



SAFMC Citizen Science Program Citizen Science Research Priorities

1. Age Sampling:

- a. Target volunteers: Recreational
- b. Data needed: otolith collection
- c. Target species: cobia, greater amberjack, scamp, snowy grouper, gag, knobbed porgy, porgy complex
- d. Anticipated outcome: characterize the age of catches
- e. Potential cost: \$\$

CitSci Project Advisory Team Feedback: Support keeping as a research priority

2. Maturity Data:

- a. Target volunteers: Recreational and commercial; tournaments
- b. Data needed: gonad collection (either actual biological samples or pictures)
- c. Target species: cobia, red porgy, snowy grouper
- d. Anticipated outcome: improved reproductive information
- e. Potential cost: \$\$

CitSci Project Advisory Team Feedback: Support keeping as a research priority; potentially add spiny lobster (NC?) to species

3. Discard information:

- a. Target volunteers: Recreational and commercial
- b. Data needed: length of fish; depth caught/released; number of fish; reason for discard; devices used
- c. Target species: scamp grouper, red snapper, deepwater groupers, red porgy, greater amberjack, cobia, king mackerel (sub-legal releases)
- d. Anticipated outcome: improved discard removals estimates, ability to characterize size composition of discards
- e. Potential cost: \$-\$\$

CitSci Project Advisory Team Feedback: Support keeping as a research priority; potentially add spiny lobster (NC?) to target species

4. Genetic Sampling:

- a. Target volunteers: Recreational and commercial; bait and tackle shops; tournaments
- b. Data needed: fin clips
- c. Target species: cobia, hogfish (both stocks), red grouper, white grunt
- d. Anticipated outcome: stock identification
- e. Potential cost: \$-\$\$

CitSci Project Advisory Team Feedback: Support keeping as a research priority

5. Bottom Habitat Mapping:

- a. Target volunteers: Recreational and for-hire captains
- b. Data needed: mapping data using multi-beam or side scan sonar equipped on fishing vessels
- c. Anticipated outcome: improved habitat maps, improved resolution
- d. Potential cost: \$\$-\$\$\$

CitSci Project Advisory Team Feedback: Recommend removing from research priorities

6. Monitoring in Managed Areas (MPAs, Spawning Special Management Zones):

- a. Target volunteers: Recreational and commercial
- b. Data needed: species, length, depth
- c. Target species: deepwater snapper and grouper
- d. Anticipated outcome: changes in fish abundance over time

e. Potential cost: \$\$

CitSci Project Advisory Team Feedback: Support keeping as a research priority; however, some feedback suggested this may be better suited for Cooperative Research Project than CitSci

7. Fishing Infrastructure:

- a. Target volunteers: Recreational; commercial; community members/citizens
- b. Data needed: GPS location of fishing-related infrastructure (commercial fishing facilities, marinas, bait/tackle shops, ice house, fuel docks, boat ramps, piers, roadside seafood stands, retail markets, etc.)
- c. Anticipated outcome: Baseline for fishing-related infrastructure to help document potential impacts from regulations
- d. Potential cost: \$

CitSci Project Advisory Team Feedback: Support keeping as a research priority; recommend adjusting data needed to include locations for infrastructure that no longer exists (e.g. closed fish houses, old commercial dock areas, etc.); a lot of fishing infrastructure has already been lost – so it would be helpful to capture this information as well

8. Historical Fishing Photos:

- a. Target volunteers: Recreational and for-hire
- b. Data needed: digitized images (will need to scan print photos into digital format)
- c. Target species: commonly caught charter/headboat species
- d. Anticipated outcome: length comps for certain species; improved historical information
- e. Potential cost: \$-\$\$

CitSci Project Advisory Team Feedback: Support keeping as a research priority

9. Fishery Oral Histories:

- a. Target volunteers: For-hire and commercial captains
- b. Data needed: interviews with fishermen to learn about the history of a fishery; possibly pair interviews with topic #8 (Historical Fishing Photos)
- c. Anticipated outcome: documentation of how fisheries operated over time (catchability changes over time with improvements in technology; markets; clients; species distribution; size of fish; weather; etc.) and other observational data
- d. Potential cost: \$

CitSci Project Advisory Team Feedback: Support keeping as a research priority; Recommend adjusting data needed to include interviews with fishermen to learn about the history of the fishery as well the current state of the fishery

10. Oceanographic/Environmental/Weather Conditions:

- a. Target volunteers: Recreational and commercial
- b. Data needed: Bottom temperature; weather impacts to fishing; presence/absence of sargassum and size of area; movement of forage fish (bait) and shifts in patterns of a fishery (i.e., mackerel)
- c. Anticipated outcome: building database on climate and conditions; distribution of sargassum; how forage fish impacts patterns in a fishery
- d. Potential cost: \$-\$\$

CitSci Project Advisory Team Feedback: Support keeping as a research priority

11. Rare Species Observations:

- a. Target volunteers: Recreational and commercial
- b. Data needed: point observations of unusual or rarely encountered species
- c. Anticipated outcome: baseline for species shift
- d. Potential cost: \$-\$\$

CitSci Project Advisory Team Feedback: Support keeping as a research priority; may be helpful to tie into historic photos to see if actually rare occurrences or if see more now due to social media, etc.