



MarinTrust Standard V2

By-product Fishery Assessment Lemon sole (*Microstomus kitt*) in Subarea 4 and divisions 3.a and 7.d (North Sea, Skagerrak and Kattegat, eastern English Channel)

MarinTrust Programme

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Table 1 Application details and summary of the assessment outcome

| | | |
|---|-----------------------------------|--|
| Fishery Under Assessment | Species: | Lemon sole, <i>Microstomus kitt</i> |
| | Geographical area: | FAO 27 Northern Atlantic |
| | Country of origin of the product: | Denmark |
| | Stock: | ICES in Subarea 4 and divisions 3.a and 7.d (North Sea, Skagerrak and Kattegat, eastern English Channel) |
| Date | 12 September 2022 | |
| Report Code | DNK32 | |
| Assessor | Léa Lebechnech | |
| Country of origin of the product - PASS | Denmark | |
| Country of origin of the product - FAIL | NA | |

| | | | |
|--|-------------------|----------------------------|-----------------------------------|
| Application details and summary of the assessment outcome | | | |
| Company Name(s): Marine Ingredients Denmark, FFSkagen, TripleNine | | | |
| Country: Denmark | | | |
| 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 days | Re-approval |
| Assessment Period | To September 2022 | | |

| | |
|---------------------------------------|--|
| Scope Details | |
| Main Species | Lemon sole, <i>Microstomus kitt</i> |
| Stock | ICES in Subarea 4 and divisions 3.a and 7.d (North Sea, Skagerrak and Kattegat, eastern English Channel) |
| Fishery Location | Lemon sole in FAO 27 Northeast Atlantic |
| Management Authority (Country/ State) | European Union Common Fisheries Policy |
| Gear Type(s) | Demersal trawl, otter trawl, beam trawl, seine, gillnet |
| Outcome of Assessment | |
| Peer Review Evaluation | Agree with recommendation |
| 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. Lemon sole (<i>Microstomus kitt</i>) in ICES Subarea 4 and divisions 3.a and 7.d (North Sea, Skagerrak and Kattegat, eastern English Channel), is neither listed as Endangered or Critically Endangered on IUCN’s Red List (“least concern”), nor listed in CITES appendices; therefore, lemon sole is eligible for approval for use as Marin Trust by-product raw material.</p> <p>The EU multiannual plan (MAP) for stocks in the North Sea (EU, 2018) and adjacent waters applies to bycatches of this stock. UK and Norway have not requested ICES to provide advice based on the EU MAP. The MAP stipulates that when the F_{MSY} ranges are not available, fishing opportunities should be based on the best available scientific advice. There is a TAC set for it so there is evidence of a species-specific regime in place and due to the fact that Norway and UK do not request advice, a precautionary approach is in place. As there is a management plan for the stock, it has been assessed under category C. Fisheries removals are considered in the stock assessment and the stock has been above proxy biomass reference points, so clauses C1.1 and C1.2 are met.</p> <p>Therefore, Lemon sole (<i>Microstomus kitt</i>) in ICES Subarea 4 and divisions 3.a and 7.d (North Sea, Skagerrak and Kattegat, eastern English Channel), is APPROVED for the production of fishmeal and fish oil under the current MarinTrust v 2.0 by-products standard.</p> |
| Fishery Assessment Peer Review Comments |
| <p>The internal peer reviewer agrees with the assessor’s determination, who correctly classified lemon sole (<i>Microstomus kitt</i>) in FAO subarea 4 and subdivisions 3.a and 7.d under Category C, as reference points are defined to assess status of stock relative to, and there is a specific management regime in place.</p> <p>Fishery removals are included in the stock assessment and it PASSES Clause C1.1. The stock is considered, in its most recent assessment, to have biomass above the proxy biomass reference point, it PASSES Clause C1.2.</p> <p>Therefore, lemon sole (<i>Microstomus kitt</i>) in FAO subarea 4 and division 3.a and 7.d is APPROVED.</p> |
| Notes for On-site Auditor |
| N/A |

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 |
|-------------|-------------------------|---|--|----------|-------------------------------------|-------------------------------|
| Lemon sole | <i>Microstomus kitt</i> | ICES Subarea 4 and divisions 3.a and 7.d (North Sea, Skagerrak and Kattegat, eastern English Channel) | European Union Common fisheries policy | C | LC | No |

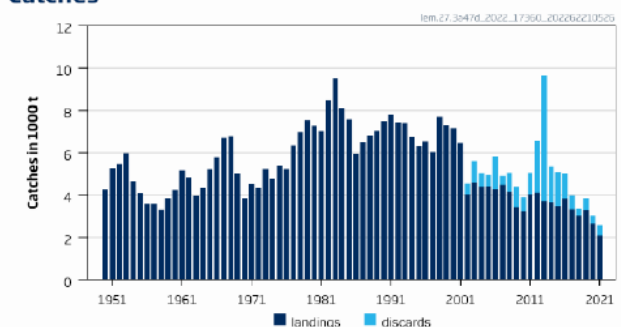

¹ <https://www.iucnredlist.org/>

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.

| Species Name | | Lemon Sole (<i>Microstomus kitt</i>) | |
|--|--|--|------|
| C1 | Category C Stock Status - Minimum Requirements | | |
| | 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. | Yes |
| | 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. | Yes |
| Clause outcome: | | | PASS |
| <p>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.</p> <p>The EU multiannual plan (MAP) for stocks in the North Sea (EU, 2018) and adjacent waters applies to bycatches of this stock. UK and Norway have not requested ICES to provide advice based on the EU MAP. The MAP stipulates that when the F_{MSY} ranges are not available, fishing opportunities should be based on the best available scientific advice.</p> <p>ICES advises that when the MSY approach is applied, catches in 2023 should be no more than 2960 tonnes.</p> <p>Management of lemon sole and witch flounder under a combined species TAC prevents effective control of the single-species exploitation rates and could lead to the overexploitation of either species. ICES advises that management should be implemented at the species level in the entire stock distribution area.</p> <p>In the last stock assessment, the input data were as follows: Commercial catches (international landings and discards), relative abundance data from one survey index (IBTS Q1 [G1022]), and fixed maturity estimates and annual stock weight-at-age data from three surveys (IBTS Q1 [G1022], IBTS Q3 [G2829], BTS Q3 [B2453]) (ICES, 2022).</p> <p>Discarding is known to take place and discards have been quantified for 2002–2021 (rate for 2021 = 19.18%). Latest stock assessment information is shown in Figure 1 below.</p> | | | |
| <p>Catches</p>  | | <p>Biomass index</p>  | |
| <p>Figure 1 Lemon sole in Subarea 4 and divisions 3.a and 7.d. Summary of the stock assessment. Discards are available since 2002. Biomass index is derived from the IBTS Q1 survey for ages 2–5.</p> | | | |

Therefore, fishery removals of the species in the fishery under assessment are included in the stock assessment process, so it 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 stock size index is above $MSY B_{trigger\ proxy} (/_{trigger})$ as it can be seen on the Figure 1 above.

Furthermore, it can be added that fishing pressure on the stock is below the F_{MSY} proxy (Figure 2).

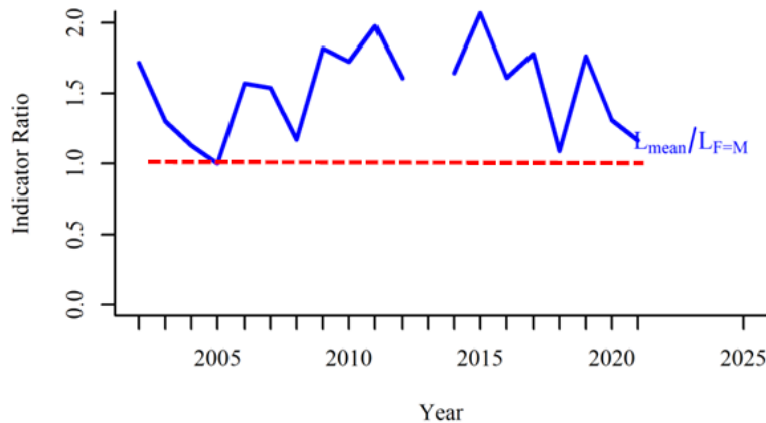


Figure 2 Lemon sole in Subarea 4 and divisions 3.a and 7.d. Indicator ratio $L_{mean}/L_{F=M}$ from the length-based indicator (LBI) method is used for the evaluation of the exploitation status. The exploitation status is below the F_{MSY} proxy when the indicator ratio value is higher than 1 (shown by a dotted red line).

The length-based indicator (LBI) analysis shows that fishing mortality is below likely proxies for MSY reference points (Figure 2). While there is no sign of overexploitation, the stock size is unknown.

Therefore, relative SSB is fluctuating around the mean stock indicators and it could be assumed that the species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy), so it PASSES clause C1.2.

References

EU. 2018. Regulation (EU) 2018/973 of the European Parliament and of the council of 4 July 2018 establishing a multiannual plan for demersal stocks in the North Sea and the fisheries exploiting those stocks, specifying details of the implementation of the landing obligation in the North Sea and repealing Council Regulations (EC) No 676/2007 and (EC) No 1342/2008. Official Journal of the European Union, L 179: 1–13: <http://data.europa.eu/eli/reg/2018/973/oj>.

ICES. 2022. Lemon sole (*Microstomus kitt*) in Subarea 4 and divisions 3.a and 7.d (North Sea, Skagerrak and Kattegat, eastern English Channel). In Report of the ICES Advisory Committee, 2022. ICES Advice 2022, lem.27.3a47d: <https://doi.org/10.17895/ices.advice.19448039>.

Munroe, T.A. 2021. *Microstomus kitt*. The IUCN Red List of Threatened Species 2021: e.T18227047A162705396: <https://dx.doi.org/10.2305/IUCN.UK.2021-2.RLTS.T18227047A162705396.en>.

Links

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