

**SCIENTIFIC COUNCIL MEETING – JUNE 2021****Faroese Research Report 2020**Luis Rida Cruz, luisr@hav.fo

Faroe Marine Research Institute, Tórshavn, Faroe Islands

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 4357 t. in 2019 which is the largest recorded in the last 10 years. Catches in 2020 were 2263 t. The Faroese quota of cod in 3M is 22.35% of the total. A complete list of catches by species from 2010 to 2020 is shown at the end of the document as an annex.

Table 1. Faroese landings (tons) of cod in SA3 from 2010 to 2020. (Source: Statlant)

Area	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
3L	0	30.8	3.7	2.9	25	1.2	0.6	0	0	0	0
3M	1183	2211	2045	3144	3369	3319	3124	3165	2973	4371	2263
3N	2.1	0	0.1	0.6	0	1.5	5.7	0	1.2	0	0.4
Total	1185	2242	2049	3148	3394	3322	3130	3165	2974	4357	2263

The number of fishing vessels operating in the NAFO area has varied between 4 and 13 from 2010 to 2020. 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	2018	2019	2020
LL	0%	2%	2%	92%	27%	63%	75%	100%	100%	100%	100%
TR	100%	98%	98%	8%	73%	37%	25%	0%	0%	0%	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.

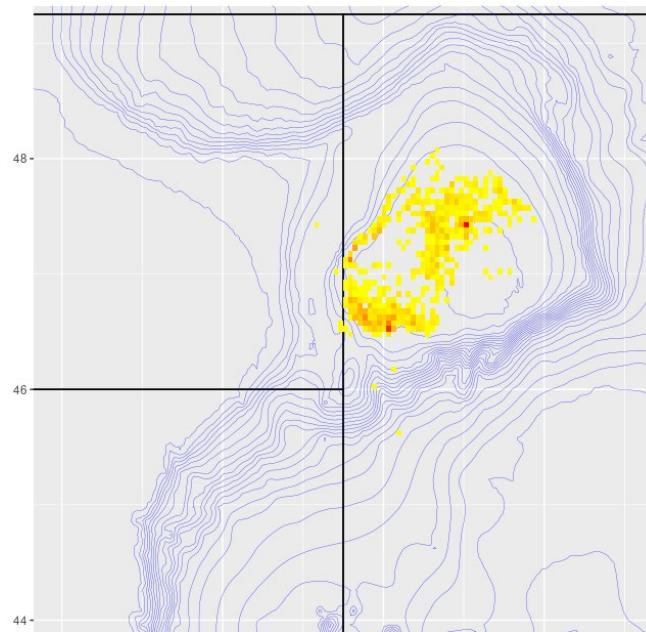


Figure 1. Spatial distribution of Faroese longline fishery for cod in SA3 (2013-2020).

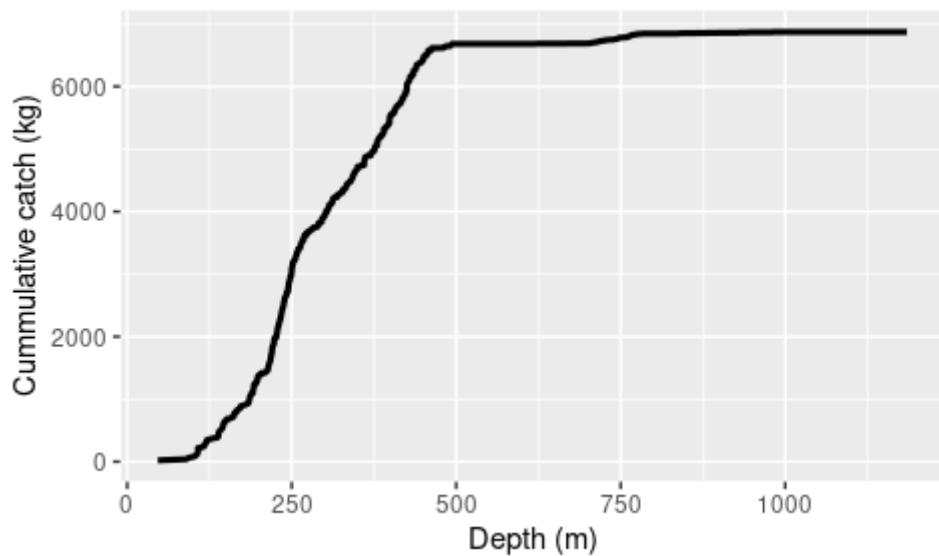


Figure 2. Relation between cumulative catch of cod (SA3) and average depth for Faroese vessels (2014 to 2020).

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. 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.

Table 3. Average length in cm (avg. L), number of individuals (nr. L), number of length (nL) and weight (nW) samples of cod (SA3) from Faroese vessels since 2014.

	2014	2015	2016	2017	2018	2019	2020
avg. L	59	62	73	76	72	74	68
nr. L	1796	5152	4794	1546	2215	1012	2531
nL	21	48	47	55	34	14	11
nW	21	5	-	29	14	14	11

Table 4. Length distribution and length-weight relation of cod (SA3) from Faroese fishery (2014 - 2020). No weight measurements were available for 2016. Length measured in centimetres and weight in grams.

cm	Length						Weight					
	2014	2015	2016	2017	2018	2019	cm	2014	2015	2017	2018	2019
27	1				2	1	30			2600		
29	1				1		31	250				620
30							32	400				
31	1					2	33		2600			
32	8		1			2	34					1283
33	1				4	2	35			2850		
34	1	1			5	9	36			1037		1620
35	1				3	6	37			1104		1295
36	1	3			12	12	38	500		1016		1512
37					15	8	39	512	1660	1518	1200	2727
38	8			2	18	15	40	556		550	1000	2600
39	6			4	20	4	41	615		1240	1300	1675
40	10	2			14	3	42	690		2058	772	1070
41	5	3		1	28	4	43	772		1884	1443	2391
42	18	1	1	2	17	13	44	804			784	2800
43	26	9	2	6	29	10	45	861	900	2000	1657	1325
44	28	4			18	10	46	940			1167	1100
45	39	8	3	1	36	24	47	978	1000		1377	1300
46	49	7	5	13	22	8	48	1032	1000	3190	2329	3750
47	50	45	3	1	49	4	49	1061	1000	2325	2069	1100
48	71	124	12	6	41	2	50	1123	1227	1980	1480	1550
49	78	75	21	16	40	3	51	1159	1326		1821	1233
50	106	92	30	2	12	8	52	1204	1436	2155	2323	1500
51	87	172	46	2	24	5	53	1255	1402	1500	2915	1100
52	87	178	38	3	21	16	54	1316	1395		2221	1375
53	76	209	52	2	27	8	55	1413	1596	1920	2798	1400
54	91	297	78	2	24	12	56	1433	1585	1808	2241	1820
55	70	278	66	14	29	8	57	1541	1726	1768	2843	1900
56	53	341	106	13	23	15	58	1646	1721	1911	3092	1625
57	49	285	105	22	35	29	59	1731	1792	2149	3318	1567
58	38	307	128	32	35	18	60	1794	1818	2288	2778	1767
59	36	344	143	27	47	17	61	2027	1976	2335	2651	3919
60	50	262	187	32	22	22	62	2012	2045	2377	2774	4085
61	43	252	176	49	44	19	63	2170	2156	2423	3315	2467
62	44	164	225	41	37	9	64	2189	2233	2720	2847	4040
63	41	183	199	45	49	16	65	2314	2093	2713	3104	2256
64	35	140	184	59	42	38	66	2903			4120	
65	45	111	164	32	44	16	67	2954	2602	2824	3887	2400
66	52	95	137	31	43	9	68	2841	3710	3192	4462	2622
67	48	75	166	62	38	17	69	2658	3667	3054	4339	2785
68	26	69	185	56	44	42	70	3345	4750	4515	4743	3947
69	22	71	112	38	54	31	71	3874	4978	5128	5850	4067
70	33	60	211	70	32	33	72	4198	4744	5242	5911	4377
71	28	62	105	67	49	28	73	4447	4733	6128	5817	4440
72	19	62	102	59	36	20	74	2881	3268	3162	4059	2880
73	17	31	79	49	43	23	75	3081	4542	4340	4452	3020
74	13	46	82	54	40	45	76	3272	3578	3931	5812	3087
75	16	34	99	30	41	19	77	3397	4446	3953	4200	3320
76	13	50	71	43	35	28	78	3345	4750	4515	4743	3580
77	4	27	61	21	35	26	79	3590	4558	4946	6091	3858
78	12	22	53	14	52	26	80	4353	4364	5582	4115	3865
79	8	32	54	21	49	12	81	3874	4978	5128	5850	4067
80	6	22	62	14	24	32	82	4198	4744	5242	5911	4377
81	10	29	50	13	30	8	83	4447	4733	6128	5817	4440
82	4	22	49	24	21	22	84	4837	6142	6275	6452	4890
83	4	17	36	19	28	17	85	4830	6055	5323	6310	4836
84	6	23	41	10	18	15	86	5042	6880	5750	5127	5186
85	15	13	30	14	34	15	87	5695	5250	5733	6308	5760
86	5	28	25	19	13	24	88	5695	5250	5733	6308	8100
87	5	32	48	16	30	18	89	6191	6271	5118	8170	5800
88	7	16	37	22	16	11	90	5918	5315	5615	4500	5760
89	3	28	28	10	32	10	91	6439	5800	6515	6087	5650
90	5	18	50	18	17	7	92	8000	6180	6154	6531	6280
91	2	22	40	20	35	12	93	7109	5600	6773	6595	6667
92	7	12	24	17	19	1	94	8000	6913	7431	7082	6633
93	5	18	32	16	18	7	95	7762	6200	8431	7116	6790
94	5	13	30	19	30	10	96	7600	7120	8004	8620	7250
95	2	14	53	9	19	4	97	8000		8822	9923	6750
96	5	11	38	18	35	10	98	8955	9672	10454	9633	12050
97	4	7	36	14	31	6	99	11000	8955	10278	10713	9150
98	11	15	51	16	27	6	100	11050	10135	11212	11306	
99	5	10	36	14	21	20	101	9950				9750
100	2	16	49	17	23	10	102	11000	10300	11939	10451	10000
101	4	5	37	24	22	1	103	8300	8540	7774	7600	11035
102	3	16	36	17	22	1	104	98	9012	9589	10533	11900
103	3	11	27	12	15	7	105	11000	12720	11743	12988	10350
104	1	14	20	10	13	5	106	10288	9470	7925		
105	1	9	31	6	18	8	107	14107	11235	11693		
106	3	17	3	14	3	2	108	14600	11600	11904	12113	10567
107	1	9	15	4	17	2	109	14600	12677	17100	16842	14363
108	1	4	18	9	11	4	110	14600	12677	17100	16842	14363
109	3	18	8	10	9	8	111					
110+	4	55	237	70	72	30	112					



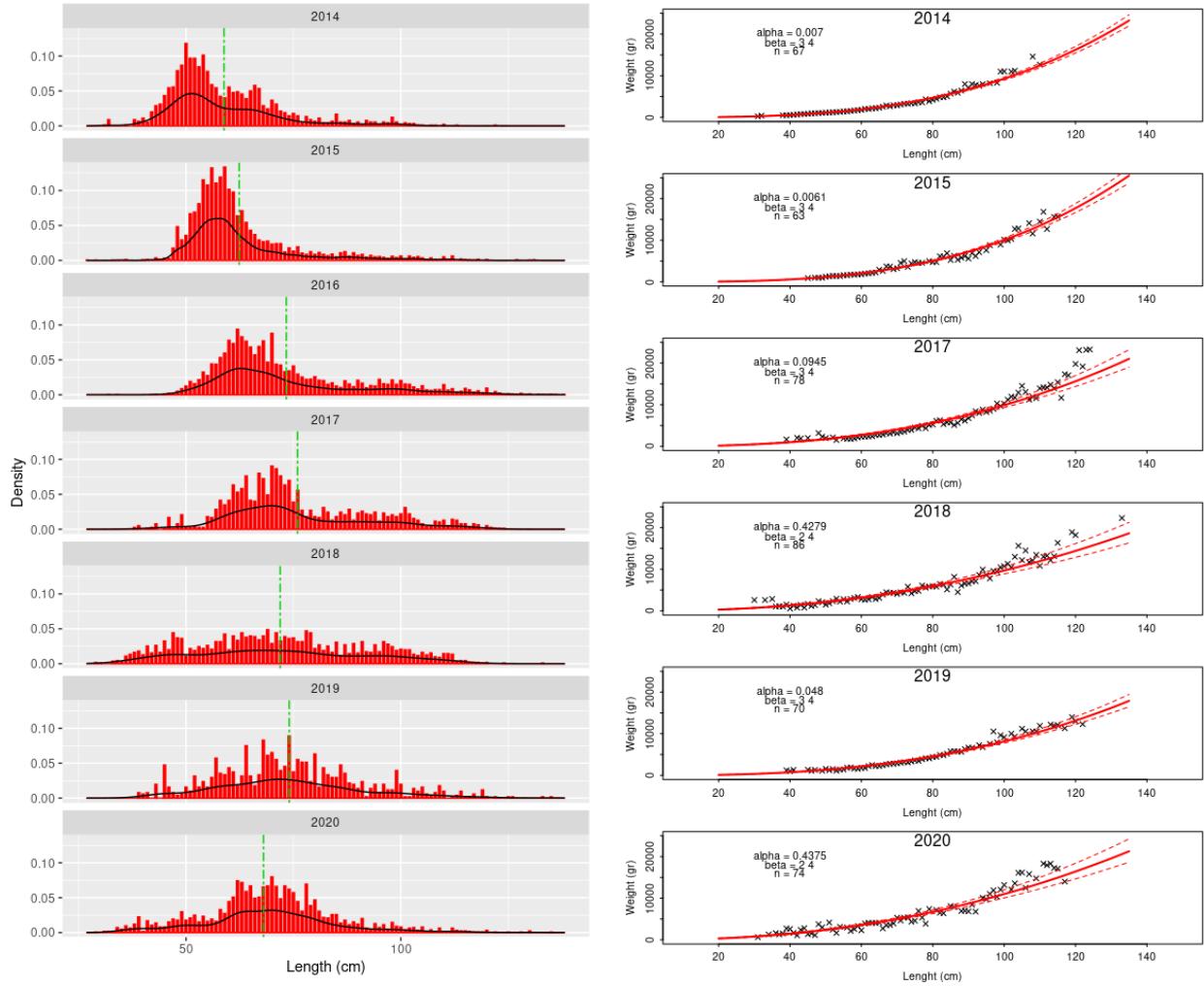


Figure 3. Length distribution (left panel) and length-weight relation (right panel) of cod (SA3) from Faroese fishery (2014 - 2020). Vertical green line shows average length. No weight measurements were available for 2016.

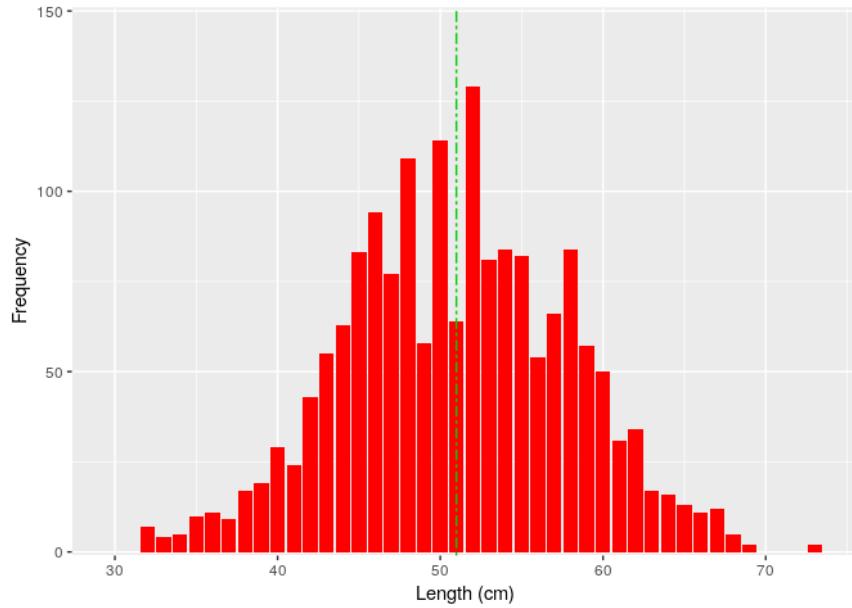


Figure 4. Length distribution of Greenland halibut (SA3) from Faroese fishery (2019). Vertical green line shows average length.

Annex. Faroese catches (tons) in the NAFO regulatory area from 2010 to 2019. (Source: Statlant)

Year	Species	OB	1A	1D	2G	3L	3M	3N	Total
2010	Atlantic cod	0	0	0	0	1183	2.1	1185	
2010	Atlantic halibut	0	0	0	0	2.3	1.2	3.5	
2010	Atlantic redfishes	0	0	0	0	121.9	19.7	141.6	
2010	European plaice	0	0	0	0	3.7	0	3.7	
2010	Flatfishes	0	0	0	0	0.7	0	0.7	
2010	Greenland halibut	0	126.2	152.3	0	206.1	5.7	0.2	490.5
2010	Haddock	0	0	0	0	0	13	0	13
2010	Ling	0	0	0	0	0	0.2	0	0.2
2010	Northern prawn	0	0	0	0	2503	495.3	0	2998
2010	Whiting	0	0	0	0	0	1.8	0	1.8
2010	Wolffishes(=Catfishes)	0	0	0	0	0	9.7	0	9.7
2011	Atlantic cod	0	0	0	0	30.8	2211	0	2242.2
2011	Atlantic halibut	0	0	0	0	0.4	0.8	0.5	1.7
2011	Atlantic redfishes	0	0	0	0	26.9	420.3	5.3	452.5
2011	European plaice	0	0	0	0	0	0.2	0	0.2
2011	Greenland halibut	0	101.8	0	0	216.9	3.8	0.1	322.6
2011	Northern prawn	0	0	0	0	1447	0	0	1447
2011	Roundnose grenadier	0	0	0	0	0.4	0	0	0.4
2011	Wolffishes(=Catfishes)	0	0	0	0	0	0.5	0	0.5
2012	Atlantic cod	0	0	0	0	3.7	2045	0.1	2049
2012	Atlantic halibut	0	0	0	0	0.1	0.2	0.1	0.4
2012	Atlantic redfishes	0	0	0	0	28.5	148.7	2.2	179.4
2012	Greenland halibut	0	102.3	0	0	104.2	42.3	1.4	250.2
2012	Haddock	0	0	0	0	0	10.1	0	10.1
2012	Northern prawn	0	0	0	0	1037	0	0	1036.8
2012	Raja rays	0	0	0	0	0	0.2	0	0.2
2012	Roundnose grenadier	0	0	0	0	2.1	1.1	0	3.2
2013	Atlantic cod	0	0	0	0	2.9	3144	0.6	3147.5
2013	Atlantic halibut	0	0	0	0	0.1	9.3	0.1	9.5
2013	Atlantic redfishes	0	0	0	0	64.5	74.1	3.6	142.2
2013	Atlantic wolffish	0	0	0	0	0	5.3	0	5.3
2013	Greenland halibut	0	0	102	0	194.7	4.8	0	301.5
2013	Northern prawn	0	0	0	0	592.2	0	0	592.2
2013	Raja rays	0	0	0	0	0	0.1	0	0.1
2013	Roundnose grenadier	0	0	0	0	0.7	0	0	0.7
2013	Tusk	0	0	0	0	0	0.4	0	0.4
2013	Wolffishes(=Catfishes)	0	0	0	0	0	26.4	0	26.4
2014	Atlantic cod	0	0	0	0	25	3369	0	3394.1
2014	Atlantic halibut	0	0	0	0	0	10.6	0	10.6
2014	Atlantic redfishes	0	0	0	0	0	5.1	0	5.1
2014	Atlantic wolffish	0	0	0	0	0	0.5	0	0.5
2014	Greenland halibut	0	0	0	0	118.4	2.4	0	120.8
2014	Haddock	0	0	0	0	0	0.1	0	0.1
2014	Northern prawn	0	0	0	0	437	0	0	437
2014	Roundnose grenadier	0	0	0	0	1	0.4	0	1.4
2014	Wolffishes(=Catfishes)	0	0	0	0	0	9.2	0	9.2
2015	Atlantic cod	0	0	0	0	1.2	3319	1.5	3321.3
2015	Atlantic halibut	0	0	0	0	0	7.3	0.9	8.2
2015	Atlantic redfishes	0	0	0	0	30.9	75.4	32.6	138.9
2015	Atlantic wolffish	0	0	0	0	0	0.2	0	0.2
2015	Black scabbardfish	0	0	0	8.3	0	0	0	8.3
2015	Blue ling	0	0	0	0.6	0	0	0	0.6
2015	Dogfish sharks	0	0	0	0.3	0	0	0	0.3
2015	Greenland halibut	0	101.7	0	0	44.8	156.2	0	302.7
2015	Haddock	0	0	0	0	0	0.6	0	0.6
2015	Roundnose grenadier	0	0	0	0.3	0	0	0	0.3
2015	Tusk	0	0	0	0.3	0	0.4	0	0.7
2015	Wolffishes(=Catfishes)	0	0	0	0	0	4.7	0	4.7
2016	Atlantic cod	0	0	0	0	0.6	3124	5.7	3130.7
2016	Atlantic halibut	0	0	0	0	0	8.4	0	8.4
2016	Atlantic redfishes	0	0	0	0	20.4	70	43	133.4
2016	Greenland halibut	0	103.4	0	0	24.1	165	0	292.5
2016	Haddock	0	0	0	0	0	0.6	0	0.6
2016	Roundnose grenadier	0	0	0	0	0	0.3	0	0.3
2016	Tusk	0	0	0	0	0	0.1	0	0.1
2016	Wolffishes(=Catfishes)	0	0	0	0	0	0.5	0	0.5

Year	Species	0B	1A	1D	2G	3L	3M	3N	Total
2017	Atlantic cod	0	0	0	0	3165	0	0	3164.6
2017	Atlantic halibut	0	0	0	0	14.4	0	0	14.4
2017	Atlantic redfishes	0	0	0	0	0.1	1.8	0	1.9
2017	Greenland halibut	0	0	0	0	135.1	44.8	0	179.9
2017	Roundnose grenadier	0	0	0	0	0.6	0	0	0.6
2018	Atlantic cod	0	0	0	0	0.1	2973	1.2	2973.8
2018	Atlantic halibut	0	0	0	0	0	14.1	0	14.1
2018	Atlantic redfishes	0	0	0	0	15.3	69.9	69.7	154.9
2018	Greenland halibut	0	84.1	0	0	208.7	2.3	0	295.1
2018	Haddock	0	0	0	0	0	0.3	0	0.3
2018	Roundnose grenadier	0	0	0	0	0.5	0	0	0.5
2018	Tusk	0	0	0	0	0	0.2	0	0.2
2018	Wolffishes(=Catfishes)	0	0	0	0	0	2.1	0	2.1
2019	Atlantic cod	0	0	0	0	0	4371	0	4370.5
2019	Atlantic halibut	0	0	0	0	0	23.6	0	23.6
2019	Atlantic redfishes	0	0	0	0	0	0.6	0	0.6
2019	Greenland halibut	0	103	0	0	211.5	0	0	314.5
2019	Porbeagle	0	0	0	0	0	0.4	0	0.4
2019	Raja rays	0	0.4	0	0	0	1.8	0	2.2
2019	Roundnose grenadier	0	0.1	0	0	3.1	0	0	3.2
2019	Tusk	0	0	0	0	0	0.4	0	0.4
2019	Wolffishes(=Catfishes)	0	0	0	0	0	4	0	4
2020	Atlantic cod	0	0	0	0	0	2263	0.4	2263
2020	Atlantic halibut	0	0	0	0	0	14.2	14.7	28.9
2020	Atlantic redfishes	0	0	0	0	0.1	0	0	0.1
2020	Atlantic wolffish	0	0	0	0	0	0.1	0	0.1
2020	Blue shark	0	0	0	0	0	0	0.1	0.1
2020	Greenland halibut	0	104.8	0	0	206	14.2	0.1	325.1
2020	Haddock	3.4	0	0	0	0	0	0	3.4
2020	Raja rays	0	0	0	0	0	0	0.3	0.3
2020	Roundnose grenadier	0	0	0	0	1.2	1.8	0	3
2020	Tusk	0	0	0	0	0	1	0	1
2020	White hake	0	0	0	0	0	0	2.6	2.6
2020	Wolffishes(=Catfishes)	0	0	0	0	0	13.1	0.1	13.2