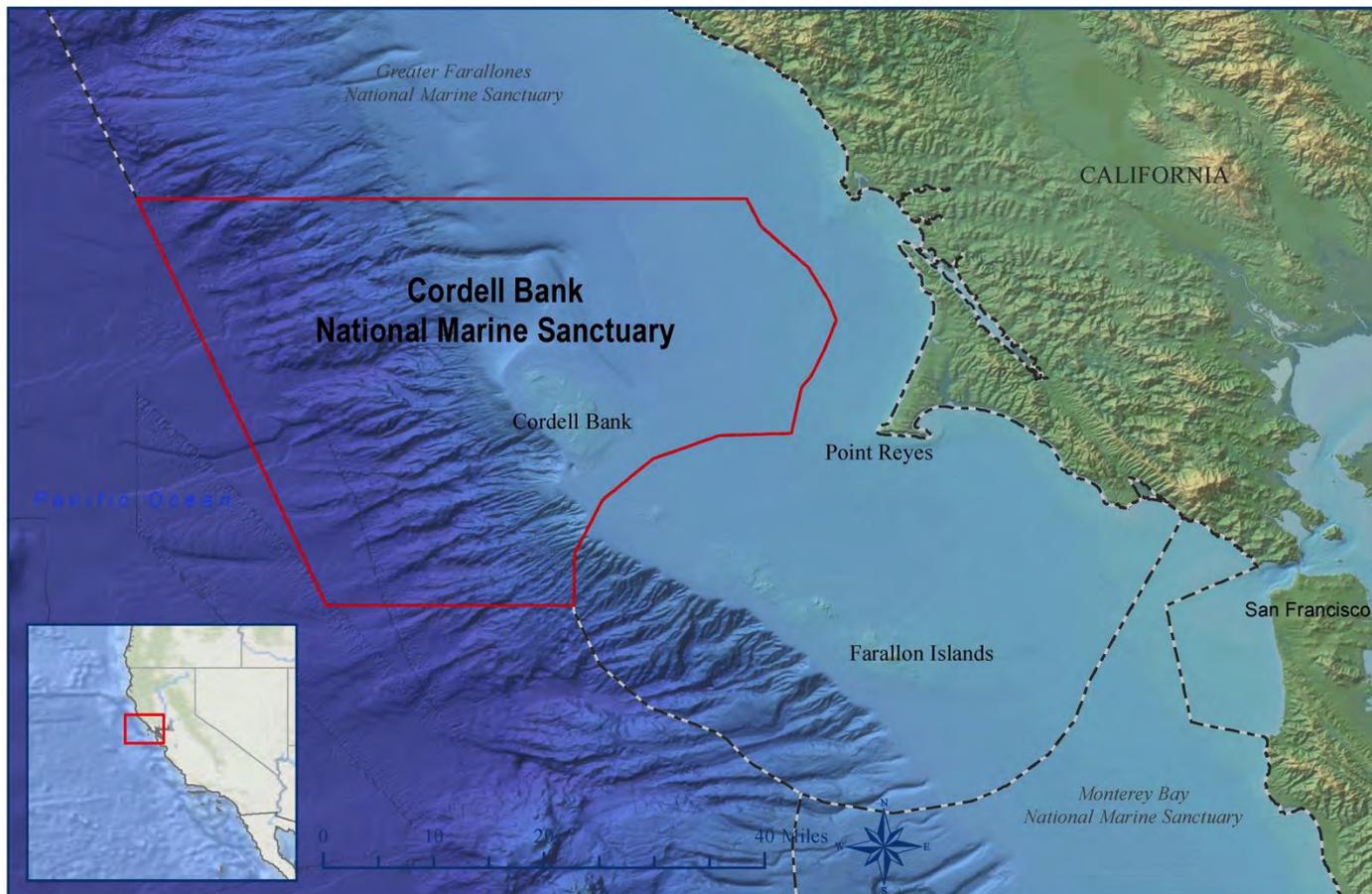


FY17 Accomplishments



BACKGROUND

Cordell Bank National Marine Sanctuary was established in 1989 to protect and preserve the extraordinary marine ecosystem surrounding the Cordell Bank. Surrounded by soft sediments of the continental shelf seafloor, Cordell Bank emerges with a rocky habitat, providing home to colorful and abundant invertebrates, algae, and fishes.

Cordell 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 13 national marine sanctuaries and **Papahānaumokuākea and Rose Atoll** marine national monuments.



Photo: Ocean Exploration Trust

Cordell Bank National Marine Sanctuary has a wide diversity of invertebrates like this rarely seen purple octopus.



Photo: NOAA/Point Blue

Cordell Bank National Marine Sanctuary deploys an instrument with NOAA Teacher at Sea, Jenny Hartigan.



Photo: Aaron Ninokawa/NOAA

Students visiting Point Reyes National Seashore at the edge of Greater Farallones National Marine Sanctuary to conduct marine debris surveys.

Deep sea surveys in Cordell Bank National Marine Sanctuary

Cordell Bank National Marine Sanctuary and collaborating scientists observed new corals, sponges, and other invertebrates during remotely operated vehicle surveys down to 2700 meters on the Exploration Vessel *Nautilus*. Scientists explored the seafloor in areas that were added to the sanctuary in 2015 but had never been visited. The exploration significantly expanded the information about deep habitat and species in the sanctuary and revealed topics for future research and outreach. Through telepresence technology, thousands of people around the world watched the exploration live on their computers.

At Sea Monitoring Partnership completes 50th cruise in the sanctuaries

Scientists completed the 50th Applied California Current Ecosystem Studies (ACCESS) cruise, spanning 14 years of effort. Sampling included documenting seabird and marine mammal distribution and abundance, zooplankton abundance, and oceanographic conditions. This collaborative partnership among Point Blue Conservation Science and Cordell Bank and Greater Farallones national marine sanctuaries provides information for managing dynamic ocean ecosystems and supplies information to protect sanctuary resources at risk from ship strikes, ocean acidification, and marine debris.

Winged Ambassadors takes flight in classrooms

With support from a National Environmental Education Foundation/Hands on the Land grant, Cordell Bank National Marine Sanctuary in partnership with Point Reyes National Seashore Association engaged 250 students in the northern region of the sanctuary with in-class programming followed by a coastal field trip to Point Reyes National Seashore. Students learned about the sanctuary's "winged ambassador," the albatross. Albatrosses feed in local national marine sanctuaries but are harmed by the prevalence of plastics, which they ingest. Students took action by participating in a marine debris survey/pick up at the beach.

Cordell Bank National Marine Sanctuary Looking Ahead to FY18

- Scientists will be analyzing video footage and collected specimens from the 2017 remotely operated vehicle surveys to better characterize the diversity of species in the sanctuary and assess their condition.
- **Cordell Bank National Marine Sanctuary and NOAA's Pacific Marine Environmental Lab** will collaboratively assess the influence of ocean noise, utilizing data collected from a Noise Reference Station (acoustic buoy).
- Cordell Bank National Marine Sanctuary will further conserve and protect sanctuary resources by evaluating management scenarios on whales threatened by ship strike and noise impacts from large ocean vessels.