



MarinTrust Standard V2

By-product Fishery Assessment Report Template

MarinTrust Programme

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Table 1 Application details and summary of the assessment outcome

Fishery Under Assessment	Species:	Thornback ray, <i>Raja clavata</i>
	Geographical area:	FAO Area 27 Atlantic Northeast
	Country of origin of the product:	UK & Ireland
	Stock:	ICES in Subarea 4 and in divisions 3.a and 7.d (North Sea, Skagerrak, Kattegat, and eastern English Channel)
Date	26/05/2021	
Report Code	BP87	
Assessor	Virginia Polonio	
Country of origin of the product - PASS	UK & Ireland	
Country of origin of the product - FAIL	NA	

Application details and summary of the assessment outcome			
Name:			
Address:			
Country: UK & Ireland		Zip:	
Tel. No.:		Fax. No.:	
Email address:		Applicant Code:	
Key Contact:		Title:	
Certification Body Details			
Name of Certification Body:		Global Trust Certification	
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval
Virginia Polonio	Geraldine Criquet	0.5	Surveillance 1
Assessment Period	To May 2021		

Scope Details	
Main Species	Thornback ray, <i>Raja clavata</i>
Stock	ICES in Subarea 4 and in divisions 3.a and 7.d (North Sea, Skagerrak, Kattegat, and eastern English Channel)
Fishery Location	FAO 27 Atlantic Northeast
Management Authority (Country/ State)	EU, Common Fisheries Policy (CFP) and UK and Ireland Fisheries management agencies
Gear Type(s)	Bottom trawl
Outcome of Assessment	
Peer Review Evaluation	Agree with assessor's determination
Recommendation	APPROVED

Table 2. Assessment Determination

Assessment Determination
<p>If any species is categorised as Endangered or Critically Endangered on IUCN's Red List, or if it appears in the CITES appendices, it cannot be approved for use as Marin Trust raw material. <i>Raja Clavata</i> does not appear as Endangered or Critically Endangered on IUCN's Red List, nor does it appear in CITES appendices; therefore, product originating from this fishery is eligible for approval for use as Marin Trust by-product raw material.</p> <p>For assessment and management purposes, Thornback ray are managed within European waters under the Common Fisheries Policy (CFP) and scientific advice on their management provided by ICES. According to genetic studies available there is a low level of genetic differentiation between Thornback ray populations, across the Atlantic area, including Irish and Celtic Seas</p> <p>Skates and rays, including thornback ray, are managed under a single TAC (by area) for all species (EC, Council Regulation 2019/124).</p> <p>Scientific advice on Thornback ray is provided by ICES for the following ICES areas:</p> <ul style="list-style-type: none"> • Subarea 4 and Divisions 3a, 7d (North Sea, Skagerrak, Kattegat and Eastern English Channel) • Subarea 6 (West of Scotland) • Division 8 (Bay of Biscay) • Divisions 7a, f-g (Irish Sea, Bristol Channel and Celtic Sea north) • Division 7e (western English Channel) • Division 9a (Atlantic Iberian waters) <p>Of those stocks, the one assessed in this report is: ICES in Subarea 4 and in divisions 3.a and 7.d (North Sea, Skagerrak, Kattegat, and eastern English Channel)</p> <p>The species is not subject to a species-specific research, and the comparative lack of scientific information on the status of the population in the assessment area means that a risk-assessment style approach must be taken. No quantitative stock assessment is currently available for any of ray stocks in the FAO 27 fishing area. Therefore, the fishery was assessed using the risk-based Productivity, Susceptibility Analysis (PSA) as per Marin Trust v2.0 procedures for Category D species.</p> <p>With a productivity score of 2.43 and a susceptibility score of 3, the fishery was further assessed in Clause D4.</p>

There are management measures in place to consider the potential impacts on the species and so the fishery achieves a **PASS** in clause D4.1

There is no substantial evidence that the fishery has a significant negative impact on the species and so the fishery achieves a **PASS** in clause D4.2

Therefore, thornback ray (*R.clavata*) fishery in the FAO Fishing Area 27, ICES Subarea 4 and in divisions 3.a and 7.d (North Sea, Skagerrak, Kattegat, and eastern English Channel), by-product covered by this report, is **APPROVED** for the production of fishmeal and fish oil under the current MarinTrust v 2.0 by-product standard.

Fishery Assessment Peer Review Comments

The assessor correctly classified North Sea, Skagerrak, Kattegat, and eastern English Channel thornback ray as category D, reference points are not defined to assess the stock status relative to.

A PSA was performed. With an average productivity score of 2.43 and an average susceptibility score of 3, the fishery was further assessed in Clause D4.

A precautionary approach is applied for this stock and the stock size indicator is in an increasing trend. Therefore, there is evidence that the fishery has no significant negative impact on the species.

Therefore, the peer reviewer agrees with the assessor’s determination that the fishery passes Clause D4 and North Sea, Skagerrak, Kattegat, and eastern English Channel thornback ray is thus approved.

Notes for On-site Auditor

Empty box for notes for on-site auditor.

Species Categorisation

NB: If any species is categorised as Endangered or Critically Endangered on the IUCN Red List, or if it appears in CITES Appendix 1, it **cannot** be approved for use as an MARINTRUST raw material.

IUCN Redlist Category

By-product material from a species listed by IUCN (the International Union for Conservation of Nature) under the Red List for the following categories shall immediately fail the assessment;

- EXTINCT (E) AND EXTINCT IN THE WILD (EW)
- CRITICALLY ENDANGERED (CR) facing an extremely high risk of extinction in the wild.
- ENDANGERED (EN) facing a very high risk of extinction in the wild.

By-product material may be used from the following categories provided that all clauses in the MarinTrust standard are passed.

- VULNERABLE (VU) facing a high risk of extinction in the wild.
- NEAR THREATENED (NT) does not qualify for above now, but is close or is likely to qualify for, a threatened category in the near future.
- LEAST CONCERN (LC) Widespread and abundant.
- DATA DEFICIENT (DD) and NOT EVALUATED (NE)

Table 3 Species Categorisation Table

Common name	Latin name	Stock	Management	Category	IUCN Red List Category ¹	CITES Appendix 1 ²
Thornback ray	<i>Raja clavata</i>	ICES in Subarea 4 and in divisions 3.a and 7.d (North Sea, Skagerrak, Kattegat, and eastern English Channel)	European Commission and UK & Ireland	D	NT	No

¹ <https://www.iucnredlist.org/>

² <https://cites.org/eng/app/appendices.php>

CATEGORY D SPECIES

Category D species are those which make up less than 5% of landings and are not subject to a species-specific management regime. In the case of mixed trawl fisheries, Category D species may make up the majority of landings. The comparative lack of scientific information on the status of the population of the species means that a risk-assessment style approach must be taken.

D1	Species Name	Thornback ray, <i>Raja clavata</i>	
	Productivity Attribute	Value	Score
	Average age at maturity (years)	6.5	3
	Average maximum age (years)	10	2
	Fecundity (eggs/spawning)	170 max usually 48-74eggs	3
	Average maximum size (cm)	105	2
	Average size at maturity (cm)	76.6 (TL)	2
	Reproductive strategy	Paired eggs are laid and deposited on shallow sand, mud, pebble or gravel bottoms	2
	Mean trophic level	3.8	3
	Average Productivity Score		2.43
	Susceptibility Attribute	Value	Score
	Overlap of adult species range with fishery	>50% of stock occurs in area fished	3
	Distribution	Not scored if overlap attribute scored	
	Habitat	demersal	3
	Depth range	5-1020m	3
	Selectivity	Up to 4m in length	3
	Post-capture mortality	Most dead or retained	3
	Average Susceptibility Score		3
	PSA Risk Rating (From Table D3)		D4
	Compliance rating		
References			
<p>ICES. 2019. Thornback ray (<i>Raja clavata</i>) 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, 2019. ICES Advice 2019, rjc.27.3a47d, https://doi.org/10.17895/ices.advice.4836</p>			

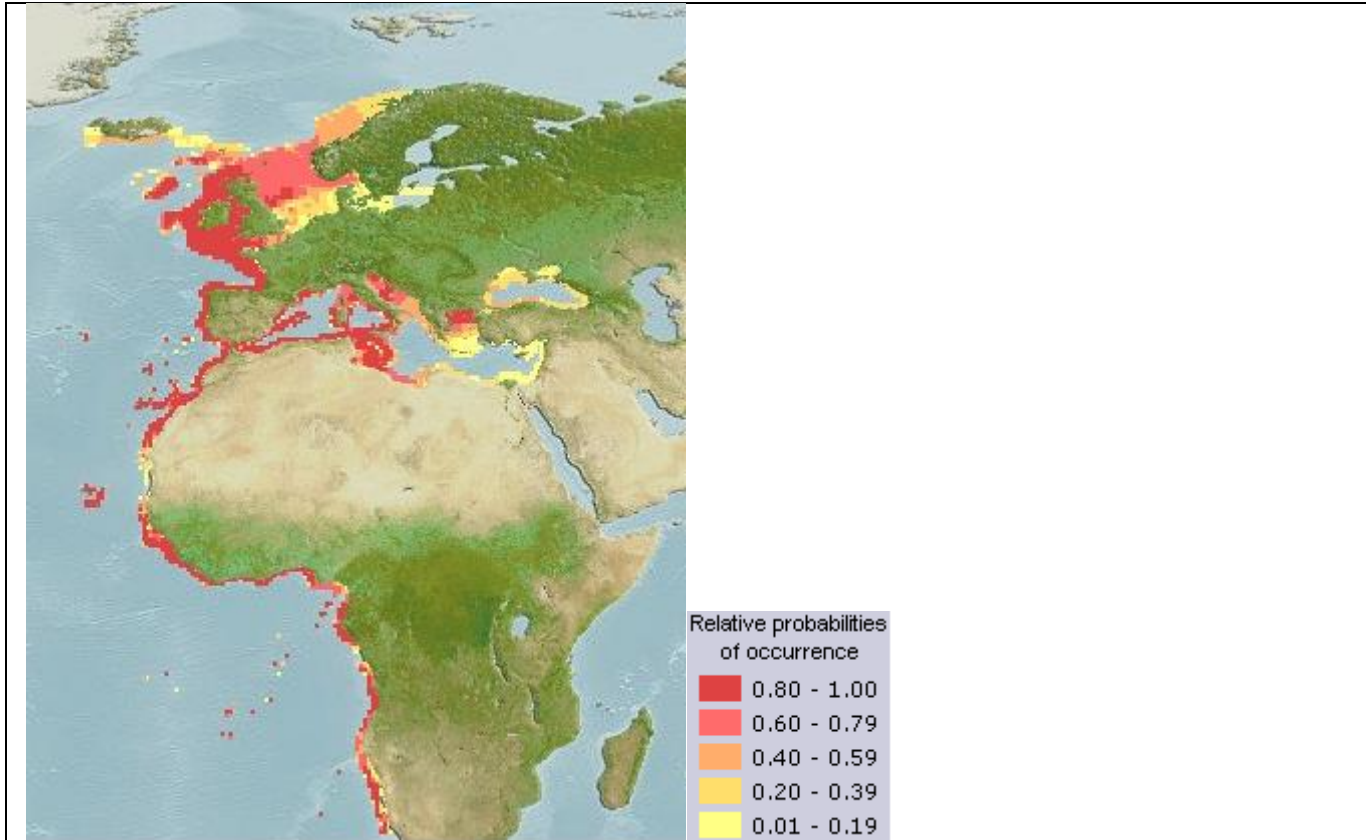


Figure 1. Computer Generated Native Distribution Map for *Raja clavata* (Thornback ray), with modelled year 2050 native range map based on IPCC RCP8.5 emissions scenario.

Fishbase Thornback Ray: <https://www.fishbase.se/summary/2059>

Fishsource Thornback Ray https://www.fishsource.org/stock_page/1997

Standard clauses 1.3.2.2

Table D2 - Productivity / Susceptibility attributes and scores.

Productivity attributes	Low productivity/ High risk	Medium productivity/ Medium risk	High productivity/ Low risk
	Score 3	Score 2	Score 1
Average age at maturity (years)	>4	2 to 4	<2
Average maximum age (years)	>30	10 to 30	<10
Fecundity (eggs/spawning)	<1 000	1 000 to 10 000	>10 000
Average maximum size (cm)	>150	60 to 150	<60
Average size at maturity (cm)	>150	30 to 150	<30
Reproductive strategy	Live bearer, mouth brooder or significant parental investment	Demersal spawner "berried"	Broadcast spawner
Mean trophic level	>3.25	2.5–3.25	<2.5

Susceptibility attributes		High susceptibility/ High risk	Medium susceptibility/ Medium risk	Low susceptibility/ Low risk
		Score 3	Score 2	Score 1
Availability	1) Overlap of adult species range with fishery	>50% of stock occurs in the area fished	Between 25% and 50% of the stock occurs in the area fished	<25% of stock occurs in the area fished
	2) Distribution	Only in the country/ fishery	Limited range in the region	Throughout region/ global distribution
Encounterability	1) Habitat	Habitat preference of species make it highly likely to encounter trawl gear (e.g. demersal, muddy/sandy bottom)	Habitat preference of species make it moderately likely to encounter trawl gear (e.g. rocky bottom/reefs)	Depth or distribution of species make it unlikely to encounter trawl gear (e.g. epi-pelagic or meso-pelagic)
	2) Depth range	High overlap with trawl fishing gear (20 to 60 m depth)	Medium overlap with trawl fishing gear (10 to 20 m depth)	Low overlap with trawl fishing gear (0 to 10 m, >70 m depth)
Selectivity		Species >2 times mesh size or up to 4 m length	Species 1 to 2 times mesh size or 4 to 5 m length	Species <mesh size or >5 m length
Post capture mortality		Most dead or retained Trawl tow >3 hours	Alive after net hauled Trawl tow 0.5 to 3 hours	Released alive Trawl tow <0.5 hours

Note: Availability 2 is only used when there is no information for Availability 1; the most conservative score between Encounterability 1 and 2 is used.

D3		Average Susceptibility Score		
		1 - 1.75	1.76 - 2.24	2.25 - 3
Average Productivity Score	1 - 1.75	PASS	PASS	PASS
	1.76 - 2.24	PASS	PASS	TABLE D4
	2.25 - 3	PASS	TABLE D4	TABLE D4

D4	Species Name	Thornback ray, <i>Raja clavata</i>	
	Impacts On Species Categorised as Vulnerable by D1-D3 - Minimum Requirements		
	D4.1	The potential impacts of the fishery on this species are considered during the management process, and reasonable measures are taken to minimise these impacts.	Yes
	D4.2	There is no substantial evidence that the fishery has a significant negative impact on the species.	Yes
Outcome:			PASS

Evidence

D4.1: The potential impacts of the fishery on this species are considered during the management process, and reasonable measures are taken to minimise these impacts.

ICES advise that when the precautionary approach is applied, landings should be no more than 2,237 tonnes in each of the years 2020 and 2021. The stock size indicator has increased from a low level in the 1990s and has levelled off in recent years (Figure 1).

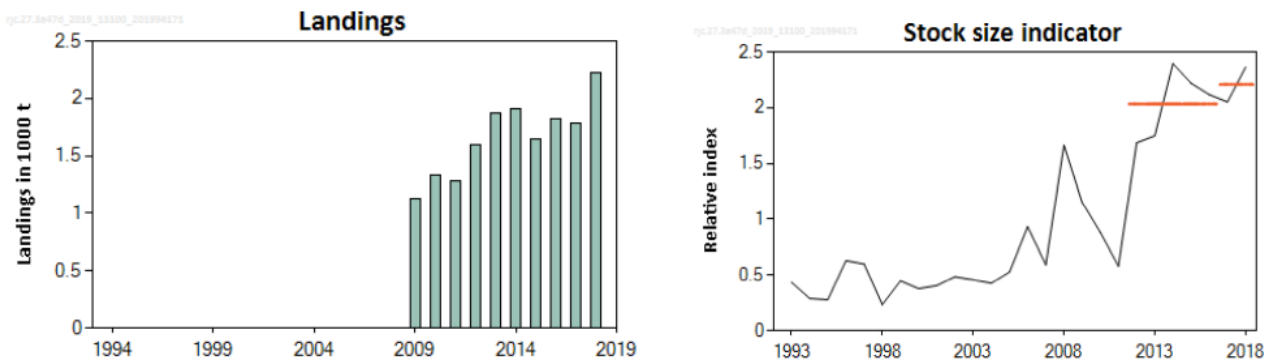


Figure 1. Thornback ray in Subarea 4 and in divisions 3.a and 7.d. Summary of the stock assessment. Left: ICES estimates of landings of thornback ray since 2009. Right: Stock size indicator of exploitable biomass (the annual mean of four surveys (NS-IBTS-Q1, NS-IBTS-Q3, BTS-Eng-Q3, and CGFS-Q4) after results from each survey had been normalized by their long-term means, and based on individuals of ≥ 50 cm total length). The horizontal lines show the mean stock indicators for 2017–2018 and 2012–2016. Source: ICES 2019

Therefore, precautionary approach is applied for this stock to ensure that the stock size indicator remains increasing or stable, the potential impacts are therefore considered during the management and it PASSES clause D 4.1

D4.2 There is no substantial evidence that the fishery has a significant negative impact on the species.

The stock size indicator (Figure 1) has shown an increasing trend, that can be considered as an evidence that there is no substantial evidence that the fishery has a significant negative impact on the species. The stock PASSES D4.2.

References

ICES. 2019. Working Group on Elasmobranch Fishes (WGEF). ICES Scientific Reports. 1:25. <http://doi.org/10.17895/ices.pub.5594>.

ICES. 2019. Thornback ray (*Raja clavata*) 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, 2019. ICES Advice 2019, rjc.27.3a47d, <https://doi.org/10.17895/ices.advice.4836>

Links

MARINTRUST Standard clause	1.3.2.2, 4.1.4
FAO CCRF	7.5.1
GSSI	D.5.01