MarinTrust Standard V2

By-product Fishery Assessment
GBR25
Horse mackerel (*Trachurus trachurus*)
in ICES Subarea 8 and Divisions 2a, 4a, 6a, 7a-c and 7e-k

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Table 1 Application details and summary of the assessment outcome

Fishery Under Assessment	Species:	Horse mackerel (*Trachurus trachurus*)
	Geographical area:	FAO 27
	Country of origin of the product:	Ireland
	Stock:	ICES Subarea 8 and Divisions 2a, 4a, 6a, 7a-c and 7e-k
Date		August 2024
Report Code		GBR25
Assessor		Sam Peacock
Country of origin of the product - PASS		Ireland
Country of origin of the product - FAIL		None

Application details and summary of the assessment outcome			
Company Name(s): Killybegs (Pelagia)			
Country: Ireland			
Email address:		Applicant Code:	
Certification Body Details			
Name of Certification Body:		NSF / Global Trust Certification Ltd.	
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/Re-approval
Sam Peacock	Léa Lebechnech	0.2	Re-approval
Assessment Period		August 2024 – August 2025	

Scope Details	
Main Species	Horse mackerel (*Trachurus trachurus*)
Stock	ICES Subarea 8 and Divisions 2a, 4a, 6a, 7a-c and 7e-k
Fishery Location	FAO 27
Management Authority (Country/ State)	UK
Gear Type(s)	Pelagic trawl, otter trawl, purse seine, others
Outcome of Assessment	
Peer Review Evaluation	Agree with the assessor's determination
Recommendation	**APPROVED**

Table 2. Assessment Determination

Assessment Determination
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 (*Trachurus trachurus*) does not appear as Endangered or Critically Endangered on IUCN's Red List, and does not appear in CITES appendices; therefore, *Trachurus trachurus* is eligible for approval for use as Marin trust by-product raw material. This stock is not managed under a formal management plan. The stock is subject to annual stock assessment conducted by ICES, which incorporates all commercial landings. Therefore C1.1 is met. The latest stock assessment concluded that SSB is below the target and limit reference points, and therefore C1.2 is not met. As per the MT byproduct assessment guidance, the stock was subsequently assessed under Category D. Horse mackerel was awarded an average Productivity score of 1.43 and an average Susceptibility score of 2.75, leading to a PASS rating on Table D3. Therefore, horse mackerel (*Trachurus trachurus*) in ICES Subarea 8 and Divisions 2a, 4a, 6a, 7a-c and 7e-k is **APPROVED** for the production of fishmeal and fish oil under the current MarinTrust v2.3 by-products.

Fishery Assessment Peer Review Comments
The assessor correctly classified horse mackerel (*Trachurus trachurus*) in ICES Subarea 8 and Divisions 2a, 4a, 6a, 7a-c and 7e-k firstly under category C, as reference points are defined to assess the stock status against. However, as C1.2 was not met (SSB below Blim), he had to assess it under category D. Horse mackerel was awarded an average Productivity score of 1.43 and an average Susceptibility score of 2.75, leading to a PASS rating on Table D3. Therefore, horse mackerel in ICES Subarea 8 and Divisions 2a, 4a, 6a, 7a-c and 7e-k is **APPROVED** for the production of fishmeal and fish oil under the current MarinTrust V2.3 by-products standards.

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 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[1]	CITES Appendix 1[2]
Horse mackerel	*Trachurus trachurus*	ICES Subarea 8 and Divisions 2a, 4a, 6a, 7a-c and 7e-k	Yes	Failed C, subsequently assessed under D	Least Concern[3]	No

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[1] https://www.iucnredlist.org/
[2] https://cites.org/eng/app/appendices.php
[3] https://www.iucnredlist.org/species/198647/44767022

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	Greenland halibut (*Reinhardtius hippoglossoides*)	
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.

This stock is subject to regular assessment by the ICES Working Group on Widely Distributed Stocks (WGWIDE). The most recent assessment was conducted in 2023 using a length and age based analytical assessment. The assessment incorporated commercial catches, international catches, length and age data, three survey indices, length frequency distributions, time variant maturity-at-age estimates and a constant natural mortality rate. Discarding is included in the assessment (ICES 2023).

The 2023 catch advice states that "ICES advises that when the MSY approach and precautionary considerations are applied, there should be zero catch in 2024" (ICES 2023).
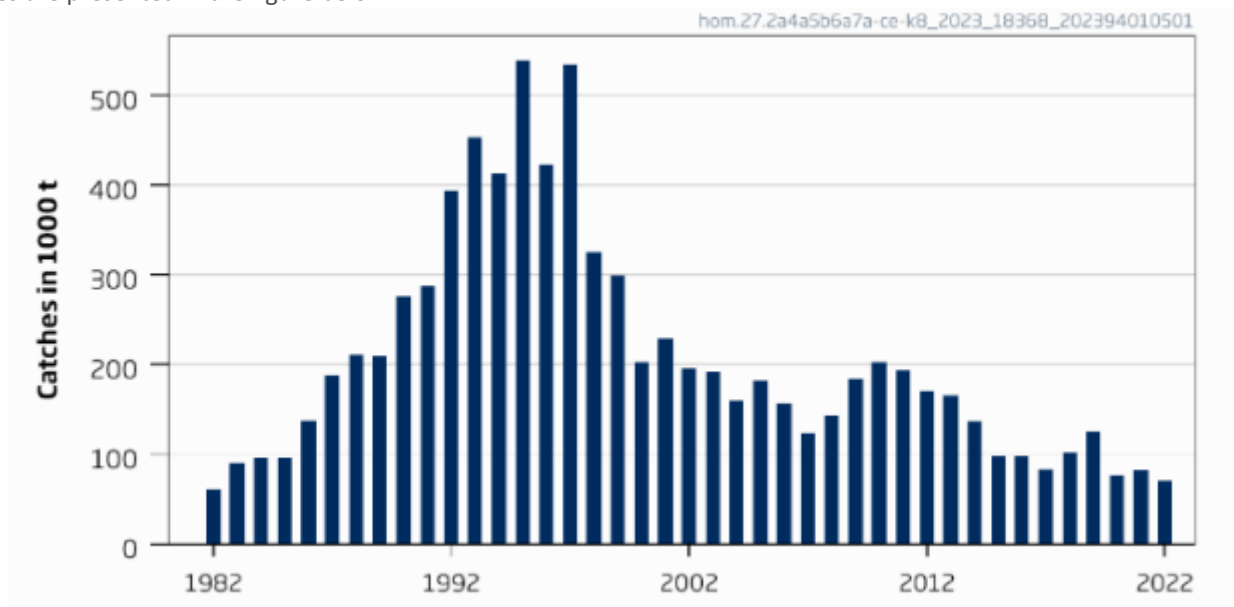
Catches are presented in the figure below:

Figure 1. Horse mackerel in ICES Subarea 8 and Divisions 2a, 4a, 6a, 7a-c and 7e-k: catches (ICES 2023)

Therefore, fishery removals of the species in the fishery under assessment are included in the stock assessment process and therefore the stock PASSES clause C1.1.

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.

The annual ICES catch recommendation provides an indication of the status of the stock relative to established reference points. The target reference points MSY $B_{trigger}$ and B_{pa} are set at 1,168,272t. The limit reference point B_{lim} is set at 834,480t. The 2023 stock assessment included a projection for estimated SSB in 2024, placing it at 744,547t, below the target and limit reference point levels.

The 2023 catch advice states, "Fishing pressure on the stock is above F_{MSY} but below F_{pa} and F_{lim}; spawning-stock size is below MSY $B_{trigger}$, B_{pa}, and B_{lim}." (ICES 2023). Estimated SSB is shown in Figure 2, below.
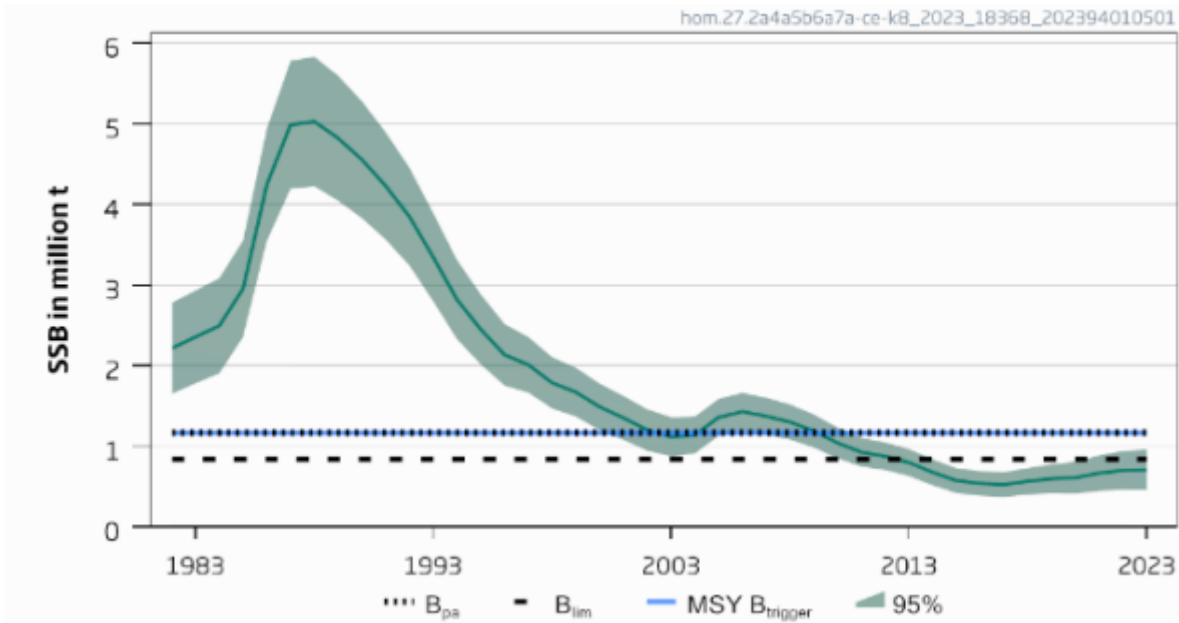

Figure 2. Horse mackerel in ICES Subarea 8 and Divisions 2a, 4a, 6a, 7a-c and 7e-k: estimated biomass relative to current reference points (ICES 2023)

Therefore, the species is considered, in its most recent stock assessment, to have a biomass below the limit reference point (or proxy) and it FAILS clause C1.2. As per MT guidance, the stock will be assessed under Category D hereinafter.

References
ICES (2023). 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). ICES Advice: Recurrent Advice. Report. https://doi.org/10.17895/ices.advice.21856521.v1

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.

D1	Species Name	Horse mackerel (*Trachurus trachurus*)	
Productivity Attribute		**Value**	**Score**
Average age at maturity (years)		4.5 years	1
Average maximum age (years)		19 years	2
Fecundity (eggs/spawning)		96,943t	1
Average maximum size (cm)		70cm	1
Average size at maturity (cm)		27cm	1
Reproductive strategy		Broadcast spawner	1
Mean trophic level		3.7	3
		Average Productivity Score	**1.43**
Susceptibility Attribute		**Value**	**Score**
Availability (area overlap)		10-30%	2
Encounterability (the position of the stock/species within the water column relative to the fishing gear)		Targeted	3
Selectivity of gear type		Retained	3
Post-capture mortality		Retained	3
		Average Susceptibility Score	**2.75**
		PSA Risk Rating (From Table D3)	**PASS**
		Compliance rating	**PASS**

Further justification for susceptibility scoring (where relevant)
For susceptibility attributes, please provide a brief rationale for scoring of parameters where there may be uncertainty affecting your decision

Horse mackerel, computer generated map of global distribution. From fishbase:
https://fishbase.se/summary/1365

References

Fishbase, horse mackerel: https://fishbase.se/summary/1365

Standard clauses 1.3.2.2

Table D2 - Productivity / Susceptibility attributes and scores.

Productivity attributes	High productivity (Low risk, score = 1)	Medium productivity (medium risk, score = 2)	Low productivity (high risk, score = 3)
Average age at maturity	<5 years	5-15 years	>15 years
Average maximum age	<10 years	10-25 years	>25 years
Fecundity	>20,000 eggs per year	100-20,000 eggs per year	<100 eggs per year
Average maximum size	<100 cm	100-300 cm	>300 cm
Average size at maturity	<40 cm	40-200 cm	>200 cm
Reproductive strategy	Broadcast spawner	Demersal egg layer	Live bearer
Mean Trophic Level	<2.75	2.75-3.25	>3.25

Susceptibility attributes	Low susceptibility (Low risk, score = 1)		Medium susceptibility (medium risk, score = 2)		High susceptibility (high risk, score = 3)	
Areal overlap (availability) Overlap of the fishing effort with the species range	<10% overlap		10-30% overlap		>30% overlap	
Encounterability The position of the stock/species within the water column relative to the fishing gear, and the position of the stock/species within the habitat relative to the position of the gear	Low overlap with fishing gear (low encounterability).		Medium overlap with fishing gear.		High overlap with fishing gear (high encounterability). Default score for target species	
Selectivity of gear type Potential of the gear to retain species	a	Individuals < size at maturity are rarely caught	a	Individuals < size at maturity are regularly caught.	a	Individuals < size at maturity are frequently caught
	b	Individuals < size at maturity can escape or avoid gear.	b	Individuals < half the size at maturity can escape or avoid gear.	b	Individuals < half the size at maturity are retained by gear.
Post-capture mortality (PCM) The chance that, if captured, a species would be released and that it would be in a condition permitting subsequent survival	Evidence of majority released post-capture and survival.		Evidence of some released post-capture and survival.		Retained species or majority dead when released.	

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.	

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