

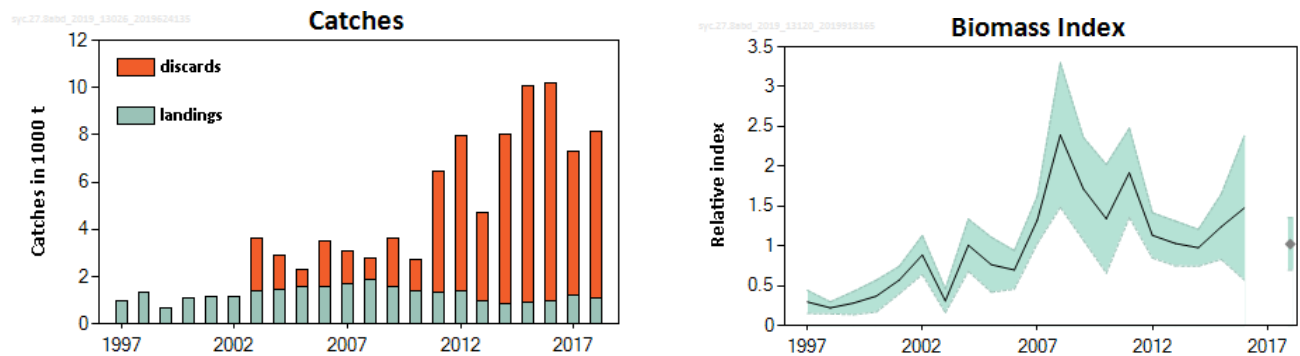
## Lesser spotted dogfish (*Scyliorhinus canicula*) in divisions 8.a–b and 8.d (Bay of Biscay)

### 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 shows that the stock increased until 2008 and has generally decreased since.



**Figure 1** Lesser spotted dogfish in divisions 8.a–b and 8.d. Summary of the stock assessment. Top: ICES estimates of species-specific landings of *Scyliorhinus canicula* since 1997. Discard data are from France, Belgium, and Spain, with more complete data from 2011 onwards. Bottom: Biomass index derived from the EVHOE–WIBTS–Q4 survey (normalized relative to the time-series mean). No survey was conducted in 2017. Confidence intervals are shaded.

### 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** Lesser spotted dogfish in divisions 8.a–b and 8.d. 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	-	↗	?	↘	Decreasing

### 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** Lesser spotted dogfish in divisions 8.a–b and 8.d. The basis of the advice.

Advice basis	No advice requested.
Management plan	ICES is not aware of any agreed precautionary management plan for lesser spotted 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).

Historical series of discards were updated in 2019 (ICES, 2019).

## Issues relevant for the advice

Scyliorhinid species are productive in comparison to other demersal elasmobranchs (McCully Phillips et al. 2015), and are typically discarded or retained as low-value bycatch.

Discard survival occurs and can be around 70–100% in some métiers and areas (Revell *et al.*, 2005; Rodriguez-Cabello *et al.*, 2005), but has not been estimated for all the métiers.

## Reference points

No reference points are defined for this stock.

## Basis of the assessment

**Table 3** Lesser spotted dogfish in divisions 8.a–b and 8.d. Basis of the assessment and advice.

ICES stock data category	3 ( <a href="#">ICES, 2018</a> ).
Assessment type	Survey trends-based assessment (ICES, 2019).
Input data	Survey EVHOE–WIBTS–Q4.
Discards and bycatch	Partly quantified from 2003 and more comprehensively from 2011.
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** Lesser spotted dogfish in divisions 8.a–b and 8.d. History of ICES advice, agreed TAC and species-specific estimates of landings. All weights are in tonnes.

Year	ICES advice	Catch corresp. to advice	Landings corresp. to advice	Agreed TAC	ICES species-specific estimates of landings *
2005	No advice			No TAC	1597
2006	No advice			No TAC	1598
2007	No advice			No TAC	1691
2008	No advice			No TAC	1863
2009	No advice		< 1800	No TAC	1586
2010	No advice		< 1800	No TAC	1415
2011	Maintain catch at recent level		< 1700	No TAC	1330
2012	No new advice, same as for 2011		< 1700	No TAC	1418
2013	Increase catch by a maximum of 20% + no species-specific TAC			No TAC	960
2014	No new advice, same as for 2013			No TAC	838
2015	No new advice, same as for 2014			No TAC	891
2016	Decrease by 20% compared to the average catches in 2012–2014			No TAC	976
2017	Same catch advice as advised for 2016			No TAC	1195
2018	Precautionary approach	≤ 5592	≤ 611	No TAC	1092

Year	ICES advice	Catch corresp. to advice	Landings corresp. to advice	Agreed TAC	ICES species-specific estimates of landings *
2019	Precautionary approach (same advice as for 2018)	≤ 5592	≤ 611	No TAC	
2020	No catch advice requested	-	-		
2021	No catch advice requested	-	-		

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

### History of the 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. Estimated landings are presented in Table 6 however total catches from the NEAFC Regulatory Area are not quantified, but are assumed negligible.

**Table 5** Lesser spotted dogfish in divisions 8.a–b and 8.d. Catch distribution by fleet in 2018 as estimated by ICES.

Catch (2018)	Landings				Discards
	Bottom and otter trawl	Hook and lines	Nets	All other gears	
8148 tonnes	87%	2%	9%	2%	7056 tonnes
1092 tonnes					

**Table 6** Lesser spotted dogfish in divisions 8.a–b and 8.d. 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	838	838
2015	0	891	891
2016	0	976	976
2017	0	1195	1195
2018	0	1092	1092

**Table 7** Lesser spotted dogfish in divisions 8.a–b and 8.d. ICES species-specific estimated landings and discards (in tonnes).

Year	Belgium	France	Spain	UK	Total landings	Discards
2005	10	1229	355	3	1597	672
2006	13	1247	338	0	1598	1896
2007	13	1352	327	0	1691	1371
2008	18	1382	460	0	1863	941
2009	24	1117	445	0	1586	2046
2010	28	1085	302	0	1415	1323
2011	28	1000	303	0	1330	5117
2012	32	912	472	2	1418	6527
2013	23	883	54	0	960	3720
2014	26	720	92	0	838	7204
2015	27	734	130	0	891	9150
2016	32	705	239	0	976	9210
2017	26	671	498	0	1195	6102
2018	25	698	369	0	1092	7056

## Summary of the assessment

**Table 8** Lesser spotted dogfish in divisions 8.a–b and 8.d. Assessment summary. Biomass index derived from the EVHOE–WIBTS–Q4 trawl survey (biomass km<sup>-2</sup>), normalized relative to the long-term mean. All weights are in tonnes.

Year	Biomass index	High	Low	Landings	Discards
1997	0.30	0.33	0.24	967	
1998	0.22	0.22	0.23	1320	
1999	0.28	0.32	0.22	669	
2000	0.37	0.42	0.27	1115	
2001	0.57	0.55	0.63	1142	
2002	0.89	0.83	1.00	1145	
2003	0.31	0.34	0.25	1366	2281
2004	1.01	0.98	1.10	1438	1453
2005	0.77	0.82	0.66	1597	672
2006	0.70	0.69	0.72	1598	1896
2007	1.33	1.19	1.61	1691	1371
2008	2.4	2.4	2.3	1863	941
2009	1.12	1.74	1.68	1586	2046
2010	1.34	1.48	1.03	1415	1323
2011	1.92	1.82	2.1	1330	5117
2012	1.13	1.04	1.33	1418	6527
2013	1.03	0.96	1.17	960	3720
2014	0.98	0.89	1.17	838	7204
2015	1.24	1.21	1.30	891	9150
2016	1.48	1.75	0.90	976	9210
2017				1195	6102
2018	1.02	0.99	1.09	1092	7056

## Sources and references

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