



MarinTrust Standard V2

By-product Fishery Assessment FRO03 – Mackerel in FAO 27, ICES Subareas 1-8 & 14, and Division 9a

MarinTrust Programme

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Table 1 Application details and summary of the assessment outcome

	Species:	Atlantic mackerel (Scomber scombrus)		
	Geographical area:	FAO 27, ICES Subareas 1-8 & 14, and Division 9a		
Fishery Under Assessment	Country of origin of the product:	Faroe Islands, EU, Iceland, Greenland, Norway		
	Stock:	Northeast Atlantic and adjacent waters		
Date	June 2023			
Report Code		FRO03		
Assessor		Sam Peacock		
Country of origin of the product - PASS	Faroe Islands, EU, Iceland, Greenland, Norway			
Country of origin of the product - FAIL		n/a		

Application details and summary of the assessment outcome									
Company Name(s): P/	Company Name(s): P/f Havsbrún								
Country: Faroe Islands									
Email address:		Applicant Code	e:						
Certification Body Deta	ails								
Name of Certification I	Body:	LRQA							
		Assessment	Initial/Surveillance/						
Assessor	Peer Reviewer	Days	Re-approval						
Sam Peacock Kate Morris 0.2 Surveillance 2									
Assessment Period June 2023 – June 2024									

Scope Details	
Main Species	Atlantic mackerel (Scomber scombrus)
Stock	Northeast Atlantic and adjacent waters
Fishery Location	ICES Subareas 1-8 & 14, and Division 9a
Management Authority	North East Atlantic Fisheries Commission (NEAFC), EC, Faroe
(Country/ State)	Islands, Greenland, Norway, Iceland, UK
Gear Type(s)	Pelagic trawl, purse seine
Outcome of Assessment	
Peer Review Evaluation	Pass
Recommendation	Pass



Table 2. Assessment Determination

Assessment Determination

Atlantic mackerel has been categorised by the IUCN as Least Concern and does not appear in the CITES appendices. Mackerel in the Northeast Atlantic is managed relative to target and limit reference points and was therefore assessed under Category C.

The ICES Working Group on Widely Distributed Stocks conducts regular stock assessments of this mackerel stock the most recent of which was carried out in 2022. The stock assessment incorporated catch and discard data, and concluded that SSB was substantially larger than the target reference point level. The byproduct therefore continues to meet the MT requirements and should remain approved for use as a raw material.

Fishery Assessment Peer Review Comments

The by-product fishery under assessment here is the Atlantic mackerel (*Scomber scombus*) fishery, pursued by vessels in FAO fishing area 27. Atlantic mackerel is managed by international or state regulations. Therefore, for this Marin Trust assessment, the Atlantic mackerel stock is scored against Category C.

The species scoring table has 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 FAO 27, Atlantic mackerel stock pursued by the fishery under the Marin Trust IFFO RS v2.0 by-fishery standard for the production of 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
Atlantic mackerel	Scomber scombrus	Northeast Atlantic	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.

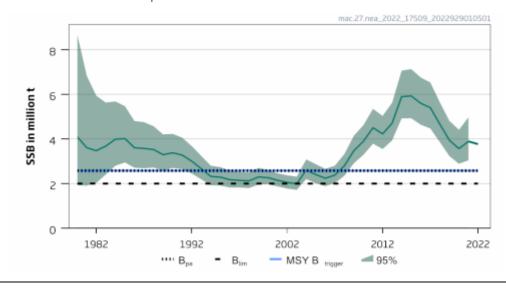
Spe	ecies	Name	Mackerel	
C1	Categ	ory C Stock Sta	atus - Minimum Requirements	
CI	C1.1 Fishery removals of the species in the fishery under assessment are included in the stock assessment process, OR are considered by scientific authorities to be negligible.		PASS	
	C1.2	reference po	s considered, in 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 o 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.

Mackerel in the Northeast Atlantic is subjected to regular stock assessment by the ICES Working Group on Widely Distributed Stocks (WGWIDE). The most recent assessment was conducted in 2022 using an age-based analytical model which incorporated catches in the model and the forecast. The assessment also incorporates three survey indices and the available discarding estimates, although discarding in recent years is assumed to be negligible. The catch advice includes a section discussing the quality of the assessment, which does not raise any substantial concerns (ICES 2022). 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 ICES catch advice provides an indication of the current estimated stock status relative to target and limit reference points. The target reference points MSY $B_{trigger}$ and B_{pa} have been set at 2,580,000t. The limit reference point B_{lim} has been set at 2,000,000t. The 2022 stock assessment projected SSB at spawning time in 2022 would be 3,769,326t, substantially larger than the target reference point. The catch advice concludes, "spawning-stock size is about MSY $B_{trigger}$, B_{pa} , and B_{lim} " (ICES 2022). SSB is estimated to be above the limit reference point and C1.2 is met.





Mackerel in the Northeast Atlantic, estimated SSB relative to current target and limit 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						
	within the water column relative to the	e fishing gear)					
	Selectivity of gear type						
	Post-capture mortality						
		Average Susceptibility Score					
		PSA Risk Rating (From Table D3)					
	Compliance rating						
	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						
	uncertainty affecting your accision						
Refere	nces						
Stando	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 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	(availability) Overlap of the fishing <10% overlap effort with the species		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		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	b	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		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	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 n/a								
	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 managem								
		process, and reasonab	le measures are taken to minimise these impacts.					
	D4.2	There is no substantia species.	al evidence that the fishery has a significant negative impact on the					
			Outcome:					
Eviden	ice							
D4.2 T	here is r	no substantial evidence	that the fishery has a significant negative impact on the species.					
Refere	ences							
Links								
Marin [*]	Trust Sta	andard clause	1.3.2.2, 4.1.4					
FAO C	CRF		7.5.1					

D.5.01

GSSI