

Improving Fishery Conservation through Recreational Angler Data Collection



Angler Action Foundation

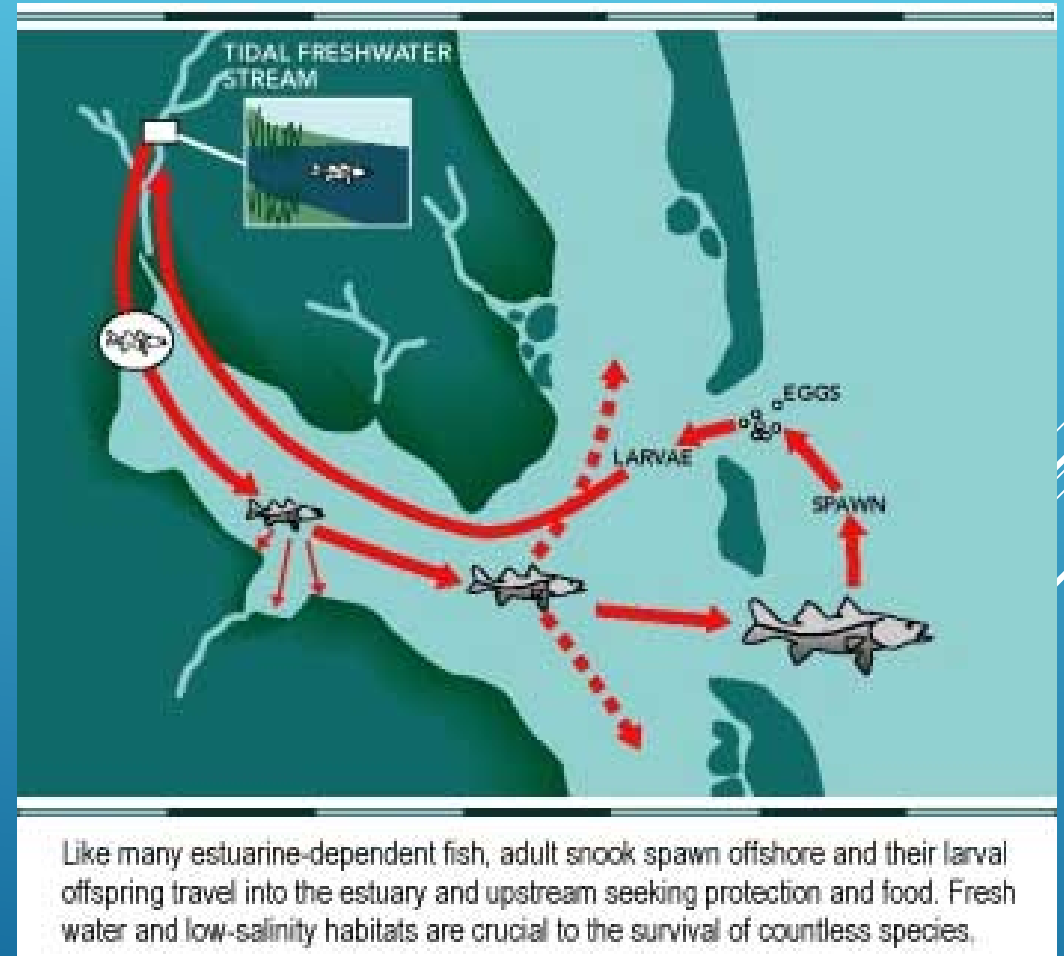
Research – Education - Conservation



20 YEARS OF SNOOK!

The Perfect Mascot to Connect the Habitats

- Beaches
- Passes
- Estuaries
- Upstream freshwater





Our Vision & Mission

Vision

Let Anglers Count.

Mission Statement

To improves angler access, fisheries science and marine habitat through collaborative Research, Education and Conservation programs.

Why do we need AAF today?

The perception of who an angler is has changed over time.



- There are many of us – millions!
- No single conservation outfit that has broad appeal
- Many non-fishing groups don't understand angling
- Poor actions of a few end up representing all of us



Angling Today: By The Numbers

- America's 46 million anglers
- \$48 billion in retail sales
- \$115 billion impact

We must feel obligagted to make these numbers work FOR us, not against us.

This can only be accomplished through new and creative applications of cutting-edge technology, in a way that promotes a single mission of all anglers – to work towards a brighter fishing future.



Time For Anglers To Be Heard

We Count.

We are often the first or only to report:

- declining fish populations
- local habitat breakdowns
- water quality problems (natural and manmade)

We are often among the first to:

- volunteer for habitat projects
- pay for conservation through a variety of ways
- advocate for sensible rules and regulations



AAF conservation projects

Habitat Adoptions: Jupiter Ridge, Snook Islands

- Template partnership
- Increases community involvement
- Education opportunities
- Builds relationship between citizens and managers

So far:

- 7000 mangroves planted
- 1500 spartina plugs
- Tons of trash removed
- Data collection





Other conservation projects

Restorations: Caloosahatchee River SAV

- 20 acres being replanted
- Partnership with Sea & Shoreline, Johnson Engineering
- Plants protected for 18 months from herbivory
- Strategic Locations
- Can, should, and will be expandable



IANGLER: AAF'S PRIMARY SERVICE PROJECT

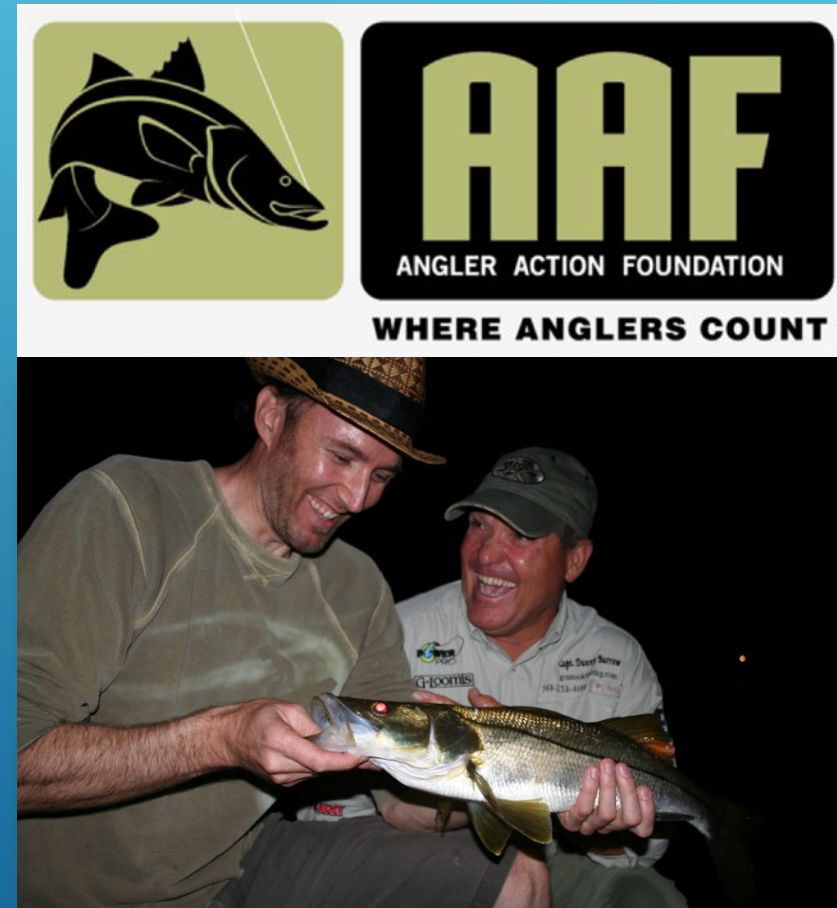
- ▶ **What are the main issues facing recreational anglers today?**
- ▶ **How can we best address them?**
- ▶ **Individually and as a group?**



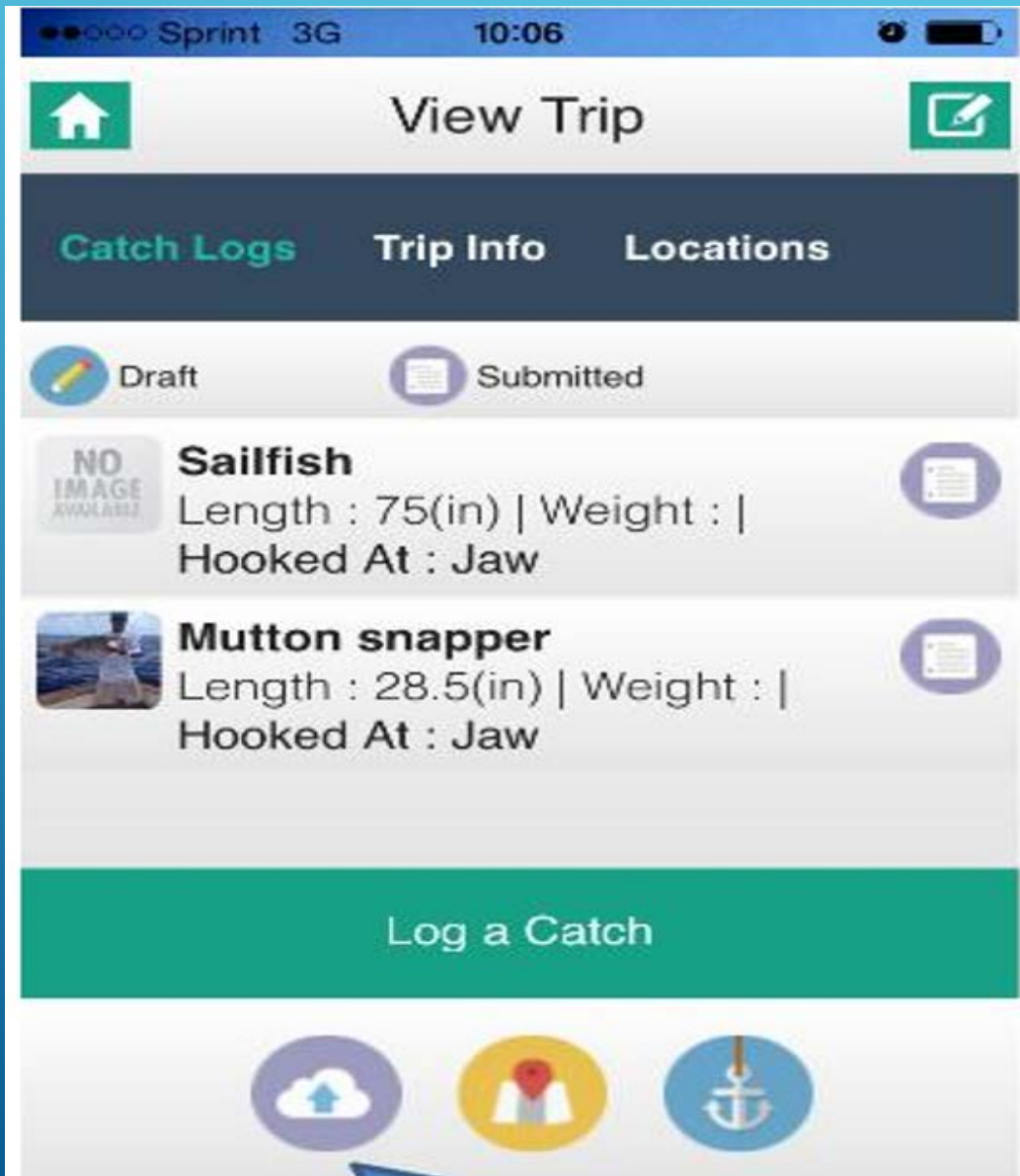
THE GENESIS A NEW PARADIGM FOR CITIZEN SCIENCE

iAngler: Finding opportunity
through crisis

- 2010 Fish Kill
- FWC needed help
- Anglers answered the call
- NOAA, TPW, independent scientists helped design program structure



iAngler: Key Assumptions



- ▶ Valid data is the currency of the future
- ▶ Mutually beneficial partnerships between anglers, industry and government is essential
- ▶ Conservation is an integral part of angling

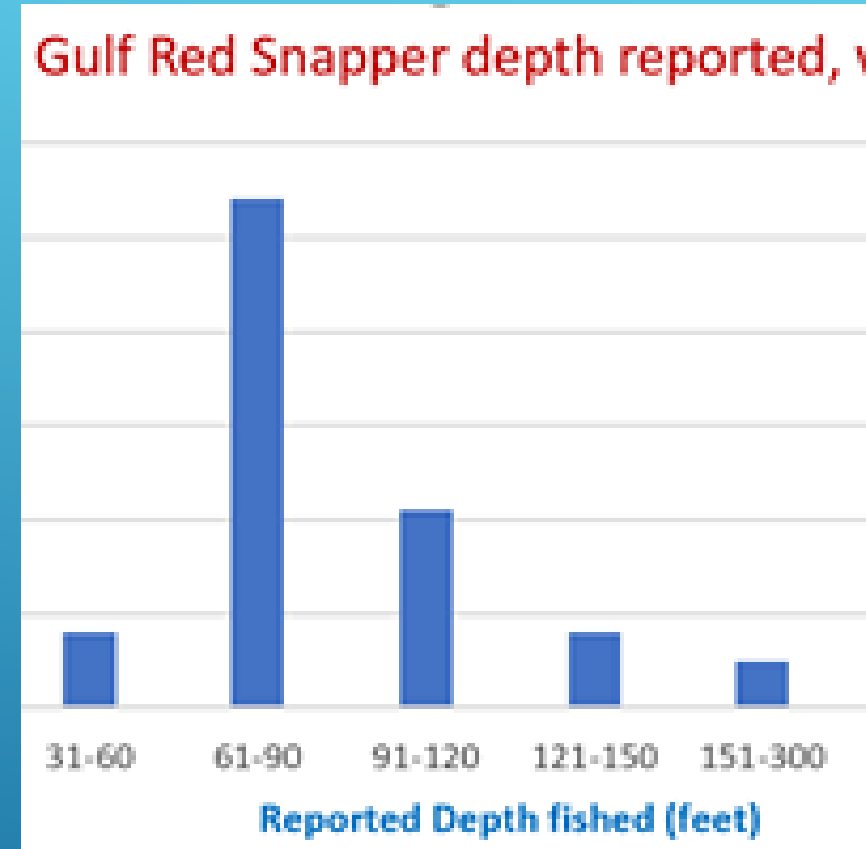
iAngler Research Scope



- ▶ Growing rapidly with 30,000 users across our many platforms
- ▶ Salt & Fresh Water
- ▶ New Partnerships with SAFMC and FWC to help solve Red Snapper issues (and other species)
- ▶ Other states and councils inquiring about coming aboard Angler Action
- ▶ Habitat and conservation data

AAP: WHY SHOULD ANGLERS LOG FISH?

- ▶ **Shed the target - Accountability**
- ▶ **Obtain a personal fishing log**
- ▶ **Provide a service which satisfies many needs**
 - **Data for managers**
 - **Habitat mapping**
- ▶ **More?**



WHERE ANGLERS COUNT



iAngler Data Improves Habitats



- What species use what habitats throughout their lifecycle?
- What habitats attract more anglers?
- What habitats have the highest catch rates?
- How do we develop an increased a sense of personal conservation ethos?
Through participation!

iAngler Research Benefits Anglers



- ▶ **Personal fishing log book**
- ▶ **Private & Password Protected**
- ▶ **Anglers are able to enter key environmental data for self-comparison**

iAngler Research Builds Partnerships

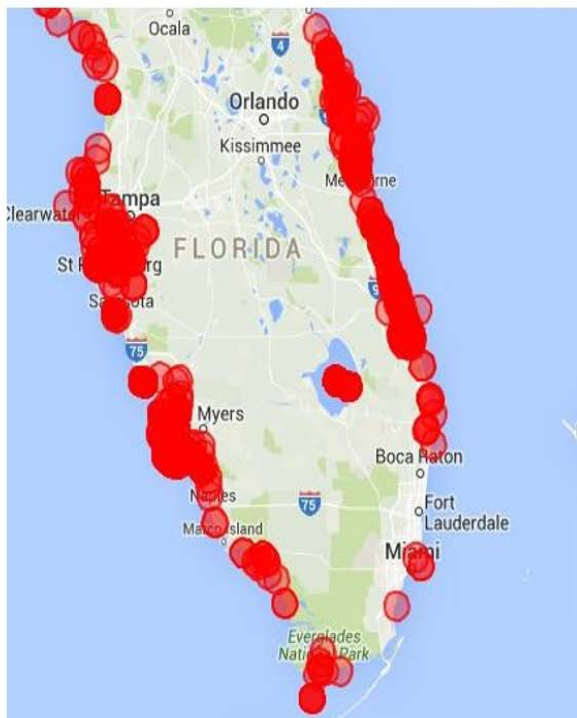


- ▶ Allows anglers to participate directly in management
- ▶ 'second set of eyes' on raw data
- ▶ Trust between anglers and managers leads to better overall conservation

Data that supports better habitats



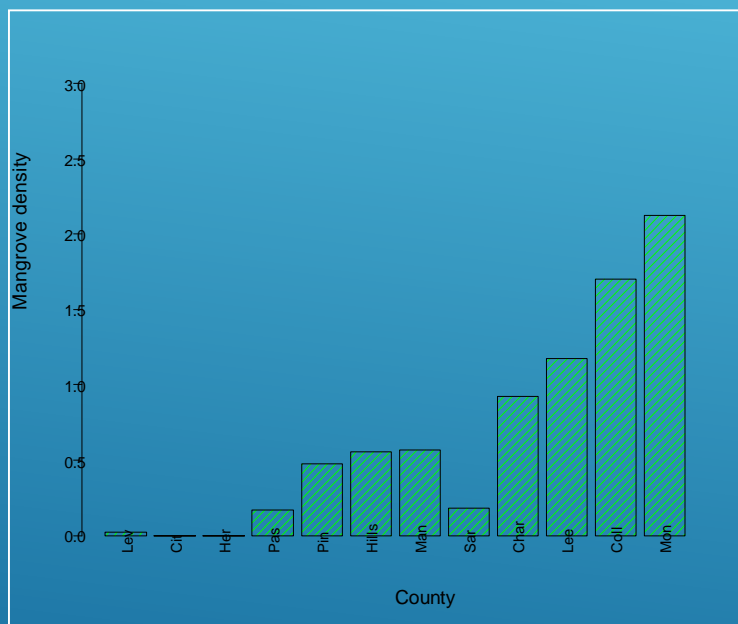
Snook



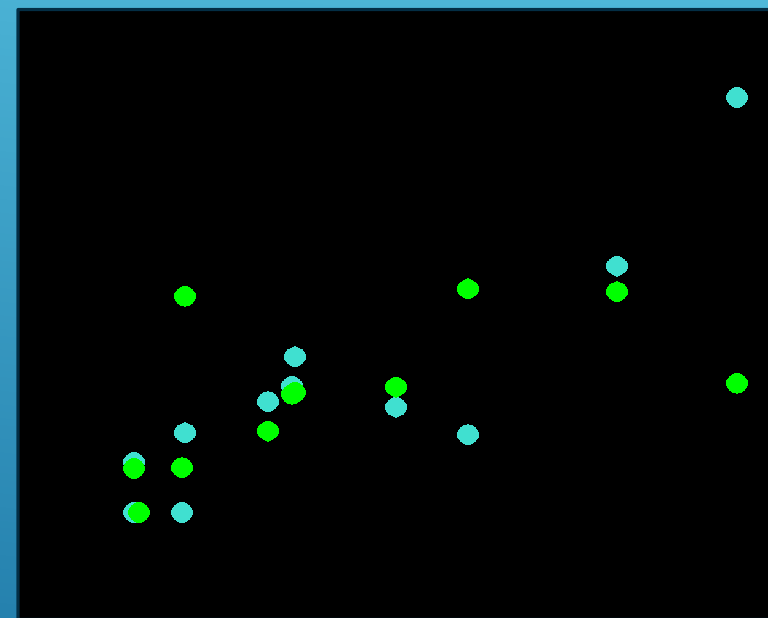
Seatrout

- ▶ Research data will track fish movement over time
- ▶ Helps anglers demonstrate the links between habitats, fish, and human activities
- ▶ Fisheries can be managed to more precise level
- ▶ Can plot invasive species

Spatial patterns of catch-per-trip- Does mangrove density play a role?



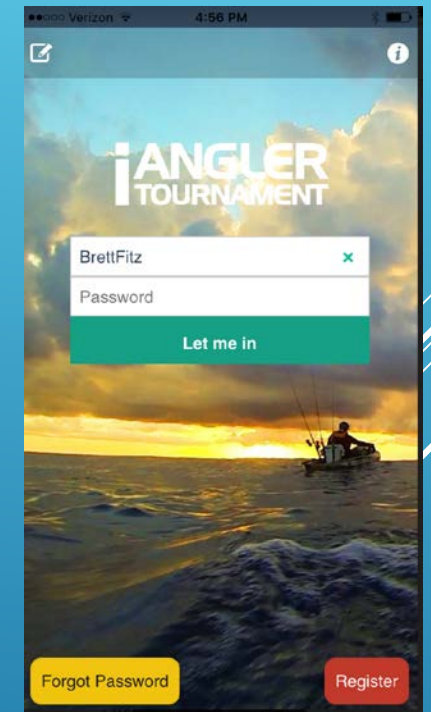
Mangrove density - Gulf



Mangrove density ~ Catch per trip
(snook)

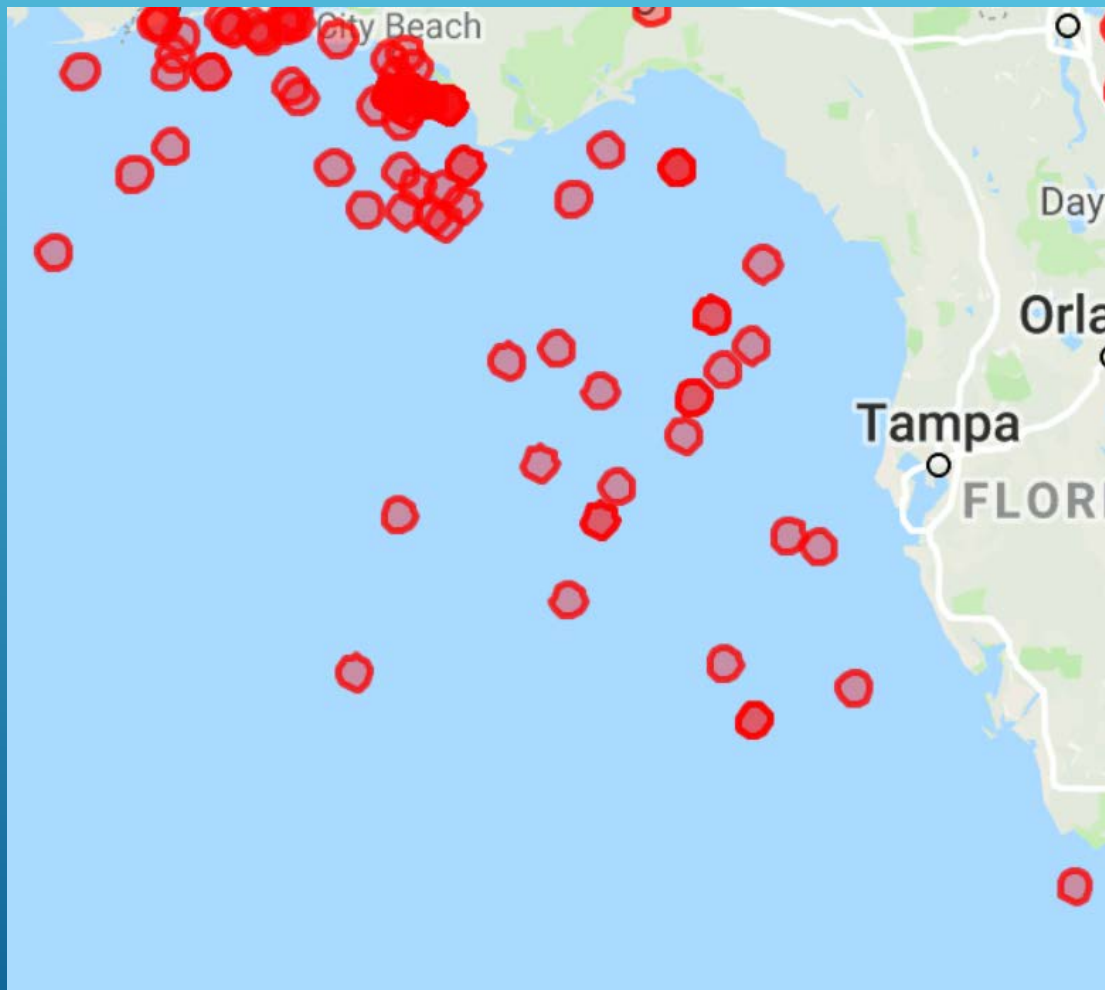


LAKE WORTH LAGOON FISHING CHALLENGE: ENGAGING ANGLERS AND BETTERING OUR HABITATS



www.angleraction.org

iAngler Data Means Better Decisions

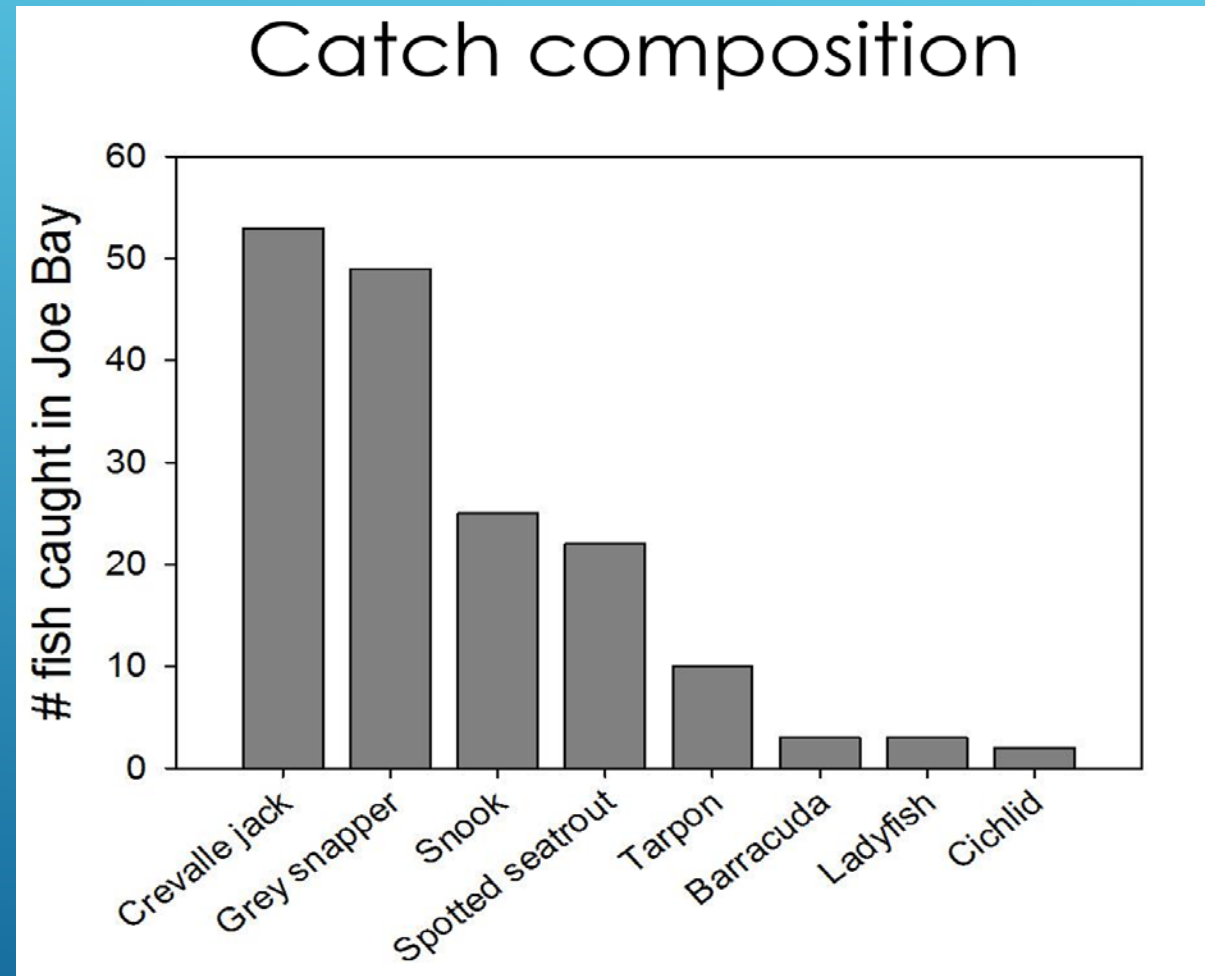


- **There is no better means for state and federal gov. to capture recreational angler fishery data**
- **Information on fish we release is most needed – and iAngler provides it**
- **Formatted in a way that managers understand and can use (5 stock assessments in Florida already)**

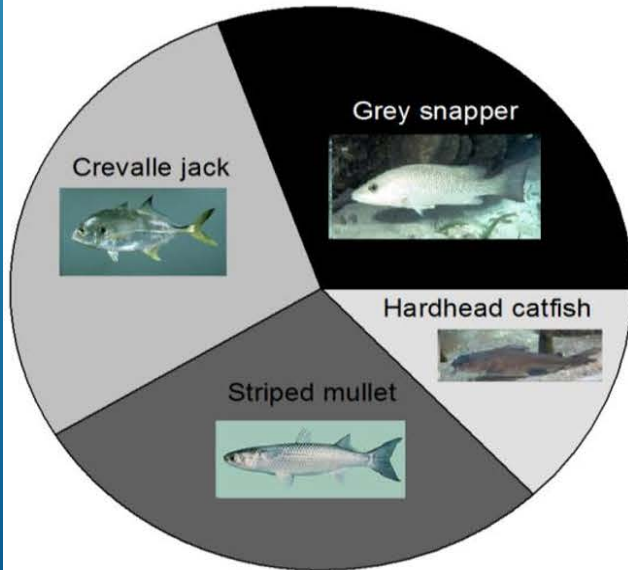
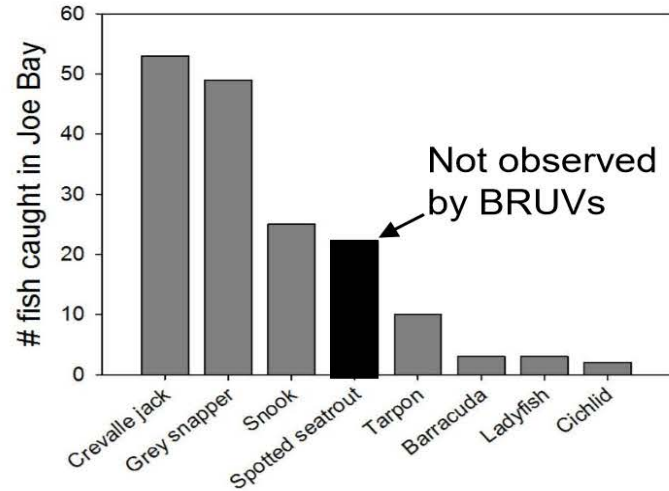
JOE BAY SURVEY/APP



- Area was closed for almost 40 years
- ENP, FIU, SGF teamed up to collect data
- Anglers contributed data



Self-reported data revealed new info





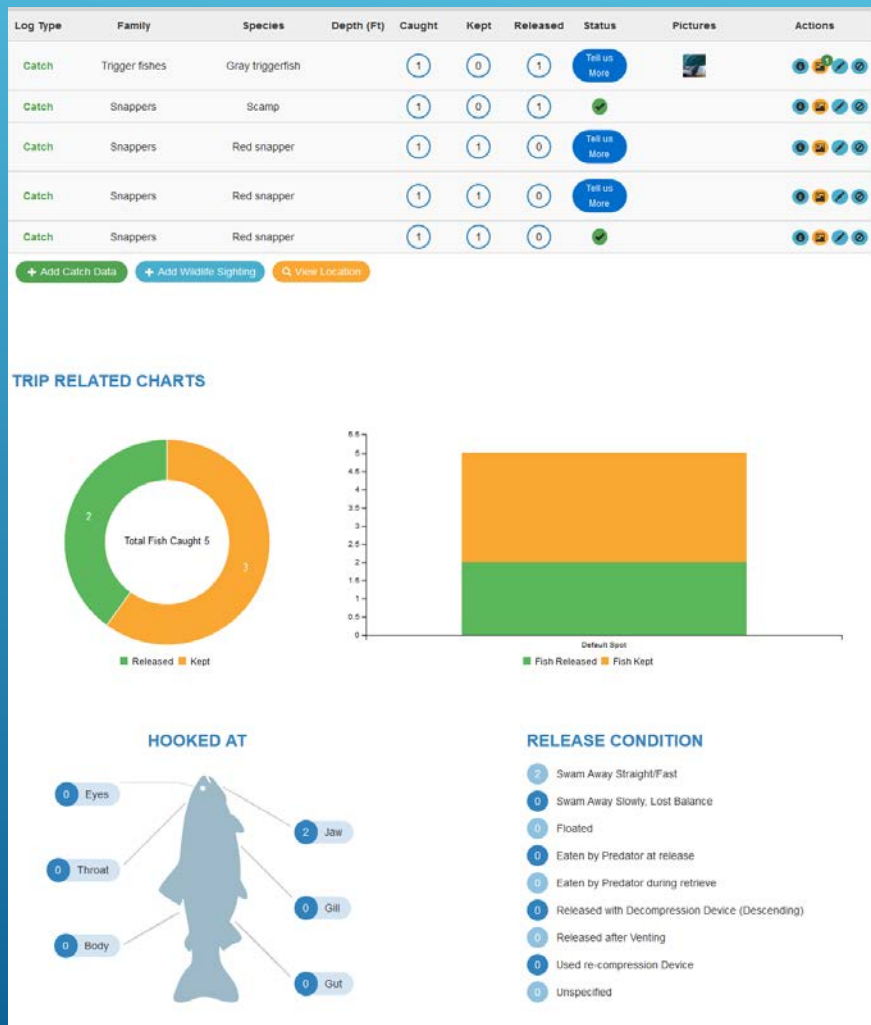
AAF Research

Science That Improves Individual Fishing



Every angler can see:

- Image
- Depth
- location
- Caught/released
- Where hooked
- Release disposition
- More



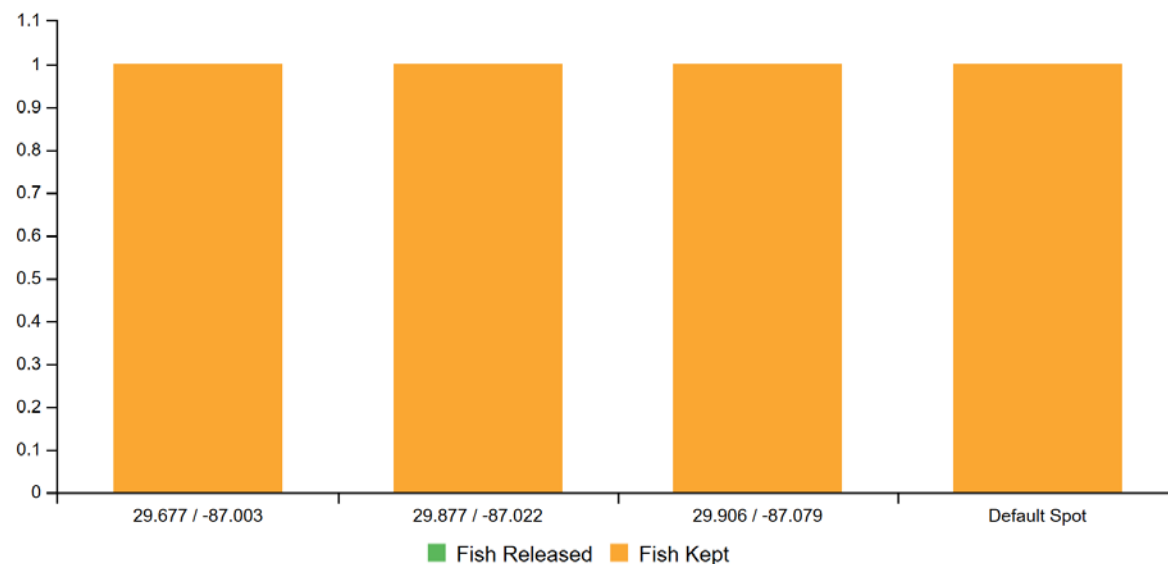
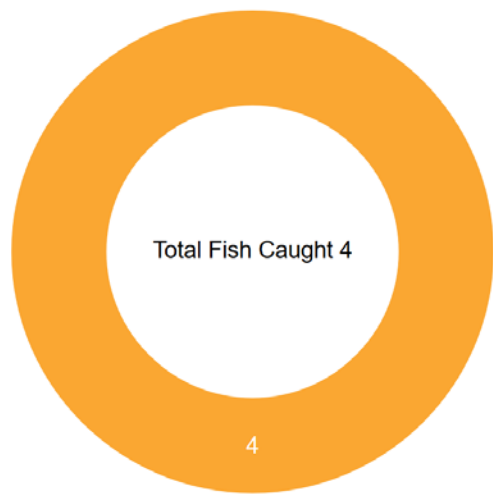


AAF Research

Science That Improves Overall Fishing



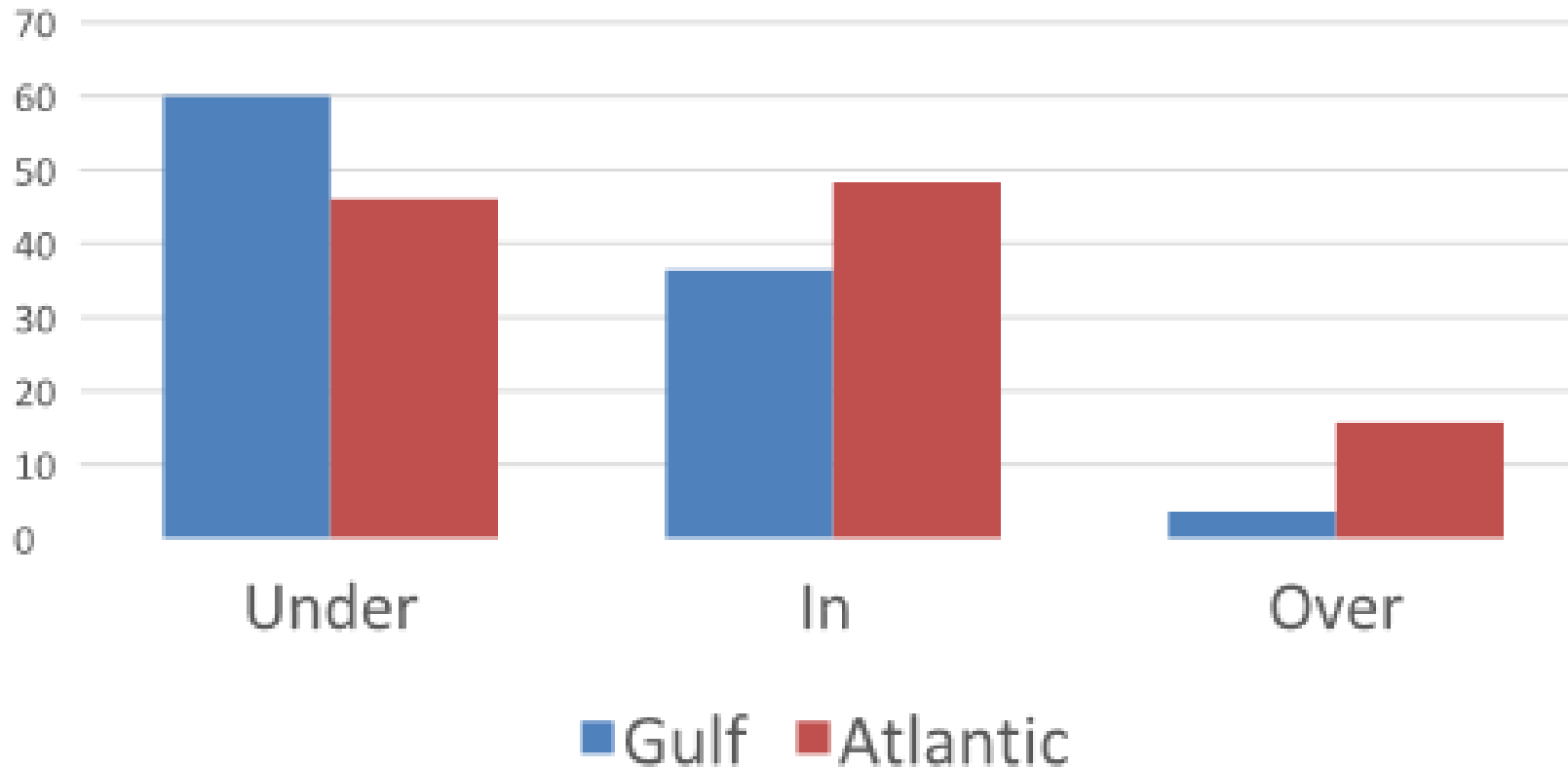
TRIP RELATED CHARTS



Traditional surveys only capture fraction of the information.
iAngler data is available REAL TIME.

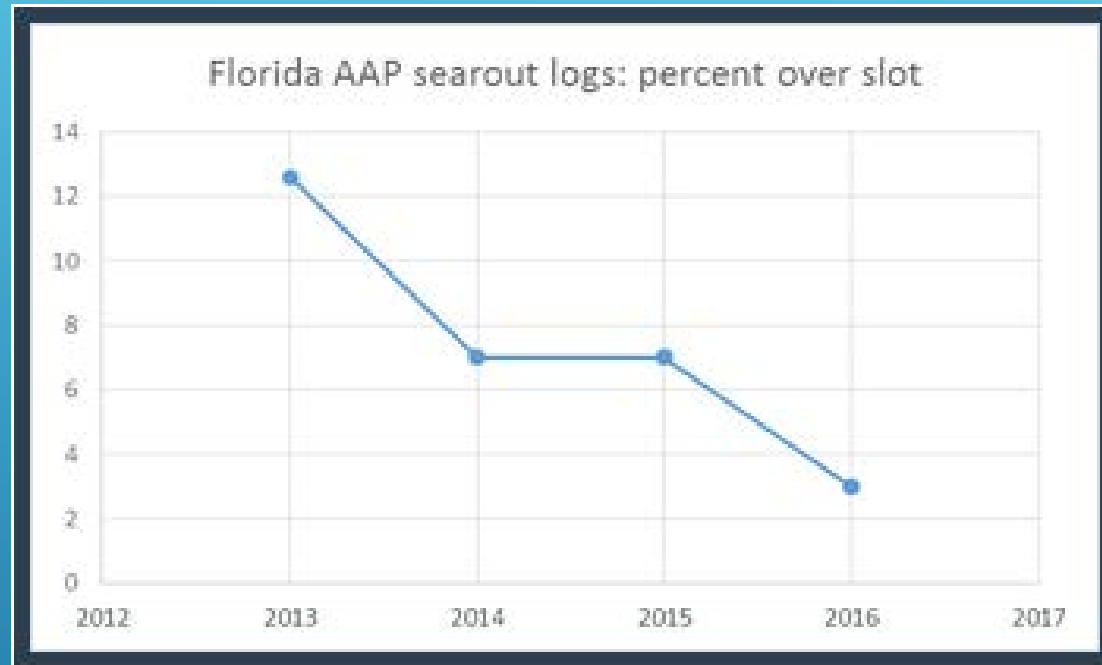
TROUT DATA THAT TELLS A STORY

AAP Trout data 2012/13



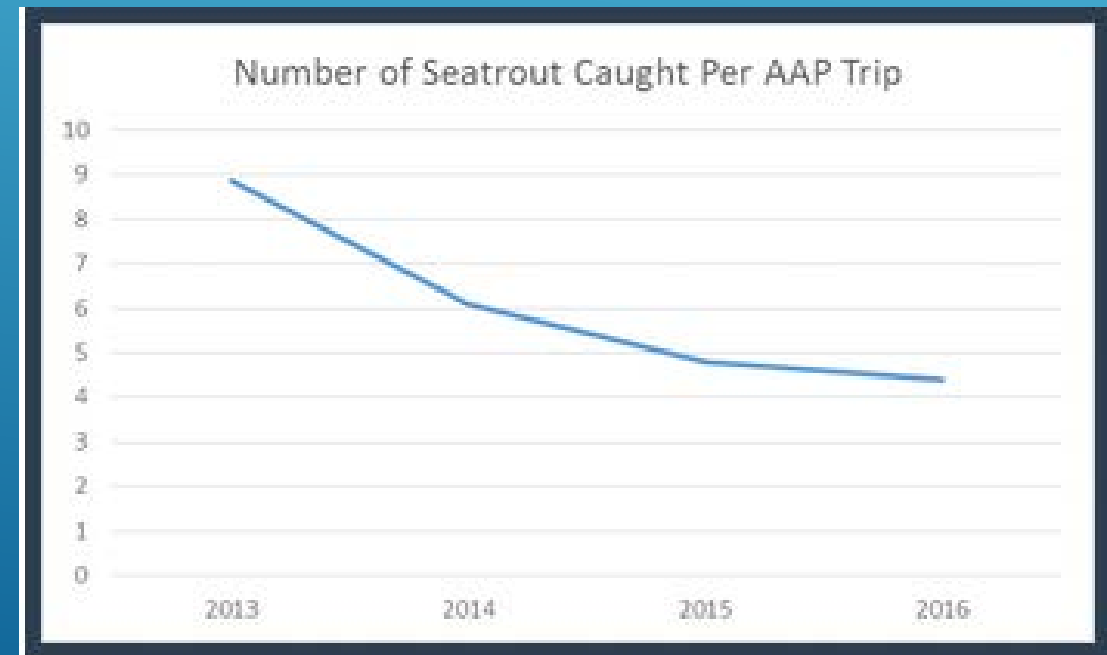
- Thousands of trout each year
- 8% kept on Atlantic side, 39% kept on Gulf side
- 1.71/hour Atlantic, 1.77 Gulf

MORE FLORIDA AAP SEATROUT DATA



The percentage of 'over slot' fish in the AAP has **dropped from 12.8 to 3.1** since 2012/13

The number of seatrout per trip has **dropped from 8.9 to 4.4** since 2012/13





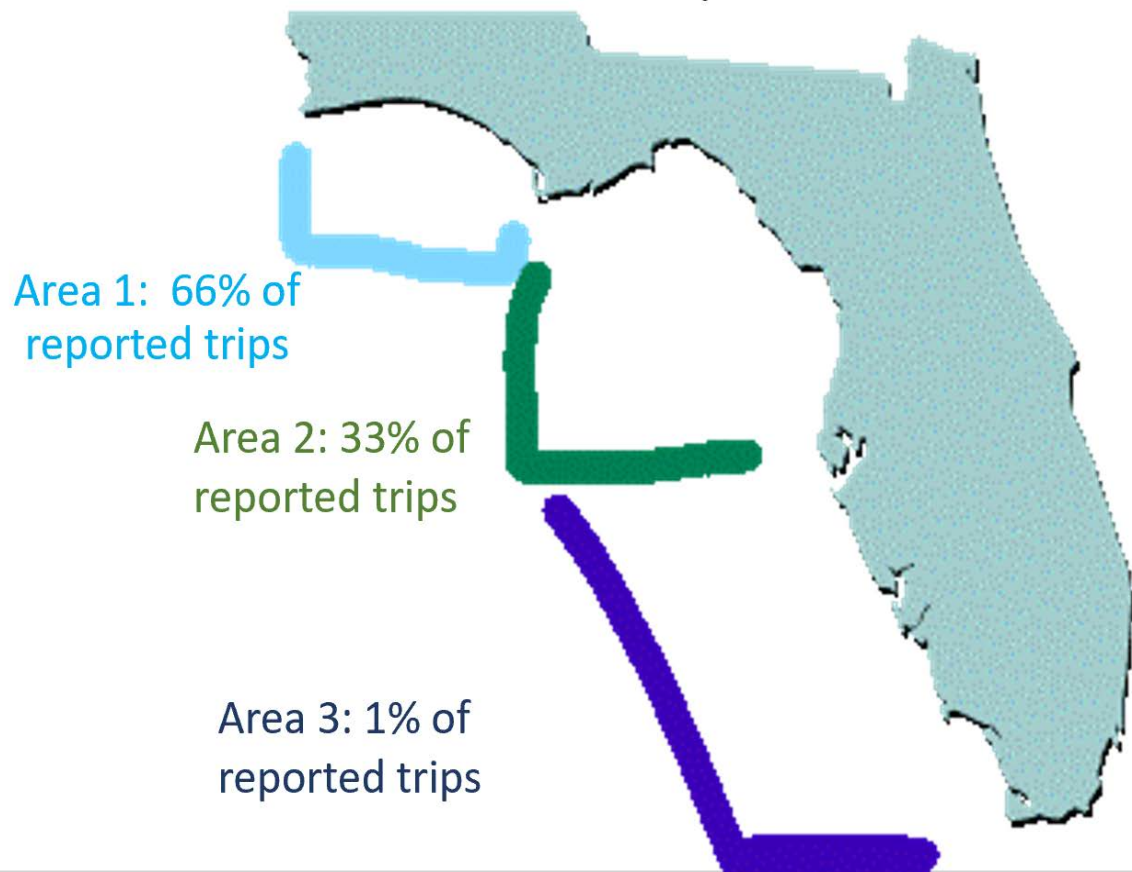
2017 – ANGLER ACTION AND ARS



Why partnership is important

1. Only 3 weekends of season since 2014
2. Anglers regaining trust in managers
3. This can match what anglers see with what researchers see

Florida's iAngler Gulf Red Snapper: Where are they from?



Why partnership is important

1. Allows researchers access to new data
2. Anglers regaining trust in managers
3. Can match what anglers see with what researchers see



Support The Angler Action Foundation



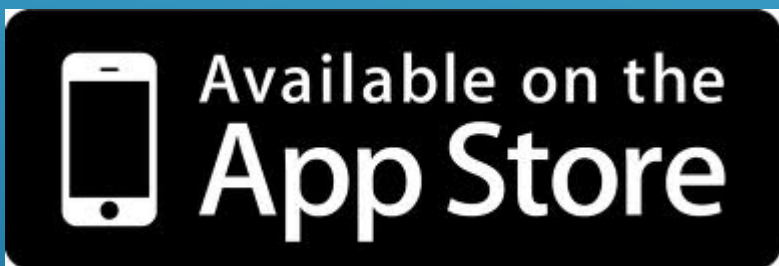
- ▶ Only organization that has established enough trust to manage raw fishery data
- ▶ Only organization that has full support and endorsement from environmental groups, industry leaders, fishery managers, guides associations, etc.
- ▶ SAFMC and FWC partnerships benefit all anglers and fish, but is not funded



Down Load the iAngler App Now

iAngler Mobile Apps

Angler Action mobile applications allow you to log in the catch info while on the move. To get started with the Mobile Apps, you will need to download them from the iTunes (iPhone & iPad) and Google Play (Android).



Once the download completes and you install the application, you will see an icon for iAngler. Tap the icon to get started.

Thank You



brett@angleraction.org
www.angleraction.org

holly@angleraction.org
561-707-8923