



Monterey Bay National Marine Sanctuary Advisory Council **Diver Newsletter** **October**

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Hello Larry Ankuda,

September was a tragic month for the Diving community. There are no other words to describe the events of early September 2, 2019, Labor Day. We have attended several memorials, gatherings and simple get-together's to share feelings, thoughts and grieve together over the loss of near and dear friends, colleagues, fellow divers and crew. Most of us have been on the dive boat *Conception* with Captain Jerry at the helm sometime over the years and to a person we all are still in disbelief of what happened.

Glen Fritzier, owner, has regarded his customers as family with many diving for decades on his three boats. This horrific tragic event has changed so many lives forever. MaryJo showed me a black button with "34" Remembering you on every Dive. It hit me in the gut to hold it and read it as I imagined and thought about some of our personal friends on that trip. We are thankful for all our fellow divers, it is a big family that comes together when we need each other. Only divers can speak "diver" to each other as we know the beauty, adventure, and skills we share to venture into our underwater world. Thank you all for coming and sticking together during this difficult time.



DEMA is around the corner in November and we hope to see you there with the Diving community.

We have an agenda item concerning helium filled foil, metallic, nylon (Mylar) balloons floating into the sanctuary and marine life entanglement. There are some interesting data points that we will be reviewing and looking at how education may play a role in helping curb the incident rates.

At the last meeting of the year we will be tackling the increasing occurrence of needles on the beaches. The often referred program "Needle Exchange" has turned into 600,000 being distributed in 2018. Few are ever returned and now we have recorded accidental "stick" situations happening on popular beaches. The needles and their contents threaten the environment and human health.

The Reef Check Urchin Experiment has found some first year results that are quite surprising and RCCA will release a report later this year. The main take away is that although purple urchins are the main culprit in destroying kelp forests, the red urchins also increased their numbers and are preventing kelp from recruiting in the experimental plots. We are seeking to expand the project for next season by adding more targets and including removal of red urchins to see if kelp can successfully be restored.

Please email us on either of these subjects if you have comments or information that we should put forward in the discussion.

Drop us an email at:

Brian Nelson - brian@pcscuba.com

Keith Rooseart - keith.rootsaert@salasobrien.com

Safe Diving,
Brian and Keith

Do you know how to find out the local beach water quality reports?
Monterey County Health Department Beach Report

Know before you go...Diving
[BEACH WATER QUALITY REPORT](#)

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Detecting fish from ocean-going robots to complement ship-based surveys

The ocean is vast, and fish swim. These are challenges for scientists who need to find out when, where, and how many, fish are found in Alaska's marine waters. They also want to know which species and what ages are found there—all information essential to managing Alaska's valuable commercial fisheries sustainably.

Recent advances in autonomous vehicle and fish finders or echosounder (sonar) technology may help overcome those challenges. A new NOAA Fisheries study demonstrates that unmanned surface vehicles can expand the range and duration of ship-based acoustic fish surveys.



“This opens a window in time and space that we didn’t have using ships alone,” said Alex De Robertis, the NOAA Alaska Fisheries Science Center scientist who led the study. “Ship-based surveys are limited because they are short, and mostly done in summer—we don’t know what happens the rest of the time. Our results show that oceangoing robots such as saildrones now make autonomous long-term acoustic measurements possible.”

[More Information](#) :

White House report showcases NOAA citizen science efforts

At NOAA and beyond, federal scientists are engaging members of the public in citizen science projects to collaboratively address realworld problems. This summer, the White House Office of Science and Technology Policy published a report to Congress that showcased federal citizen science and crowdsourcing activities from the past two years. Out of the 86 projects highlighted from 14 government agencies, 11 came from NOAA. Dr. Kelvin Droegemeier, Director of the



White House Office of Science and Technology Policy, announced the Implementation of Federal Prize and Citizen Science Authority: Fiscal Years 2017-18 report at the June 14 U.S. Government Open Innovation Summit to an audience of over 150 public and private sector workers.

[More Information](#)

Teaming up for Gear Innovation Demonstration Day

To inform the efforts of the California Dungeness Crab Fishing Gear Working Group to reduce whale entanglements, the California Department of Fish and Wildlife (CDFW) and Monterey Bay National Marine Sanctuary hosted a gear innovation/modification demonstration day on September 6, 2019, funded and supported by the National Marine Sanctuary Foundation as part of their whale conservation program.

The purpose of the event was to provide a venue for gear innovators, fishermen, and fishery and resource managers to collaboratively address whale and sea turtle entanglements through technology and gear innovations by demonstrating and/or learning about different gear types that may help reduce the risk of marine life entanglements in Dungeness crab fishing gear.

The RV *Fulmar* served as an observation deck while the CDFW Patrol Vessel *Steelhead* demonstrated six different types of gear in Monterey Bay. Some known as “ropeless” gear, remove the need for constant lines in the water thereby reducing the risk of entanglement. Other types of gear include long soaker systems, and using lines with a weak link and are designed to release when an animal puts pressure on the line. A diversity of technologies were reviewed in the field by agencies, fishermen and nonprofits, and valuable information was collected and will be used to evaluate and rate the performance for each gear type. The information will be brought back to the Working Group for discussion and will likely be followed up by additional selective testing in 2020.

Whale entanglements are identified by the West Coast Regional Sanctuary Resource Protection Coordinators as a priority over the next 5 years as the issue represents one of the major threats to large whales. Gear innovation is one of the areas to explore that could ultimately allow “whale safe” fishing in high-risk areas.

Get Into Your Sanctuary Weekend 2019 at the Sanctuary Exploration Center

On August 3 and 4 over 750 visitors to the Sanctuary Exploration Center in Santa Cruz CA were encouraged to “Get Into Your Sanctuary” through ocean recreation and responsible wildlife viewing. Participants were able to: learn how to responsibly view wildlife on Cowell's Beach and the Santa Cruz Wharf, learn what types of wildlife are easy to view in this area and where to see them, go on a virtual reality dive experience led by the [CSUMB Research Diving Program](#), and explore the micro world of plankton in Monterey Bay!

Santa Cruz Main Beach and the Santa Cruz Wharf are popular tourist attractions and feature excellent opportunities for responsible wildlife viewing within MBNMS. Often visitors are not aware of recreation and responsible wildlife viewing opportunities in this area. Get Into Your Sanctuary Weekend aims to bring awareness to these opportunities and highlight the rich wildlife found within MBNMS. Visitors were able to learn about the wildlife they could experience above the ocean, in the kelp forests through SCUBA diving, or in microscopic world found in a drop of water.



Sanctuary Sound Exhibit installed at the Sanctuary Exploration Center

A joint project between Monterey Bay National Marine Sanctuary and Monterey Bay Aquarium Research Institute to design, develop and fabricate a Soundscape exhibit was completed at the Sanctuary Exploration Center in Santa Cruz. The exhibit highlights ten sounds taken with MBARI's hydrophone at 900 meters in the sanctuary.

When a visitor pushes one of ten buttons, they hear a sound in the Open Ocean Mini Theater and see a corresponding sound wave. After a few seconds, a video for the sound's source and message is revealed on the large screen. The exhibit consist of sounds that are human in origin (container ships), natural in origin (earthquake and rain) and animal in origin (Blue, Fin humpback and Sperm whales, Orca, sea lion and dolphins).

New and changing exhibits are important to the viability of a visitor center and sound in our sanctuary waters is an important topic and issue to interpret for NOAA Office of the National Marine Sanctuaries and MBNMS. To introduce sound and the sanctuary's soundscape and using listening as a different learning modality in an exhibit is very engaging for the visitor.

[Listening Room](#)

[More Information](#)



Pacific Grove Re-compression Chamber

The Pacific Grove Hyperbaric Chamber came into existence under the Pacific Grove Ocean Rescue, which was created and established for the purpose of promoting water safety and performing marine water rescues within the City of Pacific Grove and neighboring cities. The team additionally provided emergency medical treatment to victims suffering from SCUBA diving related injuries and carbon monoxide poisoning in the hyperbaric facility located at the Pacific Grove Fire Department.

Our volunteer staff includes medical doctors (MDs), registered nurses (RNs), respiratory therapists (RRTs), dive medical technicians (DMTs),

emergency medical technicians (EMTs), and other trained personnel – and are on call 24/7 for emergencies.

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2019 Sanctuary Advisory Meeting Schedule and Locations

October 18th - Monterey Peninsula College
December 13th - Monterey Conference Center



[Monterey Bay National Marine Sanctuary](#)

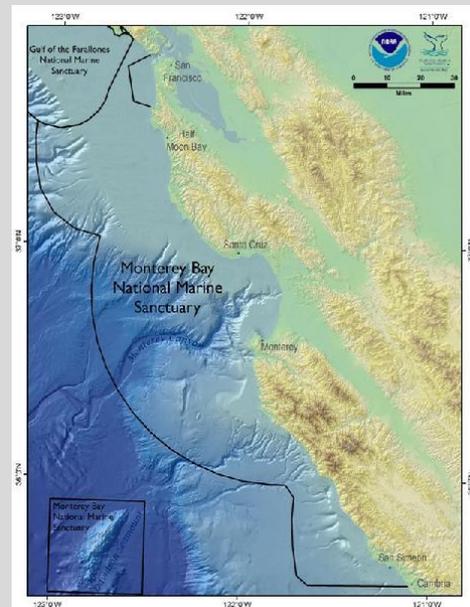
[Advisory Council Web Page](#)

[Marine Mammal Center - Moss Landing](#)

[Council Meeting Agendas](#)

[Council Meeting Minutes](#)

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Monterey Bay National Marine Sanctuary

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

It is home to one of the world's most diverse marine ecosystems, including numerous mammals, seabirds, fishes, invertebrates and plants in a remarkably productive coastal environment.

MBNMS was designated in 1992 for the purpose of resource protection, research, education, and public use of this national treasure. MBNMS is part of a system of 14 National Marine Sanctuaries and two marine national monuments, administered by the National Oceanic and Atmospheric Administration