

Creating Oyster Habitat in Sarasota Bay



Project History

Historical maps and charts reveal that the Sarasota Bay once supported a vibrant oyster community. The two sites for this project were physically disturbed and the oyster communities destroyed by coastal development during the 1960's.

This project builds on the success of an earlier pilot project in Sarasota Bay which demonstrated that prospective locations for building new oyster habitats were substrate limited. Oysters will not recover without the introduction of suitable and sufficient substrate material. Our team created four and a half acres of oyster habitat at two locations in Sarasota Bay, Florida: 1) two and a half acres at White Beach in Sarasota County, and 2) two acres at the Gladiola Fields in Manatee County. Both locations offered unique opportunities to create oyster habitat where none was currently present. White Beach is in a highly urbanized setting which once supported oyster beds, but shoreline alterations and residential development have since destroyed them. The Gladiola Fields lie adjacent to suburban agricultural fields, and the creation of oyster habitat in this area should, among other benefits, improve local water quality by filtering stormwater and nutrient-enriched drainage from these fields.



Fast Facts

Oysters are a unique estuarine habitat offering the following benefits and attributes:

- **Water filtering capacity**
- **Substrate for fish and other fauna**
- **Fishing opportunities**
- **Sediment stabilization**

Restoration Process

Our habitat design replicated existing oyster habitat in Sarasota Bay. At both sites, we built five, 75-foot diameter reefs utilizing fossil shell for the structural foundation. Each reef perimeter consists of a ring of oyster shell “sausages”- shell kept in biodegradable bags to prevent washout and dispersal. The interior consists of loose shell with an effort to create 3-D complexity. The fossil shell provides substrate for local oyster seed to attach and grow. The reefs are being monitored for oyster survival and growth and utilization by fish and invertebrates. This restoration technique can be readily transferred to other Florida estuaries with similar habitat structure but which currently lack viable oysters.

Volunteer Help

Volunteers continue to contribute to every aspect of this project. They are helping create the oyster “sausages” – bags of fossil oyster. They also are transporting shell to the reef sites and unloading shell onto the reefs. They will be assisting with some of the more basic monitoring elements.



Restored oyster reef at the Gladiola Fields site.



Oyster clump from our restored reef after one year.



Working Together

This project is being funded in part through a national partnership grant between the National Oceanic Atmospheric Administration Community-Based Restoration Program and The Nature Conservancy.

The following environmental and community groups provided over fifty volunteers and 400 hours toward all phases of this project.

- **Sarasota Bay Parrot Head Club**
- **University of South Florida Environmental SustainaBULLs**
- **Friendship Volunteer Center RISE Program**
- **Reef Innovations**

Local governments and associated partners include:

- **Sarasota County**
- **Manatee County**
- **City of Sarasota**
- **Scheda Ecological Associates**

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NOAA

The National Partnership between the NOAA Community-based Restoration Program and The Nature Conservancy implements innovative conservation activities that benefit marine, estuarine and riparian habitats across the United States. The NOAA Restoration Center has worked with community organizations to support locally-driven projects that provide strong on-the-ground habitat restoration components that offer educational and social benefits for people and their communities, as well as long-term ecological benefits.