

SHIPWRECK WORK CONTINUES ON BANKS OF THE ASHLEY RIVER

By Lynn Harris

During the winter months, the Charleston office staff and trained avocationalists have been putting in many muddy hours working on the banks of the Ashley River. Billy Judd, A SCIAA Research Associate, reported several shipwrecks in this historic area to SCIAA last year (see *Flotsam and Jetsam*, May 1995 issue), and we are now in the process of documenting these watercraft which date from colonial times to the twentieth century. Funding for the project is being provided by a SCIAA Robert L. Stephenson Archaeological Research Fund Award.



Figure 1: Eddie Weathersbee and Dee Boehme record timbers of sailing vessel on banks of Ashley River (SCIAA photo).

Three sites were selected for this season of initial research. Selection was based on criteria such as how vulnerable the specific area was to boat wake, the practical logistics involved in recording important features without removing large quantities of overburden, and how these sites could contribute towards filling in the gaps our historical knowledge of the construction and utility of these boats in the larger context of South Carolina's inland transportation and economic setting. Essentially, we were trying to combine research and management goals.



Figure 2: Shipwreck along shoreline of river (SCIAA photo).

The project also provided opportunity for SCIAA Part I Field Training Course students to obtain field experience and accumulate credits towards Part II certification. Many thanks to Doug Boehme, Dee Boehme, and George Pledger for all their hard work. Equipment donations such as a tall ladder for aerial photographs and plastic for artifact tags helped to stretch the grant money ever further. Additionally,

we had enthusiastic assistance of College of Charleston Anthropology major Rusty Clark and history major Eddie Weathersbee. April Cox from the James Island High School mentorship program joined us on-site for a day—the only day that it snowed in the Charleston area this winter!

These riverbank sites required careful planning since the work had to be conducted within tidal windows. Usually we managed to work for at least two or three hours around the low tide window while the sites were exposed. Part of the crew uncovered the timbers using garden hoses with water pumped from the river, others recorded measurements and construction features. Wood samples were taken from each component (keel, keelson, frames, planking, etc.) to determine what types of woods were being used to build these boats. The wood expert, Lee Newsome of the Center for Archaeological Investigations at Southern Illinois University, will be identifying and analyzing these samples for us in the coming months.



Figure 3: Longitudinal view of shipwreck (SCIAA photo).

The three vessels that were documented include a tugboat (with a length of 20.62 meters and beam of 6.45 meters), a motorized wooden vessel (length 17 meters and beam 2.82 meters) which is probably a sailing ship, although sections of the keelson are missing so there is no evidence of maststeps and rigging arrangements. For particulars on the tugboat, see *Flotsam and Jetsam*, May 1995 issue.

The framing pattern on the sailing vessel consisted of sets comprised of a floor timber and two first futtocks on either side fastened together laterally with metal bolts. The very square 90 degree rise of first futtocks, almost resembling standard "knees," is unusual compared to the earlier nineteenth century vessels the Institute has recorded. This was evidently a very boxy-shaped boat. The floor timbers and a disarticulated keelson both displayed distinctive slots cut to fit snugly together, locking the floor timbers into place.

On the motorized vessel site, a shaft log used to support the propeller shaft and engine beams straddling the keel provide clues that this vessel was motorized and dated to the latter part of the 1800s or early 1900s. The hull of this vessel was heavily planked, with three layers of outer hull planking in the aft section near the shaft log and two layers in the forward areas. One of the technical problems with early propeller-driven wooden vessels was that the vibration of the shaft caused hull planking to loosen and leak. The weight of an engine on a wooden hull also probably required additional reinforcement such as extra layers of hull planking.

Apart from dates provided from construction clues and fastening types, both vessels yielded small chunks of what we believe to be phosphate in the bilge's. This geological substrate

was mined extensively along the rivers in the postbellum years for agricultural fertilizer. Some of the most notable productive mines were situated along the upper Ashley River. The first mines were established in 1867, and by the 1880s, several operations flourished, due largely to South Carolina's virtual monopoly of phosphate production in its early years. In the 1890s, however, natural disasters, financial woes, and competition from mines and mills in other Southern state combined to send the Charleston area industry into a slump. It is very likely that these vessels we are studying were part of the phosphate mining business and used to transport miners, equipment, and phosphate up and down the Ashley River. It is interesting to note how far upriver vessels of this size could maneuver.