

Black scabbardfish (*Aphanopus carbo*) in subareas 1, 2, 4–8, 10, and 14, and divisions 3.a, 9.a, and 12.b (Northeast Atlantic and Arctic Ocean)

ICES stock advice

ICES advises that when the precautionary approach is applied, catches in 2025 should be no more than 4 214 tonnes.

Non-fisheries conservation considerations

ICES has not identified any conservation aspects other than those related to the commercial fisheries.

Stock development over time

ICES cannot assess the stock and exploitation status relative to MSY and precautionary approach (PA) reference points because the reference points are undefined.

Catches

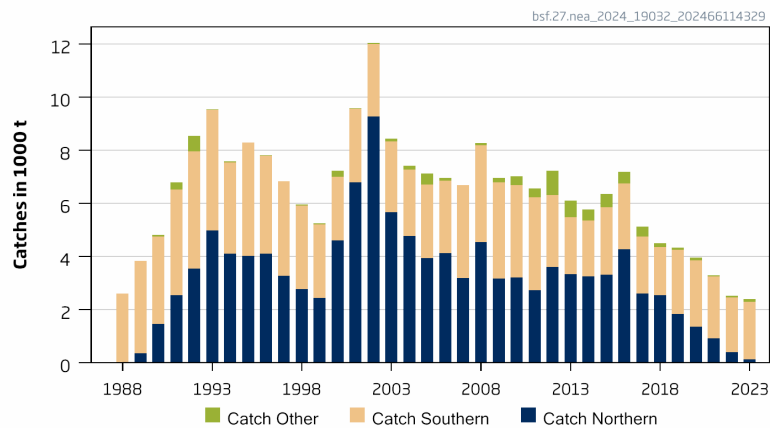


Figure 1 Black scabbardfish in the Northeast Atlantic. ICES estimates of catches (in thousand tonnes) in the Northern component (subareas 6, 7, and 12 and Division 5.b), Southern component (Subarea 8 and Division 9.a), and the adjacent areas (labelled as “other”).

Catch scenarios

The assessment could not be run in 2024 because the model input was considered unreliable. The advice for 2025 is therefore a rollover of the advice for 2023–2024. This is supported by the stability of the length frequency from the French fishery, the stable long-term abundance trend from the Scottish survey (SDS [G6642]), and the high-level stability of abundance in the Southern component (Figure 2).

Discards are negligible for this stock.

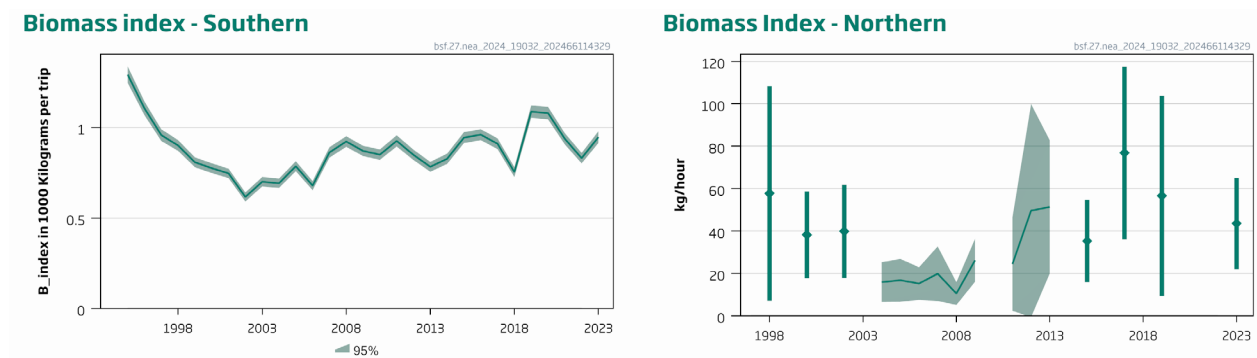


Figure 2 Black scabbardfish in the Northeast Atlantic. Left: biomass index in the Southern component; standardized landings-per-unit-effort (LPUE) in Subarea 8 and Division 9.a. Right: biomass index in the Northern component; Scottish deep-water survey index (G6642).

Basis of the advice

Table 2 Black scabbardfish in the Northeast Atlantic. The basis of the advice.

Advice basis	Rollover of the precautionary advice
Management plan	An EU multiannual management plan (MAP) has been agreed by the EU for this stock (EU, 2019). There is no agreement with all contracting parties regarding this plan, and it is not used as the basis of the advice for this shared stock.

Quality of the assessment

The previously used assessment model incorporates a standardized fishing effort index from the French bottom deep-water fishery in the Northern component (subareas 6, 7, and 12 and Division 5.b) and a biomass index from the Portuguese deep-water longline fishery in the Southern component (Subarea 8 and Division 9.a), taking into consideration the species' migration cycle in the Northeast Atlantic. For the present advice, the assessment model could not be updated as a consequence of substantial decrease in effort targeted to black scabbardfish of the French trawl fleet that operates in the Northern component. This is mainly the result of the EU ban on deepwater trawling and the reduced effort makes the use of the standardized fishing effort index uncertain. A benchmark is planned for early 2025.

Issues relevant for the advice

Advice for 2026 will be issued in 2025.

This stock is classified as Category 4 in the NEAFC categorization of deep-sea species/stocks (NEAFC, 2016). This implies that fisheries are primarily restricted to coastal state exclusive economic zones (EEZs) and, therefore, management measures are not taken by NEAFC unless complementary to coastal state conservation and management measures.

Reference points

No reference points have been defined for this stock.

Basis of the assessment

Table 3 Black scabbardfish in the Northeast Atlantic. The basis of the assessment.

ICES stock data category	3
Assessment type	No assessment in 2024 (ICES, 2024).
Input data	
Discards and bycatch	Considered negligible
Indicators	Scottish survey (SDS [G6642]) for the Northern component, biomass index for the Southern component, length data from French and Portuguese fisheries
Other information	Last benchmarked in 2014 (ICES, 2014); scheduled for benchmark early 2025
Working group	Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources (WGDEEP)

History of the advice, catch, and management

Table 4 Black scabbardfish in the Northeast Atlantic. History of ICES advice, the agreed TAC, and ICES landings in subareas 6–9 and in divisions 5.b and 12.b. Weights are in tonnes.

Year	ICES advice	Catch corresponding to advice in subareas 6–9 and in divisions 5.b and 12.b **	Catch corresponding to advice in Division 5.b, subareas 6–7, and Division 12.b	Catch corresponding to advice in Subarea 8 and Division 9.a	EU + UK TAC in subareas 5–7 and 12 ^	EU TAC in subareas 8–10	ICES landings in Division 5.b, subareas 6–7, and Division 12.b	ICES landings in subareas 8 and 9
2003	Significant effort reduction				3 100	4 000*	5 661	2 665
2004	Biennial				3 100	4 000*	4 768	2 503
2005	Significant effort reduction				3 100	4 000*	3 923	2 772
2006	Biennial				3 100	4 000*	4 127	2 726
2007	Constrain catches to the level before the expansion period (1990–1996)		3 500		3 000	4 000	3 192	3 481
2008	Biennial		3 500		3 000	4 000	4 532	3 647
2009	Constrain catches to the 50% level before the expansion period (1993–1997)		2 000	2 800	2 700	3 600	3 160	3 620
2010	Biennial		2 000	2 800	2 400	3 300	3 202	3 470
2011	Same advice as previously		2 000	2 800	2 400	3 300	2 733	3 494
2012	No new advice, same as 2011		2 000	2 800	2 200	3 300	3 592	2 711
2013	No more than 20% (in Division 5.b, subareas 6 and 7, and Division 12.b) or 5% (in subareas 8 and 9) catch increase		4 700	3 700	3 100	3 700	3 332	2 140
2014	No new advice, same as 2013		4 700	3 700	4 000	3 700	3 048	2 118
2015	Same catch as in 2013		2 802	2 726	3 649	3 700	3 291	2 532
2016	No new advice, same as 2015		2 802	2 726	3 357	3 700	3 545	2 476
2017	Precautionary approach (same value as advised catches for 2016)		≤ 2 802	≤ 2 726	2 954	3 330	2709	2 151

Year	ICES advice	Catch corresponding to advice in subareas 6–9 and in divisions 5.b and 12.b **	Catch corresponding to advice in Division 5.b, subareas 6–7, and Division 12.b	Catch corresponding to advice in Subarea 8 and Division 9.a	EU + UK TAC in subareas 5–7 and 12 ^	EU TAC in subareas 8–10	ICES landings in Division 5.b, subareas 6–7, and Division 12.b	ICES landings in subareas 8 and 9
2018	Precautionary approach (same value as advised catches for 2016)		≤ 2 802	≤ 2 726	2 600	2 997	2 545	1 801
2019	Precautionary approach	≤ 5 914	≤ 2 812	≤ 2 735	2 470	2 832	1 839	2 409
2020	Precautionary approach (same value as advised catches for 2019)	≤ 5 914	≤ 2 812	≤ 2 735	2 470	2 832	1 350	2 507
2021	Precautionary approach	≤ 4 506	≤ 2 143	≤ 2 084	1 929	2 266	907	2 348
2022	Precautionary approach (same value as advised catches for 2021)	≤ 4 506	≤ 2 143	≤ 2 084	1 929	2 266	390	2 063
2023	Precautionary approach	≤ 4 214	***	***	1 813	2 130	120	2 163
2024	Precautionary approach (same value as advised catches for 2023)	≤ 4 214	***	***	1 370	2 327		
2025	Precautionary approach	≤ 4 214	***	***				

* Subarea 8 not included.

** Total advice for entire assessed stock.

*** Total advice not split by region.

^ The UK quota was included in the EU TAC until 2020.

Table 5 Black scabbardfish in the Northeast Atlantic. History of ICES advice, the agreed TAC, and ICES landings in subareas 1, 2, 4, 10, and 14 and in divisions 3.a and 5.a (adjacent areas). Weights are in tonnes.

Year	ICES advice	Catch corresponding to advice	EU TAC in subareas 1–4	ICES landings in other areas*
2003	<i>Status quo</i> exploitation level	-	30	112
2004	Biennial	-	30	136
2005	Fishery should not be allowed to expand, unless proven to be sustainable	-	30	427
2006	Biennial	-	30	102
2007	Fishery should not be allowed to expand, unless proven to be sustainable	-	15	3
2008	Biennial	-	15	75
2009	Fishery should not be allowed to expand, unless proven to be sustainable	-	12	182
2010	Biennial	-	12	338
2011	Fishery should not be allowed to expand, and a reduction in catches should be considered	-	12	337
2012	No new advice, same as 2011		9	916
2013	Fisheries should not be allowed to expand until they can be shown to be sustainable		9	621
2014	No new advice, same as 2013		9	398

Year	ICES advice	Catch corresponding to advice	EU TAC in subareas 1–4	ICES landings in other areas*
2015	Should be maintained at same level as in 2013	366	9	508
2016	No new advice, same as 2015	366	9	441
2017	Precautionary approach (same advised catches value as given for 2016)	≤ 366	9	364
2018	Precautionary approach (same advised catches value as given for 2016)	≤ 366	9	157
2019	Precautionary approach (5 914 tonnes**)	≤ 367	-	86
2020	Precautionary approach (same value as advised catches for 2019)	≤ 367	-	107
2021	Precautionary approach (4 506 tonnes**)	≤ 280	-	33
2022	Precautionary approach (same value as advised catches for 2021)	≤ 280	-	63
2023	Precautionary approach (4 214 tonnes**)	***	-	104
2024	Precautionary approach (same value as advised catches for 2023)	***	-	
2025	Precautionary approach (4 214 tonnes**)	***		

* Subareas 1–4, 10, and 14 and Division 5.a.

** Total advice for entire assessed stock.

*** Total advice not split by region.

History of catch and landings

Table 6 Black scabbardfish in the Northeast Atlantic. Catch distribution by fleet in 2023 as estimated by ICES.

Total catch (2023)	Landings			Discards
2 387 t	5% bottom trawl (Northern component)	91% longline (Southern component)	4% bottom trawl and longline (other areas)	Negligible
	120 t	2 163 t	104 t*	

* Catches are likely to include *A. intermedius*, but the proportion is not quantified.

Table 7 Black scabbardfish in the Northeast Atlantic. History of ICES estimated landings (in tonnes) in subareas 6, 7, and 12 and in Division 5.b, presented by each country participating in the fishery.

Year	Faroes	France	UK (E,W,S)	Spain	Germany	Ireland	Netherlands*	Lithuania*	Estonia*	Poland*	Russia	Iceland	Total
1988	0	0	0	0	0	0	0	0	0	0	0	0	0
1989	46	308	0	0	0	0	0	0	0	0	0	0	354
1990	12	1449	0	0	0	0	0	0	0	0	0	0	1461
1991	1	2536	0	0	0	0	0	0	0	0	0	0	2537
1992	7	3540	0	0	0	0	0	0	0	0	0	0	3547
1993	1315	3511	0	0	150	8	0	0	0	0	0	0	4984
1994	893	3102	2	0	91	3	0	0	0	0	0	0	4091
1995	550	3437	18	0	3	0	0	0	0	0	0	0	4008
1996	244	3775	37	41	2	0	0	0	0	0	0	0	4099
1997	123	2806	237	99	0	0	0	0	0	0	0	0	3265
1998	56	2416	149	136	0	0	0	0	0	0	0	0	2757
1999	13	2109	198	109	0	1	11	0	0	0	0	0	2440
2000	117	3745	426	327	0	59	7	0	0	0	0	0	4681
2001	406	5007	729	116	0	68	0	3	225	0	226	0	6779
2002	1362	4626	1080	1125	0	1050	23	9	0	2	0	0	9277
2003	1497	3423	104	446	0	160	2	13	7	3	7	0	5663
2004	859	3093	197	230	0	293	0	86	5	0	5	0	4768
2005	593	2881	101	239	0	79	0	5	12	0	11	0	3920
2006	758	2214	65	1009	0	72	0	1	5	0	3	0	4127
2007	754	2299	53	9	0	69	0	0	7	0	0	0	3192
2008	1747	2687	26	53	0	0	14	0	0	0	5	0	4532
2009	1165	1795	81	103	0	0	0	0	0	0	0	0	3144
2010	916	2002	104	290	0	0	0	0	0	0	0	0	3312
2011	493	2121	1	113	0	0	0	0	0	0	0	0	2728
2012	138	1752	34	117	0	0	0	0	0	0	0	0	2042
2013	583	2155	57	109	0	0	0	0	0	0	0	0	2904
2014	921	2055	110	149	0	0	3	0	0	0	0	0	3239
2015	750	2197	124	224	0	0	5	0	0	0	0	0	3301
2016	1428	2479	96	247	0	0	1	0	0	0	0	0	4251
2017	429	1840	101	221	0	0	0	0	0	0	0	0	2592
2018	553	1677	65	249	0	0	0	0	0	0	0	0	2544
2019	489	1196	45	108	0	0	0	0	0	0	0	0	1838
2020	419	822	20	88	0	0	0	0	0	0	0	0	1350
2021	143	689	68	7	0	0	0	0	0	0	0	0	907
2022	16	367	5	2	0	0	0	0	0	0	0	0	390
2023	1	102	14	3	0	0	0	0	0	0	0	0	120

* Official landings

Table 8 Black scabbardfish in the Northeast Atlantic. History of ICES estimated landings (in tonnes) in Subarea 8 and in Division 9.a, presented by each country participating in the fishery.

Year	Portugal	Spain	France	Total
1988	2602	0	0	2602
1989	3473	0	0	3473
1990	3274	0	0	3274
1991	3978	0	1	3979
1992	4389	0	9	4398
1993	4513	0	11	4524
1994	3429	0	5	3434
1995	4272	0	0	4272
1996	3686	3	0	3689
1997	3553	1	1	3555
1998	3147	4	2	3153
1999	2741	0	11	2753
2000	2371	1	35	2407
2001	2744	1	28	2773
2002	2692	1	35	2728
2003	2630	1	34	2665
2004	2463	1	39	2503
2005	2746	1	25	2772
2006	2674	0	52	2726
2007	3453	1	28	3481
2008	3602	1	45	3647
2009	3601	1	19	3620
2010	3453	0	17	3470
2011	3476	0	18	3494
2012	2668	30	14	2711
2013	2130	3	7	2140
2014	2109	0	9	2118
2015	2527	0	5	2532
2016	2456	17	3	2476
2017	2117	32	2	2151
2018	1727	65	9	1801
2019	2302	83	25	2409
2020	2369	99	39	2507
2021	2245	73	30	2348
2022	1994	44	25	2063
2023	2092	58	13	2163

Table 9 Black scabbardfish in the Northeast Atlantic. History of ICES estimated landings (in tonnes) in subareas 2, 4, 10, and 14 and in Division 5.a, presented by each country participating in the fishery.

Year	France	Faroes	UK (Scot)	Iceland	Portugal**	Ireland	Spain	Unallocated	Total
1988	0	0	0	0	0	0	0	0	0
1989	3	0	0	0	0	0	0	0	3
1990	71	0	0	0	0	0	0	0	71
1991	107	0	0	0	166	0	0	0	273
1992	219	370	0	0	0	0	0	0	589
1993	34	0	0	0	2	0	0	0	36
1994*	45	0	0	1	0	0	0	0	49
1995	6	0	2	0	3	0	0	0	11
1996	6	11	1	0	0	0	0	0	18
1997	0	3	2	1	0	0	0	0	6
1998	2	33	9	0	5	0	0	0	49
1999	4	0	3	6	46	0	0	0	58
2000	2	0	3	10	112	0	90	0	217
2001	1	0	11	5	0	0	0	0	18
2002	0	2	24	13	0	0	8	0	47
2003	1	0	4	14	91	0	2	0	112
2004	5	111	0	19	2	0	0	0	136
2005	2	83	0	19	323	0	0	0	427
2006	13	10	1	23	55	0	0	0	102
2007	1	1	0	1	0	0	0	0	3
2008	0	75	0	0	0	0	0	0	75
2009	5	157	0	15	5	0	0	0	182
2010	16	53	0	109	49	0	111	0	338
2011	1	25	0	172	139	0	0	0	337
2012	0	4	0	365	458	0	39	49	916
2013	1	0	0	324	206	0	50	40	621
2014	10	30	0	358	0	0	0	0	398
2015	2	234	0	265	7	0	0	0	508
2016	9	0	36	346	50	0	0	0	441
2017	0	0	63	294	7	0	0	0	364
2018	1	0	0	142	14	0	0	0	157
2019	1	3	0	65	17	0	0	0	86
2020	4	0	0	103	0	0	0	0	107
2021	2	0	0	31	0	0	0	0	33
2022	0	0	0	63	0	0	0	0	63
2023	0	0	0	55	49	.	0	0	104

* In 1994, there were 3 t taken by Germany.

** Catches in Division 10 are likely to include *A. intermedius*, but the proportion is not quantified.

Table 10 Black scabbardfish in the Northeast Atlantic. Landings inside and outside the NEAFC regulatory areas (RAs) as estimated by ICES. Landings in tonnes. Differences in the total with other tables are caused by catches that are not allocated (inside or outside).

Year	Inside the NEAFC RAs	Outside the NEAFC RAs	Total landings	Percentage inside the NEAFC RAs (%)
2014	234	5524	5759	4.1
2015	433	5918	6352	6.8
2016	223	6954	7177	3.1
2017	266	4844	5110	5.2
2018	168	4348	4516	3.7
2019	104	4230	4334	2.4
2020	78	3885	3964	2.0
2021	17	3272	3288	0.5
2022	6	2511	2517	0.2
2023	3	2384	2387	0.1

Summary of the assessment

Table 11 Black scabbardfish in the Northeast Atlantic. Assessment summary. ‘High’ and ‘Low’ indicate 95% confidence intervals.

Year	Catches			
	Total	Northern	Southern	Other
	tonnes			
1988	2602	0	2602	0
1989	3830	354	3473	3
1990	4805	1461	3274	71
1991	6790	2537	3979	273
1992	8534	3547	4398	589
1993	9544	4984	4524	36
1994	7574	4091	3434	49
1995	8291	4008	4272	11
1996	7806	4099	3689	18
1997	6826	3265	3555	6
1998	5959	2757	3153	49
1999	5251	2440	2753	58
2000	7214	4591	2407	217
2001	9570	6779	2773	18
2002	12044	9269	2728	47
2003	8437	5661	2665	112
2004	7407	4768	2503	136
2005	7123	3923	2772	427
2006	6955	4127	2726	102
2007	6676	3192	3481	3
2008	8255	4532	3647	75
2009	6962	3160	3620	182
2010	7010	3202	3470	338
2011	6564	2733	3494	337
2012	7227	3600	2711	916
2013	6094	3332	2140	621
2014	5759	3240	2118	398
2015	6352	3312	2532	508
2016	7177	4260	2476	441
2017	5110	2595	2151	364
2018	4516	2545	1801	157
2019	4334	1839	2409	86
2020	3964	1350	2507	107
2021	3288	907	2348	33
2022	2517	390	2063	63
2023	2387	120	2163	104

Sources and references

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[Download the stock assessment data and figures](#)

Recommended citation: ICES. 2024. Black scabbardfish (*Aphanopus carbo*) in subareas 1, 2, 4–8, 10, and 14 and divisions 3.a, 9.a, and 12.b (Northeast Atlantic and Arctic Ocean). In Report of the ICES Advisory Committee, 2024. ICES Advice 2024, bsf.27.nea. <https://doi.org/10.17895/ices.advice.25019180>