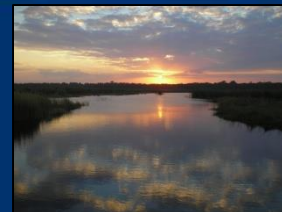


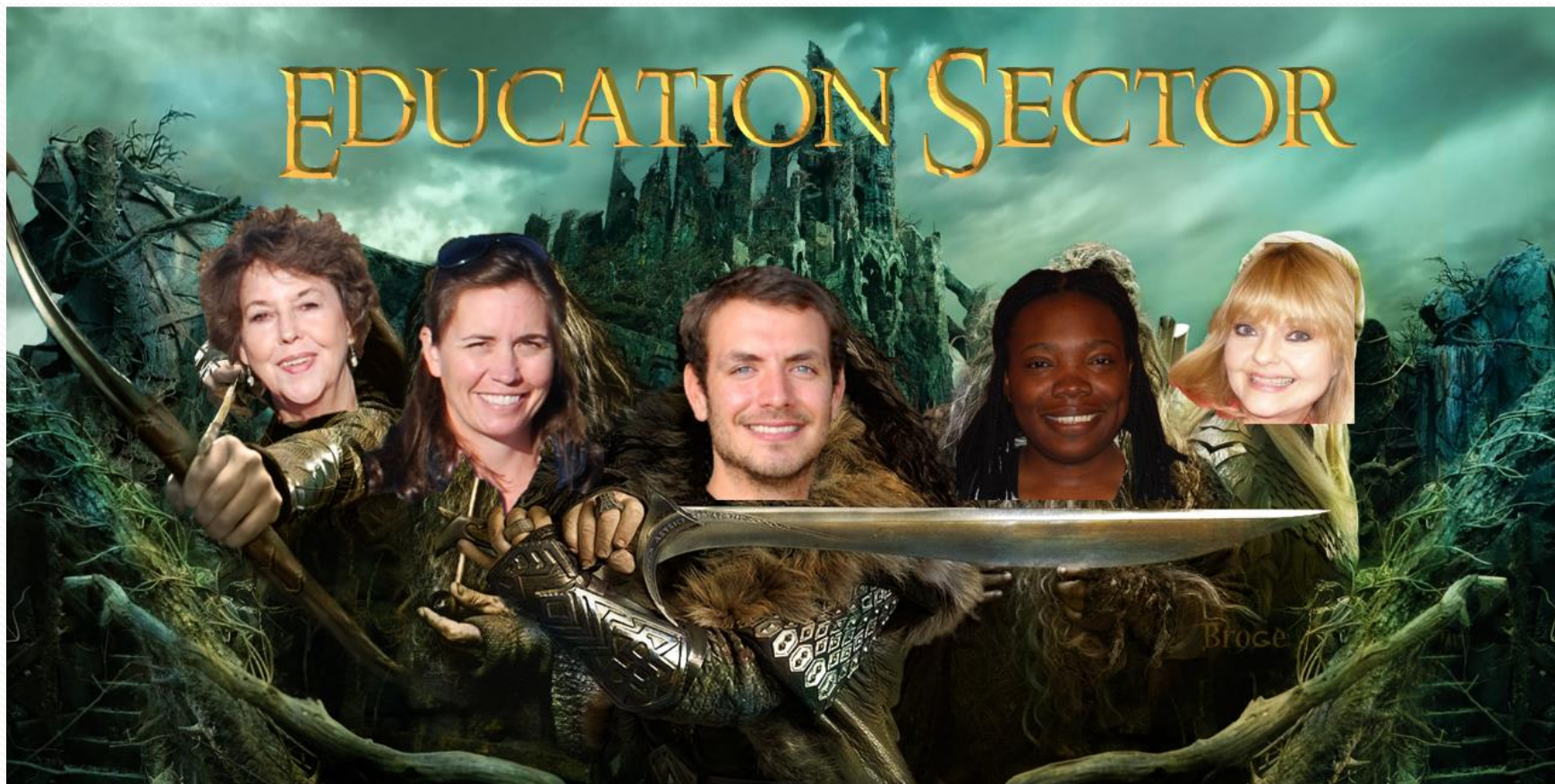
# Florida Department of Environmental Protection



# GTM NERR IGNITE!



# EDUCATION SECTOR



# Education Sector



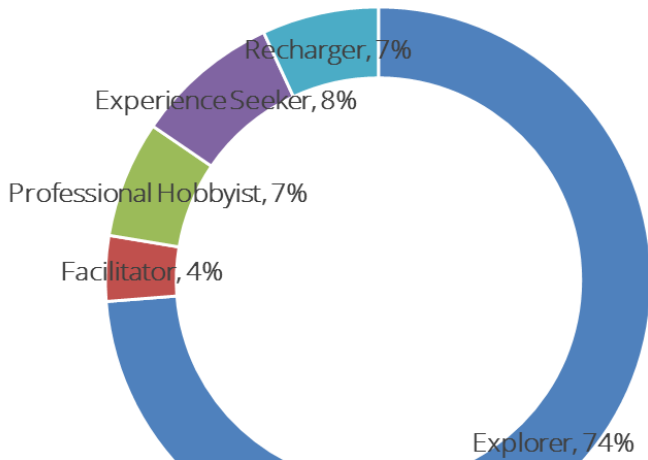
**3,530**

K-16  
Students

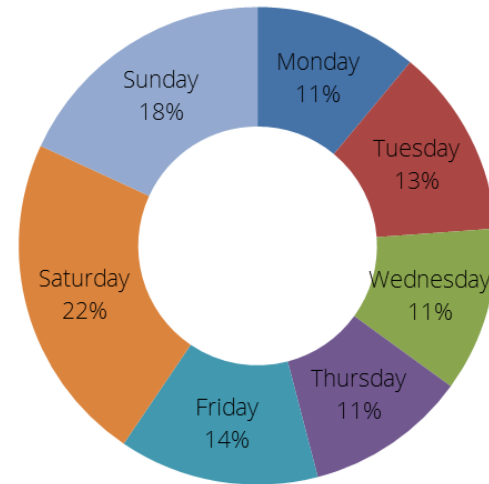


**10,145**

K-16 Hours



**7,920** Public Outreach  
Participants



**5,886** Visitor Center  
Walk-Ins

# Grants Awarded

Salt Marsh Nursery Program

Florida DEP-Mini Grant

NNOCCI Study Circle



# Adventures in the Estuary Summer Camp

## SUMMER 2013

**4** One-week  
day camps

**119** Campers  
7-12 y.o.

## SUMMER 2014

**6** One-week  
day camps

**150** Campers  
7-12 y.o.

Revenue generated supports educational efforts including paid internships (2015).

# GTMNERR Research



# GTMNERR Research

## Long-term Monitoring

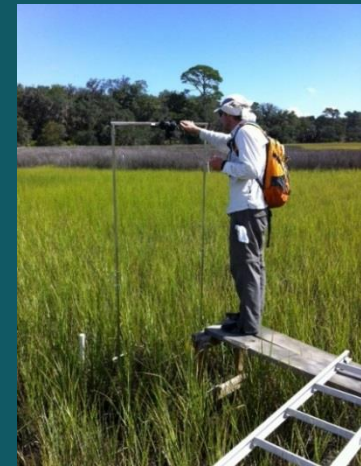
weather



water quality



biology



# Mangroves



**Poleward expansion of mangroves is a threshold response to decreased frequency of extreme cold events**

Kyle C. Cavanaugh<sup>a,b,1</sup>, James R. Kellner<sup>b</sup>, Alexander J. Forde<sup>c</sup>, Daniel S. Gruner<sup>d</sup>, John D. Parker<sup>a</sup>, Wilfrid Rodriguez<sup>a</sup>, and Ilka C. Feller<sup>a</sup>

<sup>a</sup>Smithsonian Environmental Research Center, Smithsonian Institution, Edgewater, MD 21037; <sup>b</sup>Department of Ecology and Evolutionary Biology, Brown University, Providence, RI 02912; <sup>c</sup>Graduate Program in Behavior, Ecology, Evolution, and Systematics, University of Maryland, College Park, MD 20742; and <sup>d</sup>Department of Entomology, University of Maryland, College Park, MD 20742



# Oysters



- Ecosystem services
- Mapping
- Monitoring
- Recruitment, disease, predation, harvesting

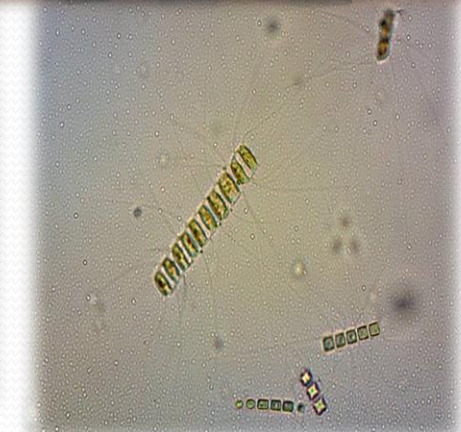




Over 350 volunteers  
dedicating  
over 12,000 hours  
annually.

# Research

- ❖ Marine Sea Turtle Patrol
- ❖ Phytoplankton Monitoring Task Force
- ❖ Shorebird Monitoring
- ❖ Butterfly Monitoring
- ❖ Surface Elevation Table
- ❖ Red Tide monitoring
- ❖ Oyster reef Restoration
- ❖ SWMP





# Education



# Stewardship/Facilities

- ❖ Invasive Exotic Plant Removal Task Force
- ❖ Invasive Exotic Animal Removal Task Force
- ❖ Trail and Beach Monitoring
  - ❖ Volunteer Ranger
  - ❖ Carpentry
- ❖ Kiosk and Boardwalk Repair



# Administration

Front Desk  
Greeter

Answering  
Telephones

Data Entry

Filing



Nature Store  
Clerk







# Aquatic Preserves

**Andrea Small**



**Lauren Flynn**



# Installed New Cultural Heritage Exhibit



# Installed New Cultural Heritage Exhibit

## Historical Marker



## Overlook rebuilt, renamed and dedicated to the sponsors



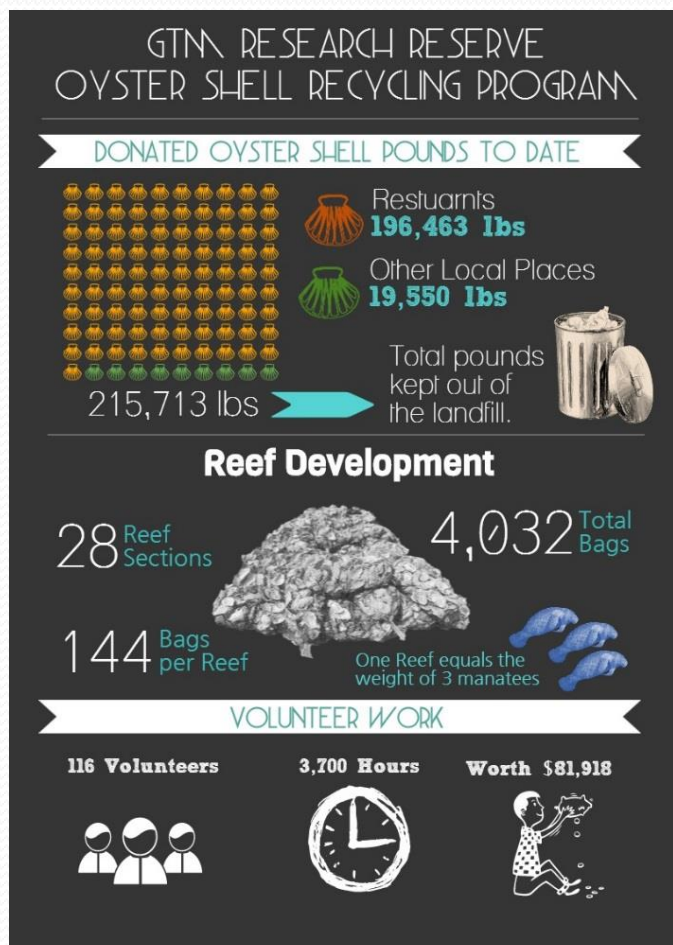
## Statue



## Bilingual Interpretive panels



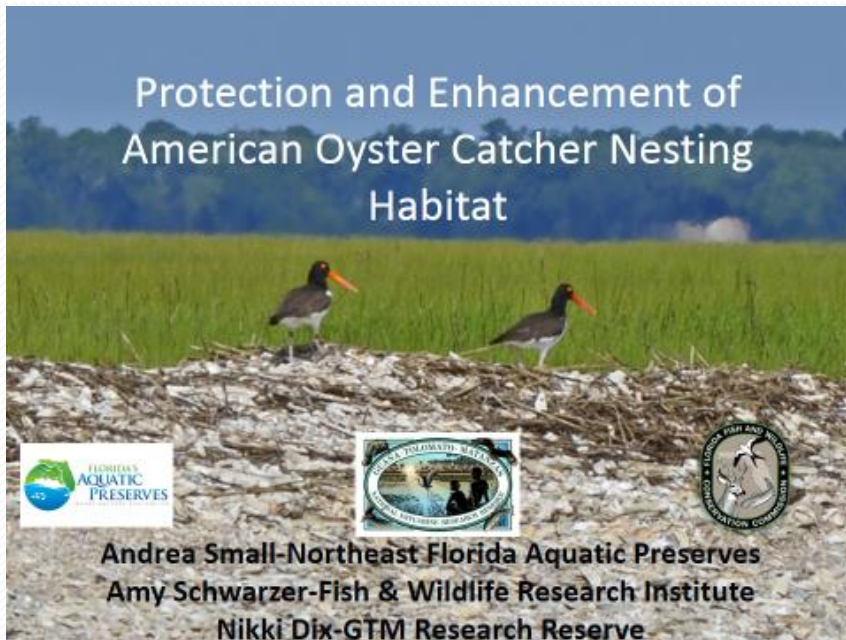
# Oyster Shell Recycling and Reef Building



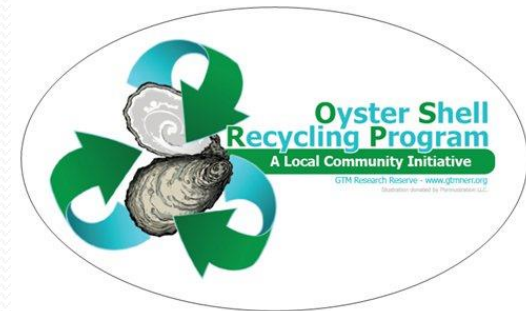
- 5 restaurants donated over 100,000 lbs of shell
- 1 truck and several dedicated volunteers making 3 restaurant trips per week
- Over 52 tons of shell diverted from landfills
- 96,000 lbs of shell already put back in the waterways where it belongs

# What's Next

Coordinated efforts to protect and restore endangered habitats



Continue oyster shell recycling to install More oyster reefs



# Resource Management



# Facilities and Public Use

- 10 miles of multi-use trails
- 3 beach parking areas accessing 4 miles of unspoiled beach
- 3 paved boat launch
- Environmental Education Center
  
- Dormitory for visiting researchers





# Land Management

## Habitat Restoration

- Achieved through prescribed fire
- Mechanical
- Exotic removal or control



## Exotic Species

- Active management
- Exotic Grasses
- Feral pig



# Coastal Training Program (CTP)



# CTP Bridges the Gap Between Science and Application

*Mission: to provide the most up-to-date scientific information and tools to key professionals responsible for making decisions about coastal resources*

- ❖ Workshops
- ❖ Professional Development
- ❖ Technical Assistance
- ❖ Training



# Ongoing Work



# CTP focus depends on your needs

