Serial No. N7738 NAFO SCR Doc. 26/019

SCIENTIFIC COUNCIL MEETING –JUNE 2026

Commercial data from the Greenland halibut fishery in Uummannaq fjord

Rasmus Nygaard[1], Henrik Christiansen[1]

[1]Greenland Institute of Natural Resources, P.O. Box 570, 3900 Nuuk, Greenland

NYGAARD, R., & CHRISTIANSEN, H. 2026. Commercial data from the Greenland halibut fishery in Uummannaq fjord. *NAFO Scientific Council Research Document*, SCR Doc. 26/019: 1-17.

Abstract

Although the commercial fishery for Greenland halibut started around 1910 the first available catch statistics from the Uummannaq area are from the 1950s. The fishery is traditionally performed with longlines from small open boats, or dog sledges through a hole in the sea ice. In recent decades a minor part of the catches has also been taken by small vessels using longlines and gillnets. This document presents catch statistics combined from various resources from the Uummannaq fjord. The document includes catch statistics, statistics of commercial sampling effort done by the Greenland Institute of Natural Resources (GINR) and factories, length frequencies in the landings, calculations of mean size in the landings and a preliminary catch-at-age estimation. Also provided are three commercial CPUE indices. Two based on logbooks (one for longline fishery and one for gillnets fishery) and one on factory landings data (longline).

Introduction

The first available catch statistics from the Uummannaq fjord are from 1954. The fishery is traditionally performed with longlines from small open boats, small vessels, or through holes in the sea ice and transported by dog sledge or snowmobile. In the 1980s, small vessels entered the fishery and the use of gillnets increased in the following years. In the late 1990s, the first area limiting regulations were introduced restricting the gillnet fishery to the winter season. Authority to regulate seasons and areas open to the gillnet fishery, was transferred to municipalities in 2004, and areas open to the gillnet fishery expanded since. The minimum mesh size in the gillnets was 110 mm (half meshes or knot to knot) until 2017, when the mesh size was reduced to 95 mm half mesh.
Licence requirements were introduced in 1998 and in 2008 TAC and quota regulations were introduced for the inshore fishery. Logbooks have been mandatory for vessels larger than 30^{ft} since 2008. In 2012, the TAC was split in two components with ITQs for vessels and a shared quota for open boats. The ITQ system currently does not specify catch to a certain district which causes a discrepancy between the ITQ and total quota set for each district.

Materials and methods

Input data for catch statistics and CPUE

Recent catch statistics (factory landings and logbooks) are available from a centralized database managed by the Greenland Fisheries and Hunting Control Authority (GFJK). Both logbook (haul by haul) and factory

landings (daily individual landings) are reported as individual fishing events containing metadata, such as date, gear, field code or position, effort, fishing period, sorting categories, and more. Data quality has been very good since 2012.

Commercial sampling

Commercial samples are collected by GINR. During surveys or in sampling campaigns factories are visited and the size of the landed fish by species and gear is registered. Due to the logistic challenges in Greenland (size of Greenland and mainly transport by air or sea), sampling the catch is challenging. To ensure sufficient length information from the commercial catches, GINR conducts commercial length measurements in factories during the winter months (Jan-April).
An alternative source of length information in the catch are grader data. Graders are automated sorting machines that weigh each fish individually and sort them according to size categories. If extracted, the millions of individual weights can be transformed into length information. Graders typically do not register information on gear. This is, however, not a problem since all fish in the landings provide information, and gear therefore is randomly incorporated into in the length distribution. No grader data has been received from the Uummannaq area since 2021. In 2023-2025, local factory staff have collected the majority of length information

Age-length key (ALK)

Age information is occasionally obtained from commercial landings, but most otoliths in the area are collected through biological surveys with GINR research vessel RV Sanna during summer gillnet surveys.

Logbook CPUE calculation

A general linear model (GLM) with year, month, and boat as factors is applied to the longline and gillnet fishery logbook data since 2008. Only longline sets with more than 200 hooks and gillnets with catches between 0 and 1001 kg/gillnet are included to omit obvious outlier values and limit the influence of potential data errors on the analysis. CPUE observations are log-transformed prior to the GLM analysis. Least-mean square estimates were used as standardized CPUE series. For more information about the standardized logbook CPUE see Riget and Nygaard (2018). In 2022, a new CPUE based on factory landings data from longline fishery calculated in the same way as the logbook CPUE, but from a different data source, was introduced (Bjare and Nygaard, 2022). Another difference is that due to the high number of small boat fishermen and diverse types of fisheries all using the same standard gear (longlines from either logbook vessels, small open boats, or directly from the sea ice) the model uses year, vessel type (vessel, boat, dog sledge or snowmobile) and statistical catch square as factors.

Results

Catches

First available catch statistics are from 1954. Catches increased during the 1980s and peaked in 1999, at more than 8,000 t (Table 1 and Fig. 1). Catches then decreased to around 6,000 but then started to increase and peaked in 2020 with 10,670 t taken in the area. Since then catches have steadily decreased reaching 7,812 t in 2025.

Breakdown of catch

A breakdown of catch by gear and area is provided in Table 2. The fishery in Uummannaq is scattered all over the fjord near settlements (Fig. 2). The area is highly productive with 10 large iceberg producing glaciers.

Size of the landed fish

An overview of number of length measured Greenland halibut by year and gear is shown in Table 3. Due to the logistical challenges in Greenland commercial length information is not available for all months. In most years

the sampling covers the three different categories (Uummannaq longline winter, Uummannaq gillnet winter and Uummannaq longline summer). Grader information has not been received from 2022 (Table 4) and due to logistic challenges no sampling was done in the summer of 2022. In Uummannaq there is no major difference between summer and winter fishing grounds and only small differences in the summer and winter length distributions are observed. Only gear is accounted for in the length sampling. Mean individual length in the commercial landings gradually decreased since 1993 with a drastic decrease from 60 cm in 2016 to just above 50 cm in 2023 (Fig. 3), which is also apparent in shifting length frequency distributions (Fig. 4).

Age-length key (ALK)

Age reading of Greenland halibut was suspended from 2011 to 2017 at GINR due to low quality of the age readings and lack of an internationally agreed method. However, in 2017 the ageing was reinitiated. An age-length key (ALK) is currently being constructed for every year back in time. For years prior to 2021, the ALK used to calculate a CAA table, was created using age readings from whole frozen otoliths from all three inshore areas collected from 2008, 2009 and 2010.

Catch-at-age (CAA)

The CAA was constructed with individual year's ALK from the GINR Uummannaq gillnet survey and based on the new method from 2021 (Table 5). Due to the lack of sufficient length information from the catches, the CAA from Uummannaq is less certain in 2022. The bubbleplot indicates a shift gradual shift towards smaller and younger fish (Fig. 5). In 2025 the catches were dominated by ages 5 to 9.

Factory landings CPUE (longline)

A general linear model (GLM) with year, month, vessel type, and catch area as factors was applied to the longline landings in the factory provided landing slips from 2012 to 2023 (see Bjare and Nygaard, 2022). The new CPUE based on factory landings data consists of more than 10,000 observations in all years and covers >90% all longline fishery (Table 6). The CPUE shows a gradual decrease from 2013 to 2022 and a substantial decrease in 2023-2025 (Fig. 6).

Logbook CPUE (longline)

The CPUE initially increased from 2007 to 2011 but gradually decreased since. The CPUE in 2023-2025 were the lowest observed in the time series (Fig. 6.).

Logbook CPUE (Gillnet)

A general linear model (GLM) with year, month, and boat as factors was applied to the longline fishery logbook data since 2008. Fewer observations are available in 2008, and value for this first year in the time series is thus uncertain.

From 2009, the CPUE gradually increases and peaks in 2013 and again in 2018, whereafter it decreases. Caution should be applied when interpreting the CPUE after 2017 due to the allowed reduction from 110 mm gillnets to 95 mm gillnets leading to a gradual transition to these gillnets selecting fish on average about 10 cm smaller.

Discussion

Although the catches have decreased in the recent 5 years and in general have been high in the recent decade, the catches in numbers of Greenland halibut continue to increase. The fishery is increasingly dependent on younger fish and smaller Greenland halibut. Over the recent decade the main indices for the stock have all gradually decreased concomitant with high catches. Although the CPUEs based on longline fishery are derived from two different data sources, they show a similar trend. The CPUE based on the factory landings starts at a higher level than the logbook based CPUE, but they coincide in 2024-2025 at around 25-27 kg/100hooks. The

initial difference in CPUEs between the logbook and the factory-based data could be due to differences in fishing grounds.

References

Riget, F. and J. Boje (1989). Fishery and some biological aspects of Greenland halibut (*Reinhardtius hippoglossoides*) in West Greenland waters. NAFO Sci.Council Studies(13): 41-52.

Riget, F. and Nygaard, R. (2017). An analyses of logbooks of Greenland Halibut Stock Component in NAFO Division 1A Inshore. NAFO SCR 18/023.

Bjare, F. and Nygaard, R. (2022). A new longline based CPUE for Greenland halibut in NAFO division 1A inshore based on factory landing reports. NAFO SCR 12/024.

Table 1. Catches (t) of Greenland halibut in Uummannaq by gear and year.

	Uummannaq			Notes
Year	Longline	Gillnet	Catch	
1954			16	
1955			76	
1956			84	
1957			31	
1958			177	
1959			206	
1960				No catch statistics ?
1961				No catch statistics ?
1962				No catch statistics ?
1963				No catch statistics ?
1964			403	
1965			688	
1966			675	
1967			593	
1968			407	
1969			584	
1970			326	
1971			149	
1972			271	
1973				No catch statistics ?
1974				No catch statistics ?
1975			309	
1976				No catch statistics ?
1977			754	
1978			1144	
1979			835	
1980			1422	
1981			1662	
1982			1210	
1983			966	
1984			1259	
1985			1833	
1986				No catch statistics ?
1987			2897	
1988			2920	
1989			2859	
1990			2779	
1991			3045	
1992			3067	
1993			3916	

1994			4004	
1995			7234	
1996	3176	1437	4579	
1997			6293	
1998			6912	
1999			8425	
2000	7103	465	7568	
2001	6185	375	6558	
2002			5339	
2003	3924	1115	5039	
2004	4140	1101	5248	
2005	1947	2908	4856	
2006			5984	
2007	4460	858	5318	
2008			5426	
2009			5451	
2010	5617	610	6226	
2011	5046	1179	6397	
2012	5847	357	6204	
2013	6639	369	7008	
2014	7800	407	8207	
2015	7279	962	8244	
2016	9512	792	10305	
2017	8261	788	9049	
2018	7505	1334	8839	
2019	8142	2021	10162	
2020	8880	1797	10677	
2021	8479	1130	9609	
2022	7977	1030	9007	Poor commercial sampling. No grader data available.
2023	7662	588	8250	
2024	7565	462	8028	
2025	7566	246	7812	

Notes.
1998 License requirements introduced.
2002 Offshore shrimp trawlers equipped with grid separators.
2008 First Quota regulations introduced.
2009 Logbooks mandatory for vessels larger than 30^{ft}.
2011 Inshore shrimp trawlers equipped with grid separators.
2012 Separate TAC set for vessels and small boats.
2014 Quota free areas outside TAC placed by the fisheries minister.
2017 Minimum mesh size in gillnets reduced from 110 halfmesh (220mm) to 95mm halfmesh (190mm).

Table 2. Uummannaq landings of Greenland halibut (t) by gear and month.

	Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OKT	NOV	DEC	Total
Longline	2011	169	156	306	560	357	772	1298	736	98	585	9	0	5046
	2012	387	614	625	158	217	1023	1140	957	301	184	207	35	5847
	2013	197	354	482	357	547	1128	1352	934	609	424	216	38	6639
	2014	172	351	667	572	347	965	1420	1201	1032	532	415	126	7800
	2015	173	462	701	598	211	494	1428	1068	1060	657	314	113	7281
	2016	598	731	585	469	871	1405	1540	1324	1129	519	217	127	9512
	2017	432	563	732	521	311	900	1340	1167	921	885	291	197	8261
	2018	157	370	508	564	427	1173	1455	1017	876	708	134	118	7505
	2019	443	409	440	466	666	1321	1398	1036	663	865	234	200	8142
	2020	193	470	455	440	537	1692	1597	1210	1102	760	183	241	8880
	2021	161	297	350	176	814	1632	1364	1208	1160	945	208	164	8479
	2022	146	219	671	735	376	1051	1569	1078	701	773	349	310	7977
	2023	305	539	671	554	461	1160	1167	681	826	768	291	238	7662
	2024	216	592	653	623	335	822	1149	1195	902	607	295	176	7565
	2025	115	356	443	419	513	1126	1293	1016	1054	696	318	217	7566

	Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OKT	NOV	DEC	Total
Gillnet	2011	158	293	8	0	140	531	50	0	0	0	0	0	1179
	2012	90	37	60	14	0	3	0	0	0	9	57	85	357
	2013	66	56	54	77	28	0	0	1	0	0	57	30	369
	2014	83	76	42	62	0	1	0	0	0	0	40	104	407
	2015	74	38	59	43	1	0	617	95	2	0	23	10	963
	2016	20	40	44	115	38	0	0	67	180	120	86	82	792
	2017	46	18	27	33	24	37	46	3	32	131	158	233	788
	2018	163	76	270	316	3	14	3	0	0	0	320	169	1334
	2019	207	509	362	263	8	1	1	3	1	1	250	414	2021
	2020	229	324	380	284	3	4	4	2	3	13	261	288	1797
	2021	241	55	104	207	59	6	0	0	0	0	85	373	1130
	2022	248	10	105	127	141	16	0	0	0	0	163	219	1030
	2023	67	15	90	61	5	0	0	0	0	0	138	212	588
	2024	73	35	45	49	2	1	0	0	0	0	130	128	462
	2025	41	46	28	27	1			1			52	52	246

	Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OKT	NOV	DEC	Total
Tot Total	2011													
	2012	477	651	685	172	217	1026	1140	957	301	193	265	120	6204
	2013	263	410	537	434	575	1128	1352	935	609	424	273	68	7008
	2014	256	427	710	633	347	965	1420	1201	1032	532	455	230	8207
	2015	247	500	761	640	212	494	2045	1163	1063	657	337	124	8244
	2016	618	772	629	584	908	1405	1540	1391	1309	638	303	208	10305
	2017	478	581	760	554	335	938	1386	1169	953	1016	449	430	9049
	2018	320	445	778	880	430	1187	1458	1017	876	708	454	287	8839
	2019	650	918	802	730	674	1322	1400	1039	664	866	484	614	10162
	2020	423	794	835	725	540	1696	1601	1212	1105	773	444	528	10677
	2021	402	352	454	383	873	1638	1364	1208	1160	946	293	536	9609
	2022	394	229	776	862	517	1068	1569	1078	701	773	512	529	9007
	2023	372	554	761	616	466	1160	1167	681	826	768	429	450	8250
	2024	289	627	698	672	337	822	1149	1195	902	607	425	304	8028
	2025	156	402	470	446	514	1126	1293	1017	1054	696	370	269	7812

Table 3 Number of length measured Greenland halibut by gear, division and month from the inshore areas in 2019. Blocks indicates the use of length distributions in the CAA calculation.

	Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Longline	2010	-	3047	1583	-	-	-	-	-	854	2673	-	-
	2011	-	287	3265	1853		2973	2328	988	-	5124	-	-
	2012	-	-	2416	-	-	-	-	1469	-	-	-	-
	2013	-	484	3068	-	-	-	-	287	1485	-	-	-
	2014	-	4390	-	-	-	-	-	1690	-	-	-	-
	2015	-	5972	-	-	-	-	864	821	-	-	-	-
	2016	-		5940	-	-	-	777		-	-	-	-
	2017	-	5126	3858	-	-	-		4208	-	-	-	-
	2018	-	732	4770	-	-	-	3239	-	-	-	-	-
	2019	-	3653	-	-	-	-	204	3250	-	-	-	-
	2020	-	3955	-	-	-	453	-	2031	1334	-	-	-
	2021	-	821	2259	-	-	-	-	3232		-	-	-
	2022	-	-	495	-	-	-	-	-	-	-	-	-
	2023	-	-	-	-	-	-	1446	-	2785	-	631	1026
	2024	4174	3249	-	-	1792	265	-	-	2830	1176	981	-
	2025		848	1144	199		72	1799					

	Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Gillnet	2010	-	127		-	-	-	-	-	-	-	-	-
	2011	-	632	1454	-	-	-	-	-	-	-	-	-
	2012	-	-	-	-	-	-	-	-	-	-	-	-
	2013	-	45	-	-	-	-	-	-	-	-	-	-
	2014	-	-	-	-	-	-	-	-	-	-	-	-
	2015	-	185	-	-	-	-	-	-	-	-	-	-
	2016	-	-	487	-	-	-	-	-	-	-	-	-
	2017	-	102	-	-	-	-	-	-	-	-	-	-
	2018	-	331	91	-	-	-	-	-	-	-	-	-
	2019	-	1902	-	-	-	-	-	-	-	-	-	-
	2020	1744	2753	-	-	-	-	-	-	-	-	-	-
	2021	-	163	-	-	-	-	-	-	-	-	-	-
	2022	-	-	237	-	-	-	-	-	-	-	-	-
	2023	-	-	-	-	-	-	-	-	-	-	44	-
	2024	21	-	-	-	-	-	-	-	-	-	-	-

Table 4 Number of Greenland halibut individuals weighed on automated sorting machines (grader data) recalculated to individual lengths by GINR in Uummannaq. No data received since 2022.

Greenland halibut individually gutted weights (5 gram accuracy) from automated sorting machines (graders) recalculated to individual lengths. Table indicates number of individual observations.												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2021	20899	13761	48620	55551	146335	177245	155751	153469	115541	79663	NA	NA
2022	ND											
2023	ND											
2024	ND											
2025	ND											

Table 5. Catch-at-age (CAA) for Greenland halibut in the Uummannaq district.

age/year	3	4	5	6	7	8	9	10	11	12	13	14	15+	16+	Total
1988	0	0	0	1	5	20	52	121	143	121	96	49	23	17	648
1989	0	0	0	0	2	9	35	98	120	99	76	38	19	20	516
1990	0	0	0	1	3	15	47	108	121	101	82	42	20	21	561
1991															
1992															
1993	0	0	0	9	45	200	202	142	138	104	158	93	28	20	1139
1994	0	0	0	24	105	226	271	346	139	105	34	12	0	3	1265
1995	0	0	0	6	217	564	601	413	414	219	138	49	28	22	2671
1996	0	1	0	6	76	308	279	286	232	142	69	28	11	15	1453
1997	0	0	0	0	69	377	793	702	460	206	75	32	10	6	2732
1998	0	0	0	0	0	235	566	657	586	355	138	39	15	5	2595
1999	0	8	70	218	554	596	690	789	526	295	131	42	12	4	3935
2000	0	0	19	86	357	441	543	669	487	311	170	68	24	8	3184
2001	0	0	65	113	674	507	315	492	303	178	121	60	28	12	2868
2002															
2003	0	0	3	21	127	360	321	235	220	158	78	145	150	94	1911
2004	0	0	1	10	105	197	249	198	163	118	82	103	78	59	1364
2005	0	1	17	101	108	192	142	115	109	74	58	80	67	50	1115
2006	0	1	32	12	47	243	70	284	127	324	49	108	9	9	1315
2007	0	3	40	181	221	340	273	192	149	94	64	82	71	56	1767
2008	0	4	46	203	249	381	304	213	166	104	71	91	79	63	1974
2009	0	3	9	25	238	525	470	415	243	157	90	42	20	11	2248
2010	0	1	8	77	484	822	459	458	235	128	79	32	21		2804
2011	0	0	11	94	465	743	432	441	242	141	91	43	26		2730
2012	0	0	6	61	347	627	393	422	260	168	114	57	37		2492
2013	0	1	9	72	397	730	494	531	302	173	108	49	31		2896
2014	0	1	20	120	622	1026	613	608	308	163	107	46	32		3667
2015	0	2	26	112	489	828	545	582	354	211	144	68	41		3403
2016	0	4	49	203	840	1290	736	727	386	211	132	58	40		4679
2017	2	28	204	424	924	1079	564	553	299	174	121	62	38		4473
2018	2	36	265	499	1036	1150	586	550	261	137	93	43	29		4687
2019	5	67	311	528	1171	1307	691	644	306	158	102	47	35		5372
2020	5	61	356	576	1225	1404	694	652	319	162	120	57	38		5668
2021	0	148	673	1408	1435	1088	719	405	175	129	27	33	5	18	6263
2022	7	164	1946	1683	525	549	359	174	57	26	5	1	0	14	5510
2023	43	240	2237	1451	929	1027	384	181	75	32	23	18	17	6	6663
2024	9	402	2005	1780	1430	715	233	49	35	9	8	5	2	1	6683
2025	0	50	762	1170	1301	741	696	238	152	61	23	17	6	14	5232

Notes:
2009-The CAA is based on age-readings from 2008,2009 and 2014 from 2009-2020.
2021, 2022, CAA based on readings from individual years.
2022 poor length frequency sampling.

Table 6 CPUE from factory landings (longline only). Note that GLM based indices vary slightly from year to year.

Year	GLM LogCPUE	SE	df	lower.CL	upper.CL	Kg/100 hooks
2012	-0.20049	0.02934	230832	-0.25799	-0.14299	81.83
2013	-0.25224	0.02928	230832	-0.30963	-0.19485	77.71
2014	-0.22504	0.02930	230832	-0.28246	-0.16763	79.85
2015	-0.31594	0.02921	230832	-0.37319	-0.25868	72.91
2016	-0.25056	0.02914	230832	-0.30767	-0.19344	77.84
2017	-0.50395	0.02907	230832	-0.56093	-0.44697	60.41
2018	-0.56804	0.02908	230832	-0.62504	-0.51103	56.66
2019	-0.60287	0.02905	230832	-0.65980	-0.54593	54.72
2020	-0.64100	0.02908	230832	-0.69800	-0.58400	52.68
2021	-0.62838	0.02913	230832	-0.68548	-0.57128	53.35
2022	-0.68665	0.02911	230832	-0.74371	-0.62959	50.33
2023	-1.05878	0.02902	230832	-1.11567	-1.00189	34.69
2024	-1.30301	0.02897	230832	-1.35979	-1.24624	27.17
2025	-1.30826	0.02899	230832	-1.36508	-1.25144	27.03

Table 7. Uumannaq CPUE from logbook data (longline only) for vessels >30ft. Note that GLM based indices vary slightly from year to year.

Year	GLM LogCPUE	SE	df	lower.CL	upper.CL	Kg/100 hooks
2006	6.091933	0.08084095	16433	5.933476	6.25039	44.23
2007	5.931254	0.03314237	16433	5.866291	5.996216	37.66
2008	5.924764	0.03331691	16433	5.859459	5.990069	37.42
2009	5.957557	0.03281615	16433	5.893234	6.02188	38.67
2010	6.125551	0.02900802	16433	6.068692	6.18241	45.74
2011	6.236071	0.02558786	16433	6.185916	6.286226	51.08
2012	6.166816	0.02513532	16433	6.117548	6.216084	47.67
2013	6.078743	0.02335646	16433	6.032962	6.124525	43.65
2014	6.220107	0.02331422	16433	6.174409	6.265805	50.28
2015	6.050216	0.02327744	16433	6.00459	6.095842	42.42
2016	6.047854	0.02235479	16433	6.004036	6.091671	42.32
2017	5.864345	0.02318976	16433	5.818891	5.9098	35.23
2018	5.930776	0.02445441	16433	5.882843	5.978709	37.64
2019	5.891755	0.02304425	16433	5.846586	5.936925	36.20
2020	5.818429	0.02407786	16433	5.771234	5.865625	33.64
2021	5.977348	0.02579203	16433	5.926793	6.027903	39.44
2022	5.783007	0.0266213	16433	5.730826	5.835188	32.47
2023	5.564316	0.0270748	16433	5.511246	5.617386	26.09
2024	5.489854	0.02652922	16433	5.437853	5.541854	24.22
2025	5.524716	0.0258557	16433	5.474036	5.575396	25.08

Table 8. Uumannaq CPUE from logbook data (gillnets only) for vessels >30ft. Note that GLM based indices vary slightly from year to year.

Year	GLM LogCPUE	SE	df	lower.CL	upper.CL	Kg/gillnet
2008	3.271951	0.25871281	5929	2.764779	3.779122	26.36
2009	4.089355	0.0611869	5929	3.969407	4.209304	59.7
2010	4.17902	0.05420549	5929	4.072757	4.285282	65.3
2011	4.284912	0.04973174	5929	4.187419	4.382404	72.6
2012	4.206842	0.06282842	5929	4.083676	4.330009	67.14
2013	4.535326	0.06033058	5929	4.417056	4.653596	93.25
2014	4.477829	0.05903543	5929	4.362098	4.59356	88.04
2015	4.363599	0.07443537	5929	4.217679	4.50952	78.54
2016	4.368957	0.06294636	5929	4.245559	4.492354	78.96
2017	4.489557	0.06374532	5929	4.364593	4.614521	89.08
2018	4.515718	0.05492413	5929	4.408047	4.62339	91.44
2019	4.451384	0.05326633	5929	4.346962	4.555805	85.75
2020	4.25203	0.05009793	5929	4.15382	4.350241	70.25
2021	4.355831	0.05115039	5929	4.255557	4.456104	77.93
2022	4.251251	0.05055718	5929	4.15214	4.350361	70.19
2023	4.016953	0.05448592	5929	3.910141	4.123765	55.53
2024	3.856278	0.05701761	5929	3.744502	3.968053	47.29
2025	3.615997	0.05956756	5929	3.499222	3.732771	37.19

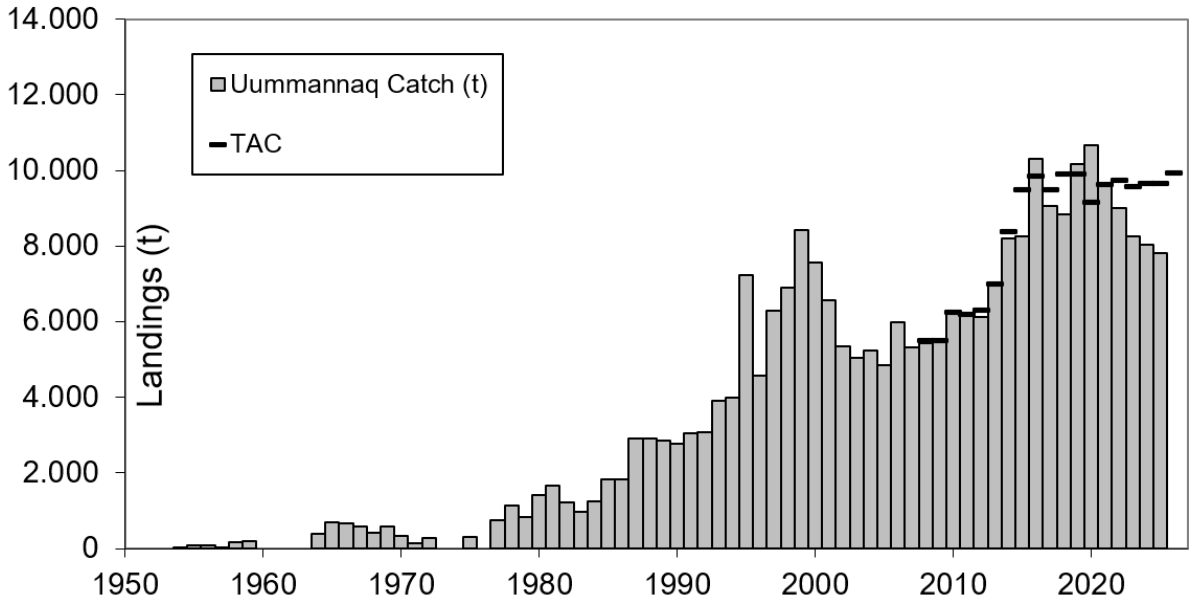

Figure 1. Greenland halibut catches and TAC set by the Government of Greenland in management area Uummannaq since 1954.

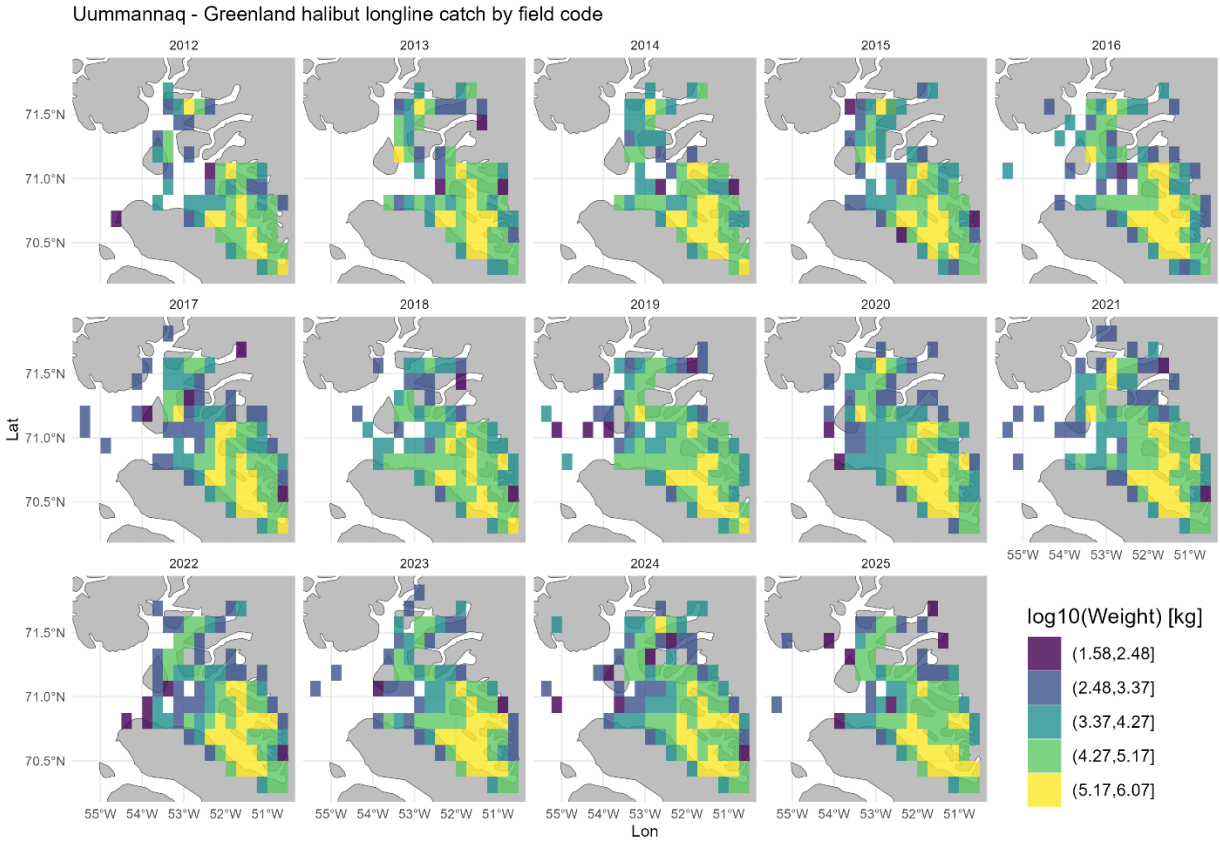

Figure 2. Greenland halibut longline catch by statistical square in the Uummannaq fjord.

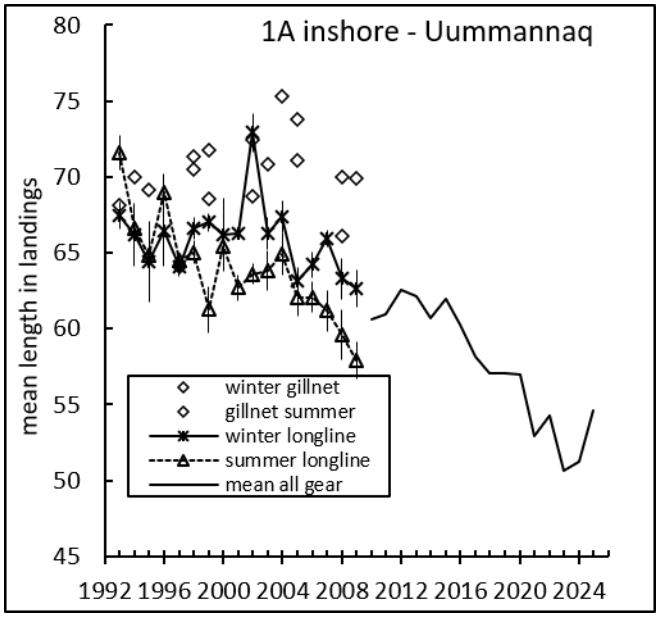

Figure 3. Uummannaq mean length in the landings: longline summer, longline winter, gillnet and overall mean weighted by area, season gear and amounts (since 2010).

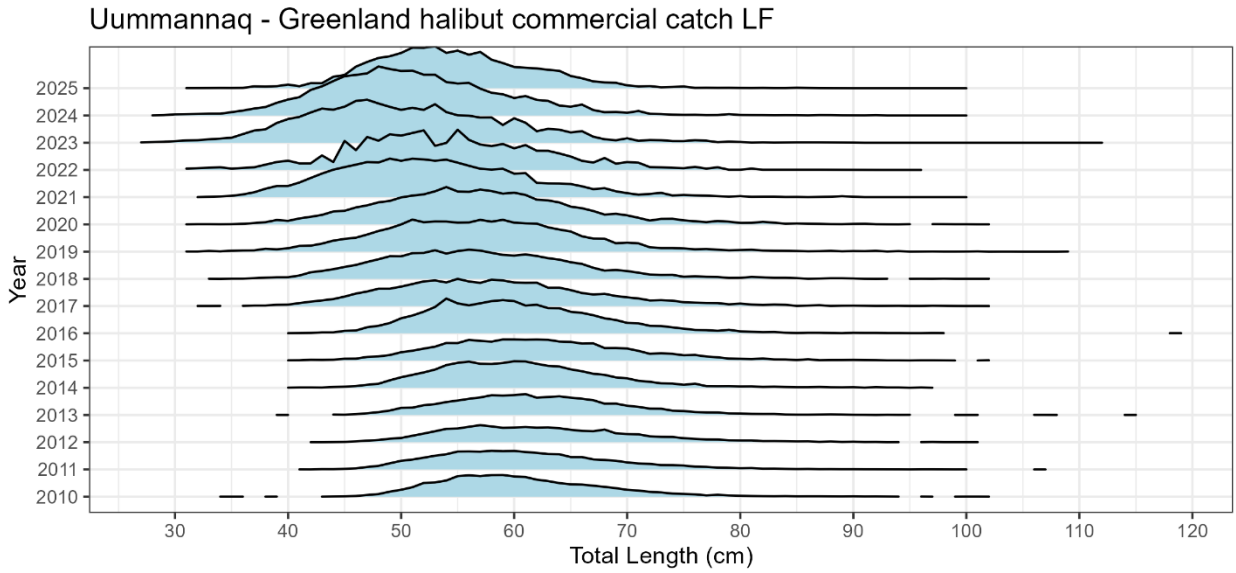

Figure 4. Uummannaq length distribution of the catch.

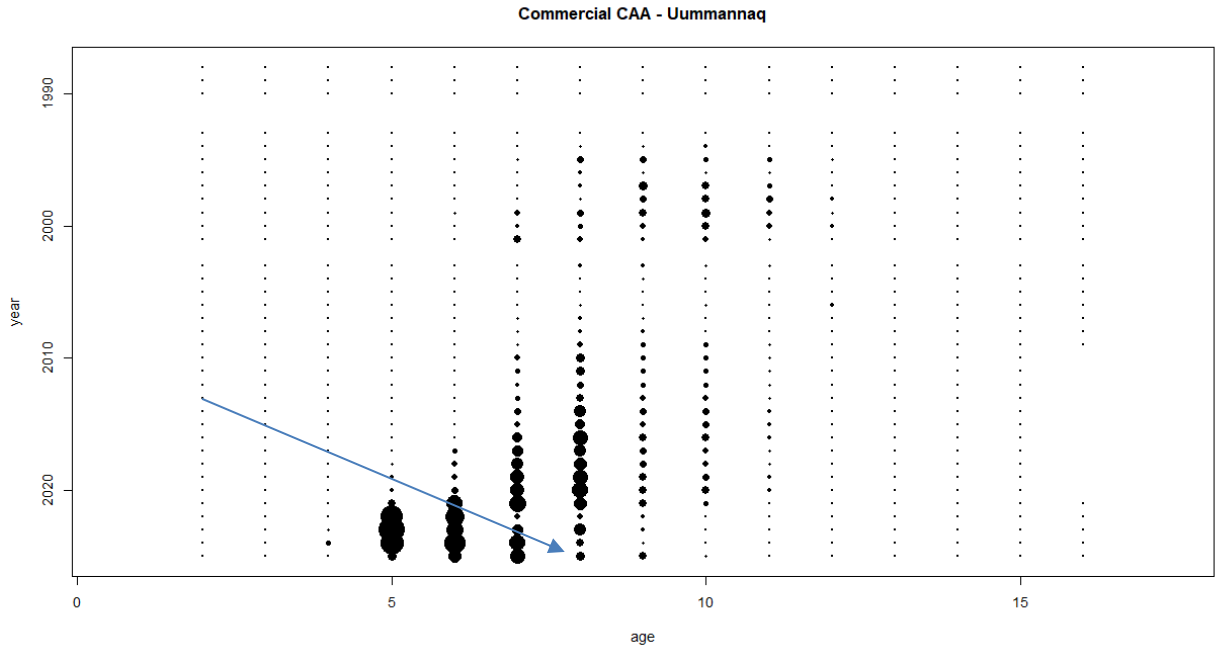

Figure 5. Catch-at-age (CAA) bubble plot for the commercial landings in Uummannaq.

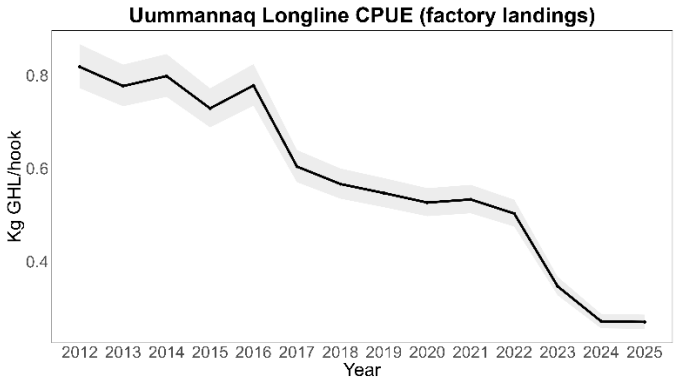

Figure 6. Commercial CPUE (kg/hook) based on factory landing reports from all factories in Uummannaq.

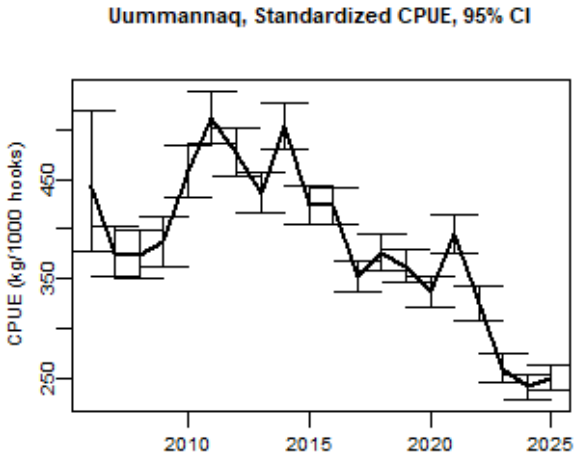

Figure 7. Standardized longline means and 95% CI CPUE based on logbooks from vessels larger than 30ft in Uummannaq.

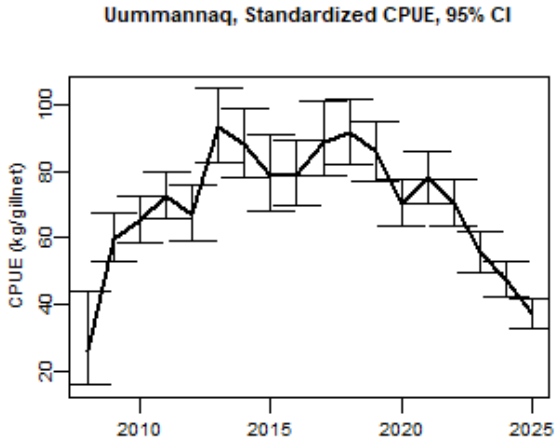

Figure 8. Gillnet standardized means and 95% CI CPUE based on logbooks from vessels larger than 30ft in Uummannaq.