9.4.7 Northeast Atlantic porbeagle

State of the stock

Available information from Norwegian and Faroese fisheries shows that landings have declined strongly and have almost ceased. The stock is considered to be depleted. The directed fisheries have not been resumedThe stock is considered to be depleted. The directed fisheries have not resumed, implying that the stock has not recovered, at least in the areas where those fisheries took place.

While the cpue indices for a targeted fishery may not reflect trends in relative abundance, cpue data have been relatively stable since 1996.CPUE of the French fishery has declined since a peak in 1994 and has been stable at a lower level since then.

Single-stock exploitation boundaries

Exploitation boundaries in relation to precautionary considerations

Given the state of the stock, no targeted fishing for porbeagle should be permitted and bycatch should be limited. landings of porbeagle should not be allowed.

Porbeagles are particularly vulnerable to fishing mortality, because the population productivity is low (long-lived, slow-growing, high age-at-maturity, low fecundity, and a protracted gestation period) and they have an aggregating behavior. In the light of this,Therefore, risk of depletion of reproductive potential is high. It is recommended that exploitation of this species should only be allowed when indicators and reference points for stock status and future harvest have been identified and a management strategy, including appropriate monitoring requirements has been decided upon and is implemented.

Management considerations

Information from surface longline fishing shows that porbeagles are usually captured alive and there may be potential benefits to the stock by protecting mature females, in a similar way to that proposed by ICES for NEA spurdog (Section 9.4.6). If a non-zero TAC is set, ICES recommends the introduction of a maximum landing length (MLL). This is expected to deter fisheries targeting areas where large females occur. Although there are no studies to define an MLL that would be most beneficial to the stock, the length at first maturity of females may serve as a preliminary MLL which would be at ~210 cm fork length.
Information from surface longline fishing shows that porbeagles are usually captured alive. Therefore, a mitigation policy might be implemented by releasing porbeagle. A maximum landing length (MLL) in longline fisheries may be a useful precautionary management measure to afford protection to the mature female part of the stock. Although there are no studies to define an MLL that would be most beneficial to the stock, the length at first maturity of females may serve as a precautionary MLL, which would be about 210 cm fork length

Porbeagle is a highly migratory and schooling species. Sporadic targeted fisheries develop on these schools and such fisheries are highly profitable. Porbeagle is highly vulnerable to longline fisheries.

At present, not all countries fishing for porbeagle supply information on the landings in the different fisheries. It should be a requirement for all countries fishing for porbeagle to document all their catches of this species.

Factors affecting the fisheries and the stock

Regulations and their effect

EC Regulation 40/2008 gives a total TAC of 581 t for the NE Atlantic porbeagle stock (EC and international waters of Subareas I, II, III, IV, V, VI, VII, VIII, IX, X, XII, and XIV).

The current TAC is higher than recent landings, although quotas may be restrictive for some nations.

EC Regulation 1185/2003 prohibits the removal of shark fins of this species, and the subsequent discarding of the body. This regulation is binding on EC vessels in all waters and non-EC vessels in Community waters.

Scientific basis

Data and methods

The evaluation of stock status for porbeagle is based on landings data and one cpue series. Although the available landings data has improved compared to previous assessments, it still does not cover all fisheries from all countries. The landings are therefore an underestimate. Landings data for Spain are only for pelagic fisheries.

No fishery-independent data are available for this stock.

Uncertainties in assessment and forecast

Some early landings data for porbeagle may be reported as 'various sharks nei' in the official statistics. This means that the reported landings of porbeagle are likely an underestimation of the total landings of the species from the Northeast Atlantic.

While cpue indices for a targeted fishery may not reflect trends in relative abundance, cpue data have been relatively stable since 1996 but lower than at the start of the series in the early nineties Preliminary observations on CPUE data suggest a decline since a peak in 1994, although CPUE indices for a targeted fishery may not reflect trends in relative abundance (Figure 9.4.7.2). Further studies of these data are required to better understand spatial and temporal patterns in catch rates and search times.

Comparison with previous assessment and advice

This advice is consistent with the advice provided in 2006.

Source of information

Report of the Working Group on Elasmobranch Fishes, 2008 (ICES CM 2008/ACFM: 16).

Table 9.4.7.1 Available landing data for porbeagle in the ICES area. Data from ICCAT, Eurostat, ICES databases, and national data. Landings are considered an underestimate. Data for Spain are from pelagic fisheries only.

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
Denmark	158	170	265	233	289	112	72	176	158	84	45	38
Faroe Islands	269	.	80	307	295	121	299	425	344	259	256	126
France	105	97	292	302	554	835	1092	898	768	200	793	411
Germany	6	3	4	.	.	.	.	.	.	.	.	.
Iceland	2	2	4	3	3	.	1	1	1	1	1	1
Ireland	.	.	.	.	.	.	.	.	.	.	.	.
Netherlands	.	.	.	.	.	.	.	.	.	.	.	.
Norway	230	165	304	259	77	76	106	84	93	33	33	97
Portugal	.	.	.	.	.	.	.	.	.	.	.	.
Spain	.	.	.	.	.	.	.	.	.	.	.	.
Sweden	.	.	3	.	.	5	1	8	5	6	5	9
UK (Eng, Wal & NI)	14	15	16	25	.	.	1	3	2	1	2	5
UK (Scotland)	13	.	.	.	.	.	.	.	.	.	.	.
Japan	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL	797	452	968	1129	1218	1149	1572	1595	1371	584	1135	687

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Denmark	72	114	56	33	33	46	85	80	91	93	86	72
Faroe Islands	210	270	381	373	477	550	1189	1149	165	48	44	8
France	254	260	273	440	341	575	305	462	642	816	643	475
Germany	.	.	.	.	.	.	.	.	1	.	.	.
Iceland	1	1	1	1	1	.	.	1	3	4	5	3
Ireland	.	.	.	.	.	.	.	.	.	.	.	.
Netherlands	.	.	.	.	.	.	.	.	.	.	.	.
Norway	80	24	25	12	27	45	35	43	24	26	28	31
Portugal	.	.	3	3	2	2	1	0	1	1	1	1
Spain	.	.	.	.	.	.	.	.	.	.	.	31
Sweden	10	8	5	3	3	2	2	4	3	.	2	1
UK (Eng, Wal & NI)	12	6	3	3	15	9	.	.	.	.	0	.
UK (Scotland)	.	.	.	.	.	.	.	.	.	.	.	.
Japan	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3
TOTAL	639	683	747	868	899	1229	1617	1740	930	988	810	626

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Denmark	69	85	107	73	76	42	21	20	4	3	2
Faroe Islands	9	7	10	13	8	10	14	5	19	21	.
France	494	419	240	318	278	394	303	287	246	194	316
Germany	.	2	0	17	1	3	5	6	5	0	
Iceland	2	3	3	2	4	2	0	1	0	1	0
Ireland	.	.	8	2	6	3	11	18	.	4	8
Netherlands	.	.	.	0			0		0		0
Norway	19	28	34	23	17	14	19	24	11	27	10
Portugal	1	1	0	7	4	10	101.2	50	13	6	0
Spain	45	31	15	17	43	98	49	12	7	25	
Sweden	1	1	1	1	1	.	.	5	0	.	1
UK (Eng, Wal & NI)	.	1	6	7	10	7	25	24	24	11	26
UK (Scotland)	.	.	.	.	1	.	.	.	.	.	.
Japan	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL	643	578	425	480	448	584	548	453	330	292	363

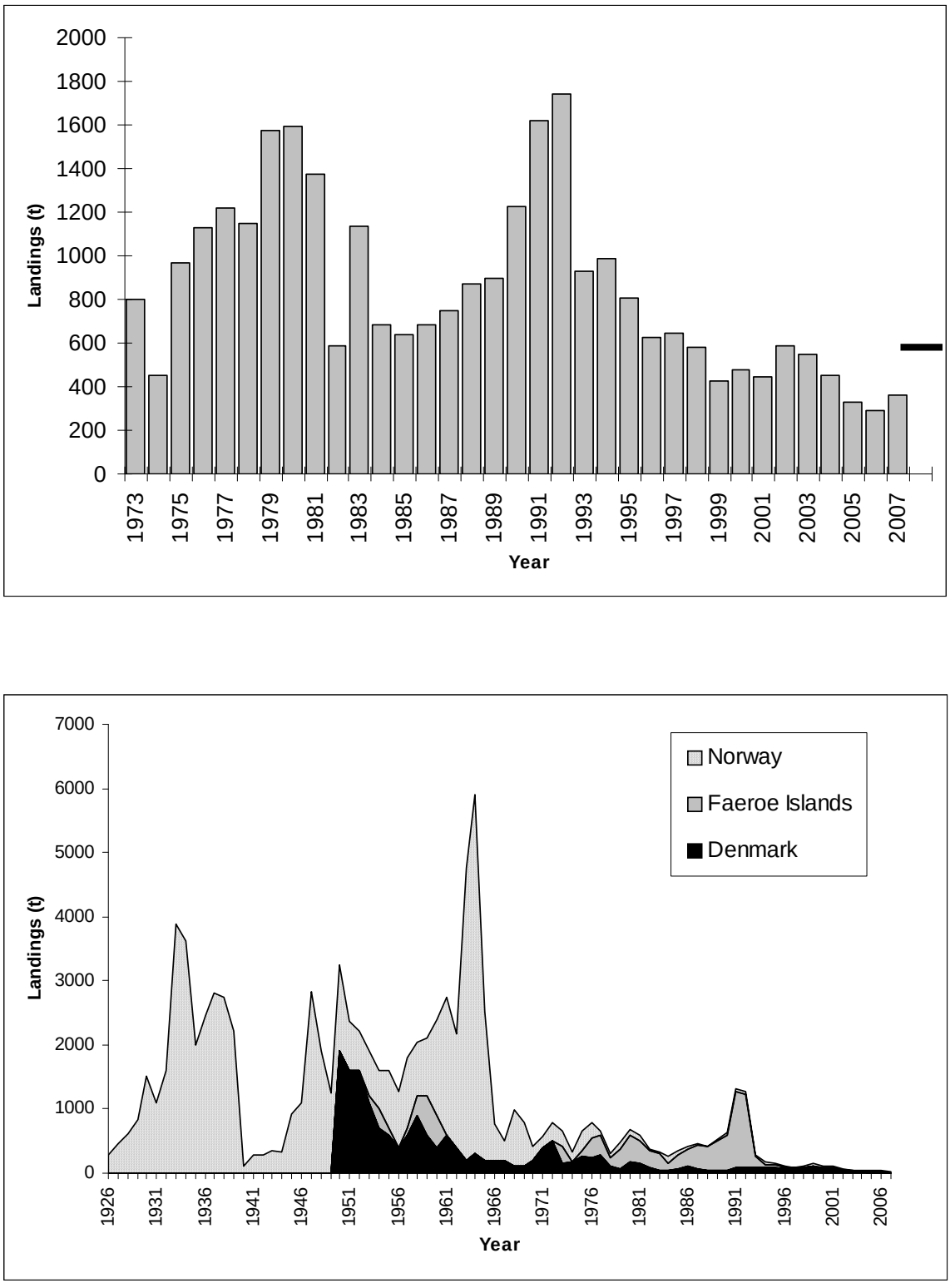

Figure 9.4.7.1 Porbeagle in the NE Atlantic. Working Group estimates of landings of porbeagle in the NE Atlantic for 1973–2007 (top, black line indicates 2008 TAC) and landings from the northern part of the ICES area (bottom) illustrating reported landings from Norway (1926–2007) and from Denmark and the Faroe Islands (1950–2007).

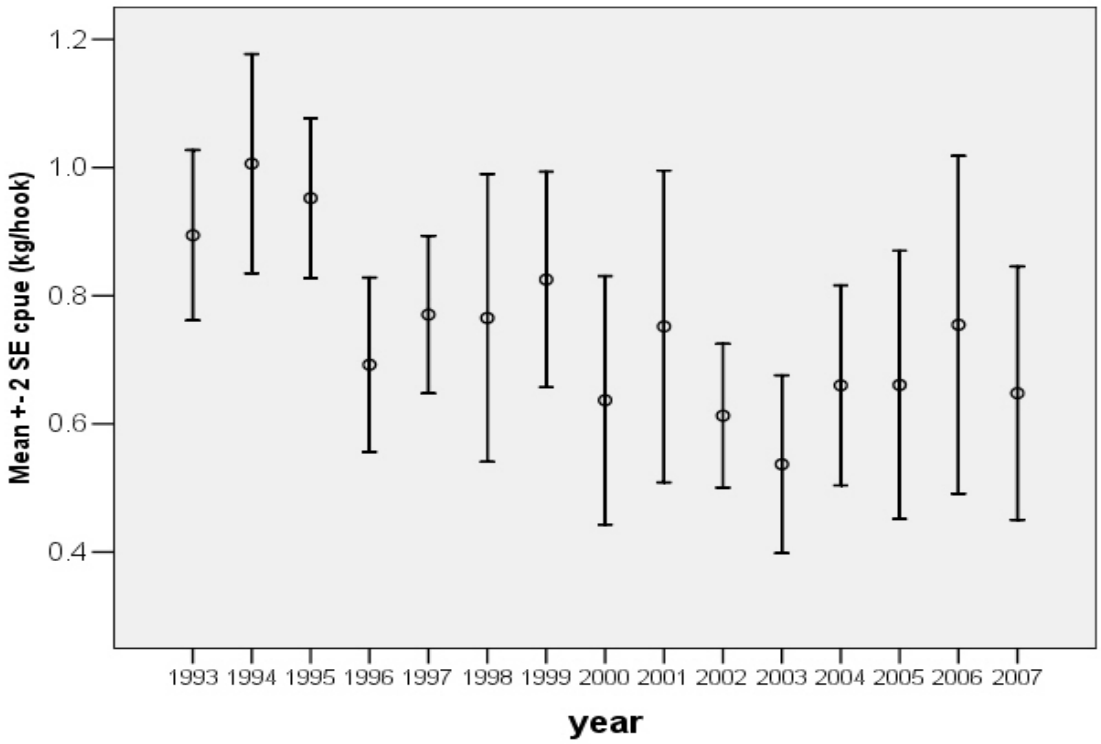

Figure 9.4.7.2 Porbeagle in the NE Atlantic. Temporal trends in cpue (kg/hook) of the French longline fishery for porbeagle targeted fishery 1993–2007 (based on twelve vessels).