New Smyrna Beach Saltmarsh Restoration

Volusia County, FL

Introduction

When New Smyrna Beach relocated its high school in 2006, the Florida Fish and Wildlife Conservation Commission (FWC) became manager of its old site along Mosquito Lagoon in Volusia County. The site became one of many properties around the state named as a Marine Enhancement Center (MEC). The goal of MECs is to restore fisheries and marine habitats as well as provide opportunities for environmental research, education and outreach. The 22-acre New Smyrna site includes some submerged lands which contain saltmarsh. According to maps from the 1800s, the entire property was historically saltmarsh. The Wildlife Foundation of Florida steered the first major accomplishment by securing a county grant with local partners to demolish most of the buildings and refurbish one. In 2013, the FWC and partners secured funding from the National Oceanic and Atmospheric Administration's Habitat Restoration program to conduct restoration in northeast Florida on habitats such as oyster reefs, seagrass beds and saltmarshes. The grant included funds to restore five acres of New Smyrna MEC property to its original saltmarsh state. Partners for the project include Marine Discovery Center, a nonprofit partner occupying the property, and Costa del Mar Inc., the New Smyrna-based business famous for producing world-class sunglasses.

Objectives

- Restore five acres of the property to historic saltmarsh habitat
- Plant the restored saltmarsh with native species
- Provide a demonstration area for shoreline stabilization techniques
- Use the new saltmarsh for research, education and outreach
- Harvest native plants from the new saltmarsh and use them for regional restoration projects

Approach

Over a five-month period in 2014, excavators removed over 45,000 cubic yards of fill material from the northwest corner of the property (site of the old high school track and field). Crews carefully graded the new marsh surface and its slopes to the upland in order to provide the perfect substrate for native plants. As work progressed, dozens of volunteers planted over 25,000 native plants to jumpstart the natural community. Along the new slope, crews constructed various shoreline stabilization features such as seawalls and terraces to showcase erosion-control techniques. Fill material was placed into three features on the property: an overlook mountain, a future building pad and an amphitheater.

Benefits

The project involves restoration of saltmarsh, a critically important habitat for the production of marine life such as birds, shrimps, crabs and fish like red drum. The Mosquito Lagoon will benefit from the productivity of the new saltmarsh. Plants will be harvested from the new saltmarsh and used to restore other areas in the region. The Marine Discovery Center will use the saltmarsh to conduct research and education programs, utilizing a newly installed kayak launch. The shoreline demonstration area contains educational signs describing the benefits of using natural products such as plants and oysters to create "living shorelines" and introduces a new website, www.floridalivingshorelines.com, where waterfront landowners can get more information. All of the new site features are part of a trail system on the property and the amphitheater will be used for community events.

Done in partnership with:

Volusia County FLORIDA

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Aquatic Habitat Conservation and Restoration manages, enhances, and preserves aquatic habitat in Florida for the benefit of wildlife, aquatic life and the people of Florida. For more information, please email AquaticHabitat@MyFWC.com.