5.3.53 Plaice (*Pleuronectes platessa*) in divisions 7.f and 7.g (Bristol Channel, Celtic Sea)

ICES stock advice

ICES advises that when precautionary approach is applied, catches in 2017 should be no more than 1500 tonnes. If this stock is not under the EU landings obligation in 2017 and discard rates do not change from the average of the last three years (2013–2015), this implies landings of no more than 405 tonnes.

Stock development over time

Since 2004 the landings have been relatively stable but discards have been increasing. Both stock size indicators based on survey biomass show an increasing trend since the mid-2000s. In the last five years the two stock size indicators show different trends (increase vs. stable).
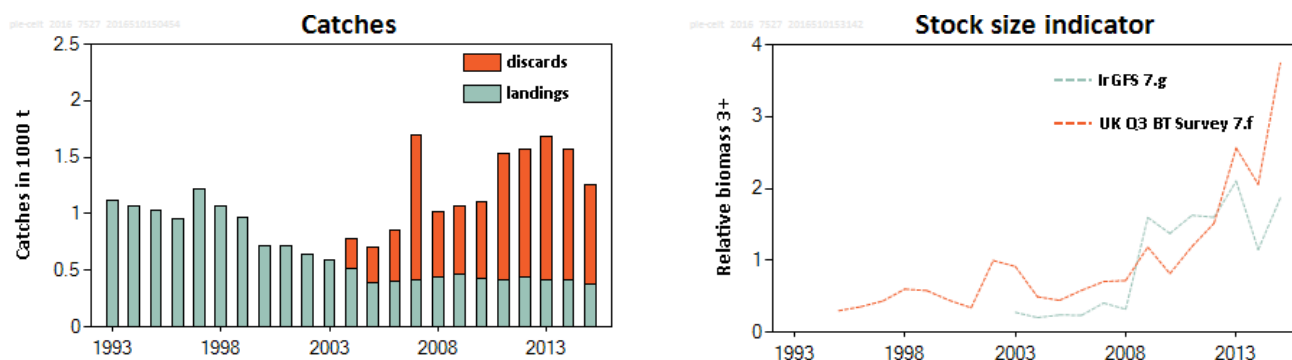

Figure 5.3.53.1   Plaice in divisions 7.f and 7.g. Catches (thousand tonnes) and UK(E&W)-BTS-Q3 and IGFS-WIBTS-Q4 survey biomass of plaice older and equal to 3 years old (relative to the average of the time-series). Discard estimates prior to 2004 are not available.

Stock and exploitation status

Table 5.3.53.1   Plaice in divisions 7.f and 7.g. State of the stock and fishery relative to reference points*.

		Fishing pressure				Stock size		
		2013	2014	2015		2013	2014	2015
Maximum sustainable yield	$F_{MSY\ proxy}$	✅	✅	❓ Unknown	MSY $B_{trigger}$ proxy	✅	✅	✅ Above proxy
Precautionary approach	F_{pa}, F_{lim}	✅	✅	❓ Unknown	B_{pa}, B_{lim}	✅	✅	✅ Above possible candidates ref. points
Management plan	F_{MGT}	-	-	- Not applicable	SSB_{MGT}	-	-	- Not applicable
Qualitative evaluation	-	❓	❓	❓ Unknown		↗	↘	↗ Increasing

*Note: The state of the stock evaluation is based on reference point proxies (ICES, 2016a) and relative change in stock size.

Catch options

The ICES framework for category 3 stocks was applied (ICES, 2012). The perception of the stock is difficult to assess. The two biomass indicators show different trends in the recent years. ICES is not able to combine the information into one indicator because of the partial spatial coverage of each of the surveys and the unknown reliability of the survey estimates. Therefore, in absence of a representative combined stock indicator, the advice given last year (for 2016) is also applicable for 2017.

The precautionary buffer was last applied in 2012 (for the 2013 advice) and indicators suggest that the stock has remained either stable or increased since then. Therefore, no additional precautionary buffer was applied.

The discarding rate was 73% of the total catch (average 2013–2015).

Table 5.3.53.2　　Plaice in divisions 7.f and 7.g. For stocks in ICES data categories 3–6, one catch option is provided.

Recent advised catch for 2016		1500 t
Discard rate (average 2013–2015)		0.73
Precautionary buffer	Not applied	-
Catch advice		1500 t
Landings corresponding to the catch advice		405 t

Basis of the advice

Table 5.3.53.3　　Plaice in divisions 7.f and 7.g. The basis of the advice.

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

Quality of the assessment

The assessment is based on two survey time-series. Both surveys indicate increasing stock abundance over the last decade at ages 3+. These indices are used qualitatively rather than for the index ratio approach. This is because there are spatial differences and partial coverage of stock biomass and unknown reliability of the survey estimates.

Issues relevant for the advice

Sole and plaice are caught in mixed fisheries, which generates high discards of plaice owing to mismatch in the selectivity properties of the gear and the plaice minimum landings size. In addition, the relatively low market value of plaice may contribute to the high discard rates.

Reference points

Table 5.3.53.4　　Plaice in divisions 7.f and 7.g. Reference points, values, and their technical basis.

Framework	Reference point	Value	Technical basis	Source
MSY approach	MSY $B_{trigger\ proxy}$ *	3800 t	0.5 × B_{MSY} (estimated by SPiCT from model parameters)	ICES (2016a)
	$F_{MSY\ proxy}$ *	0.27	F_{MSY} (estimated by SPiCT from model parameters using data from 1977–2014)	ICES (2016a)
Precautionary approach	B_{lim}	Not defined		
	B_{pa}	Not defined		
	F_{lim}	Not defined		
	F_{pa}	Not defined		
Management plan	SSB_{MGT}	Not applicable		
	F_{MGT}	Not applicable		

*The current assessment is indicative of trends only and therefore results cannot be compared directly to the F_{MSY} proxy reference point estimate.

Basis of the assessment

Table 5.3.53.5   Plaice in divisions 7.f and 7.g. The basis of the assessment.

ICES stock data category	3 (ICES, 2016b)
Assessment type	Survey based assessment (ICES, 2016c)
Input data	Two survey indices (UK (E&W)-BTS-Q3, IGFS-WIBTS-Q4)
Discards and bycatch	Discard data are available since 2004 and used to provide advice.
Indicators	SPiCT model (ICES, 2016d)
Other information	Benchmarked in 2011 (ICES, 2011)
Working group	Working Group for the Celtic Seas Ecoregion (WGCSE)

Information from stakeholders

There is no available information.

History of the advice, catch, and management

Table 5.3.53.6   Plaice in divisions 7.f and 7.g. History of ICES advice, the agreed TAC, and the official and ICES estimates of landings. Weights are in thousand tonnes. N/A = French landings not available.

Year	ICES advice	Predicted catch corresp. to advice	Predicted landings corresp. to advice	Agreed TAC	Official landings	ICES landings	ICES discards*
1987	TAC not to be restrictive on other species	-	-	1.8	1.91	1.90	–
1988	TAC not to be restrictive on other species	-	-	2.5	2.19	2.12	–
1989	TAC not to be restrictive on other species	-	-	2.5	2.58	2.15	–
1990	F likely to be F(88)	-	~1.9	1.9	2.22	2.08	–
1991	F likely to be F(89)	-	~1.7	1.9	1.83	1.50	–
1992	No long-term gains in increasing F	-	-	1.5	1.36	1.19	–
1993	No long-term gains in increasing F	-	-	1.4	1.30	1.11	–
1994	No long-term gains in increasing F	-	-	1.4	0.98	1.07	–
1995	No increase in F	-	1.29	1.4	0.96	1.03	–
1996	20% reduction in F	-	0.93	1.1	0.98	0.95	–
1997	20% reduction in F	-	1.10	1.1	1.26	1.22	–
1998	20% reduction in F	-	1.00	1.1	1.15	1.07	–
1999	35% reduction in F	-	0.67	0.9	N/A	0.97	–
2000	30% reduction in F	-	0.70	0.80	0.72	0.72	–
2001	40% reduction in F	-	0.60	0.76	0.68	0.71	–
2002	At least 35% reduction in F	-	0.68	0.68	0.62	0.64	–
2003	At least 40% reduction in F	-	< 0.66	0.66	0.56	0.59	–
2004	F< 0.10 or recovery plan	-	< 0.21	0.56	0.49	0.51	0.27
2005	70% reduction in F or recovery plan	-	< 0.25	0.48	0.40	0.39	0.32
2006	50% reduction in F or recovery plan	-	< 0.40	0.48	0.41	0.40	0.45
2007	50% reduction in F or recovery plan	-	< 0.38	0.42	0.42	0.41	1.29
2008	60% reduction in F	-	< 0.24	0.49	0.38	0.44	0.58
2009	75% reduction in F	-	< 0.17	0.42	N/A	0.46	0.61
2010	50% reduction in F	-	< 0.33	0.45	0.44	0.43	0.67
2011	See scenarios	-	-	0.41	0.42	0.42	1.11
2012	Reduce catches	-	-	0.37	0.45	0.44	0.85
2013	Decrease landings by 19% (1.5% increase followed by 20% PA reduction)	-	< 0.36	0.37	0.41	0.41	1.27
2014	Increase catches by 20%	< 1.608	< 0.519	0.46	0.41	0.41	1.16

Year	ICES advice	Predicted catch corresp. to advice	Predicted landings corresp. to advice	Agreed TAC	Official landings	ICES landings	ICES discards*
2015	Catches should be no more than recent catches (last 3 years)	< 1.500	< 0.420	0.461	0.38	0.38	0.87
2016	Precautionary approach (same catch value as advised for 2015)	≤ 1.500	≤ 0.420**	0.420			
2017	Precautionary approach (same catch value as advised for 2016)	≤ 1.500	≤ 0.405				

* Discards only available from 2004 to 2015.
** Wanted catch.

History of catch and landings

Table 5.3.53.7 Plaice in divisions 7.f and 7.g. Catch distribution by fleet in 2015 as estimated by ICES.

Catch (2015)	Landings			Discards		
	Beam trawl	Otter trawl	Other gear types	Beam trawl	Otter trawl	Other gear types
1251 t	57%	32%	11%	60%	28%	12%
	381 t			870 t		

Table 5.3.53.8 Plaice in divisions 7.f and 7.g. History of official landings by country, ICES estimated landings, and discards. Weights are in tonnes.

Year	Belgium	UK (Engl. & Wales)	France	Ireland	N. Ireland	The Netherlands	Scotland	Total reported	Discards	Unallocated	ICES landings	ICES catch
1977	214	150	365	28			0	757	N/A	0	757	N/A
1978	196	152	527	0			0	875	N/A	0	875	N/A
1979	171	176	467	49			0	863	N/A	0	863	N/A
1980	372	227	706	61			7	1373	N/A	0	1373	N/A
1981	365	251	697	64			0	1377	N/A	0	1377	N/A
1982	341	196	568	198			0	1303	N/A	0	1303	N/A
1983	314	279	532	48			0	1173	N/A	−27	1146	N/A
1984	283	366	558	72			0	1279	N/A	−69	1210	N/A
1985	357	466	493	91			0	1407	N/A	345	1752	N/A
1986	665	529	878	302		9	1	2384	N/A	−693	1691	N/A
1987	581	496	708	127				1912	N/A	−11	1901	N/A
1988	617	629	721	226	1			2194	N/A	−78	2116	N/A
1989	843	471	1089	180				2583	N/A	−432	2151	N/A
1990	794	497	767	160			1	2219	N/A	−137	2082	N/A
1991	836	392	444	155				1827	N/A	−326	1501	N/A
1992	371	302	504	180			5	1362	N/A	−174	1188	N/A
1993	542	290	373	89			9	1303	N/A	−189	1114	N/A
1994	350	251	298	82			1	982	N/A	88	1070	N/A
1995	346	284	254	70			2	956	N/A	72	1028	N/A
1996	410	239	246	83				978	N/A	−26	952	N/A
1997	594	258	329	78				1259	N/A	−42	1217	N/A
1998	540	176	298	135				1149	N/A	−82	1067	N/A

Year	Belgium	UK (Engl. & Wales)	France	Ireland	N. Ireland	The Netherlands	Scotland	Total reported	Discards	Unallocated	ICES landings	ICES catch
1999	371	170	N/A	115				N/A	N/A	312	968	N/A
2000	224	134	287	76				721	N/A	−3	718	N/A
2001	241	136	262	45				684	N/A	30	714	N/A
2002	248	105	186	79				618	N/A	24	642	N/A
2003	221	127	165	51				564	N/A	30	594	N/A
2004	212	87	145	45				489	274	21	510	784
2005	168	55	132	44				399	321	−13	386	707
2006	172	88	106	48				414	453	−10	404	857
2007	194	61	104	58				417	1288	−7	410	1698
2008	187	63	62	63				375	583	62	437	1020
2009	216	56	N/A	61				N/A	608	N/A	481	1071
2010	188	54	136	63				442	670	0	442	1103
2011	210	45	98	67				420	1107	-7	427	1528
2012	203	44	126	76				450	854	0	450	1298
2013	186	40	106	80				412	1274	-2	414	1686
2014	181	24	155	50				410	1158	0	410	1568
2015*	185	25	111	59				381	870	0	381	1251

N/A = not available.
* Preliminary.

Summary of the assessment

Table 5.3.53.9   Plaice in divisions 7.f and 7.g. Mean standardized biomass index of +3-year-old plaice.

Year	Survey	
	UK (E&W)-BTS-Q3	IGFS-WIBTS-Q4
1995	0.300	
1996	0.355	
1997	0.435	
1998	0.601	
1999	0.579	
2000	0.446	
2001	0.341	
2002	0.998	
2003	0.916	0.278
2004	0.495	0.205
2005	0.444	0.240
2006	0.584	0.237
2007	0.705	0.407
2008	0.721	0.321
2009	1.185	1.596
2010	0.816	1.375
2011	1.194	1.627
2012	1.517	1.600
2013	2.563	2.103
2014	2.058	1.149
2015	3.745	1.867

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