

## Undulate ray (*Raja undulata*) in Division 8.c (Cantabrian Sea)

### ICES advice on fishing opportunities

ICES cannot provide catch advice on the status of this stock because of lack of reliable survey and catch data. ICES advises that when the precautionary approach is applied, there should be no targeted fisheries on this stock in each of the years 2019 and 2020. Close monitoring of the stock and fishery should be implemented.

### Stock development over time

Landings are not informative of stock size due to changes in management and reporting requirements over time. There is no stock size indicator.

### 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** Undulate ray in Division 8.c. State of the stock and fishery relative to reference points.

Candidate 14 in Division 6: 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

The ICES framework for category 6 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.

**Table 2** Undulate ray in Division 8.c. The basis for the catch scenarios.

Advised landings for 2017–2018 issued in 2016			-
Discard rate			Unknown
Precautionary buffer	Not applied		-
Landings advice			-
% Advice change *			-

\* Advice value for 2019 relative to advice value for 2018.

### Basis of the advice

**Table 3** Undulate ray in Division 8.c. The basis of the advice.

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

### Quality of the assessment

There is no assessment for this stock.

### Issues relevant for the advice

This species has a patchy and coastal distribution, with traditionally limited data on stock status. Data from existing trawl surveys are limited, owing largely to a poor overlap between surveyed areas and the coastal habitat of this species.

ICES (2014) has previously advised *“that there should be no targeted fisheries on this stock. Any possible provision for bycatch to be landed should be part of a management plan, including close monitoring of the stock and fishery”*. In 2015 and 2016, European regulations were introduced to allow limited exploitation of this stock, through trip limits, which in 2017 were no more than 20 kg live weight per fishing trip, and an overall quota limit (30 tonnes for Division 8.c). For the current stock, assuming regulations allowing for a limited bycatch are in place, data from these catches should be collated to evaluate the status of the stock. ICES also considers that there should be a management plan for this stock.

Observations on commercial trammelnet vessels from the Basque country found that undulate ray was the fourth most abundant coastal skate species (ICES, 2016a). The earlier prohibition on landing this species may have resulted in fishers avoiding areas of local abundance and, therefore, commercial catch and effort data are limited and may not be informative.

### Reference points

No reference points are defined for this stock

### Basis of the assessment

**Table 4** Undulate ray in Division 8.c. Basis of assessment and advice.

ICES stock data category	6 ( <a href="#">ICES, 2016b</a> )
Assessment type	No assessment (ICES, 2018)
Input data	None
Discards and bycatch	Discarding is known to take place but cannot be fully quantified.
Indicators	None
Other information	None
Working group	Working Group on Elasmobranch Fishes ( <a href="#">WGEF</a> )

### Information from stakeholders

Fishers have reported that undulate ray can be locally common in some areas, which has been confirmed by scientific observations on commercial fishing vessels.

## History of the advice, catch, and management

**Table 5** Undulate ray in Division 8.c. History of ICES advice and ICES estimates of landings\*. All weights are in tonnes.

Year	ICES advice	Landings corresp. to advice	TAC	ICES species-specific landings: minimum estimate based on reported landings
2011	No specific advice			na
2012	No specific advice			na
2013	No specific advice	-		na
2014	No specific advice	-		na
2015	No directed fishery and bycatch should be mitigated	-		6
2016	No directed fishery and bycatch should be mitigated	-	25	7
2017	Precautionary approach	-	30	8
2018	Precautionary approach	-	30	
2019	Precautionary approach	-		
2020	Precautionary approach	-		

\* Fishing opportunities are managed through an overall TAC by management unit, which includes all species of skates and rays. Since 2015–2016, there has been a specified TAC for this species in Subarea 8.

## History of the catch and landings

The distribution of this stock does not extend into the NEAFC regulatory area.

**Table 6** Undulate ray in Division 8.c. Catch distribution by fleet in 2017 as estimated by ICES.

Table 6: Crustacean fish in Division 610: catch distribution by fleet in 2017 as estimated by ICES				
Catch (2017)	Landings			Discards
Unknown	hooks and lines	nets	other	Discarding is known to take place but cannot be quantified
	9%	84%	7%	
	8 tonnes			

## Summary of the assessment

There is no assessment for this stock in this area.

## Sources and references

ICES. 2014. Undulate ray (*Raja undulata*) in Divisions VIIIc (Cantabrian Sea). In Report of the ICES Advisory Committee, 2014. ICES Advice 2014, Book 7, Section 7.3.18.7.

ICES. 2016a. 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. 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.