

SAFMC Citizen Science Program



2024 Annual Report



Credit: REEF, T. Twyford, West Palm Beach Fishing Club

A Busy Year

The South Atlantic Fishery Management Council's (Council) Citizen Science Program had an exciting and productive year in 2024! Our 2024 Annual Report showcases the standout moments and achievements that shaped our year. None of this would have been possible without the dedication and support of our incredible partners, collaborators, and volunteers. We're proud of the progress the Citizen Science Program has made and we're looking forward to building on this momentum as we look ahead to what we can accomplish in 2025.

Contributions to Workshops, Conferences, and Meetings Supporting Citizen Science



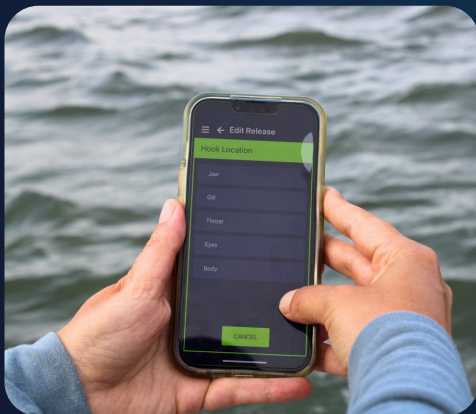
In 2024, the Citizen Science (CitSci) Team actively shared information about the Council's Citizen Science Program and its individual projects at a variety of workshops and meetings. In January, we presented on the development and approach of the Program at NOAA Fisheries' Annual Recreational Coordinators Meeting.

Staff also collaborated with colleagues at the Atlantic Coastal Cooperative Statistics Program (ACCSP) to present information on citizen science, the SAFMC Release project, and the SciFish platform at both national and regional events, workshops, meetings, and conferences. Additionally, staff participated in the Gray's Reef National Marine Sanctuary (GRNMS) Advisory Council's Citizen Science Work Group, contributing to discussions on expanding citizen science opportunities within the Sanctuary.

These outreach efforts allowed us to showcase the Council's work to new audiences, learn from others, integrate new ideas into our Program, and build stronger relationships with partners across the region and beyond.



SAFMC Release Builds Momentum with Outreach & Partnerships



Making a SAFMC Release entry.

The SAFMC Release project collaborates with recreational, for-hire, and commercial fishermen to gather data on released shallow water grouper and Red Snapper through the SciFish app.

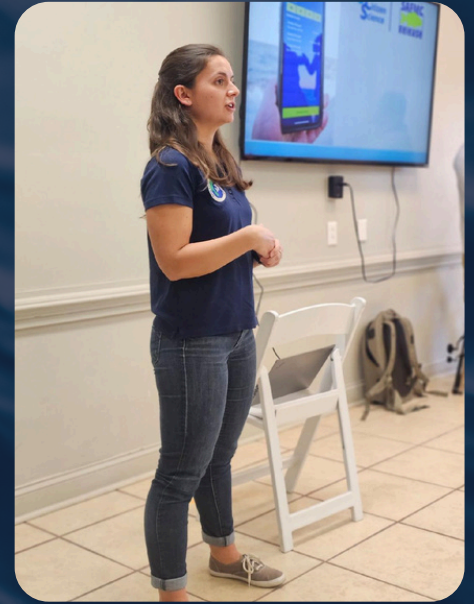
Participants are sharing valuable information that sheds light on the size of released fish and their likelihood of survival.

In 2024, we continued to conduct outreach for the project in close collaboration with the Council's Best Fishing Practices campaign. We visited tackle shops, held seminars with fishing clubs and at events in partnership with local captains, presented at the Best Fishing Practices Master Volunteer Program (BFP MVP) workshops, and

hosted booths at industry events, such as the Salt Water Sportsman National Seminar Series featuring George Poveromo. The project has been featured through multiple platforms including social media, a feature article in Tide Magazine, and North Carolina Sea Grant's Hook, Line and Science blog.



Citizen science staff contributed to the BFP MVP workshops in 2024, including this one in New Smyrna, FL.



Staff sharing information about SAFMC Release at a seminar.

We also expanded the project's Participant Recognition Program (PRP) in 2024. The PRP is designed to celebrate participants' contributions to the project. In 2024, Sea Grant adopted some PRP milestones, making it possible for SAFMC Release participants to earn thank you packets from Sea Grant when they meet these milestones, such as submitting a photo with their Release entry that demonstrates best fishing practices.

The recruitment and retention focus for SAFMC Release has strengthened the data coming to the project and we continue to gain valuable insight into the snapper grouper fishery. Check out the [2024 Annual Data Summary](#) to get a taste of the data being submitted to the project! Keep up with the SAFMC Release on our [webpage](#).

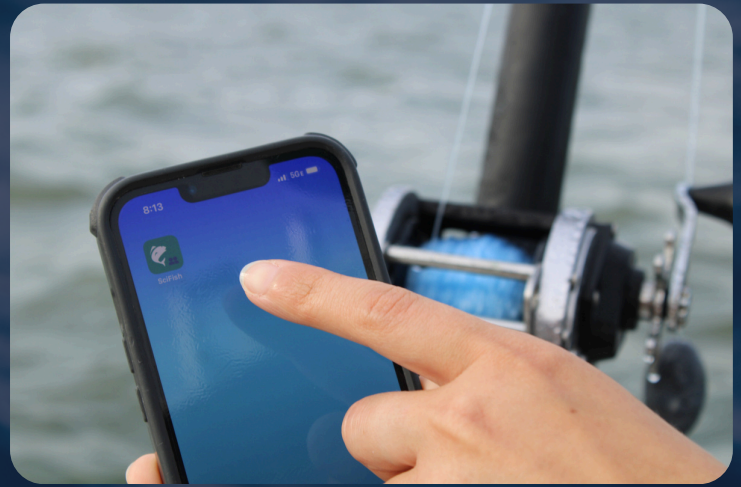
SciFish Transitions to ACCSP & New Project Applications Begin



In 2023, the Council, in partnership with the North Carolina Division of Marine Fisheries and the Atlantic Coastal Cooperative Statistics Program (ACCSP), completed the development of the SciFish platform and its supporting policies. SciFish is a mobile application and menu-driven project builder designed to standardize and streamline the collection of citizen science data from Atlantic Coast fisheries. By offering a single platform for multiple data collection projects, SciFish helps standardize the collection of citizen science data along

the Atlantic coast. After completing an application process, partners can build new projects using the SciFish project builder or integrate existing efforts by sharing data through the SciFish API.

While administration of SciFish transitioned to ACCSP in 2024, the Council's Citizen Science Program remains actively involved. Council staff serve on the SciFish Advisory Panel (SAP), which recommends policy updates and manages the application process. In 2024, two new projects submitted full applications for SAP consideration. Want to learn more about building a project in SciFish? Check out the [ACCSP SciFish webpage!](#)



The SciFish app is a free and easy-to-use mobile app.

FISHstory Continues to Build its Historic Photo Archive and Re-Launches in Zooniverse

Thanks to funding from ACCSP, the FISHstory project has continued to grow from a pilot initiative into a full-scale effort. We continue to collaborate with NC State University, NOAA Fisheries Southeast Fisheries Science Center, and fishermen and organizations across the region to fill data gaps using historic fishing photos. .

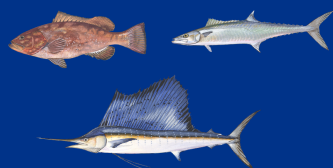
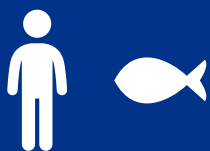


FISHstory's photo archive continues to grow! These photos were provided to the project by the West Palm Beach Fishing Club (left) and Paul Nelson (right).

In 2024, we made strides in expanding the FISHstory photo archive. We hosted six scanning events—four in conjunction with Council Advisory Panel (AP) meetings, one with the West Palm Beach Fishing Club, and one with a retired captain from the Florence Bluewater Fishing Club. Not only did AP members, Council members, and members of the public share photos with the project through these events, they also connected the CitSci Team with other sources of photos in their communities. As a result, over 270 new photos were added to the FISHstory collection.

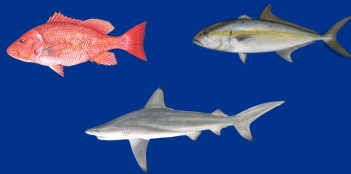
In July 2024, we re-launched FISHstory on **Zooniverse**, introducing new, streamlined workflows based on lessons learned during the pilot phase of the project. To celebrate the re-launch, we partnered with SciStarter for a live webinar that included a project overview and a demo for their community of volunteers. The updated Zooniverse workflows use a tiered system to gather information on 10 key species or species groups across four simplified workflows (see below). From July through December 2024, more than **2,400 volunteers** contributed over **61,600 classifications** (individual species identifications and counts) in Zooniverse.

Level 1: Count Fish & People



Level 2: Classify King Mackerel, Grouper & Sailfish

Level 3: Classify Red Snapper, Amberjack & Sharks



Level 4: Classify Dolphin, Cobia, Gray Triggerfish & Little Tunny

FISHstory implemented a tiered system for Zooniverse classifications, based on lessons learned during the pilot project.

Our work measuring Red Snapper in historic photos also continued to advance. As of December 2024, **over 1,900 photos** have been reviewed and more than **19,000 Red Snapper** measured. These measurements are being used to develop length composition estimates that will inform historical data on this iconic species.

Want to get involved? Whether you have old fishing photos to share or want to help classify images online, we'd love for you to join the FISHstory team. **Visit our FISHstory webpage** to learn more and get started!

SMILE Project Grows & Refines Methodology

The SMILE (Size Matters: Innovative Length Estimates) project continued to make impressive progress in 2024! Led by the Reef Environmental Education Foundation (REEF), **SMILE engages volunteer scuba divers to collect valuable fish length data** using low-cost, laser-mounted underwater cameras. These cameras capture images that can be analyzed using artificial intelligence (AI) to estimate fish sizes for data limited species, helping support key research and management needs.



The SMILE cameras are being field tested and refined.
Credit: REEF

The project has made progress in numerous areas:

- The team has worked with partners to refine the laser and camera technology - making it more durable and easier for volunteers to use
- Image processing and data analysis are underway
- To automate future image analysis, the team is developing an AI workflow, with the help of volunteers who annotate images to train and improve the system
- To understand volunteer motivation and barriers to participation in SMILE, REEF is working with researchers from Colorado State University and the Florida Fish and Wildlife Conservation Commission to design a volunteer survey.

SMILE is truly a collaborative project. The project team includes REEF, the SAFMC's Citizen Science Program, the Southeast Coastal Ocean Observing Regional Association (SECOORA), Axiom Data Science, the Semmens Lab at Scripps Institution of Oceanography, UC San Diego Engineers for Exploration, UCSD Kastner Research Lab, and funding through NOAA's Coral Reef Conservation Program. Check out the [SMILE webpage](#) to learn more about the progress on this project!



REEF works with volunteer divers to collect fish length data. Credit: REEF

The Citizen Science Program's Project Idea Portal Launches

The Citizen Science Program's Project Idea Portal successfully launched in 2024. Through this portal, anyone can share citizen science project ideas with the Program. Submissions are reviewed twice a year in May and October and will be used to help update the Program's research priorities. View the [portal online](#) and share your idea!



Citizen Science Program Evaluation & Stakeholder Assessment



In 2024, the Council continued its collaboration with researchers to better understand **baseline levels of knowledge, confidence, and trust in the citizen science process** to collect data to inform fisheries management. This work focused on fishermen, scientists, and managers.

In 2024, Rick Bonney, Director Emeritus of the Public Engagement in Science Program at the Cornell Lab of Ornithology, led an online survey targeting scientists and managers working in the South Atlantic. In parallel, a research team led by Jennifer Sweeney Tookes (Georgia Southern University) conducted interviews with fishermen from July 2023 to February 2024. Final reports summarizing the survey and interview findings are available on the Council's website.

Program staff developed an overview of the researchers' findings, including a comparison of citizen science research topics deemed most useful by scientists and managers and the topics fishermen are most willing to engage in (see Tables 1–4). Many current CitSci Program activities align with key recommendations from this work. Building on this, staff collaborated with the Citizen Science APs and the Council to develop recommendations for refining the Program in the future (see Tables 5–7).



Rick Bonney (left) and the interview research team - Jennifer Sweeney Tookes, Tracy Yandle, and Bryan Fluech (right).

We are grateful to the research teams for their collaboration on this important initiative. Their findings have helped quantify concerns raised by stakeholders and have brought greater clarity to the challenges and opportunities within citizen science efforts in marine fisheries. These insights will not only support ongoing evaluation of the CitSci Program but also guide its continued growth and responsiveness to the needs of our fisheries community.

Citizen Science Advisory Panel Transitions

The Citizen Science Program is fortunate to work with two dedicated Advisory Panels (APs): the CitSci Operations AP and the CitSci Projects AP. These panels provide invaluable expertise, helping to shape and guide the Program as it continues to evolve and expand.

In 2024, Jimmy Hull transitioned off the CitSci Operations AP following his appointment as a Council member. We extend our sincere thanks to Jimmy for his many contributions to the Program and are excited to continue working with him in his new role on the Council.

We're also pleased to welcome Bob Zales, who was appointed to the CitSci Operations AP in September 2024. Bob brings a wealth of experience and we're excited to have him join this AP.



Jimmy Hull transitioned from one of our APs to serve on the Council. We wish him well!

We are deeply grateful to everyone who serves on the Citizen Science APs and in the Citizen Science Pool. Your time, knowledge, and commitment are vital to the Program's success—and we look forward to learning and working together in the upcoming months and years.

Thank You!

Our Citizen Science Program wouldn't be what it is today without the incredible support of our partners, volunteers, and collaborators. We sincerely appreciate everyone who has contributed to the development and ongoing success of the Program and its projects—and to those who continue to help it grow.

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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Thank you from Team CitSci to everyone who has supported the program!



Citizen Science

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