



## MarinTrust Standard V2

# By-product Fishery Assessment *Report Template (Northeast Atlantic mackerel, *Scomber scombrus*)*

**MarinTrust Programme**

Unit C, Printworks

22 Amelia Street

London

SE17 3BZ

E: [standards@marin-trust.com](mailto:standards@marin-trust.com)

T: +44 2039 780 819

**Table 1 Application details and summary of the assessment outcome**

Fishery Under Assessment	Species:	Mackerel ( <i>Scomber scombrus</i> )
	Geographical area:	FAO Area 27 North East Atlantic
	Country of origin of the product:	France
	Stock:	Mackerel in ICES subareas 1-8 and 14, and division 9.a (Northeast Atlantic and adjacent waters)
Date	8 February 2022	
Report Code	BP017	
Assessor	Geraldine Criquet	
Country of origin of the product - PASS	France	
Country of origin of the product - FAIL	NA	

Application details and summary of the assessment outcome			
Company Name(s):			
Country: France			
Email address:		Applicant Code:	
Certification Body Details			
Name of Certification Body:		Global Trust Certification	
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval
Geraldine Criquet	Vito Romito	0.5	Surveillance 2
Assessment Period	To February 2022		

Scope Details	
Main Species	Mackerel ( <i>Scomber scombrus</i> )
Stock	Mackerel in ICES subareas 1-8 and 14, and division 9.a (Northeast Atlantic and adjacent waters)
Fishery Location	FAO Area 27 Northeast Atlantic Ocean
Management Authority (Country/ State)	European Union / France Direction des Pêches Maritimes et de l'Aquaculture
Gear Type(s)	Pelagic trawl, purse seine, and others
Outcome of Assessment	
Peer Review Evaluation	Approve
Recommendation	<b>APPROVED</b>

## 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. Mackerel (<i>Scomber scombrus</i>) is neither listed as Endangered or Critically Endangered on IUCN's Red List, nor listed in CITES appendices; therefore, mackerel is eligible for approval for use as Marin Trust by-product raw material.</p> <p>There is no long-term management strategy for Northeast Atlantic mackerel agreed by all parties involved in the mackerel fishery. Reference points are defined for the stock, therefore it was assessed under category C.</p> <p>Fishery removals are included in the stock assessment process, it PASSES Clause C1.1. The stock is considered, in its most recent stock assessment, to have a biomass above the limit reference point, it PASSES Clause C1.2.</p> <p>Therefore, mackerel in ICES subareas 1-8 and 14, and division 9.a (Northeast Atlantic and adjacent waters) is <b>APPROVED</b> for the production of fishmeal and fish oil under the current Marin Trust v 2.0 by-products.</p>
Fishery Assessment Peer Review Comments
<p>The Peer Reviewer agrees with the category C classification of this stock. The stock is assessed through an age-based analytical model (SAM) that uses catches in the model and the forecast. The spawning-stock size is above MSY Btrigger, Bpa and Blim. Accordingly, mackerel in ICES subareas 1-8 and 14, and division 9.a (Northeast Atlantic and adjacent waters) shall be <b>APPROVED</b> for the production of fishmeal and fish oil under the current Marin Trust v 2.0 by-products.</p>
Notes for On-site Auditor
NA

## 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 a MarinTrust raw material.

### IUCN Red list 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 <sup>1</sup>	CITES Appendix 1 <sup>2</sup>
Mackerel	<i>Scomber scombrus</i>	Mackerel in ICES subareas 1-8 and 14, and division 9.a (Northeast Atlantic and adjacent waters)	European Union / France Direction des Pêches Maritimes et de l'Aquaculture	C	LC	No

<sup>1</sup> <https://www.iucnredlist.org/>

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

## CATEGORY C SPECIES

In a by-product assessment, Category C species are those which are subject to a species-specific management regime and are usually targeted species in fisheries for human consumption.

Clause C1 should be completed for each Category C species. If there are no Category C species in the fishery under assessment, this section can be deleted. Where a species fails this Clause, it should be assessed as a Category D species instead.

Species Name		Mackerel ( <i>Scomber scombrus</i> )	
<b>C1</b>	<b>Category C Stock Status - Minimum Requirements</b>		
	<b>C1.1</b>	Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.	Yes
	<b>C1.2</b>	The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.	Yes
			<b>Clause outcome: PASS</b>
<b>C1.1 Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.</b>			
<p>The stock assessment type is an age-based analytical model (SAM) that uses catches in the model and the forecast. Catches are presented in Figure 1.</p> <p>Therefore, fishery removals of the stock, including from the fishery under assessment, are included in the stock assessment process, it <b>PASSES Clause C1.1</b></p>			
<p>Figure 1: Mackerel catches in million tonnes from 1980 to 2020. The chart shows a general upward trend in catches over the period, with a notable peak around 2015. The y-axis is labeled 'Catches in million t' and ranges from 0 to 1.5. The x-axis shows years from 1980 to 2020. Bars from 1980 to 2000 are light blue, and bars from 2000 to 2020 are dark blue.</p>			
<p><b>Figure 1.</b> Mackerel in in ICES subareas 1-8 and 14, and division 9.a. Long-term trends in catches; the paler shaded catches prior to 2000 have been down-weighted in the assessment because of the considerable underreporting suspected to have taken place in this period.</p>			
<b>C1.2 The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), OR removals by the fishery under assessment are considered by scientific authorities to be negligible.</b>			
<p>The spawning-stock size is above MSY <math>B_{trigger}</math>, <math>B_{pa}</math> and <math>B_{lim}</math> (Figure 2).</p> <p>Therefore, the stock is considered, in its most recent stock assessment, to have a biomass above the limit reference point, <b>C1.2 is met.</b></p>			

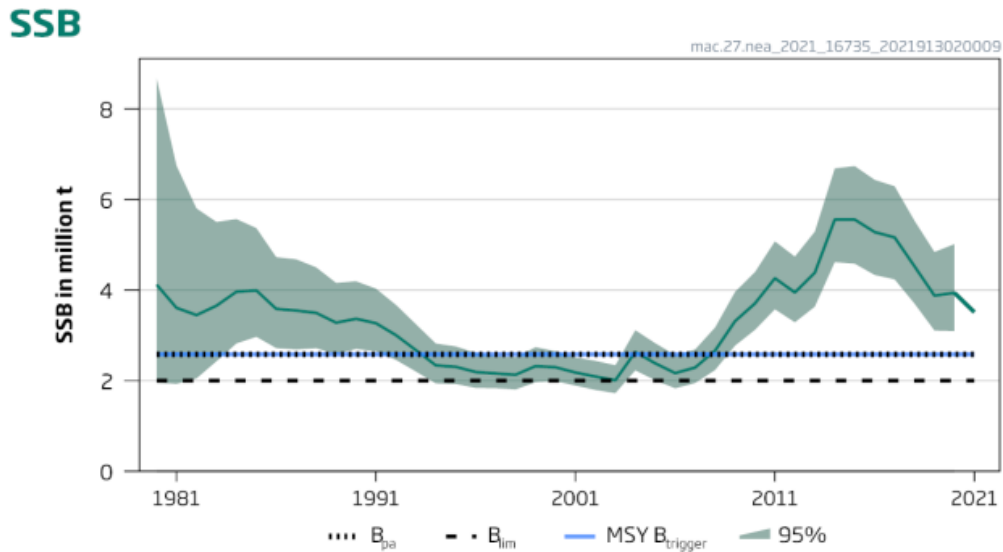


Figure 2. Mackerel in in ICES subareas 1-8 and 14, and division 9.a. Spawning stock biomass.

**References**

ICES. 2021. Mackerel (*Scomber scombrus*) in subareas 1-8 and 14 and division 9.a (the Northeast Atlantic and adjacent waters). In Report of the ICES Advisory Committee, 2021. ICES Advice 2021, mac.27.nea. <https://doi.org/10.17895/ices.advice.7789>. <https://www.ices.dk/sites/pub/Publication%20Reports/Advice/2021/2021/mac.27.nea.pdf>

Collette, B., Fernandes, P. & Heessen, H. 2015. *Scomber scombrus*. The IUCN Red List of Threatened Species 2015: e.T170354A18207463. Accessed on 18 January 2022. <https://www.iucnredlist.org/species/170354/18207463>

**Links**

MarinTrust Standard clause	1.3.2.2
FAO CCRF	7.5.3
GSSI	D.3.04, D5.01

## CATEGORY D SPECIES

Category D species are those which 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.

<b>D1</b>	<b>Species Name</b>		
	<b>Productivity Attribute</b>		<b>Value</b>
	Average age at maturity (years)		
	Average maximum age (years)		
	Fecundity (eggs/spawning)		
	Average maximum size (cm)		
	Average size at maturity (cm)		
	Reproductive strategy		
	Mean trophic level		
	<b>Average Productivity Score</b>		
	<b>Susceptibility Attribute</b>		<b>Value</b>
	Overlap of adult species range with fishery		
	Distribution		
	Habitat		
	Depth range		
	Selectivity		
	Post-capture mortality		
	<b>Average Susceptibility Score</b>		
	<b>PSA Risk Rating (From Table D3)</b>		
	<b>Compliance rating</b>		
<b>References</b>			
<i>Standard clauses 1.3.2.2</i>			



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			
<b>Impacts On Species Categorised as Vulnerable by D1-D3 - Minimum Requirements</b>			
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.		
D4.2	There is no substantial evidence that the fishery has a significant negative impact on the species.		
<b>Outcome:</b>			
<b>Evidence</b>			
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.			
D4.2 There is no substantial evidence that the fishery has a significant negative impact on the species.			
<b>References</b>			
<b>Links</b>			
MarinTrust Standard clause		1.3.2.2, 4.1.4	
FAO CCRF		7.5.1	
GSSI		D.5.01	