



## MarinTrust Standard V2

### By-product Fishery Assessment

*Horse mackerel (Subarea 8 and Div. 2.a,  
4.a, 5.b, 6.a, 7.a-c, and 7.e-k)*

**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:	Horse mackerel <i>Trachurus trachurus</i>
	Geographical area:	FAO 27 Northeast Atlantic
	Country of origin of the product:	Norway
	Stock:	Subarea 8 and Div. 2.a, 4.a, 5.b, 6.a, 7.a-c, and 7.e-k
Date	February 2022	
Report Code	BP016	
Assessor	Conor Donnelly	
Country of origin of the product - PASS	NORWAY	
Country of origin of the product - FAIL		

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

Scope Details	
Main Species	Horse mackerel
Stock	Subarea 8 and Div. 2.a, 4.a, 5.b, 6.a, 7.a-c, and 7.e-k
Fishery Location	Northeast Atlantic
Management Authority (Country/ State)	Norway, EU
Gear Type(s)	Pelagic trawl
Outcome of Assessment	
Peer Review Evaluation	Approve
Recommendation	Approve

## 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. Horse mackerel (<i>Trachurus trachurus</i>) is neither listed as Endangered or Critically Endangered on IUCN's Red List, nor listed in CITES appendices; therefore, it is eligible for approval for use as Marin Trust by-product raw material.</p> <p>ICES is not aware of any agreed management plan for Northeast Atlantic horse mackerel. An EU TAC is set and 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 just above the limit reference point, it PASSES Clause C1.2.</p> <p>Therefore, horse mackerel in the Northeast Atlantic is <b>APPROVED</b> for the production of fishmeal and fish oil under the current Marin Trust v 2.0 Standard for by-products.</p>
Fishery Assessment Peer Review Comments
<p>Horse mackerel is correctly assessed under category C. The species in question is assessed by ICES using a length and age-based analytical assessment with commercial catch and survey inputs. The current stock level (<math>SSB_{2021}</math>) is very low at 836 074 tonnes, and is estimated to be just above the <math>B_{lim}</math> value of 834 480 tonnes (<math>SSB_{2021}/B_{lim} = 100.2\%</math>). Accordingly, horse mackerel in the Northeast Atlantic shall be <b>APPROVED</b> for the production of fishmeal and fish oil under the current Marin Trust v 2.0 Standard for by-products.</p>
Notes for On-site Auditor
<p>None</p>

## 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>
Horse mackerel	<i>Trachurus trachurus</i>	Subarea 8 and Div. 2.a, 4.a, 5.b, 6.a, 7.a-c, and 7.e-k	Norway & EU CFP	C	VU	Not listed

<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.

<b>Species Name</b>		Horse mackerel	
<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:</b> PASS
<p><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> <p>The stock assessment is undertaken by ICES, the latest available is September 2021. It is a length and age-based analytical assessment (Stock Synthesis 3; NOAA Toolbox) which use commercial catch data (international catches, length and age data from catch sampling). It also uses three survey indices: Triennial egg survey index (I4189, 1992–2019); a combined recruitment index (2003–2020) derived from EVHOE (G9527), IGFS (G7212), SCOWCGFS (G4748 and G4815), and SWC-IBTS (G1179 and G4299); and the PELACUS acoustic biomass index (A2548, 1992–2019). Consequently, fishery removals of the species are included in the stock assessment process. <b>C1.1. is passed.</b></p>			
<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>			

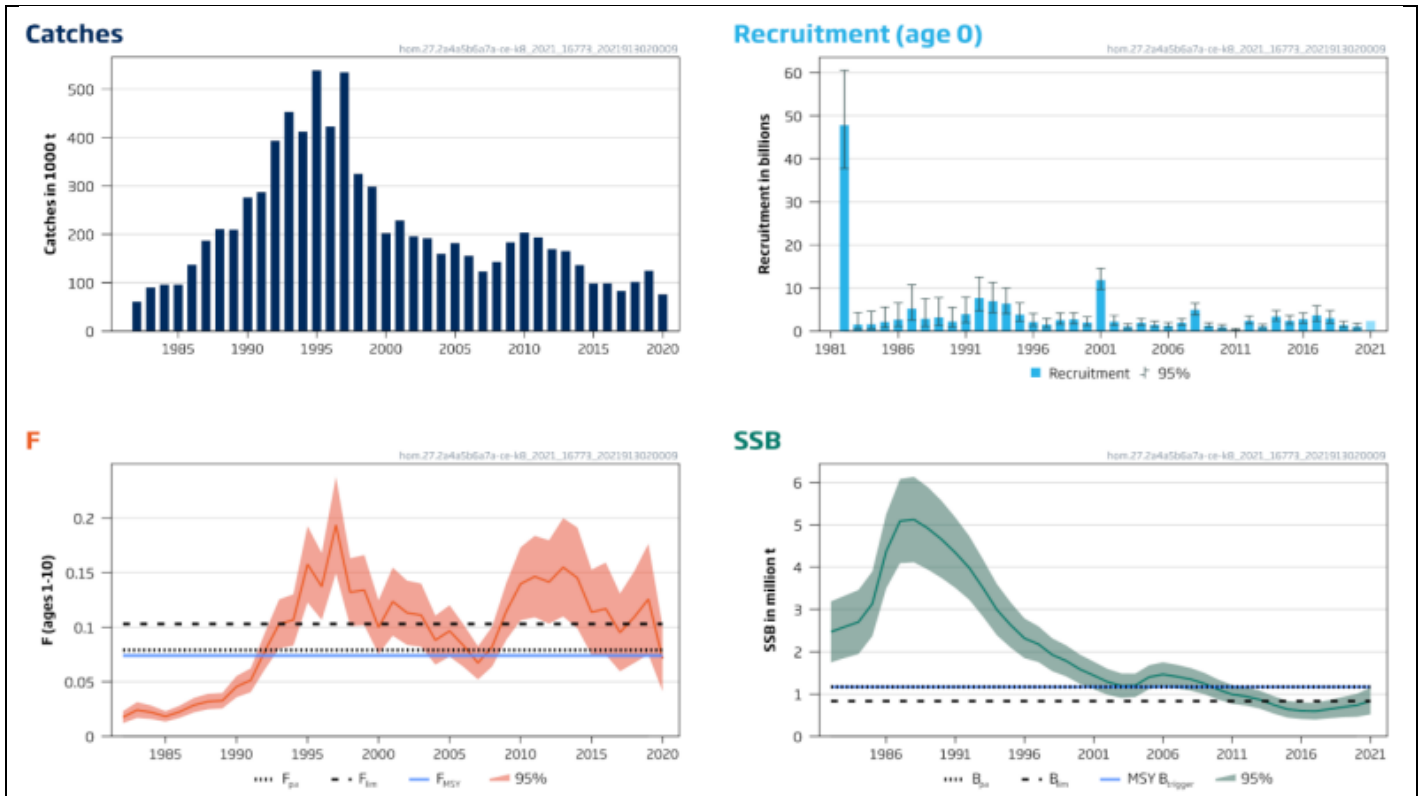


FIGURE 1. HORSE MACKEREL IN SUBAREA 8 AND DIVISIONS 2.A, 4.A, 5.B, 6.A, 7.A–C, AND 7.E–K. SUMMARY OF THE STOCK ASSESSMENT. THE ASSUMED RECRUITMENT VALUE FOR 2021 IS SHADED IN A PALER COLOUR (SOURCE: ICES, 2021).

The latest stock assessment information is shown in the figure above. A limit reference point is defined,  $B_{lim}$ , at 834 480 tonnes. The current stock level ( $SSB_{2021}$ ) is very low but at 836 074 tonnes is estimated to be just above  $B_{lim}$  ( $SSB_{2021}/B_{lim} = 100.2\%$ ). 95% confidence interval values have been identified for the stock with a lower range of 520 294 tonnes and upper range of 1 151 854 tonnes. The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point, **C1.2 is passed.**

**References**

ICES. 2021. Horse mackerel (*Trachurus trachurus*) in Subarea 8 and divisions 2.a, 4.a, 5.b, 6.a, 7.a-c,e-k (the Northeast Atlantic). In Report of the ICES Advisory Committee, 2021. ICES Advice 2021, hom.27.2a4a5b6a7a-ce-k8. <https://doi.org/10.17895/ices.advice.7777>

**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>	<b>Score</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>	<b>Score</b>
	Availability (area overlap)		
	Encounterability (the position of the stock/species within the water column relative to the fishing gear)		
	Selectivity of gear type		
	Post-capture mortality		
	<b>Average Susceptibility Score</b>		
	<b>PSA Risk Rating (From Table D3)</b>		
	<b>Compliance rating</b>		
	<b>Further justification for susceptibility scoring (where relevant)</b>		
	<i>For susceptibility attributes, please provide a brief rationale for scoring of parameters where there may be uncertainty affecting your decision</i>		
<b>References</b>			
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			
<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	