### **FINAL**

# SUMMARY REPORT CITIZEN SCIENCE COMMITTEE

#### SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL

# Beaufort, North Carolina December 7, 2023

The Committee approved the December 2023 Citizen Science (CitSci) Committee meeting agenda and the transcript from the June 2023 meeting.

#### **Citizen Science Research Priorities**

Staff provided background information on the citizen science research priorities and gave a brief overview of the process outlined in the Citizen Science SOPPS to update these priorities. The Council reviewed and discussed the updated citizen science research priorities which incorporated input from the Citizen Science Projects Advisory and Operations Committees.

The Committee supported adopting the updated citizen science research priorities as presented with the following modifications. Modifications are noted below with yellow highlighted or strikethrough text.

- Remove 'Maturity Data' from the list of citizen science research priorities
- Make the following changes to the 'Age Sampling' priority
  - o Target volunteers: Recreational
  - o Data needed: otolith collection, fin clips (still developing)
  - Target species: Cobia, Greater Amberjack (fin clip), Scamp, Snowy Grouper, Gag, Knobbed Porgy, Porgy complex, Wahoo, Lane Snapper, Hogfish (GA-NC both stocks), Red Grouper, Black Grouper, Vermilion Snapper, Blueline tilefish, Black Seabass (private recreational), Gray Triggerfish (spines), Spiny Lobster (ossicles), Red Snapper
  - o Anticipated outcome: characterize the age of catches
  - o Potential cost: \$\$
- Make the following changes to the 'Discard Information' priority
  - o Target volunteers: Recreational and commercial
  - Data needed: length of fish; depth caught/released; number of fish; reason for discard; devices used; when and where fish are released, terminal gear used, disposition of fish (e.g. released dead/alive)
  - Target species: all SAFMC managed species in particular, Scamp, Red Snapper, deepwater groupers, Red Porgy, Greater Amberjack, Cobia, King Mackerel (sublegal releases), and Gray Triggerfish
  - Anticipated outcome: improved discard removals estimates, ability to characterize size composition of discards, could help monitor recruitment for some species (e.g., Gag)
  - o Potential cost: \$-\$\$

- Make the following changes to the 'Genetic Sampling" priority
  - Target volunteers: Recreational and commercial; bait and tackle shops; tournaments
  - o Data needed: fin clips
  - Target species: Cobia, Hogfish (both stocks), Red Grouper, White Grunt, Spanish Mackerel, Dolphin, Wahoo, Black Grouper/Gag, Scamp/Yellowmouth, Red Snapper, Greater Amberjack
  - Anticipated outcome: stock identification, species identification, ageing (still developing)
  - o Potential cost: \$-\$\$
- Make the following changes to the 'Fishing Infrastructure' priority
  - Target volunteers: Recreational, commercial, and community members/citizens, county/state/municipalities/gov
  - Data needed: GPS location of existing and previously existing/closed fishingrelated infrastructure (commercial fishing facilities, marinas, bait/tackle shops, ice house, fuel docks, boat ramps, piers, roadside seafood stands, retail markets, etc.)
  - Anticipated outcome: Baseline for fishing-related infrastructure to help document potential impacts from regulations, could help define communities and better understand key fishing hubs for social analysis for FMP amendments, track behavior changes in a fishery
  - o Potential cost: \$
- Make the following changes to the 'Oceanographic/Environmental/Weather Conditions'
  - o Target volunteers: Recreational and commercial
  - Ontain 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)
  - o Anticipated outcome: building database on climate and conditions; distribution of sargassum; how forage fish impacts patterns in a fishery
  - o Potential cost: \$-\$\$
- Combine the 'Shifting Species and Rare Event Observations' and 'Rare or Data Limited Species Observations' priorities into one and make the following changes
  - o Target volunteers: Recreational and commercial, divers
  - O Data needed: Point observations of data limited and/or unusual or rarely encountered species for areas along the Atlantic coast; length information for data limited species
  - o Target species:
    - Shifting and rare event: all managed species, but especially Dolphin, King Mackerel, Spanish Mackerel, shrimp, Wahoo, Black Seabass, Tilefish
    - Data limited: Hogfish (both stocks), snapper and grouper species, spiny lobster

- Anticipated outcome: baseline and/or early warning for species shift; increasing information available for data limited species, in particular length compositions
- O Potential cost: \$-\$\$
- Make the following change to the 'Observations in Managed Areas' priority
  - o Target volunteers: Recreational and commercial, divers
  - Data needed: species, length, depth, videos/photos, effort in closed areas, observations on edge effects
  - o Target species: snapper and grouper
  - o Anticipated outcome: species composition, changes in fish abundance over time, occurrence of spawning, information on compliance
  - o Potential cost: \$\$
- Make the following change to the 'Movement & Migration' priority
  - Target volunteers: Recreational and commercial, focus on supporting and working with existing tagging programs
  - o Data needed: species, location, length, tag details
  - o Target species: Dolphin, Wahoo, Spanish Mackerel
  - o Anticipated outcome: movement and migratory patterns
  - o Potential cost: \$-\$\$
- Make the following change to the 'Habitat Characterization' priority
  - o Target volunteers: Recreational and commercial, divers
  - O Data needed: photo/videos, location (concentrate on South Atlantic Essential Fish Habitat)
  - o Anticipated outcome: ground truth bathymetry data
  - o Potential cost: \$-\$\$
- Make the following changes to the 'Spiny Lobster Data' priority
  - o Target volunteers: Recreational and commercial, divers
  - Data needed: catch, effort, carapace length, sex, presence of eggs, presence/absence
  - Anticipated outcome: characterize fishery in GA north (data more limited in this portion of the fishery so higher priority) and FL
  - o Potential cost: \$

Additional points from the Committee's discussion are summarized below.

- It would be helpful to explore partnering with existing research projects (e.g., Red Snapper and Greater Amberjack counts) for some of the biological focused research priorities (e.g. Age Sampling, Genetic Sampling) since these types of projects can take substantial resources and coordination among many partners.
- The 'Discard Information' research priority was flagged as a high priority.
- Explore pairing oral histories, historic fishing photos, and fishing infrastructure projects.
- Explore incorporating questions to Fishery Performance Reports asking AP members about existing/closed infrastructure within their communities.

**MOTION:** ADOPT THE UPDATED CITIZEN SCIENCE RESEARCH PRIORITIES WITH MODIFICATIONS AS SUGGESTED.

APPROVED BY COUNCIL

### **SciFish Update and Platform Demonstration**

Over the past three years the Council, the North Carolina Division of Marine Fisheries (NCDMF), and the Atlantic Coastal Cooperative Statistics Program (ACCSP) have partnered to develop the citizen science platform, SciFish, which will support the capture and sharing of information about fish stocks along the Atlantic coast. SciFish is a mobile application and menudriven project builder designed to collect citizen science data. It will allow ACCSP partners to easily create a customizable app without the need to develop stand-alone applications for each new data need or project. Staff provided a demonstration of the SciFish platform and an overview of the policies and procedures to support the development of projects within the platform. SciFish will transition to ACCSP administration and be available for partners to use (following the application outlined in the policies) next year.

# Citizen Science Program Update

Staff provided an overview on Citizen Science Program and project activities highlighting current efforts on the Citizen Science Project Idea Portal, Program evaluation work, SMILE, FISHstory, and SAFMC Release.

### **Other Business**

No further business was brought before the Committee.