

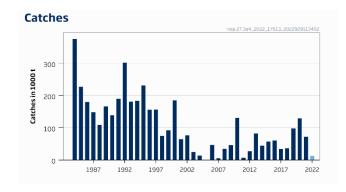
## Norway pout (Trisopterus esmarkii) in Subarea 4 and Division 3.a (North Sea, Skagerrak, and Kattegat)

# ICES advice on fishing opportunities

ICES advises that when the MSY approach is applied, catches from 1 November 2022 to 31 October 2023 should be no more than 116 823 tonnes.

#### Stock development over time

Spawning-stock size is above  $B_{pa}$  and  $B_{lim}$ ; no reference points for fishing pressure or for MSY  $B_{trigger}$  have been defined for this stock.



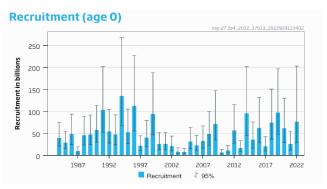






Figure 1 Norway pout in Subarea 4 and Division 3.a. Summary of the stock assessment. Catches in 2022 (unshaded) are up to mid-September. SSB is estimated at the beginning of quarter 4.

### **Catch scenarios**

**Table 1** Norway pout in Subarea 4 and Division 3.a. Values in the forecast and for the interim year.

Variable	Value	Notes
Fages 1-2	0.218	Fishing mortality from the 4th quarter of 2021 to the 3rd quarter of 2022; from the
· ages 1-2	0.220	assessment model
SSB (4th quarter 2022)	122 199	From the assessment model; tonnes
R <sub>age 0</sub> (2022)	76 654	Age 0 in the 3rd quarter of 2022. From the assessment model; millions.
R <sub>age 0</sub> (2023)	48 099	Resampled from estimated historical recruitments; millions
Catch	43701	Based on landings statistics from the 4th quarter of 2021 to 15 September 2022; tonnes
Discards	0	Industrial fishery with negligible discarding; tonnes

**Table 2** Norway pout in Subarea 4 and Division 3.a. Annual catch scenarios. All weights are in tonnes.

of way pout in Subarea 4 and Division 5.a. Annual catch scenarios. An weights are in tollies.							
Catch	F	5th parcantila CCD	Median SSB	% SSB	% catch	% advice	
(1 November 2022-	(1 November 2022-	· · · · · · · · · · · · · · · · · · ·	(4th quarter	change	change	change	
31 October 2023)*	31 October 2023)	(4til qualter 2025)	2023)	**	***	٨	
116 823	0.635	42 570	133 480	9.2	167	-1.23	
0	0.000	80 120	190 620	56	-100	-100	
45 564	0.220	63 550	165 940	36	4.3	-61	
61 133	0.303	58 530	158 540	30	40	-48	
79 162	0.405	52 850	149 820	23	81	-33	
95 769	0.503	48 010	142 220	16.4	119	-19.0	
111 636	0.603	43 870	135 600	11.0	155	-5.6	
126 284	0.705	40 520	129 060	5.6	189	6.8	
	Catch (1 November 2022– 31 October 2023)*  116 823  0 45 564 61 133 79 162 95 769 111 636	Catch (1 November 2022–31 October 2023)*  116 823  0.635  0.000  45 564 0.220 61 133 0.303 79 162 0.405 95 769 0.503 111 636 0.603	Catch (1 November 2022– 31 October 2023)*  116 823  0.635  0.635  116 823  0.635  116 823  0.635  116 823  0.635  116 823  0.635  116 823  0.635  116 823  0.635  0.635  116 823  0.635	Catch (1 November 2022– 31 October 2023)*  116 823  0.635  0.635  12 5th percentile SSB (4th quarter 2023)  Median SSB (4th quarter 2023)  116 823  0.635  42 570  133 480  0.000  80 120  190 620  45 564  0.220  63 550  165 940  61 133  0.303  58 530  158 540  79 162  0.405  79 162  0.503  48 010  142 220  111 636  0.603  43 870  135 600	Catch (1 November 2022– 31 October 2023)*  116 823  0.635  0.635  12 5th percentile SSB (4th quarter 2023)  133 480  9.2  0.635  42 570  133 480  9.2  0.635  42 570  133 480  9.2  0.635  10 0.000	Catch (1 November 2022– 31 October 2023)*  Sth percentile SSB (4th quarter 2023)*  Median SSB (4th quarter 2023)*  116 823  0.635  42 570  133 480  9.2  167  0 0.000  80 120  190 620  56 -100  45 564  0.220  63 550  165 940  36 4.3  61 133  0.303  58 530  158 540  30 40  79 162  0.405  52 850  149 820  23 81  95 769  0.503  48 010  142 220  16.4  119  111 636  0.603  43 870  135 600  11.0  155	

<sup>\*</sup> The catch forecast is for the period 1 October to 30 September.

#### Basis of the advice

**Table 3** Norway pout in Subarea 4 and Division 3.a. The basis of the advice.

Advice basis	MSY approach (escapement strategy based on stochastic projections) with an $F_{cap}$ ( $F_{bar[1-2]}$ ) = 0.7
	ICES is not aware of any agreed precautionary management plan for Norway pout in this area.
Management plan	ICES has previously evaluated a proposed management plan from Norway and EU (ICES, 2018a, 2018b, 2018c). ICES escapement strategy was found only to be precautionary with an $F_{cap}$ at or below 0.7.

# Quality of the assessment

The assessment shows a tendency in recent years to overestimate SSB and to underestimate F.



Figure 2 Norway pout in Subarea 4 and Division 3.a. Historical assessment results. Fishing pressure (F) for 2022 is not shown because it can be estimated only up to quarter 3. The SSB shown is for the beginning of quarter 4, and the recruitment (rec) is for quarter 3. The reference points were revised in 2020 because there was a change to the survey index input data, and only the last three assessment results should be compared to the reference points indicated.

<sup>\*\*</sup> SSB at the beginning of the 4th quarter of 2023 relative to SSB at the beginning of the 4th quarter of 2022 (= 122 199 tonnes).

<sup>\*\*\*</sup> Catches 1 October 2022–30 September 2023 relative to catches 1 October 2021–15 September 2022 (= 43 701 tonnes).

<sup>^</sup> Advice value 2023 relative to the advice value 2022 (= 118 273 tonnes).

#### Issues relevant for the advice

Norway pout is a short-lived species. Recruitment is highly variable and strongly influences both the spawning-stock and total biomass. ICES approach to MSY-based management for short-lived species has been used here in the form of an escapement strategy based on a stochastic forecast, i.e. to maintain, with 95% probability, SSB above  $B_{lim}$  after the fishery has taken place. This includes an  $F_{cap}$  at 0.7, which was not required this year because the advised F is below 0.7.

For the implementation of the escapement strategy SSB is calculated at the beginning of quarter 4 as a proxy for SSB at spawning time (quarter 1).

The catch forecast is for the period 1 October to 30 September. ICES considers that this forecast sufficiently approximates the TAC period and that it can be used directly for management purposes for the period 1 November 2021–31 October 2022.

#### **Reference points**

**Table 4** Norway pout in Subarea 4 and Division 3.a. Reference points, values, and their technical basis.

Framework	Reference point	Value	Technical basis	Source
MSY approach	MSY B <sub>escapement</sub>	Not defined*		
	F <sub>MSY</sub>	Not defined		
	F <sub>cap</sub>	0.70	A long-term management strategy evaluation, indicating that an escapement strategy for Norway pout is only precautionary with the addition of an upper limit on fishing mortality = $F_{cap}$ ( $F_{bar[1-2]}$ ) at 0.7	ICES (2020)
	B <sub>lim</sub>	42 573 tonnes (4th quarter)	$B_{lim} = B_{loss}$ , the lowest observed biomass in 2005 (as estimated in the updated benchmark assessment)	ICES (2020)
Precautionary approach	B <sub>pa</sub>	69 736 tonnes (4 <sub>th</sub> quarter)	$B_{pa} = B_{lim} e^{0.3 \times 1.645}$	ICES (2020)
	F <sub>lim</sub>	Not defined		
	F <sub>pa</sub>	Not defined		
Management	SSB <sub>mgt</sub>	Not applicable		
plan	F <sub>mgt</sub>	Not applicable		

<sup>\*</sup> MSY B<sub>escapement</sub> has not been defined, as the escapement strategy uses directly the 95% probability of SSB being above B<sub>lim</sub>.

#### Basis of the assessment

**Table 5** Norway pout in Subarea 4 and Division 3.a. Basis of the assessment and advice.

ICES stock data category	1 (ICES, 2022a)
Assessment type	Age-based analytical assessment (quarterly SAM model, called SESAM)
Input data	Commercial catches (quarterly catches; catch-at-age and mean weight-at-age from catch sampling from the main Danish and Norwegian fisheries), four survey indices (IBTS Q1 [G1022], IBTS Q3 [G2829], EngGFS-IBTS-Q3 [G2829], and ScoGFS-IBTS-Q3 [G2829]). Constant maturity data from survey estimates, constant natural mortality estimated from survey indices (IBTS Q1&3), and constant mean weight-at-age in the stock from long-term commercial catch estimates.
Discards and bycatch	Discarding and bycatch of Norway pout is considered negligible and not included in the assessment
Indicators	None
Other information	Benchmarked in 2016 (ICES, 2016)
Working group	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak ( <u>WGNSSK</u> )

# History of the advice, catch, and management

**Table 6**Norway pout in Subarea 4 and Division 3.a. History of ICES advice, agreed TACs, official catch, and ICES catch estimate.
All weights are in tonnes. Catch values prior to 2004 are presented to the nearest thousand tonnes.

All weights are in tonnes. Catch values prior to 2004 are presented to the nearest thousand tonnes.									
Year	ICES advice	Predicted catch corresponding to advice^^	TAC Norway	TAC EU^	TAC UK^	Official catch (including bycatch of other species)	ICES catch		
1987	No advice	-	No TAC	200000		215000	149300		
1988	No advice	-	No TAC	200000		187000	109300		
1989	No advice	-	No TAC	200000		276000	166400		
1990	No advice	-	No TAC	200000		212000	163300		
1991	No advice	-	No TAC	200000		223000	186600		
1992	No advice	-	No TAC	200000		335000	296800		
1993	No advice	=	No TAC	220000		241000	183100		
1994	No advice	-	No TAC	220000		214000	182000		
1995	Can sustain current F	-	No TAC	180000		289000	236800		
1996	Can sustain current F; take bycatches into consideration	-	No TAC	220000		197000	163800		
1997	Can sustain current F; take bycatches into consideration	-	No TAC	220000		155000	169700		
1998	Can sustain current F; take bycatches into consideration	-	No TAC	220000		72000	79800		
1999	Can sustain current F; take bycatches into consideration	-	No TAC	220000		93000	94500		
2000	Can sustain current F; take bycatches into consideration	-	No TAC	220000		182000	184400		
2001	Can sustain current F; take bycatches into consideration	-	No TAC	211200		63000	65600		
2002	Can sustain current F; take bycatches into consideration	-	No TAC	198000		93000	80000		
2003	Can sustain current F; take bycatches into consideration	-	No TAC	198000		24000	27100		
2004	The stock is at risk of decreasing below B <sub>lim</sub>	-	No TAC	198000		7640	13500		
2005	Fishery should be closed		1000	5000		1927	1927		
2006	Fishery closed until 4th August, where a TAC of 95 000 tonnes was set		1000	95000		53599	46626		
2007	Fishery closed because SSB < B <sub>pa</sub> in 2008	0	1000	5000		5792	5792		
2008	F = 0.35 or 50 000 tonnes for first half of 2008	< 50000 in first six months		41000					
In-year*	Maintain SSB > B <sub>pa</sub>	< 148000	37500	114616		39222	36138		
2009	Reduce F to increase SSB > B <sub>pa</sub>	< 35000		28300					
In-year*	Maintain SSB > B <sub>pa</sub>	< 157000	128170	116279		57170	54500		
2010	Maintain SSB > B <sub>pa</sub>	< 307000	86000	76000					
In-year*	Maintain SSB > MSY B <sub>escapement</sub>	< 434000		162950		136974	125955		
2011	No directed fisheries	0							
In-year*	Maintain SSB > MSY B <sub>escapement</sub>	< 6000	3150	4500		7283	6524		

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Year	ICES advice	Predicted catch corresponding to advice^^	TAC Norway	TAC EU^	TAC UK^	Official catch (including bycatch of other species)	ICES catch
2012	No fisheries	0		0			
In-year*	No fisheries	0				30148	27073
In-year**	Maintain SSB > MSY B <sub>escapement</sub>	< 101000	25000	70683			
2013	Maintain SSB > MSY B <sub>escapement</sub>	< 458000 (Catch <sub>2012</sub> = 0) < 393000 (Catch <sub>2012</sub> = 101)	157000	165700		84969	82100
In-year*	Maintain SSB > MSY B <sub>escapement</sub>	< 457000					
2014	Maintain SSB > MSY B <sub>escapement</sub>	< 216000	108000	128250		47120	44170
In-year*	Maintain SSB > MSY B <sub>escapement</sub>	< 108000	123000				
2015	Precautionary considerations (F = 0.6)	< 326000	178000	150000		63430	63400
2016	MSY approach (escapement biomass with F <sub>cap</sub> )	< 390000	210000	150000		62770	63400
2017	MSY approach (escapement strategy; probability of SSB falling below B <sub>lim</sub> is less than 5%)	≤ 358471	204235	141950		33847	33933
2018	MSY approach (escapement strategy; probability of SSB falling below B <sub>lim</sub> is less than 5%)	≤ 212531	90978	85265		36060	36147
2019	MSY approach (escapement strategy; probability of SSB falling below B <sub>lim</sub> is less than 5%) with F <sub>cap</sub> = 0.7	≤ 135459	82230	55000		100279	97654
2020	MSY approach (escapement strategy; probability of SSB falling below B <sub>lim</sub> is less than 5%) with F <sub>cap</sub> = 0.7	≤ 167105	98053	72500		129609	129497
2021	MSY approach (escapement strategy; probability of SSB falling below B <sub>lim</sub> is less than 5%) with F <sub>cap</sub> = 0.7	≤ 254038	127019	116555	11745	72479	71954

Year	ICES advice	Predicted catch corresponding to advice^^	TAC Norway	TAC EU^	TAC UK^	Official catch (including bycatch of other species)	ICES catch
2022	MSY approach (escapement strategy; probability of SSB falling below B <sub>lim</sub> is less than 5%)	≤ 118273	59137	49524	10204		
2023	MSY approach (escapement strategy; probability of SSB falling below B <sub>lim</sub> is less than 5%)	≤ 116823					

<sup>\*</sup> Between 2008 and 2014, advice was provided in autumn, while the in-year advice was given in June on the basis of the first surveys and catches in the TAC year.

# History of the catch and landings

Table 7 Norway pout in Subarea 4 and Division 3.a. Catch distribution by fleet in 2021 as estimated by ICES.

Catch	Landings	Discards
71 954 tonnes	Small-meshed trawl fleet 100%	Modigible
71 954 tonnes	71 954 tonnes	Negligible

**Table 8a** Norway pout in Division 3.a. History of commercial catch as officially reported to ICES; values are presented for each country participating in the fishery. All weights are in tonnes.

Division 3.a	Denmark	Faroe Islands	Norway	Sweden	Germany	Total
2004	110	45	41	-	54	250
2005	-	-	-	-	-	0
2006	18	=	2		-	20
2007	24	-	1	1	-	24
2008	156	-	1	1	-	156
2009	-	-	209	1	1	209
2010	51	-	711	10	-	772
2011	2	-	-	-	-	2
2012	118	-	-	-	-	118
2013	6945	-	147	1	-	7093
2014	538	-	9	1	-	548
2015	2220	-	41	1	-	2262
2016	918	-	82	1	-	1001
2017	110	-	72	4	2	188
2018	159	-	6	1	-	166
2019	1125	-	6	181	-	1312
2020	585	-	16	13	-	614
2021	1942	-	1	2	-	1945

<sup>\*\*</sup> Update of in-year advice in October 2012.

<sup>^</sup> From 2018, the TAC for EU Member States and UK fishing in EU and UK waters is provided for the period 1 November of the previous year to 31 October of the current year. The EU TAC included UK up to 2020.

<sup>^^</sup> Starting with the advice for 2016, ICES advice has been provided for the period 1 November of the previous year to 31 October of the current year.

**Table 8b** Norway pout in Subarea 4 (Division 4.a). History of commercial catch as officially reported to ICES; values are presented for each country participating in the fishery. All weights are in tonnes.

Division 4.a	Denmark	Faroe Islands	Netherlands	Germany	Norway	Sweden	UK (Scotland)	Total
2004	10762	1085	-	-	4953	-	-	16800
2005	941*	24	ı	-	962	-	-	1927
2006	39531	=	-	15	13618	-	-	53164
2007	59	-	-	-	4712	-	-	4771
2008	32158	=	ı	-	6650	10	-	38818
2009	19226	-	22	-	36961	-	-	56209
2010	71032	-	18	-	64303	**	29	135382
2011	4038	-	-	-	3189	1	-	7228
2012	25431	-	-	-	4528	3	-	29962
2013	31375	-	-	-	45839	4	-	77218
2014	27894	-	-	-	18647	1	8	46550
2015	10760	5270	17	22	43742	12	3	59826
2016	21125	3156	8	27	35959	-	12	60287
2017	12312	-	1	1	21275	-	-	33589
2018	10367	-	2	-	25498	4	-	35871
2019	35647	3034	-	-	59546	32	-	98259
2020	59402	-	88	4	63726	35	82	123337
2021	39871	-	23	486	29863	2	10	70255

**Table 8c** Norway pout in Subarea 4 (Division 4.b). History of commercial catch as officially reported to ICES; values are presented for each country participating in the fishery. All weights are in tonnes.

Division 4.b	Denmark	Faroe Islands	Germany	Netherlands		Sweden	UK (E/W/NI)	UK (Scotland)	Total
2004	473	29	-	-	-	88	-	-	590
2005	-	-	-	-	-	-	-	-	0
2006	394	-	19	-	2	-	-	-	415
2007	-	-	-	-	-	-	-	-	0
2008	244	-	-	-	-	-	-	-	244
2009	595	ı	75	-	82	-	-	-	752
2010	229	ı	ı	-	620	-	ı	ı	849
2011	32	ı	ı	-	21	-	ı	ı	53
2012	9	ı	ı	-	59	-	-	-	68
2013	43	ı	ı	-	615	-	ı	ı	658
2014	16	ı	ı	-	8	-	ı	6	30
2015	53	ı	ı	1	577	714	-	-	1345
2016	1463	ı	ı	-	11	1	ı	18	1493
2017	45	1	13	-	10	2	-	1	70
2018	20	=	3	-	-	-	1	=	23
2019	573	=	-	1	109	25	ı	1	708
2020	620	-	-	-	35	-	3	ı	658
2021	189	-	-	-	88	2	-	1	279

**Table 8d**Norway pout in Subarea 4 (Division 4.c). History of commercial catch as officially reported to ICES; values are presented for each country participating in the fishery. All weights are in tonnes.

Division 4.c	Denmark	France	Netherlands	UK (E/W/NI)	Total
2004	-	-	-	-	0
2005	-	-	-	-	0
2006	-	-	-	-	0
2007	-	**	-	-	0
2008	-	**	-	-	0
2009	-	-	-	-	0
2010	-	-	-	-	0
2011	•	•	=	-	0
2012	-	-	-	-	0
2013	-	-	-	-	0
2014	Ī	ı	-	-	0
2015	•	•	=	-	0
2016	1	ı	-	-	1
2017	•	•	=	-	0
2018	-	-	-	-	0
2019		ı	-	-	0
2020		•	=	-	0
2021	-	-	-	-	0

**Table 8e**Norway pout in Subarea 4 and Division 3.a combined. History of commercial catch as officially reported to ICES; values are presented by area for each country participating in the fishery.

All weights are in tonnes.

All weights are in comes.										
Subarea 4 and Division 3.a combined	Denmark	Faroe Islands	Norway	Sweden	Netherlands	Germany	UK	Total nominal landings	Unallocated catches***	ICES estimate of total landings (Subarea 4 + Division 3.a)
2004	11345	1159	4994	88	0	54	0	17640	-4140	13500
2005	941*	24	962	0	0	0	0	1927	-24	1903
2006	39943	0	13622	0	0	34	0	53599	-6973	46626
2007	83	0	4712	0	0	0	0	4795	997	5792
2008	32558	0	6650	10	0	0	0	39218	-3080	36138
2009	19821	0	37252	0	22	75	0	57170	-2645	54525
2010	71312	0	65634	10	18	0	29	137003	-11048	125955
2011	4072	0	3210	1	0	0	0	7283	-759	6524
2012	25558	0	4587	3	0	0	0	30148	-3145	27003
2013	38363	0	46601	5	0	0	0	84969	-2869	82100
2014	28448	0	18664	2	0	0	14	47128	-2958	44170
2015	13033	5270	44360	727	18	22	3	63433	-33	63400
2016	23507	3156	36052	2	8	27	30	62782	618	63400
2017	12467	0	21357	6	1	16	0	33847	86	33933
2018	10546	0	25504	5	2	3	0	36060	87	36147
2019	37345	3034	59661	238	1	0	0	100279	-2625	97654
2020	65607	0	63777	48	88	4	85	129609	-112	129497
2021	42002	0	29952	6	23	486	10	72479	-525	71954

<sup>\* 781</sup> tonnes from trial fishery (directed fishery); 160 tonnes from bycatches in other fisheries.

ICES Advice 2022

<sup>\*\*</sup> Landings less than one tonne.

<sup>\*\*\*</sup> Difference between total nominal landings and ICES estimates of total landings including bycatch of other species.

# Summary of the assessment

**Table 9** Norway pout in Subarea 4 and Division 3.a. Assessment summary. Weights are in tonnes. High and low correspond to 95% confidence intervals.

95% confidence intervals.											
Year	Recruitment in Q3 (age 0)	High	Low	SSB in Q4	High	Low	Catches* Q1–Q4	Fishing pressure Q1–Q4 (ages 1–2)	High	Low	
1984	39817	75428	21019	122073	199835	44312	376555	1.13	2.0	0.63	
1985	28819	54815	15152	63597	106791	20403	227482	1.09	2.0	0.58	
1986	48432	93687	25037	47400	79861	14939	180508	0.80	1.49	0.43	
1987	9969	19953	4981	72359	117585	27133	148894	0.75	1.44	0.39	
1988	45725	88488	23627	71139	127959	14318	109295	0.55	1.00	0.30	
1989	47217	91710	24310	72029	119603	24455	166559	0.56	1.02	0.31	
1990	58282	113542	29917	95268	158663	31873	139095	0.53	0.97	0.29	
1991	103234	201650	52850	117948	196320	39575	190406	0.51	0.95	0.28	
1992	54476	105121	28231	196110	331158	61062	302490	0.49	0.92	0.26	
1993	47192	92196	24156	153588	271213	35963	181265	0.50	1.04	0.24	
1994	134913	267514	68039	106838	188773	24903	183585	0.43	0.86	0.21	
1995	52801	105471	26433	211839	360866	62812	231772	0.32	0.65	0.156	
1996	112567	227241	55762	253226	459908	46543	156079	0.29	0.60	0.141	
1997	22077	44725	10898	252265	442098	62431	156937	0.28	0.59	0.133	
1998	40137	79307	20313	228154	420652	35655	75034	0.26	0.55	0.125	
1999	94317	188086	47296	136447	244922	27973	92302	0.28	0.60	0.133	
2000	26141	52328	13059	226848	394064	59633	184970	0.26	0.57	0.120	
2001	25858	51880	12888	216868	397547	36189	64373	0.22	0.50	0.100	
2002	21213	43924	10245	105483	193291	17675	77108	0.28	0.66	0.120	
2003	8320	17050	4060	63902	115195	12609	24647	0.22	0.54	0.092	
2004	7844	16007	3843	43596	79388	7804	13487	0.20	0.51	0.078	
2005	31338	63978	15350	32258	57568	6948	42	0.00	0.00100	0.00	
2006	22260	45775	10825	60198	103185	17212	46553	0.25	0.67	0.091	
2007	32648	66953	15920	84763	152407	17120	5796	0.033	0.081	0.0140	
2008	48357	100144	23350	106768	188899	24637	34844	0.053	0.123	0.023	
2009	71697	147086	34949	155441	273276	37606	45813	0.079	0.190	0.033	
2010	6395	13330	3068	265161	477874	52449	131078	0.088	0.21	0.038	
2011	11016	22505	5392	192471	354421	30521	6843	0.068	0.167	0.028	
2012	56619	115404	27778	82516	153679	11353	26947	0.137	0.35	0.054	
2013	16508	33525	8128	101326	174425	28227	82109	0.22	0.58	0.083	
2014	95420	201607	45162	95007	171388	18626	44164	0.21	0.54	0.083	
2015	35685	75823	16795	118327	204551	32103	57417	0.23	0.60	0.086	
2016	61908	131998	29035	122692	223167	22217	60241	0.25	0.65	0.092	
2017	20576	42444	9975	99637	175735	23539	33940	0.23	0.61	0.089	
2018	74574	151069	36813	78643	141789	15497	36130	0.25	0.64	0.098	
2019	97178	196875	47968	111028	191148	30909	97668	0.26	0.64	0.109	
2020	61834	130192	29368	200033	347856	52211	129333	0.26	0.66	0.104	
2021	25853	55056	12140	186978	336235	37720	71979	0.24	0.68	0.088	
2022	76654	203083	28934	122199	227598	16800	12934**				

<sup>\*</sup> The catches presented are the sum of product values from catch numbers- and weights-at-age used in the assessment model and do not match exactly ICES estimates presented in previous tables.

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<sup>\*\*</sup> Provisional (first three quarters of 2022 only).

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Download the stock assessment data and figures.

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