

Thornback ray (*Raja clavata*) in Division 7.e (western English Channel)

ICES advice on fishing opportunities

ICES advises that when the precautionary approach is applied, landings should be no more than 212 tonnes in each of the years 2019 and 2020. ICES cannot quantify the corresponding catches.

Stock development over time

Landings have increased from 2011. No stock size indicator is currently available.

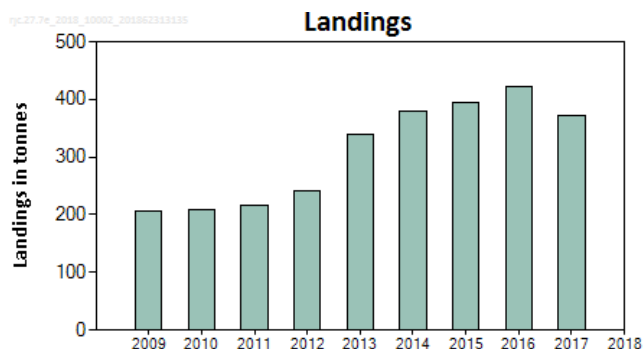


Figure 1 Thornback ray in Division 7.e. ICES estimates of species-specific landings (in tonnes) since 2009.

Stock and exploitation status

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

Table 1 Thornback ray in Division 7.e. 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	$MSY B_{trigger}$?	?	?	Undefined
Precautionary approach	F_{pa}, F_{lim}	?	?	?	Unknown	B_{pa}, B_{lim}	?	?	?	Undefined
Management plan	F_{MGT}	—	—	—	Not applicable	B_{MGT}	—	—	—	Not applicable
Qualitative evaluation	-	?	?	?	Unknown	-	?	?	?	Unknown

Catch scenarios

The ICES framework for category 5 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. The precautionary buffer was applied in 2016, and has therefore not been applied again.

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

Table 2 Thornback ray in Division 7.e. The basis for the catch scenarios.*

Advised landings for 2017–2018 issued in 2016		212 t
Discard rate		Unknown
Precautionary buffer	Not applied	-
Landings advice**		212 t
% Advice change***		0%

* 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.

** Recent advised landings.

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

The advised landings for 2019 and 2020 are the same as advised for 2017 and 2018, as there is no stock size indicator and the precautionary buffer has been applied within the last three years.

Basis of the advice

Table 3 Thornback ray in Division 7.e. The basis of the advice.

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

Quality of the assessment

The stock structure of thornback ray in Division 7.e is unclear, and it is unclear as to whether it is discrete or associated with the neighboring stocks in Subarea 4 and Division 7.d, or with the stock in divisions 7.a and 7.f–g. Until the stock structure is clarified, ICES provides advice separately for Division 7.e.

The increase in landings in the period 2009 to 2013 is likely to have been caused by the introduction of mandatory species specific reporting.

Issues relevant for the advice

Thornback ray is one of the most commercially important skate species in this division, and it is taken in trawl and net fisheries.

Earlier trawl survey data in Lyme Bay (the Carhelmar survey) indicated that the relative abundance of this species was stable or increasing over the period 1989–2011 (Burt *et al.*, 2013), although wider parts of Division 7.e were not sampled by this survey. The UK-Q1-SWBeam (2006–present) has shown that thornback ray is locally common in Lyme Bay. These two surveys overlap in space and time. Preliminary analyses of the UK-Q1-SWBeam indicated a greater biomass in 2014–2017 than at the beginning of the time-series, with 2018 at a similar level to the beginning of the time-series (ICES, 2018). This survey may be able to provide an appropriate stock size indicator in the future.

Reference points

No reference points are defined for this stock.

Basis of the assessment

Table 4 Thornback ray in Division 7.e. Basis of the assessment and advice.

ICES stock data category	5 (ICES, 2016a).
Assessment type	No assessment.
Input data	ICES estimated landings.
Discards and bycatch	Discarding is known to take place but has not been fully quantified.
Indicators	UK-Q1-SWBeam; Carhelmar.
Other information	None.
Working group	Working Group on Elasmobranch Fishes (WGEF)

Information from stakeholders

There is no additional available information.

History of the advice, catch, and management

Table 5 Thornback ray in Division 7.e. History of ICES advice and ICES estimates of landings*. All weights are in tonnes.

Year	ICES advice	Landings corresp. to advice	ICES species-specific landings: minimum estimate based on reported landings
2011	<i>Status quo</i> catch		216
2012	No new advice, same as 2011		242
2013	No TAC, species-specific measures needed, catch could increase by max. 20%	-	339
2014	No new advice, same as 2013	-	379
2015	No increase in landings from average of last 3 years' landings	260	395
2016	No new advice, same as 2015	260	423
2017	Precautionary approach	≤ 212	371
2018	Precautionary approach (same value as advised catches for 2017)	≤ 212	
2019	Precautionary approach	≤ 212	
2020	Precautionary approach	≤ 212	

* 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.

History of the catch and landings

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

Table 6 Thornback ray in Division 7.e. Catch distribution by fleet in 2017 as estimated by ICES.

Catch (2017)	Landings				Discards
	beam trawl	bottom trawl	nets	other	
Unknown	13%	64%	18%	5%	Unquantified
371 tonnes					

Table 7 Thornback ray in Division 7.e. History of landings. ICES estimates of landings by country (in tonnes). Data revised in 2016 (ICES, 2016b, 2018).

Year	Belgium	Spain	France	UK	Ireland	Netherlands	Total landings
2009	2		122	82		0.2	206
2010	8	0.2	101	98		2	208
2011	3	< 0.1	114	98		0.5	216
2012	4		108	129		0.4	242
2013	4		181	151	0.2	2	339
2014	3		224	151			379
2015	9		225	158	2	< 0.1	395
2016	14		213	195		0.1	423
2017	21		176	172	2	0.1	371

Summary of the assessment

There is no assessment for this stock 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.

Burt, G. J., Ellis, J. R., Harley, B. F., and Kupschus, S. 2013. The FV Carhelmar beam trawl survey of the western English Channel (1989–2011): History of the survey, data availability and the distribution and relative abundance of fish and commercial shellfish. Science Series Technical Report (CEFAS, Lowestoft), 151. 139 pp.

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

ICES. 2016b. 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. 2018. Report of the Working Group on Elasmobranch Fishes (WGEF), 19–28 June 2018, Lisbon, Portugal. ICES CM 2018/ACOM:16.