Appendix III. The Nissia Shipwreck Project — Interim Report

The first excavation season at the Nissia Shipwreck took place between 1-15 September 2014. The excavation was conducted by the Maritime Archaeological Research Laboratory (MARELab) of the University of Cyprus (UCy), in collaboration with the Department of Antiquities (DoA) of Cyprus.

The site

The Nissia Shipwreck is located on the east coast of Cyprus in the Paralimni area. It is a post medieval ship, provisionally dated to the 18th–19th century AD. It lies on a sandy seabed at –28 metres below sea level, surrounded by poseidonia fields.

The main visible features of the site were two cannons, several exposed timbers, as well as scattered metal concretions and bricks. The maximum size of the oblong concentration, oriented to the northeast-southwest, is 24 x 11 m.

Visual inspection and mapping of the site

The initial objectives of the project were to determine the size of the wreck and to document the site in detail. To that end, an inspection was undertaken around the concentration, using a 1m long metal probe, which indicated that the site extends farther in all directions, under the poseidonia fields.

The site was documented using photogrammetry methods, under the direction of Dr. Demetrios Skarlatos (Department of Civil Engineering and Geomatics, Cyprus University of Technology, Limassol). This procedure proved to be a challenging task as there were no rocks in the area that could be used as reference points. Moreover, the existence of poseidonia fields around the concentration rendered the endeavor difficult. In order to overcome these obstacles, custom made fixed points, made of 1.5. m plastic tubes, were placed on the seabed. A high resolution photomosaic of the site was created and the trench was mapped and documented. The production of a 3D model of the site is currently in progress, which will also record how the excavation evolved.

Excavation of the site

During this first field season, the team opened two excavation trenches. The first one focused on the cannon that was standing in an upright position at the northeast side of the site, 5 m off

the shipwreck's main concentration. The aim was to lift the cannon so that further research could be conducted which could reveal its date and origin. The cannon, made of iron (as indicated by the XRF analysis conducted by Andreas Charalambous, NARNIA Project, UCy), is now being conserved at the Conservation Laboratory of underwater archaeological material of the Department of Antiquities **(Figures 1-2).**

The second trench was opened in the center of the east side of the main concentration, next to the two iron cannons lying on the seabed. As the aim was to investigate the state of the ship's preservation, this particular area was selected because of the presence of numerous timber pieces on the seabed (**Figure 3**). Excavation revealed a number of wood logs (firewood?) below the disordered surface timbers, as well as sets of logs with angular shaped ends. They were all lying on the ceiling planks of the hull, four of which were partly excvated. Four frame timbers were also revealed fitted on hull planks, which seemed well preserved but they were barely exposed (**Figure 4**).

In addition, several artefacts were lifted during the excavation. The finds include wooden rigging – elements (a deadeye), metal objects (pistol bullets and a number of still non-diagnostic metal concretions), pottery (an amphora, open glazed vessels and closed vessels, some with incised decoration), glass tableware, bricks and stones (ballast?).

Timbers

Selected timbers (both logs and hull timbers) were lifted and transferred to the Conservation Laboratory of Underwater Archaeological material of the DoA. Samples of particular timbers (both logs and hull timbers) were sent for dendrochronology and species analysis, a procedure that will shed light on the building as well as the date of the ship (**Figure 5**).

In situ preservation

On completion of the excavation, the trench was covered using fine sand (silica sand (SiO_2) with particle size less 320μm), Fioccotex 200gr/m2 non-woven polyester geotextile and sandbags for *in situ* preservation purposes (**Figure 6**). In addition, *in situ* experiments aiming to assess the burial environment, its effects on wood and the effectiveness of re-burial methodologies were carried out.

Public Archaeology

Parallel to the field work, the project involved community archaeology research and practices, aiming (a) to detect the biography of the shipwreck in the present and (b) to involve the local

community in the project and its interpretation. This side-project was part of Anna Demetriou's doctoral research.

(a) The biography of the shipwreck

In this regard, archival research was undertaken and personal interviews were conducted with divers and fishermen. Although local divers have been aware of the site since the 1980s, it was not until 1992 that the shipwreck was officially reported to the authorities. Since then, several attempts have been made to survey the site, with no followup: in 1994, a team from the Ephorate of Underwater Antiquities of Greece visited the site, while in 2004 a private company, in collaboration with DEGUWA, planned to begin survey and protection of the site, but the project never happened.

Gradually, as knowledge of the site became widespread among the diving community, the shipwreck was transformed into an uncontrolled recreation spot, which resulted in its destruction and looting. Reports refer to the existence of a variety of movable finds located on the site (Ottoman pipes, pistol, cannon balls), which were removed by divers, as well as to the uncontrolled excavation taking place on the site, attempting to lift one cannon. Valuable archaeological evidence has been totally destroyed due to systematic looting.

(b) Approaching the local community

Attempts were made to approach the diving and local community with the aim of increasing awareness regarding the significance of the site through interviews with divers who had visited the site. Although most of the divers were initially reluctant to talk, they gradually became more willing to hear what the archaeologists had to say, and were ready to discuss what they knew or had heard regarding the specific site (as well as others). A characteristic example of the positive outcome of this procedure was that an old diver gave back three lead pistol bullets he had taken from the site years ago.

Another objective of the project was to open the site to the public during the excavation. The intention was to present to the public the level of detailed work undertaken during an underwater archaeological excavation in order to understand and protect the site. In this regard, local divers had the opportunity to dive and work with the team. In addition, 'tours' on the boat and on site during the excavation were organised, enabling divers to have a hands-on experience of an underwater archaeological excavation.

Student training

The Nissia Shipwreck Project aimed to act as a platform for student training. To that end, students participated in the project and had the possibility to contribute actively in a shipwreck excavation and to have the unique experience of scientific work.

In particular, undergraduate and graduate students from the University of Cyprus were given the chance to participate in an underwater archaeological project and to take part in all its procedures, from the setting up of the site, excavation, first conservation treatments, and cataloguing of finds (**Figure 7**).

A PhD student from the Cyprus University of Technology was also involved in the project focusing on its documentation using photogrammetry mapping. In addition, two graduate students from abroad (Lebanon and Belgium) participated in the project and contributed to the various fields of the project with a special focus on the mapping and 3D documentation of the site and wood documentation.

Logistics

Participants

In total, 24 people participated in the project: (1) the basic team of the MARELab and the DoA, (2) students from UCy, (3) students from abroad – Lebanon and Belgium, (4) an archaeologist from USA, and (5) divers form part of the MARELab team as well as new volunteers from the area (**Figure 8**).

Figures

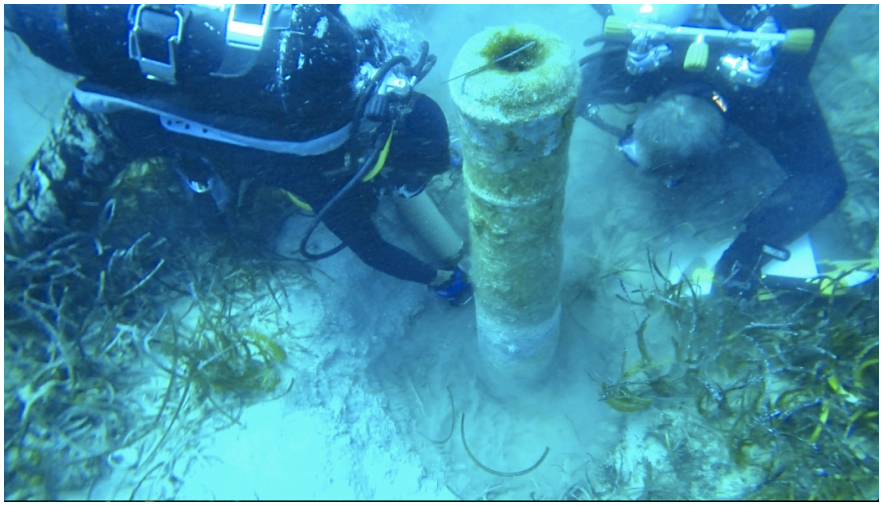

Figure 1: Excavating the cannon

Figure 2: Lifting the cannon

Figure 3: Excavation of the second trench, within the main concentration

Figure 4: Excavation of the second trench, in the concentration

Figure 5: Sampling wood for dendrochronology

Figure 6: The trench being covered with fine sand.

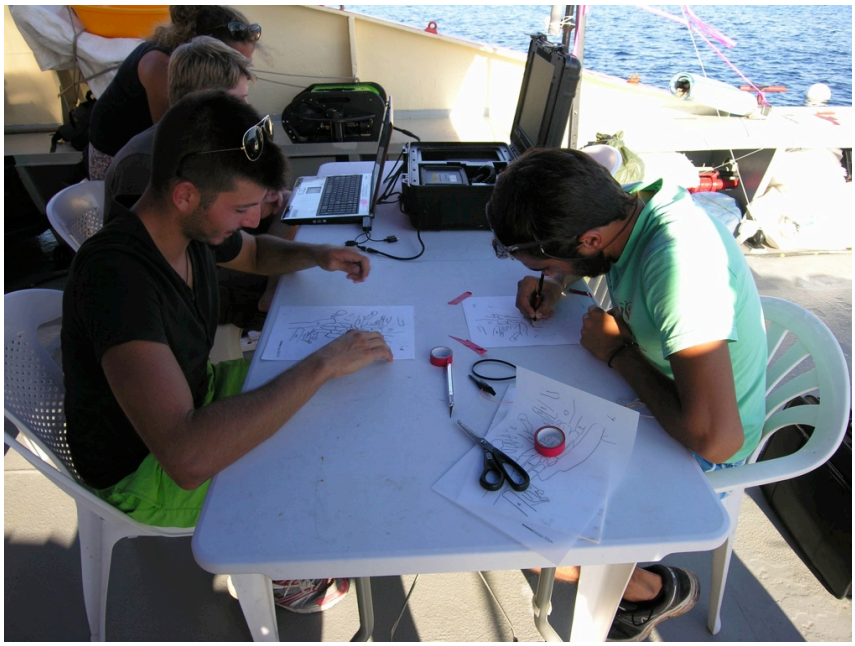

Figure 7: Students from the University of Cyprus preparing the site plan.

Figure 8: The Nissia Shipwreck Project 2014 team.