## 9.4.6 Northeast Atlantic spurdog (Squalus acanthias) in ICES Areas I–IX

The only new information available for spurdog (*Squalus acanthias*) is landings data which does not offer any reason to change the advice from 2006. The advice for 2009 and 2010 is therefore the same as the advice given in 2006: "The stock is depleted and may be in danger of collapse. Targeted fisheries should not be permitted to continue, and bycatch in mixed fisheries should be reduced to the lowest possible level. The TAC should cover all areas where spurdog are caught in the northeast Atlantic and should be set at zero (...)."

In addition to the advice of 2006, ICES offers the following considerations:

Simulation modelling has shown there are strong potential benefits to the stock by protecting mature female spurdog in this long-lived species. If a non-zero TAC would be set, ICES recommends the introduction of a **maximum** landing length (MLL). This is expected to deter fisheries targeting areas where large females occur.

The maximum landing length should initially be set at 100 cm. The length at 50% maturity for female spurdog is just over 80 cm and the maximum size of females is about 120 cm. The maximum size of males is about 90 cm. Fecundity of spurdog increases with length and females of 100–120 cm length generally produce the highest amount of pups (10–21). Survivorship of spurdog released from longline fisheries is thought to be high, but will be lower in gillnet and trawl fisheries.

## **Sources of information**

ICES. 2007. Report of the Working Group on Elasmobranch Fishes (WGEF) 22–28 June 2007, Galway, Ireland. ICES CM 2007/ACFM:27.

ICES. 2008. Report of the Working Group on Elasmobranch Fishes (WGEF). 3–6 March 2008, ICES Headquarters. ICES CM 2008/ACOM:16.

				Predicted catch corresponding to		
	ICES	Single-stock ex- ploitation	Predicted catch corresponding to	single-stock ex- ploitation	Agreed	ACOM
Year	Advice	boundaries	advice	boundaries	TAC	Landings (4)
1991	None			'		27.9
1992	None					25.7
1993	None					19.6
1994	None					17.8
1995	None					17.8
1996	None					15.2
1997	None					13.3
1998	None					12.7
1999	None				8.9 (1)	11.2
2000	None				8.9 (1)	11.7 (5)
2001	None				8.9 (1)	12.4 (5)
2002	None				7.1 (1)	9.0
2003	None				5.6 (1)	10.1
2004	None				4.5 (1)	8.0
2005	None				1.1 (1)	6.6
2006					1.05 (1)	3.8
2007	F = 0				3.7 <sup>(2)</sup>	2.5 (6)
2008	F = 0				2.6 (3)	
2009						
2010	no fishery					

## Weights in '000 t.

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<sup>(1)</sup> TAC for ICES Subarea IV and Division IIa (EC).

<sup>(2)</sup> Combined TAC for ICES Subarea IV and Division IIa (EC) and for ICES Subareas IIIa, I, V, VI, VII, VIII, XII, and XIV (EU and international waters).

<sup>(3)</sup> Combined TAC for ICES Subarea IV and Division IIa (EC) and for ICES Subareas I, V, VI, VII, VIII, XII, and XIV (EU and international waters).

<sup>(4)</sup> Landings for total stock area: Subareas I–IX.

<sup>(5)</sup> May include some misreported deep-sea sharks or other species.

<sup>(6)</sup> Preliminary.

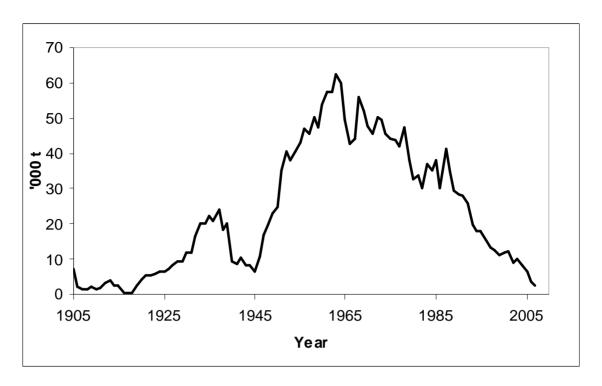
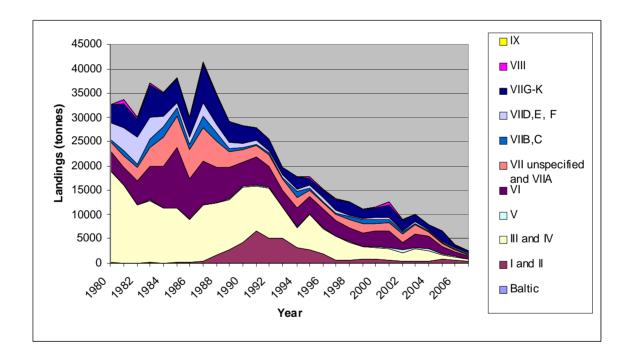


Figure 9.4.6.1 WG estimate of landings of spurdog in the Northeast Atlantic (Subareas I–IX). From ICES (2008).



**Figure 9.4.6.2** Recent landings of spurdog by area. From ICES (2008).

**Table 9.4.6.1** Northeast Atlantic spurdog. WG estimates of total landings of NE Atlantic spurdog (1947–2007).

Year	Landings (Tonnes)	Year	Landings (Tonnes)	Year	Landings (Tonnes)
1947	16893	1968	56043	1989	29301
1948	19491	1969	52074	1990	28370
1949	23010	1970	47557	1991	27874
1950	24750	1971	45653	1992	25667
1951	35301	1972	50416	1993	19589
1952	40550	1973	49412	1994	17854
1953	38206	1974	45684	1995	17783
1954	40570	1975	44119	1996	15215
1955	43127	1976	44064	1997	13274
1956	46951	1977	42252	1998	12769
1957	45570	1978	47235	1999	11192
1958	50394	1979	38201	2000	11706
1959	47394	1980	32711	2001	12547
1960	53997	1981	33537	2002	9050
1961	57721	1982	29901	2003	10132
1962	57256	1983	36942	2004	8044
1963	62288	1984	35229	2005	6592
1964	60146	1985	38063	2006	3771
1965	49336	1986	29994	2007	2501
1966	42713	1987	41361		
1967	44116	1988	34730		

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