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Results from Bottom Trawl Survey on Flemish Cap of June-July 2025

by

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Abstract

A stratified random bottom trawl survey on Flemish Cap was carried out from 8 July to 4 August 2025. Following the same procedures as in previous years, the area surveyed extends up to depths of 800 fathoms (1460 meters) and 181 fishing stations were planned. The survey was carried out by the R/V *Vizconde de Eza* with the usual survey gear (*Lofoten*). A total of 182 valid hauls were made, 120 up to 730 meters depth and 62 up to 1460 meters. Survey results are presented, including abundance indices of the main commercial species and age distributions for cod, redfish, American plaice, Greenland halibut, roughhead grenadier, squid and shrimp. The general indexes for this year are estimated taken into account the traditional swept area (strata 1-19, up to depths of 730 m.) and the total area surveyed (strata 1-34, up to depths of 1460 m.).

Introduction

The survey on Flemish Cap was carried out on board R/V *Vizconde de Eza* in 2025. A total of 182 valid bottom trawls were made up to a depth of 1460 m. (800 fathoms) (Figure 1). The survey covered all strata of the bank adequately with the exception of the strata corresponding with the Beothuk knoll (35-39 strata) in the Southwest of the bank and the strata 26 and 27 in the Southeast. In Figure 1 we can observe the closed areas for Vulnerable Marine Ecosystems. Although the closed areas are tried to be avoided during the survey, sometimes this is impossible due to the lack of trawled zones. A synoptic sheet of the survey with vessel and gear characteristics is shown in Table 1. This was the 38th survey of the series initiated by the EU in 1988. All years, the survey has had a stratified random design following NAFO specifications (Doubleday, 1981). Dates, vessel, number of valid tows (including the number of valid tows until 700 m. in brackets since 2002) and dates of the survey each year were:

Year	Vessel	Valid tows	Dates	Year	Vessel	Valid tows	Dates
1988	Cornide de Saavedra	115	08/07 – 22/07	**2006**	Vizconde de Eza	179 (115)	01/07 – 26/07
1989	Cyros	116	12/07 – 01/08	**2007**	Vizconde de Eza	174 (117)	23/06 – 19/07
1990	Ignat Pavlyuchenkov	113	18/07 – 06/08	**2008**	Vizconde de Eza	179 (111)	23/06 – 19/07
1991	Cornide de Saavedra	117	24/06 – 11/07	**2009**	Vizconde de Eza	178 (119)	23/06 – 20/07
1992	Cornide de Saavedra	117	29/06 – 18/07	**2010**	Vizconde de Eza	153 (97)	22/06 – 21/07
1993	Cornide de Saavedra	101	23/06 – 08/07	**2011**	Vizconde de Eza	128 (79)	29/06 – 09/08
1994	Cornide de Saavedra	116	06/07 – 23/07	**2012**	Vizconde de Eza	174(118)	26/06 – 24/07
1995	Cornide de Saavedra	121	02/07 – 19/07	**2013**	Vizconde de Eza	181(120)	26/06 – 23/07
1996	Cornide de Saavedra	117	28/06 – 14/07	**2014**	Vizconde de Eza	181(120)	25/06 – 23/07
1997	Cornide de Saavedra	117	16/07 – 01/08	**2015**	Vizconde de Eza	181(120)	23/06 – 22/07
1998	Cornide de Saavedra	119	17/07 – 02/08	**2016**	Vizconde de Eza	181(120)	23/06 – 22/07
1999	Cornide de Saavedra	117	02/07 – 20/07	**2017**	Vizconde de Eza	181(120)	16/06 – 15/07
2000	Cornide de Saavedra	120	10/07 – 28/07	**2018**	Vizconde de Eza	181(120)	26/06 – 24/07
2001	Cornide de Saavedra	120	03/07 – 20/07	**2019**	Vizconde de Eza	180(120)	01/07 – 27/07
2002	Cornide de Saavedra	120	30/06 – 17/07	**2020**	Vizconde de Eza	181(120)	30/06 – 29/07
2003	Vizconde de Eza	177 (114)	02/06 – 02/07	**2021**	Vizconde de Eza	181(120)	12/07 – 09/08
	Cornide de Saavedra	50**	07/06 – 17/06	**2022**	Vizconde de Eza	182(121)	06/07 – 18/08
2004	Vizconde de Eza	177 (124)	25/06 – 02/08	**2023**	Vizconde de Eza	181(120)	06/07 – 02/08
	Cornide de Saavedra	61**	23/07 – 02/08	**2024**	Vizconde de Eza	181 (120)	06/07 – 31/07
2005	Vizconde de Eza	176 (117)	01/07 – 21/08	**2025**	Vizconde de Eza	182 (120)	08/07 – 04/08

( ) valid tows carried out in depths lesser than 400 fathoms ** calibration tows

Material and Methods

As last years, the R/V *Vizconde de Eza* carried out the survey following the same procedures as in previous years, the same bottom trawl net *Lofoten*, with a cod-end mesh size of 35 mm, as well as all other details of its use (Vazquez *et al.*, 2014).

Results

The biomasses of the main species during the survey estimated by swept area method (tons) are:

	Survey	Cod	American plaice	Redfish	Greenland halibut	Roughhead grenadier	Squid	Shrimp
120-730 m	1988	40839	16046	188331	6926	2009	6	5615
	1989	114050	14047	162535	4472	871	9	2252
	1990	59362	11983	126757	5799	852	2107	3405
	1991	40248	10087	76955	8169	1335	1483	11352
	1992	26719	8656	130209	8728	1577	83	24508
	1993	60963	7861	72608	6529	3021	1	11673
	1994	26463	8227	162525	8037	1975	269	3879
	1995	9695	6785	87644	10875	1558	1	7276
	1996	9013	4098	119662	11594	1362	113	10461
	1997	9966	3026	165816	16098	1197	81	7449
	1998	4986	3437	70832	24229	1691	92	39367
	1999	2854	2585	98651	21207	1250	22	24692
	2000	3062	1606	177990	16959	1047	3	19003
	2001	2695	2404	77345	13872	2079	10	27204
	2002	2496	2049	121312	12100	1211	8	36510
	2003	1593	2286	93816	6214	2348	222	21087
	2004	4071	3525	250605	12292	3597	470	20182
	2005	5242	2760	451215	11698	2387	79	30675
	2006	12505	1691	766922	11708	3933	3541	16235
	2007	23886	1053	464628	13040	1367	411	17046
	2008	43675	1766	566126	11997	2961	5137	11092
	2009	75228	1442	358479	7777	782	1688	2797
	2010	69295	2446	212211	6657	1402	43	4894
	2011	106151	4084	197031	6765	888	89	1621
	2012	113227	4491	305946	4291	612	38	1041
	2013	72289	3698	219737	2799	807		844
	2014	159939	3800	179925	5168	399	3	900
	2015	114807	3821	158001	6577	478		1551
	2016	80583	4325	171199	6139	373	3	2478
	2017	89414	7475	163262	7632	616	2350	2884
	2018	75795	6109	100483	5578	625	49	4394
	2019	42460	7654	143297	5496	590	363	9273
	2020	67442	7752	227261	6649	624	142	6734
	2021	51501	9372	148914	5872	699	329	2101
	2022	62206	6654	201837	4226	546	4	862
	2023	100474	9893	226474	6873	958	2	912
	2024	143325	13097	167012	5947	2717	2	1018
	2025	120129	11865	257032	5860	1269	16	1123

	2004	4071	3525	250638	28676	17184	479	20195
	2005	5242	2760	453086	20460	14253	83	31186
	2006	12505	1691	766952	23475	12109	3551	15250
	2007	23886	1053	464660	30731	7807	411	17120
	2008	43675	1766	566647	39614	12139	5144	11141
	2009	75228	1442	358521	36047	7304	1694	2792
	2010	69295	2446	212282	27096	9091	43	4896
	2011	106151	4084	196574	32309	8997	90	1733
	2012	113227	4491	305974	23505	5476	41	1063
120-1460 m	2013	72289	3698	219767	23391	4298		855
	2014	159939	3800	179956	29288	4111	3	901
	2015	114807	3821	158055	58180	3702		1551
	2016	80583	4325	171219	34642	3836	4	2479
	2017	89414	7475	163273	52237	5141	2366	2897
	2018	75795	6109	100512	36482	4375	52	4404
	2019	42460	7654	143390	20673	6500	365	9325
	2020	67442	7752	227332	16194	4037	142	6869
	2021	51501	9372	148929	19969	3964	351	2246
	2022	62206	6654	201850	16527	3720	4	902
	2023	100474	9893	226518	33629	5332	2	935
	2024	143325	13097	167053	25249	8919	5	1040
	2025	120129	11865	257051	25290	8046	16	1123

Values for surveys before 2003, when R/V *Cornide de Saavedra* was used, are transformed to their equivalences for R/V *Vizconde de Eza* following the accepted calibration among the two vessels (González Troncoso and Casas, 2005). From 2004 onwards, abundances are calculated for 19 shallowest strata covering the bank up to 730 m. deep, as it was done in previous years, and for 32 strata up to 1460 m. deep.

The biomass indices for the most important species or groups up to 730 m. are presented in Table 2, and even they belong to different species, having into account the pelagic vs. demersal character, and the transformation to the new scale only was carried out for the main species, a global index is presented for each year, which minimum occurred in 2001. The composition of the species in 2025 is similar to that found in the beginning of the series: cod at high levels, shrimp residual, redfish fluctuating around 150-300 kt. and grenadiers and Greenland halibut (<730m) at low levels. Greenland halibut biomass index (<1400m) increased in 2017 next to historic maximums, decreasing until 2022, with an increase in 2023 and a slight decrease since. American plaice biomass has increased since 2014 and it seems to show signs of recovery, being the 2024 value the highest of the series since 1989 and the third maximum of the series. Everything seems to point to a return to the situation found at the beginning of the EU survey series, and prior to the changes induced by the collapse of cod in the late 90´s.

Due to administrative problems in the Spanish administration, the ALKs and maturity ogives for cod and the three species of *Sebastes* (S. *norvegicus*, *S. mentella* and *S. fasciatus*) could not be processed in 2023-2025. Moreover, the ALKs for American plaice has not been produced since 2019 due to lack of time.

Cod

Mean catch per haul and biomass by strata with standard errors for 2025 are presented in Table 3. These indices are compared with results of previous surveys in Table 5. Total biomass calculated by the swept area method and compared with Russian survey results are:

Year	EU (1)	Russia: (2)	(3)	Year	EU (1)	Russia: (2)	(3)
1983		23,070		**2005**	5,242		
1984		31,210		**2006**	12,505		
1985		28,070		**2007**	23,866		
1986		26,060		**2008**	43,675		
1987		10,150	21,600	**2009**	75,228		
1988	40,839	7,720	34,200	**2010**	69,295		
1989	114,050	36,520	78,300	**2011**	106,151		
1990	59,362	3,920	15,200	**2012**	113,227		
1991	40,248	6,740	8,200	**2013**	72,289		
1992	26,719	2,490	2,400	**2014**	159,939		
1993	60,963	8,990	9,700	**2015**	114,807		
1994	26,463	-	-	**2016**	80,583		
1995	9,695	8,260	-	**2017**	89,414		
1996	9,013	730	-	**2018**	75,795		
1997	9,966	-	-	**2019**	42,460		
1998	4,986	-	-	**2020**	67,442		
1999	2,854	-	-	**2021**	51,501		
2000	3,062	-	-	**2022**	62,206		
2001	2,695	784	-	**2023**	100,474		
2002	2,496	694	-	**2024**	143,325		
2003	1,593			**2025**	120,129		
2004	4,071		-				tons

1) Biomass estimated from bottom trawl survey. **2)** Biomass estimated from bottom trawl survey (Kiseleva and Vaskov 1994; Kiseleva 1996, 1997; Vaskov and Igashov, 2003). **3)** Biomass estimated of bottom trawlable plus pelagic biomass (Borovkov *et al.* 1993; Kiseleva and Vaskov 1994).

Table 4 shows the length distribution of this stock. As explained above, it was not possible to get the age-length key for this stock in the 2023-2025 surveys. For that, Tables 6 and 7, that show the age-length key and the abundance at age by stratum respectively, have not been updated since 2022.

Distribution of survey catches in the last four surveys is presented in Figure 2. Evolution of biomass and abundance are illustrated in Figure 3. The abundance at age along the series is presented in Table 8 and Figure 4.

The 1992 to 2003 year-classes failed almost completely. The abundances of 2004-2008 years classes were higher than in previous 12 years. The abundance of the 2010 year-class was the highest of the series, and the 2009 and 2011 ones were also high. The 2012-2018 year-classes failed according to current results at age 1 and the 2019-2021 years classes seems to be better than in recent years but it remains still at low level (Figure 4). In 2022, the recruitment shows a new decrease.

After the historic maximum in biomass in 2014, the biomass decreased to a low in 2019, in the level of the 2008 one, increasing since then. The abundance had a peak in 2011 due to the very high recruitment, decreasing until 2019, indicating an increase in older ages and a failure in recruitment. Since then, both biomass and abundance show an increasing trend, being the 2024 the second highest biomass of the series, at a similar level of the 2014 one. In 2025 a decrease in biomass and abundance can be observed, being more critical in abundance.

American plaice

Mean catch per haul and biomass by strata with standard errors for 2025 are presented in Table 9. Survey biomass, as calculated by the swept area method, is compared with results of previous surveys in Table 11. This biomass is compared with Russian survey results in the following table:

Year	EU	Russia (1)		Year	EU	Russia (1)		Year	EU	Russia (1)
1983		8,900		**1998**	3,437			**2012**	4,491	
1984		7,500		**1999**	2,585			**2013**	3,698	
1985		7,800		**2000**	1,606			**2014**	3,800	
1986		20,200		**2001**	2,404			**2015**	3,821	
1987		9,300		**2002**	2,049			**2016**	4,325	
1988	16,046	6,500		**2003**	2,286	548		**2017**	7,475	
1989	14,047	5,000		**2004**	3,525	1,398		**2018**	6,109	
1990	11,983	1,200		**2005**	2,760			**2019**	7,654	
1991	10,087	14,400		**2006**	1,691			**2020**	7,752	
1992	8,656	1,200		**2007**	1,053			**2021**	9,372	
1993	7,861	2,700		**2008**	1,766			**2022**	6,654	
1994	8,227			**2009**	1,442			**2023**	9,893	
1995	6,785			**2009**	1,442			**2024**	13,097	
1996	4,098			**2010**	2,446			**2025**	11,865	ton
1997	3,026		ton	**2011**	4,084		ton			

1) Rikhter *et al.* 1991; Borovkov *et al.* 1992, 1993, 1994; Vaskov and Igashov, 2003.

Table 10 shows the length distribution and Tables 12 and 13 the age-length key and the abundances at age by stratum respectively (no updated since 2019). Figure 5 shows the distribution of the survey catches in the last four surveys. The abundance at age along the series is shown in Table 14 (no updated since 2019). Also, the evolution of survey biomass and abundance along the series is presented in Figure 6. Figure 7 shows the age distribution over the years (no updated since 2019).

Fish aged 6 or more roughly correspond with fishable biomass. Results indicate two periods for recruitment, and a change from an upper abundance level to a lower one. The 1991 year-class was the first weak cohort. The 2006 year-class is the more abundant since 1991, but its abundance is only intermediate. Recruitment for later year-classes seems to be weaker; too weak for a quick recovery of the stock. Figure 7 illustrates the lack of recruitment that occurred for many years, and how most recent year-classes are weaker than those at the beginning of the series. It is necessary to wait to see what happened since 2020. The biomass and abundance were more or less stable from 2011 to 2016, showing an upward trend since 2017 reaching in 2024 the highest of the series since 1989 and the third maximum of the series, with a slight decrease in 2025.

The ALKs for American plaice since 2020 are not available yet due to lack of time, so the indices by age are presented only until year 2019. The length distribution doesn´t indicate a change with regards to previous years.

Redfish

All redfish catches were classified by species. The group name *juvenile* contains those individuals of small size for which routine classification was not possible. The 15 cm maximum length is a good reference for this group, but it has been never used as a criterion. The skill required to identify the species increased over time, so the group *juvenile* is not an uniform defined group, but it is maintained for practical reasons.

Mean catch per standard haul and biomass by strata with the standard errors are presented in Tables 15, 19, 23 and 27 for *Sebastes norvegicus*, *S. mentella*, *S. fasciatus* and the *juvenile* group, respectively. The following table shows the total biomass (tons) by year in the traditional strata (<730 m.).

Year	*Sebastes norvegicus*	*Sebastes spp.*			Total
		mentella	*fasciatus*	*juvenile*	
1988	18,229		170,102		188,331
1989	27,312		135,223		162,535
1990	16,751	86,695		23,311	126,757
1991	4,864	59,552	6,755	5,784	76,955
1992	4,909	85,408	6,314	33,578	130,209
1993	4,789	21,235	5,175	41,409	72,608
1994	39,516	42,495	9,303	71,211	162,525
1995	10,754	70,567	5,986	337	87,644
1996	13,431	92,647	13,112	472	119,662
1997	77,125	66,710	20,780	1,201	165,816
1998	7,640	53,946	7,656	1,590	70,832
1999	11,215	77,610	9,460	366	98,651
2000	53,388	106,283	15,364	2,955	177,990
2001	10,244	45,931	13,715	7,455	77,345
2002	11,651	48,760	27,556	33,345	121,312
2003	40,110	28,785	15,031	9,890	93,816
2004	85,383	45,999	76,164	43,059	250,605
2005	147,688	105,110	123,326	75,762	451,215
2006	298,290	105,849	319,387	43,396	766,922
2007	88,071	51,191	261,790	63,576	464,628
2008	240,777	42,570	202,288	80,491	566,126
2009	72,211	111,787	171,676	2,804	358,479
2010	47,377	62,684	97,067	5,083	212,211
2011	29,056	103,678	59,753	4,543	197,030
2012	55,410	166,693	82,539	1,304	305,946
2013	32,016	102,500	84,801	420	219,737
2014	37,171	96,158	46,174	422	179,925
2015	30,672	45,668	80,494	1,167	158,001
2016	35,069	79,143	55,394	1,593	171,199
2017	23,371	92,136	47,521	234	163,262
2018	10,771	57,403	30,407	1,931	100,512
2019	22,588	49,464	43,222	28,023	143,297
2020	70,138	95,372	58,304	3,508	227,261
2021	15,723	78,212	51,733	3,246	148,914
2022	27,286	93,914	73,761	6,876	201,837
2023	36,931	109,533	72,944	7,066	226,474
2024	27,565	80,596	57,046	1,805	167,012
2025	47,050	90,338	116,438	3,206	257,032

Due to the administrative problems explained above, it was not possible to get the age-length key for these stocks in the 2023-2025 surveys. For that, Tables 16 and 18, 20 and 22, 24 and 26, showing the age length key and the abundance at age by stratum for the three species of redfish respectively, have not been updated since 2023. Tables 17, 21, 25 and 28 show the length frequency of *Sebastes norvegicus*, *S. mentella*, *S. fasciatus* and

the *juvenile* group, respectively. Catches per haul distributions in the 2025 survey and biomass of the three species and juveniles are presented in the Figure 8 and 9 respectively.

Greenland halibut

Mean catch per standard haul and the estimated biomass by strata with their standard errors in the 2025 survey are presented in Table 29. These indices are compared with results of previous surveys in Table 30. The following table summarises the total biomass in tons by year in depths <730 m. (1988-2025) and in depths up to 1460 m. (2004-2025).

Year	EU < 730 m.	Year	EU < 730 m.	EU < 1460 m.
1988	6,926	**2004**	12,292	28,343
1989	4,472	**2005**	11,698	21.515
1990	5,799	**2006**	11,706	24.357
1991	8,169	**2007**	13,040	31,723
1992	8,728	**2008**	11,995	39,614
1993	6,529	**2009**	7,775	36,047
1994	8,037	**2010**	6,299	26,739
1995	10,875	**2011**	6,713	32,257
1996	11,594	**2012**	4,291	23,505
1997	16,098	**2013**	2,799	23,391
1998	24,229	**2014**	5,168	29,288
1999	21,207	**2015**	6,577	58,180
2000	16,959	**2016**	6,139	34,642
2001	13,872	**2017**	7,632	52,237
2002	12,100	**2018**	5,578	36,482
2003	6,214	**2019**	5,496	20,673
		2020	6,649	16,194
		2021	5,872	19,969
		2022	4,226	16,527
		2023	6,873	33,629
		2024	5,947	25,249
		2025	5,860	25,290

Age-length keys and length frequency are presented in Tables 31 and 32 respectively. Frequency at age by stratum for 2025 is presented in Table 33. Catch per haul distribution for the last four surveys is presented in Figure 10. Figure 11 shows the estimated biomass with their standard error and numbers by year. The abundance at age along the series is shown in Table 34. Figure 12 shows the age distribution by year in the EU Flemish Cap surveys. The 2017 biomass and abundance indices until 1430 m. are the second highest of the series, after the 2015 values. The 2020 and 2022 biomasses to 1400 m. are the lowest in the historical series, since 2004. The 2023 biomass showed a pronounced increase followed with a slight decrease in 2024, with almost identical values as 2025. The 2017 age 1 numbers were the highest since 2004, but no good recruitments can be seen since then.

Roughhead grenadier (*Macrourus berglax*)

Mean catch per standard haul and estimated biomass by strata with their standard errors for 2025 are presented in Table 35. These indices are compared with results of previous surveys in Table 36. The following table summarises the total biomass in tons by year:

Year	EU < 730 m.	Year	EU < 730 m.	EU < 1460 m.
1988	2,009	**2004**	3,597	17,185
1989	871	**2005**	2,387	12,560
1990	852	**2006**	3,933	11,336
1991	1,335	**2007**	1,367	7,271
1992	1,577	**2008**	2,961	12,138
1993	3,021	**2009**	781	7,303
1994	1,975	**2010**	1,403	9,092
1995	1,558	**2011**	729	8,800
1996	1,362	**2012**	612	5,477
1997	1,197	**2013**	807	4,298
1998	1,691	**2014**	399	4,111
1999	1,250	**2015**	478	3,702
2000	1,047	**2016**	373	3,836
2001	2,079	**2017**	616	5,141
2002	1,211	**2018**	625	4,375
2003	2,348	**2019**	590	6,500
		2020	624	4,037
		2021	699	3,964
		2022	546	3,720
		2023	958	5,332
		2024	2,717	8,919
		2025	1,269	8,046

Age-length keys and length frequency and are presented in Tables 37 and 38. Frequency at age by strata is presented in Table 39. Catch per haul distribution in the last four surveys is presented in Figure 13. Figure 14 shows the estimated biomass with their standard error and numbers by year. The abundance at age along the series is shown in Table 40 and Figure 15. Biomass and abundance have been stable in the last years at low levels, with a steep increase in 2024 both in the sallower and deeper strata, reaching the maximum since 2008, followed by a slight decrease in 2025.

Squid

Some indices of the squid (*Illex illecebrosus*) are presented. Total biomass and abundance are presented in Table 41. The biomass is presented by stratum and year. Catch per haul distribution for the last four surveys is presented in Figure 16. The indices could be seen in Figure 17. Not all the years squid is present in the survey, and the indices show a high variability.

Shrimp

Total biomass and mean catch per town, as well as those indices for females, are presented in Table 42 and Figure 19 by year. Abundance at age by year is presented in Table 43 and Figure 20. Catch per haul distribution for the last four surveys is presented in Figure 18. All indices are up to 700 meters. The biomass and abundance estimated in 2025 EU survey were mainly represented by female; young specimens (mainly males around 25% in number) remain well below average. The 2025 female biomass values are between the lowest estimated in the historical survey series, confirming the downward trend started in 2020. More detailed results are presented in Casas, 2025.

Biodiversity

Figure 21 shows the biodiversity of the survey. The percentage of catch of the species analyzed in this work, together with each functional group (other Fish, other Crustacea, other Mollusca, human rests and others), are presented. At the beginning of the series, other Fishes as well as Atlantic cod were the most caught taxa, but since 1994 the catch is dominated by the three redfish species, followed since 2008 for the Atlantic cod due to the recovery of this stock. The importance of the shrimp varies depending on the year, being a good part of the catches between 1998 and 2003.

Acknowledges

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Table 1. Technical data of the 2025 survey.

Procedure	Specification
Vessel	R/V *Vizconde de Eza*
GT	1 400 t
Power	1 800 HP
Mean trawling speed	3.0 -3.5 knots
Trawling time	30 minutes effective time
Fishing gear	type *Lofoten*
footrope / handrope	31.20 / 17.70 m.
footgear	27 steel bobbins of 35 cm
vertical opening	3.0 m. (MARPORT)
warps	100 meters, 45 mm, 200 Kg/100m
trawl doors	polyvalent, 850 Kg
wire length	2 × depth echo sounder (m.) + 250.
mesh size in cod-end	35 mm
Type of survey	Stratified sampling
Station selection procedure	Random
Criterion to change position of a selected tow	- Unsuitable bottom for trawling according to ecosonder register. - Information on gear damage from previous surveys.
Criterion to reject data from tow	- tears in cod-end - severe tears in the gear - less than 20 minutes tow - bad behaviour of the gear
Daily period for fishing	6.30 to 18:30 hours
Species for sampling	All fish, cephalopods, shrimp and invertebrates
Species for age determination	Cod, American plaice, redfish (*Sebastes sp.*), Greenland halibut and roughhead grenadier (*Macrourus berglax*).

Table 2. Biomass (t.) for the most important species or groups of species in 1988-2025 surveys in depths lesser than 730 m.

Species	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Rajidae	4495	1938	2823	4061	3780	6241	3506	2268	2051	1842	1978	1608	1150	2236	1544	4608	6241	4238	3506
Synaphobranchus sp.	217	88	40	80	72	105	8	16	0	8	40	0	0	24	8	24	88	72	32
Urophycis sp.	643	169	169	257	72	169	217	80	80	32	225	249	169	394	129	547	667	740	611
Antimora sp.	394	306	281	563	724	820	796	193	185	233	491	290	265	667	346	306	1158	1110	474
Macrouridae	3088	1456	1222	2252	2589	6498	3233	2606	2340	2292	2831	2332	1809	3080	2043	3691	4914	3353	5026
Notacanthus sp.	499	410	64	474	450	740	458	346	177	290	169	64	97	105	64	24	145	64	145
Illex sp.	8	8	1649	1158	64	0	209	0	88	64	72	16	0	8	8	225	474	80	3546
Anarhichadidae	7994	7487	8122	10101	9095	14355	15642	19220	20563	14033	10985	5581	4471	5863	5227	5983	10591	9570	9272
Witch flounder	909	338	418	772	820	1045	788	708	507	322	241	378	410	458	209	844	1568	1777	893
Greenland halibut	6924	4471	5798	8171	8725	6530	8034	10873	11596	16100	24230	21207	16960	13872	12103	6216	12288	11701	11709
Zoarcidae	563	1142	1206	1978	1359	3474	1874	2179	1705	1729	2059	893	780	1246	812	2067	3683	3080	1801
Cod	40837	114050	59365	40250	26715	60966	26466	9699	9015	9964	4986	2855	3064	2694	2493	1592	4069	5243	12505
American plaice	16044	14049	11982	10085	8653	7865	8227	6787	4101	3024	3434	2581	1608	2405	2051	2284	3522	2758	1689
Redfish	188333	162535	126757	76953	130206	72610	162527	87641	119664	165816	70833	98650	177991	77347	121312	93817	250602	453041	766924
Shrimp*	5742	2300	3490	11661	25155	12087	3981	7503	10905	7704	41971	25734	19719	28316	40177	21512	20129	30672	16237
Total	277325	310956	224530	169483	218909	193504	236440	150512	183669	224039	165655	163058	230087	140162	189459	149394	322866	529181	845252

Species	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Rajidae	2179	6289	2244	3471	2188	1658	743	680	836	1073	1365	775	1592	1650	1339	866	607	2447	1240
Synaphobranchus sp.	64	40	24	14	2	20	40	14	9	23	10	25	19	11	12	7	9	23	13
Urophycis sp.	249	547	217	685	682	380	332	258	145	113	107	130	199	305	663	433	476	864	482
Antimora sp.	587	893	499	670	342	727	655	649	630	748	520	442	455	370	243	136	175	88	266
Macrouridae	2364	3957	1166	1926	561	1190	1253	980	843	655	848	855	1065	1227	1384	1438	1628	3864	1942
Notacanthus sp.	64	88	32	21	12	69	68	40	17	69	55	109	91	83	83	91	95	124	94
Illex sp.	410	5139	1737	43	89	0	0	0	0	3	2350	49	363	142	329	4	2	2	17
Anarhichadidae	8195	9867	4600	4256	3739	5073	3893	4775	5402	5371	6182	6333	8802	9121	4635	4238	3224	6177	2679
Witch flounder	595	2220	764	1836	1458	2283	940	1810	2163	2126	3134	2465	3380	4291	3223	1819	3142	5969	5551
Greenland halibut	13044	11999	7777	6299	6481	4291	2884	5168	6577	6139	7633	5578	5277	6649	5872	4226	6873	5947	5860
Zoarcidae	354	458	56	75	20	1	6	0	1	5	1	0	30	58	61	46	34	220	142
Cod	23884	43676	75232	69295	106151	113227	71903	159939	114807	80583	89414	75621	42460	67442	51501	62206	100474	143325	120129
American plaice	1053	1769	1440	2446	4084	4491	3632	3800	3821	4325	7475	6105	7654	7752	9372	6654	9893	13097	11865
Redfish	464621	566649	358476	212212	196493	305947	219729	179925	158001	171198	163262	100484	143297	227261	148915	201837	226473	167012	257032
Shrimp*	17049	11066	2799	4889	1593	1055	844	900	1551	2478	2885	4395	9273	6734	2101	862	912	1018	1138
Total	534714	664655	457062	317805	320886	448661	319157	365459	300443	283269	325190	212421	236417	343032	246150	293835	362285	360409	418272

* Values affected by mesh size cod-end: 40 mm in 1994, 25 mm in 1998 and 30 mm in 1999.

Table 3. Cod (*Gadus morhua*) mean catch per standard haul and the estimated biomass by strata and its standard error in the 2025 survey.

	area	tow	catch (kg)		Biomass (t.)	
stratum	sq. miles	number	mean	s. e.	value	s.e.
1	342	4	217.04	58.00	5655	1511
2	838	10	119.16	60.46	7607	3861
3	628	7	232.61	59.68	11129	2855
4	348	4	172.29	52.31	4568	1387
5	703	8	245.61	154.68	13156	8285
6	496	6	154.23	44.01	5829	1663
7	822	9	435.35	189.12	27265	11845
8	646	7	376.04	85.70	18509	4218
9	314	3	78.56	23.80	1880	569
10	951	11	171.08	79.14	12396	5734
11	806	9	39.20	5.79	2407	356
12	670	8	57.42	10.73	2931	548
13	249	3	23.64	10.24	449	194
14	602	7	39.78	19.09	1824	876
15	666	8	74.41	22.35	3776	1134
16	634	7	4.80	2.07	231	100
17	216	2				
18	210	2	3.50	3.50	56	56
19	414	5	14.63	8.65	462	273
Total < 730 m.	10555	120	149.38	21.26	120129	17105
Total < 1460 m.	16070	182	98.12	13.97	120129	17105

Table 4. Cod (*Gadus morhua*) length distribution ('000) in the 2025 survey.

length	number	length	number	length	number	length	number
3-5	7	39-41	6569	75-77	414	111-113	8
6-8	0	42-44	15301	78-80	205	114-116	0
9-11	7	45-47	21446	81-83	129	117-119	7
12-14	42	48-50	20689	84-86	98		
15-17	353	51-53	13615	87-89	104		
18-20	1451	54-56	8782	90-92	30		
21-23	342	57-59	5037	93-95	61		
24-26	7	60-62	3292	96-98	55		
27-29	308	63-65	1869	99- 101	31		
30-32	1684	66-68	1370	102- 104	38		
33-35	1537	69-71	873	105- 107	30		
36-38	1125	72-74	526	108-110	22	total	107464

Table 5. Cod (*Gadus morhua*) biomass (t.) by strata in 1988-2025 surveys.

	year																		
strata	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
1	1345	649	767	5585	76	516	2165	1563	1006	243	125	99	250	86	477	173	1996	1091	2433
2	10150	10323	2065	5486	5150	9044	8186	3040	3991	2049	1899	1502	740	491	736	102	1668	1888	4145
3	4471	10276	2391	2459	8473	8435	6092	1146	1054	1132	703	145	360	230	451	90	9	1791	1948
4	3130	4843	2446	2900	3443	14171	1885	746	1068	857	140	25	443	488	66	136	168	152	466
5	2130	10702	8447	10651	4570	6824	924	1274	936	1149	976	256	425	260	146	303	19	30	644
6	3230	6789	3286	1531	952	4220	1412	1310	620	1074	613	375	511	749	525	24	155	206	1224
7	2224	16025	4385	2538	945	6153	857	122	55	1067	78	52	5	12	24	107	18		473
8	8931	16434	15973	5107	2349	7964	3615	349	93	1610	77	23	74	123	37	111	5		347
9	184	5261	6340	188	143	998	239	9	103	174		20	41		14	376			64
10	1338	4898	4193	1558	327	936	506	58	46	301	199	102	107	81	2	24		28	304
11	2505	13219	3859	1787	224	1678	582	78	41	310	176	255	106	175	18	58	33	56	381
12	335	2469	1587	126		24										71			
13	9	2534	734	93															
14	107	1121	545	131	67														76
15	748	8436	2344	108												18			
16		66																	
17		5																	
18	2																		
19																			
total	40839	114050	59362	40248	26719	60963	26463	9695	9013	9966	4986	2854	3062	2695	2496	1593	4071	5242	12505
s.e.	5784	12205	8225	6704	5837	17397	7367	2070	1459	1725	646	451	593	380	398	273	780	813	980

s.e.: standard error

	year																		
strata	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
1	4420	4224	2253	11815	4694	1567	1931	4688	11089	3195	5589	15884	11385	959	3943	1765	19936	18943	5655
2	1775	5346	6627	23368	22989	13861	10230	27320	1896	8348	18068	15592	3691	7608	8928	4116	9078	34865	7607
3	11466	4129	7630	4512	16922	17743	12291	22585	5572	21702	10439	8556	5364	3002	3389	5032	18525	7290	11129
4	1132	771	5190	1716	10114	2903	7106	3081	2046	11268	5305	2466	2389	971	1429	6492	4908	8770	4568
5	548	1129	6947	3600	10947	11639	5528	5090	2051	3499	11273	4189	5000	3639	1817	3177	4048	3003	13156
6	3214	12487	10734	2303	9510	9991	3849	11494	7413	2298	8027	8814	4312	2145	5119	5250	5039	4647	5829
7	140	4692	12659	4667	2586	6824	5872	37607	5914	7099	8053	4630	2292	38851	5045	11907	15084	5906	27265
8	475	3471	2814	4204	10921	7739	4641	9335	5732	5284	2708	2260	1342	2265	5658	2035	3507	19007	18509
9	151	81	503	2048	1997	5963	970	9040	256	9058	2334	2670	653	1086	530	1168	376	8572	1880
10	246	2625	5071	4275	5247	16988	5153	6655	9852	1676	3217	1005	1780	981	3690	3808	3946	5821	12396
11	272	3699	4336	4458	4557	5701	4205	9585	1490	2457	7350	1929	1778	1747	6821	7749	5781	8249	2407
12		42	339	588	1135	2538	1323	927	747	974	1974	1475	1334	2319	1529	857	1506	5563	2931
13		15	135	124	419	875	940	529	311	846	213	513	120	17	1382	2179	243	803	449
14		160	9795	1056	3186	3663	6094	8331	3093	1092	1297	3355	175	220	772	2947	6124	2575	1824
15	47	805	195	475	926	5133	1961	3532	532	1787	3567	2375	815	1630	1229	3615	1523	5017	3776
16							82	142	93						17	30	228	3050	231
17												80				73		664	
18						100												97	56
19				88			113		17				32		204	6	622	481	462
total	23886	43675	75228	69295	106151	113227	72289	159939	114807	80583	89414	75795	42460	67442	51501	62206	100474	143325	120129
s.e.	4526	5507	8109	16269	11805	12293	8904	25425	19966	14715	11056	16599	6846	13801	6639	10396	20044	16968	17105

s.e.: standard error

Table 6a. Cod (*Gadus morhua*) age-length key in 2023. NOT AVAILABLE

Table 6b. Cod (*Gadus morhua*) age-length key in 2024. NOT AVAILABLE

Table 6c. Cod (*Gadus morhua*) age-length key in 2025. NOT AVAILABLE

Table 7a. Cod (*Gadus morhua*) frequency ('000) at age and stratum in the 2023 survey. NOT AVAILABLE

Table 7b. Cod (*Gadus morhua*) frequency ('000) at age and stratum in the 2024 survey. NOT AVAILABLE

Table 7c. Cod (*Gadus morhua*) frequency ('000) at age and stratum in the 2025 survey. NOT AVAILABLE

	Strata																			Mean	
Age	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	19	total	Weight (g)	Length (cm)
1																					
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					
13																					
14																					
15																					
16+																					
Sets																					
n																					

Table 8. Cod (*Gadus morhua*) abundance ('000) at age in 1988-2025 surveys. 2023-2025 NOT AVAILABLE

age	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	4868	19604	2303	129032	71533	4075	3017	1425	36	37	23	5	178	473	0	684	14	8069
2	79905	10800	12348	26220	41923	138357	4130	11901	3121	150	83	84	16	1990	1330	54	3380	16
3	49496	91303	5121	16903	5578	31096	27756	1338	6659	3478	95	116	327	13	641	628	25	1118
4	13448	54613	16952	2125	2385	1099	5097	3892	892	4803	1256	117	198	122	29	134	600	78
5	1457	20424	15834	6757	385	1317	130	928	2407	391	1572	717	96	79	70	22	168	709
6	211	1336	4492	1731	1398	173	67	33	192	952	78	444	446	15	33	42	5	136
7	225	143	340	299	244	489	7	23	8	21	146	19	172	142	26	7	10	
8	72	126	146	68	14	87	111	0	5	0	0	5	11	99	96	8	3	17
9	0	6	77	32	0	0	0	21	0	0	6	0	17	6	30	39	5	16
10	0	7	25	4	0	0	5	5	0	0	0	0	0	6	0	24	15	8
11	0	0	0	10	8	0	0	0	0	0	0	0	0	6	5	0	0	0
12	0	0	0	0	0	0	0	0	0	4	0	0	5	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	149683	198363	57637	183181	123468	176693	40319	19567	13320	9837	3259	1507	1470	2951	2261	1642	4226	10166

age	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0			
1	19709	3917	6096	5139	66370	347674	103494	5525	7282	1141	56	2010	366	11900	7137	19195	3787			
2	3886	11620	16671	7479	27689	142999	128087	67521	2372	12952	4485	314	4303	1740	4733	8871	17222			
3	62	5022	12433	16150	8654	16993	10942	32339	48564	7250	14356	6516	271	5210	25203	9272	14010			
4	1481	21	4530	14310	7633	6309	11721	4776	43168	25614	2230	16645	6114	310	13495	19074	19231			
5	85	1138	72	4154	4911	7739	4967	4185	17861	14107	14540	3267	13117	3310	5678	3913	6971			
6	592	58	946	26	1780	3089	4781	2782	6842	21854	12375	15842	3370	5700	4109	960	2485			
7	115	425	56	1091	8	1191	1630	1807	3447	3434	4814	8519	7074	400	3336	1061	507			
8	7	74	231	0	442	0	832	963	1931	1426	1157	2765	3948	1460	687	1035	1253			
9	0	13	76	335	46	215	24	278	1551	762	522	789	1030	1960	631	289	485			
10	7	20	0	0	251	0	93	40	600	366	303	345	272	830	938	558	205			
11	14	0	14	0	26	89	30	29	79	194	145	137	182	130	566	636	377			
12	0	0	0	14	0	0	101	32	54	14	28	53	63	30	126	195	506			
13	7	0	0	0	0	0	0	5	8	21	20	27	13	10	54	31	125			
14	0	0	0	0	0	0	17	0	0	21	0	6	0	10	14	37	32			
15	0	0	0	0	0	0	0	0	0	0	0	7		0	29	0	7			
16	0	0	0	0	0	0	0	0	0	7	0	0	6	0	0	7	0			
17	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0			
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0			
19	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0			
Total	25965	22308	41124	48697	117810	526300	266720	120280	133760	89164	55032	57241	40139	33002	66744	65149	67204	110192	162716	107464

Table 9. American plaice (*Hippoglossoides platessoides*) mean catch per haul and the estimated biomass by stratum, and their standard error, in the 2025 survey.

	area	tow	catch (kg)		Biomass (t.)	
stratum	sq. miles	number	mean	s. e.	value	s.e.
1	342	4	24.47	21.75	638	567
2	838	10	50.93	12.69	3252	810
3	628	7	46.03	14.95	2202	715
4	348	4	40.32	13.32	1069	353
5	703	8	29.38	6.77	1573	363
6	496	6	15.00	3.47	567	131
7	822	9	9.22	1.79	578	112
8	646	7	13.90	7.37	684	363
9	314	3	2.05	1.52	49	36
10	951	11	7.91	1.56	574	112
11	806	9	11.01	2.05	676	126
12	670	8				
13	249	3				
14	602	7				
15	666	8	0.07	0.07	3	3
16	634	7				
17	216	2				
18	210	2				
19	414	5				
Total < 730 m.	10555	120	14.75	1.73	11865	1392
Total < 1460 m.	16070	182	9.70	1.14	11865	1392

Table 10. American plaice (*Hippoglossoides platessoides*) length frequency ('000) in the 2025 survey.

length	male	female	length	male	female	length	male	female
10-11	7		30-31	117	155	50-51	73	707
12-13			32-33	121	52	52-53	22	825
14-15			34-35	278	27	54-55		838
16-17			36-37	324	61	56-57		680
18-19			38-39	396	157	58-59		201
20-21		30	40-41	369	276	60-61		60
22-23	22	7	42-43	598	339			
24-25	66	8	44-45	1116	267			
26-27	90	22	46-47	896	429			
28-29	119	58	48-49	397	521	total	5011	5720

Table 11. American plaice (*Hippoglossoides platessoides*) survey biomass (t) by strata in 1988-2025.

	year																	
stratum	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	1306	1000	505	1078	709	1079	661	2230	1462	381	156	372	345	1043	141	1292	1507	1038
2	2845	3602	1375	2663	1714	1267	1199	1335	943	740	1587	1810	976	835	1262	713	768	796
3	1367	1118	1668	1247	631	444	325	252	168	495	284	97	21	93	75	17	427	101
4	2199	461	817	320	557	572	853	489	268	203	343	53	100	85		128	395	359
5	2599	3093	1830	1407	837	1291	1230	549	500	619	744	73	56	112	189	82	72	45
6	479	1130	954	501	601	305	808	123	32	13	35	40	25	37	63	29	26	71
7	1174	531	837	389	639	319	316	249	72	83	47	19	15	28	52	30	84	31
8	417	164	263	251	727	487	171	132	56	123	165	3		45	43	14	55	175
9	103	163	343		373	205	20	500	55	36					1	9	77	18
10	2323	1491	2000	1308	1406	1459	2236	708	415	287	36	72	45	95	36	54	45	87
11	1186	1168	1316	401	372	292	303	109	68	32	29	37	23	27	59	29	69	35
12	9	19	45	17	11	15	33	12	32	7				4		11		
13	3		20					3										
14	8	8	7	389	29		24	15	4		4	9						
15	23	99	3	97	37	109	40	68	23	7	7					6		4
16	5			4	9	12	5											
17																		
18																		
19				15	4	5	3	11										
total	16046	14047	11983	10087	8656	7861	8227	6785	4098	3026	3437	2585	1606	2404	2049	2286	3525	2760
s.e.	1845	2048	1276	1180	954	1040	1373	1083	912	708	751	869	332	429	729	748	740	684

	year																			
stratum	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
1	714	284	144	548	716	693	462	329	181	410	219	1014	764	945	1360	1583	411	612	1228	638
2	354	209	513	370	1084	1141	1272	1202	1872	1248	1307	4379	1807	831	1793	3603	2096	2274	4804	3252
3	74	101	147	74	103	364	468	266	223	462	488	410	534	1042	436	982	914	1322	894	2202
4	109	153	440	36	91	1201	749	671	258	376	178	342	285	801	571	596	467	925	1325	1069
5	63	81	88	72	200	190	716	267	328	443	592	277	421	1602	1107	447	467	737	637	1573
6	61	99	37	57	34	160	185	341	187	309	282	314	751	805	680	534	755	840	845	567
7	37	20	47	32	28	160	156	166	208	117	253	215	389	289	495	419	255	435	537	578
8	163	58	128	47	49	65	187	156	249	220	346	114	241	206	119	293	192	573	804	684
9				77			30	25	0	2	12	2		121	35		17	26	37	49
10	97	24	163	54	115	35	123	153	105	86	325	190	403	336	482	230	282	440	424	574
11	19	22	50	64	26	33	121	121	185	124	308	188	397	559	462	667	751	1681	1452	676
12				11			11	0				10	16	18	128	7	9	18	11	
13											2			20		4	25			
14						32				3	3	16	39	28	13				68	
15		3	7	1		10	13			22	10	4	51	52	72	6	13	9	31	3
16																				
17																				
18													12							
19																				
total	1691	1053	1766	1442	2446	4084	4491	3698	3800	3821	4325	7475	6109	7654	7752	9372	6654	9893	13097	11865
s.e.	342	159	300	327	526	780	534	439	671	556	481	1547	558	852	987	1382	999	961	1230	1392

Table 12a. American plaice (*Hippoglossoides platessoides*) age-length key in 2020.
NOT YET AVAILABLE

MALE/FEMALE

Table 12b. American plaice (*Hippoglossoides platessoides*) age-length key in 2021.
NOT YET AVAILABLE

MALE/FEMALE

Table 12c. American plaice (*Hippoglossoides platessoides*) age-length key in 2022.
NOT YET AVAILABLE

MALE/FEMALE

Table 12d. American plaice (*Hippoglossoides platessoides*) age-length key in 2023.
NOT YET AVAILABLE

MALE/FEMALE

Table 12e. American plaice (*Hippoglossoides platessoides*) age-length key in 2024.
NOT YET AVAILABLE

MALE/FEMALE

Table 12f. American plaice (*Hippoglossoides platessoides*) age-length key in 2025.
NOT YET AVAILABLE

MALE/FEMALE

Table 13a. American plaice (*Hippoglossoides platessoides*) frequency at age in the 2020 survey.
NOT YET AVAILABLE

Table 13b. American plaice (*Hippoglossoides platessoides*) frequency at age in the 2021 survey.
NOT YET AVAILABLE

Table 13c. American plaice (*Hippoglossoides platessoides*) frequency at age in the 2022 survey.
NOT YET AVAILABLE

Table 13d. American plaice (*Hippoglossoides platessoides*) frequency at age in the 2023 survey.
NOT YET AVAILABLE

Table 13e. American plaice (*Hippoglossoides platessoides*) frequency at age in the 2024 survey.
NOT YET AVAILABLE

Table 13f. American plaice (*Hippoglossoides platessoides*) frequency at age in the 2025 survey.
NOT YET AVAILABLE

Table 14. American plaice (*Hippoglossoides platessoides*) abundance ('000) at age in 1988-2025 surveys. 2020-2025 NOT YET AVAILABLE.

age	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	0	40	8	40	0	0	0	0	8	8	0	8	16	0	0	8	0	0
2	402	563	426	354	852	8	40	32	32	16	24	0	24	40	0	8	113	32
3	1882	8364	917	1206	796	1544	48	113	121	113	32	24	8	48	32	32	281	113
4	1311	1874	8372	2171	1070	1086	2131	740	257	24	48	64	80	56	64	97	72	290
5	4230	4367	1126	5348	1938	780	1037	2131	587	121	72	80	105	105	16	80	80	105
6	6385	4359	3370	2445	4769	418	877	1367	1665	418	265	80	153	56	88	56	105	105
7	5010	4142	2340	2686	1279	4134	973	1375	893	1206	619	241	121	113	64	48	105	129
8	5460	2429	2228	2067	1504	450	3426	909	547	273	901	474	153	265	129	137	129	105
9	1753	804	1351	852	828	780	322	1536	402	410	523	507	394	434	161	290	249	225
10	458	346	627	298	378	370	651	161	627	290	354	257	426	579	193	233	314	201
11	97	40	113	8	177	257	225	177	145	491	298	338	225	483	298	426	281	225
12	161	16	16	56	97	306	225	145	80	129	290	209	185	418	225	483	595	249
13	129	0	32	0	16	362	249	145	80	24	88	121	72	193	249	281	426	354
14	48	0	16	0	0	1070	523	290	105	97	113	121	56	161	145	265	402	394
15	56	0	0	0	0	32	491	217	72	48	56	56	48	113	129	145	330	257
16+	40	0	0	0	0	40	8	32	24	113	105	97	56	97	185	161	523	547
total	27415	27351	20949	17523	13711	11637	11226	9377	5645	3772	3804	2670	2131	3169	1970	2766	4013	3329
N6+	19598	12135	10093	8412	9047	8219	7970	6353	4640	3498	3611	2501	1890	2911	1866	2525	3458	2791
Biomass	16043	14044	11983	10088	8657	7861	8228	6785	4097	3024	3436	2587	1606	2404	2048	2286	3525	2760

age	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
1	7	207	51	26	10		7	27	8	20	70			30						
2	28	7	1492	293	341	394	60	198	344	578	178	847	211	137						
3	37	13	69	1107	608	601	447	76	219	695	1176	442	980	458						
4	106	35		147	2000	1384	629	311	144	599	1275	923	717	918						
5	133	106	32	29	301	2467	980	718	135	101	936	1397	899	719						
6	139	119	127	22	187	454	2833	866	510	109	263	891	1136	1032						
7	72	49	120	80	72	94	447	1596	816	328	239	282	652	911						
8	57	49	108	57	139	49	84	138	1569	609	405	549	300	794						
9	123	35	104	94	122	90	111	64	190	1320	515	883	288	318						
10	163	47	111	90	70	176	143	94	65	140	1083	1528	467	240						
11	200	76	63	132	56	144	125	109	55	49	77	1623	617	488						
12	193	122	47	121	176	55	115	108	62	33	49	209	519	652						
13	192	143	118	63	125	107	45	55	46	41	21	68	66	504						
14	213	82	110	104	114	148	133	61	64	47	27	71	60	307						
15	201	75	150	121	134	82	130	54	50	55	34	86	46	75						
16+	323	236	561	353	497	672	323	195	201	228	175	329	228	212						
total	2188	1401	3262	2838	4952	6917	6614	4670	4477	4950	6523	10129	7186	7795	7250	8812	5785	8816	11434	10805
N6+	1877	1033	1619	1237	1692	2072	4489	3340	3628	2959	2888	6519	4379	5533						
Biomass	1691	1053	1766	1442	2446	4084	4491	3698	3800	3821	4325	7475	6109	7654	7752	9372	6654	9893	13097	11865

Table 15. Redfish (*Sebastes norvegicus*) mean catch per haul and the estimated biomass by stratum, and their standard error, in the 2025 survey.

	area	tow	catch (kg)		Biomass (t.)	
stratum	sq. miles	number	mean	s. e.	value	s.e.
1	342	4	1.77	1.23	46	32
2	838	10	2.28	2.07	146	132
3	628	7	67.95	35.18	3251	1683
4	348	4	0.81	0.56	21	15
5	703	8	10.87	6.58	582	352
6	496	6	17.99	7.56	680	285
7	822	9	111.93	51.54	7010	3228
8	646	7	130.90	92.42	6442	4548
9	314	3	226.56	222.69	5420	5328
10	951	11	245.75	81.57	17807	5910
11	806	9	74.73	22.21	4589	1364
12	670	8	5.09	5.09	260	260
13	249	3				
14	602	7	9.47	5.79	434	266
15	666	8	7.12	7.12	361	361
16	634	7				
17	216	2				
18	210	2				
19	414	5				
20	525	6				
21	517	6				
22	533	7				
23	284	3				
24	253	3				
25	226	3				
28	530	6				
29	488	6				
30	1134	11				
31	203	2				
32	238	2				
33	98	2				
34	486	5				
Total < 730 m.	10555	120	58.50	12.41	47050	9980
Total < 1460 m.	16070	182	38.43	8.16	47050	9980

Table 16a. Redfish (*Sebastes norvegicus*): age-length key in the 2023 survey. NOT AVAILABLE

Male

Female

Table 16b. Redfish (*Sebastes norvegicus*): age-length key in the 2024 survey. NOT AVAILABLE

Male

Female

Table 16c. Redfish (*Sebastes norvegicus*): age-length key in the 2025 survey. NOT AVAILABLE

Male

Female

Table 17. Redfish (*Sebastes norvegicus*) length frequency ('000) in the 2025 survey.

length	male	female	length	male	female	length	male	female
16	379	161	32	828	699	48	48	1302
17	547	198	33	894	552	49	26	1111
18	676	455	34	1194	1097	50	8	834
19	611	548	35	1199	920	51	16	370
20	844	532	36	1794	685	52		432
21	858	703	37	1579	945	53		261
22	798	901	38	1524	870	54		122
23	640	805	39	1872	1180	55		101
24	451	508	40	2661	1071	56		
25	498	396	41	2226	876	57		
26	275	289	42	1662	1013	58		8
27	455	258	43	993	938			
28	342	332	44	1371	770			
29	375	144	45	328	1150			
30	373	218	46	258	1593			
31	641	519	47	82	1627	Total	29326	27494

Table 18a. *Sebastes norvegicus*: frequency at age ('000) by strata in the 2023 survey. NOT AVAILABLE

Table 18b. *Sebastes norvegicus*: frequency at age ('000) by strata in the 2024 survey. NOT AVAILABLE

Table 18c. *Sebastes norvegicus*: frequency at age ('000) by strata in the 2025 survey. NOT AVAILABLE

	Strata														Mean	
age	1	2	3	4	5	6	7	8	9	10	11	14	15	total	Weight	Length
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																
25+																
Sets																
n																

Table 19. Redfish (*Sebastes mentella*) mean catch per haul and the estimated biomass by stratum, and their standard error, in the 2025 survey.

	area	tow	catch (kg)		Biomass (t.)	
stratum	sq. miles	number	mean	s. e.	value	s.e.
1	342	4				
2	838	10				
3	628	7	0.05	0.04	2	1
4	348	4				
5	703	8	0.02	0.02	1	1
6	496	6	3.20	2.96	121	112
7	822	9	57.73	29.42	3616	1842
8	646	7	20.34	11.74	1001	578
9	314	3	58.77	58.77	1406	1406
10	951	11	53.73	29.68	3893	2150
11	806	9	32.92	23.77	2022	1459
12	670	8	168.35	43.59	8594	2226
13	249	3	552.49	325.34	10481	6172
14	602	7	872.18	203.84	40004	9349
15	666	8	325.82	56.23	16533	2853
16	634	7	9.26	4.32	447	208
17	216	2				
18	210	2	107.07	106.19	1713	1699
19	414	5	15.96	9.21	503	291
20	525	6				
21	517	6				
22	533	7				
23	284	3				
24	253	3				
25	226	3				
28	530	6				
29	488	6				
30	1134	11				
31	203	2				
32	238	2				
33	98	2				
34	486	5				
Total <730 m.	10555	120	112.33	15.44	90338	12413
Total < 1460 m.	16070	182	73.78	10.13	90338	12413

Table 20a. *Sebastes mentella*: age-length key in the 2023 survey. NOT AVAILABLE

Male

Female

Table 20b. *Sebastes mentella*: age-length key in the 2024 survey. NOT AVAILABLE

Male

Female

Table 20c. *Sebastes mentella*: age-length key in the 2025 survey. NOT AVAILABLE

Male

Female

Table 21. Redfish (*Sebastes mentella*) length frequency ('000) in the 2025 survey.

length	male	female		length	male	female		length	male	female
16	820	460	29	21840	14470	42	0	600	16	820
17	3420	1670	30	18770	16630	43	60	120	17	3420
18	10440	6240	31	12820	9180	44	0	100	18	10440
19	19370	11920	32	8660	5500	45	0	120	19	19370
20	19320	13530	33	6730	2670				20	19320
21	11380	9040	34	5190	2370				21	11380
22	6610	5040	35	3000	1510				22	6610
23	4900	2950	36	1880	2680				23	4900
24	3560	2720	37	370	2020				24	3560
25	1980	1090	38	240	2020				25	1980
26	3820	2160	39	90	1540				26	3820

Table 22a. *Sebastes mentella*: frequency at age ('000) by strata in the 2023 survey. NOT AVAILABLE

Table 22b. *Sebastes mentella*: frequency at age ('000) by strata in the 2024 survey. NOT AVAILABLE

Table 22c. *Sebastes mentella*: frequency at age ('000) by strata in the 2025 survey. NOT AVAILABLE

	strata																		mean	
age	**3**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**33**	total	Weight	Length
1																				
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				
16																				
17																				
18																				
19																				
20																				
21																				
22																				
23																				
24																				
25+																				
Sets																				
n																				

Table 23. Redfish (*Sebastes fasciatus*) mean catch per haul and the estimated biomass by stratum, and their standard error, in the 2025 survey.

	area	tow	catch (kg)		Biomass (t.)	
stratum	sq. miles	number	mean	s. e.	value	s.e.
1	342	4				
2	838	10	0.21	0.19	14	13
3	628	7	4.25	2.40	204	114
4	348	4				
5	703	8	5.79	5.34	310	286
6	496	6	5.62	4.57	212	172
7	822	9	133.07	50.49	8334	3162
8	646	7	288.70	105.18	14210	5176
9	314	3	603.33	599.69	14434	14347
10	951	11	230.63	89.23	16711	6466
11	806	9	78.45	24.31	4818	1493
12	670	8	450.92	257.25	23018	13132
13	249	3	108.55	56.16	2059	1065
14	602	7	155.10	19.53	7114	896
15	666	8	475.32	134.93	24119	6846
16	634	7	5.36	2.22	259	107
17	216	2				
18	210	2	13.37	12.97	214	207
19	414	5	13.02	7.12	411	225
20	525	6	0.04	0.04	1	1
21	517	6				
22	533	6				
23	284	3				
24	253	3				
25	226	3				
28	530	6	0.33	0.19	13	8
29	488	6				
30	1134	11				
31	203	2				
32	238	2				
33	98	2	0.53	0.53	4	4
34	486	5				
Total <730 m.	10555	120	144.80	28.04	116438	22542
Total < 1460 m.	16070	181	95.11	18.41	116457	22542

Table 24a. *Sebastes fasciatus*: age-length key in the 2023 survey. NOT AVAILABLE
Male/Female

Table 24b. *Sebastes fasciatus*: age-length key in the 2024 survey. NOT AVAILABLE
Male/Female

Table 24c. *Sebastes fasciatus*: age-length key in the 2025 survey. NOT AVAILABLE

Male/Female

Table 25. Redfish (*Sebastes fasciatus*) length frequencies ('000) in the 2025 survey.

length	male	female	length	male	female	length	male	female
16	2150	1550	28	15100	10030	40	220	1160
17	2870	2260	29	19350	11000	41	20	220
18	5920	4150	30	16330	11090	42	0	100
19	10750	7060	31	11460	9470	43	0	130
20	9780	7000	32	5200	7660	44	20	10
21	9980	7010	33	2930	7560	45	0	30
22	7500	6110	34	2150	9990	46	0	0
23	7830	6430	35	1030	9330	47	0	0
24	8100	5620	36	350	10660	48	0	10
25	8880	6470	37	130	5870	49	0	20
26	10620	7100	38	80	4180			
27	12230	5910	39	210	2080	Total	171190	167270

Table 26a. *Sebastes fasciatus*: frequency at age ('000) by strata in the 2023 survey. NOT AVAILABLE

Table 26b. *Sebastes fasciatus*: frequency at age ('000) by strata in the 2024 survey. NOT AVAILABLE

Table 26c. *Sebastes fasciatus*: frequency at age ('000) by strata in the 2025 survey. NOT AVAILABLE

age	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	28	33	total	Weight	Length
1																							
2																							
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							
13																							
14																							
15																							
16																							
17																							
18																							
19																							
20																							
21																							
22																							
23																							
24																							
25+																							
Sets	2																						

n 10

Table 27. Juvenile redfish (*Sebastes sp.*) mean catch per haul and the estimated biomass by stratum, and their standard error in the 2025 survey.

	area	tow	catch (kg)		Biomass (t.)	
stratum	sq. miles	number	mean	s. e.	value	s.e.
1	342	4	0.14	0.09	4	2
2	838	10	0.21	0.19	14	12
3	628	7	1.42	0.51	68	24
4	348	4	0.12	0.07	3	2
5	703	8	0.56	0.28	30	15
6	496	6	4.74	1.89	179	71
7	822	9	6.56	2.61	411	164
8	646	7	6.00	1.89	295	93
9	314	3	3.59	2.64	86	63
10	951	11	5.39	2.10	390	152
11	806	9	16.49	4.74	1012	291
12	670	8	1.24	0.63	64	32
13	249	3				
14	602	7	11.38	7.04	522	323
15	666	8	2.52	1.33	128	67
16	634	7	0.00	0.00	0	0
17	216	2				
18	210	2				
19	414	5				
20	525	6				
21	517	6				
22	533	7				
23	284	3				
24	253	3				
25	226	3				
28	530	6				
29	488	6				
30	1134	11				
31	203	2				
32	238	2				
33	98	2				
34	486	5				
Total <730 m.	10555	120	3.99	0.63	3206	513
Total < 1460 m.	16070	182	2.63	0.42	3206	513

Table 28. Juvenile redfish (*Sebastes sp*.) length frequency ('000) in the 2025 survey.

length	Ind	length	Ind
3	10	10	25140
4		11	11480
5		12	14180
6	10	13	28480
7	270	14	19650
8	2570	15	9610
9	18990	Total	97740

Table 29. Greenland halibut (*Reinhardtius hippoglossoides*) mean catch per haul by strata and the estimated biomass with their standard errors in the 2025 survey.

	Area	tow	catch (Kg)		Biomass (t.)	
stratum	sq. miles	number	mean	s.e	value	s.e.
1	342	4				
2	838	10				
3	628	7				
4	348	4	0.00	0.00	0	0
5	703	8				
6	496	6				
7	822	9	0.46	0.25	28	15
8	646	7				
9	314	3				
10	951	11	0.05	0.05	3	3
11	806	9				
12	670	8	7.67	2.36	391	121
13	249	3	3.90	1.61	74	31
14	602	7	2.84	1.45	130	67
15	666	8	6.90	3.27	349	166
16	634	7	37.05	3.96	1789	191
17	216	2	69.21	20.53	1139	338
18	210	2	39.57	20.76	633	332
19	414	5	41.91	10.26	1322	323
20	525	6	40.53	7.09	1621	283
21	517	6	38.34	3.48	1510	137
22	533	7	30.89	5.76	1255	233
23	284	3	29.19	5.62	632	121
24	253	3	53.88	13.67	1039	264
25	226	3	24.03	7.49	414	129
28	530	6	42.21	4.38	1704	176
29	488	6	51.78	10.66	1925	396
30	1134	11	65.47	8.49	5657	734
31	203	2	19.86	13.63	307	211
32	238	2	90.67	5.95	1644	108
33	98	2	53.04	14.04	396	105
34	486	5	35.82	6.58	1326	243
Total < 730 m.	10555	120	7.28	0.81	5860	643
Total < 1460 m.	16070	182	20.65	1.02	25290	1233

Table 30. Greenland halibut (*Reinhardtius hippoglossoides*) biomass (t.) by strata in 1988-2025 surveys.

Strata	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		2		
2	0	3	6	0	0	0	0	121	0	2	6	3	0	15	10	0	14	7	9
3	26	31	8	8	18	3	0	21	108	90	367	347	244	384	140	55	852	416	324
4	144	20	0	15	27	10	0	5	0	23	41	197	207	157	58	105	348	91	182
5	74	98	0	28	42	1	2	21	36	98	173	409	307	268	66	92	253	280	231
6	31	18	15	12	8	15	0	31	106	228	361	301	178	265	104	21	466	332	61
7	85	63	58	189	246	94	214	904	1148	1423	2607	2356	1570	982	429	414	1032	596	778
8	151	222	62	180	379	140	46	333	359	1065	989	1993	1317	1124	878	507	811	934	910
9	180	165	53	76	323	30	43	178	160	254	471	354	245	355	138	140	464	91	550
10	108	82	58	172	362	31	235	526	716	862	1369	1528	1602	1743	744	286	754	1059	851
11	45	61	22	106	229	234	236	492	671	627	1227	1320	1088	1021	338	277	631	1063	290
12	405	647	288	761	619	933	1219	1147	2124	2248	3077	3661	2174	1582	1086	673	902	1020	978
13	64	124	218	44	24	143	152	127	298	484	554	978	382	291	521	61	447	311	219
14	368	302	284	787	847	0	620	410	902	1589	1461	1080	491	877	1081	885	1659	618	573
15	435	169	525	973	643	1378	1492	1768	1448	2689	4055	2987	2687	1616	1233	607	1084	1747	1783
16	1374	1363	2543	2527	1827	2175	1524	1861	2098	1770	3356	1143	2016	1328	2182	633	1166	1357	1752
17	266	120	127	415	40	0	742	742	258	525	737	603	498	170	204	148	223	429	639
18	106	50	506	354	58	0	386	958	191	557	775	932	179	574	694	1062	578	434	606
19	3064	934	1026	1522	3036	1342	1126	1230	971	1564	2603	1015	1774	1120	2194	248	608	915	971
20																	1647	1061	666
21																	906	345	359
22																	607	510	845
23																	407	42	130
24																	208	328	555
25																	2377	993	322
28																	1614	1162	1239
29																	2300	1330	674
30																	2025	602	2771
31																	546	186	354
32																	598	596	1357
33																	358	147	607
34																	2675	1461	1886
Total (1-19)	6926	4472	5799	8169	8728	6529	8037	10875	11594	16098	24229	21207	16959	13872	12100	6214	12288	11701	11709
s.e. (1-19)	768	392	809	817	1389	956	678	1226	882	1136	1348	1520	923	776	662	611	796	627	611
Total (1-34)																	28565	20459	23471
s.e. total (1-34)																	2669	918	1237
total_700-1400																	16269	8761	11765
s.e._700-1400																	2544	664	1080

Table 30 (cont.) Greenland halibut (*Reinhardtius hippoglossoides*) biomass (t.) by strata in 1988-2025 surveys.

Strata	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
1																			
2													1						
3	22		4	7						0	1	4	5	0	3	8			
4	8									0		12							0
5	92	14	7		6			0	6		2	4	0						
6	75	8					0	2	1	8		3	6	12	8	5	10		
7	729	524	11	15	3		4	9	12	21	9	18	39	47	4			3	28
8	432	226	31	0		0				15	2	20	12	16					
9	487	401	31	0			10						6	47		9			
10	559	777	25	19	5				1	1	23	11	26	15	0				3
11	504	563	21	32	1	9	2	3		17	8	17	11	18	6	14	5	6	
12	1246	1393	1217	743	126	332	140	239	522	133	282	218	363	999	491	171	399	720	391
13	392	431	217	273	33	19			80	26	9	98	129	378	4	50	44	19	74
14	878	1023	742	62	35	256	28	22	22	89	121	131	169	285	190	119	49	180	130
15	3041	1621	771	1224	112	111	89	119	241	49	171	81	476	1136	167	303	129	208	349
16	2264	1623	2186	2079	1892	1911	1038	2165	3049	2188	3921	1772	2179	1762	2773	1891	2928	2251	1789
17	407	411	558	446		401	170	298	395	682	562	369	208	625	788	475	724	346	1139
18	864	944	540	526	563	325	395	696	687	277	74	308	249	497	171	409	1561	961	633
19	1042	2035	1414	1231	3700	927	924	1615	1560	2633	2447	2510	1617	812	1268	771	1024	1254	1322
20	2041	4119	1856	1490	2471	2381	1858	3556	2536	1904	4109	3498	1490	1081	1027	833	2121	1754	1621
21	742	2161	1569	1366	1257	1496	1952	1210	4577	1058	3080	1809	714	796	784	875	1563	1216	1510
22	551	883	1971	2411	1226	714	1220	1201	4707	1901	3530	1741	730	188	859	774	1574	1142	1255
23	495	1144	474	715	464	281	534	576	1623	677	1579	956	392	294	361	289	435	242	632
24	588	1082	1185	460	1749	652	379	540	846	1082	796	430	813	455	476	612	2157	736	1039
25	436	441	732	473	593	459	392	968	450	506	1127	380	352	478	396	373	305	657	414
28	2857	3920	3153	1994	4188	2244	2150	1955	5627	2920	7414	4914	1629	890	1703	1245	1699	2145	1704
29	1487	3335	2618	2091	2044	2238	2060	4603	7198	3038	6525	4561	1956	684	2260	1276	3032	1403	1925
30	4719	5067	7692	5381	5061	4737	4684	3916	14974	5662	8756	7340	3933	2438	2418	3608	8917	3592	5657
31	347	385	944	319	414	82	461	754	1631	659	1393	563	374	32	279	482	321	432	307
32	1040	1755	2391	1539	1916	1097	1244	2610	4308	2588	2597	2101	1375	1208	2102	842	1809	3668	1644
33	166	698	309	408	707	320	594	474	542	678	597	250	333	425	248	142	476	559	396
34	2222	2627	3377	1790	3454	2514	3063	1756	2585	5831	3101	2362	1085	575	1185	954	2345	1755	1326
Total (1-19)	13044	11990	7777	6659	6475	4291	2801	5168	6576	6139	7633	5578	5496	6649	5872	4226	6873	5947	5860
s.e. (1-19)	1576	1182	724	812	2744	338	352	542	1246	802	812	691	398	790	553	466	1389	802	643
Total (1-34)	30732	39609	36046	27096	32019	23506	23398	29288	58180	34642	52237	36482	20673	16194	19969	16527	33629	25249	25290
s.e. total (1-34)	2510	2620	3073	1788	3857	1414	1843	16736	4046	3454	3263	2152	1266	1145	1036	1117	2837	1498	1233
total_700-1400	17690	27615	28270	20438	25545	19214	20589	24121	51604	28503	44604	30904	15177	9545	14097	12302	26755	19302	19430
s.e._700-1400	1958	2349	2988	1597	2721	1375	1816	1802	3849	3360	3161	2038	1201	829	877	1015	2474	1266	1052

Table 31. Greenland halibut (*Reinhardtius hippoglossoides*) age-length key in the 2025 survey.

MALE

Length	age																
cm	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16+	total
28-29				1													1
30-31				2													2
32-33				1	6												7
34-35				4	11												15
36-37					18	1											19
38-39					15	5											20
40-41					14	7											21
42-43					6	13											19
44-45					3	21											24
46-47						15	6										21
48-49						9	11										20
50-51						5	14	4									23
52-53						1	14	5									20
54-55							8	2	1	1							12
56-57								3	3								6
58-59							1		3	1							5
60-61									1	1							2
62-63																	0
64-65												1					1
total:	0	0	0	8	73	77	54	14	8	3	0	1	0	0	0	0	238

Table 31 (**cont.**) Greenland halibut (*Reinhardtius hippoglossoides*) age-length key in the 2025 survey.

FEMALE

length	age																
cm	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16+	total
12-13																	0
14-15																	0
16-17																	0
18-19																	0
20-21																	0
22-23																	0
24-25																	0
26-27																	0
28-29																	0
30-31				1													1
32-33				4	1												5
34-35				1	13												14
36-37					12	3											15
38-39				1	18	1											20
40-41					10	12											22
42-43					5	18											23
44-45						19	2										21
46-47					1	17	2										20
48-49						10	10										20
50-51						6	11	3									20
52-53							17	2									19
54-55							12	8	3								23
56-57							7	8	5	2							22
58-59							2	4	8	5	1						20
60-61									3	10	8						21
62-63									1	2	7	8	1	1			20
64-65										3	5	6	3	1			18
66-67										1	8	5	4	1			19
68-69											5	2	8				15
70-71												2	2	8	1		13
72-73													1	1	4	2	8
74-75											1		5	2	5		13
76-77														6	2	1	9
78-79														2	1	3	6
80-81														1	3	2	6
82-83																6	6
84-85																1	1
86-87																1	1
88-89																1	1
90-91																1	1
92-93																1	1
94-95																	0
96-97																1	1
total:	0	0	0	7	60	86	63	25	20	23	35	23	24	23	16	20	425

Table 32. Greenland halibut (*Reinhardtius hippoglossoides*) length frequency ('000) in the 2025 survey.

depths < 730 m.

length	male	female	length	male	female	length	male	female
12-13			36-37	255	145	60-61		41
14-15			38-39	262	281	62-63		40
16-17			40-41	288	413	64-65		17
18-19			42-43	311	424	66-67		18
20-21			44-45	468	414	68-69		9
22-23			46-47	379	563	70-71		8
24-25			48-49	252	430	72-73		
26-27			50-51	179	525	74-75		9
28-29			52-53	139	348	76-77		
30-31	8		54-55	71	261	78-79		7
32-33	45	25	56-57	35	105			
34-35	161	130	58-59	8	148	total	2860	4363

depths < 1460 m.

length	male	female	length	male	female	length	male	female
12-13			42-43	930	973	72-73		103
14-15			44-45	1196	1379	74-75		118
16-17			46-47	1148	1633	76-77		120
18-19			48-49	990	1554	78-79		92
20-21			50-51	639	1597	80-81		45
22-23			52-53	482	1215	82-83		56
24-25			54-55	145	1053	84-85		9
26-27		8	56-57	155	622	86-87		9
28-29	17		58-59	57	576	88-89		9
30-31	17	27	60-61	38	463	90-91		9
32-33	80	44	62-63		401	92-93		8
34-35	221	234	64-65	8	315	94-95		
36-37	557	290	66-67		308	96-97		7
38-39	694	586	68-69		246			
40-41	775	994	70-71		187	total	8149	15290

Table 33. Greenland halibut (*Reinhardtius hippoglossoides*) frequency at age ('000) and strata in the 2025 survey.

	Stratum																									Mean	
age	4	7	10	12	13	14	15	16	17	18	19	20	21	22	23	24	25	28	29	30	31	32	33	34	total	Weight (g)	Length (cm)
1	7																								7	10	12
2																											
3																											
4				5			5	51	13		26	6	1		1	1		4		68		5		13	198	275	33
5		2	8	139	24	12	143	516	167	89	651	295	85	65	15	70	23	99	97	799	29	373	35	192	3926	460	39
6		20		202	30	65	210	974	466	289	795	602	353	294	102	340	99	460	496	1549	126	626	143	702	8944	735	45
7		9		128	18	26	87	483	388	145	330	336	240	219	102	372	106	360	366	947	97	351	113	331	5554	1082	51
8		1		30	1	7	22	107	97	41	57	69	81	57	29	89	26	95	104	260	26	72	27	74	1372	1316	54
9				6		5	8	53	32	25	18	35	65	39	32	24	20	67	62	127	20	53	10	45	747	1605	58
10				4		2	5	24	15	14	15	25	38	27	27	13	25	68	41	137	5	43	6	36	571	1862	60
11					4	3	1	18	7	11	8	41	48	45	31	13	25	65	60	186	3	35	3	24	633	2269	64
12					3	4		7	2	10	2	41	43	32	16	9	11	38	36	110	2	21	2	12	399	2377	65
13					1	1		1	3	11		19	36	30	16	13	8	33	37	130	2	13	4	6	365	2790	68
14								7	1	1	1	22	35	28	25	3	1	17	31	126	1	20	7	2	328	3386	72
15								1		6	2	13	13	12	4	2		23	24	55		14	3	4	179	3811	75
16+											5	20	25	18	2			12	38	71		13		2	205	5061	81
Sets	1	3	1	7	3	3	7	7	2	2	5	6	6	7	3	3	3	6	6	11	2	2	2	5	103	1056	
n	7	32	8	513	81	124	480	2241	1191	642	1912	1524	1064	866	404	951	345	1341	1393	4566	311	1637	354	1444	23429	24749	48.7

Table 34. Greenland halibut (*Reinhardtius hippoglossoides*) abundance at age ('000) in the 1991-2025 surveys.

<730 m. strata (1-19)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
1	1302	1677	1423	1429	9978	4699	2674	2200	852	3014	6459	3282	1768	1762	437	550	301
2	207	1260	1245	996	2045	6408	3036	1716	563	235	1153	2364	804	2644	652	312	64
3	348	447	777	1365	1793	1942	4822	6180	2419	479	1456	2248	489	3517	2554	525	455
4	1054	1023	692	1435	1535	2442	5225	8843	8419	1741	799	1342	1217	1585	2007	949	275
5	2307	1852	1021	1545	2136	3380	5714	9919	10787	5703	2242	3045	1991	5601	5537	4800	2765
6	1291	2249	1545	2385	4099	4680	6800	9085	10119	11336	6262	4498	2362	6271	6105	6002	5928
7	2212	1947	1627	2139	3029	2001	4014	6304	4467	4346	5328	4610	1552	2040	2345	2665	4632
8	534	1054	1266	1180	1706	1299	1731	2108	1466	1865	2584	1025	375	518	491	623	1217
9	462	468	776	631	1052	341	528	600	280	361	147	104	105	233	89	180	247
10	352	273	213	219	209	70	177	157	82	92	36	48	79	107	97	143	165
11	141	138	104	90	53	21	23	27	6	44	5	16	15	63	44	103	62
12	12	67	38	47	18	31	17	6	3	0	0	6	4	38	15	45	38
13	0	25	21	18	0	0	17	16	3	0	0	0	0	5	3	10	5
14	0	12	9	0	5	4	0	0	5	0	0	0	0	3	3		2
15	15	0	0	0	0	5	6	0	0	0	0	0	0	3	3		
16+	8	0	0	0	0	0	9	0	0	0	0	0	0	3	3		
Total	10245	12490	10757	13479	27659	27323	34792	47160	39470	29216	26471	22587	10762	24390	20374	16907	16156
Freq 10+	528	515	385	374	285	131	249	206	99	136	41	70	98	222	168	301	272

Table 34 (cont.). Greenland halibut (*Reinhardtius hippoglossoides*) abundance at age ('000) in the 1991-2025 surveys.

<730 m. strata (1-19)

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
1	157	61	38			6	20	40	211	924	369	458	60	22	7	7		7
2	78	7	9		8			13	15	41	221	287	147					
3	121	30	29		36	4	3		7	21	255	226	372	28	27	27		
4	155	81	47	60	87	112	97	48	3	78	84	381	528	391	156	393	377	99
5	1203	606	894	880	822	643	1089	719	264	1067	1136	1655	2295	1807	1108	1869	1991	1749
6	4586	2905	2469	2930	1827	1733	2315	3440	1826	3071	2705	2346	3307	3430	2671	3221	2493	3051
7	4950	3255	2365	2850	1406	718	1566	2091	2256	2867	1687	1440	1323	1279	1036	2234	1668	1614
8	909	713	715	570	349	158	283	493	733	735	502	413	305	305	269	426	495	363
9	283	153	259	160	112	39	63	120	219	225	149	205	238	157	98	220	271	147
10	210	215	137	110	83	44	66	115	123	160	147	102	175	90	51	143	111	80
11	100	62	50		54	12	22	50	64	56	47	40	59	42	24	49	51	53
12	43	47	22	10	15	10	9	12	27	18	16	10	38	24	9	32	28	27
13	18	35	10		10	6	12	2	17	18	5	7	11	9	3	8	19	17
14	10	12	2		10	2	6		5	4	6	1	5	3	1		16	9
15	4	0			3	4	3		3			1					4	9
16+	1	0			6	1	2		2			1					1	5
Total	12825	8182	7046	7420	4823	3492	5156	7143	5775	9284	7330	7573	8863	7587	5460	8629	7525	7230
Freq 10+	386	371	221	120	181	79	54	179	241	256	221	162	288	168	88	232	230	200

Table 34 (cont.) Greenland halibut (*Reinhardtius hippoglossoides*) abundance at age ('000) in the 1991-2025 surveys.

< 1460 m. strata (1-34)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
1	1710	438	550	310	160	60	38			6	20	40	210	926	369	458	66	22	7	10		7
2	2680	652	320	60	80	10	9		8			10	20	41	232	287	151			0		
3	3580	2561	540	480	120	40	29	10	46	15	8	10	10	28	259	240	380	31	57	30		
4	1880	2117	1110	360	200	100	137	110	200	393	200	150	10	363	152	758	621	482	246	1020	793	198
5	8330	6470	7160	4700	2480	1380	2447	2270	2964	2583	3405	3110	710	5134	2610	3738	3393	3126	2086	5990	5658	3926
6	11210	8314	10480	11130	11020	8330	7356	8200	7073	8608	9839	18180	5970	14080	7333	5408	5764	7344	6455	11050	8759	8944
7	6060	4182	5730	10490	15340	13990	9587	10390	6124	5538	8415	17190	11310	15536	8776	4204	2835	3809	3261	8020	6164	5554
8	1790	1206	1700	3530	3890	4340	3063	3140	2349	2005	1989	5650	4820	5902	3787	1611	887	1267	1154	1840	1695	1372
9	890	318	510	880	1400	1140	1200	1360	920	643	548	2040	1800	2586	1933	1105	815	829	637	1200	1001	747
10	450	500	440	720	1060	1260	1019	1490	906	1026	780	1730	1300	2158	2671	1057	729	850	682	1260	822	571
11	320	282	370	370	540	440	383	560	587	412	406	960	660	845	1129	620	387	485	475	800	606	633
12	200	161	180	210	300	340	213	320	233	349	182	360	280	333	647	252	248	326	289	670	337	399
13	180	74	60	80	160	310	151	270	126	153	235	210	190	382	364	121	201	217	207	430	261	365
14	70	47	30	60	120	170	114	140	114	73	131	230	100	115	232	98	140	169	104	220	223	328
15	80	9	10	20	80	50	59	50	75	103	55	150	80	152	122	93	46	68	63	140	91	179
16+	60	9	10	10	70	70	55	40	140	94	81	120	90	194	101	118	64	83	85	310	106	205
Total	39490	27340	29200	33410	37020	32030	25860	28350	21865	22002	26294	50140	27560	48774	30717	20168	16727	19108	15808	32990	26516	23428
Freq 10+	1360	1082	1100	1470	2330	2640	1994	2870	2181	2210	1870	3760	2700	4178	5266	2359	1815	2198	1905	3830	2446	2680

Table 35. Roughhead grenadier (*Macrourus berglax*) mean catch per haul by strata and the estimated biomass with their standard errors in the 2025 survey.

	Area	tow	catch per tow (Kg)		Biomass (t.)	
stratum	sq. miles	number	mean	s. e.	value	s.e.
1	342	4				
2	838	10				
3	628	7				
4	348	4				
5	703	8				
6	496	6				
7	822	9				
8	646	7				
9	314	3				
10	951	11				
11	806	9				
12	670	8	1.42	0.56	73	29
13	249	3	4.13	1.98	78	37
14	602	7	1.61	0.95	74	43
15	666	8	2.99	1.17	152	59
16	634	7	5.97	1.37	288	66
17	216	2	6.20	1.40	102	23
18	210	2	5.53	1.75	89	28
19	414	5	13.11	5.27	413	166
20	525	6	5.43	1.70	217	68
21	517	6	18.85	6.00	743	236
22	533	7	35.56	7.04	1444	286
23	284	3	33.79	3.96	731	86
24	253	3	4.34	1.30	84	25
25	226	3	6.55	2.28	113	39
28	530	6	9.91	3.40	400	137
29	488	6	5.67	1.87	211	70
30	1134	11	22.40	2.40	1936	207
31	203	2	23.24	4.73	360	73
32	238	2	13.51	0.79	245	14
33	98	2	6.88	2.59	51	19
34	486	5	6.55	0.54	243	20
Total <740 m.	10555	120	1.58	0.25	1269	202
Total < 1460 m.	16070	182	6.58	0.42	8046	515

Table 36. Roughhead grenadier (*Macrourus berglax*) biomass by strata in 1988-2025 surveys.

Stratum	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
1																			
2								8											
3																	10		
4																9			
5																			
6									22										
7					0								3	0		0	10		
8		10		1					11	3		7		16	2	13	28	65	13
9	47	4		5	28	21	3	21	153	18	40	45	29	29		30	282	82	181
10	1								6	1		18	68	18		0	48	38	21
11												3	8	6			3	2	
12	112	103	40	108	100	413	55	126	46	137	55	191	81	236	154	165	292	207	97
13	21	64	18	18	60	18	32	75	5	18	78	92	50	116	121	123	299	94	154
14	200	145	107	85	139		73	67	270	77	194	135	103	292	124	346	877	379	362
15	92	5	29	64	52	321	82	180	84	69	101	72	103	60	16	87	259	16	85
16	349	140	212	229	432	1333	523	256	397	211	405	150	225	338	272	352	594	426	1391
17	134	45	31	180	123		98	129	27	116	204	96	67	370	380	101	244	124	603
18	311	128	143	356	215		756	414	154	224	189	313	219	383	27	877	423	588	435
19	743	227	273	289	429	915	352	282	187	322	424	129	92	216	116	245	228	366	592
20																	419	182	353
21																	1432	996	763
22																	1095	1115	1545
23																	897	463	342
24																	137	1030	419
25																	344	870	817
28																	425	695	610
29																	3113	1012	445
30																	3553	2869	1108
31																	650	327	235
32																	274	267	132
33																	118	17	122
34																	1131	330	511
total (1-19)	2009	871	852	1335	1577	3021	1975	1558	1362	1197	1691	1250	1047	2079	1211	2348	3597	2387	3933
s.e. (1-19)	264	142	149	250	270	487	169	223	277	169	243	338	196	284	176	611	362	281	700
total																	17184	12560	11336
s.e. total (1-34)																	1616	1420	1167

Table 36 (cont.) Roughhead grenadier (*Macrourus berglax*) biomass by strata in 1988-2025 surveys.

Stratum	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
1																			
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9	17	39												3					
10											0	0							
11																			
12	22	92	73	60	0	27	39	17	14	29	34	35	35	50	37	17	34	104	73
13	80	108	25	97	43	6			0	2	15	12	20	57	39	8	26	40	78
14	223	539	1	3	10	67	28	14	27	42	70	19	4	30	79	50	21	91	74
15	55	12		132	8		34	4	14	20	15	38	85	40	28	14	24	84	152
16	242	493	213	79	112	134	122	102	26	80	108	125	62	90	46	175	119	229	288
17	70	385	40	278	38	111	134	52	142	62	77	110	123	89	129	81	14	113	102
18	491	610	194	685	445	235	422	173	202	100	227	195	178	139	172	130	578	1521	89
19	167	683	235	69	73	32	29	36	51	37	70	91	84	126	169	72	142	534	413
20	144	269	130	355	78	88	47	101	25	120	94	55	263	199	73	51	70	214	217
21	755	1114	528	1135	1606	768	299	375	198	394	349	399	405	439	319	251	430	724	743
22	608	1735	1216	967	1610	945	537	747	658	669	548	376	906	712	490	306	671	884	1444
23	332	399	305	388	506	325	382	168	251	259	113	264	229	141	175	194	276	241	731
24	165	152	146	207	222	218	97	160	87	53	158	278	135	97	164	44	115	460	84
25	197	391	362	149	98	146	260	326	226	100	1093	276	668	125	280	532	408	357	113
28	299	360	273	338	137	68	70	29	57	89	184	141	57	90	62	70	189	391	400
29	527	555	424	509	163	309	200	437	265	154	275	340	347	615	204	256	275	455	211
30	2139	3356	2560	2816	2965	1582	1224	836	887	1137	1023	1217	2313	717	883	860	1234	1509	1936
31	242	176	225	107	295	137	60	199	270	153	113	123	127	35	168	209	263	399	360
32	86	222	197	242	172	63	100	80	117	92	361	94	264	100	98	74	179	162	245
33	105	38	12	57	112	54	22	42	39	89	43	28	40	27	72	28	3	56	51
34	305	410	144	419	145	162	191	212	146	154	171	159	155	115	278	297	261	351	243
total (1-19)	1367	2961	782	1403	729	612	807	399	478	373	616	625	590	624	699	546	958	2717	1269
s.e. (1-19)	314	611	209	201	409	258	141	113	147	86	143	142	201	187	131	103	287	1160	202
total	7270	12139	7304	9091	8838	5476	4298	4111	3702	3836	5141	4375	6500	4037	3964	3720	5332	8919	8046
s.e. total (1-34)	808	659	478	930	1212	678	475	407	300	403	914	356	1318	1318	395	536	628	1262	515

Table 37. Roughhead grenadier (*Macrourus berglax*) age-length key in the 2025 survey.

MALE

Length	age																
cm	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16+	total
5		3															3
6		6	1														7
7		1	4														5
8			8														8
9			3	5													8
10				7	1												8
11				2	5												7
12				4	3	1											8
13				1	4	3											8
14					1	2	5										8
15						3	3	1									7
16							4	2									6
17							2	4									6
18								2	2	2							6
19									3	2	1						6
20									2	6							8
21										4	2	2					8
22											1	4					5
23												1	1				2
24														1			1
25													1				1
26														1			1
Total		10	16	19	14	9	14	9	7	14	4	7	2	2			127

Table 37 (cont.) Roughhead grenadier (*Macrourus berglax*) age-length key in the 2025 survey.

FEMALE

Length	age																
cm	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16+	total
5		2															2
6		6															6
7		4	4														8
8			8														8
9			4	4													8
10			1	7													8
11				4	4												8
12				1	6	1											8
13				1	5	2											8
14					2	4	2										8
15						5	2										7
16							2	4									6
17								3	3								6
18								2	2	2							6
19								1	3	1	1						6
20									2	4	2						8
21										1	6	1					8
22										2	4	2					8
23											4	3	1				8
24												4	3	1			8
25												1	4	3			8
26													2	6			8
27													2	2	4		8
28														2	4	2	8
29													1	1	2	4	8
30														1	1	6	8
31															1	7	8
32																7	7
33																4	4
34																4	4
35																4	4
36																2	2
37																2	2
38																1	1
39																	
40																	
41																1	1
42																1	1
		12	17	17	17	12	6	10	10	10	17	11	13	16	12	45	225

Table 38. Roughhead grenadier (*Macrourus berglax*) length frequency ('000) in the 2025 survey.

depths < 730 m. strata (1-19)

length	indet.	male	female	length	indet.	male	female	length	indet.	male	female
3	94	0	0	15	0	22	16	27	0	0	48
4	16	0	0	16	0	46	23	28	0	0	8
5	38	15	17	17	0	64	67	29	0	0	8
6	15	0	0	18	0	91	39	30	0	0	0
7	0	0	15	19	0	118	44	31	0	0	24
8	0	0	0	20	0	147	133	32	0	0	8
9	0	0	10	21	0	77	85				
10	0	9	7	22	0	54	66				
11	0	0	0	23	0	22	101				
12	0	7	9	24	0	0	69				
13	0	8	9	25	0	0	66				
14	0	15	14	26	0	0	30	Total	162	694	915

depths < 1460 m. strata (1-34)

length	indet.	male	female	length	indet.	male	female	length	indet.	male	female
2			7	17		821	375	32			70
3	136	8		18		844	299	33			29
4	37			19		696	330	34			34
5	225	30	21	20		396	350	35			27
6	111	146	90	21		235	270	36			16
7	8	122	174	22		74	262	37			16
8		237	236	23		22	318	38			7
9		344	442	24		7	213	39			
10		520	588	25		8	303	40			
11		340	438	26		7	231	41			8
12		236	327	27			185	42			9
13		400	384	28			143				
14		400	330	29			128				
15		477	207	30			121				
16		779	261	31			152	Total	517	7148	7401

Table 39. Roughhead grenadier (*Macrourus berglax*) frequency ('000) at age and strata in the 2025 survey.

	strata																							mean	
Age	12	13	14	15	16	17	18	19	20	21	22	23	24	25	28	29	30	31	32	33	34	total	Weight (g)	Length (cm)
1	7				102						20		15	7	8				11	4		174	4	3
2			8		35	10		39	48	108	72	76	14	10	37	6	198	17	10	22		709	21	6
3	1				4	5		4	130	152	123	168	12	7	53	26	296	54	26	6	46	1114	57	8
4	7	1				5	11	4	72	198	223	169	10	23	67	59	772	89	73	6	192	1979	106	10
5		4	1	3			14	4	56	97	173	69	2	13	47	47	696	56	58	6	87	1433	168	12
6		3	16	12			4	4	32	65	91	67	2	5	35	32	440	69	23	4	29	933	251	14
7	12	5	33	25			6	4	34	107	135	175	5	10	32	39	604	131	59	4	56	1476	341	16
8	31	11	27	38	7	3	16	27	41	126	190	252		12	27	42	503	113	125		82	1673	434	17
9	30	10	16	38	23	8	13	90	28	91	159	169	4	6	36	23	307	76	89	3	51	1268	560	19
10	20	23	20	49	42	19	30	127	27	79	173	156	10	10	42	25	298	79	62	8	55	1357	641	19
11	2	13	13	35	51	12	18	92	15	57	107	71	15	1	65	22	129	44	19	11	30	824	804	21
12		8	6	36	45	13	11	61	8	34	67	36	8	9	33	8	65	18	11	4	12	491	999	23
13	2	2		4	26	22	2	45	11	56	59	28	11	4	33	8	66	9	13	4	5	410	1319	25
14	6	2		1	15	15	2	30	15	73	83	20	16	8	27	8	82	10	13	5	10	440	1477	26
15		4			9	5	5	11	8	43	69	4	4	2	16	6	40	1			4	230	1820	28
16+		2			32				18	66	180	36		24	23	19	107	17		4	11	539	2617	32
Sets	7	3	4	6	7	2	2	5	6	6	7	3	3	3	6	6	11	2	2	2	5	98	515	
n	119	89	140	240	392	117	132	542	544	1350	1923	1496	128	149	581	369	4603	782	591	92	670	15050	7746	15.9

Table 40. Roughhead grenadier (*Macrourus berglax*) abundance at age ('000) in the 1994 - 2025 surveys.

<730 m. strata (1-19)

age	Year																																
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
1			129		51	15	3	63	39	467	216	109	10	12	5	3	30	18	9	14	16	18	15	34	37		17	8	19	16	32	109
2	46	107	56	46	128	36	77	208	189	2139	466	267	353	23	79	15	73	48	49	31	63	112	255	178	171	95	34	86	33	55	129	91
3	136	209	110	186	227	49	108	271	220	1077	3119	362	438	59	228	31	232	76	79	26	25	73	81	170	110	157	49	62	68	35	97	14
4	487	467	224	153	236	216	50	120	57	672	1009	762	392	35	219	42	107	69	14	27	30	41	68	78	53	136	47	50	34	23	84	27
5	507	861	351	157	138	199	283	283	108	618	877	628	501	87	170	25	81	39	25	22	5	21	34	115	75	138	95	110	91	72	198	26
6	570	592	586	450	346	247	277	445	189	635	1105	544	561	202	285	96	66	54	24	15	0	32	36	59	77	104	65	145	76	38	255	39
7	566		351	613	725	445	218	540	290	843	810	499	719	268	458	94	128	63	40	32	8	40	49	71	65	85	99	124	76	125	323	86
8	493	458	338	162	907	616	231	505	283	901	955	593	519	298	743	168	446	119	98	118	16	63	59	58	78	73	154	170	96	173	612	160
9	379	263	216	158	250	422	339	510	241	535	962	413	487	178	536	87	492	199	124	126	37	58	39	44	46	26	127	147	101	293	865	227
10	181	113	264	98	226	197	338	666	266	474	896	579	577	345	471	48	347	251	129	203	52	99	37	97	50	48	130	80	86	221	862	332
11	109	35	254	151	135	109	72	231	203	472	465	371	727	172	431	82	224	122	154	233	88	86	47	59	22	46	74	115	65	165	392	237
12	82	23	93	164	182	80	95	131	244	236	392	167	396	108	162	56	113	70	84	115	90	58	39	36	26	41	46	43	28	99	254	181
13	40	19	38	124	152	55	57	80	75	88	147	227	293	95	318	56	62	43	44	25	52	56	24	47	56	41	46	40	44	50	198	103
14	15	5	34	42	76	61	55	104	63	31	89	191	211	77	79	49	61	33	23	32	22	23	28	65	38	35	22	41	24	29	69	71
15	27	15	4	42	48	33	23	55	19	18	18	21	195	39	179	43	21	18	14	12	15	21	23	34	43	22	4	8	25	4	13	33
16+	9		10	18	34	3	33	76	64	73	60	33	215	72	116	94	19	25	3	18	14	11	16	31	65	55	26	18	29	25	9	34
Total	3647	3685	3060	2564	3862	2783	2259	4288	2550	9278	11584	5765	6593	2069	4479	988	2501	1247	911	1049	533	811	851	1175	1010	1104	1035	1246	895	1422	4392	1771

Table 40 (cont.). Roughhead grenadier (*Macrourus berglax*) abundance at age ('000) in the 1994 - 2025 surveys.

< 1460 m. strata (1-34)

	Year																					
Age	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
1	461	391	34	51	52	19	37	39	52	71	103	70	36	34	49	51	40	57	50	46	156	174
2	856	719	602	81	549	143	125	172	177	178	244	501	648	494	304	316	167	379	219	500	536	709
3	6380	1420	855	222	1086	306	622	395	405	279	221	482	575	863	648	793	402	329	481	539	1349	1114
4	2989	2303	1532	321	1268	419	616	509	349	320	298	531	818	902	767	1685	489	505	334	449	1255	1979
5	2576	2425	1399	543	1269	253	755	587	409	316	232	503	697	1303	1181	2023	1136	992	688	712	975	1433
6	3062	2695	2316	1063	1578	954	1084	775	348	435	346	657	733	545	879	1487	855	1019	686	420	1115	933
7	2552	2069	2351	1209	1954	936	1054	1009	572	533	344	688	713	791	873	1059	719	858	778	1189	1194	1476
8	3215	2418	1184	1285	2010	1680	2392	1466	1052	836	507	593	602	717	1003	963	831	1036	871	1050	1819	1673
9	2670	1442	1737	770	1649	866	1451	1241	919	610	436	449	405	365	554	386	517	756	609	1035	2129	1268
10	2282	1666	1643	1109	1454	476	911	1160	517	638	300	442	347	698	382	451	423	315	453	725	1738	1357
11	1863	1123	1409	697	1333	824	685	652	650	583	350	295	294	409	234	387	208	338	305	469	877	824
12	1374	676	739	473	626	564	565	660	491	317	441	219	204	299	254	275	149	117	149	329	666	491
13	670	1090	823	412	1170	563	461	516	429	116	350	316	200	357	252	332	142	153	199	257	645	410
14	416	1007	566	432	348	490	510	570	307	247	259	125	214	420	160	271	180	190	112	258	417	440
15	178	298	478	272	718	434	255	460	215	138	237	280	228	256	193	167	125	69	117	49	154	230
16+	1130	1113	1069	944	887	959	692	1044	373	443	372	338	352	468	457	746	464	292	339	525	430	539
total	32674	22855	18737	9884	17951	9886	12215	11255	7265	6059	5039	6487	7066	8920	8190	11391	6846	7405	6390	8552	15455	15050

Table 41. Squid (*Illex illecebrosus*) biomass (t.) by strata and total abundance ('000) in 1988-2025 surveys.

Strata	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1			15	0	0		17		0		8					5	42	2
2	1	0	120	18	12		19		6	8	17	3		0	0	29	36	7
3			9	93	1		6		12	3	5	1		1	0	8	19	2
4			3	3	4		8		3	1	3	0			0	2	51	2
5	1	4	1090	4	20		58	0	26	9	12	3		0	0	81	89	5
6		0	468	472	4		10	0	6	8	6	1			0	5	26	4
7	1		22	130	1	0	8		5	3	1	1		0	0	22	39	6
8			1	29	3	0	8		13	3	8	1		0	0	8	8	1
9		1	24	4	3		6		3	4	1				0	2	25	
10	3	4	216	646	17	0	81		28	18	20	3		1	1	25	52	17
11			128	40	12		27	0	3	13	4	3		1	0	12	36	13
12				1				0	3	1	1	1	1	1	1	6	11	1
13				1			8			1	0	0	0		0	0	9	1
14			4	22	4		5	0	4	6	4	1		1		10	15	4
15			5	13	3		4		1	1	0	1	0	1	1	6	3	6
16				4					0	1	1	1	1	1	1	1	4	4
17					0		1			0		0	0		1	0	1	2
18		0	1		1		4			0	0			0		1	1	0
19				3	0		0	0	1	1	1	1	0	1	1	1	3	2
20																	1	3
21																	0	
22																	0	0
23																	1	
24																	1	1
25																		
28																	1	0
29																		
30																	1	
31																	1	
32																		
33																	2	
34																	2	
Total (1-19)	6	9	2107	1483	83	1	269	1	113	81	92	22	3	10	8	222	470	79
s.e. (1-19)	4	4	604	395	18	1	33	1	15	12	12	4	1	3	3	60	55	8
Total (1-34)																	479	83
s.e. total (1-34)																	55	8
Abundance (1-19)	67	86	21184	17064	1114	32	3749	62	1561	1104	1481	801	182	608	457	3898	4675	1463
Abundance (1-34)																	4944	1711

Table 41 (cont.) Squid (*Illex illecebrosus*) biomass (t.) by strata and total abundance ('000) in 1988-2025 surveys.

Strata	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
1	385	1	7	13	0	1	1					18	0	10			1			0
2	1181	10	1736	296	6	14	11				0	383	4	86	4	10				3
3	8	62	66	158	1	1	1		0		0	630	1	33	2	63				
4	130	0	6	17			1		0		0	31	3	41		1		0		1
5	1457	40	357	285	3	2	8		0			114	15	22	14					4
6	222	58	37	21	3	3	0					259	2	37	28	16				3
7	28	38	48	34	3	1	1		0		1	294	2	1	10	89				
8	7	24	38	36	2	4	0		1		0	19	1	43	2	29				0
9	1	22	16	345		5						10	8	8	1				1	
10	26	56	2560	359	16	24	8		0			323	5	28	19	26	1	1		3
11	86	88	104	41	3	28	5		0		1	227	5	20	57	50	0			2
12	3	2	2	23			0					0	1	16	1	30		0		
13				0								1		5						
14	1	6	106	52	5	5			0			17	1	5	1	3		0	0	0
15	4	3	49	2		0						18	0	5	2	5	2	0		
16			2	0									0	2		6	0	0	1	
17			0		0							4			0					
18			1	3			1					1							1	
19	1		0	1								1		0		1				
20	0			0									1			6			1	
21	0		1	0												3				
22	0					0							1			9			0	
23	0																			
24				1									0						0	
25	1		1	0								0		0						
28	5			0								2		0		1			1	
29	2			0			1					3								
30	3		1	1			0				1	9				2			1	
31				2																
32	0						0									1				
33																				
34			4	1			2					2	1	1			0			
Total (1-19)	3541	411	5137	1688	43	89	38		3		3	2350	49	363	142	329	4	2	2	16
s.e. (1-19)	1244	64	2392	346	7	19	8		1		1	490	6	50	22	41	2	1	1	3
Total (1-34)	3551	411	5144	1694	43	90	41		3		4	2366	52	365	142	351	4	2	5	16
s.e (1-34)	1244	64	2392	346	7	19	8		1		1	490	7	50	22	42	2	1	2	3
Abundance (1-19)	28614	5793	48476	23029	616	699	695		83				683	3093	1679	2589				
Abundance (1-34)	28953	5793	48563	23112	616	707	765		83				712	3105	1679	2751				

Table 42. Shrimp (*Pandalus borealis*) total and female biomass by strata (t.) in the 1988 - 2025 surveys.

	Total		Female	
Year	Biomass (t)	Catch per tow (kg)	Biomass (t)	Catch per tow (kg)
1988	5615	6.98	4525	5.63
1989	2252	2.80	1359	1.69
1990	3405	4.23	1363	1.69
1991	11352	14.12	6365	7.91
1992	24508	30.48	15472	19.24
1993	11673	14.52	6923	8.61
1994	3879	4.82	2945	3.66
1995	7276	9.05	4857	6.04
1996	10461	13.01	5132	6.38
1997	7449	9.26	4885	6.07
1998	39367	48.95	11444	14.23
1999	24692	30.70	13669	17.00
2000	19003	23.63	10172	12.65
2001	27204	33.83	13336	16.58
2002	36510	45.40	17091	21.25
2003	21087	26.22	11589	14.41
2004	20182	25.10	12081	15.02
2005	30675	38.14	14381	17.88
2006	16235	20.19	11359	14.27
2007	17046	21.20	12843	15.97
2008	11092	13.79	8630	10.73
2009	2797	3.48	1764	2.19
2010	4894	6.09	3819	4.75
2011	1621	2.02	1132	1.41
2012	1055	1.31	791	0.98
2013	844	1.05	691	0.86
2014	900	1.12	716	0.89
2015	1551	1.93	1079	1.34
2016	2521	3.13	1982	2.46
2017	2885	3.59	2304	2.86
2018	4394	5.31	4051	4.90
2019	9273	11.53	8486	10.60
2020	6734	8.37	6048	7.52
2021	2101	2.61	1792	2.23
2022	862	1.07	705	0.88
2023	912	1.14	773	0.96
2024	1018	1.27	868	1.08
2025	1138	1.42	1034	1.29

Table 43. Shrimp (*Pandalus borealis*) abundance at age ('00000) in the 1988 - 2025 surveys.

Year/Age	1	2	3	4	5	6	7	8	9	10	Total
1988			1363	548	1815	1635	126				5487
1989		8	816	692	193	738	131				2579
1990			3647	389	910	273	10				5229
1991		435	2651	4677	3882	1000	318				12964
1992			3043	4751	13728	1282					22804
1993		7878	3760	2052	4458	492					18640
1994		427	875	726	1806	75					3909
1995		2359	2682	1278	2146	1217					9682
1996		3424	9557	1828	1523	571	437				17339
1997		695	3372	5078	980	258	77	0			10461
1998	1220	56080	38922	13786	5341	2006	145				117501
1999	13	4735	23924	14962	6008	2043	81				51766
2000	94	1148	17135	12744	5342	1651	669				38783
2001	27	3711	18668	17331	13880	3875	7				57500
2002	1806	11004	44684	7167	12874	8003	545				86082
2003	146	13869	16468	5589	9089	2306	49				47516
2004		27415	9603	6425	7831	1330	206				52810
2005		1792	69026	5240	10500	7576	1407				95541
2006		809	18127	10561	7449	3698	616				41260
2007		301	3866	12213	12758	5882	1287				36306
2008		473	4708	5027	6865	4013	282				21367
2009	6	1506	1783	1236	1004	241	70				5846
2010	77	1106	4185	2747	243	0	0				8358
2011	2	611	893	1063	330	3					2903
2012		216	889	536	148	5					1795
2013	10	63	186	606	377	42					1284
2014	0	15	338	180	689	179					1401
2015		1090	393	916	151	159					2710
2016	2	230	1089	2141	492	61					4014
2017		662	1100	2018	612	25					4418
2018		1048	2479	1939	1558	37					7061
2019	9	1010	5923	5445	1439	42	21	8	0	14	13911
2020		1449	2598	5723	1746	152	0				11666
2021		125	1702	1620	707	39					4193
2022	0	61	552	1055	218	60					1945
2023		140	645	690	181	0	5				1661
2024		270	820	551	31	0	4		3		1680
2025	2	368	840	429	76	22					1738

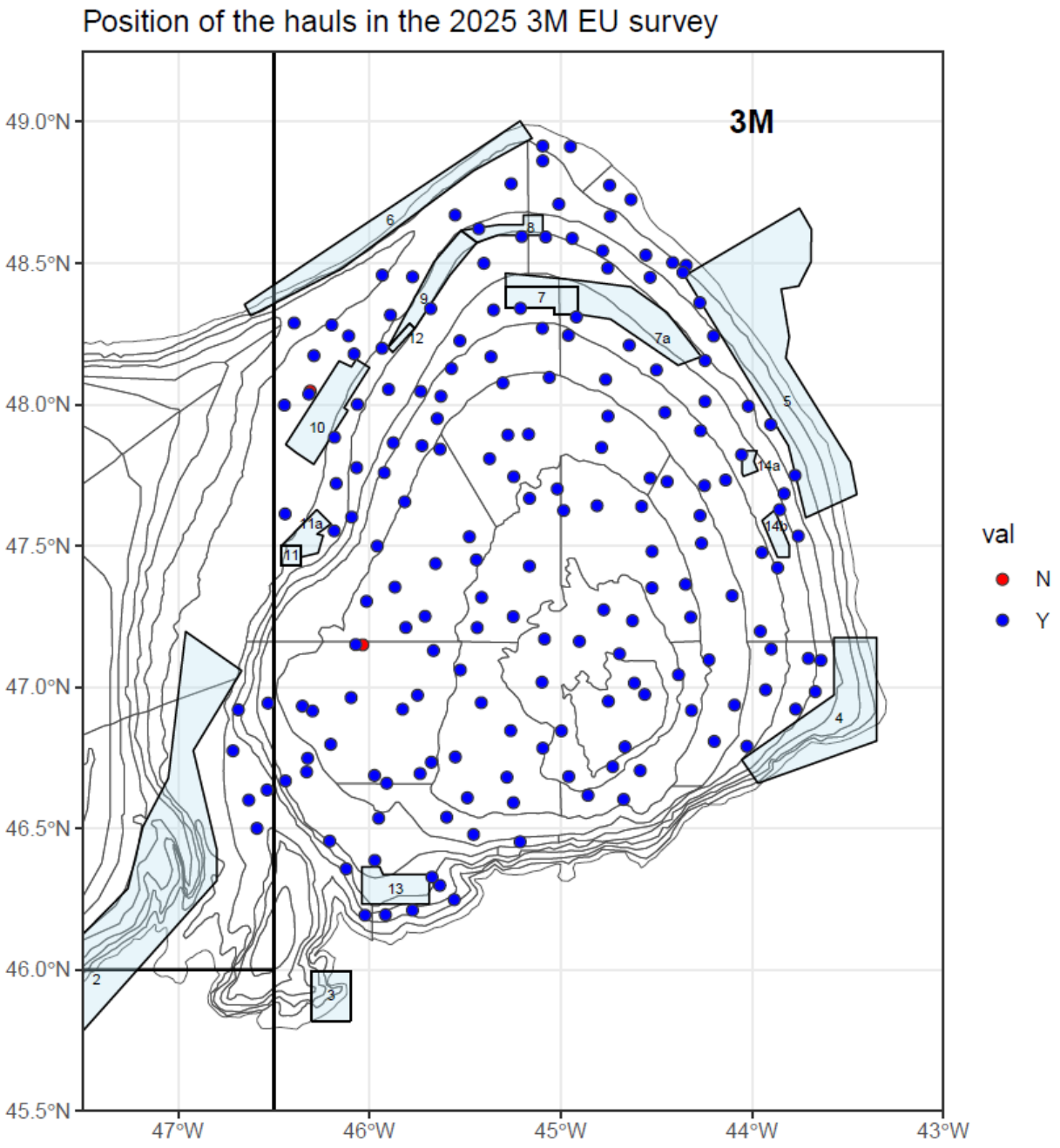

Figure 1. Haul positions in the Flemish Cap survey 2025. Coral and sponge protection areas (blue shaded) are displayed in the map.

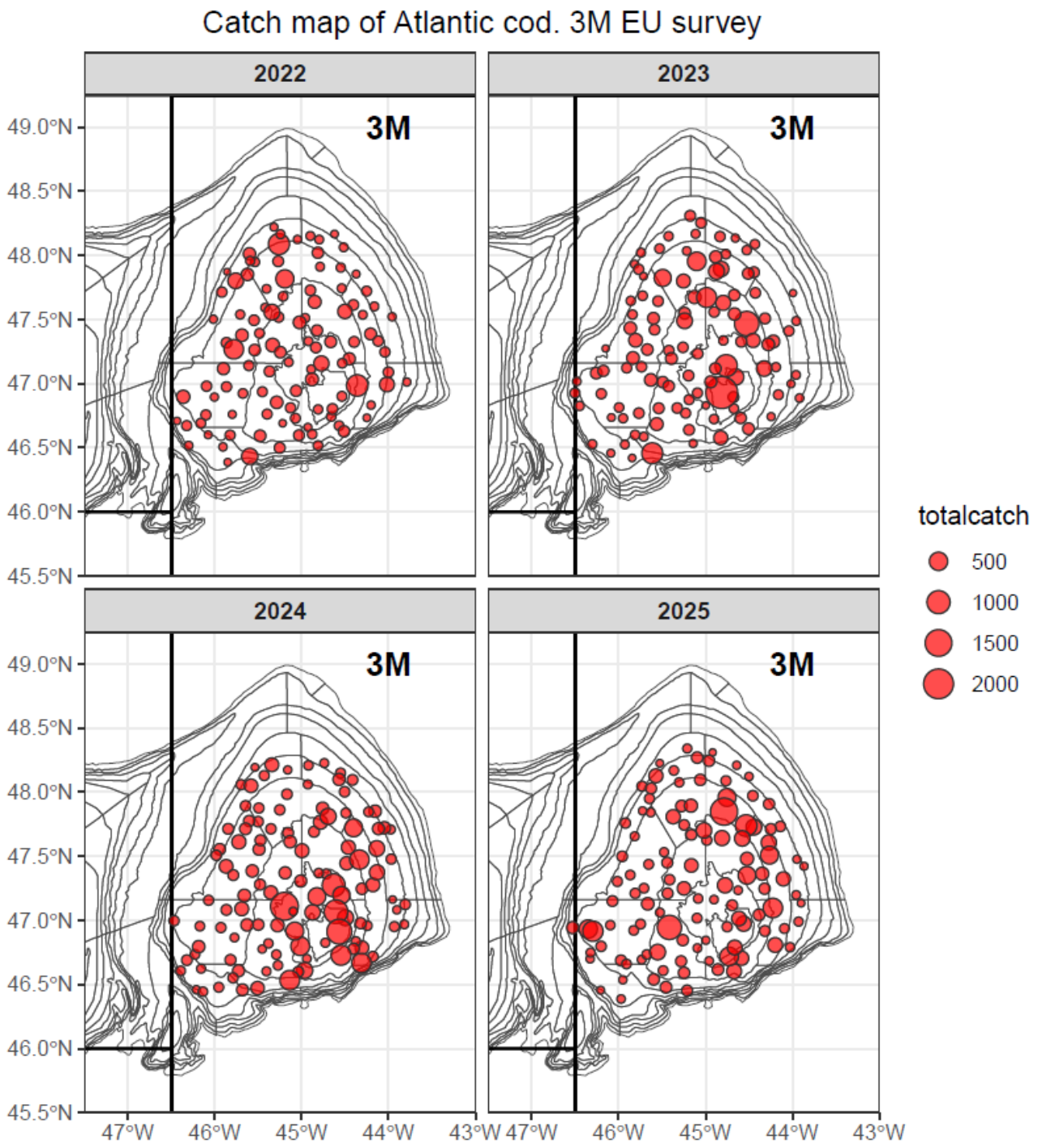

Figure 2. Cod (*Gadus morhua*) catch (kg.) distribution in the last four surveys.

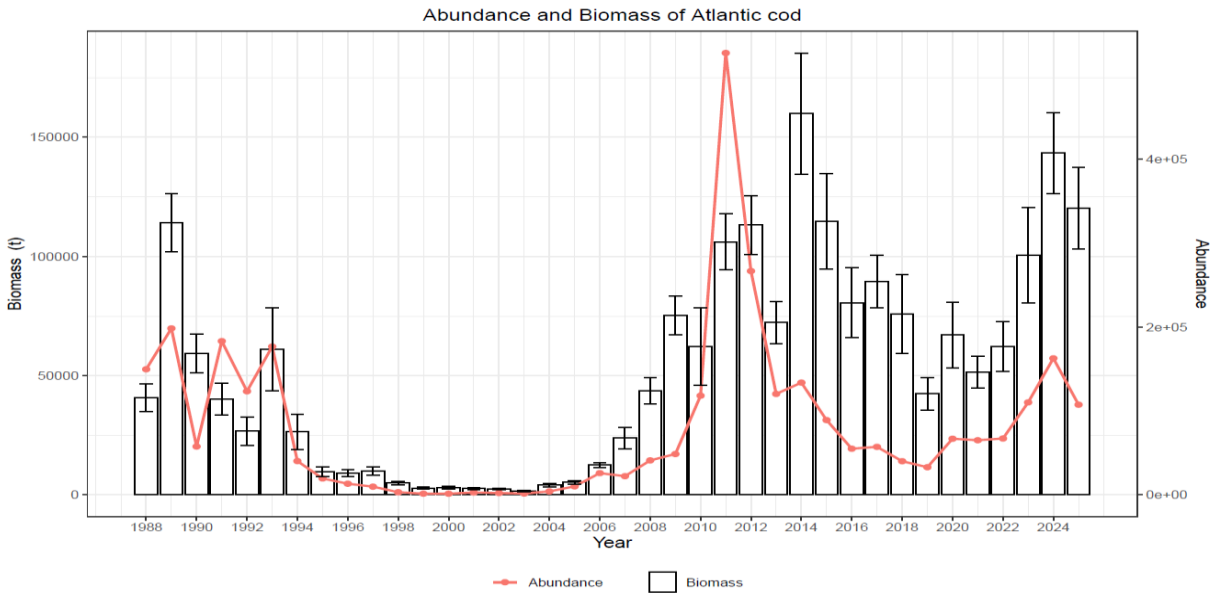

Figure 3. Cod biomass (t.) ± S.E. and abundance 1988-2025.

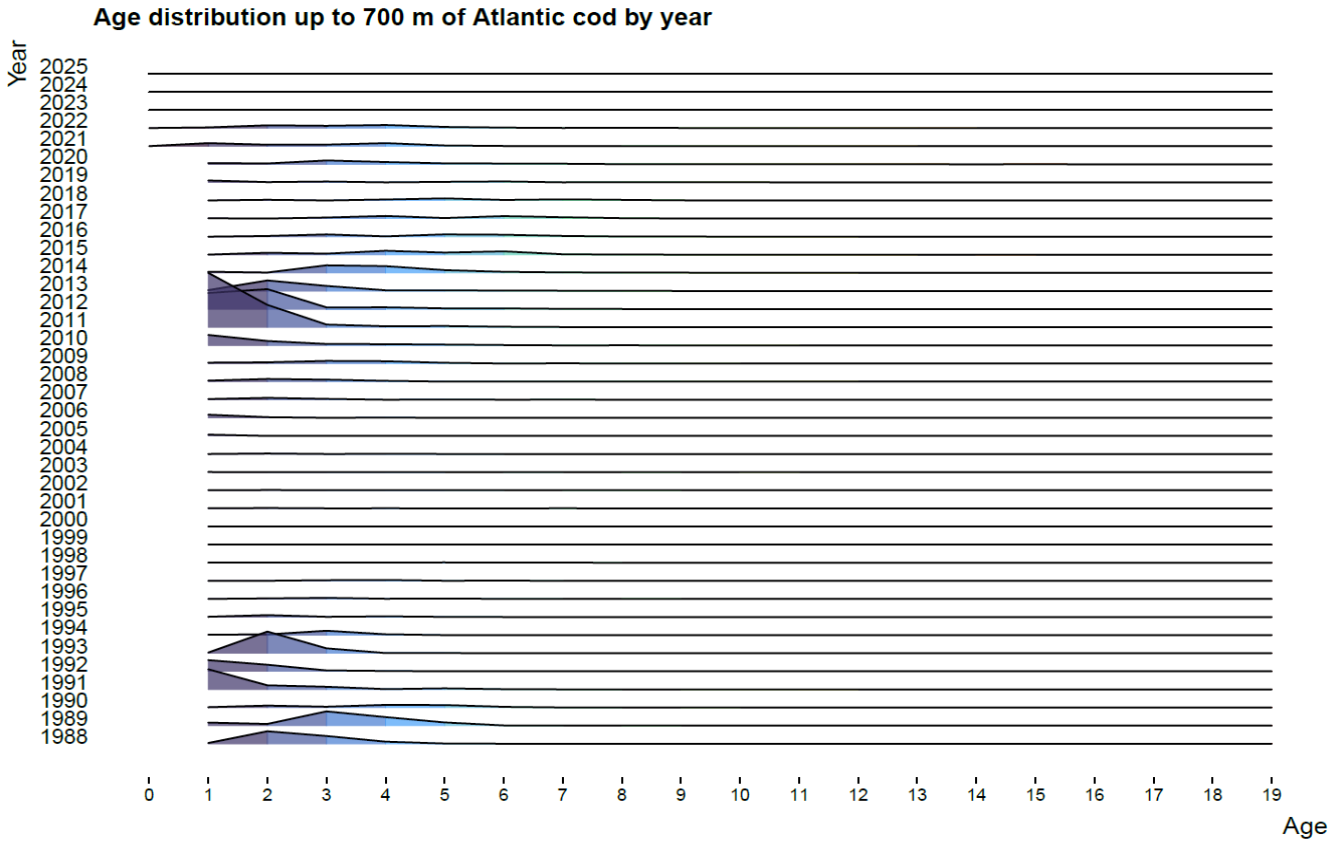

Figure 4. Cod age distribution in Flemish Cap NAFO 3M 1988-2025. 2023-2025 NOT AVAILABLE.

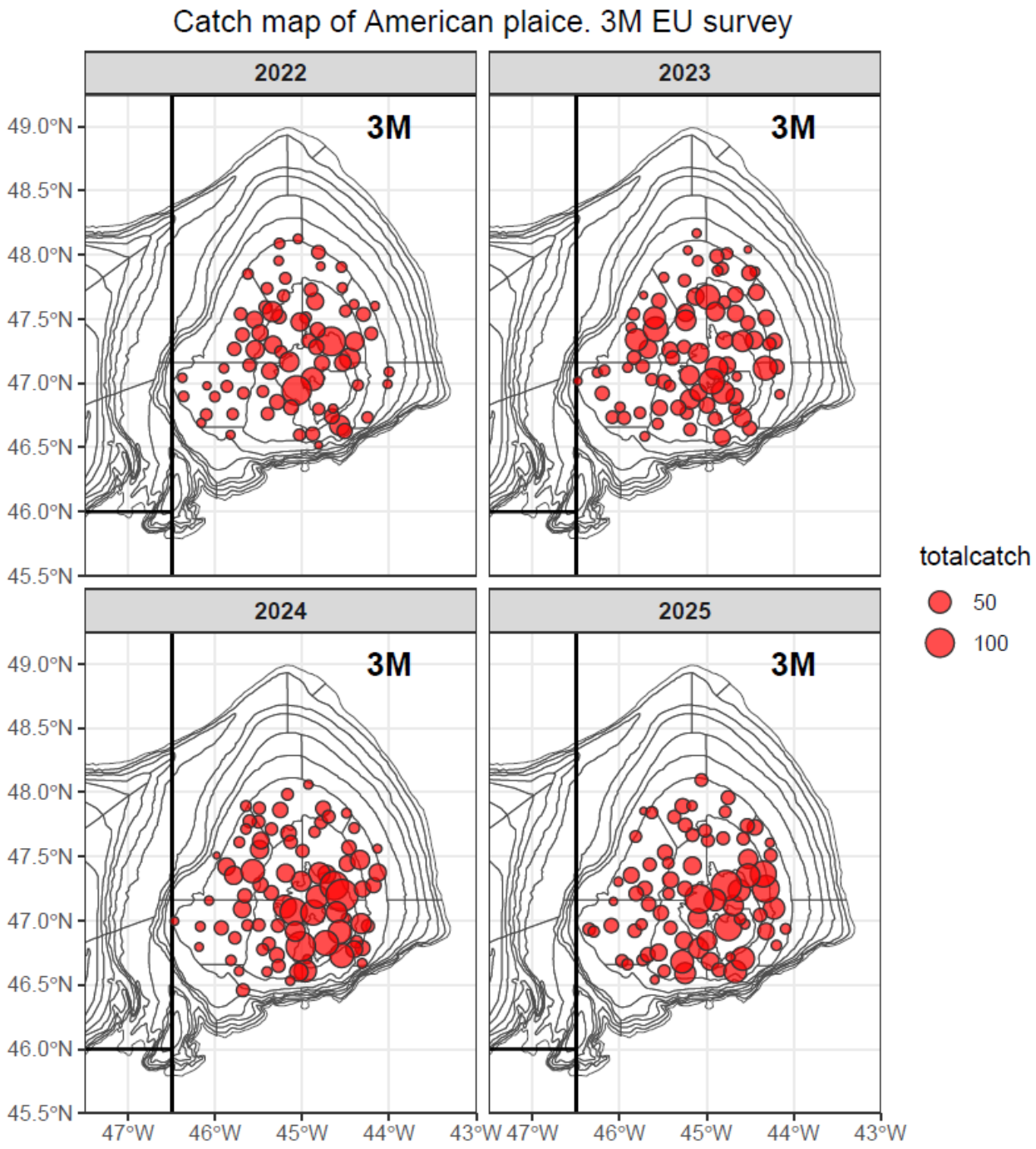

Figure 5. American plaice (*Hippoglossoides platessoides*) catch (kg) distribution in the last four surveys.

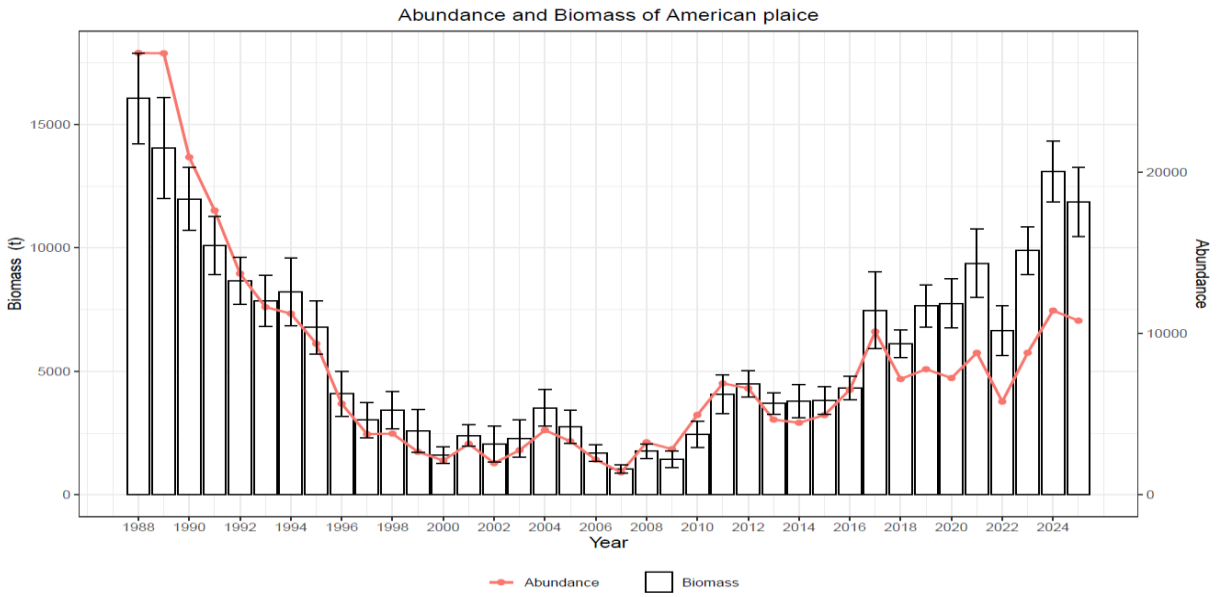

Figure 6. American plaice (*Hippoglossoides platessoides*) biomass (t.) ± S.E. and abundance 1988-2025.

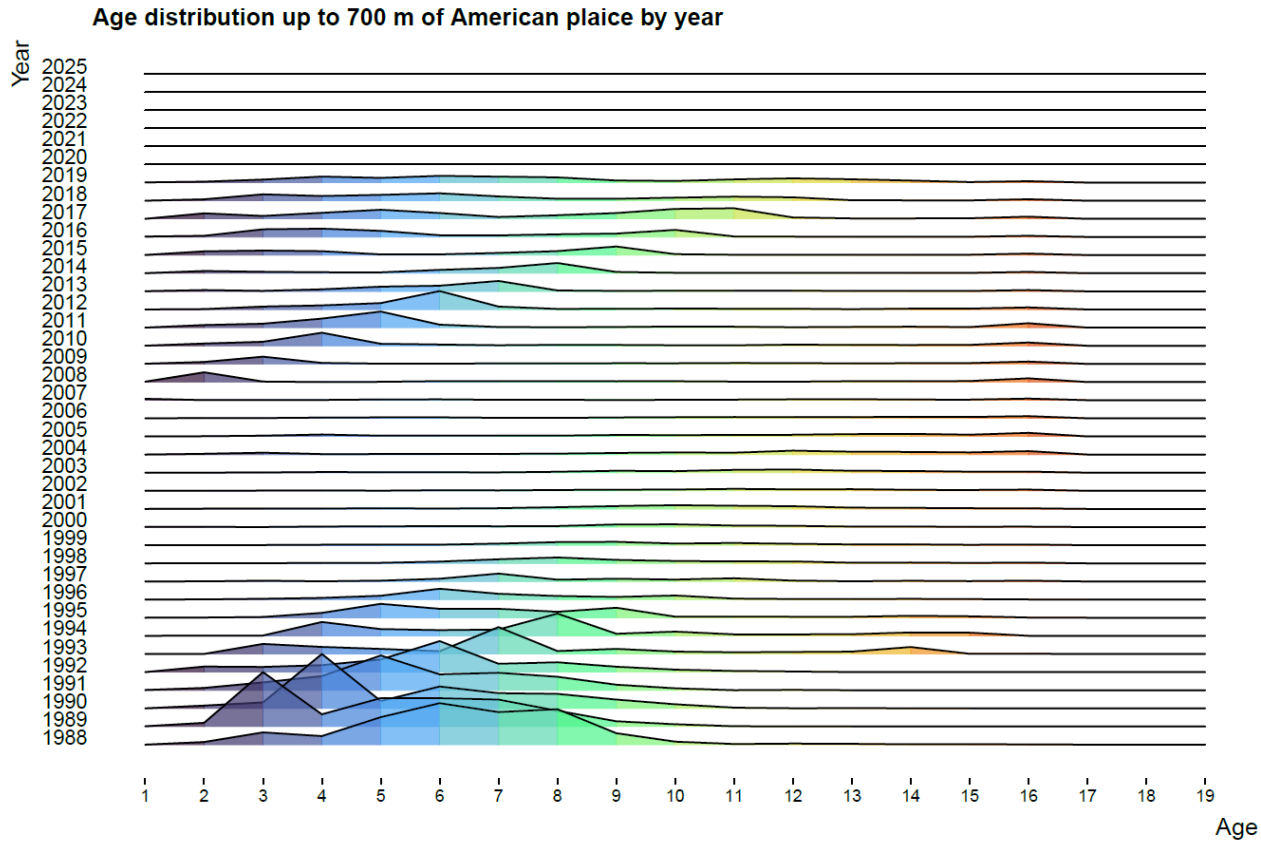

Figure 7. American plaice age distribution on Flemish Cap, NAFO Div. 3M: 1988-2025. 2020-2025 NOT YET AVAILABLE.

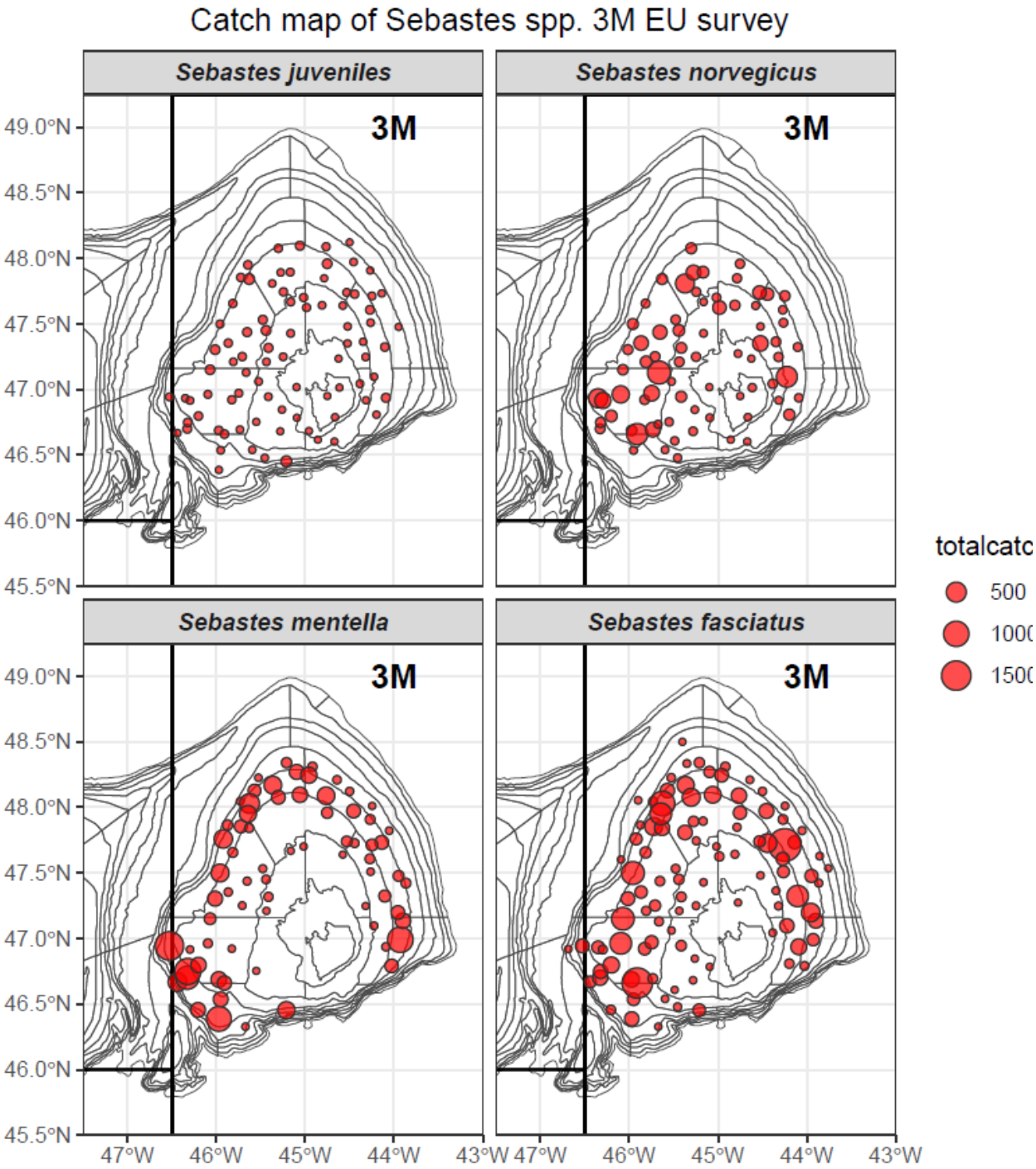

Figure 8. Catch distribution (kg) of *S. norvegicus, S. mentella, S. fasciatus* and *S. juvenile* in 2025 survey.

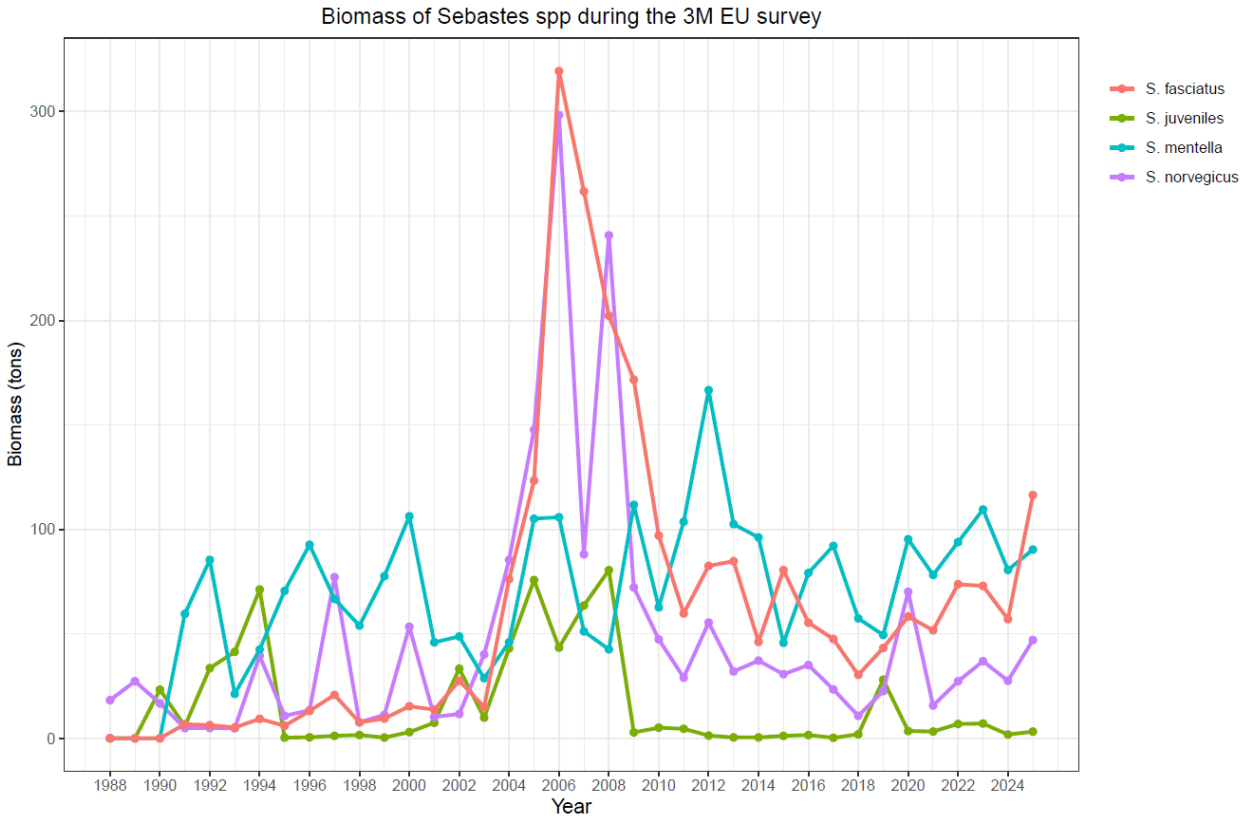

Figure 9. Redfish species biomass (t.) 1988-2025.

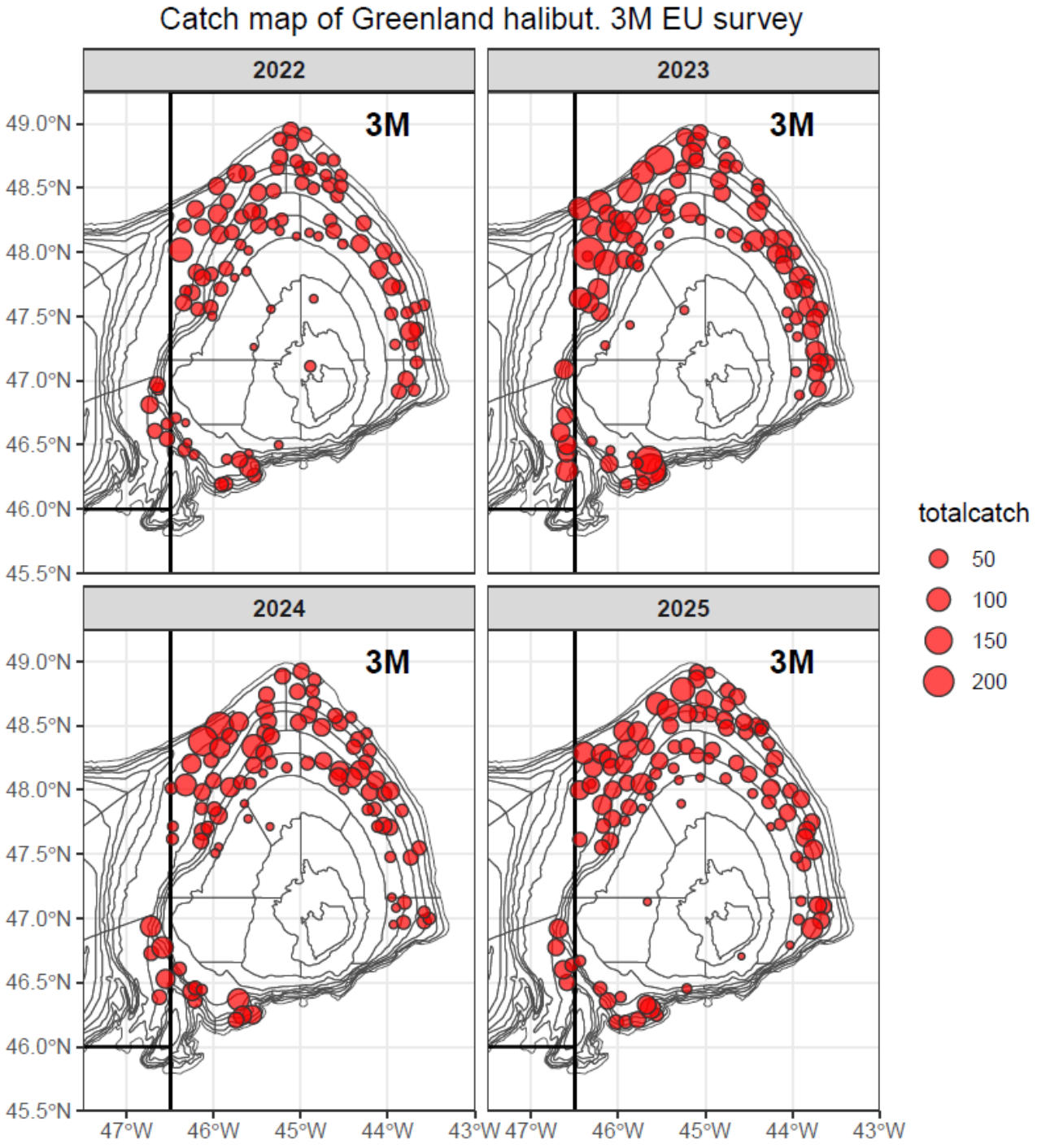

Figure 10. Greenland halibut (*Reinhardtius hippoglossoides*) catch distribution (kg) in the last four surveys.

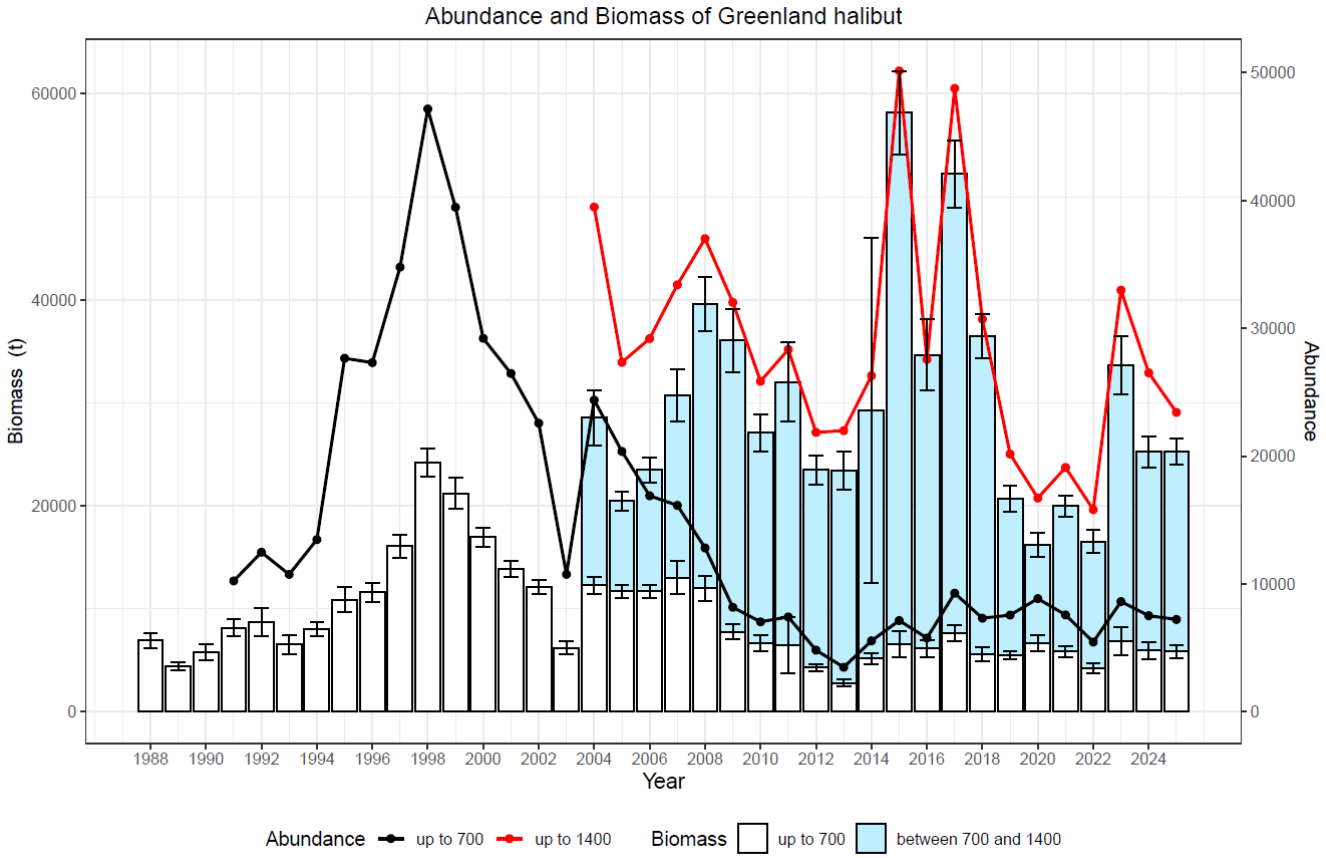

Figure 11. Greenland halibut (*Reinhardtius hippoglossoides*) biomass (t.) ± S.E. and abundance 1988-2025.

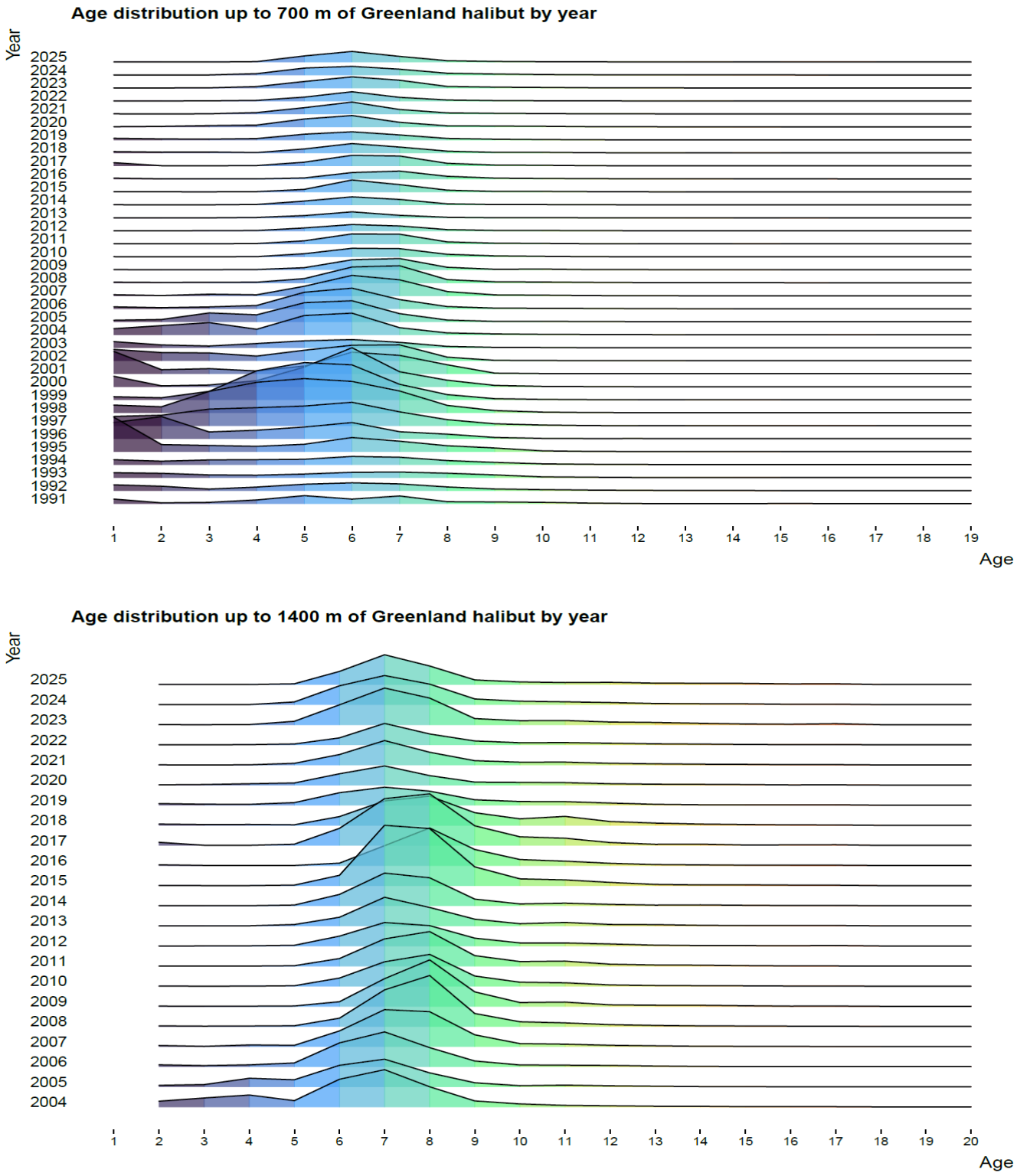

Figure 12. Greenland halibut (*Reinhardtius hippoglossoides*) age distribution on Flemish Cap in depths < 730 m. (up, 1988-2025) and until 1440 m. (bottom, 2004-2025), NAFO Div. 3M.

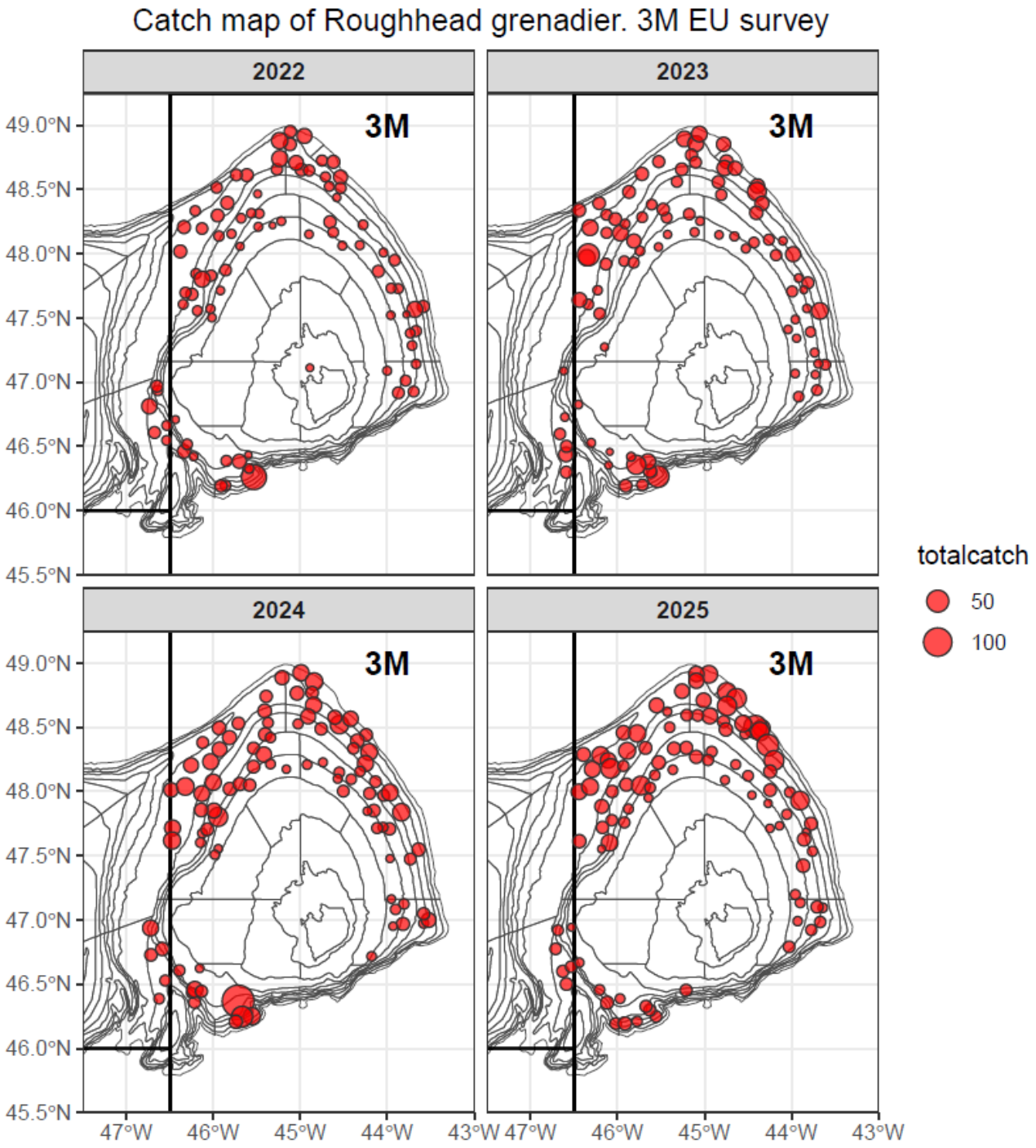

Figure 13. Roughhead grenadier (*Macrourus berglax*) catch distribution (kg) in the last four surveys.

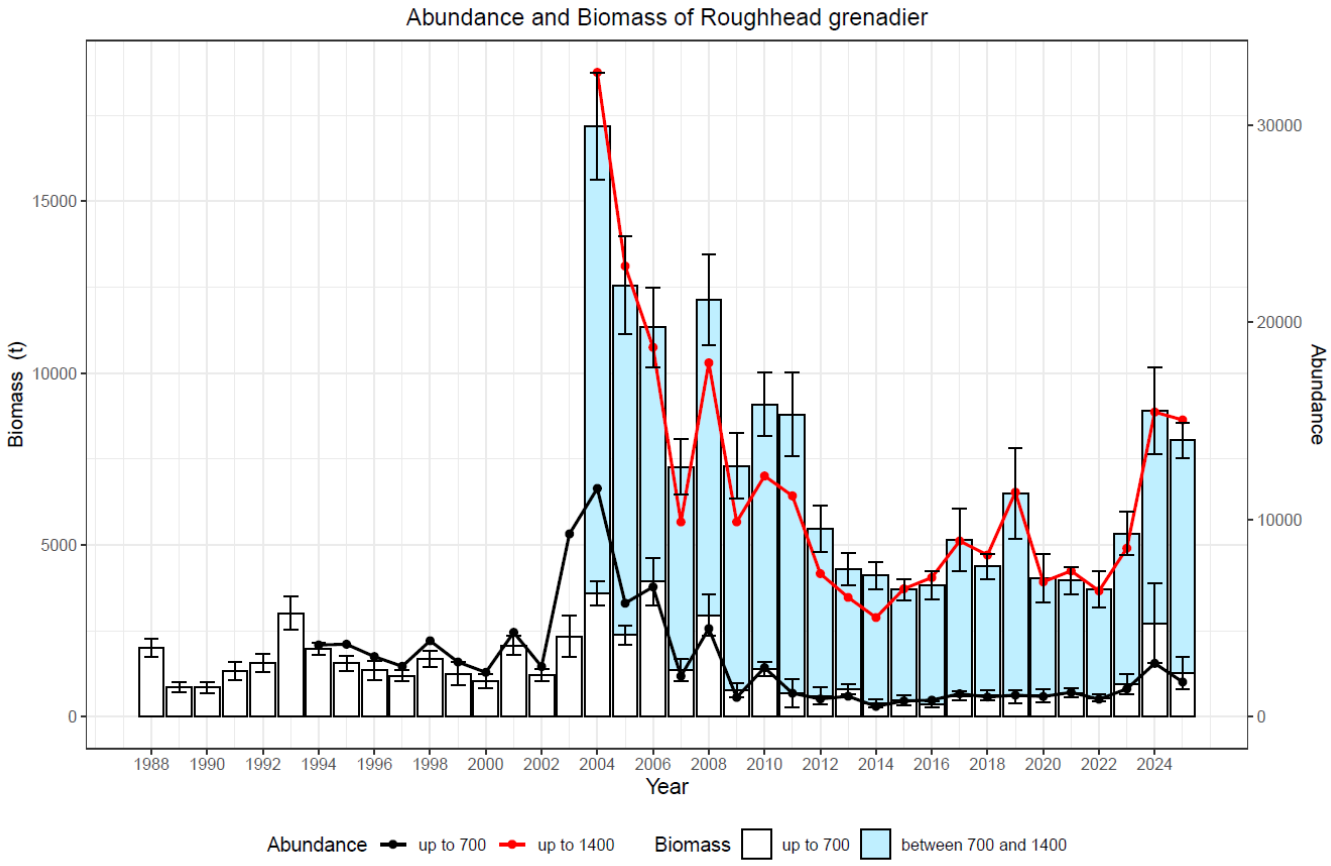

Figure 14. Roughhead grenadier (*Macrourus berglax*) biomass (t.) ± S.E. and number ('000) 1988-2025.

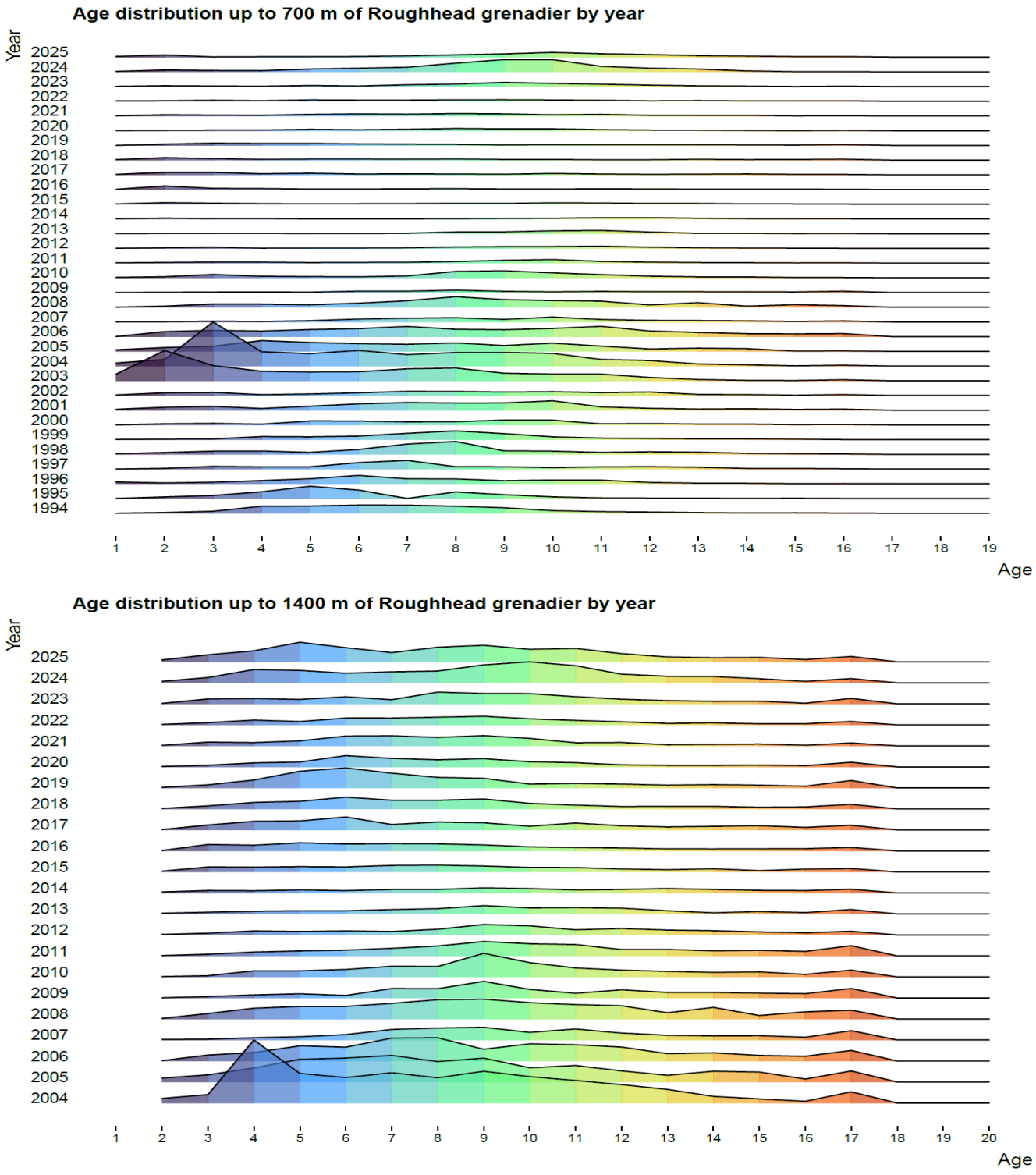

Figure 15. Roughhead grenadier (*Macrourus berglax*) age distribution on Flemish Cap in depths < 730 m. (up, 1988-2025) and until 1440 m. (bottom, 2004-2025), NAFO Div. 3M.

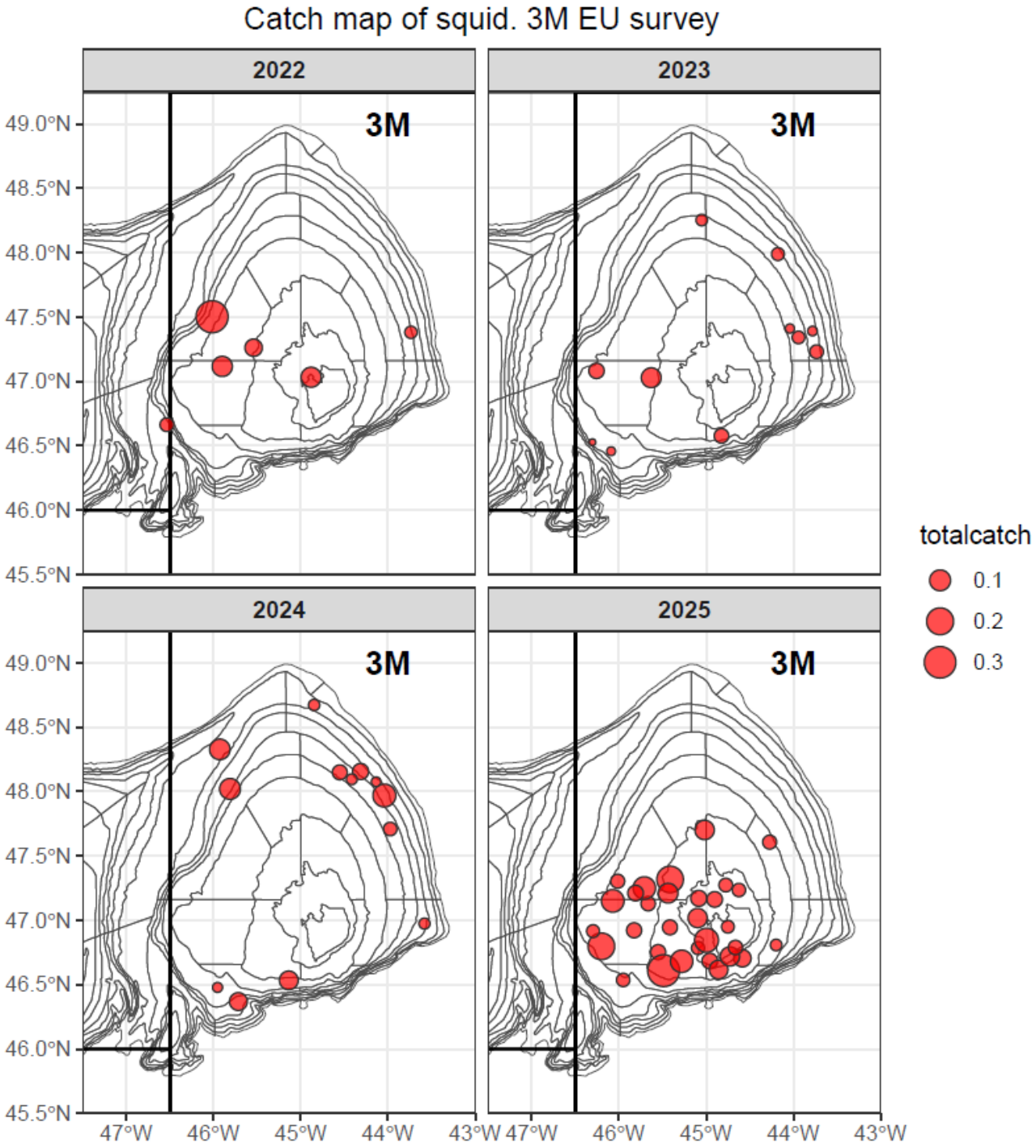

Figure 16. Squid (*Illex illecebrosus*) catch distribution (kg) in the last four surveys.

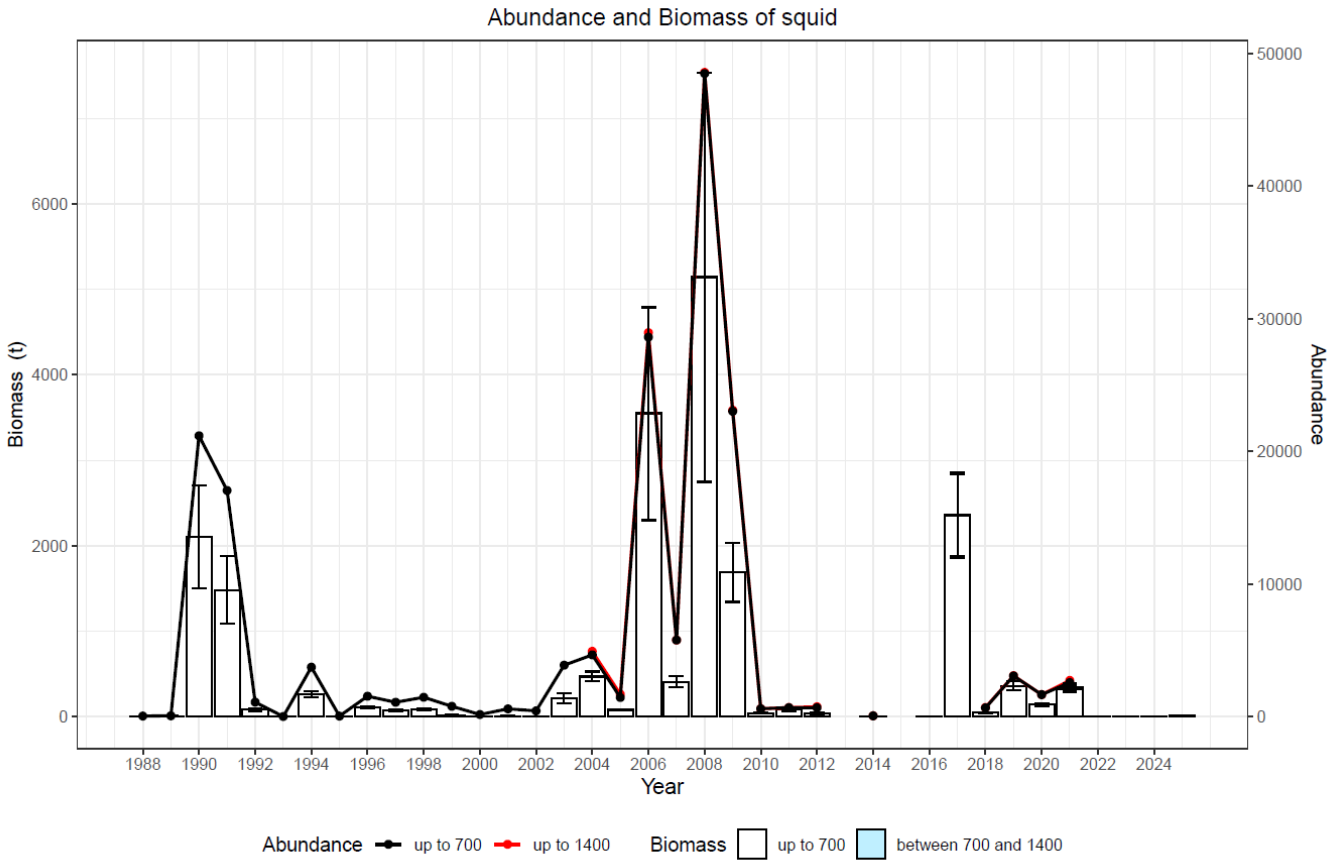

Figure 17. Squid (*Illex illecebrosus*) biomass (t.) ± S.E. and number ('000) 1988-2025.

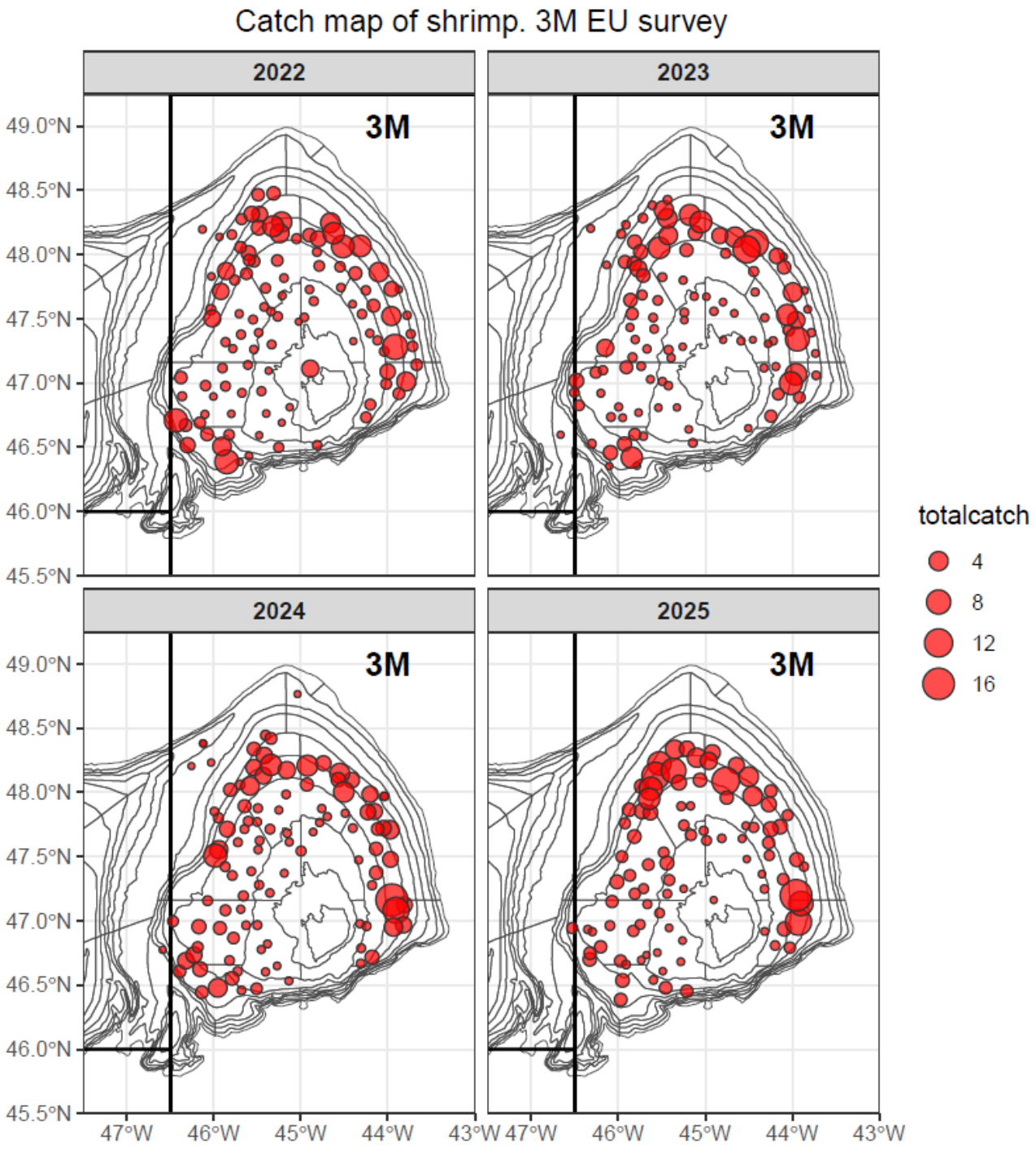

Figure 18. Shrimp (*Pandalus bolearis*) catch distribution (kg) in the last four surveys.

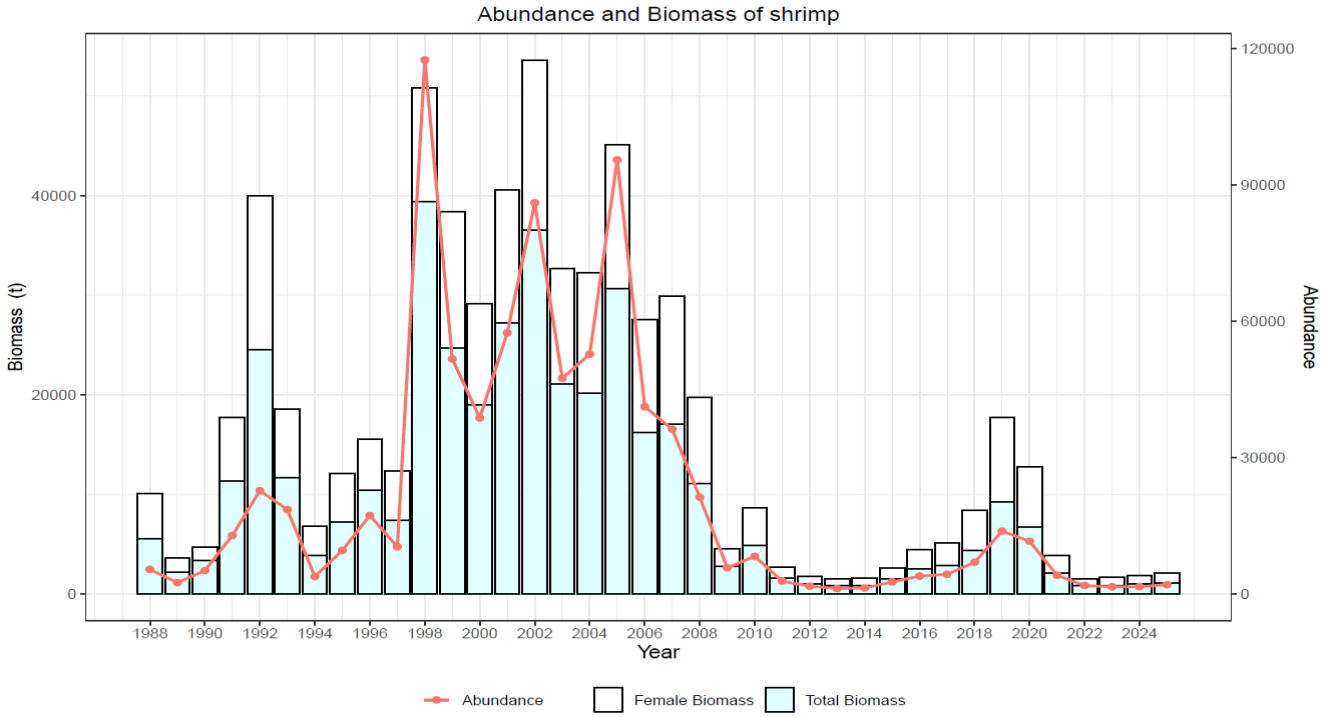

Figure 19. Shrimp (*Pandalus borealis*) biomass and female biomass (t.) and number ('00000) 1988-2025.

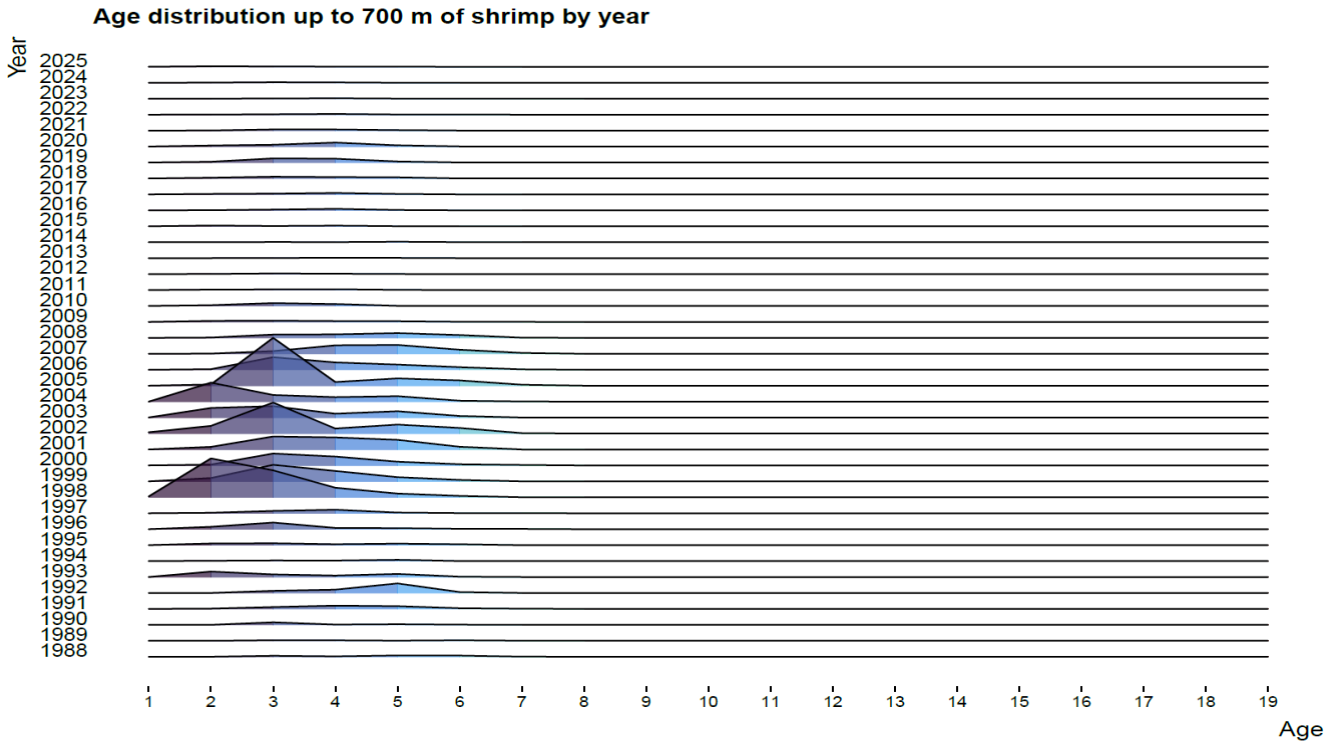

Figure 20. Shrimp age distribution on Flemish Cap, NAFO Div. 3M: 1988-2025.

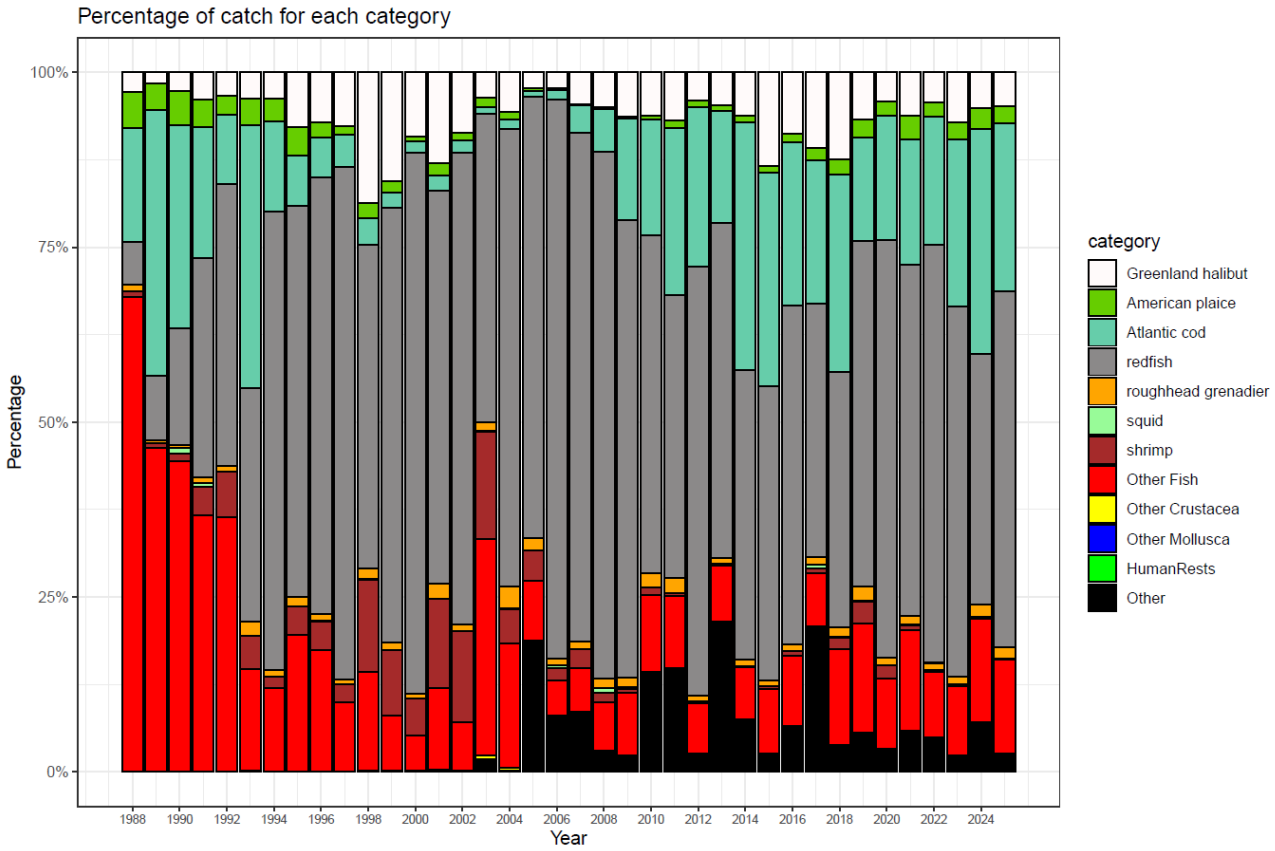

Figure 21. Biodiversity during the EU survey, 1988-2025.