

4.4.4 Faroe saithe in Division Vb

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 target	Comment
Unknown.	Unknown.	Unknown.	Unknown.	

The state of the stock is uncertain, but stock trends indicate that the spawning biomass is declining from a recent high. There are indications that fishing mortality has been increasing in recent years. Recruitment in the past 10 years has been well above the long-term average, but the mean weight-at-age has declined significantly over the same period.

Management objectives

The management objective is to achieve sustainable fisheries. An effort management system was implemented in the Faroese demersal fisheries (Division Vb) in 1996 and aims at harvesting, on average, 33% of the saithe stock in numbers. This translates into an average F of 0.45, above the F_{pa} of 0.28. ICES considers this to be inconsistent with the precautionary approach.

Reference points

	Type	Value	Technical basis
Precautionary approach	B_{lim}	60 000 t	Lowest observed SSB (1999).
	B_{pa}	85 000 t	Former MBAL.
	F_{lim}	0.40	consistent with B_{lim} of 60 000 t.
	F_{pa}	0.28	consistent with F_{lim} and previous estimate of F_{med} .
Targets	F_y	~ 0.45	Harvest on average 33% of the exploitable stock in numbers.

(unchanged since 1999)

Single-stock exploitation boundaries

Exploitation boundaries in relation to precautionary considerations

The estimates of fishing mortality and SSB are uncertain, but fishing mortality appears to be relatively high. ICES considers that fishing mortality should be reduced. ICES recommends a reduction of fishing effort of around 20% as an arbitrary step taking into account the declining trends in stock size and growth rates, and the recent measures to reduce the number of fishing days.

Management considerations

Recruitment in the past 10 years has been high and above the long-term average. An expected increase in SSB has however not occurred most likely because of high fishing mortality and reduced growth. Landings have been historical high in the last four years. ICES considers that the current catches and effort on this stock are unlikely to be sustainable and should be reduced. Noting that the number of fishing days were reduced by 10% for the current fishing year (2008/2009), ICES advises for a further reduction of effort. This advice applies to all fleets fishing saithe, including the single trawlers which are not presently regulated by fishing days but have accounted for about 20% of the annual landings on average since the introduction of the present management system.

The present spawning closures should be maintained.

The routine collection of information on by-catch of saithe in the blue whiting fishery in ICES Division Vb should be undertaken.

Factors affecting the fisheries and the stock

Regulations and their effects

The principal fleets fishing for saithe are pairtrawlers, single trawlers and jiggers. The average annual landings from these fleets since the introduction of the present management system are about 75%, 20% and 5%, respectively. The single trawlers have so far mainly been regulated by number of licenses and area closures but not by fishing days.

Limited sampling in the blue whiting fishery in Faroe waters indicates that by-catches of saithe have been minor since the mandatory use of sorting grids from 15 April 2007 in the areas west and northwest of the Faroe Islands.

Changes in fishing technology and fishing patterns

The effort management system invites improvement of fishing technology and fishing patterns. Presently, ICES is not able to quantify these changes.

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Impacts of the environment on the fish stock

There has been a strong decline in weight-at-age in recent years (Figure 4.4.4.2). The reason for this is not known.

Scientific basis

Data and methods

The assessment is based on landings-at-age and commercial cpue's. The assessment is indicative of trends and cannot be compared directly with the precautionary reference points..

Uncertainties in assessment and forecast

Due to a consistent bias in the estimates of SSB and F in the final year an analytical assessment cannot be accepted. In the absence of reliable fisheries-independent information, the assessment is considered to be very uncertain.

Comparison with previous assessment and advice

Assessment and advice are unchanged from those of last year.

Source of information

Report of the North-Western Working Group, 29 April – 5 May 2009 (ICES CM 2009/ACOM:04).

Saithe (*Pollachius virens*) in the Faroes (Division Vb). Single-stock exploitation boundaries.

Fishing Year	ICES Advice	Predicted catch corresp. to advice	Agreed TAC	ICES Landings
1987	No increase in F	<32		40
1988	No increase in F	<32		45
1989	Reduction in F	<40		44
1990	Reduction in F	<41		62
1991	TAC	<30		55
1992	Reduction in F	<27		36
1993	Reduction in F	<37		34
1994	TAC	<26	42 ¹	33
1995	TAC	<22	39 ¹	27
1996	TAC	<39	-	20
1997	20% reduction in F from 1995 level	<21	-	22
1998	30% reduction in effort from 1996/97 level	-	-	26
1999	F below F_{pa} (0.28)	<14		33
2000	F below than F_{pa} (0.28)	<15		39
2001	Reduce fishing effort to generate F well below F_{pa} (0.28)	<17		52
2002	Reduce fishing effort to generate F below F_{pa} (0.28)	<28		54
2003	Reduce fishing effort to generate F below F_{pa} (0.28)	<47		47
2004	Reduce fishing effort to generate F below F_{pa} (0.28)	<48		46
2005	Reduce fishing effort to generate F below F_{pa} (0.28)	<32		68
2006	Reduce fishing effort to generate F below F_{pa} (0.28)	<24		67
2007	Average catch considerations	40		61
2008	Do not increase effort	-		57
2009	Reduce fishing effort by around 20%	-		
2010	Reduce fishing effort by around 20%	-		

Fishing year: 1 September–31 August the following year

Weights in '000 t.

¹⁾ In the quota year 1 September–31 August the following year.

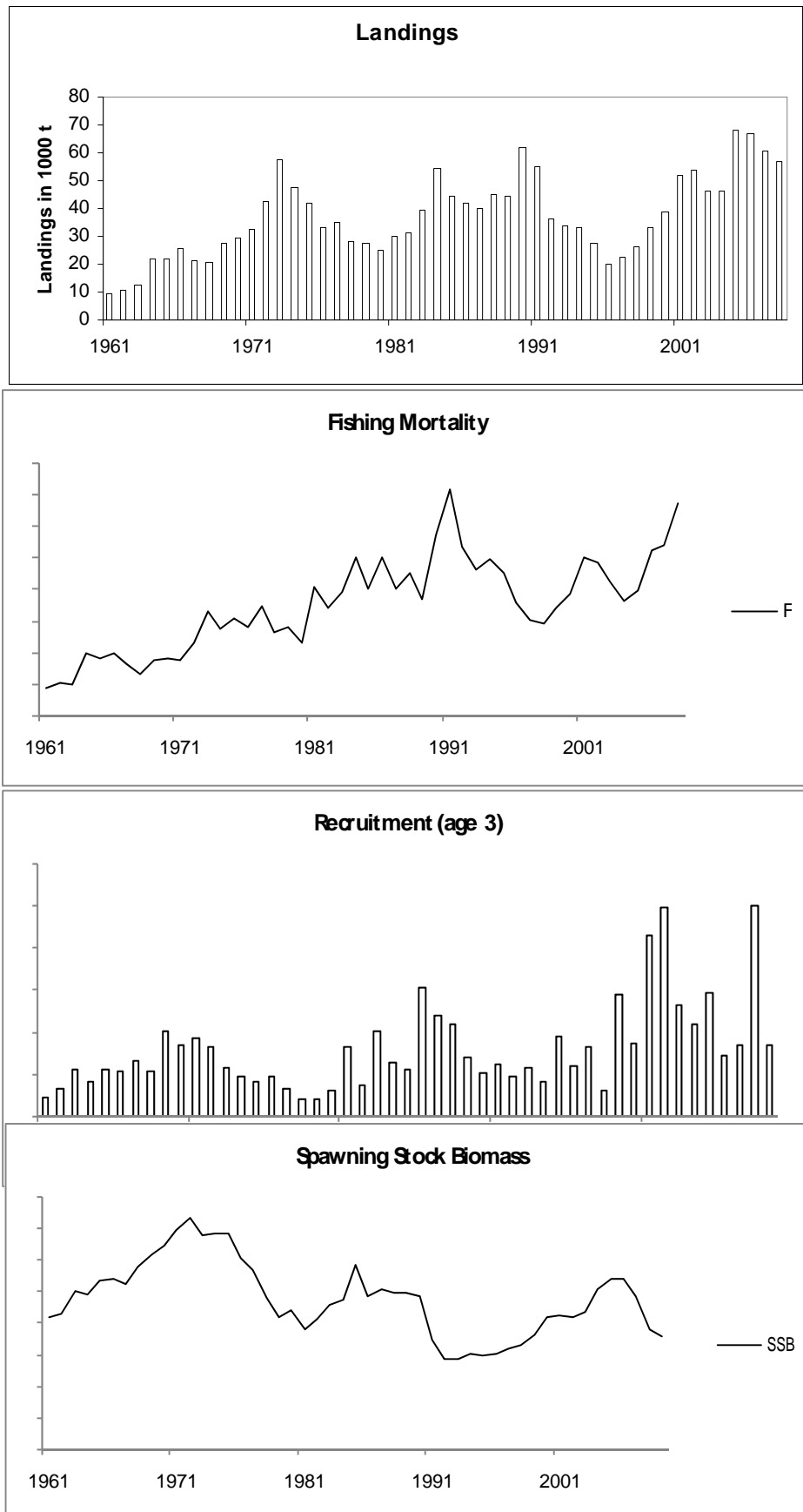


Figure 4.4.4.1. Saithe (*Pollachius virens*) in the Faroes (Division Vb). Landings, fishing mortality, Recruitment, spawning-stock biomass.

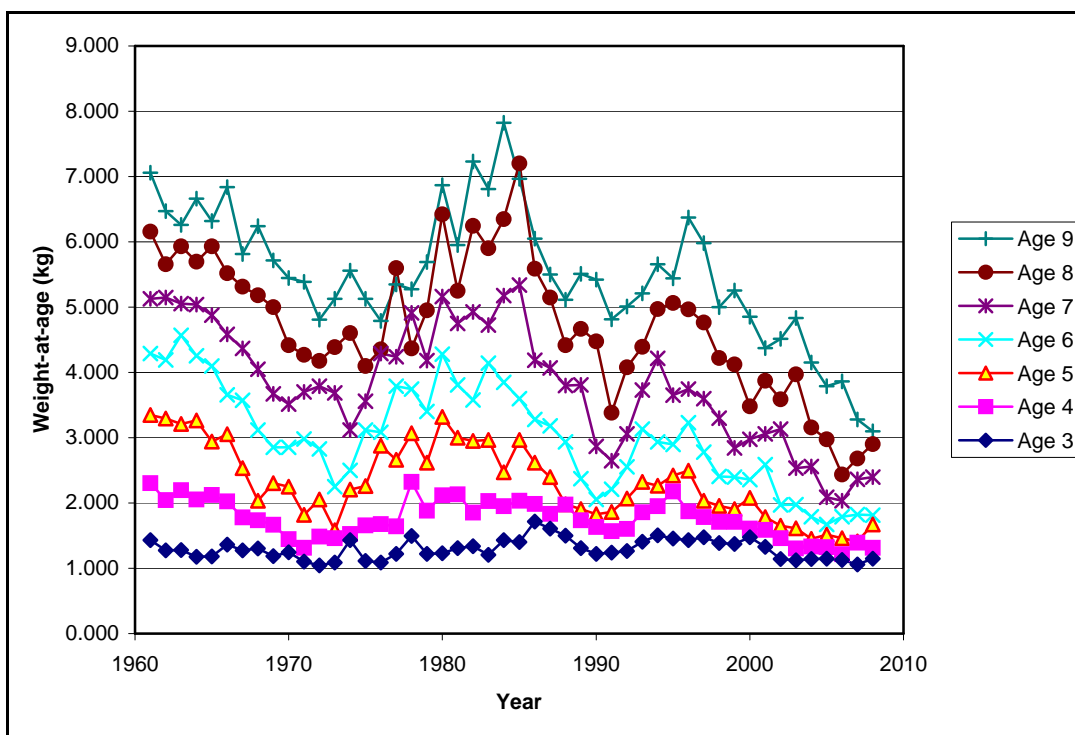


Figure 4.4.4.2 Saithe in the Faroes (Division Vb). Mean weight-at-age (kg) in the commercial catches for the period 1961–2008.

Table 4.4.4.1

Saithe (*Pollachius virens*) in the Faroes (Division Vb). Nominal catches (tonnes round weight) by countries, 1989–2008, as officially reported to ICES, and the working group estimate.

Country	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Denmark	-	2	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	16	-
Faroe Islands	43,624	59,821	53,321	35,979	32,719	32,406	26,918	19,267	21,721	25,995
France ³	-	-	-	120	75	19	10	12	9	17
Germany	-	-	32	5	2	1	41	3	5	-
German Dem.Rep.	9	-	-	-	-	-	-	-	-	-
German Fed. Rep.	20	15	-	-	-	-	-	-	-	-
Greenland	-	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-	-
Netherlands	22	67	65	-	-	-	-	-	-	-
Norway	51	46	103	85	32	156	10	16	67	53
Portugal	-	-	-	-	-	-	-	-	-	-
UK (Eng. & W.)	-	-	5	74	279	151	21	53	-	19
UK (Scotland)	9	33	79	98	425	438	200	580	460	337
USSR/Russia ²	-	30	-	12	-	-	-	18	28	-
<i>Total</i>	43,735	60,014	53,605	36,373	33,532	33,171	27,200	19,949	22,306	26,065
<i>Working Group estimate</i> ^{4,5}	44,477	61,628	54,858	36,487	33,543	33,182	27,209	20,029	22,306	26,421

Country	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008 ¹
Denmark	-	-	-	-	-	-	-	34	-	-
Estonia	-	-	-	-	-	-	-	-	-	-
Faroe Islands	32,439	-	49,676	55,165	47,933	48,222	71,496	70,696	64,552	61,137
France	-	273	934	607	370	147	123	315	108	38
Germany	100	230	667	422	281	186	1	49	3	3
Greenland	-	-	-	125	-	-	-	73	-	-
Ireland	-	-	5	-	-	-	-	-	-	-
Norway	160	72	60	77	62	82	82	35	81	37
Portugal	-	-	-	-	-	5	-	-	-	-
Russia	-	20	1	10	32	71	210	104	114	38
UK (E/W/NI)	67	32	80	58	89	85	32	88	4	-
UK (Scotland)	441	534	708	540	610	748	4,322	1,011	408	-
United Kingdom										358
<i>Total</i>	33,207	1,161	52,131	57,004	49,377	49,546	76,266	72,405	65,270	61,611
<i>Working Group estimate</i> ^{4,5,6,7}	33,207	39,020	51,786	53,546	46,555	46,355	68,008	67,103	60,819	57,025

¹ Preliminary.

² As from 1991.

³ Quantity unknown 1989-91.

⁴ Includes catches from Sub-division Vb2 and Division IIa in Faroese waters.

⁵ Includes French, Greenlandic, Russian catches from Division Vb, as reported to the Faroese coastal guard service.

⁶ Includes Faroese, French, Greenlandic catches from Division Vb, as reported to the Faroese coastal guard service.

⁷ The 2001-2008 catches from Faroe Islands, as stated from Faroese coastal guard service, are corrected in order to be consistent with procedures used previous years.