

Draft SSC Report December 2019



**SSC Oral Report on
C2 GOA Groundfish Specifications**

GOA Pollock

- The SSC **supports** the author and PT preferred model 19.1, noting ongoing issues with the fit to Shelikof and bottom trawl indices.
- The results indicate low weight-at-age and a declining stock, with the 2012 year-class comprising the majority of the current abundance
- The stock is projected to stabilize after 2021, due to a strong 2018 year class observed in 2019 survey data
- The SSC **supports** the authors' and PT's OFLs and a 10% reduction from the maximum ABC, noting:
 - Reduced risk-table concerns relative to the 2018 assessment, leading to a smaller reduction from the maximum ABC than in 2018 (14.2%)
- The SSC **endorses** the Tier 5 specifications for the SE Outside area

GOA Pollock

- The SSC *supports*:
 - Development of alternative models and analyses to explore and account for divergent trends in the Shelikof winter acoustic survey and summer bottom trawl surveys
 - Continued work in developing a model-based approach to combining the summer acoustic and bottom trawl surveys accounting for vertical and distributional shifts
- The SSC *commends* the authors on the development of the ESP, and looks forward to continued refinement and integration of the results with development of future assessments and integration of socioeconomic indicators from communities in the Western GOA

GOA Pacific Cod

- Divergent trends:
 - Trawl survey up but uncertain
 - Longline survey at all time low
- Author presented new model with some updates
- The SSC **agrees** with the author and PT recommended model and associated max ABCs and OFLs
- The SSC noted that there was a 57% reduction due to downward sloping harvest control rule
- Concerns from the risk table were not deemed high enough to warrant reduction below max ABC for 2020
- However, uncertainty about future recruitment and effects of the new heat wave led the SSC to **set the 2021 ABC equal to the 2020 ABC**

GOA Pacific Cod

SSC comments to authors:

- Other methods for projections should be evaluated
- Authors should evaluate options for data collection in non-directed fisheries and potential state fishery for 2020 given the lack of a directed federal fishery

SSC Comments to Council:

- After deliberations were closed the SSC learned that it is possible that the maximum ABC could be achieved absent a directed fishery
- The SSC ***recommends*** that the Council consider other measures to meet intent of Steller Sea Lion rule, as the recommended ABC should be sufficient to prevent overfished status

GOA Deepwater Flatfish Complex

- Complex includes Dover sole (Tier 3a), Greenland turbot (Tier 6), and deepsea sole (Tier 6)
- ~75% of total landings are Dover sole
- Multiple changes were made to the age-structured model for Dover sole that addressed Plan Team, SSC, and CIE recommendations
- The SSC ***supports*** the authors' and PT's recommended OFL and area-apportioned maximum-permissible ABC
- The SSC ***recommends*** a Tier 6 assessment using max catch from 2011-2019 (69 t) as OFL for Kamchatka flounder to be included in the Deepwater Flatfish Complex assessment next year

Arrowtooth Flounder

- Two model scenarios evaluated the removal of early trawl survey years from the analysis:
 - Base model with full time series (model 17.1), and an alternative model using 1977-current (model 19.0)
- The SSC *supports* PT's recommended model 19.0 and associated ABCs and OFLs
 - Time period is consistent with other groundfish assessments
- SSC *recommends* the authors investigate:
 - Removal of opportunistically collected survey length-frequency data (1985, 1986, and 1989)
 - Inclusion of IPHC survey and fishery age composition data

GOA flathead sole, rex sole, northern and southern rock sole, shallow-water flatfish

- All partial assessments, updated with new catch data
- Survey biomass is declining for most species
- The SSC *agrees with* author's and PT's recommended OFLs and ABCs for these GOA flatfish

Pacific Ocean Perch

- The SSC ***supports*** the authors' and PT's choice of model updated with new data
- Results of 2019 bottom trawl survey marks the 4th year in a row of survey biomass above 1 million t
- The assessment underestimated the survey bottom trawl biomass in the last 4 years (model does not keep up with stock growth)
- The SSC ***accepts*** the authors' and PT's recommendation for the model and the associated max ABC and OFL recommendations using Tier 3a
- No reduction from max ABC is indicated by the Risk Table
- The SSC ***accepts*** the authors' and Plan Team's recommendations for area apportionments

Pacific Ocean Perch

SSC Comments to Authors and Plan Team:

- The lack of fit suggests a misspecification within the assessment that should be explored in the next full assessment
- Acoustic trawl biomass estimates for POP are now available. The author is **encouraged** to try incorporating them into the assessment
- The SSC **recommends** that the authors include a table of the effective sample sizes for ages. The SSC also requests that the authors explore data weighting methods to explore whether the age data are being over emphasized.
- The SSC **agrees** with public testimony that it would be beneficial to conduct an internal assessment review of AFSC experts prior to the external CIE review

Shortraker Rockfish

- New model changes:
 - The AFSC longline survey was added to the random effects model, in addition to the bottom trawl survey
 - Estimating regional catchability coefficients and down-weighting the longline survey
- The SSC ***supports*** the authors' and PT's choice of new model and the use of the maximum permissible ABC
- The SSC also endorses the use of the random effects model to apportion the ABC by subarea

Blackspotted/Rougheye Rockfish

- There were no changes to the Tier 3 age structured model
 - Catch data were updated, along with survey data
- The SSC ***supports*** the authors' and PT's choice of the updated model and the use of the maximum permissible ABC
- An new random effects model was developed to apportion the ABC by subarea and the SSC ***endorses*** this approach for apportionment

Other Rockfish

- Two species (Aurora rockfish and shortbelly rockfish) were added to this complex bringing the total number of species managed as OR to 27.
- Relative to 2017 the 2019 biomass estimates for five of the six primary species declined: harlequin (-65%); redbanded (-17%), redstripe (-42%); sharpchin (-2%) and silvergrey (-21%).
- Biological reference points are derived using Tier 4 (sharpchin rockfish), Tier 5 (17 species) and Tier 6 (nine species) methods for different species and summed for setting reference points for the complex. These species exhibit different longevity and maturation schedules.
- The SSC **accepted** the GOA PT recommendations for Tier, ABC and OFL for this complex and the recommended area apportionments in 2020 and 2021.

Other Rockfish

- The SSC ***supports*** the author's plan to explore elevating estimation of biological reference points using Tier 4 methods for harlequin rockfish and Tier 5 methods for yelloweye rockfish (in WGGOA/CGGOA/WY)
- The SSC ***supports*** the Plan Team's recommendation to monitor collection of new data under the 2020 full retention mandate and new EM
- The SSC ***recommends*** that the authors examine range expansions of species from Canada and the US west coast and update the stock structure template

Rockfish Partial Assessments

- The SSC received partial assessments for Demersal Shelf Rockfish, dusky rockfish and northern rockfish
- The SSC **accepted** the author and Plan Team recommendations for Tier, ABC and OFL for these stocks and stock complexes
- The SSC encourages the author to explore alternatives to the 90th percentile of the biomass estimate as a precautionary measure for DSR
- The SSC continues to encourage the development of an age-structured model for DSR

GOA Atka Mackerel

- Tier 6 assessment based on very scant samples; updates but no methodological changes
- Harvest specifications remain at anticipated levels
- The SSC *recommends* acceptance of the OFLs and ABCs as shown in Table 2

Skates

- The SSC **concur**s with the author's and Plan Team's recommended OFLs and ABCs for big skate, longnose skate, and other skates.
- The SSC appreciates the inclusion of the additional skate abundance information from longline surveys (AFSC and IPHC) and two ADFG trawl surveys in the SAFE. While data from these surveys are not currently used for calculating harvest specifications, they provide additional insight into population trends
- The SSC **support**s the development of age-structured models for longnose and big skates.

Octopus

- Full assessment of this Tier 6 stock
- The SSC *supports* the use of maximum catch to set harvest specifications as in 2017
 - The maximum catch was from 2014
 - This number from the catch accounting system was revised slightly since used for 2019 specs
- No reduction from the maximum ABC is recommended

Sculpin Complex

- Tier 5 assessment with updated fishery data
 - No targeted fisheries, purely incidental catch
- Final assessment before moving the complex to Ecosystem Component species
- The SSC *recommends* acceptance of the OFLs and ABCs as recommended by the authors and Plan Team