



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:	European Sardine, <i>Sardina pilchardus</i>
	Geographical area:	FAO Area 27 Atlantic Northeast
	Country of origin of the product:	UK & Ireland
	Stock:	ICES subareas 7
Date	19/08/2021	
Report Code	BP 156	
Assessor	Virginia Polonio	
Country of origin of the product - PASS	UK & Ireland	
Country of origin of the product - FAIL	NA	

Application details and summary of the assessment outcome			
Name: Pelagia Killybegs only			
Address:			
Country: UK & Ireland		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	Sam Dignan	0.5	Re-approval
Assessment Period	August 2021		

Scope Details	
Main Species	European Sardine, <i>Sardina pilchardus</i>
Stock	ICES subarea 7
Fishery Location	FAO 27 Atlantic Northeast
Management Authority (Country/ State)	European Union, CEFAS and DAFM
Gear Type(s)	Purse seines and pelagic trawls
Peer Review Evaluation	
Peer Review Evaluation	Agree with recommendation to approve.
Recommendation	APPROVE

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 Marin Trust raw material. Sardine (<i>Sardina pilchardus</i>) do not appear as Endangered or Critically Endangered on IUCN’s Red List, nor do they appear in CITES appendices; therefore, Sardine is eligible for approval for use as Marin Trust by-product raw material.</p> <p>One stock forms part of this assessment:</p> <ul style="list-style-type: none"> ▪ ICES Subarea 7 <p>There is currently no biomass or recruitment index for the whole of Subarea 7. The only available index comes from a survey that partially covers divisions 7.e and 7.f and is not considered sufficient to evaluate the stock biomass and exploitation status. Therefore, ICES is not aware of any agreed precautionary management plan for sardine in this area. Further, ICES cannot provide catch advice for this stock because of lack of reliable landings data. The level of discarding is unknown, and probably quite variable.</p> <p>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. Consequently, the stock has been assessed under Category D.</p> <p>The compliance rating for PSA has achieved a PASS. Hence, Sardine (<i>Sardina pilchardus</i>) in ICES Subarea 7 is APPROVED 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>Agree with recommendation to approve.</p>
Notes for On-site Auditor
Empty space for notes

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
European Sardine	<i>Sardina pilchardus</i>	ICES subarea 7	EU, CEFAS and DAFM	D	LC	No

¹ <https://www.iucnredlist.org/>

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

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	European Sardine, <i>Sardina pilchardus</i>	
	Productivity Attribute	Value	Score
	Average age at maturity (years)	1.7	1
	Average maximum age (years)	5.9	1
	Fecundity (eggs/spawning)	156,525 [50,000-490,000]	1
	Average maximum size (cm)	27.5	1
	Average size at maturity (cm)	14.8	1
	Reproductive strategy	Non-guarders open water/substratum egg scatterers	1
	Mean trophic level	3.1	2
	Average Productivity Score		1.15
	Susceptibility Attribute	Value	Score
	Overlap of adult species range with fishery	NA	
	Distribution	Global distribution	1
	Habitat	Pelagic	1
	Depth range	20-60 m	Not used
	Selectivity	Up to 4 m	3
	Post-capture mortality	Retained	3
	Average Susceptibility Score		2.25
	PSA Risk Rating (From Table D3)		PASS
	Compliance rating		PASS

References

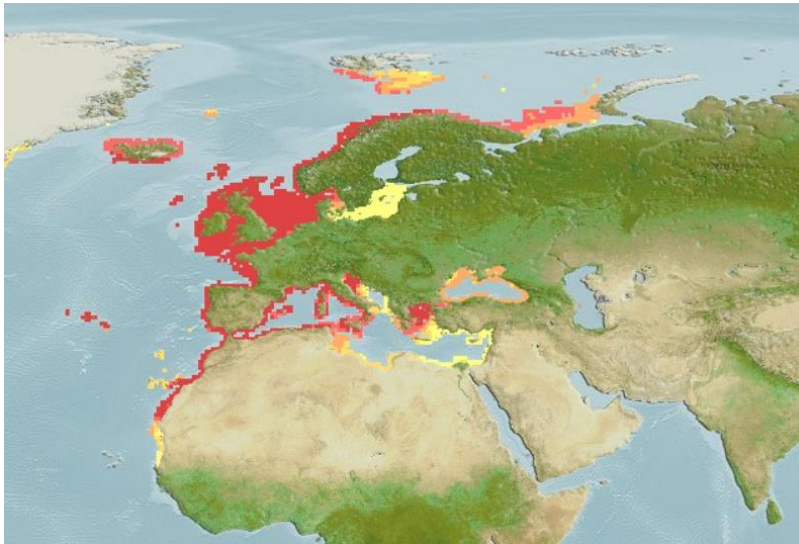


Figure 1. Global distribution of Sardine. Source: Scarponi, P., G. Coro, and P. Pagano. A collection of Aquamaps native layers in NetCDF format. Data in brief 17 (2018): 292-296.

ICES. 2019. Sardine (*Sardina pilchardus*) in Subarea 7 (southern Celtic Seas and the English Channel). In Report of the ICES Advisory Committee, 2019. ICES Advice 2019, pil.27.7. <https://doi.org/10.17895/ices.advice.4854>.

<https://www.fishbase.se/summary/1350>

Tous, P., Sidibé, A, Mbye, E., de Morais, L., Camara, Y.H., Adeofe, T.A., Munroe, T., Camara, K., Cissoko, K., Djiman, R., Sagna, A. & Sylla, M. 2015. *Sardina pilchardus*. The IUCN Red List of Threatened Species 2015: e.T198580A15542481. <https://dx.doi.org/10.2305/IUCN.UK.2015-4.RLTS.T198580A15542481.en>.

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.		
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		