

The Status of Florida's Coral Reef and Influence of Florida Bay on Nearshore Reef Communities

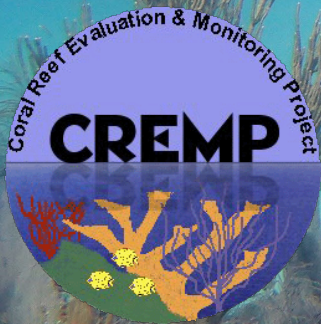
Greater Everglades Ecosystem Restoration Conference

Rob Ruzicka

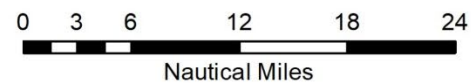
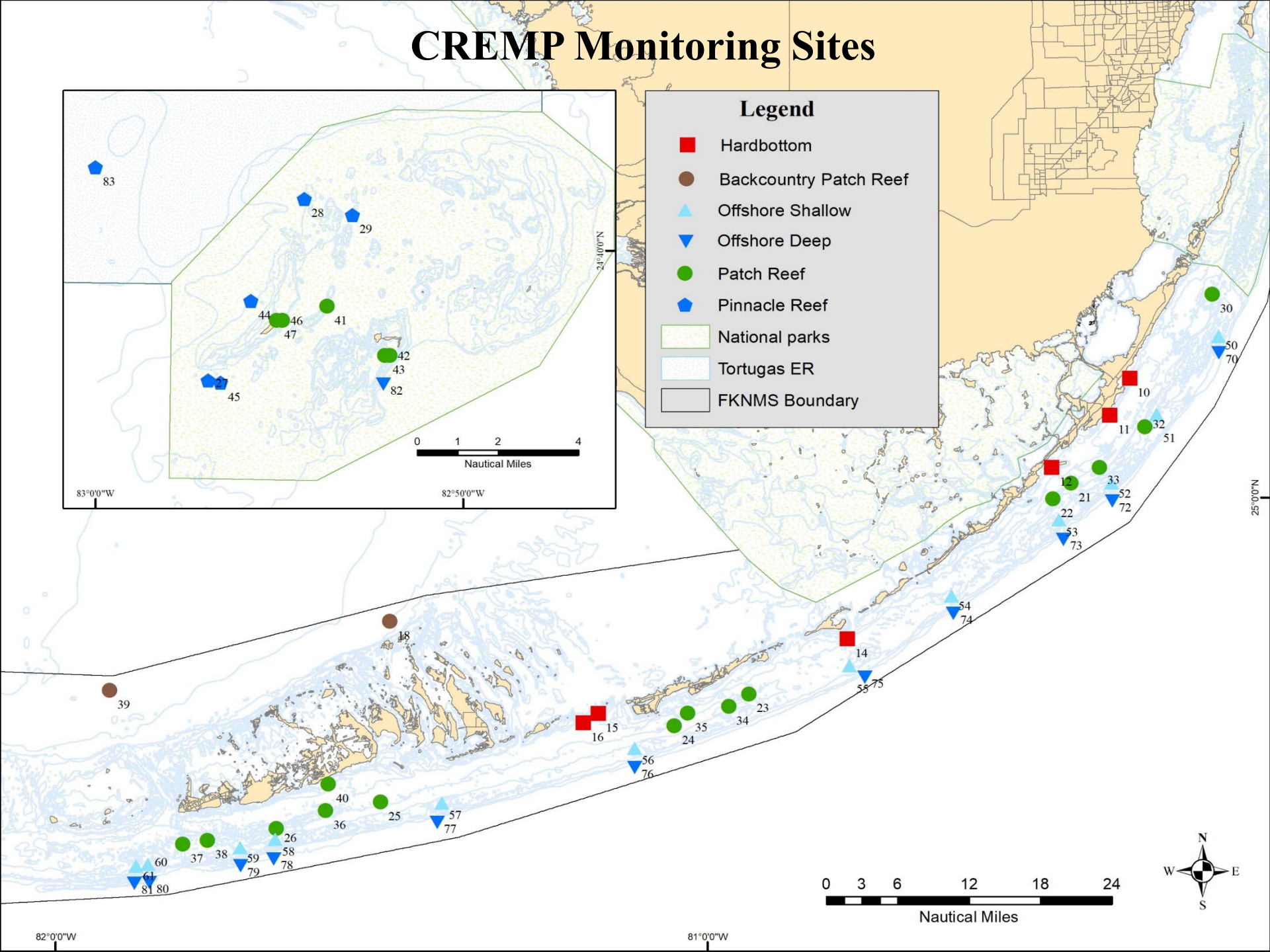
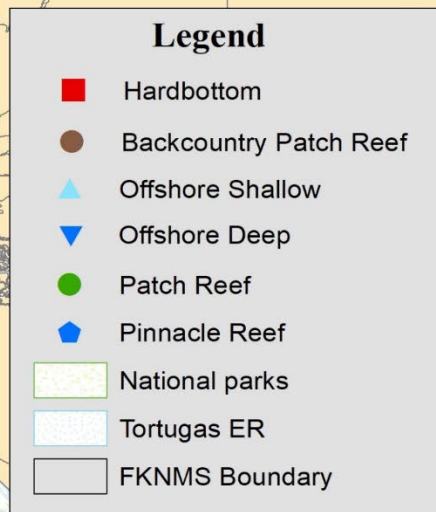
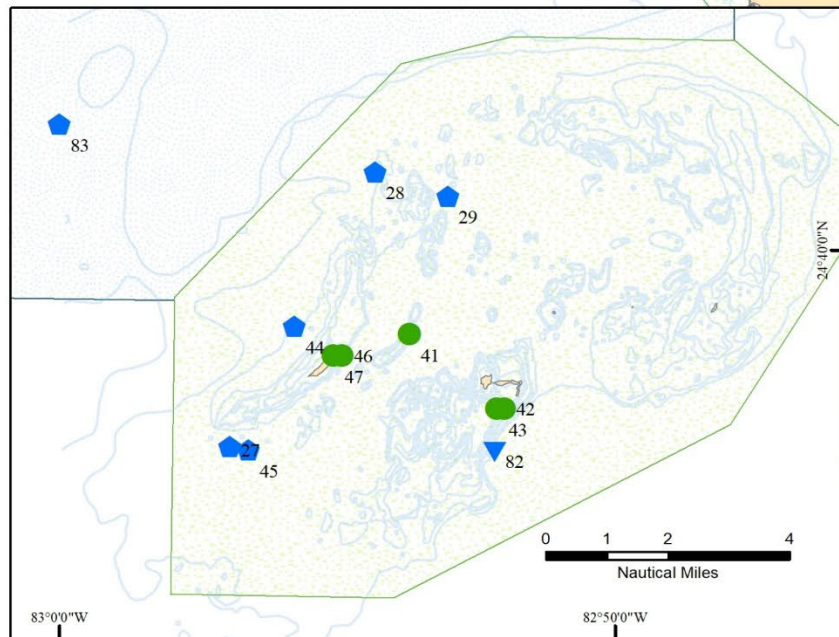
Florida Fish & Wildlife Research Institute

Coral Research Program

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CREMP Monitoring Sites



CREMP Surveys

Camera Transect

Demographic Survey

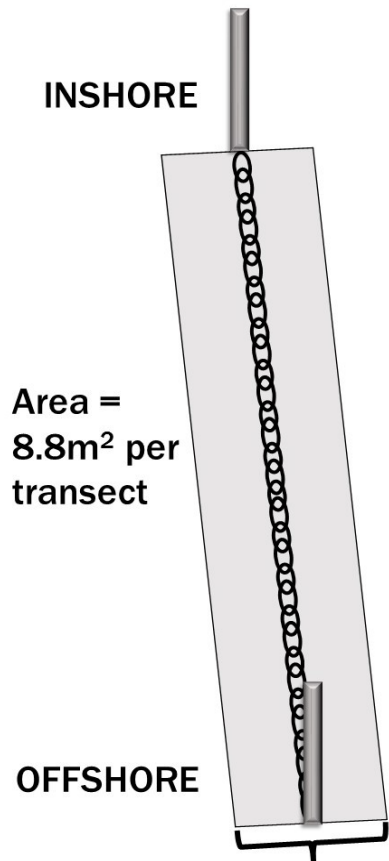
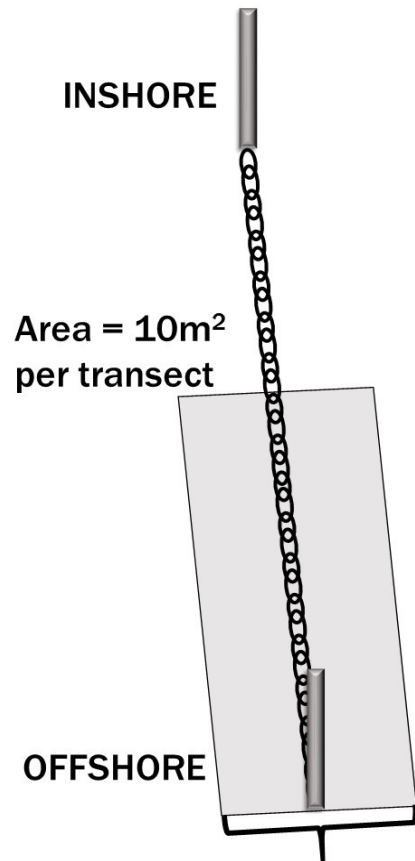


Photo width = 40cm

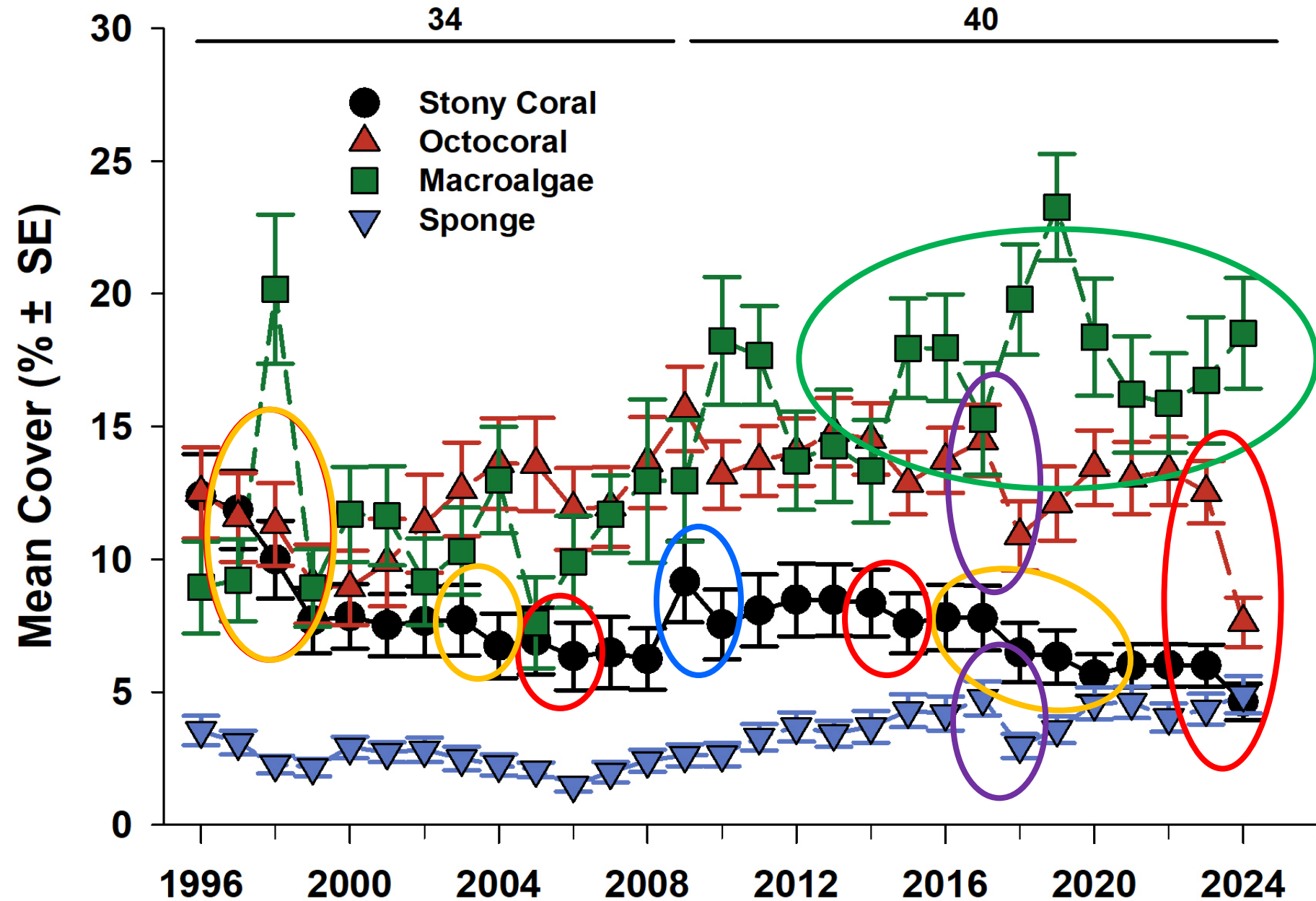


Transect width = 1m

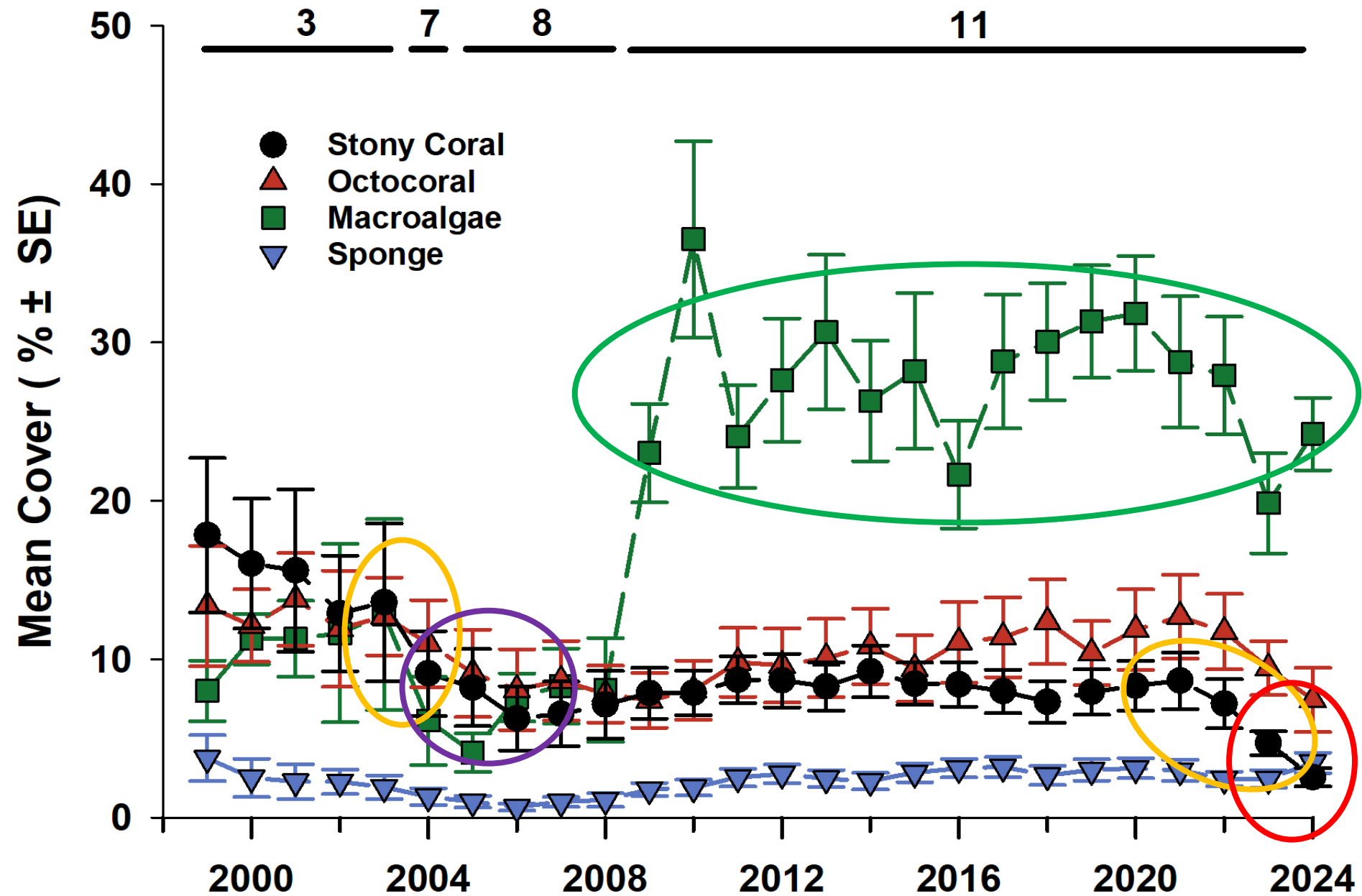


1. Camera & Coral Demographic surveys @ 51 sites in Keys & Dry Tortugas

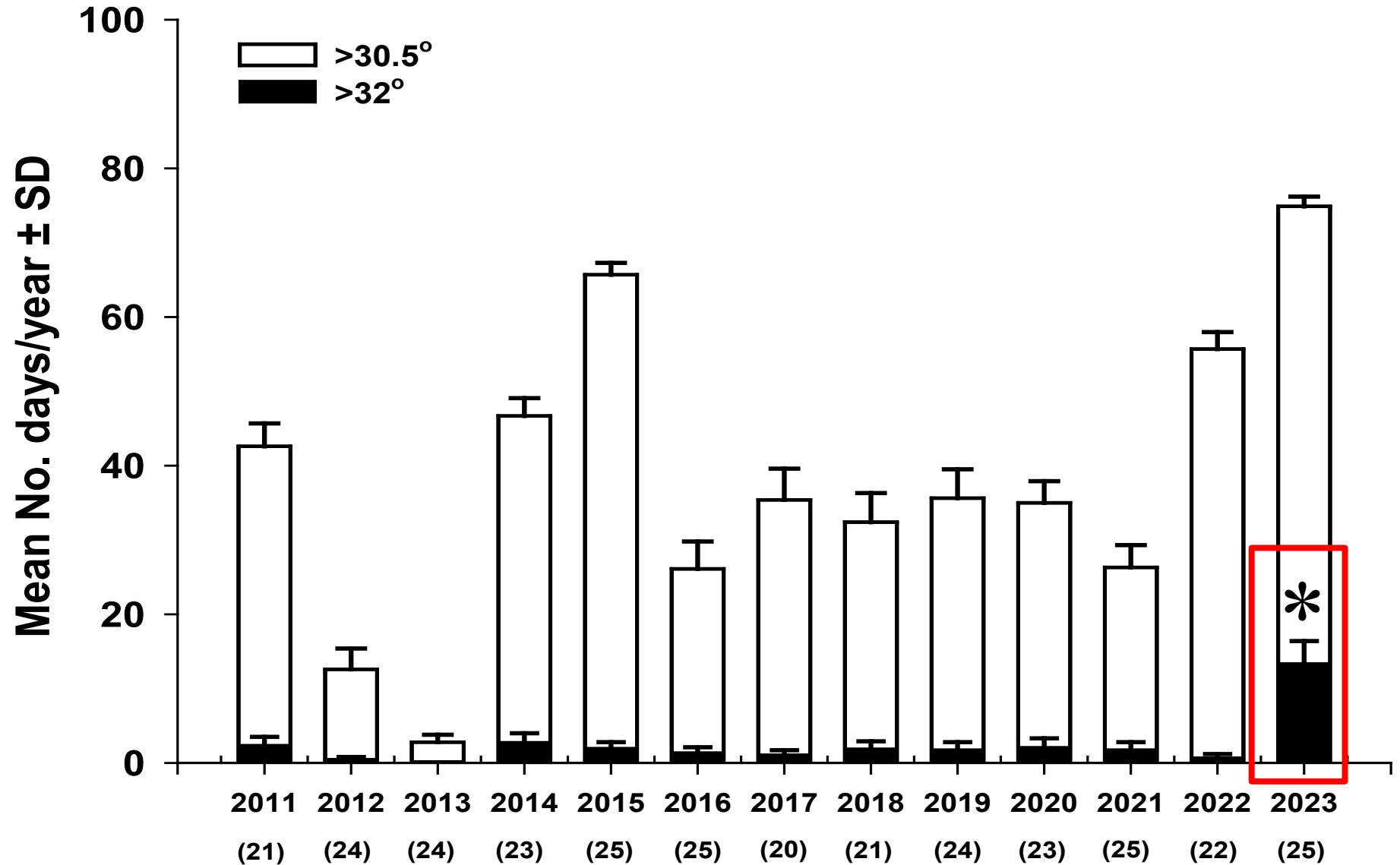
Long-term Benthic Taxa Trends in the Florida Keys



Long-term Benthic Taxa Trends in the Dry Tortugas



Temperature Stress on Florida's Coral Reef



- 7x the number of days above coral mortality threshold than in 2015
- NOAA revised bleaching alert levels in response to 2023 temperatures



Disappearance of Octocorals on Patch Reefs

2022



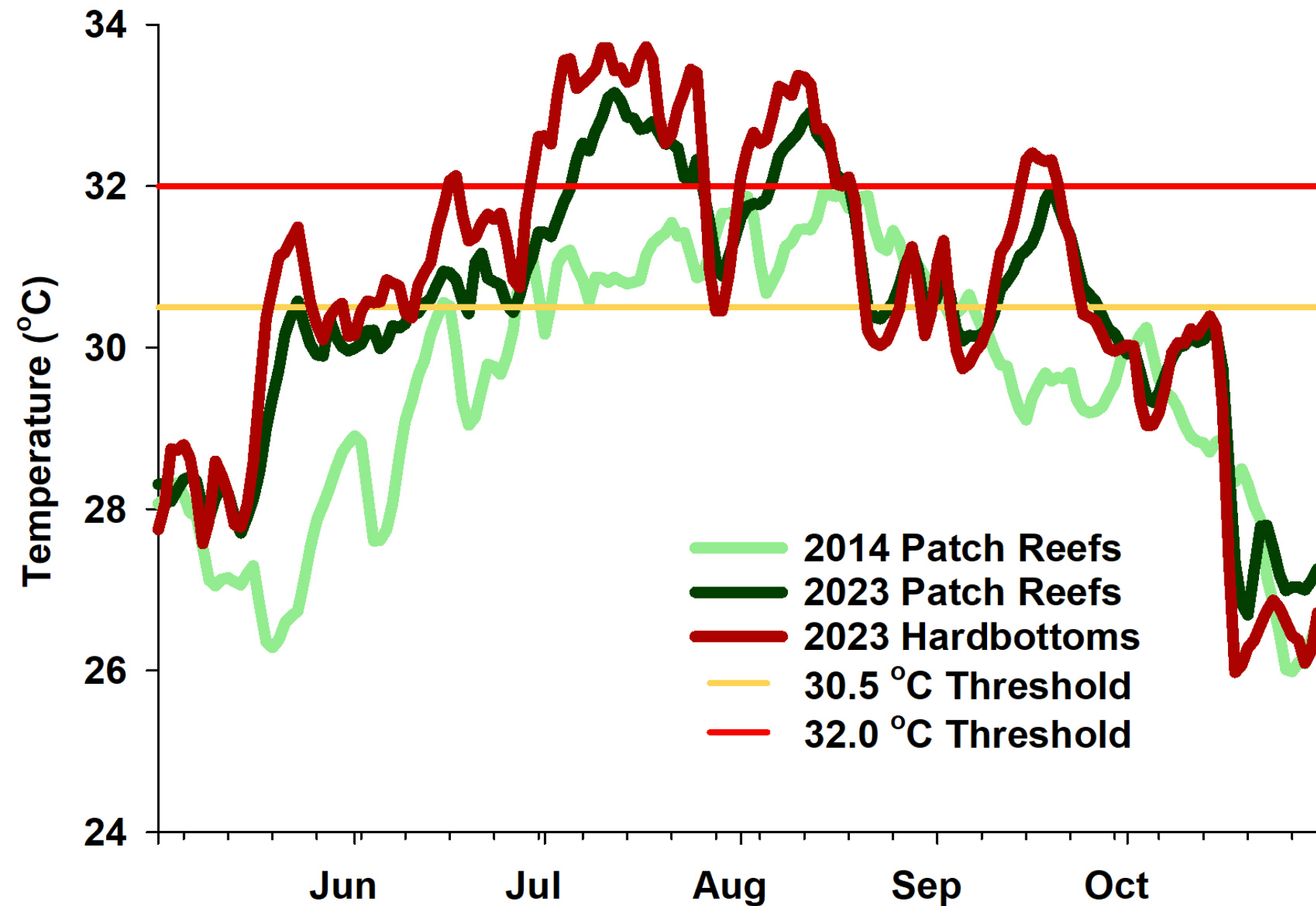
2024



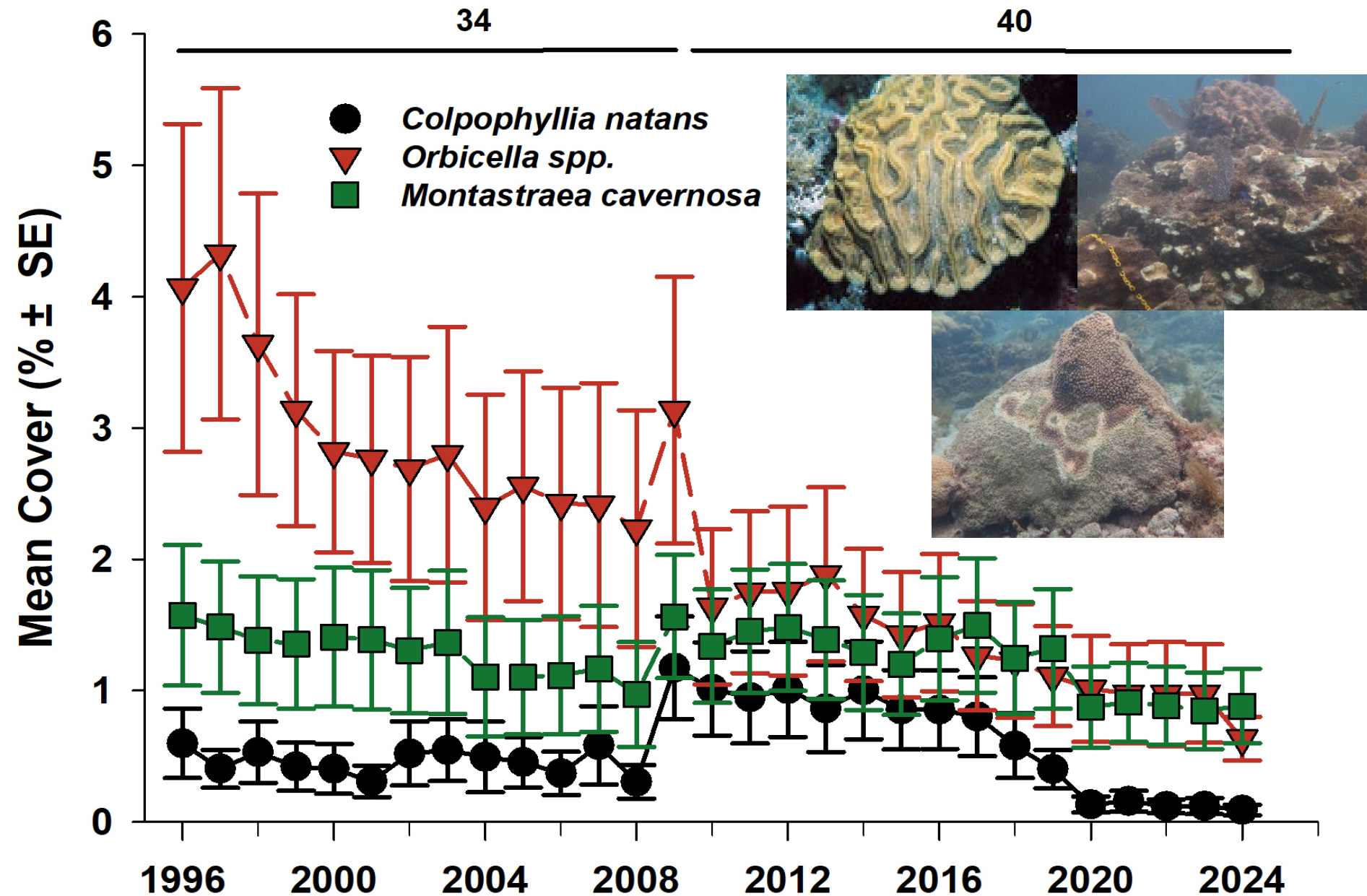
Dustan Rocks
Florida Keys



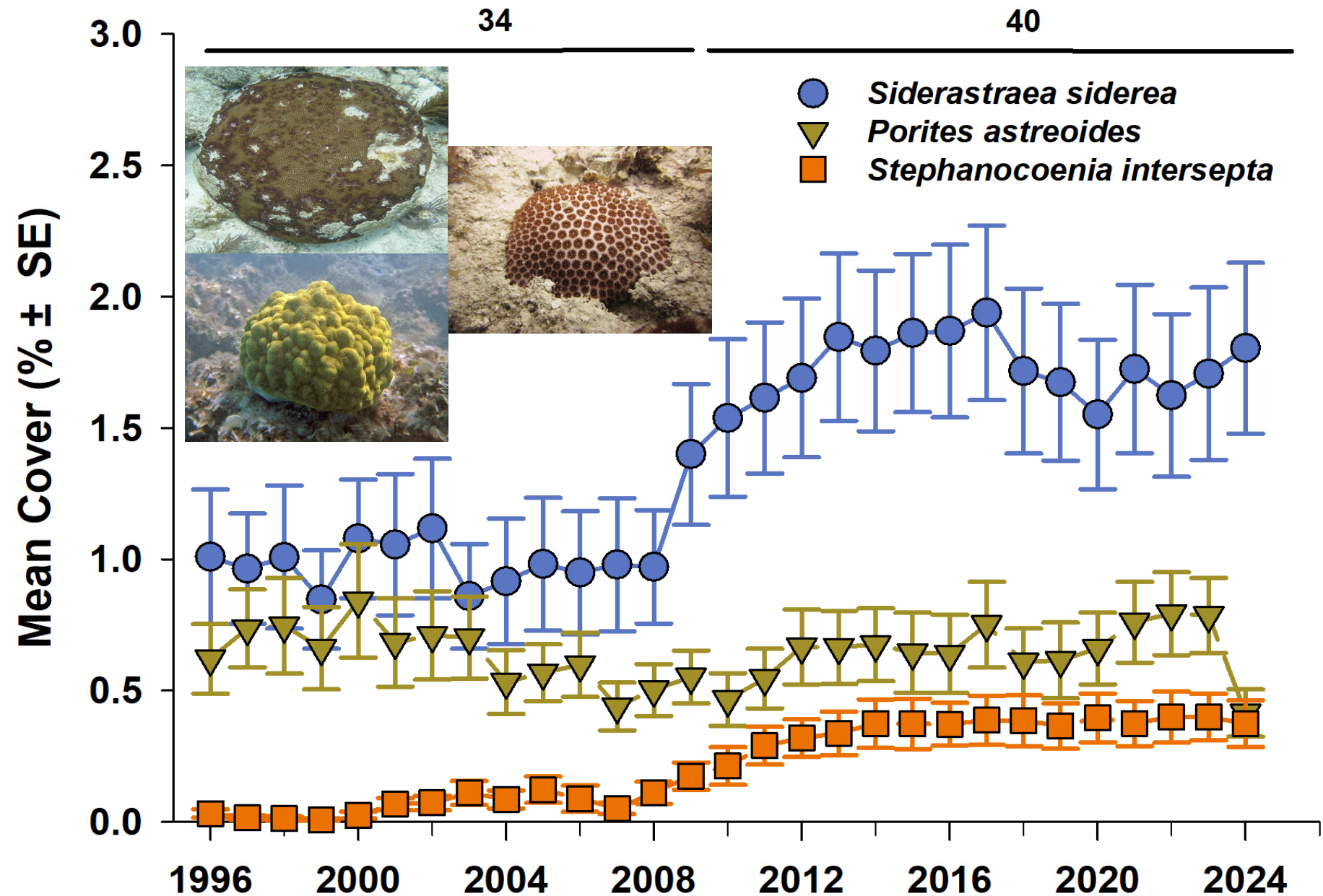
Influence of Florida Bay on Nearshore Patch Reefs



Transition From Framework Builders to Weedy Corals



Transition From Framework Builders to Weedy Corals



Acropora palmata Status in the Florida Keys

Molasses Shallow Reef | Florida Keys

2009

2015

2020

2024



Acropora palmata Status in Dry Tortugas

Palmata Patch | Dry Tortugas

2022

2023

2024



Orbicella spp. Status on Florida's Coral Reef

Admiral Reef | Florida Keys

2007

2014

2021

2024



Summary

1. Several species are now functionally extinct on FCR
2. Patch reefs no longer provide a safe haven for corals
3. Transition to weedy coral assemblages and thermally tolerant reef taxa



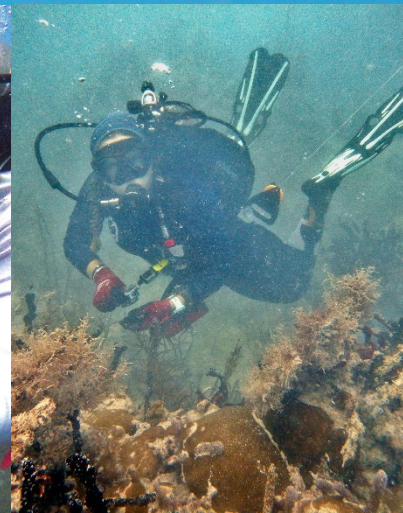


Thank You

FWRI Coral Program Team



Rob Ruzicka | Mike Colella | Stephanie Schopmeyer | Jennifer Stein | Kamy Herbison | Alicia Vollmer



Cailin Harrel | Lindsay Huebner | Katy Cummings | Tanya Ramseyer | Courtney Eshelman | Caroline Link

<https://myfwc.com/research/habitat/coral/cremp/>