

SCCOOS News

The IOOS Regional Association Serving Southern California www.sccoos.org (858) 534-9808 info@sccoos.org

May 2017 Issue

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March & April Activities

March 2	US International Boundary and Water Commission Citizen's Forum - Imperial Beach, CA
March 8	Meeting with Blue Tribe – La Jolla, CA
March 9	SCCOOS Meeting with SIO Director's office and CA Ocean Science Trust – La Jolla, CA
March 14 - 17	US IOOS Spring Meeting – Washington DC
March 14-16	US IOOS Data Management Meeting – Washington DC
March 16	Capitol Hill Visits – Washington DC
March 18	SEA Days at Birch Aquarium at Scripps Oceanography
March 20 & 23	State of the California South Coast Community Gatherings – San Diego & San Clemente, CA
March 24	SIO & XPRIZE Earth Hack-a-thon – La Jolla, CA
March 28	Happy Hour meeting with Blue Tribe – La Jolla, CA
April 6	San Diego Area Planning Committee Meeting
April 15	AltaSea Quarterly Open House – San Pedro, CA
April 18-20	IOOS Marine Modeling Workgroup Meeting – Washington DC
April 25	PaclOOS/SCCOOS Lunch - Hawaii

Harmful Algal Blooms (HABs) Alert: Stranded Pregnant Sea Lions Washing Up on California Shores. Learn How SCCOOS and CeNCOOS Ocean Observations are Helping Sea Lion suffering from domoic acid poisoning

SCCOOS & CeNCOOS's network of HAB monitoring and forecasting provides an operational warning system for HAB events. Monitoring HABs throughout the State of California can prevent human illness by providing an early warning system for fisheries and for marine mammal stranding networks. Advanced warning of HABs informs managers, researchers, and the public on environmental and economic threats.







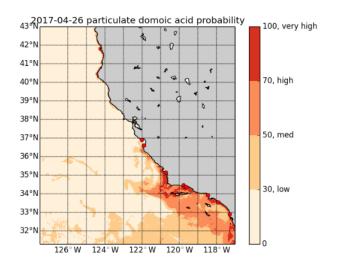
HABs Continued...

An <u>uptick in strandings of sea lions</u> have been occurring off the California coast during the month of April, particularly pregnant females, from domoic acid poisoning. <u>HAB sampling</u> by CeNCOOS & SCCOOS is part of the Harmful Algal Bloom Monitoring and Alert Program (<u>HABMAP</u>), found large numbers of the algae <u>Pseudo-nitzschia</u> at the piers that are included in the HAB monitoring system. The California Harmful Algae Risk Mapping System (<u>C-HARM</u>) hosted by CeNCOOS and SCCOOS suggests that domoic acid levels are potentially very high offshore of Orange County where these sea lions are foraging for food.

UPDATES

- April 13, 2017 Notification: "Consumers Urged Not to Eat Sport-Harvested Bivalve Shellfish from Santa Barbara County" – CA Dept. of Public Health
- Many sea lions and sea birds have died from DA poisoning since this event began, and the toll includes
 a wide swath of marine animals from Santa Barbara to Baja California: dolphins, elephant seals, loons,
 grebes, cormorants, brown pelicans, and even the endangered Guadalupe fur seal. Santa Barbara
 County receives hundreds of calls every day about stranded or dead sea lions on the beaches.
- "The memory center of the brain, the hippocampus, gets degraded and destroyed over time when animals are exposed to the toxins, Clarissa Anderson, SCCOOS Executive Director said. Though there are some things that can be done to lessen the effects of the domoic acid poisoning, there is no cure. As a result, once an animal has been stranded from domoic acid poisoning, its chances of becoming stranded in the future is higher." April 19th article

STATEWIDE MONITORING RESULTS





HAB Sampling from a boat



As of April 26, 2017 HAB 1-3 Day Forecasting Tool for Mangers and Researchers

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IOOS Spring 2017 Meeting Update



CeNCOOS's Aric Bickel pictured with SCCOOS's Clarissa Anderson, Libe Washburn and Jen McWhorter.

In order to make the best of their time in DC...IOOS Staff and Stakeholders visit with legislators to communicate the importance of Ocean Observations



The IOOS program office, the IOOS Association, and the 11 Regional Associations (RAs) braved the snow during the week of March 13 for an annual IOOS Spring meeting.

- The first day was kicked off with presentations from the IOOS Program Office and discussions on communicating the value of IOOS.
 - The afternoon was comprised of a facilitated working session that kicked off the development of the IOOS Enterprise Strategic Plan.
- The rest of the week had presentations from Russell Callender, RA Director/DMAC (Data Mgmt and Communication) Manager joint session, and an IOOS DMAC Technical Session.
 - The agenda was packed with presentations that addressed regional/national partnerships, software capabilities that can improve on current DMAC services, and regional successes.
- On March 15, a strategic planning session was held between RA Directors, DMAC personnel and the Program Office on determining a path forward for DMAC, defining roles and responsibilities, and prioritizing next steps over the next few years.
- The DMAC Annual Meeting was held in March 16 and 17, bringing together data managers from each of the Regional Associations, Program Office staff, and IOOS DMAC partners.
 - Technical presentations were given throughout the 2-day meeting, as well as a lighting talk round focused on successes and challenges at each of the RAs over the past year.

SCCOOS is Certified...What Does that Actually Mean?

On March 15, 2017, SCCOOS was officially certified as a Regional Information Coordination Entity (RICE). As a certified RICE, under the authority of the Integrated Costal and Ocean Observation System Act of 2009 (ICOOS Act), the U.S. Integrated Ocean Observing System (U.S. IOOS[®]) ensures that the data collected and distributed are managed according to National Oceanic and Atmospheric Administration (NOAA) best practices.

Certification means that all data hosted by SCCOOS have gone through rigorous reviews to ensure the highest possible standard.

In short, the process to become certified consisted of organizing all of <u>SCCOOS documentation</u> from administration and governance to data management. Within the data management component, we have written synthesized reports on data ingestion, management, distribution, quality control, and archiving.



Russell Callender (left), Assistant Administrator of NOAA's National Ocean Service, Clarissa Anderson (center), Director of SCCOOS, and Carl Gouldman (right), Director of the U.S. IOOS signed a Memorandum of Agreement certifying SCCOOS for the next 5 years.

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Program Profile: Spray Gliders and Their GREAT New Website

If you are like us at SCCOOS, then you will find it VERY EXCITING that there are Autonomous Underwater Vehicles (AUVs), or Gliders that have been running off the coast of California (amongst other locations around the globe), since 2005! For those of you that didn't know this, let us explain...

Gliders collect ocean observations (ocean temperatures, salinity - salt content of the ocean water, etc..) of the entire water column the entire time it is driving through the ocean. Gliders are another type of Ocean Observing asset that are out on (or in) the ocean. Like buoys, surveys collected from ships, or instruments strapped to piers - gliders collect similar

types of ocean data. These data give us another way to look at how the ocean works, so experts can determine why (or how) it works the way it does.

SCCOOS also wants to inform you that the experts at the Scripps Oceanography Instrument Development Group, have created a website to explore, including answers to questions like...

- 1. What are gliders and how do they do their job?
- 2. Why and how we use gliders?
- 3. Where the Spray Gliders are, and what data are being collected?
- 4. What kind of projects and publications involve Spray Gliders?

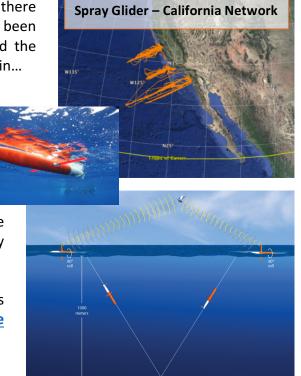
Outreach Update: SEA Days at the Birch Aquarium

On March 18th, SCCOOS and CDIP (Coastal Data and Information Program - national wave buoy program) participated in SEA Days at Birch Aquarium at Scripps, an outreach effort where aquarium guests can interact with people working at Scripps Oceanography. This was a great way to let the public to learn about the exciting science that is happening at Scripps. SCCOOS found that the audience was more interested in learning how to start a career that involves ocean observing. We found that interest VERY exciting!

Our SEA Day was filled with enthusiastic science lovers, as you can see by those that showed up to the aquarium in costume (see pics below)! SCCOOS also got to meet Renee Klein, a science educator who has been using SCCOOS data in her lessons for YEARS, WOW (3rd pic from the left)!







Spraydata.ucsd.edu





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Outreach Update: AltaSea Open House





Marine welder, Ramiro created a chute for the CSR vessel, Cpt. Jack

Vessels in support of Catalina Sea Ranch (CSR) operations



Kelly Stromberg educates the crowd about how aquafarming works



Jenny Krusoe and Danielle met briefly after her talk

The destination was Berth 58 at the Port of Los Angeles. The event, and open house for <u>AltaSea</u>. A non-profit for ocean-related science, business, and education – a place where innovators collaborate to develop solutions. The goal of the open house was to highlight AltaSea's industry partner, <u>Catalina Sea Ranch</u>. The first in its industry to get permission to have an aquafarm in US federal waters.

AltaSea's Executive Director, Jenny Krusoe (pictured above), gave a brief and informative presentation on the progress of re-developing the Los Angeles pier. Jenny's talk left one with the feeling that the AltaSea will be a place that people will come to learn and explore. With sustainability at the center of their plans, AltaSea is laying the ground work to support an economy that stays close to the ocean.

Catalina Sea Ranch's space is immense to say the least. Don't believe us? They are renovating it 60,000 square feet at a time, and it is going to take years to complete.

Kelly Stromberg (pictured above) explained all things Catalina Sea Ranch. She explained CSR's path and goals effortlessly – addressing all the following;

- Why this area was chosen for the first aquafarming federal waters;
- What CSR had to do to adapt to the concerns of all the regulating agencies that had their say;
- Who they connected with to create a monitoring systems that serves their purpose while supplementing precious data about the ocean in a changing climate.

She also informed us about all the ways they're engaging academic institutions. One example of their investigations is to find out if it is possible to make a more nutritious mussel, with more meat, that grows faster, without using GMOs. Kelly was so interesting too. Not only is she the marketing director but she understands the science and the systems of it all. She tells a great story about how everything works in a way that makes you I understand it instantly and feel like you could work there, no problem.

It was great to learn from everyone, and SCCOOS is interested to what AltaSea's future holds... check them out!





Outreach Update: Marine Protected Areas (MPAs) Community Gatherings







It was a full house at the San Diego MPA Community Gathering!

Danielle, SCCOOS Program Coordinator takes a selfie with the San Diego crowd!

SCCOOS Presentation

<u>California South Coast Marine Protected Areas</u> baseline monitoring was completed in 2014 and is a collaboration between CA Ocean Science Trust (CalOST), CA Dept. of Fish and Wildlife (CA DFW), CA Ocean Protection Council (OPC) and CA Sea Grant (CA SG). All that baseline ocean monitoring was collated into the State of the South Coast <u>Report</u>.

SCCOOS got involved in this effort in order to add value to the report. We provided near real-time data on waves, temperature, currents and ocean chemistry. If you missed out on the events or would like to learn more - go to the <u>ocean spaces blog</u>.

The MPA Community Gatherings were an outreach effort to get the data and information that were collected for the baseline monitoring, out to anyone and everyone. Danielle Muller presented at the San Diego gathering and Jen McWhorter presented at the San Clemente gathering. Both were packed to the gills (no pun intended) and went on well beyond their 8 pm cut off time.

When it comes to the ocean - I think it is safe to say that California's South Coast has an active and informed public. Much was learned about the challenges and opportunities communities face when managing a dynamic coast and ocean. The audience expressed their need for well communicated ocean observations in a context that can be understood by anyone – no matter what their education level or chosen occupation.

SCCOOS appreciates everyone out there that keeps the oceans health on their hearts and minds. Thanks to all of you!

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