

Stellwagen Bank National Marine Sanctuary

Fishing Impacts to Maritime Heritage Resources

Management Issue

Maritime heritage resources in Stellwagen Bank National Marine Sanctuary (SBNMS or Sanctuary) are being negatively impacted by traditional fishing activities.

Description

The Sanctuary encompasses 842-square miles of seafloor at the mouth of Massachusetts Bay placing it astride some of America's oldest shipping routes and fishing grounds. During the past 400 years of Euro-American maritime travel, hundreds of shipwrecks have occurred within the sanctuary's boundaries. Vessels ranging from small coastal fishing schooners to large steamships have been sunk by storms, fire, and collisions. When the sanctuary was designated, little was known about its maritime heritage resources. Since 2000, archaeological fieldwork has located 45 historic shipwrecks. Investigation of these shipwrecks has shown that nearly all exhibit moderate to severe impacts from traditional fishing activities. Current regulations do not afford maritime heritage resources any protection from commercial and recreational fishing activities. NOAA's Office of National Marine Sanctuaries (ONMS) is currently considering a management framework to better protect maritime heritage resources from fishing activities through a tiered system based upon historical significance, archaeological integrity and an assessment of site threats. Maritime heritage resources are nonrenewable and should not be managed in such a way that provides for an allowable take.



*Trawl net wrapped around the Paul Palmer's windlass.
Photo Credit: Tane Casserlev. ONMS*

Questions and Information Needs

- 1) What is the minimum exclusion zone needed around a maritime heritage resource to prevent impacts from traditional fishing activities?
- 2) How do impacts to maritime heritage resources from traditional fishing activities vary based upon vessel size and gear types?
- 3) Does notification of maritime heritage resource site locations reduce fishing gear impacts?

Scientific Approach and Actions

- Document impacts to Sanctuary maritime heritage resources from fishing activities.
- Continue to inventory, assess, and characterize Sanctuary maritime heritage resources.
- Monitor Sanctuary maritime heritage resources for continued impacts from fishing activities.

Key Partners and Information Sources

- Northeast Underwater Research Technology and Education Center at the University of Connecticut (NURTEC-UConn)
- ONMS's Maritime Heritage Program

Sanctuary Resources Available

- NOAA Research Vessel *Auk* available for charter
- Personnel and NOAA divers available for data collection

Resource Needs

- Financial support: all project costs (including some personnel costs) are funded by grants.
- Strategic partnerships to provide access to remote sensing and remotely operated vehicle technology.

Management Support Products

- Develop a comprehensive report detailing traditional fishing impacts to maritime heritage resources.

Updated: 10/31/2014

For More Information -- <http://www.sanctuaries.noaa.gov/science/assessment>

Planned Use of Products and Actions

- Management framework to provide protection to maritime heritage resources while allowing for uses compatible with resource protection.
- Revise current Sanctuary regulations to remove the exemption given to traditional fishing activities for damaging historical resources.
- Create maritime heritage resource voluntary avoidance guidelines for traditional fishing activities around “historic sites.”
- Establish “heritage preserves” around exceptional maritime heritage resources.
- Inform stakeholder communities about impacts to maritime heritage resources from fishing.
- Incorporate research results into the management plan review process.
- Utilize data products to support outreach and education projects that inspire resource protection and stewardship



*Gill nets caught around the Louise B. Crary's bow.
Photo Credit: SBNMS and NURTEC-UConn*

Program References

SBNMS Management Plan.

- Maritime Heritage Action Plan Objective MH.1 – Inventory, Assess and Characterize Historical Resources
- Maritime Heritage Action Plan Objective MH.3 – Protect and Manage Historical Resources

SBNMS Condition Report

- What is the integrity of known maritime archaeological resources and how is it changing?
- What are the levels of human activities that may influence maritime archaeological resource quality and how are they changing?

ONMS Performance Measures

- Program Performance Measure 5: By 2015, 100% of the sanctuary system adequately characterized.
- Program Performance Measure 6: By 2015, 100% of known historical, cultural and archaeological resources within each national marine sanctuary boundary will be inventoried within the NOAA's ARCH database.



Trawl door and netting entangled with the Heroic's engine. Photo Credit: Matthew Lawrence, SBNMS

Other Documents

- ONMS Maritime Heritage Program Strategic Plan Goals:
 1. Develop a comprehensive inventory of our nation's maritime heritage resources.
 2. Become an international leader in maritime heritage research and science
 3. Serve as a responsible steward for maritime heritage resources
 4. Increase public awareness and understanding of our nation's maritime heritage, and encourage responsible stewardship through education and outreach.

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For More Information -- <http://www.sanctuaries.noaa.gov/science/assessment>