

Harvest Projection Assessments BSAI Groundfish Plan Team



September, 2024

Northern rockfish - Spencer
Skates (Alaska skate) - Tribuzio
Arrowtooth flounder - Shotwell

Northern rockfish (Tier 3a)

Not overfishing, overfished or approaching overfished



- Fishery Trends: high catch in 2023, expected to be smaller in 2024
- Survey Trends: Persistent large, but variable, biomass
 - last survey 2024, next 2026
- Last full/update assessment 2023, next 2025
- 2024 spawning biomass 124,767 t, trend decreasing
- ABC: 18,694 t, OFL: 22,848 t

Quantity	As estimated or specified last year for:		As estimated or recommended this year for:	
	2024	2025	2025*	2026*
<i>M</i> (natural mortality rate)	0.052	0.052	0.052	0.052
Tier	3a	3a	3a	3a
Projected total (age 3+) biomass (t)	297,189	292,686	292,807	289,639
Female spawning biomass (t)				
Projected	128,229	124,651	124,767	122,075
<i>B</i> _{100%}	187,268	187,268	187,268	187,268
<i>B</i> _{40%}	74,907	74,907	74,907	74,907
<i>B</i> _{35%}	65,544	65,544	65,544	65,544
<i>F</i> _{OFL}	0.086	0.086	0.086	0.086
<i>maxF</i> _{ABC}	0.070	0.070	0.070	0.070
<i>F</i> _{ABC}	0.070	0.070	0.070	0.070
OFL (t)	23,556	22,838	22,848	22,284
maxABC (t)	19,274	18,685	18,694	18,232
ABC (t)	19,274	18,685	18,694	18,232
Status	As determined last year for:		As determined this year for:	
	2022	2023	2023	2024
Overfishing	No	n/a	No	n/a
Overfished	n/a	No	n/a	No
Approaching overfished	n/a	No	n/a	No

*Projections are based on estimated catches of 7,706 t and 7,514 t used in place of maximum permissible ABC for 2025 and 2026.

Thanks to Paul Spencer

Skates (Alaska skate) (Tier 3a, 5)

Not overfishing, overfished or approaching overfished

- Fishery Trends: catch in 2024 down for both Alaska skate and Other skates
 - Unusual trends/observations?
- Survey Trends: No survey update
 - last survey available for assessment 2023, next 2024
- Last operational assessment 2023, next 2025
- ABC: 36,523 t, OFL: 44,086 t
 - Tier 3a ABC: 26,665 t, OFL: 30,941 t
 - Tier 5 ABC: 9,858 t, OFL: 13,145 t
 - No reductions from maxABC

aggregate harvest recommendations for the BSAI skate complex

Quantity	As estimated or specified <i>last</i> year for:		As estimated or recommended this year for:	
	2024	2025	2025	2026
OFL (t)	45,574	44,203	44,086	43,285
maxABC (t)	37,808	36,625	36,523	35,833
ABC (t)	37,808	36,625	36,523	35,833

Thanks to Cindy Tribuzio

Arrowtooth Flounder (Tier 3a)

Not overfishing, overfished or approaching overfished



- Fishery Trends: BS catch lowest in time series, AI low but increase from 2023, 65% in flatfish fisheries, ~20% in atka and rockfish, ~12% in Pacific cod and sablefish
- Survey Trends: No survey update
 - Last survey available for assessment 2023, next survey (EBS and AI) 2024
- Update Projection Catch:
 - 2024: 9,476 t, 2025: 8,900 t, 2026: 7,780 t
 - Catch/Biomass decreasing since 2012, lowest in time series again
- ABC: 88,683 t, OFL: 104,428 t

Quantity/Status	As estimated or specified last year for:		As estimated or recommended this year for:	
	2024	2025	2025*	2026*
M (female, male)	0.2, 0.35	0.2, 0.35	0.2, 0.35	0.2, 0.35
Tier	3a	3a	3a	3a
Projected total (age 1+) biomass (t)	921,062	907,809	908,977	898,546
Projected female spawning biomass (t)	539,030	559,145	560,110	572,274
B _{100%}	561,219	561,219	561,219	561,219
B _{40%}	224,487	224,487	224,487	224,487
B _{35%}	196,427	196,427	196,427	196,427
F _{OFL}	0.174	0.174	0.174	0.174
maxF _{ABC}	0.146	0.146	0.146	0.146
F _{ABC}	0.146	0.146	0.146	0.146
OFL (t)	103,280	104,270	104,428	102,472
maxABC (t)	87,690	88,548	88,683	87,035
ABC (t)	87,690	88,548	88,683	87,035
Status	As determined last year for:		As determined this year for:	
	2023	2024	2024	2025
Overfishing	No	n/a	No	n/a
Overfished	n/a	No	n/a	No
Approaching overfished	n/a	No	n/a	No

Thanks to Kalei Shotwell