



MarinTrust Standard V2

By-product Fishery Assessment Report Template

MarinTrust Programme

Unit C, Printworks

22 Amelia Street

London

SE17 3BZ

E: 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 Excluding 7a
	Country of origin of the product:	U.K. and Ireland
	Stock:	FAO 27 Excl 7a ICES Subarea 8 and Divisions 2.a, 4.a, 5.b, 6.a, 7.a–c, and 7.e–k (Northeast Atlantic)
Date	01/10/2021	
Report Code	BP158	
Assessor	Sam Dignan	
Country of origin of the product - PASS	UK and Ireland	
Country of origin of the product - FAIL	NA	

Application details and summary of the assessment outcome			
Name: Pelagia			
Address:			
Country: Vietnam		Zip:	
Tel. No.:		Fax. No.:	
Email address:		Applicant Code:	
Key Contact: geraldine.fox@pelagia.com		Title:	
Certification Body Details			
Name of Certification Body:		Global Trust Certification	
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval
Sam Dignan	Virginia Polonio	0.5	Re-approval
Assessment Period	To September 2021		

Scope Details	
Main Species	Horse mackerel (<i>Trachurus trachurus</i>)
Stock	FAO 27 Excl 7a ICES Subarea 8 and Divisions 2.a, 4.a, 5.b, 6.a, 7.a–c, and 7.e–k (Northeast Atlantic)
Fishery Location	FAO 27 Excluding 7a
Management Authority (Country/ State)	EU, U.K. and Ireland
Gear Type(s)	Pelagic trawls, purse seines
Peer Review Evaluation	Agree with recommendation to approve.
Recommendation	APPROVE

Table 2. Assessment Determination

Assessment Determination
<p>If a 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.</p> <p>Horse mackerel (<i>Trachurus trachurus</i>) is not listed on the IUCN Red List as Endangered or Critically Endangered or CITES listed such that horse mackerel derived products are eligible for approval for use as Marin Trust by-product raw material.</p> <p>While there is no agreed precautionary management plan for horse mackerel in the area, the stock is subject to species-specific management such that it is assessed under category C.</p> <p>Fishery removals of the stock are considered in their respective stock assessment processes such that the fishery PASSES Clause C1.1.</p> <p>As of the latest assessment, the stock is considered to have the biomass below its corresponding limit reference points such that the fishery FAILS Clause C1.2.</p> <p>As the stock fails both Clause C1.2, is further assessed under Category D which it passes; therefore, by-products from this stock are APPROVED for the production of fishmeal and fish oil under the Marin Trust v 2.0 by-product standard.</p>
Fishery Assessment Peer Review Comments
<p>The peer review agrees with the recommendation of approval Horse mackerel in Subarea 8 and divisions 2.a, 4.a, 5.b, 6.a, 7.a–c, and 7.e–k. The stock has been correctly classified as Category C and when failed as category D which has passed.</p>
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
Horse mackerel	<i>Trachurus trachurus</i>	Horse mackerel in Subarea 8 and divisions 2.a, 4.a, 5.b, 6.a, 7.a–c, and 7.e–k.	EU, UK and Ireland	D	Globally VU; Europe LC	No

¹ <https://www.iucnredlist.org/>

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

CATEGORY C SPECIES

In a whole fish assessment, Category C species are those which make up less than 5% of landings, but which are subject to a species-specific management regime. In most cases this will be because they are a commercial target in a fishery other than the one under assessment.

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		Horse mackerel in Subarea 8 and divisions 2.a, 4.a, 5.b, 6.a, 7.a–c, and 7.e–k.	
C1	Category C Stock Status - Minimum Requirements		
	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.	PASS
	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.	FAIL
			Clause outcome: FAIL

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.

Catches are reported annually and included in the stock assessment as can be seen in Table 8 of ICES, 2021. Catches in 2020 were estimated to be 76,422 mt. As fishery removals are included in the stock assessment process, Clause C1.1 is met.

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.

In the last stock assessment, B_{lim} is estimated at 834,480 mt while SSB_{2021} is estimated to be 836,074 mt (95% CIs 520,294 mt – 1,151,854 mt) (Figure 1); therefore, the stock is considered, in its most recent stock assessment, to have a biomass below its limit reference point. Removals by the fishery in 2020 were >75,000 mt such that they cannot be considered to be negligible. As the stock is below its limit reference point and catches are not negligible, the fishery fails Clause C1.2.

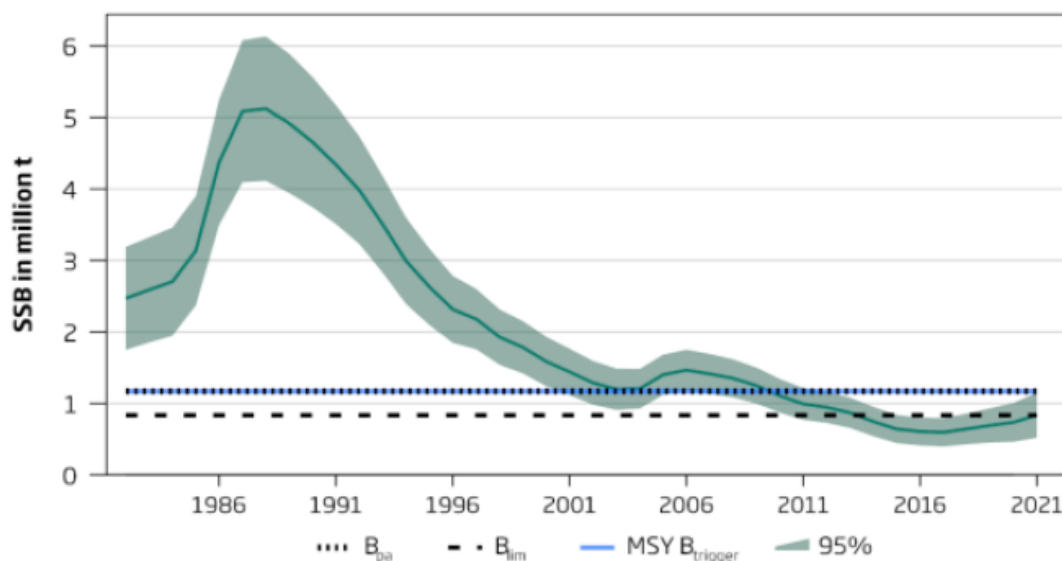


Figure 1. Biomass and reference points for Horse mackerel (*Trachurus trachurus*) in Subarea 8 and divisions 2.a, 4.a, 5.b, 6.a, 7.a–c, and 7.e–k (Northeast Atlantic). Source: (ICES, 2021).

As Clause C1.2 is not met, the stock is assessed as Category D.

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 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	Horse mackerel (<i>Trachurus trachurus</i>)		
	Productivity Attribute	Value	Score	
	Average age at maturity (years)	2.5 – 4 (FishBase)	2	
	Average maximum age (years)	$t_{max} = 11$ (FishBase)	2	
	Fecundity (eggs/spawning)	Fec = 70,000 (FishBase)	1	
	Average maximum size (cm)	Max length: 70.0 cm; common length: 22.0 cm (FishBase)	1	
	Average size at maturity (cm)	L_m 23.9 cm (range 21 – 30 cm) (FishBase)	1	
	Reproductive strategy	Broadcast spawner (FishBase)	1	
	Mean trophic level	3.7 \pm 0.0 se; based on diet studies (FishBase)	3	
			Average Productivity Score	1.57
	Susceptibility Attribute	Value	Score	
	Overlap of adult species range with fishery	Between 25% and 50% of stock occurs in the area fished	2	
	Distribution	Not assessed	–	
	Habitat	Habitat preference of species makes it highly unlikely to encounter trawl gear (e.g. epi-pelagic or meso-pelagic) (it is a pelagic species)	1	
	Depth range	Low overlap with trawl fishing gear (0 to 10 m, >70 m depth) (depth range 0 – 1,050 m, usually 100 – 200 m)	1	
	Selectivity	Species >2 times mesh size or up to 4 m length	3	
	Post-capture mortality	Most dead or retained, trawl tow >3 hours	3	
			Average Susceptibility Score	2.25
			PSA Risk Rating (From Table D3)	PASS
			Compliance rating	PASS
	References			
	FishBase: https://www.fishbase.se/summary/Trachurus-trachurus.html			
	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	
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.		
D4.2	There is no substantial evidence that the fishery has a significant negative impact on the species.		
Clause outcome:			
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.			
D4.2 There is no substantial evidence that the fishery has a significant negative impact on the species.			
References			
Links			
MARINTRUST Standard clause		1.3.2.2, 4.1.4	
FAO CCRF		7.5.1	
GSSI		D.5.01	