

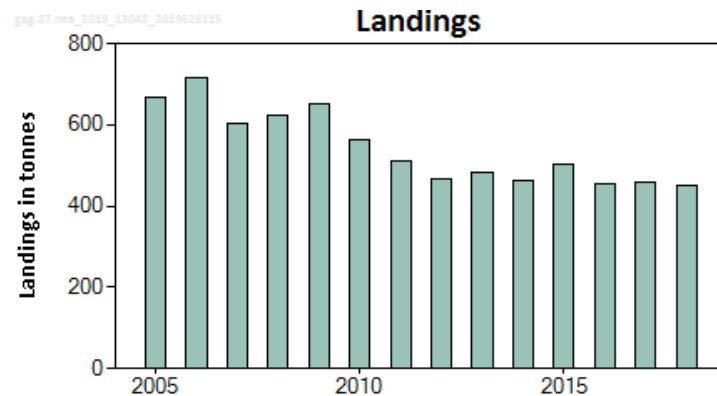
## Tope (*Galeorhinus galeus*) in subareas 1–10, 12 and 14 (the Northeast Atlantic and adjacent waters)

### ICES advice on fishing opportunities

ICES advises that when the precautionary approach is applied, landings should be no more than 301 tonnes in each of the years 2020 and 2021. ICES cannot quantify the corresponding catches.

### Stock development over time

Estimated species-specific landings of tope have been relatively stable since 2010.



**Figure 1** Tope in subareas 1–10 and 12. Summary of the stock assessment. ICES estimates of species-specific landings (tonnes) since 2005, considered to be minimum estimates based on reported landings (landings data before 2005 are incomplete and not shown).

### 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** Tope in subareas 1–10 and 12. State of the stock and fishery relative to reference points.

		Fishing pressure			Stock size					
		2016	2017	2018	2016	2017	2018			
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

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 where there is no ancillary information clearly indicating that the current level of exploitation is appropriate for the stock. The precautionary buffer was not applied in 2017, and has been applied in 2019.

Discarding is known to take place, but ICES cannot quantify the corresponding catch. Discard survival, which is likely to occur, has also not been estimated.

**Table 2** Topse in subareas 1–10 and 12. The basis for the catch scenario. \*

Advised landings for 2018–2019 (issued in 2017)		376 tonnes
Discard rate		Unknown
Precautionary buffer	Applied	0.8
Landings advice **		301 tonnes
% 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.

\*\* [Advised landings 2018–2019] × [precautionary buffer]

\*\*\* Advice value for 2020 and 2021 relative to advice value for 2019.

The advice for 2020–2021 is lower than previous advice as the precautionary buffer has been applied.

### Basis of the advice

**Table 3** Topse in subareas 1–10 and 12. The basis of the advice.

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

### Quality of the assessment

Landings data are uncertain. National landings for topse may include an unknown proportion of other aggregated landing categories (e.g. “dogfish and hounds”) and may also include cases of misidentification/misreporting of other species (e.g. smooth-hounds). Species-specific landings are incomplete for the Mediterranean and Northwest Africa, which is believed to be part of the distribution area for the stock.

The current trawl surveys are not indicative of stock trends (ICES, 2019).

### Issues relevant for the advice

The Northeast Atlantic topse stock is distributed mainly in ICES subareas 4 to 10, and extends into the Mediterranean Sea and off Northwest Africa (CECAF area).

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

Since 2015, topse has been listed as a prohibited species on EU fishing regulations (EU [2015], applicable to longline only and excluding subareas 9 and 10). Since 2008, UK vessels have not been allowed to land more than 45 kg of topse per day, with no landings allowed by hook gears (The Topse (Prohibition of Fishing) Order 2008).

This species is taken by recreational fishers and, although often released, post-release survival is unquantified. No landings are allowed in UK recreational fisheries.

### Reference points

No reference points are defined for this stock.

### Basis of the assessment

**Table 4** Topse in subareas 1–10 and 12. Basis of the assessment and advice.

ICES stock data category	5 (ICES, 2018).
Assessment type	No assessment (ICES, 2019).
Input data	Landings.
Discards and bycatch	Unquantified.
Indicators	None.
Other information	None.
Working group	Working Group on Elasmobranch Fishes (WGEF).

## Information from stakeholders

There is no additional available information.

## History of advice, catch, and management

**Table 5** Tope in subareas 1–10 and 12. History of ICES advice, the agreed TAC, and ICES species-specific estimates of landings. All weights are in tonnes.

Year	ICES advice	Predicted landings corresponding to advice	TAC *	ICES species-specific estimated landings **
2005	No advice	-	No TAC	668
2006	No advice	-	No TAC	715
2007	No advice	-	No TAC	601
2008	No advice	-	No TAC	621
2009	No advice	-	No TAC	650
2010	No advice	-	No TAC	564
2011	No advice	-	No TAC	511
2012	No advice	-	No TAC	466
2013	Reduce catch by 20%	-	No TAC	483
2014	No new advice, same catch value as for 2013	-	No TAC	462
2015	No new advice, same catch value as for 2013	-	No TAC	501
2016	Precautionary approach	283	No TAC	454
2017	Biennial	283	No TAC	457
2018	Precautionary approach	≤ 376 <sup>^</sup>	No TAC	452
2019	Precautionary approach (same advice as for 2018)	≤ 376 <sup>^</sup>	No TAC	
2020	Precautionary approach	≤ 301		
2021	Same advice as for 2020	≤ 301		

\* Between 2010 and 2014 catches of tope caught by longline were included in the zero TAC for spurdog. Since 2015 tope is on the EU list of protected species, prohibiting longline fishery for tope in EU waters of Division 2.a and Subarea 4, as well as in EU and international waters of subareas 1, 5–8, 12, and 14 (EU, 2015).

\*\* Data do not include generic “dogfishes & hounds”.

<sup>^</sup> The revision of the landings statistics for 2012–2014 (ICES, 2016) led to an increase in advised landings.

## History of catch and landings

The distribution of this species may extend into the NEAFC Regulatory Area, but the main component of the stock occurs in shelf seas. Catches from the NEAFC Regulatory Area are not quantified, but are assumed negligible.

This is a bycatch species in longline, gillnet, and trawl fisheries.

**Table 6** Tope in subareas 1–10 and 12. Catch distribution by fleet in 2018 as estimated by ICES.

Catch (2018)	Landings				Discards
	Otter trawl	Hooks and lines	Gillnets	Others	
Unknown	57%	19%	16%	8%	Unknown
452 tonnes					

**Table 7** Tope in subareas 1–10 and 12. History of ICES species-specific estimates of landings inside and outside of the NEAFC regulatory area. All weights are in tonnes.

Year	Inside the NEAFC regulatory area	Outside the NEAFC regulatory area	ICES species-specific estimates of landings
2014	0	462	462
2015	0	501	501
2016	0	454	454
2017	0	457	457
2018	0	452	452

**Table 8** Tope in subareas 1–10 and 12. History of landings. ICES species-specific estimates of landings by country. All weights are in tonnes. Blank = no data reported; 0 ≤ 0.5 tonnes \*.

Year	Belgium	Denmark	Germany	Spain	France	UK	Ireland	Netherlands	Norway	Portugal	Sweden	Total landings **
2005		7		182	348	81	6			45	0	668
2006		6		182	383	92	7			45	0	715
2007		2		203	302	49	3			43	0	601
2008		3		163	365	41	2			47	0	621
2009		2		234	354	23	3			34		650
2010		2		179	320	17	3	2	0	41		564
2011		3		138	291	17	1	18	0	44		511
2012		1		94	283	16	0	25		47		466
2013				100	309	17		11	0	46		483
2014		3		101	261	20		11		65		462
2015		1		56	350	17		6	0	71		501
2016	0	1		37	303	20		8		85		454
2017	0		0	41	313	14		19		70		457
2018	0			31	356	13		12	0	41		452

\* 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.

\*\* Landings include those reported in FAO Areas 34 and 37; the proportion of landings varies from 0 up to 11% of the ICES species-specific estimated landings.

## Summary of the assessment

There is no assessment for this stock.

## Sources and references

EU. 2015. Council Regulation (EU) 2015/104 of 19 January 2015 fixing for 2015 the fishing opportunities for certain fish stocks and groups of fish stocks, applicable in Union waters and, for Union vessels, in certain non-Union waters, amending Regulation (EU) No 43/2014 and repealing Regulation (EU) No 779/2014. Official Journal of the European Union, L 22. 163 pp. <http://data.europa.eu/eli/reg/2015/104/oj>.

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

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. <https://doi.org/10.17895/ices.pub.5590>.

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>.

Tope (Prohibition of Fishing) Order 2008 (SI 2008/691). Accessed: 01 January 2019 at: <http://www.legislation.gov.uk/uksi/2008/691/contents/made>.

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