



Queen Anne's Revenge

Conservation Laboratory Report, May 2004

UAB Conservation Laboratory, Greenville

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The conservation staff was sad to see the ECU Graduate Assistants leave as the semester came to an end. Their work was an incredible help in processing hundreds of nails and monitoring the desalination process. Nonetheless, conservators carried on as the last step in completing the construction of the conservation lab was accomplished with the installation of drainage tanks for the warehouse.



ECU Graduate Assistants

David Krop and Jessica Curci, ECU Graduate Assistants, helped with many tasks around the lab. They maintained solution levels as well as occasionally changed out the water in the wood tanks. They also assisted in the 1:1 drawings and cleaning of hull planks and frames free of concretion and worm remains. Both individuals marked artifacts such as bone and ceramics with the *QAR* number as part of the cataloging process. The two also worked on processing the debitage from

numerous concretions. Debitage is the remnants of concretions after it has been broken down into small pieces. They scanned everything with a metal detector and even x-rayed some pieces at the ECU Maritime Studies Conservation Lab. Though they both did an array of tasks, both had their individual projects as well.

David Krop began working at the lab in August of 2003. Initially Dave was a huge help in entering the backlog of data from the lab sheets to the artifact database when the lab first opened. Eventually he took on the project of conserving hundreds of nails. Dave figured a way to batch process many nails by hooking up each nail in electrolysis and then putting them through a hot wash, which removes chlorides loosened by the electrolytic process. The nails were dried in acetone and placed into a desiccator. Once the nails were dry, he did a fine cleaning with a microscope and dental picks. The nails were then coated with tannic acid and the surface was protected with Paraloid B72. Dave repeated this process and conserved numerous nails for the project. He also wrote a report detailing the processes involved with the debitage. Dave has currently completed his course work for his MA in Maritime Studies and is in

the process of completing his thesis. This summer Dave is working as an intern under the supervision of Conservator, Curtis Peterson at the Mariners Museum in Newport News, Virginia.



Jessica Curci began working at the lab in January 2004. Jessica was a great help in the weekly monitoring of the desalination process. Her duties included that of sampling all the solutions and testing each one for chlorides, pH, conductivity and total dissolved solids (TDS). This task is important because the data generated informs us when artifacts are ready to move on to the next step of conservation. One project Jessica undertook was cleaning a glass bottle base free of marine shell. She used a 10% citric acid poultice, a microscope, scalpel and dental picks to remove the unwanted shell. This process must occur prior to the object undergoing desalination so all salts can be released. Jessica's background and interest in waterlogged wood was also ideal in helping conservators determine the density and moisture content of the *QAR* wood. ([February 2004 Report](#)) Jessica is currently enrolled in the Cultural Resource Management doctoral program. This summer she is also in Newport News, working as an intern with NOAA's Marine Sanctuary Program under the direction of Dr. John Broadwater.

Both Dave and Jessica were assets to the *QAR* project and will be greatly missed.

Final Construction



The warehouse that houses the *QAR* artifacts was formerly a storage facility. This is important to note because there are no sewer lines that run out to the building. When the new concrete floor was installed there was a floor drain put in that ran down the middle of the warehouse. The only problem was that it didn't run anywhere except to the outside of the building. Many options were explored and budget constraints did not allow us to connect to the main sewer line. ECU facility employees came up with the idea of sinking three tanks in the ground, two to filter out sediment and the last as a holding tank. The installation of these tanks will serve a number of purposes. Any process that requires the use of water, i.e. cleaning wood or cannon, will allow conservators to use the floor drains and not worry about water on the warehouse floor. Secondly, if any tank holding chemical solutions were to leak inside the warehouse, these tanks would also serve as a holding reservoir, which complies with environmental health and safety concerns.



On May 19th, NC Dept. of Cultural Resources Historic Sites Mechanic Mike Byers and the *QAR*conservation staff implemented this drainage plan. Byers brought the backhoe to dig the large holes and helped with the installation. Mike Byers also helped move the objects and tanks to the Greenville lab from Morehead City in October of 2003. Mike has been so generous with his time and his work is greatly appreciated, as these tasks would have been very difficult without his help.



Next month find out where conservators traveled to spread the word of the *Queen Anne's Revenge*.