ICES Advice on fishing opportunities, catch, and effort
Bay of Biscay and the Iberian Coast ecoregion
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Lesser spotted dogfish (*Scyliorhinus canicula*) in divisions 8.c and 9.a (Cantabrian Sea 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 shown an increasing trend since 2004, with most recent years being the highest in the time-series.
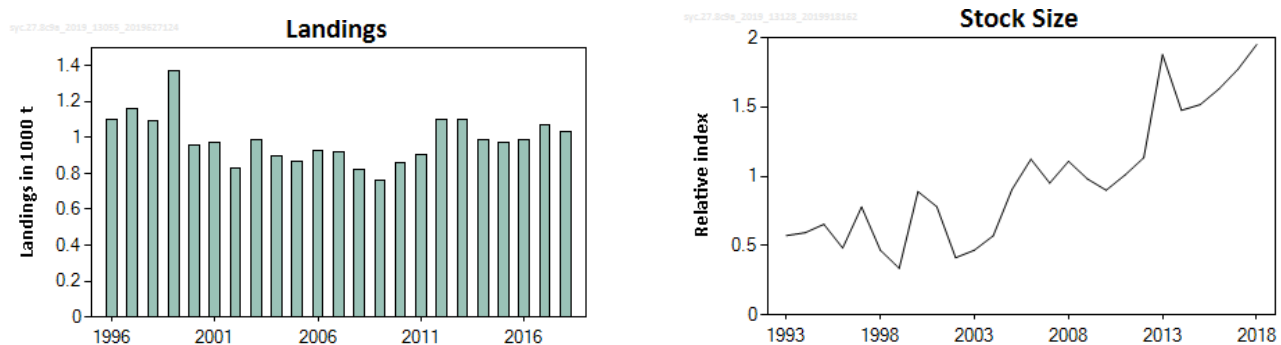

Figure 1   Lesser spotted dogfish in divisions 8.c and 9.a. Summary of the stock assessment. Top: Recent ICES estimates of species-specific landings (landings data before 1996 are incomplete and not shown). Bottom: The stock size indicator, derived from four surveys (SPGFS-caut-WIBTS-Q1, SPGFS-caut-WIBTS-Q4, PT–PGFS–Q4, and SP–GFS–IBTS–Q4) and normalized 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   Lesser spotted dogfish in divisions 8.c and 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

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[*] Version 2: Pictograms for Fishing pressure 2016, 2017, 2018 corrected.

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.c and 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 lesser spotted dogfish in this area.

Quality of the assessment

Fishery-independent trawl surveys provide the longest time-series of species-specific information, cover most of the stock area and depth distribution, and sample mature fish effectively.

The stock indicator time series was revised using the 2013 value from the Spanish survey (SP–GFS–IBTS–Q4) which was not included in the previous advice.

Issues relevant for the advice

Scyliorhinid species are productive in comparison to other demersal elasmobranchs (McCully Phillips *et al*. 2015).

Discarding is known to occur, is high and variable between fishing fleets and has not been fully quantified for all the time-series. Discard survival is ca. 70% in otter trawls (Rodríguez-Cabello *et al*., 2005), but has not been estimated for other métiers.

Reference points

No reference points are defined for this stock.

Basis of the assessment

Table 3   Lesser spotted dogfish in divisions 8.c and 9.a. Basis of the assessment and advice.

ICES stock data category	3 (ICES, 2018).
Assessment type	Survey trends-based assessment (ICES, 2019).
Input data	Surveys: Portuguese (PT–PGFS–Q4), Spanish (SPGFS-caut-WIBTS-Q1, SPGFS-caut-WIBTS-Q4, and SP–GFS–IBTS–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.

History of the catch and landings

Table 4 Lesser spotted dogfish in divisions 8.c and 9.a. History of ICES advice, the agreed TAC and ICES species-specific estimated landings. All weights are in tonnes.

Year	ICES advice	Landings corresp. to advice	Agreed TAC	ICES species-specific estimates of landings*
2005	No advice		No TAC	866
2006	No advice		No TAC	924
2007	No advice		No TAC	923
2008	No advice		No TAC	819
2009	Maintain catch at recent level		No TAC	765
2010	Maintain catch at recent level		No TAC	858
2011	Maintain catch at recent level		No TAC	905
2012	No new advice, same as for 2011		No TAC	1099
2013	Decrease catch by 9% + no species-specific TAC		No TAC	1097
2014	No new advice, same as for 2013		No TAC	985
2015	No new advice, same as for 2014		No TAC	971
2016	Increase by no more than 20% compared to the average catches in 2012–2014		No TAC	988
2017	Same catch value as advised for 2016		No TAC	1067
2018	Precautionary approach	≤ 1178	No TAC	1035
2019	Precautionary approach (Same advice as for 2018)	≤ 1178	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 stock does not extend into the NEAFC Regulatory area.

Table 5 Lesser spotted dogfish in divisions 8.c and 9.a. Catch distribution by fleet in 2018 as estimated by ICES.

Catch (2018)	Landings		Discards
Unknown	Bottom trawl 73%	Others 27%	Unknown
	1035 tonnes		

Table 6   Lesser spotted dogfish in divisions 8.c and 9.a. ICES estimates of landings by country (in tonnes)*.

Year	France	Spain	Portugal	Total
1996	0	431	667	1098
1997	0	472	691	1163
1998	1	403	689	1093
1999	1	491	882	1374
2000	1	202	757	960
2001	4	236	734	974
2002	3	155	673	831
2003	4	248	735	987
2004	5	237	657	900
2005	1	297	568	866
2006	1	333	591	925
2007	1	327	595	923
2008	1	272	546	819
2009	1	229	535	765
2010	0	336	522	858
2011	0	354	551	905
2012	0	555	544	1099
2013	0	577	520	1097
2014	0	464	521	985
2015	0	417	554	971
2016	1	398	589	988
2017	0	448	619	1067
2018	0	505	530	1035

* 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.

Summary of the assessment

Table 7   Lesser spotted dogfish in divisions 8.c and 9.a. Assessment summary. Biomass indices were derived from four trawl surveys (SPGFS-caut-WIBTS-Q1, SPGFS-caut-WIBTS-Q4, PT–PGFS–Q4, and SP-GFS-IBTS-Q4; kg h⁻¹). 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 survey indices.

Year	Spain		Portugal	Combined stock size indicator
	SPGFS-caut-WIBTS-Q1 & Q4	SP–N–GFS–Q4	PT–PGFS–Q4	
1993	0.20	0.55	0.97	0.57
1994	0.48	0.54	0.76	0.59
1995	0.51	0.35	1.10	0.65
1996	0.46	0.50		0.48
1997	0.70	0.51	1.13	0.78
1998	0.17	0.44	0.78	0.47
1999	0.29	0.38		0.34
2000	0.34	0.60	1.73	0.89
2001	0.44	0.85	1.06	0.78
2002	0.24	0.54	0.45	0.41
2003	0.31	0.63		0.47
2004	0.58	0.57		0.57
2005	1.04	0.81	0.87	0.91
2006	1.62	0.94	0.81	1.12
2007	1.03	1.11	0.72	0.95
2008	1.47	0.80	1.05	1.11
2009	0.92	0.96	1.06	0.98
2010	1.18	0.87	0.64	0.90
2011	1.22	0.83	0.98	1.01
2012	1.13	1.13		1.13
2013	1.82	2.82	0.99	1.88
2014	1.59	2.07	0.76	1.48
2015	1.76	1.76	1.03	1.52
2016	2.08	1.90	0.91	1.63
2017	2.40	1.55	1.37	1.77
2018	2.01	2.00	1.84	1.95

Sources and references

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.

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