



MarinTrust Standard V2

By-product Fishery Assessment *Albacore tuna (Thunnus alalunga) in FAO 51 & 57 Indian Ocean*

MarinTrust Programme

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Table 1 Application details and summary of the assessment outcome

Fishery Under Assessment	Species:	Albacore tuna (<i>Thunnus alalunga</i>)
	Geographical area:	FAO 51 & 57 Indian Ocean
	Country of origin of the product:	Seychelles, South Africa
	Stock:	Albacore tuna from FAO 51 & 57, Indian Ocean
Date	18 August 2022	
Report Code	USA09	
Assessor	Matthew Jew	
Country of origin of the product - PASS	USA (Flag Countries: Seychelles and South Africa)	
Country of origin of the product - FAIL	NA	

Application details and summary of the assessment outcome			
Company Name(s): The Scoular Company			
Country: USA			
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	Initial
Assessment Period	Up to August 2022		

Scope Details	
Main Species	Albacore Tuna (<i>Thunnus alalunga</i>)
Stock	Albacore Tuna from FAO 51 & 57, Indian Ocean
Fishery Location	FAO 51 & 57 Indian Ocean
Management Authority (Country/ State)	Indian Ocean Tuna Commission (IOTC), Seychelles Fishing Authority, Department of Agriculture, Forestry and Fisheries (South Africa)
Gear Type(s)	Longlines, Purse seines
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 Marine trust raw material. Albacore Tuna (<i>Thunnus alalunga</i>) do not appear as Endangered or Critically Endangered on IUCN's Red List, nor do they appear in CITES appendices; therefore, <i>Thunnus alalunga</i> is eligible for approval for use as Marine trust by-product raw material.</p> <p>The most recent stock assessment for Indian Ocean Albacore Tuna was conducted in 2019 by the Indian Ocean Tuna Commission (IOTC), however, a more recent stock assessment is currently underway (committee met in July 2022). This assessment report is based upon the 2019 stock assessment (using Stock Synthesis III), management advice published for 2021, and the preliminary 2022 stock assessment.</p> <p>The assessment considers Albacore Tuna in the Indian Ocean to be a single stock (which includes FAO subareas 51 & 57) and this is the only stock under assessment. The stock is subject to a specific management regime, therefore it was assessed under Category C.</p> <p>Fishery removals are included in the stock assessment and it PASSES Clause C1.1. The stock is considered, in its most recent stock assessment, to have biomass above the limit reference point, it PASSES Clause C1.2.</p> <p>Therefore, Albacore Tuna in FAO subareas 51 & 57 (Indian Ocean) is APPROVED for the production of fishmeal and fish oil under the current MarineTrust v2.0 by-products.</p>
Fishery Assessment Peer Review Comments
<p>The internal peer reviewer agrees with the assessor's determination, who correctly classified Indian Ocean Albacore Tuna under category C, as reference points are defined to assess status of the stock relative to.</p> <p>The internal peer reviewer notes that this initial assessment is based on the IOTC 2019 stock assessment, its management advice published for 2021, and its preliminary 2022 stock assessment.</p> <p>Fishery removals are included in the stock assessment process, so the stock of Indian Ocean Albacore Tuna PASSES Clause C1.1. Also, the stock is considered, in its most recent stock assessment, to have a biomass above the limit reference point. Therefore, it PASSES Clause C1.2.</p> <p>Therefore, Albacore Tuna in FAO subareas 51 & 57 (Indian Ocean) 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
Albacore Tuna	<i>Thunnus alalunga</i>	Albacore Tuna in FAO 51 & 57 (Indian Ocean)	Indian Ocean Tuna Commission (IOTC) Seychelles Fishing Authority, Department of Agriculture, Forestry and Fisheries (South Africa)	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		Albacore Tuna (<i>Thunnus alalunga</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.	Pass
	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.	Pass

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.

The most recent stock assessment was carried out in 2019 by the Indian Ocean Tuna Commission (IOTC) and uses a Stock Synthesis III (SS3) model. In the 2022 assessment, this fully integrated model uses fishing mortality in the assessment and forecasts. Long term catches are presented in Figure 1.

Therefore, fishery removals of the stock, including from the fishery under assessment, are included in the stock assessment process. **The stock passes Clause C1.1.**

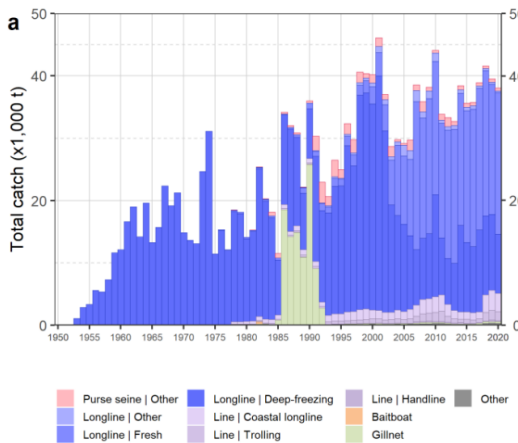


Figure 1. Catches of Albacore Tuna by gear type in the Indian Ocean from 1953 to 2020. Source: IOTC 2021.

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 2015, the IOTC adopted Resolution 15/10 which defined target/limit reference points and decision framework. Resolution 15/10 defined the limit reference point to be $0.4 \cdot SB_{MSY}$. The 2019 assessment model, SS3, showed that fishing mortality (F_{2017}/F_{MSY}) is 1.346 (0.588-2.171). Thus, the stock status (relative to target reference points: B_{MSY} and F_{MSY}) is not overfished, but is subject to overfishing (Figure 2). In Figure 2, all trajectory points are to the right of the limit and target reference points for SB. Thus, current SB is considered to be above the target reference point (SB_{MSY}), and thus above the limit reference point of $0.4 \cdot SB_{MSY}$.

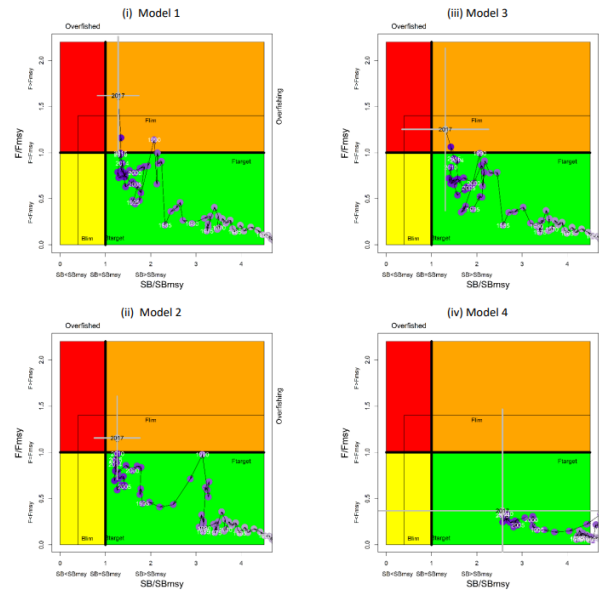


Figure 2. Kobe plots of four SS3 models for Indian Ocean Albacore Tuna. Purple circles indicate the trajectory of the point estimates for the spawning biomass (SB) ratio and fishing mortality (F) ratio for each year from 1950 to 2017 (the grey lines represent the 95 percentiles of the 2017 estimate). Target (F_{target} and SB_{target}) and limit (F_{lim} and SB_{lim}) reference points are shown as vertical (spawning biomass) and horizontal (fishing mortality) lines.
Source: originally from IOTC 2019

Furthermore, the preliminary 2022 IOTC stock assessment analysed the stock statuses as of the year 2020. This assessment uses a Statistical-Catch-At-Size Model, but compared with the model used in the 2019 assessment: SS3. The preliminary results from the 2022 stock assessment indicate that the Indian Ocean Albacore Tuna stock, is not overfished nor subject to overfishing (Figure 3). Figure 3 shows that both model runs for the 2020 stocks are above SSB_{limit} ($0.4 \times SSB_{MSY}$) and below F_{limit} ($1.4 \times F_{MSY}$).

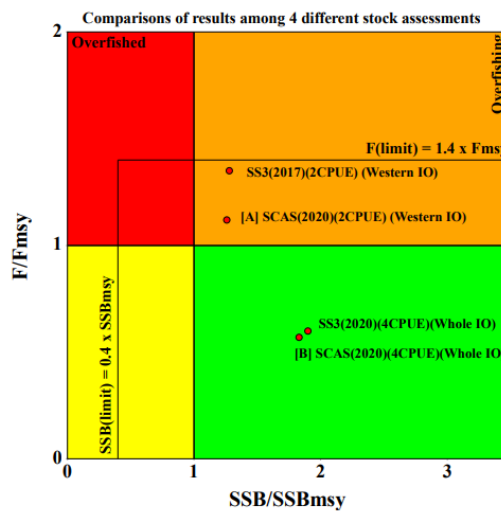


Figure 3. Kobe plots for SS3 and SCAS models for Indian Ocean Albacore Tuna using both 2017 and 2020 data. Target and limit reference points are shown as vertical (spawning biomass) and horizontal (fishing mortality) lines.
Source: IOTC 2022

Therefore, the stock is considered, in its most recent stock assessment, to have biomass above the limit reference point. **The stock passes Clause C1.2.**

References

- IOTC. 2019. Report of the Seventh Session of the IOTC Working Party on Temperate Tunas: Assessment Meeting. 23-27 July 2019. Shizuoka, Japan. https://www.iotc.org/documents/WPTmT/702/R_E
- IOTC. 2021. Status of the Indian Ocean albacore (ALB: *Thunnus alalunga*) resource. Available at https://www.iotc.org/sites/default/files/documents/science/species_summaries/english/1_Albacore2021E.pdf.

IOTC. 2022. Preliminary stock assessments of Indian Ocean albacore tuna using Statistical-Catch-At-Size (SCAS). Authors: Nishida T & Kitakado T. <https://www.iotc.org/documents/WPTmT/802/INF01>.

Links

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