

6.4.8 Plaice in Division VIIId (Eastern Channel)

State of the stock

Spawning biomass in relation to precautionary limits	Fishing mortality in relation to precautionary limits	Fishing mortality in relation to high long-term yield	Fishing mortality in relation to agreed management targets	Comment
Unknown	Unknown	Unknown	Unknown	

The assessment is indicative of trends only. The SSB trends suggest that the spawning-stock biomass has declined through the last 15 years to a stable historical low level. The current level of SSB is low. F varies without trend around the long-term average. Recruitment in 2006 and 2007 have been above average.

Management objectives

There are no explicit management objectives for this stock.

Reference points

	Type	Value	Technical basis
Precautionary approach	B_{lim}	5,600 t	B_{loss} (~1995)
	B_{pa}	8,000 t	$1.4 B_{lim}$
	F_{lim}	0.54	F_{loss} (~1995)
	F_{pa}	0.45	5th percentile of F_{loss} ; long-term SSB $> B_{pa}$ and $P(SSB_{MT} < B_{pa}) < 10\%$.
Targets	F_y	Not defined	

(unchanged since 1998)

Single-stock exploitation boundaries

In the absence of a short-term forecast, ICES advises on the basis of exploitation boundaries in relation to precautionary considerations that landings in 2010 should not increase above the average of landings from the last three years (2006–2008), corresponding to landings less than 3 500 t.

Management considerations

There is a limited directed fishery on plaice at the beginning of the year on the spawning grounds. This fishery catches plaice that originates from both the North Sea and VIIId components. However, plaice is mainly taken as bycatch in the demersal fisheries, especially in the fisheries targeting sole.

Due to the minimum mesh size (80 mm) in the mixed beam trawl fishery, a large number of undersized plaice are discarded. The 80-mm mesh size is not matched to the minimum landing size of plaice (27 cm). Measures taken specifically directed at sole fisheries will also impact the plaice fisheries.

Following the EU Commission consultation paper on TACs for 2010 (COM(2009) 224, 12 May 2009) this stock would be categorised based on the average of SSB in the last 2 years compared to the average of the 3 preceding years. For this stock only relative measures of stock biomass are available but these show a reduction of 3%, resulting in an unchanged TAC. ICES has not evaluated this rule in relation to the precautionary approach.

Factors affecting the fisheries and the stock

The effects of regulations

In previous years, effort from the beam trawl fleet has not been restricted. The new EU Council Regulation (EC) N°43/2009 does not reduce the effort for this fleet.

Scientific basis

Data and methods

The XSA exploratory assessment is valid for trends only and is based on reported landings data, three commercial cpue indices, and three survey indices. Time-series of discard data are not available, but observations from all fisheries from 2003 indicate that discards are high.

Uncertainties in assessment and forecast

There is uncertainty about the stock structure. Historical tagging information shows that around 40% of the juvenile plaice in Division VIId come from nursery grounds in the North Sea, while the Eastern Channel supplies very few recruits to the North Sea. Similarly, around 20% of the recruits in Division VIIe come from VIId, while VIId does not receive significant numbers of juvenile from VIIe. There is also an adult migration between the North Sea and the Channel – 20–30% of the plaice caught in the winter in VIId were from migratory North Sea fish. The available information also suggests that plaice may migrate from the VIIe into the VIId and the North Sea after spawning.

Lack of discarding information also adds to the uncertainty. Routine discard sampling began in 2003 following the introduction of the EU Data Collection Regulations and indicates percentages of discards up to 50% in number, depending on the trip and on fishing practices. However, the time-series of discards is not yet long enough to be used in an analytical assessment.

Comparison with previous assessment and advice

The assessment was considered unreliable due to problems in stock structure identity and the absence of discards in the assessment. This year's advice is similar to last year's advice which was not to exceed average recent landings.

Source of information

Report of the Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak, 6-12 May 2009 (ICES CM 2009/ACOM:10).

Table 6.4.8.1 Plaice in Division VIIId. Single stock exploitation boundaries (advice), management and landings.

Year	ICES Advice (Single-stock Exploitation Boundaries since 2004)	Predicted catch corresp. to advice	Agreed TAC ¹	Official landings	ICES landings
1987	Precautionary TAC ¹	6.8 ¹	8.3	7.9	8.4
1988	Precautionary TAC ¹	6.9 ¹	9.96	9.1	10.4
1989	No increase in effort ¹	11.7 ¹	11.7	6.7 ²	8.8
1990	No increase in F; TAC	10.7 ¹	10.7	7.8 ²	9.0
1991	TAC	8.8 ¹	10.7	7.4 ²	7.8
1992	<i>Status quo</i> F gives mean SSB	7.6 ³	9.6	6.2	6.3
1993	Within safe biological limits	6.4 ³	8.5	4.8	5.3
1994	No long-term gains in increased F	-	9.1	5.6	6.1
1995	No increase in F	5.6	8.0	4.6	5.1
1996	No long-term gains in increasing F	6.5	7.53	4.6	5.4
1997	No advice	-	7.09	5.3	6.3
1998	Reduce F in 98 by 30% from 96	4.3	5.7	4.8	5.8
1999	Fishing at F_{pa}	6.3	7.4	5.4	6.3
2000	Fishing at F_{pa}	4.9	6.5	5.2	6.0
2001	Fishing at $<F_{pa}$	<4.4	6.0	5.0	5.3
2002	Fishing at $<F_{pa}$	<5.8	6.7	5.5	5.8
2003	Fishing at $<F_{pa}$	<5.3	6.0	4.5	4.5
2004	Fishing at $<F_{pa}^{*)}$	<5.4	6.06	4.0	4.0
2005	Fishing at $<F_{pa}^{*)}$	<4.4	5.15	3.0	3.4
2006	No effort increase ^{*)}		5.15	3.3	3.3
2007	Average landings ^{*)}	<4.0	5.08	3.7	3.7
2008	Average landings ^{*)}	<3.5	5.05	3.5	3.5
2009	Average landings ^{*)}	<3.5	4.64		
2010	Average landings ^{*)}	<3.5			

Weights in '000 t.

¹TACs for Divisions VIIId,e.²For France Division VIIId landings are estimated by ICES from the combined VIIId,e landings.³Catch at *status quo* F.^{*)} Single-stock boundary and the exploitation of this stock should be conducted in the context of mixed fisheries.

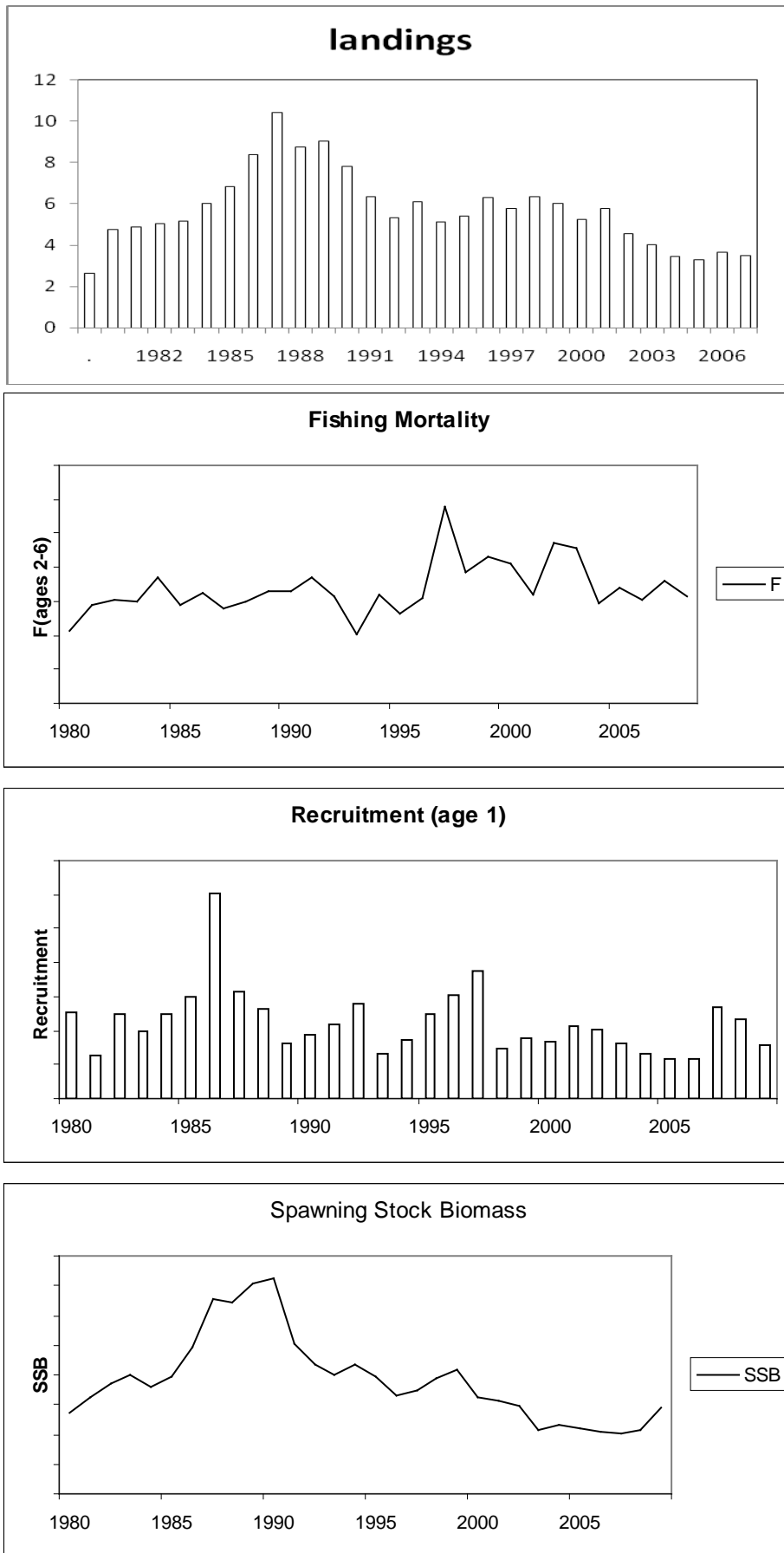


Figure 6.4.8.1 Plance in Division VIIId (Eastern Channel). Landings (in '000 t), fishing mortality, recruitment, and SSB. Indicative of trends only.

Table 6.4.8.2 Plaice in Division VIIId. Catches/landings by country and by area
(in '000 t).

Year	Belgium	Denmark	France	UK(E+W)	Others	Total reported	Un-allocated	Total as used by WG
1976	147	1(1)	1439	376	-	1963	-	1963
1977	149	81(2)	1714	302	-	2246	-	2246
1978	161	156(2)	1810	349	-	2476	-	2476
1979	217	28(2)	2094	278	-	2617	-	2617
1980	435	112(2)	2905	304	-	3756	-1106	2650
1981	815	-	3431	489	-	4735	34	4769
1982	738	-	3504	541	22	4805	60	4865
1983	1013	-	3119	548	-	4680	363	5043
1984	947	-	2844	640	-	4431	730	5161
1985	1148	-	3943	866	-	5957	65	6022
1986	1158	-	3288	828	488 (2)	5762	1072	6834
1987	1807	-	4768	1292	-	7867	499	8366
1988	2165	-	5688 (2)	1250	-	9103	1317	10420
1989	2019	+	3265 (1)	1383	-	6667	2091	8758
1990	2149	-	4170 (1)	1479	-	7798	1249	9047
1991	2265	-	3606 (1)	1566	-	7437	376	7813
1992	1560	1	3099	1553	19	6232	105	6337
1993	877	+(2)	2792	1075	27	4771	560	5331
1994	1418	+	3199	993	23	5633	488	6121
1995	1157	-	2598 (2)	796	18	4569	561	5130
1996	1112	-	2630 (2)	856	+	4598	795	5393
1997	1161	-	3077	1078	+	5316	991	6307
1998	854	-	3276 (23)	700	+	4830	932	5762
1999	1306	-	3388 (23)	743	+	5437	889	6326
2000	1298	-	3183	752	+	5233	781	6014
2001	1346	-	2962	655	+	4963	303	5266
2002	1204	-	3454	841	-	5499	278	5777
2003	995	-	2783 (3)	756	-	4536	-	4536
2004	987	-	2439 (4)	580	-	4007	-	4007
2005	830	-	1756	411	20	3018	428	3446
2006	1031	-	1713	545	16	3305	-	3305
2007	1356	-	1858	460	-	3674	-	3674
2008	1388	-	1642	461	-	3491	-	3491

1 Estimated by the working group from combined Division VIIId+e

2 Includes Division VIIe

3 Provisional

4 Data provided to the WG but not officially provided to ICES