ADOPTED – June 2018

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: $$

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: $$

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: $-$$

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: $-$$

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: $$-$$$

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: $$

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: $

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: $-$$

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: $

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: $-$$

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: $-$$