Citizen Science Program Background & Overview

Citizen Science Projects Advisory Committee Meeting

October 2019

Why Citizen Science?

- Long-standing data deficiencies
- Many ‘eyes’ – 3.5 million anglers, 40+ million trips in S. Atlantic
  - Offer to help collect data & want to be involved
  - More involvement might improve success

SAFMC Citizen Science Program Approach

- **Fill data gaps & address research needs**
- **Complement existing programs & partnerships (*NOT compete or replace*)**
- **Intentional project design - *direct application/use in management and stock assessments***
- **Fishermen & Scientist collaboration**
  - **Program – contribute priorities and operational procedures**
  - **Projects - idea → delivery of results**
- **Umbrella to support projects – internal & external**

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.

Program Initiation

Citizen Science Program Design Workshop - 2016

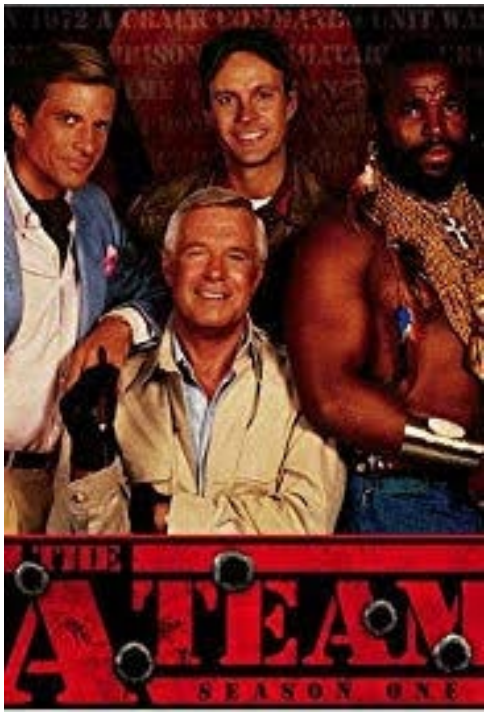
- **Over 60 fishermen, managers, scientists**
  - **Plus Rick Bonney and Jennifer Shirk**
- **Brainstorming**
  - **Projects**
  - **What is success, failure?**
  - **What will people do?**
- **Program ‘Blueprint’**

Focus Areas - *Action Teams*

Tasked with building program infrastructure

Designed around areas that needed to be addressed for success

- Finance & Infrastructure
- Projects
- Data Management
- Volunteers
- Communication & Outreach



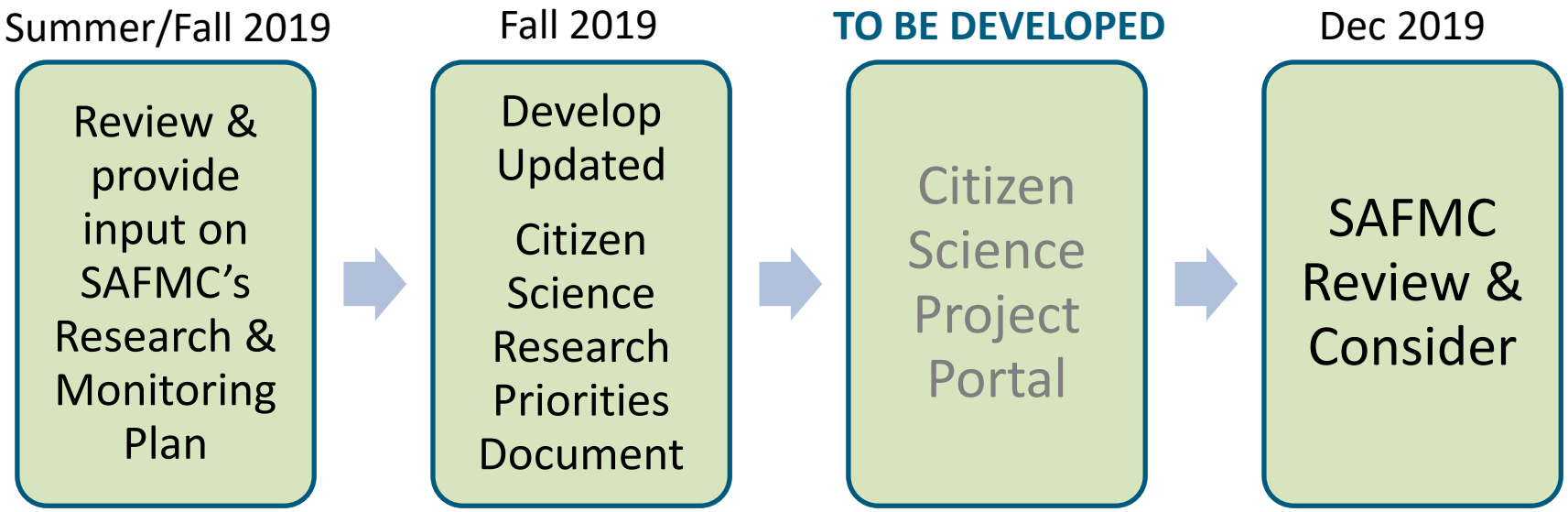
Citizen Science Research Priorities

Updated every two years

Will help guide projects the Program pursues

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.
Bottom habitat mapping	Imagery	Improved resolution of habitat
Monitoring in managed areas	Species, length, depth	Changes in fish abundance
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
Oceanographic/ Environmental Conditions	Bottom temperature; weather	Build database on climate and changing conditions
Rare species observations	Point observations	Baseline for species shift

Citizen Science Research Prioritization Process



Informed by SSC, AP's, SEDARs, SAFMC

Cit Sci Projects Advisory Team & Operations Committee