AN OBSCURE HISTORICAL BATTLE along the Mullica River in Port Republic, New Jersey, was

foreign nation on American soil and has led to a 10-year investigation of shipwrecks of the Revolutionary War period. These shipwrecks have become on-going

marine science students about small boat operations, research diving, and how to use remote sensing technology to understand, map and document local

side scan sonar platforms have been deployed to collect imagery on these shipwrecks, to provide visual

of Historic Preservation and help identify, document and preserve the importance of privateers during the Revolutionary War. This study will provide the

data about how shipwrecks deteriorate due to both environmental and man-made factors over time in coastal environments.

New Jersey was an important battleground state in the Revolutionary war due to its proximate location between the major colonial cities of New York and

intervention, privateers operating under letters of marque served as important adjuncts to the colonial naval attacks on British shipping. Throughout the

Continental Congress, making British transport and supply lines slower and riskier

overland to Philadelphia and even to Valley Forge.
The British-formed Little Egg Harbor

now much more advanced than the thermal paper used by the Klein 595. Wreck mapping used three

side scan sonar system with dual frequency 455/900 kHz transducers, with collection and processing

with the New Jersey Historical Divers Association (NJHDA) dived the wreck in 3.5 m of water and found it to be largely intact but buried in marsh sediment.

that have undercut the wreck and broken it apart.

Table 1.

The Bead wreck now rests in 11.8 m of water and is quickly migrating its way over the marsh ledge into the deeper water of a man-made borrow pit used for the construction of the Garden State Parkway Bridges a few decades

measure its length and width but only a diver, whether by sight or by feel can determine the type of construction that holds the hull planking to the frames and the type of fasteners that would indicate the age of construction, thereby dating the wreck.

Figure 13.

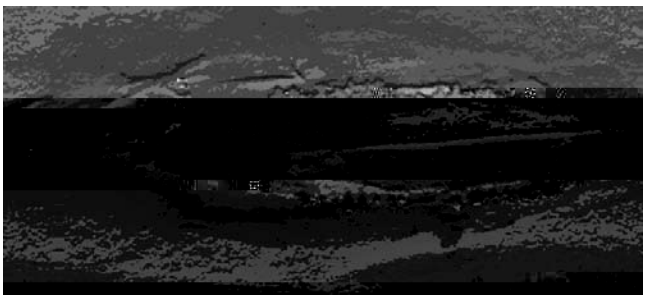

Figure 14.

past four months to collect this data. Divers, Steve Nagiewicz, Dr. Peter Straub and Jessica DiBlasi were

those dives are to: 1. collect measurements of frames, planking, 2. take video and close-up photographic records of each wreck where possible, 3. obtain wood samples for testing, and 4. record in place potential artifacts that can help date the wreck and secure the artifact if it is in potential danger of deterioration (Kahanov, 2013).

Artifacts were recovered on subsequent dives at the

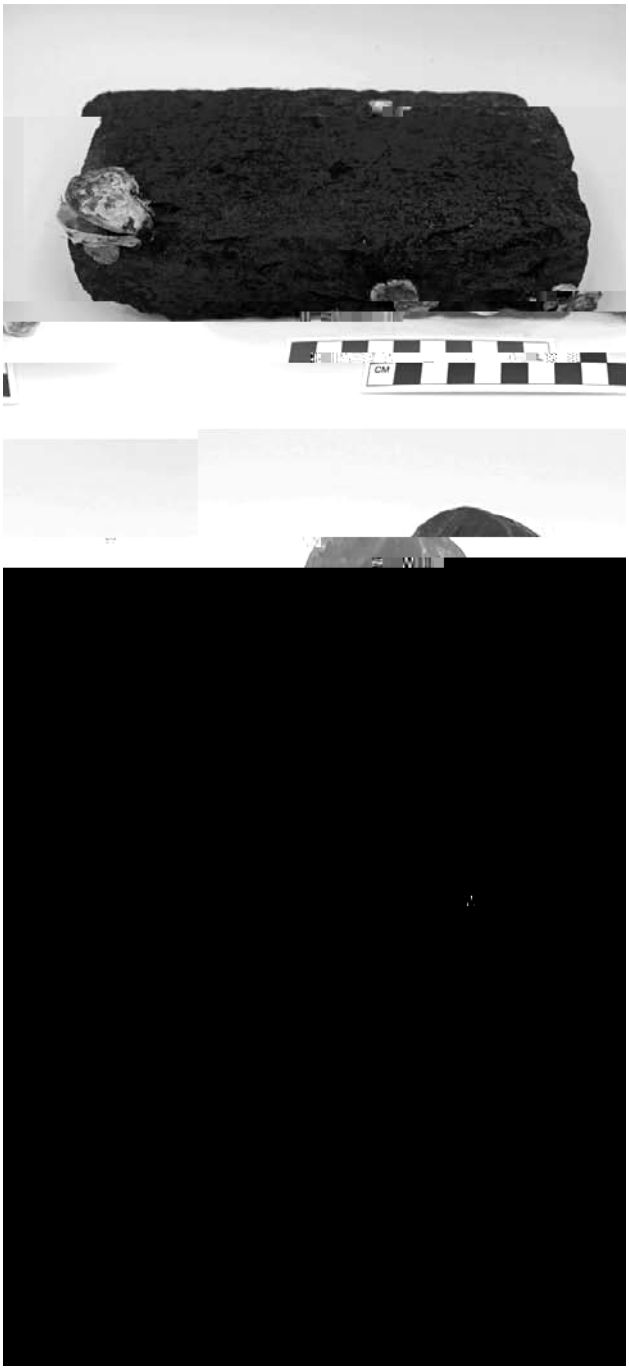

Figure 15.

(center), one of 7 pieces that ýt together, and wood sample

is a deep center gouge for the insertion of the tapered end of the mast and some signs of framed support on either sign of the mid ship mast. The hull planking near the stern showed ‘tree-nail’ fasteners which are a very positive indication of the age of the shipwreck and determination of its type. Treenails (trunnels) or wood dowel fasteners were often economical cost-

ships that were not built to last more than 3- 5 years of heavy use. Their use also dwindled into the 19th century where iron, or steel and bronze and brass were normally used. Some

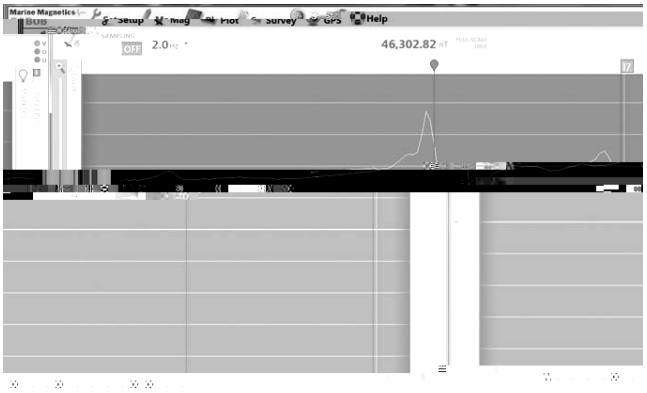

Figure 17.

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