Joint Groundfish Plan Team meeting report

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Meeting overview and agenda

- Overview
  - Date: November 12
  - Place: AFSC Seattle lab
  - Participation: 27 Team members present (plus numerous AFSC and AKRO staff and members of the public), and at least 25 people participating via WebEx

Agenda

- Economic SAFE report
- Risk table
- Sablefish

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Risk table

- Review of some SSC minutes related to the risk table:

  2/18: "The SSC recommends identification of clear and transparent rules for defining the specific criteria to be used when adjusting the recommended ABC…."

  10/18: "A distribution-based approach to risk (P*) fundamentally relies on all sources of uncertainty (including structural) being explicitly captured in the distribution. ... The SSC supports future consideration and development of distribution-based approaches, but not as a priority for 2018."

  12/18: "The SSC requests that all authors fill out the risk table in 2019…"

  - The author and PT should provide a complete evaluation to allow for the SSC to come up with a recommended adjustment
  - The SSC emphasizes that the table should be used to reach a decision, not to justify a decision made *a priori*"
  - The SSC anticipates that the use of the risk table will continue to evolve and recognizes that case-specific considerations may not lead to consistency in percentage reductions among all species within each level of concern"

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Risk table

- The Teams evaluated the risk table for each full assessment and noted important concerns or issues associated with completing the table
- The Teams noted that summarizing the concerns listed in the risk table is helpful as a decision framework for potential changes to ABC
- The risk table approach fostered increased collaboration between scientists with different expertise and more formally brought ecosystem considerations into assessment deliberations
- However, several common questions were brought forward throughout the discussions regarding the individual risk tables
  - See next two slides

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Risk table, Teams discussed following issues…

- Whether elevated risk level (>1) mandates a reduction in ABC
- Documenting changes that may not warrant higher levels of precaution
- The appropriateness of the overall level of risk, e.g., scores of {4, 4, 4, 4} vs {1, 1, 1, 4}
- Default level of no risk (=1) or an unknown level of risk when there is no information to evaluate the risk level for a given category
- Relative influence of stock-specific versus indirect ecosystem indicators for risk level
- Number of direct or indirect ecosystem indicators constitute an elevated concern
- Fishery performance indicator relationship to stock productivity risk
- Delineating issues that fall under more than one category
- If both positive or negative items constitutes a “concern” (e.g., sablefish)

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Risk table

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

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Risk table

- The Teams agreed with the authors' decisions
- The individual SAFE chapters contain more information and issues identified by the authors
- Deliberations regarding the risk tables were quite time-consuming
- The Teams recognized that the risk table prep in early days
  - could be simplified if the process to determine levels of risk was decoupled from decision to reduce and the associated amount
- As process develops, a decision table might be useful

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Risk table Team recommendations

The Teams recommended

- Authors continue to complete risk tables
- That adjustment of ABC be discretion of the author, the Team(s), and/or the SSC
    - not mandated if elevated concern

The Teams requested clarification and guidance from the SSC on highlighted issues

Teams plan to discuss the risk table process at the 2020 September meeting

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Sablefish assessment

- Switch to senior author's presentation (Team comments will follow)

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Sablefish

- Teams concerned about positive retrospective bias and poor fits to indices
- The Teams discussed appropriateness of using fishery CPUE given
  - size-selective nature of the fishery
  - inconsistent trends with fishery-independent indices.
- The Teams agreed stronger rationale for removing index needed before excluding
- Teams suggested alternative model configurations
  - In particular, selectivity may be changing as young fish move deeper

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Sablefish

- Alaska, US West Coast, and British Columbia seem to have asynchronous recruitment
  - Strong 2014 and 2016 year classes in BC
  - State of Alaska data show strong 2013 and 2015 year classes
- Otolith edge effects could explain part of discrepancy
- OFL by area and Bering Sea trawl fishery bycatch of sablefish in 2019 discussed
- The authors provided historical background on the evolution of OFL determinations and included the OFL options requested by the SSC
- Since 1996, sablefish managed Alaska-wide
  - ABCs determined by sub-area
  - OFLs set separately for BS, AI, and GOA since 1995

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Sablefish

- The Teams discussed potential biological concerns over spatial structure including spawning aggregations, productivity
- From a management perspective, sablefish are managed on an Alaska-wide stock basis and the OFL should be managed at the stock level
- Bycatch of 2014 and 2016 year classes were highlighted as a conservation concern for which the Council could consider additional bycatch controls
- Public comment indicated that trawl fleets were actively avoiding sablefish bycatch, with the caveat that they must balance this effort with avoiding bycatch of other species like salmon and halibut
- 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

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Sablefish

The Teams agreed with authors' ABC for 2020

- 25% increase from the 2019 ABC BUT a
- 57% reduction from maxABC

The Teams recommended combining BS and AI OFLs

- Also following the Council's spatial management policy, including the development of management controls to mitigate regional bycatch

- The Teams recommended that the authors examine poor fits and residual patterns in the abundance indices
- The Teams recommended that the authors continue to include retrospective recruitment plots (aka "squid plots") to determine when estimates of large recruitment events stabilize

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Sablefish

Quantity/Status	As estimated or specified *last* year for: 2019	2020	As estimated or recommended *this* year for: 2020*	2021*
M (natural mortality rate)	0.100	0.100	0.105	0.105
Tier	3b	3a	3a	3a
Projected total (age 2+) biomass (t)	488,273	513,502	704,683	741,029
Projected female spawning biomass (t)	96,687	129,204	113,368	156,854
$B_{100\%}$	291,845	291,845	264,940	264,940
$B_{40\%}$	116,738	116,738	105,976	105,976
$B_{35\%}$	102,146	102,146	92,729	92,729
F_{OFL}	0.096	0.117	0.121	0.121
$maxF_{ABC}$	0.081	0.099	0.102	0.102
F_{ABC}	0.044	0.051	0.044	0.051
OFL (t)	33,141	45,692	51,726	66,361
OFL_w (t)**	32,798	**45,220**	**50,481**	**64,765**
max ABC (t)	28,171	38,916	44,065	56,589
ABC (t)	15,380	20,620	19,225	24,031
ABC_w (t)**	15,068	20,144	**18,763**	**23,453**

Sablefish

Team recommended combining BS and AI OFLs

Year	2019				2020		2021	
Region	OFL	ABC	TAC	Catch*	OFL	ABC**	OFL	ABC**
BS	3,221	1,489	1,489	2,994	4,987	1,853	6,397	2,317
AI	4,350	2,008	2,008	490	6,771	2,517	8,687	3,146
GOA	25,227	11,571	11,571	9,528	38,723	14,393	49,681	17,990
WGOA	--	1,581	1,581	1,139	--	1,942	--	2,427
CGOA	--	5,178	5,178	4,374	--	6,445	--	8,055
**WYAK	--	1,828	1,828	1,614	--	2,343	--	2,687
**EY/SEO	--	2,984	2,984	2,401	--	3,663	--	4,821
Total	32,798	15,068	15,068	13,012	50,481	18,763	64,675	23,453

* As of October 1, 2019 Alaska Fisheries Informatic… …ww.akfin.org). ** After 95:5 trawl split shown above and after whale depredation methods described above.

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