



Queen Anne's Revenge

Conservation Laboratory Report, December 2004

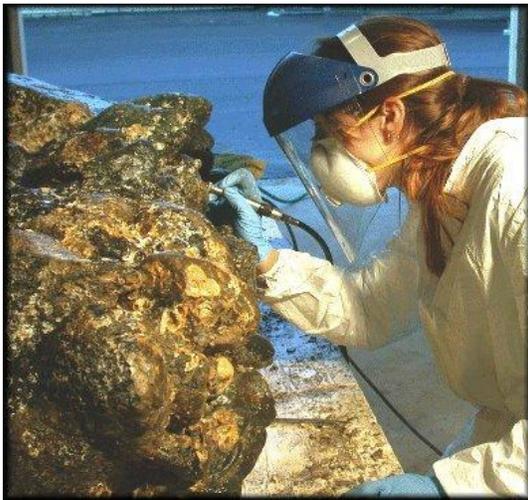
UAB Conservation Laboratory, Greenville

Sarah Watkins-Kenny, *QAR* Project Conservator

Wendy Welsh, *QAR* Laboratory Manager

Eric Nordgren, Project Assistant Conservator

In 2000, the Discovery Channel filmed the former *QAR* Project Conservator, Wayne Lusardi, breaking down the large concretion, *QAR*418.000, nicknamed 'Baby Ruth'. It was given this name because with all the ballast stones stuck to the outside it reminded archaeologists of the chocolate bar. Baby Ruth yielded many artifacts: two small cannon, C19 and C21, as well as ceramic sherds, rope, pipe fragments, glass, nails, cannon shot, cask hoops, gunflints and an array of other objects. Not all of the Baby Ruth artifacts have been conserved, however, some can be seen at the *North Carolina Maritime Museum* (NCMM) and others, including C19 and C21, are heading there this spring.



Another similar looking concretion (*QAR* 509.000) was recovered in 2001 but has remained in storage since. Originally nicknamed the Baby Ruth II, this concretion has been renamed to Baby Bertha (so as not to confuse!). Concretion *QAR* 509.000 will be our feature concretion for the next couple of months. At the beginning of December we began the process of breaking down this concretion, fortunately this time not under the pressure of video cameras. Before removing anything from the concretion it was well documented with digital photographs, scaled drawings and weighed (800lbs). Once initial documentation was complete, the first step was to mechanically remove the top layer of shells to outline the ballast stones and to clarify where the stones end and concretion (which will contain artifacts) begins. The loose shell was carefully cleaned off with a hammer and chisel and with a pneumatic air scribe. Graduate students Kristin and Kim helped with this stage. Once most of the top layer of shells was cleaned away, the illustrator was brought back to fill in drawings with more detail. Copies of the drawings will be used to record and plan the location of objects within the concretion before they are removed. There will be more on our feature concretion next month.

Office of State Archaeology (OSA) Tour of *QAR* Lab

The North Carolina Department of Cultural Resources' Office of State Archaeology (OSA), of which the *QAR* Project is a part, embraces a large network of people including volunteers - the backbone of any archaeological operation. Some within OSA have worked together for years, while others from different branches, rarely if ever meet. Once a year the OSA gets together in December, giving old colleagues a chance to reminisce, and new ones the chance to meet and to finally put faces to names.



This year the venue was Greenville and the *QAR* Conservation lab gave a tour of the facilities to all the OSA staff that could attend and 17 State Archaeology Laboratory volunteers. After a short introduction by Sarah, the group was split into two and was given a chance to see *QAR* artifacts not yet on display.

Conservators explained the process objects undergo to reach exhibit in the museum as well as answered many questions. Afterwards we convened to downtown Greenville where we enjoyed a wonderful lunch. The *QAR* Conservation lab thanks everyone who attended and missed the ones who could not, we'll see you next year!



Bringing the Year to an End and Looking to the Future.

2004 was an excellent year for the *QAR* Conservation Lab with much progress made. A good start was made on January 15 with the [Grand Dedication ceremony](#). Crucial for the conservation of artifacts was some key lab construction work. The installation of the [RO System](#) made it possible not only to continue but also, for some artifacts, to complete the desalination

treatment. Desalination is an essential treatment step for every artifact. Connecting the floor [water drain](#) to tanks outside the warehouse was also an important step forward. It greatly facilitated the process of cleaning the hull timbers (frames and planks), which needs lots of running water. There is still more construction work to be done in 2005, for example connecting the sewer drain in the warehouse to the VOA sites sewage system will enable us to install a sink with running water in the warehouse. We also hope to install additional hanging infra-red lamps in the warehouse to provide some warmth for those working there in the winter.

Artifact conservation and study has continued throughout the year. Cannon [C19](#) & [C21](#) have been [dehydrated](#) and will be in the museum in 2005. The other three large cannon are clean and in the last stages of desalination by electrolysis. These cannon will be removed into clean RO water within the first few months of the 2005 to begin washing out the alkaline storage/treatment solution in preparation for drying. All the wood frames and most of the sheathing planks have been cleaned free of concretion and shell. Cleaning the large hull planks of all concretion will be completed soon. We anticipate that all wood will begin [PEG treatment](#) during 2005. These objects along with the many others are being pushed along to be on display as soon as possible. The Conservation Lab transferred approximately 1,500 individual objects to the [North Carolina Maritime Museum](#) during 2004. Those objects range from bone gunflints, and wrought iron nails to lead patches, copper alloy pins, a sail needle and cannon shot.

Zooarchaeologist [Dr. David Clark](#) identified and analyzed the bone present on the shipwreck. Wood expert [Dr. Lee Newsom](#) has continued her work with the *QAR* wood and botanical remains. Artifact specialist Dr. Linda Carnes-McNaughton studied the *QAR* ceramics and textile expert Dr. Runying Chen has been putting much time into the analysis of the rope, fabric, hair and cannon wads. These specialists and members of the *QAR* Project Team are now working to bring together accounts of their work and research into a *QAR* Interim Report, which will be available in 2005. This interim report will incorporate all the research completed on the *QAR* from 1996 to the present. Summaries of this report will be presented at a symposium Friday, April 8th that will be held at East Carolina University, entitled *Science, Mystery, and the Pirate Era in North Carolina: Examining the Shipwreck Believed to be Queen Anne's Revenge*.

Conservators have attended a number of conferences and meetings this year, Sarah presented a paper at the [ICOM-CC WOAM](#) conference in Denmark and spoke at the Blackbeard Symposium in Beaufort. Eric attended the AIC conference in Portland Oregon and presented a poster describing the Project and conservation of *QAR* artifacts. Eric also attended a course in [Switzerland](#) to learn more in-depth about the electrolytic process. Conservators have established good international networks and we try to keep one another informed about what we are doing, including what treatments work or don't work, through publishing articles and books but also through attending conferences and lectures.

We are very pleased to report that former Graduate Assistants, Danielle LaFleur and David Krop have moved on to jobs which will further their careers in the field. Danielle is at the Muskegon County Museum in Michigan, while David is a conservator with the USS Monitor at the Mariners' Museum in Virginia. The *QAR* lab is proud to have worked with such assistants and we are glad to see them continue to achieve. One of our volunteers, [Sharon Penton](#) was so inspired by her experience at the *QAR* lab, that she has decided to apply for a Masters in Conservation at a university in the UK. Michael Tutwiler, former *QAR* Conservation Technician and volunteer, now

has a permanent position as a Field Archaeologist with Coastal Carolina Research, based in Tarboro. Congratulations to all!

Though so much has been done this year, all this progress would come to a halt without funding. The *QAR* Conservation Lab and the project as a whole owe much gratitude to the state of North Carolina for a grant of \$100,000 awarded to the North Carolina Maritime History Council for the *Queen Anne's Revenge* artifact program at [East Carolina University](#). This grant along with a \$145,000 [Golden Leaf](#) grant will keep the project going through 2005. This support is much appreciated and will allow us to keep putting artifacts in the North Carolina Maritime Museum as well as continue the study of the *Queen Anne's Revenge*. Last but certainly not least, we thank East Carolina University for their ongoing support of the *QAR* Conservation Lab and look forward to continuing to work with researchers in various departments.