

Exploratory diving near the Highway 24 Bridge, which separates Swansboro Harbor from the White Oak River, revealed an early 20<sup>th</sup> century navigation light but no other associated material.

Test excavations on Deer Island in Swansboro Harbor revealed a wharf of probable early 19<sup>th</sup> century construction. It was built in a loose cobb or "Lincoln Log" style and fastened with wooden trunnels. Wood scraps, pine resin and barrel hoops indicate that naval stores were the main cargo loaded at the wharf.

## Geophysical Research

In 2002, William J Cleary conducted a Geographic Information System [GIS] study of the recent history Bogue Inlet for CPE (Cleary 2002). The study is based upon aerial photography of the inlet area and covers the period between 1973 and 2001. The results of that research show that though Bogue Inlet is relatively stable its associated ebb channel is unstable and has exhibited a great deal of migration. Since 1974, the ebb channel has migrated eastward approximately 3,181 feet at a migration rate of approximately 170 feet a year. This migration has produced significant changes along the immediate shoreline on either side of the inlet. On Bogue Banks, the inlet shoreline is being eroded and is currently endangering several houses along the Pointe. However, there has been a corresponding accretion along the ocean shoreline of the Banks. The study has noted an accretion on the oceanfront ranging from 56 to 409 feet for an average change of 10.6 feet a year (Cleary 2002:14). The study also shows an opposite change on the Bear Island side of the inlet, growth of the inlet shoreline and erosion of the ocean front. In conclusion, the study suggests that relocating the channel to near its 1978 position will reconfigure the tidal delta with a net benefit to the Pointe and the structures located there.

## Description of Findings

The remote sensing survey of Bogue Inlet identified a total of three magnetic anomalies: one in Area 1 and two in Area 2 (Figures 4, 5). No acoustic signatures were identified in either of the two survey areas. Analysis of the data indicates that one of the targets has a potential association with shipwreck material. That target, 1-01, lies in the current channel within Area 1. Because on-site disturbance will consist of the deposit of dredge spoil, it appears that there will be no adverse impacts to the material generating the target signature. The remaining two targets are located within Area 2. Both targets appear to have been generated by single ferrous objects such as crab traps, small diameter pipe, small boat anchor or other modern debris. Water depth within the survey areas ranged between 0 and 20 feet.