



Center for Natural Lands Management and International Baccalaureate students from Letha Raney Intermediate School restore habitat at the Coyote Hills East Preserve (May 2009)

During work sessions in April and May 2009, Center for Natural Lands Management (CNLM) staff and the International Baccalaureate (IB) students from Letha Raney Intermediate School and their parents worked hard to restore habitat at the Coyote Hills East Preserve.

“Habitat Restoration ties in directly with the student’s science curriculum, and it gives the students a chance to interact directly with the environment, as well as learn about their local environmental issues,” says Lee Houston, Volunteer Coordinator for IB.

This Preserve is located in Fullerton, Orange County, California, is approximately 103 acres of coastal sage scrub habitat, and is home to more than 30 pairs of the federally threatened coastal California gnatcatcher (*Polioptila californica californica*). The students and parents gear up for the day's volunteer event by donning gloves to protect their hands and hard hats to shield them from erratic golf balls. That’s right: Coyote Hills East is a unique Preserve in that it is intermixed with a golf course. This was shaping up to be a slightly different sort of volunteer day than normal!



The goal of the project is to restore half an acre of nonnative invasive grasses to coastal sage scrub. Sage scrub has been declining in Southern California and is the primary nesting habitat for the coastal California gnatcatcher, a small gray songbird. Specifically, the student volunteers were applying topsoil to the restoration site; soil that was taken from another site where mature sage scrub was removed. Climbing up the steep hill of the preserve, the volunteers line up, ready for the tedious task of getting the large pile of topsoil from the bottom of the hill to the top and spread out over the restoration site. Two of the students at the bottom of the hill start carving into the large pile with their shovels and filling up buckets. The buckets then get handed up the chain of volunteers and emptied throughout the site. "Initially it seemed overwhelming," remarked Houston, "As we continued to visit and work at the site, it did not seem as daunting and it was very satisfying." Applying topsoil is an important step in the restoration process. The soil contains native seeds and important mycorrhizal fungi that help the plants' roots suck up water from the ground. “We will monitor the restoration site for the next five years and expect to see native sage scrub seedlings establishing from seeds brought in with the topsoil,” remarked Sasha Auer, CNLM Assistant Preserve Manager.



IB is a worldwide program that "aims to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect" (<http://www.ibo.org/mission/>). As part of the IB program, students must complete 15 - 100 community service hours a year. Service projects include beach clean-ups, food packaging for food banks, tutoring other children, and habitat restoration.

IB students have been volunteering with CNLM since October 2008 and have been an enormous help at two CNLM preserves in Riverside and Orange Counties. At CNLM's Mockingbird Canyon Preserve, the students have collected native seeds, installed native plants and removed numerous bagfuls of nonnative plants. During these activities, CNLM staff share their knowledge of the flora and fauna in the area and help the students understand the positive impacts their work will have on the quality of habitat.

Says Ms. Houston: "The students can now look out their car windows and identify native and nonnative plants. They also know what native animal species live at the various habitat restoration sites. Most importantly, the students can see what their direct intervention can do in helping to create change in the environment." Hopefully when the time comes to collect and sow seeds on the Coyote Hills East site, the IB students will be ready for more conservation fun!



To inquire about volunteering to help with restoration at these or other preserves, contact CNLM Preserve Manager, Kim Klementowski at kklementowski@cnlm.org.