4/28/23

SAFMC Citizen Science Program Evaluation Work Draft Survey for Fisheries Scientists and Managers

Prepared on behalf of the South Atlantic Fishery Management Council by contractor Rick Bonney, Director Emeritus of Public Engagement in Science, Cornell Lab of Ornithology

The goal of our initial evaluation work is to collect baseline information on knowledge, attitudes, collaborations, engagement, and trust levels from various stakeholders to help determine the success of the SAFMC citizen science program in the future.

At the Citizen Science Committee meeting in May 2022, we discussed a draft survey intended to gather baseline information from scientists, managers, and fishermen. Much of this draft is based on that original draft. However, since that time, we have decided to focus our online survey work only on scientists and managers, while collecting data on fishermen through other means. Therefore, this draft eliminates questions directed toward fishermen.

Most of the comments made by the Committee in 2022 have been incorporated into this version. However, this is still a draft with plenty of room for discussion and change. In particular, many of the questions are focused on respondent characteristics, but don't get at deeper issues around trust and transparency of the fisheries management process. We invite discussion and ideas to deepen the questions and make the survey more thoughtful!

*Which category best describes your role in the saltwater fisheries community? (If you fit into multiple categories, please choose the one that describes you best or for which you spend most of your time.)

Fisheries scientist* Fisheries manager* Both fisheries scientist and fisheries manager

*For the purpose of this survey, we are defining "fisheries scientist" as *For the purpose of this survey, we are defining "fisheries manager" as

*What type of agency do you work for?

Federal State Academic Non-governmental Organization

*What state or states do you work in? (Check all that apply)

North Carolina South Carolina Georgia Florida

*For how many years have you been working in fisheries science/management?

1-5 6-10 11-20 21-30 30+

(Is there a meaningful way to define subsets of the fishery with which different scientists/managers primarily work? finfish, shellfish, crustacean? Or by topic? Stock assessment, genetics, life history, ecology?)

*Are you familiar with the South Atlantic Fisheries Management Council (SAFMC)?

I am very familiar with the SAFMC I am somewhat familiar with the SAFMC I have heard of the SAFMC but am not sure what it does I am not familiar with the SAFMC

*For those who answer very familiar:

*Have you personally been involved with the SAFMC? If so, please check all of the ways in which you have been involved:

Served as a SAFMC council member Served on a SAFMC advisory panel or scientific advisory committee Participated in a SEDAR stock assessment workshop or webinar Attended a public meeting Submitted public comments

*How familiar are you with the stock assessment process that the South Atlantic Fisheries Council uses to recommend fisheries management regulations to NOAA?

Very familiar Somewhat familiar Not familiar

(need to think whether the answer to the above uses logic to move forward. For instance, if they are not familiar, then the below question may not be relevant/helpful)

*To make recommendations for managing fisheries (or, "to conduct stock assessments"), SAFMC requires reliable data about fisheries biology, and fish populations, and fisheries socioeconomics. Please indicate the sources of data used by the SAFMC with which you are familiar (check all that apply).

Onboard observers Fishermen logbooks Dockside sampling Port sampling Surveys by scientists Cooperative research Citizen Science

*Do you feel that these sources, taken together, provide sufficient data on which to base management recommendations?

Yes, sufficient data are available Yes, sufficient data are available for most species Sometimes, but more data would be helpful for many species No, insufficient data are available for most species

*If answer more data would be helpful or not sufficient data:

*How do you think that more data could be best acquired? (Rank the below)

Observers on boats Dockside surveys Logbooks Citizen Science Other (please describe)

*The last data-collection method in the above list is citizen science, a term that refers to projects for which non-scientists collect and submit data about the natural world. In the past, several citizen science efforts have involved fishermen, such as fish tagging projects. Are you familiar with the field of citizen science?

I am very familiar with citizen science I am somewhat familiar with citizen science I have heard of citizen science but am not sure exactly what it does I am not familiar with citizen science

*For those who answer very familiar or somewhat familiar: Have you engaged personally with citizen science?

Yes, a lot

Yes, some No I'm not sure

*For those who have engaged: In what ways have you engaged with citizen science? (check all that apply)

Using citizen science data for scientific publications Using citizen science data for decision making/management recommendations Designing projects Collecting data Classifying data (photos or online data) Analyzing data

*Assuming that citizen science projects are professionally developed by knowledgeable scientists, managers, and fishermen, do you think that citizen science can be a useful tool for collecting data that could inform fisheries management?

Yes, very much so Possibly No I'm not sure

*For those who say yes or possibly: The SAFMC has created a list of topics for which citizen science data could be collected. Please rank the top five that you think would provide data most useful for fisheries management (or, "be most appropriate for citizen science")

Provide current list of priorities

*For those who say possibly, no, or I'm not sure: What concerns do you have about citizen science? (check all that apply)

The data won't be collected according to protocol The data won't be collected randomly Fishermen may not be truthful about their data Scientists and/or managers won't use the data Other (elaborate)

*More possible questions to work in but not sure where ...

Do you think that managers use science to make management recommendations? Do you trust managers to consider the needs of fishermen in making recommendations? Do you trust fishermen to provide accurate data? Ask an open-ended question about the status of the South Atlantic Fisheries? Also, we are still studying the Ropicki and Carlton Final Report on Analysis of Marine Recreational Angler Information Gathering for ideas for additional questions