

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

ICES advice on fishing opportunities

ICES advises that when the precautionary approach is applied, catches should be no more than 280 tonnes in each of the years 2021 and 2022.

Note: This advice sheet is abbreviated due to the Covid-19 disruption. The previous advice issued for 2019 and 2020 is attached as Annex 1.

Stock development over time

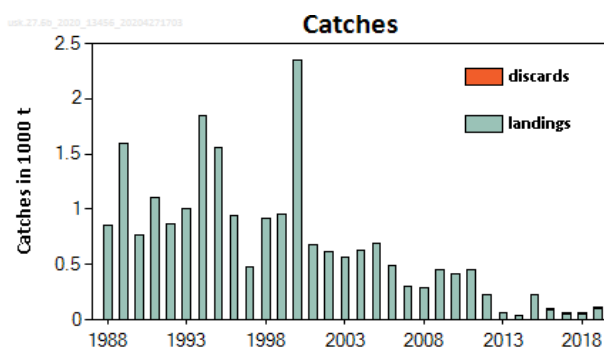


Figure 1 Tusk in Division 6.b. Catches in thousand tonnes. Discards have been reported since 2016.

Stock and exploitation status

Table 1 Tusk in Division 6.b. State of the stock and the fishery relative to reference points.

		Fishing pressure				Stock size				
		2017	2018	2019		2017	2018	2019		
Maximum sustainable yield	F_{MSY}	?	?	?	Unknown	$MSY B_{trigger}$?	?	?	Unknown
Precautionary approach	F_{pa}, F_{lim}	?	?	?	Unknown	B_{pa}, B_{lim}	?	?	?	Unknown
Management plan	F_{MGT}	—	—	—	Not applicable	B_{MGT}	—	—	—	Not applicable
Qualitative evaluation	-	?	?	?	Unknown	-	?	?	?	Unknown

Catch scenarios

Table 2 Tusk in Division 6.b. The basis for the catch scenarios*.

Advised catch for 2019–2020 issued on 2018	280 tonnes
Discard rate, average 2017–2019	0.22
Precautionary buffer	Not applied (last applied in 2018)
Catch advice**	280 tonnes
Landings corresponding to catch advice***	218 tonnes
% advice change^	0%

* The figures in the table are rounded. Calculations were carried out with unrounded inputs and computed values may not match precisely when calculated using the rounded figures in the table.

** Equals to [Advice for 2019–2020]

*** [Advice for 2019–2020] × [1 – discard rate].

^ Advice value for 2021–2022 relative to advice value for 2019–2020.

Issues relevant for the advice

This stock is classified as Category 4 in the NEAFC categorization of deep-sea species/stocks, which implies that fisheries are primarily restricted to coastal state exclusive economic zones (EEZs). Therefore, management measures are not taken by NEAFC unless complementary to coastal state conservation and management measures (NEAFC, 2016).

History of the advice, catch, and management

Table 3 Tusk in Division 6.b. History of ICES advice and landings. Weights are in tonnes.

Year	ICES advice*	Predicted catch corresp. to advice	ICES landings	ICES discards
2003	-		561	
2004	-		627	
2005	-		692	
2006	-		487	
2007	-		299	
2008	-		293	
2009	Constrain catches to the 2003–2007 average	530	469	
2010	Biennial	530	419	
2011	Reduce catches by at least the rate of decline of the CPUE	-	450	
2012	No new advice, same as 2011	-	233	
2013	20% reduction in catches	< 350	57	
2014	No new advice, same as 2013	< 350	38	
2015	Same advised catch as in 2013	< 350	226	
2016	No new advice, same as 2015	< 350	90	7
2017	Precautionary approach (same value as advised catches for 2016)	≤ 350	47	14
2018	Precautionary approach (same value as advised catches for 2016)	≤ 350	47	21
2019	Precautionary approach	≤ 280	100	12
2020	Precautionary approach	≤ 280		
2021	Precautionary approach	≤ 280		
2022	Precautionary approach (same value as advised catches for 2021)	≤ 280		

* Prior to 2009, advice for this stock was combined with other areas.

Table 4 Tusk in Division 6.b. Landings inside and outside the NEAFC Regulatory Area (RA) as estimated by ICES, and official commercial landings. All weights are in tonnes.

Year	Inside the NEAFC RA	Outside the NEAFC RA	Landings	Proportion of catches inside the NEAFC RA (%)
2014	10	28	38	26
2015	43	183	226	19.0
2016	20	70	90	22
2017	3	44	47	6.4
2018	6	41	47	12.8
2019	4	96	100	4.0

Summary of the assessment

There is no assessment for tusk in this area.

Sources and references

ICES. 2020. Working Group on the Biology and Assessment of Deep-sea Fisheries Resources (WGDEEP). ICES Scientific Reports, 2:38. <http://doi.org/10.17895/ices.pub.6015>.

NEAFC. 2016. The NEAFC approach to conservation and management of deep-sea species and categorization of deep-sea species/stocks. Adopted at the 35th Annual Meeting, November 2016. <https://www.neafc.org/basictexts>.

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

ICES advice on fishing opportunities

ICES advises that when the precautionary approach is applied, catches should be no more than 280 tonnes in each of the years 2019 and 2020. If discard rates do not change from 2017, this implies landings of no more than 255 tonnes.

Stock development over time

The catches have been low and decreasing since 2001.

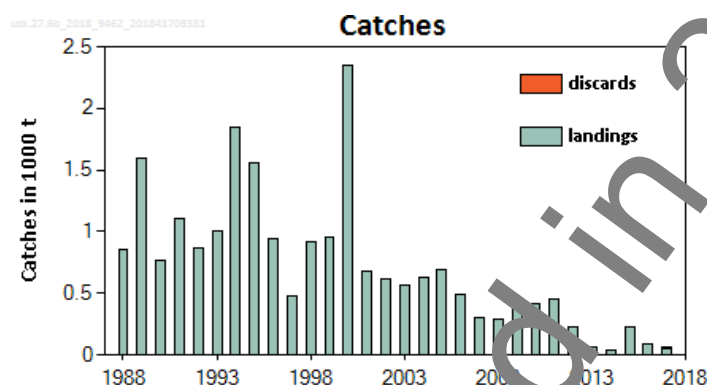


Figure 1 Tusk in Division 6.b. Catches in thousand tonnes, 2017 values are preliminary.

Stock and exploitation status

ICES cannot assess the stock and exploitation status relative to MSY and PA reference points because the reference points are undefined.

Table 1 Tusk in Division 6.b. State of the stock and fishery relative to reference points.

Task in Division 6.6: State of the stock and fishery relative to reference points.										
		Fishing pressure				Stock size				
		2015	2016	2017		2015	2016	2017		
Maximum sustainable yield	F_{MSY}	?	?	?	Unknown	$MSY B_{trigger}$?	?	?	Undefined
Precautionary approach	F_{pa}, F_{lim}	?	?	?	Unknown	B_{pa}, B_{lim}	?	?	?	Undefined
Management plan	F_{MGT}	—	—	—	Not applicable	B_{MGT}	—	—	—	Not applicable
Qualitative evaluation	-	?	?	?	Unknown	-	?	?	?	Unknown

Catch scenarios

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. The precautionary buffer was last applied in 2012 and was therefore applied again this year.

Table 2 Tusk in Division 6.b. The basis for the catch scenarios*.

Advised catch for 2017–2018 issued on 2016		350 t
Discard rate 2017		0.23
Precautionary buffer	Applied	0.80
Catch advice**		280 t
Landings corresponding to catch advice***		216 t
% Advice change^		–20%

* The figures in the table are rounded. Calculations were done with unrounded inputs and computed values may not match exactly when calculated using the rounded figures in the table.

** [Advice for 2017–2018] × [precautionary buffer].

*** [Advice for 2017–2018] × [precautionary buffer]/[1 – discard rate].

^ Advice value for 2019 and 2020 relative to advice value for 2018.

The advised catch is lower than that advised for 2018 because the precautionary buffer was applied.

Basis of the advice

Table 3 Tusk in Division 6.b. The basis of the advice.

Advice basis	Precautionary approach.
Management plan	ICES is not aware of any management plan for tusk in this area.

Quality of the assessment

There is no assessment of the stock this year.

Issues relevant for the advice

The overall discard rate in 2017 increased to 23% of the total catch. In the longline fishery discarding is negligible. Trawl fisheries are directed at other species and most of the bycatch of tusk is discarded. The F_{MSY} proxy, derived in 2016 (ICES, 2016a) and based on the length-based indicator (LBI), is considered unreliable because the biological parameters used for this stock are no longer considered appropriate.

Reference points

No reference points are defined for this stock.

Basis of the assessment

Table 4 Tusk in Division 6.b. The basis of the assessment.

ICES stock data category	5 (ICES, 2016b).
Assessment type	No assessment (ICES, 2018).
Input data	Commercial catches.
Discards and bycatch	Discards are included.
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 5 Tusk in Division 6.b. ICES advice and landings. Weights are in tonnes.

Year	ICES advice*	Predicted catch corresp. to advice	ICES landings
2003	-		56
2004	-		63
2005	-		69
2006	-		49
2007	-		30
2008	-		29
2009	Constrain catches to 2003–2007 average	53	47
2010	Biennial	53	42
2011	Reduce catches by at least the rate of decline of the CPUE	-	45
2012	No new advice, same as 2011	-	233
2013	20% reduction in catches	< 35	57
2014	No new advice, same as 2013	< 35	38
2015	Same advised catch as in 2013	< 35	226
2016	No new advice, same as 2015	< 35	90
2017	Precautionary approach (same value as advised catches for 2016)	≤ 350	47
2018	Precautionary approach (same value as advised catches for 2016)	≤ 350	
2019	Precautionary approach	≤ 280	
2020	Precautionary approach	≤ 280	

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

History of catch and landings

Table 6 Tusk in Division 6.b. Catch distribution by fleet in 2017 as estimated by ICES.

Table 5: Catch in Division 516: Catch distribution by fleet in 2017 as estimated by IZSL				
Total catch (2017)		Landings		Discards
61 t	Longline		Trawls	14 t
	79%		21%	
	47 t			

Table 7 Tusk in Division 6.b. History of commercial official landings 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	+	5		1003
1994	70	1	+	30		1673	6		66		1846
1995	79	1	+	33		1415	1		25		1564
1996		1		30		836	3		69		939
1997	1	1		23		359	2		90		476
1998		1		24	18	630	9		255		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			8		231	1		30	25	299
2008	41			2		190			16	44	293
2009	70			4		358			17	3	452
2010	57			1		348			13		419
2011	3					433			14		450
2012	15					205			9		233
2013		1				16			11		57
2014	6					26			6		38
2015	1					218			7		226
2016				1		80			9		90
2017*				2		37			8		47

* Preliminary.

+ indicates catches < 0.5 tonnes.

Table 8 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
2016	20	70	90
2017	3	44	47

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. Advice basis. *In* Report of the ICES Advisory Committee, 2016. ICES Advice 2016, Book 4, Section 1.2.

ICES. 2018. Report of the Working Group on the Biology and Assessment of Deep-sea Fisheries Resources (WGDEEP), 11–18 April 2018, ICES HQ, Copenhagen, Denmark. ICES CM 2018/ACOM:14. 624 pp.

Advice provided in 2018