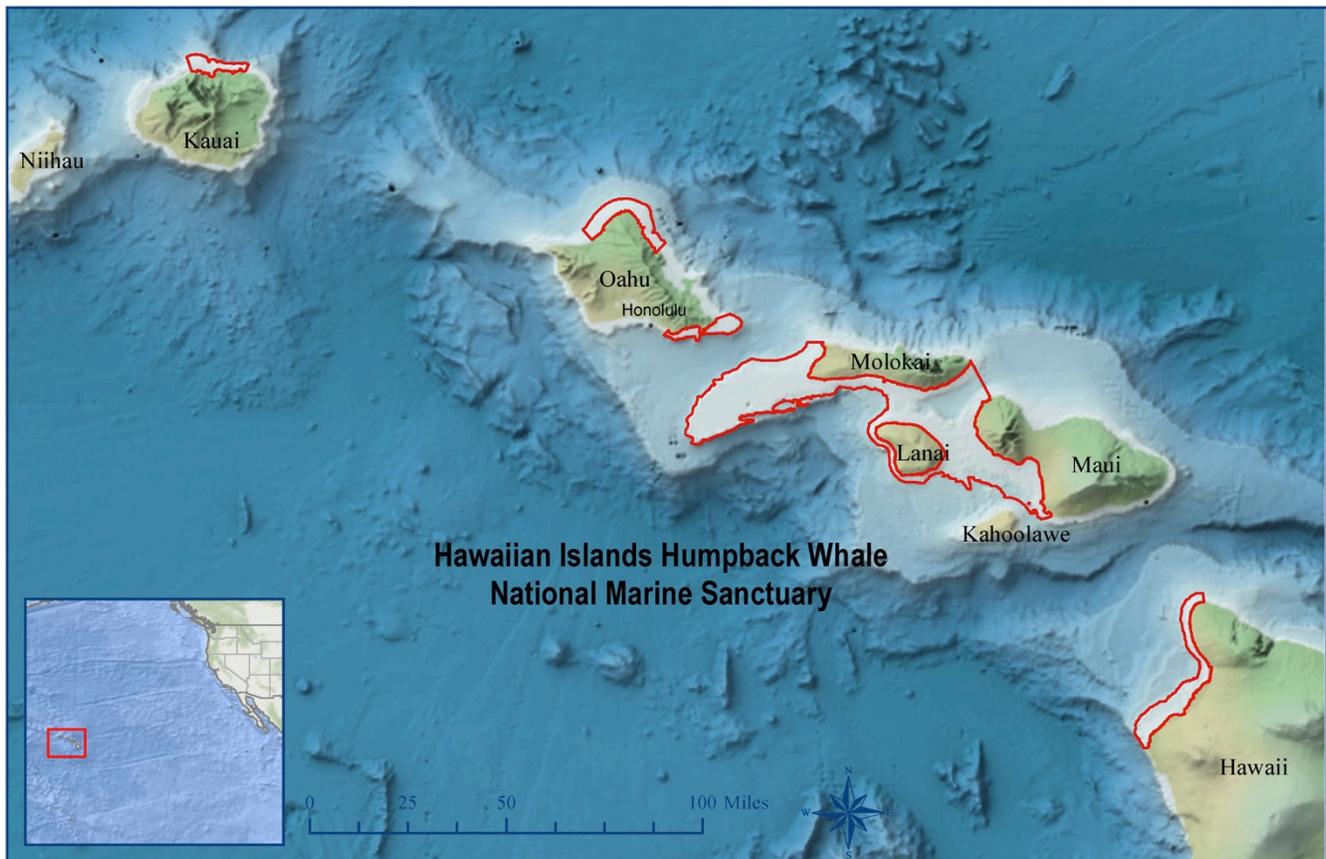


FY16 Accomplishments



BACKGROUND

Hawaiian Islands Humpback Whale National Marine Sanctuary was established in 1992 to protect and preserve humpback whales and their habitat in Hawai'i. Surrounded by soft sediments of the continental shelf seafloor, the sanctuary is located from the shoreline to the 100-fathom isobath (600 ft. depth) in the four island area of Maui; Penguin Bank; and off the north shore of Kaua'i, the north and south shores of O'ahu, and the north Kona and Kohala coast of Hawai'i Island.

Hawaiian Islands Humpback Whale 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 13 national marine sanctuaries and Papahānaumokuākea and Rose Atoll marine national monuments.



Photo: Bo Petty

Team OCEAN was launched in Hawai'i in the sanctuary waters off of Maui.



Photo: Franco/NOAA MMHSRP Permit # 18786, FAA Exemption #12618

Humpback whales exhibited a rarely seen behavior, called "sailing."



Photo: HUMP Cruise, Daniel Wagner

Mesophotic corals were found on a research cruise in the sanctuary.

Team OCEAN supports responsible wildlife watching

Hawaiian Islands Humpback Whale National Marine Sanctuary launched a new Team OCEAN (Ocean Conservation Education Action Network) program in the sanctuary waters off of Maui. A fleet of trained and knowledgeable kayaking naturalists served as ambassadors for the sanctuary to promote respectful and responsible wildlife viewing. This group of volunteer docents greeted and interacted with visitors and ocean users while out on the water to provide information about the national marine sanctuary and efforts to protect its iconic whales.

Monitoring from above with small Unmanned Aircraft Systems

The sanctuary led a collaborative pilot study using small Unmanned Aircraft Systems (sUAS) to provide remote aerial assessments of humpback whales for research and large whale entanglement response monitoring. Three different sUAS platforms and more than a dozen flights were logged during the two-week study. Researchers observed more than 15 humpback whales and documented a rarely seen behavior, "sailing," where a whale keeps its tail out of the water. The study successfully demonstrated the usefulness of sUAS as a safe, cost-effective, and –under appropriate operating procedures– a low-impact means for humpback whale research and response operations.

Collaborative research cruise in the sanctuary

Hawaiian Islands Humpback Whale National Marine Sanctuary and Papahānaumokuākea Marine National Monument collaborated on a research cruise aboard the NOAA Ship *Hi'ialakai* to characterize the nearshore habitats of the sanctuary including assessments of coral bleaching and disease on shallow coral reefs and to investigate the deeper mesophotic coral ecosystems. The cruise observed severe coral bleaching at all survey sites on Lanāi i, Maui, and Hawai'i Islands. This collaborative effort included outreach and education to raise awareness of Hawai'i's national marine sanctuary.

Hawaiian Islands Humpback Whale National Marine Sanctuary Looking Ahead to FY17

- The sanctuary is partnering with two popular tourist destinations, Maui Ocean Center and Whalers Village shopping center, to raise awareness of the sanctuary's conservation efforts to protect humpback whales. These public-private partnerships share the goal of promoting marine conservation to visitors.
- A passive acoustic monitoring device will be deployed in the sanctuary to record whale vocalizations. Characterizing the soundscape of humpback whales will be a primary focus to increase understanding of how the whales use the sanctuary habitat and the effects of vessel noise. Humpback whale vocalizations and song will be live-streamed to several venues to promote stewardship through education and awareness.
- The sanctuary is increasing its monitoring efforts by coordinating with other research and management agencies to better characterize the humpback whales' relative abundance, health, and impacts from known and potential threats in sanctuary waters.