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SCIENTIFIC COUNCIL AND STACFIS SHRIMP ASSESSMENT MEETING – SEPTEMBER 2023

Catch Table Update for the West Greenland Shrimp Fishery

by

AnnDorte Burmeister

Greenland Institute of Natural Resources

Box 570, 3900 Nuuk, Greenland

Introduction

The table in present document summarize various recent catch estimates and TAC values for the shrimp fisheries on the West Greenland shelf in Div. SA 1 and SFA 1.

In earlier years the provisional catch in Canadian SFA 1 had been estimated as the mean of the previous 5 years' catches. However, the fishery has fluctuated in recent years (Table 1.A) and from 2009 provisional catch furnished by industry observers for the present year has been used as a measure for catch information.

A projected catch in Greenland Subarea 1 has since 2010 been provided by the Greenland Fishery and License Kontrol (GFLK). The projected catch is based on cumulative catches from logbooks from the Greenlandic and EU fleets for the current year compared with past years.

The stock extends into the EEZs of both Greenland and Canada. There is no agreement on sharing the stock. In order to improve its management of its own fishery, Greenland has instituted a procedure for taking account of Canadian interests when setting quotas. After deciding on a TAC for the stock, Greenland reserves a portion of it for Canada before allocating quotas to fleets fishing in Greenland waters. The fraction set aside for Canada is based on a weighting of the Canadian portions of the standard survey area, recent survey estimates of biomass, and recent catches. Quota allocation within Greenland waters has also been changed in 2012 such that an agreed EU quota is deducted before allocating quotas to the Greenland offshore and inshore fleets (Table 1).

Quota drawdowns in Greenland have, until 1st of January 2011, been based not on live-caught weight, but on traded weight, less than the logbook recorded catch by an allowance for crushed and broken shrimps (G.H. 2010). This has caused a discrepancy between the quota drawdowns by GFLK (Table 1) and the catch from the

logbooks (Table 1) amounting from 11% to 14% for the years 2007 to 2010. Since 2011, where quota drawdowns by legislation is required to be based on live-caught weight, this discrepancy has been less than 5%.

A Greenlandic licence holder who fishes out his quota may apply to start fishing the following year's quota from the 15th of November and licence holders with quotas unfished at the end of the year may apply to fish them until the 30th of April in the following year (G.H. 2002 and G.H. 2012). These concessions have in earlier years led to accumulation of unfished quotas and can partly explain how the quota drawdowns by GFLK (Table 1) in some years can exceed the enacted TAC for Greenland (Table 1). In addition, catches of *Pandalus montagui* have often not been distinguished in logbooks from *Pandalus borealis*, especially by vessels fishing bulk shrimps for landing in Greenland, the proportion of *P. montagui* being estimated by sampling the catch at the point of sale. Quota drawdowns were then restricted to the estimated weight of borealis and logbook records could in this way still come to exceed quotas. Since 2011 logbooks are required to record at least estimated catches of *P. montagui* (G.H. 2010).

In recent years the capacity of the Greenland offshore fleet has been reduced and part of its quota has been sold to the Greenland inshore fleet.

Results

Greenland has set a TAC at 110 000 tonnes for the fishery in 2023 from where 845 tonnes is set aside to Canada and 109 115 tonnes for Greenland. However, the Canadian authorities have enacted a TAC of 15 583 tonnes. Greenlandic catches in 2023 are projected to be 110 000 tonnes and Canadian catches 0.49 tonnes (person comm. Wojciech Walkusz, DFO-Canada), (Table 1.A).

From 2014 to 2016 a trial and development fishery has been conducted in the Melville Bay North of 73°30'N (for details on catches and TACs see Table 2, Table 1B). This area is now incorporated in the assessment. Hence catches from this area and TACs for this area are included in Table 1

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References

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Table 1. Annual catch (A), Input of yearly catch figures to Assessment Model (B) and TAC (C), for the fishery for Northern Shrimp on the West Greenland shelf up to 76°00'N

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
STATLANT[#] (SA1) (PRA and PAN)	91800	88834	71777	82922	88947	90457	98219	110250	107367	115772	
GFLK[†] year (SA 1) (Quota drawdowns) (PRA)	92464	86625	68912	80855	85839	90498	97462	109526	109565	112628	
Logbooks[‡] (SA 1 up to 76°00'N) (PRA)	95379	88765	72254	84356	89369	93189	101977	113117	114348	118127	*110000p*
STATLANT[#] (0A) (PRA and PAN)	2	0	2	1381	2778	1412	1328	115	204	*?*	
DFO quota report SFA1[§] (PRA)	2	0	2	1163	3001	1689	2463	641	*221p*	*0.49*	*0.49p*
DFO, Observer logbooks[¤] (PRA)	2	0	2	1171	3215	1689	2463	641	*221p*	*0.49*	*0.5p*
B. Input to Assessment Model (tonnes) for year:	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total Catch for 2022 Assessment	95381*l*	88765l	72256l	85527l	90000	101250	100000	117000	108000	*120000*	*110000p*
Total Catch for 2021 Assessment	95381*l*	88765l	72256l	85527l	90000	101250	100000	117000	108000		
Total Catch for 2020 Assessment	95288l	87358l	70650l	82000p	90000	101250	100000				
C. TACs (tonnes) for year:	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Greenland SA1 offshore	47802	45262	39365	45715	49223	55517	57332	60182	63373	63373	60736
Greenland SA1 inshore	36061	34145	29696	34486	37134	41881	43251	45401	47806	47806	45819
Greenland SA1 EU	3400	3400	2000	2600	2600	2600	2800	2800	2600	2600	2600
Greenland set-aside for Canada	2737	2193	1939	2199	1044	1252	1617	1617	1223	1223	845
Greenland Trial Fishery (SA1 North of 73°30'N)	2000	3509	3000	3000							
Total Greenland SA1 & SFA1	92000	88509	76000	88000	90000	101250	105000	110000	115000	115000	110000
Total Greenland enacted SA1	89263	86316	74061	85801	88956	99998	103383	108383	113777	113777	109155
Canada enacted SFA1	11333	11333	8500	10625	12750	14875	14875	15229	15937	16291	15583
Total enacted TAC, SA1 & SFA1	100596	97649	82561	96426	101706	114873	118213	125229	130937	131291	125583
Advised by SC	80000	80000	60000	90000	90000	105000	105000	110000	115000	115000	110000

† quota drawdowns (Northern Prawn, PRA) recorded in the GFLK data base; [#] species PRA (Northern Prawn) and PAN (Pandalid shrimps). [‡] since 2011 legally required to be 'live weight' and includes discards; [§] Canadian Shrimp Fishing Area 1 (SFA1) is NAFO Division 0A east of longitude 60°30'W; [¤] provided for 2006–15 through Tim Siferd and since 2016 through Wojciech Walkusz, Department of Fisheries and Oceans (DFO). GFLK = Greenland Fisheries and Licence Control. *s* STATLANT + DFO Commercial Statistics, *l* logbooks from Greenland and the highest catch reported from Canada, *p* provisional.

Table 2. Annual catch (A) and TAC (B), for the trial fishery for Northern Shrimp in Melville Bay from 73°30'N to 76°N

A. Catch (tonnes) in year:	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
GFLK† year (Quota drawdowns) (PRA)	-	-	-	-	-	-	0	1 392	1 552	2 611
Logbooks‡ (North of 73°30'N) (PRA)	0	182	89	5	132	32	93	1 407	1 604	3007
B. TACs (tonnes) for year:	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Greenland offshore fleet	-	-	-	-	-	-	2 000	2 000	1 943	1 943
Greenland inshore fleet	-	-	-	-	-	-	0	1 509	1 057	1 057
Total	-	-	-	-	-	-	2 000	3 509	3 000	3 000

† quota drawdowns (Northern Prawn, PRA) recorded in the GFLK data base. ‡ since 2011 legally required to be 'live weight' and includes discards