South Atlantic Fishery Management Council
Citizen Science Program Update

CitSci Operations Committee Meeting

October 2019

SAFMC Citizen Science Program

Mission Statement:
"Improve information for fisheries management through collaborative science"

GOAL 1: Design, implement, and sustain a program framework to guide the development of projects that support fishery management decision making.
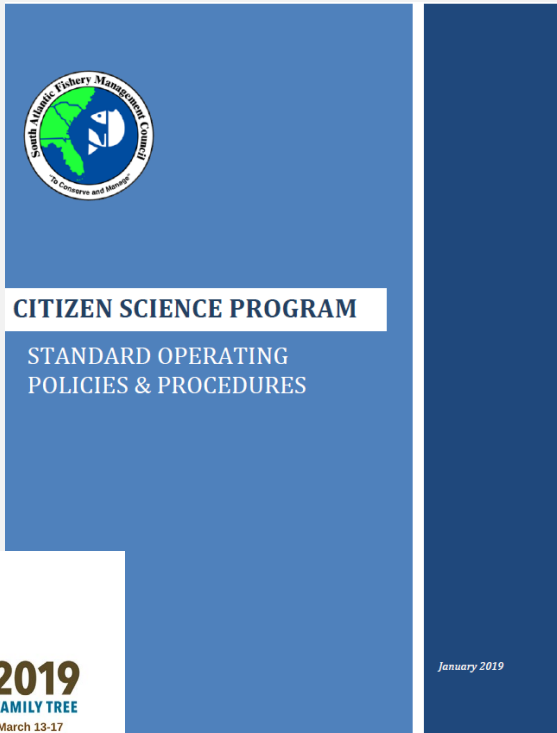
GOAL 2: Facilitate development of individual projects to address specific research priorities.

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

GOAL 4: Build partnerships that foster mutual learning, collaboration, and programmatic support.

GOAL 5: Inspire active engagement through communication about purposes, processes, and impacts.

Activities 2019

Cit Sci SOPPS Adopted – Dec 2018 / Jan 2019

Program Manager Transition – Spring 2019

CitSci 2019 Conference – March 2019

- *SAFMC Team led Symposium highlighting efforts to develop Program*
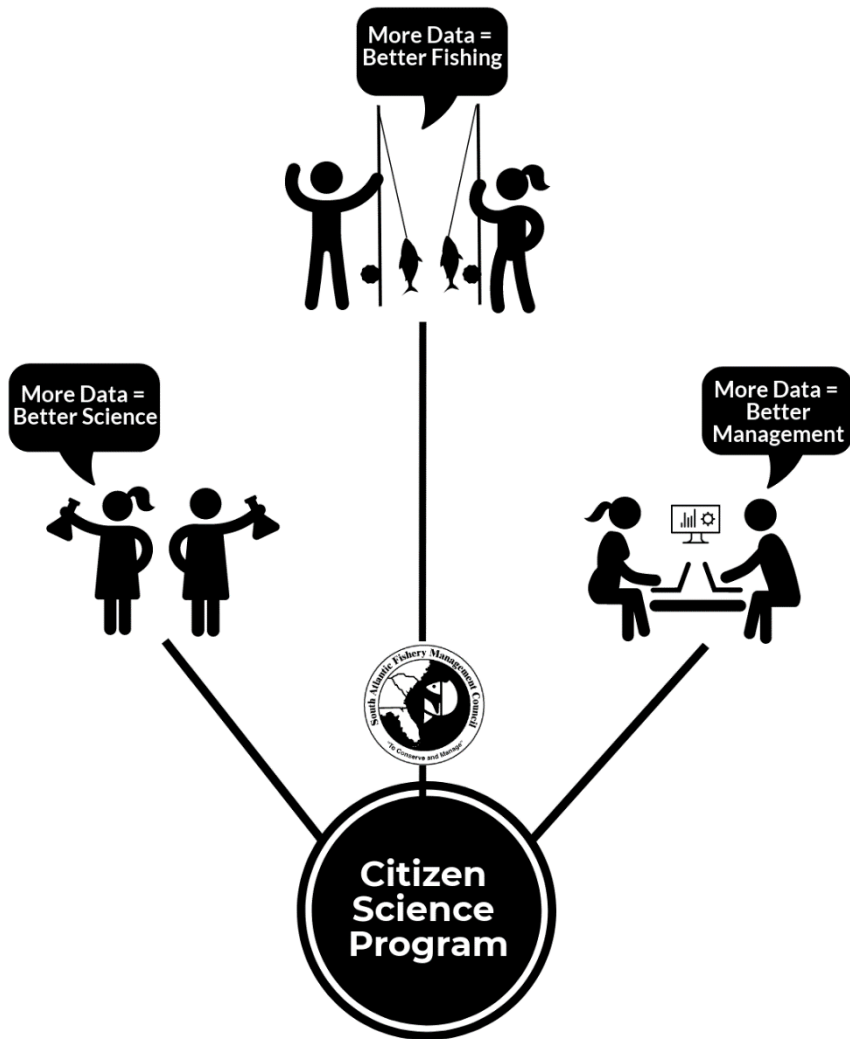- *Participated in Problem Driven Citizen Science Session*

Formation of CitSci Projects Advisory Committee – Summer 2019

Bioscience manuscript, Bonney et al. – submitted Summer 2019

Cit Sci Research Priorities Update – Summer/Fall 2019

- *Use process developed by A-teams*
- *CitSci Committee review – Dec 2019*

CITIZEN SCIENCE PROGRAM

STANDARD OPERATING
POLICIES & PROCEDURES

January 2019

CitSci2019
GROWING OUR FAMILY TREE
Raleigh, NC | March 13-17

Activities 2019

Program & Project Evaluation

- *Working with Rick Bonney & Operations Committee*

CitSci Advisory Panel & Committee Meetings

- *Oct 2019: Projects Advisory Committee*
- *Oct 2019: Operations Committee*
- *Dec 2019: SAFMC CitSci Committee; updates provided at other meetings*

Presentations

- *Spring 2019: I & E, Mackerel/Cobia, Snapper Grouper, Habitat APs*
- *May 2019: CCC meeting*
- *June 2019: Panel for Federal Community of Crowdsourcing & CitSci meeting*
- *Fall 2019: Mackerel/Cobia, Snapper Grouper, Habitat APs*

Activities 2019

Program Promotion and Outreach Events

- *July 2019: CitSci Program featured at SAFMC's ICAST booth*

- *Oct 2019: GA CoastFest & SCDNR Open House*

- *Nov 2019: NC Fishing Industry Summit*

Program Outreach

- *CitSci Brochure*

- *CitSci Corner in SAFMC quarterly newsletters*

- *#CitSciFri*

- *Email distribution list*

- *Annual Report*

Projects & Collaborations

PROJECTS IN PROGRESS:

- **Scamp Release Pilot Project** → *Discards*
- **FISHstory** → *Historic Data from Historical Fishing Photos*
- **Collaborator on TNC/GRNMS Project**

PROJECTS UNDER DEVELOPMENT:

- **Rare Species Observations**
- **Diver Observations for Data Limited Species**

ADDITIONAL COLLABORATIONS UNDER DEVELOPMENT:

- **Participatory Workshops**
- **Shifting Species Proposal**

Photo credit: Don DeMaria

Pilot Project:
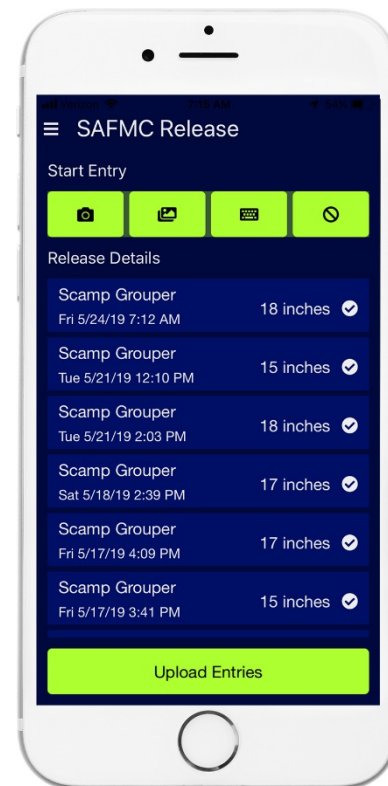## *SAFMC Scamp Release*

SAFMC

Catch

Measure

Record

Release

Release

- Collect info on scamp discards via mobile app
- App development - beta tested by fishermen & CitSci A-team members
- Relied & built on CitSci A-Team members work
- Website, training videos, quick start guide, flyer, and presentation developed
- **App launched June 20, 2019**
- Recruiting fishermen to participate
- Data collection underway

☰ SAFMC Release

Start Entry

Release Details

Scamp Grouper		
Fri 5/24/19 7:12 AM	18 inches	✓
Scamp Grouper		
Tue 5/21/19 12:10 PM	15 inches	✓
Scamp Grouper		
Tue 5/21/19 2:03 PM	18 inches	✓
Scamp Grouper		
Sat 5/18/19 2:39 PM	17 inches	✓
Scamp Grouper		
Fri 5/17/19 4:09 PM	17 inches	✓
Scamp Grouper		
Fri 5/17/19 3:41 PM	15 inches	✓

Upload Entries

Photo credit: FWC

Pilot Project:
SAFMC Scamp Release

- Project promotion - multiple avenues

- Developing evaluation metrics…

- Additional grant proposals

- Growing interest in app

- Additional research

    - Jennifer Shirk research project…

    - Potential graduate student collaboration

Lessons Learned...So far!

- **Project Design & Planning Team critical**

  - **Data and science partners involved from the start**

    - **Fishermen keeping project based in reality**

      - **Experts with track record**

      - **Collective agreement on measures of success**

    - **Managing expectations**

- **Recruitment and retention is resource intensive!**

  - **Scamp challenging pilot species**

  - **Partnerships are key!**

PC: Don DeMaria

Project FISHstory

Photo credit: Rusty Hudson

DAYTONA BEACH
CAUGHT AT INLET HARBOR

Documenting historic catch and length estimates from historical photos in the for-hire sector using electronic data collection and imagery analysis platforms and crowdsourcing approaches.
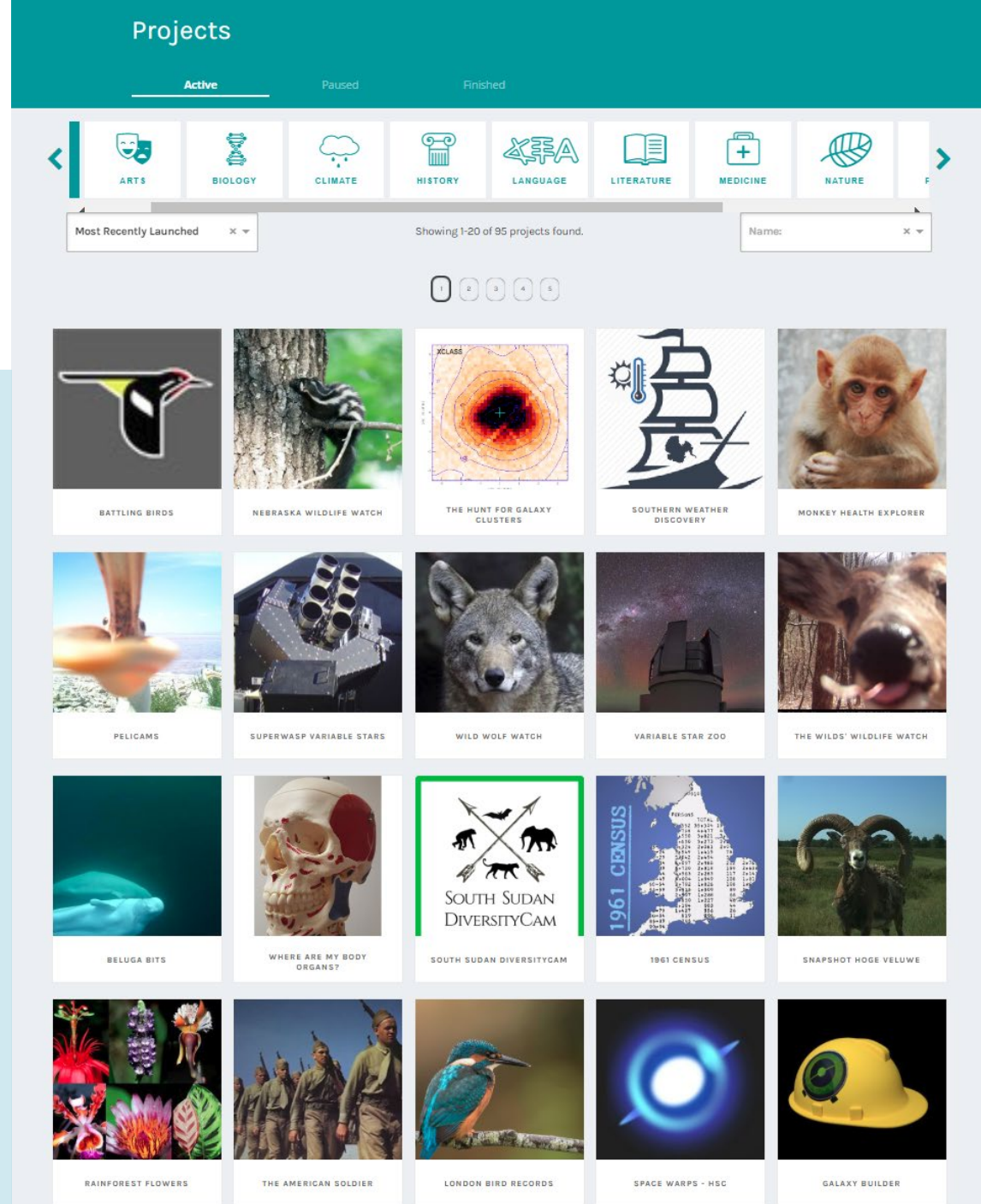
PROJECT OBJECTIVES/METHODS:

- Fill in historical data gap – headboat photos from 1940s-70s; prior to fishery dependent surveys

- Species composition analysis

- Crowdsourcing

- Expert validation team

- Length analysis of one key species

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ZOONIVERSE
Crowdsourcing Platform

- Build project online

- Develop tutorials/training

- Citizen Scientists analyze images

- Validation

- I.D. key species for length analysis

IMAGE 'J'

- Open source image processing program

Methods:

- Establish standards
- Measure lengths

DAYTONA BEACH
CAUGHT AT INLET HARBOR

CAUGHT ABOARD
'FLAMINGO'
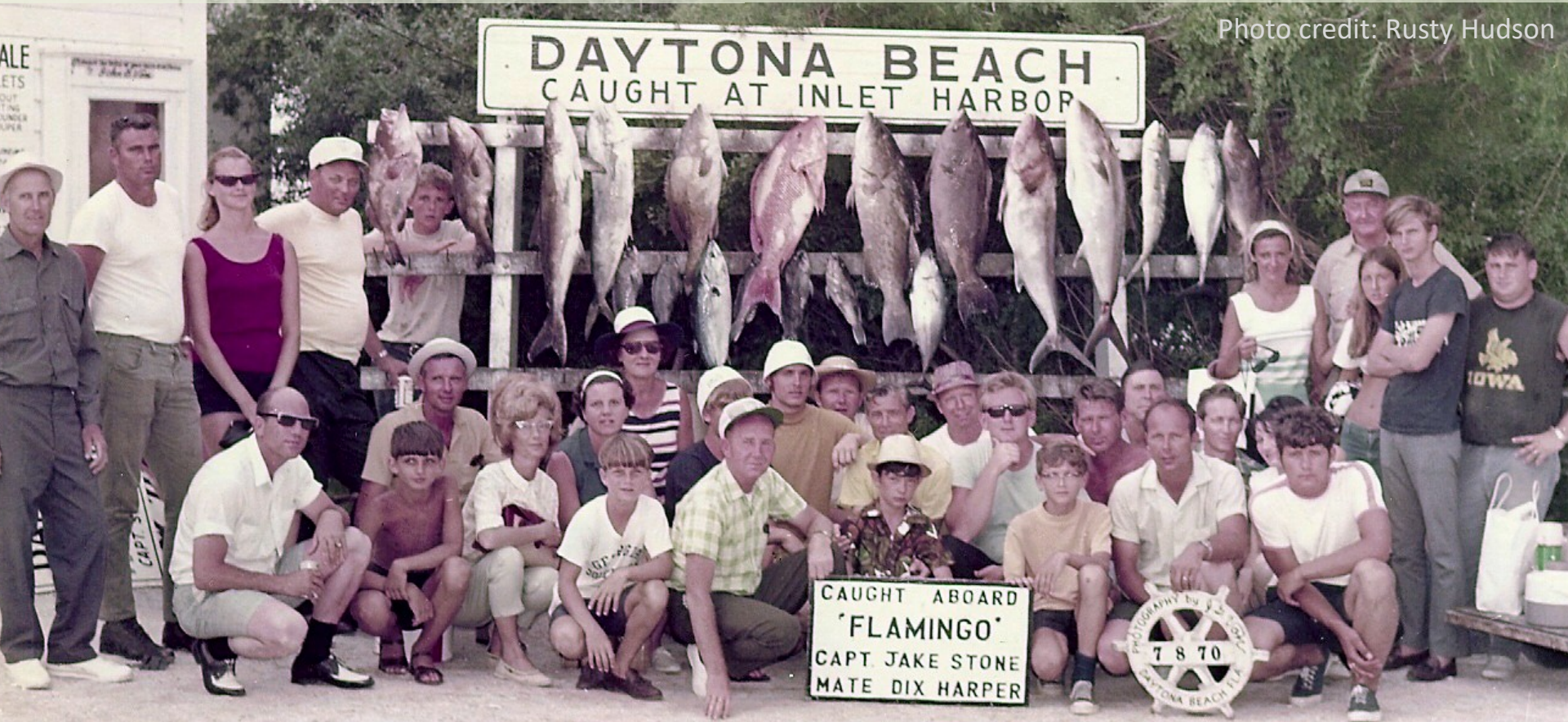CAPT. JAKE STONE
MATE DIX HARPER

7 8 70

Photo credit: Rusty Hudson

- Project Coordinator, Allie Iberle, hired

- Project Design Team formed; held 3 meetings

- Zooniverse project & training materials under development

- Recruiting species ID experts for validation team

FISHstory Zooniverse Demonstration

Lessons Learned....So far!

- Project Design Team essential!
- Important to have varying expertise on the Design Team
- Managing expectations
- Resource intensive
- Project Coordinator is key!