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Faroese Research Report 2021

by

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The present report represents information of Faroese fishing vessels operating in the NAFO Regulatory Area (NAFO-RA). The fishery targets mainly cod (*Gadus morhua*) in SA 3. Other species like Greenland halibut and redfish (*Sebastes* spp.) are also caught to a lesser extent. Official catch statistics are reported to NAFO by the Fisheries Inspection authorities (stored on STATLANT database). Collection of logbooks and biological measurements (fish length) of cod are provided by NAFO observers employed by the Faroese Ministry of Fisheries. Samples of fish length and weight measurements are also taken on board fishing vessels by crew members (non NAFO-observers).

Faroese landings of cod in NAFO SA 3 since 2010 are shown in Table 1. Catches have fluctuated from 1185 t. in 2010 to 4371 t. in 2019 which is the largest recorded in the last 10 years. A total of 964 t. were recorded in 2021. Catches from the Faroese longline survey conducted in 2021 (June-July) are also included in the official reported landings. The Faroese quota of cod in 3M is 22.35% of the total. A complete list of catches by species from 2010 to 2021 is shown at the end of the document as an annex.

Table 1. Faroese landings (tons) of cod in SA3 from 2010 to 2021. (Source: Statlant)

Area	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
3L	0	30.8	3.7	2.9	25	1.2	0.6	0	0.1	0	0	0
3M	1182.9	2211.4	2045.2	3144	3369.1	3318.6	3124.4	3164.6	2972.5	4370.5	2262.6	961.3
3N	2.1	0	0.1	0.6	0	1.5	5.7	0	1.2	0	0.4	2.3
Total	1185	2242.4	2049	3147.5	3394.1	3321.3	3130.7	3164.6	2973.8	4370.5	2263	963.6

The number of fishing vessels operating in the NAFO area has varied between 4 and 13 from 2010 to 2021. From 2010 to 2012 most of the catch was taken by trawlers whereas the share of catches by longliners has increased substantially since 2015 (Table 2). Just 25% of the total Faroese catch was taken by trawlers in 2016 and since 2017 the fisheries is exclusively conducted by longliners (100%).

Table 2. Share of catches (percentage) of cod (SA3) by fleet segment from 2010 to 2020. Longliners (LL), trawlers (TR).

Gear	2010	2011	2012	2013	2014	2015	2016	2017-2021
LL	0%	2%	2%	92%	27%	63%	75%	100%
TR	100%	98%	98%	8%	73%	37%	25%	0%



The spatial distribution of the longline fishery for cod from 2013 to 2020 is shown in Figure 1. Longliners operate at average depths of 430 m. The catch profile with respect to depth is shown in figure 2. Trawlers operating in 3M from 2010 to 2016 were fitted with mesh sizes ranging from 135 mm to 150 mm in cod-ends. Catches are taken almost entirely in the direct fishery.

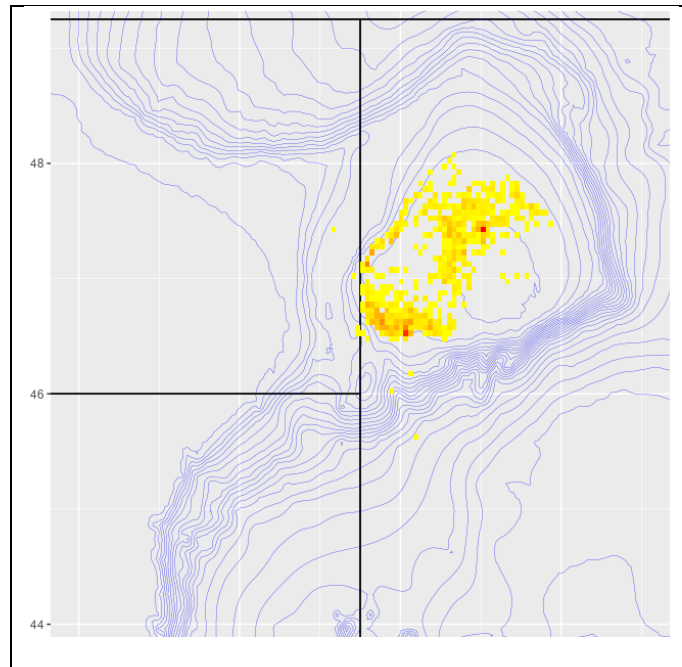


Figure 1. Spatial distribution of Faroese longline fishery for cod in SA3 (2013-2020)

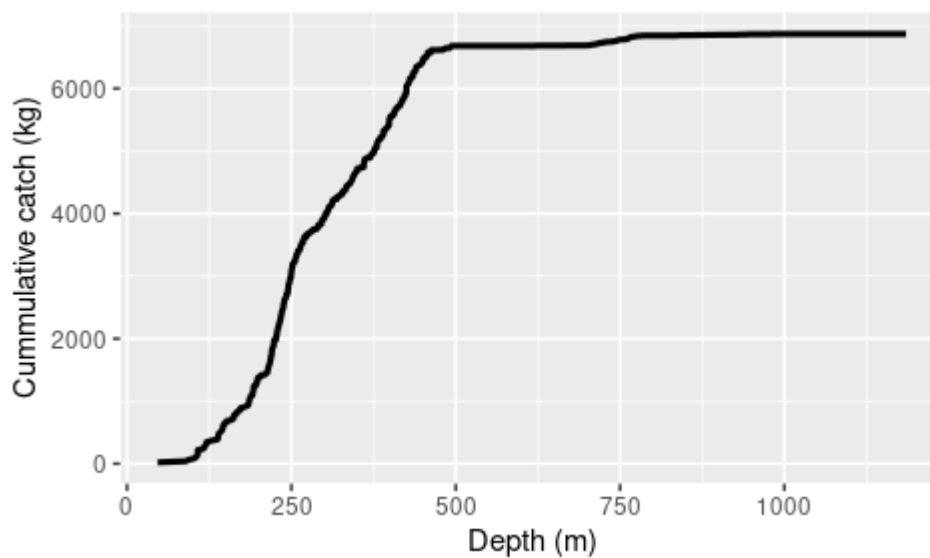


Figure 2. Relation between cumulative catch of cod (SA3) and average depth for Faroese vessels (2014 to 2020)

Average length and number of samples of cod in SA3 collected from Faroese vessels is shown in table 3. The largest number of length and weight samples was recorded in 2017 (84) whereas the number of individual length measurements was the highest in 2015 (5152). Samples from non-NAFO observers include individual weight measurements. Length distributions (sampled numbers) and the relation between weight and length of cod from 2014 to 2020 are presented in table 4 and figure 3. Mean length has varied from 59 cm in 2014 to 76 cm in 2017. No commercial samples were collected in 2021. However substantial sampling was recorded in the June-July longline survey of 2021 (SCR 22/012). In 2019 samples of Greenland halibut (*Reinhardtius hippoglossoides*) containing information on length distributions were collected in NAFO 3L (NAFO-observer). The length composition of G. Halibut individuals is shown in figure 4 and table 5.

Table 3. Average length in cm (avg. L), number of individuals (nr. L), number of length (n_L) and weight (n_w) samples of cod (SA3) from Faroese vessels (2014 - 2020). No samples were taken from the fishery in 2021.

	2014	2015	2016	2017	2018	2019	2020	2021
avg. L(cm)	59	62	73	76	72	74	68	-
nr. L	1796	5152	4794	1546	2215	1012	2531	-
n _L	21	48	47	55	34	14	11	-
n _w	21	5	-	29	14	14	11	-

Table 4. Length distribution and length-weight relation of cod (SA3) from Faroese fishery (2014 - 2020).
Length measured in cm and weight in kg.No samples were taken from the fishery in 2021.

cm	2014	2015	2016	2017	2018	2019	2020	cm	kg	2014	2015	2017	2018	2019	2020
0-27		1						12							
29		1			2		1	14							
30					1			15							
31	1						2	16							
32	8		1				2	17							
33		1			4		2	18							
34		1	1		5		9	19							
35		1			3		6	20							
36	1	3			12		12	25							
37					15		8	30					2.6		
38	8			2	18		15	31	0.25						0.62
39	6			4	20	4	28	32	0.4						
40	10	2			14	3	2	33					2.6		
41	5	3		1	28	4	21	34							1.28
42	18	1	1	2	17		13	35					2.85		
43	26	9	2	6	29	10	17	36					1.04		1.62
44	28	4			18		10	37					1.1		1.3
45	39	8	3	1	36	24	10	38	0.5				1.02		1.51
46	49	7	5	13	22	8	19	39	0.51			1.66	1.52	1.2	2.73
47	50	45	3	1	49	4	24	40	0.56				0.55	1	2.6
48	71	124	12	6	41	2	22	41	0.62				1.24	1.3	1.68
49	78	75	21	16	40	3	37	42	0.69			2.06	0.77		1.07
50	106	92	30	2	12	8	22	43	0.77			1.88	1.44		2.39
51	87	172	46	2	24	5	26	44	0.8				0.78		2.8
52	87	178	38	3	21	16	31	45	0.86	0.9	2	1.66	1.33	1.33	1.36
53	76	209	52	2	27	8	19	46	0.94				1.17	1.1	1.53
54	91	297	78	2	24	12	29	47	0.98	1			1.38	1.3	1.12
55	70	278	66	14	29	8	20	48	1.03	1	3.19		2.33		3.75
56	53	341	106	13	23	15	24	49	1.06	1	2.33	2.07	2.07	1.1	3
57	49	285	105	22	35	29	20	50	1.12	1.23	1.98	1.48	1.48	1.55	
58	38	307	128	32	35	18	41	51	1.16	1.33		1.82	1.23	4.15	
59	36	344	143	27	47	17	34	52	1.2	1.44	2.16	2.32	1.5	2.45	
60	50	262	187	32	22	22	55	53	1.26	1.4	1.5	2.92	1.1	1.65	
61	43	252	176	49	44	19	63	54	1.32	1.4		2.22	1.38	3.13	
62	44	164	225	41	37	9	92	55	1.41	1.6	1.92	2.8	1.4		
63	41	183	199	45	49	16	89	56	1.43	1.59	1.81	2.24	1.82	2.98	
64	35	140	184	59	42	38	73	57	1.54	1.73	1.77	2.84	1.9	2.12	
65	45	111	164	32	44	16	83	58	1.65	1.72	1.91	3.09	1.63	2.57	
66	52	95	137	31	43	9	61	59	1.73	1.79	2.15	3.32	1.57	3.31	
67	48	75	166	62	38	17	63	60	1.79	1.82	2.29	2.78	1.77	2.28	
68	26	69	185	56	44	42	81	61	2.03	1.98	2.34	2.65	1.77	3.92	
69	22	71	112	38	54	31	83	62	2.01	2.05	2.38	2.77	2.2	4.09	
70	33	60	211	70	32	33	99	63	2.17	2.16	2.42	3.32	2.47	4.07	
71	28	62	105	67	49	28	82	64	2.19	2.23	2.72	2.85	2.21	4.04	
72	19	62	102	59	36	20	60	65	2.31	2.9	2.71	3.1	2.26	4.12	
73	17	31	79	49	43	23	83	66	2.53	2.6	2.82	3.89	2.4	2.74	
74	13	46	82	54	40	45	77	67	2.84	3.71	3.19	4.46	2.62	3.52	
75	16	34	99	30	41	19	71	68	2.66	3.67	3.05	4.34	2.79	3.55	
76	13	50	71	43	35	28	55	69	2.91	3.05	3.4	4.33	2.77	3.95	
77	4	27	61	21	35	26	38	70	2.88	3.27	3.16	4.06	2.88	5.32	
78	12	22	53	14	52	26	86	71	3.08	4.54	3.43	4.45	3.02	4.63	
79	8	32	54	21	49	12	48	72	3.27	4.99	3.54	4.32	3.16	5.34	
80	6	22	62	14	24	32	58	73	3.27	3.58	3.93	5.81	3.09	5.37	
81	10	29	50	13	30	8	38	74	3.4	4.45	3.95	4.2	3.32	4.36	
82	4	22	49	24	21	22	27	75	3.35	4.75	4.52	4.74	3.58	4.59	
83	4	17	36	19	28	17	26	76	3.66	4.55	4.31	4.8	3.46	6.94	
84	6	23	41	10	18	15	32	77	3.59	4.56	4.95	6.09	3.86	5.35	
85	15	13	30	14	34	15	32	78	4.35		4.36	5.58	4.12	3.87	
86	5	28	25	19	13	24	17	79	3.87	4.98	5.13	5.85	4.07	7.4	
87	5	32	48	16	30	18	22	80	4.2	4.74	5.24	5.91	4.38		
88	7	16	37	22	16	11	14	81	4.45	4.73	6.13	5.82	4.44	7.17	
89	3	28	28	10	32	10	19	82	4.84	6.14	6.28	6.45	4.89	6.51	
90	5	18	50	18	17	7	15	83	4.83	6.06	5.32	6.31	4.84	6.39	
91	2	22	40	20	35	12	25	84	5.04	6.88	5.75	5.13	5.19		
92	7	12	24	17	19	1	8	85	5.7	5.25	5.73	6.31	5.76	8.1	
93	5	18	32	16	18	7	6	86	6.19	6.27	5.12	8.17	5.8	7.9	
94	5	13	30	19	30	10	16	87	5.92	5.32	5.62	4.5	5.76		
95	2	14	53	9	19	4	9	88	6.44	5.8	6.52	6.09	5.65	6.93	
96	5	11	38	18	35	10	14	89	8	6.18	6.15	6.53	6.28	6.99	
97	4	7	36	14	31	6	6	90	7.11	5.6	6.77	6.6	6.67	6.84	
98	11	15	51	16	27	6	18	91	8	6.91	7.43	7.08	6.63	8.45	
99	5	10	36	14	21	20	11	92	7.76	6.2	8.43	7.12		6.79	
100	2	16	49	17	23	10	10	93	7.6	7.12	8	8.62	7.25		
101	4	5	37	24	22	1	5	94	8		8.82	9.92	6.75	10.1	
102	3	16	36	17	22	1	8	95		7.6	8.24	8.64		9.75	
103	3	11	27	12	15	7	9	96	8.2	8.8	8.54	7.77	7.6	11.0	
104	1	14	20	10	13	5	4	97			9.01	9.59	10.5	11.9	
105	1	9	31	6	18	8	10	98	8.3		10.2	9.47	7.93	10.3	
106		3	17	3	14	3	2	99	11	8.96	9.67	10.4	9.63	12.0	
107	1	9	15	4	17	2	5	110+	12.1	13.0	12.8	12.7	10.8	15.6	
108	1	4	18	9	11	4	1								
109		3	18	8	10	9	8								
110+	4	55	237	70	72	30	38								

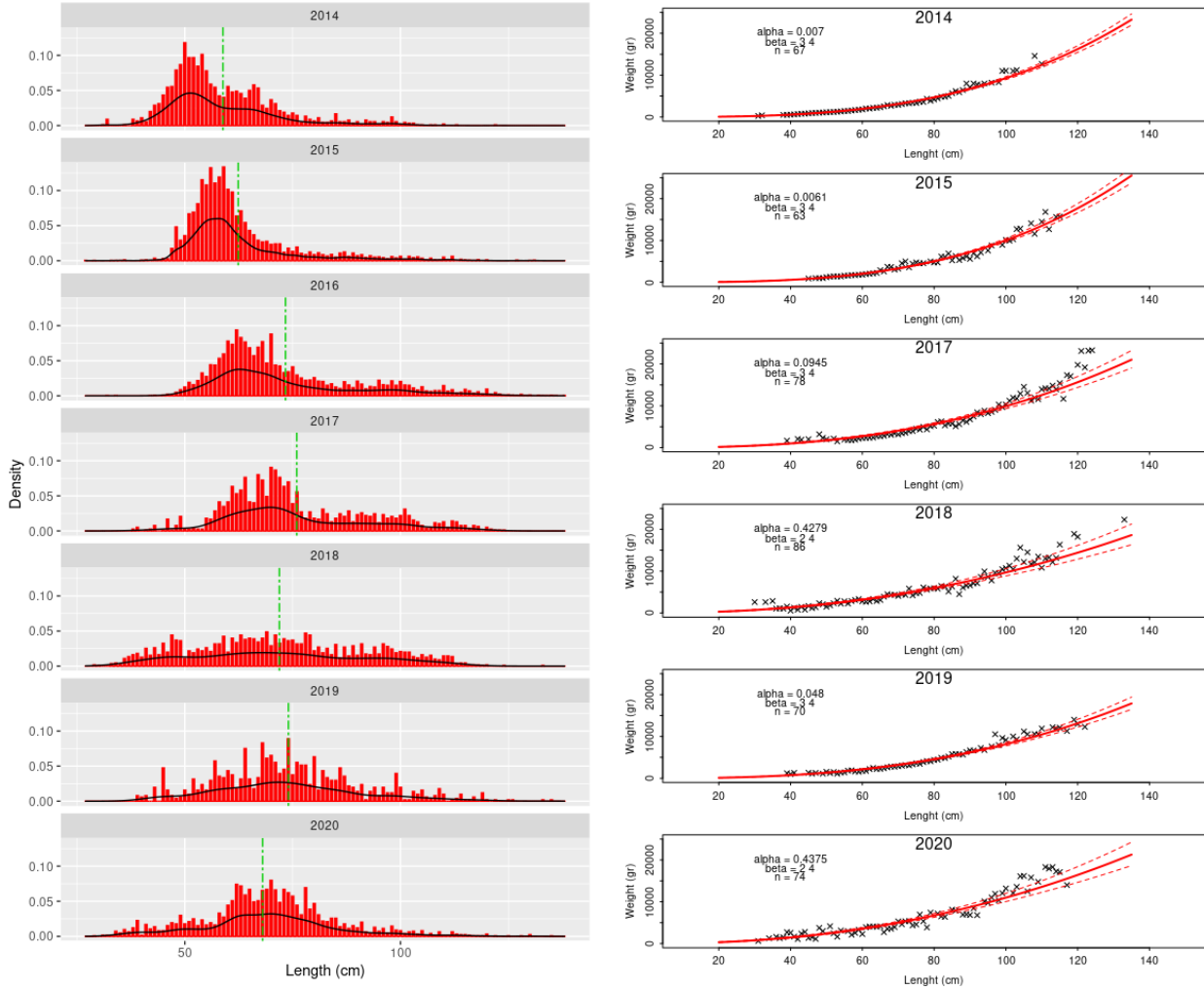


Figure 3. Length distribution and length-weight relation of cod (SA3) from Faroese fishery (2014 - 2020). Vertical green line shows average length. No samples were taken from the fishery in 2021.

Table 5. Length distribution of Grennland halibut (SA3) from Faroese fishery (2019). Length measured in cm.

Length(cm)	freq	Length(cm)	freq	Length(cm)	freq
30	0	49	58	68	5
31	0	50	114	69	2
32	7	51	64	73	2
33	4	52	129		
34	5	53	81		
35	10	54	84		
36	11	55	82		
37	9	56	54		
38	17	57	66		
39	19	58	84		
40	29	59	57		
41	24	60	50		
42	43	61	31		
43	55	62	34		
44	63	63	17		
45	83	64	16		
46	94	65	13		
47	77	66	11		
48	109	67	12		

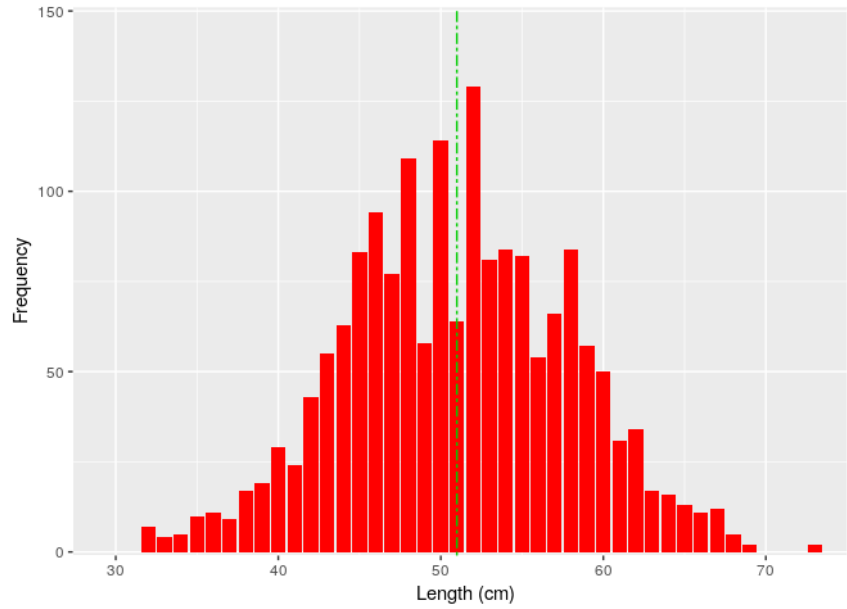


Figure 4. Length distribution of Greenland halibut (SA3) from Faroese fishery (2019). Vertical green line shows average length.

Annex. Faroese catches (tons) in the NAFO regulatory area from 2010 to 2021. (Source: Statlant)

Year	Species	0B	1A	1D	1F	2G	3L	3M	3N	3O	Total
2010	Northern prawn	0	0	0	0	0	2502.7	495.3	0	0	2998
2010	Atlantic cod	0	0	0	0	0	0	1182.9	2.1	4.6	1189.6
2010	Greenland halibut	0	126.2	152.3	0	0	206.1	5.7	0.2	1.1	491.6
2010	Atlantic redfishes	0	0	0	0	0	0	121.9	19.7	162.6	304.2
2010	Haddock	0	0	0	0	0	0	13	0	0	13
2010	Wolffishes(=Catfishes)	0	0	0	0	0	0	9.7	0	0	9.7
2010	Atlantic halibut	0	0	0	0	0	0	2.3	1.2	2.8	6.3
2010	European plaice	0	0	0	0	0	0	3.7	0	0	3.7
2010	Whiting	0	0	0	0	0	0	1.8	0	0	1.8
2010	Flatfishes	0	0	0	0	0	0	0.7	0	0	0.7
2010	Ling	0	0	0	0	0	0	0.2	0	0	0.2
2011	Atlantic cod	0	0	0	0	0	30.8	2211.4	0	0	2242.2
2011	Northern prawn	0	0	0	0	0	1447	0	0	0	1447
2011	Atlantic redfishes	0	0	0	0	0	26.9	420.3	5.3	0	452.5
2011	Greenland halibut	0	101.8	0	0	0	216.9	3.8	0.1	0	322.6
2011	Atlantic halibut	0	0	0	0	0	0.4	0.8	0.5	0	1.7
2011	Wolffishes(=Catfishes)	0	0	0	0	0	0	0.5	0	0	0.5
2011	Roundnose grenadier	0	0	0	0	0	0.4	0	0	0	0.4
2011	European plaice	0	0	0	0	0	0	0.2	0	0	0.2
2012	Atlantic cod	0	0	0	0	0	3.7	2045.2	0.1	4.4	2053.4
2012	Northern prawn	0	0	0	0	0	1036.8	0	0	0	1036.8
2012	Atlantic redfishes	0	0	0	0	0	28.5	148.7	2.2	101	280.4
2012	Greenland halibut	0	102.3	0	0	0	104.2	42.3	1.4	0	250.2
2012	Haddock	0	0	0	0	0	0	10.1	0	0	10.1
2012	Roundnose grenadier	0	0	0	0	0	2.1	1.1	0	0	3.2
2012	Atlantic halibut	0	0	0	0	0	0.1	0.2	0.1	0.6	1
2012	Raja rays	0	0	0	0	0	0	0.2	0	0	0.2
2013	Atlantic cod	0	0	0	0	0	2.9	3144	0.6	8.6	3156.1
2013	Northern prawn	0	0	0	0	0	592.2	0	0	0	592.2
2013	Greenland halibut	0	0	102	0	0	194.7	4.8	0	0	301.5
2013	Atlantic redfishes	0	0	0	0	0	64.5	74.1	3.6	57.9	200.1
2013	Wolffishes(=Catfishes)	0	0	0	0	0	0	26.4	0	0	26.4
2013	Atlantic halibut	0	0	0	0	0	0.1	9.3	0.1	0.6	10.1
2013	Atlantic wolfish	0	0	0	0	0	0	5.3	0	0	5.3
2013	Roundnose grenadier	0	0	0	0	0	0.7	0	0	0	0.7
2013	Tusk	0	0	0	0	0	0	0.4	0	0	0.4
2013	Raja rays	0	0	0	0	0	0	0.1	0	0	0.1
2014	Atlantic cod	0	0	0	0	0	25	3369.1	0	0	3394.1
2014	Northern prawn	0	0	0	0	0	437	0	0	0	437
2014	Greenland halibut	0	0	0	0	0	118.4	2.4	0	0	120.8
2014	Atlantic halibut	0	0	0	0	0	0	10.6	0	0	10.6
2014	Wolffishes(=Catfishes)	0	0	0	0	0	0	9.2	0	0	9.2
2014	Atlantic redfishes	0	0	0	0	0	0	5.1	0	0	5.1
2014	Roundnose grenadier	0	0	0	0	0	1	0.4	0	0	1.4
2014	Atlantic wolfish	0	0	0	0	0	0	0.5	0	0	0.5
2014	Haddock	0	0	0	0	0	0	0.1	0	0	0.1
2015	Atlantic cod	0	0	0	0	0	1.2	3318.6	1.5	0	3321.3
2015	Greenland halibut	0	101.7	0	0	0	44.8	156.2	0	0	302.7
2015	Atlantic redfishes	0	0	0	0	0	30.9	75.4	32.6	0	138.9
2015	Black scabbardfish	0	0	0	0	8.3	0	0	0	0	8.3
2015	Atlantic halibut	0	0	0	0	0	0	7.3	0.9	0	8.2
2015	Wolffishes(=Catfishes)	0	0	0	0	0	0	4.7	0	0	4.7
2015	Tusk	0	0	0	0	0.3	0	0.4	0	0	0.7
2015	Haddock	0	0	0	0	0	0	0.6	0	0	0.6
2015	Blue ling	0	0	0	0	0.6	0	0	0	0	0.6
2015	Dogfish sharks	0	0	0	0	0.3	0	0	0	0	0.3

2015	Roundnose grenadier	0	0	0	0	0.3	0	0	0	0	0.3
2015	Atlantic wolffish	0	0	0	0	0	0	0.2	0	0	0.2
2016	Atlantic cod	0	0	0	0	0	0.6	3124.4	5.7	0	3130.7
2016	Greenland halibut	0	103.4	0	0	0	24.1	165	0	0	292.5
2016	Atlantic redfishes	0	0	0	0	0	20.4	70	43	0	133.4
2016	Atlantic halibut	0	0	0	0	0	0	8.4	0	0	8.4
2016	Haddock	0	0	0	0	0	0	0.6	0	0	0.6
2016	Wolffishes(=Catfishes)	0	0	0	0	0	0	0.5	0	0	0.5
2016	Roundnose grenadier	0	0	0	0	0	0	0.3	0	0	0.3
2016	Tusk	0	0	0	0	0	0	0.1	0	0	0.1
2017	Atlantic cod	0	0	0	0	0	0	3164.6	0	0	3164.6
2017	Greenland halibut	0	0	0	0	0	135.1	44.8	0	0	179.9
2017	Atlantic halibut	0	0	0	0	0	0	14.4	0	0	14.4
2017	Atlantic redfishes	0	0	0	0	0	0.1	1.8	0	0	1.9
2017	Roundnose grenadier	0	0	0	0	0	0.6	0	0	0	0.6
2018	Atlantic cod	0	0	0	0	0	0.1	2972.5	1.2	0	2973.8
2018	Greenland halibut	0	84.1	0	0	0	208.7	2.3	0	0	295.1
2018	Atlantic redfishes	0	0	0	0	0	15.3	69.9	69.7	0	154.9
2018	Atlantic halibut	0	0	0	0	0	0	14.1	0	0	14.1
2018	Wolffishes(=Catfishes)	0	0	0	0	0	0	2.1	0	0	2.1
2018	Roundnose grenadier	0	0	0	0	0	0.5	0	0	0	0.5
2018	Haddock	0	0	0	0	0	0	0.3	0	0	0.3
2018	Tusk	0	0	0	0	0	0	0.2	0	0	0.2
2019	Atlantic cod	0	0	0	0	0	0	4370.5	0	0	4370.5
2019	Greenland halibut	0	103	0	0	0	211.5	0	0	0	314.5
2019	Atlantic halibut	0	0	0	0	0	0	23.6	0	0	23.6
2019	Wolffishes(=Catfishes)	0	0	0	0	0	0	4	0	0	4
2019	Roundnose grenadier	0	0.1	0	0	0	3.1	0	0	0	3.2
2019	Raja rays	0	0.4	0	0	0	0	1.8	0	0	2.2
2019	Atlantic redfishes	0	0	0	0	0	0	0.6	0	0	0.6
2019	Tusk	0	0	0	0	0	0	0.4	0	0	0.4
2019	Porbeagle	0	0	0	0	0	0	0.4	0	0	0.4
2020	Atlantic cod	0	0	0	0	0	0	2262.6	0.4	0	2263
2020	Greenland halibut	0	104.8	0	0	0	206	14.2	0.1	0	325.1
2020	Atlantic halibut	0	0	0	0	0	0	14.2	14.7	0	28.9
2020	Wolffishes(=Catfishes)	0	0	0	0	0	0	13.1	0.1	0	13.2
2020	Haddock	3.4	0	0	0	0	0	0	0	0	3.4
2020	Roundnose grenadier	0	0	0	0	0	1.2	1.8	0	0	3
2020	White hake	0	0	0	0	0	0	0	2.6	0	2.6
2020	Tusk	0	0	0	0	0	0	1	0	0	1
2020	Raja rays	0	0	0	0	0	0	0	0.3	0	0.3
2020	Blue shark	0	0	0	0	0	0	0	0.1	0	0.1
2020	Atlantic wolffish	0	0	0	0	0	0	0.1	0	0	0.1
2020	Atlantic redfishes	0	0	0	0	0	0.1	0	0	0	0.1
2021	Northern prawn	0	0	0	0	0	0	1162.1	0	0	1162.1
2021	Atlantic cod	1.5	0	0	193.4	0	0	961.3	2.3	0	1158.5
2021	Greenland halibut	0	75.4	0	0	0	210.3	0	0	0	285.7
2021	Atlantic halibut	0	0	0	0	0	0	20.6	84.4	0.7	105.7
2021	White hake	0	0	0	0	0	0	0	22.9	0.2	23.1
2021	Wolffishes(=Catfishes)	0	0	0	9.2	0	0	11.3	0	0	20.5
2021	Tusk	0.4	0	0	0.6	0	0	2.2	0	0	3.2
2021	Haddock	2.7	0	0	0	0	0	0	0	0	2.7
2021	Atlantic wolffish	0	0	0	1.1	0	0	0.6	0	0	1.7
2021	Ling	1.4	0	0	0	0	0	0	0	0	1.4
2021	Atlantic redfishes	0	0	0	1.1	0	0	0	0	0	1.1
2021	Raja rays	0	0	0	0	0	0	0	0.5	0	0.5
2021	Roundnose grenadier	0	0.1	0	0	0	0	0	0.2	0	0.3
2021	Saithe(=Pollock)	0.2	0	0	0	0	0	0	0	0	0.2