

# SAFMC'S CITIZEN SCIENCE PROGRAM

## 2019 ANNUAL REPORT



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## 2019 PROGRAM ACTIVITIES

The Council's Citizen Science Program was busy during 2019! The 2019 Annual Report highlights key programmatic activities and the pilot projects the Program focused on during the past year.

### Staff Transitions

During 2019, we said goodbye to Amber Von Harten who left the Council's Citizen Science Program to pursue a position with the Sustainable Fisheries Partnership. We are immensely grateful for the incredible work she did to build and grow the Program and wish her the best in her new position.



New faces also joined the Council's Citizen Science Program in 2019! Julia Byrd moved into the Council's Citizen Science Program Manager position after working with the SEDAR Stock Assessment Program. Allie Iberle joined the Council's Citizen Science Team in Summer 2019 as the FISHstory Project Coordinator.



### Standard Operating Policies and Procedures (SOPPS)

All of the Citizen Science Action Teams' (A-Teams) and Operations Committee's hard work culminated in the adoption of the Citizen Science Program's SOPPS by the Council in December 2019. The comprehensive resources developed by the A-Teams to help support the program and individual projects are available online in the SOPPS or on the Program's webpages.

### 2019 CitSci Conference

CitSci2019 was a national conference hosted by the Citizen Science Association in Raleigh, NC in March 2019. As part of the conference's program, a SAFMC Team and Jennifer Shirk (Citizen Science Association) led a Symposium highlighting the Council's efforts to develop its Citizen Science Program. Representatives from each of the A-Team's presented as part of the Symposium. To learn more about the Council's CitSci2019 efforts, check out the Citizen Science Corner in the Council's Spring 2019 newsletter.



## Citizen Science Advisory Panel Meetings

The Council's two Citizen Science Advisory Panels, the Citizen Science Projects Advisory Committee and the Citizen Science Operations Committee, both met via webinar in October 2019. A BIG thank you to those serving on these Committees! Your thoughtful insights and contributions are greatly appreciated and critical to the development and growth of the Program.

## Citizen Science Research Priorities

### SAFMC Citizen Science Research Needs

TOPIC	DATA NEEDED:	POTENTIAL OUTCOME:
Age Sampling	Otolith collection	Age of catches
Maturity Data	Gonad collection	Improved reproductive information
Discard information	Length, depth, # of fish, reason, devices used	Improved discard removal estimates, size comps of discards
Genetic Sampling	Fin clips	Stock I.D.
Fishing Infrastructure	Location and type of infrastructure	Document social/economic impacts of regulations over time
Historical Fishing Photos	Images (electronic)	Length comps; improved historical information
Fishing Oral Histories	Fishermen Interview	Improved understanding of the changes in the fishery over time
Oceanographic/ Environmental Conditions	Bottom temperature; weather	Build database on climate and changing conditions
Rare or data limited species observations	Point observations	Baseline for species shift; increased information on data limited species
Diet Samples	Stomach collection	Improved diet information
Personal Fishing Logbooks/Diaries	Logbook data (electronic)	Develop relative indices of abundance

The Citizen Research Priorities drive what projects the Citizen Science Program supports and pursues. The priorities were updated during 2019 using the process laid out in the Citizen Science SOPPS.

The Citizen Science Advisory Panels provided critical feedback during this process. The list to the left summarizes the updated citizen science research priorities adopted by the Council in December 2019!

## Program Evaluation

Evaluation is critical to help improve a program or project's overall effectiveness. As a first step in developing a Citizen Science Program Evaluation Plan, staff have been working with the Citizen Science Operations Committee, Rick Bonney (Cornell Lab of Ornithology), and Jennifer Shirk (Citizen Science Association) to develop and refine Program goals, objectives, strategies to help meet those objectives, and indicators of success.

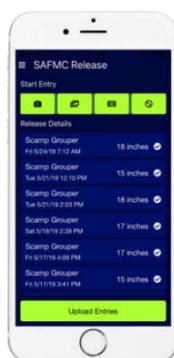
## Program Outreach Efforts

To help spread the word about the Council's Citizen Science Program, staff have participated in outreach events throughout the year, including ICAST, Georgia Coastfest, and the North Carolina Boating and Fishing Industry Summit.





The Program has also developed outreach materials and campaigns to share information about the Program, including a Citizen Science brochure, Citizen Science Corner in the Council's quarterly newsletter, and #CitSciFri posts on social media.



## SAFMC SCAMP RELEASE



The Council was excited to launch their first citizen science project, SAFMC Scamp Release, in June 2019. The project focuses on collecting data on released Scamp Grouper through the development and use of a mobile app, SAFMC Release.

The number of released fish is increasing in many South Atlantic fisheries. Improving

information on released fish is a priority research need for the Council, as reliable information to characterize released fish for many species managed by the Council is limited. It can be challenging to collect information on these fish since they can't be sampled back at the dock through many traditional data monitoring programs.

The SAFMC Release app is a tool for commercial, for-hire, and recreational fishermen to help collect critical data on released fish, including length, depth of capture, location, and the use of descending devices or venting tools. These data points were chosen to help address unknowns about released fish and can potentially be used to characterize the size of released fish and help inform discard mortality estimates.



The project is collecting data on Scamp Grouper as a pilot due to the SEDAR 68 South Atlantic and Gulf of Mexico Scamp stock assessment scheduled for 2020-20201. Data collected through the project will be provided for consideration at the SEDAR 68 Data Workshop.



The development of the SAFMC Scamp Release project was a true team effort. The app was developed in partnership with the Atlantic Coastal Cooperative Statistics Program (ACCSP), The Pew Charitable Trusts, and Harbor Light Software with the Citizen Science Association serving as a fiscal sponsor. A Project Design Team - consisting of scientists, fishermen, app developers, data management personnel, and

outreach/extension specialists - provided guidance throughout the development of the project. The app was beta tested by fishermen and supporting materials were provided by Citizen Science Action Teams.

Interest in the SAFMC Release app grew almost immediately when it was undergoing beta testing. The North Carolina Division of Marine Fisheries (NCDMF) was the first group to approach the Council, ACCSP, and Harbor Light Software with interest in developing a similar app, Catch U Later, to collect information on flounder released by recreational fishermen. There has also been interest in the app from other state agencies along the Atlantic Coast and scientists on the West Coast.



Later this year, the SAFMC Release app will be expanding to collect data on more fish than just Scamp Grouper, thanks to a grant from ACCSP! The Council partnered with NCDMF on the ACCSP grant to expand SAFMC Release and the NCDMF Catch U Later apps into a single, flexible reporting tool that can be customized for other state or federal agencies along the Atlantic Coast to collect information on released fish. The grant will increase the number of species that can be reported through SAFMC Release from a single species to all of the shallow water grouper species (Red, Gag, Black, Scamp, Yellowfin, and Yellowmouth Groupers; Red Hind, Rock Hind, Coney, and Graysby).



We're currently looking for commercial, for-hire, and recreational fishermen to participate in this project!

If you are interested in joining, please contact:

Julia Byrd at [julia.byrd@safmc.net](mailto:julia.byrd@safmc.net) or 843-302-8439.



Want to learn more about the SAFMC Scamp Release Project? Visit our project webpage at: <https://safmc.net/cit-sci/scamp-release/>.



## SAFMC FISHSTORY

During 2019, the Citizen Science Program started work on their second pilot project, FISHstory.

FISHstory, pronounced like history, will take participants to the docks of Daytona Beach, FL in the 1940s-1970s. This pilot project will train citizen science volunteers to identify and count fish in historic photos. Data collected will help document historic catches and fish lengths, building a more complete picture of the fishery prior to when dedicated catch monitoring began in the 1970s. Funding for FISHstory is provided by a NOAA Fisheries' Fisheries Information System grant.

In the past, fishermen have approached the Council and others about archiving their historic sportfishing photos to document the beginnings of the for-hire fishery in the



South Atlantic. These photos can help provide a better baseline of the catch composition of the for-hire sector prior to fishery dependent surveys. But before the Council's Citizen Science Program collects photos from stakeholders across the region, the FISHstory pilot project will focus on a headboat fleet out of Daytona Beach, FL to see if this methodology proves useful.

The photos for FISHstory were provided by Rusty Hudson, a retired recreational and commercial captain and member of the Council's Snapper Grouper Advisory Panel. He has provided over 1300 photos from his family's fishing fleet that detail not only fishing, also family history.

Due to the large number of photos, the FISHstory project is turning to crowdsourcing to help with data collection. Using the online crowdsourcing platform, Zooniverse, staff have built a project that will train members of the public to identify and count species in the historic photos. Tutorials and training materials are available, so even those unfamiliar with fish can help collect data. A Validation Team, composed of fishermen and scientists, will help verify citizen scientists' species identifications.



The FISHstory project will launch in Zooniverse in Spring 2020!

Want to learn more about the FISHstory project and get involved?

Visit <https://safmc.net/safmc-fishstory/> or contact:

Allie Iberle at [allie.iberle@safmc.net](mailto:allie.iberle@safmc.net) or Julia Byrd at [julia.byrd@safmc.net](mailto:julia.byrd@safmc.net).



The FISHstory pilot project will also develop a method to estimate fish lengths in the historic photos using lumber from the leaderboards to provide scale. The method will be pilot tested on King Mackerel, and if it proves successful, can be expanded to more species in the future.

A Design Team, led by Allie Iberle, FISHstory Project Coordinator, and composed of fishermen, scientists, and outreach specialists has been working over the past year guiding the development of the project.



**To keep up with the Citizen Science Program, check out the Citizen Science Corner in the Council's quarterly newsletter or follow the Council on social media to see the #CitSciFri posts! You can also tune into Council meetings to get Program updates and stay up to date on the Council's Citizen Science Committee's activities.**

**Without our amazing partners, volunteers, and collaborators, we would not have the Citizen Science Program we do today. We are incredibly thankful to all who have contributed to the development and growth of the Program and continue to do so!**

**Want to join a project or learn more about the Citizen Science Program? Staff would love to talk with you about how to get involved!**

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