



MarinTrust Standard V2

By-product Fishery Assessment *Scallop (Pecten maximus) in FAO 27 Northeast Atlantic, ICES Divisions: 4.a-c, 6.a, 7.d-h*

MarinTrust Programme

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Table 1 Application details and summary of the assessment outcome

Fishery Under Assessment	Species:	King scallop (<i>Pecten maximus</i>)
	Geographical area:	FAO 27 Northeast Atlantic
	Country of origin of the product:	Flag country not supplied by client
	Stock:	King scallop in ICES Divisions: 4.a-c, 6.a, 7.d-h
Date	4 August 2022	
Report Code	GBR27	
Assessor	Matthew Jew	
Country of origin of the product - PASS	Flag country not supplied by client	
Country of origin of the product - FAIL	NA	

Application details and summary of the assessment outcome			
Company Name(s): Pelagia			
Country: United Kingdom and Ireland			
Email address:		Applicant Code:	
Certification Body Details			
Name of Certification Body:		Global Trust Certification	
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval
Matthew Jew	Léa Lebechnech	0.5	Re-approval
Assessment Period	Up to August 2022		

Scope Details	
Main Species	King scallop (<i>Pecten maximus</i>)
Stock	King scallop in ICES Divisions: 4.a-c, 6.a, 7.d-h
Fishery Location	FAO 27 Northeast Atlantic
Management Authority (Country/ State)	European Union (Common Fisheries Policy)
Gear Type(s)	King scallop Dredge
Outcome of Assessment	
Peer Review Evaluation	Agree with the assessor's recommendation of approval
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. King Scallop (<i>Pecten maximus</i>) is not assessed on IUCN's Red List, and does not appear in CITES appendices; therefore, <i>Pecten maximus</i> is eligible for approval for use as Marin trust by-product raw material.</p> <p>On the basis of currently available information, multiple scallop 'stocks' are assumed to occur in FAO 27 (Northeast Atlantic). The stocks relevant to this assessment are in Divisions: 4.a-c, 6.a, 7.d-h.</p> <p>While some scallop stocks are assessed, many of the stocks are not. Scallops are not subject to species-specific management regimes that are required to be assessed under Category C (e.g. no established limit reference points). Therefore, all stocks occurring in relevant subareas/divisions are assessed as Category D.</p> <p>Table D1 (PSA) shows that the stock as an average productivity score of 1.14 and an average susceptibility score of 3. The PSA risk rating results (Table D3) determined that the species passes.</p> <p>Therefore, King Scallop in FAO 27 Divisions: 4.a-c, 6.a, 7.d-h is APPROVED for the production of fishmeal and fish oil under the current MarinTrust v2.0 by-products standard.</p>
Fishery Assessment Peer Review Comments
<p>The internal peer reviewer agrees with the assessor's determination, who correctly assessed the stock of Northern Atlantic King scallop in FAO 27 (Divisions 4.a-c, 6.a, 7.d-h) under Category D, as there is no reference point defined.</p> <p>The internal peer reviewer notes that the stock passed the PSA risk rating with an average productivity score of 1.14 and an average susceptibility score of 3.</p> <p>Therefore, King Scallop in FAO 27 (Divisions 4.a-c, 6.a, 7.d-h) is APPROVED.</p>
Notes for On-site Auditor
<p>Determine which flag state(s) the plant is sourcing its King Scallop from.</p>

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 ¹	CITES Appendix 1 ²
King Scallop	<i>Pecten maximus</i>	King Scallop in ICES Divisions: 4.a-c, 6.a, 7.d-h	European Union (Common Fisheries Policy)	D	Not Assessed	No

¹ <https://www.iucnredlist.org/>

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

CATEGORY D SPECIES

D1	Species Name	King Scallop (<i>Pecten maximus</i>)	
	Productivity Attribute	Value	Score
	Average age at maturity (years)	2 years	1
	Average maximum age (years)	20 years	2
	Fecundity (eggs/spawning)	>20,000	1
	Average maximum size (cm)	17cm Shell Length	1
	Average size at maturity (cm)	6-8 cm	1
	Reproductive strategy	Broadcast Spawner	1
	Mean trophic level	~2 (Filter Feeding Invert)	1
	Average Productivity Score		1.14
	Susceptibility Attribute	Value	Score
	Availability (area overlap)	High Overlap	3
	Encounterability (the position of the stock/species within the water column relative to the fishing gear)	Targeted	3
	Selectivity of gear type	High capture rate	3
	Post-capture mortality	Retained	3
	Average Susceptibility Score		3
	PSA Risk Rating (From Table D3)		Pass
	Compliance rating		PASS
	Further justification for susceptibility scoring (where relevant)		
	<ul style="list-style-type: none"> <i>Pecten Maximus</i> occurs along the European Atlantic coast from northern Norway, south to the Iberian peninsula and has also been reported off West Africa, the Azores, Canary Islands and Madeira. At least 30% of species distribution occurs in area under assessment. This assessment covers a large number of subareas/divisions within FAO 27 and the highest probability of occurrence for this species is in FAO 27, so the maximum score was given to area overlap. This stock is caught on scallop dredges, thus there is high encounterability, high capture/retention, and high post capture mortality. 		
References			
<p>Chauvaud L, Patry Y, Jolivet A, Cam E, Le Goff C, Strand Ø, Charrier G, Thébault J, Lazure P, Gotthard K, Clavier J. 2012. Variation in size and growth of the great scallop <i>Pecten maximus</i> along a latitudinal gradient. <i>PLoS one</i> 7(5): e37717. https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0037717.</p> <p>ICES. 2020. Scallop Assessment Working Group (WGSCALLOP). ICES Scientific Reports. 2:111. 57 pp. http://doi.org/10.17895/ices.pub.7626.</p> <p>Jennings, S., J. Lancaster, A. Woolmer and J. Cotter 1999 Distribution, diversity and abundance of epibenthic fauna in the North Sea. <i>Journal of the Marine Biological Association of the UK</i> 79:385-399. https://www.cambridge.org/core/journals/journal-of-the-marine-biological-association-of-the-uk/article/abs/distribution-diversity-and-abundance-of-epibenthic-fauna-in-the-north-sea/C6B0E6C787122F94E0776580DF043E18.</p> <p>Le Goff C, Lavaud R, Cugier P, Jean F, Flye-Sainte-Marie J, Foucher E, Desroy N, Fifas S, Foveau A. 2017. A coupled biophysical model for the distribution of the great scallop <i>Pecten maximus</i> in the English Channel. <i>Journal of Marine Systems</i> 167:55-67. https://www.sciencedirect.com/science/article/abs/pii/S0924796316303530.</p>			

Salomonsen, H. M., Lambert, G. I., Murray, L.G. & Kaiser, M.J. 2015. The spawning of King scallop, *Pecten maximus*, in Welsh waters – A preliminary study. Fisheries & Conservation report No. 57, Bangor University. pp.21.
<http://fisheries-conservation.bangor.ac.uk/wales/documents/57.pdf>.

Standard clauses 1.3.2.2

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.

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