



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

Visit our Website

Greetings!

Diving in Monterey has been mixed lately. Between storms we have experienced calm and clear conditions with amazing visibility. Conditions on the surface don't seem to have any real relationship with what it is like underwater. During rain and high winds the visibility has been amazing and on nice sunny days the ocean favored surfers over divers.

Southern California fish species are becoming more plentiful here with last years sheephead recruits grown up to be foot long females in large numbers. Large male sheephead sightings are more common and they seem more approachable by divers. Unusual species of urchins like heart urchins and tan urchins have found their way north on the Davidson current and taken up residence at Hopkins and Del Monte Beach. There have been a growing number of reports on Facebook of spiny lobster sightings at South Monastery and Mola Mountain.



Koala delivered the first harbor seal pup on March 21 at Hopkins Marine Station. In 2014 there was a record 90 harbor seal pups born at Hopkins but warmer waters since then have left near-shore waters with unreliable food supplies. While last year was the best pupping since then, early signs this year indicated pupping should be ok but not as good as last year due to more failed pregnancies and miscarriages before pupping started this season.

In order to encourage and collaborate sanctuary advisory council seated representatives to reach out and communicate with the stakeholder communities they represent, superintendent Paul Michel and the executive board initiated a Sanctuary Challenge where all members seats are to present to the advisory council the means and methods of how they communicate and act as "conduits". To this end, your diving representatives will present to the council at the April meeting how they engage the diving community. We feel that we connect pretty well with the diving community but there is always room for improvement. If you have suggestions for how we can better our communication of Sanctuary issues with divers please provide us your suggestions. Don't forget if you have a Dive Club meeting we welcome the opportunity to speak at your club and discuss Sanctuary activities. Drop us an email at:

Brian Nelson - [brian@pcscuba.com](mailto:brian@pcscuba.com)

Keith Rooseart - [keith.rootsaert@salasobrien.com](mailto:keith.rootsaert@salasobrien.com)

Safe Diving,  
Brian and Keith



thousands of golf balls from Pebble Beach

PEBBLE BEACH — At Pebble Beach Golf Links, even the most skilled golfers have hit balls into the ocean.

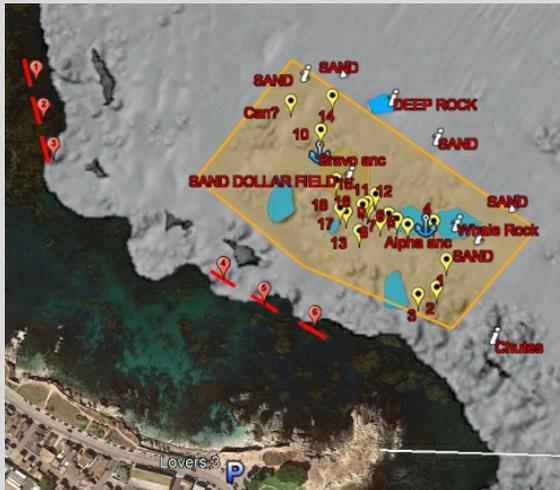
“But not that many golf balls are hit directly into the water,” says Mark Stilwell, Pebble Beach Company’s vice president. “There’s beach areas and coastal cliff areas where the balls are often hit.” And waves, rainfall and gravity transport these errant golf balls into the ocean.

## The Use of Seal Bombs in California Fisheries Unknown Impacts Point to an Urgent Need for More Research

Abstract Commercial fishing in California is a significant source of jobs and incomes. The industry can also produce detrimental environmental impacts, including injuries to threatened and endangered marine mammals and damage to [marine](#) ecosystems. There are a host of state and federal legal and regulatory mechanisms in place to protect marine mammals and their habitat. Some of these are more effective than others, and all exist within a continually evolving political and economic landscape. Seal bombs are incendiary devices used by some fishers to deter sea lions, seals, and other mammals from fish nets and fishing grounds. Measures to allow the use of seal bombs were adopted in part to protect fishermen from mammal depredation, but there is increasing evidence that the devices are being used off the coast of California at higher levels than previously realized.

[Link to the complete White Paper](#)

## Kelp Restoration Experiment



Reef Check California is conducting an experiment at Lovers #3 to determine at what density of urchins will kelp return. Target sites are now mapped and described and urchin manipulations will be underway in April. Urchin numbers will be reduced to 50%, 30%, 20% and 10% as well as a control site replicated 4 times to determine at what threshold will kelp recruit and not be immediately set upon by the resident urchins on rock sites surrounded by sand. In addition to underwater counts, the kelp canopy is monitored by drone surveys.

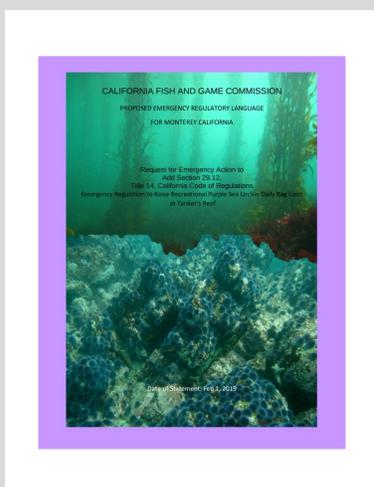
If clear outcomes are determined this should inform future large scale removal efforts. Stay tuned for progress in the next newsletter and [Visit the website](#)

## In Otter News

The USGS published a very extensive report of their study of the Sea Otter populations in the Sanctuary: Southern Sea Otter (*Enhydra lutris nereis*) Population Biology at Big Sur and Monterey, California—Investigating the Consequences of Resource Abundance and Anthropogenic Stressors for Sea Otter Recovery. The full 244 page [report](#) examines the otter populations in area of high density human population areas vs the more pristine areas of Big Sur. There are many lessons to be learned including that otters are at their carrying capacity and the best way to expand the population is to expand their range. The number of otters and their population trends can be found in the annual [census report](#)



## Emergency Regulatory Language



On April 17 Keith will go before the Fish and Game Commission in Santa Monica to continue discussions on the petition to increase the recreational sport fishing limit from 35 urchins to 40 gallons of urchins in order to permit divers to remove urchins on the shale beds off Del Monte Beach. The F&GC does not see this as an urgent concern until giant kelp is locally extinct.

Divers have seen for themselves how the urchins are dominating the diving sites in Monterey and many divers admit that they secretly smash urchins when diving, but that is illegal and really not effective as small removals are just infilled by nearby urchins. It is really just shoveling water and damaging the "untouched" Marine Reserves. Our recent diver poll indicated that 99% of divers favor removal of urchins and 92% said they would help with removal efforts. Stay tuned for future updates and sign up to volunteer for removal activities on the [website](#)

## Reef Check Training

How much more rewarding would your diving be if you knew how to identify the most common critters you see while diving? Training classes are now open to become a certified citizen scientist with Reef Check California. The May 18/19, June 1/2 & 8/9 Monterey class is only \$149 for an expansive and mature class to identify and count invertebrates, fish, algae, and characterize substrate. The class involves a weekend in the classroom and pool and two weekends diving in the ocean learning scientific protocols. This is an incredibly low price for this comprehensive educational program that costs less than what you would pay for two days of diving!



Spots are [still available](#) but filling up fast! Classes are also available in 9 other locations from Arcata to San Diego.

(Coastal Ocean Mammal and Bird Education and Research Surveys) is a citizen science program collaboration among Monterey Bay National Marine Sanctuary, Moss Landing Marine Laboratories, US Geological Survey, US Fish and Wildlife Service, California Department of Fish and Wildlife, and Save The Earth Foundation. Since 1997, trained volunteers have surveyed beached marine birds and mammals monthly at selected sections of beaches throughout the Monterey Bay area, with the specific goal of using



deposition of beach cast carcasses as an index of the health of the sanctuary. On average, Beach COMBERS detect 2.5 events per year, where baseline numbers of dead organisms are significantly surpassed. These could be natural events (e.g., a low productivity year for food) or human caused (e.g., an oil spill). Beach COMBERS accomplishments and information can be found on the [web site](#)

New and experienced Beach COMBERS citizen science volunteers receive training.

A training was held for new and experienced Beach COMBERS volunteers on Sunday February 3 at Moss Landing Marine Laboratories Beach Combers



## 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.

[DONATE NOW](#)

Congratulations are in order!

We are pleased to announce our 2019 Ocean Awards Gala honorees: Dr. Nancy Knowlton, the Walton Family Foundation and Ms. Francesca Koe. The National Marine Sanctuary Foundation will honor these ocean champions at the Ocean Awards Gala on June 4, 2019 at the Ronald Reagan Building and International Trade Center in Washington, DC. We hope you'll join us as we celebrate their outstanding contributions to ocean conservation!

Learn more about each of our honorees below or [click here for the full story](#).



Read the MBNMS Complete Office Report [OFFICE REPORT](#)

2019 Sanctuary Advisory Meeting

## Schedule and Locations

April 15th - Moss Landing - *Monterey Bay Aquarium Research Institute, 7700 Sandholdt Rd, Moss Landing, CA 95039 Conference Room, 9:00 AM - 4:30 PM*  
June 21st - Cambria  
August 15th - Pillar Point  
October 18th - Marina  
December 13th - Monterey



[Monterey Bay National Marine Sanctuary](#)

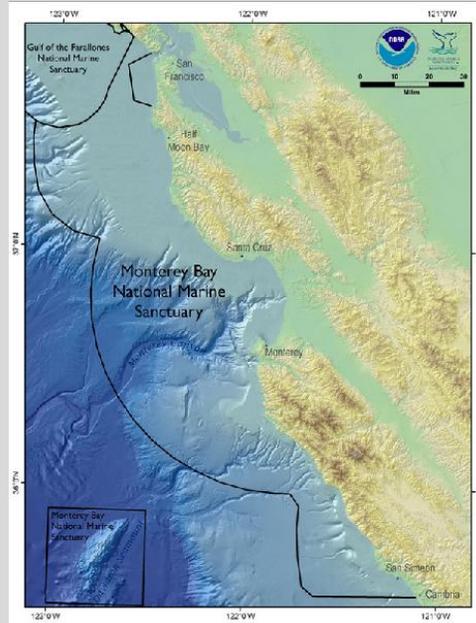
[Advisory Council Web Page](#)

[Marine Mammal Center - Moss Landing](#)

[Council Meeting Agendas](#)

[Council Meeting Minutes](#)

[Advisory Council Members](#)



## 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

[Official Website](#)