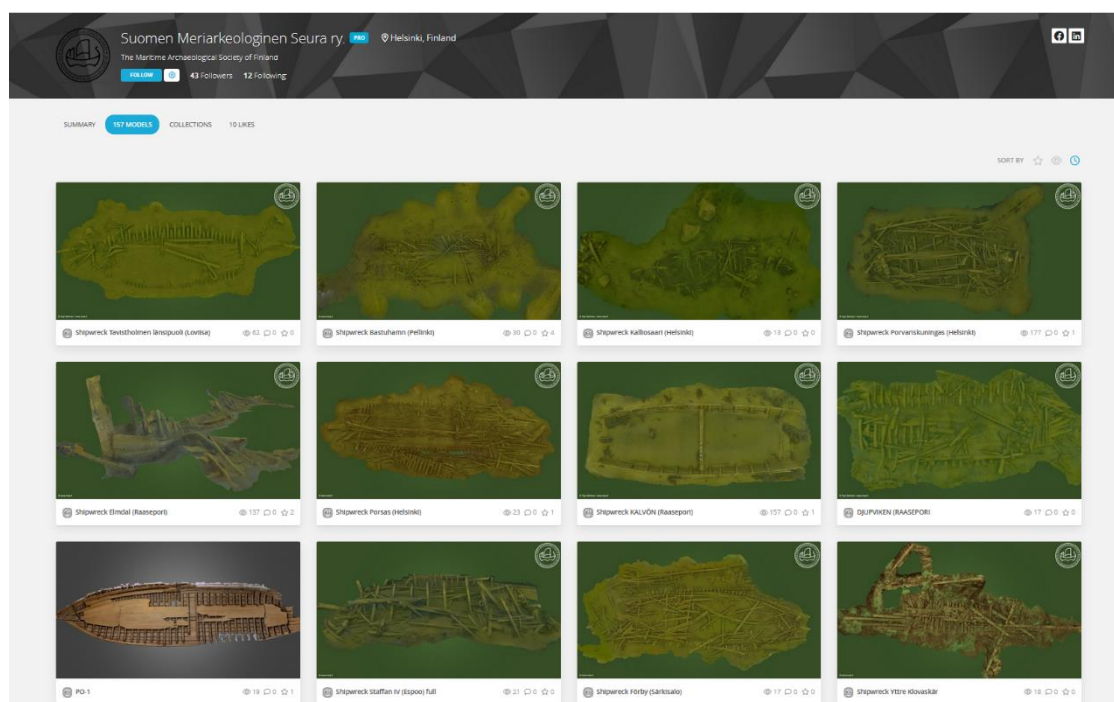


Figure 27. Picture of our club's Sketchfab page, where you can already find more than 150 3D models

UNIVERSITY COOPERATION

As the University of Helsinki has invested in remote learning in recent years, the chair of our society has held annual online lectures in English on the role of volunteering in maritime archaeology as part of the lecture series of the Chair of Maritime Archaeology at the University of Helsinki. In addition, many archaeology students from different universities participated in the "NAS-intro" basic courses in maritime archaeology organized by our society.

The expedition and fieldwork camp were also attended by archaeology students from the University of Helsinki, who participated in a wide range of different tasks during the camp. The goal is that the research results of the Archipelago Sea Wreck Park would also end up as part of the theses already at the undergraduate level.

For years, our society has also had close cooperation with the University of Helsinki Computer Science dept. We have supervised several working groups of the Software Engineering (OhTu) course as "product owner", i.e. as a customer of a programming group consisting of about 6-8 students. Last year's OhTu project produced a sukellusilmoitus.fi service for us, which can be used to crowdsource the monitoring of the condition of known wrecks for diving enthusiasts. In 2023, we also launched the inventoitu.fi service, which was also a student project, which can be used to coordinate the search for new wrecks by reporting areas that have already been found to be unfound. Both services can also be used on our club's website mas.fi/tutkimus.



Figure 28. Sami Brchisky, a student of archaeology, leads the activities of the club's volunteer divers with a surface phone and a UWIS device that shows how divers are progressing around the site.

CO-OPERATION WITH THE FINNISH HERITAGE AGENCY

MAS worked closely with the Finnish Heritage Agency also in 2023. We updated the exact locations of numerous wrecks and verified false observations to be removed from the ancient relics register. During the expedition to the Archipelago Sea, we carried out several tasks proposed by the Finnish Heritage Agency, such as taking dating samples and retrieving artefacts under the guidance of a designated supervisor.

Maritime Archaeology Unit of the Finnish Heritage Authority joining our expedition to the Archipelago Sea was an excellent example of cooperation between the third sector and the authorities. Based on the feedback received from members, it is "the best" and most effective stakeholder cooperation that the Finnish Heritage Agency's maritime archaeologists do. Here volunteers meet professionals at work and, through their experiences, learn to cooperate with professionals and benefit from their good knowledge of the context.



Figure 29. Maritime archaeologist Riikka Alvik interprets the finds for volunteer divers.

CLUB NIGHTS AND OTHER SOCIAL ACTIVITIES

Club evenings continued to be held as hybrid events at the request of the members. Only a few actual club nights were held in the spring and autumn seasons. In addition, we held several planning meetings for the expeditions and the fieldwork camp that were open to everyone. We participated in the Finnish Heritage Agency's excavation season presentations and the Maritime Archaeology Days. In connection with the autumn meeting, we also held an overview of the results of the fieldwork, not forgetting the Christmas parties, which have already become a tradition. In other words, the social program organized by the club has been available at least once a month - at least remotely.

SOCIETAL IMPACT

With UNSECO's accreditation, our society also has social tasks in promoting the protection of underwater cultural heritage and scientific openness and freedom. Through our research strategy, we have become embarrassingly aware of the poor archiving possibilities and subsequent accessibility of digital source material in the humanities. Similarly, in our opinion, the reform project of the Antiquities Act has taken off in completely the wrong direction during the previous government. Last but by no means least, promoting the ratification of the UNESCO Convention for the Protection of the Underwater Cultural Heritage in Finland and the other Nordic countries. In order to draw attention to these themes, our Chairs and Vice-Chairs met with Minister of Science Sari Multala, who promised to promote the issues we have raised.



Ministry Sari Multala

STATEMENTS

The board of our society renewed a statement for the working group preparing the reform of the Antiquities Act, which emphasised that the criminality of the antiquities offence should be raised to the level of protection of protected animal species so that each offence would have a minimum punishment that would exceed the threshold for investigation by the police as they prioritise their resources. In addition, we participated in all the press conferences held on the law and strongly criticised the change in the drafting of the law in 2023 to reflect the bureaucracy of the Finnish Heritage Agency rather than the actual needs of the sector. According to several legal experts, the old law also offers better protection for underwater relics than the now proposed law.

OUR STAKEHOLDER DEVELOPMENT PROJECTS

The Maritime Archaeological Society has been actively involved in the development of the archaeological operating environment in the Archaeology 2.0 project led by the Finnish Heritage Agency, as well as in the environmental authorities' inventory programme for the diversity of underwater marine nature, and in the maritime spatial planning working group led by the Government. Our goal is to make the utilisation of underwater cultural heritage part of the various maritime or "blue" strategies of public administration, and at least in terms of maritime spatial planning, we have succeeded in this.



Figure 30. Areas of influence of maritime spatial

DISSEMINATION AND REPRESENTATION & INFORMATION ACTIVITIES

Särkisalon hylky paljon luultua vanhempi



MAS was active in raising awareness of the discipline of maritime archaeology and our own activities. During the year, we held several presentations open to everyone about our activities in recent years.

At the Science Days and Night on 11-15 January, we participated in a panel discussion in Porthania and held a lecture and a stand at the House of Science and Letters. We reached a total of hundreds of people in person and online.

At the Finnish Heritage Agency's virtual excavation days on 3-4 February, we gave a presentation on the results of the previous year's fieldwork period, and we got more than 80 listeners online. In addition, more than 100 people had come to see the recording of our performance.

At the Maritime Archaeology Seminar at the Boat Show on 11 February, we gave a presentation and participated in discussions, reaching a total of almost a hundred people on site and online.

Newspaper articles about our activities were published during the year in both the University and local newspapers. However, most audience came through **Facebook**.

At our annual meeting on 27 March, which was held as a hybrid event, we also created a review of our activities for the previous year and the coming season. We reached several dozen of our members with the event and its recording.

At the annual meetings of the member clubs, we held presentations in Turku, Tampere, Kirkkonummi and Salo, reaching hundreds of divers and at the same time gathering numerous new personal and community members.

Our club nights, which were held four times during the year, typically had a total of half a hundred participants on-site and online.

On the media and visit day of the field work camp on 7 July, we presented our activities to the public and journalists.

At the Archaeology of the Sea seminar on 30 September, we gave a presentation and gave out recognition awards.

At the ESG & SCM Summit Cruise on October 5th, we gave a presentation and offered participants the opportunity to "dive" into the wreck with 3D virtual glasses.

In connection with our autumn meeting on 31 October, we gave an hour-long presentation on our results of the past season and reached dozens of our members in person and online.

Member letters, i.e. more extensive overviews of our activities, were sent three times during the year, and six shorter member newsletters about future activities or events in the field. Hundreds of posts were published on Facebook about industry news and events, which reached thousands of followers. In the use of active members, Signal established its position so that about half of all members of the club are now also in our Signal group.

OTHER ACTIVITIES

A significant part of our club's stakeholder activities is hardly visible outside the club's board. During 2023, our society's representatives maintained relationships with many different parties, both in the public and private sectors, e.g. Meriturva, the Finnish Heritage Agency, the Finnish Transport Infrastructure Agency, the Navy and the Navy and Guard, Metsähallitus, universities, and international actors in the field, such as NAS and the IKUWA7 steering group – not forgetting other scientific societies or the Forum Marinum in Turku and the Kotka Maritime Centre Vellamo. Our club's activities are therefore well networked.

EQUIPMENT

During 2023, the club mainly acquired various supplies for taking dating samples, both in connection with the fieldwork camp and expeditions. The most significant equipment purchase was the purchase of a new pneumatic chainsaw for sampling slices.

MARITIME ARCHAEOLOGICAL INSTITUTE

MAS board has promoted the establishment of the Institute of Maritime Archaeology. The rules of the club have been changed as required and the auxiliary business name has been registered in both the association and trade registers. The board of the society has appointed an executive director for the institute and created a preliminary roadmap for the establishment of a wreck aquarium presenting the institute's activities and results, as well as a marine archaeological research unit. The first goal is to have an immersive 3D exhibition at Forum Marinum so that the results of our work can be shown. We are currently in negotiations to put together a project consortium.

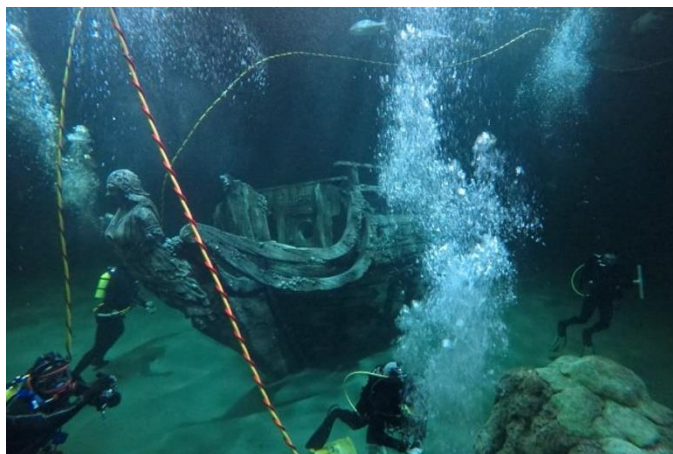


Figure 31. The vision of establishing a wreck aquarium in Finland by the end of the decade may

AWARDS

The publication of the history of Finnish maritime archaeology at the "Archaeology of the Sea" seminar at the Kotka Maritime Centre Vellamo on 30 September offered our society the opportunity to reward the people who supported our society's activities. The society's standard and certificates of honour were handed over to **Maija Matikka** for her long-term cooperation in updating the wreck data – not to mention issuing research permits and recommendations. The Society's silver badges of merit with certificates of honour were presented to **Riikka Alvik** and **Minna Koivikko** for their cooperation and inspiring sharing of contextual information among our companions. **Päivi Pihlanjärvi**, **Ulla Klemelä** and **Irma Lounatvuori** were presented with the society's pin with certificates of honour for collecting and recording the history of maritime archaeology. In addition, **Jesse Jokinen** was presented with the club's pin with a certificate of honor for supporting our activities and tolerating diving chaos. The Finnish Heritage Agency also awarded our club's active volunteers with the Maritime Museum's Golden Anchor. At the annual meeting, our chairman **Markku Luoto** was awarded the golden badge of merit of the Maritime Archaeological Society.

BOARD AND SOCIETY MEETINGS

During 2023, the Board of Directors convened a total of 10 times, in addition to which matters were discussed on the Board's own Signal channel and in emails. The facilities for meetings were provided free of charge by the House of Science and Letters or Pedab Finland Oy. Almost all meetings could also be attended remotely, and often remote participation was more abundant than arriving in person.

In 2023, the Board of Directors has consisted of the following persons: Markku Luoto (Chairman), Vesa Saarinen (Vice Chairman), Juha Hakala (Treasurer), Hannu Rokka (Secretary General), Kalle Virtanen, Kaj Enholm, Ari Pajunen, Emma Barrow, Kati Laasonen, Sami Brchisky, Ekku Pinola, Sanna Siltanen and deputy members Mikko Nieminen and Rupert Simon. The performance auditors are Seppo Roiva-inen and Sanna Paukku. The deputy performance auditors have been Ekku Pinola and Juha Lauro.

The annual meeting was held on 27.3.2023, where the club's annual report and financial statements were approved, and the club's board of directors for 2022 was discharged from liability. On 31.10.2023, the club's autumn meeting was held, where the club's chairman and board for 2024 were elected and the preliminary action plan for 2024 was presented.

REALIZATION OF SUSTAINABLE DEVELOPMENT

Our society is committed to following the principles of responsibility, openness, and scientific ethics in all its operations. According to our rules, we are an association open to everyone and our members, i.e. the volunteers participating in the activities, represent a wide range of cultural, religious and gender diversity. Almost all of the expeditions and fieldwork camps have involved foreigners or volunteers with a foreign background, all the way from Somalia to Canada.



Figure 32. Our club's volunteer diver documents aquatic biotopes on the wreck of Utö's Vrakgrundet.

MAS board is democratically elected in its entirety every year. The club's board meets regularly about every other month, and the members have the opportunity to raise matters for the board based on the club's rules. Our society is committed to the principles of the Federation of Finnish Learned Societies related to equality, safety and ethics in science and research. Personal financial situation should also not affect the opportunities to participate in activities, so members can ask the club's board for an exemption from the participation fees.

When we move around in nature, we take care of the appropriate treatment of waste and wastewater and delivery to waste stations, i.e. we do not burden the waste management of the archipelago at all. In general, we only leave air bubbles in the sea and only take photos of it.

Our operations do not disturb marine flora or fauna, as we only land in natural ports in case of emergency, otherwise we float far away from islands, islets or shallows – especially if there is life on them.

Our diving support vessels are vessels that move slowly at hull speed, so they do not harm seals, for example. Sound pollution from ships, both on and under the surface, is low. On all our dives, we remove plastic and other debris that has sunk from the bottom, as well as old, disused research equipment. In addition, we participate in beach clean-up operations and report sightings of rare or endangered aquatic biotopes. Our club is involved in the underwater marine biodiversity inventory programme VELMU, led by the environmental administration.

We aim to reduce the carbon footprint by connecting the research vessels to shore power and turning off the internal combustion engines whenever possible. We avoid all disposability in our operations, invest in durability and quality, and recycle many objects for reuse in the structures of wreck parks or in research equipment. In terms of mobility, we coordinate carpooling and maritime transport of heavy equipment. Food supply is usually handled centrally from primary production ingredients instead of convenience foods, which contributes to reducing waste and the carbon footprint of food processing. Our chefs take into account plant-based and special diets.

SUPPORT AND SUPPORTERS

During the past year, MAS has applied for and received a money collection permit from the police and a so-called "money collection permit" from the Tax Administration, based on which companies and other communities can use the donation deduction in their taxation when it comes to an amount of €850 – €50,000 to support our club's activities.

The following parties have supported the club's activities or goals:



Given to the annual meeting of the Finnish Maritime Archaeological Society on 27.3.2024 as approved by the MAS board.
On behalf of the MAS board,

Markku Luoto, Chairman of the Board

