



MarinTrust Standard V2

By-product Fishery Assessment Report Template

MarinTrust Programme

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Table 1 Application details and summary of the assessment outcome

Fishery Under Assessment	Species:	Yellowfin Sole (<i>Limanda aspera</i>)
	Geographical area:	FAO 61 & 77, Northwest and Eastern Central Pacific
	Country of origin of the product:	USA
	Stock:	Bering Sea and Aleutian Islands
Date	13/12/2021	
Report Code	BP256	
Assessor	Virginia Polonio	
Country of origin of the product - PASS	USA	
Country of origin of the product - FAIL	NA	

Application details and summary of the assessment outcome			
Name:			
Address:			
Country: Thailand		Zip:	
Tel. No.:		Fax. No.:	
Email address:		Applicant Code:	
Key Contact:		Title:	
Certification Body Details			
Name of Certification Body:			
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval
Virginia Polonio	Conor Donnelly	0.5	Surveillance 1
Assessment Period	To December 2021		

Scope Details	
Main Species	Yellowfin Sole (<i>Limanda aspera</i>)
Stock	Bering Sea and Aleutian Islands
Fishery Location	FAO 61&77 Bering Sea and Aleutian Islands
Management Authority (Country/ State)	North Pacific Fishery Management Council (NPFMC) and Magnuson-Stevens Act
Gear Type(s)	Otter trawls
Outcome of Assessment	
Peer Review Evaluation	Agree with recommendation
Recommendation	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. Yellowfin sole (<i>Limanda aspera</i>) does not appear as Endangered or Critically Endangered on IUCN's Red List, nor does it appear in CITES appendices; therefore, Yellowfin sole (<i>Limanda aspera</i>) in the FAO areas 61 & 77 is eligible for approval for use as MARINTRUST by-product raw material. The species in the study area is managed under the Magnuson-Stevens Act, the governs allocations of groundfish account to the CDQ Program. The species is managed following the Optimal Yield (OP) approach. The OP of the BSAI groundfish complex is 85% of the historical estimate of MSY, or 1.4 to 2.0 million mt. Based on the annual Stock Assessment and Fishery Evaluation (SAFE) report, the Council recommends to the Secretary of Commerce TACs and apportionments thereof for each target species such as yellowfin sole. The Secretary implements annual TACs which may address up to 2 fishing years, following public comment and Council recommendations at the December Council meeting. Therefore, there is a species-specific management system and the species has been assessed under Category C. Fishery removals of the stock are considered in the 2021 stock assessment processes so the stock PASSES Clause C1. In the last stock assessment, the species has not been considered overfished and overfishing is not occurring, therefore, the stock PASSES Clause C1.2. In order to be approved, the stock assessed must pass both Clause C1.1 and C1.2; therefore, as this is the case here, Yellowfin sole (<i>Limanda aspera</i>) in the FAO areas 61 & 77, by-product covered by this report is APPROVED for the production of fishmeal and fish oil under the current MARINTRUST v2.0 by-product standard.
Fishery Assessment Peer Review Comments
The assessor correctly classified Yellowfin sole (<i>Limanda aspera</i>) in the FAO areas 61 & 77 as category C, reference points are defined to assess status of the stocks relative to. Fishery removals are included in the stock assessment process so the stock PASSES Clause C1.1. The Yellowfin sole (<i>Limanda aspera</i>) in the FAO areas 61 & 77 is considered, in its most recent stock assessment, to have a biomass above the limit reference point. Therefore, it PASSES Clause C1.2. Therefore, Yellowfin sole (<i>Limanda aspera</i>) in the FAO areas 61 & 77 is APPROVED.
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
Yellowfin Sole	<i>Limanda aspera</i>	Bering Sea and Aleutian Islands FAO 61&77	North Pacific Fishery Management Council (NPFMC) and Magnuson-Stevens Act	C	LC	No

¹ <https://www.iucnredlist.org/>

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

CATEGORY C SPECIES

In a whole fish assessment, Category C species are those which make up less than 5% of landings, but which are subject to a species-specific management regime. In most cases this will be because they are a commercial target in a fishery other than the one under assessment.

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		Yellowfin Sole, <i>Limanda aspera</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
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.			
From the last re-approval there have been changes to the input data that include: 1. The 2020 fishery age composition was added. 2. The estimate of the total catch made through the end of 2020 was updated as reported by the NMFS Alaska Regional office. The catch through the end of 2021 was estimated to be 108,086 t. Catch for the 2022 and 2023 projections were assumed to be equal to the mean of the past 5 years (126,929 t). 3. The 2021 NMFS survey biomass estimate and standard error were included. In the last stock assessment, it was recommend retaining the current base model (18.2) for use in setting 2022 and 2023 harvest specifications. The catches and cumulative one can be seen in the figure below. (figure 1)			

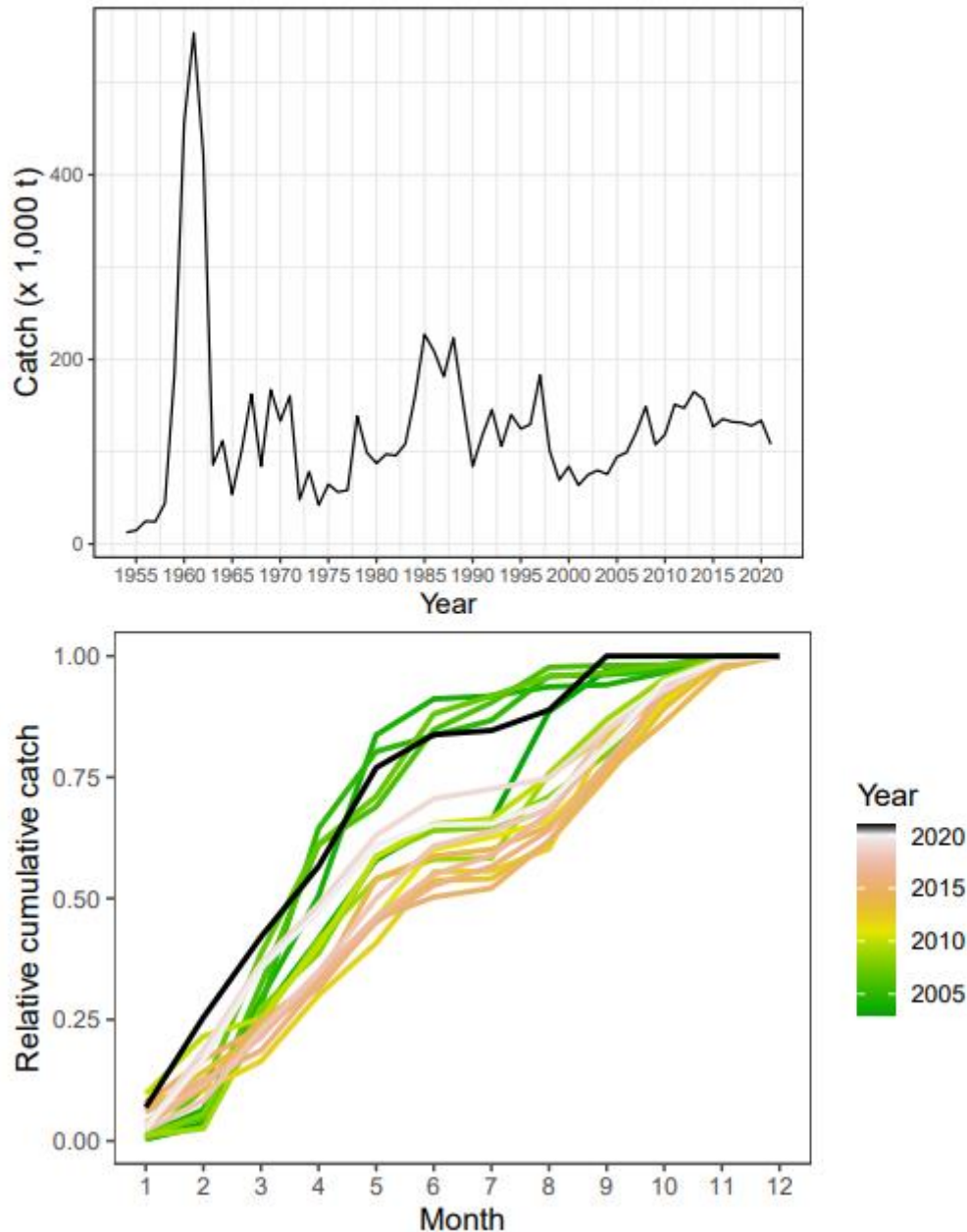


Figure 1. Yellowfin Sole annual total catch (1,000s t) in the Eastern Bering Sea from 1954-2021 (upper panel). Yellowfin Sole annual cumulative catch by month and year (non CDQ) 2003-October 1, 2021 (lower panel). Source: BSAI Yellowfin sole 2021.

Catch of Yellowfin Sole as of October 1, 2021 in the Bering Sea and Aleutian Islands was 88,895 t. Over the past 5 years (2016 - 2020), 82.2% of the catch has taken place by this date therefore, fishery removals are considered in the stock assessment and 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.

In the Eastern Bering Sea (EBS) bottom trawl survey performed in 2021, the EBS Yellowfin Sole biomass was estimated to be 19% lower than estimated by the 2019 EBS bottom trawl survey, at 1,622,910 t. Spawning biomass estimated by Model 18.2 was 1.73 * BMSY .

This assessment updates last year's assessment with total and spawning biomass estimates that are lower than the 2020 assessment. This is due to a long-term decline in the stock. However, this year's ABC and OFL are higher than the 2020 assessment, due to revisiting calculations and assumptions for annual weight at age.

Increased management quantities are the result of increased growth rate, which translates into a stock that is more resilient to harvest.

Yellowfin Sole female spawning biomass continues to be above BMSY and the annual harvest remains below the ABC level (figure 2).

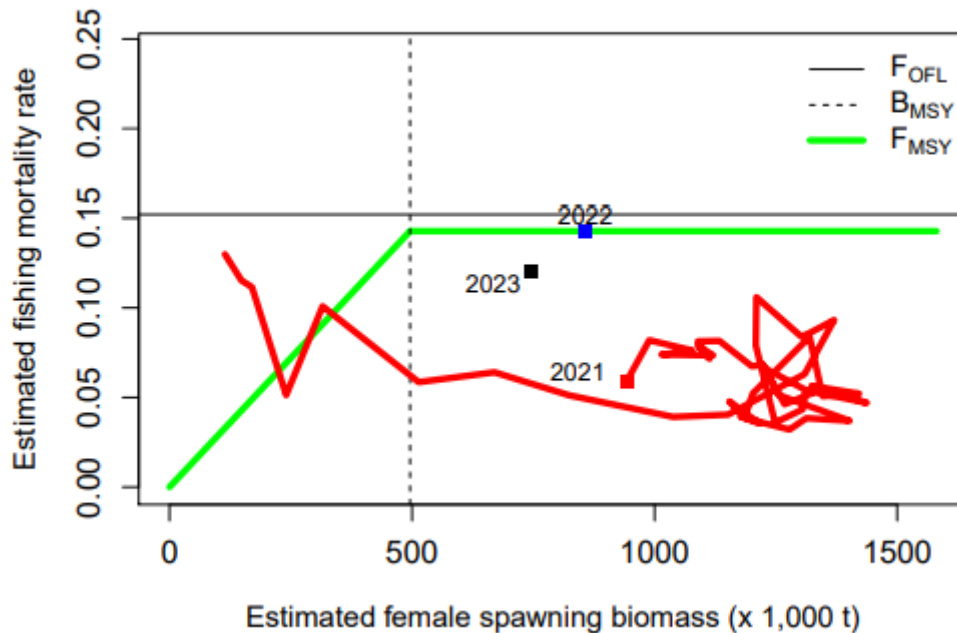


Figure 2. Fishing mortality rate and female spawning biomass from 1975 to 2021 compared to the F35% and F40% control rules, based on Model 18.2. Vertical line is B35%. Squares indicate estimates for 2021, 2022, and 2023. Source: BASAI Yellowfin sole 2021.

Yellowfin sole is not being subjected to overfishing, is not overfished, and is not approaching an overfished condition. Therefore, the stock is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy) and it meets Clause C1.2 .

References

Spies, I., et al 2021. Assessment of the Yellowfin Sole Stock in the Bering Sea and Aleutian Islands. NPFMC Bering Sea and Aleutian Islands SAFE.

FMP for Groundfish of the BSAI Management Area. November 2020.

https://www.fishsource.org/stock_page/1955

Links

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