

Sole (*Solea solea*) in divisions 8.c and 9.a (Cantabrian Sea and Atlantic Iberian waters)

ICES stock advice

ICES advises that when the precautionary approach is applied, catches of *Solea solea* in each of the years 2018 and 2019 should be no more than 502 tonnes.

Stock development over time

Catches of *Solea* spp. (*Solea solea* and *Solea senegalensis* combined) are available from 2000, whereas catches by species are available from 2012. Catch estimates of *Solea solea* are considered reliable, but those of *Solea senegalensis* are preliminary. The available information is insufficient to evaluate stock trends and exploitation status.

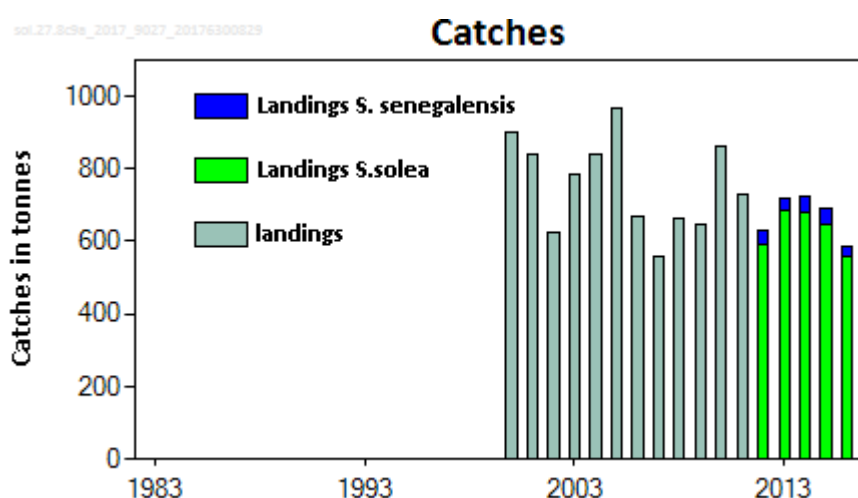


Figure 1 Sole (*Solea solea*) in divisions 8.c and 9.a. Catches of *Solea* spp., separated by species from 2012 onwards.

Stock and exploitation status

Table 1 Sole in divisions 8.c and 9.a. State of the stock.

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

Catch options

The advice is provided for *Solea solea*, for which reliable catch statistics are available. Advice for *Solea senegalensis* is not provided given the preliminary nature of the catch statistics.

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 unless there is ancillary information clearly indicating that the current level of exploitation is appropriate for the stock. This is the first time that quantitative advice is given for *Solea solea* and the precautionary buffer is applied. Discarding is considered to be negligible.

Table 2 Sole in divisions 8.c and 9.a. The basis for the catch options.

Average catch (average of 2014, 2015, 2016)	628 tonnes	
Discard rate	Negligible	
Precautionary buffer	Applied	0.8
Catch advice for <i>Solea solea</i> *	502 tonnes	

* [average catch] × [precautionary buffer].

Basis of the advice

Table 3 Sole in divisions 8.c and 9.a. The basis of the advice.

Advice basis	Precautionary approach.
Management plan	There is no management plan for sole in this area.

Quality of the assessment

There are indications of species misidentification in the historical landing statistics for sole species in this area, combining *Solea solea* and *Solea senegalensis*. Reliable catch statistics for *Solea solea* are available, starting in 2012. The catch statistics for *Solea senegalensis* are preliminary; this species was not included in the ICES data call for the assessment in 2017 but will be included in future data calls.

Issues relevant for the advice

The landing obligation for *Solea solea* has been enforced since 2016 (EU, 2013). Information on discards indicates that discarding can be considered negligible.

The previous advice issued by ICES (advice for 2017) considered *Solea solea*, *Solea senegalensis*, and *Pegusa lascaris*. This year only the *Solea* species are considered.

Management of all sole species under a combined TAC prevents effective control of each single-species exploitation rate and could potentially lead to over-exploitation of all of the species.

Reference points

No reference points are defined for this stock.

Basis of the assessment

Table 4 Sole in divisions 8.c and 9.a. Basis of the assessment and advice.

ICES stock data category	5 (ICES, 2016).
Assessment type	No assessment (ICES, 2017).
Input data	ICES landings.
Discards and bycatch	Discards are known to take place and are considered negligible.
Indicators	None.
Other information	None.
Working group	Working Group for the Bay of Biscay and the Iberian Waters Ecoregion (WGBIE)

Information from stakeholders

No information available.

History of the advice, catch, and management

Table 5 Sole in divisions 8.c and 9.a. ICES advice and official landings. All weights are in tonnes.

Year	ICES advice	Predicted catch corresp. to advice [^]	EU TAC*	Total official landings <i>Solea</i> spp.	ICES landings of <i>Solea solea</i>
2000		-	2000	900	
2001		-	2000	842	
2002		-	2000	623	
2003		-	1600	786	
2004		-	1520	839	
2005		-	1216	966	
2006		-	-	670	
2007		-	1216	560	
2008		-	1216	665	
2009		-	1216	649	
2010		-	1094	864	
2011		-	1072	730	
2012	No increase in catch	-	1072	628	589
2013	20% reduction in catches	-	1072	721	687
2014	Same catch value advised for 2013	-	1072	722	681
2015	Same catch value advised for 2013	-	1072	689	646
2016	Precautionary approach (same catch value advised for 2013)	-	1072	586	557
2017	Precautionary approach (same catch value advised for 2013)	-	1072		
2018	Precautionary approach (≥20% reduction in catch relative to 2014–2016 average)	≤ 502			
2019	Precautionary approach (same catch value advised for 2018)	≤ 502			

* The TAC is set for *Solea* spp.

[^] The advice until 2017 considered several species, whereas the catch advised for 2018 and 2019 corresponds only to *Solea solea*.

History of the catch and landings

Table 6 Sole in divisions 8.c and 9.a. Catch distribution of *Solea solea* by fleet in 2016 as estimated by ICES.

Catch (2016)	Landings		Discards
557 tonnes	OTB 4%	Other gear 96%	negligible
	557 tonnes		

Summary of the assessment

There is no assessment for sole in this area.

Sources and references

EU. 2013. REGULATION (EU) No 1380/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 11 December 2013 on the Common Fisheries Policy, amending Council Regulations (EC) No 1954/2003 and (EC) No 1224/2009 and repealing Council Regulations (EC) No 2371/2002 and (EC) No 639/2004 and Council Decision 2004/585/EC. Official Journal of the European Union, L 354/22. <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013R1380&from=EN>.

ICES. 2012. ICES Implementation of Advice for Data-limited Stocks in 2012 in its 2012 Advice. ICES CM 2012/ACOM:68. 42 pp.

ICES 2016. Advice basis. In Report of the ICES Advisory Committee, 2016. ICES Advice 2016, Book 1, Section 1.2.

ICES. 2017. Report of the Working Group for the Bay of Biscay and the Iberian waters Ecoregion (WGBIE), 4–9 May 2017, Cadiz, Spain. ICES CM 2017/ACOM:12.