



MarinTrust Standard V2

By-product Fishery Assessment Report Template

MarinTrust Programme

Unit C, Printworks

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Table 1 Application details and summary of the assessment outcome

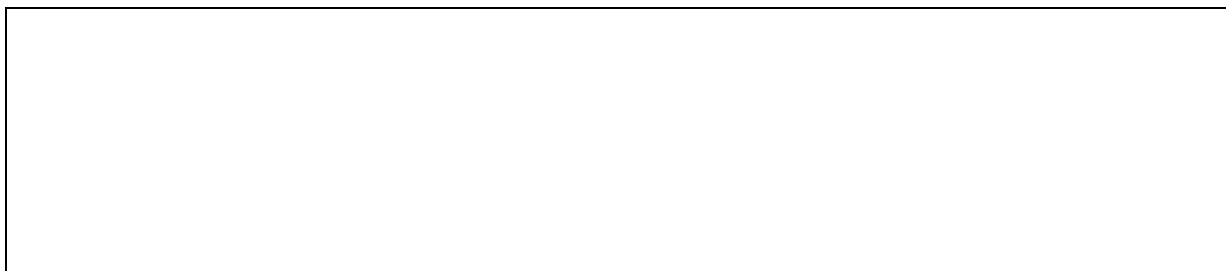
Fishery Under Assessment	Species:	Mackerel (<i>Scomber scombrus</i>)
	Geographical area:	FAO Area 27 Northeast Atlantic
	Country of origin of the product:	Denmark
	Stock:	Northeast Atlantic and adjacent waters mackerel stock (ICES Subareas 1–8 and 14, and in Division 9.a.)
Date	26/05/2021	
Report Code	BP71	
Assessor	Virginia Polonio	
Country of origin of the product - PASS	Denmark	
Country of origin of the product - FAIL	NA	

Application details and summary of the assessment outcome			
Name:			
Address:			
Country: Denmark		Zip:	
Tel. No.:		Fax. No.:	
Email address:		Applicant Code:	
Key Contact:		Title:	
Certification Body Details			
Name of Certification Body:		Global Trust Certification	
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/Re-approval
Virginia Polonio	Geraldine Criquet	0.5	Re-approval
Assessment Period	To May 2021		

Scope Details	
Main Species	Mackerel (<i>Scomber scombrus</i>)
Stock	Northeast Atlantic and adjacent waters mackerel stock (ICES Subareas 1–8 and 14, and in Division 9.a.)
Fishery Location	FAO Area 27 Atlantic Northeast
Management Authority (Country/ State)	EU/Common Fisheries Policy and Danish management authority
Gear Type(s)	Purse seine and pelagic trawl
Outcome of Assessment	
Peer Review Evaluation	Agree with the assessor’s recommendation
Recommendation	APPROVED

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 IFFO RS raw material. Mackerel (<i>Scomber scombrus</i>) do not appear as Endangered or Critically Endangered on IUCN’s Red List, nor do they appear in CITES appendices; therefore, Mackerel in subareas 1–8 and 14, and in Division 9.a is eligible for approval for use as Marin Trust by-product raw material.</p> <p>One stock forms part of this assessment:</p> <ol style="list-style-type: none"> ICES in subareas 1–8 and 14, and in Division 9.a <p>There is no long-term management strategy for Northeast Atlantic (NEA) mackerel agreed by all parties involved in the mackerel fishery. In 2019 Coastal State delegations from Norway, the EU, and the Faroes requested ICES to review new harvest control rule (HCR) options for a management strategy. ICES delivered the advice from this evaluation in August 2020 (ICES, 2020a). Reference points are defined for this stock therefore, the stock was assessed under Category C.</p> <p>Fishery removals of the stock are included in the stock assessment process so the stock PASSES Clause C1.1. Further, the stock is considered, in its most recent stock assessment, to have a biomass above the limit reference point so the stock PASSES Clause C1.2.</p> <p>Therefore, Mackerel in subareas 1–8 and 14, and in Division 9.a is APPROVED by the assessors for the production of fishmeal and fish oil under the current Marin Trust v 2.0 by-products standard.</p>
Fishery Assessment Peer Review Comments
<p>The assessor correctly classified Northeast Atlantic and Adjacent waters mackerel as category C, reference points are defined to assess the stock status relative to.</p> <p>Fishery removals are included in the stock assessment process so the stock PASSES Clause C1.1. The stock is considered, in its most recent stock assessment, to have a biomass above the limit reference point so the stock PASSES Clause C1.2.</p> <p>Therefore, the peer reviewer agrees with the assessor’s determination that the fishery passes both Clauses C1.1 and C1.2, so Northeast Atlantic and Adjacent waters mackerel is thus approved.</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
Mackerel	<i>Scomber scombrus</i>	Northeast Atlantic and Adjacent waters (ICES Subareas 1–8 and 14, and in Division 9.a.) mackerel	EU/Common Fisheries Policy and Denmark management authority	C	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 may be assessed as a Category D species instead, EXCEPT if there is evidence that it is currently below the limit reference point.

Species Name		Mackerel, <i>Scomber scombrus</i>	
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.	Yes
	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.	Yes
Clause outcome:			PASS
<p>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.</p> <p>The input data used in the stock models are as follows: Catch data, steel tagging data (1980–2006) and RFID tagging data (2014–2019), and three survey indices: SSB index from the triennial egg survey (1992–2019), abundance indices from the IBTS survey (combined Q1 and Q4; age 0, 1998–2019), and from the IESSNS survey (ages 3–11, 2010, 2012–2020).</p> <p>Catches prior to 2000 are given a very low weight in the assessment. Natural mortality (= 0.15 for all ages and years) is based on tagging studies from the early 1980s. Discarding is known to take place (0.9% of the total catch in weight in 2019), but is only quantified for part of the fisheries; the proportion of the landings covered cannot be calculated. Partial discard estimates are included in the assessment and overall discarding in recent years is assumed negligible (Figure 1 upper right)</p> <p>Fishery removals of the species in the fishery under assessment are included in the stock assessment process and it PASSES clause C1.1.</p> <p>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.</p> <p>The spawning-stock biomass (SSB) is estimated to have increased since 2007, reaching a maximum in 2014, and has been declining since then. It has, however, remained above MSY Btrigger since 2008. The fishing mortality (F) has declined since 2003 and is estimated to have been below FMSY since 2016. There has been a succession of large year classes since 2001, with year classes since 2011 estimated to be above average. (Figure 1)</p>			

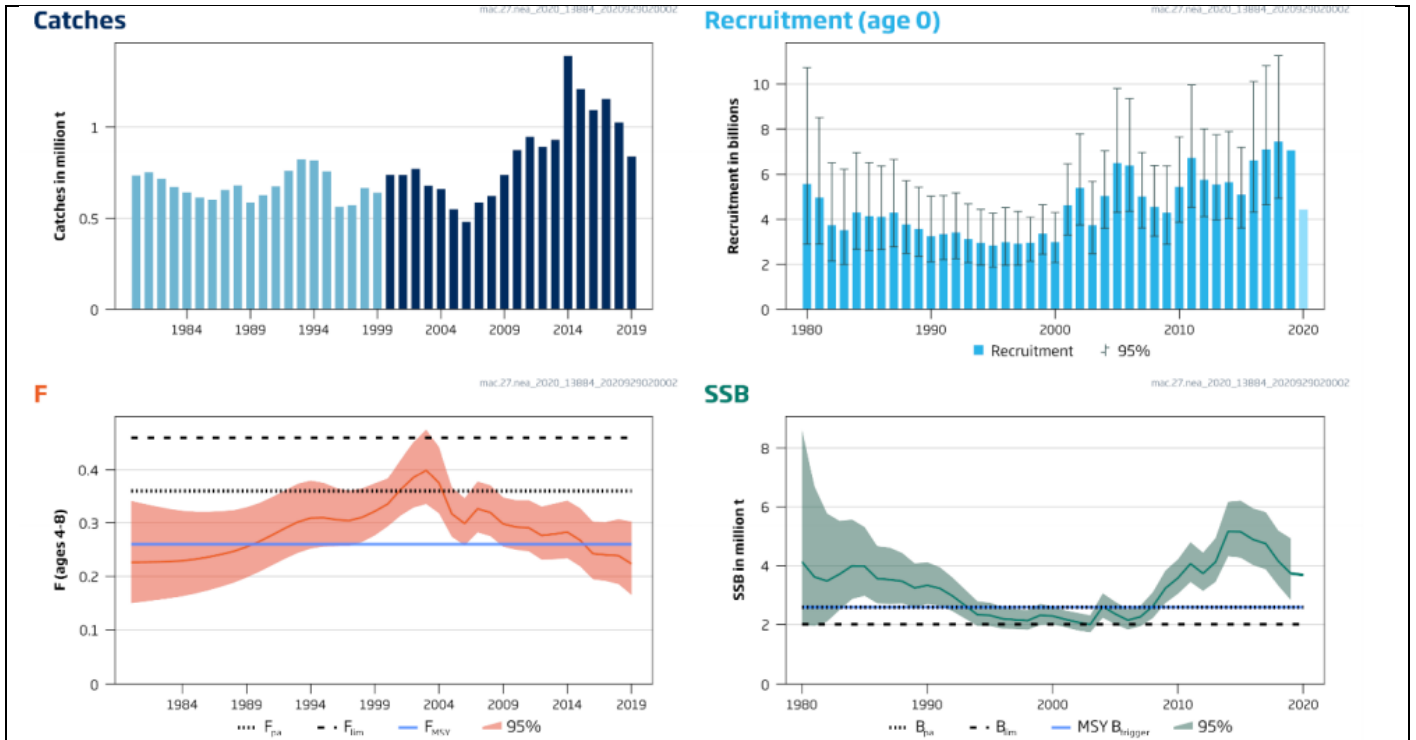


Figure 1. Mackerel in subareas 1–8 and 14, and in Division 9.a. Summary of the stock assessment. The paler shaded catches prior to 2000 have been down-weighted in the assessment because of the considerable underreporting suspected to have taken place in this period. The recruitment value for 2019 is estimated using the recruitment survey (IBTS) and a model (RCT3), and the recruitment value for 2020 is the geometric mean of the recruitments from 1990 to 2018. Source: ICES 2020.

ICES assess that fishing pressure on the stock is below FMSY, and spawning-stock size is above MSY Btrigger, Bpa, and Blim (Table 1).

Table 1. Mackerel in subareas 1–8 and 14, and in Division 9.a. State of the stock and the fishery relative to reference points. Source: ICES 2020

	Fishing pressure			Stock size				
	2017	2018	2019	2018	2019	2020		
Maximum sustainable yield	F_{MSY}	✓	✓	✓	Below			
Precautionary approach	F_{pa}, F_{lim}	✓	✓	✓	Harvested sustainably			
Management plan	F_{MGT}	—	—	—	Not applicable			
				$MSY B_{trigger}$	✓	✓	✓	Above trigger
				B_{pa}, B_{lim}	✓	✓	✓	Full reproductive capacity
				B_{MGT}	—	—	—	Not applicable

The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy) and it **PASSES** clause C1.2.

References

ICES. 2020. 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, 2020. ICES Advice 2020, mac.27.nea. <https://doi.org/10.17895/ices.advice.5907>
 Collette, B., Boustany, A., Carpenter, K.E., Di Natale, A., Fox, W., Graves, J., Juan Jorda, M., Kada, O., Nelson, R. & Oxenford, H. 2011. *Scomber scombrus*. The IUCN Red List of Threatened Species 2011: e.T170354A6764313.

Links

MARINTRUST Standard clause	1.3.2.2
FAO CCRF	7.5.3
GSSI	D.3.04, D5.01