

6.4.19 Horse mackerel (*Trachurus trachurus*) in Divisions IIIa, IVb,c and VIIId (North Sea stock)

The data available for this stock do not change the perception of the stock and do not give reason to change the advice from 2007. The advice on this stock for the fishery in 2010 is therefore the same as the advice given in 2007 and reiterated in 2008. The advice on this stock for the fishery in 2010 is therefore the same as the advice given in 2008 for the 2009 fishery: “ICES reiterates the recommendation made since 2002 to limit the catches to below the 1982–1997 average of 18 000 t. It is necessary to constrain the fishery until there is more information about the structure of horse mackerel stocks, and sufficient information to show that higher exploitation rates are sustainable.”

ICES’ advice is based on the time period when the catches in Division VIIId were small. In recent years, catches in Division VIIId have remained stable at a higher level but without a trend. However, the sustainability of these catches cannot yet be assessed and the basis of ICES’ advice remains unchanged.

The advice for horse mackerel assumes that all catches are counted against the TAC for each stock separately. In 2008 and before, the TAC covered only part of the distribution and fishing areas (EU waters). ICES advises that the management areas correspond to the distribution areas which include all EU, Norwegian, and Faroe Islands waters where horse mackerel are caught.

The table below shows a summary of the TACs set, ICES advice, and catches for 2008, and the 2009 advice and TACs.

Areas	other	IXa	VIIIc	VIII abde	VII a-c,e-k	VIIId	VI	Vb	IIa	IVa	IVbc	IIIa	TAC and Advice 2008	Catch 2008	TAC and Advice 2009
TAC	CECAF X, XII												5.76		5.76
		SOUTHERN											57.8	42.9 ¹	57.8
				WESTERN AREA									170.0	139.1 ¹	170.0
									(EU)	(EU) NORTHERN		no TAC	39.3	15.9 ¹	39.3
													Total	272.9	197.9 ¹
Advice	no Adv.	SOUTH											25.0	23.6	25.0
				WESTERN STOCK						Q34		West Q34	180.0	139.6 ²	180.0
										Q12	NORTH SEA		18.0	34.7 ²	18.0
													Total	223.0	197.9 ²
Landggs 2008		23.6	19.3	14.5	67.3	31.4	25.9	0.6	12	1	2.3	0		197.9	

All figures in thousand tonnes.

(1) landings from TAC regulated areas only, (2) includes discards

TACs for the Northern Area apply only to EU waters (in IVa and IIa)

Catches taken in IVa are attributed to North Sea Horse Mackerel in Quarters 1 and 2 and to Western Horse Mackerel in Quarters 3 and 4.

Catches taken in IIIa are attributed to Western Horse Mackerel in the western Skagerrak in Quarters 3 and 4 and to North Sea Horse Mackerel in all other areas and quarters.

Since 2002, the TAC advice has remained the same. Catches of North Sea horse mackerel have varied between 24 and 42 thousand tonnes during this period. In 2008, the catch was 34,750 tonnes which is almost double the advised catch. Most of the catch of North Sea horse mackerel is taken in ICES Division VIIId (90% in 2008). The key problem is that the TAC for the western stock is allocated to this ICES division, but catches from this area are of North Sea horse mackerel. To ensure precautionary management of all the horse mackerel stock areas TACs should be allocated according to the advice section in the table above. Specifically, three measures need to be taken:

1. The TAC for western horse mackerel should apply to all areas where western horse mackerel is caught (EU, Norwegian, and Faroe Islands waters) and where necessary be subject to agreement.
2. Catches from ICES Division VIIId should be taken against a TAC for the North Sea stock.
3. Catches taken in Division VIIIc need to be taken against a TAC for the western stock.

If the management area limits are revised, measures should be taken to ensure that misreporting of juvenile catch taken in Divisions VIIe,h and VIIId (the latter then belonging to the North Sea stock management area) is effectively hindered.

Source of information

Report of the Working Group on Widely Distributed Stocks, ICES Headquarters, Copenhagen 2–8 September 2009 (ICES CM 2009/ACOM:10).

Table 6.4.19.1 Horse mackerel (*Trachurus trachurus*) in Divisions IIIa, IVb,c and VIId (North Sea stock). Single-stock exploitation boundaries (advice), management, and landings.

Year	ICES Advice	Predicted catch corresp. To advice	Agreed TAC ¹	ICES landings ²
1987	Not assessed	-	30	12
1988	No advice	-	50	24
1989	No advice	-	45	33
1990	No advice	-	40	19
1991	No advice	-	45	12
1992	No advice	-	55	15
1993	No advice	-	60	14
1994	No advice	-	60	6
1995	No advice	-	60	17
1996	No advice	-	60	19
1997	No advice	-	60	20
1998	Develop and implement management plan	-	60	31
1999	Develop and implement management plan	-	60	37
2000	Develop and implement management plan	-	51	48
2001	No increase in catch	-	51	46
2002	No increase in catch from 1982–1997 average	<18	58	23
2003	No increase in catch from 1982–1997 average	<18	50	32
2004	No increase in catch from 1982–1997	<18	42	35
2005	No increase in catch from 1982–1997	<18	43	29
2006	No increase in catch from 1982–1997	<18	43	36
2007	No increase in catch from 1982–1997	<18	43	41
2008	No increase in catch from 1982–1997	<18	39	35
2009	Same advice as last year	< 18	39	
2010	Same advice as last year	< 18		

Weights in '000 t.

¹Division IIa and Subarea IV (EU waters only).

²Catch of North Sea stock (Divisions IVa (quarters 1–2), IIIa (except western part in quarters 3–4), IVb,c, and VIId).

Table 6.4.19.2 Horse mackerel general. Landings and discards (t) by year and Division, for the North Sea, Western, and Southern horse mackerel stocks. (Data submitted by Working Group members.)

Year	IIIa	IVa	IVb,c	Discards	VII d	North Sea Stock	IIa Vb	IIIa	IVa	VIa,b	VIIa-c,e-k	VIIIa,b,d,e	VIIIc	Disc	Western Stock	Southern Stock (IXa)	All stocks
1982	2,788 ¹		-		1,247	4,035	-		-	6,283	32,231	3,073	19,610	-	61,197	39,726	104,958
1983	4,420 ¹		-		3,600	8,020	412		-	24,881	36,926	2,643	25,580	-	90,442	48,733	147,195
1984	25,893 ¹		-		3,585	29,478	23		94	31,716	38,782	2,510	23,119	500	96,744	23,178	149,400
1985	-		22,897		2,715	26,750	79		203	33,025	35,296	4,448	23,292	7,500	103,843	20,237	150,830
1986	-		19,496		4,756	24,648	214		776	20,343	72,761	3,071	40,334	8,500	145,999	31,159	201,806
1987	1,138		9,477		1,721	11,634	3,311		11,185	35,197	99,942	7,605	30,098	-	187,338	24,540	223,512
1988	396		18,290		3,120	23,671	6,818		42,174	45,842	81,978	7,548	26,629	3,740	214,729	29,763	268,163
1989	436		25,830		6,522	33,265	4,809		85,304 ²	34,870	131,218	11,516	27,170	1,150	296,037	29,231	358,533
1990	2,261		17,437		1,325	18,762	11,414	14,878	112,753 ²	20,794	182,580	21,120	25,182	9,930	398,645	24,023	441,430
1991	913		11,400		600	12,000	4,487	2,725	63,869 ²	34,415	196,926	25,693	23,733	5,440	357,288	21,778	391,066
1992			13,955	400	688	15,043	13,457	2,374	101,752	40,881	180,937	29,329	24,243	1,820	394,793	26,713	436,548
1993			3,895	930	8,792	13,617	3,168	850	134,908	53,782	204,318	27,519	25,483	8,600	458,628	31,945	504,190
1994			2,496	630	2,503	5,689	759	2,492	106,911	69,546	194,188	11,044	24,147	3,935	413,022	28,442	447,153
1995	112		7,948	30	8,666	16,756	13,133	128	90,527	83,486	320,102	1,175	27,534	2,046	538,131	25,147	580,034
1996	1,657		7,558	212	9,416	18,843	3,366		18,356	81,259	252,823	23,978	24,290	16,870	420,942	20,400	460,185
1997			14,078	10	5,452	19,540	2,617	2,037	65,073 ³	40,145	318,101	11,677	29,129	2,921	471,700	27,642	518,882
1998	3,693		10,530	83	16,194	30,500	2,540 ⁴		17,011	35,043	232,451	15,662	22,906	830	326,443	41,574	398,523
1999			9,335		27,889	37,224	2,557 ⁵	2,095	47,316	40,381	158,715	22,824	24,188		298,076	27,733	363,033
2000			25,954		22,471	48,425	1,169 ⁶	1,105	4,524	20,657	115,245	32,227	21,984		196,911	27,160	272,496
2001	85	69	8,157		38,114	46,356	60	72	11,456	24,636	100,676	54,293	20,828		212,090	24,911	283,357
2002			12,636	20	10,723	23,379	1,324	179	36,855	14,190	86,878	32,450	22,110	305	194,292	23,665	241,336
2003	48	623	10,309		21,098	32,078	24	1,974	21,272	23,254	101,948	21,732	19,979		190,183	19,570	241,831
2004	351		18,348		16,455	35,154	47		11,841	21,929	98,984	8,353	15,772	701	157,627	23,581	216,361
2005	357		13,892	62	15,460	29,711	176		26,315	22,054	91,431	26,483	14,775	760	181,994	23,111	234,876
2006	1,099	2,661	7,998	78	23,790	35,626	30		27,152	15,722	77,970	20,651	13,470	99	155,094	24,557	215,277
2007	63	2,056	9,118	139	29,788	41,164	366 ⁷	110	4,940	26,279	63,223	14,428	13,960	102	123,408	23,423	187,994
2008	27	1,003	2,330		31,389	34,749	572	3	12,014	25,902	67,325	14,537	19,345	43	139,741	23,596	198,085

¹Divisions IIIa and IVb,c combined; ²Norwegian catches in IVb included in Western horse mackerel; ³ Includes Norwegian catches in IVb (1,426 t); ⁴Includes 1,937 t from Vb; ⁵Includes 132 t from Vb; ⁶Includes 250 t from Vb; ⁷ all fom Vb

Table 6.4.19.3 Horse Mackerel general. Catches (t) by Subarea. Data as submitted by Working Group members. Data of limited discard information are only available for some years.

Sub-area	1979	1980	1981	1982	1983	1984
II	2	-	+	-	412	23
IV + IIIa	1,412	2,151	7,245	2,788	4,420	25,987
VI	7,791	8,724	11,134	6,283	24,881	31,716
VII	43,525	45,697	34,749	33,478	40,526	42,952
VIII	47,155	37,495	40,073	22,683	28,223	25,629
IX	37,619	36,903	35,873	39,726	48,733	23,178
Total	137,504	130,970	129,074	104,958	147,195	149,485

Sub-area	1985	1986	1987	1988	1989	1990
II	79	214	3,311	6,818	4,809	11,414
IV + IIIa	24,238	20,746	20,895	62,892	112,047	145,062
VI	33,025	20,455	35,157	45,842	34,870	20,904
VII	39,034	77,628	100,734	90,253	138,890	192,196
VIII	27,740	43,405	37,703	34,177	38,686	46,302
IX	20,237	31,159	24,540	29,763	29,231	24,023
Total	144,353	193,607	222,340	269,745	358,533	439,901

Sub-area	1991	1992	1993	1994	1995	1996	1997
II + Vb	4,487	13,457	3,168	759	13,133	3,366	2,617
IV + IIIa	77,994	113,141	140,383	112,580	98,745	27,782	81,198
VI	34,455	40,921	53,822	69,616	83,595	81,259	40,145
VII	201,326	188,135	221,120	200,256	330,705	279,109	326,415
VIII	49,426	54,186	53,753	35,500	28,709	48,269	40,806
IX	21,778	26,713	31,944	28,442	25,147	20,400	27,642
Total	389,466	436,553	504,190	447,153	580,034	460,185	518,882

Sub-area	1998	1999	2000	2001	2002	2003	2004
II + Vb	2,538	2,557	1,169	60	1,324	24	47
IV + IIIa	31,295	58,746	31,583	19,839	49,691	34,226	30,540
VIII	38,562	47,012	54,211	75,120	54,560	41,711	24,125
IX	41,574	27,733	27,160	24,912	23,665	19,570	23,581
Total	399,698	363,033	272,496	283,357	241,335	241,831	216,361

Sub-area	2005	2006	2007	2008 ¹
II + Vb	176	30	366	572
IV + IIIa	40,564	38,911	16,407	15,377
VI	22,055	15,751	26,279	25,902
VII	107,475	101,912	93,132	98,746
VIII	41,495	34,122	28,387	33,892
IX	23,111	24,557	23,423	23,596
Total	234,876	215,283	187,994	198,085

¹Preliminary.