

9.3.45 Tusk (*Brosme brosme*) in Division 6.b (Rockall)

ICES stock advice

ICES advises that when the precautionary approach is applied, catches should be no more than 350 tonnes in each of the years 2017 and 2018*. All catches are assumed to be landed.

Stock development over time

The catches have been low and decreasing since 2001.

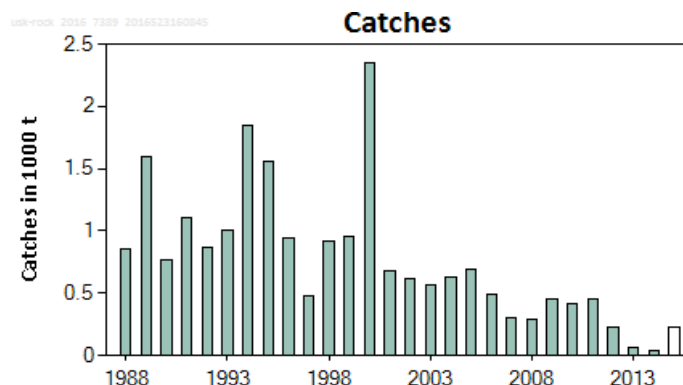


Figure 9.3.45.1 Tusk in Division 6.b. Catches in thousand tonnes, 2015 values are preliminary.

Stock and exploitation status

Table 9.3.45.1 Tusk in Division 6.b. State of the stock and fishery relative to reference points.

		Fishing pressure				Stock size			
		2013	2014	2015		2013	2014	2015	
Maximum sustainable yield	F_{MSY} proxy	✓	?	?	Unknown	MSY	?	?	Undefined
Precautionary approach	F_{pa} , F_{lim}	✓	?	?	Undefined	B_{pa} , B_{lim}	?	?	Undefined
Management plan	F_{MGT}	-	-	-	Not applicable	SSB_{MGT}	-	-	Not applicable
Qualitative evaluation		?	?	?	Unknown		?	?	Unknown

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 ancillary information clearly indicating that the current level of exploitation is appropriate for the stock. In 2013, this stock was exploited at a harvest rate below the F_{MSY} proxy estimate (ICES, 2016a) and effort has decreased since. Therefore, the precautionary buffer, which was last applied in 2012, is not applied this year.

* Version 2: years corrected

Table 9.3.45.2 Tusk in Division 6.b. For stocks in ICES data category 5, one catch option is provided.

Recent advised catch	350 tonnes	
Discard rate	Negligible	
Precautionary buffer	Not applied	-
Catch advice*	350 tonnes	

* = Recent advised catch.

Basis of the advice

Table 9.3.45.3 Tusk in Division 6.b. The basis of the advice.

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

Quality of the assessment

The advice issued in 2014 was based on the Norwegian cpue index in Rockall (Division 6.b). The effort for the fleet has declined substantially and the index can no longer be used as an indicator of stock development. Therefore, there is no assessment of the stock this year.

Issues relevant for the advice

There is no information to present for this stock.

Reference points

Table 9.3.45.4 Tusk in Division 6.b. Reference points, values, and their technical basis.

Framework	Reference point	Value	Technical basis	Source
MSY approach	MSY B _{trigger}	Undefined		
	F _{MSY proxy}	53 cm (using data up to 2013)	Length-based indicator (LBI); expected mean length of catch above L _c when F = M, where L _c is the length at first catch (length at 50% of mode of catch length frequency distribution). Calculated as $(1-a) L_c + a \text{ Linf}$, where $a = 1/(1 + 2 M/K)$ and Linf and K are growth parameters; the default value 1.5 has been assumed for M/K.	ICES (2016a)
Precautionary approach	B _{lim}	Not defined		
	B _{pa}	Not defined		
	F _{lim}	Not defined		
	F _{pa}	Not defined		
Management plan	SSB _{MGT}	Not applicable		
	F _{MGT}	Not applicable		

Basis of the assessment

Table 9.3.45.5 Tusk in Division 6.b. The basis of the assessment.

ICES stock data category	5 (ICES, 2016b)
Assessment type	No assessment (ICES, 2016c)
Input data	Commercial catches.
Discards and bycatch	Discarding is considered negligible.
Indicators	None
Other information	None
Working group	Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources (WGDEEP)

Information from stakeholders

There is no available information.

History of the advice, catch, and management

Table 9.3.45.6 Tusk in Division 6.b. ICES advice and landings. Weights are in thousand tonnes.

Year	ICES advice*	Predicted catch corresp. to advice	ICES landings
2003	-		0.56
2004	-		0.63
2005	-		0.69
2006	-		0.49
2007	-		0.30
2008	-		0.29
2009	Constrain catches to 2003–2007 average	0.53	0.47
2010	Biennial	0.53	0.42
2011	Reduce catches by at least the rate of decline of the cpue	-	0.45
2012	No new advice, same as 2011	-	0.233
2013	20% reduction in catches	< 0.35	0.057
2014	No new advice, same as 2013	< 0.35	0.038
2015	Same advised catch as in 2013	< 0.35	0.226
2016	No new advice, same as 2015	< 0.35	
2017	Precautionary approach (same value as advised catches for 2016)	≤ 0.350	
2018	Precautionary approach (same value as advised catches for 2016)	≤ 0.350	

* Prior to 2008 advice for this stock was combined with other areas.

History of catch and landings

Table 9.3.45.7 Tusk in Division 6.b. Catch distribution by fleet in 2015 as estimated by ICES.

Table 3.13.45.1: Trawl in Division 0.0: Catch distribution by fleet in 2015 as estimated by ICES.				
Total catch (2015)		Landings		Discards
226 t		Longline	Others	Negligible
		96%	4%	
	226 t			

Table 9.3.45.8 Tusk in Division 6.b. History of commercial official catches as reported to ICES. Weights are in tonnes.

Year	Faroes	France	Germany	Ireland	Iceland	Norway	E & W	N.I.	Scot.	Russia	Total
1988	217		-	-		601	8	-	34		860
1989	41	1	-	-		1537	2	-	12		1593
1990	6	3	-	-		738	2	+	19		768
1991	-	7	+	5		1068	3	-	25		1108
1992	63	2	+	5		763	3	1	30		867
1993	12	3	+	32		899	3	+	54		1003
1994	70	1	+	30		1673	6	-	66		1846
1995	79	1	+	33		1415	1		35		1564
1996	0	1		30		836	3		69		939
1997	1	1		23		359	2		90		476
1998		1		24	18	630	9		233		915
1999				26	-	591	5		331		953
2000		2		22		1933	14		372	1	2344
2001	1	1		31		476	10		157	6	681
2002		8		3		515	8		88		622
2003		7		18		452	11		72	1	561
2004		9		1		508	4		45	60	627
2005		5		9		503	5		33	137	692
2006	10	1		16		431	2		25	2	487
2007	4	0		8		231	1		30	25	299
2008	41	0		2		190	0		16	44	293
2009	70			4		358			17	3	452
2010	57			1		348			13		419
2011	3					433			14		450
2012	15					209			9		233
2013		1				46			11		57
2014	6					26			6		38
2015*	1					218	7		7		226

* Preliminary.

+ indicates catches < 0.5 tonnes.

Table 9.3.45.9 Tusk in Division 6.b. Landings inside and outside the NEAFC Regulatory Area (RA) as estimated by ICES, and official commercial landings in tonnes.

Year	Inside the NEAFC RA	Outside the NEAFC RA	Landings
2014	10	28	38
2015	43	183	226

Summary of the assessment

There is no assessment for tusk 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. 42 pp.
- ICES. 2016a. EU request to provide a framework for the classification of stock status relative to MSY proxies for selected category 3 and category 4 stocks in ICES subareas 5 to 10. *In* Report of the ICES Advisory Committee, 2016. ICES Advice 2016, Book 5, Section 5.4.2.
- ICES. 2016b. General context of ICES advice. *In* Report of the ICES Advisory Committee, 2016. ICES Advice 2016, Book 1, Section 1.2.
- ICES. 2016c. Report of the Working Group on the Biology and Assessment of Deep-Sea Fisheries Resources (WGDEEP), 20–27 April 2016, ICES Headquarters, Copenhagen. ICES CM 2016/ACOM:17.