

# Monterey Bay National Marine Sanctuary

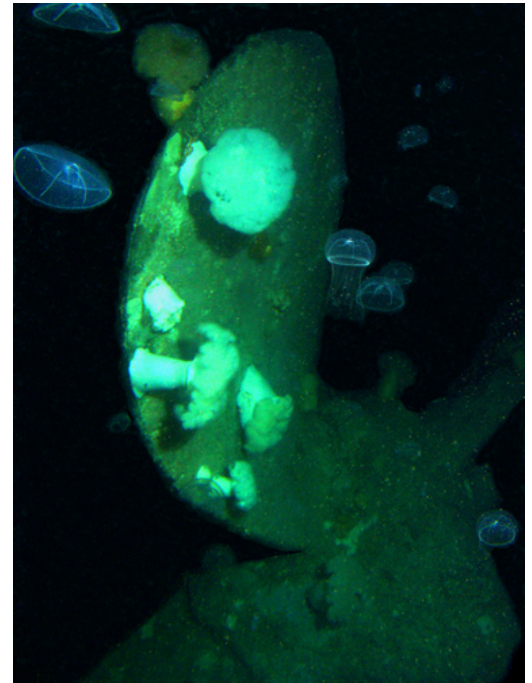
## Development of a Maritime Heritage Program

### Management Issue

The ability of Monterey Bay National Marine Sanctuary (MBNMS or Sanctuary) managers to adequately manage and protect submerged archaeological sites relies on expanded efforts to conduct paleo-ecological and archaeological studies, and to locate, inventory, and monitor both historic heritage sites and those that may pose an environmental threat to Sanctuary marine resources.

### Description

The National Marine Sanctuary Act and site regulations mandate the management and protection of Sanctuary cultural and historical resources. The area encompassed by the MBNMS is rich in cultural and historical resources, and has a long and interesting maritime history. Ships, boats, wharves, lighthouses, lifesaving and whaling stations, prehistoric sites, and a myriad of other heritage sites lie covered by water, sand, and time. The MBNMS Maritime Heritage Action Plan provides a framework for a Maritime Heritage Resources Program. The Sanctuary is working with the Office of National Marine Sanctuaries, West Coast sanctuaries and local agencies to more fully develop a Maritime Heritage program. A project to characterize shipwrecks within the Sanctuary has been completed, including a summary of the shipping routes and types of coastal settings that were conducive to maritime activities and trade and an assessment of known ship losses. Additionally, MBNMS staff has been involved in extensive monitoring and exploration of the oil tanker *Montebello* and of the USS *Macon*. However, a large knowledge gap still exists. A total of 381 ship and aircraft wrecks have been reported in the MBNMS, but only 29 have been located by archaeological surveys. More complete inventorying, monitoring, and assessment of submerged sites is needed for management consistent with the Federal Archeological Program. A more complete inventory and assessment will allow for improved protection of cultural and historical sites from human activities, and will also facilitate the identification of submerged heritage sites that may pose environmental threats to Sanctuary marine resources.



*S.S. Montebello's 18 foot bronze propeller, in the MBNMS nearly 900 feet below the surface, has been colonized by white plume anemones. Photo credit: Robert Schwemmer/NOAA.*

### Questions and Information Needs

- 1) What are the locations of maritime archaeological resources and submerged sites within the MBNMS?
- 2) What is the integrity of maritime archaeological resources, and how is it changing?
- 3) What are the timeframes at which submerged cultural resources break down and shift location?
- 4) What are the levels of human activities that may influence maritime archaeological resource quality and how are they changing?
- 5) Do known maritime archaeological resources pose an environmental hazard and is this threat changing?
- 6) What are the strategies for most effectively addressing submerged hazards?

### Scientific Approach and Actions

- Inventory and assess known submerged cultural and historical sites in the MBNMS, including those identified in the 2001 MBNMS Submerged Cultural Resources Study
- Survey recreational divers and perform systematic surveys of beaches for buried cultural materials
- Conduct historical research, including ship registry and enrollment search, historic newspaper review, full dossier research on specific wrecks, and an illustrated typology of ships for the Pacific
- Conduct archaeological research, including remote sensing surveys around the areas of highest concentration of potential submerged resources and ongoing collection and analysis of remote sensing data for the remaining portions of the Sanctuary

### Scientific Approach and Actions (continued)

*Current as of 11/28/2012*

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

- Review data collected by scientists in other fields for relevant submerged resource information
- Identify threats that human activities may pose to specific maritime heritage resources
- Assess shipwrecks and submerged structures for hazards and coordinate with resource protection / damage assessment

### Key Partners and Information Sources

NOAA's Office of Ocean Exploration and Research, ONMS Maritime Heritage Program, San Francisco Maritime National Historical Park, Bureau of Ocean Energy Management, U.S. Coast Guard, U.S. Naval History and Heritage Command, U.S. Geological Survey, California State Lands Commission, California Department of Parks and Recreation, California Office of Historic Preservation, California Department of Fish and Game Oil Spill Prevention and Response, Stanford University, Monterey Bay Aquarium Research Institute, Piedras Blancas Lighthouse, Pigeon Point Light Station, Monterey History and Art Association, Pacific Grove Museum of Natural History, Miwok and Ohlone Native Groups



*Remains of the schooner William H. Smith that grounded on Del Monte Beach on February 24, 1933. Winter storms periodically uncover the buried wreck. Photo credit: Bob Yerena, NOAA.*

### Management Support Products

- Maps and charts depicting the locations of all known maritime heritage resources
- Archaeological reports that demonstrate significance and integrity of cultural and historical resources
- Threats assessment of human-use patterns that may influence stability and sustainability of maritime heritage resources
- Development of Remediation of Underwater Legacy Environmental Threats (RULET) database to identify potentially polluting wrecks

### Planned Use of Products and Actions

- Management and protection of submerged sites that is consistent with the Federal Archaeological Program
- Provide improved interpretation of shoreline and nearshore sites to mitigate damage and enhance visitor usage
- Mitigation of environmental hazards posed by submerged maritime resources

### Program References

#### MBNMS Management Plan

- Maritime Heritage Action Plan, Strategy XMHR-1, XMHR-2, XMHR-3, XMHR-4

#### MBNMS Condition Report

- What is the integrity of known maritime archaeological resources and how is it changing? (Offshore, Nearshore, and Estuarine Environments – Question 15)
- Do known maritime archaeological resources pose an environmental hazard and is this threat changing? (Offshore, Nearshore, and Estuarine Environments – Question 16)
- What are the levels of human activities that may influence maritime archaeological resource quality and how are they changing? (Offshore, Nearshore, and Estuarine Environments – Question 17)

#### ONMS Performance Measures

- 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.

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