

South Atlantic Fishery Management Council Citizen Science Program Update





Activities 2020/2021

<u>Cit Sci SOPPS</u> updated with new vision, mission, goals, and objectives

BioScience article on development of Council's CitSci Program

NOAA FY19-20 CitSci & Crowdsourcing Report to Congress

FISHstory project highlighted

AFS Cit Sci Symposium with NOAA colleagues

NOAA releases <u>Citizen Science Strategy</u>

Citizen Science Program Outreach

- #CitSciFri social media
- Cit Sci email updates
- April 2021 Cit Sci Month campaign





Program Planning & Evaluation

Program Vision:

Advancing science and increasing trust, one project at a time

GOAL 1: Design, implement, and sustain a program framework to guide the development of projects that support fishery management decision making.

GOAL 2: Facilitate development of individual projects to address specific research priorities.

GOAL 3: Ensure that data collected are accessible, robust, and fit for purpose.

GOAL 4: Foster mutual learning, collaboration, and program engagement.



Initial Evaluation Plan

 Working with Rick Bonney to gather baseline data on knowledge, attitudes, collaborations, engagement, and trust levels of various stakeholders in three stages:



Interviews - 2021



Develop survey - 2021



Implement & analyze survey - 2022



Projects & Collaborations Under Development



Rare Species Observations

Partners: UNC, NOAA Fisheries, SECOORA, University of Tasmania Looking for funding opportunities



Diver Observations of Data Limited Species

Partners: REEF & SECOORA

Jan 2021: NFWF pre-proposal



Dolphin Wahoo Participatory Workshops

Partner: SEFSC Discussing options for FL Keys



eMOLT

Industry, science, academic collaboration to collect environmental & oceanographic data
Interest in expanding to South Atlantic



Dolphin Movement & Migration

Partner: Dolphinfish Research Program Exploring ways to collaborate to expand tagging efforts in the Atlantic



FISHstory

A pilot project to document historic for-hire catch and length estimates using historic photos





FISHstory Project Components



Digitizing historic fishing photos - complete



For-hire catch composition — underway, launch in Zooniverse May 2020



Method to estimate length composition - underway



For-Hire Catch Composition

as of March 25, 2021

- 1,984 volunteers
- **33,168** classifications
- 1,374 individual photos uploaded
 - All 1,374 photos have been linked to the FISH & PEOPLE: Count workflow
 - 1000 photos have been linked to the
 FISH: Classify workflow
- 2,261 photos have been retired
 - 1,374 from FISH & PEOPLE: Count workflow
 - 887 from FISH: Classify workflow







For-Hire Catch Composition

Validation Team

- Photo validation for 'live' data began
 January 2021
- Shiny app developed summarizing validation data

'Live' Data Analysis

- Initial photos identified for Validation
 Team review
- Shiny app developed summarizing 'live' data
- Preliminary data analysis underway







- Protocol finalized & production length analysis underway
- 5 analysts assisting with production length measurements
- Measurements completed for 700 photos
- Developing resampling method to estimate length compositions from photos
- Methods reviewed by SSC at Oct
 2020 meeting

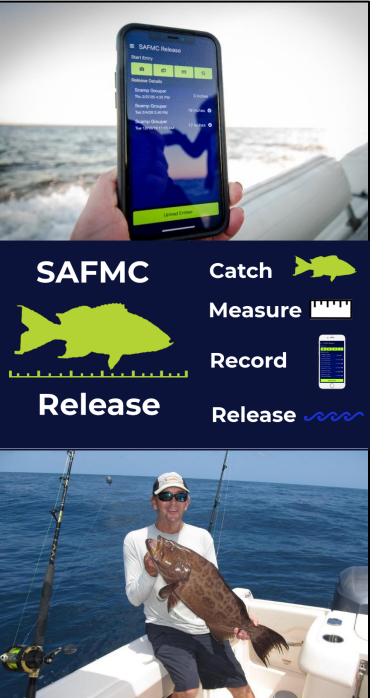


Outreach & Promotion

- FISHstory & SAFMC Outreach teams have been contacting industry, communication & education contacts
- FISHstory features:
 - NC Sea Grant's Hook Line & Science
 - Episode 74 of the Fisheries Podcast
 - SCDNR Coastal Resources blog
 - The Fishing Wire
 - SciStarter: Dive into Summer Citizen Science
 - Guest blog for Sci/Starter/Discover CitSci Salon
 - Virtual Field Trip with Earth Echo: Sept 29
 - Feature in 2020 Zooniverse 'highlights' book
 - Seven Seas Media Article: Dec 2020 Issue
 - NC State and SciStarter's Make it Count Monday







SAFMC Scamp Release

Continue work to recruit and retain commercial, forhire, and recreational fishermen

Graduate student research

- Identify best strategies to market self-report apps to fishermen
- Interviews with SAFMC Release participants
- Analysis of MyFishCount survey results & marketing strategies

FY20 ACCSP Project - underway

- Combine SAFMC Release & NCDMF's Catch U Later under new ACCSP citizen science app
- Expand SAFMC Release to all shallow water grouper
- Target launch: Spring 2021

New ACCSP Citizen Science App

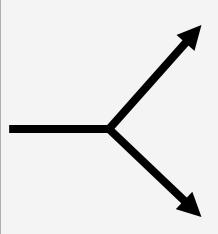




New ACCSP Citizen Science App

Target Launch: Spring 2021







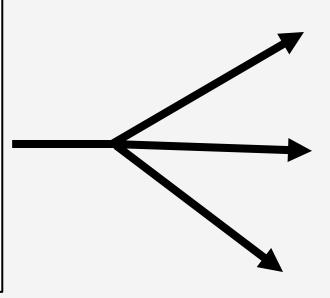




New ACCSP Citizen Science App

Into the future...











New Projects from ACCSP Partners

Customizable Citizen Science App Scoping Meetings

To develop a mobile application that encourages & supports the capture and sharing of information about Atlantic coast fish



Online questionnaire

 To gather information from broad group of fishermen, scientists, and managers



Virtual town hall meetings

- March 9 at 5pm EST
- March 11 at 10am EST



Half day virtual workshops

- April 1 at 9am EST
- April 14 at 9am EST
- April 20 at 1pm EST

Customizable Citizen Science App Scoping Meetings

Socio-Economic Ideas from Town Hall Brainstorming

Wouldn't it be great if we had......

- Inventory of fishing infrastructure
- Information on fishermen demographics, values, motivations, and barriers to fishing
- Wholesale and retail prices for seafood by species & size
- Monetary investment spent by recreational anglers
- Angler satisfaction over time
- Way to capture when fishermen couldn't go fishing due to storm events, water quality problems, etc.



Discussion Questions

- What niche can citizen science fill for social and economic information that is different from what we can learn through surveys and academic research?
- How can it help inform decision making?
- What information can't be collected through other means?
- Which of the socio-economic town hall ideas may lend themselves well to inclusion in the customizable citizen science app?





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