



STOCK STATUS UPDATE OF SCALLOP (*PLACOPECTEN MAGELLANICUS*) IN SCALLOP PRODUCTION AREAS 1 TO 6 IN THE BAY OF FUNDY

Context

Advice on the status of Scallop in Scallop Production Areas (SPAs) 1 to 6 in the Bay of Fundy (BoF) is requested annually by Fisheries and Oceans Canada (DFO) Resource Management to help determine a Total Allowable Catch (TAC, meat weight) in support of the fishery. The purpose of this report is to update the stock status of Scallop in SPAs 1 to 6 with data from the 2021 scallop survey and fishery (October 1 to September 30). The last Regional Advisory Process of the BoF Scallop stocks occurred in 2015 (DFO 2016, Nasmith et al. 2016); updates have been conducted since.

This Science Response Report results from the Regional Science Response Process of November 22, 2021, on the Stock Status Update of Bay of Fundy Scallop in Scallop Production Areas (SPAs) 1A, 1B, and 3–6.

Background

There are three fleets (Full Bay, Mid Bay, and Upper Bay) in the inshore BoF scallop fishery. Full Bay licence holders are permitted to fish throughout the BoF. Mid Bay licence holders have access to all areas north of the Mid Bay line. Upper Bay licence holders are restricted to the upper reaches of the Bay (Figure A1). The fishery is managed using limited entry, drag gear size limits, seasonal closures, minimum shell height, and meat count. The drag gear width limit is 5.5 metres (m) with a ring size of not less than 82 mm inside diameter. The Full Bay Fleet operates under an Individual Transferable Quota (ITQ) system, while the Mid Bay and Upper Bay fleets fish with competitive quotas. Total Allowable Catches (TACs) and landings are reported in terms of meat weights (adductor muscles).

Population surveys are conducted annually by DFO Science. The population dynamics of commercial and recruit Scallops for all SPAs (Figure A1) were modelled using a Bayesian state-space model, with modifications presented in Smith et al. (2012) and Smith and Hubley (2014). A detailed description of survey design and strata boundaries is presented in Nasmith et al. (2016). In this report, Scallops with a shell height of 80 mm and greater are referred to as commercial size. Scallops with a shell height of 65–79 mm are referred to as recruits and are expected to grow to be commercial size in the following year. Scallops less than 65 mm are defined as pre-recruits. Scallop removals accounted for in assessments include commercial landings from all three inshore scallop fleets, and Food, Social, and Ceremonial (FSC) catch by scallop drag. Landed recreational and FSC catch by dip netting, diving, tongs, and hand are not accounted for in the assessment. Landing values from 2021 are preliminary (Table A1). In 2020, there was no survey. The indices used as input for the model in 2020 are imputed using the 2019 and 2021 values; this approach is consistent with methods used to address missing information in previous years (e.g., Nasmith et al. 2016).

Analysis and Response

Indicators of Stock Status

Scallop Production Area 1A Stock Status

The biomass estimate of 2,413 t (meats) for commercial Scallops in 2021 is above the long-term (1997–2020) median of 1,866 t; the probability that the 2021 biomass is currently above the USR and in the Healthy Zone is greater than 0.99 (Figure 1). The biomass estimate of 36.0 t for recruit Scallops in 2021 is below the long-term (1997–2020) median of 55.4 t.

Catch scenarios for the 2021–2022 fishing season are presented in Table 1. Biomass projections assume current year estimates of growth and that natural mortality is the average over the last 5 years. For example, Table 1 is interpreted as follows: a catch of 220 t corresponds to an exploitation 0.09 and is projected to result in a 9% decline in commercial biomass, the probability of commercial biomass increase is 37%, the probability that a catch of 220 t will result in the population remaining above the Lower Reference Point (LRP) is > 99%, and the probability of the population remaining above the Upper Stock Reference (USR) is 98%. In the following fishing year (2022–2023), a catch of 208 t would have a probability of 10% of exceeding a removal reference exploitation of 0.15.

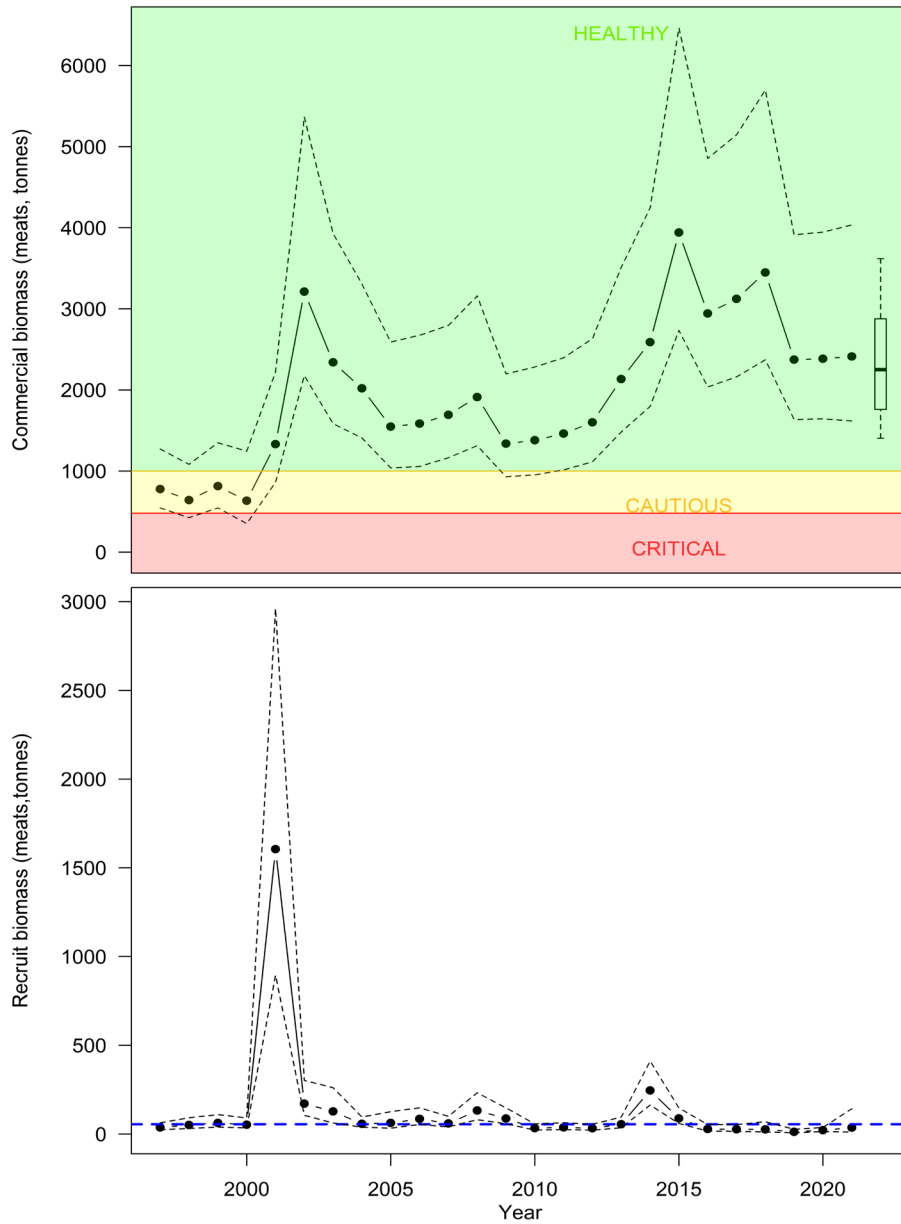


Figure 1. Median biomass estimates in Scallop Production Area (SPA) 1A for commercial (top panel) and recruit (bottom panel) size Scallops in meat weight (tonnes) from the assessment model fit to the survey and commercial data. Dashed lines are the upper and lower 95% credible limits on the estimates. The predicted commercial size biomass for 2022, assuming the 2021–2022 interim Total Allowable Catch (TAC; 200 t), is displayed as a box plot with median, 50% credible limits (box) and 80% credible limits (whiskers). The green-shaded area represents the Healthy Zone (based on an Upper Stock Reference [USR] point of 1000 t), the yellow-shaded area represents the Cautious Zone, and red-shaded area represents the Critical Zone (based on Lower Reference Point [LRP] of 480 t; Nasmith et al. [2014]). The blue horizontal dashed line in the lower panel represents the long-term median (1997–2020) recruit biomass. There was no survey in 2020; the indices used as input for the model in 2020 are imputed using the 2019 and 2021 values.

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Table 1. Harvest scenario table for Scallop Production Area (SPA) 1A to evaluate 2021–2022 catch levels in terms of resulting exploitation (e), expected changes in commercial biomass (%), probability (Pr) of commercial biomass increase, probability that after removal the stock will be above the Upper Stock Reference (USR; 1000 t), and above the Lower Reference Point (LRP; 480 t). Potential catches (t) in 2022–2023 are evaluated in terms of the posterior probability of exceeding a removal reference exploitation of 0.15.

Catch (t)	2021–2022 Fishing Season					2022–2023 Fishing Season Probability Exploitation > 0.15 Potential Catch (t)					
	e	% Change	Pr Increase	Pr > LRP	Pr > USR	0.1	0.2	0.3	0.4	0.5	0.6
200	0.08	-8	0.38	> 0.99	0.98	210	248	278	307	337	369
220	0.09	-9	0.37	> 0.99	0.98	208	246	276	305	334	366
240	0.10	-9	0.36	> 0.99	0.98	205	242	273	302	332	364
260	0.11	-10	0.35	> 0.99	0.98	203	240	270	300	329	361
280	0.11	-11	0.33	> 0.99	0.98	202	238	268	296	326	358
300	0.12	-11	0.32	> 0.99	0.98	199	236	266	294	323	355
320	0.13	-13	0.31	> 0.99	0.97	196	233	262	291	320	351
340	0.14	-13	0.30	> 0.99	0.97	195	230	260	288	316	348
360	0.15	-14	0.29	> 0.99	0.97	192	228	257	285	313	345

Scallop Production Area 1B Stock Status

The biomass estimate of 3,066 t (meats) for commercial Scallops in 2021 is above the long-term (1997–2020) median of 2,700 t; the probability that the 2021 biomass is currently above the USR and in the Healthy Zone is greater than 0.99 (Figure 2). The biomass estimate of recruit Scallops in 2021 was 267.4 t. This estimate is above the long-term (1997–2020) median of 142.9 t.

Catch scenarios for the 2021–2022 fishing season are presented in Table 2. Biomass projections assume current year estimates of growth and that natural mortality is the average over the last 5 years. See SPA 1A Stock Status section in this document for an example of interpreting the table.

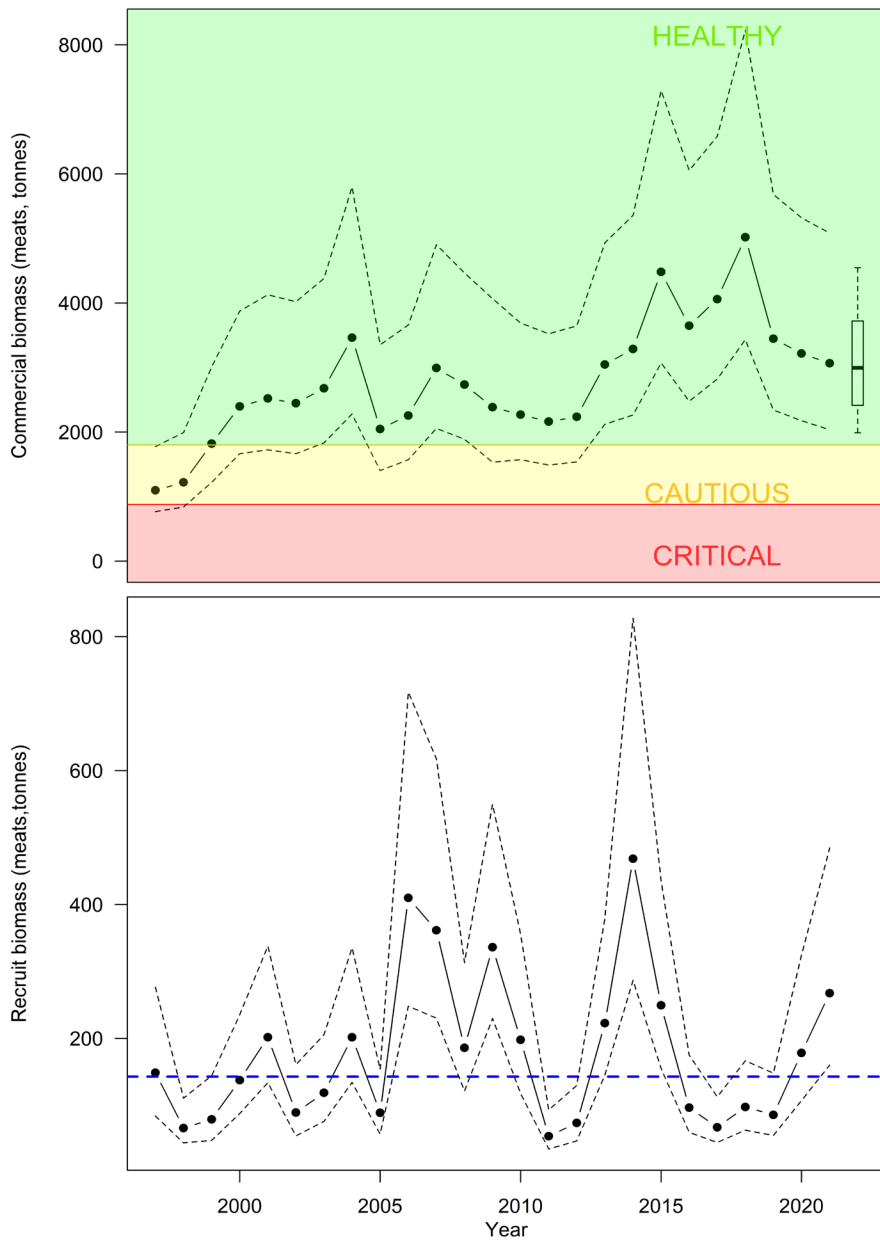


Figure 2. Median biomass estimates in Scallop Production Area (SPA) 1B for commercial (top panel) and recruit (bottom panel) size Scallops in meat weight (tonnes) from the assessment model fit to the survey and commercial data. Dashed lines are the upper and lower 95% credible limits on the estimates. The predicted commercial size biomass for 2022, assuming the 2021–2022 interim Total Allowable Catch (TAC; 150 t), is displayed as a box plot with median, 50% credible limits (box) and 80% credible limits (whiskers). The green-shaded area represents the Healthy Zone (based on an Upper Stock Reference [USR] point of 1,800 t), the yellow-shaded area represents the Cautious Zone, and red-shaded area represents the Critical Zone (based on Lower Reference Point [LRP] of 880 t; Nasmith et al. [2014]). The blue horizontal dashed line in the lower panel represents the long-term median (1997–2020) recruit biomass. There was no survey in 2020; the indices used as input for the model in 2020 are imputed using the 2019 and 2021 values.

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Table 2. Harvest scenario table for Scallop Production Area (SPA) 1B to evaluate 2021–2022 catch levels in terms of resulting exploitation (e), expected changes in commercial biomass (%), probability (Pr) of commercial biomass increase, probability that after removal the stock will be above the Upper Stock Reference (USR; 1800 t), and above the Lower Reference Point (LRP; 880 t). Potential catches (t) in 2022–2023 are evaluated in terms of the posterior probability of exceeding a removal reference exploitation of 0.15.

Catch (t)	2021–2022 Fishing Season					2022–2023 Fishing Season Probability Exploitation > 0.15 Potential Catch (t)					
	e	% Change	Pr Increase	Pr > LRP	Pr > USR	0.1	0.2	0.3	0.4	0.5	0.6
150	0.05	-3	0.45	> 0.99	0.94	298	344	381	415	449	486
190	0.06	-4	0.42	> 0.99	0.94	293	338	375	409	443	480
230	0.07	-5	0.40	> 0.99	0.93	289	334	370	404	438	475
270	0.09	-7	0.38	> 0.99	0.92	284	329	365	398	432	469
310	0.10	-8	0.36	> 0.99	0.92	280	324	360	393	426	463
350	0.11	-9	0.33	> 0.99	0.91	276	319	354	387	420	457
390	0.12	-10	0.31	> 0.99	0.90	271	315	350	382	415	451
430	0.14	-12	0.29	> 0.99	0.89	266	309	344	376	410	446
470	0.15	-13	0.27	> 0.99	0.88	262	305	339	372	404	441

Scallop Production Area 2

Scallop Production Area 2 is considered to be marginal habitat for Scallops and is not monitored regularly. This area was last assessed in 2006 (DFO 2007).

Scallop Production Area 3 Stock Status

The biomass estimate of 2,120 t (meats) for commercial Scallops in 2021 is above the long-term (1996–2020) median of 1,617 t; the probability that the 2021 biomass is currently above the USR and in the Healthy Zone is greater than 0.99 (Figure 3). The biomass estimate of 31.7 t for recruit Scallops in 2021 is below the long-term (1996–2020) median of 61.7 t.

Catch scenarios for the 2021–2022 fishing season are presented in Table 3. Biomass projections assume current year estimates of growth and that natural mortality is the average over the last 5 years. See SPA 1A Stock Status section in this document for an example of interpreting the table.

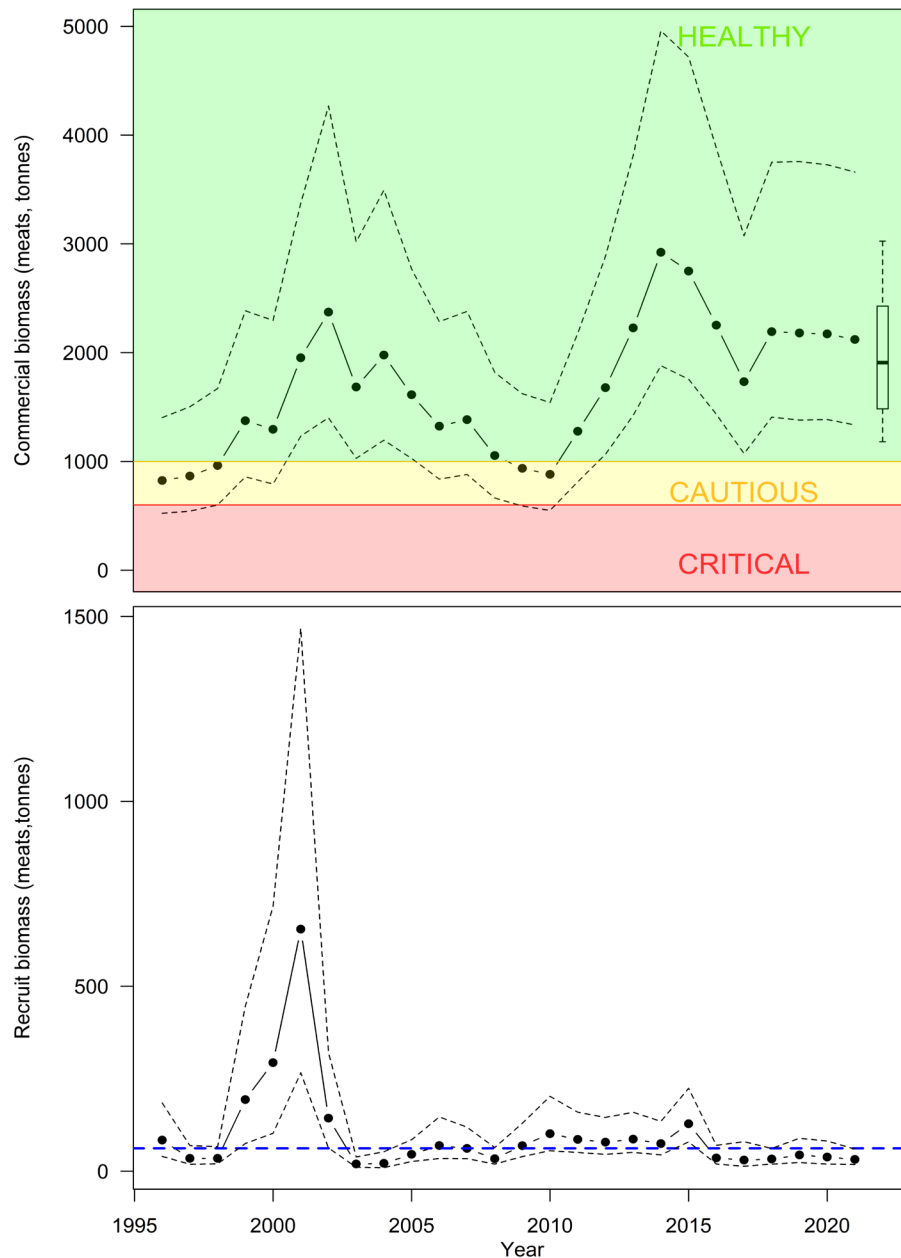


Figure 3. Median biomass estimates in Scallop Production Area (SPA) 3 for commercial (top panel) and recruit (bottom panel) size scallops in meat weight (tonnes) from the assessment model fit to the survey and commercial data. Dashed lines are the upper and lower 95% credible limits on the estimates. The predicted commercial size biomass for 2022, assuming the 2021–2022 interim Total Allowable Catch (TAC; 100 t), is displayed as a box plot with median, 50% credible limits (box) and 80% credible limits (whiskers). The green-shaded area represents the Healthy Zone (based on an Upper Stock Reference [USR] point of 1,000 t), the yellow-shaded area represents the Cautious Zone, and red-shaded area represents the Critical Zone (based on Lower Reference Point [LRP] of 600 t; Nasmith et al. [2014]). The blue horizontal dashed line in the lower panel represents the long-term median (1997–2020) recruit biomass. There was no survey in 2020; the indices used as input for the model in 2020 are imputed using the 2019 and 2021 values.

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Table 3. Harvest scenario table for Scallop Production Area (SPA) 3 to evaluate 2021–2022 catch levels in terms of resulting exploitation (e), expected changes in commercial biomass (%), probability (Pr) of commercial biomass increase, probability that after removal the stock will be above the Upper Stock Reference (USR; 1000 t), and above the Lower Reference Point (LRP; 600 t). Potential catches (t) in 2022–2023 are evaluated in terms of the posterior probability of exceeding a removal reference exploitation of 0.15.

Catch (t)	2021–2022 Fishing Season					2022–2023 Fishing Season Probability Exploitation > 0.15 Potential Catch (t)					
	e	% Change	Pr Increase	Pr > LRP	Pr > USR	0.1	0.2	0.3	0.4	0.5	0.6
100	0.05	-11	0.32	> 0.99	0.96	176	209	235	260	285	313
120	0.06	-12	0.30	> 0.99	0.95	175	207	233	258	283	310
140	0.07	-13	0.30	> 0.99	0.95	172	205	231	256	281	308
160	0.08	-14	0.28	> 0.99	0.94	170	202	228	252	277	305
180	0.09	-14	0.27	> 0.99	0.94	168	200	226	250	275	301
200	0.10	-15	0.25	> 0.99	0.94	165	196	223	247	272	299
220	0.11	-16	0.24	> 0.99	0.93	164	195	220	244	269	297
240	0.12	-17	0.23	> 0.99	0.93	161	193	218	242	266	293
260	0.13	-18	0.21	> 0.99	0.92	159	190	215	239	263	290
280	0.14	-19	0.20	> 0.99	0.92	157	188	213	237	261	288
300	0.15	-20	0.19	0.99	0.91	155	186	211	234	258	284

Scallop Production Area 4 and 5 Stock Status

SPA 4

The biomass estimate of 1,467 t (meats) for commercial Scallops in 2021 is above the long-term (1983–2020) median of 1,105 t; the probability that the 2021 biomass is currently above the USR and in the Healthy Zone is greater than 0.99 (Figure 4). The biomass estimate of 13.7 t for recruit Scallops in 2021 is below the long-term (1983–2020) median of 29.5 t.

Catch scenarios for the 2021–2022 fishing season are presented in Table 4. Biomass projections assume current year estimates of growth and that natural mortality is the average over the last 5 years. See SPA 1A Stock Status section in this document for an example of interpreting the table.

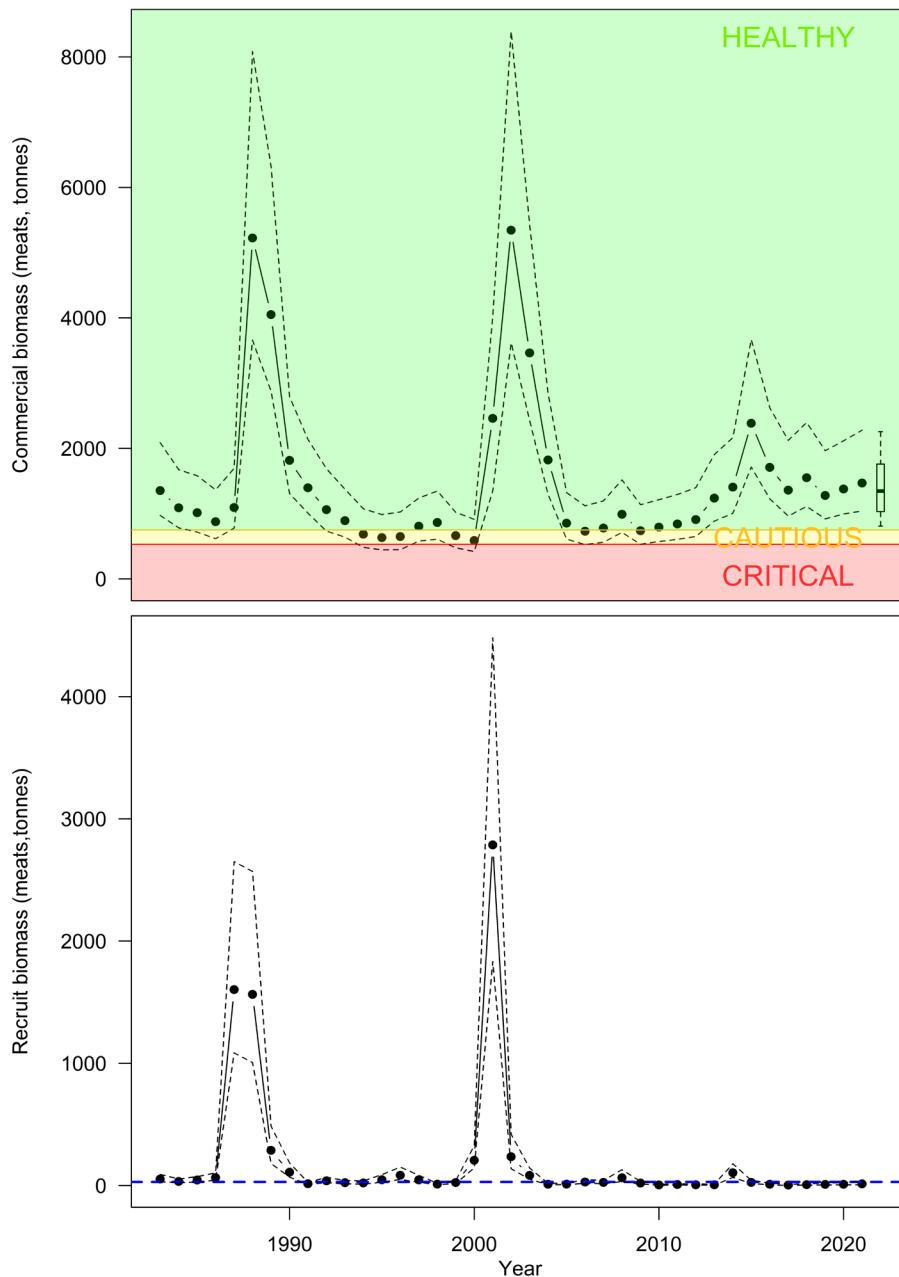


Figure 4. Median biomass estimates in Scallop Production Area (SPA) 4 for commercial (top panel) and recruit (bottom panel) size scallops in meat weight (tonnes) from the assessment model fit to the survey and commercial data. Dashed lines are the upper and lower 95% credible limits on the estimates. The predicted commercial size biomass for 2022, assuming the 2021–2022 interim Total Allowable Catch (TAC; 100 t), is displayed as a box plot with median, 50% credible limits (box) and 80% credible limits (whiskers). The green-shaded area represents the Healthy Zone (based on an Upper Stock Reference [USR] point of 750 t), the yellow-shaded area represents the Cautious Zone, and red-shaded area represents the Critical Zone (based on Lower Reference Point [LRP] of 530 t; Nasmith et al. [2014]). The blue horizontal dashed line in the lower panel represents the long-term median (1997–2020) recruit biomass. There was no survey in 2020; the indices used as input for the model in 2020 are imputed using the 2019 and 2021 values.

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Table 4. Harvest scenario table for Scallop Production Area (SPA) 4 to evaluate 2021–2022 catch levels in terms of resulting exploitation (e), expected changes in commercial biomass (%), probability (Pr) of commercial biomass increase, probability that after removal the stock will be above the Upper Stock Reference (USR; 750 t), and above the Lower Reference Point (LRP; 530 t). Potential catches (t) in 2022–2023 are evaluated in terms of the posterior probability of exceeding a removal reference exploitation of 0.15.

Catch (t)	2021–2022 Fishing Season					2022–2023 Fishing Season Probability Exploitation > 0.15 Potential Catch (t)					
	e	% Change	Pr Increase	Pr > LRP	Pr > USR	0.1	0.2	0.3	0.4	0.5	0.6
	100	0.07	-9	0.39	0.99	0.93	121	145	164	183	202
120	0.08	-11	0.37	0.99	0.92	120	143	161	180	198	220
140	0.10	-12	0.35	0.99	0.92	117	140	159	177	196	217
160	0.11	-13	0.34	0.98	0.91	114	138	157	175	193	214
180	0.12	-14	0.32	0.98	0.90	113	136	155	172	190	211
200	0.14	-16	0.30	0.98	0.90	112	133	152	170	188	208
220	0.15	-17	0.29	0.98	0.88	109	131	149	166	184	204

SPA 5

The annual survey in SPA 5 was discontinued in 2009 after consultation with industry, and the sampling effort was redirected to other areas in the BoF. Since the 2014 survey, a small number (n = 5) of tows have been conducted in SPA 5 annually. Survey trends are compared to the historic long-term medians (1990–2008). The commercial weight per tow of 0.6 kilograms per tow (kg/tow) in 2021 is below the historic long-term (1990–2008) median (1.4 kg/tow); commercial weight per tow in 2019 was 1.9 kg/tow. Recruit weight per tow of 0.02 kg/tow in 2021 is below the historic long-term (1990–2008) median (0.1 kg/tow); recruit weight per tow in 2019 was 0.03 kg/tow.

Scallop Production Area 6 Stock Status

For SPA 6, the stock status indicator is the commercial catch rate time series starting in 1997 for all subareas combined. The LRP is 6.2 kg/h, the lowest catch rate observed in the time series since 1997, and the USR is 9.1 kg/h based on the average catch rate from 2005 to 2011 (Nasmith et al. 2016). In 2021, the catch rate of 29.9 kg/h across all areas is above the USR and in the Healthy Zone (Figure 5). In 2020, the catch rate was 27.7 kg/h.

The productivity of Scallops is tied closely to habitat suitability and, in the absence of detailed habitat information, the spatial distribution of fishing effort can be a good indicator of suitable habitat (Smith et al. 2009, Brown et al. 2012, Sameoto et al. 2014, Smith et al. 2015). The modelled area for SPA 6 corresponds to an area of historically high fishing intensity as described in Nasmith et al. (2016). However, unlike other SPAs in the Bay of Fundy, the modelled area of SPA 6 represents a subset of the core Scallop habitat. The proportion of landings associated with the modelled area ranged from 64–81% between 2006 and 2020. In 2021, the proportion of landings that came from the modelled area was 69%. The biomass estimate of 1,063 t (meats) for commercial Scallops in 2021 is above the long-term (2006–2020) median of 693 t (Figure 6). The biomass estimate of 6.1 t for recruit Scallops in 2021 is below the long-term (2006–2020) median of 45.5 t.

Catch scenarios for 2021–2022 are presented in Table 5. Biomass projections assume current year estimates of growth and that natural mortality is the average over the last 5 years. Table 5 is interpreted as follows: a catch of 120 t in the modelled area of SPA 6 would correspond to an exploitation of 0.11 and is projected to result in a 12% decline in commercial biomass in the modelled area, and the probability of commercial biomass increase in the modelled area is 35%.

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Conditional on the proportion of catch from the modeled area staying the same in 2022 as 2021, a catch of 120 t from the modelled area would correspond to a total SPA 6 catch of 174 t.

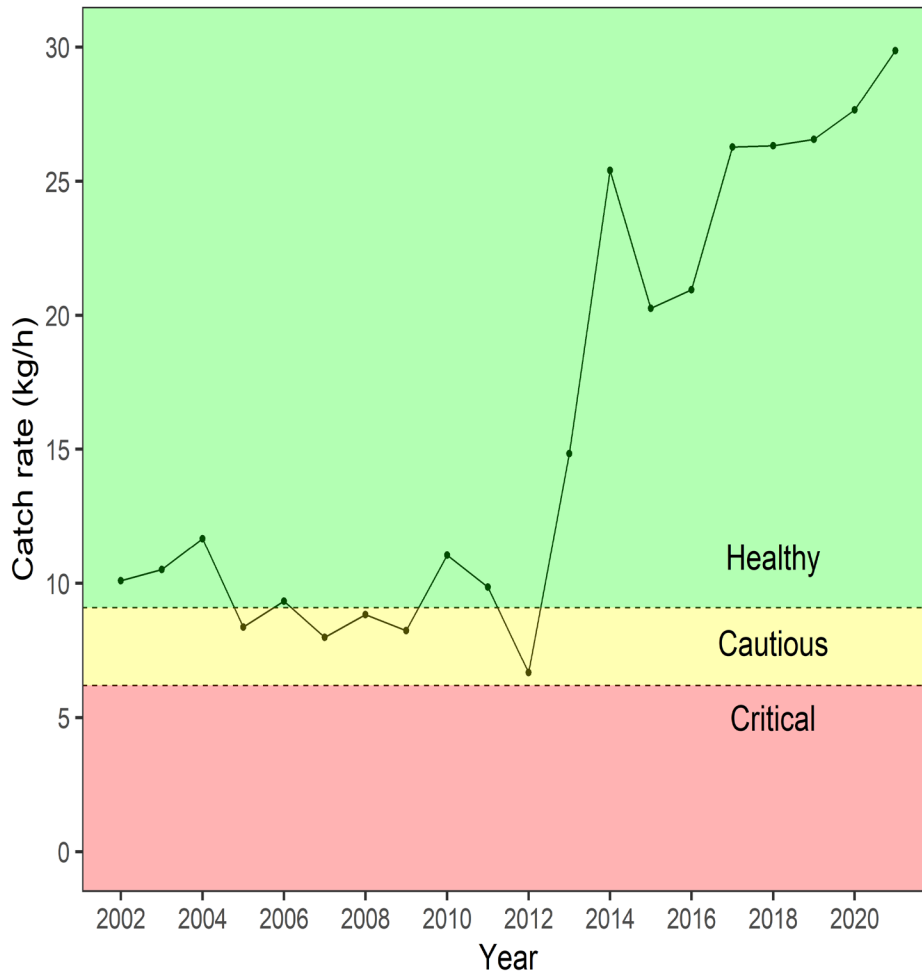


Figure 5. Annual commercial catch rate (kilogram/hour [kg/h]) for Scallop Production Area (SPA) 6 for all subareas and both fleets combined. The green-shaded area represents the Healthy Zone (based on an Upper Stock Reference of 9.1 kg/h), the yellow-shaded area represents the Cautious Zone, and the red-shaded area represents the Critical Zone (based on Lower Reference Point of 6.2 kg/h).

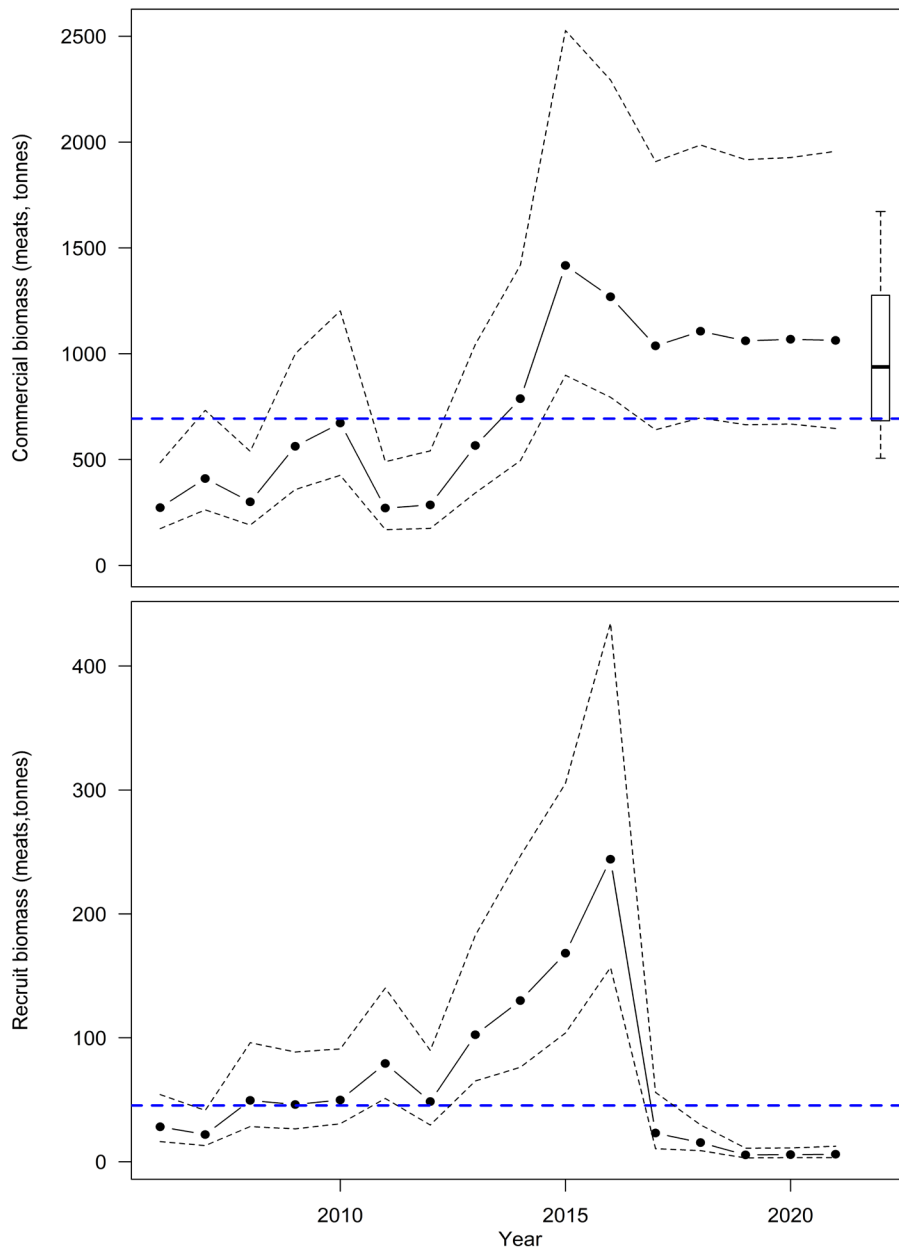


Figure 6. Median biomass estimates (solid line) in the Scallop Production Area (SPA) 6 modelled area for commercial (top panel) and recruit (bottom panel) size Scallops in meat weight (tonnes) from the assessment model fit to the survey and commercial data. Dashed lines are the upper and lower 95% credible limits on the estimates. The predicted commercial size biomass for 2021, assuming a catch of 129 t in 2022, is displayed as a box plot with median, 50% credible limits (box) and 80% credible limits (whiskers). The blue horizontal dashed lines represent the long-term median (2006–2020) biomasses. There was no survey in 2020; the indices used as input for the model in 2020 are imputed using the 2019 and 2021 values.

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Table 5. Harvest scenario table for the Scallop Production Area (SPA) 6 modelled area to evaluate 2021–2022 fishing season catch levels in terms of resulting exploitation (e), expected changes in commercial biomass (%), and probability (Pr) of commercial biomass increase.

Catch (t)	2021–2022 Fishing Season		
	e	% Change	Pr Increase
100	0.09	-10	0.37
120	0.11	-12	0.35
140	0.13	-14	0.33
160	0.15	-16	0.31
180	0.17	-17	0.29
200	0.19	-20	0.26
220	0.20	-21	0.24

Bycatch Considerations

Currently, there is no DFO requirement that SFA 28A–D trips be observed. Refer to Sameoto and Glass (2012) for past analysis of discards from the inshore scallop fishery.

Conclusions

In 2021, all SPAs remained in the Healthy Zone. The biomass estimates of recruit Scallops for SPAs 1A, 3, 4, and 6 were below their respective long-term medians, whereas it was above the long-term median for SPA 1B.

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Sources of Information

- Brown, C., Sameoto, J.A., and Smith, S.J. 2012. Multiple Methods, Maps, and Management Applications: Purpose made Seafloor Maps in Support of Ocean Management. *J. Sea Res.* 72: 1–13.
- DFO. 2007. [Stock Assessment Report on Scallops \(*Placopecten magellanicus*\) in Scallop Production Areas 1 to 6 in the Bay of Fundy](#). DFO Can. Sci. Advis. Sec. Sci. Advis Rep. 2007/013.
- DFO. 2016. [Assessment of Scallops \(*Placopecten magellanicus*\) in Scallop Production Areas 1 to 6 in the Bay of Fundy](#). DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2016/004.
- Nasmith, L., Hubley, B., Smith, S.J., and Glass, A. 2014. [Scallop Production Areas in the Bay of Fundy: Stock Status for 2013 and Forecast for 2014](#). DFO Can. Sci. Advis. Sec. Res. Doc. 2014/016: vii + 139 p.
- Nasmith, L., Sameoto, J.A., and Glass, A. 2016. [Scallop Production Areas in the Bay of Fundy: Stock Status for 2015 and Forecast for 2016](#). DFO Can. Sci. Advis. Sec. Res. Doc. 2016/021. vi + 140 p.
- Sameoto, J.A. and Glass, A. 2012. An Overview of Discards from the Canadian Inshore Scallop Fishery in SFA 28 and SFA 29 West for 2002 to 2009. *Can. Tech. Rep. Fish. Aquat. Sci.* 2979. vi + 39 p.
- Sameoto, J.A., Smith, S.J., Glass, A., Hubley, B., and Denton, C. 2014. [Scallop Fishing Area 29: Stock Status and Update for 2014](#). DFO Can. Sci. Advis. Sec. Res. Doc. 2014/064. v + 69 p.
- Smith, S.J., Black, J., Todd, B.J., Kostylev, V.E., and Lundy, M.J. 2009. The Impact of Commercial Fishing on the Determination of Habitat Associations for Sea Scallops (*Placopecten magellanicus*, Gmelin). *ICES J. Mar. Sci.* 66: 2043–2051.
- Smith, S.J., Hubley, B., Nasmith, L., Sameoto, J., Bourdages, H., and Glass, A. 2012. [Scallop Production Areas in the Bay of Fundy: Stock Status for 2011 and Forecast for 2012](#). DFO Can. Sci. Advis. Sec. Res. Doc. 2012/009: vii + 123 p.
- Smith, S.J. and Hubley, B. 2014. Impact of survey design changes on stock assessment advice: Sea scallops. *ICES J. Mar. Sci.* 71: 320–327.
- Smith, S.J., Nasmith, L., Glass, A., Hubley, B., and Sameoto, J. 2015. [Framework assessment for SFA 29 West scallop fishery](#). DFO Can. Sci. Advis. Sec. Res. Doc. 2014/110. v + 69 p.

Appendix

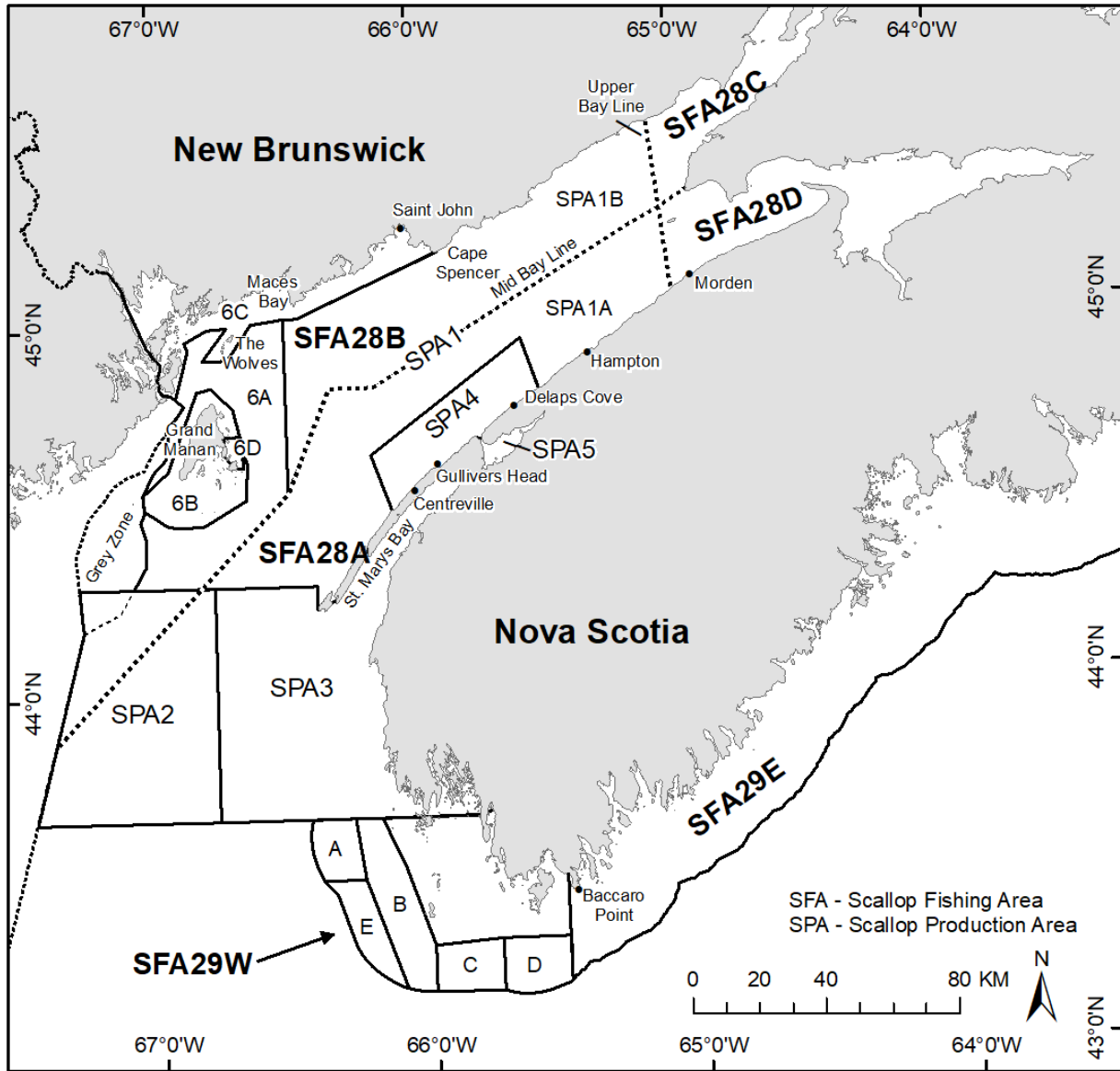


Figure A1. Map of Scallop Production Areas (SPAs) and Scallop Fishing Areas (SFAs) in the Bay of Fundy and approaches.

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Table A1. Commercial Scallop fishery landings, Total Allowable Catch (TAC), and landings for Food, Social and Ceremonial purposes (FSC) by First Nations (meats, t) for Scallop Production Areas (SPAs) in the Bay of Fundy from 2019 to 2021. TAC values are pre-quota reconciliation. Landing values in 2021 are preliminary (as of November 09, 2021). Dash (-) indicates no catch. * indicates preliminary data.

Year	SPA	TAC (t)	Landings (t)	FSC (t)	Total Landings (t)
2019	1A	450	467.5	-	467.5
	1B	750	739.8	-	739.8
	3	125	75.5	-	75.5
	4&5	125	113.1	-	113.1
	6	200	214.5	-	214.5
2020	1A	415	415.3	-	415.3
	1B	600	544.9	-	544.9
	3	175	107.6	-	107.6
	4&5	135	128.0	-	128.0
	6	200	215.9	-	215.9
2021*	1A	270	271.7	-	271.7
	1B	400	417.1	-	417.1
	3	200	249.2	-	249.2
	4&5	175	168.5	-	168.5
	6	210	190.5	-	190.5

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