

Cordell Bank National Marine Sanctuary Accomplishments

Fiscal Year 2020

Cordell Bank National Marine Sanctuary was established in 1989 to protect and preserve the extraordinary marine ecosystem surrounding the Cordell Bank. Situated at the edge of the continental shelf, Cordell Bank is a rocky feature that provides homes to colorful and abundant invertebrates, algae, and fishes. Its surface waters are feeding areas for local and migratory seabirds and marine mammals. The sanctuary is entirely offshore and protects an area of 1,286 square miles.

Visit cordellbank.noaa.gov for more information.



Engaging industry to protect endangered whales

Cordell Bank and Greater Farallones national marine sanctuaries and the West Coast regional office increased engagement with the shipping industry on voluntary slow speed requests in California to protect whales from fatal ship strikes. In 2020, letters co-signed by the Office of National Marine Sanctuaries, National Marine Fisheries Service, and the U.S. Coast Guard were sent to more than 125 shipping companies outlining their cooperation with the 2019 slow speed requests. Cooperation with these voluntary requests off San Francisco Bay increased from 45% in 2018 to 58% in 2019.



The sanctuary awards the Sapphire award to organizations that comply with the incentive-based vessel speed reduction program.
Photo: Jess Morten

Deep-sea surveys in the sanctuary

The sanctuary explored the deep seafloor of Cordell Bank National Marine Sanctuary in partnership with Greater Farallones National Marine Sanctuary and other scientists aboard the E/V *Nautilus*. The team completed two dives in the sanctuary, including a dive to 3,300 meters, the deepest dive ever within the sanctuary, where they documented deep-sea biological communities and environmental conditions and collected samples. Through telepresence technology, thousands of people around the world watched the exploration live from their computers and 1,300 students engaged with scientists through remote, ship-to-shore interactions.



Remotely operated vehicle *Hercules* gathers imagery, samples, and data to help scientists learn about the deepest regions in the sanctuary.
Photo: J. Stock/NOAA

Characterizing sounds in the sanctuary

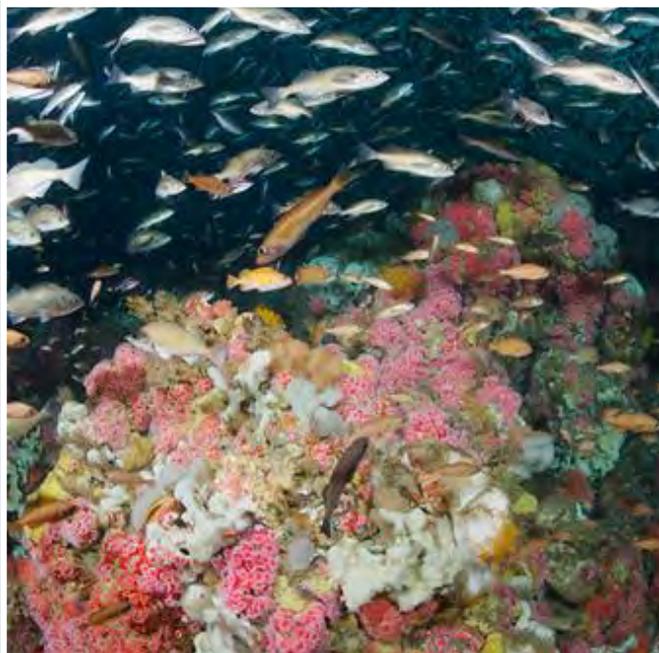
The sanctuary science team deployed a NOAA noise reference station to record underwater sound in Cordell Bank and Greater Farallones national marine sanctuaries for the third consecutive two-year term. Collaborators include NOAA's Pacific Marine Environmental Lab and Oregon State University. A NOAA Dr. Nancy Foster Scholar, along with co-authors, published a peer reviewed article describing the soundscape of the two sanctuaries based on the noise reference station data. The article describes ships and whales as the main sources of low-frequency sound, with seasonal variation detectable in the vocalizations of whales.



Data revealed that both large vessels and vocalizing baleen whales contribute to the sanctuary soundscape.
Photo: John Calambokidis/Cascadia Research

Looking Ahead

- Cordell Bank and Greater Farallones national marine sanctuaries will evaluate additional management measures to further reduce the risk of lethal ship strikes to whales.
- The sanctuary will launch a “virtual classroom visit” program to connect with students virtually on ocean and climate topics. This long-distance learning opportunity will help connect students to real-world ocean phenomena while interacting with an expert remotely.
- Sanctuary staff will work with experts to generate an updated condition report which assesses the condition and trends of resources throughout the sanctuary and describes existing management responses to the pressures that threaten the marine environment.



Cordell Bank is dense with invertebrate life and fish.
Photo: Clinton Bauder/BAUE

NATIONAL MARINE SANCTUARY SYSTEM



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

The National Marine Sanctuary System is a network of underwater parks encompassing more than 600,000 square miles of marine and Great Lakes waters. The network includes a system of 14 national marine sanctuaries and Papahānaumokuākea and Rose Atoll marine national monuments.