



MarinTrust Standard V2

By-product Fishery Assessment Report Template

MarinTrust Programme

Unit C, Printworks

22 Amelia Street

London

SE17 3BZ

E: standards@marin-trust.com

T: +44 2039 780 819

Table 1 Application details and summary of the assessment outcome

Fishery Under Assessment	Species:	Dover sole (<i>Solea solea</i>)
	Geographical area:	FAO Area 27 North East Atlantic
	Country of origin of the product:	France
	Stock:	Sole in Divisions 7.h-k (Celtic Sea South, southwest of Ireland)
Date	9 November 2021	
Report Code	BP 234	
Assessor	Geraldine Criquet	
Country of origin of the product - PASS	France	
Country of origin of the product - FAIL	NA	

Application details and summary of the assessment outcome			
Name: Bioceval SAS			
Address:			
Country: France		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
Geraldine Criquet	Virginia Polonio	0.5	Surveillance 2
Assessment Period	To November 2021		

Scope Details	
Main Species	Dover sole (<i>Solea solea</i>)
Stock	Sole in Divisions 7.h-k (Celtic Sea South, southwest of Ireland)
Fishery Location	FAO Area 27 Northeast Atlantic Ocean
Management Authority (Country/ State)	European Union / France Direction des Pêches Maritimes et de l'Aquaculture
Gear Type(s)	Trawl
Peer Review Evaluation	Agrees with assessor's determination
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 Marin Trust raw material. Sole (<i>Solea solea</i>) is neither listed as Endangered or Critically Endangered on IUCN’s Red List, nor listed in CITES appendices; therefore, Dover sole is eligible for approval for use as Marin Trust by-product raw material.</p> <p>The Celtic Sea South & southwest of Ireland Dover sole is managed under the EU multiannual plan for Western Waters. However, reference points are undefined for the stock, therefore it was assessed under category D.</p> <p>A PSA was conducted. With an average productivity score of 1.57 and an average susceptibility score of 2.5, it PASSES Clause D1.</p> <p>Therefore, Dover sole in ICES in Divisions 7.h-k (Celtic Sea South, southwest of Ireland) is APPROVED for the production of fishmeal and fish oil under the current Marin Trust v 2.0 by-products.</p>
Fishery Assessment Peer Review Comments
<p>The stock has been identified correctly as there are no reference points defined for this stock and it has been assessed under category D.</p> <p>Following the average of productivity and susceptibility, the stock passes the PSA and it is recommended for approval.</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
Dover sole	<i>Solea solea</i>	Sole in ICES in Divisions 7.b and 7.c (West of Ireland)	European Union / France Direction des Pêches Maritimes et de l'Aquaculture	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	Dover sole, <i>Solea solea</i>	
	Productivity Attribute	Value	Score
	Average age at maturity (years)	3-5	2
	Average maximum age (years)	7.9	1
	Fecundity (eggs/spawning)	100,000-150,000	1
	Average maximum size (cm)	70	2
	Average size at maturity (cm)	30.3	2
	Reproductive strategy	Non-guarders: open water/substratum egg scatterers	1
	Mean trophic level	3.2	2
	Average Productivity Score		1.57
	Susceptibility Attribute	Value	Score
	Overlap of adult species range with fishery	Not scored	NA
	Distribution	Limited range in the region	2
	Habitat	Demersal	3
	Depth range	10-60 m	3
	Selectivity	Species 1 or 2 times mesh size	2
	Post-capture mortality	Most dead	3
	Average Susceptibility Score		2.5
	PSA Risk Rating (From Table D3)		PASS
	Compliance rating		PASS

Fishbase – *Solea solea*

<https://www.fishbase.de/summary/Solea-solea.html>

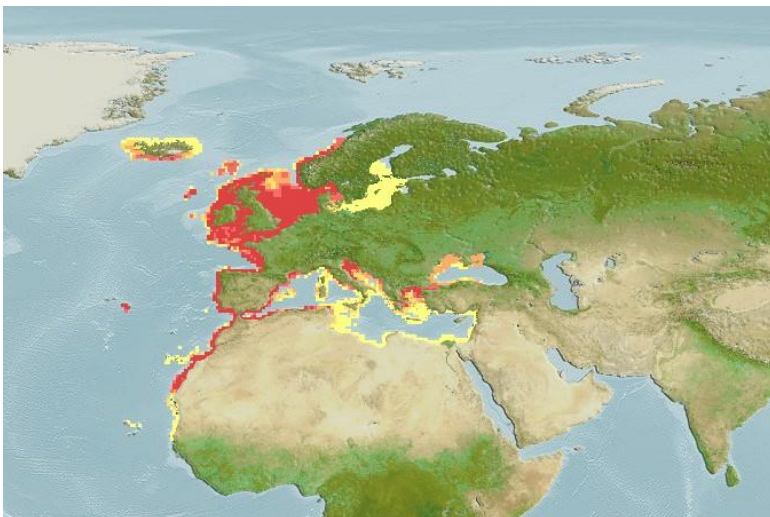


Figure 1. AquaMaps (2019, October). Computer generated distribution maps for *Solea solea* (Common sole), with modelled year 2050 native range map based on IPCC RCP8.5 emissions scenario. Retrieved from <https://www.aquamaps.org>.

Monroe, T., Keskin, Ç., Costa, M. & Rijnsdorp, A.D. 2015. *Solea solea* (errata version published in 2016). *The IUCN Red List of Threatened Species* 2015: e.T198739A87698320. Downloaded on 08 November 2021.

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