

# KIDS DO ECOLOGY

Ecologists visit local schools to help students experience science firsthand.

Nick Rettie, a fifth-grade student at the Adams School in Santa Barbara, California, said ecology is important because “it gives us an understanding of sea life so maybe in the future we will be able to help them. It teaches us about how other creatures interact. It teaches us to appreciate other creatures.”

Rettie should know. He’s among more than one thousand fifth-graders who have taken part in Kids Do Ecology. The program is sponsored by the National Center for Ecological Analysis and Synthesis (NCEAS) in association with Los Marineros, a science education curriculum managed by the Santa Barbara Museum of Natural History.

The program’s mission is to enhance elementary school students’ appreciation of science through hands-on experience conducting ecological experiments. Local fifth-grade classes are paired with scientists from NCEAS

and departments at the University of California, Santa Barbara. During classroom visits over several months, the scientists help the students develop testable hypotheses, conduct experiments, and analyze the results.

“The students learn the entire process of scientific discovery,” said Britta Bierwagen, the Kids Do Ecology coordinator.

Experiments explore aspects of the local environment, such as effects of pollution on California poppy growth, conservation strategies for the rare California condor, or the colonization patterns of sea otters.

“For our project, we tested water quality and measured aquatic insect diversity at upstream and downstream sites and found that upstream sites were healthier,” said Leah Gerber, a postdoctoral fellow at NCEAS.

Students also learn to make scientific posters that effectively communicate the results of their experiments. The program culminates when they visit NCEAS to make poster presentations and discuss their findings with the other students and scientists. For young students elsewhere around the world, the Kids Do Ecology program’s Web site ([www.nceas.ucsb.edu/nceas-web/kids/](http://www.nceas.ucsb.edu/nceas-web/kids/)) provides ecological information and resources, including an “Ask an Ecologist” link to NCEAS.

“Most of all, students learn that ecology – and science in general – can be fun,” said Carol Thornber, a UCSB graduate student who volunteered as a classroom scientist, “and that the most important tool is an open and curious mind.”

Above left: Students investigate a local shoreline habitat. Right: Students at Harding School simulate the habitat colonization patterns of sea otters by moving among desirable and undesirable “habitats” marked on the blacktop. Top right: At NCEAS, fifth-graders from Adams School present their research project findings to scientists and fellow students.

