



# Monterey Bay National Marine Sanctuary

## Sanctuary Office Report



Volume 15, Number 1

A REPORT FOR THE SANCTUARY ADVISORY COUNCIL MEMBERS

REPORTING PERIOD: NOVEMBER 25, 2017 – JANUARY 25, 2018

### ABOUT THE SANCTUARY

Designated in 1992, Monterey Bay National Marine Sanctuary (MBNMS or Sanctuary) is a federally protected marine area offshore of California's central coast. Stretching from Marin to Cambria, MBNMS encompasses a shoreline of 276 miles and 6,094 square statute miles of ocean.

Supporting one of the world's most diverse marine ecosystems, it is home to numerous mammals, seabirds, fishes, invertebrates and plants in a remarkably productive coastal environment. MBNMS was established for the purpose of resource protection, research, education and public use of this national treasure.

### NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA) AND OFFICE OF NATIONAL MARINE SANCTUARIES (ONMS) NEWS

#### **The changing Arctic: A greener, warmer and increasingly accessible region**

Warming at more than twice the rate of anywhere else on Earth, the Arctic is on the front lines of climate change.

The Arctic is warming twice as fast as anywhere else on Earth, which is already affecting the nearly 4 million people living in the region, the fish and wildlife they depend on for food, and their environment. The changes have ramifications far beyond the Arctic to global economies, weather, climate, sea levels, trade and national security. Sea ice and weather conditions are changing so rapidly in the Arctic that some animals, which have long-evolved to living in extreme cold, now struggle to acclimate to sea ice loss and warming air and water temperatures. Indigenous peoples who rely on marine food sources for sustenance (including 40,000 persons on Alaska's Arctic coastline) are being challenged to adapt to a new environment. For more information: <http://www.noaa.gov/explainers/changing-arctic-greener-warmer-and-increasingly-accessible-region>

#### **Whale science on the high seas**

People may think six months in Hawaii sounds like a vacation, but 46 scientists and crew aboard NOAA ships *Oscar Elton Sette* and *Reuben Lasker* spent the past 179 days hard at work. The teams surveyed an impressive 1.8 million square nautical miles around the main and Northwestern Hawaiian Islands as part of the Hawaiian Islands Cetacean and Ecosystem Assessment Survey (or HICEAS). This methodical research helped NOAA scientists better understand the structure of whale and dolphin populations and their unique habitats. The teams had the opportunity to encounter and study 23 species of whales and dolphins, including false killer whales — a top priority for the survey — and update data about their population size that will inform bycatch reduction strategies. Scientists saw several beaked whales during HICEAS, including the rare Longman's beaked whale, which has only recently been named after spending years with a case of mistaken identity. For more information: <http://www.noaa.gov/news/warm-air-helped-keep-2017-antarctic-ozone-hole-smallest-in-29-years>

#### **Does space junk fall from the sky?**

Yes it does! On average, a total of between 200-400 tracked objects enter Earth's atmosphere every year. That's about one every day! Thankfully human populations are rarely affected by things falling from the sky (from outer space). This is largely a numbers game. Human populations live on a small percentage of the Earth's total surface area. So any objects that do not burn up and disintegrate upon atmosphere re-entry are likely to fall into the ocean (which covers over 70% of the surface of the Earth) or a sparsely populated land area. The U.S. Department of Defense in cooperation with NASA currently monitors over 50,000 objects orbiting Earth, 60% of which are tiny, but 40% (roughly 20,000) are larger than a softball. Only about 1,000 are actual spacecraft. Space debris is the collection of defunct man-made objects in space like old satellites, spent rocket stages, and fragments from disintegration, erosion, and collisions. These items are tracked by a Space Surveillance and Tracking (SST) system, that detects, categorizes and predicts the orbits of space debris. The SST is mostly made up of ground-based sensors like telescopes and military radars. For more information: <https://www.nesdis.noaa.gov/content/does-space-junk-fall-sky>

## NATIONAL MARINE SANCTUARY NEWS

### **NOAA names Dr. Rebecca Holyoke as deputy director of Office of National Marine Sanctuaries; Matt Brookhart as acting regional director**

NOAA's Office of National Marine Sanctuaries has selected Rebecca Holyoke, Ph.D. as deputy director, replacing Matt Brookhart, who has been serving in that position in an acting capacity. Dr. Holyoke began her career with NOAA in 2009 as a John A. Knauss Marine Policy Fellow in the Office of National Marine Sanctuaries and has been a Program Analyst with the office since 2010. Mr. Brookhart has been selected as acting regional director for the office's northeast and southeast regions, following the retirement of Reed Bohne, current Regional Director on December 24. Mr. Brookhart has been with ONMS since 1999, working at both headquarters and in the field.

### **USCG Investigating Commercial Fishing Vessel Fire and Sinking in Channel Islands National Marine Sanctuary**

On December 13, the commercial squid fishing vessel Old Joe's Swan, home port Anacortes, WA, caught fire and sank south of Smuggler's Cove, Santa Cruz Island in the Channel Islands National Marine Sanctuary (sanctuary). The 32' vessel sank in ~800 meters of water and discharged upwards of 300 gallons of diesel fuel. The master was pulled from the water safely. The USCG is investigating the incident and based on the investigation NOAA's Office of Law Enforcement (OLE) will determine what if any future enforcement actions may be taken. Sanctuary staff are providing mapping and habitat data information, communicating between the USCG, NOAA OLE and the insurer. Vessels that sink in the sanctuary violate NOAA's discharge and seabed disturbance regulations for CINMS, which are in place to help protect the water quality, habitats, marine life, human use, and aesthetic values of this special place.

### **Farallones launches marine mammal-themed winter mini-camp**

On January 3, Greater Farallones National Marine Sanctuary and the Greater Farallones Association launched the second in a new series of Farallones Mini-Camps. Twelve campers, ages seven to 10, took part in the three-day program, where they received 24 hours of field and classroom studies focused on marine mammal biology and behaviors. The camp incorporated several outdoor activities highlighting the special adaptations of seals, sea lions, sea otters and whales: air-breathing yet ocean-dwelling mammals. The Farallones marine sanctuary supports 36 species of marine mammals, due to its biological abundance and diversity. The camp included excursions to Año Nuevo State Park to view breeding elephant seals on their rookery, including two battling bulls. They also visited The Marine Mammal Center to learn about marine mammals' challenges to survival, and their rescue and rehabilitation. A field based mini-camp provides children with direct experiences to connect with their national marine sanctuaries and increase their ocean literacy through exploration and discovery.

### **HIHWNMS Leads Christmas Day Effort to Free Humpback Whale off Lahaina, Maui**

On December 25, HIHWNMS led a multi-agency, community-based effort to free an adult humpback whale from a life-threatening entanglement. The animal was reported off Lahaina, Maui by tour operators that have been trained as first responders. Authorized response under NOAA's Marine Mammal Health and Stranding Response Program was mounted by trained personnel aboard the sanctuary's response vessel *Koholā*, and from the sanctuary-coordinated West Maui Response Team. More than 340 feet of heavy gauge line was removed from the animal, including 55 feet of line in the whale's mouth. The sanctuary and its partners have freed 24 large whales over the past 14 years and in the process removed more than 10,000 feet of line. Saving a whale from a life-threatening entanglement and gathering information to reduce the threat to more whales in the future; reducing the risk of members of the general public who may try and save the animals on their own by providing trained responders.



## MONTEREY BAY NATIONAL MARINE SANCTUARY NEWS AND PROGRAM UPDATES



### MANAGEMENT

#### **Monterey Bay National Marine Sanctuary Holds Advisory Council Meeting**

On December 15<sup>th</sup>, the MBNMS Advisory Council met and received a series of presentations and updates on the ONMS Strategic Plan as well as plastic straws (and other single use plastics) and steps taken in Santa Cruz County to reduce their use. Actions taken included: recommendations on beach nourishment options presented at the October Advisory Council meeting February 16<sup>th</sup> in Santa Cruz. Sanctuary Advisory Councils are community-based advisory bodies consisting of representatives from various user groups, government agencies and the public at large. The role of the council is to provide advice to the sanctuary superintendent on the designation and/or operation of a national marine sanctuary.

### RESEARCH AND MONITORING

#### **Deep Sea Field Guide Characterizing Sur Ridge Now Available**

Sur Ridge is a large rocky feature located approximately 28 miles west of Point Sur, central California within Monterey Bay National Marine Sanctuary. Sur Ridge serves as a focal area for facilitating research to better understand natural and human-caused ecosystem variation. Recently, Sur Ridge has been surveyed using a remotely operated vehicle (ROV; midwater and seafloor), and with a midwater trawl. At least 261 taxa were observed and are presented in this field guide. The purpose of this guide is to create an inventory of benthic and midwater organisms, and associated imagery, observed at Sur Ridge to provide a baseline taxonomic characterization. It may also be useful for other deep-sea studies off California. Sur Ridge is considered a sanctuary ecologically significant area (SESA), supported by expansive fields of deep-sea corals and sponges. Research will continue to characterize the area. Sur Ridge Field Guide can be viewed and downloaded at: <https://sanctuaries.noaa.gov/news/nov17/cataloguing-the-depths-of-monterey-bay-national-marine-sanctuary.html>

#### **MBNMS Research Activity Panel Meets at Monterey Bay Aquarium Research Institute**

On January 12th, the Monterey Bay National Marine Sanctuary (MBNMS) Research Activity Panel (RAP) will meet at Monterey Bay Aquarium Research Institute (MBARI), in Moss Landing, CA. Agenda items include: research activities at MBARI; summary of December Sanctuary Advisory Council meeting; Ocean Guardian School Program video interviews with scientists; Mud Creek Slide and black abalone relocation efforts; and new SIMoN website. The MBNMS Research Activity Panel (RAP) is a working group of the MBNMS Advisory Council. The RAP meets six times per year, and advises SAC and sanctuary staff on basic and conservation science issues. For more information: <http://montereybay.noaa.gov/sac/rap/rapma.html>

### RESOURCE PROTECTION

#### **MBNMS Co-hosts Carbon Farming Webinar**

MBNMS co-hosted a webinar on Carbon Farming in conjunction with the Monterey Bay Regional Climate Action Compact attended by 20 participants. Carbon Farming involves sequestering carbon from the atmosphere into the soils of working lands through adopting agricultural management practices that increase soil microbial activity and change the plant community toward those that build deeper root structures. These USDA NRCS validated practices increase soil organic matter in soil and improve soil health. They include addition of compost, cover cropping, hedgerow planting, low/no till agriculture, and silviculture. By improving the knowledge base of local stakeholders in regard to management practices that can sequester carbon into the soils of working lands, we can start to build a bridge between actions we can take on the land that can benefit the ocean ecosystems through reducing the pace of global warming.



### **California Marine Sanctuary Foundation (CMSF) Awarded Healthy Soils Program Funding**

The state of California announced the country's first grants to support farmers and ranchers in adopting Healthy Soils practices that deliver climate benefits while also producing healthier food and cleaner air and water. \$5.23 million was awarded to 86 projects across 31 counties. CMSF received an award of \$98,830,000 to work with 2 ranches in the Elkhorn watershed to implement practices that sequester carbon into soil where it can be stored for the long term and slow the pace of global warming. These ranches will serve as Demonstration Projects to better understand and show other stakeholders the multiple benefits. If California increases carbon storage by 1% on its 46 million acres of grasslands, pasture and arable lands, the CO<sub>2</sub>e sequestered would be 1.5 billion metric tons (Carbon Cycle Institute 2016). Demonstrating practices that improve soil health and sequester carbon on working lands can encourage wider adoption of these practices on agricultural land. Slowing global warming will benefit the marine ecosystem through slowing temperature and chemistry changes such as ocean acidification and the effects.

### **EDUCATION, VOLUNTEER AND OUTREACH PROGRAMS**

None

## NEWS COVERAGE

### [As ocean drones proliferate, marine wildlife are getting a bit annoyed](https://www.newsdeeply.com/oceans/articles/2017/11/28/as-ocean-drones-proliferate-marine-wildlife-are-getting-a-bit-annoyed)

<https://www.newsdeeply.com/oceans/articles/2017/11/28/as-ocean-drones-proliferate-marine-wildlife-are-getting-a-bit-annoyed>

NewsDeeply-November 28, 2017

### [Business Digest: Leadership series launches Tuesday](http://www.santacruzsentinel.com/business/20171128/business-digest-leadership-series-launches-tuesday)

<http://www.santacruzsentinel.com/business/20171128/business-digest-leadership-series-launches-tuesday>

Santa Cruz Sentinel-November 28, 2017

### [Innovative fun and adventure is alive and well at the Fifth Annual Coastal Discovery & Stewardship Celebration along 101 miles of the CA Highway 1 Discovery Route](https://www.broadwayworld.com/bwwgeeks/article/Innovative-Fun-and-Adventure-Is-Alive-and-Well-at-the-Fifth-Annual-Coastal-Discovery-Stewardship-Celebration-Along-101-Miles-of-the-CA-Highway-1-Discovery-Route-January-20171129)

<https://www.broadwayworld.com/bwwgeeks/article/Innovative-Fun-and-Adventure-Is-Alive-and-Well-at-the-Fifth-Annual-Coastal-Discovery-Stewardship-Celebration-Along-101-Miles-of-the-CA-Highway-1-Discovery-Route-January-20171129>

Broadway World-November 29, 2017

### [Santa Cruz innovators track stormwater for cities](http://www.santacruzsentinel.com/article/NE/20171207/NEWS/171209761)

<http://www.santacruzsentinel.com/article/NE/20171207/NEWS/171209761>

Santa Cruz Sentinel-December 7, 2017

### [Council voices opposition to offshore drilling](https://register-pajaronian.com/article/council-voices-opposition-to-offshore-drilling)

<https://register-pajaronian.com/article/council-voices-opposition-to-offshore-drilling>

Register Pajaronian-December 15, 2017

### [Season's first elephant seal pups are born at Piedras Blancas](http://www.sanluisobispo.com/news/local/community/cambrian/cambrian-opinion/article191764399.html)

<http://www.sanluisobispo.com/news/local/community/cambrian/cambrian-opinion/article191764399.html>

The San Luis Obispo Tribune-December 27, 2017

### [Fishing leaders: Has the Monterey Bay sanctuary kept its promise?](http://www.montereyherald.com/article/NF/20171221/LOCAL1/171229963)

<http://www.montereyherald.com/article/NF/20171221/LOCAL1/171229963>

Monterey Herald-December 21, 2017

### [Letter: The Monterey Bay marine sanctuary could be at risk](http://www.santacruzsentinel.com/opinion/20180108/letter-the-monterey-bay-marine-sanctuary-could-be-at-risk)

<http://www.santacruzsentinel.com/opinion/20180108/letter-the-monterey-bay-marine-sanctuary-could-be-at-risk>

Santa Cruz Sentinel-January 8, 2018

### [MBARI ROV Dock Ricketts makes 1,000<sup>th</sup> dive](https://www.marinetechologynews.com/news/mbari-ricketts-makes-000th-555801)

<https://www.marinetechologynews.com/news/mbari-ricketts-makes-000th-555801>

Marine Technology News-January 8, 2018

### [A whale of a time: Enjoy whale watching year-round in Monterey County](https://www.prnewswire.com/news-releases/a-whale-of-a-time-enjoy-whale-watching-year-round-in-monterey-county-300582189.html)

<https://www.prnewswire.com/news-releases/a-whale-of-a-time-enjoy-whale-watching-year-round-in-monterey-county-300582189.html>

PR Newswire-January 15, 2018

### [Monterey Bay spill could fill 11 football fields with raw sewage, authorities say](http://www.ksbw.com/article/monterey-bay-spill-could-fill-11-football-fields-with-raw-sewage-authorities-say/15873014)

<http://www.ksbw.com/article/monterey-bay-spill-could-fill-11-football-fields-with-raw-sewage-authorities-say/15873014>



KSBW-January 24, 2018

**Web Site** (<https://montereybay.noaa.gov/>)

**Follow MBNMS on Facebook** (<https://www.facebook.com/MBNMS>) and **Twitter** (<https://twitter.com/mbnms>)

*Please take a few moments to peruse the site. Your feedback is greatly appreciated.  
Comments and suggestions can be sent to [andrew.white@noaa.gov](mailto:andrew.white@noaa.gov).*

## **FUN, OCEAN RELATED WEB SITES**

### **Caitlin Seaview Survey**

<http://www.catlinseaviewsurvey.com>

### **SIMON**

<https://www.sanctuariesimon.org>

### **Seasons in the Sea**

<http://www.seasonsintthesea.com>

### **Waterlust**

<http://www.waterlust.org/about/>

### **Thank You Ocean**

<http://www.thankyouocean.org/>

### **NOAA Online Media Library**

[https://marinelife.noaa.gov/media\\_lib/](https://marinelife.noaa.gov/media_lib/)

### **Oceans Live**

<http://oceanslive.gso.uri.edu/>

### **Office of National Marine Sanctuaries**

<http://www.sanctuaries.nos.noaa.gov/>

### **NOAA Ocean Explorer**

<http://oceanexplorer.noaa.gov/>

### **Encyclopedia of the Sanctuaries**

<http://www.ocean.com/Library/Encyclopedia/>

### **National Data Buoy Center**

<http://www.ndbc.noaa.gov/rmd.shtml>

### **National Ocean Service**

<https://www.nos.noaa.gov/>

### **National Oceanic & Atmospheric Administration**

<http://www.noaa.gov/>

### **Your Sanctuary TV**

<http://yoursanctuarytv.org/>

## **MBNMS STAFF**

**Paul Michel** – Superintendent  
**Dawn Hayes** – Deputy Superintendent

### Research

**Andrew DeVogelaere** – Research Coordinator  
**Erica Burton** – Research Specialist  
**Jennifer Brown** – SIMoN Ecosystem Scientist  
**Chad King** – SIMoN Data Analyst  
**Steve Lonhart** – SIMoN Senior Scientist

### Education

**Amity Wood** – Education and Outreach Coordinator  
**Michelle Berryessa** – SEC Gift and Bookstore Manager  
**Catherine Drake** – Program Specialist (SEC)  
**Nick Ingram** – Volunteer Coordinator (SEC)  
**Brijonnay Madrigal** – Program Assistant (SEC)  
**Chelsea Prindle** – SEC Manager  
**Carolyn Skinder** – Southern Region Program Coordinator  
**Lisa Uttal** – Education Specialist

### Resource Protection

**Karen Grimmer** – Resource Protection Coordinator  
**Sophie De Beukelaer** – GIS Analyst & Research Permit Coordinator  
**Lisa Emanuelson** – Citizen Watershed Monitoring Network Coordinator  
**Bridget Hoover** – Water Quality Protection Program Director  
**Scott Kathey** – Regulatory/Emergency Response Coordinator  
**Pamela Krone-Davis** – Agriculture Water Quality Coordinator

### Program Operations

**Raymond Chisolm** – Program Specialist  
**Nichole Rodriguez** – Advisory Council Coordinator  
**Randall Fertig** – SEC Maintenance Specialist  
**Andrew White** – Network Manager and Webmaster



## **Learn More About Your Sanctuary**

The Sanctuary Office Report is produced bi-monthly by Monterey Bay National Marine Sanctuary staff in conjunction with Sanctuary Advisory Council meetings. To learn more about the Sanctuary please visit our web site at: <https://www.montereybay.noaa.gov>.

To learn more about the Sanctuary Advisory Council please visit:  
<https://montereybay.noaa.gov/sac/advisory.html>

## **The Office of National Marine Sanctuaries**

Monterey Bay National Marine Sanctuary is one of 14 marine protected areas in the National Marine Sanctuary System 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. Visit the ONMS web site at:  
<https://www.sanctuaries.nos.noaa.gov/>

## **Get involved and stay informed!**

To learn how to get involved in the Sanctuary visit:  
<https://montereybay.noaa.gov/getinvolved/welcome.html>

Sign up for the MBNMS listserv to receive email notices about upcoming Sanctuary events, and public meetings of the Sanctuary Advisory Council and Working Groups:  
<https://montereybay.noaa.gov/intro/elists.html>

## **- Contact Information -**

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