

# Florida Gulf Reef Fish Survey



Florida Fish and Wildlife Conservation Commission  
Fish and Wildlife Research Institute  
Marine Fisheries Research



# Can one survey do it all?

- Not always cost-effective or practical to increase sample size in general MRIP survey
- Supplemental surveys sometimes a better alternative
- Examples in Florida:
  - Specialized survey to monitor small ACL during 3 to 8 day South Atlantic Red Snapper season
  - Fishery observers on for-hire vessels collect discard composition, size, condition





# Gulf Reef Fish Survey

- Gulf Reef Fish Angler designation (implemented 2015)
  - Free option on saltwater fishing license
  - Free for seniors exempted from license
- Required to harvest certain species from a private boat from the Gulf coast of Florida:
  - Red Snapper, Vermilion Snapper
  - Gray Triggerfish
  - Gag, Red Grouper, Black Grouper
  - Greater Amberjack, Banded Rudderfish, Almaco, Lesser AJ
- Provides a directory of private boat anglers that fish for reef fishes





# Integrated Approach

- Improve reef fish intercepts in MRIP's APAIS
  - Distribute sample among smaller regions
  - New offshore site group
  - June Red Snapper season in EEZ
- Gulf Reef Fish Survey
  - Supplement APAIS with specialized private boat intercept survey
  - New survey directly estimates private boat angler trips for reef fishes
    - Monthly estimates by state and federal waters





# Monthly Effort Survey

- 350,000 to 420,000 individuals eligible during 2016
  - Approximately 6,700 selected each month for mail survey (20% response rate)
- Monthly sample stratified by:
  - State of residence
  - Region of FL residence (Panhandle, Big Bend, central, southern)
  - Coastal/non-coastal counties
  - Households with / without a registered boat





# Monthly Effort Survey

- For each trip, respondents report:
  - Region fished
  - Area(s) fished
    - State, EEZ
  - Types of species caught or targeted

Did anyone on the boat keep, release, or try to catch any of the following species?

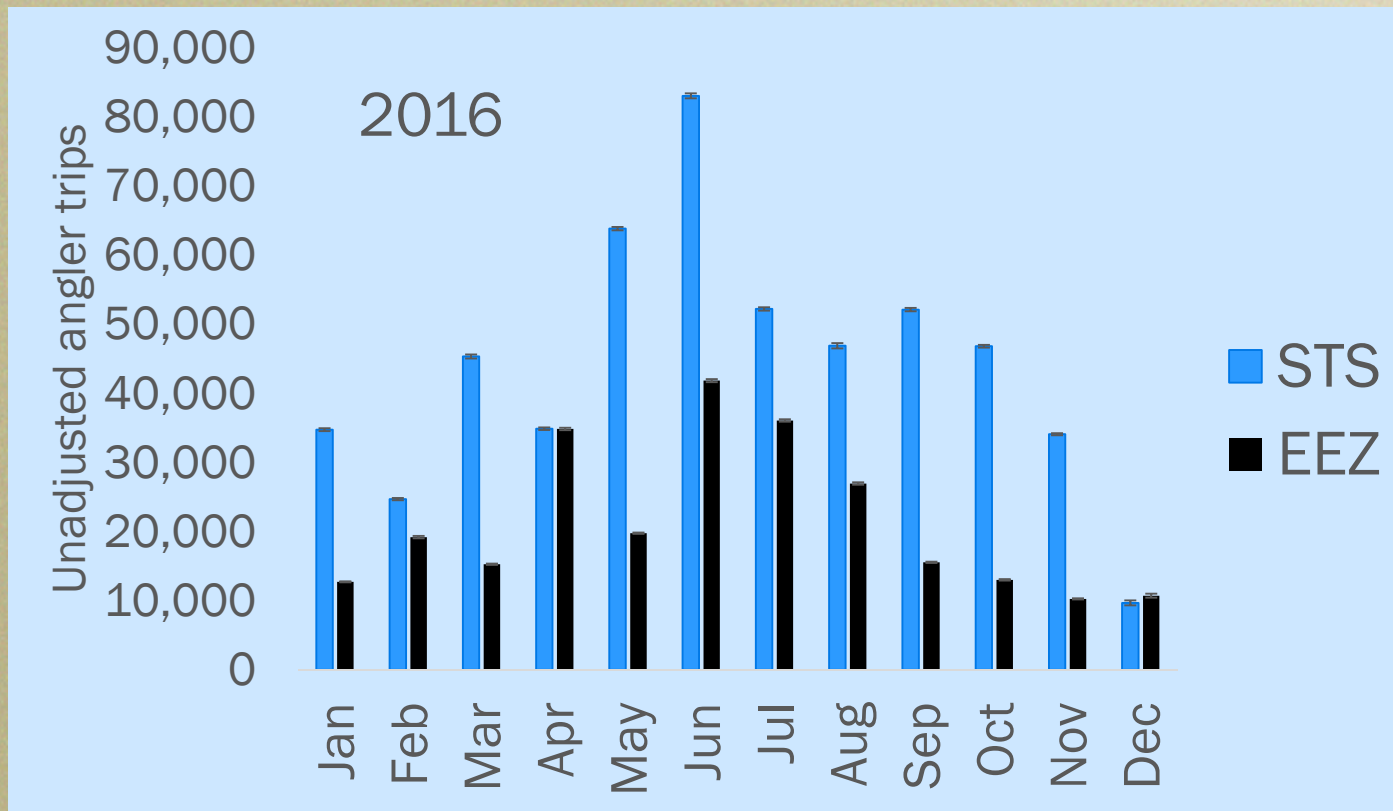
<input type="checkbox"/>	Red snapper	<input type="checkbox"/>	Banded rudderfish
<input type="checkbox"/>	Vermilion snapper	<input type="checkbox"/>	Almaco jack
<input type="checkbox"/>	Other snappers	<input type="checkbox"/>	Amberjack
<input type="checkbox"/>	Gag, black, or red grouper	<input type="checkbox"/>	Other jacks
<input type="checkbox"/>	Other groupers	<input type="checkbox"/>	None of these
<input type="checkbox"/>	Gray triggerfish		





# Monthly Effort Survey

Provides monthly estimate of reef fish trips by registered GRFS anglers in state and federal waters





# Supplemental Intercepts

- Conducted at offshore sites
- Targets reef fish trips
- Combined with APAIS to improve CPUE
  - Lengths, weights, ages
- Measure under-coverage in mail survey
  - Youth under 16 years
  - Unregistered adults





# Gulf Reef Fish Survey

- **Challenges**

- Oversubscription and implications of potential non-response bias
- Enforcement and off-frame correction
- Long term funding

- **Certification**

- Formal review with MRIP statisticians started in 2017
- State response by 2018
- Consider request for MRIP certification in 2018

