

FY19 Accomplishments



BACKGROUND

Stellwagen Bank National Marine Sanctuary was established in 1992 to protect and preserve one of the most biologically diverse ecosystems in the Gulf of Maine. Renowned for its biological diversity and remarkable productivity, the sanctuary is a critical feeding and nursery ground for several whale and dolphin species and has become one of the world's premier whale watching destinations.

Stellwagen Bank National Marine Sanctuary is part of the National Marine Sanctuary System, which is a network of underwater parks encompassing more than 600,000 square miles of marine and Great Lakes waters from Washington state to the Florida Keys, and from Lake Huron to American Samoa. National marine sanctuaries are managed for the conservation of their natural and cultural resources, while supporting sustainable recreation, tourism and compatible commercial activities. The network includes a system of 14 national marine sanctuaries and Papahānaumokuākea and Rose Atoll marine national monuments.



Stellwagen Bank National Marine Sanctuary



Photo: NOAA

Underwater ROV are a crucial tool used in the exploration of maritime heritage resources in the sanctuary.



Photo: NOAA

The sanctuary's inflatable humpback whale, *Salt*, served as an educational exhibit at February's New England Boat Show.



Photo: Elliott Hazen

A Cory's shearwater captures a sand lance in the sanctuary.

Sanctuaries Live: Expedition to sanctuary shipwrecks

Schools and museums joined a joint NOAA-Woods Hole Oceanographic Institution research team to explore sanctuary shipwrecks in September. In the first of a three-year project, the team focused on the status of the wreck of the steamship *Portland* and the scientific aspects of invertebrate growth on this form of artificial habitat. Nine ship-to-shore direct broadcasts linked 1,415 students in 28 schools. Additionally, four public programs were streamed to 21 venues reaching another 647 observers, while more than 9,400 viewers across 12 countries watched the live stream on their own web browsers. Recorded broadcasts are available on the Sanctuaries Live webpage.

Inflatable whale meets new audiences

Approximately 50,000 visitors to the February New England Boat Show encountered the sanctuary's *Salt* among the array of new vessels on the convention center floor. The life-sized inflatable whale allowed the sanctuary to interact with both children and their parents as well as educate the boating public about ocean etiquette, including safe operation around marine mammals. In an effort to expand the model's reach, the sanctuary added a handicapped-accessible entryway into the whale's organ-filled interior. Now, *Salt's* educational programs highlighting whale biology and behavior can be experienced by a more diverse and inclusive audience.

Sanctuary science – Finding links, digging deeper

Sanctuary scientists led investigations focused on key prey species, such as the sand lance, and top predators, such as great shearwater seabirds and humpback whales. These studies are multi-institution, multi-year efforts supported, in part, by funding from organizations as diverse as the Bureau of Ocean Energy Management, the Volgenau Foundation, and the International Fund for Animal Welfare. These partnership help improve our understanding of the sanctuary. Researchers satellite-tagged and tracked 10 shearwaters, placed short-term acoustic or video tags on 35 humpback whales, repeatedly sampled 44 sand lance sites for abundance and distribution, and raised larval sand lance in controlled environments to study ocean acidification.

Looking Ahead to FY20

- NOAA will release the Stellwagen Bank National Marine Sanctuary Condition Report in FY20 to guide the direction of the next 10-year Management Plan for the sanctuary.
- Year two of the Sanctuaries Live project with Woods Hole Oceanographic Institution will continue the exploration of the *Portland* and extend the mission to other shipwrecks in the sanctuary. The team will use new technologies to build virtual 3-D models of the *Portland*.
- The sanctuary will develop a shipwreck avoidance program to help protect sanctuary maritime and cultural resources from damage caused by fishing gear interactions.