



MarinTrust Standard V2

By-product Fishery Assessment *VNM17 – Albacore in FAO area 71 (Western Central Pacific)*

MarinTrust Programme

Unit C, Printworks

22 Amelia Street

London

SE17 3BZ

E: standards@marin-trust.com

T: +44 2039 780 819

Table 1 Application details and summary of the assessment outcome

Fishery Under Assessment	Species:	Albacore tuna (<i>Thunnus alalunga</i>)
	Geographical area:	FAO area 71 (Western Central Pacific)
	Country of origin of the product:	Fiji, Solomon Islands
	Stock:	Northern and Southern Pacific albacore tuna
Date	August 2024	
Report Code	VNM017	
Assessor	Jose Peiro Crespo	
Country of origin of the product - PASS	Fiji, Solomon Islands	
Country of origin of the product - FAIL	None	

Application details and summary of the assessment outcome			
Company Name(s): Thien Quynh Co. Ltd, Thien Quynh Khanh Hoa One Sole Member Limited Liability Company			
Country: Vietnam			
Email address:		Applicant Code:	
Certification Body Details			
Name of Certification Body:			
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval
Jose Peiro Crespo	Sam Peacock	0.2	Surveillance 2
Assessment Period	Up to August 2025		

Scope Details	
Main Species	Albacore tuna (<i>Thunnus alalunga</i>)
Stock	Northern and Southern Pacific albacore tuna
Fishery Location	FAO area 71
Management Authority (Country/ State)	Inter-American Tropical Tuna Commission (IATTC) & Western and Central Pacific Fisheries Commission (WCPFC)
Gear Type(s)	Not provided
Outcome of Assessment	
Peer Review Evaluation	Agree with assessor's recommendation
Recommendation	Approve

Table 2. Assessment Determination

Assessment Determination
<p>Albacore tuna (<i>Thunnus alalunga</i>) is classified as "Least Concern" on the IUCN Red List of Threatened Species and is not listed in the appendices of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). As a result, since the species is neither classified as Endangered nor Critically Endangered on the IUCN Red List and does not appear in CITES appendices, it qualifies for approval as a Marin Trust by-product raw material. The Northern and Southern Pacific albacore stocks are managed using biomass-based limit reference points and have therefore been assessed under Category C.</p> <p>The Pacific region is home to two distinct albacore tuna stocks: the northern and southern Pacific albacore. The most recent stock assessment for the northern stock was carried out by the Western and Central Pacific Fisheries Commission (WCPFC) in 2023, while the southern Pacific stock was assessed in 2021 through a collaborative effort by the WCPFC and the Inter-American Tropical Tuna Commission (IATTC). Both assessments took into account fishery removals during the evaluation process. The findings confirmed that the biomass levels of both stocks remain above their respective limit reference points, ensuring the fishery's compliance with clauses C1.1 and C1.2.</p> <p>Therefore, albacore tuna (<i>Thunnus alalunga</i>) in FAO 71 Western Central Pacific is granted approval for the production of fishmeal and fish oil, adhering to the existing MarinTrust v2.3 by-products standard.</p>
Fishery Assessment Peer Review Comments
<p>The peer reviewer agrees that these stocks are eligible for MarinTrust approval, and that both should be assessed under Category C. The assessor has demonstrated, with references, that the stocks are subject to regular stock assessments which incorporate fishery removals, and that stock biomass is currently above the limit reference point level in both cases. For these reasons, the peer reviewer agrees that this byproduct should remain approved for use as a raw material.</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 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>	Northern and Southern Pacific albacore tuna	Yes	C	Least Concern	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	
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
<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><u>Southern Pacific albacore</u></p> <p>The most recent stock assessment for albacore tuna in the south Pacific was conducted in 2021 using catch (and other) data up to 2019 (see figure below). The previous (2018) stock assessment was restricted to the convention area under the jurisdiction of the WCPFC (Tremblay-Boyer et al., 2018a). The assessment conducted in 2021 was the first complete attempt at a spatially structured South Pacific wide assessment (covering the entire stock including both the WCPFC and IATTC convention areas), although a previous assessment applied an areas-as-fleets approach to the stock across the entire South Pacific (Hoyle et al., 2012). Fishery removals are incorporated into the stock assessment, and C1.1 is met.</p>			

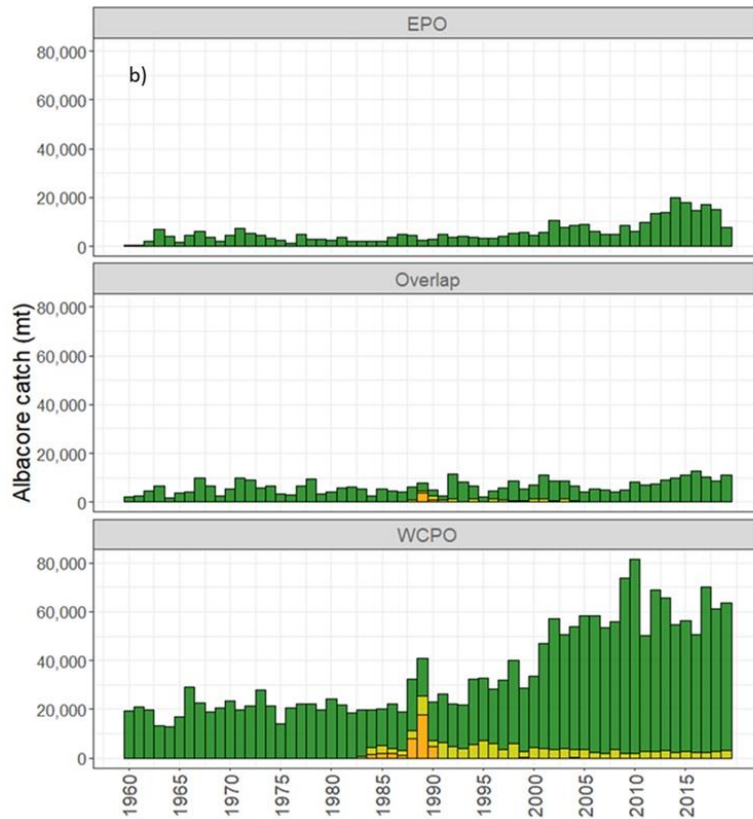


FIGURE 1 HISTORICAL CATCHES OF ALBACORE ACROSS THE MODEL REGION FROM 1952-2019 BY GEAR TYPE (ADAPTED FROM WCPFC 2022).

Northern Pacific albacore

The most recent available stock assessment for the northern Pacific albacore stock was conducted in 2023 by the Western and Central Pacific Fisheries Commission (WCPFC) using catch (and other) data up to 2021. A length-based, age- and sex-structured Stock Synthesis Model was used to assess the stock (WCPFC 2024). Fishery removals are incorporated into the stock assessment, and **C1.1 is met**.

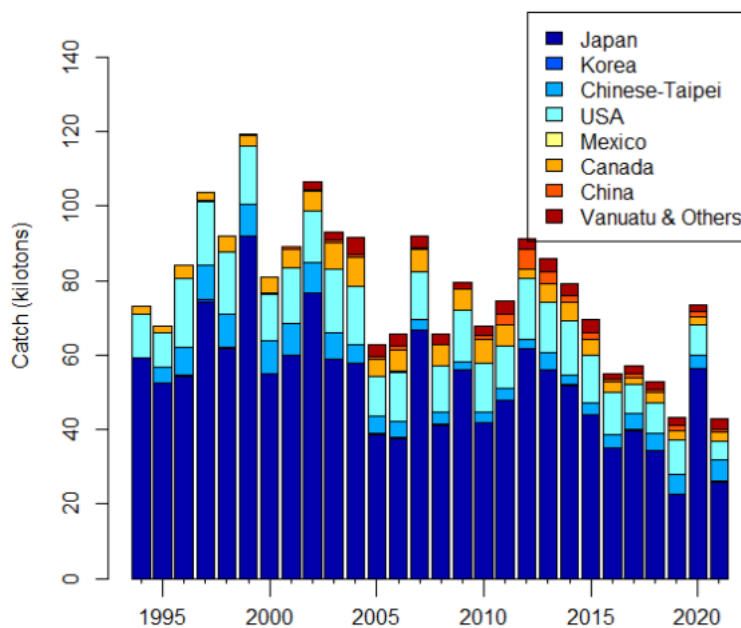


FIGURE 2. ESTIMATED TOTAL ANNUAL CATCH OF NORTH PACIFIC ALBACORE (THUNNUS ALALUNGA) BY ALL COUNTRIES HARVESTING THE STOCK, 1994-2021 (ISC 2023).

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.

Southern Pacific albacore

The stock is assessed relative to a range of potential reference points (WCPFC 2021). The main conclusions of the 2021 assessment are:

- Spawning potential has generally declined across the model period, with that decline increasing in the most recent years. **The assessment indicates the stock is not overfished, and there was zero estimated risk of the stock being below 20%SBF =0** (reference point used to indicate overfishing). However, decline in the latest estimated $S_{B_{latest}}/S_{B_{F=0}}$ (median 0.36; 0.27 - 0.44, 10th and 90th percentiles) are notably more pessimistic than those of $S_{B_{recent}}/S_{B_{F=0}}$ (median 0.47; 0.40 - 0.56, 10th and 90th percentiles). The general trends are consistent for estimates across all regions of the South Pacific stock, and for the WCPFC-CA only.

The most recent stock assessment concluded that the stock biomass is currently above the limit reference point, and therefore **C1.2 is met.**

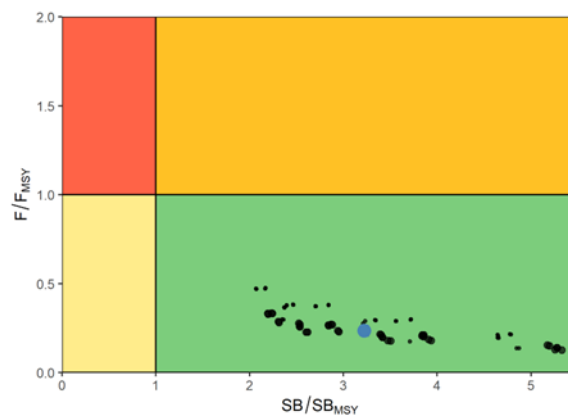


FIGURE 3. KOBE PLOT SUMMARIZING THE PACIFIC-WIDE RESULTS FOR EACH OF THE MODELS IN THE STRUCTURAL UNCERTAINTY GRID FOR THE 'LATEST' (2019) PERIOD (WCPFC 2022).

Northern Pacific albacore

The stock is assessed relative to a range of reference points (the target ($F_{45\%SPR}$), threshold ($30\%SSB_{current}$, $F=0$), and limit ($14\%SSB_{current}$, $F=0$) reference points) (WCPFC 20214). The main conclusions of the 2023 assessment are:

- The SSB_{2021} was estimated to be approximately 54% (95% CI: 40 – 68%) of $SSB_{current}$, $F=0$ and 1.8 (95% CI: 1.3 – 2.3) times greater than the estimated threshold reference point. The estimated current fishing intensity ($F_{2018-2020}$) was estimated to be $F_{59\%SPR}$ (95% CI: $F_{72\%SPR}$ – $F_{46\%SPR}$) and was lower than both the $F_{45\%SPR}$ target reference point and the average fishing intensity during 2002 – 2004.
- The stock is likely not overfished relative to the threshold ($30\%SSB_{current}$, $F=0$) and limit ($14\%SSB_{current}$, $F=0$) reference points adopted by the WCPFC and IATTC, and the stock is likely not experiencing overfishing relative to the adopted target reference point ($F_{45\%SPR}$) (WCPFC 2024) (see figure below).

The most recent stock assessment concluded that the stock biomass is currently above the limit reference point, and therefore **C1.2 is met.**

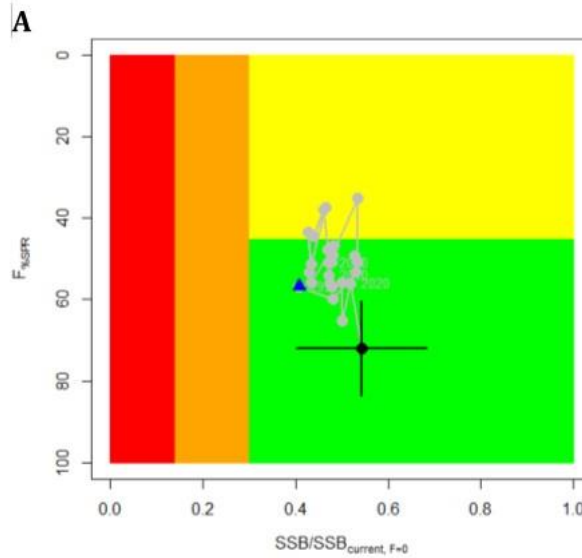


Figure 4 Stock status phase plot showing the status of the north Pacific albacore (*Thunnus alalunga*) stock relative to the biomass-based threshold (30%SSB_{current}, F=0) and limit (14%SSB_{current}, F=0) reference points, and fishing intensity-based target reference point (F45%SPR) over the modeling period (1994 – 2021) (WCPFC 2024).

References

- ISC 2023. International Scientific Committee for Tuna and Tuna-Like Species in the North Pacific Ocean. Stock Assessment of Albacore Tuna in the North Pacific Ocean in 2023. https://isc.fra.go.jp/working_groups/albacore.html
- WCPFC (2021). Stock assessment of South Pacific albacore tuna. <https://meetings.wcpfc.int/node/12551>
- WCPFC (2022). Stock status and advice key documents, South Pacific albacore tuna. <https://www.wcpfc.int/doc/04/south-pacific-albacore-tuna>
- WCPFC (2024). North Pacific albacore tuna, stock assessment summary. <https://www.wcpfc.int/doc/05/north-pacific-albacore-tuna>

Links

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

CATEGORY D SPECIES

Category D species are those which 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 a risk-assessment style approach must be taken.

D1	Species Name		
	Productivity Attribute	Value	Score
	Average age at maturity (years)		
	Average maximum age (years)		
	Fecundity (eggs/spawning)		
	Average maximum size (cm)		
	Average size at maturity (cm)		
	Reproductive strategy		
	Mean trophic level		
	Average Productivity Score		
	Susceptibility Attribute	Value	Score
	Availability (area overlap)		
	Encounterability (the position of the stock/species within the water column relative to the fishing gear)		
	Selectivity of gear type		
	Post-capture mortality		
	Average Susceptibility Score		
	PSA Risk Rating (From Table D3)		
	Compliance rating		
	Further justification for susceptibility scoring (where relevant) <i>For susceptibility attributes, please provide a brief rationale for scoring of parameters where there may be uncertainty affecting your decision</i>		
	References		
Standard clauses 1.3.2.2			

Table D2 - Productivity / Susceptibility attributes and scores.

Productivity attributes	High productivity (Low risk, score = 1)	Medium productivity (medium risk, score = 2)	Low productivity (high risk, score = 3)
Average age at maturity	<5 years	5-15 years	>15 years
Average maximum age	<10 years	10-25 years	>25 years
Fecundity	>20,000 eggs per year	100-20,000 eggs per year	<100 eggs per year
Average maximum size	<100 cm	100-300 cm	>300 cm
Average size at maturity	<40 cm	40-200 cm	>200 cm
Reproductive strategy	Broadcast spawner	Demersal egg layer	Live bearer
Mean Trophic Level	<2.75	2.75-3.25	>3.25

Susceptibility attributes	Low susceptibility (Low risk, score = 1)	Medium susceptibility (medium risk, score = 2)	High susceptibility (high risk, score = 3)
Areal overlap (availability) Overlap of the fishing effort with the species range	<10% overlap	10-30% overlap	>30% overlap
Encounterability The position of the stock/species within the water column relative to the fishing gear, and the position of the stock/species within the habitat relative to the position of the gear	Low overlap with fishing gear (low encounterability).	Medium overlap with fishing gear.	High overlap with fishing gear (high encounterability). Default score for target species
Selectivity of gear type Potential of the gear to retain species	a Individuals < size at maturity are rarely caught	a Individuals < size at maturity are regularly caught.	a Individuals < size at maturity are frequently caught
	b Individuals < size at maturity can escape or avoid gear.	b Individuals < half the size at maturity can escape or avoid gear.	b Individuals < half the size at maturity are retained by gear.
Post-capture mortality (PCM) The chance that, if captured, a species would be released and that it would be in a condition permitting subsequent survival	Evidence of majority released post-capture and survival.	Evidence of some released post-capture and survival.	Retained species or majority dead when released.

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			
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.		
D4.2	There is no substantial evidence that the fishery has a significant negative impact on the species.		
Outcome:			
Evidence			
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.			
D4.2 There is no substantial evidence that the fishery has a significant negative impact on the species.			
References			
Links			
MarinTrust Standard clause		1.3.2.2, 4.1.4	
FAO CCRF		7.5.1	
GSSI		D.5.01	