

2018 ASPIRE WHITE PAPER Deepwater Archaeological Exploration

Contact Information

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Bureau of Ocean Energy Management

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Willing to Attend Workshop?

(Yes)

Target Name(s)

Deepwater approaches to the ports of Baltimore and New York

Geographic Area(s) of Interest within the North Atlantic Ocean (Indicate all that apply)

Northwest

Southwest

Relevant Subject Area(s) (Indicate all that apply)

Marine Archaeology, Benthic Biology

Description of Topic or Region Recommended for Exploration

The United States owes its very existence to the sea and to its well-situated ports, through which flowed goods and people and from which flowed the bounty of a young nation. The three preeminent ports of the young Republic were New York, Baltimore, and New Orleans. Associated with each of these ports are the physical remains of shipwrecks on the seafloor that document the lives of the sailors, immigrants, enslaved Africans, traders, and pirates that wove their stories into the fabric of America. Of

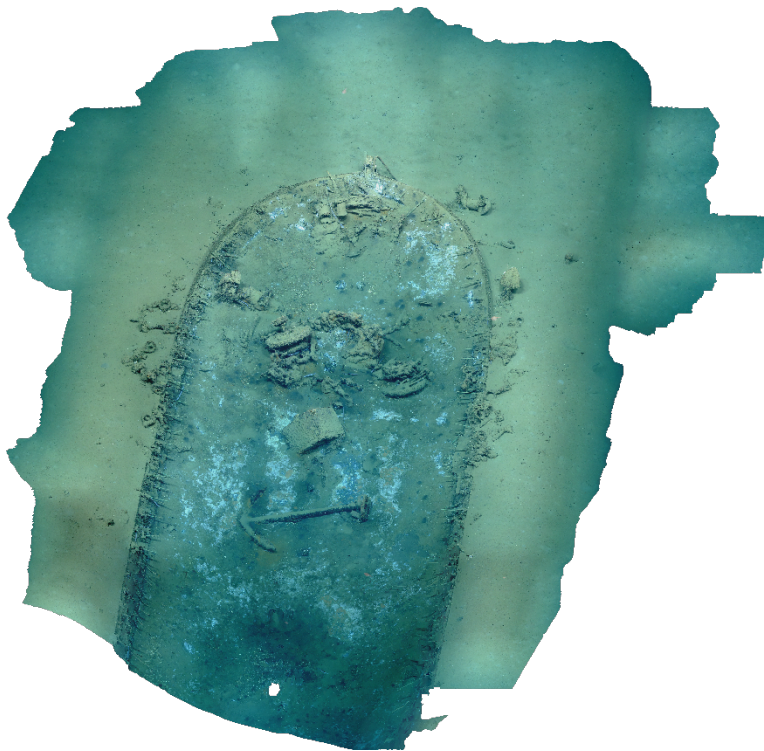


Figure 1. Partial photomosaic of Wreck 15377

the three primary port cities, New Orleans is favorably situated as the entrepôt for the rich oil and gas fields of the Gulf of Mexico. As a result, the waters off its coast, up to the edge of federal jurisdiction 200 miles offshore, have been the subject of high resolution geophysical survey undertaken by the oil and gas industry at the behest of the federal agency that regulates it, the Bureau of Ocean Energy Management. These surveys, magnetometry, sidescan sonar, and multibeam bathymetry, have discovered dozens of historic shipwrecks in water depths as much as 7,500 feet. Undisturbed by man, too deep to be effected by even the most ferocious of storms, and only reduced by the marine

organisms that feed on the organic remains, these wrecks lie on the seafloor in a remarkable state of preservation. Surprisingly fragile artifacts have been observed intact on Gulf shipwrecks that preserve their original placement aboard the ship and help to interpret the ship and its contents to modern researchers. Most importantly, vessels such as the large mid-19th century three-masted wreck known solely by its BOEM designation of Wreck 15377 (Fig. 1) are documented only through their archaeological remains. Despite years of archival searching for shipping losses in the Gulf, no written record of loss of this vessel has come to light. Other similar vessels from the 17th, 18th and 19th centuries have been found through oil and gas surveys with many clustering within 15 to 85 miles of the approach to the Mississippi River. These ships were simply “lost at sea” with no survivors to record their passing. They are arguably among the most significant submerged cultural resources in the US for the information they undoubtedly contain relating to the endeavors, hopes, aspirations, and travails of a young nation. However, the deep water approaches to America’s two wealthiest and busiest historic seaports, Baltimore and New York City, remain unsurveyed between the shelf edge at 400 feet to 8,000 feet with the kind of equipment needed to detect historic shipwrecks.

Summary of Current State of Knowledge

At present the deep water areas off the Outer Continental Shelf remain largely unexplored using high resolution sonar or any equipment capable of detecting the deflated remains of an historic wooden-hulled shipwreck on the seafloor. The hull-mounted multibeam surveys conducted by NOAA lack the resolution to find even large, modern vessels in more than one- or two hundred feet of water. As a result, the depths outside the Shelf towards the edge of America’s Exclusive Economic Zone are undescribed for the sorts of rich archaeological remains they may preserve. Yet, it is likely that scores, if not hundreds, of ships were lost in these depths on the approaches to the busiest harbors of colonial America and the Early Republic as the result of Atlantic storms, on-board fires, pirates, or mishap.

Rationale for Future Exploration

The recent accidental discovery of the Blake Ridge wreck by Woods Hole Oceanographic Institute, almost 140 miles off the coast of North Carolina, argues for the likely presence of shipwrecks in deep water along other parts of the U.S. coastline. If the example of New Orleans serves, these would lie on the approaches to the two most active historic ports along the Eastern Seaboard, Baltimore and New York. Furthermore, if the examples of the Gulf of Mexico hold, these sites from the earliest history of European contact with North America are likely well-preserved and intact and could contribute substantially to our understanding of colonial settlement and exploration. In addition, shipwrecks function as artificial reefs in the deep ocean and recruit a wide variety of organisms, and yet the role of randomly situated shipwrecks within the natural environment remains poorly understood. Thus any study of shipwrecks should incorporate a biological analysis of the species attracted to them.

Relevant Partnerships (If Applicable)

Bureau of Ocean Energy Management, Bureau of Safety and Environmental Enforcement, NOAA Office of National Marine Sanctuaries