



MarinTrust Standard V2

By-product Fishery Assessment Bigeye tuna (*Thunnus obesus*), FAO 61,71 and 81 (Northwest, Western Central and Southwest 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:	Bigeye tuna (<i>Thunnus obesus</i>)
	Geographical area:	FAO 61,71 and 81 (Northwest, Western Central and Southwest Pacific)
	Country of origin of the product:	USA (Seychelles, South Africa)
	Stock:	Northwest, Western Central and Southwest Pacific
Date	July 2024	
Report Code	USA22	
Assessor	Blanca Gonzalez	
Country of origin of the product - PASS	USA (Seychelles, South Africa)	
Country of origin of the product - FAIL	None	

Application details and summary of the assessment outcome			
Company Name(s): Indian Ocean Tuna Ltd			
Country: USA (Seychelles, South Africa)			
Email address:		Applicant Code:	
Certification Body Details			
Name of Certification Body:		LRQA	
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval
Blanca Gonzalez	Sam Peacock	0.5	Surveillance 1
Assessment Period	July 2024 – July 2025		

Scope Details	
Main Species	Bigeye tuna (<i>Thunnus obesus</i>)
Stock	Northwest, Western Central and Southwest Pacific
Fishery Location	FAO 61,71 and 81
Management Authority (Country/ State)	Western and Central Pacific Fisheries Commission (WCPFC)
Gear Type(s)	Longline, baitboat, purse seine
Outcome of Assessment	
Peer Review Evaluation	Agree with recommendation
Recommendation	PASS

Table 2. Assessment Determination

Assessment Determination
<p>Bigeye tuna (<i>Thunnus obesus</i>) was assessed as a category C species considering that it is a Vulnerable species by the IUCN, it is not included in any CITES Appendixes, and the stock is managed relative to established reference points.</p> <p>Bigeye tuna in Northwest, Western Central and Southwest Pacific (FAO 61, 71 and 81) is subject to regular stock assessment by the Western and Central Pacific Fisheries Commission (WCPFC). The last assessment was published in February 2024 using catches data in several models. For all models biomass was above the limit reference point and Kobe plot indicate that the stock is not overfished nor undergoing overfishing.</p> <p>The bigeye tuna by-product meets the Marin Trust requirements and it should be remained approved for use as a raw material.</p>
Fishery Assessment Peer Review Comments
<p>The peer reviewer agrees that this bigeye tuna stock should be assessed under Category C. The assessor has provided adequate evidence to demonstrate that the stock meets the requirements of category C, and therefore the peer reviewer agrees that the byproduct should remain approved for use as a raw material.</p>
Notes for On-site Auditor
<p>There are no concerns that requires attention from the on-site assessor</p>

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
Bigeye tuna	<i>Thunnus obesus</i>	FAO 61,71 and 81 (Northwest, Western Central and Southwest Pacific)	Yes	C	Vulnerable ³	No

¹ <https://www.iucnredlist.org/>

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

³ <https://www.iucnredlist.org/species/21859/46912402>

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		Bigeye tuna (<i>Thunnus obesus</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 clause is met considering that:

The bigeye tuna most recent assessment was published in February 2024 by The Commission for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean. Assessment stock status is based upon a 54-model structural uncertainty grid with four axes: steepness with three levels, tag mixing period with two levels, and size and age composition data with three levels each. Time series of total annual catch by fishing gear over the full assessment period in all region is also included (figure 1). Thus, removals of the species are included in the stock assessment process (WCPFC 2024).

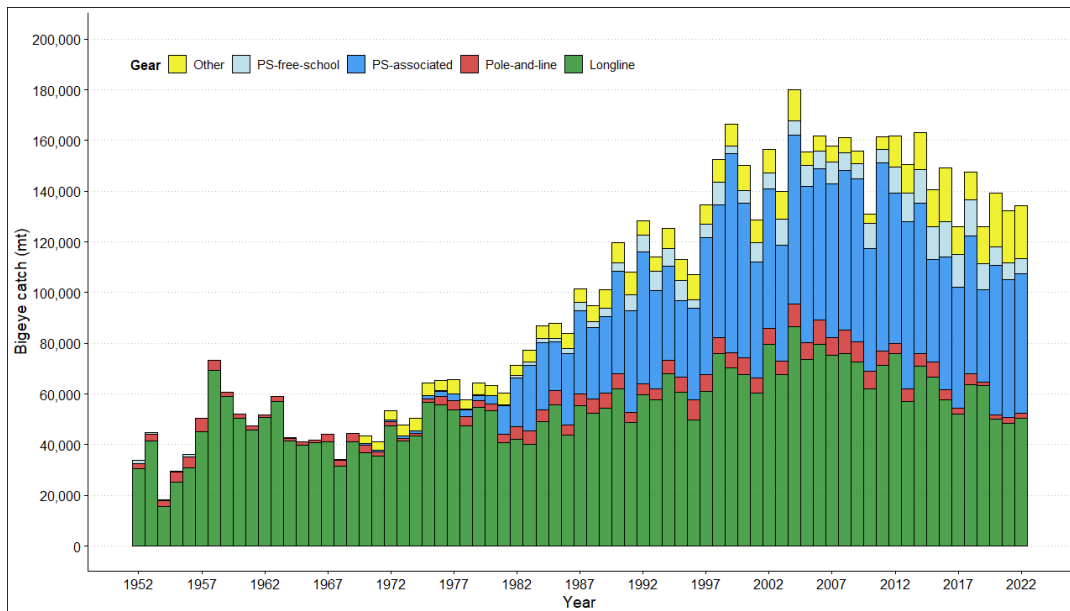


Figure 1. Bigeye tuna catches by fishing gear used for the diagnostic model over the full assessment period (WCPFC 2024).

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 Clause is met considering that:

The 2024 bigeye tuna assessment indicates that for all models in the grid $SB_{recent}/SB_{F=0}$ was above the biomass limit reference point; kobe plots show that the stock status estimates across the 54 models are all within plot zones that indicate that the stock is not overfished nor undergoing overfishing (figure 1) (WCPFC 2024).

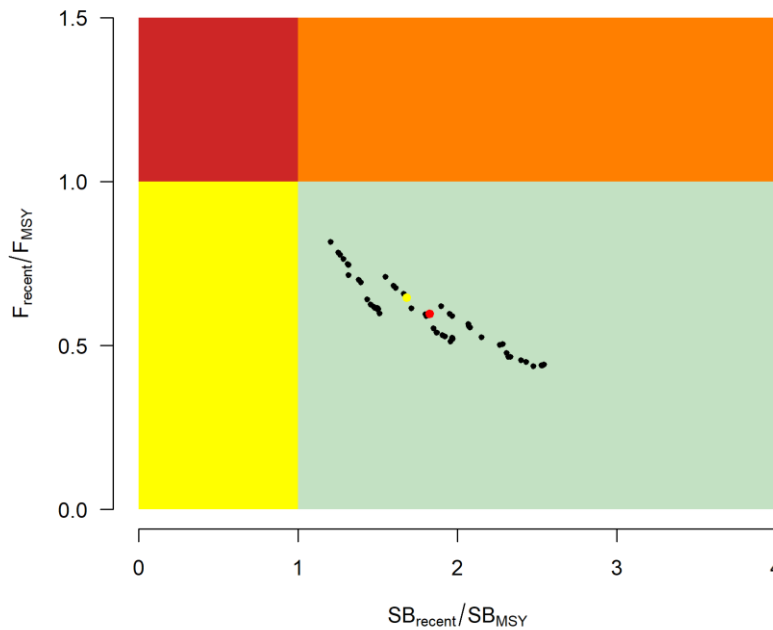


Figure 1. Kobe plot for the recent spawning potential (2018–2021) summarizing the results for each of the models in the structural uncertainty grid. The plots represent estimates of stock status in terms of spawning biomass depletion and fishing mortality. The yellow point is the 2023 diagnostic model and red point is the median (WCPFC 2024).

References

WCPFC (2024). The Commission for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean. SCIENTIFIC COMMITTEE. WCPFC BIGEYE TUNA (Thunnus obesus). STOCK STATUS AND MANAGEMENT ADVICE. <https://www.wcpfc.int/current-stock-status-and-advice>

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	NA		
	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	