



Citizen Science

Citizen Science Program Update

CitSci Operations & Projects
Advisory Committees

October 2023

Program Activities



Seminars, Conferences & Symposiums



CitSci Project Idea Portal



CitSci Initial Evaluation



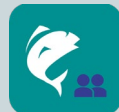
SMILE Project



FISHstory



SAFMC Release



SciFish Policies & Platform



Citizen Science Project Idea Portal

- Goal: Develop online form to gather citizen science project ideas from stakeholders
- How will the information be used?
 - Ideas reviewed by Program in May and Oct
 - Compile & consider when citizen science research priorities updated
 - Help connect fishermen and scientists with similar research interests

Initial Program Evaluation Plan

- Gather baseline data on knowledge, attitudes, collaborations, engagement, and trust levels of various stakeholders in three stages:



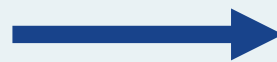
Interviews



Complete: 6 fishermen, 6 scientists, 6 managers



Gather information from broader group



Online survey – scientists & managers
More interviews - fishermen



Implement & analyze results



SMILE Pilot Project

- Partnering with recreational divers to collect length information on data limited species
- Laser mounted Olympus underwater camera
- Field tested in FL Keys – Aug/Sept 2023



OREGON INLET FISHING CENTER



Citizen Science

Next Steps

- Move from pilot to full scale project



Funding to
grow
project



Expand
geographic &
temporal
range of
photos



Improve
efficiency of
processes



Estimate
length
compositions
for more
species

FISHstory Scanning Events

- Goal: Collect historic fishing photos from across the South Atlantic region from the 1940s – 1980s for the FISHstory project
- Host in collaboration with upcoming Council & Advisory Panel meetings
 - ✓ September Council meeting
 - ✓ Outreach & Communication AP meeting
 - ✓ Fall Snapper Grouper AP meeting
 - Dolphin Wahoo AP meeting
 - Mackerel Cobia AP meeting
 - December Council meetings

FISHstory: Photos for Analyses

| Photo Description | Good | Better |
|-------------------|--|-----------------------------|
| Photo Type | Picture taken at the end of a trip displaying harvested catch with anglers | Fish hanging on leaderboard |
| Photo Date | Year | Month & Day |
| Photo Location | State | City & Dock |
| Photo Background | Photo provider name & contact | Vessel name & captain name |

Exploring other avenues to gather historic photos



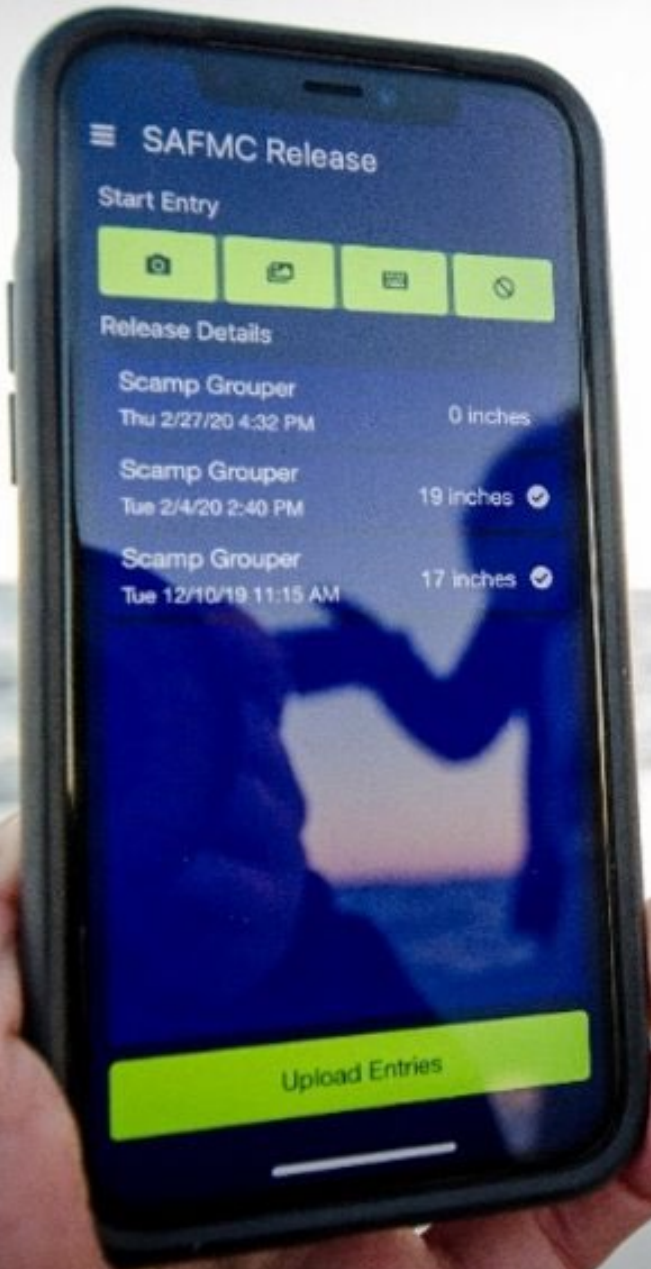
HISTORICAL SOCIETIES
AND ORGANIZATIONS



LIBRARIES



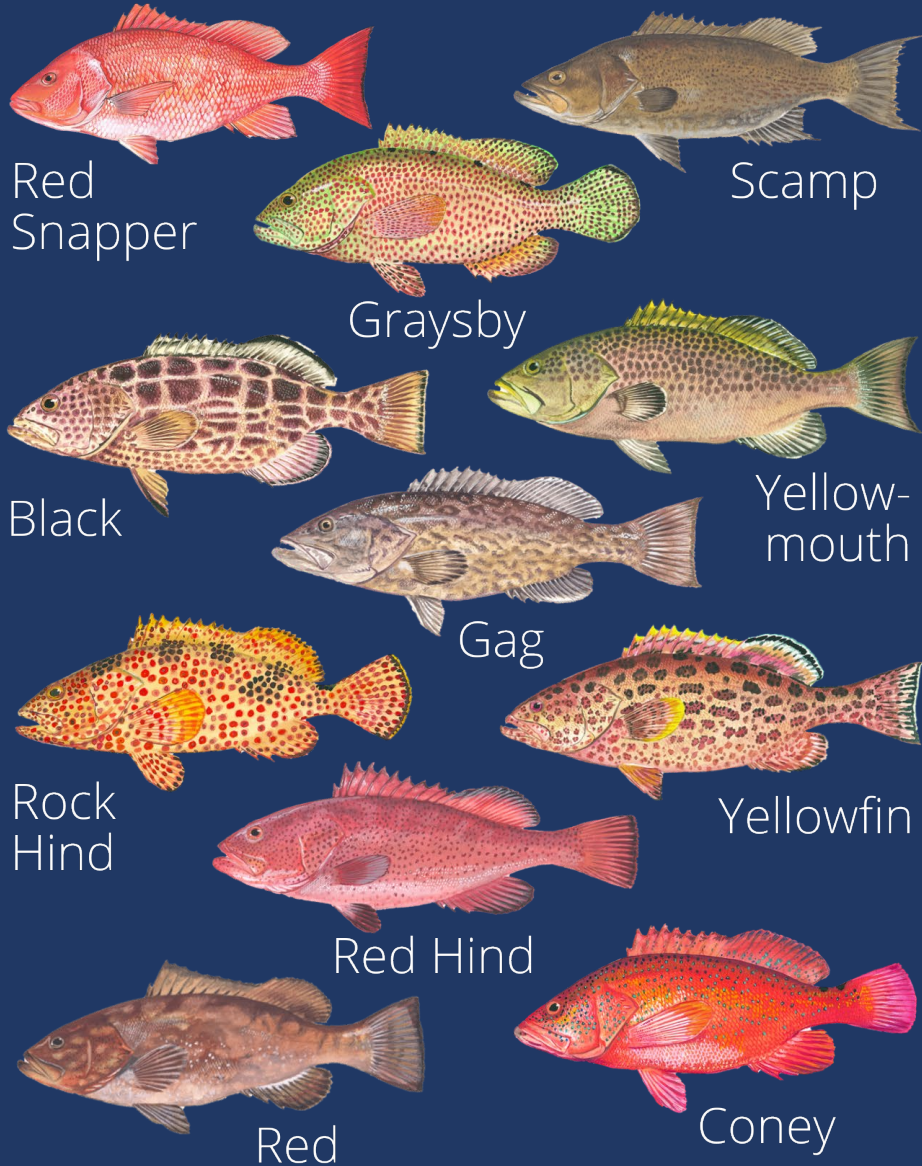
RESTAURANTS



SAFMC Release



Updates



Participants recording released shallow water grouper and Red Snapper in SciFish app

Continued outreach, including collaboration with Best Fishing Practices initiative

Participant Recognition Program (PRP)

Annual Data Summary

Outreach



Partnerships

- FWC email
- BFP (e.g., Pitman Creek mailings)
- Articles



Social media

- Instagram, Facebook, Twitter, LinkedIn



Tackle shop visits

- Each state at least 2x



Seminars & Events

- Haddrell's Fishing Expo
- SCDNR Open House
- ICAST
- JOSFC

Communication with Participants



Newsletters



Thank you emails



Data summary

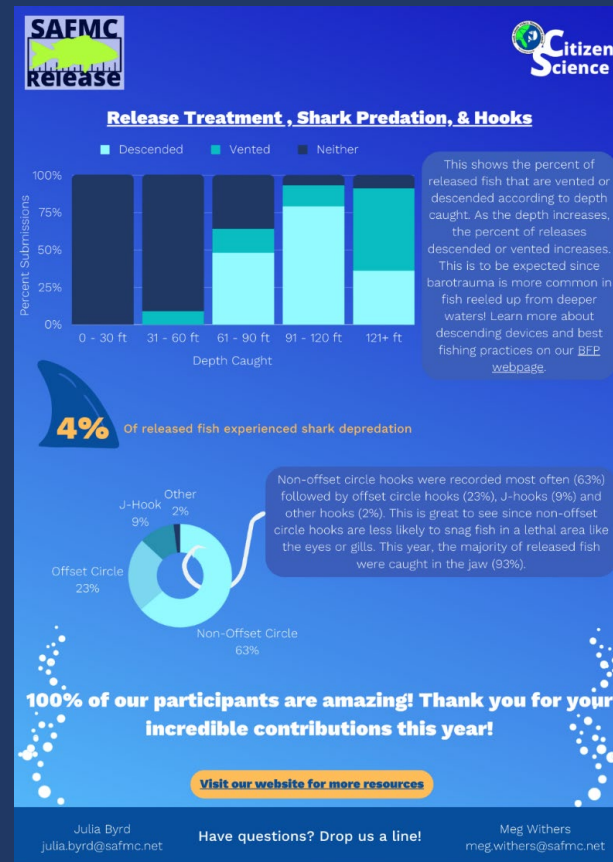
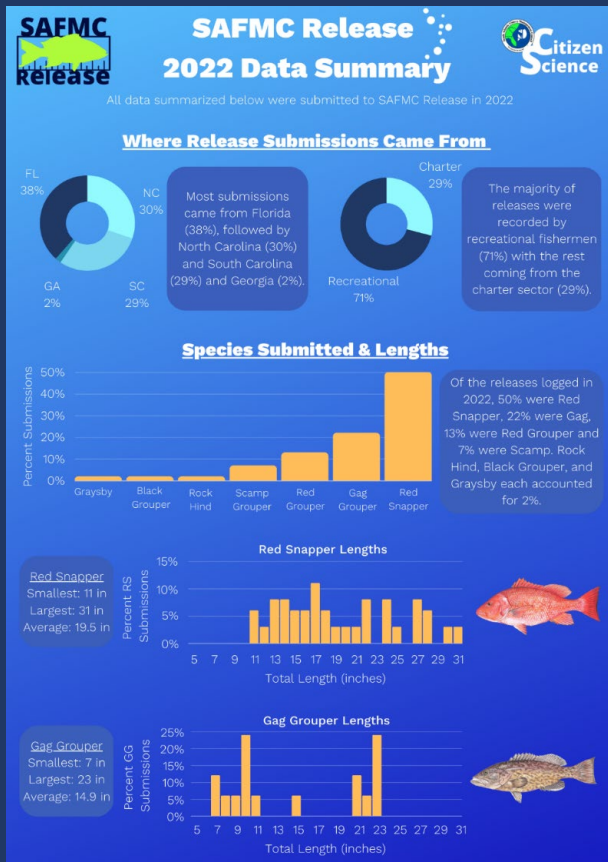


Participant Recognition Program

Milestones

| <u>Recognition</u> | First Submission | Five Submissions | Smallest/ Largest | Most Species | Best Photo | Most Submissions |
|---------------------|------------------|------------------|----------------------|--------------|------------|------------------|
| Release Newsletter | ✓ | ✓ | | | ✓ | ✓ |
| Annual Data Summary | | | ✓ | ✓ | | |
| Social Media | | | | | ✓ | ✓ |
| SA Bite | | | | | | ✓ |

2022 Data Summary



Summary includes:

- Release submissions by state & fishing sector
- Species submitted
- Length compositions
- Release treatment by depth
- Shark depredation
- Hook type & location

Thanks to the SciFish Organizing Committee for all of their hard work and dedication to this project!



CITIZEN SCIENCE POWERED BY ACCSP



- SAFMC: Julia Byrd, Meg Withers, Chip Collier, Nick Smillie, Allie Iberle
- NCDMF: Brandi Salmon, Jeff Moore, Ami Staples, Andrew Valmassoi, Steph McInerney, Drew Cathey
- ACCSP: Julie Simpson & Jamal Oudiden
- GADNR: Kathy Knowlton
- RIDMF: Mike Bucko
- NOAA: Lauren Dolinger-Few
- Harbor Light: Fran Karp & Bill Spain

SciFish - Introduction



Citizen science is a potentially powerful tool to better understand marine fish populations



Growing interest in using citizen science to supplement marine fisheries data collection



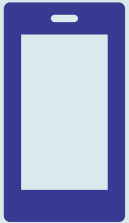
Development of SciFish, citizen science mobile application and project builder, to support capture and sharing of information about fish along the Atlantic coast



SciFish Long Term Goal

Develop for ACCSP partners:

- ✓ citizen science mobile application and
- ✓ menu-driven project builder interface to
- ✓ easily create a customizable application by selecting specific data fields
- ✓ without need to develop stand-alone applications for each new project or data need





SciFish Development Drivers



Reduce costs
needed to develop
individual
applications



Reduce time to
create
applications
from ground up



Increase
consistency in
data fields and
structure



SciFish Administration & Oversight



Administration
through ACCSP



Primary oversight by:
SciFish Advisory Panel
(SAP)



SciFish Project Development

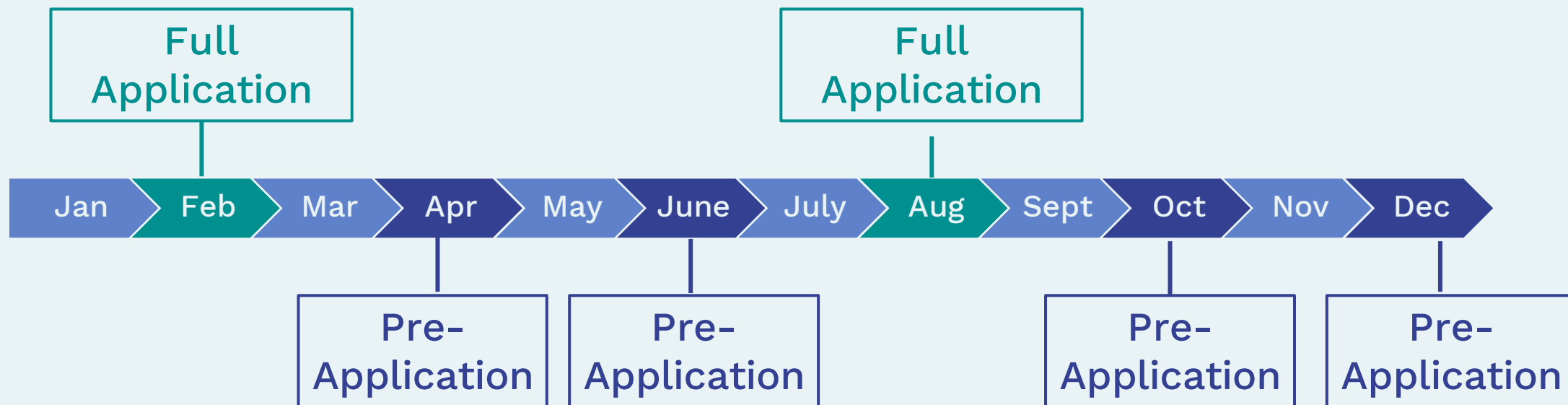
Approach

- Focus on data collection for marine and/or diadromous fisheries along the Atlantic coast
- Fill data gaps or data deficiencies and address identified research needs
- Use intentional design and clearly articulate how collected data will be used in management and/or stock assessments
- Encourage scientist and fishermen collaboration



SciFish Project Development

Multi-step Application Process*



*Projects must have ACCSP partner as PI or be sponsored by an ACCSP partner



SciFish: Policy Highlights



Project PIs must be partner or sponsored by partner



Focus on supporting citizen science projects



Projects initially limited to current data fields in project builder



Project development doesn't require funding, but uses ACCSP resources



Creation of SciFish Advisory Panel



Account creation currently done through SAFIS



Building a Project in SciFish

The image displays the SciFish Project Builder interface, which is used to create and manage a project. The interface is divided into several sections:

- LOGIN**: Configure login functionality.
- HOME**: Choose Command buttons to appear at the top and bottom of the Home Page.
- RECORDS**: Define data fields for each Record, and Command buttons to display to the user.
- ABOUT**: Configure custom text displayed in the About Page describing your project.
- NAVIGATION MENU**: Configure social media links that appear in the Navigation Menu.
- BRANDING**: Configure colors to give your project a unique look.

The interface also includes a top navigation bar with options for **NEW**, **OPEN**, and **DOWNLOAD**. The current project is named **It's A Fluke**, and there are buttons for **RENAME**, **COPY**, **DELETE**, and **PUBLISH**.

On the right, a mobile preview of the **SAFMC Release** app is shown. The app interface includes a **START ENTRY** section with four icons, a **Release Details** section for a **Red Grouper** (25 inches, 8/14/2023 1:54 PM), and an **Upload Entries** button.



Building a Project in SciFish

The image displays the SciFish Project Builder interface, split into two main sections: a desktop view on the left and a mobile app preview on the right.

Desktop View: SciFish Project - Edit Record View

- Left Panel (Attributes):** Lists various attributes for configuration, including "It's A Fluke", "Edit Record Page Title", "Hook Type", "Line Cut", "Location", "Shark Predation", "Species", and "Tag Color".
- Configure Attribute Dialog:** A modal window titled "Configure Attribute" for the "Species" attribute. It includes:
 - Value Type:** STRING
 - Options:** "Is Required" (checked), "If Required, Allow No Response" (unchecked), and "Default to previous response" (unchecked).
 - Help Message:** A text input field.
 - Help Image:** A "SELECT..." button.
 - Hide Help Instructions:** A text input field with "Do not show this anymore".
 - Species List:** A list of species with checkboxes for selection. Buttons for "Select All" (checked) and "Unselect All" are at the top. A search bar is also present.
 - Buttons:** "CANCEL" and "OK" at the bottom.

Mobile App Preview: Edit Release

- Screen:** "Edit Release" form with dropdown menus for "Species", "Trip Type", "State (Port of Return)" (South Carolina), "Trip Date", and "Release Time".
- Input:** "Total Length (Inches)" with a question mark icon.
- Bottom Bar:** Navigation icons (trash, camera, gallery) and a "SAVE" button.



Building a Project in SciFish

The image displays the SciFish Project Builder interface. The main workspace is titled "It's A Fluke" and contains several configuration panels:

- LOGIN**: A panel for configuring the login screen.
- HOME**: A panel with the instruction "Choose Command buttons to appear at the top and bottom of the Home Page".
- RECORDS**: A panel with the instruction "Define data fields for each Record, and Command buttons to display to the user".
- ABOUT**: A panel with the instruction "Configure custom text displayed in the About Page describing your project".
- NAVIGATION MENU**: A panel with the instruction "Configure social media links that appear in the Navigation Menu".
- BRANDING**: A panel with the instruction "Configure colors to give your project a unique look". This panel is highlighted with a red border.

At the top of the interface, there are buttons for "+ NEW", "OPEN", and "DOWNLOAD". Below the project name, there are buttons for "RENAME", "COPY", "DELETE", and "PUBLISH".

On the right side, a preview of the mobile app is shown. The app is titled "SAFMC Release" and features a "START ENTRY" section with four icons. Below this is a "Release Details" section for "Red Grouper" with a size of "25 inches" and a date of "8/14/2023 1:54 PM". At the bottom of the app preview is a green "Upload Entries" button.



Building a Project in SciFish

The screenshot displays the SciFish Project Builder interface, which is used for configuring the branding and layout of a mobile application. The interface is divided into three main sections:

- Left Panel (Navigation):** A blue sidebar with a menu icon and a back arrow. It contains the following options: Download Project, Switch Projects..., Preview..., Contact Us, and About.
- Center Panel (Design Canvas):** A large pink area representing the app's branding. It includes a header with the SciFish logo, a blue button labeled "COMMAND TEXT", and a section titled "HEADER TEXT" with "RELEASE DETAILS". Below this is a form for "Species Name" with a "Length" field, and a "Species" field with the text "Grouper" highlighted by a mouse cursor.
- Right Panel (Color Palette):** A list of color swatches for various UI elements, each with a corresponding hex code:
 - Background: #FFD80074
 - On Background: #FFFFFF
 - Primary: #363C92
 - Primary Dark: #FFE6A4D6
 - Primary Light: #363C92
 - On Primary: #FFFFFF
 - Secondary: #363C92
 - Secondary Dark: #151144
 - Secondary Light: #613692
 - On Secondary: #FFFFFF
 - Menu Background: #FF061DFB
 - On Menu: #FFFFFF
 - Error: #FF0000
 - On Error: #FFFFFF
- Right Panel (Mobile Preview):** A vertical preview of the mobile app. It shows a dark blue screen with a white header "SAFMC Release" and a "START ENTRY" section. Below this are four green buttons with icons (camera, document, keyboard, and a circular arrow). The "Release Details" section shows "Red Grouper" with "25 inches" and "8/14/2023 1:54 PM". At the bottom is a large green "Upload Entries" button.



Building a Project in SciFish

The screenshot displays the SciFish Project Builder interface. At the top, the title bar reads "SciFish Project Builder". Below it, there are three buttons: "+ NEW", "OPEN", and "DOWNLOAD". The project name "It's A Fluke" is shown with a "RENAME" button. To the right of the project name are three buttons: "COPY", "DELETE", and "PUBLISH", with the "PUBLISH" button highlighted in red. The main workspace is divided into six panels:

- LOGIN**: A large empty blue area.
- HOME**: Contains the text "Choose Command buttons to appear at the top and bottom of the Home Page".
- RECORDS**: Contains the text "Define data fields for each Record, and Command buttons to display to the user".
- ABOUT**: Contains the text "Configure custom text displayed in the About Page describing your project".
- NAVIGATION MENU**: Contains the text "Configure social media links that appear in the Navigation Menu".
- BRANDING**: Contains the text "Configure colors to give your project a unique look".

On the right side, a preview of the mobile app is shown. The app title is "SAFMC Release". It features a "START ENTRY" section with four green buttons containing icons for camera, location, message, and a circular arrow. Below this is a "Release Details" section for "Red Grouper" with a size of "25 inches" and a timestamp of "8/14/2023 1:54 PM". At the bottom of the preview is a large green "Upload Entries" button.



Building a Project in SciFish

The screenshot displays the SciFish Project Builder interface. The main window is titled "SciFish Project Builder" and shows a project named "It's A Fluke". A "Publish Project" dialog box is open, allowing the user to select a publish channel. The "Developer" channel is selected, and the number "751001" is entered in a red-bordered field. The dialog also includes instructions for testing the project in the SciFish mobile application and fields for "Tag 1" and "Tag 2".

Publish Project

Project Name **It's A Fluke**

Publish Channel

- Developer
Use this channel to create a release for you to test with.
- Alpha
Use this channel to create a very early release for test users.
- Beta
Use this channel to create a near-final release for a wider audience of testers.
- SciFish General Availability
Your project will be published to be downloaded by all registered users of SciFish.

To test this project in the SciFish mobile application, users in this channel should:

- 1) Select "Preview..." from the main menu
- 2) When prompted, enter the following number to download this project:

751001

Tag 1

Tag 2

Use these fields to provide unique identifiers for this release, such as a version number or feature branch.

CANCEL **OK**

The right side of the image shows a mobile app preview for "SAFMC Release". The app interface includes a "START ENTRY" section with four icons, a "Release Details" section for "Red Grouper" (25 inches, 8/14/2023 1:54 PM), and an "Upload Entries" button.

10:25 PM 8/15/2023



Building a Project in SciFish

The image displays the SciFish Project Builder interface. The main workspace is titled "It's A Fluke" and contains six configuration panels: LOGIN, HOME, RECORDS, ABOUT, NAVIGATION MENU, and BRANDING. Each panel has a brief description of its function. A top navigation bar includes buttons for NEW, OPEN, and DOWNLOAD. Action buttons for COPY, DELETE, and PUBLISH are also present.

On the right, a mobile preview of the "SAFMC Release" app is shown. The app interface includes a "START ENTRY" section with icons for camera, chat, messages, and a clock. A red box highlights a dialog box titled "Access Preview Project" with the following text: "Enter the code provided to you by the Project developer to gain access to a preview release:". Below the text is a white input field and two buttons: "Cancel" and "OK". At the bottom of the app preview is an "Upload Entries" button.



Building a Project in SciFish

The image displays the SciFish Project Builder interface, which is used to create and manage mobile applications. The interface is divided into two main sections: a desktop view on the left and a mobile app preview on the right.

Desktop View (SciFish Project Builder):

- Header:** "SciFish Project Builder" with a hamburger menu icon.
- Actions:** "+ NEW", "OPEN", and "DOWNLOAD" buttons.
- Project Name:** "It's A Fluke" with a "RENAME" button.
- Command Buttons:** "COPY", "DELETE", and "PUBLISH" buttons.
- Configuration Grid:**
 - LOGIN:** A large blue panel for configuring the login screen.
 - HOME:** A large blue panel with the text: "Choose Command buttons to appear at the top and bottom of the Home Page".
 - RECORDS:** A large blue panel with the text: "Define data fields for each Record, and Command buttons to display to the user".
 - ABOUT:** A large blue panel with the text: "Configure custom text displayed in the About Page describing your project".
 - NAVIGATION MENU:** A large blue panel with the text: "Configure social media links that appear in the Navigation Menu".
 - BRANDING:** A large blue panel with the text: "Configure colors to give your project a unique look".

Mobile App Preview (It's A Fluke):

- Header:** "It's A Fluke" with a hamburger menu icon.
- Section:** "Add A Catch" with three buttons: a camera icon, a document icon, and "Add Catch".
- Section:** "Catch Details" (empty area).
- Footer:** "Upload Your Fluke" button.



Building a Project in SciFish: Current Fields

| | | | |
|-----------------------------|--------------------------------|--------------------------|---------------------|
| Biological sample collected | Gear | Line Cut | Release Disposition |
| Comment | Hook location | Location | Species |
| Date | Hook type | Number of fish | Time |
| Depth | Hours fished | Number of people fishing | Trip type |
| Descending device usage | Info collected in other survey | Photo | Venting |
| Fish tag number | Length | Predation | |
| Fish tag color | Length type | Primary target species | |

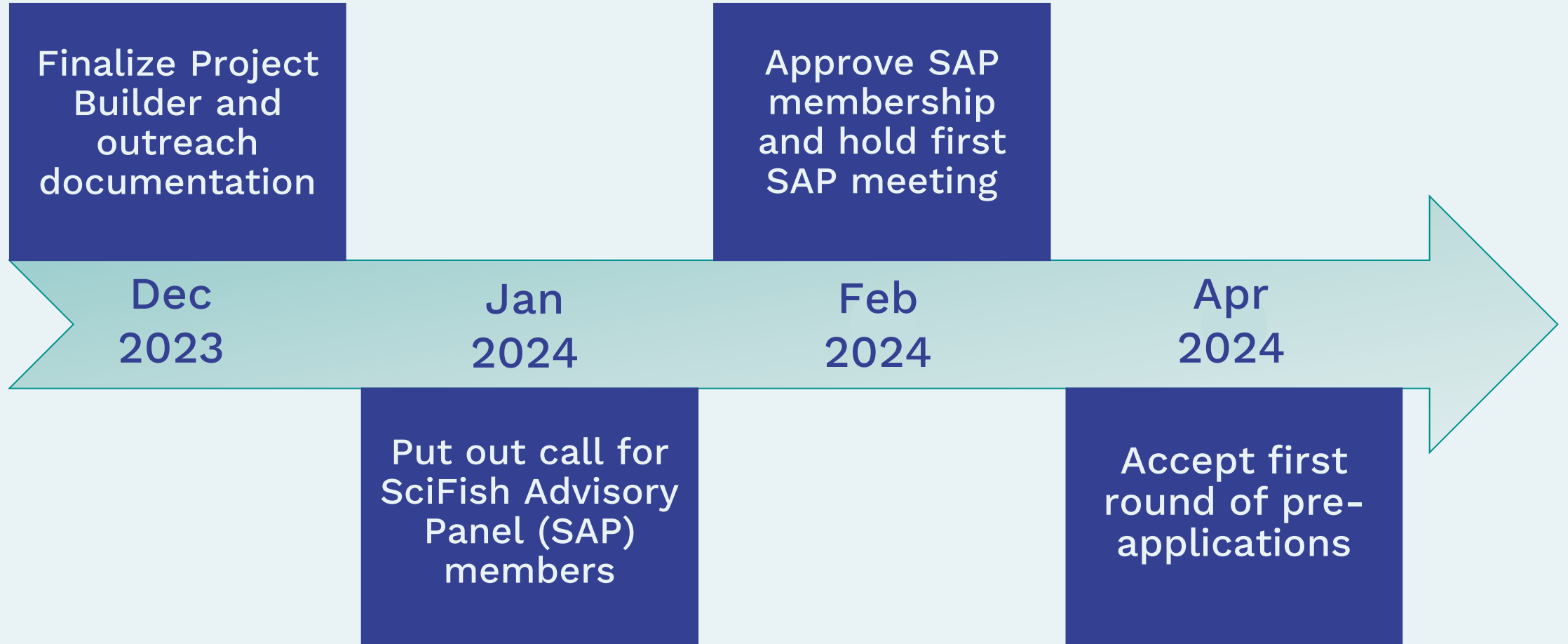


SciFish Policy: Approval





SciFish: Rollout



Keep Up with Projects & the Program!

<http://safmc.net/citizen-science-program/>



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