

Press Release: Exceptional fieldwork season at the Antikythera shipwreck

The 2024 expedition at the Antikythera shipwreck took place between May 17 and June 20, as part of the 2021-2025 research program carried out by the Swiss School of Archaeology in Greece and supervised by the Ephorate of Underwater Antiquities of the Hellenic Ministry of Culture and Sports. Exceptionally good weather conditions allowed the team to make significant advance in the field work. The excavations produced numerous finds, and most importantly the discovery of a significant part of the ship's hull.

For the first time since its discovery by sponge divers in 1900, the systematic scientific approach carried out by the international research group led by Dr. Angeliki G. Simosi (Honorary Director of Antiquities) and Professor of Archaeology Lorenz Baumer (University of Geneva), is aiming at a better understanding of the famous shipwreck site and shedding new light on one of the richest ship cargoes of Antiquity. The research is at the same time opening new questions: was there only one ship involved in this ancient naval tragedy? How did the wreckage exactly happen? Did the human remains recovered over the last few years belong to passengers or to crew members?

To answer these questions, multiple techniques were planned and deployed:

Planning and feedback were assisted by the database and Geographical Informations System (GIS) put in place during the previous seasons. Remotely Operated Vehicles deployed by the Hublot Xplorations team and the Special Diving Unit of the Hellenic Coast Guard were used to monitor and coordinate all underwater operations in real time, and to build digital 3D models of selected areas; 3D models of the recovered objects were also created thanks to a special scanner developed by Hublot R&D for the research project.

A dedicated manned survey methodology has been applied across the whole licensed research area in order to identify and **document pottery remains of utilitarian and cargo vessels visible on the whole area**, which extends over two distinct locations of concentrated finds being 200m apart (Areas "A" and "B"). Selected representative samples were also recovered for further study. The use of newly acquired, electronically controlled mixed gas Closed Circuit Rebreather units have significantly contributed to the efficiency and safety of the applicable diving procedures.

A novel, limited intervention-high quality archaeological excavation technique has been used to extract the maximum possible information from selected 2x2m large areas of the shipwreck site. All extracted sediments were collected and preliminary studied in a dedicated micro-geoarchaeological on-site laboratory, also allowing for precise stratigraphical observations to be made, highlighting the site's complexity and the diverse formation processes between Areas A and B. Additionally, phytolith analysis and the identification of various resins and caulking materials have provided crucial insights into the ship and its cargo, while detailed pottery analysis has contributed to the discussion. Lastly, previous season's identification of archaeological materials such as bone and lead has aided in documenting and guiding the excavation practices.

Rich results

The continuing and newly opened excavation trenches in both areas A and B yielded a wealth of archaeological material: around 300 objects or groups of objects, including 21 fragments of marble (18 of marble statues), numerous fragments and other structural elements of the ship's hull and over 200 ceramic shards. Several geo-archaeological samples have been also extracted.

The newly discovered part of the ship's hull

The most significant 2024 find is a structural part of the ship's hull which combines important building characteristics that have remained so-far elusive. A small group of the ship's keel, including planks and frames in their original position and still attached to one another, indicate the "shell first" building methodology, with their original fasteners and external protective coating still surviving in excellent condition. Thanks to this find, the precise location and orientation of the shipwreck is now also known. Through the ongoing comparative study of data, the question of whether multiple ships foundered during the same event at Antikythera is raised. Further analyses on the newly available shipbuilding characteristics and extensive laboratory tests on the recovered wood samples should shed additional light on the wood species selected for building various parts of the ship, its age and eventually its origin.

A second wreckage site

A second area of interest (Area B) is also being investigated, due to the presence of a concentration of pottery of great similarity to that recovered over the years from the main shipwreck site (Area A). This season's excavation efforts have provided enough evidence to confirm the presence of the remains of a wooden ship resting below the shattered cargo, which have been documented and recovered for further analysis in an attempt to further understand its relationship to Area A. The seabed has been digitally documented with modern methods, expanding and enriching the previously available 3D models.

Marbles and ceramics

The few marble fragments found are symptomatic above all for their concentration in the excavation at the top of Area A (apart from a finger found at the bottom): two fragments of skull caps of the same type as some previous findings, several fingers from at least two hands, two toes, one hand and fragments of drapery. The varying quality of these fragments and their anatomical relevance mean that they are not fragments of a single statue.

As far as the ceramic finds are concerned, in addition to the fragments removed from the layers during the stratigraphic excavation, the focus was set on the typology of the amphorae, a typology already well established by previous excavations, including a list of the five different types attested so far (Koan, Rhodian, half amphorae Koan, Ephesian /Nikandros Group and Lamboglia 2).

The finds from the 2024 campaign confirm the abundance of Koan amphorae on the site, followed by Rhodian and Ephesian amphorae. Lamboglia 2 amphorae, on the other hand, turned

out to be much more numerous than assumed, and are furthermore of three different types. While the known types are spread over both Areas A and B, the survey of Area B revealed the presence of types not attested in Area A: amphorae from Chios and a Rhodian amphora with twisted handles.

The on-site laboratory was able to supplement the visual and microscopic analysis of the ceramic bodies of the amphorae sampled with an analysis of their components. It also revealed that the black deposits present in certain Eastern Greek amphorae were mastic, used in vases to make them less porous before pouring in the wine being transported.

Other ceramic forms discovered this year include a lagynos and two-handled bowls, already attested by earlier excavations, as well as hitherto unattested forms, such as a squat jug found in Zone B.

Partners and sponsors

The research project “Return to Antikythera” is under the patronage of H.E. the President of the Hellenic Republic, Mrs. Katerina Sakellaropoulou.

The main sponsors of the research program are the Swiss watchmaker Hublot (Official Diving Watch, scientific and technical support), the Aikaterini Laskaridis Foundation (in-kind and technical support, academic partner in Greece), and the Nereus Research Foundation. technical support, academic partner in Greece), and the Nereus Research Foundation. The telecommunication services are provided by COSMOTE, that covers the shipwreck excavation zone with 5G and the island with 5G and fiber-optics networks.

The research team would especially like to thank the mayor of Kythera and Antikythera Efstratios Charchalakis for his constant support, as well as the president of the local community Georgios Charchalakis and the few remaining inhabitants of the Antikythera islands for their warm hospitality.

The expedition team

Field activities were supervised by diving architect Aikaterini Tagonidou and Athena Patsourou on behalf of the Ephorate of Underwater Antiquities of the Hellenic Ministry of Culture and Sports.

Field research was led by Alexandros Sotiriou, Associate Researcher at the University of Geneva, with a team of diving archaeologists comprising Michelle Creisher (University of Haifa), Isaac Ogloblin (University of Haifa) and Orestes Manousos, and specialized divers Nicolas Giannoulakis, Stilianos Matsoukatidis, Harry Mitrou and Dimitris Stamoulis. The team was completed by the participation of six members of the Hellenic Coast Guard's underwater missions unit (special dives team, consisting of Dimitrios Chatziaslan, Achilleas Gkanelas, Athanasios Keitzis, Dimitrios Kiosis, Dimitrios Kremmydas and Georgios Lytrivis).

Documentation of the archaeological finds, creation of the 3D models and updating of the GIS were entrusted to Patrizia Birchler Emery (University of Geneva), Orestes Manousos and Timothy Pönitz (University of Geneva), while the field laboratory was organized by Isaac Ogloblin, with the

support of Yanis Bitsakis (University of Geneva and Nereus Research Foundation) and in collaboration with the University of Ioannina (Profs Ioannis Deligiannakis and Maria Louloudi). Geologist and chronologist Yannis Basiakos (National Center for Scientific Research “Demokritos”) joined the team in Antikythera to discuss scientific topics related to the shipwreck site.

Technical support (audiovisual documentation and underwater drones) was provided by Hublot Xplorations team members Mathias Buttet, Aloïs Aebischer and Guillaume Champain.

Last, but not least: the cook of the team, Nicole Rayias, had a crucial role in an island where food supplies chain is often erratic.

Links

Swiss School of Archaeology in Greece: <https://www.esag.swiss/>

Return to Antikythera Project: <https://antikythera.org.gr/>

Antikythera Projects Youtube channel: <https://www.youtube.com/user/antikythera2012>