

C3 Joint Groundfish November 2023 Plan Team Report

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NOAA
FISHERIES



December 2023, Presentation to the Council

GF Plan Team Meetings, November 13-17th, 2023

Joint Meeting of the Groundfish Plan Teams

Plan Team Report

November 13, 2023

BSAI Groundfish Plan Team Members:

Steve Barbeaux	AFSC REFM (co-chair)	Kirstin Holsman	AFSC REFM
Kalei Shotwell	AFSC REFM (co-chair)	Phil Joy	ADF&G
Cindy Tribuzio	AFSC ABL (vice chair)	Andy Kingham	AFSC FMA
Diana Stram	NPFMC (coordinator)	Beth Matta	AFSC REFM
Lukas DeFilippo	AFSC ABL	Andrew Seitz	UAF
Allan Hicks	IPHC	Jane Sullivan	AFSC ABL
Lisa Hillier	WDFW	Steven Whitney	NMFS AKRO

GOA Groundfish Plan Team Members:

Jim Ianelli	AFSC REFM (co-chair)	Abby Jahn	NMFS AKRO
Chris Lunsford	AFSC ABL (co-chair)	Sandra Lowe	AFSC REFM
Sara Cleaver	NPFMC (coordinator)	Nat Nichols	ADF&G
Kristan Blackhart	NMFS OS&T	Cecilia O'Leary	AFSC RACE
Craig Faunce	AFSC FMA	Jan Rumble	ADF&G
Lisa Hillier	WDFW	Paul Spencer	AFSC REFM
Pete Hulson	AFSC ABL	Ben Williams	AFSC ABL



Joint Plan Team Meeting overview and agenda

Overview

Date: November 13th

Place: Seattle and online

Agenda for Joint Teams

Sablefish (+ESP)

Economic update

Sculpins

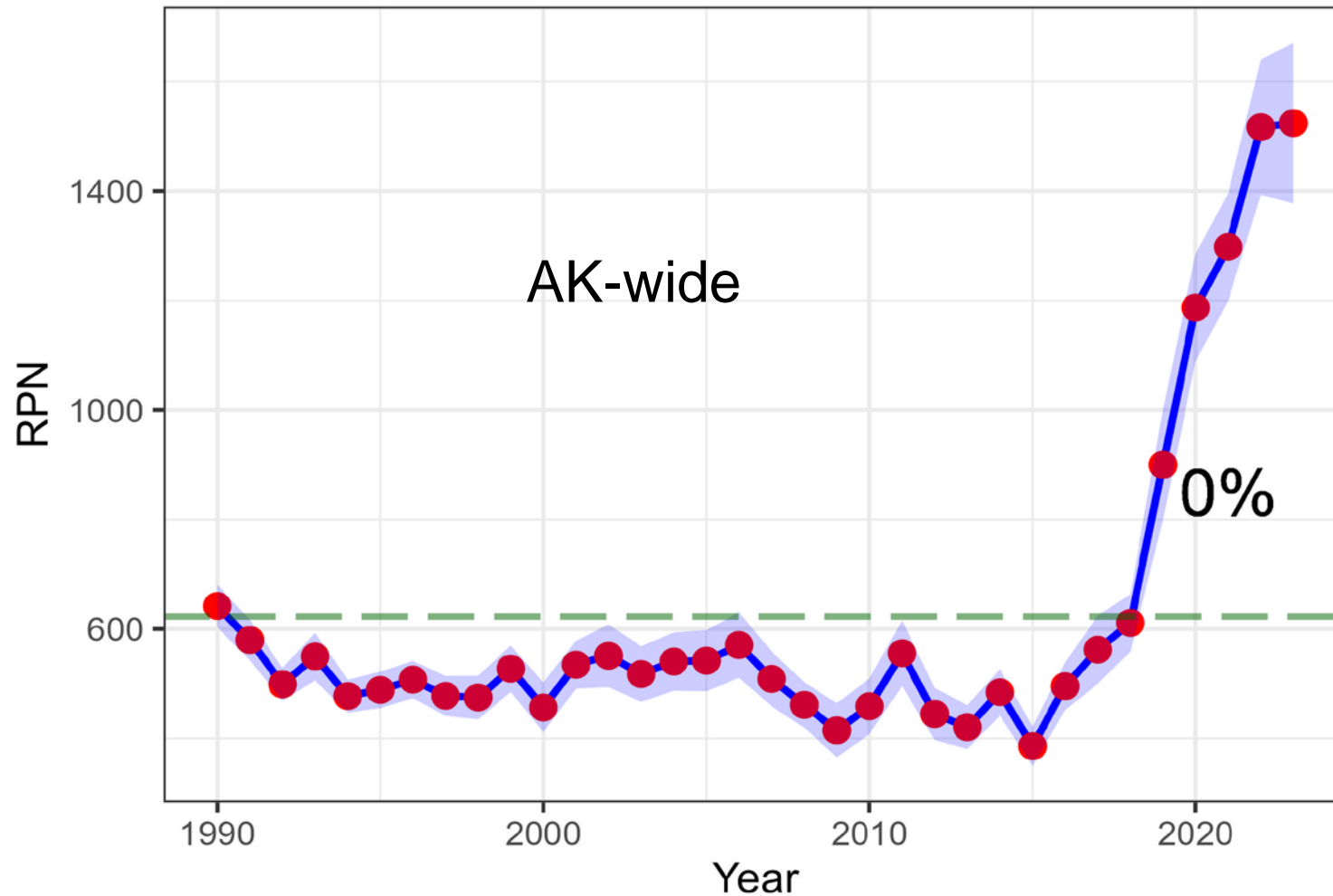
Joint Plan Team General recommendation partial (harvest projection) assessment reviewed in Sept/Oct

The Team recommended the *AFSC consider the feasibility of producing harvest projection assessments* in time for the **September Plan Team** meeting

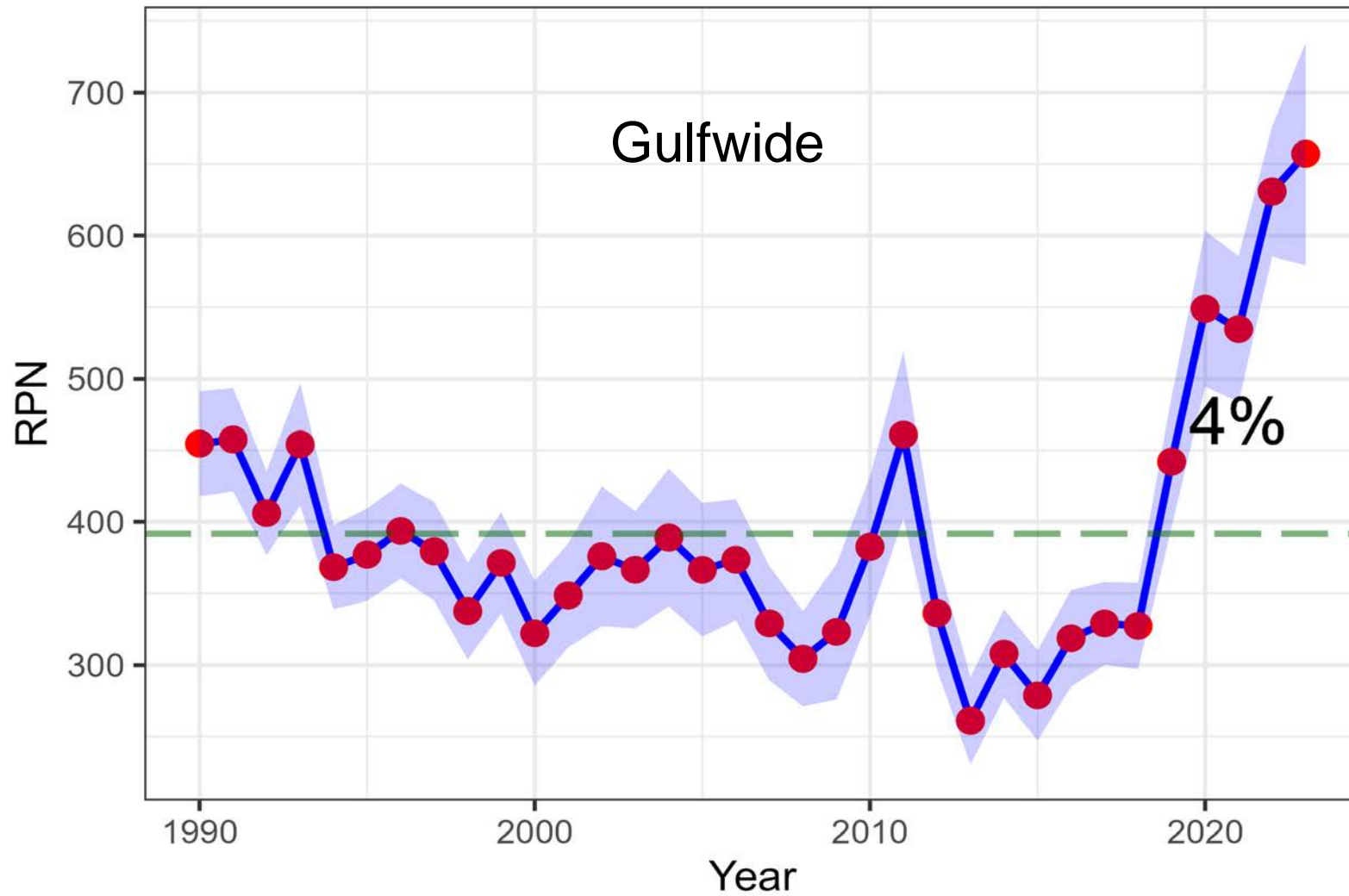
- to alleviate review time in November and
- allow for additional work on stock assessments that are operational updates or full assessments in October.
- The SSC would still review December with the minutes from this review appended to the November Plan Team report.

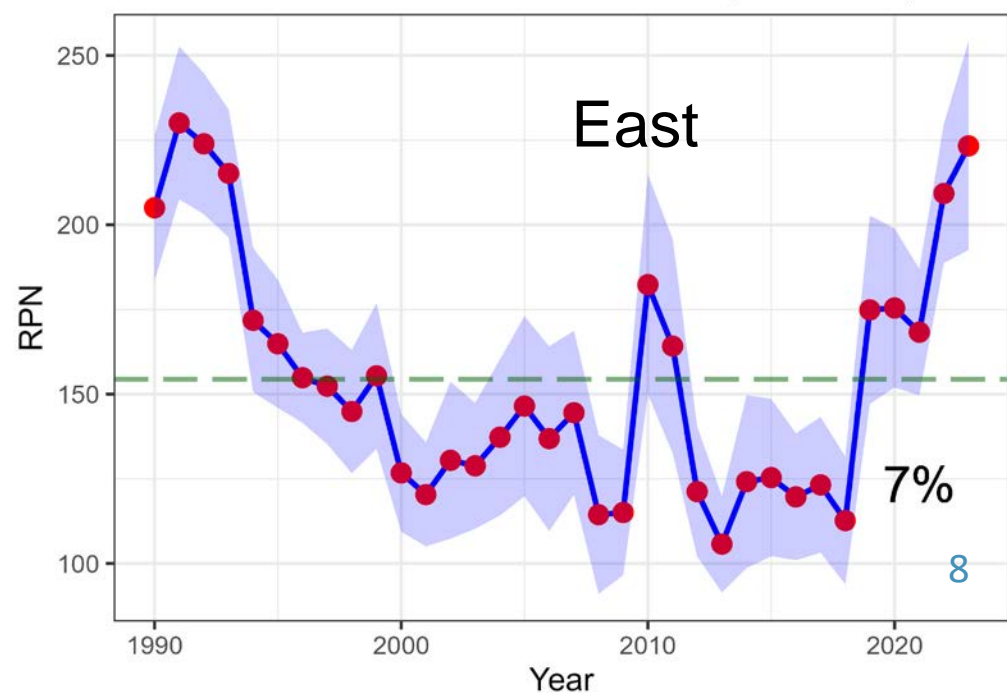
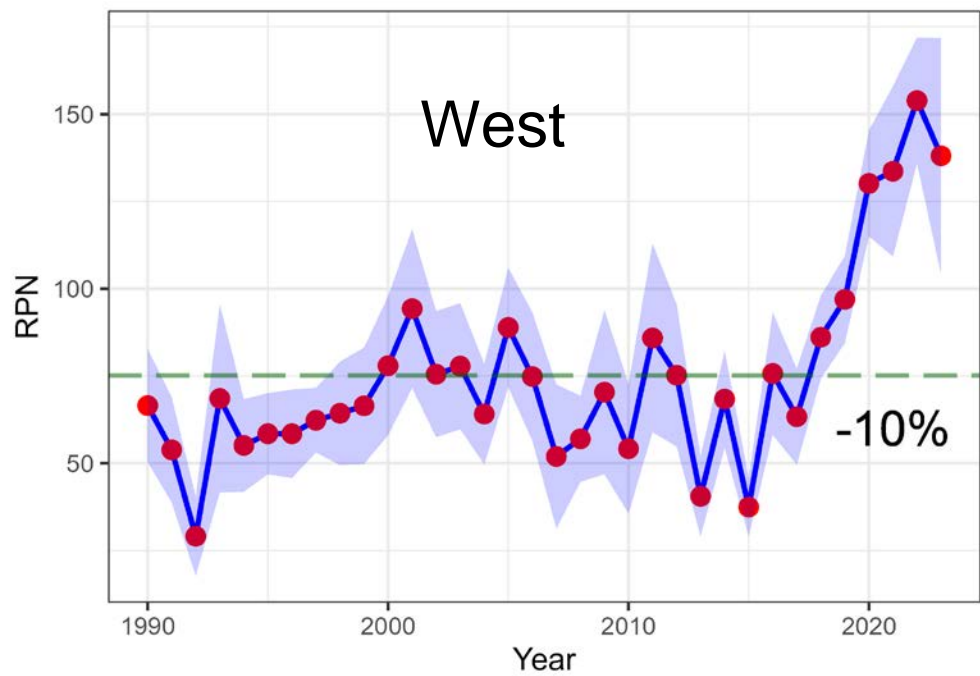
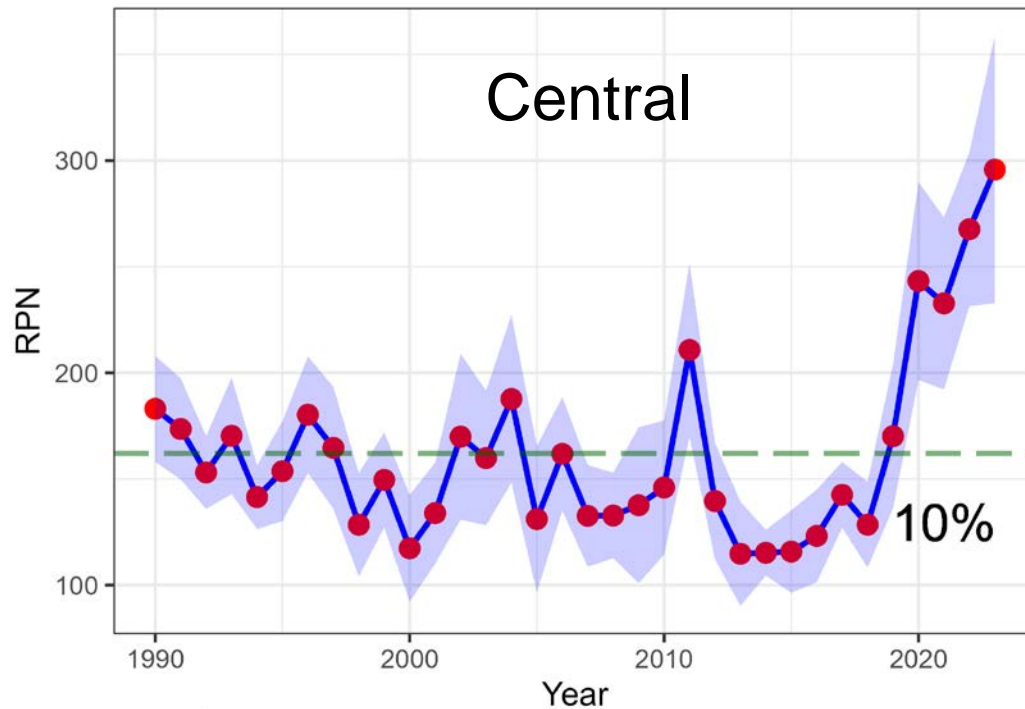
Sablefish (update)

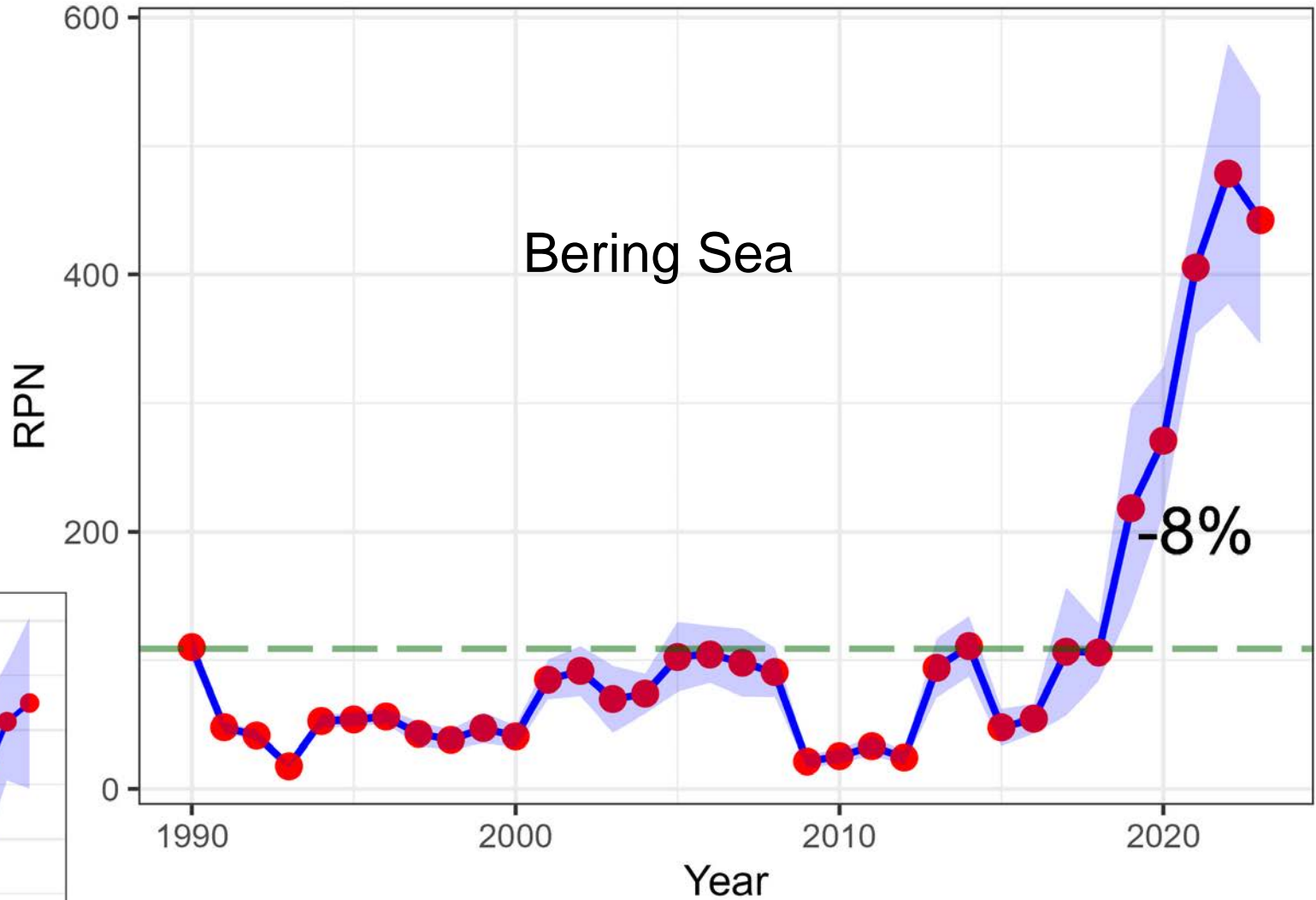
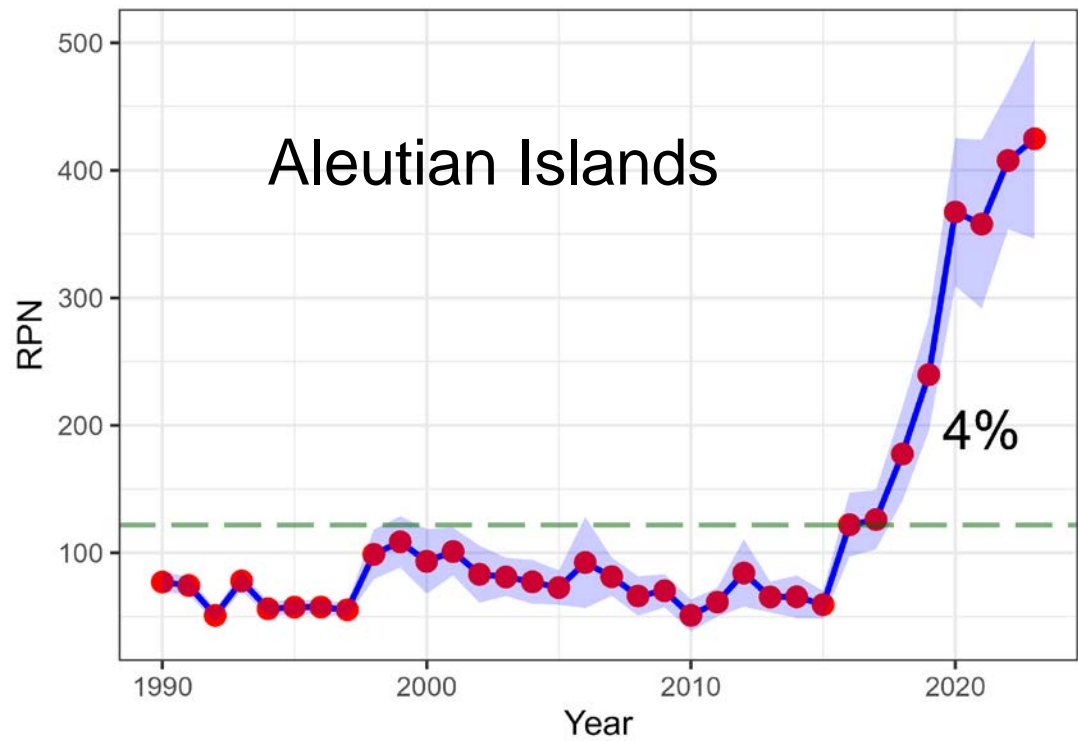
Alaska Sablefish longline survey RPNs



Sablefish: GOA







Sablefish Summary

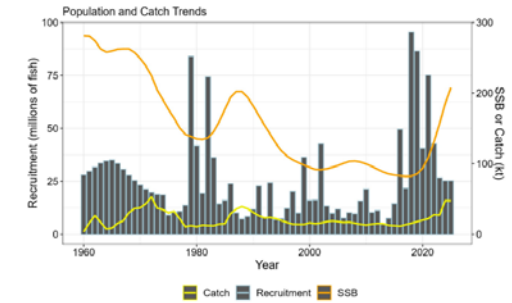
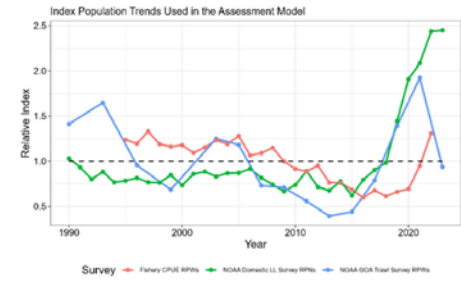
- Rapid transition to pot gear (> 85% of fixed gear catch)
- Influx of small fish
 - Decreasing economic value and flooded markets
 - NPFMC small sablefish release amendment ongoing
 - A maximum catch strategy will likely maintain long-term downward SSB trend,
 - *If* recruitment reverts to average conditions
 - 2024 SSB
 - 75% Made up of 2014-2020 year-classes



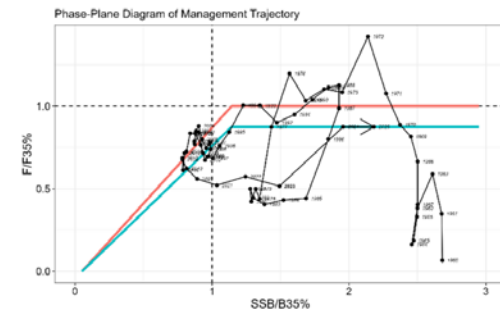
2023 Alaskan Sablefish SAFE *(Anoplopoma fimbria)*

Data and Stock Assessment Model

- Following steady increases in abundance and biomass indices since 2015, the 2023 NOAA longline survey abundance was stable matching the 2022 value, the NOAA Gulf of Alaska trawl survey declined precipitously, and the fixed gear fishery CPUE continued to increase.
- The author proposed model (23.5) integrated minor data refinements and parametrization updates, but the main structure was consistent with the previously accepted model (21.12).
- The biomass and SSB continue to increase, while recruitment has been at or above the mean since 2014.



Stock Status and ABC Recommendations



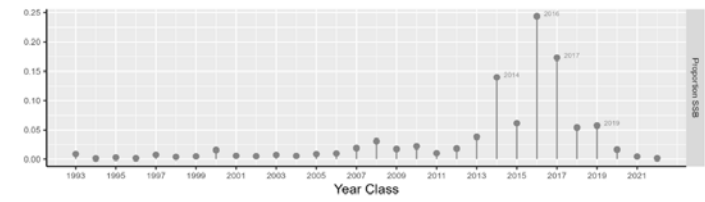
Quantity	2022 SAFE (Projections for 2023)	2023 SAFE (Projections for 2024)
B _{100%}	305,595	299,901
B _{40%}	122,238	119,960
SSB _(Terminal_Yr+1)	159,788	185,079
SSB _(Terminal_Yr+1) /B _{100%}	52%	62%
F _{ABC(Terminal_Yr+1)}	0.081	0.086
ABC _{w(Terminal_Yr+1)}	40,502	47,146
OFL _{w(Terminal_Yr+1)}	47,390	55,084

*SSB projections are based on specified catch for the terminal year. ABC_w and OFL_w are the recommended values after whale depredation has been taken into account.

- The resource is *not overfished* and *overfishing is not occurring*.
- Recent ABCs have not been fully utilized with catch averaging ~70% of the ABC over the last 3 years.
- The ABC increased by 16% due to continued maturation and growth (in weight) of the population.

Other Considerations

- The population age-structure remains contracted relative to historic levels.
- 2014 – 2020 year classes comprise > 75% of projected 2024 SSB.





Sablefish

Appendices

Last operational full assessment for sablefish was in 2021, described here:

<https://www.fisheries.noaa.gov/resource/data/2021-assessment-sablefish-stock-alaska>

Appendix 3C. Ecosystem and Socioeconomic Profile (ESP): Available here

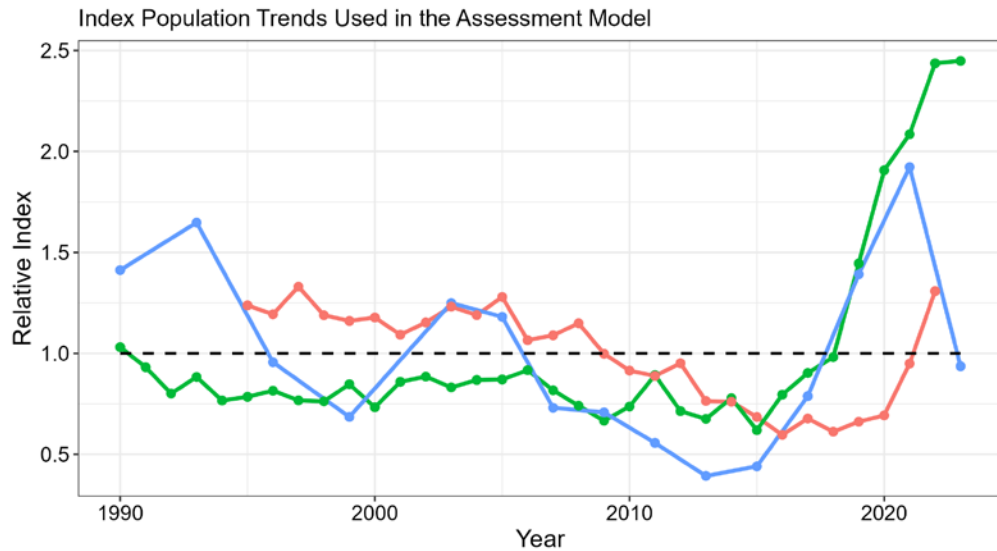
Appendix 3D. Sablefish Bycatch in the Eastern Bering Sea: [Available here](#)

Appendix 3E. Catch Rates and Observations from the Fixed Gear Fleet: [Available here](#)

Appendix 3F. Observer Coverage and Sampling of the Sablefish Stock: [Available here](#)

Sablefish data

- Indices indicate stock trend leveling off
- BSAI constitutes > 50% of survey numbers again in 2023
- 2016 year-class continues to dominate the composition data



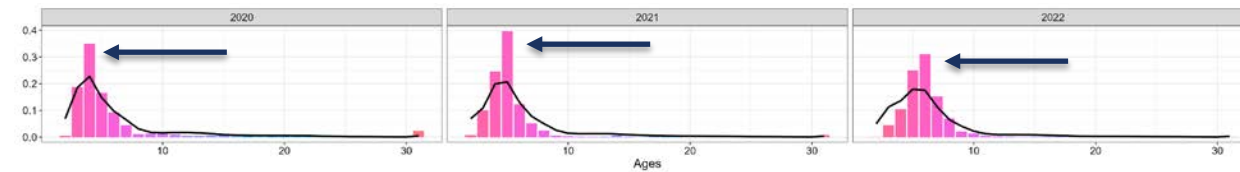
**LL Survey:
No Change**

**CPUE Index:
27% Increase**

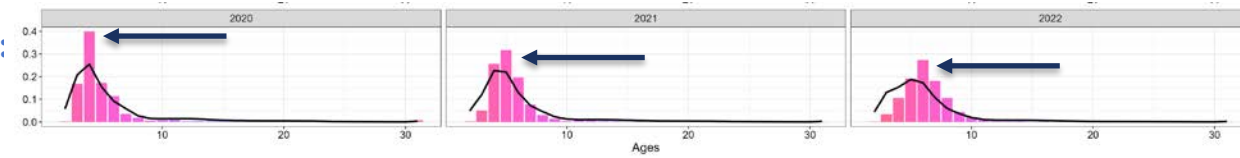
**Trawl Survey:
50% Decline**

Survey — Fishery CPUE RPWs — NOAA Domestic LL Survey RPNs — NOAA GOA Trawl Survey RPWs

Fixed Gear Fishery Ages



LL Survey Ages



Sablefish models

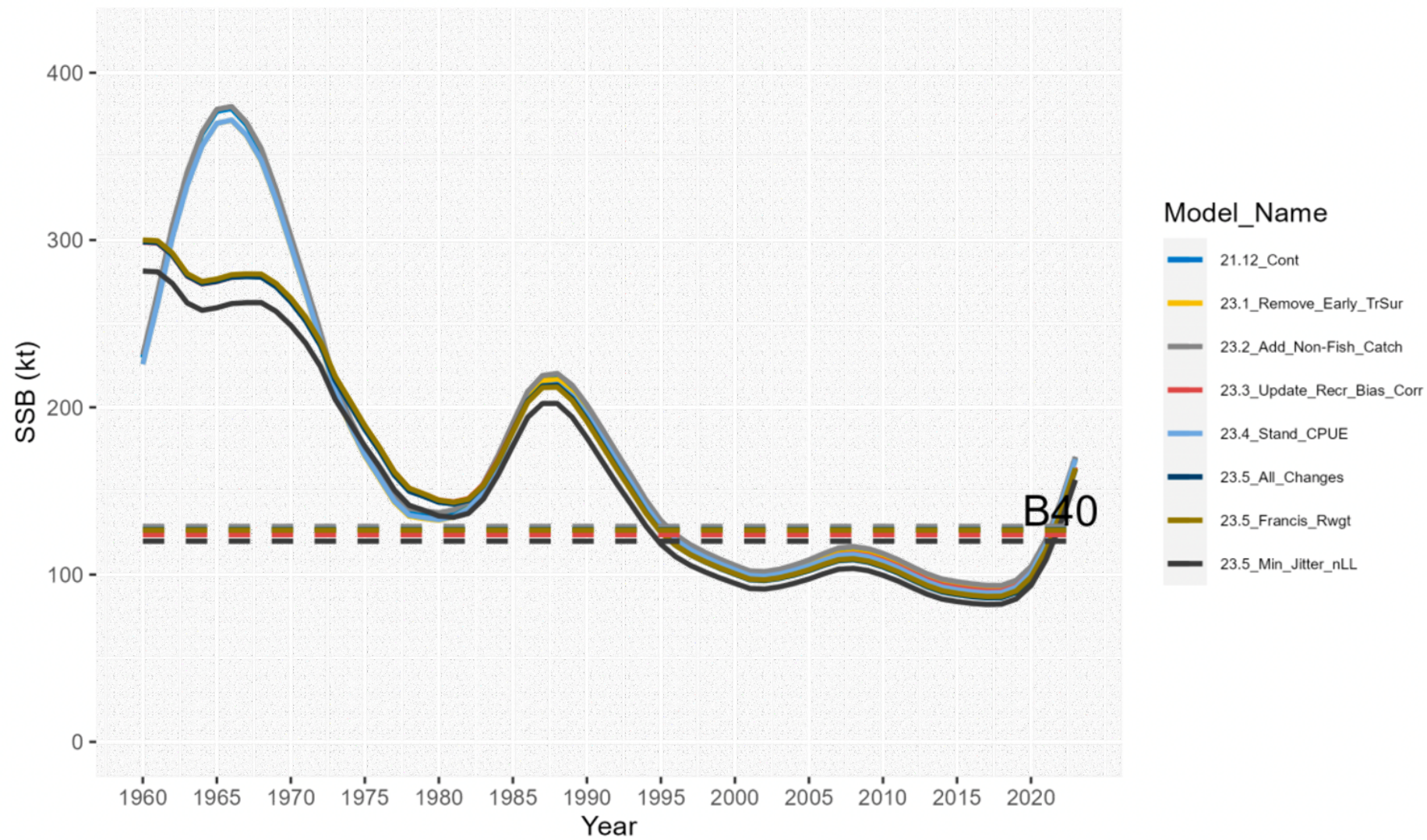
Update assessment(+) with minor changes to data and parametrization compared to 21.12:

- *Model 23.1*: removed the 1984 and 1987 trawl survey data
- *Model 23.2*: incorporated non-commercial catch (SSC)
- *Model 23.3*: minor parametrization updates including:
 - Implemented Methot and Taylor (2011) bias correction
 - Allowed further selectivity parameter sharing to improve stability
 - Removed unnecessarily estimated fishing mortality parameters
- *Model 23.4*: implemented the combined gear, standardized CPUE index (Cheng et al., 2023)
- ***Model 23.5 (recommended)***: included updates, applied Francis reweighting, jitter analysis

No major impacts or changes in data fits

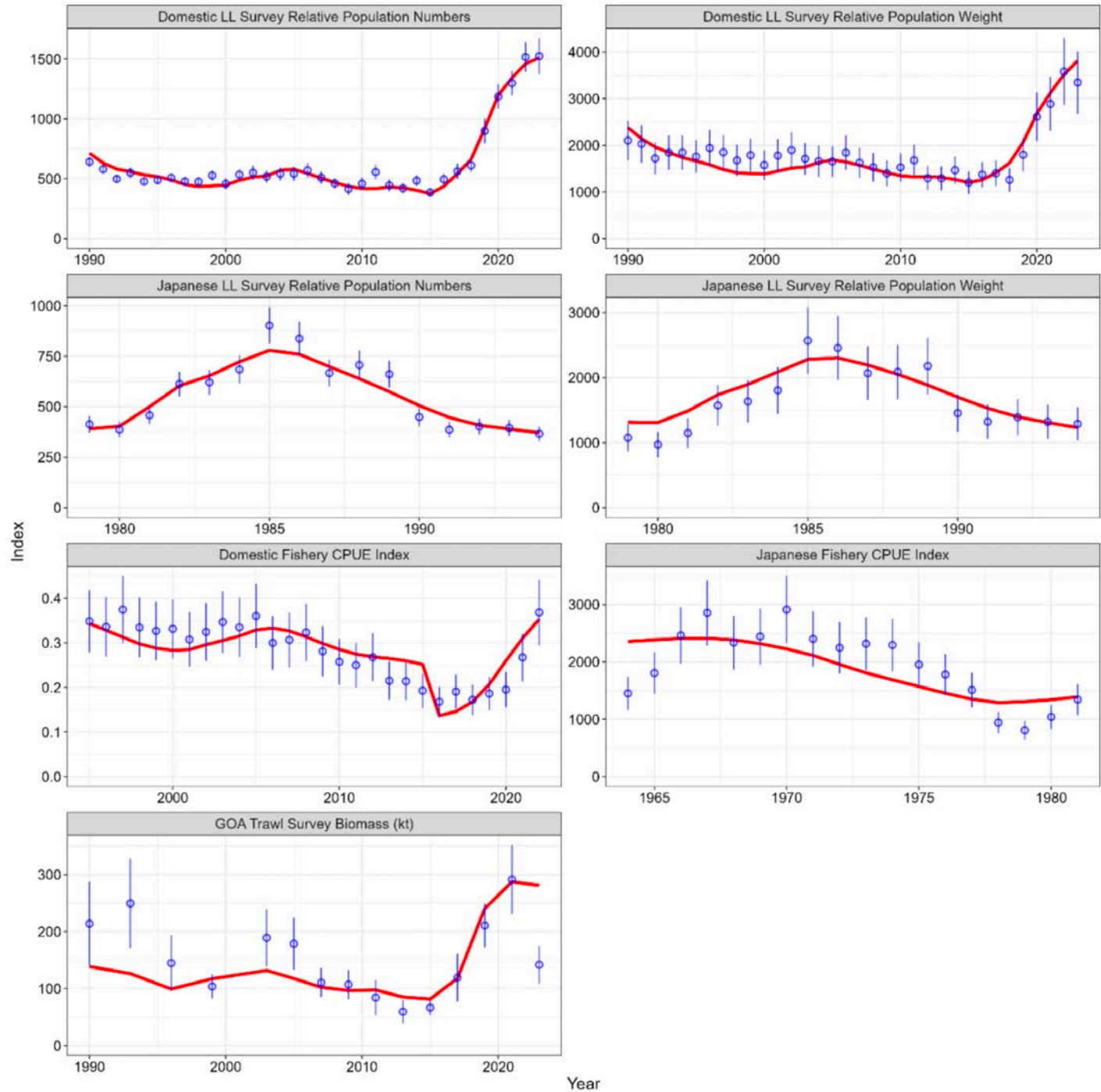
Sablefish models

SSB (kt) Comparison





- Fits to indices

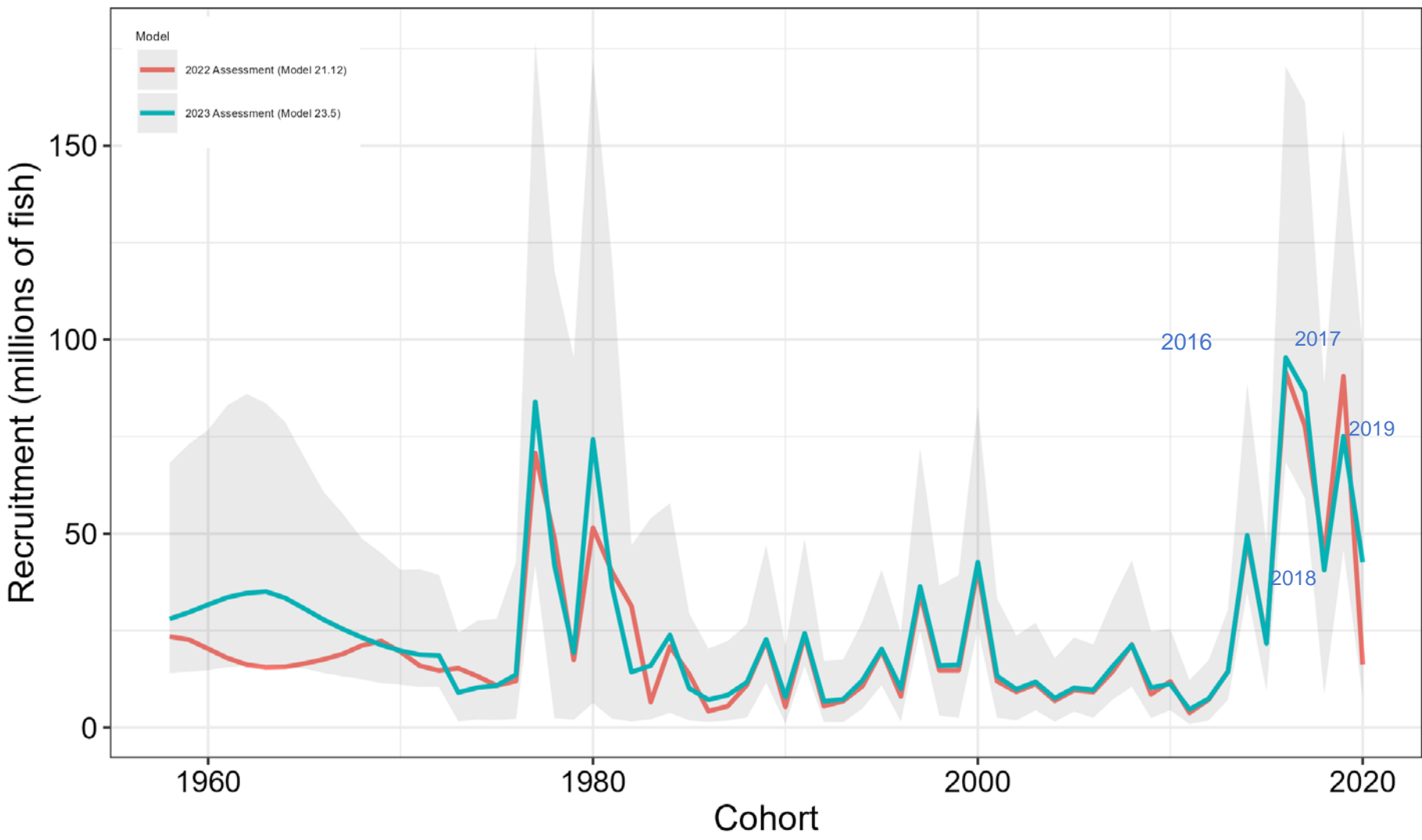




Sablefish



Model 23.5 Recruitment Compared to Previous SAFE



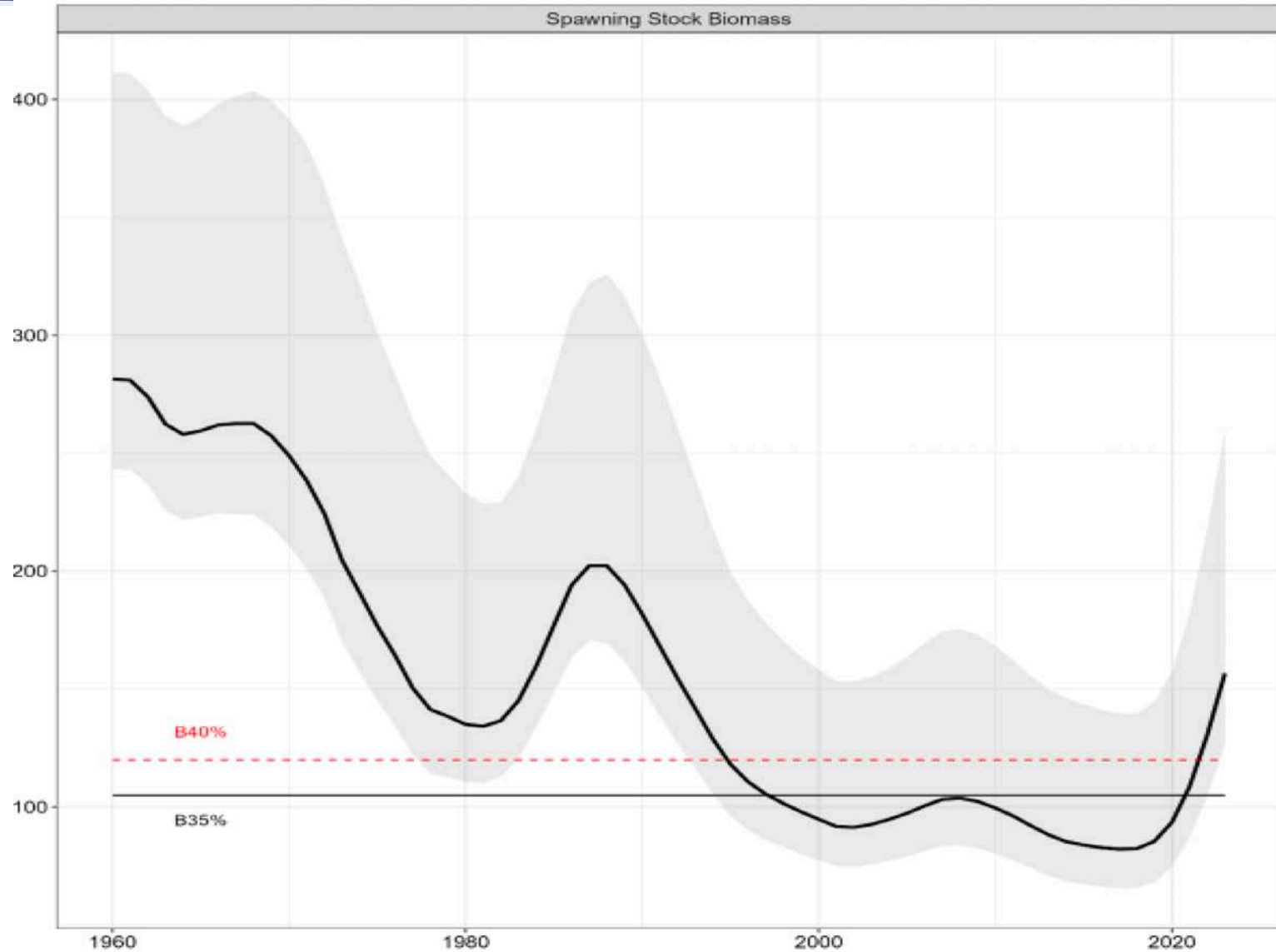
Recruitment

Fishing mortality remains at low levels (< FABC)

2016, 2017, and 2019 year classes are 3 of the largest on record

Sablefish

- Spawning biomass
 - At B52% in 2023
 - Projected to be at B62% by 2024



Sablefish OFL and ABCs

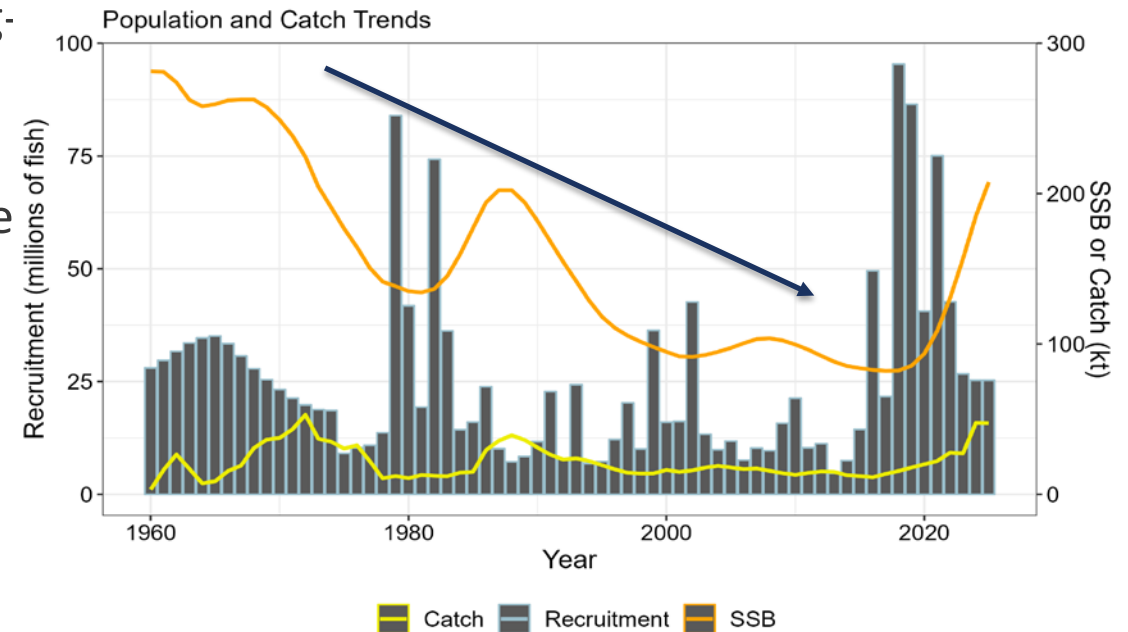
- **Max ABC = 47,146 t** (+7,000 t from 2023 ABC)
 - Only ~70% utilization in recent years
- Apportionment based on 5-year average survey biomass proportions by area
(no stair step)

Year	2023				2024		2025	
Region	OFL _w	ABC _w	TAC	Catch*	OFL _w	ABC _w **	OFL _w	ABC _w **
BS	--	8,417	7,996	4,851	--	11,450	--	11,499
AI	--	8,884	8,440	1,924	--	13,100	--	13,156
GOA	--	23,201	23,201	13,581	--	22,596	--	22,695
WGOA	--	4,473	4,473	2,357	--	4,699	--	4,719
CGOA	--	9,921	9,921	5,547	--	9,651	--	9,693
**WYAK	--	3,205	3,205	2,068	--	2,926	--	2,940
**EY/SEO	--	5,602	5,602	3,610	--	5,320	--	5,343
Total	47,390	40,502	39,637	20,357	55,084	47,146	55,317	47,350

*As of October 10, 2023 **After 95:5 trawl split and whale depredation

Sablefish authors summary

- Rapid transition to pot gear (> 85% of fixed gear catch)
- Influx of small fish
 - Decreasing economic value and flooded markets
 - NPFMC small sablefish release amendment ongoing
 - A maximum catch strategy will likely maintain long-term downward SSB trend,
 - *If* recruitment reverts to average conditions
 - Greater than 75% of 2024 SSB from 2014 – 2020 ye classes



Plan Team discussion on sablefish

The 2023 assessment recommends large increases in ABC in the AI and in the BS.

Past concerns with adequate monitoring of the sablefish fishery in these areas. The Teams benefited from the inclusion of [Appendix F: Observer Coverage and Sampling of the Sablefish Stock](#) and appreciate the work on that front.

To that end, the Teams:

- **Recommended continued collaboration between assessment scientists and the FMA Division of the AFSC to further expand on these issues to ensure quality data for this and other assessments.**
- **Agreed with the author's recommended model, Model 23.5, with no reduction from maxABC.**

Sculpins—ecosystem component



Combined presentation for BSAI and GOA

- 48 species with diverse life histories

November 2023 Council Draft

Ecosystem Report of the Sculpin Stock Complex in the Gulf of Alaska, Eastern Bering Sea, and Aleutian Islands

Ingrid Spies

November 2023

Executive Summary

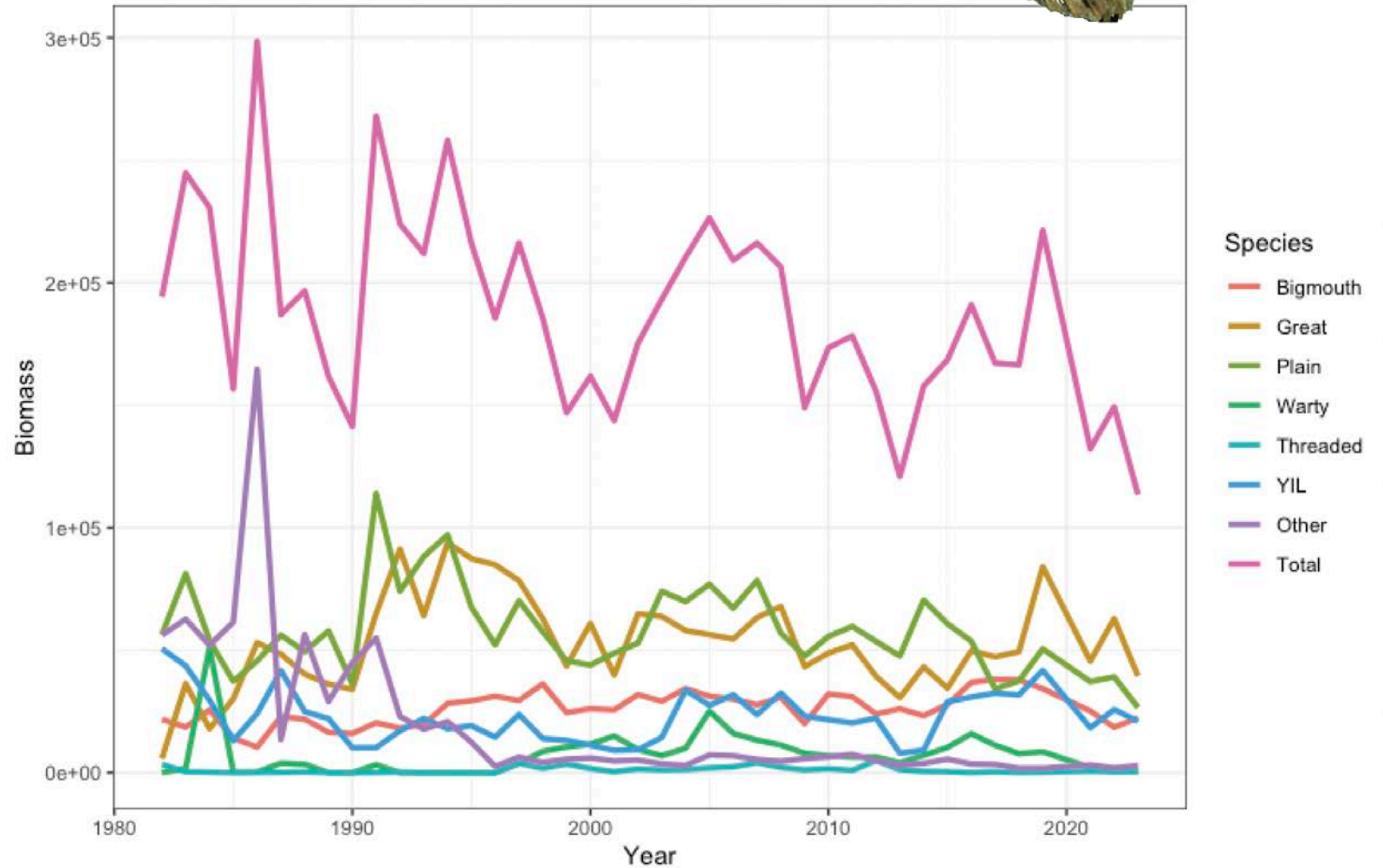
Sculpins are managed as non-target species in the BSAI and GOA, and are taken only as bycatch during directed fishing for other species. In 2020, a final rule was issued which reclassified sculpins as Ecosystem Component category, non-target species in the Bering Sea/Aleutian Islands (BSAI) (Amendment 121) and Gulf of Alaska (Amendment 110) Groundfish Fishery Management Plans ([85 FR 06310](#), March 23, 2020 for the proposed rule, and [85 FR 41427](#), July 10, 2020 for the final rule). Prior to this rule the sculpin complexes were not in the FMPs (i.e. “nonspecified”). Under this rule, sculpins are not allowed to be targeted, and there is a Maximum Retainable Allowance (MRA) of 20% in the BSAI and GOA (Federal Register, Proposed Rules, Vol. 79, No. 93). This rule applies to all vessels processing groundfish harvested in the BSAI or GOA (50 CFR 679) and it prohibits directed fishing.

Sculpins—ecosystem component



Bering Sea: trending down (in aggregate)

Survey biomass estimates for EBS sculpins, 1982 - 2023

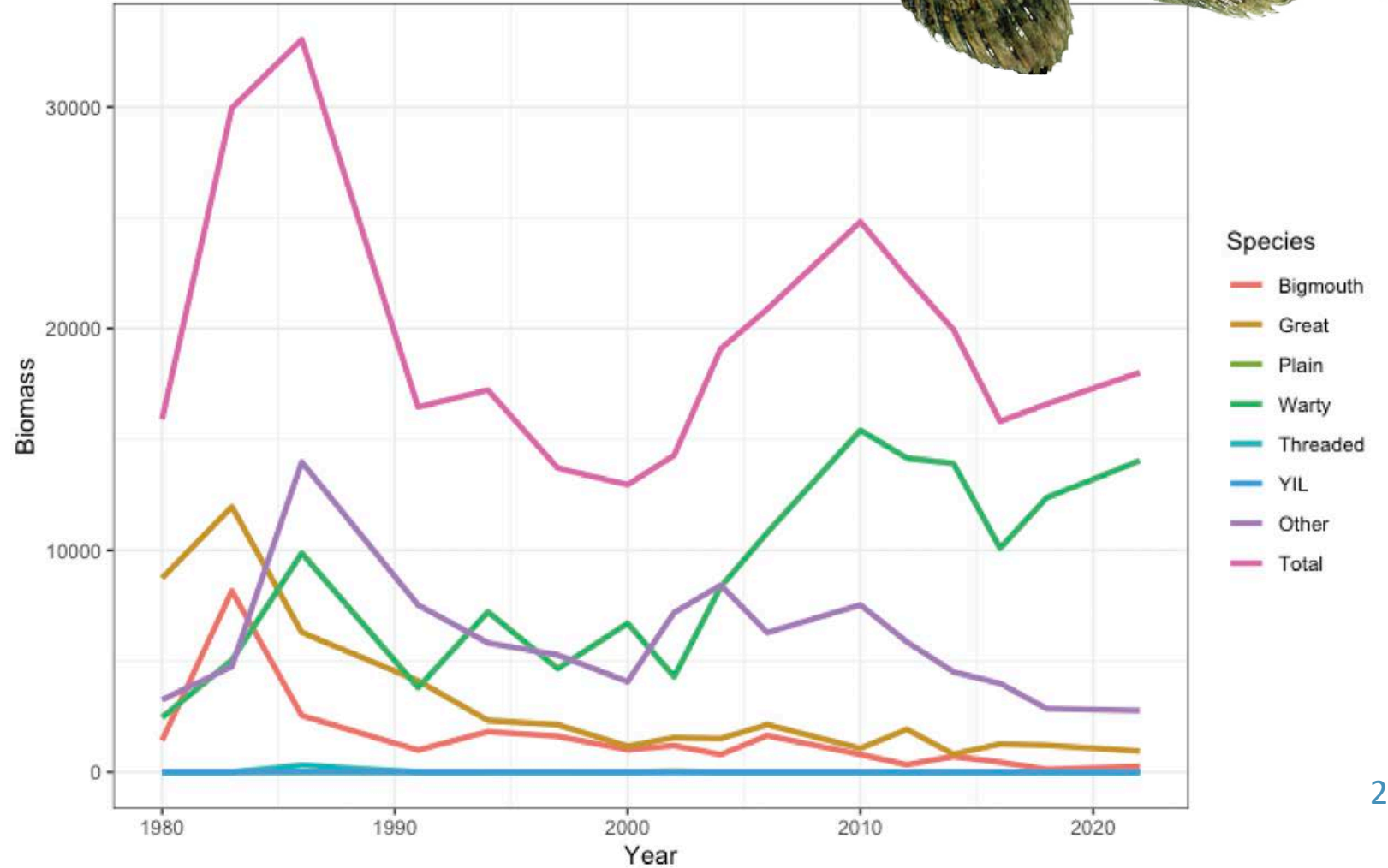


Sculpins—ecosystem component

Aleutian Islands: mixed trends



Survey biomass estimates for AI sculpins, 1980 - 2022

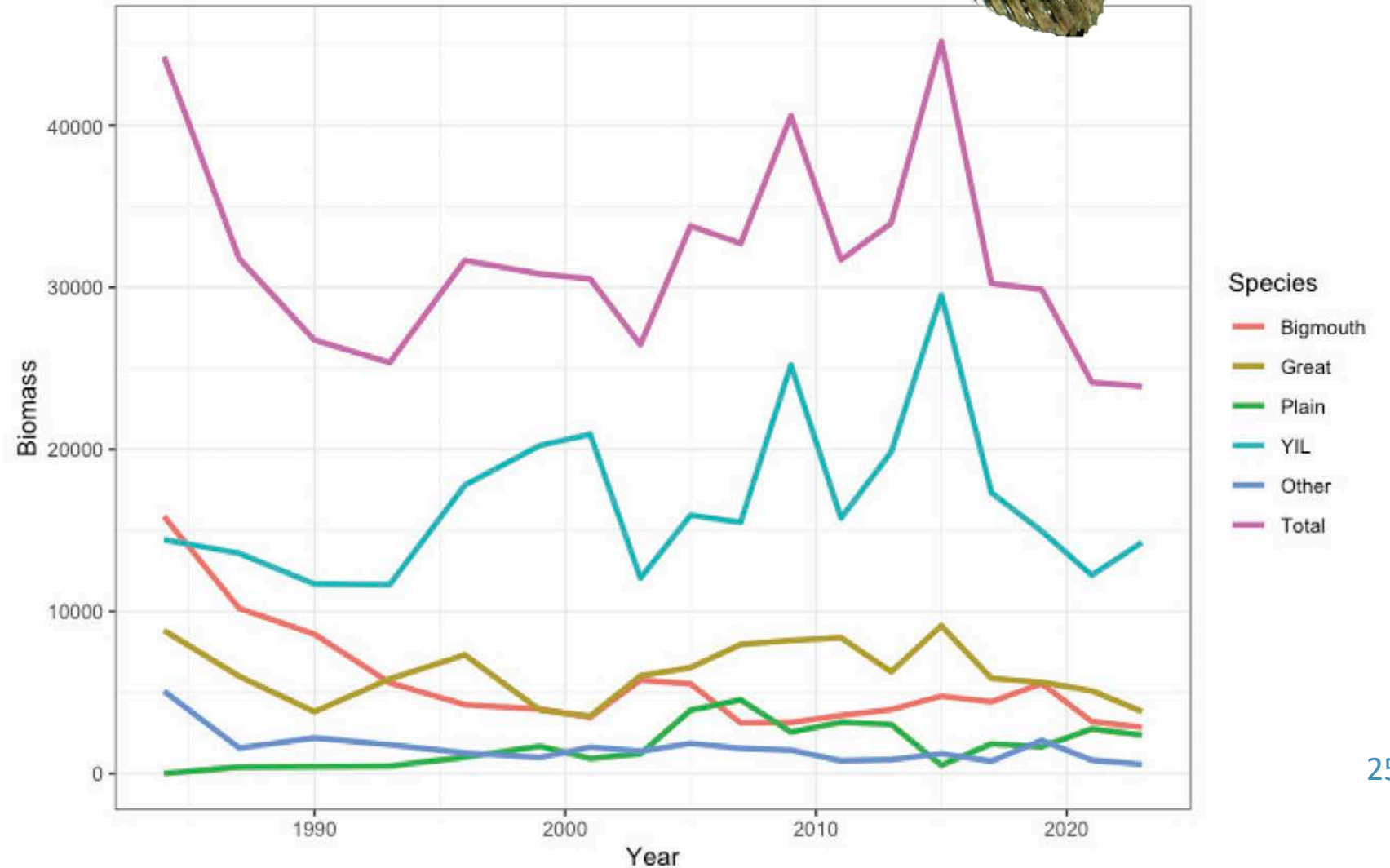


Sculpins—ecosystem component

Gulf of Alaska: mixed trends



Survey biomass estimates for GOA sculpins, 1984 - 2023



Sculpins—ecosystem component



The Team appreciates having the information on the OFL (perhaps in a format that helps clarify that the numbers are for reference not management action).