Ormond Beach Native Plant Restoration
An Oxnard College Environmental Studies Project

Tom McCormick & Lorraine Buckley

Background

The Ormond Beach dune and wetlands complex represents a significant natural resource for the people of Ventura County and California. The sand dune system of Ormond Beach stretches from Port Hueneme to Mugu Lagoon, Ventura County. This environment is a relic of much larger coastal dunes that once stretched from Ventura to Mugu Lagoon. The Ormond Beach dunes and wetlands is one of the few functioning dune-building systems left in southern California. It is home to federally and state listed endangered bird and plant species including the Least Tern (*Sternula antillarum*), Western Snowy Plover (*Charadrius alexandrinus nivosus*), Belding's Savannah Sparrow (*Passerculus sandwichensis beldingi*), and Salt Marsh Birds Beak (*Cordylanthus maritimus* Benth. *ssp. maritimus*).

In the 1970s a section of Ormond Beach, adjacent to the Ormond Beach Generating Station, was planted with non-native Ice Plant and *Myoporum* to control sand movement from the beach. In the previous decades the beach was heavily used as a road and by off-road vehicles. Little relief or native vegetation remained. With exclusion of vehicles from the beach in the 1990s, regrowth of vegetation began, slowing the movement of sand and creating new dunes. Iceplant (Sea Fig or Hotentot) and *Myoporum* still persist in the area, competing for space and water with the native plants.

Restoration of Native Plants at Ormond Beach

The Ormond Beach Native Plant Restoration project will introduce students to field biology and resource management. The project will provide hands-on learning experiences that will develop job skills, enable students to participate in environmental stewardship, and integrate community volunteers. Unlike most multi-year field projects that require years of development before any results are realized, this project will provide students with the unique opportunity for immediate observation of the dramatic restoration of the natural habitat as a direct result of their efforts.

The coastal restoration program was begun with Oxnard College students from MST 160, under the direction of Dr. Lorraine Buckley and Tom McCormick in the 2010 Spring semester. The restoration program will control non-native plants thus improving the quality, function, and diversity of the dune ecosystem at Ormond Beach. The initial restoration effort is located on a half-acre site adjacent to the Ormond Beach Generating Station. Students began the project by surveying the plant community and removing non-native plants. A seed bank of local native plants was begun this semester. Native plants for restoring beach and wetland areas will be cultivated by students in a nursery adjacent to the beach on the grounds of the generating station. The project is supported, in part, by a grant from the National Oceanic and Atmospheric Administration (NOAA) and by the Channel Islands Marine Resource Institute, a local non-profit organization committed to restoration of coastal resources. Access to the restoration site and nursery are being provided by RRI Energy.

Facilities Availability

The base of operations for beach restoration will be the Ormond Beach Mariculture Laboratory. Located on the grounds of Ormond Beach Generating Station, the lab has 1,500 sq. ft. of offices, dry and wet labs and over 2,000 sq. ft. of outdoor growing space. Owned by RRI Energy and operated by Proteus and the Channel Islands Marine Resource Institute (CIMRI), the lab has been used for education and enhancement activities including production of red, green, pink, and white abalone, and white seabass. Last year, NOAA-supported students from Oxnard College tested methods for the culture species of native coastal plants at the Mariculture Laboratory. RRI Energy will rebuild the facility for laboratory culture of native plants and wetland species for coastal restoration and as an educational center for students and community members.

Project Advisors

The following individuals are advising the development of the project:
Bill Baker, Environmental Outreach, RRI Energy
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