

MarinTrust Standard V2

By-product Fishery Assessment

Herring Report (*Clupea harengus*) in

Subareas 1, 2, and 5, and in divisions 4.a

and 14.a, Norwegian spring-spawning

herring (the northeast Atlantic and the

Arctic Ocean)

MarinTrust Programme

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Table 1 Application details and summary of the assessment outcome

	Species:	Herring (Clupea harengus)		
	Geographical area:	FAO Area 27 Atlantic, Northeast		
Fishery Under Assessment	Country of origin of the product:	Denmark		
Assessment	Stock:	Subareas 1, 2, and 5, and in divisions 4.a and 14.a, Norwegian spring-spawning herring (the Northeast Atlantic and the Arctic Ocean)		
Date	December 2022			
Report Code	DNK39			
Assessor	Léa Lebechnech			
Country of origin of the product - PASS	Denmark (Flag country: Denmark)			
Country of origin of the product - FAIL				

Application details and summary of the assessment outcome					
Company Name(s): Marine Ingredients Denmark; FFSkagen; TripleNine					
Country: Denmark					
Email address: sap@m	Email address: sap@maring.org, mid@maring.org Applicant Code:				
Certification Body Details					
Name of Certification Body:		Global Trust Certification			
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval		
Léa Lebechnech	Matthew Jew	0.5	Surveillance 2		
Assessment Period	Assessment Period To December 2022				

Scope Details				
Main Species	Herring (Clupea harengus)			
Stock	Herring in subareas 1, 2, and 5, and in divisions 4.a and 14.a			
Stock	(Norwegian spring-spawning herring)			
Fishery Location Denmark, Northeast Atlantic and the Arctic Ocean				
Management Authority	European Commission (EC), Danish Directorate of Fisheries			
(Country/ State)	(Fiskeristyrelsen)			
Gear Type(s)	Pelagic trawls and purse seines			
Outcome of Assessment				
Peer Review Evaluation	Agree with assessor's determination			
Recommendation	mendation APPROVED			

Table 2. Assessment Determination

Assessment Determination

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.

Herring (*Clupea harengus*) does not appear as Endangered or Critically Endangered on IUCN's Red List, nor do they appear in CITES appendices; therefore, Herring is eligible for approval for use as Marin Trust RS by-product raw material.

A long-term management strategy was agreed by the European Union, the Faroe Islands, Iceland, Norway and Russian Federation in 2018 (Anon, 2018). ICES has evaluated the long-term management strategy and found it to be precautionary (ICES, 2018a).

As reference points are defined for this stock and there is a management plan in place, it has been assessed under category C. Removals of the species are taken into consideration in the 2022 stock assessment and the biomass is above B_{lim} reference point, so the stock PASSES clauses C1.1. and C1.2.

Therefore, Herring in subareas 1, 2, and 5, and in divisions 4.a and 14.a (Norwegian spring-spawning herring) is APPROVED for the production of fishmeal and fish-oil under the current Marin Trust v 2.0 by-products.

Fishery Assessment Peer Review Comments

The assessor correctly classified herring in subareas 1, 2, 5, 4.a, and 14.a as Category C, the stock is subject to a specific management regime and reference points are defined.

Fishery removals are considered in the stock assessment process. The most recent stock assessment shows that the stock is above MSY B_{trigger}, B_{pa}, and B_{lim}. Therefore, the stock is considered to have biomass above the limit reference point.

Herring in FAO 27 subareas 1, 2, 5, 4.a, and 14.a passes both clauses (C1.1 and C1.2) and therefore should be approved under the MarinTrust Standard v.2.

Notes for On-site Auditor

Confirm that the flag country is Denmark.

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
Herring	Clupea harengus	Herring in subareas 1, 2, and 5, and in divisions 4.a and 14.a (Norwegian spring spawning herring)	European Commission (EC) Danish Directorate of Fisheries (Fiskeristyrelsen)	С	LC	No

¹ <u>https://www.iucnredlist.org/</u>

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



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.

Spe	Species Name Herring (Clupea Harengus)				
C1	Category C Stock Status - Minimum Requirements				
CI	C1.1	Fishery remo	ovals of the species in the fishery under assessment are included in the stock assessment	Yes	
		process, OR are considered by scientific authorities to be negligible.			
	C1.2	The species is considered, in its most recent stock assessment, to have a biomass above the limit Yes			
		reference point (or proxy), OR removals by the fishery under assessment are considered by scientific			
		authorities to be negligible.			
			Clause outcome:	PASS	

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.

ICES advises that when the long-term management strategy agreed by the European Union, the Faroe Islands, Iceland, Norway, and the Russian Federation is applied, catches in 2023 should be no more than 511 171 tonnes.

The model used for the stock assessment is a statistical assessment model (XSAM) that uses catches in the model and in the forecast and also includes uncertainty in the catches and abundance indices. The input data considered in the last stock assessment (assessment period 1988–2022) are the following: commercial catches-at-age (stock weight-at-age from surveys and, since 2009, from catch sampling). Three survey indices: Norwegian acoustic survey on spawning grounds in February/March (NASF [A7918]; 1988–1989, 1994–1996, 1998–2000, 2005–2008, 2015–2022); International Ecosystem Survey in the Nordic Seas (IESNS; A3675) covering the adult stock in the Nordic seas (1996–2022), and the juvenile stock in the Barents Sea (1991–2002, 2005–2007, 2009-2019, 2021). Maturity ogive variable by year-class strength. Natural mortalities are fixed values from historical analyses (age 2 = 0.9; ages greater than 2 = 0.15). Catches are presented in the figure below.

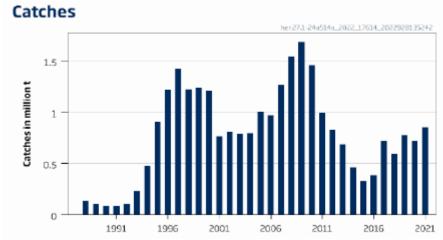


Figure 1. Herring in subareas 1, 2, & 5, and in divisions 4.a and 14.a (Norwegian spring-spawning herring). Summary of catches.

Therefore, fishery removals of the species in the fishery under assessment are included in the stock assessment process and therefore the stock PASSES clause C1.1.



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.

The estimated SSB and fishing mortality are generally in line with the estimates from last year's assessment. The 2016 year class is expected to dominate the catches in 2023, and the subsequent year classes recruiting to the fishery are estimated to be weak. SSB is predicted to be below SSB_{mgt} in 2024 if F_{mgt} is applied in 2023.

Fishing pressure on the stock is above FMSY and between Fpa and Flim; spawning-stock size is above MSY Btrigger, Bpa, and Blim.

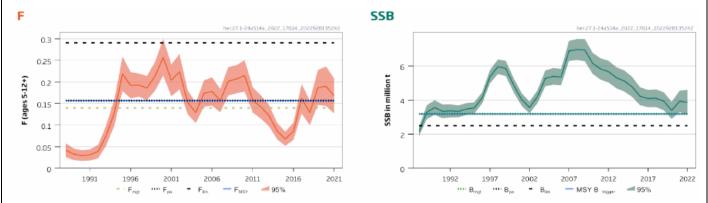


Figure 2. Herring in subareas 1, 2, and 5, and in divisions 4.a and 14.a (Norwegian spring-spawning herring). Summary of the stock assessment.

Source: ICES 2022

Therefore, the species is considered, in its most recent stock assessment, to have a biomass above the limit reference point and it PASSES clause C1.2.

References

ICES (2022): Herring (*Clupea harengus*) in subareas 1, 2, and 5, and in divisions 4.a and 14.a, Norwegian spring-spawning herring (Northeast Atlantic and Arctic Ocean). ICES Advice: Recurrent Advice. Report. https://doi.org/10.17895/ices.advice.19772380.v1

Links		
MarinTrust Standard clause	1.3.2.2	
FAO CCRF	7.5.3	
GSSI	D.3.04, D5.01	