

Sandeel (*Ammodytes* spp.) in subdivisions 20–22, Sandeel Area 6 (Skagerrak, Kattegat and Belt Sea)

ICES advice on fishing opportunities

ICES advises that when the precautionary approach is applied, catches should be no more than 175 tonnes in each of the years 2019 and 2020.

Stock development over time

Only catch statistics are available. The available information is inadequate to evaluate stock status or trends. The state of the stock is therefore unknown.

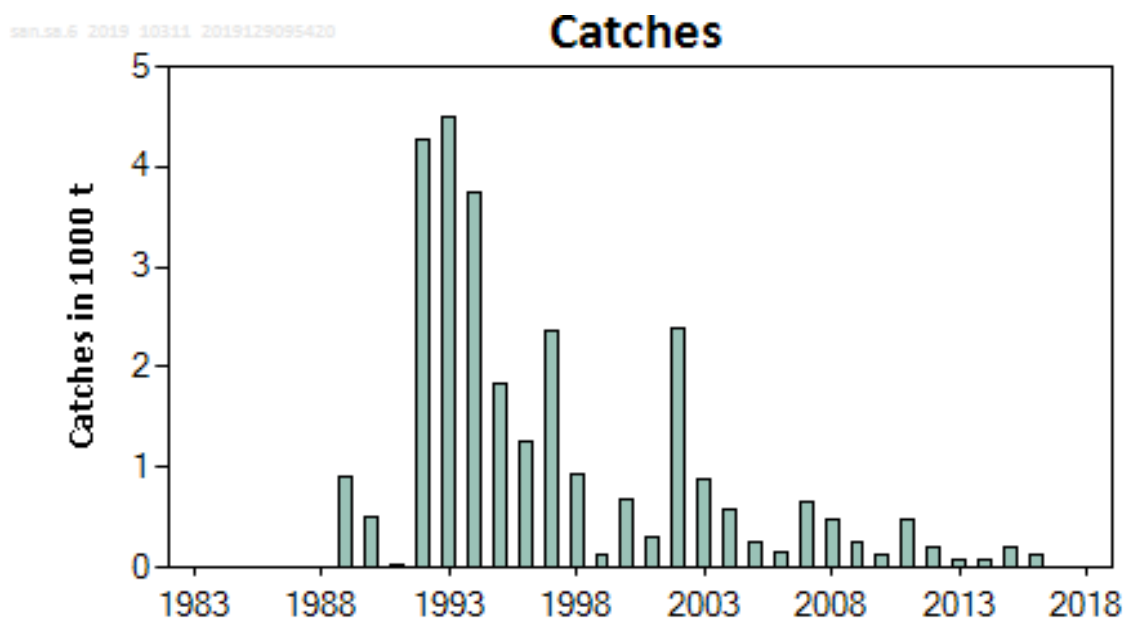


Figure 1 Sandeel in subdivisions 20-22, Sandeel Area 6. ICES estimates of catches (in thousand tonnes).

Stock and exploitation status

ICES cannot assess the stock and exploitation status relative to MSY and precautionary approach (PA) reference points because the reference points are undefined.

Table 1 Sandeel in subdivisions 20-22, Sandeel Area 6. State of the stock and fishery relative to reference points.

		Fishing pressure			Stock size					
		2016	2017	2018	2017	2018	2019			
Maximum sustainable yield	F_{MSY}	?	?	?	Undefined	$MSY B_{trigger}$?	?	?	Unknown
Precautionary approach	F_{pa}, F_{lim}	?	?	?	Undefined	B_{pa}, B_{lim}	?	?	?	Unknown
Management plan	F_{MGT}	—	—	—	Not applicable	B_{MGT}	—	—	—	Not applicable
Qualitative evaluation	-	?	→	→	Very low	-	?	?	?	Unknown

Catch scenarios

The ICES framework for stocks in categories 4–6 was applied (ICES, 2012). For stocks without information on abundance or exploitation, ICES considers that a precautionary reduction of catches should be implemented every three years unless there is ancillary information clearly indicating that the current level of exploitation is appropriate for the stock. The precautionary buffer was last applied in 2017 and is therefore not applied this year.

Table 2 Sandeel in subdivisions 20-22, Sandeel Area 6. The catch scenarios. For stocks in ICES categories 3–6, one catch scenario is possible.

Recent advised catch		175 tonnes
Discard rate		Negligible
Precautionary buffer	Not applied	-
Catch advice		175 tonnes
% Advice change*		0

* Advice value 2019–2020 relative to advice value 2017–2018.

Following the precautionary approach, the advice for 2019 and 2020 is the same as 2017 and 2018.

Basis of the advice

Table 3 Sandeel in subdivisions 20-22, Sandeel Area 6. The basis of the advice.

Advice basis	Precautionary approach
Management plan	ICES is not aware of any agreed precautionary management plan for sandeel in this area.

Quality of the assessment

The available information is inadequate to evaluate stock status or trends.

Issues relevant for the advice

The basis for the advice is expected to remain unchanged unless information on stock status becomes available.

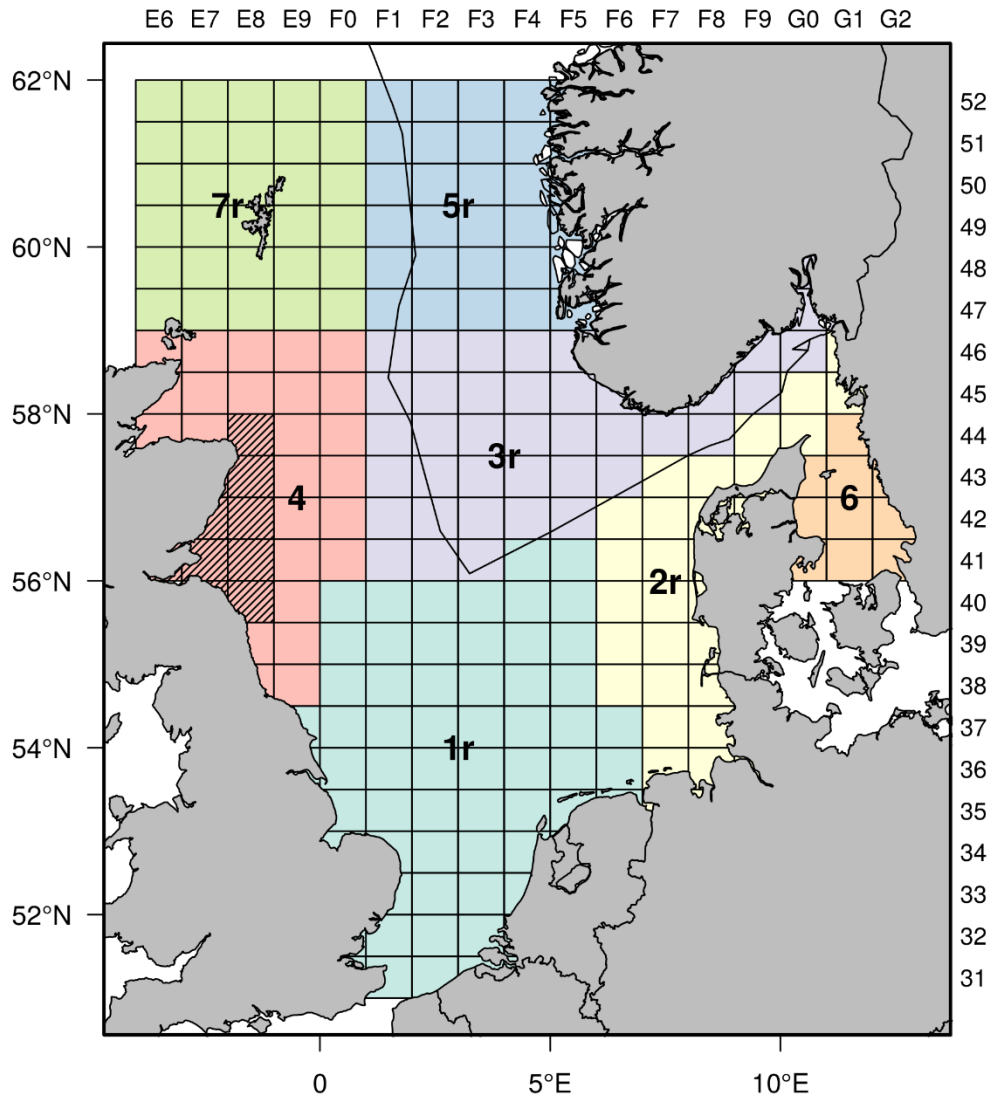


Figure 2 Sandeel in subdivisions 20–22, Sandeel Area 6. Stock areas for the seven sandeel stocks. The border of the Norwegian Exclusive Economic Zone (EEZ) is shown as a black line, and the closed part of Sandeel Area 4 is shown with hatched markings. The area of advice for sandeel in subdivisions 20–22, Sandeel Area 6 is defined as rectangles 41–43 G0–G3; 44 G1. ICES revised many of the sandeel areas by ICES statistical rectangle at the 2016 benchmark; however, Sandeel Area 6 was not revised (ICES, 2017).

Reference points

No reference points are defined for this stock.

Basis of the assessment

Table 4 Sandeel in subdivisions 20-22, Sandeel Area 6. The basis of the assessment.

ICES stock data category	5 (see ICES, 2018).
Assessment type	No assessment (ICES, 2019).
Input data	Commercial catches statistics.
Discards and bycatch	Discarding is considered to be negligible.
Indicators	None.
Other information	Last benchmarked in 2016 (ICES, 2017).
Working group	Herring Assessment Working Group (HAWG)

Information from stakeholders

There is no additional available information.

History of advice, catch, and management

Table 5 Sandeel in subdivisions 20-22, Sandeel Area 6. History of ICES advice, the agreed TAC, and ICES estimated catch. All weights are in tonnes.

Year	ICES advice	Catch corresponding to advice	EU TAC	ICES catch SA 6
2005	No advice			262
2006	No advice			161
2007	No advice			661
2008	No advice			472
2009	No advice			26
2010	No advice			132
2011	No increase in effort unless there is evidence that this is sustainable.		42	481
2012	No increase in effort unless there is evidence that this is sustainable.		42	211
2013	20% reduction in catches from last 3-year average	< 219	336	90
2014	No new advice, same as for 2013	< 219	219	79
2015	Precautionary approach	< 219	219	199
2016	Precautionary approach	< 219	219	123
2017	Precautionary approach	≤ 175	175	0
2018	Precautionary approach	≤ 175	175	0*
2019	Precautionary approach	≤ 175		
2020	Precautionary approach	≤ 175		

*Preliminary.

History of catch and landings

Table 6 Sandeel in subdivisions 20-22, Sandeel Area 6. Catch distribution by fleet in 2018 as estimated by ICES (in tonnes).

Total catch (2018)	Landings	Discards
0	0% industrial trawl fisheries 0	0

Table 7 Sandeel in subdivisions 20-22, Sandeel Area 6. History of catch (in tonnes) as estimated by ICES.

Year	Catch
1983	0
1984	0
1985	0
1986	0
1987	0
1988	0
1989	909
1990	499
1991	17
1992	4277
1993	4490
1994	3748
1995	1830
1996	1263
1997	2373
1998	936
1999	134
2000	680
2001	312

Year	Catch
2002	2378
2003	869
2004	570
2005	262
2006	161
2007	661
2008	472
2009	260
2010	132
2011	481
2012	211
2013	90
2014	79
2015	199
2016	123
2017	0
2018	0*

*Preliminary.

Summary of the assessment

There is no assessment for sandeel in this area.

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. 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>

ICES. 2017. Report of the Benchmark Workshop on Sandeel Stocks (WKSAND), 31 October–4 November 2016, Bergen, Norway. ICES CM 2016/ACOM:33. 319 pp.

ICES. 2019. Sandeel in Division 3.a and Subarea 4. Section 9 *in* Herring Assessment Working Group for the Area South of 62 deg N (HAWG). ICES Scientific Reports. VOL 1:ISS 2. Section 9 is available separately at the [HAWG](#) website.

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