

### 6.3.55 Whiting (*Merlangius merlangus*) in Division IIIa (Skagerrak and Kattegat)

#### ICES stock advice

ICES advises that when the precautionary approach is applied, catches should be no more than 500 tonnes in each of the years 2016 and 2017. If this stock is not under the EU landing obligation and discard rates do not change from the average of the last 3 years (2012–2014), this implies landings of no more than 135 tonnes.

#### Stock development over time

Catches have been relatively low in recent years after a substantial industrial fishery ceased in the mid 1990's. The state of the stock is not known.

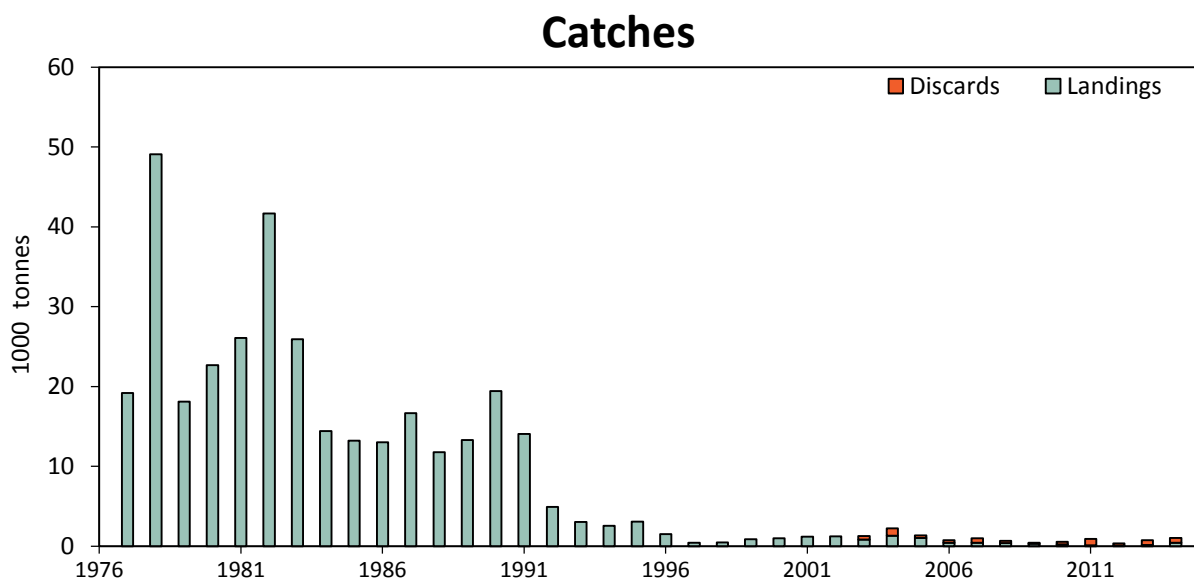


Figure 6.3.55.1 Whiting in Division IIIa. Total landings (weights in tonnes). Estimated discards are included from 2003 to the present.

#### Stock and exploitation status

**Table 6.3.55.1** Whiting in Division IIIa. State of the stock and fishery, relative to reference points.

		Fishing pressure				Stock size			
		2012	2013	2014		2013	2014	2015	
Maximum Sustainable Yield	$F_{MSY}$	?	?	?	Unknown	MSY	?	?	?
Precautionary approach	$F_{pa}$ , $F_{lim}$	?	?	?	Unknown	$B_{trigger}$	?	?	?
Management Plan	$F_{MGT}$	-	-	-	Not applicable	$B_{pa}$ , $B_{lim}$	?	?	?
Qualitative evaluation	-	?	?	?	Unknown	$SSB_{MGT}$	-	-	-
						-	?	?	?

### Catch options

The ICES framework for category 5 stocks was applied (ICES, 2012). For stocks without information on abundance or exploitation, ICES considers that a precautionary reduction of catches should be implemented unless there is supporting information clearly indicating that the current level of exploitation is appropriate for the stock. The precautionary buffer was applied in 2012 (for the 2013 advice); therefore, it is not applied again this year.

**Table 6.3.55.2** Whiting in Division IIIa. For stocks in ICES data category 5, one catch option is provided.

Recent advised catch	500 tonnes	
Discard rate (average of 2012-2014)	73%	
Precautionary buffer	Not applied	-
Catch advice*	500 tonnes	
Wanted catch corresponding to the advice**	135 tonnes	

\*recent advised catch

\*\*"Wanted catch" is used to describe fish that would be landed in the absence of the EU landing obligation (calculated from the catch advice considering the average discard rate of 2012-2014).

### Basis of the advice

**Table 6.3.55.4** Whiting in Division IIIa. The basis of the advice.

Advice basis	Precautionary approach.
Management plan	There is no management plan for whiting in this area.

### Quality of the assessment

Survey abundance indices exist for whiting in Division IIIa., However the advice is based entirely on catch information due to inconsistent survey indices, probably due to unknown stock mixing with whiting in Subarea IV and the Western Baltic.

### Issues relevant for the advice

Whiting in Division IIIa are taken as by-catch in demersal fisheries and are mostly discarded.

## Reference points

No reference points are defined for this stock.

## Basis of the assessment

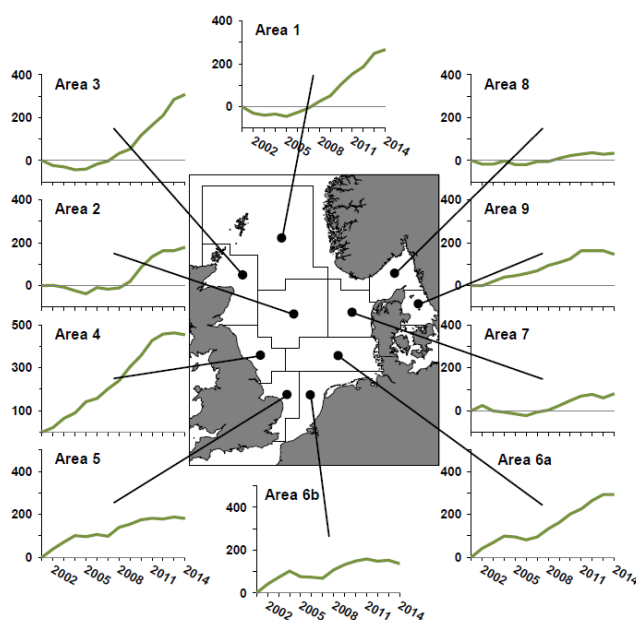
**Table 6.3.55.6** Whiting in Division IIIa. The basis of the assessment.

ICES stock data category	5.2.0 ( <a href="#">ICES 2015a</a> )
Assessment type	No assessment.
Input data	Commercial catches (international landings, ages and length frequencies from catch sampling). (ICES 2015b)
Discards and by-catch	Used to provide advice. Discard information available since 2003 (covering 99% of the landings in 2014).
Indicators	None
Other information	None
Working group	Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak ( <a href="#">WGNSSK</a> )

## Information from stakeholders

The majority of responses from the Fishers' Survey reported an increase in the abundance of whiting in most areas over the last decade (Napier 2014; Figure 6.3.55.3).

### Abundance Index



**Figure 6.3.55.3.** Cumulative time series of index of perceptions of abundance of whiting, by area (see page 14 for explanation of the index). From Napier (2014).

## History of advice, catch and management

**Table 6.3.55.7** Whiting in Division IIIa. History of ICES advice, the agreed TAC, and ICES estimates of landings. All weights in thousand tonnes.

Year	ICES Advice/Single-Stock Exploitation Boundaries**	Predicted catch corresp. to advice	Predicted landings corresp. to advice	Agreed TAC	ICES landings*	ICES catches*
1987	Precautionary TAC	-		17.0	16.7	16.7
1988	Precautionary TAC	-		17.0	11.8	11.8
1989	Precautionary TAC	-		17.0	13.3	13.3
1990	Precautionary TAC	-		17.0	19.4	19.4
1991	TAC	-		17.0	14.0	14.0
1992	No advice	-		17.0	4.9	4.9
1993	Precautionary TAC	-		17.0	3.0	3.0
1994	If required, precautionary TAC	-		17.0	2.5	2.5
1995	If required, precautionary TAC	-		15.2	3.0	3.1
1996	If required, precautionary TAC	-		15.2	1.5	1.5
1997	If required, TAC equal to recent catches	-		15.2	0.4	0.4
1998	No advice			15.2	0.5	0.5
1999	TAC, average period 1993–1996	6.0		8.0	0.9	0.9
2000	TAC, average period 1996–1998	1.5		4.0	1.0	1.0
2001	TAC, average period 1996–1998	1.5		2.5	1.2	1.2
2002	TAC, average period 1996–1998	1.5		2.0	1.2	1.2
2003	TAC, average period 1996–1998	1.5		1.5	0.8	1.3
2004	TAC, average period 1996–1998	1.5		1.5	1.3	2.2
2005	average period 1996–1998	1.5		1.5	1.0	1.3
2006	average period 1996–1998	1.5		1.5	0.4	0.8
2007	average period 1996–1998	1.5		1.5	0.4	1.0
2008	Recent average catches	1.050		1.050	0.4	0.6
2009	Same advice as last year	1.050		1.050	0.3	0.4
2010	Same advice as last year	1.050		1.050	0.2	0.5
2011	No advice	-		1.050	0.1	0.9
2012	Reduce catch	-		1.050	0.06	0.3
2013	20% Reduction in catches (last 3 years average)	< 0.5		1.050	0.16	1.6
2014	No new advice, same as for 2013	< 0.5		1.050	0.44	1.0
2015	No new advice, same as for 2014	< 0.5	< 0.212	1.050		
2016	Precautionary approach (same advised catch value as given for 2015)	≤ 0.5				
2017	Precautionary approach (same advised catch value as given for 2015)	≤ 0.5				

\* Includes bycatch in small-mesh industrial fishery.

\*\* Single-stock boundary and the exploitation of this stock should be conducted in the context of mixed fisheries protecting stocks outside safe biological limits.

## History of catch and landings

**Table 6.3.55.8** Whiting in Division IIIa. Catch distribution by fleet in 2014 as estimated by ICES.

Catch (2014)				Landings		Discards
1018 t	11% Human consumption (Denmark)		79% Total industrial (Denmark)		10% others	579 t
	439 t					

**Table 6.3.55.9** Whiting in Division IIIa. History of commercial catch.

Year	Denmark			Norway	Sweden	Others	Total landings	ICES estimate of discards	ICES estimate of catch
1975	19018			57	611	4	19690		
1976	17870			48	1002	48	18968		
1977	18116			46	975	41	19178		
1978	48102			58	899	32	49091		
1979	16971			63	1033	16	18083		
1980	21070			65	1516	3	22654		
	Total consumption	Total industrial	Total						
1981	1027	23915	24942	70	1054	7	26073		
1982	1183	39758	40941	40	670	13	41664		
1983	1311	23505	24816	48	1061	8	25933		
1984	1036	12102	13138	51	1168	60	14417		
1985	557	11967	12524	45	654	2	13225		
1986	484	11979	12463	64	477	1	13005		
1987	443	15880	16323	29	262	43	16657		
1988	391	10872	11263	42	435	24	11764		
1989	917	11662	12579	29	675	-	13283		
1990	1016	17829	18845	49	456	73	19423		
1991	871	12463	13334	56	527	97	14041		
1992	555	3340	3895	66	959	1	4921		
1993	261	1987	2248	42	756	1	3047		
1994	174	1900	2074	21	440	1	2536		
1995	85	2549	2634	24	431	1	3090		
1996	55	1235	1290	21	182	-	1493		
1997	38	264	302	18	94	-	414		
1998	35	354	389	16	81	-	486		
1999	37	695	732	15	111	-	858		
2000	59	777	836	17	138	1	992		
2001	61	970*	1031*	27	126	+	1184*		
2002	101	975*	1076*	23	127	1	1227*		
2003	93	654*	747*	20	71.9	2	840.9*	429	
2004	93	1120*	1213*	17	74	1	1305*	909	
2005	49	907*	956*	13	73	0	1042*	299	
2006	59*	290*	349*	n/a	85.9**	n/a	434.9**	331	
2007	53**	278**	331**	14	82	1	428**	561	
2008	52**	288**	340**	14	52	n/a	406**	241	
2009	71**	173**	244**	10.3	33.8**	-	288.1**	128	
2010	41	165	206	9.7	29.7	-	245.4	291	
2011	40	44	84	8.3	20.4	0.2	112.9	794	
2012	30	6.8	37	15.5	9.6	0.8	62.9	277	
2013	29	102	131	8.4	14.5	1.0	155	591	
2014	49	346	395	4.8	37.6	1.3	439	579	1018

\*Values from 1992 updated by 2007

\*\*Values updated in 2011

## Summary of the assessment

There is no assessment for whiting in this area.

## Sources and references

ICES. 2012. ICES Implementation of Advice for Data-limited Stocks in 2012 in its 2012 Advice. ICES CM 2012/ACOM:68 42pp.

ICES. 2015a. Advice basis. *In* Report of the ICES Advisory Committee, 2015. ICES Advice 2015, Book 1, Section 1.2. In preparation.

ICES. 2015b. Report of the Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak (WGNSSK), 28 April–7 May 2015. ICES CM 2015/ACOM:13.

Napier, I. R. 2014. Fishers' North Sea stock survey 2014. NAFC Marine Centre, Shetland, Scotland. <http://nsss.eu>