



MarinTrust Standard V2

By-product Fishery Assessment *Skipjack tuna in FAO Area 77 (Eastern Pacific Ocean)*

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:	Skipjack tuna, <i>Katsuwonus pelamis</i>
	Geographical area:	FAO Area 77
	Country of origin of the product:	Mexico
	Stock:	Eastern Pacific Ocean Skipjack
Date	February 2023	
Report Code	MEX02	
Assessor	Sam Peacock	
Country of origin of the product - PASS	Mexico	
Country of origin of the product - FAIL	None	

Application details and summary of the assessment outcome			
Company Name(s): Maz International			
Country: Mexico			
Email address:		Applicant Code:	
Certification Body Details			
Name of Certification Body:		LRQA	
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/Re-approval
Sam Peacock	Kate Morris	0.2	Re-approval
Assessment Period	February 2023 – February 2024		

Scope Details	
Main Species	Skipjack tuna, <i>Katsuwonus pelamis</i>
Stock	Eastern Pacific Ocean Skipjack
Fishery Location	FAO Area 77
Management Authority (Country/ State)	Inter-American Tropical Tuna Commission (IATTC)
Gear Type(s)	Purse seine, longline, pole & line, handline
Outcome of Assessment	
Peer Review Evaluation	Pass
Recommendation	Pass

Table 2. Assessment Determination

Assessment Determination
<p>Skipjack tuna has been categorised by the IUCN as a species of Least Concern, and it does not appear in the CITES appendices. Skipjack in the Eastern Pacific Ocean (EPO) is managed relative to proxy reference points by the Inter-American Tropical Tuna Commission (IATTC), and was thus assessed under Category C.</p> <p>The most recent stock assessment for skipjack in the EPO was conducted in 2021, using all available catch information. Although there are considerable uncertainties associated with the assessment, it is considered reliable for use to produce management advice. The results of the 2021 assessment indicated a low probability that stock biomass is currently below the target reference point, and therefore a very low probability it is below any potential limit reference point. For these reasons skipjack in the EPO continues to meet the MT byproduct requirements and should be re-approved for use as a raw material.</p>
Fishery Assessment Peer Review Comments
<p>The by-product fishery under assessment here is the Skipjack Tuna (<i>Katsuwonus pelamis</i>) fishery, pursued by vessels in FAO fishing area 77. Skipjack tuna is managed by Inter-American Tropical Tuna Commission (IATTC) and flag state regulations. For this Marin Trust assessment, the Skipjack tuna stock was scored against Category C.</p> <p>The species scoring table has been completed by the auditor with sufficient evidence presented to support their final determination.</p> <p>The peer review supports the auditor’s recommendation to pass the FAO 77, Skipjack stock pursued by the fishery under the Marin Trust IFFO RS v2.0 by-fishery standard for the production of fishmeal and fish oil.</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
Skipjack tuna	<i>Katsuwonus pelamis</i>	EPO Skipjack	Yes	C	Least Concern ³	No

¹ <https://www.iucnredlist.org/>

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

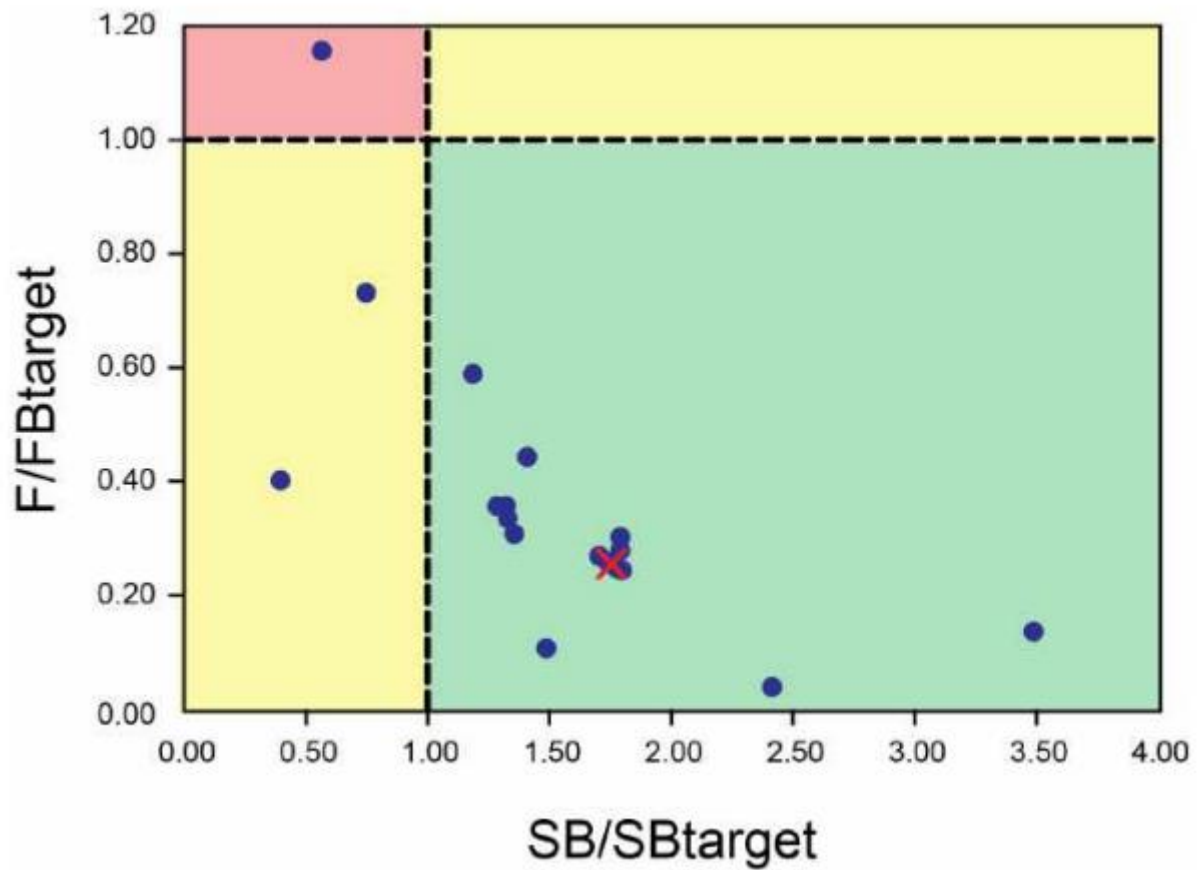
³ <https://www.iucnredlist.org/species/170310/46644566>

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		Skipjack 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>Skipjack tuna in the EPO is subject to integrated statistical age-structured catch-at-length stock assessments carried out by the IATTC. Although the assessment is termed “interim” by IATTC staff, and it does contain significant sources of uncertainty, it is also considered to be reliable for the purposes of management decision-making (IATTC 2022). The assessment incorporates all available data from across the EPO, including catch data but also size and age frequency data and other sources.</p> <p>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.</p> <p>MSY-based estimates and reference points cannot be estimated due to the nature of the model used. Instead the IATTC management process utilises a conservative proxy for target biomass of $SBR = 0.3$, with the fishing mortality corresponding to that target biomass used as the target reference point for fishing mortality (IATTC 2022). The reference model and most of the sensitivity analyses conducted in 2021 estimated that current stock biomass is above the target reference point and that fishing mortality is below the target reference point. Although there are no limit reference points established for the stock, the high probability that biomass is currently above the target reference point equates to a high probability that it is above any possible limit reference point. Therefore the byproduct meets the requirements of this clause.</p>			



Kobe plot for skipjack tuna in the EPO. Each dot represents the stock status estimate from one of the assessment models. Dashed lines indicate the target reference points (IATTC 2022).

References

IATCC (2022). Report on the tuna fishery, stocks, and ecosystem in the Eastern Pacific Ocean in 2021. https://www.iattc.org/GetAttachment/99dc87b3-cf5f-4b7b-8e6e-f5aa9cab0fce/No-20-2022_Tunas,-stocks-and-ecosystem-in-the-eastern-Pacific-Ocean-in-2021.pdf

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	