



JUNE, 2015

THE WAVE *At Crystal Cove*



Crystal Cove Alliance is the non-profit, cooperating association dedicated to education, restoration, and conservation within Crystal Cove State Park



{spotlight}

CCA TO PARTNER WITH UCI OCEANS FOCUSING ON OCEAN SUSTAINABILITY

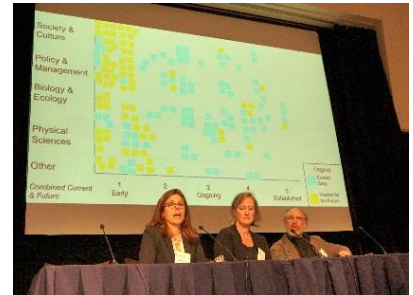
Crystal Cove Alliance is excited to announce its partnership with UCI OCEANS (Oceans, Changing Environments, Arts, and Nearshore Societies), a new three-year initiative that aims to tackle mounting questions regarding ocean sustainability. CCA is poised to strengthen its ocean education and conservation programs with this campus-wide extension of its UCI partnerships.

The UCI OCEANS initiative seeks to bridge the gap between university research, ocean-related organizations, and community members. Its goals include: supporting research with a strong local focus, engaging UCI students in local ocean issues, and encouraging UCI faculty and students to take part in community activities.

The key to the initiative, according to UCI OCEANS Director Dr. Adam Martiny, is its interdisciplinary approach. "UCI OCEANS will offer a fresh take on ocean research and education by embracing a vision and approach that spans the natural sciences, engineering, social sciences, arts, education, law and governance," says Dr. Martiny.

CCA's Marine Protected Area Citizen Science cruise is already contributing to UCI OCEANS faculty-supported research projects. Digital fishing videos, used to determine the fish biodiversity in the Crystal Cove area, are sent to Dr. Donovan German, while live plankton samples are sent to UCI's Dr. Peter Bryant. However, since UCI OCEANS involves so many departments, there are endless opportunities to deepen our existing partnerships.

"Our burgeoning partnership with Crystal Cove Alliance is a great example of the exciting activities that can be developed through partnerships between UCI and the local community," says Dr. Martiny. For more information, please visit UCI OCEANS' [website](#).



{from the field}

ROUND THE CLOCK MEASUREMENT OF SEA WATER QUALITY FROM COTTAGE #22

This past month, researchers from UCI spent the night doing 'round-the-clock' measurements of seawater collected each hour from Crystal Cove's surf zone. Genevieve Bernatchez, a UCI Lab Specialist working in Dr. Matthew Bracken's Marine Biodiversity Lab, has been collecting weekly samples since November. The overnight research was designed to provide more detail about what might be happening between monthly collections.

Genevieve and her team tested the water for a specific form of chlorophyll known as Chlorophyll-A, which is used by both phytoplankton and plants to turn light into energy during photosynthesis, along with pH (or acidity) levels, and other crucial nutrients for intertidal species. "We're monitoring to see if there are enough nutrients for phytoplankton to grow in this environment," says Genevieve.

After all of the water quality data has been collected and analyzed, the Marine Biodiversity Lab plans to compile all of the information into an online database, which Genevieve hopes will inspire students and researchers to raise more questions and help park natural resource personnel keep their finger on the pulse of Crystal Cove's ocean ecosystem.

Cottage #22's Park & Marine Research Facility is an operating marine field station supporting ocean research and education. There are always a number of projects from varying universities – ranging from ocean acidification to dolphin surveys to marine viruses - quietly working within the cottage.



{making a difference}

NEW ENHANCES WHALE WATCHING CRUISE ADDS EDUCATIONAL VALUE FOR THOUSANDS OF ELEMENTARY STUDENTS

Last month, a group of 5th grade students from Harbor View Elementary took part in Crystal Cove Alliance's latest educational program, the Enhanced Whale Watching Cruise. This one-of-a-kind STEM experience, developed and run in partnership with Newport Landing Sportfishing, was created to enhance the traditional whale watch experience by immersing students in authentic on-the-water science.

The two-hour cruise takes students into Crystal Cove's Marine Protected Area, where student-led research teams engage in different monitoring projects – such as marine mammal monitoring and plankton identification. Team backpacks filled with field equipment and five onboard exhibits turn each trip into a scientific exploration.

No stranger to CCA's ocean programs, science teacher Megan Vick has witnessed the program's evolution from its humble beginnings to what it is today. "This new cruise provides students with a more interactive learning environment," says Megan. "It brings awareness to this beautiful ecosystem off of our coast... an experience that will hopefully allow the students to develop into stewards of the ocean."

Over 20,000 elementary students per year participate in traditional whale watching programs out of Newport Landing Sportfishing and Davy's Locker. By adding educational value without increasing the price, CCA is helping to lower the barriers for all students to receive excellent science and environmental education.

The Enhanced Whale Watching Cruise is open for school group bookings for 2015-2016. For more information, please visit Newport Landing's [website](#).



{membership}

BECOME A MEMBER OF CRYSTAL COVE ALLIANCE!

Our partners are all in this together! For as little as \$50, you can become a member of Crystal Cove Alliance.

Our new program includes benefits such as discounts at the Park Interpretive Store, invitations to special events, a one-day parking pass, up to four shuttle passes, the CCA monthly newsletter and lots more.

Don't miss out – [sign up](#) today as a new member to be entered into a drawing for a two-night stay for two in a Crystal Cove Cottage.



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ALLIANCE**