

Beach day gives ocean insight

High school students will get an extra-credit opportunity to join in on a United Nations-like debate.

By Britney Barnes

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There are **No comments posted.**

Temperatures climbing, climates changing and sea levels rising aren't the only consequences of global warming, students at eight high schools learned Feb. 4 and Friday.

About 20 freshman and sophomore students at Marina High School took part in a Ocean Acidification Lab on Feb. 4 in the Crystal Cove Park and Marine Research Facility. The program is put on by the Crystal Cove Alliance, a nonprofit organization dedicated to restoration, conservation and education at the Crystal Cove State Park District, as part of the alliance's first ever Science and Nature in the Park "SNAP!" Exhibition.

Students participated in three labs in a milky-red, two-story historic cottage right on the beach. Learning about ocean acidification, the ocean's absorption of carbon gases causing carbonic acid to form, students measured sea urchin larvae in water with different acidic levels, observed the acid's effect on eggs by examining an egg in a jar of vinegar and tested ocean water's pH level.

"They need to understand their environment, especially living on the beach," said Mimi Philips, a science teacher at Marina.

Philips has been teaching her students about the issues during the class' ecology unit, and they will have the extra-credit option of participating in a United Nations-style debate on the environment in March with other high school students. Nicole Won, a Valencia High School junior who participated in the lab Feb. 4, is excited to get involved with the debate.

"I've always had a passion for discussing the environment," Nicole, 16, said. "I want to see what other schools have to say."

Marina sophomore Crystal Serrano, 15, said the lab helped her understand what she has been learning in the classroom — and it was fun to go to the beach.

"With more carbon dioxide, the ocean will become more acidic and animals will start to die," Crystal said. "It's going to affect a lot of other things, too."

Harry Helling, the Crystal Cove Alliance's president and chief executive, said everybody knows about global warming, but ocean acidification is an equal concern — rising acid levels in the ocean are going to create significant problems.

Despite its serious impact, the problem is often overlooked, Crystal said.

"I just hope that they keep doing [the lab], because not a lot of people know about it," Crystal said.

Protecting the environment should be something everyone cares about, Nicole said.

"It's just a very crucial and vital issue for future generations, and our generation needs to focus on it," she said. "At some point, we need to care about the environment."



After collecting sea water, Marina 10th-grader Max Willingham, right, takes a measure of water from which he will try to find sea urchin larvae under a microscope during a study field trip to the Ocean Acidification Lab at Crystal Cove.

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