

## Greater-spotted dogfish (*Scyliorhinus stellaris*) in subareas 6 and 7 (West of Scotland, southern Celtic Sea, and the English Channel)

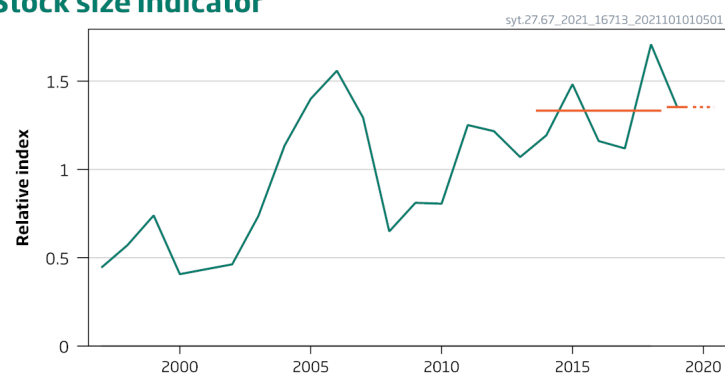
### ICES advice on fishing opportunities

ICES advises that when the precautionary approach is applied, catches in each of the years 2022 and 2023 should be decreased by no less than 18% compared to the average catches in 2018–2020. ICES cannot quantify the corresponding catches or landings.

### Stock development over time

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.

#### Stock size indicator



**Figure 1** Greater-spotted dogfish in subareas 6 and 7. Summary of the stock assessment. Stock-size indicator is the mean normalized exploitable biomass index (individuals of  $\geq 50$  cm total length) from the average of the UK(E&W)-BTS-Q3 (B6596) in divisions 7.a and 7.f in  $\text{kg}\cdot\text{hr}^{-1}$  and FR-CGFS-Q4 (G3425) in Division 7.d in  $\text{kg}\cdot\text{km}^{-2}$ . The horizontal lines indicate the mean stock size indicator for 2019–2020 (2020 missing) and 2014–2018.

### Catch scenarios

The ICES framework for category 3 stocks (ICES, 2012) was applied. An exploitable biomass index derived from the UK(E&W)-BTS-Q3 and the FR-CGFS-Q4 surveys was used to provide an overall stock-size indicator. The advice is based on a comparison of the two most recent years (2019–2020; 2020 missing; index A) with the five preceding values (index B). The stock-size indicator has decreased by less than 20% and thus the uncertainty cap was not applied. The precautionary buffer was applied in 2017, and has therefore been considered in 2021. The stock status relative to candidate reference points is unknown; therefore, the precautionary buffer was applied in the advice.

Because landings and catches are both unquantified, ICES cannot provide advice on fishing opportunities but provides an indication of the relative change in catch implied.

Discarding is known to take place, but ICES cannot quantify the corresponding dead catch. Discard survival, which is likely to occur, has not been estimated.

**Table 1** Greater-spotted dogfish in subareas 6 and 7. The basis of the advice.\*

Index A (2019-2020; 2020 missing)		1.35
Index B (2014–2018)		1.32
Index ratio (A/B)		1.02
Uncertainty cap	Not applied	-
Average catch (2018–2020)		Unknown
Discard rate		Unknown
Precautionary buffer	Applied	0.8
Landings advice **		NA
% Relative change ***		-18%

\* 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.

\*\* ICES cannot quantify the corresponding landings.

\*\*\*  $[1 - (\text{index ratio} \times \text{precautionary buffer}) \times 100]$ .

The advice decreased by 18% because the stock-size indicator ratio increased by 2% and the precautionary buffer was applied.

### Basis of the advice

**Table 2** Greater-spotted 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 greater-spotted dogfish in this area

### Quality of the assessment

In 2020 the area coverage of the UK(E&W)-BTS-Q3 survey was reduced due to COVID-19 restrictions (Division 7.a was not surveyed), and UK waters of the English Channel were not sampled during the FR-CGFS-Q4 survey. Therefore, the 2020 indices were not considered representative of this species. These two surveys cover important habitats of the species distribution.

Landings and catch data are too unreliable to be used for advice, as some landings are included in generic “dogfish” or “catshark” categories, and some landings may be combined with the more common lesser-spotted dogfish *S. canicula*. However landings data are improving as reflected by the increased species-specific landings in recent years. However, ICES is aware that data in the four last years are still incomplete. Discards and utilization as pot-bait are known to occur and are not quantified (ICES, 2021a).

### Issues relevant for the advice

Scyliorhinids are considered to be productive species in comparison to other demersal elasmobranchs (McCully Phillips *et al.*, 2015).

### Reference points

No reference points are defined for this stock.

### Basis of the assessment

**Table 3** Greater-spotted dogfish in subareas 6 and 7. Basis of the assessment and advice.

ICES stock data category	3 ( <a href="#">ICES, 2021b</a> )
Assessment type	Survey trends-based assessment (ICES, 2021a)
Input data	UK(E&W)-BTS-Q3 (B6596), FR-CGFS-Q4 (G3425)
Discards and bycatch	Unknown
Indicators	None
Other information	None
Working group	Working Group on Elasmobranch Fishes ( <a href="#">WGEF</a> )

### History of the advice, catch, and management

**Table 4** Greater-spotted dogfish in subareas 6 and 7. History of ICES advice, the agreed TAC and official landings. All weights are in tonnes.(NA = Not available.)

Year	ICES advice	Catch corresp. to advice	Agreed TAC	Landings (tonnes)
2009	<i>Status quo</i> catch			NA
2010	-			NA
2011	No advice	-	No TAC	NA
2012	No advice	-	No TAC	NA
2013	-	-	No TAC	NA
2014	-	-	No TAC	NA
2015	-	-	No TAC	NA
2016	Decrease by 6% compared to the average catches in 2012–2014	-	No TAC	NA
2017	Same catch value advised for 2016	-	No TAC	NA
2018	Precautionary approach: decrease by 36% compared to the average catches in 2014–2016	-	No TAC	NA
2019	Precautionary approach (same advice as for 2018)	-	No TAC	NA
2020	No advice	-	No TAC	NA
2021	No advice	-	No TAC	NA
2022	Precautionary approach	Decrease by 18% compared to the average catches in 2018–2020		
2023	Precautionary approach	Decrease by 18% compared to the average catches in 2018–2020		

### History of the catch and landings

The distribution of this stock does not extend into the NEAFC Regulatory Area.

**Table 5** Greater spotted dogfish in subareas 6 and 7. Catch distribution by fleet in 2020 as estimated by ICES.

Catch (2020)	Landings	Discards
Unknown	Unknown	Unknown

### Summary of the assessment

**Table 6** Greater spotted dogfish in subareas 6 and 7. Assessment summary. Stock size indicator is the mean normalized exploitable biomass index (individuals of  $\geq 50$  cm total length) from the average of the UK(E&W)–BTS–Q3 in divisions 7.a and 7.f in  $\text{kg}\cdot\text{hr}^{-1}$  and FR-CGFS-Q4 in Division 7.d in  $\text{kg}\cdot\text{km}^{-2}$ .

Year	UK(E&W)-BTS-Q3	FR-CGFS-Q4	Stock-size indicator
1997	0.504	0.383	0.444
1998	0.694	0.449	0.571
1999	1.091	0.388	0.739
2000	0.49	0.32	0.41
2001	0.68	0.19	0.44
2002	0.24	0.68	0.46
2003	0.78	0.69	0.74
2004	1.04	1.23	1.13
2005	1.31	1.49	1.40
2006	1.10	2.0	1.56
2007	0.58	2.0	1.29
2008	0.48	0.82	0.65
2009	0.77	0.85	0.81
2010	0.47	1.14	0.81
2011	2.0	0.50	1.25
2012	1.77	0.66	1.22

Year	UK(E&W)-BTS-Q3	FR-CGFS-Q4	Stock-size indicator
2013	1.19	0.95	1.07
2014	1.44	0.95	1.19
2015	1.42	1.54	1.48
2016	0.96	1.36	1.16
2017	0.99	1.25	1.12
2018	1.33	2.1	1.71
2019	1.67	1.04	1.35
2020 *	NA	NA	NA

\* 2020 data of UK(E&W)-BTS-Q3 and FR-CGFS-Q4 were not available

## Sources and references

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

ICES. 2021a. Working Group on Elasmobranch Fishes (WGEF). ICES Scientific Reports. 3:59. <http://doi.org/10.17895/ices.pub.8199>.

ICES. 2021b. Advice on fishing opportunities. *In* Report of the ICES Advisory Committee, 2021. ICES Advice 2021, section 1.1.1. <https://doi.org/10.17895/ices.advice.7720>.

McCully Phillips, S. R., Scott, F. and Ellis, J. R. 2015. Having confidence in Productivity Susceptibility Analyses: A method for underpinning scientific advice on skate stocks? *Fisheries Research*, 171: 87–100.

[Download the stock assessment data and figures.](#)

*Recommended citation:* ICES. 2021. Greater-spotted dogfish (*Scyliorhinus stellaris*) in subareas 6 and 7 (West of Scotland, southern Celtic Sea, and the English Channel). *In* Report of the ICES Advisory Committee, 2021. ICES Advice 2021, syt.27.67, <https://doi.org/10.17895/ices.advice.7875>.