

2014 ACCOMPLISHMENTS



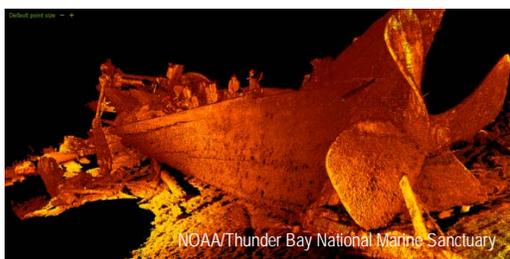
SANCTUARY EXPANDS TEN-FOLD

On September 5, 2014, Thunder Bay National Marine Sanctuary (TBNMS) expanded its boundaries from 448 square miles to 4,300 square miles to protect nearly 100 historic shipwrecks in the waters of northern Lake Huron. The expansion was based on several years of research by NOAA and its many scientific partners and driven by strong public support. Increased tourism and related business development have contributed to the sanctuary becoming an integral part of the regional economy. The sanctuary continues to encourage sustainable tourism and foster greater awareness of the Great Lakes and its rich maritime history through research, education and outreach.



THUNDER BAY HOSTS MATE ROV COMPETITION

Thunder Bay hosted the annual MATE (Marine Advanced Technology Education) International Student ROV Competition. The theme of the competition was "Exploring the Great Lakes: shipwrecks, science, and conservation in Thunder Bay National Marine Sanctuary." The competition brought 59 teams from 13 countries and 18 states and more than 1,000 attendees to Alpena. Thousands of students learned about the sanctuary's resources through [23 regional contests](#) that fed into the annual three-day event. The competition uses underwater robotics to teach science, technology, engineering and math (STEM) and prepare students for careers in marine technology.



PARTNERSHIP BRINGS CUTTING EDGE MARINE TECHNOLOGY TO THE SANCTUARY

In 2014, the sanctuary and its partners conducted a wide range of research aimed at both generating baseline data on sanctuary shipwrecks and testing new technologies. Researchers generated updated side scan sonar imagery of many sanctuary shipwreck sites and a conducted a two-week technical diving mission to monitor wrecks and explore new sites. In partnership with 2G Robotics, the sanctuary team also used laser-scanning technology for the first time, obtaining a highly accurate model of the stern of the *Monohansett*. The tripod-mounted laser scanner allows sanctuary archaeologists to document complex areas of shipwreck sites that would be otherwise difficult to capture in detail.

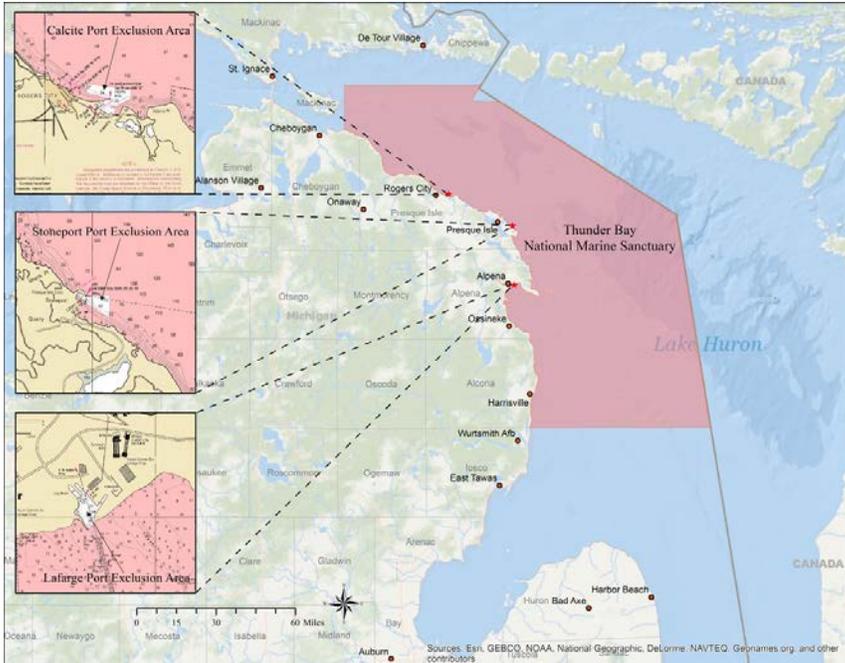


TBNMS VISITOR CENTER DRAWS NEARLY 100,000 VISITORS

The Great Lakes Maritime Heritage Center (GLMHC) received more than 97,000 visitors in 2014, a 78 percent increase since 2010. The center serves as a gateway for visitors to begin experiencing sanctuary resources and is a significant year-round economic driver for the region. In addition to 10,000 square feet of interactive exhibits, the center hosts a variety of programs and events throughout the year.

LOOKING AHEAD

- TBNMS will continue to develop the Center of Excellence for Diving and Marine Technology Education. As a hub for specialized dive training and innovation, the Center will serve partners within NOAA, the broader science community and state and regional public safety agencies. The Center will also become a Great Lakes hub for applied marine technology education.
- The sanctuary will continue to assist with and develop Alpena Community College's Marine Technology Program, which is experiencing its highest enrollment in four years. Aimed at training students for high tech jobs in the "Blue Economy," the marine technology program is part of a larger effort by the sanctuary and community partners to enhance STEM education at all levels.
- Working with state and local partners, the sanctuary is expanding the Great Lakes Maritime Heritage Trail in the coastal areas that are now part of the expanded sanctuary boundaries. Approximately 60 new outdoor interpretive signs will be added to public locations in the three counties that border sanctuary waters.



Thunder Bay National Marine Sanctuary boasts nearly 100 shipwrecks preserved by the cold, fresh waters of Lake Huron within its 4,300- square-mile boundary. Thunder Bay's unpredictable weather and treacherous shoals have earned it the nickname "Shipwreck Alley," and its collection of wrecks represents a cross-section of the diverse vessels that have traveled the Great Lakes since the 19th century. From wooden schooners to modern freighters, these cultural treasures provide a window into the region's rich maritime history. The sanctuary was established on October 7, 2000.

NOAA's Office of National Marine Sanctuaries is committed to supporting lives and livelihoods across the nation and in sanctuary communities through socioeconomic research and monitoring to understand the economic and social drivers of sanctuary resources and improve management practices.

NATIONAL MARINE SANCTUARY SYSTEM

Olympic Coast
Cordell Bank
Gulf of the Farallones
Papahānaumokuākea
Hawaiian Islands Humpback Whale
Monterey Bay
Channel Islands
American Samoa (U.S.)



Thunder Bay
Stellwagen Bank
Monitor
Gray's Reef
Florida Keys
Flower Garden Banks

○ National Marine Sanctuary
△ Marine National Monument

Scale varies in this perspective. Adapted from National Geographic Maps.

The Office of National Marine Sanctuaries serves as the trustee for a system of 14 marine protected areas encompassing more than 150,000 square miles of marine and Great Lakes waters from Washington state to the Florida Keys, and from Lake Huron to American Samoa. The system includes 13 national marine sanctuaries and the Papahānaumokuākea Marine National Monument. For more information on the National Marine Sanctuary System, visit: <http://sanctuaries.noaa.gov>

<http://thunderbay.noaa.gov/>