

Conservation activities of the Department of Antiquities, Cyprus

Progress report

Introduction

Since its establishment in 2008, the Conservation Laboratory for Underwater Finds of the Department of Antiquities, Cyprus (DoA) has been treating finds from underwater surveys and those of the two systematic underwater excavations (Mazotos and Nissia Shipwrecks) currently taking place on the island.

In recent years, and with the advancement of the excavations on both sites, a range of objects of many materials has been lifted and, consequently, requires conservation; ceramics, metals, wood (structural, cargo or objects), other organics such as olive pits, bone, horn, and many others.

In 2017, apart from the ongoing hands-on practical conservation of finds, there has been multifaceted activity at the laboratory with, inter alia, training of staff and the configuration of a new storage space, to which all conserved finds have now been moved. A number of activities were generously funded by the HFF through the three grants that are currently running. A description of the work carried out, including brief references to other work funded by the DoA through governmental resources, is outlined below.

1.0 Grant for the consultation on the treatment of metallic artefacts including a cast iron cannon from the Nissia Shipwreck

The grant awarded by the HFF was for a week-long consultation and training for the conservation of underwater metal artefacts, including the conservation of a cast iron cannon from the *Nissia* shipwreck. The consultation was carried out by Mags Felter, Senior Conservator at the York Archaeological Trust (YAT).

Since its deconcretion in September 2017 the cannon has been desalinating, through electrolysis. The process is monitored weekly and samples of the electrolyte are analysed for the chloride levels. The results of the analysis indicate that the cannon is still releasing chloride into the electrolyte, albeit at a slow rate.

The electrolyte has already been changed once and a fresh solution of sodium hydroxide in deionised water was used. It is anticipated that a further 6-12 months will be required before the cannon can be safely washed and dried.

The deconcretion and conservation works carried out so far have allowed the archaeological study of this find which may be able to shed some light as to the date of the vessel. Apart from its detailed recording and drawing, in collaboration with the University of Cyprus' MARELab, the cannon was analysed using a portable XRF¹.

¹ Analysis was carried out by Dr Andreas Charalambous.



The cannon as lifted from its desalination tank during the replacement of the electrolyte which offered the opportunity to record it and carry out XRF analysis

In addition to the conservation of the cannon, as part of the YAT's consultation, DoA conservators had the opportunity to work on metal artefacts, ferric, lead, copper alloys, etc. This not only provided practical experience but also gave the opportunity for discussion regarding the most appropriate treatments. As a result, a series of procedures have been set for the treatment of metal finds. These procedures are currently being implemented in the lab on a range of metal artefacts under conservation.

The whole training experience has been very useful in equipping conservation staff with the know-how to prepare a protocol for treating the metal artefacts currently in the lab, as well as possible new acquisitions.

The above consultation, coupled with the other training received by DoA staff in 2017 on waterlogged organic materials (training funded through the Republic of Cyprus' resources), has been a great training experience not only in terms of preventive and practical applications of treatments but also in terms of appreciating infrastructure and equipment needs, short and long term.

2.0 Grant for Conservator Assistance

In May 2017 freelance Conservator Constantina Hadjivasili was contracted to conserve the bulk of ceramics that had been lifted between 2010 and early 2017 and were being treated in the Conservation Lab. The majority of the ceramics had already been desalinated and had received some initial conservation. A small number of them were in the last stages of desalination.

Treatment carried out included cleaning (where appropriate), stabilisation, reinforcement, consolidation, and reassembly where there were breakages. For a limited number of objects, gapfilling was carried out for structural purposes. Constantina also painstakingly sorted through hundreds of sherds, often finding fragments adhering to fragmentary objects which may have been found either in the vicinity or even further away. This will be a useful tool in determining possible transference patterns at the wreck.

Part of the conservation treatment is of course documentation. All conservation procedures are recorded in the DoA's Conservation Treatment Database which also includes information on provenance, material, dimensions and many more. Lastly, all finds are photographed before, during and after any treatment. Approximately 180 amphorae (intact or broken), 60 jugs and other ceramic objects, as well as hundreds of groups of sherds have so far been treated.

As part of her contractual agreement, Constantina also assisted in the move of all the ceramic finds to the new storage space - a room adjacent to the laboratory which has been configured especially for the storage of the amphorae, jugs and all the other ceramic finds from underwater sites and surveys. It should be noted that, at the same time, another space was created for the storage of conserved metal artefacts from underwater excavations, which is environmentally monitored with the use of a dehumidifier. The renovation of the storage rooms, including the installation of appropriate shelves, was paid for by the DoA.

3.0 Grant for Purchase of Publications

Recognising the importance of creating a resource of publications and other bibliographic references the DoA created, in 2014, the Conservation of Marine Finds Library which includes relevant publications, articles, journals, conference proceedings and many more. Digital or printed copies of these are kept where possible.

With the current count at more than 250 entries, the library's database is proving an invaluable tool for the Conservators and Technicians working in this field. Through the grant by the HFF, the DoA was able to purchase a number of publications which form part of its library.

Conclusion

The DoA is grateful to the HFF for its continued support and for the immediate response to the need to proceed with the conservation of metal artefacts with an emphasis on the *Nissia* cannon. The consultation services provided have been instrumental in equipping DoA staff with knowledge and experience. At the same time, the contractual services of Conservators are also of great value to the DoA. It is hoped that the HFF will continue to support the DoA in its efforts to preserve and conserve the underwater archaeology through the above and future projects.