



**NOAA  
FISHERIES**

Alaska Fisheries  
Science Center

# Joint Groundfish Plan Team meeting report

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November 30th, 2020

# Joint Plan Team Meeting overview and agenda

## Overview

- Date: November 16-20th
- Place: Online
- Participation: 24 Team members present (4 vacancies remain)
- Numerous AFSC and AKRO staff and members of the public

## Agenda

- Grenadiers
- Economic SAFE report
- Risk tables
- Sablefish

# The Grenadier Stock in Alaska

Cara Rodgveller and Kevin Siwicke  
AFSC, Auke Bay Laboratories



The graceful  
grenadier



# Ecosystem Component

- In the BSAI and GOA FMPs
- No management – no ABC or OFL
- No targeted fishing
- SAFE not required
- Unofficial SAFE every 4 years

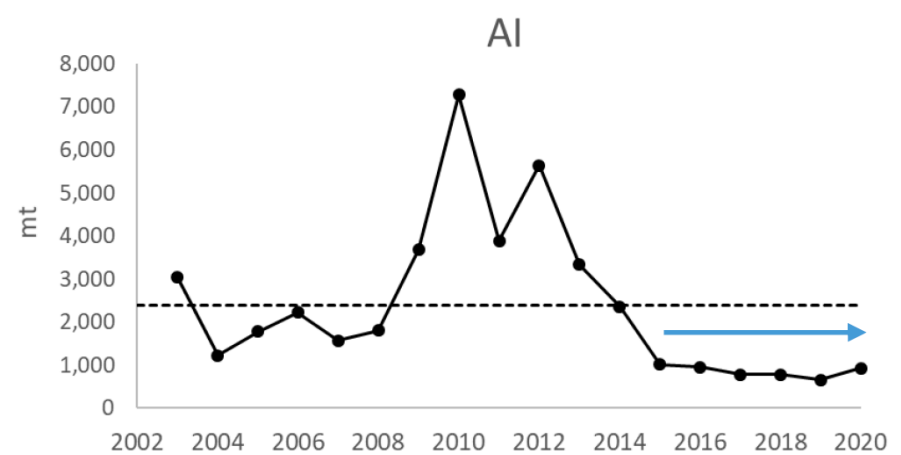
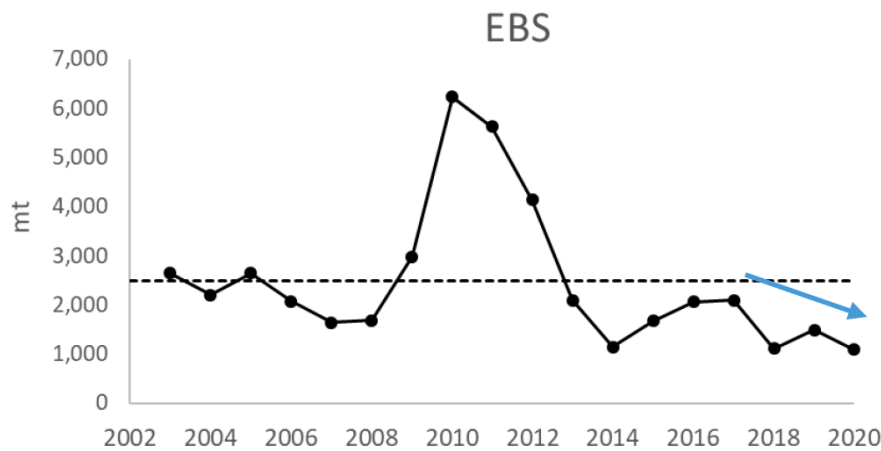
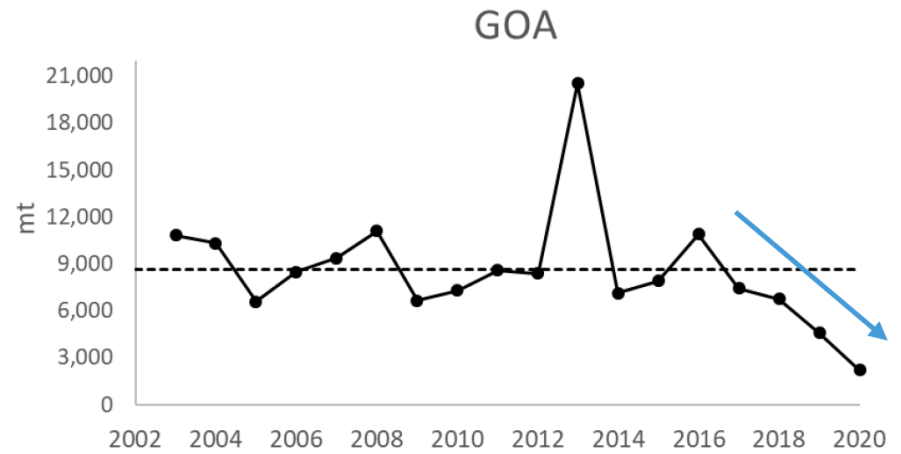
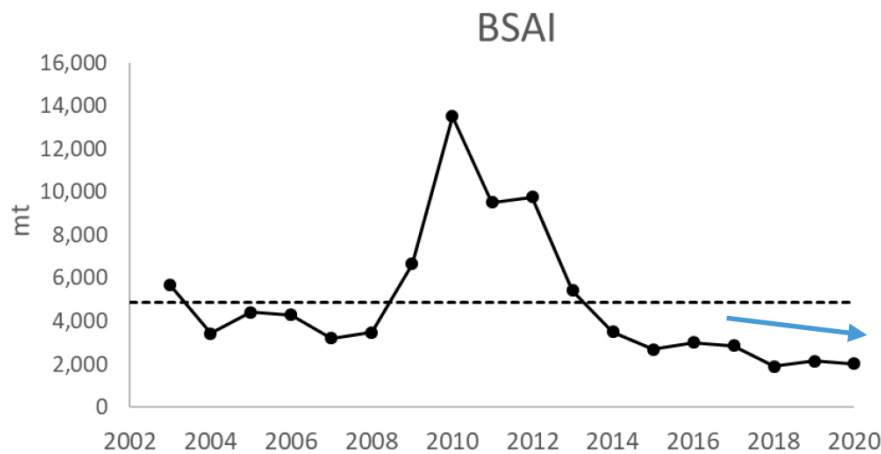


Retained on longline survey (once)

# Down in BS, overall in the BSAI, and in the GOA

## Target fisheries

- BS: Greenland turbot and P. halibut
- GOA: sablefish



# Grenadier summary (example ABCs)

- Compared to the last SAFE, completed in 2016,
  - 12% decrease in the BSAI
  - 27% decrease in the GOA
- Catches well below unofficial ABL and OFL (again, not used for management)

Complex	Year	BSAI Biomass	BSAI ABC	BSAI Catch <sup>1</sup>	GOA Biomass	GOA ABC	GOA Catch <sup>1</sup>	Total Catch <sup>1</sup>
grenadiers	2019	1,197,110	70,031	2,142	507,888	29,711	4,601	6,743
	2020	1,197,110	70,031	2,016	507,888	29,711	2,213	4,229
	2021	1,055,348	61,738		369,618	21,623		
	2022	1,055,348	61,738		369,618	21,623		

# ECONOMIC SAFE



# Economic Status report contents

## Executive Summary: 2019 highlights

- Report Card Metrics
- Plan Team Reports

## Overview of the Economic Data Tables

- All Alaska summary Tables (1-9)
- BSAI data Tables (10-25)
- GOA data Tables (26-41)
- Halibut data Tables (H1-H10)



# Contributions

## AFSC's Econ/social sciences group to NPFMC

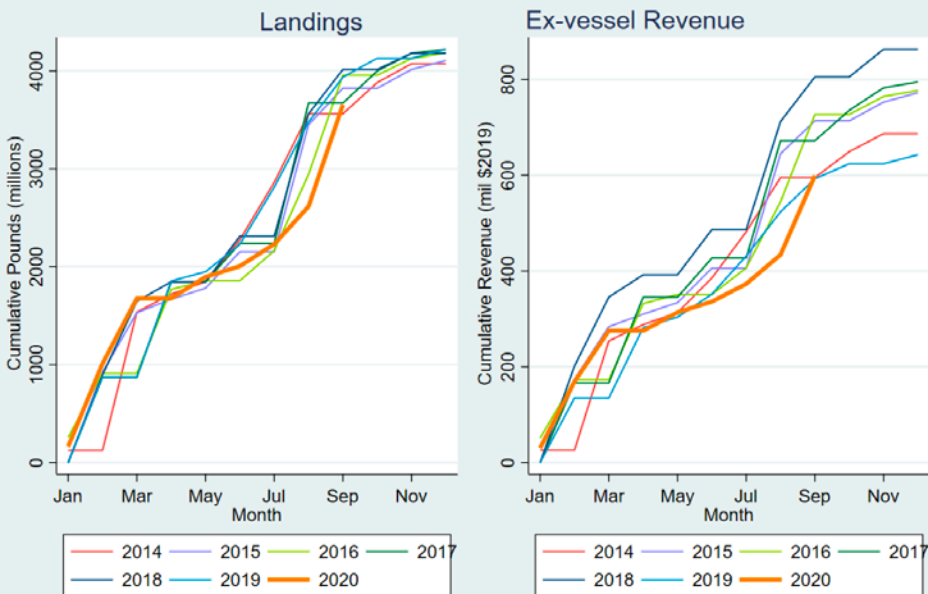
- 1) Econ SAFEs
- 2) Ecosystem Status Reports (ESR),
- 3) Economic Performance Report (EPR) / Economic and Socioeconomic Profile (ESP),
- 4) Annual Community Engagement and Participation Overview (ACEPO),
- 5) Webtools, and
- 6) Other Sources (e.g., research, PTs, SSC input etc.)

# In-season Ex-Vessel Harvest and Revenue

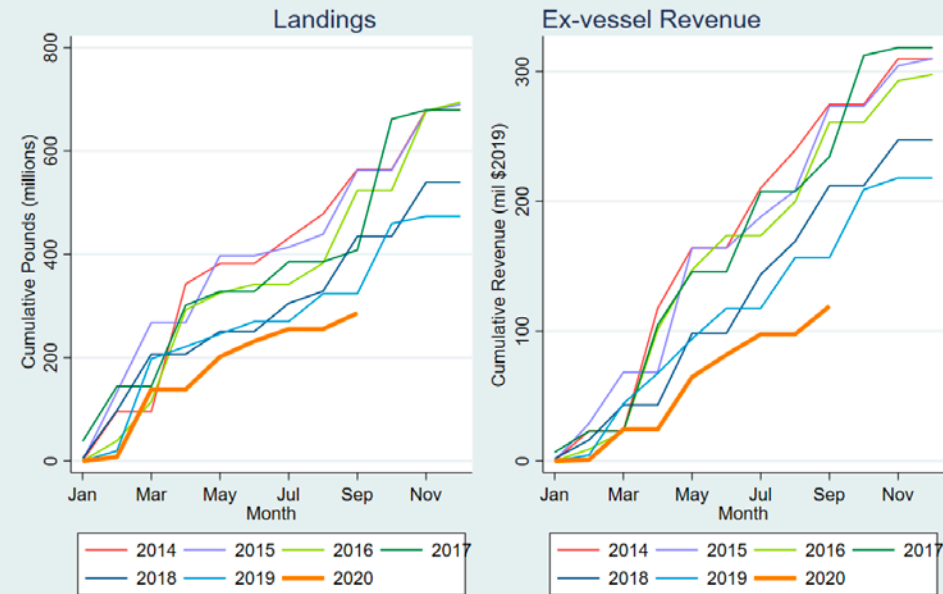
## Estimates for 2020

- Estimates “nowcasts” of 2020 monthly ex-vessel revenues and landings for Alaska groundfish and halibut fisheries through Sept.
- BSAI YoY harvest volumes through Sept. fell by approximately 11% in 2020 compared with 2019 and ex-vessel revenues are expected to be down 4% from 2019.
- GOA YoY harvest volumes through Sept. fell 27% in 2020 and ex-vessel revenues are expected to be down 32% from last year.

BSAI Cumulative Landings and Revenue by Year



GOA Cumulative Landings and Revenue by Year



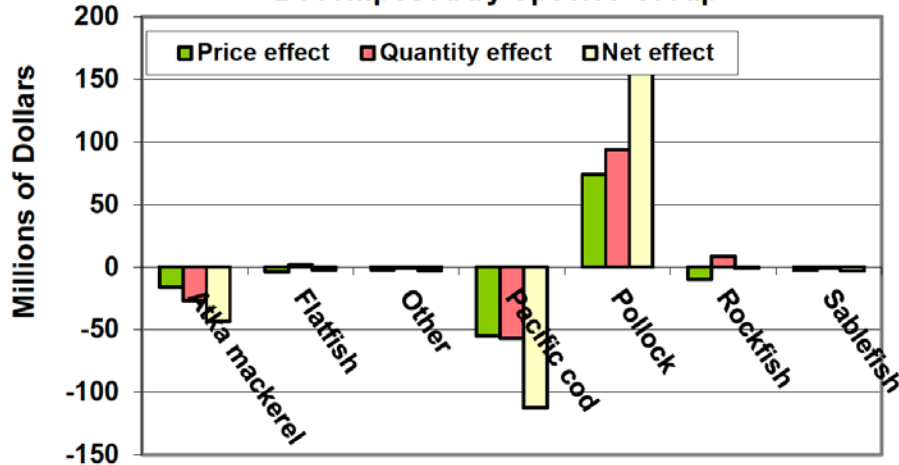
# Revenue Decompositions 2018-2019

## Bering Sea & Aleutian Islands

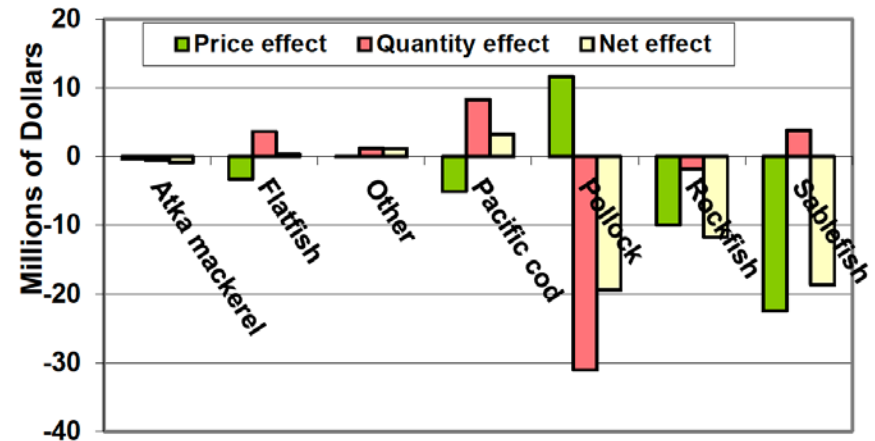
## Gulf of Alaska

Species

**BSAI First-Wholesale Revenue Change in 2018-19  
Decomposed by Species Group**

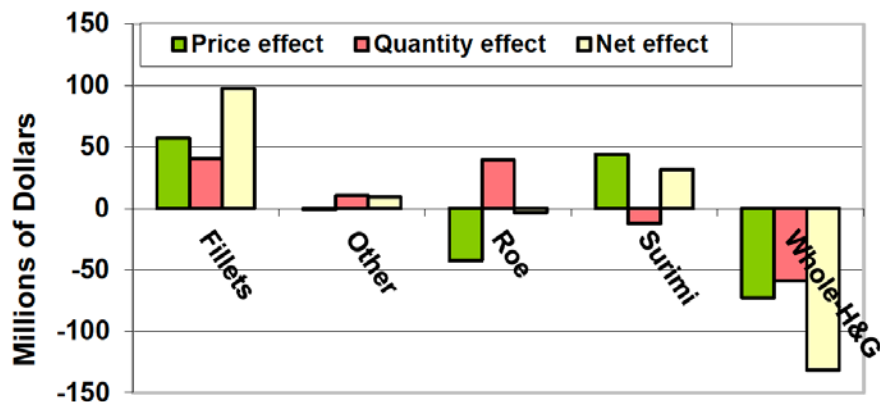


**GOA First-Wholesale Revenue Change in 2018-19  
Decomposed by Species Group**

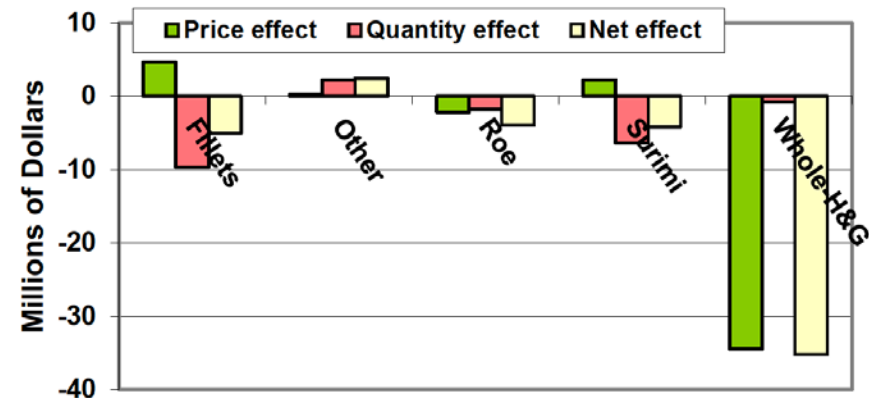


Product

**BSAI First-Wholesale Revenue Change in 2018-19  
Decomposed by Product Group**



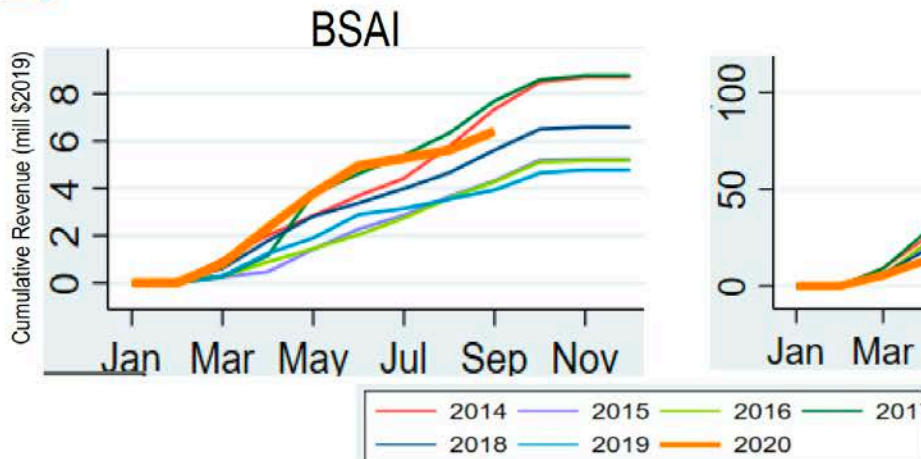
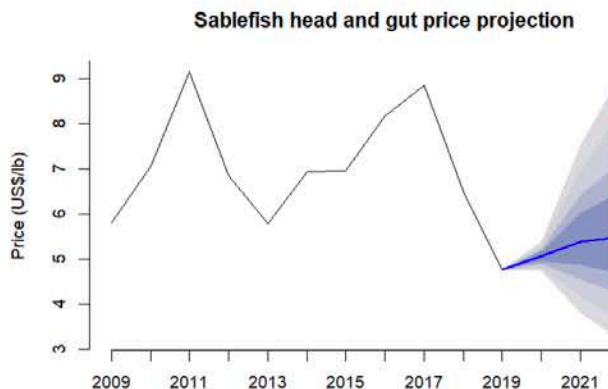
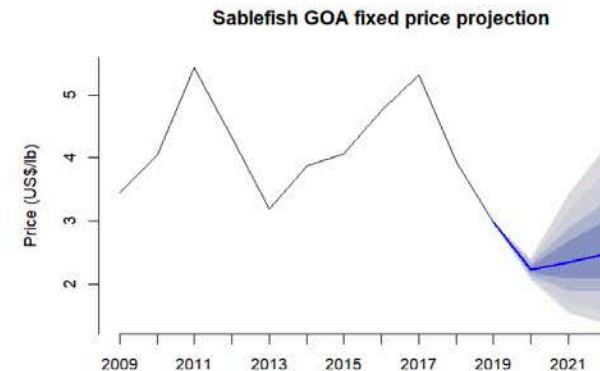
**GOA First-Wholesale Revenue Change in 2018-19  
Decomposed by Product Group**



# Sablefish

## Economic SAFE

- Revenues down in 2019 with substantial decrease in the average price of sablefish.
- Decrease driven by decreases in size of average fish and price margin between fish sizes.
- Ex-vessel prices expected to decrease further in 2020.
- First-wholesale H&G prices are projected to stabilize in 2020



# Economic SAFE chapter

## Teams recommendation

- The Teams would like the SSC to clarify how the community information should be presented in a stock-specific manner in ESPs, or if it could better be placed in the broader context of the changes being experienced by communities.

# Risk tables

- Teams compared 2019 and 2020 author recommended values
  - Differences in treatment of the levels among assessments
  - No changes to the author-recommended scores
- Refer to minutes and summary sections (in intros) for individual stock

# Risk table (from 2019)

Stock	Assessment-related	Population Dynamics	Environment /Ecosystem	Fishery Performance	Overall	Proposed Reduction
Sablefish	2	3	2	3	3	0.57
EBS Pollock	1	2	2	2	2	0.43
GOA Pollock	2	1	1	1	2	0.10
EBS Pacific Cod	1	1	2	1	2	*
AI Pacific Cod	1	1	2	1	2	*
GOA Pacific Cod	2	2	2	1	2	*
BSAI Northern Rockfish	2	1	2	1	2	0
GOA POP	2	2	1	1	2	0
GOA Arrowtooth	1	1	2	1	2	0
BSAI Yellowfin Sole	1	1	1	1	1	0
BSAI Alaska Plaice	1	1	1	1	1	0
BSAI Atka Mackerel	1	1	1	1	1	0
GOA RE/BS	1	1	1	1	1	0
GOA Other Rockfish	1	1	1	1	1	0
GOA Shortraker	1	1	1	1	1	0
GOA Atka Mackerel	1	Unknown	1	1	1	0
GOA Octopus	1	1	1	1	1	0
GOA Skate	1	1	1	1	1	0

# Risk table updated

Stock	Assessment related		Population Dynamics		Environment Ecosystem		Fishery Performance		Proposed Reduction	
	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
Sablefish	2	3	3	3	2	2	3	3	57%	57%
EBS pollock	1	1	2	1	2	2	2	2	43%	30%
Bogoslof pollock		1		1		1		1		0%
AI pollock		1		1		1		1		0%
EBS Pacific Cod	1	1	1	1	2	2	1	1	*	0%
AI Pacific cod	1	1	1	1	2	2	1	1	*	0%
BSAI Yellowfin sole	1	1	1	1	1	1	1	1	0%	0%
BSAI Alaska Plaice	1		1		1		1		0%	
BSAI Greenlnd turb.		1		1		2		1		0%
BSAI Arrowtooth		1		1		1		1		0%
BSAI Kamchatka		1		1		1		1		0%
BSAI Northrn rock sole		2		1		1		1		0%
BSAI Flathead		1		1		1		1		0%
BSAI Other Flatfish		1		1		1		1		0%
BSAI POP		2		1		1		1		0%
BSAI Blackspotted/RE		3		2		1		2		0%
BSAI Northrn Rockfish	2		1		2		1		0%	
BSAI Shortraker		1		1		1		1		0%
BSAI Other Rockfish		2		1		1		1		0%
BSAI Atka Mackerel	1	1	1	1	1	1	1	1	0%	
BSAI Skates		1		1		1		1		0%
BSAI Sharks		2		2		1		1		0%
BSAI Octopus		1		1		1		1		0%
GOA pollock	2	1	1	1	1	1	1	1	10%	0%
GOA Pacific cod	2	2	2	2	2	1	1	1	*	0%
GOA Nrthrn Rckfish		1		1		1		1		0%
GOA Arrowtooth	1		1		2		1		0%	
GOA Deepwtr Flat	2		1		1		1		0%	
GOA POP	2	2	2	2	1	1	1	1	0%	0%
GOA Northrn Rockfish		1		1		1		1		0%
GOA Dusky Rockfish		2		1		1		1		0%
GOA Rougheyeye/BS	1		1		1		1		0%	
GOA Thornyheads		1		1		1		1		0%
GOA Other Rockfish	1		1		1		1		0%	
GOA Shortraker	1		1		1		1		0%	
GOA Atka Mackerel	1		Unknown		1		1		0%	
GOA Skate	1		1		1		1		0%	
GOA Sharks		2		2		1		1		0%
GOA Octopus	1		1		1		1		0%	



# Sablefish assessment

Most of first day devoted to this assessment

- Revisited issues related to apportionment on Friday

Switch to senior author's presentation

Then ACLs AMs, and Council's spatial management policy

Team comments will follow those

# Sablefish

- ESP (partial/updated)
  - Declining YOY growth index
  - below average condition for the age-4 and large female sablefish on the longline survey.
  - Incidental catch of sablefish in the arrowtooth fishery high in last four years
    - Overlap increase
- The Teams noted concern about effort required to produce even a partial update and
  - Commended the ESP team for the efforts
- **The Teams request that the next ESP include socioeconomic analysis of the impacts of the bycatch on various fleets.**
- The Teams also suggest that the ESP developers explore the idea of “hot topics,” similar to the ESR.

# Sablefish

- Commended author on challenges of taking on a complex assessment in a few short COVID-impacted months
- Teams remain concerned about positive retrospective bias and poor fits to indices
- The Teams discussed appropriateness of using fishery CPUE given
  - Changes in the boats switching gear types (trending towards pots)
  - inconsistent trends with fishery-independent indices.
- Teams discussed issues related to shifting reference points
  - Presently based on “average recruitment,” ...incoming year-classes impact magnitude significantly.

# Sablefish

The Teams agreed with authors' ABC for 2021

- 17% increase from their 2020 ABC **BUT** a
  - 57% reduction from maxABC
  - Part of rationale was that it was an ABC that aligned closely with if average recruitment had been applied
- 
- The Teams reiterated concerns over poor fits and residual patterns in the abundance indices

# Sablefish

## JPT Recommendations

- Explore spatial distribution of the top four year-classes...
  - If possible, compare them to the spatial distribution of the 1977 year class (from survey and fishery data)
- Examine **bycatch** in the historical foreign pollock fishery to evaluate its impact on the sablefish stock
  - Did a similar pattern occur from large 1977 year-class?
- CPUE work
  - Vessel effects
  - EM
- Biology
  - Age-specific M
  - Maturity

# Sablefish apportionment

## *Team discussion*

The Teams preferred to move away from the current fixed apportionment (same since 2014)

- Noted that proportions closer to relative fish distribution designed to mitigate stock-structure uncertainty and balance exploitation rates
- Agreed with recommendation: 5-year moving average of survey biomass
- SSC, AP, or Council to weigh in on selecting an alternative
- Studies noted due to movement, alternative apportionments biologically acceptable (within range)

# Sablefish apportionment (5-year mean, recommended)

Whale depredation corrections, 5-year mean survey biomass (Non-exponential...)

Region	2020			2021		2022	
	OFL <sub>w</sub>	ABC <sub>w</sub>	TAC	OFL <sub>w</sub>	ABC <sub>w</sub>	OFL <sub>w</sub>	ABC <sub>w</sub>
BS	--	2,174	1,861	--	3,674	--	4,843
AI	--	2,952	2,039	--	5,294	--	6,978
<b>BSAI</b>	--	<b>5,126</b>	<b>3,900</b>	--	<b>8,968</b>	--	<b>11,821</b>
<b>GOA<sup>1</sup></b>	-	<b>16,883</b>	<b>14,393</b>	--	<b>13,269</b>	--	<b>17,489</b>
<b>Alaska-wide</b>	<b>50,481</b>	<b>22,009</b>	<b>18,293</b>	<b>60,426</b>	<b>22,237</b>	<b>70,710</b>	<b>29,309</b>

# Sablefish apportionment

Whale depredation corrections, fixed apportionment (constant since 2014)

Region	2020			2021		2022	
	OFL <sub>w</sub>	ABC <sub>w</sub>	TAC	OFL <sub>w</sub>	ABC <sub>w</sub>	OFL <sub>w</sub>	ABC <sub>w</sub>
BS	--	2,174	1,861	--	2,177	--	2,869
AI	--	2,952	2,039	--	2,959	--	3,901
<b>BSAI</b>	--	<b>5,126</b>	<b>3,900</b>	--	<b>5,136</b>	--	<b>6,770</b>
<b>GOA<sup>1</sup></b>	--	<b>16,883</b>	<b>14,393</b>	--	<b>17,087</b>	--	<b>22,520</b>
<b>Alaska-wide</b>	<b>50,481</b>	22,009	<b>18,293</b>	<b>60,426</b>	<b>22,223</b>	<b>70,710</b>	<b>29,290</b>

*Note total changes slightly due to differential whale depredation rates by region*

*Also, some rounding issues*



# Sablefish

- In 2019 minutes of JPT:
  - Considerable uncertainty exists as to whether this is a biological concern or allocation issue, and the Teams suggested following the Council's spatial management policy to resolve this issue

# Sablefish apportionment

## *Team discussion*

### **Notion of a workshop as next step**

- Teams noted issues related to apportionment and that it triggers “step 1” of Council’s spatial management policy
- Hence recommended that the SSC and Council consider developing a Council workshop in 2021 to evaluate both the fishing mortality rates by gear associated with different apportionment methods including management and socio-economic considerations
- This workshop would satisfy step 2 of the policy, which is to “identify the economic, social, and management implications and potential options for management response”.

# Sablefish apportionment

## *Team discussion*

### **Potential workshop focus questions** (relative to implementing the Spatial Management Policy)

- 1) What are the criteria for assessing whether a spatial management tool has been effective?
- 2) What are the specific criteria for when the Policy should be applied (either for the first time for a stock, or follow-up applications)?
- 3) Are there criteria for balancing conservation concerns (i.e., stock biomass and productivity) vs socio-economic concerns, and do these vary between target and bycatch stocks?