

6.3.37 Pollack (*Pollachius pollachius*) in Subarea 4 (North Sea) and Division 3.a (North Sea, Skagerrak and Kattegat)

ICES stock advice

ICES advises that when the precautionary approach is applied, catches should be no more than 1368 tonnes in each of the years 2017 and 2018. If discard rates do not change from the average of the last 3 years (2013–2015), this implies landings of 1345 tonnes.

Stock development over time

Since 1977 there have been two periods of high catches. In recent years catches have been low, albeit fairly stable.

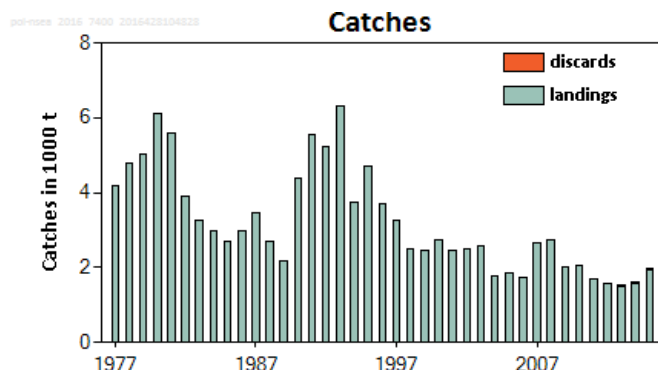


Figure 6.3.37.1 Pollack in Subarea 4 and Division 3.a. Official landings are presented until 2012. From 2013 estimated discards and landings presented are the estimates by ICES.

Stock and exploitation status

Table 6.3.37.1 Pollack in Subarea 4 and Division 3.a. State of the stock and fishery, relative to reference points.

		Fishing pressure			Stock size			
		2013	2014	2015	2014	2015	2016	
Maximum sustainable yield	F_{MSY}	?	?	?	MSY	?	?	Undefined
Precautionary approach	F_{pa} , F_{lim}	?	?	?	$B_{trigger}$?	?	Undefined
Management plan	F_{MGT}	-	-	-	B_{pa} , B_{lim}	?	?	Undefined
Qualitative evaluation	-				SSB_{MGT}	-	-	Not applicable
					-			

Catch options

The ICES framework for Category 5 stocks was applied (ICES, 2012) for pollack in ICES Subarea 4 and Division 3.a. For stocks without information on abundance or exploitation, ICES considers that a precautionary reduction of catches should be implemented unless there is ancillary information clearly indicating that the current level of exploitation is appropriate for the stock. Therefore the precautionary buffer is applied in 2016.

Table 6.3.37.2 Pollack in Subarea 4 and Division 3.a. For stocks in ICES data categories 3–6, one catch option is provided.

Average catch (2013–2015)	1710 tonnes	
Discard rate	1.65%	
Precautionary buffer	Applied	0.8
Catch advice*	1368 tonnes	
Landings corresponding to the catch advice	1345 tonnes	

* Average catch (2013–2015) × precautionary buffer

Basis of the advice

Table 6.3.37.3 Pollack in Subarea 4 and Division 3.a. The basis of the advice.

Advice basis	Precautionary approach
Management plan	There is no management plan for pollack in these areas.

Quality of the assessment

The advice is based on landings and the calculated catch for Subarea 4 and Division 3.a. The IBTS surveys are not considered suitable for advice.

Issues relevant for the advice

For pollack in ICES Division 3.a, published reports (Cardinale *et al.*, 2012) indicate a substantial decline in stock size from 1950 until approximately 2000. For Subarea 4, a similar analysis does not exist. ICES provides combined advice for Subarea 4 and Division 3.a for 2017 and 2018.

There is no directed fisheries for pollack in Subarea 4 and Division 3.a and pollack are taken solely as bycatch.

During routine IBTS surveys in Subarea 4 and Division 3.a, pollack catches seem rather irregular and with no clear pattern. A spatial analysis of Norwegian fisheries data from 2013, showing total pollack catches by ICES rectangle, indicates that the surveys do not cover the geographic distribution of the species adequately in both Subarea 4 and Division 3.a. The surveys may therefore not be very well suited to monitoring this species as trends in standardised CPUE likely are not a reliable indicator for the status of the stock. However, if the stock increases, it is arguably expected that present trawl survey (e.g. IBTS) would be able to detect such a stock trend in a consistent manner (Cardinale *et al.*, 2012).

Reference points

No reference points are defined for this stock.

Basis of the assessment

Table 6.3.37.4 Pollack in Subarea 4 and Division 3.a. The basis of the assessment.

ICES stock data category	5 (ICES, 2016a)
Assessment type	No assessment
Input data	Commercial landings
Discards and bycatch	Discards are known to take place and have been quantified for 2013–2015. Discard estimates were provided for 49% of the landings in 2015.
Indicators	None
Other information	2011 was the first year ICES reported on this species in this area.
Working group	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak (WGNSSK)

Information from stakeholders

There is no available information.

History of advice, catch, and management

Table 6.3.37.5 Pollack in Subarea 4 and Division 3.a. History of ICES advice and ICES estimates of landings. All weights in thousand tonnes.

Year	ICES advice	Predicted catch corresp. to advice	Predicted landings corresp. to advice	Official landings Division 3.a	Official landings Subarea 4	Total official landings
2000		-	-	0.500	2.251	2.751
2001		-	-	0.501	1.971	2.472
2002		-	-	0.477	2.037	2.514
2003		-	-	0.425	2.140	2.565
2004		-	-	0.359	1.397	1.756
2005		-	-	0.498	1.367	1.865
2006		-	-	0.330	1.399	1.729
2007		-	-	0.464	2.181	2.645
2008		-	-	0.451	2.294	2.745
2009		-	-	0.473	1.551	2.024
2010		-	-	0.552	1.485	2.037
2011		-	-	0.395	1.299	1.694
2012	No increase in catches	-	-	0.414	1.164	1.578
2013	4: 20% Reduction in catches (last 3 years average) 3a: no directed fisheries and reduce bycatch	4: < 1.3 3.a: 0	-	0.420	1.080	1.500
2014	Same catch advice as in 2013	4: < 1.3 3.a: 0	-	0.383	1.215	1.598
2015	Landings at the level of the 2013 advice		4: < 1.3 3.a: 0	0.389*	1.591*	1.980*
2016	No new advice, same as for 2015		4: < 1.3 3.a: 0			
2017	Precautionary approach	≤ 1.368				
2018	Precautionary approach	≤ 1.368				

* Preliminary.

History of catch and landings

Table 6.3.37.6 Pollack in Subarea 4 and Division 3.a. Catch distribution by fleet in 2015 as estimated by ICES.

Total catch (2015)	Commercial landings					Commercial discards
1980 kt	65% otter trawl	24% gillnet	3% seine	2% longline	5% other	5.7 kt
	1974.3 kt					

Table 6.3.37.7 Pollack in Division 3.a. History of commercial catch and landings; both the official, by country, and total ICES estimated values are presented. All weights in tonnes.

Year	Belgium	Denmark	Germany	Netherl.	Norway	Sweden	UK	Official Total	ICES est. Landings	ICES est. discards
1977	10	1764	4	3	449	706		2936		
1978	1	2077	4		556	794		3432		
1979	13	1898	<0.5		824	1066		3801		
1980	13	1860			987	1584	<0.5	4444		
1981	5	1661			839	1187	1	3693		
1982	1	1272			575	417	<0.5	2265		
1983	2	972			438	288		1700		
1984	2	930	<0.5		371	276		1579		
1985	-	824	<0.5		350	356		1530		
1986	4	759	<0.5		374	271		1408		
1987	6	665			342	246		1259		
1988	4	494			350	136		984		
1989	3	554			313	152		1022		
1990	8	1842	<0.5		246	253		2349		
1991	2	1824			324	281		2431		
1992	8	1228			391	320		1947		
1993	6	1130	1		364	442		1943		
1994	5	645	<0.5		276	238		1164		
1995	10	497			322	271		1100		
1996		680			309	273		1262		
1997		364	<0.5		302	178		844		
1998		299			330	105		734		
1999		192			342	88		622		
2000		199			268	33		500		
2001		201	1		253	46		501		
2002		228	3		202	44		477		
2003		168	3	1	236	17		425		
2004		140	2	4	179	34		359		
2005		160	5	7	173	153		498		
2006		103	10	3	178	36		330		
2007		172	9		245	38		464		
2008		166	5		247	33		451		
2009		208	7		220	38		473		
2010		313	8	1	195	35		552		
2011		193	7		168	28		395		
2012		200	7		171	37		414		
2013		210	3		172	35		420	430	5.4
2014		191	5	1	156	30		383	382	1.5
2015		190	14	1	138	48		389*	410	3.2

* Preliminary.

Table 6.3.37.8 Pollack in Subarea 4. History of commercial landings; both the official, by country, and total ICES estimated values of landings and discards are presented. All weights in tonnes.

Year	Belgium	Denmark	Faeroes	France	Germany	Netherl.	Norway	Poland	Sweden	UK	Official Total	ICES est. landings	ICES est. discards
1977	121	275		75	142	38	419	9	0	442	1521		
1978	102	249		98	154	21	492	2	0	471	1589		
1979	62	333		72	64	8	563	11	31	429	1573		
1980	82	407		66	58	2	1095		38	355	2103		
1981	59	500		173	21	2	1261		12	362	2390		
1982	46	431		59	40	1	1169	33	23	270	2072		
1983	58	481		79	44	1	1081		57	300	2101		
1984	52	402		108	37	0	880	2	106	315	1902		
1985	14	308		69	23	0	686		51	363	1514		
1986	44	550		45	21	0	602		67	362	1691		
1987	21	427		988	21	0	471		40	290	2258		
1988	32	432		367	30	10	560		20	296	1747		
1989	31	273		0	21	4	568		37	269	1203		
1990	44	924		0	34	3	651		126	366	2148		
1991	31	1464		0	48	4	887		153	684	3271		
1992	49	794		18	59	7	1051		141	1310	3429		
1993	46	1161		8	161	19	1429		217	1561	4602		
1994	42	635		12	55	14	845		113	872	2588		
1995	56	532	1	7	84	18	1203		175	1525	3601		
1996	13	366		4	99	13	909		82	945	2431		
1997	20	272	1	1	115	11	733		82	1185	2420		
1998	21	265		7	44	5	567		75	780	1764		
1999	21	288		0	62	5	768		72	636	1852		
2000	45	291		24	38	5	880		91	877	2251		
2001	36	156		6	40	1	860		63	809	1971		
2002	27	234		6	112	0	879		68	711	2037		
2003	13	191		9	82	1	971		36	837	2140		
2004	28	162		5	57	0	517		16	612	1397		
2005	26	173		3	128	3	511		46	477	1367		
2006	18	152		4	80	1	545		12	587	1399		
2007	18	192		130	137	2	754		43	905	2181		
2008	15	150		129	114	1	840		46	999	2294		
2009	13	121	2	6	50	1	668		32	658	1551		
2010	12	163		10	129	0	599		32	540	1485		
2011	12	106	0	10	67	0	580	0	35	489	1299		
2012	17	123	0	3	102	1	433		42	443	1164		
2013	17	128	0	2	66	4	371	0	29	463	1080	1061	42.2
2014	24	121		32	145	1	476		40	377	1215	1215	12.2
2015	19	183		2	237	2	473		50	625	1591*	1564	2.5

* Preliminary.

Summary of the assessment

There is no assessment for pollack in this area.

Sources and references

Cardinale, M., Svedäng, H., Bartolino, V., Maiorano, L., Casini, M., Hjelm, J., and Linderholm, H. 2012. Spatial and temporal depletion of haddock and pollack during the last century in the Kattegat-Skagerrak. *Journal of Applied Ichthyology*, 1-12, doi: 10.1111/j.1439-0426.2012.01937.x.

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ICES. 2016a. Report of the Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak (WGNSSK), 26 April–5 May 2016. ICES CM 2016/ACOM:14.

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