



COASTAL RESOURCES DIVISION
ONE CONSERVATION WAY · BRUNSWICK, GA 31520 · 912-264-7218

WALTER RABON
COMMISSIONER

DOUG HAYMANS
DIRECTOR

Finfish Advisory Panel

November 21, 2024 – 6:00PM-8:00PM
(Shipman Building, CRH Brunswick)

- 6:00 Welcome
- 6:05 Approve
 - Agenda
 - Draft April 2024 Finfish AP Meeting Summary
- 6:10 ASMFC and SAFMC updates
- 6:25 2025 Pilot Project: Test of Recreational Released Catch Cards
- 6:35 CRD Red Drum Gillnet Results: 2009-2024
- 6:45 ASMFC Red Drum Stock Assessment and Independent Peer Review
- 8:00 Adjourn

Pilot Study – Test Release Catch Card

Purpose: Test a modified design to APAIS that focuses on improving discard data and collecting lengths of fish that are released

Primary focus: Private/Rental

- Mode with highest percent of estimated discards
- Limited time – more efficient to focus on single mode with high interaction rate

Approach: (MA, RI, CT, NY, MD, NC, SC and GA)

- May to November (GA = Total of 50; 5-7 assignments per month)
- Separate draw assignments at primarily PR mode sites (same probability-based sampling design)
- Catch card handed to angler before beginning trip with measuring sticker and pencil
- Angler can return by pre-paid mail or handing to employee if still on site
- Conduct dockside interviews when not handing out cards (potential extra data for estimates, pending NOAA approval)

Benefit:

- New information not currently collected = Length of priority species (can modify list on card) and Depth
- Education/awareness on importance of accurate discard information
- Provide data that can be compared to APAIS to help identify or use to correct bias (rounding, recall)

****Voluntary****

Meant to be self explanatory

Species can be adjusted for Region

99% of trips = 5 or fewer species released

Any more than 20 lengths may be burdensome for angler

TL – in line with regulation, not all fish have forked tail

Feel free to share with your friends, really would like feedback

Marine Angler Released Catch Card (MARC)

Only ONE angler's released fish per card and for this trip only.

Control Number:

12345

Trip Information

Fishing Mode <input type="checkbox"/> Boat <input type="checkbox"/> Shore	Targeted Species	Average Depth Fished (ft)																					
Distance from Shore <input type="checkbox"/> Inland <input type="checkbox"/> 3 Miles or less (ocean) <input type="checkbox"/> 3 Miles or more (ocean)	Released Catch: For ALL fish released: Record the species name and track the number released alive or dead using tally marks below.																						
Trip End Time (return to shore)	<table border="1"><thead><tr><th>Species</th><th># Released Alive</th><th># Released Dead</th></tr></thead><tbody><tr><td><i>Spot (example)</i></td><td> </td><td> </td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr></tbody></table>	Species	# Released Alive	# Released Dead	<i>Spot (example)</i>																		
Species	# Released Alive	# Released Dead																					
<i>Spot (example)</i>																							
Hours Fished (nearest 1/2 hour)																							
I did not release any fish today <input type="checkbox"/>																							

Length of Fish Released (Inches)

(Total length rounded up to the nearest 1/4 inch)

Species	Total Length (1/4 inch)	Species	Total Length (1/4 inch)

For detailed instructions on how to fill out this card, please scan QR code.



List of priority species for lengths:

Black Sea Bass	Weakfish	Spotted Seatrout
Bluefish	Cobia	Gray Triggerfish
Haddock	Red Drum	Red Porgy
Spanish Mackerel	Tautog	Vermilion Snapper
Striped Bass	Summer Flounder	



Marine Sportfish Population Health Survey

Ryan Harrell
Finfish Advisory Panel
November 21, 2024

Mission Statement:

To balance coastal development and protection of the coast's natural assets, socio-cultural heritage and recreational resources for the benefit of present and future generations.

Marine Sportfish Population Health Survey (MSPHS)

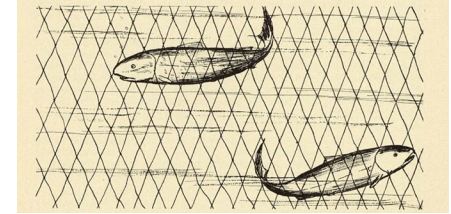
- Used to collect information on the biology and population dynamics of recreationally important estuarine finfish
- Began in 2003 – Re-analyzed in 2009
- Sampling ongoing in three Georgia estuaries:
 - Altamaha – 2003
 - Wassaw – 2003
 - St. Andrew – 2019
- All catch is identified, counted, measured in fork length (mm), and released



Fishery Independent – MSPHS Netting Surveys

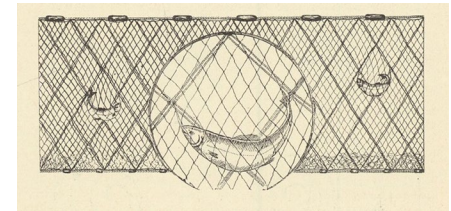
- **Gillnet Survey**

- June through August
- 300 ft x 9 ft with 2.5 in stretched mesh
- 36 sets monthly in each sound system
- Targets young-of-the-year Red Drum
- Information collected on other finfish species is still useful when considering relative abundance, seasonal trends, and location of occurrence

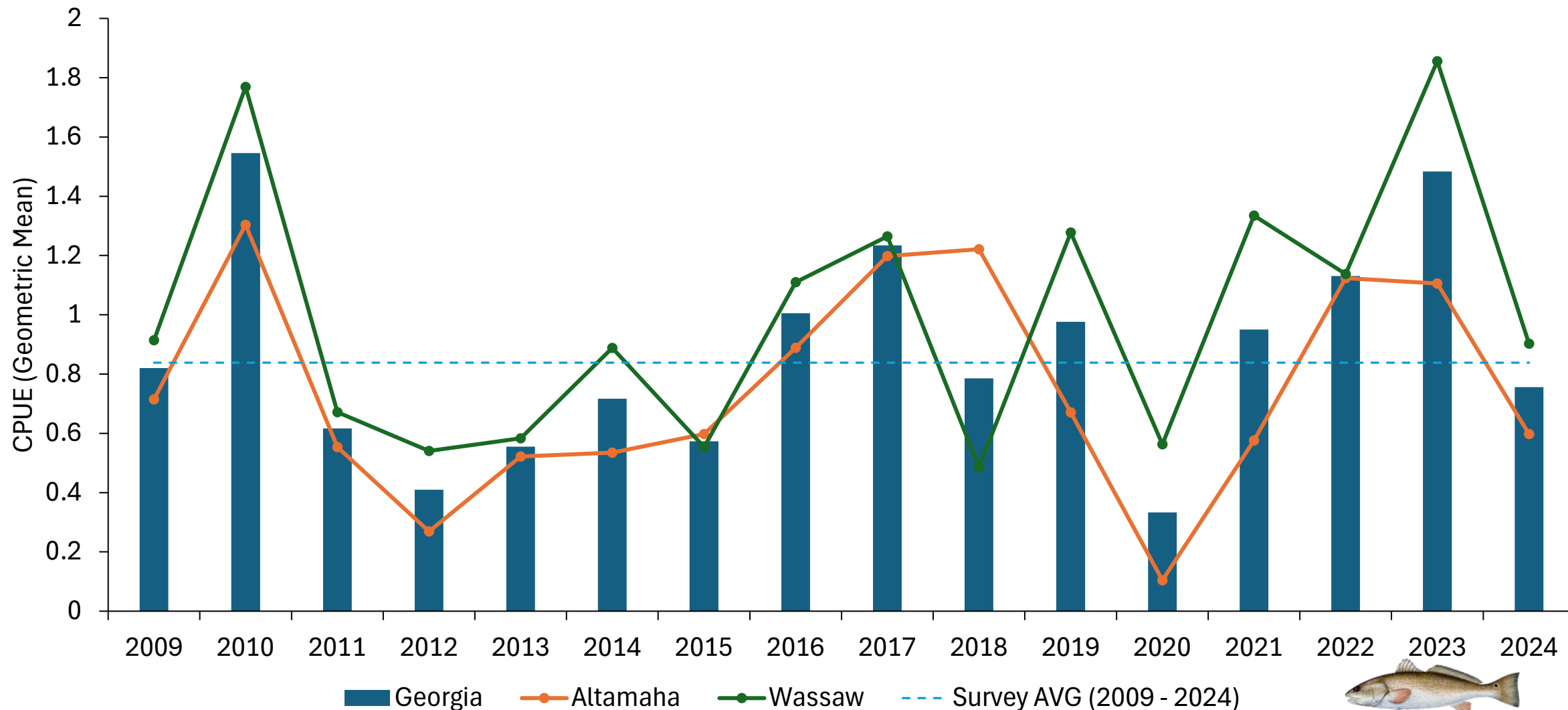


- **Trammel Net Survey**

- September through November
- 300 ft x 7ft with 14 in stretched outer panels and 2.75 stretched inner mesh
- 25 sets monthly in each sound system
- Targets multiple species (Spotted Seatrout primary target)



Gillnet Survey Results – Red Drum





Atlantic States Marine Fisheries Commission 2024 Red Drum Benchmark Stock Assessment



November 21, 2024
Presented by Jared Flowers



Prepared By...

Stock Assessment Subcommittee

Joey Ballenger, PhD, SCDNR, Chair

Tracey Bauer, ASMFC

Jared Flowers, PhD, GA DNR

Angela Giuliano, MD DNR

Jeff Kipp, ASMFC

C.J. Schlick, PhD, SCDNR

Ethan Simpson, VMRC

Chris Swanson, FL FWC

Technical Committee

Ethan Simpson, VMRC, Chair

Joey Ballenger, PhD, SCDNR

Sara Burnsed, FL FWC

Matthew Jargowsky, MD DNR

Chris Kalinowsky, GA DNR

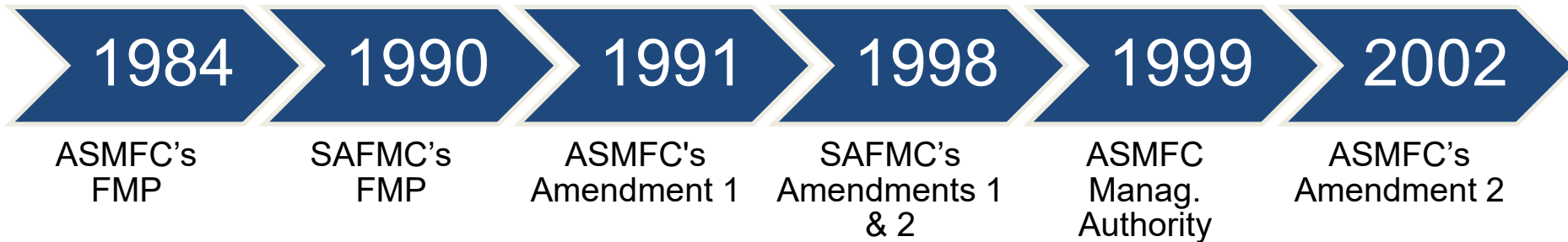
Cara Kowalczyk, NCDMF

Devon Scott, DE REC

Alissa Wilson, NJ DEP



Regional Fisheries Management



ASMFC Interstate Fisheries Management Plan

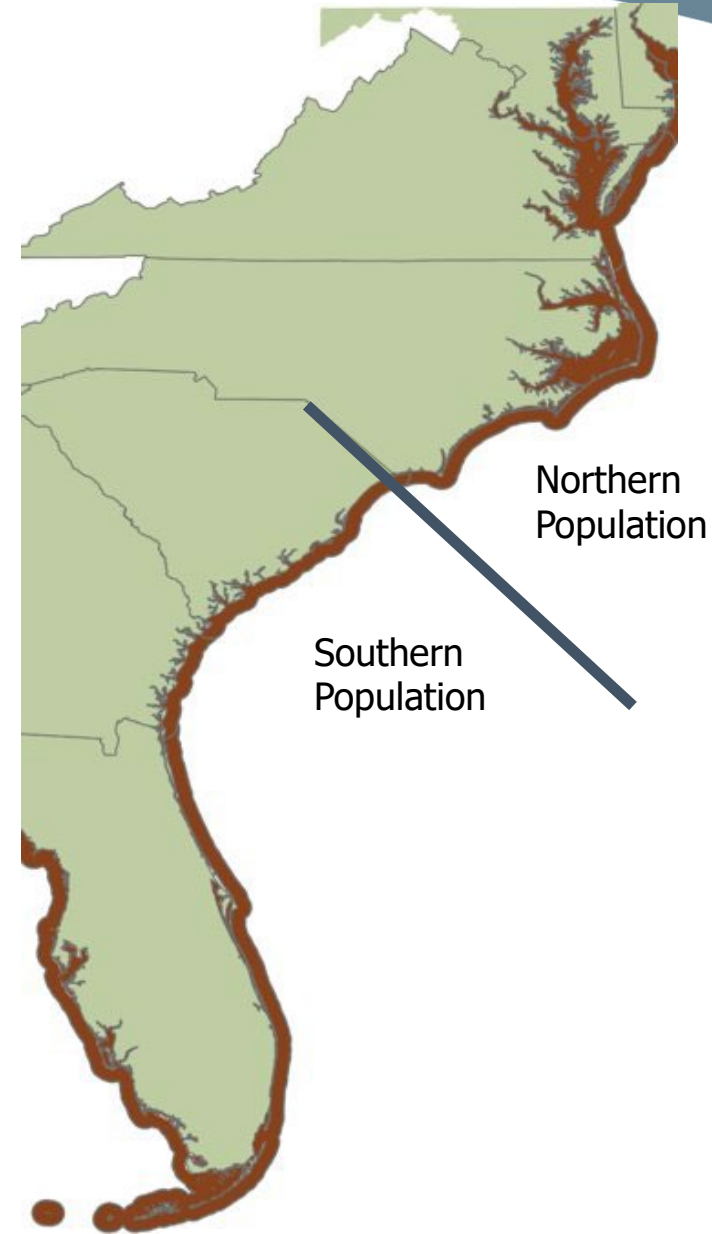
- Last amended in 2002

Goal: Spawning potential above 30% of potential in the absence of fishing

- Target 40% of potential in absence of fishing

Two Atlantic Stocks

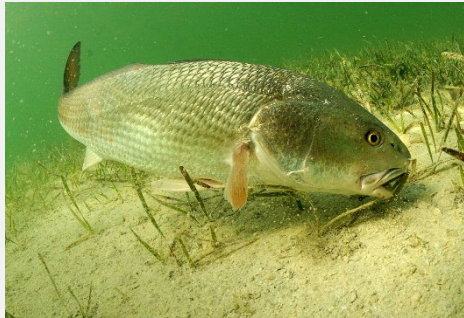
- **Northern Stock**
 - SC/NC border north
 - NC, VA, MD, PRFC, DE, NJ
- **Southern Stock**
 - SC/NC border south
 - SC, GA, east coast of FL



Stock Assessments

Evaluate the health of a population for preservation of fisheries for current and future generations

ABUNDANCE + BIOLOGY + CATCH



Fishery-independent or fishery-dependent monitoring data



Information on growth, maturity, and natural mortality.



Direct Harvest + Dead Discards = Total Removals

= STOCK ASSESSMENT



ASMFC Stock Assessments



2017 ASMFC Stock Assessment

- Overfishing not occurring
- Unable to determine overfished status

2022 Simulation Assessment

- Performed to identify assessment model for upcoming benchmark assessment



2022 Simulation Assessment

Three modeling frameworks

- Model-three stock indicators (e.g., traffic light analysis)
- Juvenile population dynamics model (e.g., SCA used in ASMFC 2017)
- Integrated stock population dynamics model (e.g., Stock Synthesis)

Recommendations

- Do **not** continue pursuit of custom SCA model
 - Model used in SEDAR 18 (2009) and ASMFC (2017) assessments
- Prioritize development of Stock Synthesis (SS) models
 - Output (e.g., F, SPR, SSB) can be used for stock status determination
 - Including metrics related to SSB and SSB status
- Develop the traffic light analysis (TLA) as a complementary analysis



2024 Benchmark Assessment

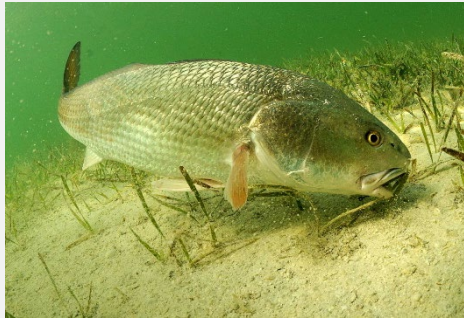
Multi-state effort

- Data and personnel from each southern state
- Focused on SS and TLA approaches
- Terminal year of 2021
- Data representing different life stages available

Stock Synthesis

A statistical age-structured population modeling framework that has been applied in a wide variety of fish assessments

ABUNDANCE + BIOLOGY + CATCH



Fishery-independent or fishery-dependent monitoring data



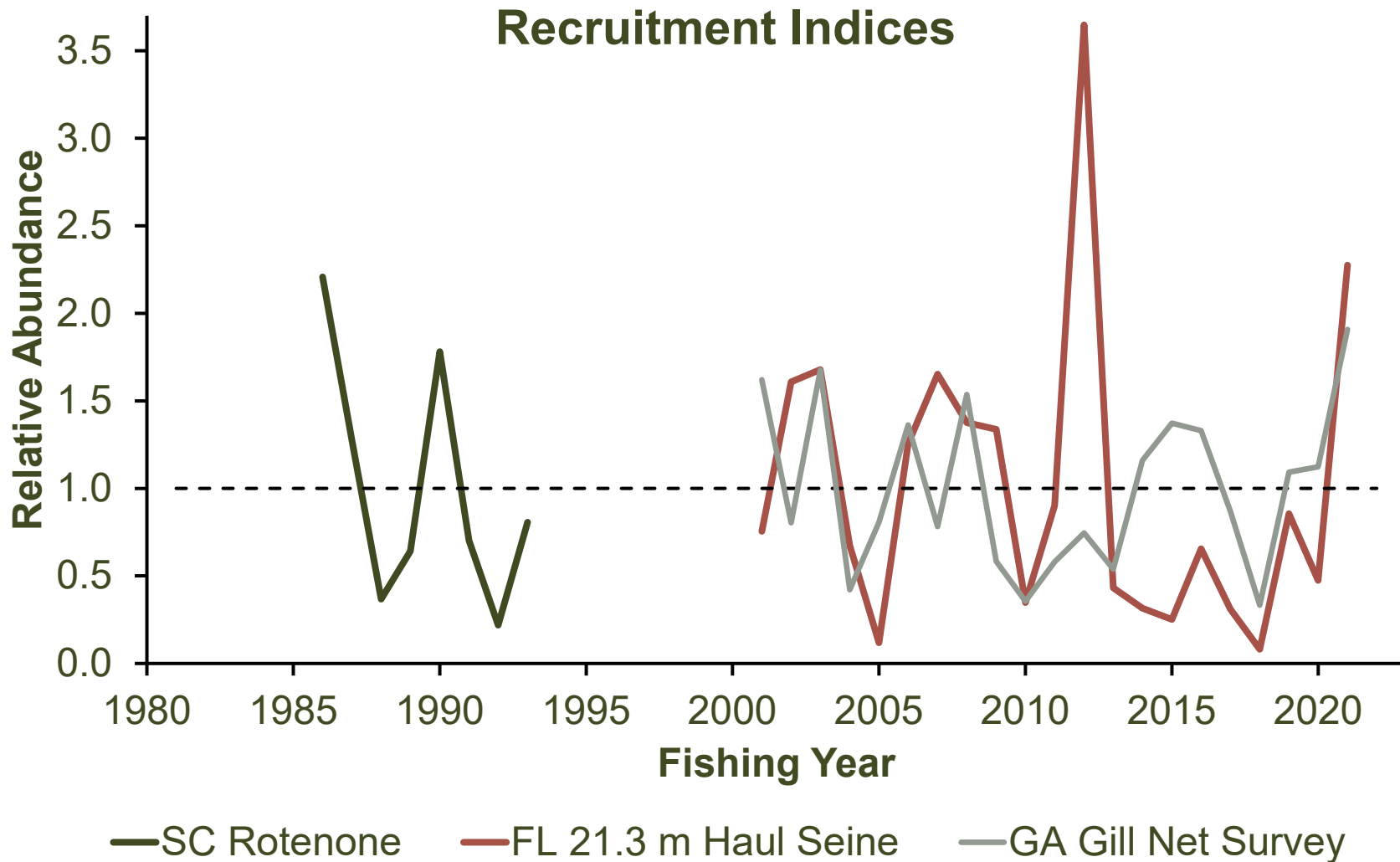
Information on growth, maturity, and natural mortality.



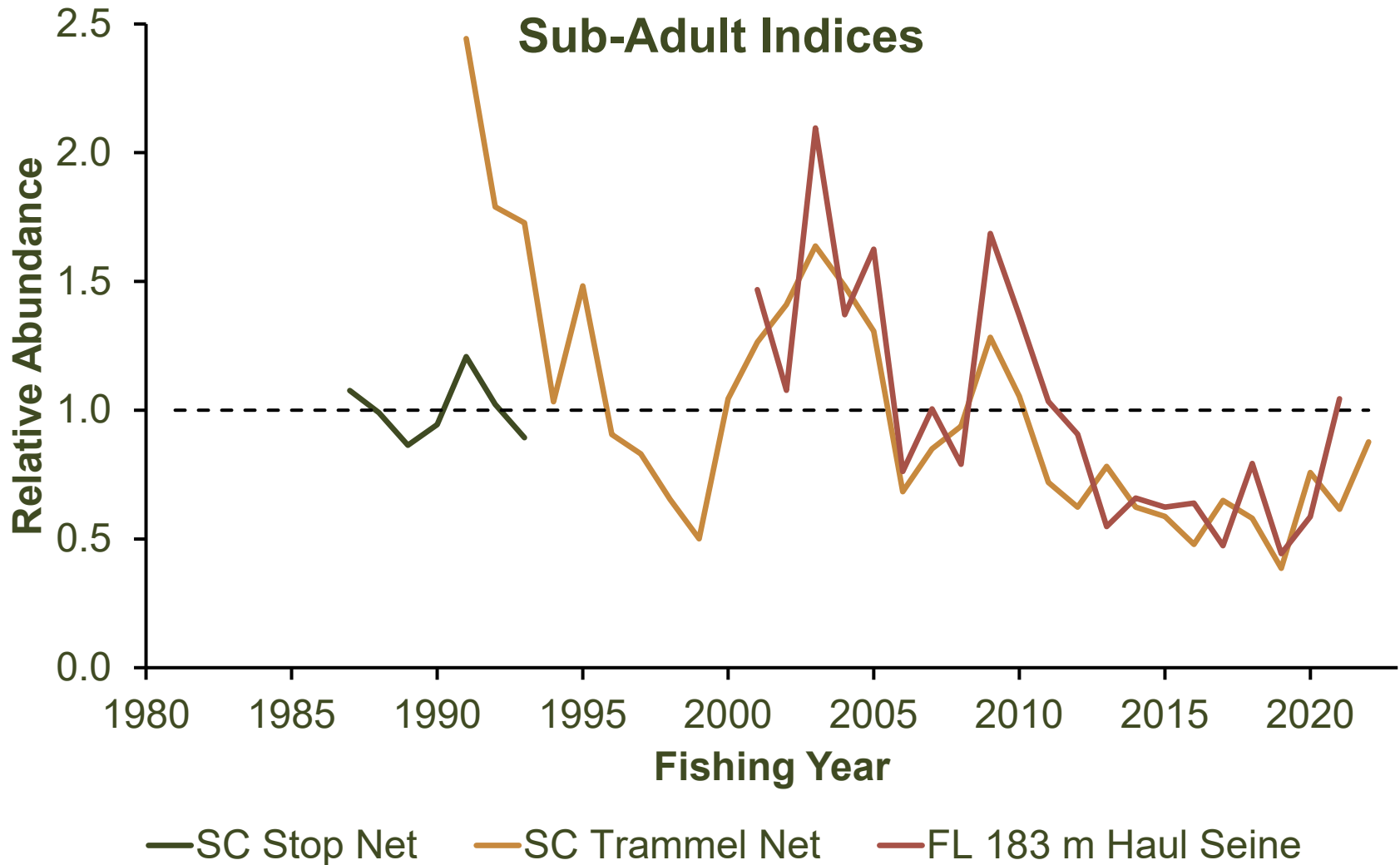
Direct Harvest + Dead Discards = Total Removals

= STOCK ASSESSMENT

Abundance: Age-0 (Recruitment)

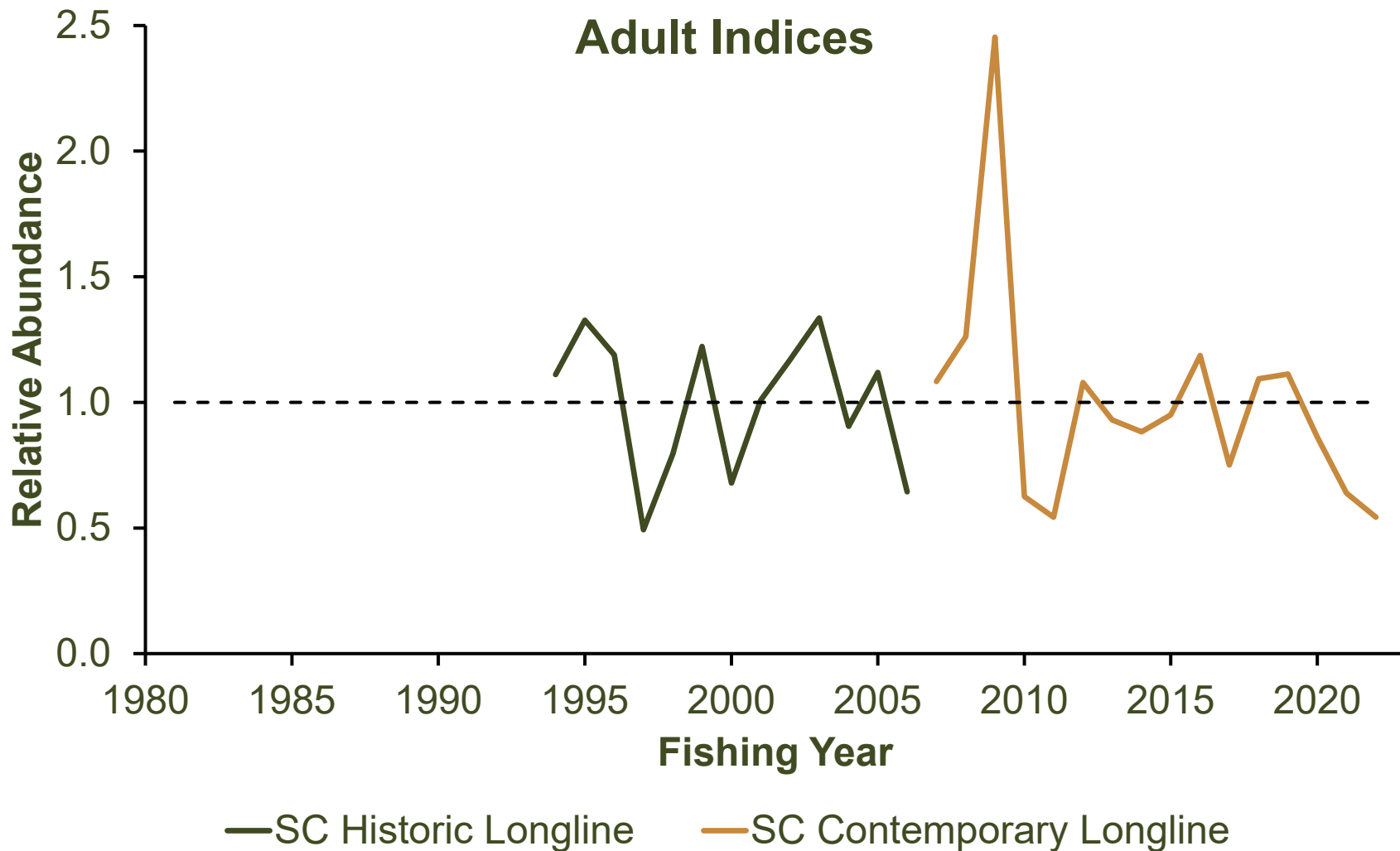


Abundance: Subadult

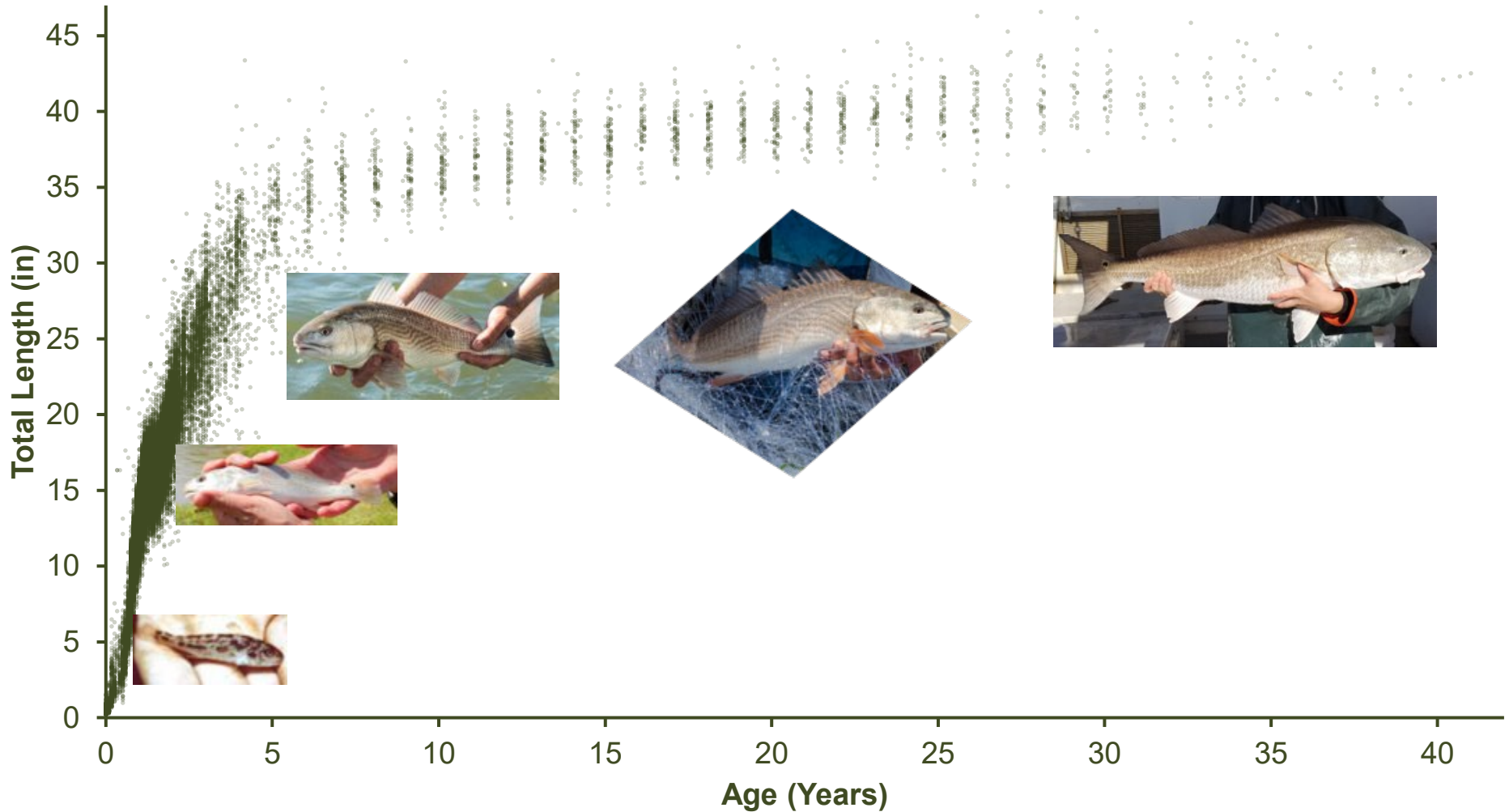


Abundance: Adults

Adult Indices



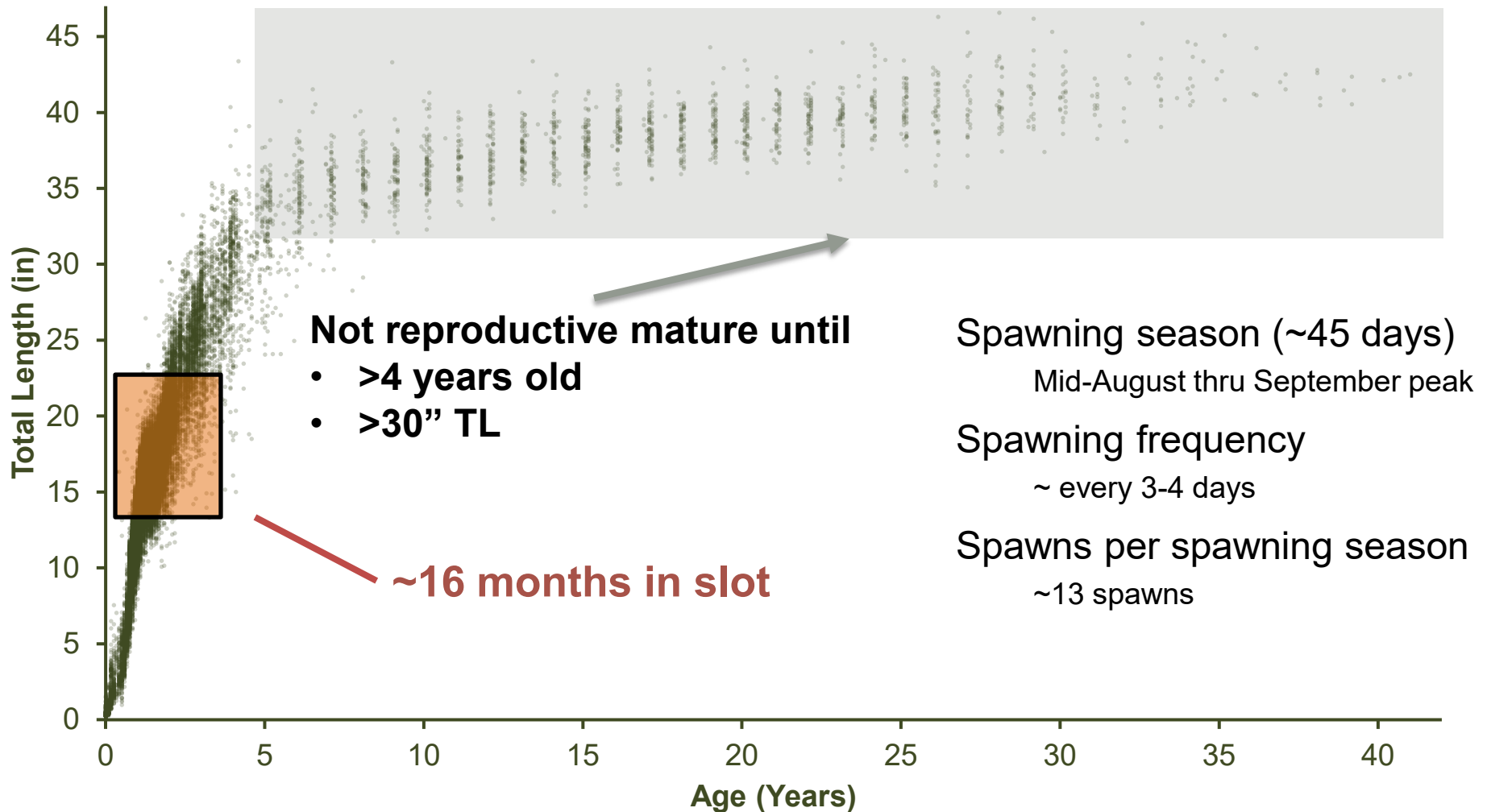
Biology: Growth



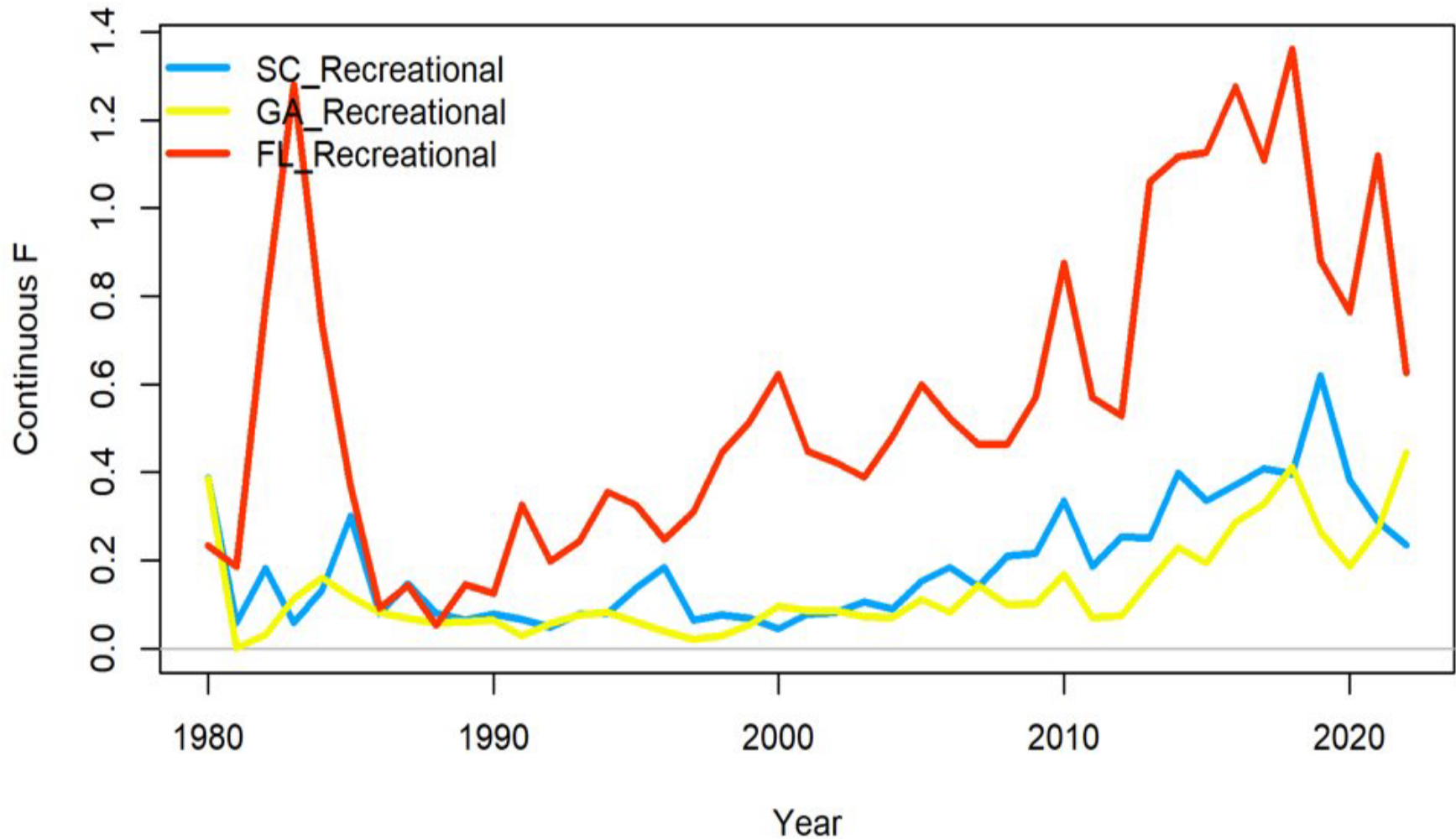
Biology: Growth



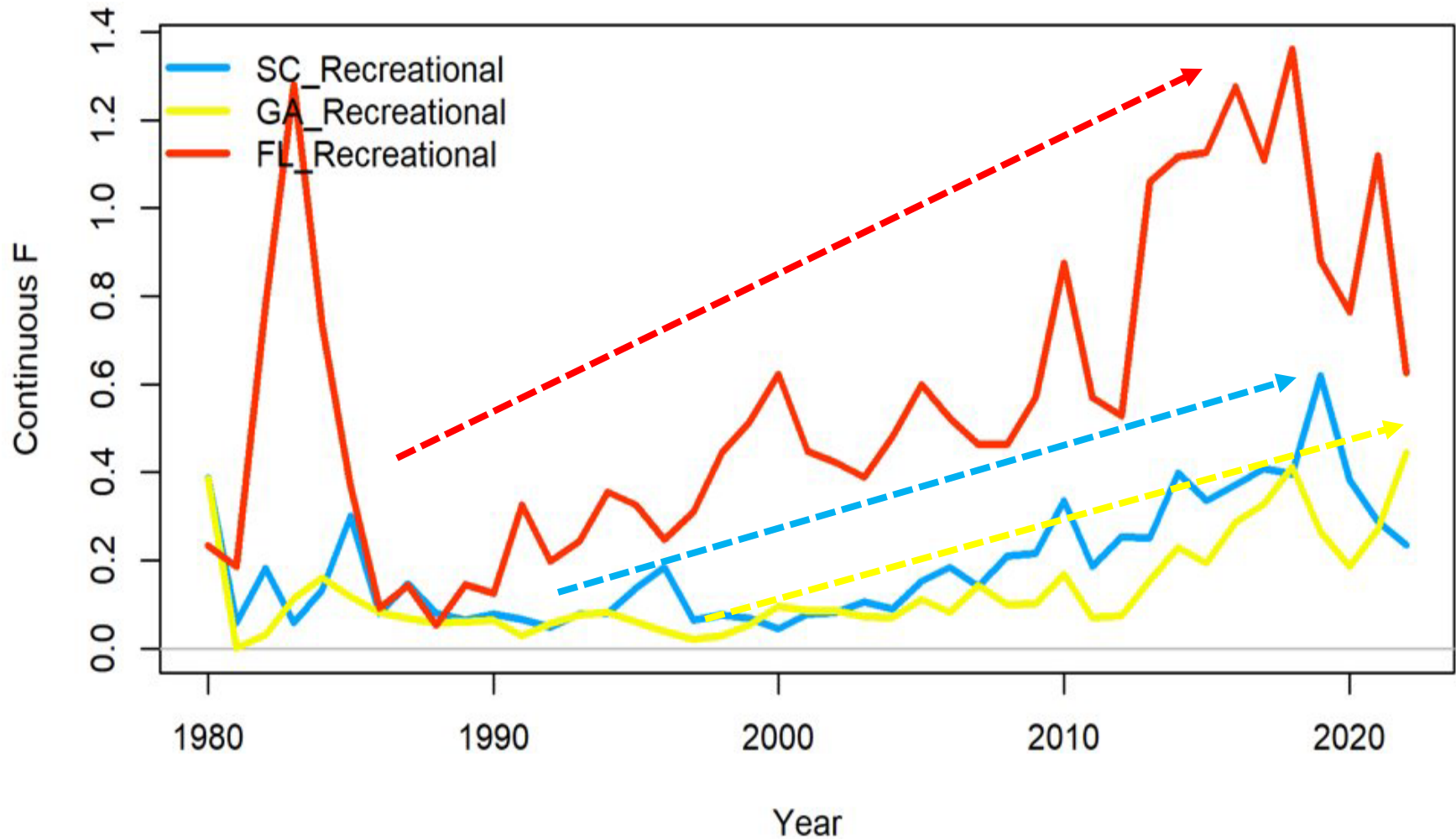
Biology: Growth



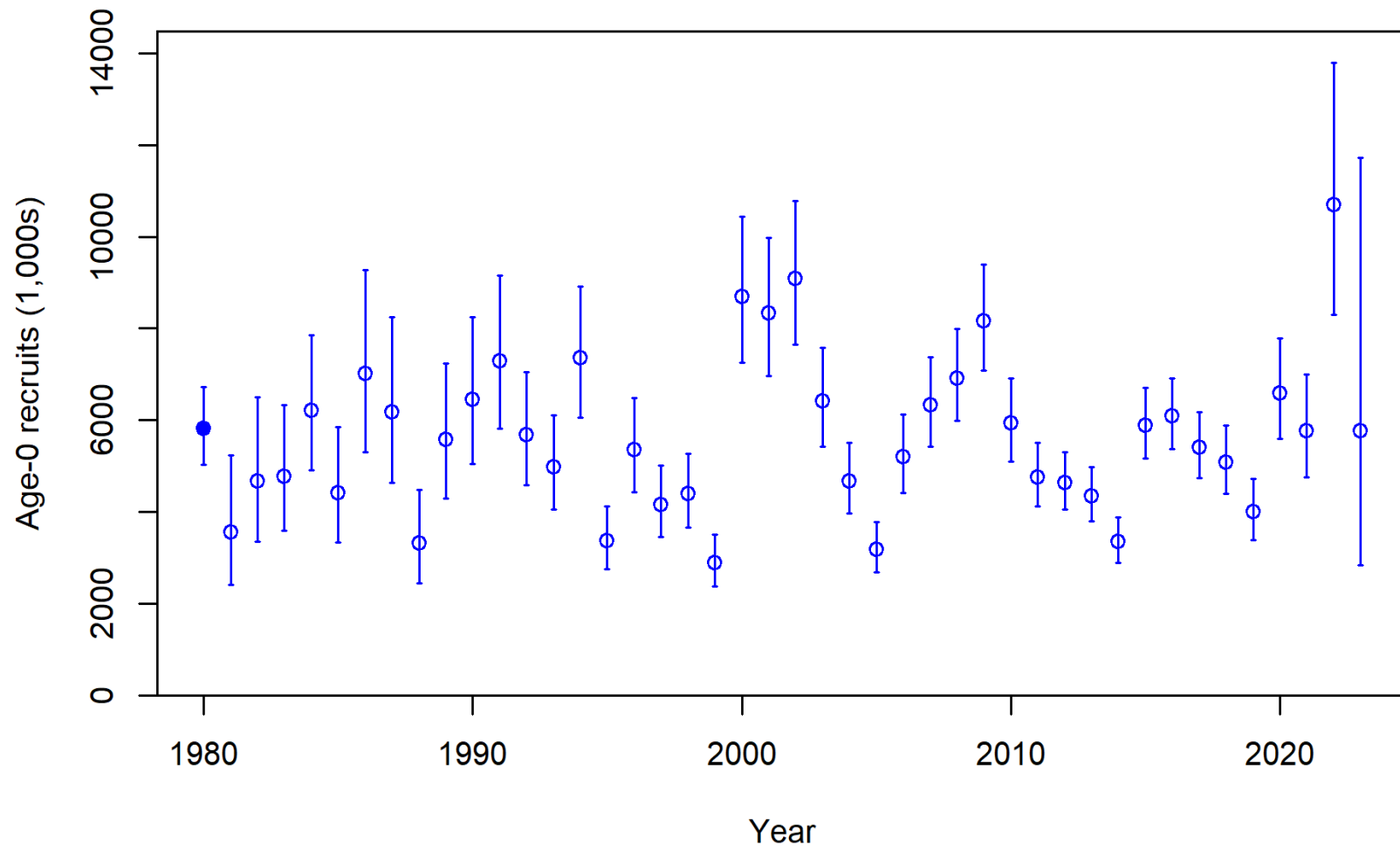
Catch: Total Removals



Catch: Total Removals



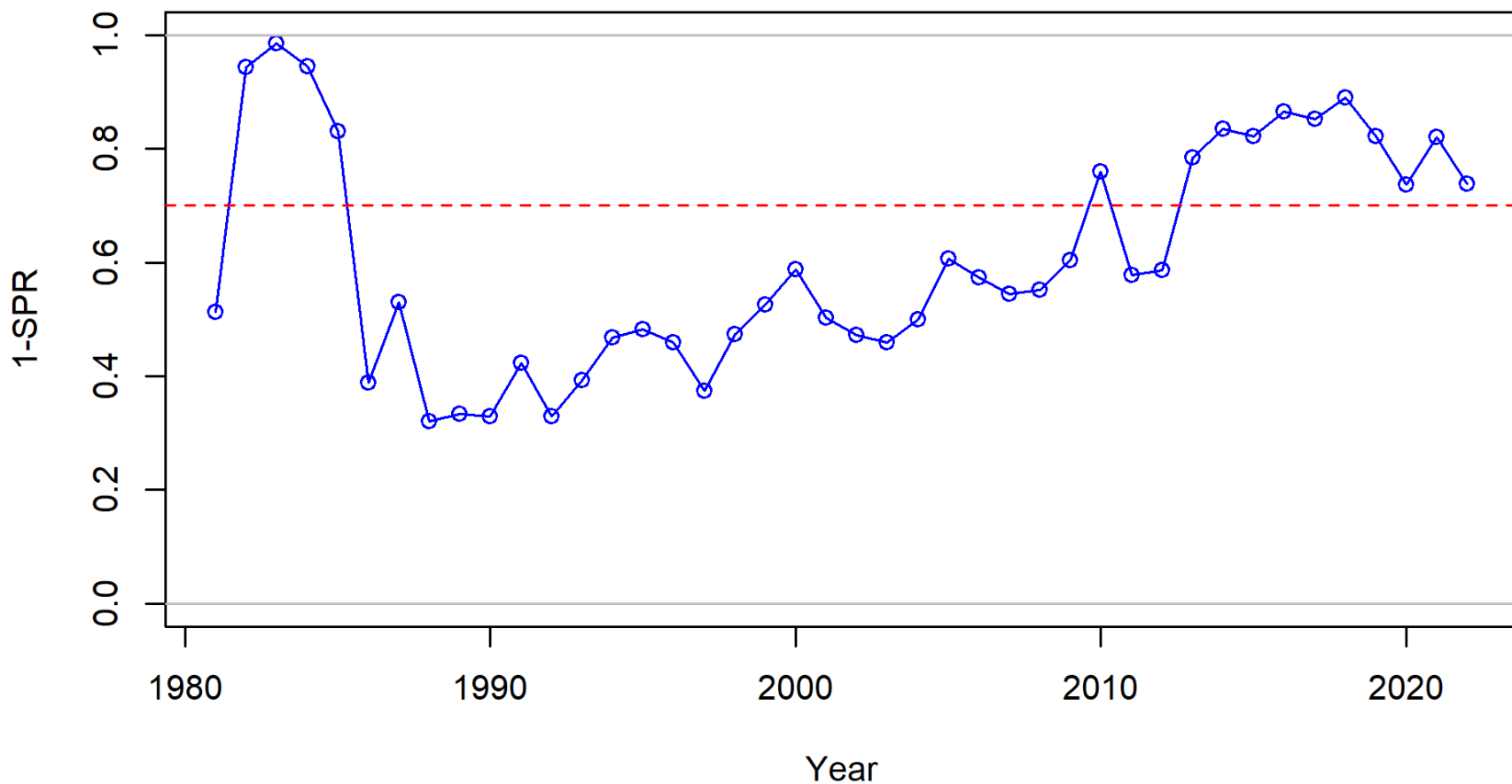
Results: Recruitment



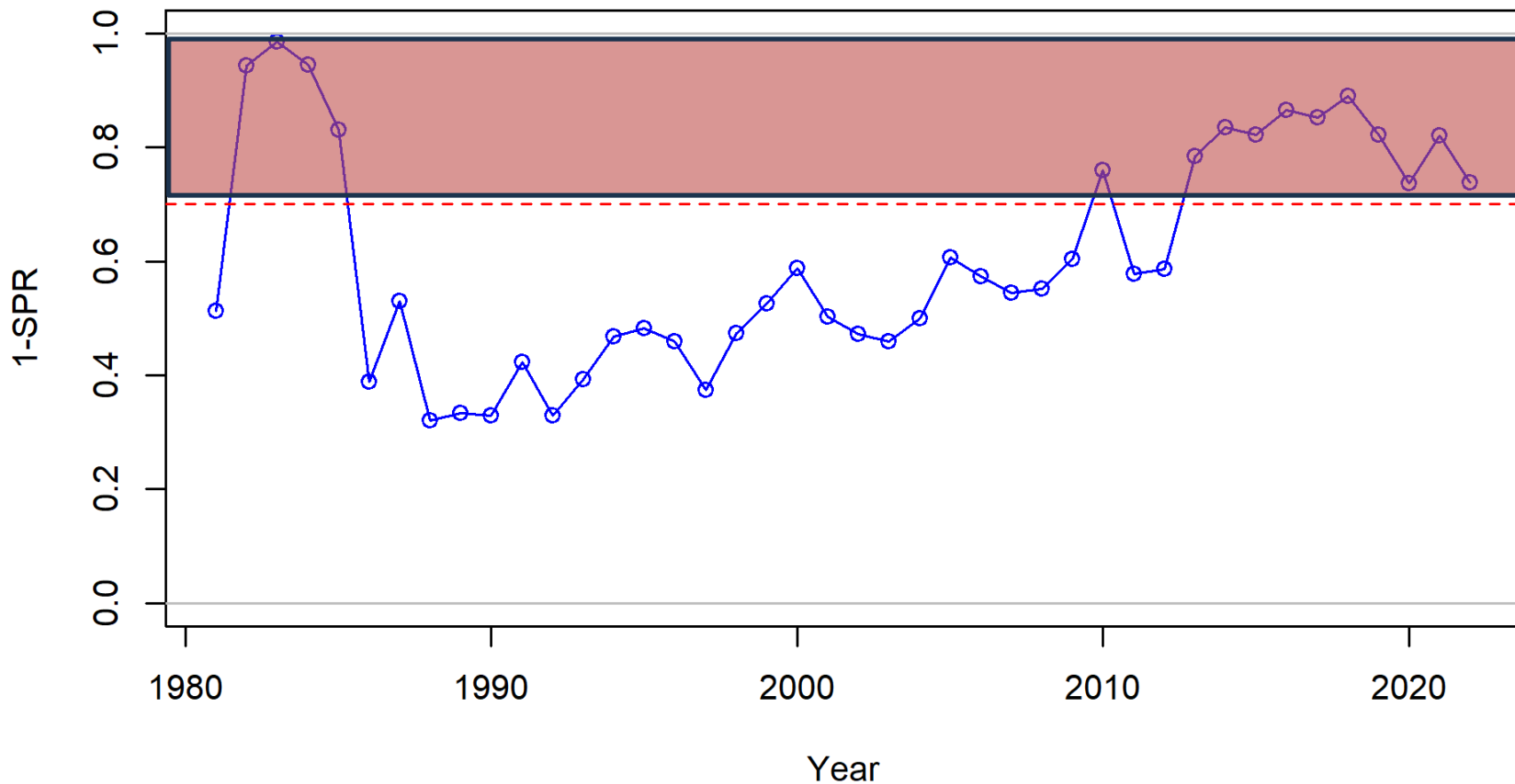
Stock Synthesis Reference Points

- Overfishing: Defined in current Interstate FMP
 - Threshold = $SPR_{30\%}$ ($F_{30\%}$)
 - Target = $SPR_{40\%}$ ($F_{40\%}$)
- Overfished: Not currently defined in Interstate FMP
 - Threshold = $SSB_{30\%}$
 - Target = $SSB_{40\%}$
- Status Determination
 - Used three-year moving average (2019-2021)

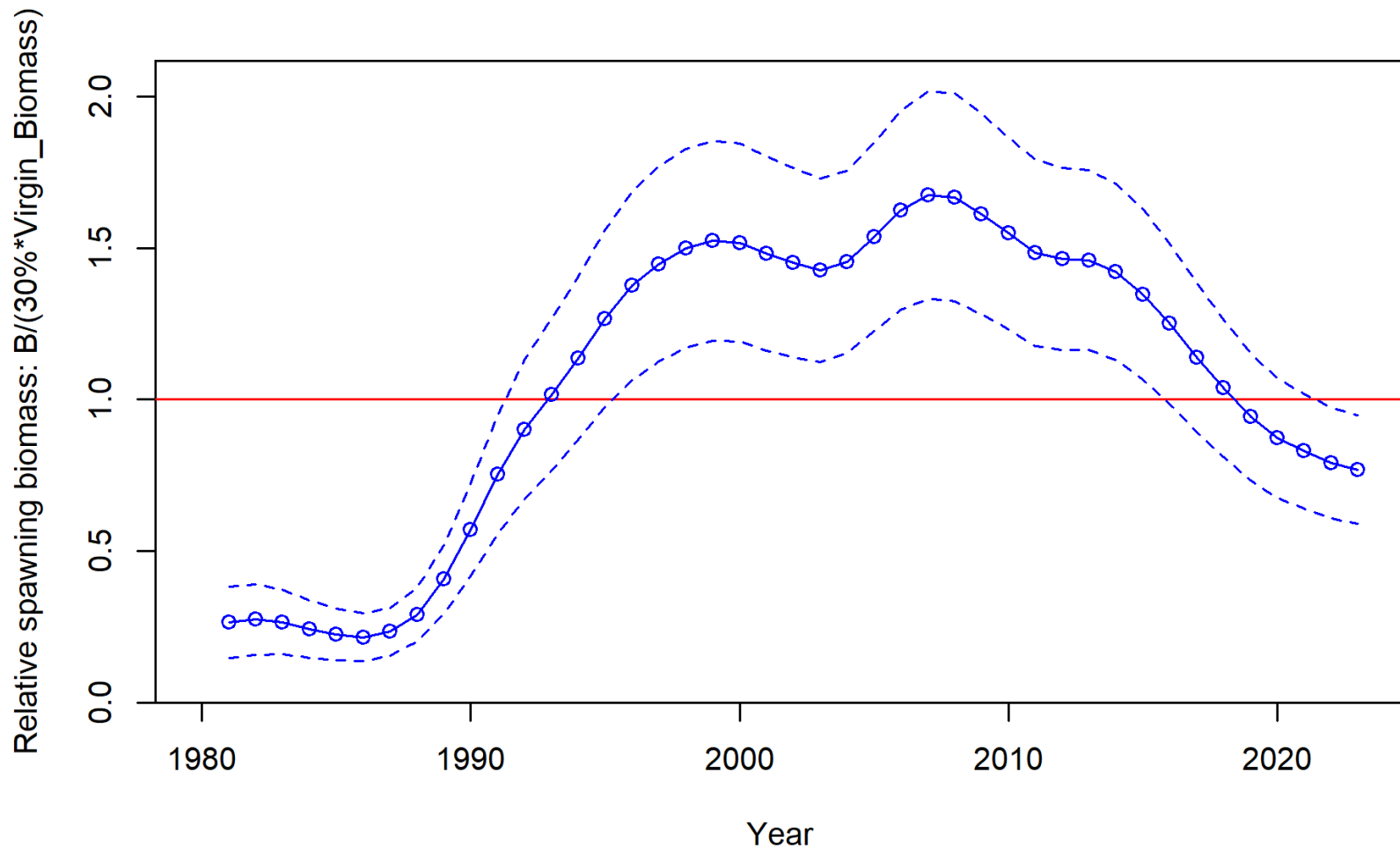
Results: Spawning Potential Ratio



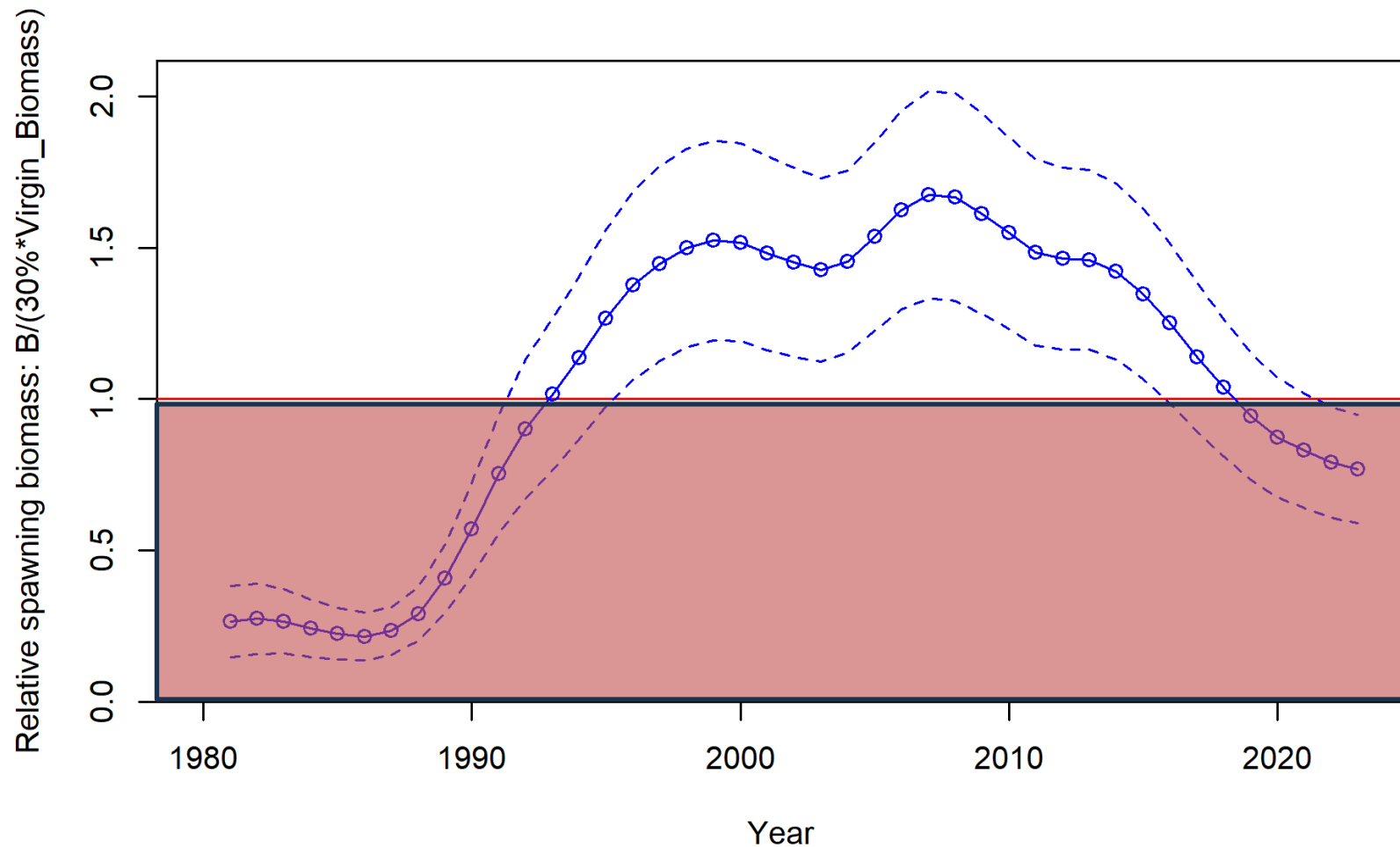
Results: Spawning Potential Ratio



Results: Spawning Stock Biomass



Results: Spawning Stock Biomass



Traffic Light Analysis

- Uses traffic light colors to represent the state of a fishery based on appropriate indicators (i.e., an index or time-series of relevant data)
- Can provide an information basis for management decisions not constrained by a model-based framework



Traffic Light Analysis

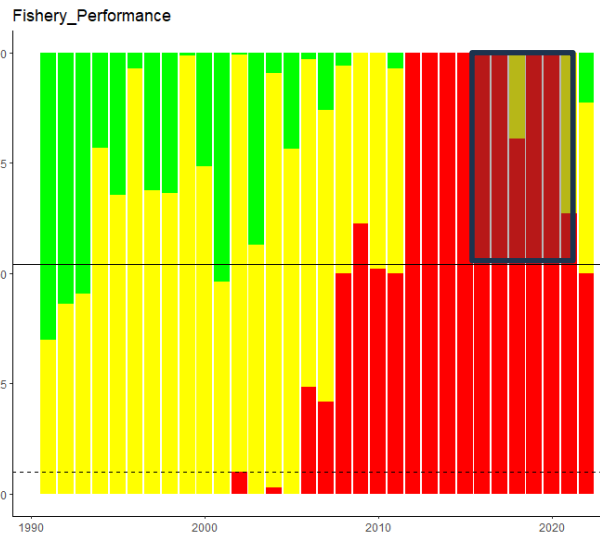
- Overfishing
 - Fishery performance red in any of the past 3 years
- Overfished
 - Adult abundance red in any of the past 3 years
- Additional Management Triggers
 - Fishery performance yellow any of the past 3 years + recruitment red for 5 consecutive years
 - Both fishery performance + adult abundance yellow any of past 3 years
 - Recruitment red for 5 consecutive years + adult abundance yellow in any of the past 3 years

Traffic Light Analysis

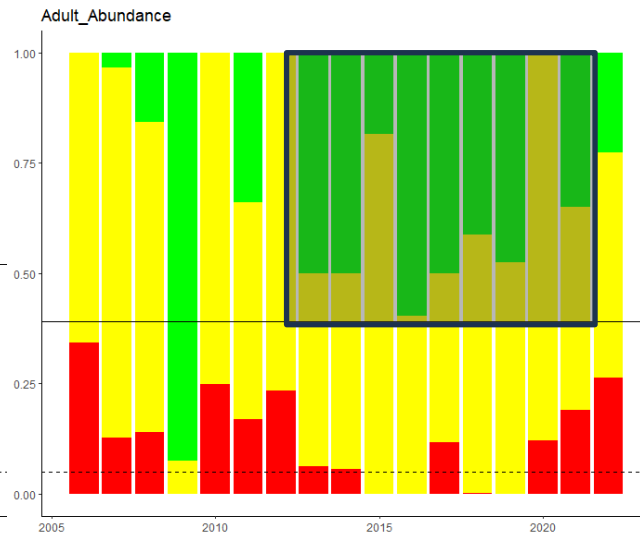
Management Trigger Time Frame
 Moderate (yellow or red in all years)
 Elevated (red in all years)



Years = 1
 Threshold = 0.05



Years = 6
 Threshold = 0.52



Years = 9
 Threshold = 0.39



Traffic Light Analysis

Year	Recruitment	Adult Abundance	Fishery Performance
2018	Elevated Action	Moderate Action	Elevated Action
2019	Elevated Action	Moderate Action	Elevated Action
2020	Elevated Action	Moderate Action	Elevated Action
2021	Elevated Action	Moderate Action	Elevated Action

- **Overfishing**
 - Fishing performance red for at least 1 of the last 3 years
- **Not Overfished**
 - Adult Abundance not red for at least 1 of last 3 years
 - 2 additional TLA management triggers using adult abundance triggered



Conclusion and Next Steps

- Stock is overfished and overfishing is occurring
 - Assessment passed peer review
 - SS3 accepted by ASMFC Sciaenids Board for management
- Board requested additional information to inform management

Conclusion and Next Steps

- Board requested additional information to inform management
 - Request for SAS/TC to produce the static SPR for a range of slot size limits (between 14" and 27") associated with bag limits ranging from 0 to 5 fish per person*
 - Can SPR target projections be met with various bag limits and slot limits?
- Board decisions will ultimately determine what changes GA does or does not have to make



Questions

CJ Schlick

schlickc@dnr.sc.gov

843-735-9090

Jared Flowers

jared.flowers@dnr.ga.gov

912-223-0030