Cordell Bank National Marine Sanctuary

National Marine Sanctuaries
National Oceanic and Atmospheric Administration





2016 Sanctuary Science Accomplishments

Field Work:

- ➤ The Applied California Current Ecosystem Studies (ACCESS) Partnership completed three research cruises in Cordell Bank National Marine Sanctuary (CBNMS) and Greater Farallones National Marine Sanctuary (GFNMS), adding to a thirteen year data set of monitoring the nearshore and open ocean sanctuary habitat. ACCESS data address critical management issues including supporting removal of derelict crab pots to reduce entanglement risk for endangered whales feeding in the sanctuary, and supporting the California Department of Health's assessment of domoic acid in the region in determining public risk to shellfish poisoning. ACCESS is a collaborative partnership of CBNMS, GFNMS, and Point Blue Conservation Science (accessoceans.org).
- In partnership with scientists from UC Davis, Bodega Marine Lab, two moorings outfitted with oceanographic instruments were deployed at Cordell Bank to monitor dissolved oxygen for the third consecutive year. Hypoxic conditions have been observed each year to varying degrees and CBNMS will continue to monitor to understand how conditions are changing and how marine life on the bank could be affected.

Science Publications:

- Benthic Characterization of Deep-Water Habitat in the Newly Expanded Areas of Cordell Bank and Greater Farallones National Marine Sanctuaries was published as an Office of National Marine Sanctuaries Conservation Science Series. The report provides a characterization of habitat, fishes, and invertebrates at two sites: Bodega Canyon (CBNMS) and The Football (GFNMS) that were sampled by a Remotely Operated Vehicle (ROV) in 2014.
- ➤ <u>Benthic Community Characterization of the Upper Reefs of Cordell Bank</u> is a technical report that provides a fine scale characterization of the benthic community using percent cover of taxa (collected from ROV still images) and physical habitat variables from the upper reef areas of Cordell Bank in the 45-70 meter depth range.

Benthic Science Workshop:

- CBNMS held a two-day workshop with regional experts in benthic sampling to discuss a variety of aspects of benthic science work such as survey scheme and design, transect type and placement, analysis, and operations.
- A <u>workshop report</u> was produced summarizing the advice received on how to effectively characterize and monitor CBNMS benthic habitats.

Beyond the Golden Gate Research Symposium:

The one-day symposium at the Romberg Tiburon Center for Environmental Studies was co-sponsored by CBNMS and GFNMS, along with seven other local research organizations. Forty research talks and twenty-two poster presentations were given and 160 people attended. CBNMS research was represented in five talks and two posters. Proceedings are available on the symposium website.

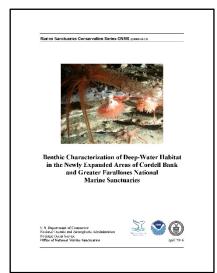
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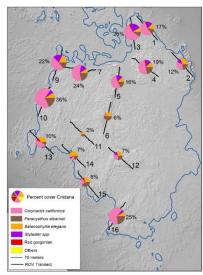
Read more about our ongoing science activities at Cordellbank.noaa.gov



Humpback whales observed on ACCESS. Photo: J. Thompson/ACCESS/NOAA/Point Blue



Conservation Series Report published in 2016.



Relative percent cover of Cnidaria from the Benthic Community Characterization of the Upper Reefs of Cordell Bank report published in