

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

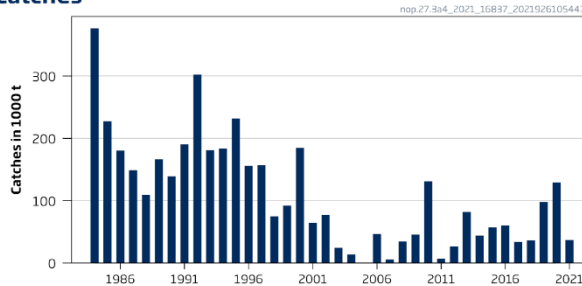
ICES advice on fishing opportunities

ICES advises that when the MSY approach is applied, catches from 1 November 2021 to 31 October 2022 should be no more than 118 273 tonnes.

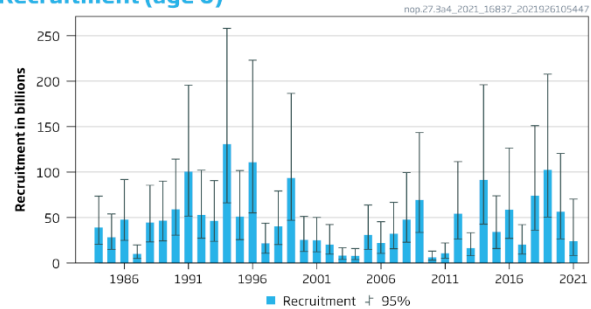
Stock development over time

ICES assesses that the 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.

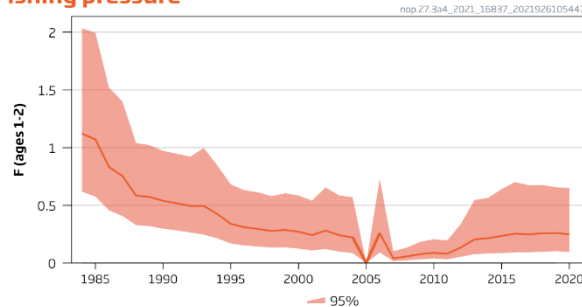
Catches



Recruitment (age 0)



Fishing pressure



SSB

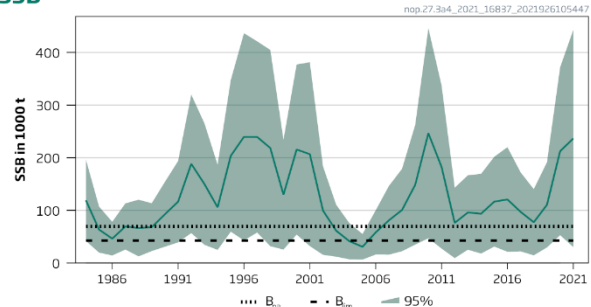


Figure 1 Norway pout in Subarea 4 and Division 3.a. Summary of the stock assessment. Catches in 2021 are up to mid-September. SSB is estimated at the beginning of quarter 4.

Catch scenarios

Table 1 Norway pout in Subarea 4 and Division 3.a. The basis for the catch scenarios.

Variable	Value	Notes
$F_{ages\ 1-2}$	0.229	Fishing mortality from the 4th quarter of 2020 to the 3rd quarter of 2021; from the assessment
SSB (4 th quarter 2021)	236 634	From the assessment model; tonnes
$R_{age\ 0}$ (2021)	24 117	Age 0 in the 3rd quarter of 2021. From the assessment; millions.
$R_{age\ 0}$ (2022)	46 377	Resampling from estimated historical recruitments; millions
Total catches	104 121	Based on landings statistics from the 4th quarter of 2020 to 15 September 2021; 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.

Basis	Catch (1 November 2021– 31 October 2022)*	F (1 November 2021– 31 October 2022)	5th percentile SSB (4 th quarter 2022)	Median SSB (4 th quarter 2022)	% SSB change**	% catch change***	% advice change^
ICES advice basis							
MSY approach: (escapement strategy) 95% probability of SSB being above B_{lim} in the 4th quarter of 2022	118273	0.47	42573	130020	-45	14	-53
Other options							
F = 0	0	0	88170	202990	-14	-100	-100
F = $F_{status\ quo}$	63193	0.23	61820	161790	-32	-39	-75
F = 0.3	80473	0.30	55820	151810	-36	-23	-68
F = 0.4	103130	0.40	48080	138740	-41	-1	-59
F = 0.5	123900	0.50	41100	126860	-46	19	-51
F = 0.6	143323	0.60	35000	116760	-51	38	-44
F = 0.7	161545	0.70	30330	107550	-55	55	-36

* The catch forecast is for the period 1 October to 30 September.

** SSB at the beginning of the 4th quarter of 2022 relative to SSB at the beginning of the 4th quarter of 2021 (= 236 634 tonnes).

*** Catches 1 October 2021–30 September 2022 relative to catches 1 October 2020–15 September 2021 (= 104 121 tonnes).

^ Advice value 2022 relative to the advice value 2021 (= 254 038 tonnes).

The change (-53%) from this year's to last year's advice results from a downward revision of recruitment in 2020 as well as the weak 2021 year class, which produces a lower forecasted SSB.

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
Management plan	ICES is not aware of any agreed precautionary management plan for Norway pout in this area ICES has previously evaluated a proposed management plan from Norway and EU (ICES, 2018a, 2018b, 2018c). ICES escapement strategy was only found 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 recruitment and to underestimate F. In 2020 there was a change to survey index input data, and reference points were revised.

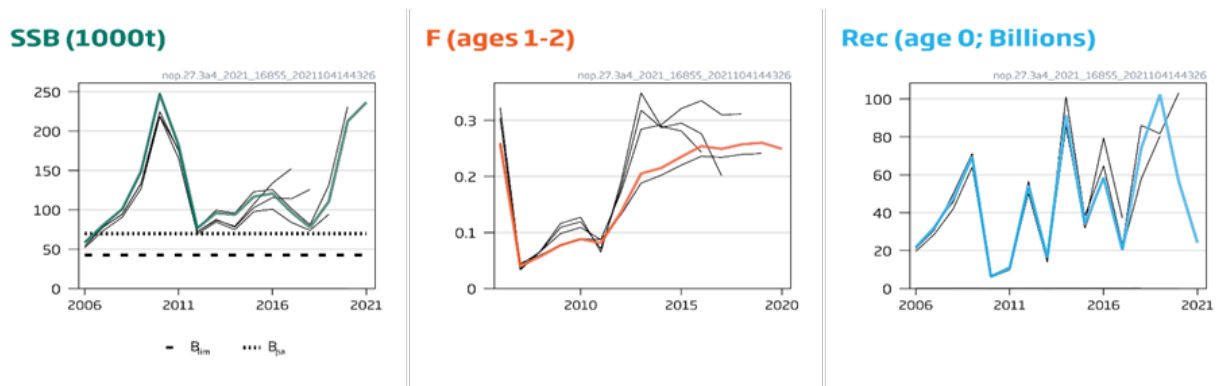


Figure 2 Norway pout in Subarea 4 and Division 3.a. Historical assessment results. Fishing pressure (F) for 2021 is not shown because it can be estimated only up to quarter 3. The SSB shown is for the beginning of quarter 4 2021, and the recruitment (rec) is for quarter 3.

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 $B_{escapement}$	Not defined*		
	F_{MSY}	Not defined		
	F_{cap}	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)
Precautionary approach	B_{lim}	42 573 tonnes (4 th quarter)	$B_{lim} = B_{loss}$, the lowest observed biomass in 2005 (as estimated in the updated benchmark assessment)	ICES (2020)
	B_{pa}	69 736 tonnes (4 th quarter)	$B_{pa} = B_{lim} e^{0.3 \times 1.645}$	ICES (2020)
	F_{lim}	Not defined		
	F_{pa}	Not defined		
Management plan	SSB _{MGT}	Not applicable		
	F_{MGT}	Not applicable		

* MSY $B_{escapement}$ has not been defined, as the escapement strategy uses directly the 95% probability of SSB being above B_{lim} .

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, 2021a)
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 (WGNSSK)

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.

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_{lim}	-	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 $SSB < B_{pa}$ 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 $SSB > B_{pa}$	< 148000	37500	114616		39222	36138
2009	Reduce F to increase $SSB > B_{pa}$	< 35000		28300			
In-year*	Maintain $SSB > B_{pa}$	< 157000	128170	116279		57170	54500
2010	Maintain $SSB > B_{pa}$	< 307000	86000	76000			
In-year*	Maintain $SSB > MSY B_{escapement}$	< 434000		162950		136974	125955
2011	No directed fisheries	0					
In-year*	Maintain $SSB > MSY B_{escapement}$	< 6000	3150	4500		7283	6524

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 _{escapement}	< 101000	25000	70683			
2013	Maintain SSB > MSY B _{escapement}	< 458000 (Catch ₂₀₁₂ = 0) < 393000 (Catch ₂₀₁₂ = 101)	157000	165700		84969	82100
In-year*	Maintain SSB > MSY B _{escapement}	< 457000					
2014	Maintain SSB > MSY B _{escapement}	< 216000	108000	128250		47120	44170
In-year*	Maintain SSB > MSY B _{escapement}	< 108000	123000				
2015	Precautionary considerations (F = 0.6)	< 326000	178000	150000		63430	63400
2016	MSY approach (escapement biomass with F _{cap})	< 390000	210000	150000		62770	63400
2017	MSY approach (escapement strategy; probability of SSB falling below B _{lim} is less than 5%)	≤ 358471	204235	141950		33847	33933
2018	MSY approach (escapement strategy; probability of SSB falling below B _{lim} is less than 5%)	≤ 212531	90978	85265		36060	36147
2019	MSY approach (escapement strategy; probability of SSB falling below B _{lim} is less than 5%) with F _{cap} = 0.7	≤ 135459	82230	55000		100094	97654
2020	MSY approach (escapement strategy; probability of SSB falling below B _{lim} is less than 5%) with F _{cap} = 0.7	≤ 167105	98053	72500		130432	129497
2021	MSY approach (escapement strategy; probability of SSB falling below B _{lim} is less than 5%) with F _{cap} = 0.7	≤ 254038	127019	116555	11745		
2022	MSY approach (escapement strategy; probability of SSB falling below B _{lim} is less than 5%)	≤ 118273					

* 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.

** Update of in-year advice in October 2012.

^ 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.

^^ 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.

History of the catch and landings

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

Total catch (2020)	Landings	Discards
129 497 tonnes	100% taken by the small-meshed trawl fleet	Discarding is considered negligible
	129 497 tonnes	

Table 8a Norway pout in Division 3.a. 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.

Division 3.a	Denmark	Faroe Islands	Norway	Sweden	Germany	Total
2004	110	45	41	-	54	250
2005	-	-	-	-	-	0
2006	18	-	2	-	-	20
2007	24	-	-	-	-	24
2008	156	-	-	-	-	156
2009	-	-	209	-	-	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	5585	-	16	125	-	5726

Table 8b Norway pout in Subarea 4 (Division 4.a). 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.

Division 4.a	Denmark	Faroe Islands	Netherlands	Germany	Norway	Sweden	UK (Scotland)	Total
2004	10762	1085	-	-	4953	-	-	16800
2005	941*	24	-	-	962	-	-	1927
2006	39531	-	-	15	13618	-	-	53164
2007	59	-	-	-	4712	-	-	4771
2008	32158	-	-	-	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	354	825	124399

Table 8c Norway pout in Subarea 4 (Division 4.b). 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.

Division 4.b	Denmark	Faroe Islands	Germany	Netherlands	Norway	Sweden	UK (E/W/Ni)	UK (Scotland)	Total
2004	473	29	-	-	-	88	-	-	590
2005	-	-	-	-	-	-	-	-	0
2006	394	-	19	-	2	-	-	-	415
2007	-	-	-	-	-	-	-	-	0

Division 4.b	Denmark	Faroe Islands	Germany	Netherlands	Norway	Sweden	UK (E/W/Ni)	UK (Scotland)	Total
2008	244	-	-	-	-	-	-	-	244
2009	595	-	75	-	82	-	-	-	752
2010	229	-	-	-	620	-	-	-	849
2011	32	-	-	-	21	-	-	-	53
2012	9	-	-	-	59	-	-	-	68
2013	43	-	-	-	615	-	-	-	658
2014	16	-	-	-	8	-	-	6	30
2015	53	-	-	1	577	714	-	-	1345
2016	1463	-	-	-	11	1	-	18	1493
2017	45	-	13	-	10	2	-	-	70
2018	20	-	3	-	-	-	-	-	23
2019	573	-	-	1	109	25	-	-	708
2020	620	-	-	-	35	3	3	-	661

Table 8d Norway pout in Subarea 4 (Division 4.c). 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.

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	-	-	-	-	0
2015	-	-	-	-	0
2016	1	-	-	-	1
2017	-	-	-	-	0
2018	-	-	-	-	0
2019	-	-	-	-	0
2020	-	-	-	-	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.

Subarea 4 and Division 3.a combined	Denmark	Faroe Islands	Norway	Sweden	Netherlands	Germany	UK	Total nominal landings	Bycatch of other species***	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	-	1927
2006	39943	0	13622	0	0	34	0	53599	-6973	46626
2007	83	0	4712	0	0	0	0	4795	-	4795
2008	32558	0	6650	10	0	0	0	39218	-3080	36138
2009	19821	0	37252	0	22	75	0	57170	-2670	54500
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	-3075	27073
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	206	1	0	0	100279	-2625	97654
2020	65607	0	63777	482	88	4	828	130786	-1289	129497

* 781 tonnes from trial fishery (directed fishery); 160 tonnes from bycatches in other fisheries.

** Landings less than one tonne.

*** By catches of other species are subtracted from the total nominal landings to estimate total ICES landings

Table 9 Norway pout in Subarea 4 and Division 3.a. History of the commercial catch. ICES estimates of catches by country. Weights are in tonnes. Catch values prior to 2017 are presented to the nearest hundred tonnes.

Year	Denmark		Faroes	Norway	Sweden	UK (Scotland)	Others	Total
	North Sea	Skagerrak						
1961	20500	-	-	8100	-	-	-	28600
1962	121800	-	-	27900	-	-	-	149700
1963	67400	-	-	70400	-	-	-	137800
1964	10400	-	-	51000	-	-	-	61400
1965	8200	-	-	35000	-	-	-	43200
1966	35200	-	-	17800	-	-	*	53000
1967	169600	-	-	12900	-	-	*	182500
1968	410800	-	-	40900	-	-	*	451700
1969	52500	-	19600	41400	-	-	*	113500
1970	142100	-	32000	63500	-	200	200	238000
1971	178500	-	47200	79300	-	100	200	305300
1972	259600	-	56800	120500	6800	900	200	444800
1973	215200	-	51200	63000	2900	13000	600	345900
1974	464500	-	85000	154200	2100	26700	3300	735800
1975	251200	-	63600	218900	2300	22700	1000	559700
1976	244900	-	64600	108900	*	17300	1700	437400
1977	232200	-	48800	98300	2900	4600	1000	387800
1978	163400	-	18500	80800	700	5500	-	268900
1979	219900	9000	21900	75400	-	3000	-	329200
1980	366200	11600	34100	70200	-	600	-	482700
1981	167500	2800	16400	51600	-	*	-	238300
1982	256300	35600	12300	88000	-	-	-	392200
1983	301100	28500	30700	97300	-	*	-	457600
1984	251900	38100	19110	83800	-	100	-	393010
1985	163700	8600	9900	22800	-	100	-	205100
1986	146300	4000	2500	21500	-	-	-	174300
1987	108300	2100	4800	34100	-	-	-	149300
1988	7900	7900	1300	21100	-	-	-	109300
1989	95700	4200	800	65300	*	100	300	166400
1990	61500	23800	900	77100	*	-	-	163300
1991	85000	32000	1300	68300	*	-	*	186600
1992	146900	41700	2600	105500	*	-	100	296800
1993	97300	6700	2400	76700	-	-	*	183100
1994	97900	6300	3600	74200	-	-	*	182000
1995	138100	46400	8900	43100	100	*	200	236800
1996	74300	33800	7600	47800	200	100	*	163800
1997	94200	29300	7000	39100	*	*	100	169700
1998	39800	13200	4700	22100	-	-	*	79800
1999	4100	6800	2500	44200	*	-	-	94500
2000	12700	9300	-	48000	100	-	*	184400
2001	40600	7500	-	16800	700	*	*	65600
2002	50200	2800	3400	23600	-	-	-	80000
2003	9900	3400	2400	11400	-	-	-	27100
2004	8100	300	-	5000	-	-	100	13500
2005	900	-	-	1000	-	-	-	1900
2006	35100	100	-	11400	-	-	-	46600
2007	2000	-	-	3700	-	-	-	5700
2008	30400	-	-	5700	*	-	*	36100
2009	17500	-	-	37000	*	-	*	54500
2010	64900	200	-	60900	*	*	*	126000
2011	3300	-	-	3200	*	*	*	6500

Year	Denmark		Faroes	Norway	Sweden	UK (Scotland)	Others	Total
	North Sea	Skagerrak						
2012	22300	100	-	4600	*	*	*	27000
2013	29000	6200	-	46900	*	*	*	82100
2014	25000	500	-	18700	*	*	*	44200
2015	10800	2200	5300	44400	700	*	*	63400
2016	23200	900	3200	36100	*	*	*	63400
2017	12345	109	-	21479	*	*	*	33933
2018	10486	159	-	25502	*	*	*	36147
2019	36772	1125	-	59757	*	*	*	97654
2020	60139	5586	-	63772	*	*	*	129497

* Catches less than 100 tonnes.

Summary of the assessment

Table 10 Norway pout in Subarea 4 and Division 3.a. Assessment summary. Weights are in tonnes. High and low correspond to 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	39017	73681	20661	119321	196724	41919	376555	1.12	2.0	0.62
1985	28466	53902	15033	63547	107268	19825	227482	1.07	2.00	0.57
1986	47858	91862	24932	46323	78361	14286	180508	0.83	1.52	0.46
1987	10064	19923	5084	69471	113323	25619	148894	0.75	1.40	0.41
1988	44522	85557	23169	66463	120306	12620	109295	0.58	1.04	0.33
1989	46754	90109	24259	68153	113614	22692	166559	0.57	1.02	0.32
1990	59141	114303	30600	92581	154210	30951	139095	0.54	0.97	0.30
1991	100538	195655	51661	116557	193874	39240	190406	0.52	0.95	0.28
1992	52895	102119	27398	188445	320022	56868	302490	0.49	0.92	0.27
1993	46475	90576	23847	149961	265329	34593	181265	0.50	1.00	0.25
1994	130771	258211	66229	105843	186753	24933	183585	0.43	0.85	0.21
1995	51186	101780	25742	203649	347752	59546	231772	0.34	0.68	0.169
1996	110818	223048	55059	239751	436639	42862	156079	0.31	0.63	0.152
1997	21685	43771	10743	239560	421220	57900	156937	0.30	0.61	0.143
1998	40118	79187	20325	218420	404889	31952	75034	0.28	0.58	0.134
1999	93621	186562	46981	129861	234189	25532	92302	0.29	0.61	0.136
2000	25528	51297	12704	215662	377229	54096	184970	0.27	0.59	0.125
2001	24942	50177	12398	206795	381455	32134	64373	0.24	0.54	0.109
2002	20313	42372	9738	99645	183658	15632	77108	0.28	0.66	0.121
2003	8135	16753	3950	61409	110802	12017	24647	0.24	0.59	0.099
2004	7770	15909	3795	41482	75861	7104	13487	0.22	0.57	0.086
2005	31020	63767	15090	30829	55125	6534	42	0.00100	0.00100	0.00
2006	21885	45389	10552	58100	100132	16068	46553	0.26	0.73	0.092
2007	32311	66812	15626	81052	146272	15832	5796	0.040	0.102	0.0160
2008	47789	99501	22953	100736	179032	22440	34844	0.057	0.134	0.024
2009	69441	143495	33605	148609	262341	34877	45813	0.077	0.183	0.033
2010	6277	13140	2999	246501	445933	47069	131078	0.088	0.21	0.038
2011	10754	22080	5238	182526	337517	27536	6843	0.081	0.197	0.033
2012	54216	111544	26351	76284	143229	9338	26947	0.136	0.34	0.054
2013	16320	33370	7982	96025	166749	25300	82109	0.21	0.55	0.077
2014	91604	196126	42785	93663	169407	17919	44164	0.22	0.56	0.082
2015	34277	73950	15888	116577	201871	31283	57417	0.24	0.64	0.086
2016	58513	126526	27060	120767	220111	21423	60241	0.25	0.70	0.092
2017	20336	42275	9782	97242	172311	22173	33940	0.25	0.67	0.092
2018	73952	151104	36193	77451	140352	14550	36130	0.26	0.68	0.098
2019	102408	207746	50482	110513	191420	29606	97668	0.26	0.66	0.103
2020	56504	120630	26467	212380	371861	52898	129333	0.25	0.65	0.095
2021	24117	70362	8266	236634	442930	30338	37021**			

* 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.

** Provisional (first three quarters of 2021 only).

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