



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:	Atlantic Wolffish, <i>Anarhichas lupus</i>
	Geographical area:	FAO Area 27 Northeast Atlantic
	Country of origin of the product:	Norway
	Stock:	ICES Subareas 1,2 (Northeast Arctic)
Date	31/03/2021	
Report Code	BP28	
Assessor	Virginia Polonio	
Country of origin of the product - PASS	Norway	
Country of origin of the product - FAIL	NA	

Application details and summary of the assessment outcome			
Name: Norway Seafood Federation			
Address:			
Country: Norway		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	Surveillance 1
Assessment Period	March 2021		

Scope Details	
Main Species	Atlantic Wolffish, <i>Anarhichas lupus</i>
Stock	ICES Subareas 1,2 (Northeast Arctic)
Fishery Location	Norway, FAO Area 27 Northeast Atlantic
Management Authority (Country/ State)	EU and Norwegian Directorate of Fisheries (DoF)
Gear Type(s)	Bottom trawls
Outcome of Assessment	
Peer Review Evaluation	Agree 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 MARINTRUST raw material Atlantic wolffish <i>Anarhichas lupus</i> do not appear as Endangered or Critically Endangered on IUCN’s Red List, nor do they appear in CITES appendices; therefore, Atlantic wolffish, <i>Anarhichas lupus</i> in the ICES areas 1 and 2 is eligible for approval for use as MARINTRUST by-product raw material.</p> <p>The species is not subject to a specific research and management regime, therefore it is classified as Category C. The lack of scientific information on the stock status in the assessment area results in the use of the risk-assessment style approach. The fishery was assessed using the risk-based Productivity, Susceptibility Analysis (PSA) as per Marin Trust v 2.0 procedures for Category D species.</p> <p>The species has passed this risk-based assessment (Table D4 Clause D4.1; D4.2). Atlantic Wolffish is APPROVED in the assessment area 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 Arctic Atlantic wolffish as category D, reference points are not defined to assess the stock status relative to.</p> <p>A PSA was performed. With an average productivity score of 2.29 and an average susceptibility score of 2.75, the stock was further assessed using Table D4. The fishery passes both Clauses D4.1 and D4.2.</p> <p>Therefore, the peer reviewer agrees with the assessor’s determination that the fishery passes Table D4 and Northeast Arctic wolffish 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 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
Atlantic Wolffish	<i>Anarhichas lupus</i>	ICES Subarea 1,2	EU and Norway Directorate of Fisheries	D	DD	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

D1	Species Name	Atlantic Wolffish, <i>Anarhichas lupus</i>	
	Productivity Attribute	Value	Score
	Average age at maturity (years)	5.1	3
	Average maximum age (years)	24	2
	Fecundity (eggs/spawning)	12,740-no value (max.)	1
	Average maximum size (cm)	150	2
	Average size at maturity (cm)	54.1	2
	Reproductive strategy	guarders: clutch tenders	3
	Mean trophic level	3.6	3
	Average Productivity Score		2.29
	Susceptibility Attribute	Value	Score
	Overlap of adult species range with fishery	Not scored	Not scored
	Distribution	25-50%	2
	Habitat	Demersal	3
	Depth range	1-600 m	2
	Selectivity	>2 mesh size	2
	Post-capture mortality	Most dead	3
	Average Susceptibility Score		2.75
	PSA Risk Rating (From Table D3)		D4
	Compliance rating		Go to D4

References

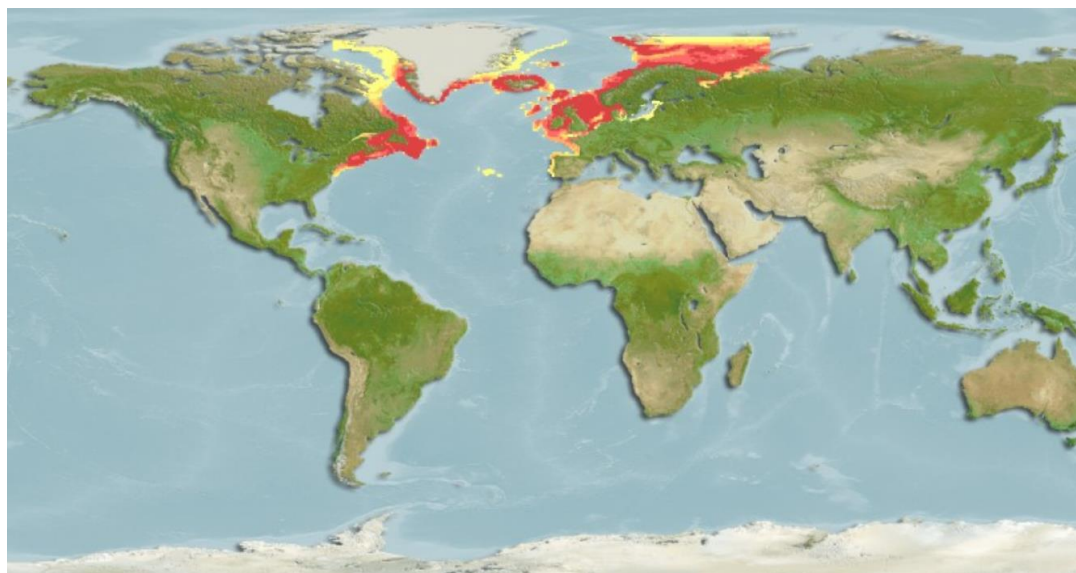


Figure 1. Distribution of *Anarhichas lupus* (Atlantic wolffish), with modelled year 2050 native range map based on IPCC RCP8.5 emissions scenario. www.aquamaps.org, version 10/2019.

<https://www.fishbase.de/summary/Anarhichas-lupus.html>

Standard clauses 1.3.2.2

a risk-assessment style approach must be taken.

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		Atlantic Wolffish, <i>Anarhichas lupus</i>	
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.		PASS
D4.2	There is no substantial evidence that the fishery has a significant negative impact on the species.		PASS
Outcome:			PASS
<p>Evidence</p> <p>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.</p> <p>Under the latest agreed record of consultations between Norway and the European Union fisheries arrangements for 2020 were outlined in Section 5 Paragraph 5.1 (Jointly managed stocks) of this agreed record referred to the wish of both Delegations to continue to work to avoid unwanted catches and discards through technical measures that improve selectivity, closed seasons and areas and other measures including a ban on high grading and Real Time Closure (RTC) systems. These measures, they conclude, would support both the EU landing obligation and discard ban in Norway.</p> <p>Technical measures in force designed to reduce potential impacts of the fishery on this species include a minimum mesh size (130mm) for quota species, sorting grids that minimize catches of juveniles and move-on rules that protect juvenile target species (demersal stocks). Marine Protected Areas (MPAs) are also designed to protect vulnerable benthic habitats and species.</p> <p>D4.2 There is no substantial evidence that the fishery has a significant negative impact on the species.</p> <p>Fisheries are regulated in Norway, with restrictions on mesh size (gillnets), number of nets, and catching periods. All commercial species caught in Norwegian waters must be retained, recorded and landed. A study was undertaken by ICES on the effect of targeted fisheries in the assessment area on Atlantic Wolffish and other minor species. The impact of these fisheries on Atlantic Wolffish ranged from Medium to Low. These data can be used where fisheries are suspected of having significant interactions that deserve attention in setting up TACs applying to single stocks. There is no substantial evidence that the fishery has a significant negative impact on the species</p>			
<p>References</p> <p>Electronic Reporting Systems (fiskeridir.no)</p> <p>Regulations (fiskeridir.no)</p> <p>Mandatory release of halibut more than 2 metres in length (fiskeridir.no)</p>			
Links			
MARINTRUST Standard clause		1.3.2.2, 4.1.4	
FAO CCRF		7.5.1	
GSSI		D.5.01	