



Florida Fish & Wildlife Conservation Commission



Florida Fish and Wildlife Research Institute

Senator George Kirkpatrick Marine Lab

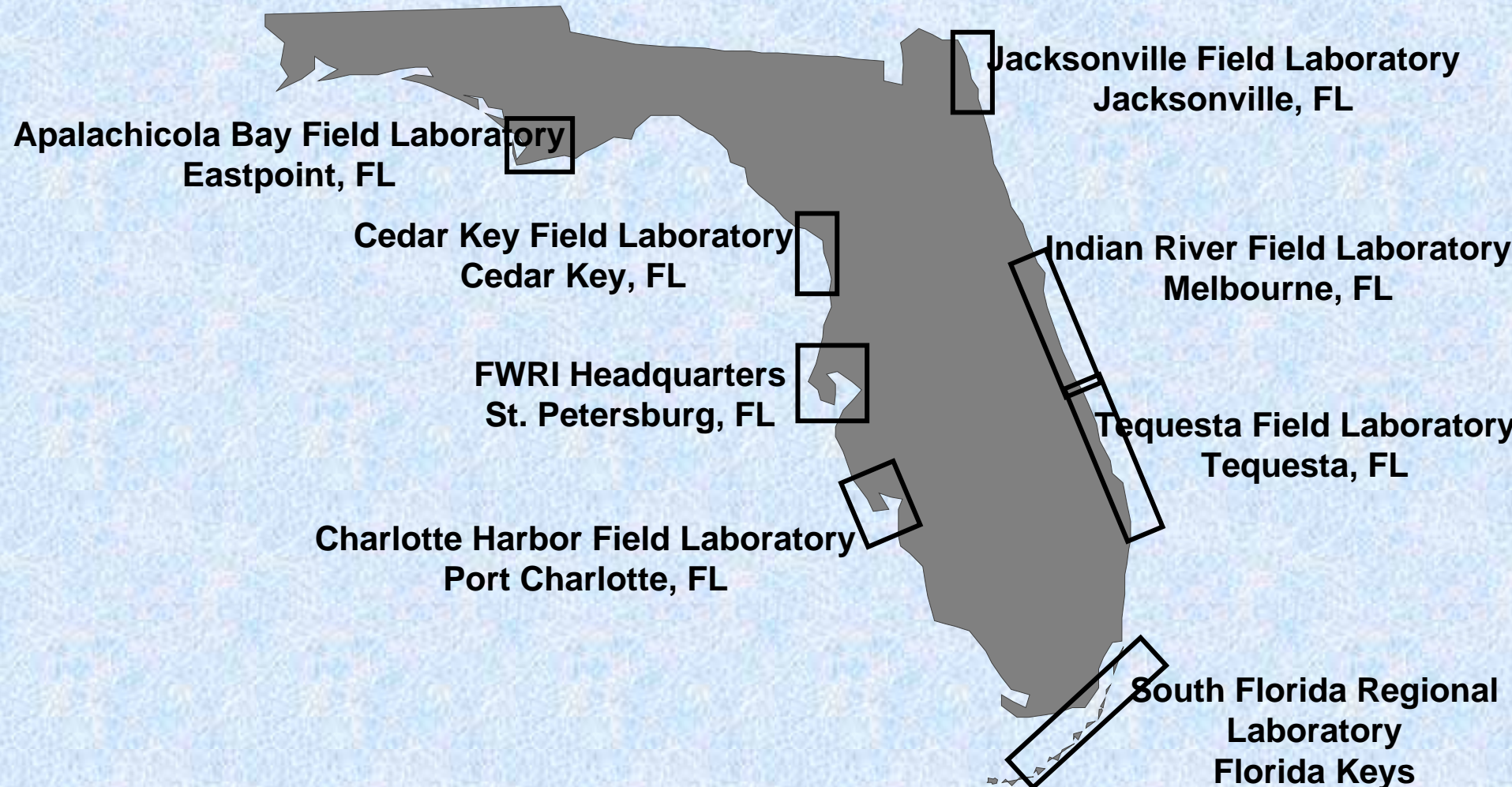
Doug Nemeth
Research Administrator

**Monitoring the fish community
and aquatic habitats of the
Suwannee River estuary**



Florida's FIM Program

Supporting Management of Florida's Fisheries



Cedar Key Sampling Universe

Stratified-random sampling



Each estuary is subdivided into zones.

Each zone is further subdivided into grids (1nm²).

Each grid into 100 microgrids.



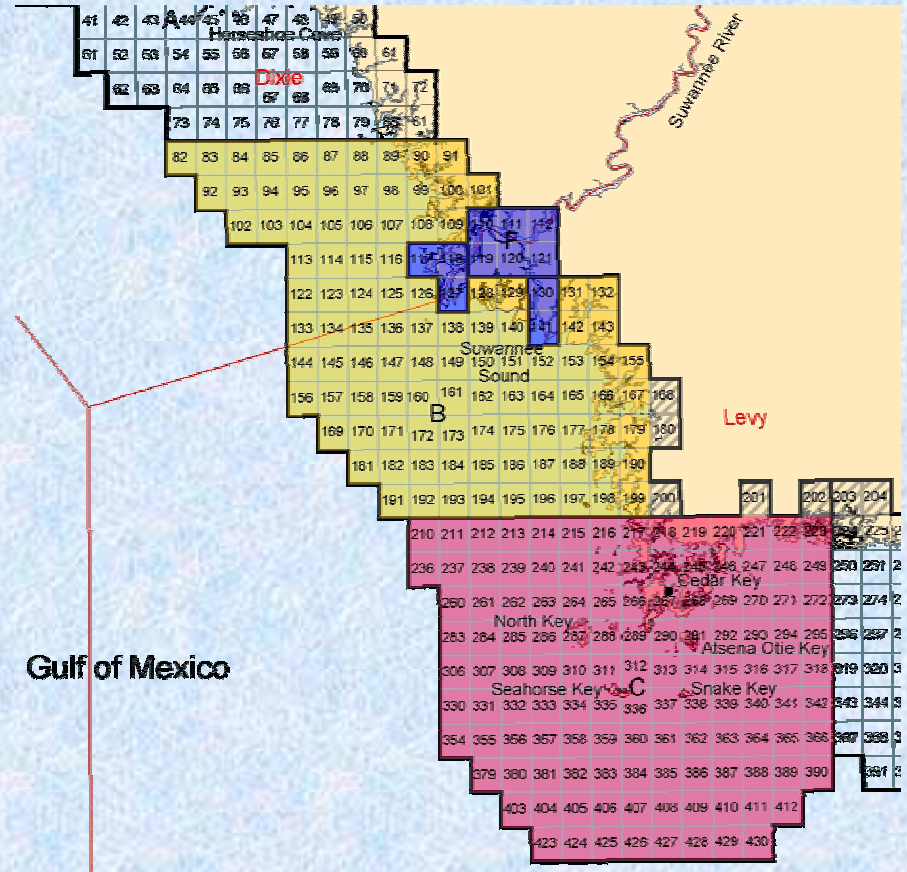
Net suitability by microgrid in database.



A set number of deployments per net type, per zone, each month is selected.



66 sets per month, 792 sets per year



Sampling the Fish Community by Habitat



Habitat Parameters

• Sampling the Fish Community

• Date & Lat. and Long.
Habitat Characteristics
-bottom type
Different nets for, IOD
-seagrass spp.,
different habitats.
-substrate

• Net length
-other
• Water chemistry

• Mesh size
-salinity
- temperature

• Deployment method
-dissolved oxygen
-other

• Weather

-tide

-wind

• Others

Cedar Key FIM Gears

70' seine, small mesh

35 deployments per month

Tidal Creeks and
River- 14/mo
Shoreline Set

Open water set- 12/



Cedar Key FIM Gears

20' Otter trawl, small mesh

Deeper water – 15/mo



Cedar Key FIM Gears

600' Seine, large mesh

16 / Mo



Cedar Key FIM Totals

2003

Savannah River

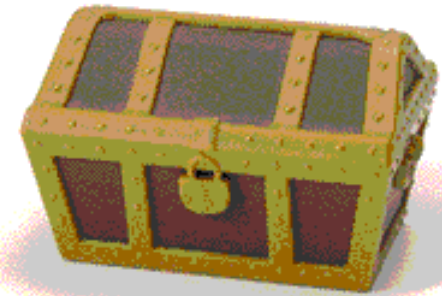
792 Net Deployments per Year

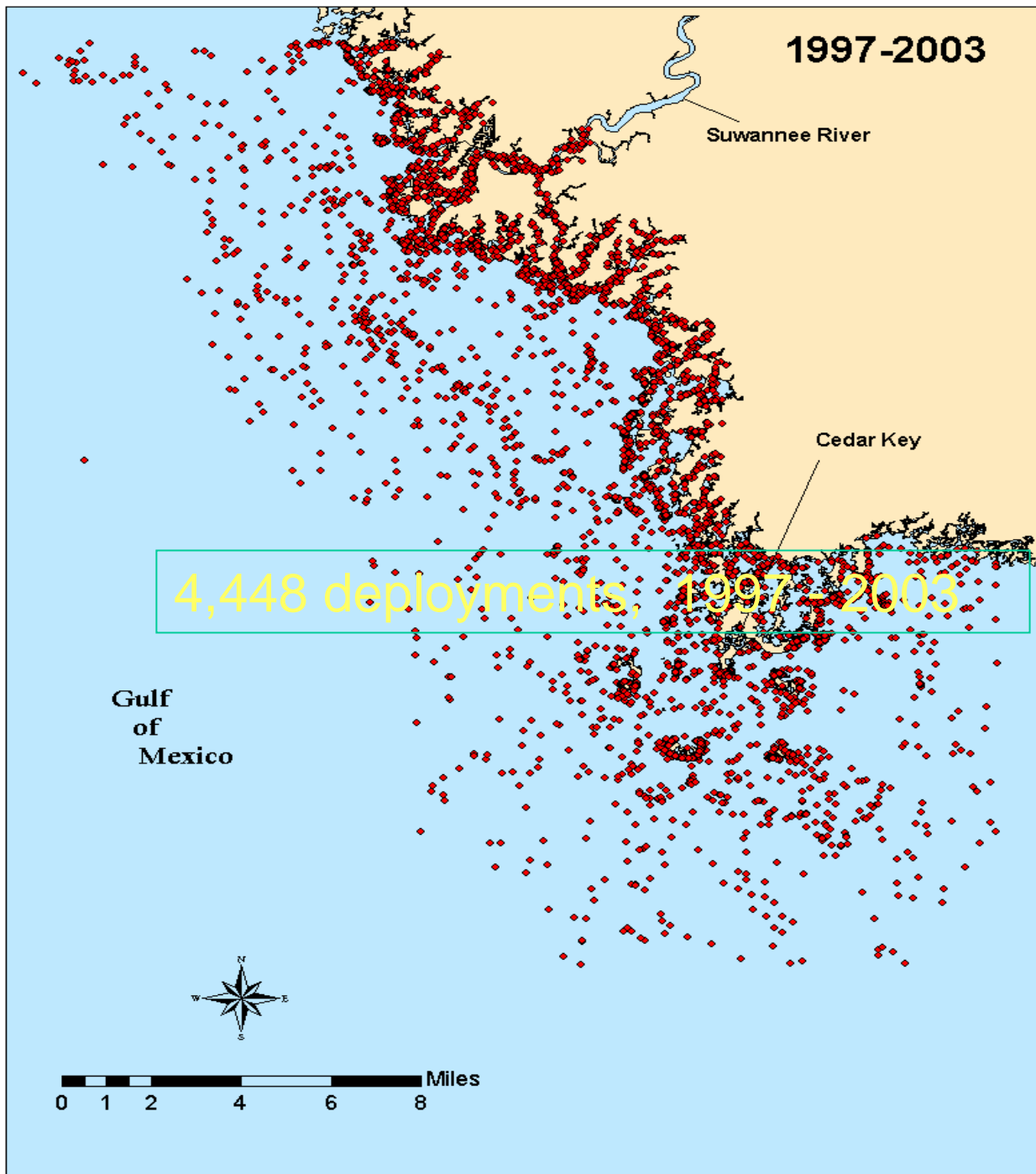
Cedar Key

Gulf
of
Mexico



0 1 2 4 6 8 Miles





Cedar Key FIM Totals

792 Net Deployments per Year

4,448 deployments, 1997 - 2003

93,000 – 201,000 animals captured annually

990,000 animals collected, 1997 - 2003

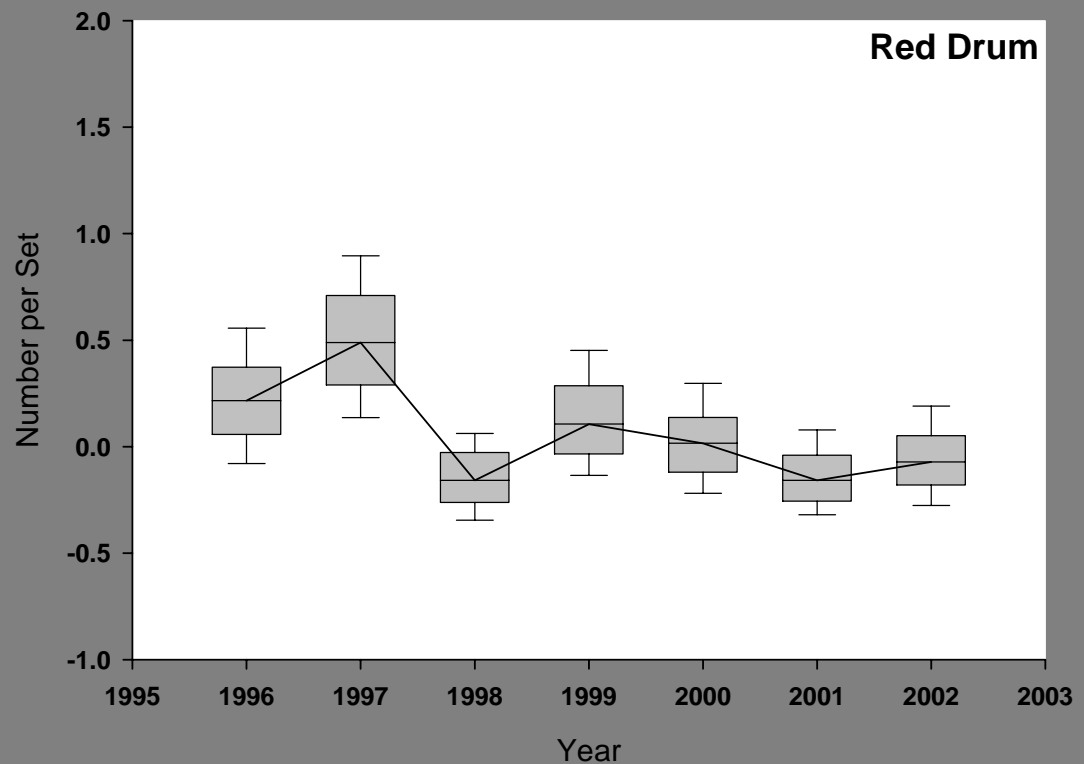
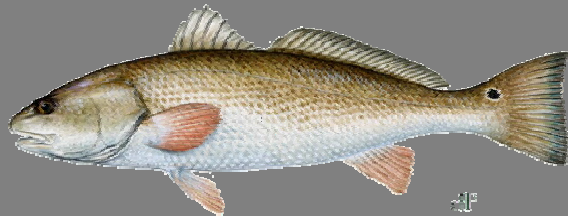


Data Uses

FISHERY MANAGEMENT

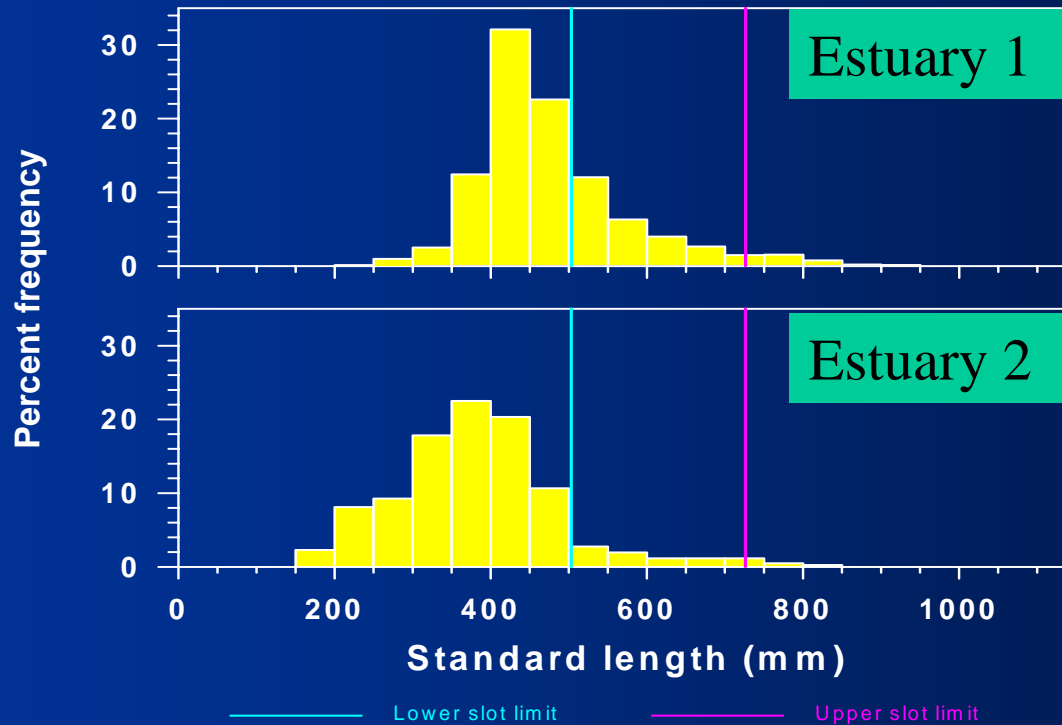
Are populations stable thru time?

YOY Index of Abundance



Data Uses

FISHERY MANAGEMENT Is the Slot Regulation Working?

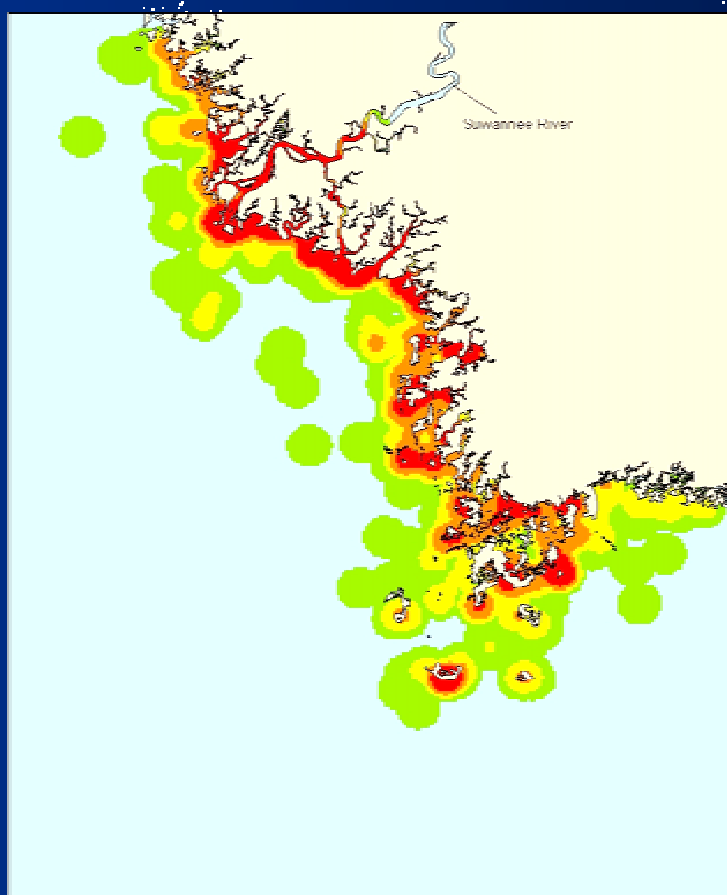


Data Uses

Spatial and Temporal Distribution



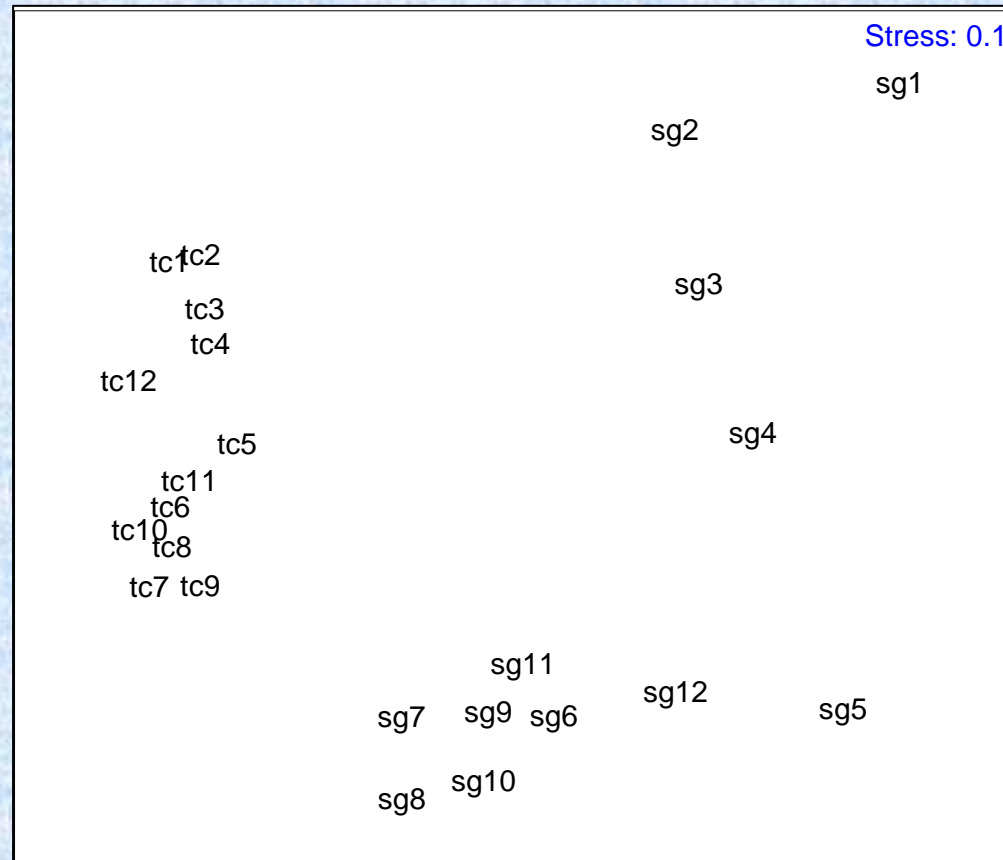
Young Blue Crab



Data Uses

FISH & HABITAT WHAT ? WHERE ? WHEN ?

Cedar Key Fish Assemblages by Habitat and Month



Research Studies of the Cedar Key FIM Program



The age, growth, and mortality of the sand seatrout in the eastern Gulf of Mexico.



Distribution and habitats used by juvenile sand seatrout in the eastern Gulf of Mexico.



The development of a method to quickly quantify seagrass coverage.



The fish assemblages of tidal creeks and seagrass beds in the Cedar Key area.



The evaluation of a mid-water trawl for fishery-independent sampling.