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An Incomplete Circumnavigation: The Callawassie Island Submerged Archaeological Prospecting Survey-Brief Report

By James D. Spirek

From 16 to 20 July 2004, the Maritime Research Division (MRD) conducted marine remote sensing survey operations on the waterways surrounding Callawassie Island in Beaufort County. The residents of Callawassie Island, galvanized by Mr. Bill Behan, a board member of the Archaeological Research Trust and the local historian of the island, granted funds to implement the survey. Behan, the island residents, and the MRD hoped to detect vestiges of the island’s maritime legacy in the form of prehistoric canoes, historic watercraft, docks or wharves, and other remnants. While never a commercial hub, the island over the years was the site of native occupations, plantations, and a sugar mill requiring vessels and infrastructure, for example landings or piers, to transport people and products between the island and mainland. Over the course of the survey, the MRD almost circumnavigated the island; only thwarted by the small, reticulated tidal creeks and their uncertain inter-connectedness to Callawassie and Chechessee creeks along the eastern periphery of the island.

The survey covered approximately one square mile of bottomland in eight survey areas (Figure 1). The Division’s ADAP-III marine remote sensing ensemble was deployed in the hopes of finding submerged archaeological resources. Data analysis is incomplete, but preliminary results of the survey suggest that several anomalies are worth further scrutiny by visual inspection. Approximately 243 magnetic anomalies were detected by the magnetometer, with the majority associated with modern artifacts. A large proportion of the anomalies were associated with crab traps, both marked and unmarked that rest on the bottom in every adjacent waterway. The sonar imaging square objects resting on the bottom aided identification of the connection between magnetic anomalies and crab traps, besides the obvious presence of a buoy for marked traps. Also, several unmarked crab traps became exposed during low tide to reveal the source of a magnetic anomaly. Fortunately, the relative homogeneous nature of the magnetic signal related to buoyed and sonar-detected crab traps make it possible to discard a number of targets bearing the same magnetic signature that went undetected by the sonar and are presumed to be environmentally shrouded, i.e., buried or oyster-encrusted, crab traps. A humongous magnetic anomaly (+2,000 gammas) just offshore of an old oyster processing plant at Bailey’s Landing on the Okatee River, was revealed by sonar to consist of several large iron bars or pipes. Subsequently, Bill Behan found, by talking to old-timers at Bailey’s Landing, that the debris most likely represents a culvert that was washed out during a particularly violent rainstorm. Besides crab traps and the old culvert, another modern artifact causing magnetic and physical interference to detecting archaeologically significant materials were the many private docks lining the shoreline.

Currently, we are still perusing the sonar records to determine the relationship between acoustic to magnetic anomalies. Once this analysis is completed, and modern artifacts are discounted, a set of prioritized magnetic or acoustic anomalies will be prepared to guide visual inspection by underwater archaeologists. A shoreline reconnaissance during low tide of the intertidal zone of the survey blocks will also take place to aid in identifying or confirming the source of acoustic or magnetic anomalies. The intertidal survey will also allow use of the best sensory equipment—our eyes to locate any exposed structures protruding through the marsh or mud. On 2 February 2005, MRD staff presented their findings to the residents of the island. Future work along the shores of the island will be predicated on the results of the visual inspections.

The MRD would like to thank Bill and Kathy Behan for their enthusiasm and interest in underwater archeology and for Bill’s persistence in obtaining funds for the project. The island’s residents are especially thanked for their support of the project by agreeing to fund an archaeological prospecting survey with no guarantee of discovering significant archaeological resources, but rather for seeing the potential presence of such resources in local waterways. Other individuals meriting attention are Jim and Evelyn Scott for their involvement in the project, especially in providing dinner and a place to discuss the survey. Bill Sullivan provided a dock for our use to tie the survey vessel during lunch and for allowing use of his house and guest house for lunch and relaxation. We look forward to resuming the survey in May.

Figure 1: Map of Callawassie Island and survey blocks. (SCIAA graphic)