



September 6, 2018

Dear Reader,

This month's Science Note highlights the Pacific Marine Assessment Program for Protected Species (PacMAPPS). BOEM is partnering with the National Oceanic and Atmospheric Administration (NOAA), the U.S. Navy, and the U.S. Fish and Wildlife Service to collect data on the distribution and abundance of marine mammals and seabirds across the Hawaiian Archipelago and along the Washington, Oregon, and California coast. Survey activities in Hawaii took place from July 6 through December 1, 2017, and included 179 days at sea, split between two NOAA research vessels. Surveys along the Pacific coast began June 26, 2018, and will continue through December 4, 2018.

BOEM develops, funds, and manages rigorous scientific research such as PacMAPPS to inform policy decisions on the development of energy and mineral resources on the Outer Continental Shelf. Collectively, the data collected during these surveys provide important environmental context that supports all of the partner agencies' missions and help us make sure the environment is protected.

Enjoy reading this edition, and please send your comments to us at [boempublicaffairs@boem.gov](mailto:boempublicaffairs@boem.gov).

Sincerely,  
William Y. Brown, Chief Environmental Officer

---

## Now Underway:

### The Pacific Marine Assessment Program for Protected Species

The Pacific Marine Assessment Program for Protected Species (PacMAPPS) is advancing. The first survey of this effort, the Hawaiian Cetacean Ecosystem assessment survey (HICEAS), was completed in 2017. The survey of the Pacific coast, the California Current Ecosystem Assessment Survey (CalCurCEAS), is currently underway and a winter survey of the Main Hawaiian Islands is scheduled for 2019.

BOEM, NOAA, and the U.S. Navy have combined financial, maritime, and other resources to work toward the common goal of understanding the Pacific marine environment and the species that call this piece of the ocean their home. Scientists on each leg of the survey look and listen for marine mammals and seabirds using standardized line transect methods. Concurrently, the research team collects oceanographic data (e.g., sea state, water temperature, salinity, chlorophyll content) to record environmental parameters that each species may be associated with. They take photos to add to



A pair of false killer whales, *Pseudorca crassidens*, encountered during HICEAS 2017. Photo by Greg Sanders, BOEM, under NMFS permit.

photo identification libraries and, when conditions permit, they mark some animals with satellite tags and collect skin biopsies for genetic analysis.

Together these data will be used to inform NOAA's marine mammal stock assessments and help BOEM and the U.S. Navy characterize the offshore marine environment for environmental analysis of their respective activities. Check out <https://www.boem.gov/Notes-From-The-Field/> for more information on the HICEAS 2017 research cruise, and the [study profile](#) for additional background. Stay tuned for more information on subsequent survey efforts.

To learn more about BOEM's other regional and multidisciplinary research activities, visit BOEM's [Environmental Studies Program](#), which develops, funds, and manages rigorous scientific research to inform policy decisions regarding the development of energy and mineral resources on the Outer Continental Shelf. Through this program, BOEM is a leading contributor to the body of scientific knowledge about the marine and coastal environment, funding more than \$1 billion in research since 1973.

- BOEM -

