

# Other rays and skates (Rajidae) in Subarea 4 and in divisions 3.a and 7.d (North Sea, Skagerrak, Kattegat, and eastern English Channel)

# **ICES** advice on fishing opportunities

ICES cannot provide advice on the status of these stocks owing to a lack of reliable survey and catch data. ICES advises that the collection of species-specific landings data should be introduced for more species of rays and skates to help inform on the status of these stocks.

## Stock development over time

ICES cannot assess the stock and exploitation status relative to the maximum sustainable yield (MSY) and precautionary approach (PA) reference points because information to define reference points is not available.

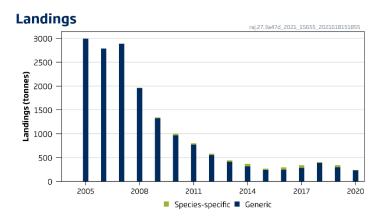


Figure 1 Other rays and skates in Subarea 4 and in divisions 3.a and 7.d. ICES estimated landings for species not reported elsewhere (including *Amblyraja hyperborea, Dipturus batis* complex in Division 7.d, *Leucoraja circularis, Leucoraja fullonica, Rajella lintea,* and *Raja brachyura* in Division 4.b) and generic reported landings (unidentified Rajiformes), in tonnes.

## **Catch scenarios**

ICES cannot provide catch advice for these stocks due to a lack of reliable survey and catch data. Revised recent landings (ICES, 2016) are not considered reliable to provide advice because of progressive increase in the level of species-specific reporting.

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

lable 1	Other rays and skates in Subarea 4 and in division	s 3.a and 7.d.The	basis for the catch scenarios.
Recent adv	vised landings for 2020 and 2021		NA
Discard rat	Discard rate		Unknown
Precaution	nary buffer	Not applied	-
Landings a	Landings advice		NA
% Advice c	hange		NA

 Table 1
 Other rays and skates in Subarea 4 and in divisions 3.a and 7.d. The basis for the catch scenarios.

# Basis of the advice

Table 2Other rays and skates in Subarea 4 and in divisions 3.a and 7.d. The basis of the advice.			
Advice basis	No advice		
Management plan	ICES is not aware of any agreed precautionary management plans for other rays and skates in this area		

## Quality of the assessment

The species composition of the catch is mostly unknown. The decrease in generic landings is due to the introduction and improvement in species-specific recording of the main commercial skate and ray species.

Landings data for 2017 and 2018 have been updated, as revised Danish data were supplied.

# Issues relevant for the advice

This advice relates to those skates (in the order Rajiformes) not specified elsewhere in ICES advice for skate stocks in the Greater North Sea ecoregion; it does not refer to stingrays or electric rays. The skate species considered here include Arctic skate (*Amblyraja hyperborean*) and *Dipturus batis* complex in Division 7.d and sandy ray (*Leucoraja circularis*), shagreen ray (*Leucoraja fullonica*), round skate (*Rajella fyllae*), sailray (*Rajella lintea*), and blonde ray (*Raja brachyura*) in Division 4.b, as well as generic reported landings (indeterminate Rajiformes).

Some of the generic skate landings are likely to be commercial species for which ICES provides species-specific advice.

Fishing opportunities are managed through an overall TAC for skates and rays by management unit.

#### **Reference points**

No reference points are defined for these stocks.

## **Basis of the assessment**

 Table 3
 Other rays and skates in Subarea 4 and in divisions 3.a and 7.d. Basis of the assessment and advice.

ICES stock data category	6 ( <u>ICES, 2021a</u> )
Assessment type	No assessment (ICES, 2021b)
Input data	None
Discards and bycatch	Unknown
Indicators	None
Other information	None
Working group	Working Group on Elasmobranch Fishes (WGEF)

# History of the advice, catch, and management

Table 4

Other rays and skates in Subarea 4 and in divisions 3.a and 7.d. History of ICES advice, agreed TAC,and official landings. All weights are in tonnes.

Veer ICEC eduies		Landings corresp. to				
Year	ICES advice	advice	2.a and 4	7.d	3.a	ICES landings**
2011	No specific advice		1397	887	58	801
2012	No specific advice		1395	887	58	583
2013	No TAC, species-specific measures needed, catch to decrease by at least 20%	-	1256	798	52	444
2014	No new advice, same as 2013	-	1256	798	47	367
2015	No new advice, same as 2014	-	1382	798	47	270
2016	In the absence of reliable survey data and catch data, ICES currently cannot provide advice on the status of these bycatch species		1313	966	47	295
2017	Biennial advice	-	1378	1063	47	338^
2018	In the absence of reliable survey data and catch data, ICES currently cannot provide advice on the status of these bycatch species	-	1654	1276	47	406^
2019	Same advice as 2018	-	1654	1404	47	341
2020	In the absence of reliable survey data and catch data, ICES currently cannot provide advice on the status of these bycatch species	-	1737	1474	47	244
2021	Same advice as in 2020	-	1650	1400	45	
2022	In the absence of reliable survey data and catch data, ICES currently cannot provide advice on the status of these bycatch species					
2023	Same advice as in 2022					

\* Combined TAC for skates and rays.

\*\* Data revised in 2016 (ICES, 2016).

^ Data revised in 2021 (ICES, 2021a).

# History of the catch and landings

Table 5Other rays and skates in Subarea 4 and in divisions 3.a and 7.d. Catch distribution by fleet in 2020 as estimated by ICES.

Catch (2020)		Discards		
Unknown	Beam trawl 1%	Bottom trawl 75%	Other 24%	Unknown
Unknown		Unknown		

Таха	Division	2005	2006	2007	2008	2009	2010	2011 2011	2012	2013	2014	2015	2016	2017*	2018*	2019	2020
Amblyrajahyperbor ea	4.a								0	1	0		0	0	3	1	0
Dipturus batis complex	7.d																0
	4.a					1	0		0	3	13		16	14	14	35	10
Leucoraja circularis	4.b				0	0	0		0	0	0	0	0	0			
	4.c													1			
	7.d			0	0		0	0	1	0	0						
Leucorajafullonica	4.a	0	0	0	0	6	23	18	6	8	4	0	1	4	2	3	
Leucorujujunomcu	4.b					1	1	0	0	0		0	0	0			
Raja brachyura	3.a										1						
Naja brachyara	4.b				6	7	12	12	24	16	27	29	32	38	2	1	2
Raja microocellata	4.a						0	0									
Rajellalintea	3.a	2	1					0	2	4	3					2	0
Najenanntea	4.a							0	0	0	0					0	0
	3.a	168	93	33	33	46	44	67	44	67	52	59	87	105	176	89	80
	3.b											0	0				
Unspecified rays	3.c											0	0				
Unspecified rays and skates	4.a	481	457	432	454	410	245	169	164	167	149	113	108	120	155	172	124
difu skales	4.b	260	269	311	125	58	46	49	28	31	53	43	15	24	19	24	14
	4.c	1133	1097	1063	376	210	193	96	62	39	28	9	12	10	14	1	2
	7.d	949	870	1049	970	603	436	389	251	108	35	18	25	23	20	11	12
Subtotal (species)		2	1	0	6	15	36	31	33	32	49	29	49	56	21	43	13
Subtotal (unspecified)		2991	2787	2888	1958	1327	965	770	550	412	318	241	246	282	384	299	231
Total	-	2993	2788	2888	1964	1341	1001	801	583	444	367	270	295	338	406	341	244

Table 6	Other rays and skates in Subarea 4 and in divisions 3.a and 7.d. ICES estimates of landings by species (for stocks not included in separate advice sheets) and unallocated
	skate and ray landings by year (in tonnes). Blank cell = no data reported: 0 = value below 0.5 tonnes.

\* Landings data for 2017 and 2018 have been updated, as revised Danish data were supplied.

## Summary of the assessment

There are no assessments for the other skates and rays in this area.

## Sources and references

ICES. 2016. Report of the Workshop to compile and refine catch and landings of elasmobranchs (WKSHARK2), 19–22 January 2016, Lisbon, Portugal . ICES CM 2016/ACOM:40. 69 pp.

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

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

Download the stock assessment data and figures.

*Recommended citation:* ICES. 2021. Rays and skates (*Rajidae*) in Subarea 4 and in divisions 3.a and 7.d (North Sea, Skagerrak, Kattegat, and eastern English Channel). *In* Report of the ICES Advisory Committee, 2021. ICES Advice 2021, raj.27.3a47d, <a href="https://doi.org/10.17895/ices.advice.7837">https://doi.org/10.17895/ices.advice.7837</a>.