

## California's Deep-Sea Treasures



*Deep-sea coral and sponge community on Rodriguez Seamount (courtesy of MBARI)*

The federal waters off California's coastline are home to an exceptional array of seamounts, ridges and banks that host diverse marine wildlife and habitat, as well as extraordinary geological features. These ancient islands, underwater volcanoes and mountain ranges support extraordinarily high productivity and host relatively large concentrations of a variety of species. Endangered fin and blue whales and white abalone, unique angler fish and sea jellies, and rare deep-water corals and sponges are just some of the species that rely upon these valuable habitats. Yet, less than one percent of the federal waters off of California are permanently protected.

### **Oceanic Oases**

The waters overlying California's seamounts, ridges and banks are home to thousand-year-old corals thriving against all odds in the dark, cold depths. They attract a remarkable variety of migratory predators, such as sharks, tuna, billfishes, seabirds and endangered sea turtles, which congregate to fuel up on the food produced by nutrient-rich upwelling currents. Additionally, these areas house some of the only hydrothermal vent systems in continental U.S. waters, which support unique ecosystems of chemosynthetic life, including dense communities of animals well-adapted to the distinctly harsh local environment.

Marine scientists and conservation organizations have long noted the scientific significance of these special places. Left intact, protected seamounts, ridges and banks can serve as refuges and centers of resilience for a unique array of species and habitats in the face of activities that alter the seabed, as well as climate change and ocean acidification.

## The Threat

Although these remote areas are offshore and relatively far from coastal populations, these seamounts, ridges and banks are not exempt from human impacts.

While state and federal data show that fishing on most of these sites is minimal, the Pacific Fishery Management Council has noted the scientific significance and remarkable value of these places by prohibiting bottom trawling at many of these unique geological features. These regulations are long-term, but not permanent, and still allow bottom-tending gear such as traps and longlines.

New oil exploration or mining at or adjacent to these seamounts, ridges and banks could destroy their rare, fragile ecosystems. The deep sea is also believed to hold large quantities of untouched energy resources, precious metals and minerals.

## An Opportunity for Protection

Taken together, the biological and geological treasures found within California's seamounts, ridges and banks exhibit significant scientific importance and warrant additional protection. We have an opportunity today to protect these globally important sites.

Long-term deep-sea protections would complement those offered by California's landmark coastal network of marine protected areas established in 2012, by connecting state water protections to offshore habitats. This comprehensive approach would leave a powerful legacy of ocean protection for present and future generations.

The biological and geological hotspots under consideration include: Gorda (the portion off California) and Mendocino Ridges in the north; Gumdrop, Pioneer, Guide, and Taney Seamounts off Central California; and Rodriguez and San Juan Seamounts, and Northeast, Cortes, and Tanner Banks in the south. All are in federal waters. The sites included above are for discussion purposes only; specific sites, boundaries and regulations will be determined through a robust public consultation process that includes tribes, fishermen and stakeholders. There is a full commitment to working with these interests to better understand the activities occurring in these areas and mitigate potential concern. All recreational fishing, including commercially licensed charter boat fishing, will be exempt.

