

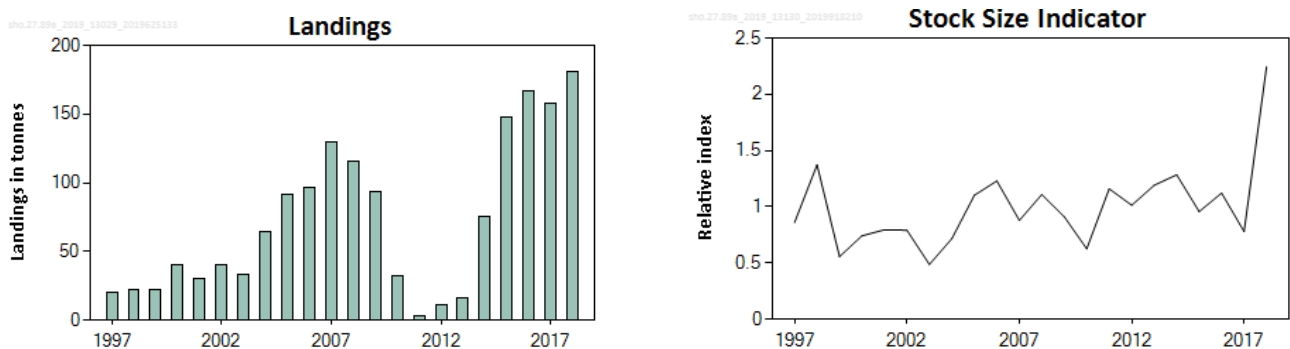
## Black-mouthed dogfish (*Galeus melastomus*) in Subarea 8 and Division 9.a (Bay of Biscay and Atlantic Iberian waters)

### ICES advice on fishing opportunities

ICES has not been requested to provide advice on fishing opportunities for this stock.

### Stock development over time

The stock size indicator has been stable over the longer time-series. The 2018 value is the highest in the time series. Landings have increased since black mouthed dogfish was removed from the EU list of deepwater sharks (EU 2013).



**Figure 1** Black-mouthed dogfish in Subarea 8 and Division 9.a. Summary of the stock assessment. Left: ICES estimates of species-specific landings of *Galeus melastomus* since 1997. Right: Stock size indicator from four trawl surveys (EVHOE–WIBTS–Q4, PT–CTS(UWTV(FU 28–29)), SPGFS–caut–WIBTS–Q1, and SPGFS–caut–WIBTS–Q4) relative to the time-series mean.

### 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** Black-mouthed dogfish in Subarea 8 and Division 9.a. 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	-	↗	↘	↗	Increasing

### Catch scenarios

ICES has not been requested to provide advice on fishing opportunities for this stock.

### Basis of the advice

ICES has not been requested to provide advice on fishing opportunities for this stock.

**Table 2** Black-mouthed dogfish in Subarea 8 and Division 9.a. The basis of the advice.

Advice basis	No advice requested.
Management plan	ICES is not aware of any agreed precautionary management plan for black-mouthed dogfish in this area.

## Quality of the assessment

The biomass index series used in the assessment has been revised because a more consistent stratification of the survey for the stock area north and south of 48°North has been applied (ICES, 2019).

Landings data are not fully reliable for this species, because some are reported in the generic “dogfish” category and therefore not allocated to this stock.

## Issues relevant for the advice

This stock is classified as Category 2 in the [NEAFC categorization of deep-sea species/stocks](#) which implies that NEAFC requires measures stipulating that directed fisheries are not authorised and that bycatches should be minimised.

Scyliorhinids are productive species in comparison to other demersal elasmobranchs.

Misidentification problems are likely to exist, especially in Division 9.a, where the congener *Galeus atlanticus* also occurs.

Discarding occurs, is variable between fishing fleets and has not been fully quantified. Discard survival has not been quantified. The discard rate was likely to have been higher between 2010 and 2013, when EU regulations listed this species as a deep-water shark for which no landings were allowed at this time.

## Reference points

No reference points are defined for this stock.

## Basis of the assessment

**Table 3** Black-mouthed dogfish in Subarea 8 and Division 9.a. Basis of the assessment and advice.

ICES stock data category	3 ( <a href="#">ICES, 2018</a> ).
Assessment type	Survey-based trends (ICES, 2019).
Input data	Surveys: EVHOE–WIBTS–Q4, PT–CTS(UWTV(FU 28–29)), SPGFS–caut–WIBTS–Q1, and SPGFS–caut–WIBTS–Q4.
Discards and bycatch	Unquantified.
Indicators	None.
Other information	None.
Working group	Working Group on Elasmobranch Fishes ( <a href="#">WGEF</a> )

## Information from stakeholders

There is no additional available information.

## History of the advice, catch, and management

**Table 4** Black-mouthed dogfish in Subarea 8 and Division 9.a. ICES advice and ICES species-specific estimated landings. All weights are in tonnes.

Year	ICES advice	Landings corresp. to advice	Agreed TAC	ICES landings*
2003				33
2004				64
2005	No advice		No TAC**	91
2006	No advice		No TAC**	97
2007	No advice		No TAC**	130
2008	No advice		No TAC**	116
2009	No advice		No TAC**	93
2010	No advice		No TAC***	32
2011	No advice		No TAC***	3

Year	ICES advice	Landings corresp. to advice	Agreed TAC	ICES landings*
2012	No advice		Zero TAC <sup>^</sup>	11
2013	No advice	-	Zero TAC/No TAC <sup>^^</sup>	16
2014	No advice	-	No TAC	75
2015	No advice	-	No TAC	148
2016	Decrease by 4% compared to the average catches in 2012–2014	-	No TAC	167
2017	Same catch value as advised for 2016	-	No TAC	158
2018	Precautionary approach	≤ 156	No TAC	181
2019	Precautionary approach (same advice as for 2018)	≤ 156	No TAC	
2020	No catch advice requested	-		
2021	No catch advice requested	-		

\* Data revised in 2016 (ICES, 2016). 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.

<sup>^</sup> TAC for “deep-sea sharks” was zero.

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

### History of the catch and landings

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

**Table 5** Black-mouthed dogfish in Subarea 8 and Division 9.a. Catch distribution by fleet in 2018 as estimated by ICES.

Catch (2018)	Landings				Discards
	Bottom trawls 38%	Misc. gear 42%	Nets 14%	Hooks and lines 6%	
Unknown	181 tonnes				Unknown

**Table 6** Black-mouthed dogfish in Subarea 8 and Division 9a. 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	75	75
2015	0	148	148
2016	0	167	167
2017	0	158	158
2018	0	181	181

**Table 7** Black-mouthed dogfish in Subarea 8 and Division 9.a. ICES species-specific estimated landings by country (in tonnes).

Year	France	Spain	UK	Portugal	Total
2005	1	53		37	91
2006	1	68		28	97
2007	2	103		24	130
2008	2	103		12	116
2009	3	75		16	93
2010	0	24		7	32
2011	0		1	2	3
2012	1	8		2	11
2013	0	15		1	16
2014	1	54		21	75
2015		123		25	148
2016		141		26	167
2017	0	124		34	158
2018	0	150		31	181

## Summary of the assessment

**Table 8** Black-mouthed dogfish in Subarea 8 and Division 9.a. Assessment summary. Biomass indices were derived from four trawl surveys (EVHOE–WIBTS–Q4, PT–CTS(UWTV(FU 28–29)), SPGFS–caut–WIBTS–Q1, and SPGFS–caut–WIBTS–Q4; kg h<sup>-1</sup>). The normalized indices for: SPGFS–caut–WIBTS–Q1 and SPGFS–caut–WIBTS–Q4 were averaged). The stock size indicator is the annual mean of the normalized surveys indices.

Year	EVHOE–WIBTS–Q4	SPGFS–caut–WIBTS–Q1–Q4	PT–CTS(UWTV(FU 28–29))	Mean survey index
1997	0.25	0.32	2.01	0.86
1998	0.13	1.83	2.16	1.37
1999	0.34	0.35	0.98	0.56
2000	0.29	1.24	0.69	0.74
2001	0.67	1.14	0.58	0.80
2002	1.02	0.77	0.58	0.79
2003	0.20	0.52	0.74	0.49
2004	0.72	1.01	0.42	0.72
2005	0.99	2.03	0.29	1.10
2006	1.11	1.99	0.59	1.23
2007	1.19	0.55	0.90	0.88
2008	1.29	0.94	1.10	1.11
2009	0.96	0.71	1.07	0.91
2010	0.90	0.42	0.56	0.63
2011	1.91	0.46	1.11	1.16
2012	0.84	1.19		1.01
2013	0.57	1.95	1.05	1.19
2014	1.25	1.24	1.36	1.28
2015	1.03	0.78	1.06	0.96
2016	1.55	0.74	1.07	1.12
2017		1.03	0.53	0.78
2018	3.78	0.79	2.16	2.24

## 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://data.europa.eu/eli/reg/2013/1182/oj>.

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