CRL Report 3: Silicone oil and organic conservation

La Salle Shipwreck Project
Texas Historical Commission

Throughout each year, the Conservation Research Laboratory conserves material from a number of different archaeological projects. The purpose of these CRL reports is to showcase the conservation procedures used to treat some of the more interesting archaeological material. The conservation of a walnut bowl recovered from the *Belle* is presented in this report. The *Belle*, one of the ships of French explorer Robert Cavelier, Sieur (Lord) de La Salle, was lost in Matagorda Bay, Texas, in 1686. It was excavated by the Texas Historical Commission.

SILICONE OIL IN ORGANIC CONSERVATION

Quite often in shipwreck sites such as the *Belle*, which is buried in anaerobic sand, organic material like wooden bowls and even rope are preserved. Finds such as these are quite significant for they are seldom found in land sites of a comparable age. While it is very exciting to find these artifacts, they create some very difficult conservation problems. Accordingly, the Conservation Research Laboratory has been in the forefront in developing new techniques for conserving waterlogged wood and other organic material. A laboratory, the Archaeological Preservation Research Laboratory (APRL), directed by Dr. Wayne Smith, was established at Texas A&M University to conduct research in these new areas.

This small, turned wooden bowl was very thin and was contorted by the burial environment. In order to prevent it from splitting, cracking, or shrinking, it was decided to conserve it by a new process developed at APRL utilizing silicone oil. The silicone-treated wood provides a much more dimensionally stable wood than any other conservation technique currently in common use.

Small bowls such as these were commonly used as eating bowls. This one was turned on a lathe and has been identified as being made of walnut. To the left is the bowl after being conserved with silicone oil.

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