



MarinTrust Standard V2

By-product Fishery Assessment Mackerel in ICES Subareas 1-8 & 14, and Division 9.a (UK & Ireland)

MarinTrust Programme

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Table 1 Application details and summary of the assessment outcome

	Species:	Mackerel (Scomber scombrus)	
	Geographical area:	ICES Subareas 1-8 and 14, and Division 9a	
Fishery Under Assessment	Country of origin of the product:	UK & Ireland	
	Stock:	Mackerel in the Northeast Atlantic and Adjacent Waters	
Date	January 2023		
Report Code	GBR01		
Assessor	Sam Peacock		
Country of origin of the product - PASS	UK & Ireland		
Country of origin of the product - FAIL	None		

Application details and summary of the assessment outcome						
Company Name(s): Pe	lagia UK					
Country: United Kingdo	om					
Email address:		Applicant Code	e:			
Certification Body Deta	ails					
Name of Certification Body:		LRQA				
		Assessment	Initial/Surveillance/			
Assessor Peer Reviewer		Days	Re-approval			
Sam Peacock Kate Morris		0.2 Re-approval				
Assessment Period	January 2023 – January 2024					

Scope Details	
Main Species	Mackerel (Scomber scombrus)
Stock	Mackerel in the Northeast Atlantic and Adjacent Waters
Fishery Location	ICES Subareas 1-8 and 14, and Division 9a
Management Authority (Country/ State)	EU, UK, Norway
Gear Type(s)	Pelagic trawl, purse seine, others
Outcome of Assessment	
Peer Review Evaluation	PASS
Recommendation	PASS



Table 2. Assessment Determination

Assessment Determination

Mackerel has been categorised by the IUCN Red List as a species of Least Concern, and it does not appear in the CITES appendices. Mackerel in the Northeast Atlantic and adjacent waters are managed using annual quotas relative to established reference points and therefore was assessed under Category C.

This mackerel stock is subject to an annual stock assessment by ICES, the most recent of which was conducted in 2022. This assessment incorporated landings data and discard estimates and concluded that SSB is currently substantially above the target and has limit reference points. Therefore, this by-product meets the MT requirements and should be re-approved for use as a raw material.

Fishery Assessment Peer Review Comments

The by-product fishery under assessment here is the Atlantic Mackerel (*Scomber scombrus*) fishery, pursued by fishing vessels in FAO fishing area 27, ICES area 1-4, 9a and 14. Mackerel is managed to species-specific reference points, so for this assessment, mackerel is assessed as a category C species. Mackerel meets the requirements detailed in C1.

All species scoring tables have been completed by the auditor with sufficient evidence presented to support their final determination.

The peer review supports the auditor's recommendation to PASS the ICES 1-8, 9a and 14, mackerel stock under the Marin Trust IFFO RS v2.0 by-fishery standard to produce fishmeal and fish oil.

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
Mackerel	Scomber scombrus	Northeast Atlantic and Adjacent Waters	Yes	С	Least Concern ³	No

¹ https://www.iucnredlist.org/

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

³ https://www.iucnredlist.org/species/170354/18207463



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		Name	Mackerel	
C1	Categ	ory C Stock Sta	atus - Minimum Requirements	
CI	C1.1		ovals of the species in the fishery under assessment are included in the stock assessment are considered by scientific authorities to be negligible.	PASS
	C1.2	reference po	s considered, in its most recent stock assessment, to have a biomass above the limit int (or proxy), OR removals by the fishery under assessment are considered by scientific be negligible.	PASS
			Clause outcome:	PASS

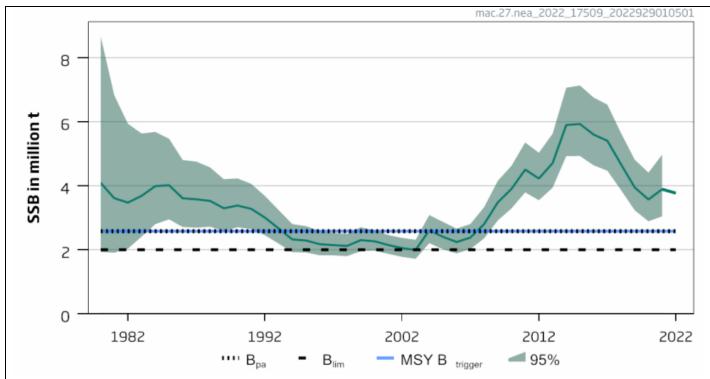
C1.1 Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.

A stock assessment for mackerel in the Northeast Atlantic is conducted annually by the ICES Working Group on Widely Distributed Stocks (WGWIDE). The outcomes of the most recent stock assessment were published in September 2022. The assessment used an age-based analytical model which incorporated catches in both the model and the forecast. Partial discarding estimates were also included, although discards are assumed to be negligible overall. The September 2022 catch advice includes a section discussing the quality of the stock assessment, which noted that only preliminary catch data was available for the Russian Federation, along with some other potential sources of uncertainty (ICES 2022). However, there is no indication that the outcomes of the assessment are likely to be unreliable overall. Fishery removals are included in the assessment and 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.

The 2022 catch advice 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 2,580,000t. The limit reference point B_{lim} is set at 2,000,000t. The catch advice projected that SSB at spawning time in 2022 would be 3,769,326t. The advice also notes that "spawning-stock size is above MSY B_{trigger}, B_{pa}, and B_{lim}" (ICES 2022). Spawning stock size is therefore estimated to be substantially larger than both the target and limit reference points, and C1.2 is met.





Mackerel in Subareas 1-8 and 14, and Division 9a. SSB over time relative to current reference points (ICES 2022)

References

ICES (2022). 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, 2022. ICES Advice 2022, mac.27.nea. https://doi.org/10.17895/ices.advice.7789

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		n/a	
	Productivity Attribut	:e	Value	Score
	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			
			Average Productivity Score	
	Susceptibility Attribu	te	Value	Score
	Availability (area overlap)			
	Encounterability (the position of the s	stock/species		
	within the water column relative to the	ne fishing gear)		
	Selectivity of gear type			
	Post-capture mortality			
			Average Susceptibility Score	
			PSA Risk Rating (From Table D3)	
			Compliance rating	
	Further justification for susceptibility	• .	•	
	For susceptibility attributes, please pr	ovide a brief ration	ale for scoring of parameters when	e there may be
	uncertainty affecting your decision			
Refere	ences			
Standa	ard 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		ow susceptibility ow 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	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	а	Individuals < size at maturity are rarely caught	а	Individuals < size at maturity are regularly caught.	а	Individuals < size at maturity are frequently caught	
Potential of the gear to retain species		Individuals < size at maturity can escape or avoid gear.	Ь	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		rel	idence of some eased post-capture d survival.	m	etained species or ajority dead when leased.		



D3		Average Susceptibility Score				
		1 - 1.75	1.76 - 2.24	2.25 - 3		
Average Productivity	1 - 1.75	PASS	PASS	PASS		
Score	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 measure	es are taken to minimise these impacts.					
	D4.2	There is no substantial evidence species.	e that the fishery has a significant negative impact on the					
			Outcome:					
Evider	nce		·					
D4.2 T	here is r	o substantial evidence that the fi	shery has a significant negative impact on the species.					
Refere	ences							
Links								
Marin	Trust Sta	andard clause	1.3.2.2, 4.1.4					
	II ust st	illaala claasc	- /					

D.5.01

GSSI