



Gulf Coast Oyster Recycling and Renewal (GCORR) Project

GCORR 2017

**Funded by
Tampa Bay Estuary
Program 2017 Mini-grant**



- **Location: Manatee County's**
 - **Perico Preserve**
 - **Robinson Preserve**

Solution To Avoid Red Tide (START)

Advances education and innovation that improves the quality of our coastal waters.

- Action:
 - GCORR
 - on-going clam and oyster seeding
- Research:
 - promising new ozonation test on red tide
 - intriguing new data analysis on the role of specific nutrients in the development of red tide blooms
- Education: START increases public awareness about the marine environment with
 - public service announcements that air on local TV stations alerting the public to impending toxic blooms
 - daily status reports via start1.org website links
 - an E-Newsletter
 - ongoing informational exhibits that are seen by over 500,000 visitors a year





GCORR TEAM

- **Solutions To Avoid Red Tide (START)
in Partnership with**
- **Manatee County**
- **The Chiles Group**
- **Gulf Coast Shellfish Institute**
- **Florida Sea Grant, UF/IFS
Extension**

Partnership Team

- Non-Profit: START – Since 1995, increasing public awareness and activity to improve the quality of our Gulf coastal waters
- Non-Profit: Gulf Shellfish Institute, studying oyster shells to successfully create new marine nurseries
- Government: Manatee County Parks and Natural Resources, Property Management Department, Florida Sea Grant, UF/IFAS Extension, stewards of parks, preserves and gulf waters
- For-Profit: The Chiles Group's three restaurants located in Anna Maria, Bradenton Beach and Longboat Key, FL, educating customers and recycling shells to gulf waters



GCORR Activities

- START : Program Management
- The Chiles Group: Action/Education
- Manatee County: Action/Education
- Gulf Shellfish Institute : Research



Multi-faceted Project

- Project: Recycling oyster shells from restaurants to create new oyster reefs
- Action: Moving the shells from table to coastal waters and creating structures for new oyster habitat
- Education: Value of oysters to restaurant patrons, general public and workshop participants
- Research: Studying fresh vs. fossil shell effectiveness and identifying critical timing



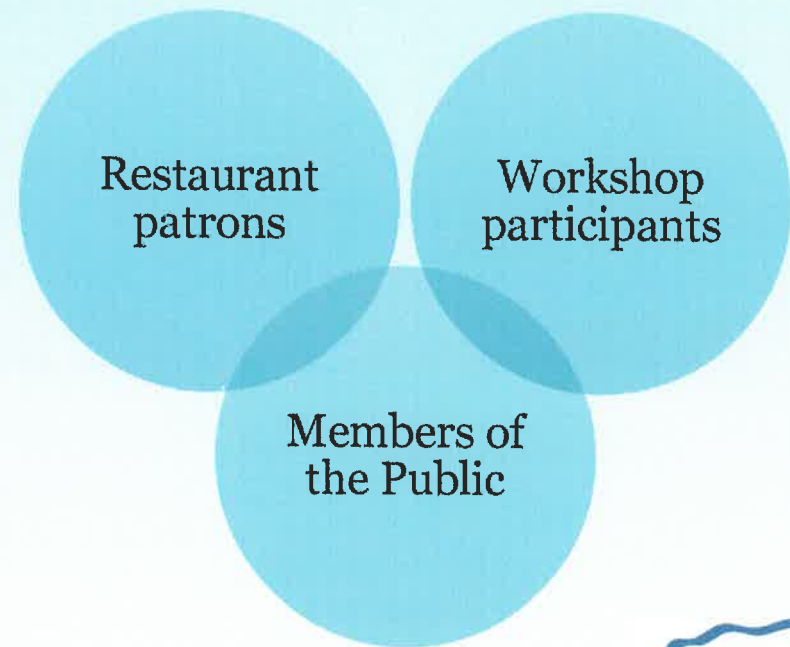
Actions

- START purchased and delivered vehicular trailer and nine waste bins
- Restaurant personnel collected 37,279 pounds of shell from three restaurants
- Restaurant-supervised volunteers spent 106 hours and 1000 miles delivering shell
- Manatee County educated 815 students and adults with hands-on workshops where shells were prepared for oyster reef creation in Manatee County waters within Robinson Preserve and Perico Preserve, with a collective effort of 791 volunteer hours..
- Manatee County natural resources staff planted both shell structures and pure shell into intertidal waters creating a habitat of 800 square feet with 30,000 pounds of shell awaiting new permits
- To educate the public and restaurant patrons, excellent marketing materials and media efforts were created to publicize the project, including two news releases, signs, posters and three restaurant flyers
- Research was conducted to determine the most appropriate timing of placing fresh shell in gulf intertidal waters, as well as a comparison of fresh vs. fossil shell effectiveness, requiring over 58 hours of research requiring 392 miles of driving



Educational Outreach

- Restaurant patrons: Tabletop cards, posters and check out flyers
- Workshop participants: 815 participants in 25 workshops created oyster bags and mats
- Members of the Public: two news releases and on-going informational posters and signs

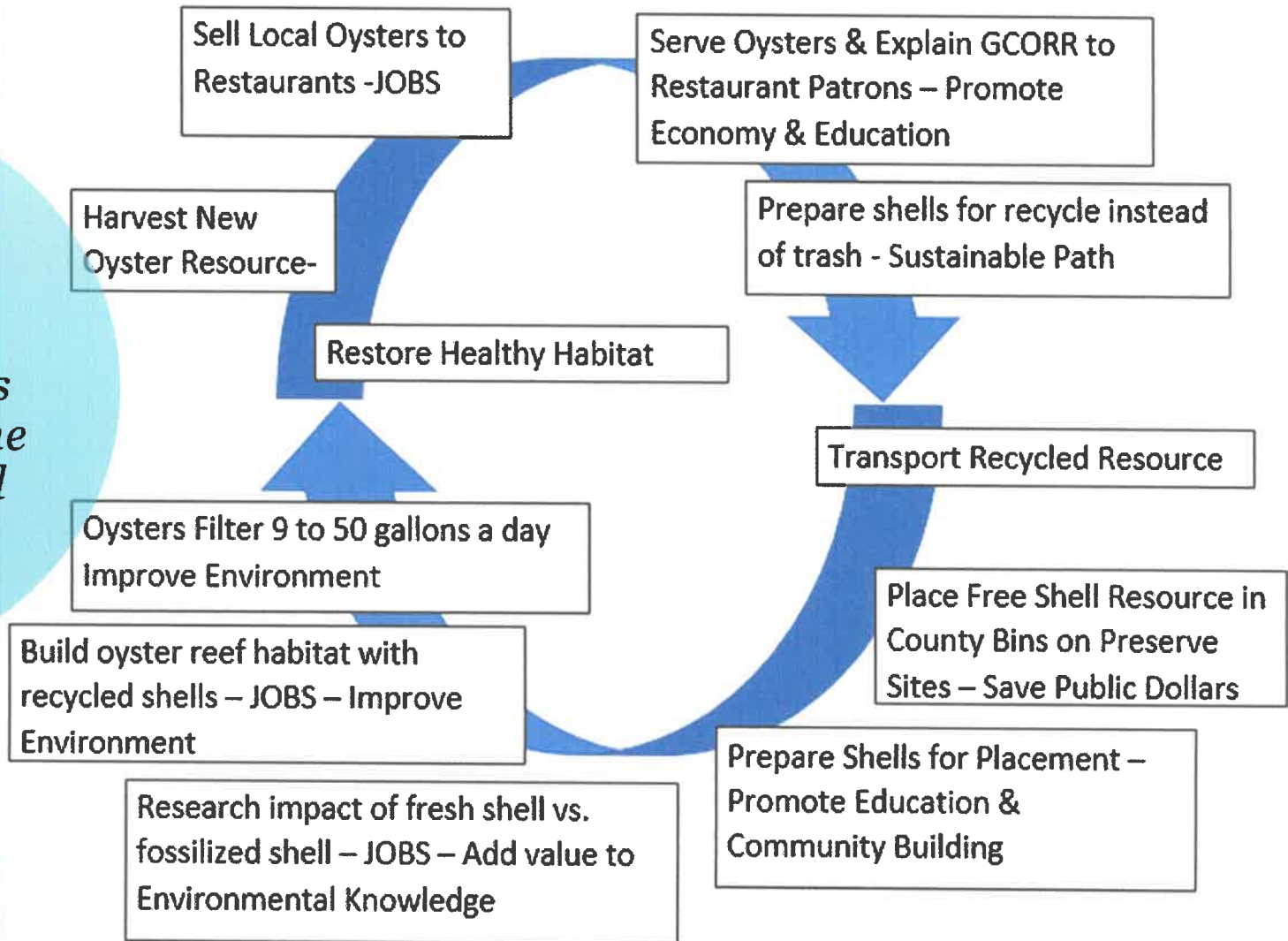


Research Findings : Six Months

- In all months, fresh shells had more oyster spat than fossil shells. In total, 374 spat were counted on fresh shells and 302 spat were found on fossil shell.
- Based on the six months collected thus far, there was approximately 19% greater settlement of spat found on fresh shell than on fossil shell.
- Greatest oyster spat settlement occurred in October, when 74% of all settlement occurred
- To maximize settlement success, restoration biologists should plant shell (mid-intertidal zone) end of September



GCORR is a Sustainable Solution that positively impacts the Community, the Environment and the Economy.





START

Preserving Our
Coastal Waters

START1.ORG

Thank You
Questions?

