

Black-mouthed dogfish (*Galeus melastomus*) in subareas 6 and 7 (Celtic Seas and English Channel)

ICES stock advice

ICES advises that when the precautionary approach is applied, catches in each of the years 2018 and 2019 could be increased by no more than 20% compared to the average catches in 2014–2016. ICES cannot quantify the corresponding catches or landings.

Stock development over time

The stock size indicator shows that the stock has increased considerably since 2001.

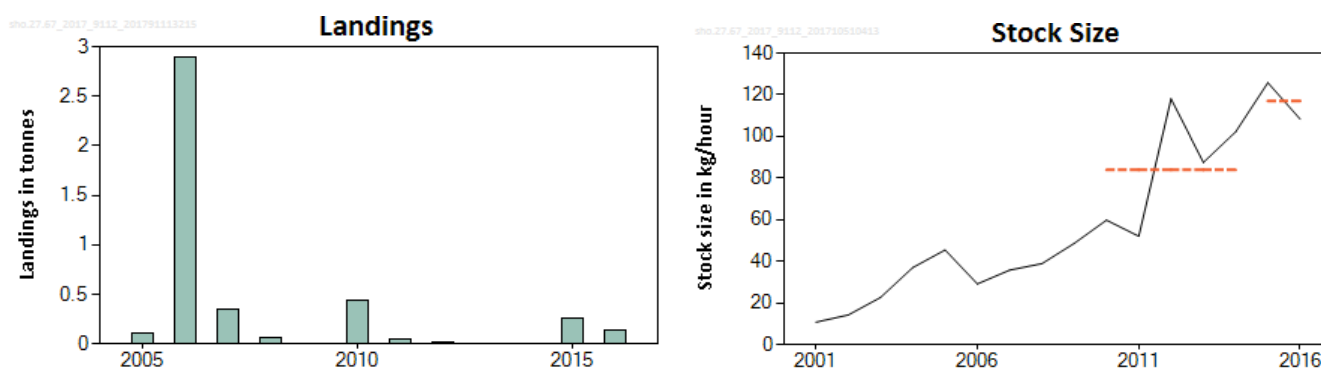


Figure 1 Black-mouthed dogfish in subareas 6 and 7. Summary of the stock assessment. Left: ICES estimated landings (in tonnes). Right: Stock size indicator from the Spanish SpPGFS-IBTS-Q4 survey (kg h⁻¹).

Stock and exploitation status

Table 1 Black-mouthed dogfish in subareas 6 and 7. State of the stock and fishery relative to reference points.

		Fishing pressure				Stock size			
		2014	2015	2016		2014	2015	2016	
Maximum sustainable yield	F_{MSY}	?	?	?	Undefined	MSY	?	?	?
Precautionary approach	F_{pa} , F_{lim}	?	?	?	Undefined	B_{pa} , B_{lim}	?	?	?
Management plan	F_{MGT}	-	-	-	Not applicable	B_{MGT}	-	-	-
Qualitative evaluation	-	?	?	?	Unknown	-	↗	↗	↘
									Decreasing

Catch options

The ICES framework for category 3 stocks was applied (ICES, 2012). A biomass index from the Spanish Porcupine Bank Survey (SpPGFS-WIBTS-Q4) was used as an indicator of stock development. The advice is based on a comparison of the two latest index values (index A) with the five preceding values (index B), multiplied by the recent average landings. The index is estimated to have increased by more than 20% and thus the uncertainty cap was applied. The stock size relative to candidate reference points is unknown. Given that the survey biomass index has increased considerably since 2001, the precautionary buffer has not been applied.

However, the exact levels of both catch and landings are unreliable as discard levels are considered to be high as well as highly variable, and a substantial part of the landings are not reported at species level. This species is known to survive

discarding in line fisheries, but discard survival rates have not been quantified for any métiers. Therefore, ICES cannot quantify the corresponding catches and/or landings.

Table 2 Black-mouthed dogfish in subareas 6 and 7. The basis for the catch options.*

Index A (2015–2016)		117 kg h ⁻¹
Index B (2010–2014)		84 kg h ⁻¹
Index ratio(A/B)		1.39
Uncertainty cap	Applied	1.2
Average catch (2014–2016)		Unknown
Discard rate		Unknown
Precautionary buffer	Not applied	-
Catch advice**	Increase by 20% compared to the average catches in 2014–2016.	

* 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.

** [Average catches (2014, 2015, 2016)] × [uncertainty cap].

Basis of the advice

Table 3 Black-mouthed dogfish in subareas 6 and 7. The basis of the advice.

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

Quality of the assessment

Landings data are unreliable for this species, because part of the landings of this species is included in the generic “dogfish” category, and not disaggregated at the species level. Landings data were reassessed in 2016 (ICES, 2016a) and indicate landings of black-mouthed dogfish are lower than previously estimated.

Discarding is known to occur and is very high and variable between fishing fleets, but it has not been fully quantified and discard survival has not been estimated. The discard rate is likely to have been higher between 2010 and 2013, when EU regulations listed this species as a deep-water shark, permitting no landings (EU, 2013). Since 2013, this species has been removed from this list.

Fishery-independent trawl surveys provide the longest and most reliable time-series of species-specific information. The status of the stock was evaluated from a single survey, covering only a small part of the management area. However, this is an important area for commercial fishing; the survey is therefore regarded as suitable to assess the stock and potential fishing impact. Other trawl surveys in this ecoregion have reduced their coverage of the shelf edge, and therefore were not considered informative on the trend of this stock.

Issues relevant for the advice

Scyliorhinids are generally productive species in comparison to other demersal elasmobranchs and are typically either discarded or landed as a low-value bycatch.

Given that the species is a common bycatch in shelf-edge fisheries and is usually discarded, the amount of discards and discard survival should be quantified.

Reference points

Reference points are not defined for this stock.

Basis of the assessment

Table 4 Black-mouthed dogfish in subareas 6 and 7. Basis of the assessment and advice.

ICES stock data category	3 (ICES, 2016b).
Assessment type	Survey trends-based assessment (ICES, 2017).
Input data	Surveys: SpPGFS-WIBTS-Q4.
Discards and bycatch	Unknown.
Indicators	None.
Other information	None.
Working group	Working Group on Elasmobranch Fishes (WGEF)

Information from stakeholders

There is no additional available information for this stock.

History of the advice, catch, and management

Table 5 Black-mouthed dogfish in subareas 6 and 7. ICES advice and estimates of landings. All weights are in tonnes.

Year	ICES advice	Predicted catch corresp. to advice	Agreed TAC	ICES species-specific estimated landings*
2002	No advice	-	No TAC	
2003	No advice	-	No TAC	
2004	No advice	-	No TAC	
2005	No advice	-	No species-specific TAC**	0.1
2006	No advice	-	No species-specific TAC**	2.9
2007	No advice	-	No species-specific TAC**	0.35
2008	No advice	-	No species-specific TAC**	0.06
2009	No advice	-	No species-specific TAC**	0
2010	No advice	-	No species-specific TAC***	0.44
2011	No advice	-	No species-specific TAC***	0.05
2012	No advice	-	Zero TAC^	0.02
2013	No advice	-	Zero TAC/No TAC^^	0
2014	No advice	-	No TAC	0
2015	No advice	-	No TAC	0.26
2016	Precautionary approach	Increase by no more than 20% compared to the average catches in 2012–2014	No TAC	0.13
2017	Biennial advice	Same catch value as advised for 2016	No TAC	
2018	Precautionary approach	Catches could be increased by no more than 20% compared to the average catches in 2014–2016		
2019	Precautionary approach (Same advice as for 2018)	Catches could be increased by no more than 20% compared to the average catches in 2014–2016		

* Data revised in 2016 (ICES, 2016a). These are minimum estimates based on reported landings, and do not include landings of black-mouthed dogfish reported in generic categories.

** *Galeus melastomus* was included in the TAC for “deep-sea sharks” in the EU and international waters of ICES subareas 6–9.

*** *Galeus melastomus* was included in the bycatch TAC for “deep-sea sharks” in the EU and international waters of ICES subareas 6–9.

^ The TAC for “deep-sea sharks” was zero.

^^ *Galeus melastomus* was removed from the EU list of “deep-sea sharks” in an in-year amendment (EU, 2013).

History of the catch and landings

Table 6 Black-mouthed dogfish in subareas 6 and 7. Catch distribution by fleet in 2016 as estimated by ICES.

Catch (2016)	Landings 2016	Discards 2016
Unknown	Bottom trawl 100%	Unknown*
	0.13 tonnes	

*Discard numbers cannot be quantified but are believed to be high.

Table 7 Black-mouthed dogfish in subareas 6 and 7. History of ICES estimates of species-specific 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	Official catches
2014	0	0	0
2015	0	0.26	0.26
2016	0	0.13	0.13

Table 8 Black-mouthed dogfish in subareas 6 and 7. ICES estimates of landings by country. Weights in tonnes.

Year	France	Total
2009		0
2010	0.44	0.44
2011	0.05	0.05
2012	0.02	0.02
2013		0
2014		0
2015	0.26	0.26
2016	0.13	0.13

Summary of the assessment

Table 9 Black-mouthed dogfish in subareas 6 and 7. Assessment summary. Biomass index from the SpPGFS-WIBTS-Q4 trawl survey (in kg h⁻¹), normalized by its long-term mean.

Year	Biomass kg h ⁻¹
2001	10.81
2002	14.31
2003	22.66
2004	37.04
2005	45.49
2006	29.18
2007	35.83
2008	38.92
2009	48.63
2010	59.82
2011	52.08
2012	118.05
2013	87.52
2014	102.18
2015	125.76
2016	108.28

Sources and references

EU. 2013. Council regulation (EU) No. 1182/2013 of 19 November 2013 amending Regulations (EC) No. 754/2009, (EU) No. 1262/2012, (EU) No. 39/2013 and (EU) No. 40/2013 as regards certain fishing opportunities. Official Journal of the European Union, L 313: 15–29. <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013R1182&rid=1>

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