

Queen Anne's Revenge

Conservation Laboratory Report, July 2004

UAB Conservation Laboratory, Greenville

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While Nordgren was abroad in Switzerland, staff from the North Carolina Maritime Museum joined the conservation staff for a session with "the nails." As July has come and gone, so have many of the ballast stones from this month's feature concretion QAR 495.000.

Nordgren in Switzerland



From July 12-16, 2004, Assistant Conservator Eric Nordgren traveled to La Chaux de Fonds, Switzerland to attend a professional development course entitled 'Introduction to Electrolytic Techniques'. The course was taught, in English, by Christian Degrygn, an electrochemist from France who has done extensive research into electrochemical techniques for conserving metal artifacts. The *QAR* Conservation Lab already uses electrolytic techniques to conserve many of its metal artifacts, but this course offered the possibility of learning about new unpublished research on the subject firsthand from one of the principle researchers in this field. The course was well designed and encompassed both extensive theoretical background and practical lab work, which was made possible by the excellent laboratory facilities available at the course venue. A great deal of useful information was presented on a range of topics such as predicting which metal objects are at risk to corrosion and which are not, analytical work using a potentiostat,

application of controlled voltages to remove specific corrosion products and promote the stability of the artifacts. In addition to being a great learning opportunity, the course was a great opportunity to meet and compare notes with conservators from France, Germany, Switzerland and England, and to present information about the *QAR* project and current conservation work in the US to them. The information gained will be used as part of the continuing efforts of *QAR* conservators to evaluate current treatment practices and develop new treatment protocols as needed in order to ensure that the *QAR* artifacts receive the safest and most effective conservation treatments possible. Eric supplied his own funding to attend this course.

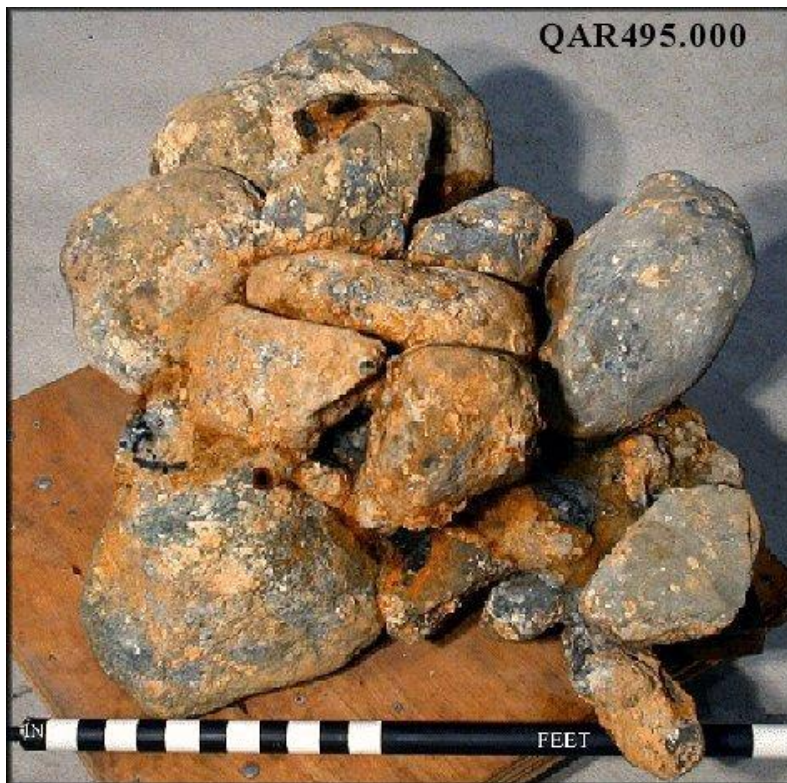
NCMM/*QAR* Collaboration: Marking nails

Every object from the wreck is assigned a unique number. Through this number the artifact can be linked to all information about it, including its location on the wreck, treatment records, analysis reports, photographs. After conservation the assigned number is marked directly onto the object, if possible. Due to the size (small) and quantity (over 700) of the nails from concretion QAR366.000 (which also contained cannon C4), it was not going to be practical to mark a lengthy number on every nail. Writing the entire number on the object would take up

one whole side of the nail. Other marking and labeling options for the nails were discussed with the NCMM curators. It was decided that marking the nails with a different color dot(s), in place of the assigned number and recording which color was used for which number on the object records) would take up little of the objects surface but allow curators to keep track of them while on display and in storage at the NCMM. July 20th, Wendy photographed all the nails prior to marking. Then Sarah, Curator Connie Mason, Fran Henderson and intern Sarah Risty `painted their nails' with a small white background on which the color will be marked at the next nail session.



Sarah Risty is a student of the University of St Andrews, in Scotland. This summer Sarah has been compiling research through the NCMM and the QAR Conservation Lab to complete her Master of Letters in Museum and Gallery Studies. She has turned the focus of her thesis to what happens to metal artifacts from recovery, through treatment, to display and storage of the QAR collection at NCMM. As a native of New Bern, Sarah's interest in the QAR project was sparked in high school and to incorporate local history in with her education was certainly brilliant. Sarah will graduate in November with hopes of continuing a PhD in Museum Studies or Art History.



Feature Concretion 495.000

This concretion was recovered in 2000, and has been in wet storage for the past four years. Though at first sight this conglomerate appears to be mostly ballast, there is concretion around the ballast holding all the stones together. Initially X-rays would not have been useful because the rays would not penetrate through the stones to tell us anything about the objects inside. Now that 60kg or 132lbs of ballast stones have been removed, conservators have been able to better assess the concretion.

Volunteer Michael Tutwiler has been working on QAR 495.000 and has found that most of the metal has completely corroded leaving many interconnected cavities. Casting into these cavities with epoxy resin before cleaning away the concretion will preserve the shape, if not the material, of the original object. So far one large piece of wood has been partially exposed and appears to run through the center of the concretion. At this point enough of the ballast stones have been removed that an X-ray will be beneficial. Conservators are planning to X-ray the concretion before any more objects are removed so that they will have a better understanding of what's inside. More on this featured concretion as we progress.



Visitors

A surprise visit was made by Dr. George Harrell, Senior Associate Vice Chancellor for Campus Operations and Adjunct Associate Professor who was accompanied by Dr. Sallye McKee, Associate vice Provost of Urban and Educational Partnerships for the Center for Adolescent Health and Development with the University of Minnesota. Dr. Harrell was giving Dr. McKee and her husband Michael a tour of the ECU facilities. Luckily we were working in the warehouse when they came by and they were able to see our set up. It was a pleasant visit and we thank you for coming by.