



## MarinTrust Standard V2

# By-product Fishery Assessment

## *Black scabbardfish in ICES Divisions 4a-c, 6a, 7a,b,d-h,j*

### MarinTrust Programme

Unit C, Printworks

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**Table 1 Application details and summary of the assessment outcome**

Fishery Under Assessment	Species:	Black scabbardfish ( <i>Aphanopus carbo</i> )
	Geographical area:	ICES Divisions 4a-c, 6a, 7a,b,d-h,j
	Country of origin of the product:	France
	Stock:	Northeast Atlantic
Date	October 2022	
Report Code	FRA34	
Assessor	Sam Peacock	
Country of origin of the product - PASS	France	
Country of origin of the product - FAIL	None	

Application details and summary of the assessment outcome			
Company Name(s):			
Country: France			
Email address:		Applicant Code:	
Certification Body Details			
Name of Certification Body:		LRQA	
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval
Sam Peacock	Kate Morris	0.25	Surveillance
Assessment Period	October 2022 – October 2023		

Scope Details	
Main Species	Black scabbardfish ( <i>Aphanopus carbo</i> )
Stock	Northeast Atlantic
Fishery Location	ICES Divisions 4a-c, 6a, 7a,b,d-h,j
Management Authority (Country/ State)	EU & UK
Gear Type(s)	Trawls, Longlines
Outcome of Assessment	
Peer Review Evaluation	Pass
Recommendation	Maintain approval

## Table 2. Assessment Determination

Assessment Determination
<p>Black scabbardfish has been categorised by the IUSN Red List as Least concern and does not appear in the CITES appendices. ICES provides annual advice for the species as a single unit throughout the Northeast Atlantic, but no stock structure has been established. Although TACs are in place for the species in EU waters, there are no established reference points and stock status is not known. For these reasons, the species was assessed under Category D.</p> <p>Black scabbardfish was awarded a Productivity score of 1.71 and a Susceptibility score of 2.5, leading to a Pass rating on Table D3. For this reason, the by-product meets the MT requirements and should remain approved for use as a raw material.</p>
Fishery Assessment Peer Review Comments
<p>The by-product fishery under assessment here is the Black scabbardfish (<i>Aphanopus carbo</i>) fishery pursued by French vessels in FAO fishing area 27. The fishery is managed by the French government and the EU common fisheries policy in French waters, the UK and the fisheries act in UK water. For this Marin Trust assessment, Black scabbardfish is scored as a category D as it is not managed to reference points.</p> <p>All species scoring tables have been completed by the auditor with sufficient evidence presented to support their final determination.</p> <p>The peer review supports the auditor’s recommendation to Pass the fishery under the Marin Trust IFFO RS v2.0 by-fishery standard for the production of fishmeal and fish oil.</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 a 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 <sup>1</sup>	CITES Appendix 1 <sup>2</sup>
Black scabbardfish	<i>Aphanopus carbo</i>	Northeast Atlantic	No	D	Least Concern <sup>3</sup>	No

<sup>1</sup> <https://www.iucnredlist.org/>

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

<sup>3</sup> <https://www.iucnredlist.org/species/18179793/45900190>

## 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		N/A	
<b>C1</b>	<b>Category C Stock Status - Minimum Requirements</b>		
	<b>C1.1</b>	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.	
	<b>C1.2</b>	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.	
			<b>Clause outcome:</b>
<b>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.</b>			
<b>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.</b>			
References			
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.

<b>D1</b>	<b>Species Name</b>	<b>Black Scabbardfish</b>	
	<b>Productivity Attribute</b>	<b>Value</b>	<b>Score</b>
	Average age at maturity (years)	3.5 years	1
	Average maximum age (years)	17 years	2
	Fecundity (eggs/spawning)	150,000 – 600,000	1
	Average maximum size (cm)	151cm	2
	Average size at maturity (cm)	67cm	2
	Reproductive strategy	Broadcast spawner	1
	Mean trophic level	4.5	3
	<b>Average Productivity Score</b>		<b>1.71</b>
	<b>Susceptibility Attribute</b>	<b>Value</b>	<b>Score</b>
	Availability (area overlap)	<10%	1
	Encounterability (the position of the stock/species within the water column relative to the fishing gear)	Targeted	3
	Selectivity of gear type	Retained	3
	Post-capture mortality	Retained	3
	<b>Average Susceptibility Score</b>		<b>2.5</b>
	<b>PSA Risk Rating (From Table D3)</b>		<b>PASS</b>
	<b>Compliance rating</b>		<b>PASS</b>
	<b>Further justification for susceptibility scoring (where relevant)</b>		
	<i>For susceptibility attributes, please provide a brief rationale for scoring of parameters where there may be uncertainty affecting your decision</i>		

	<p>Computer-generated distribution map for black scabbardfish. From Fishbase,  <a href="https://www.fishbase.se/summary/Aphanopus-carbo.html">https://www.fishbase.se/summary/Aphanopus-carbo.html</a></p>
<p><b>References</b></p> <p>Fecundity value from Neves, A, Vieira, AR, Farias, I, &amp; Figueiredo, I (2009). Reproductive strategies in black scabbardfish (<i>Aphanopus carbo</i> Lowe, 1839) from the NE Atlantic. <i>Scientia Marina</i> 73(S2): 19-31.</p> <p>All other values from Fishbase, Black scabbardfish. <a href="https://www.fishbase.se/summary/Aphanopus-carbo.html">https://www.fishbase.se/summary/Aphanopus-carbo.html</a></p>	
<p><i>Standard clauses 1.3.2.2</i></p>	

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	<10% overlap	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 Potential of the gear to retain species	a Individuals < size at maturity are rarely caught	a Individuals < size at maturity are regularly caught.	a Individuals < size at maturity are frequently caught
	b Individuals < size at maturity can escape or avoid gear.	b 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 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			
<b>Impacts On Species Categorised as Vulnerable by D1-D3 - Minimum Requirements</b>			
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.		
			<b>Outcome:</b>
<b>Evidence</b>			
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.			
<b>References</b>			
<b>Links</b>			
MarinTrust Standard clause		1.3.2.2, 4.1.4	
FAO CCRF		7.5.1	
GSSI		D.5.01	