

2014 ACCOMPLISHMENTS



STUDYING THE EFFECTS OF A LOST SHIPPING CONTAINER

Scientists from the Monterey Bay National Marine Sanctuary (MBNMS) and Monterey Bay Aquarium Research Institute returned to study the effects of a lost shipping container resting on the seafloor at 4,200 feet. Scientists first documented the container using a remotely operated vehicle in 2011, finding it had altered sea life in an area 20 times larger than its footprint. Researchers are further studying the container's impacts to marine life and the toxicity of its paint. Influenced by this study, the U.S. Coast Guard is enacting a law to standardize lashing down containers.



FIRST-EVER EXPLORATION OF UNDERSEA RIDGE

Scientists from the MBNMS and Monterey Bay Aquarium Research Institute explored Sur Ridge for the first time last year, confirming the ridge was biologically significant. Offshore Big Sur, the base of Sur Ridge lies 4,400 feet below sea level. The ridge rises 1,300 feet above the seafloor and is about the size of Manhattan. Scientists explored the ridge using a remotely operated vehicle. The team expected to see spectacular corals at the ridge's top, but was surprised also to find corals extending to its base. Additionally, researchers identified an abundance of sponges and a chemosynthetic community of clams. The ridge has been declared a Sanctuary Ecologically Significant Area and will be the focus of future studies.



MBNMS EXPANDS PARTNERSHIPS WITH TOURISM AND RECREATION BUSINESSES

Under the direction of the sanctuary advisory council, MBNMS established a Recreation and Tourism Working Group to strengthen partnerships with recreation and tourism businesses. The group is helping to improve sanctuary awareness, exploring outreach opportunities and connecting businesses to the sanctuary. MBNMS also hosted two events for businesses in Monterey and Santa Cruz. The events highlighted the many ways the sanctuary enhances visitor experiences in the region.



THE WHALE TRAIL EXPANDS TO SANCTUARY

MBNMS helped expand The Whale Trail to California by adding new sanctuary locations. The trail starts in Washington and includes a network of shore-based sites where the public can view and learn about whales and other marine mammals. The sanctuary identified new sites in Santa Cruz and at Point Lobos State Reserve and produced interpretive signs for them. Additionally, the sanctuary designed signs for installation at San Simeon and Cambria that were added to the trail. MBNMS also held events in Monterey and Santa Cruz to educate the public about coastal whale watching and orcas in particular.



LOOKING AHEAD

- MBNMS is gearing up for a three-year process to review and update the sanctuary's management plan, which was last revised in 2008. The new plan will guide future management of the sanctuary. Additionally, it will address programs and issues related to resource protection, research and monitoring and education and outreach.
- The sanctuary's two visitor centers, the Sanctuary Exploration Center in Santa Cruz and Coastal Discovery Center in San Simeon, are prime avenues for educating the public about the sanctuary. MBNMS looks forward to successfully continuing their operations and enhancing volunteer and education programs in order to serve more than 80,000 visitors in 2015.
- Sanctuary scientists and partners will study the Davidson Seamount and several other Sanctuary Ecologically Significant Areas aboard the NOAA Ship *Bell M. Shimada* in May. They will survey marine animals and study environmental DNA, Fukushima radioisotopes, oceanography and microplastics.

Monterey Bay National Marine Sanctuary spans more than 6,000 square miles of coastal waters off central California. Within its boundaries, a rich variety of habitats teem with an amazing array of life. The sanctuary is home to rugged rocky shores, lush kelp forests, a towering offshore seamount, steep underwater canyons and other coastal environments. These diverse habitats host 34 species of marine mammals, more than 180 species of seabirds and shorebirds, 345 species of fish and a wealth of invertebrates and algae. The sanctuary was established on September 18, 1992.

NOAA's Office of National Marine Sanctuaries is committed to supporting lives and livelihoods across the nation and in sanctuary communities through socioeconomic research and monitoring to understand the economic and social drivers of sanctuary resources and improve management practices.

NATIONAL MARINE SANCTUARY SYSTEM

Olympic Coast
Cordell Bank
Gulf of the Farallones
Papahānaumokuākea
Hawaiian Islands Humpback Whale
Monterey Bay
Channel Islands
American Samoa (U.S.)



Scale varies in this perspective. Adapted from National Geographic Maps.

The Office of National Marine Sanctuaries serves as the trustee for a system of 14 marine protected areas encompassing more than 150,000 square miles of marine and Great Lakes waters from Washington state to the Florida Keys, and from Lake Huron to American Samoa. The system includes 13 national marine sanctuaries and the Papahānaumokuākea Marine National Monument. For more information on the National Marine Sanctuary System, visit: <http://sanctuaries.noaa.gov>