

FISHstory Highlights

SAFMC June 2022

FISHstory wouldn't be possible without so many amazing partners & volunteers!



- Rusty Hudson, Ken Brennan, and Amber Von Harten
- FISHstory Design & Validation Teams
- FISHstory Length Analysts
- FISHstory Zooniverse Volunteers
- Outreach Partners
- Many Council Staff

FISHstory Project Components



Digitize & archive
historic photos



Over 1,374 photos digitized & archived



For-hire catch
composition in
Zooniverse



Over 2,120 volunteers made 35,740
classifications
Validation Team reviewed 180 photos



Method to estimate
length - test on
King Mackerel

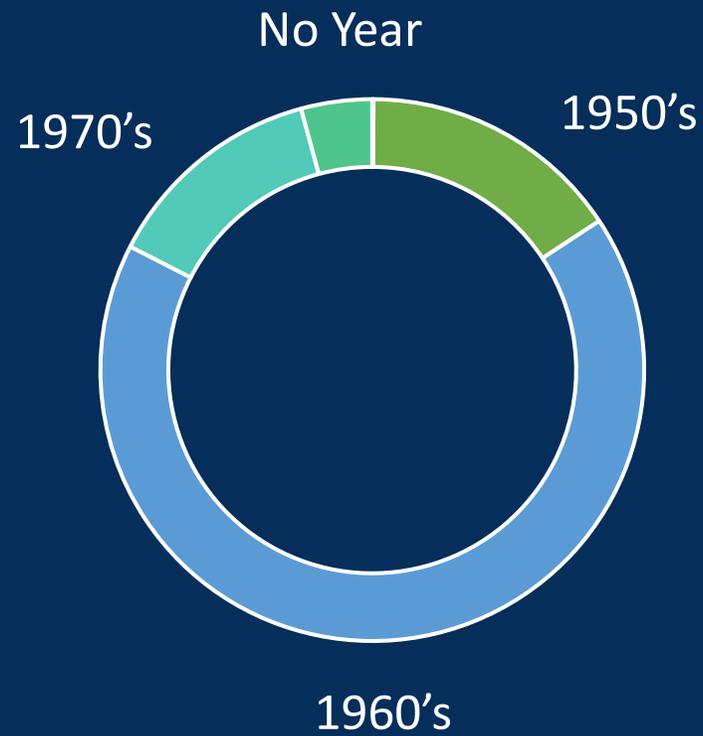


All 1,374 photos reviewed for King
Mackerel

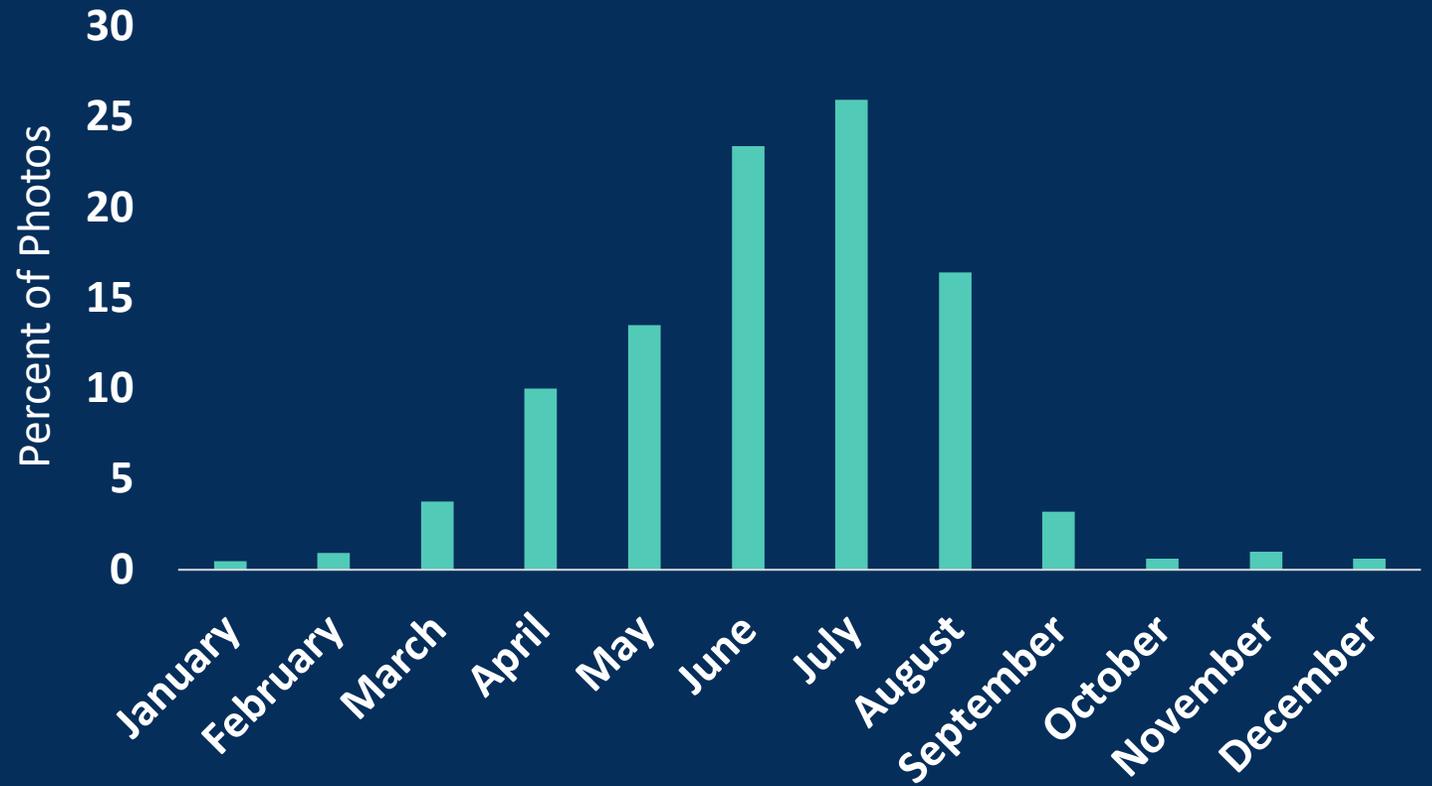
Historical Photo Overview

Percentage of photos by decade

Photo range: 1949 - 1975



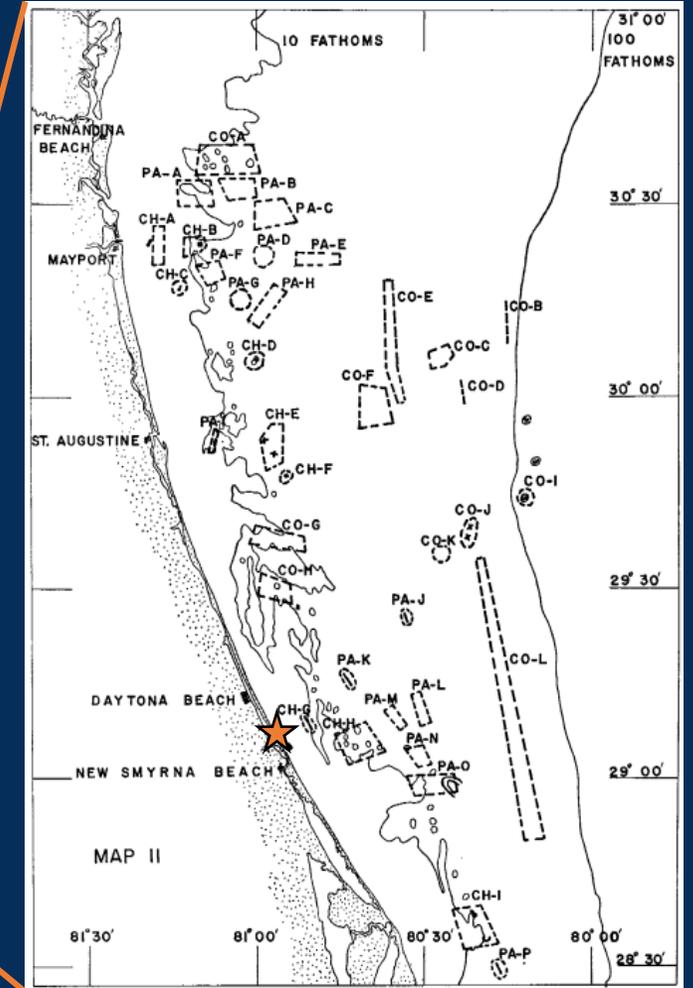
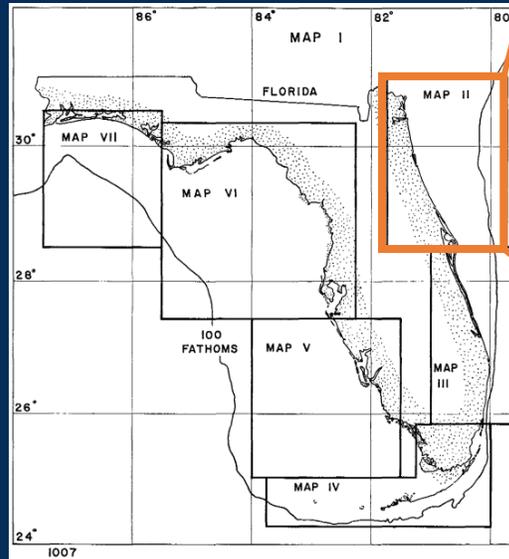
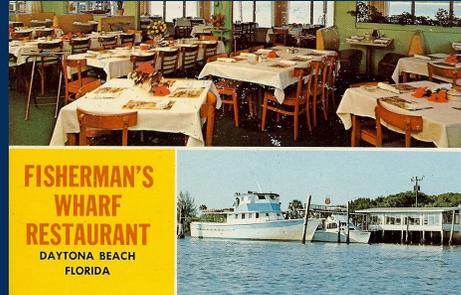
Percentage of photos by month



Historical Photo Overview

Photo Location:
Daytona Beach, FL

Photos from fishing trips
departing from :
Inlet Harbor & Timmons Fish
Camp



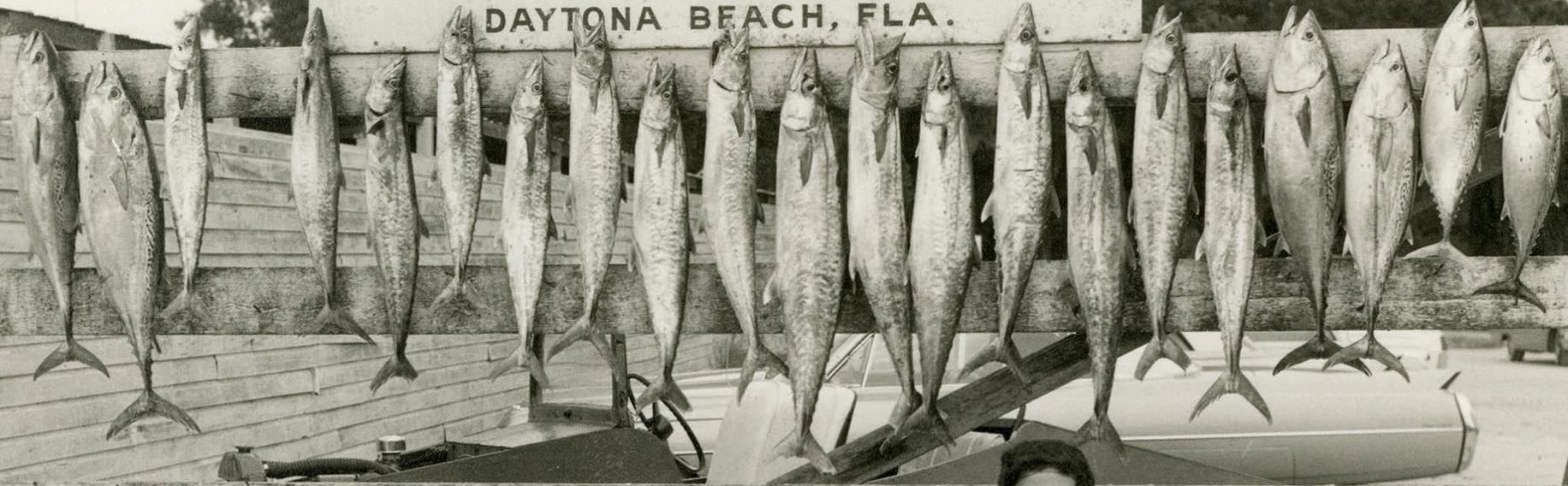
Moe, M. A. (1963). A Survey of Offshore Fishing in Florida (Rep. No. Four).

Historical Photo Overview

88% of photos from 5 vessels



CAUGHT AT **TIMMONS** CL 3-5825
FISHING CAMP
DAYTONA BEACH, FLA.



CAUGHT AT
FISHERMAN'S PARADISE
DAYTONA BEACH FLA. CALL 767-7676



For-Hire Catch: Process

Pre-launch



BUILD PROJECT IN
ZONIVERSE



DEVELOP
TRAINING
MATERIALS



RECRUIT & TRAIN
VALIDATION TEAM
MEMBERS



BETA TEST IN
ZONIVERSE &
ADJUST

Post-launch



BATCH & ADD
PHOTOS



IDENTIFY PHOTOS
FOR &
COORDINATE
VALIDATION TEAM
REVIEW



VOLUNTEER
OUTREACH &
ENGAGEMENT



DATA ANALYSIS



SHARE RESULTS

Zooniverse Workflows

FISH & PEOPLE: Count

- Count the total number of fish and people in the photos
- 10 volunteers per photo
- No Validation Team Review
- 1,374 photos complete



TASK

TUTORIAL

FISH: Please mark all of the fish in the photo regardless of their species. If there is a stringer, pile, trash can, or wheelbarrow where individual fish can not be differentiated leave them unmarked. Mark all fish as close to the eye as possible

PEOPLE: Counting people will help to determine fishing effort. Please mark all of the people in the photo, including children and captains.

 Fish 20 drawn

 People 7 drawn

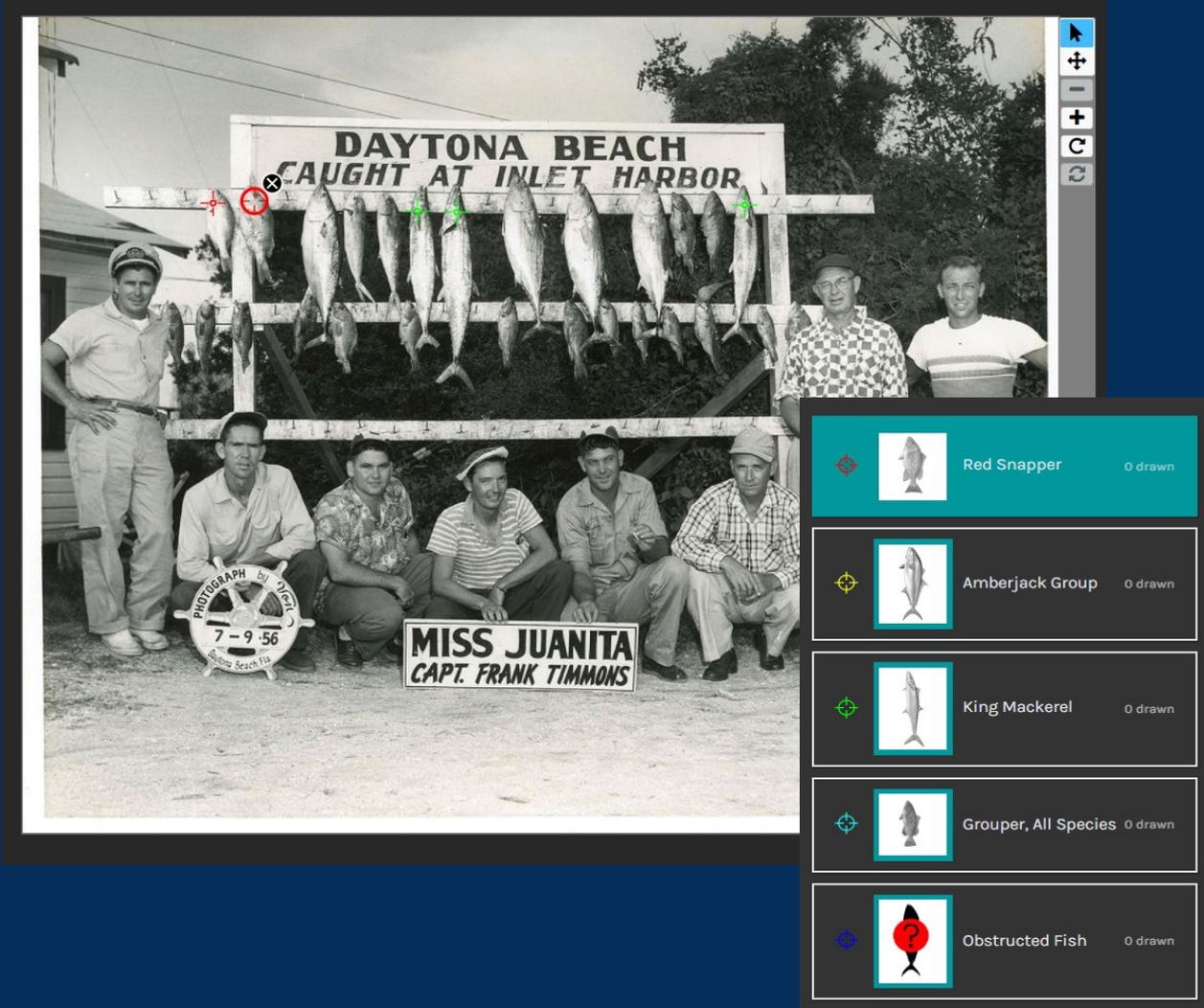
NEED SOME HELP WITH THIS TASK?

Done & Talk

Done



Zooniverse Workflows



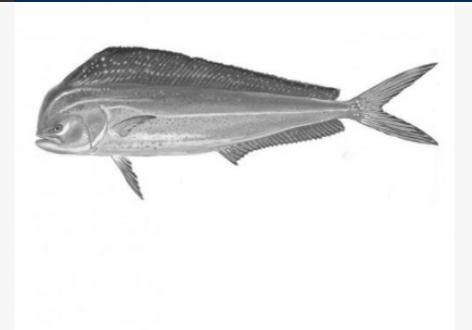
FISH: Classify

- Identify fish into 16 species or species groups
- Document obstructed fish
- Tiered data collection via two tasks
- 20 volunteers per photo
- Validation Team review when substantial disagreement
- 1,000 photos complete

Zooniverse Workflows

Shape	Tail
 Snapper, Other	 Dolphin Fish/Mahi
 Jack, Other	 Flounder
 Hammerhead Shark	 Gray Triggerfish
 Shark, Other	 Little Tunny
 Black Sea Bass	 Porgy/Grunt
 Cobia	 Other

Showing 12 of 12 [Clear filters](#)



Dolphin Fish/Mahi

Dolphin Fish are brilliantly colored with blue, green, and yellow however this coloring fades once the fish dies. Male Dolphin Fish have a vertical, wide forehead with a body that tapers to the tail. Females have a softer sloping forehead (see last image). These fish have a single dark dorsal fin that runs from behind the head to the tail. The tail of this fish is long and narrowly forked.

How many of this species or species group are present in the photo?

1 2 3 4 5 6-10 11-15 16+

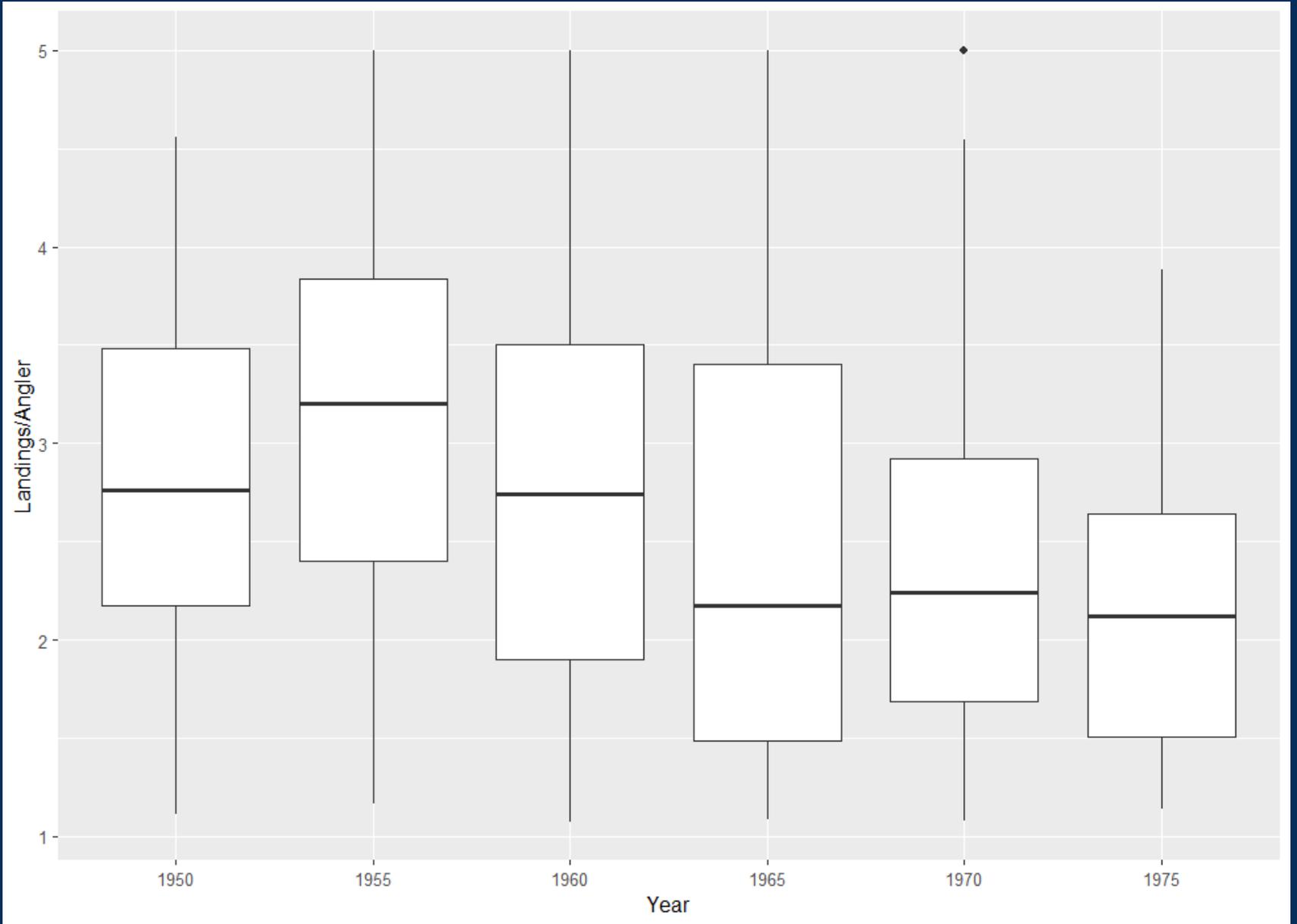
Cancel

Identify

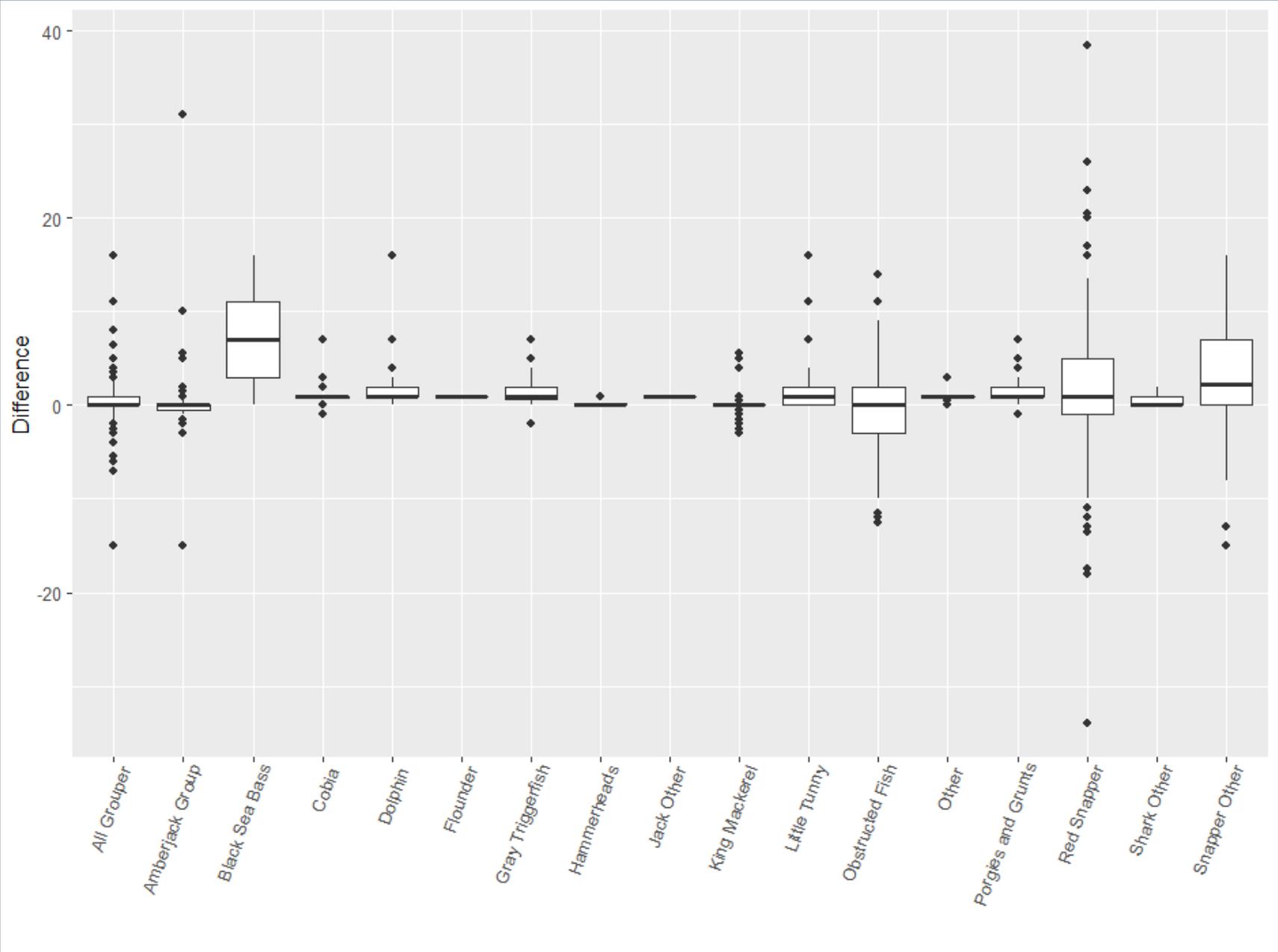
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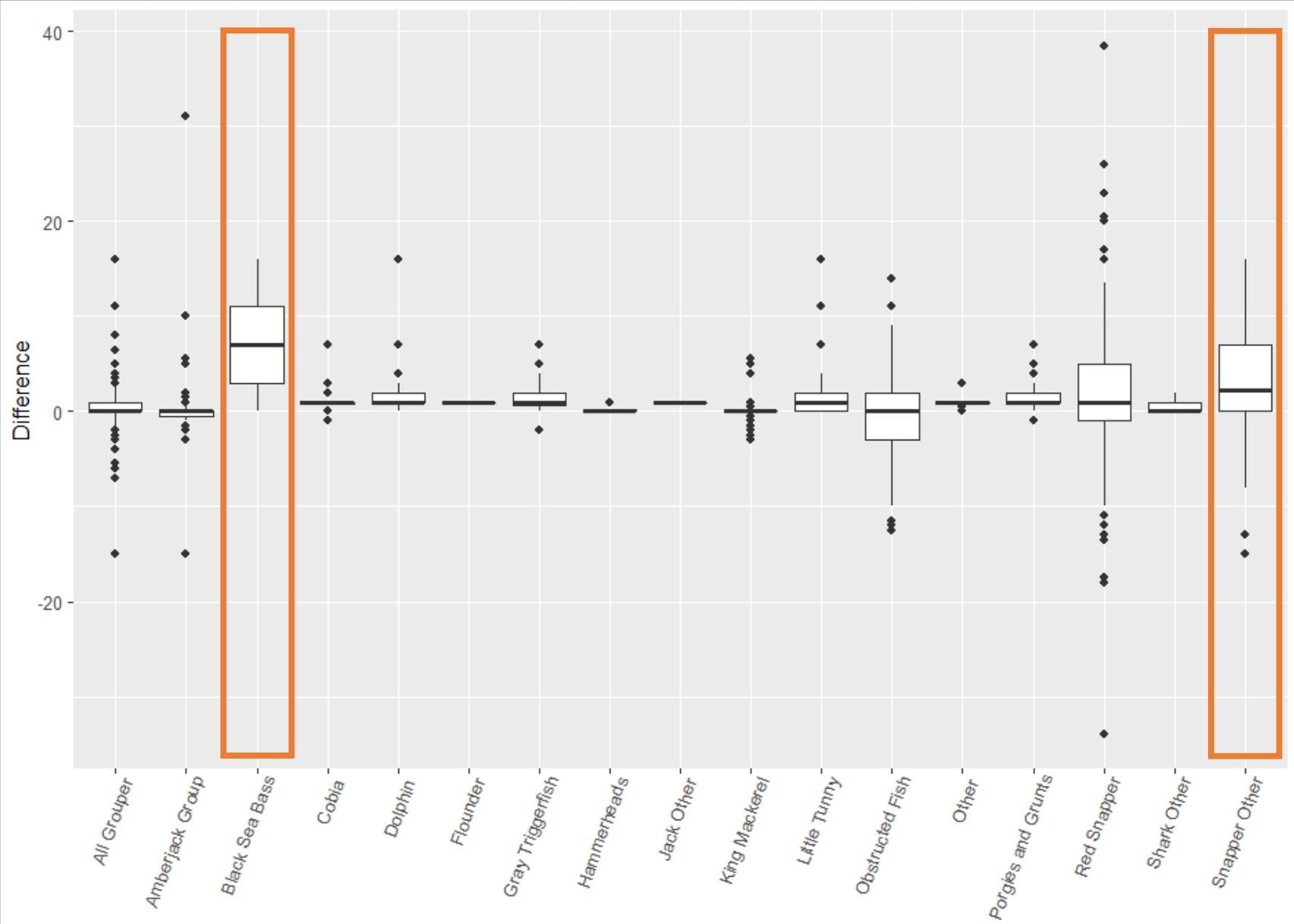
Total landings per angler in 5-year time blocks



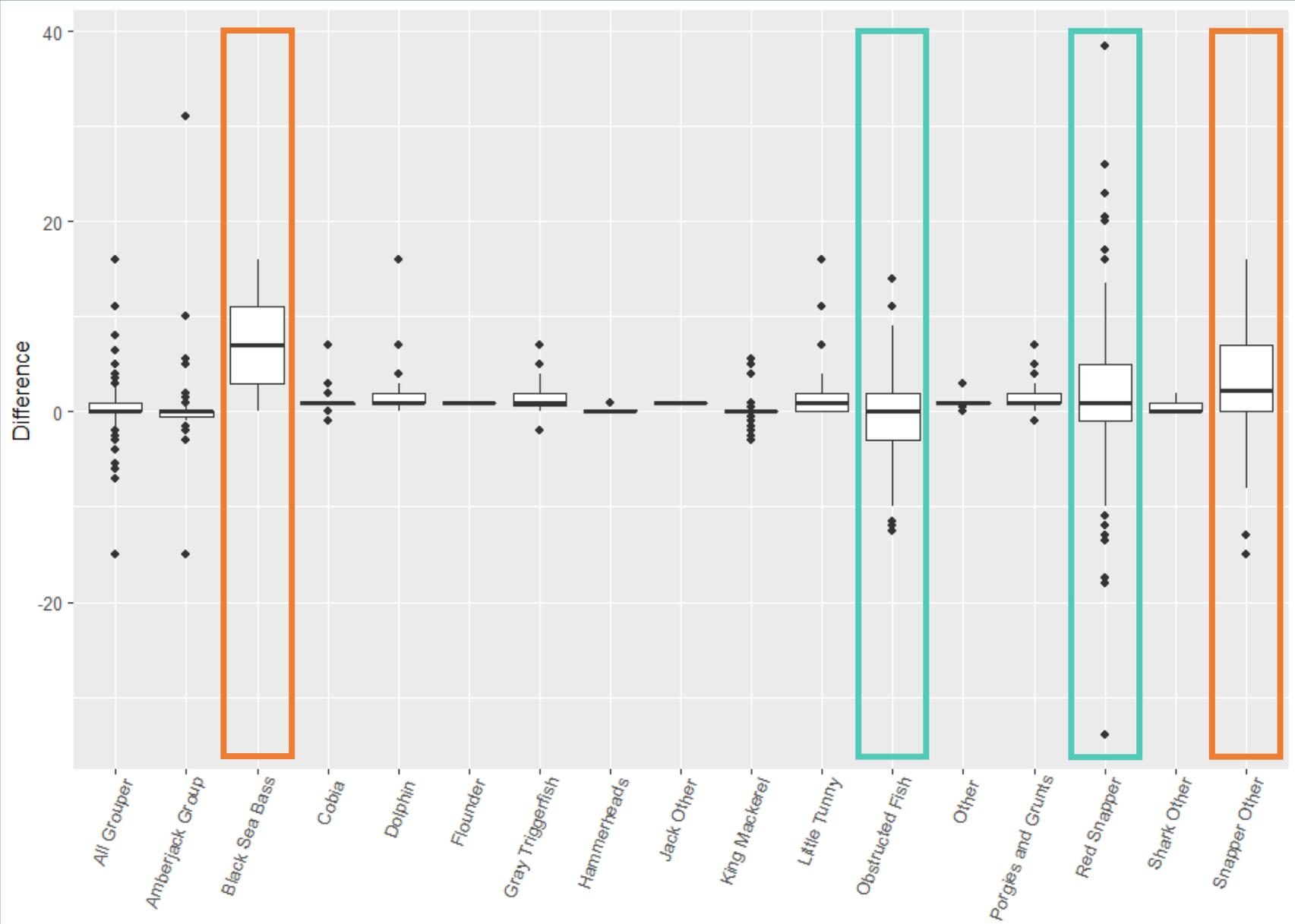
Comparison of Validation Team & Citizen Scientists



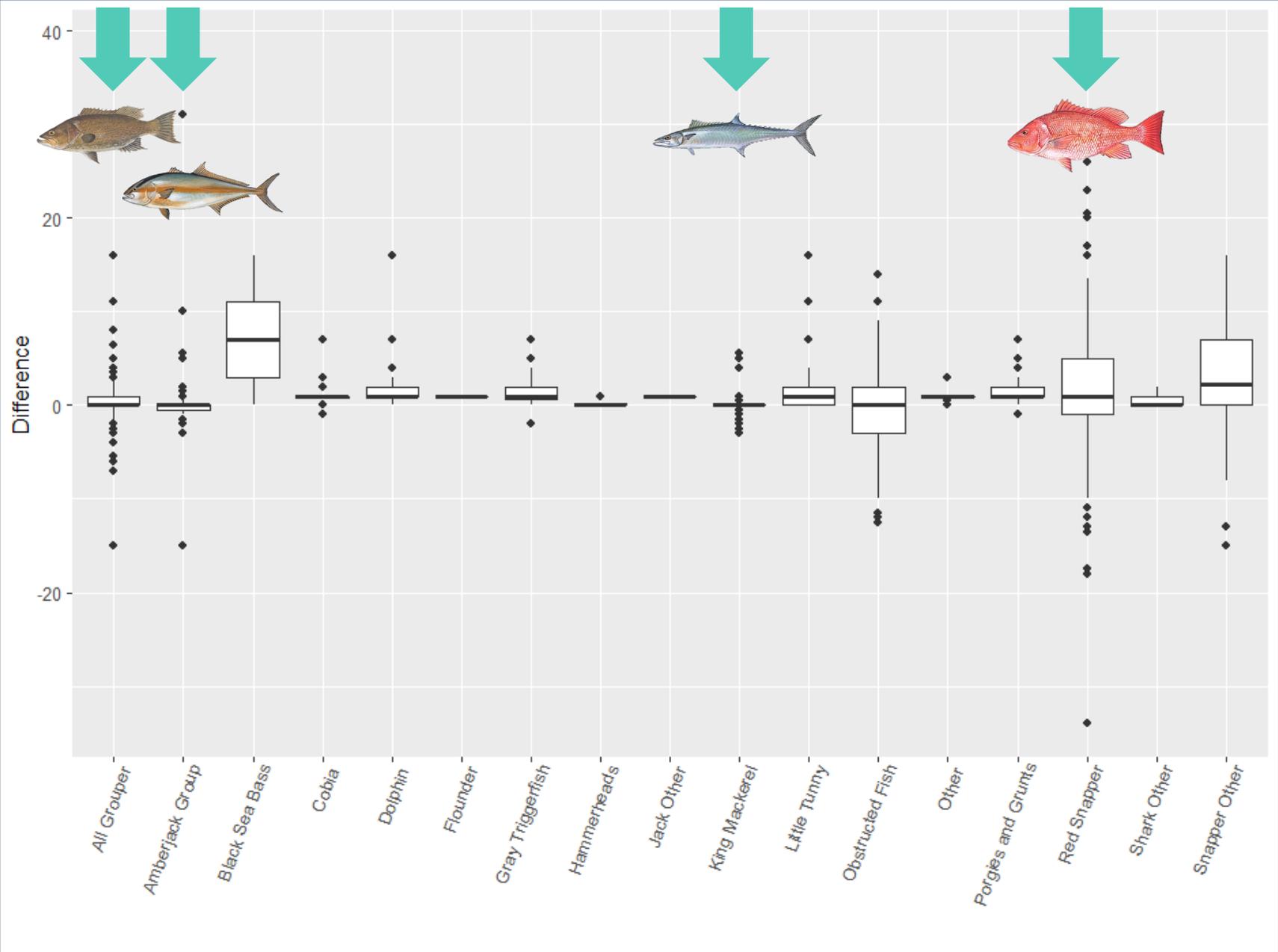
Comparison
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Team &
Citizen
Scientists



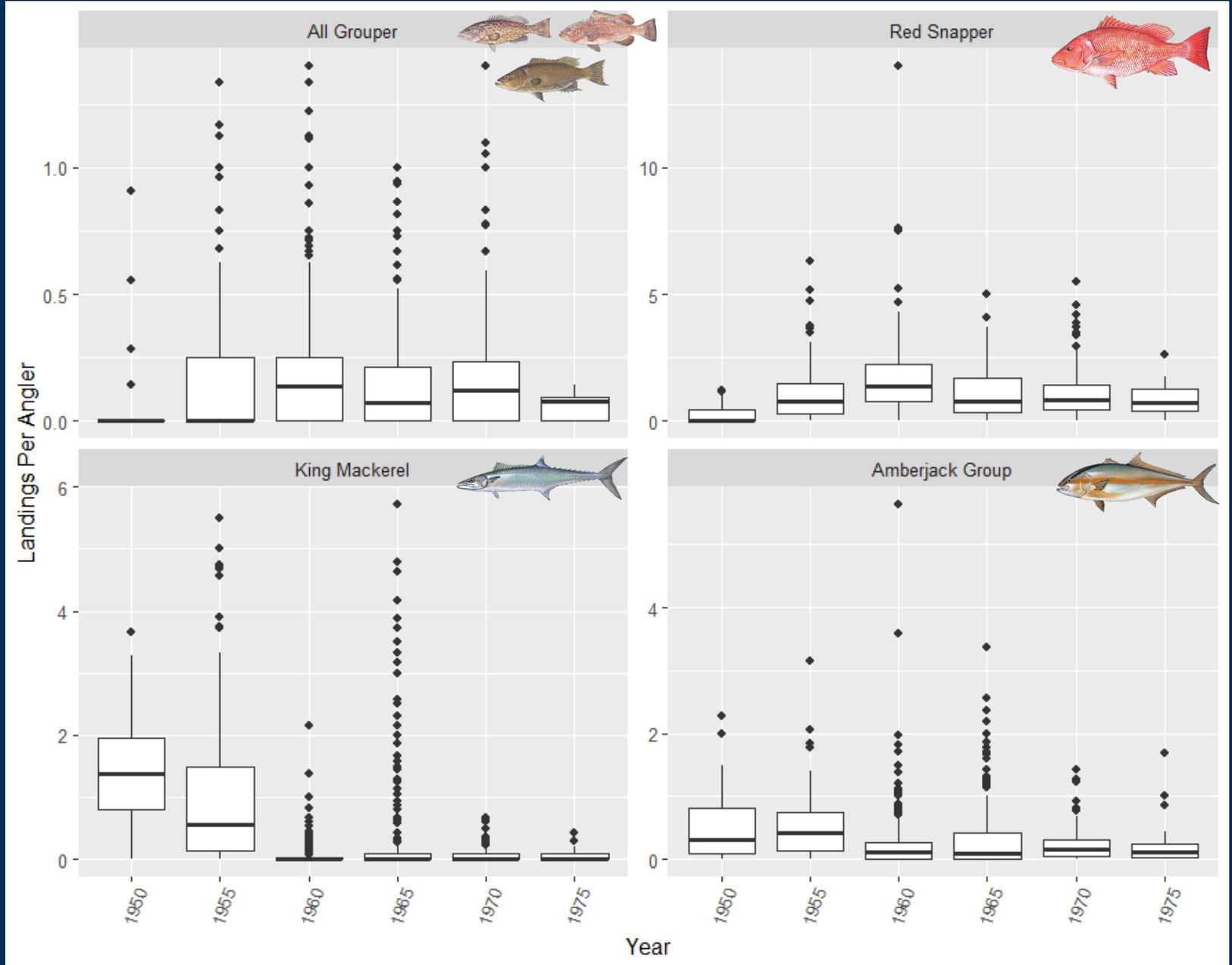
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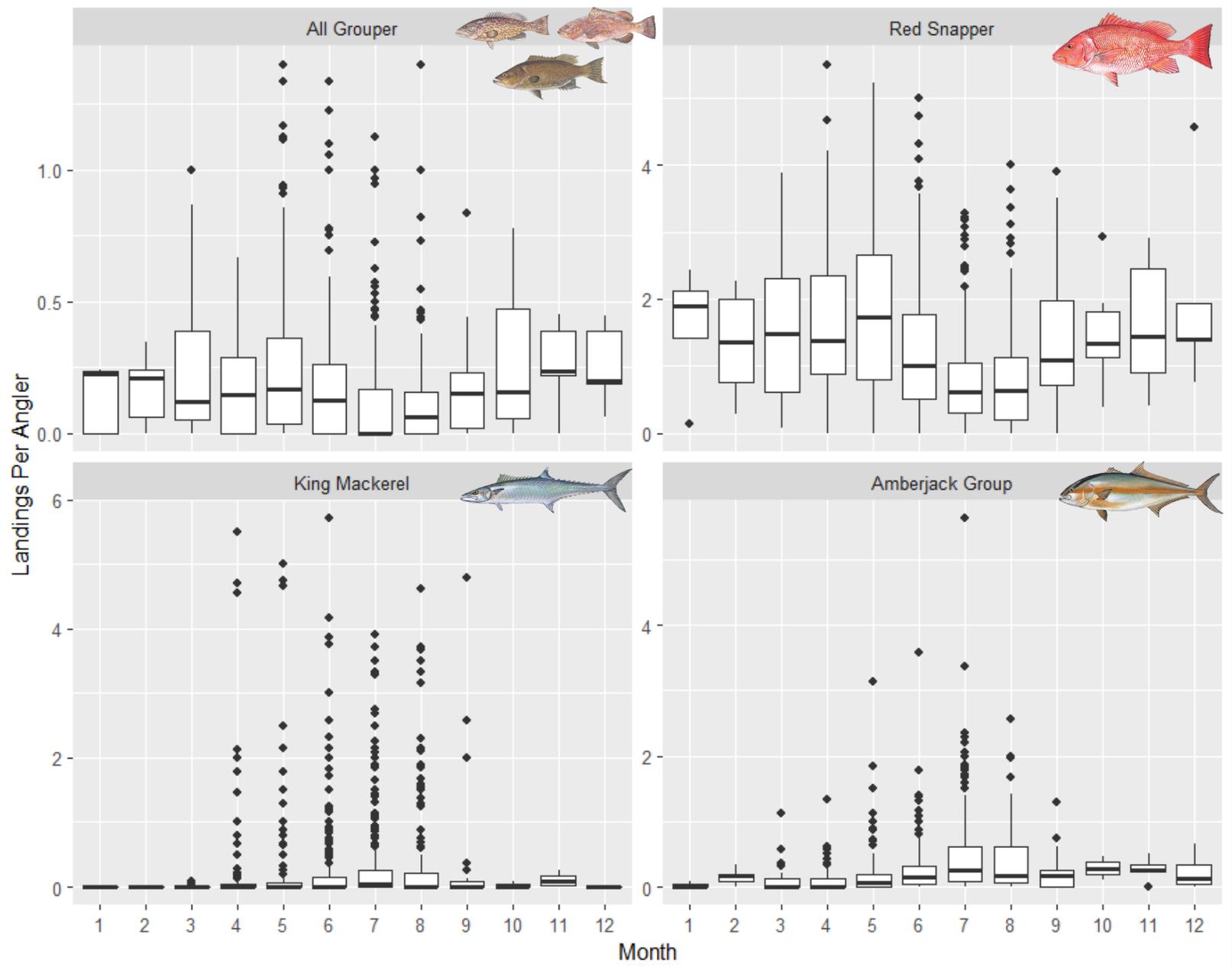
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Landings per angler for mark species in 5-year time blocks



Landings per angler for mark species by month, all years combined



FISHstory: Length Component

- Method developed to measure fish length



Identify scalar &
develop protocol



Test protocol



Train length analysts

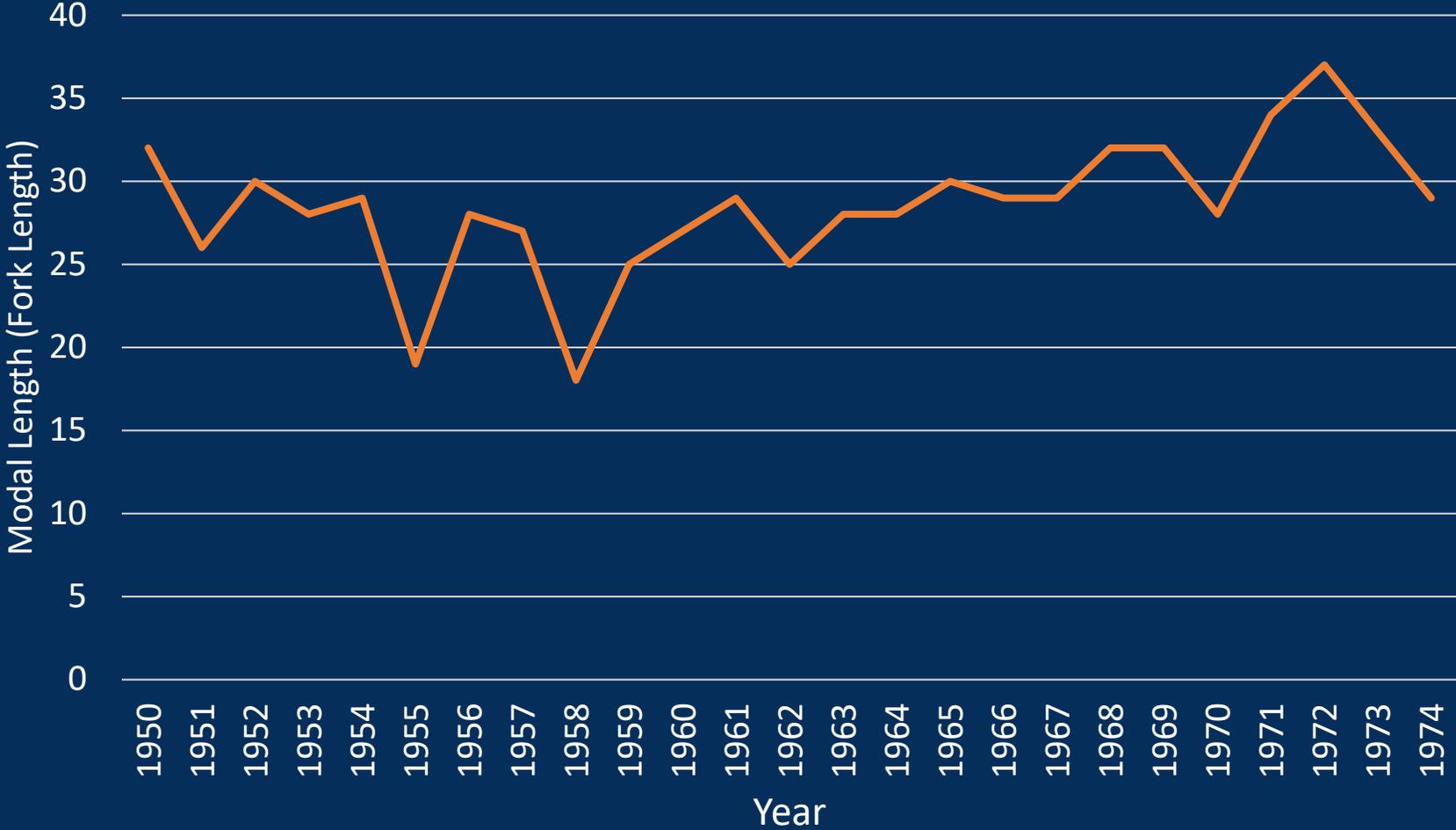


Coordinate & measure
King Mackerel



Share Results

King Mackerel
modal length
by year



FISHstory Project Outreach



Branding & promotional items



Council webpage, social media & newsletter



Presentations at Council & AP meetings



Online blog posts & articles



Online blog posts & articles



Zooniverse talk boards & monthly newsletters



Earth Echo Collaboration



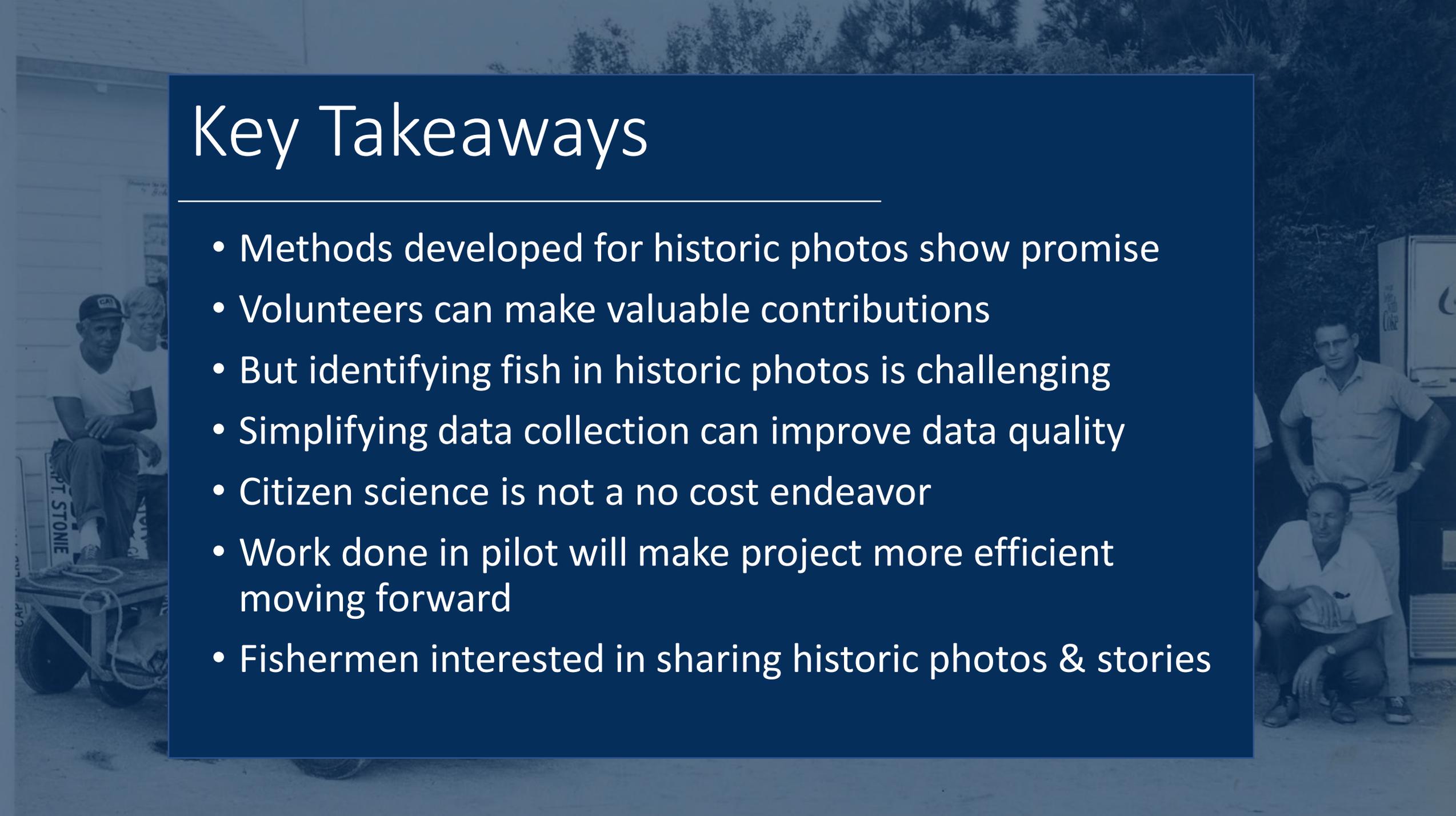
Presentations at conferences



SciStarter Partnership

Key Takeaways

- Methods developed for historic photos show promise
- Volunteers can make valuable contributions
- But identifying fish in historic photos is challenging
- Simplifying data collection can improve data quality
- Citizen science is not a no cost endeavor
- Work done in pilot will make project more efficient moving forward
- Fishermen interested in sharing historic photos & stories



Next Steps

- Is there Council interest in continuing FISHstory project?
- If so, things to consider:
 - Need to pursue additional funding
 - Would make improvements to project based on pilot findings
 - Could pursue additional analyses with existing photos
 - Explore ways to identify and archive additional photos
 - Could consider adding oral history component

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