

# Basking shark (*Cetorhinus maximus*) in subareas 1–10, 12, and 14 (Northeast Atlantic and adjacent waters)

## ICES advice on fishing opportunities

ICES advises that when the precautionary approach is applied, there should be zero catches in each of the years 2020–2023.

#### Stock development over time

Landings declined from the mid-1970s to the mid-1990s. Various national and EU management measures have restricted landings since 1998.

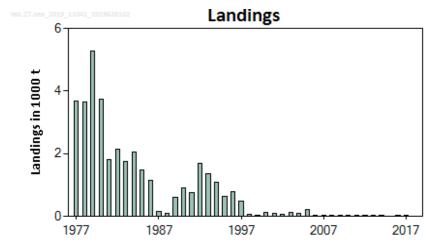


Figure 1 Basking shark in the Northeast Atlantic. ICES landings (tonnes) of basking sharks in subareas 1–14 from 1977 to 2018.

## Stock and exploitation status

ICES cannot assess the stock and exploitation status relative to maximum sustainable yield (MSY) and precautionary approach (PA) reference points, because the reference points are undefined.

**Table 1** Basking shark in the Northeast Atlantic. State of the stock and fishery relative to reference points.

	Fishing pressure					Stock size					
		2016	2017		2018		2016 201		2017	2018	
Maximum sustainable yield	F <sub>MSY</sub>	3	3	?	Unknown		MSY B <sub>trigger</sub>	3	3	3	Unknown
Precautionary approach	$F_{pa}, F_{lim}$	3	3	3	Unknown		B <sub>pa</sub> ,B <sub>lim</sub>	?	?	3	Unknown
Management plan	F <sub>MGT</sub>	-	-	_	Not applicable		B <sub>MGT</sub>	_	-	-	Not applicable
Qualitative evaluation	-	3	3	3	Unknown		-	?	2	3	Unknown

#### **Catch scenarios**

The ICES framework for category 6 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.

Discarding is known to take place, but ICES cannot quantify the corresponding catch.

 Table 2
 Basking shark in the Northeast Atlantic. Basis for the catch options

Recent advised catch for 2016–2019 (issued in 2015)		0 tonnes
Discard rate		Unknown
Precautionary buffer	Not applied	-
Catch advice		0 tonnes
% Advice change*		0%

<sup>\*</sup> Advice value for 2020–2023 relative to the advice value for 2016–2019.

The advice for 2020–2023 has not changed from the previous advice.

## Basis of the advice

**Table 3** Basking shark in the Northeast Atlantic. The basis of the advice.

Advice basis	Precautionary approach.
Management plan	ICES is not aware of any agreed precautionary management plan for basking shark in this area.

#### Quality of the assessment

There is no assessment for this stock.

## Issues relevant for the advice

The low productivity and aggregating nature of this species makes it particularly vulnerable to overexploitation.

Measures should be put in place to ensure that incidental catches are recorded in numbers, and by size and weight (where possible). Discards and discard survival rates have not been estimated.

Basking shark has a high conservation status, and is legally protected in the national wildlife legislation of some ICES Member Countries. It is included in Appendices I and II of the Convention on the Conservation of Migratory Species of Wild Animals (CMS, 2018) since 2005, and in Appendix II of the Convention on International Trade of Endangered Species of Wild Flora and Fauna (CITES) since 2003.

Article 14 of Council Regulation (EU) 2019/124 prohibits Union fishing vessels from fishing for, retaining on board, transshipping, or landing basking shark in all waters. Article 50 of Council Regulation (EU) 2019/124 prohibits third-country vessels fishing for, retaining on board, transhipping, or landing basking shark from EU waters.

## **Reference points**

No reference points are defined for this stock.

## Basis of the assessment

 Table 4
 Basking shark in the Northeast Atlantic. The basis of the assessment.

6 ( <u>ICES, 2018</u> ).
No assessment (ICES, 2019).
Landings.
Unknown.
None.
Historical landings, life-history information, historical accounts.
Working Group on Elasmobranch Fishes ( <u>WGEF</u> ).

# Information from stakeholders

There is no additional available information.

## History of advice, catch, and management

**Table 5** Basking shark in the Northeast Atlantic. History of ICES advice, the agreed TAC, and ICES estimates of landings. Weights in tonnes.

Year	ICES advice	Catch corresp. to advice	Agreed TAC *	ICES estimated landings **
2006	TAC = 0	0	0	17
2007	TAC = 0, no target fishery, minimize bycatch	0		26
2008	No new advice, same as for 2007	0		5
2009	TAC = 0, no target fishery, minimize bycatch	0		1
2010	No new advice, same as for 2009	0		1
2011	Catch = 0	0		2
2012	No new advice, same as for 2011	0		24
2013	No target fishery, TAC = 0	0		0.2
2014	No new advice, same as for 2013	0		0.03
2015	No new advice, same as for 2014	0		0
2016	Precautionary approach: no target fishery, bycatch should be minimized	0		0.02
2017	Quadrennial advice	0		0.6
2018	Quadrennial advice	0		0
2019	Quadrennial advice	0		
2020	Precautionary approach	0		
2021	Same advice as in 2020	0		
2022	Same advice as in 2020	0		
2023	Same advice as in 2020	0		

<sup>\*</sup> The species was listed as a prohibited species from 2007 (EU, 2019; ICES, 2019), TAC only applied before this time.

# History of catch and landings

The distribution of this stock extends into the NEAFC Regulatory Area, but the proportional split of catches cannot be determined.

 Table 6
 Basking shark in the Northeast Atlantic. Catch distribution by fleet in 2018 as estimated by ICES.

Total catch (2018)	Landings	Discards
Unknown	0 tonnes	Unknown

<sup>\*\*</sup> Figures revised in 2019 following data revision from WKSHARK2 (ICES, 2016).

Table 7 Basking shark in the Northeast Atlantic. ICES estimates of landings by area. Weight is rounded to the nearest tonne, values under 1 t are shown to first significant figure.\*

Year	1 and 2	3 and 4	5.b	6	7	8	9	10	Total
1977	3680	0	0	0	, 0	0	0	0	3680
1978	3349	0	14	0	278	0	0	0	3641
1979	5120	0	0	0	139	7	0	0	5266
1980	3642	0	83	0	0	0	0	0	3725
1981	1772	0	28	0	0	0	0	0	1800
1982	1970	0	0	0	186	0	0	0	2156
1983	967	734	0	0	60	0	0	0	1761
1984	873	1188	0	0	1	0	0	0	2062
1985	1465	0	0	0	0	0	0	0	1465
1986	1144	0	0	0	0	0	0	0	1144
1987	164	0	0	0	0	0	1	0	165
1988	96	10	0	0	0	0	0	0	106
1989	593	0	0	0	0	0	0	0	593
1990	781	116	0	0	0	1	0	0	897
1991	533	220	0	0	0	0	0	0	753
1992	1613	84	0	0	0	0	0	0	1697
1993	1374	0	0	0	0	0	0	0	1374
1994	920	157	0	0	0	0	1	0	1078
1995	604	23	0	0	0	1	1	0	629
1996	792	0	0	0	0	0	1	0	793
1997	425	43	0	0	0	2	1	0	471
1998	55	0	0	0	0	1	0	0	56
1999	31	0	0	0	0	1	1	0	33
2000	117	0	0	0	0	1	1	0	119
2001	80	0	0	0	0	0	2	1	83
2002	54	0	0	0	0	0	1	0	55
2003	128	0	0	0	0	0	1	0	129
2004	72	0	0	0	0	0	1	26	99
2005	218	0.1	0	0	2	1	2	0	223
2006	16	0	0	0	0.02	0.5	0.1	0	17
2007	26	0	0	0	0	0	0	0.3	26
2008	4	0	0	0	0	1	0	0	5
2009	0	0	1.3	0.03	0	0.03	0	0	1
2010	0	0	0.05	1.2	0	0	0.1	0	1
2011	2	0	0	0	0	0	0.1	0	2
2012	22	0	0	0	0	0	1	0	22
2013	0	0	0	0	0	0	0.2	0	0.2
2014	0	0	0	0	0.03	0	0	0	0.03
2015	0	0	0	0	0	0	0	0	0
2016	0	0	0	0	0	0	0.02	0	0.02
2017	0	0	0	0	0.6	0	0	0	0.6
2018	0	0	0	0	0	0	0	0	0

<sup>\*</sup> 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. Figures from 2005 onwards were revised in 2019 following data revision from WKSHARK2 (ICES, 2016).

# Summary of the assessment

There is no assessment for this stock.

#### Sources and references

CMS. 2018. Appendices I and II of the Convention on the Conservation of Migratory Species of Wild Animals (CMS), as amended by the Conference of the Parties in 1985, 1988, 1991, 1994, 1997, 1999, 2002, 2005, 2008, 2011, 2014 and 2017. 15 pp. <a href="https://www.cms.int/sites/default/files/basic page documents/cms cop12 appendices e 0.pdf">https://www.cms.int/sites/default/files/basic page documents/cms cop12 appendices e 0.pdf</a>.

EU. 2019. Council Regulation (EU) 2019/124 of 30 January 2019 fixing for 2019 the fishing opportunities for certain fish stocks and groups of fish stocks, applicable in Union waters and, for Union fishing vessels, in certain non-Union waters. Official Journal of the European Union, L 29: 1–166. <a href="http://data.europa.eu/eli/reg/2019/124/oj">http://data.europa.eu/eli/reg/2019/124/oj</a>.

ICES. 2012. ICES Implementation of Advice for Data-limited Stocks in 2012 in its 2012 Advice. ICES CM 2012/ACOM:68. 42 pp. <a href="https://doi.org/10.17895/ices.pub.5322">https://doi.org/10.17895/ices.pub.5322</a>.

ICES. 2016. Report of the Workshop to compile and refine catch and landings of elasmobranchs (WKSHARK2), 19–22 January 2016, Lisbon, Portugal. ICES CM 2016/ACOM:40. 69 pp. <a href="https://doi.org/10.17895/ices.pub.5590">https://doi.org/10.17895/ices.pub.5590</a>.

ICES. 2018. Advice basis. *In* Report of the ICES Advisory Committee, 2018. ICES Advice 2018, Book 1, Section 1.2. https://doi.org/10.17895/ices.pub.4503.

ICES. 2019. Working Group on Elasmobranch Fishes (WGEF). ICES Scientific Reports. 1:25. http://doi.org/10.17895/ices.pub.5594.

Recommended citation: ICES. 2019. Basking shark (*Cetorhinus maximus*) in subareas 1–10, 12, and 14 (Northeast Atlantic and adjacent waters). *In* Report of the ICES Advisory Committee, 2019. ICES Advice 2019, bsk.27.nea, https://doi.org/10.17895/ices.advice.4827.