

# **The Kyrenia Ship Conservation Project**

## **Kyrenia Ship Collection: Conservation Progress Report**

**September 2016**



Photographs courtesy of Veronica Ford and Cassy Cutulle, 2016

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## **General Introduction**

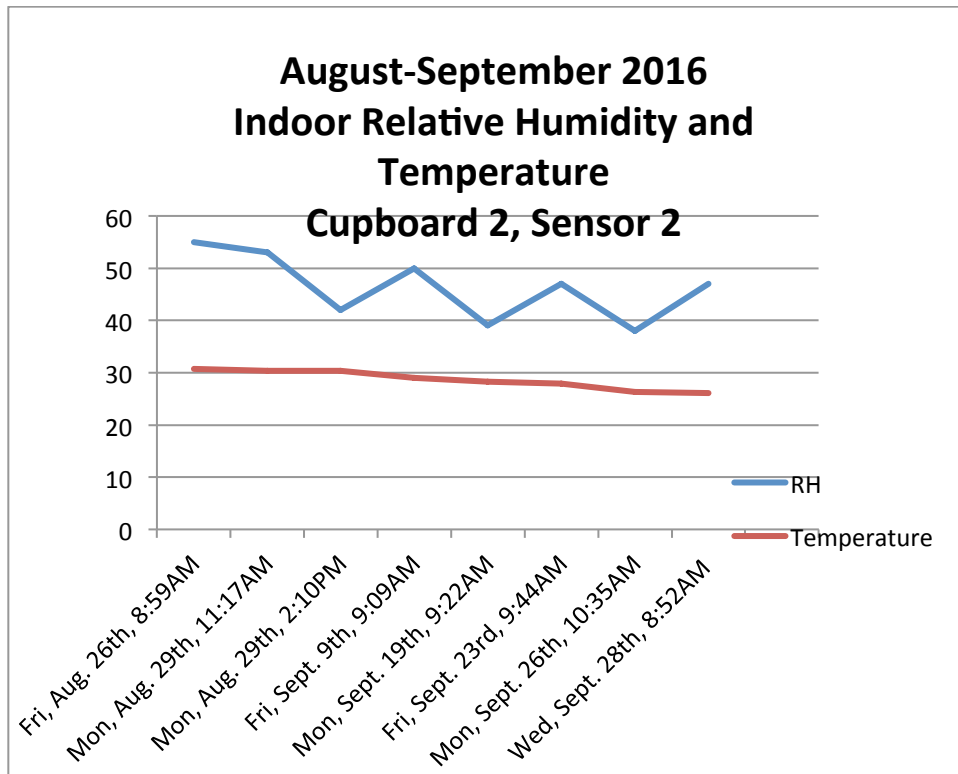
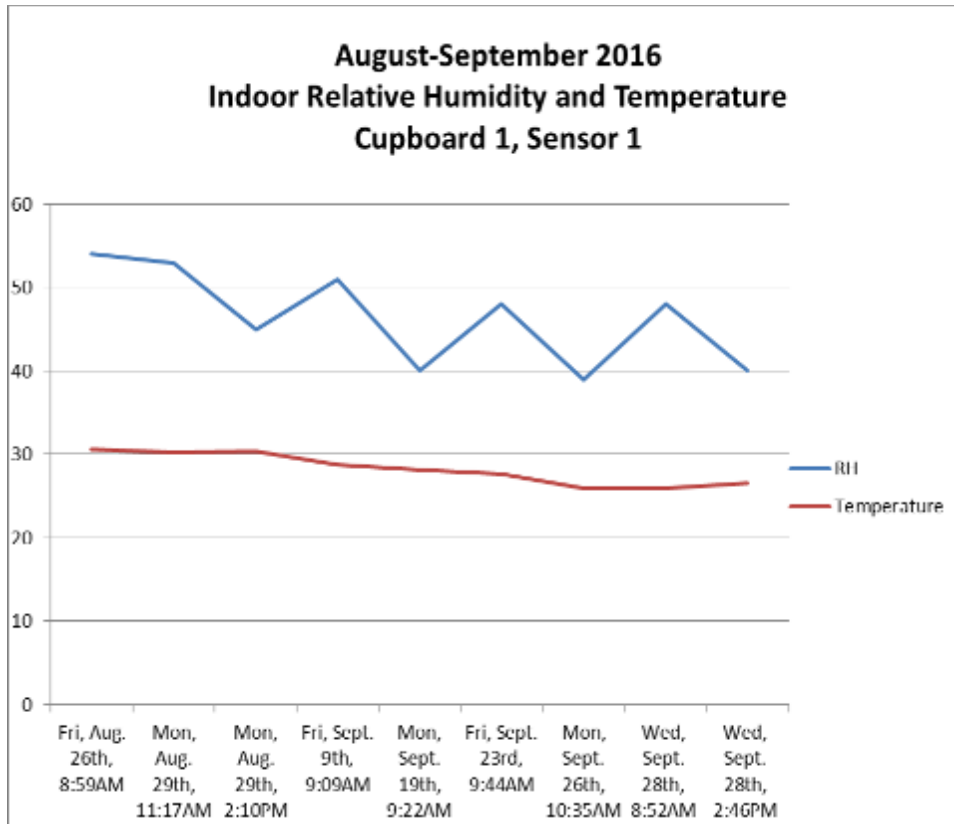
This month, the conservators have worked to continue reconstruction on the ceramics and to begin restoration activities accordingly. This also included cleaning, consolidation and furthering desalination of object P113. In addition, the end of September signified the conclusion of desalination activities as per our work plan. The last batch—Batch #14—constituted object P113 and was finished on September 29<sup>th</sup>, 2016.

Preventive activities such as environmental monitoring and placement of Tiny Tag electronic environmental data loggers and analog thermohygrometers for environmental recording in the Kyrenia Ship Storeroom and the Ship and Shipwreck Museum Galleries was undertaken in September. The goal is to have the data loggers functioning in position in October so that a better understanding of the environmental fluctuations within Castle spaces can begin. Furthermore, during a Laboratory closure in September, the conservators dedicated time to updating the treatment records in order to ensure that all appropriate written and photographic treatment documentation was completed.

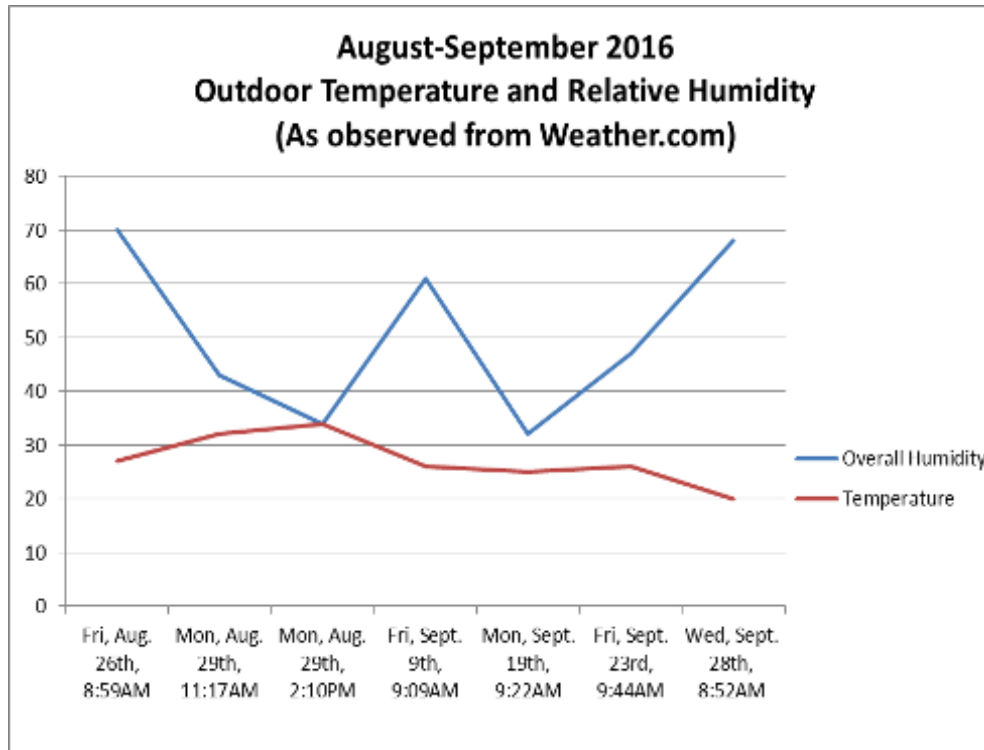
## **September 2016: Conservation Tasks in Progress**

### **Preventive Conservation Tasks**

In July and August, the conservators continued to monitor and log the relative humidity and temperature at the Conservation Laboratory in Nicosia. Data from the monitors placed within the object cupboards was recorded, as well as data for the outdoor conditions, which was retrieved from “Weather.com”. The same recording schedule was utilized as previously: logging of relative humidity and temperature took place four times a week—two recordings on Monday and Friday mornings and afternoons at approximately 9:00am and 2:00pm. There are some noticeable gaps in recording, which were due to sick leave/trips to Kyrenia Castle and also a week where the laboratory was closed and recording could not take place.



**Figs.1-2: Graphs displaying the indoor relative humidity and temperature for both cupboards over the period of August to September 2016 (Graphs courtesy of Cassy Cutulle, 2016).**



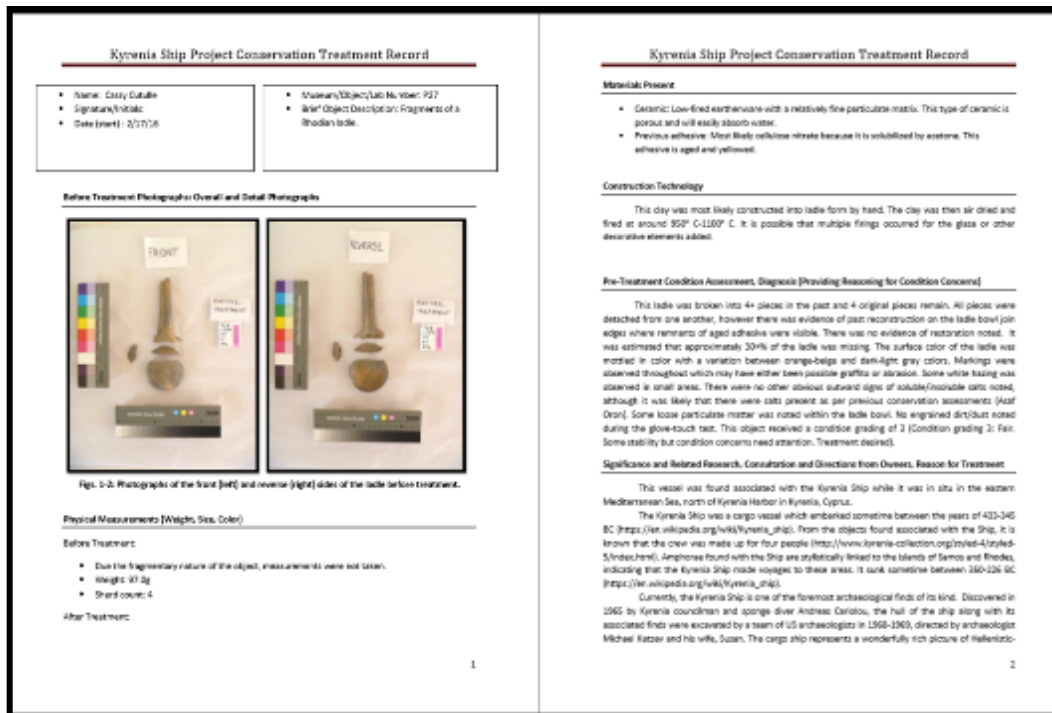
**Fig.3: Graph displaying the outdoor relative humidity and temperature as observed through weather.com over the period of August to September 2016 (Graph courtesy of Cassy Cutulle, 2016).**

The graphs above illustrate the fluctuations in temperature and relative humidity that occurred both indoor and outdoor throughout the end of August to the end of September. The graphs displaying the readings from within the cupboards are noticeably similar, showing the same types of fluctuations with a lower relative humidity in the morning followed by a rise throughout the day and high-point at around 2:30PM. Overall, the average daily relative humidity is gradually decreasing with the change of seasons from summer to autumn. The temperature for the indoor cupboards is also stable, with no stark rises/decreases noted. A gradual decrease of the daily average temperature is noted in both graphs as the seasons change. When compared to the outdoor graph, it is obvious that the building and the metal cupboards provide a buffer for the objects, preventing extreme fluctuations occurring outdoors from taking place within object storage. From the outdoor graph, it is evident that the overall humidity has wildly fluctuated with the seasonal shift, whereas temperature has gradually decreased. In sum, the indoor graphs follow a milder pattern of the shifts seen within the outdoor graphs.

In late-September, the analog thermohygrometers and Tiny Tag data loggers that were recently purchased were brought to Kyrenia Castle in preparation for their installation. The Tiny Tag data loggers will serve the purpose of logging both the relative humidity and temperature in a space on a specified time interval throughout the day over a long-term period (usually around 1 year). This data is recorded onto the Tiny Tag device, which can be downloaded to a computer and analyzed. This will facilitate long-term environmental recording well after the Conservation Project has ended. Additionally, with the exception of downloading data and minor servicing, the devices will not need any daily maintenance. With regards to the analog thermohygrometers, the aim of these are to replace the aged thermohygrometers currently in place with the new instruments which will be more accurate. These instruments show the temperature and

relative humidity in real time and can also be used to calibrate the electronic Tiny Tags through comparing the readings on each [See Figs. 5-6 below]. Both the Tiny Tags and analog thermohygrometers will be placed throughout the Kyrenia Ship Storeroom and the Ship and Shipwreck Museum Galleries at Kyrenia Castle so that long-term monitoring can take place.

During the weeklong lab closure, conservators Veronica and Cassy updated the treatment records for the objects treated so far using the Object Treatment Database and personal notes, all of which contain the information on the treatments conducted and tools and supplies utilized. This information was transferred into the records, which also includes before, during and after treatment photography and information such as significance of the object, construction and details of any examination or analysis that has taken place. It is very important that these records are often updated with the Object Database information, as it is crucial that the records present accurate details of what has been done to the object and any alterations that may have occurred to it, avoiding future mistakes or misunderstandings. As a result, all who are involved with the Project are kept knowledgeable of conservation activities performed.



**Fig.4: The first two pages of the treatment record for P27. This record will not be entirely finished until after treatment concludes.**



**Figs.5-6: (Left) Image of an electronic Tiny Tag relative humidity/temperature data logging device and (right) image of an analog thermohygrometer, which shows the relative humidity and temperature in real-time. (Images courtesy of: <http://www.gemindataloggers.com/data-loggers/tinytag-ultra-2> and <http://www.homedepot.com/p/General-Tools-Indoor-Analog-Thermo-Hygrometer-with-5-in-Dial-and-Stainless-Steel-Case-A600FC/202735076>, 2016)**

## **Remedial Conservation Tasks**

The start of September entailed the cleaning, consolidation and desalination of object P113 for reconstruction and restoration treatment—an object which was brought to the Conservation Laboratory after the two primary groups of ceramics were transported. First, P113 was deconstructed into many large sherds at Kyrenia Castle using acetone to solubilize the old adhesive. When brought to the Conservation Laboratory, the joins of the sherds were cleaned by the conservators using acetone that was applied to the aged adhesive using a paint brush and a no. 15 scalpel to mechanically remove the adhesive. This was a lengthy process due to the tightly adhered adhesive, which was difficult to remove. During the cleaning, some friability of the ceramic fabric was noted, and consolidation was deemed appropriate for stability. The front and reverse sides as well as the join edges, were consolidated with Paraloid B-44 2.5% w/v in acetone applied with a large paint brush. This provided the ceramic with the stability needed to undergo immersion desalination. At the end of September, the object was desalinated in four basins as Batch #14. It was noted as containing a particularly large amount of salt ions and after 4 baths, desalination was concluded. This object represented that last of the ceramics currently needing desalination for this Project.

With the conclusion of desalination activities, the conservators have turned their attention towards finishing reconstruction of the ceramics and proceeding with restoration. At the end of September, Cassy and Veronica have worked to reconstruct those ceramics which were recently desalinated and dried (Batch #12 and #13). This includes objects P133 and P137 which conservators Cassy and Veronica recently completed reconstruction on. In September, 8 ceramic objects were reconstructed in total. Reconstruction is slated to be complete in October when P113 after P113 is finished with desalination and drying. Restoration of ceramics which are ready will take place concomitantly with the final reconstruction jobs.



**Figs.7-8:** (Left) Photograph of conservator Cassy Cutulle and (right) Veronica Ford reconstructing ceramics P133 and P137, respectively (Photographs courtesy of Veronica Ford and Cassy Cutulle, 2016).

As the reconstruction phase of the Project slows, the conservators are preparing the first objects for restoration. After discussions with the Project Team and the Bi-communal Focal Points, the conservators have prepared a list of the ceramics to be restored, their priority for restoration and the level of restoration desired. To begin, Cassy and Veronica have chosen two lower-level restoration jobs (objects P84 and P98) to carefully ease into the delicate work. Moreover, both conservators have examined ceramics and started to test the ratios of dry pigments to plaster (“Rain plaster”) to test color matching for those ceramics which will be restored with tinted plaster.



**Fig. 9:** Photograph of object P137 after treatment (Photograph courtesy of Veronica Ford, 2016).





**Fig.10: Photograph of Rain plaster mixed in varying ratios with different colored dry pigments to color match against ceramics (Photograph courtesy of Veronica Ford, 2016)**

## October 2016: Projected Work Plan

In October, the conservators will carry out the reconstruction of P113 and restoration of the ceramics will proceed. Preventive conservation activities and supply ordering will proceed as appropriate.

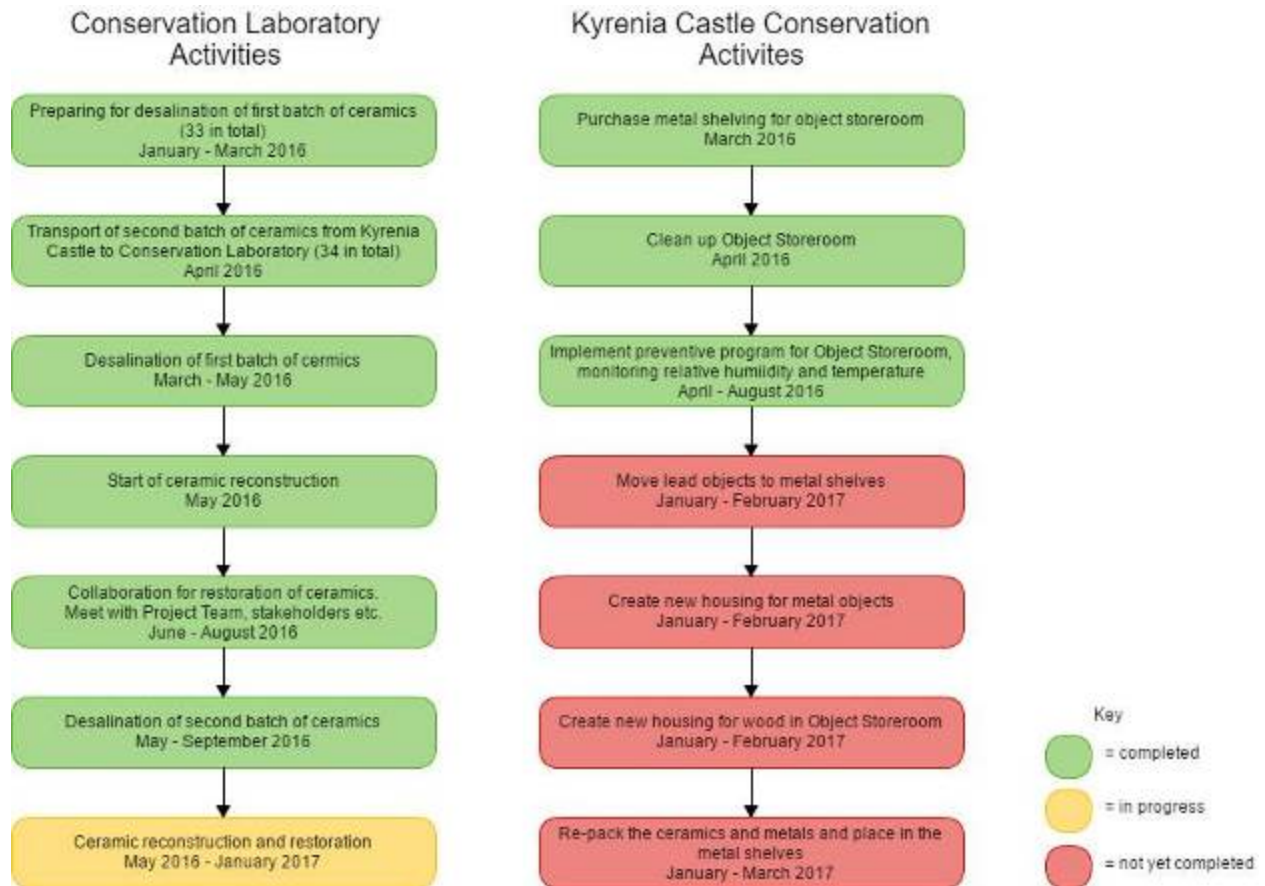


Fig.11: Flow chart displaying the activities to be undertaken by the conservators for this Project and the progress made thus far (Flow chart courtesy of Veronica Ford, 2016).