

8.3.7 Flounder (*Platichthys flesus*) in Subdivisions 26 and 28 (East of Gotland, Gulf of Gdansk)

ICES stock advice

ICES advises that when the precautionary approach is applied, landings in 2016 should be no more than 2606 tonnes. ICES cannot quantify the corresponding total catches.

Stock development over time

The stock size indicator from surveys has been decreasing since 2012.

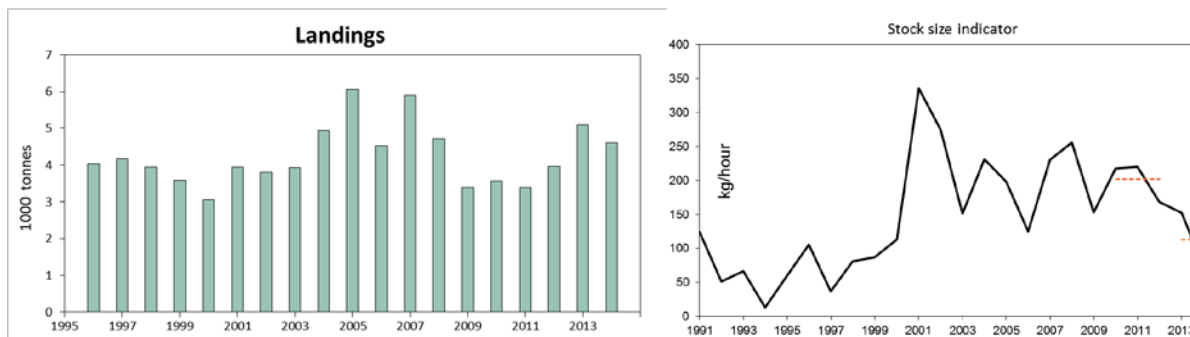


Figure 8.3.7.1 Flounder in Subdivisions 26 and 28. Left panel: Official landings. Right panel: Combined 1st and 4th quarters biomass index (kg hr^{-1} ; weighted average per depth stratum area) of fish equal to or larger than 20 cm, from the Baltic International Trawl Survey (BITS). The dashed line indicates the average biomass index of the respective year range.

Stock and exploitation status

Table 8.3.7.1 Flounder in Subdivisions 26 and 28. State of the stock and fishery, relative to reference points.

		Fishing pressure			Stock size		
		2012	2013	2014	2012	2013	2014
Maximum Sustainable Yield	F_{MSY}	?	?	?	MSY	?	?
Precautionary approach	F_{pa} , F_{lim}	?	?	?	B_{pa} , B_{lim}	?	?
Management Plan	F_{MGT}	-	-	-	SSB_{MGT}	-	-
Qualitative evaluation	-	→	↗	↗	-	↘	↘
				Increasing			Decreasing

Catch options

The ICES framework for category 3 stocks was applied (ICES, 2012). The Baltic International Trawl Survey (BITS – Q1+Q4) was used as the index of stock development. The advice is based on a comparison of the two latest index values (index A) with the three preceding values (index B), multiplied by the recent advised landings.

The index is estimated to have decreased by more than 20% and thus the uncertainty cap was applied to calculate the landings advice. The stock status relative to candidate reference points is unknown. The precautionary buffer was applied in 2014 and was therefore not applied again. Discarding is known to take place, but ICES cannot quantify the corresponding catch.

Table 8.3.1.2 Flounder in Subdivisions 26 and 28. For stocks in ICES data categories 3–6, one landing option is provided.

Index A (2013, 2014)		112.6
Index B (2010, 2011, 2012)		202.2
Index ratio (A/B)		0.56
Uncertainty cap	Applied	0.8
Recent advised landings for 2015		3 257 t
Discard rate	Unknown	
Precautionary buffer	Not applied	-
Landings advice*		2 606 t

*(recent advised landings × cap).

Basis of the advice

Table 8.3.7.3 Flounder in Subdivisions 26 and 28. The basis of the assessment and advice.

Advice basis	Precautionary approach.
Management plan	There is no management plan for flounder in this area.

Quality of the assessment

The discard ratio in both subdivisions varies between countries, fleets, vessels, and even individual hauls of the same vessel and trip. Estimated discards in 2014 varied by country, from 0 to 99.6% of the catch. Discarding practices are controlled by factors such as market price and cod catches. Given the high variability in the discard ratios, estimating discards is very uncertain and cannot be used.

The BITS survey index from Quarter 4 in 2013 has been changed due to an update in the database.

Issues relevant for the advice

Catch are mainly bycatch and this stock is not currently regulated by a TAC. The fishing effort has increased since 2013 (Figure 8.3.7.2)

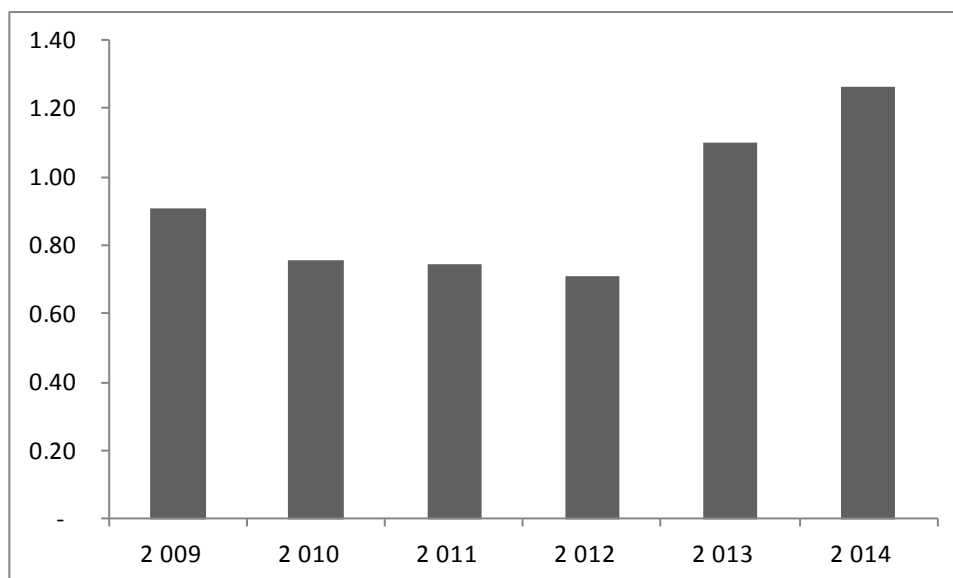


Figure 8.3.7.2 Flounder in Subdivisions 26 and 28. Standardized fishing effort (fishing days) weighted by the mean of demersal fish landings by country. Includes only those countries that have flounder landings.

Reference points

No reference points are defined for this stock.

Basis of the assessment

Table 8.3.7.4 Flounder in Subdivisions 26 and 28. The basis of the assessment and advice.

ICES stock data category	3.2.0 (ICES, 2015a).
Assessment type	Survey trends (ICES, 2015b).
Input data	Commercial landings and survey data from the Baltic International Trawl Survey (BITS–Q1+Q4).
Discards and bycatch	Discards are substantial but not used in the advice.
Indicators	Commercial effort (ICES, 2015b).
Other information	This stock was benchmarked in 2014 (WKBALFLAT; ICES, 2014).
Working group	Baltic Fisheries Assessment Working Group (WGBFAS).

Information from stakeholders

There is no available information.

History of advice, catch, and management

Table 8.3.7.5 Flounder in Subdivisions 26 and 28. History of ICES advice, the agreed TAC, and official landings. Weights in thousand tonnes.

Year	ICES advice*	Predicted landings corresp. to advice	Agreed TAC	Official landings SDs 22–32	Official landings SDs 26 and 28
2000	No advice	-	-	14.9	3.0
2001	No advice	-	-	17.6	3.9
2002	No advice	-	-	19.4	3.8
2003	No advice	-	-	15.2	3.9
2004	No advice	-	-	18.2	4.9
2005	No advice	-	-	20.1	6.1
2006	No advice	-	-	17.2	4.5
2007	No advice	-	-	19.4	5.9
2008	No advice	-	-	16.8	4.7
2009	No advice	-	-	15.1	3.4
2010	No advice	-	-	16.2	3.6
2011	No advice	-	-	15.3	3.4
2012	Reduce catches	-	-	15.9	4.0
2013	Catches should be reduced by 5%	< 15.1*	-	21.1	5.1
2014	Landings should be reduced by 15%	< 13.5*	-	20.6	4.6
2015	Landings should be reduced by 36%	< 3.257	-		
2016	Precautionary approach (≥ 20% decrease)	≤ 2.606	-		

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

History of catch and landings

Table 8.3.7.6 Flounder in Subdivisions 26 and 28. Catch distribution by fleet in 2014 as estimated by ICES.

Total catch (2014)	Landings		Discards
Unknown	Trawls (78%)	Other gears (22%)	Discards are known to take place and are considered substantial but could not be quantified.
	4 614 t		

Table 8.3.7.7 Flounder in Subdivisions 26 and 28. History of official landings per country. Weights in tonnes.

Year	Denmark	Finland	Germany	Poland	Sweden	Estonia	Latvia	Lithuania	Russia	Total
1996	0	0	19	2 556	79	44	289	316	740	4 043
1997	10	0	16	1 730	401	101	362	554	1 001	4 175
1998	0	0	2	1 370	135	146	362	737	1 188	3 940
1999	0	0	0	1 435	47	92	505	547	964	3 590
2000	9	0	0	721	28	65	415	575	1 236	3 049
2001	15	0	0	548	182	100	613	1 127	1 355	3 941
2002	42	0	0	626	52	91	596	1 077	1 314	3 798
2003	1	0	0	648	17	122	673	1 066	1 402	3 929
2004	1	0	0	1 955	18	89	769	834	1 277	4 943
2005	0	0	0	1 743	124	133	1 716	949	1 393	6 058
2006	4	0	0	1 675	22	83	1 155	355	1 231	4 524
2007	2	2	0	1 829	20	92	1 043	268	2 650	5 905
2008	0	0	0	1 451	19	91	577	629	1 960	4 727
2009	0	0	0	1 472	17	77	364	499	969	3 398
2010	0	0	0	1 727	15	93	250	462	1 030	3 577
2011	1	1	0	1 437	20	89	280	418	1 139	3 387
2012	0	10	0	1 501	14	81	622	651	1 079	3 959
2013	22	8	0	1 581	45	76	1 399	949	1 010	5 089
2014	1	0	0	1 210	0	79	1 578	698	1 047	4 614

Summary of the assessment

Table 8.3.7.8 Flounder in Subdivisions 26 and 28. Biomass index (kg hour⁻¹; weighted average per depth stratum area) of fish equal to or larger than 20 cm, from the BITS from 1st and 4th quarters and combined (geometric mean).

Year	Biomass index 1st quarter	Biomass index 4th quarter	Combined index
2001	278.9	404.1	335.8
2002	238.2	316.5	274.6
2003	159.9	143.3	151.4
2004	145.6	366.0	230.9
2005	128.5	307.0	198.6
2006	103.8	150.2	124.8
2007	238.7	223.2	230.8
2008	330.1	198.8	256.2
2009	160.9	145.1	152.8
2010	242.2	196.4	218.1
2011	230.4	209.9	219.9
2012	211.7	134.2	168.5
2013	132.7	175.8*	152.8
2014	82.7	63.5	72.5

* The index estimate was changed when compared to the 2014 advice after updated information was gathered from DATRAS database.

Sources and references

ICES. 2012. ICES Implementation of Advice for Data-limited Stocks in 2012 in its 2012 Advice. ICES CM 2012/ACOM 68. 42 pp.

ICES. 2014. Report of the Benchmark Workshop on Baltic Flatfish Stocks (WKBALFLAT), 27–31 January 2014, Copenhagen, Denmark.

ICES 2015a. Advice basis. *In* Report of the ICES Advisory Committee, 2015. ICES Advice 2015, Book 1. In preparation.

ICES. 2015b. Report of the Baltic Fisheries Assessment Working Group (WGBFAS), 14–21 April 2015, ICES Headquarters, Copenhagen, Denmark. ICES CM 2015/ACOM:10.