

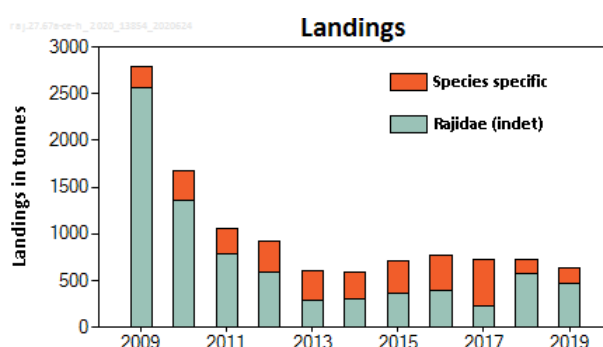
## Other skates and rays in subareas 6–7 (excluding Division 7.d) (Rockall and West of Scotland, southern Celtic Seas, western English Channel)

### ICES advice on fishing opportunities

ICES cannot provide catch advice for these stocks due to a lack of reliable survey and catch data. Discarding is known to take place, but ICES cannot quantify the corresponding catches.

*Note: This advice sheet is abbreviated due to the COVID-19 disruption. The previous advice issued for 2019 and 2020 is attached as Annex 1.*

### Stock development over time



**Figure 1** Other skates and rays in subareas 6–7 (excluding Division 7.d). ICES estimates of landings for species covered by this advice, which includes species not reported elsewhere (orange – *Amblyraja hyperborea*, *Amblyraja radiata*, and *Rajella fyllae*), species outside the currently recognized stock boundaries in this ecoregion (orange – *Raja brachyura*, *Raja clavata*, *Raja microocellata*, *Raja montagui*, and *Raja undulata*), and the generic reported landings (green – indeterminate Rajiformes). All landings are in tonnes.

### Stock and exploitation status

**Table 1** Other skates and rays in subareas 6–7 (excluding Division 7.d). State of the stock and the fishery relative to reference points.

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

### Catch scenarios

Discarding is known to take place, but ICES cannot quantify the corresponding dead catch.

**Table 2** Other skates and rays in subareas 6–7 (excluding Division 7.d). The basis for the catch scenarios.

Advised landings for 2019 and 2020, issued in 2018	No advice	
Discard rate	Unknown	
Precautionary buffer	Not applied	-
Landings advice	-	
% advice change*	-	

\* Advice value 2021 and 2022 relative to advice value 2019 and 2020.

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

**Table 3** Other skates and rays in subareas 6–7 (excluding Division 7.d). History of ICES advice and ICES estimates of landings\*. All weights are in tonnes.

Year	ICES advice	Landings corresponding to advice	ICES unallocated skate landings ^
2009			2783
2010			1671
2011	No specific advice		1052
2012	No specific advice		919
2013	Decrease by up to 20%	-	600
2014	No new advice, same as 2013	-	594
2015	Reduce landings by 20% **	789	714
2016	No new advice, same as 2015 **	789	770
2017	No advice	-	729
2018	No advice	-	731
2019	No advice	-	639
2020	No advice	-	
2021	No advice	-	
2022	No advice	-	

\* There is no specific TAC for this stock. Fishing opportunities are managed through an overall TAC by management unit, which includes all species of skates and rays.

\*\* ICES provided advice for these skates in 2014 as a larger proportion of total skate landings were not assigned to assessed stock units.

^ Data for 2009–2017 were revised in 2020.

### Summary of the assessment

There are no assessments for the stocks addressed here.

### Sources and references

ICES. 2020. Working Group on Elasmobranch Fishes (WGEF). ICES Scientific Reports, 2:77. <http://doi.org/10.17895/ices.pub.7470>.

*Recommended citation:* ICES. 2020. Other skates and rays in subareas 6–7 (excluding Division 7.d) (Rockall and West of Scotland, southern Celtic Seas, western English Channel). In Report of the ICES Advisory Committee, 2020. ICES Advice 2020, raj.27.67a-ce-h. <https://doi.org/10.17895/ices.advice.5782>.

# Annex 1

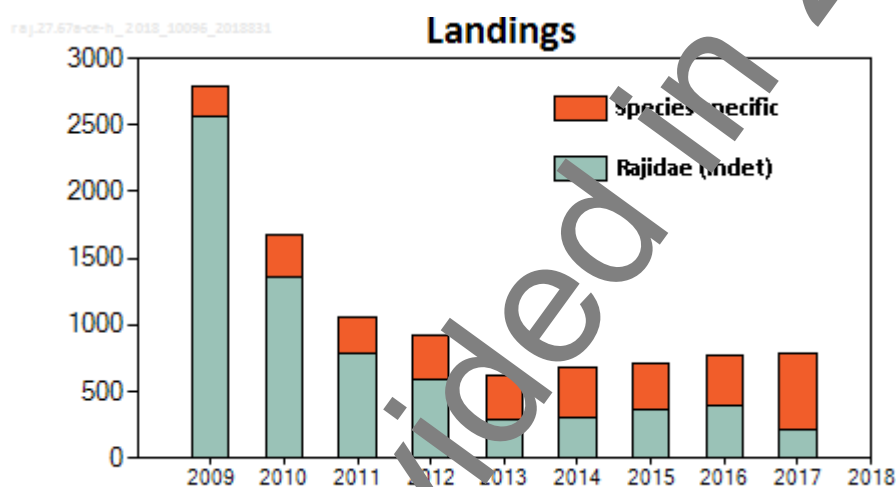
## Other skates and rays in subareas 6–7 (excluding Division 7.d) (Rockall and West of Scotland, southern Celtic Seas, western English Channel)

### ICES advice on fishing opportunities

ICES cannot provide catch advice for these stocks due to a lack of reliable survey and catch data. Discarding is known to take place, but ICES cannot quantify the corresponding catches.

### Stock development over time

The available survey and abundance data are insufficient to assess these species individually. All stocks are considered to be of minor importance for the commercial fisheries in this ecoregion. The apparent reduction in landings since 2009 is attributed to improved reporting at the species level, which has reduced the amount of skates reported as unidentified.



**Figure 1** Other skates and rays in subareas 6–7 (excluding Division 7.d). ICES-estimated landings for species covered by this advice which includes species not reported elsewhere (*Amblyraja hyperborea*, *Amblyraja radiata*, *Rajella fyllae*), species outside stock boundaries (*Raja brachyura*, *Raja clavata*, *Raja microocellata*, *Raja montagui*, *Raja undulata*), and the generic reported landings (indeterminate Rajiformes) in tonnes.

### 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** Other skates and rays in subareas 6–7 (excluding Division 7.d). State of the stock and fishery relative to reference points.

		Fishing pressure				Stock size				
		2015	2016	2017		2015		2016	2017	
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	-	?	?	?	Unknown

## Catch scenarios

ICES cannot provide catch advice for these stocks due to a lack of reliable survey and catch data. Revised recent landings (ICES, 2016a, 2018) are not considered reliable to provide advice because of progressive changes in the level of species-specific reporting.

Discarding is known to take place, but ICES cannot quantify the corresponding dead catch.

**Table 2** Other skates and rays in subareas 6–7 (excluding Division 7.d). The basis for the catch scenarios.

Advised landings for 2017 and 2018, issued in 2016	No advice	
Discard rate	Unknown	
Precautionary buffer	Not applied	-
Landings advice		-
% Advice change*		-

\* Advice value 2019 relative to advice value 2017.

The advice has not changed from 2016.

## Basis of the advice

**Table 3** Other skates and rays in subareas 6–7 (excluding Division 7.d). The basis of the advice.

Advice basis	No advice.
Management plan	ICES is not aware of any agreed precautionary management plan for these stocks.

## Quality of the assessment

There is no assessment for these stocks.

## Issues relevant for the advice

Reported landings of skates in the Celtic Seas that are not species specific (undetermined) have declined from more than 2562 tonnes in 2009 to 204 tonnes in 2017, reflecting the improved species-specific reporting of skates.

This advice relates to skates (order Rajiformes), not specified elsewhere in ICES advice for the Celtic Seas ecoregion. Specifically, it refers to (i) skates not reported to species level, (ii) commercial species, including thornback ray (*R. clavata*), blonde ray (*R. brachyura*), and small-eyed ray (*R. microocellata*) reported from divisions outside defined stock boundaries, and (iii) deep-water skates (e.g. round skate *Rajella fyllae*) and northerly species from the northern parts of the ecoregion (e.g. Arctic skate *Amblyraja hyperborea* and starry ray *Amblyraja radiata*).

Stock identity for many of the species is unknown. The majority of the skate landings included in this advice now refer to commercial skate species that are outside other defined stock boundaries. Ongoing studies may allow these landings to be allocated to assessed stocks in the future.

The other skate species included in this advice are all of minor importance and/or the Celtic Seas ecoregion represents the southern limit of their distributions.

## Reference points

There are no reference points for these stocks.

## Basis of the assessment

**Table 4** Other skates and rays in subareas 6–7 (excluding Division 7.d). The basis of the assessment.

ICES stock data category	6 (ICES, 2016b)
Assessment type	No assessment (ICES, 2018)
Input data	Estimated landings
Discards and bycatch	Discarding is known to take place but has not been fully quantified.
Indicators	None
Other information	None
Working group	Working Group on Elasmobranch Fishes (WGEF)

## Information from stakeholders

No information has been provided.

## History of the advice, catch, and management

**Table 5** Other skates and rays in subareas 6–7 (excluding Division 7.d). History of ICES advice and ICES estimates of landings\*. All weights are in tonnes.

Year	ICES advice	Landings corresponding advice	ICES unallocated skate landings <sup>^</sup>
2009			2787
2010			1671
2011	No specific advice		1053
2012	No specific advice		924
2013	Decrease by up to 20%	-	623
2014	No new advice, same as 2013	-	674
2015	Reduce landings by 20% **	789	714
2016	No new advice, same as 2015 **	789	770
2017	No advice	-	787
2018	No advice	-	
2019	No advice	-	
2020	No advice	-	

\* There is no specific TAC for this stock. Fishing opportunities are managed through an overall TAC by management unit, which includes all species of skates and rays.

\*\* ICES provided advice for these skates in 2015 as a larger proportion of total skate landings were not assigned to assessed stock units.

<sup>^</sup> Data for 2009–2015 revised in 2018.

## History of the catch and landings

Whilst various skate species may be captured in the NEAFC area, the quantities caught and the species composition are uncertain and cannot be quantified.

**Table 6** Other skates and rays in subareas 6–7 (excluding Division 7.d). Catch distribution by fleet in 2017 as estimated by ICES.

Catch (2017)	Landings				Discards
Unknown	Beam trawl	Bottom trawl	Set nets	Other	Unquantified
	15%	55%	7%	23%	
	787 t				

**Table 7** Other skates and rays in subareas 6–7 (excluding Division 7.d). ICES estimates of landings by species, country, and year (in tonnes). Data revised in 2016 (ICES, 2016a) and 2018.

Country	Species	2009	2010	2011	2012	2013	2014	2015	2016	2017
Belgium	<i>Raja brachyura</i>	0	0	0	0	0	0	0	1	2
	<i>Raja clavata</i>	0	0	0	0		0	1	0	0
	<i>Raja undulata</i>								1	0
	<i>Rajiformes</i> (indet)	416	333	227	74	8	0	0	1	0
Belgium Total		416	333	227	74	8	1	1	3	3
Denmark	<i>Rajiformes</i> (indet)	2	4	3	1					
Denmark Total		2	4	3	1					
Spain	<i>Dipturus spp</i>	4		0	5	23	80			72
	<i>Raja brachyura</i>	1			0	1				
	<i>Raja clavata</i>	65	23	13	6	5	10	44	59	62
	<i>Raja montagui</i>		3							
	<i>Rajiformes</i> (indet)	139	26	11	9	4	2	1	1	
Spain Total		210	52	24	20	32	92	45	61	134
France	<i>Amblyraja hyperborea</i>				3	0	2	18	10	7
	<i>Amblyraja radiata</i>					4	8	5	9	9
	<i>Dipturus spp</i>									18
	<i>Raja brachyura</i>	2	5	6	2	31	25	29	45	62
	<i>Raja clavata</i>	82	92	45	5	61	46	42	36	27
	<i>Raja microocellata</i>	0	2	0		1	1	2	0	1
	<i>Raja montagui</i>	0.01	0.01	0.11		0.00	0.04	0.02	0.04	58
	<i>Raja undulata</i>		0.03		0.00			0.04	0.06	
	<i>Rajidae indet.</i>									1
	<i>Rajiformes</i> (indet)	463	215	23	77	42	46	28	31	
France Total		548	314	11	160	139	128	123	130	183
UK	<i>Amblyraja hyperborea</i>					0	0			
	<i>Amblyraja radiata</i>			0	0	1		0		
	<i>Raja brachyura</i>	10	5	4	11	1	1	3	2	2
	<i>Raja clavata</i>	30	55	58	58	35	14	20	27	19
	<i>Raja microocellata</i>	6	8	4	2	11	16	18	1	0.2
	<i>Raja undulata</i>								0.2	0.4
	<i>Rajella fyllae</i>									
	<i>Rajiformes</i> (indet)	463	223	102	83	54	45	6	4	8
UK Total		508	290	168	153	101	77	46	34	30
Ireland	<i>Amblyraja radiata</i>				0		0			
	<i>Raja brachyura</i>	5	36	46	47	53	53	40	45	47
	<i>Raja clavata</i>	18	81	88	127	111	117	133	147	151
	<i>Raja microocellata</i>		0				0		0	
	<i>Raja montagui</i>						1	1	0	42
	<i>Rajella fyllae</i>		1		1					
	<i>Rajiformes</i> (indet)	983	429	259	236	79	49	53	38	43
Ireland Total		1007	547	394	410	243	219	227	230	284
Netherlands	<i>Raja clavata</i>			0.1						
	<i>Raja montagui</i>		0.1							
	<i>Rajiformes</i> (indet)	0.4		0.1	0.1	0.0				
Netherlands Total		0.4	0.1	0.1	0.1	0.0				
Norway	<i>Rajiformes</i> (indet)	96	131	62	107	99	157	272	312	153
Norway Total		96	131	62	107	99	157	272	312	153
Total		2787	1671	1053	924	623	674	714	770	787

## Summary of the assessment

There is no assessment for these stocks in this area.

## Sources and references

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

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

ICES. 2018. Report of the Working Group on Elasmobranch Fishes (WGEF), 19–28 June 2018, Lisbon, Portugal. ICES CM 2018/ACOM:16.

Advice provided in 2018