

Flounder (*Platichthys* spp.) in subdivisions 26 and 28 (east of Gotland and Gulf of Gdansk)

ICES stock advice

ICES has not been requested to provide advice on fishing opportunities for this stock for 2022.

Stock development over time

Fishing pressure on the stock is below F_{MSY} (Figure 2). No reference points for stock size have been defined for this stock. The stock size indicator shows a general decrease in stock size over time.

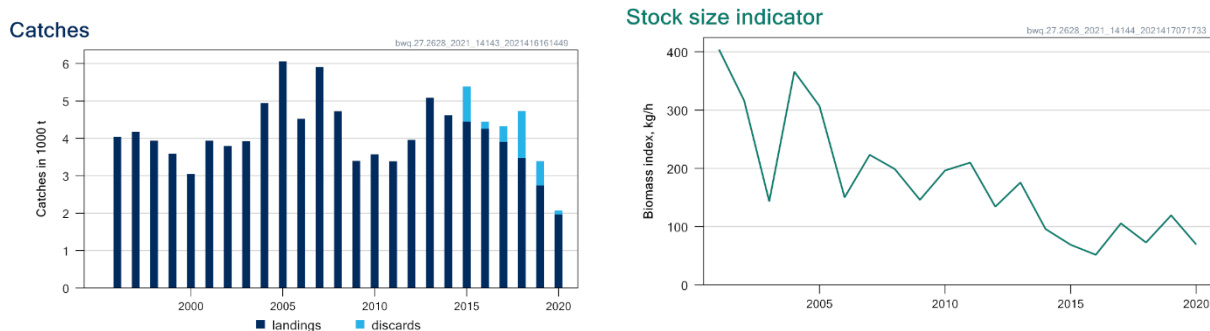


Figure 1 Flounder in subdivisions 26 and 28. Summary of the stock assessment. Left panel: catches (ICES estimates) in subdivisions (SDs) 26 and 28. Discard data have only been included since 2015. Right panel: biomass index (kg h^{-1}) of flounder ≥ 20 cm, from the Baltic International Trawl Survey (BITS–Q4).

Catch scenarios

ICES has not been requested to provide advice on fishing opportunities for this stock.

Basis of the advice

ICES has not been requested to provide advice on fishing opportunities for this stock.

Table 1 Flounder in subdivisions 26 and 28. The basis of the advice.

Advice basis	No advice requested
Management plan	The EU multiannual plan for the Baltic Sea (EU, 2016, 2019) applies to by-catches of this stock taken when fishing for the target stocks described in the plan

Quality of the assessment

Two flounder species European flounder *P. flesus* and Baltic flounder *P. solemdali* occur in the Baltic Sea, both of which are present in the management area. The proportion of European flounder and Baltic flounder in this management area are estimated at approximately 45% and 55%, respectively. However, it is not possible at this stage to separate the proportions of the two species in either the stock assessment or the fisheries.

Issues relevant for the advice

The stock development over time shows a declining trend. The fishing pressure is below the F_{MSY} proxy reference point; no reference points for stock size have been defined.

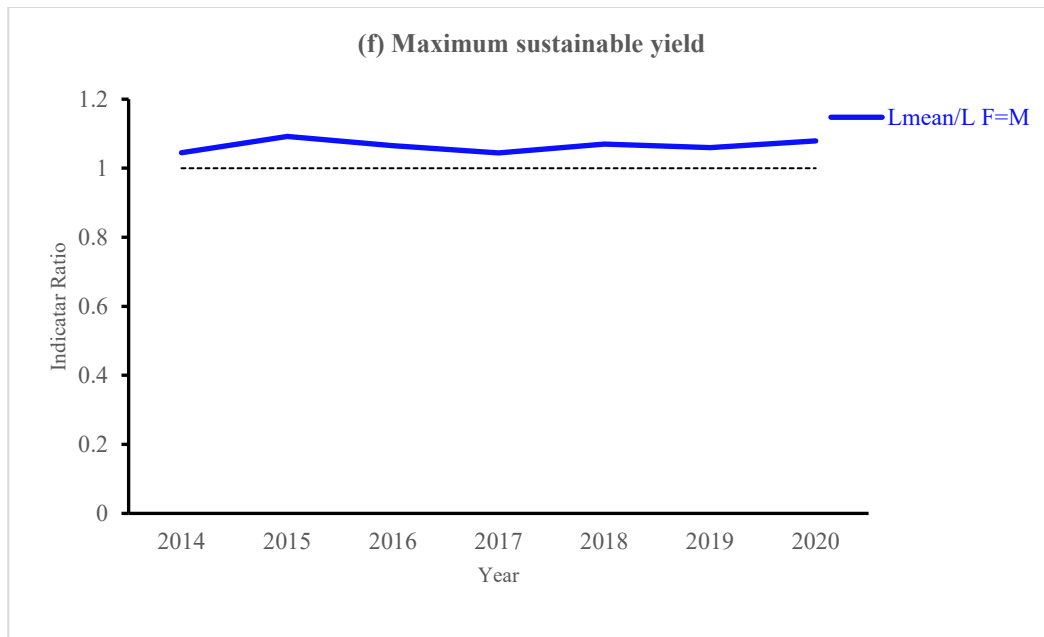


Figure 2 Flounder in subdivisions 26 and 28. Index ratio $L_{mean}/L_{F=M}$ from the length-based indicator method (LBI; ICES, 2015) used for the evaluation of the exploitation status. The exploitation status is below the F_{MSY} proxy (dotted line) when the index ratio value is higher than one.

Reference points

Table 2 Flounder in subdivisions 26 and 28. Reference points, values, and their technical basis.

Framework	Reference point	Value	Technical basis	Source
MSY approach	MSY $B_{trigger\ proxy}$	Not defined		
	$F_{MSY\ proxy}$	$\frac{L_{mean}}{L_{F=M}} = 1$	Relative value from LBI analysis, assuming $M/K = 1.5$. $L_{F=M}$ is based on L_c (length at 50% of modal abundance), which varies each year	ICES (2020)
Precautionary approach	B_{lim}	Not defined		
	B_{pa}	Not defined		
	F_{lim}	Not defined		
	F_{pa}	Not defined		
Management plan	SSB_{mgt}	Not defined		
	F_{mgt}	Not defined		

Basis of the assessment

Table 3 Flounder in subdivisions 26 and 28. Basis of assessment and advice.

ICES stock data category	3 (ICES, 2021a)
Assessment type	Survey trends (ICES, 2021b)
Input data	Commercial landings and survey data from the Baltic International Trawl Survey (BITS–Q4, G8863)
Discards and bycatch	Discard numbers are used in the advice
Indicators	A length-based indicator method (LBI; ICES, 2018a) using catch data from commercial sampling and the biological parameters of the BITS to assess the stock status
Other information	This stock was benchmarked in 2014 (WKBALFLAT; ICES, 2014)
Working group	Baltic Fisheries Assessment Working Group (WGBFAS)

History of the advice, catch, and management

Table 4 Flounder in subdivisions (SDs) 26 and 28. ICES advice and official landings. All weights are in tonnes.

Year	ICES advice*	Catches corresponding to advice*	Agreed TAC	ICES estimated landings SDs 22–32	ICES estimated landings SDs 26 and 28	ICES estimated catch SDs 26 and 28
2000	No advice	-	-	14900	3049	
2001	No advice	-	-	17600	3941	
2002	No advice	-	-	19400	3798	
2003	No advice	-	-	15200	3929	
2004	No advice	-	-	18200	4943	
2005	No advice	-	-	20100	6058	
2006	No advice	-	-	17200	4524	
2007	No advice	-	-	19400	5905	
2008	No advice	-	-	16800	4727	
2009	No advice	-	-	15100	3398	
2010	No advice	-	-	16200	3577	
2011	No advice	-	-	15300	3387	
2012	Reduce catches	-	-	15900	3959	
2013	Catches should be reduced by 5%	< 15100**		21100	5089	
2014	Landings should be reduced by 15%	< 13500**		20600	4614	
2015	Landings should be reduced by 36%	< 3257**		16800	4443	5388
2016	Precautionary approach (≥ 20% decrease)	≤ 2606**		20200	4252	4443
2017	Precautionary approach (≥ 20% decrease)	≤ 2527		16070	3908	4325
2018	Precautionary approach (≥ 36% decrease relative to the advised catch for 2017)	≤ 1617		17199	3475	4734
2019	Precautionary approach (≥ 36% decrease relative to the advised catch for 2017)	≤ 1617		15790	2740	3390
2020	No advice requested			15528	1965	2066
2021	No catch advice requested					
2022	No catch advice requested					

* Advice prior to 2015 was for flounder in subdivisions 22–32.

** Landings corresponding to the advice.

History of the catch and landings

Table 5 Flounder in subdivisions 26 and 28. Catch distribution by fleet in 2020 as estimated by ICES.

Catch (2020)	Landings		Discards
2066 tonnes	Active gears (80.8 %)	Passive gears (19.2 %)	101 tonnes
	1965 tonnes		

Table 6 Flounder in subdivisions 26 and 28. History of commercial landings; both the official and ICES estimated values are presented by area for each country participating in the fishery. All weights are in tonnes.

Year	Denmark	Finland	Germany	Poland	Sweden	Estonia	Latvia	Lithuania	Russia	Total
1996	0	0	19	2556	79	44	289	316	740	4043
1997	10	0	16	1730	401	101	362	554	1001	4175
1998	0	0	2	1370	135	146	362	737	1188	3940
1999	0	0	0	1435	47	92	505	547	964	3590
2000	9	0	0	721	28	65	415	575	1236	3049
2001	15	0	0	548	182	100	613	1127	1355	3941
2002	42	0	0	626	52	91	596	1077	1314	3798
2003	1	0	0	648	17	122	673	1066	1402	3929
2004	1	0	0	1955	18	89	769	834	1277	4943
2005	0	0	0	1743	124	133	1716	949	1393	6058
2006	4	0	0	1675	22	83	1155	355	1231	4524
2007	2	2	0	1829	20	92	1043	268	2650	5905
2008	0	0	0	1451	19	91	577	629	1960	4727
2009	0	0	0	1472	17	77	364	499	969	3398

Year	Denmark	Finland	Germany	Poland	Sweden	Estonia	Latvia	Lithuania	Russia	Total
2010	0	0	0	1727	15	93	250	462	1030	3577
2011	1	1	0	1437	20	89	280	418	1139	3387
2012	0	10	0	1501	14	81	622	651	1079	3959
2013	22	8	< 1	1581	45	76	1399	949	1010	5089
2014	1	< 1	0	1210	< 1	79	1578	698	1047	4614
2015	0	< 1	0	981	18	55	2025	258	1106	4443
2016	0	0	1	912	16	52	1843	295	1133	4252
2017	< 1	< 1	< 1	701	12	59	1576	255	1304	3907
2018	8	0	0	473	20	60	1207	214	1493	3475
2019	1	11	2	565	19	43	753	20	1325	2740
2020	0	0	< 1	273	19	46	780	77	770	1965

* From 2013 onwards landings below 0.5 tonnes are given as < 1, landings ≥ 0.5 tonnes are given as 1. Zeros (0) represent true zero landings. Before 2013, a distinction between “true zero landings” and rounded zero landings (< 0. tonnes) is not possible.

Summary of the assessment

Table 7 Flounder in subdivisions 26 and 28. Total catch (tonnes) and stock-size indicator. The stock-size indicator is a biomass index of flounder equal to or larger than 20 cm, from the Baltic International Trawl Survey (BITS-Q4). The index is weighted averages per depth stratum area.

Year	Stock-size indicator (kg h ⁻¹)	Landings (tonnes)	Discards (tonnes)
1996		4043	
1997		4175	
1998		3940	
1999		3590	
2000		3049	
2001	404	3941	
2002	317	3798	
2003	143	3929	
2004	366	4943	
2005	307	6058	
2006	150	4524	
2007	223	5905	
2008	199	4727	
2009	146	3398	
2010	196	3577	
2011	210	3387	
2012	134	3959	
2013	176	5089	
2014	96	4614	
2015	69	4443	945
2016	52	4252	191
2017	106	3908	418
2018	73	3475	1259
2019	119	2740	650
2020	69	1965	101

Sources and references

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

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