

## Monterey Bay National Marine Sanctuary Advisory Council Diver Newsletter

Visit our Website

Greetings!

Diving in Monterey has been absolutely amazing with visibility days exceeding 50 feet. The temperature went from 48 degrees at the beginning of the month to a moderate 56 a week later. The wind has blown pretty hard even when there is not much swell making the bay look like a windswept lake at times.

The Urchin Experiment in Pacific Grove has reached the manipulation phase where divers cull urchins to a prescribed density. The resulting carnage has been a boon to the fish and sea star denizens who come along and munch on what remains. It should only be a matter of time until giant kelp recruits to these reefs now that the voracious herbivores are reduced.

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 Keith Recept. keith rectaect@palacebrian.com

Keith Rooseart - <u>keith.rootsaert@salasobrien.com</u>

Safe Diving, Brian and Keith



#### **Reef Check Urchin Experiment**

The Urchin Experiment is now at the manipulation phase and divers are culling purple urchins to prescribed densities to determine the threshold density where kelp will return. This will inform future kelp restoration efforts.

Historically the urchin density at this site was .04 urchins per square meter, but now the urchin density averages 21 urchins per square meter which is over 500 times greater. It is also double what it was last year with lots of small urchins recruiting to the hard substrate.

More Information

### Long Beach Dive Show

We hope you had a chance to see this show. Bigger and bigger. The purpose of a dive show is to support the regional dive community. When you think about it from your perspective, there aren't many ways for a diver, or someone who is thinking about taking it up, to personally connect with diving as the complete picture. At the show, you get to see all of diving's possibilities at one time in one place. Hopefully you get excited about what to experience next, and when you return home we want you to connect with your local dive community— the retailers, clubs, instructors and charter operators who can make it happen for you. Having you more involved is great for you, and it is great for the diving business. But it is even more than that.

MORE INFORMATION FOR 2020 Show



## **Get Into Your Sanctuary Day!**



You're Invited!

As a travel destination, few places on the planet can compete with the diversity of the National Marine Sanctuary System, which protects America's most iconic natural and cultural marine resources. The majority of national marine sanctuaries' waters are open to compatible and sustainable recreational activities that generate considerable benefits for local economies.

This year NOAA's Office of National Marine Sanctuaries is hosting its fifth national "Get into Your Sanctuary" celebration to raise awareness about the value of our national marine sanctuaries as iconic destinations for responsible recreation through a series of special activities. These events will begin over the long weekend of August 2-4, 2019 across the National Marine Sanctuary System – from sea to shining sea.

More Information

#### SFO Dive Show in Santa Clara

The SFO Dive Show is one of <u>several events</u> produced by US Dive Shows, Inc. The show is held in April each year on the last weekend of the month.

Saturday is a big day, open to consumers of adventure travel and scuba diving and those wishing to learn more about this adventurous activity. There will be 70 exhibitors from resorts around the world,



local retail professionals, social groups and seminars so travelers, new divers and experienced divers can learn and share! Over 25 seminar or breakout sessions and demonstrations about local and exotic diving adventures, the latest equipment, new techniques and topics that cover local and worldwide issues will be featured. Be a part of this adventure!

On Saturday Evening special social events are planned. Divers... Come out and enjoy the company of other divers in the Bay Area!

Sunday there is a continuation of exhibitions, seminars and we add workshops to the offering for more understanding of scuba diving, the local environment and skills to make your diving more enjoyable. Learn to Scuba Dive by visiting our local Scuba Retailers who specialize in training, travel and equipment sales. They are a great source for social activities too!

More Information

#### M/V Never Say Never Vessel Casualty at Año Nuevo in MBNMS

On April 18, 2019, a 57' Chris-Craft motor vessel *Never Say Never* began taking on water off Año Nuevo. A USCG helicopter lifted two people off the boat at 1730 hrs (PDT). At that time, the vessel was over a bottom depth of approximately 225 feet. No EPIRB was activated for the rescue. USCG estimate of potential fuel aboard was from 200 - 1,200 gallons of diesel. In addition, the boat had 12-20 qts of oil in the engine(s) and assorted standard household hazmat items (e.g. paints, solvents, bleach, epoxies, etc.).



NOAA ERD provided a trajectory which put the floating top of the cabin washing ashore into Marina State Beach. The top of the cabin separated from the hull/engines/tanks which are presumed

sunk somewhere between Año Nuevo and Marina. Much of the floating debris ended just north of Marina State Beach, and spread along the beach. The vessel owner was transiting from Vallejo to Half Moon Bay and on to Moss Landing's boat yard for a haul out. Beach cleanup efforts have been conducted and are ongoing.

#### MORE INFORMATION

# Whale Entanglement Presentation for Cordell Bank National Marine Sanctuary (CBNMS) Advisory Council

April 25th, MBNMS' Resource Protection Coordinator, who also represents California Sanctuaries as an advisor on the Dungeness Crab Fishing Gear Working Group, together with CDFW staff and a commercial crab fishermen, presented to the CBNMS Advisory Council an update on whale entanglements including the recently signed settlement between the State, the Center for Biological Diversity and PCFFA.

The update discussed the settlement terms for this year (early closure of the crab fishery) as well as potential mitigations for future years, whale entanglement numbers over recent years, the Risk Assessment & Mitigation Program for humpbacks, blues and leatherbacks, and



entanglement response and training. The presenters covered sources of data on whale densities and ocean/forage conditions and some preliminary results for ropeless gear testing, conducted by fishermen. The presentation seemed well received by the Advisory Council and they were quite interested in the gear innovation item. Fishermen Dick Ogg had a mini gear model to demonstrate and discussed a new line cutting tool, as well as the effects of the closure to the fishermen.<u>MORE</u>INFORMATION



MBNMS Staff Dives in the Alvin Submersible at Davidson Seamount for BBC's Live Broadcast of "Blue Planet Live"

MBNMS Research Spacialist Chad King dove

Although both dives were short and were primarily pilot training dives, important observations were made and questions answered. Shimmering water was observed last October, indicating that warm water was seeping out of the seafloor, but it was only confirmed on these dives. The maximum temperature recorded was 9.9 degrees celsius, while ambient is only 1.6.

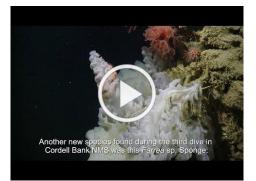
It was also questionable if these Davidson octopus eggs were viable, as a similar area in Costa Rica had oxygen levels so low that it is assumed it cannot support growth of embryos. During an Alvin dive, not only were fully formed octopuses seen through translucent egg cases, but the Alvin occupants witnessed two octopuses hatching. Video of both newly hatched octopuses were recorded. Additional aggregations of octopuses were observed, and a conservative known population is estimated to be 1,500 or more. Both octopus eggs and whelks that were associated with the seeps were twice in the Alvin submersible; once at the summit of Davidson Seamount, and once at the "octopus gardens" that were discovered last October during a research expedition on the E/V Nautilus.

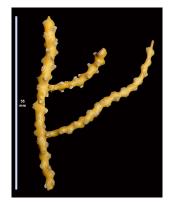
collected and will have their DNA sequenced. It is unclear whether these whelks and other fauna observed within the seeps are cosmopolitan or endemic. MORE INFORMATION

## New Coral described in Cordell Bank National Marine Sanctuary

New coral described in Cordell Bank National Marine Sanctuary A new coral species has been described from Cordell Bank National Marine Sanctuary (CBNMS) and named Chromoplexaura cordellbankensis. The species was described by Dr. Gary Williams of California Academy of Science and his colleague Dr. Odalisca Breedy in the Proceedings of the California Academy of Sciences on May 15, 2019.

The coral was observed by CBNMS scientists Danielle Lipski and Kaitlin Graiff during a CBNMS research expedition using remotely operated vehicle on Cordell Bank in 2017. In 2018, CBNMS scientists and collaborators returned to the location to make a collection of the coral. Subsequent reviews of imagery indicates the coral has been on the bank since at least 2004 but had never been collected or noted. News stories were published in Bay Nature and the Marine Independent Journal. Exploration and characterization of species inventories and ecology of habitats is needed for effective management of sanctuaries





#### MORE INFORMATION



# Corals studied during a research cruise to Sur Ridge

MBNMS participated in a research cruise to Sur Ridge in collaboration with the Monterey Bay Aquarium Research Institution and the University of California at Santa Cruz (April 19 - 24).

### MBNMS Coordinated Salvage of Two Vessels That Sank Separately On The Same Day

In mid-afternoon on Friday, March 22, MBNMS received notice within the same hour of two vessels sinking in northern Monterey Bay. The sinkings were unrelated to one another. The 30-ft *S/V Star* was discovered awash at the waterline 7 nm SW of Point Santa Cruz. The 53-ft M/V *Albatross* sank at anchor 1.2 nm east of Soquel Point. There were no injuries or fatalities. Neither vessel was insured, and no owners took responsibility for salvage. Coral transplants were evaluated, food availability and feeding mechanisms were assessed, ocean current measurements were made, coral growth was assessed, and site assessments were made for placement of a video camera monitoring system.

These efforts are part of developing the MBARI coral observatory program. NOAA's West Coast DeepSea Coral Initiative is addressing characterization and applied research in the five west coast sanctuaries. Providing detailed information on coral growth, age, predation at the regularly visited Sur Ridge coral observatory provides additional context for the broader initiative. Moreover, coral transplant techniques developed at Sur Ridge may be useful in NOAA restoration efforts following of the Deep Horizon oil spill in the Gulf of Mexico.

#### MORE INFORMATION



Over 100 gallons of diesel were pumped off the

MBNMS collaborated with Coast Guard Sector San Francisco to salvage and remove fuel from the *Albatross*. MBNMS was the sole sponsor for salvage of the *Star*. Both vessels were towed to Seacliff State Beach, where they were demolished over several days and sent to a waste facility. Albatross. Salvage required a full week of continual effort. NOAA OLE has initiated investigations into both sinkings, with assistance from MBNMS.

MORE INFORMATION



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.

#### 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.

DONATE NOW

### 2019 Sanctuary Advisory Meeting Schedule and Locations

June 21st - Cambria August 15th - Pillar Point October 18th - Marina December 13th - Monterey

> Monterey Bay National Marine Sanctuary

Advisory Council Web Page

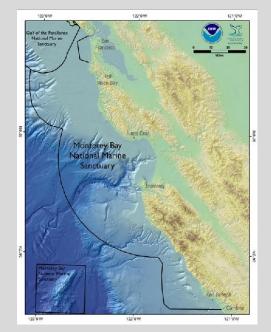
Marine Mammal Center - Moss Landing

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