

ECOREGION Iceland and East Greenland
STOCK Greenland halibut in Subareas V, VI, XII, and XIV

Advice for 2013

ICES advises on the basis of the MSY approach that landings in 2013 should be no more than 20 000 t.

Stock status

F (Fishing Mortality)			
	2009	2010	2011
MSY (F_{MSY})	✗	✗	✗ Above target
Precautionary approach (F_{pa} , F_{lim})	?	?	? Undefined
SSB (Spawning-Stock Biomass)			
	2010	2011	2012
MSY ($B_{trigger}$)	?	?	? Undefined
Precautionary approach (B_{pa} , B_{lim})	?	?	? Undefined
Qualitative evaluation	✔ Above possible reference points		

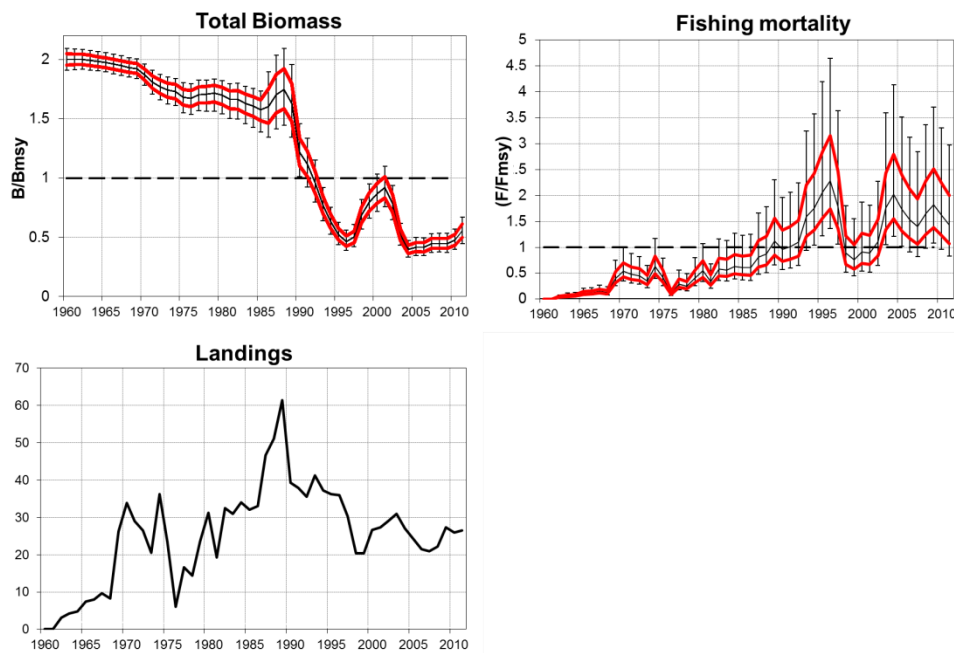
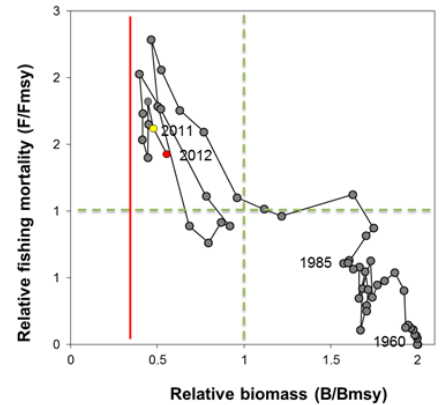


Figure 2.4.5.1 Greenland halibut in Subareas V, VI, XII, and XIV. Summary of the stock assessment (weights in thousand tonnes). Lower panels: trends of biomass and fishing mortality relative to MSY reference points (medians) with indication of 25–75 percentiles (red curves) and 95% confidence intervals (error bars). Top right: relative SSB and F over the years with indication of B_{MSY} (1.0), B_{lim} ($0.3B_{MSY}$), F_{MSY} (1.0), and F_{lim} ($1.7F_{MSY}$). Bottom: Landings (thousand tonnes).

The assessment is indicative of stock trends, and provides relative measures of stock status. The stock has been below B_{MSY} since the early 1990s and is presently at 55% of B_{MSY} . Since the record-low biomass observed in 2004 the stock has been stable with signs of slow increase. Landings have for more than a decade been between 20 000 and 30 000 t. Present fishing mortality is estimated to be 1.4 times the F_{MSY} .

Management plans

In 2012 the coastal states have initiated work on a common management plan for Greenland halibut in Subareas V, XII, and XIV. The plan will move in two steps; first, a gradual lowering of the total catches until biological reference points have been evaluated by ICES, and thereafter implementation of a harvest control rule in accordance with ICES MSY approach. The plan will include continuous monitoring of the resources and the requirements on information from the fishery.

Biology

Greenland halibut is a relatively slow-growing and long-lived species. Changes in stock dynamics may take several years. Available biological data and distribution of the fisheries suggest that Greenland halibut in Subareas XIV and V belong to the same entity and do mix, although precise stock associations are not known. Tagging studies suggest that some mixing occurs also with Greenland halibut in the Norwegian Sea/Barents Sea. Nursery grounds are unknown.

The fisheries

The fishery is distributed over a vast area, mainly conducted by factory trawlers operating with demersal trawl.

Catch distribution	Total landings (2011) are 26 424 t (96% bottom trawl and 4% gillnets/longlines). Discarding is considered to be minor (less than 1% by weight).
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Quality considerations

Lack of knowledge on life history and stock structure of Greenland halibut in relation to the assessment area (Subareas V, VI, XII, and XIV) impede the interpretation and weighting of the different biomass indices. Lack of information on recruitment to the stock prevents an accurate short-term forecast.

Scientific basis

Assessment type	A probabilistic (Bayesian) version of a surplus-production model.
Input data	One cpue series of the Icelandic trawl fleet (since 1985) and two trawl surveys (Division Va: since 1996, Subarea XIV: since 1998).
Discards and bycatch	Not considered relevant for the assessment.
Indicators	None.
Other information	A benchmark is planned for 2013
Working group report	NWWG

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Reference points

Relative reference points are defined for this stock. Fishing mortality is estimated in relation to F_{MSY} and total stock biomass is estimated in relation to B_{MSY} . A possible candidate for MSY $B_{trigger}$ will be within the range of 30%–50% B_{MSY} . MSY $B_{trigger}$ values in this range have been adopted for a number of ICES and NAFO stocks.

Outlook for 2013

Basis: Assumed landings 2012 according to TACs = 25 000 t.

Catch option 2013 (in thousand tonnes):	0	5	10	15	20	30
Probability of falling below $0.3B_{MSY}$	1%	2%	2%	2%	3%	10%
Probability of being below B_{MSY}	93%	94%	94%	95%	96%	97%
Probability of exceeding F_{MSY}	-	3%	13%	31%	53%	86%
Probability of exceeding $1.7F_{MSY}$	-	1%	4%	10%	20%	55%
Stock size (B/B_{MSY}), median	0.62	0.61	0.60	0.59	0.57	0.49
Fishing mortality (F/F_{MSY}),	0.00	0.24	0.49	0.75	1.04	1.83
Productivity (% of MSY)	86%	85%	84%	83%	82%	74%

Probabilities are for the catch option year

MSY approach

The stock is considered to be above any potential MSY $B_{trigger}$ (30%–50% B_{MSY}) Following the ICES MSY framework implies that the advised fishing mortality should be F_{MSY} or a transitional F_{MSY} .

Because this is a vulnerable long lived species, aiming directly for a harvest at F_{MSY} will correspond to maximum landings in 2013 of less than 20 000 t which is expected to lead to a *status quo* in stock size in 2013. 20 000 t offers a 50% probability of reaching F_{MSY} in five to ten years.

Additional considerations*Management considerations*

No regional management agreement is in place, TACs are set separately for Iceland and Greenland EEZs, and the number of licences is set separately by the Faroe Islands. A common management plan by the three coastal states is presently being developed. The management plan will include monitoring of the effort and stock development as well as a framework for adapting future fishing according to the response of the stock, aiming at a harvest control rule in accordance with MSY. Since Greenland halibut is a slow-growing species, it is expected that a change in stock dynamics may take several years and this will be taken into consideration in the management plan. The plan is intended to be fully implemented in 2015; however, a stepwise reduction in catches is predicted to take place already from 2013 until MSY reference points have been evaluated by ICES for this stock.

The stock has sustained catches between 20 000 t and 30 000 t in the past decades. It should be taken into account that Greenland halibut is a slow-growing and long-lived species and rebuilding the stock is therefore only likely to be achieved within a long time frame. The medium-term forecasts suggest that stock recovery is slow under all fishing scenarios, even in the case of no fishery.

Available biological information such as tagging and genetic studies and the distribution of the fisheries suggest that Greenland halibut in Subareas XIV and V belong to the same stock entity and that a common management is therefore required.

Because the nursery grounds are not known, there is no monitoring of recruits and juveniles. Because Greenland halibut is a slow-growing species that first appears in catches at ages 4–6, recruitment failure will only be detected in the fishery some 5–10 years after it occurs. The management plan that is under development should consider these features.

Information from the fishing industry

Information from the fisheries in East Greenland and the Faroe Islands, which is not contained in the assessment model, suggest stable biomasses in recent years.

Regulations and their effects

No formal agreement on the management of the Greenland halibut fishery exists presently among the three coastal states, Greenland, Iceland, and the Faroe Islands. In Greenland and Iceland, the fishery is regulated by a TAC and in the Faroe Islands by effort limitation (number of fishing licenses). This management practice has resulted in adoption of TACs by Greenland and Iceland that in total are set substantially higher than the TACs advised by ICES. In addition to this a number of fishery licenses at the Faroe Islands also contributed to landings. As a result of these national TACs and effort regulations, landings have been in excess of the TACs advised by ICES since 1987. The management plan that is under development will solve this lack of coordination.

Data and methods

Two surveys (Greenland and Icelandic) and cpue data from the Icelandic trawler fleet along with landings data back to the start of the fishery (1960) were used as input to the stock production model. Additional data were available (cpues from East Greenland trawlers and from Faroese trawlers), but these data had conflicting trends with the other indices and they could not be included in the model. All available indices are considered equally relevant as biomass indicators.

Uncertainties in the assessment

Survey coverage is considered adequate to monitor the stock, but lack of sufficient knowledge on life history and stock structure of Greenland halibut in relation to the assessment area (Subareas V,VI, XII, and XIV) impede the interpretation and weighting of the different indices. Furthermore, conflicting indices cannot be accommodated by the stock production model. In the present assessment cpues from Subarea XIV have not been used for that reason. Increasing conflict between the two remaining survey indices contributes to increased uncertainty in the population estimates. Furthermore, the lack of a 2011 survey in Division Va also contributes to the increased uncertainty.

Prior to the introduction of sorting grids in the shrimp fisheries a substantial number of juvenile Greenland halibut were expected to be discarded. However, there is no quantification of the historical as well as the present discard levels. Hence, the potential bias by not including discards in the assessment cannot be evaluated.

Comparison with previous assessment and advice

The assessment and estimates for the state of the stock are consistent with last year's results.

The basis for advice this year is the same as last year, the MSY approach. A potential range for a candidate MSY B_{trigger} was defined and this resulted in a substantial change in the advice.

Source

ICES. 2012. Report of the North-Western Working Group, 26 April–3 May 2012. ICES CM 2012/ACOM:07.

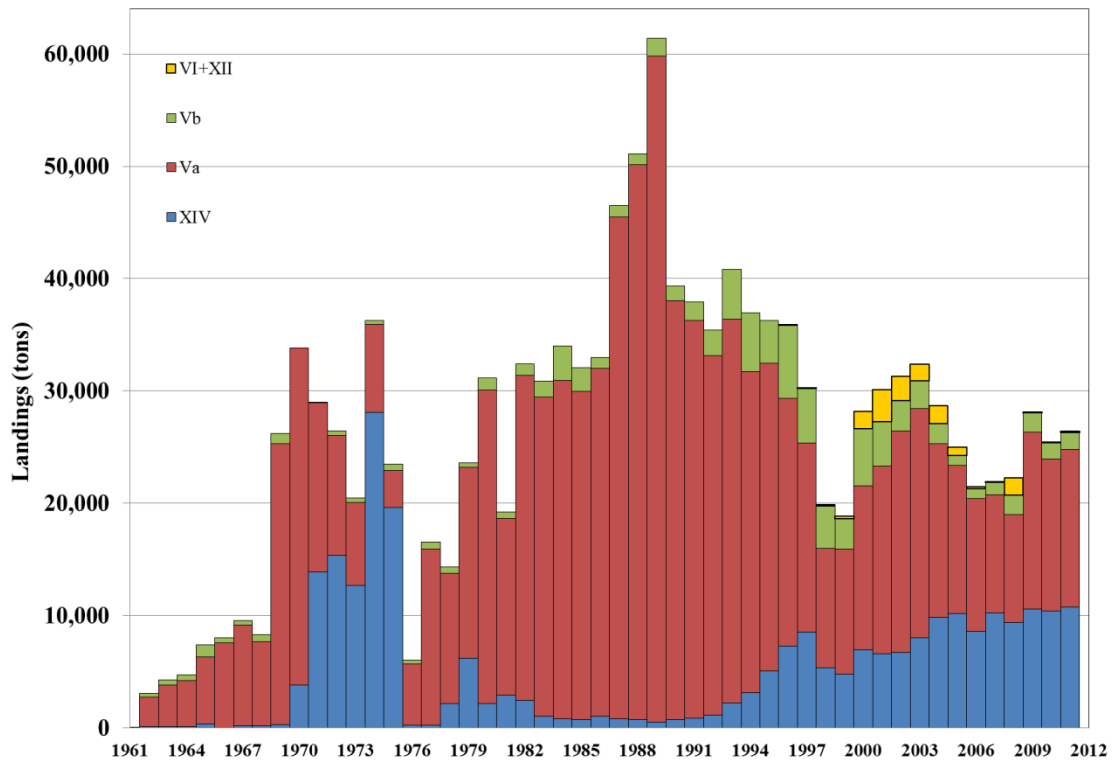


Figure 2.4.5.2 Greenland halibut in Subareas V, VI, XII, and XIV. Landings by area (tonnes).

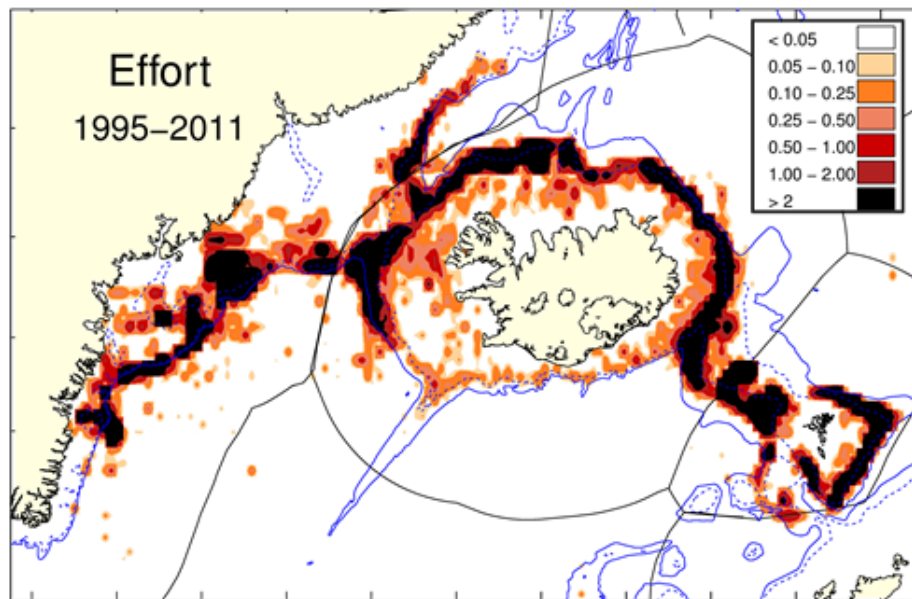


Figure 2.4.5.3 Greenland halibut in Subareas V, VI, XII, and XIV. Distribution of total effort in the fishery for the period 1991–2011. 500 m and 1000 m depth contours are shown.

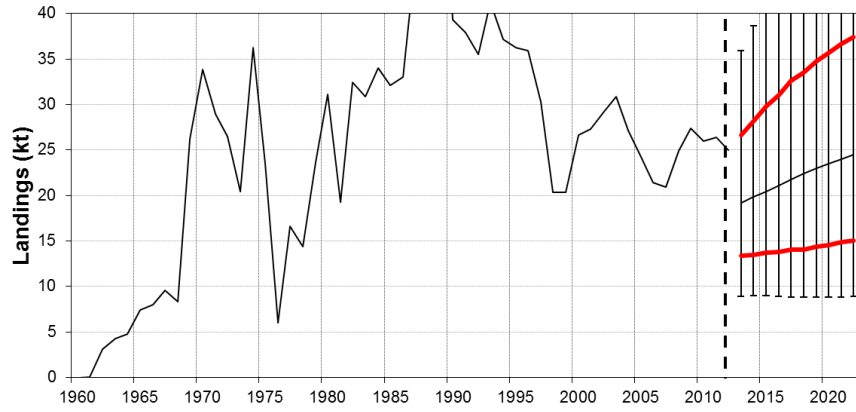


Figure 2.4.5.4 Historical landings (thousand tonnes) and projected landings 2013–2022 assuming F/F_{MSY} (2013–2022) = 1.0. The solid line is the median, red bold lines are quartiles, and bars indicate the 90% confidence limit.

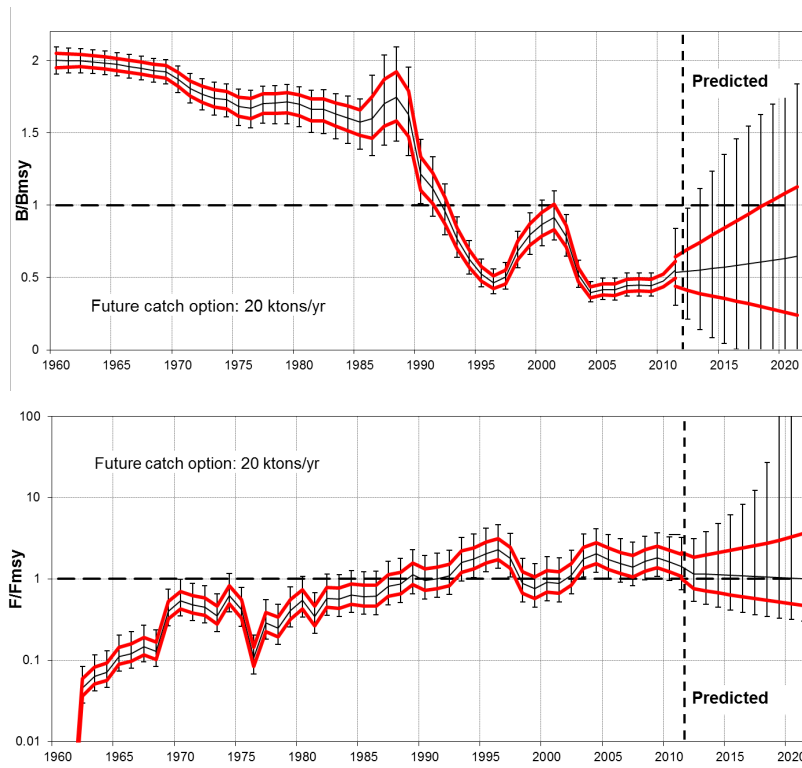


Figure 2.4.5.5 SSB (upper) and fishing mortality (lower), assuming future fixed catch option of 20 kt per year. The solid line is the median, red bold lines are quartiles, and bars indicate the 90% confidence limit.

Table 2.4.5.1 Greenland halibut in Subareas V, VI, XII, and XIV. ICES advice, management, and landings.

Year	ICES Advice	Predicted catch Corresp. to advice	TAC for Icelandic EEZ	Greenland TAC	Landings in Va	ICES landings V, VI, XII, and XIV
1987	No increase in F	28	30		45	47
1988	No increase in F	28	30		49	51
1989	TAC	33	30		59	61
1990	No advice	-	45		37	39
1991	TAC	40	30		35	38
1992	TAC	30	25		32	35
1993	No increase in effort	28 ¹	30 ²		34	41
1994	No increase in effort	34 ¹	30 ²		29	37
1995	TAC	32	30 ²		27	36
1996	TAC	21	20 ²		22	36
1997	60% reduction in F from 1995	13	15 ²		18	30
1998	70% reduction in F from 1996	11	10 ²	8.1	11	20
1999	65% reduction in F from 1997	11	10 ²	8	11	21
2000	60% reduction in F from 1998	11	10 ²	8	15	26
2001	catch less than 98–99 catch	<20	20 ²	14.5	17	28
2002	F reduced below 0.67*F _{MSY}	<21	20 ²	14.5	20	29
2003	F reduced below 0.67*F _{MSY}	<23	23 ²	14.5	20	30
2004	F reduced below 0.67*F _{MSY}	<20	23 ²	14.1	15	28
2005	Effort reduced to 1/3 of the 2003 level	<15	15	12	13	24
2006	Effort reduced to 1/3 of the 2003 level	<15	15	10	12	21
2007	Adaptive management plan, start at 15 000 t	<15	15	11.7	10	21
2008	Adaptive management plan, start at 15 000 t	<15	15	11	12	24
2009	Adaptive management plan, reduce to 5000 t	<5	15	10	16	28
2010	Adaptive management plan, reduce to 5000 t	<5	12	12	14	26
2011	Adaptive management plan, reduce F substantially below F _{MSY}	<5	13	12	14	26
2012	No directed fishery, multi-annual management plan to be developed and implemented	-	13	13		
2013	F reduced to F _{MSY}	<20				

Weights in thousand tonnes.

¹Catch at *status quo* F.²Year ending 31 August.

Table 2.4.5.2

Greenland halibut in Subareas V, VI, XII, and XIV. Nominal landings (tonnes) by country, as officially reported to ICES and estimated by the working group.

Country	1981	1982	1983	1985	1986	1987	1988	1989
Denmark	-	-	-	-	-	6	+	-
Faroe Islands	767	1,532	1,146	1,052	853	1,096	1,378	2,319
France	8	27	236	845	52	19	25	-
Germany	3,007	2,581	1,142	863	858	565	637	493
Greenland	+	1	5	81	177	154	37	11
Iceland	15,457	28,300	28,360	29,231	31,044	44,780	49,040	58,330
Norway	-	-	2	3	+	2	1	3
Russia	-	-	-	-	-	-	-	-
UK (Engl. and Wales)	-	-	-	-	-	-	-	-
UK (Scotland)	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-
Total	19,239	32,441	30,891	32,075	32,984	46,622	51,118	61,156
Working Group estimate	-	-	-	-	-	-	-	61,396

Country	1990	1991	1992	1994	1995	1996	1997	1998
Denmark	-	-	-	-	-	1	-	-
Faroe Islands	1,803	1,566	2,128	6,241	3,763	6,148	4,971	3,817
France	-	-	3	-	-	29	11	8
Germany	336	303	382	648	811	3,368	3,342	3,056
Greenland	40	66	437	867	533	1,162	1,129	747
Iceland	36,557	34,883	31,955	27,778	27,383	22,055	18,569	10,728
Norway	50	34	221	1,173 ¹	1,810	2,164	1,939	1,367
Russia	-	-	5	-	10	424	37	52
Spain	-	-	-	-	-	-	-	89
UK (Engl. and Wales)	27	38	109	513	1,436	386	218	190
UK (Scotland)	-	-	19	84	232	25	26	43
United Kingdom	-	-	-	-	-	-	-	-
Total	38,813	36,890	35,259	37,305	36,006	35,762	30,242	20,360
Working Group estimate	39,326	37,950	35,423	36,958	36,300	35,825	30,309	20,382

Country	1999	2000	2001	2003 ¹	2004 ¹	2005 ¹	2006 ¹	2007 ¹
Denmark	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	5	3	-
Faroe Islands	3,884	-	121	458	338	1,150	855	1,141
France	-	2	32	177	157	-	62	17
Germany	3,082	3,265	2,800	2,948	5,169	5,150	4,299	4,930
Greenland	200	1,740	1,553	1,459	-	-	-	-
Iceland	11,180	14,537	16,590	20,366	15,478	13,023	11,798	-
Ireland	-	-	56	-	-	-	-	-
Lithuania	-	-	-	2	1	-	2	3
Norway	1,187	1,750	2,243	1,074	1,233	1,124	1,097	692
Poland	-	-	2	93	207	-	-	-
Portugal	-	-	6	-	-	-	1,094	-
Russia	138	183	187	-	262	-	552	501
Spain	-	779	1,698	3,075	4,721	506	33	-
UK (Engl. and Wales)	261	370	227	40	49	10	1	-
UK (Scotland)	69	121	130	367	367	391	1	-
United Kingdom	-	166	252	841	1,304	220	93	17
Total	20,001	22,913	25,897	30,900	29,286	21,579	19,890	7,301
Working Group estimate	20,371	26,644	27,291	30,891	27,102	24,978	21,466	21,873

Country	2008 ¹	2009 ¹	2010 ¹	2011 ¹
Denmark	-	-	-	-
Estonia	-	-	-	-
Faroe Islands	-	270	1,408	1,266
France	114	-	-	43
Germany	4,846	427	5,287	5,782
Greenland	-	2,819	-	3,415
Iceland	-	-	13,293	13,192
Ireland	-	-	-	-
Lithuania	566	-	-	-
Norway	639	124	233	176
Poland	1,354	988	960	-
Portugal	-	-	-	-
Russia	799	762	1,070	1,095
Spain	-	-	-	-
United Kingdom	422	581	577	648
Total	9,744	5,974	22,901	25,618
Working Group estimate	24,481	28,197	25,995	26,347

1) Provisional data

Table 2.4.5.3 Greenland halibut in **Division Va**. Nominal landings (tonnes) by country, as officially reported to ICES and estimated by the working group.

Country	1981	1982	1983	1984	1985	1986	1987	1988	1989
Faroe Islands	325	669	33	46			15	379	719
Germany									
Greenland									
Iceland	15,455	28,300	28,359	30,078	29,195	31,027	44,644	49,000	58,330
Norway			+	+	2				
Total	15,780	28,969	28,392	30,124	29,197	31,027	44,659	49,379	59,049
Working Group estimate									59,272²

Country	1990	1991	1992	1993	1994	1995	1996	1997	1998
Faroe Islands	739	273	23	166	910	13	14	26	6
Germany					1	2	4		9
Greenland					1				
Iceland	36,557	34,883	31,955	33,968	27,696	27,376	22,055	16,766	10,580
Norway									
Total	37,296	35,156	31,978	34,134	28,608	27,391	22,073	16,792	10,595
Working Group estimate	37,308²	35,413²							

Country	1999	2000	2001	2002	2003 ¹	2004 ¹	2005 ¹	2006 ¹	2,007 ¹
Faroe Islands	9		15	7	34	29	77	16	25
Germany	13	22	50	31	23	10	6	1	228
Greenland									
Iceland	11,087	14,507	2,310 ⁴	2,277 ⁴	20,360	15,478	13,023	11,798	
Norway							100		691
Russia									
UK (E/W/I)	26	73	50	21	16	8	8	1	
UK Scotland	3	5	12	16	5	2	27	1	
UK									1
Total	11,138	14,607	2,437	2,352	20,438	15,527	13,241	11,817	945
Working Group estimate		14,607	16,752	19,714	20,415	15,477	13,172	11,817	10,525

Country	2008 ¹	2009 ¹	2010 ¹	2011 ¹
Faroe Islands			37	123
Germany	4	423	797	576
Greenland				157
Iceland			13,293	13,192
Norway				
Russia	4			
Poland		270		
UK	179			
Total	187	693	14,128	14,048
Working Group estimate	11,859	15,782	14,128	14,048

1) Provisional data

2) Includes 223 t catch by Norway.

3) Includes 12 t catch by Norway.

4) fished in Icelandic EEZ, but allocated to XIVb

Table 2.4.5.4 Greenland halibut in **Division Vb**. Nominal landings (tonnes) by country, as officially reported to ICES and estimated by the working group.

Country	1981	1982	1983	1984	1985	1986	1987	1988	1989
Denmark	-	-	-	-	-	-	6	+	-
Faroe Islands	442	863	1,112	2,456	1,052	775	907	901	1,513
France	8	27	236	489	845	52	19	25	...
Germany	114	142	86	118	227	113	109	42	73
Greenland	-	-	-	-	-	-	-	-	-
Norway	2	+	2	2	2	+	2	1	3
UK (Engl. and Wales)	-	-	-	-	-	-	-	-	-
UK (Scotland)	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
Total	566	1,032	1,436	3,065	2,126	940	1,043	969	1,589
Working Group estimate	-	-	-	-	-	-	-	-	1,606 ²

Country	1990	1991	1992	1993	1994	1995	1996	1997	1998
Denmark	-	-	-	-	-	-	-	-	-
Faroe Islands	1,064	1,293	2,105	4,058	5,163	3,603	6,004	4,750	3,660
France ⁶	3 ¹	2	1	28	29	11	8 ¹
Germany	43	24	71	24	8	1	21	41	
Greenland	-	-	-	-	-	-	-	-	-
Norway	42	16	25	335	53	142	281	42 ¹	114 ¹
UK (Engl. and Wales)	-	-	1	15	-	31	122		
UK (Scotland)	-	-	1	-	-	27	12	26	43
United Kingdom	-	-	-	-	-	-	-	-	-
Total	1,149	1,333	2,206	4,434	5,225	3,832	6,469	4,870	3,825
Working Group estimate	1,282 ²	1,662 ²	2,269 ²	-	-	-	-	-	-

Country	1999	2000 ¹	2001 ¹	2002 ¹	2003 ¹	2004 ¹	2005 ¹	2006 ¹	2007 ¹
Denmark									
Faroe Islands	3873		106	13	58	35	887	817	1116
France		1	32	4	8	17		40	9
Germany	22								
Iceland									
Ireland									
Norway	87	1	2	1	1		1		1
UK (Engl. and Wales)	9	35	77	50	24	41	2		
UK (Scotland)	66	116	118	141	174	87	204		
United Kingdom								19	1
Total	4057	153	335	209	265	180	1,094	876	1,127
Working Group estimate	2694 ²	5079	3,951	2,694	2,459	1,771	892	873	1060

Country	2008	2009	2010	2011
Denmark				
Faroe Islands			1,037	1,476
France	36		35	1
Germany				
Iceland				
Ireland				
Norway	1	1	5	
UK (Engl. and Wales)				
UK (Scotland)				
United Kingdom	32	117	336	11
Total	69	118	1,413	1,489
Working Group estimate	1,759	1,739	1,413	1,489

1) Provisional data

2) WG estimate includes additional catches as described in Working Group reports for each year and in the report from 2001.

Table 2.4.5.5

Greenland halibut in **Subarea XIV**. Nominal landings (tonnes) by country, as officially reported to ICES and estimated by the working group.

Country	1981	1982	1983	1984	1985	1986	1987	1988	1989
Faroe Islands	-	-	-	-	-	78	74	98	87
Germany	2,893	2,439	1,054	818	636	745	456	595	420
Greenland	+	1	5	15	81	177	154	37	11
Iceland	-	-	1	2	36	17	136	40	+
Norway	-	-	-	+	-	-	-	-	-
Russia	-	-	-	-	-	-	-	-	+
UK (Engl. and Wales)	-	-	-	-	-	-	-	-	-
UK (Scotland)	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
Total	2,893	2,440	1,060	835	753	1,017	820	770	518
Working Group estimate	-	-	-	-	-	-	-	-	-

Country	1990	1991	1992	1993	1994	1995	1996	1997	1998
Denmark	-	-	-	-	-	-	1	+	+
Faroe Islands	-	-	-	181	168	147	130	148	151
Germany	293	279	311	391	639	808	3,343	3,301	3,399
Greenland	40	66	437	288	866	533	1,162	1,129	747 ^{1,7}
Iceland	-	-	-	19	82	7	-	1,803	148
Norway	8	18	196	511	1,120	1,668	1,881	1,897 ¹	1,253 ¹
Russia	-	-	5	-	-	10	424	37	52
UK (Engl. and Wales)	27	38	108	796	513	1405	264	218	190
UK (Scotland)	-	-	18	26	84	205	13	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
Total	368	401	1,075	2,212	3,472	4,783	7,218	8,533	5,940
Working Group estimate	736 ²	875 ³	1,176 ⁴	2,249 ⁵	3,125 ⁶	5,077 ⁷	7,283 ⁸	8,558 ⁹	-

Country	1999	2000	2001 ¹	2002 ¹	2003 ¹	2004 ¹	2005 ¹	2006 ¹	2007 ¹
Denmark	-	-	-	-	-	-	-	-	-
Faroe Islands	2	-	-	274	366	274	186	22	-
Germany	3047	3243	2,750	2,019	2,925	5,159	5,144	4,298	4,702
Greenland	200 ^{1,4}	1740	1,553	1,887	1,459	-	-	-	-
Iceland	93	30	14,280	16,947	6	-	-	-	-
Ireland	-	-	7	-	-	-	-	-	-
Norway	1100	1161	1,424	1,660	846	1,114	1,023	1,094	-
Poland	-	-	-	-	-	205	-	-	-
Portugal	-	-	6	130	-	-	-	1,094	-
Russia	138	183	186	44	-	261	-	505	500
Spain	-	8	10	-	2,131	3,406	2	-	-
UK (Engl. and Wales)	226	262	100	-	-	-	-	-	-
UK (Scotland)	-	-	-	24	188	278	160	-	-
United Kingdom	-	-	-	178	799	1,294	-	-	-
Total	4806	6627	20,316⁰	22,889	8,720	11,991	6,515	7,013	5,202
Working Group estimate	5376 ¹¹	6958	6,588 ⁶	6,750 ⁶	8,017	9,854	10,185	8,589	10,261

Country	2008 ¹	2009 ¹	2010 ¹	2011 ¹
Denmark	-	-	-	-
Faroe Islands	-	270	333	-
Germany	4,842	4	4,490	5,206
Greenland	-	2,819	-	3,258
Iceland	-	-	-	-
Ireland	-	-	-	-
Norway	637	29	226	164
Poland	1,354	718	960	-
Portugal	-	-	-	-
Russia	763	-	1,070	1,095
Spain	-	-	-	-
United Kingdom	131	452	229	309
Total	7,727	4,292	7,308	10,032
Working Group estimate	9,102	9,805	10,402	10,761

1) Provisional data

2) WG estimate includes additional catches as described in working Group reports for each year and in the report from 2001.

3) Includes 125 t by Faroe Islands and 206 t by Greenland.

4) Excluding 4732 t reported as area unknown.

5) Includes 1523 t by Norway, 102 t by Faroe Islands, 3343 t by Germany, 1910 t by Greenland, 180 t by Russia, as reported to Greenland authorities.

6) Does not include most of the Icelandic catch as those are included in WG estimate of Va.

7) Excluding 138 t reported as area unknown.

Table 2.4.5.6

Greenland halibut in **Subarea XII**. Nominal landings (tonnes) by country, as officially reported to ICES and estimated by the working group.

Country	1996	1997	1998	1999	2000	2001	2002	2003 ¹	2004 ¹
Faroe Islands		47					40		
France					1			4	30
Ireland						49			
Lithuania								2	1
Poland						2		2	1
Spain ²	2	42	67	137	751	1338	28	730	1145
UK					7	5			
Russia									
Norway	2				553	500	316	201	119
Estonia									
Total	4	89	67	137	1,312	1,894	384	939	1,296
WGestimate									
Country	2005 ¹	2006 ¹	2007 ¹	2008 ¹	2009 ¹	2010 ¹	2011 ¹		
Faroe Islands							106		
France									
Ireland									
Lithuania		2	3	566					
Poland									
Spain ²	501								
UK	3								
Russia		46	1		762				
Norway					94				
Estonia		2							
Total	504	50	4	566	856	0	106		
WGestimate	504	50	4	566	856	0	106		

¹ Provisional data

² Based on estimates by observers onboard vessels

Table 2.4.5.7

Greenland halibut in **Subarea VI**. Nominal landings (tonnes) by country, as officially reported to ICES and estimated by the working group.

Country	1996	1997	1998	1999	2000	2001	2002	2003 ¹	2004 ¹
Estonia							8		
Faroe Islands									
France							286	165	110
Poland							16	91	1
Spain ²			22	88	20	350	1367	214	170
UK					159	247	77	42	10
Russia						1			1
Norway					35	317	21	26	
Total	0	0	22	88	214	915	1775	538	292
WGestimate									
Country	2005 ¹	2006 ¹	2007 ¹	2008 ¹	2009 ¹	2010 ¹	2011 ¹		
Estonia	5	1							
Faroe Islands						1			
France		22	8	114		38	8		
Poland									
Spain ²	3	33							
UK	217	74	15	80	12	11	3		
Russia		1		32					
Norway		3		1	3	2	7		
Lithuania				968					
Total	225	134	23	1195	15	52	18		
WGestimate	225	134	23	1195	15	52	18		

¹ Provisional data

² Based on estimates by observers onboard vessels