

# Conservation of Finds from Underwater Sites

Concluding Report for the 2014 HFF Grant

Department of Antiquities, Cyprus

## Introduction

The Honor Frost Foundation (HFF) has, since 2013, been supporting the Department of Antiquities' (DoA) efforts in the Conservation of underwater finds. Initially it funded the position of a part time Assistant Conservator for underwater finds, whilst in 2014, a three year grant (renewed on an annual basis) was offered to fund the position of an Assistant Conservator. Ms Antigoni Christophi filled this position until June 2015. This grant was accompanied by another grant of 800euro for the purchase of publications relating to the subject.

This report builds from the previous report on activities undertaken by the Department of Antiquities in Cyprus with regards to Underwater Archaeology and the Conservation of Finds from Underwater Locations.

## Work in the Laboratory for the Conservation of Underwater Finds

Conservation works continued in the Laboratory for the Conservation of Underwater Finds (LCUF) in Larnaca where more than 120 objects from the 2014 excavation season at the Nissia Wreck were being treated, along with ceramics from surveys carried out by the University of Cyprus off the south eastern coast of the island.

Apart from the treatment, documentation and storage of the finds, the focus in 2015 has been the upgrade of the facilities and the infrastructure in the laboratory. The main aim was to improve H&S by installing appropriate ventilation systems. These will enable the employment of a wide range of treatments that were so far not possible, such as ones requiring the use of chemicals. The majority of the upgrade works should be completed by the end of 2015.

## Reports and Databases

Apart from the practical conservation work carried out two reports dealing with specific conservation issues have been prepared which will assist in formulating future strategies for the conservation of specific types of material, namely wood and cast iron. Moreover an initial report on possible requirements for future conservation laboratories has been prepared and two databases, one for recording all conservation procedures and one for cataloguing all relevant literature have been designed. More specifically:

### *Recommendations on the conservation of a cast iron cannon:*

The excavation and lifting in September 2014 of a cast iron cannon from the Nissia wreck posed a new challenge for the conservation team at the DoA. Building on the initial Literature Review on Methods of Conserving Waterlogged Wood and Marine Metals produced in early 2014, a report was produced on the methodology for the treatment of the cannon. The report draws from other examples in the literature but also from contact with other colleagues who have experience in the field. It includes detailed information on the

proposed steps to be followed as well as local supplier information for the necessary equipment and consumables. This report will be of great assistance in progressing with the conservation of the cannon, planned in 2016.

#### *Recommendations on the conservation of wood and other organic material*

A number of wooden finds were lifted during the 2014 expedition at the Nissia wreck. The aim is to use these in experiments with various wood conservation techniques, such as PEG, Kauramin, freeze drying, etc, details of which are yet to be decided. A report detailing the various stages that would need to be followed for each technique as well as the required infrastructure and consumables has been produced and will form the basis of a programme of methodology experimentation. These experiments will provide an excellent opportunity for conservation staff to familiarise first hand and practically with the techniques, evaluate the results and propose the most appropriate to be employed for the specific wreck. All this experience will be invaluable for establishing infrastructure and other needs when plans progress for the creation of a new laboratory for the conservation of underwater finds within a Centre for Maritime Archaeology, one of the DoA's long term goals.

#### *Requirements for new laboratory setup:*

As the current conservation laboratory is of small scale and can only accommodate specific treatments, it is the DoA's intention to create new conservation facilities in the future. The long term plan, as mentioned above, is the creation of a Centre of Marine Archaeology and Conservation which will include a Museum of Maritime Archaeology and Conservation Laboratories specifically for Underwater Finds. In preparation for this long term goal the conservation team has begun putting down on paper thoughts on possible needs for such new facilities. The scope of this exercise at this stage is not to record comprehensively and holistically all requirements in one go but to start problematizing on needs and desired outcomes. This approach will hopefully result in clear requirements and specifications when that need arises.

#### *Conservation Treatments Database:*

Proper written and photographic documentation forms an integral part of the conservation treatment of any archaeological find. To this end a digital Microsoft Access Database was designed in such a way that it allows for the recording of a large range of information for each object. The information ranges from excavation details (depth of location, associated finds, burial conditions, date of excavation, etc.), information on any first aid treatments, to details on the desalination process and all other conservation treatments employed, to storage information before and after conservation. Conservation treatments can be recorded according to material and separate but linked forms have been created for ceramics and stone, wood and other organics, and metals. An 'object record' report can be produced which includes all the information relating to the object.

#### *Bibliographic references database:*

The DoA library is situated in the Cyprus Museum in Nicosia and amongst the publications that address both Cypriot and international archaeology includes a number of Conservation publications. As the library is not a lending library and the LCUF is located in Larnaca DoA Conservators have, throughout the years, been collecting reference and published material (books, articles in periodicals and on line, journals, etc.) dealing with issues directly related

to the field of conservation of underwater finds with the aim of building a Library dedicated to this specific field. In order to manage and easily access this increasing amount of information a digital Microsoft Access Database was designed. Detailed information regarding each piece of publication or reference material is recorded together with searchable keywords. Beyond the ability to store information regarding Books, Periodicals, Conference Proceedings and other reports, the database allows for the storage of other useful information such as interviews, electronic documents, websites. More than 200 entries have so far been recorded.

#### *Book purchases:*

Additional to the grant for the employment of an Assistant Conservator the HFF generously provided a grant of 800euro for the enhancement of LCUF's library. The following titles were purchased in 2015:

- Proceedings of the 6th ICOM-CC Working Group on Wet Organic Archaeological Materials Conference York 1996
- Proceedings of the 7th ICOM-CC Working Group on Wet Organic Archaeological Materials Conference Grenoble 1998
- Proceedings of the 8th ICOM-CC Group on Wet Organic Archaeological Materials Conference Stockholm 2001
- Proceedings of the 9th ICOM-CC Working Group on Wet Organic Archaeological Materials Copenhagen 2004
- Preprints of the 12th ICOM Triennial Mtg Lyon 1999
- Preprints of the 13th ICOM Triennial Mtg Rio de Janeiro 2002
- Preprints of the 15th ICOM Triennial Mtg New Delhi 2008

These publications contribute enormously to the advancement of knowledge by DoA staff and are an invaluable tool to advancing in the field.

#### **Conclusion**

The support provided by the HFF to the DoA in its efforts to advance knowledge and gain further experience in the Conservation of Underwater Finds is invaluable. In a field that requires extensive infrastructure and substantial budgets the DoA is taking steps in ensuring the sustainable development of the field on the island.