

## Initial Discoveries of the Southern California Living Seafloor Expedition

Oceana and Marine Applied Research & Exploration (MARE) conducted a five-day research expedition off Southern California from August 7 to August 11, 2016. The goal of the expedition was to explore and document fragile living habitats on the seafloor, including coral gardens, sponge beds, rocky reefs and underwater canyons that provide areas for shelter, breeding and feeding for important fish species. Oceana and MARE completed 13 dives and launched the Remotely Operated Vehicle, [ROV Beagle](#), to depths ranging from 80 meters (263 feet) to 435 meters (1,427 feet). During the expedition, Oceana and MARE discovered:

- Coral gardens and rocky reefs west of Santa Barbara Island, both inside and outside National Marine Sanctuary boundaries. These previously unidentified fragile habitats exist in areas that Oceana has proposed be closed to [bottom trawling](#).
- Many types of corals, including black corals (which can live to be over 1,000 years old), *Lophelia pertusa* (the only reef building, deep water coral) and several different species of gorgonian corals (sea fans), like gold corals and bubble gum corals.
- Black corals adorned with hundreds of associated species, including bright pink barnacles.
- Lace sponges adorning the peaks of offshore pinnacles at Butterfly Bank, 75 miles off the coast of San Diego.
- In the Santa Rosa Channel, where high resolution seafloor mapping has recently been completed, rockfish nurseries previously unidentified.
- Adult rockfish, including vermillion, flag, bocaccio and cowcod, as well as other commercially valuable fish like lingcod in close association with deep sea corals and sponges.
- Shark eggs laid on gold corals.
- Octopus wrapped around the base of a vase sponge, using the sponge for camouflage.
- Mola mola (ocean sunfish), wolf eel, octopus, nudibranchs and other non-commercial marine life associated with the seafloor.
- A mating aggregation of box crabs in a deep ledge at Osborne Bank.
- Territorial use of sponges by squat lobsters and California king crabs.

In the coming months, Oceana will be analyzing the video footage to make quantitative comparisons of habitat densities and fish associations.



(image left): Gold coral on a newly identified large rocky reef; (image center): vase sponge decorated with basket stars located within the Channel Islands National Marine Sanctuary; (image right): bubblegum coral at Butterfly Bank 75 miles off the Coast of San Diego.



99 Pacific Street, Suite 155-C  
Monterey, CA 93940  
T 831.643.9267 | F 831.643.9268  
W [www.oceana.org](http://www.oceana.org)



1230 Brickyard Cove Road #101  
Richmond, CA 94801  
T: 510.232.1541 | F: 510.232.1511  
W: [www.maregroup.org/](http://www.maregroup.org/)