



MarinTrust Standard V2

By-product Fishery Assessment Report Template

MarinTrust Programme

Unit C, Printworks

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Table 1 Application details and summary of the assessment outcome

Fishery Under Assessment	Species:	Skipjack tuna, <i>Katsuwonus pelamis</i>
	Geographical area:	FAO Areas 34 and 47 Atlantic Eastern Central and Southeast
	Country of origin of the product:	Ivory Coast
	Stock:	East Atlantic skipjack tuna
Date	7 April 2021	
Report Code	BP43	
Assessor	Geraldine Criquet	
Country of origin of the product - PASS	Ivory Coast	
Country of origin of the product - FAIL	NA	

Application details and summary of the assessment outcome			
Name: Marine Biotechnology Products			
Address:			
Country: Ivory Coast		Zip:	
Tel. No.:		Fax. No.:	
Email address:		Applicant Code:	
Key Contact:		Title:	
Certification Body Details			
Name of Certification Body:		Global Trust Certification	
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/ Re-approval
Geraldine Criquet	Sam Dignan	0.5	Surveillance 1
Assessment Period	April 2021		

Scope Details	
Main Species	Skipjack tuna, <i>Katsuwonus pelamis</i>
Stock	East Atlantic skipjack tuna
Fishery Location	FAO Areas 34 and 47 Atlantic Eastern Central and Southeast
Management Authority (Country/ State)	International Commission for the Conservation of Atlantic Tunas (ICCAT)/Ivory Coast
Gear Type(s)	Longline, pole & line, and purse seine
Outcome of Assessment	
Peer Review Evaluation	Agree with assessment outcome based on evidence provided
Recommendation	APPROVED

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 MARINTRUST raw material. Skipjack tuna (<i>Katsuwonus pelamis</i>) is not listed as Endangered or Critically Endangered on IUCN’s Red List, nor it is listed in CITES appendices; therefore, East Atlantic skipjack tuna is eligible for approval for use as MARIN TRUST by-product raw material.</p> <p>There is are two stocks of skipjack tuna in the Atlantic. This assessment covers the East Atlantic skipjack tuna stock.</p> <p>This stock is managed at the international level by the International Commission for the Conservation of Atlantic Tunas (ICCAT). ICCAT conducts stock assessments; reference points are defined for the East Atlantic tuna stock.</p> <p>The stock is classified as Category C.</p> <p>Fishery removals of the stock are considered in the stock assessment processes so the stock PASSES Clause C1.1.</p> <p>In the most recent stock assessment, the stock is considered to have a biomass above the limit reference point, the stocks PASSES Clause C1.2.</p> <p>In order to be approved, the stock under assessment must pass both Clauses C1.1 and C1.2.</p> <p>East Atlantic skipjack tuna passes both Clauses C1.1 and C1.2, and therefore is APPROVED by the assessor for the production of fishmeal and fish oil under the current Marin Trust v.2.0 by-product Standard.</p>
Fishery Assessment Peer Review Comments
<p>Agree with assessment outcome based on evidence provided</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 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
Skipjack tuna	<i>Katsuwonus pelamis</i>	East Atlantic skipjack tuna	International Commission for the Conservation of Atlantic Tunas (ICCAT)/Ivory Coast	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		
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 stock assessment is conducted by ICCAT using catch data. Skipjack catches in the Eastern Atlantic by gear for the 1950-2018 period are shown in Figure 1. Therefore, the stock **PASSES** Clause C1.1.

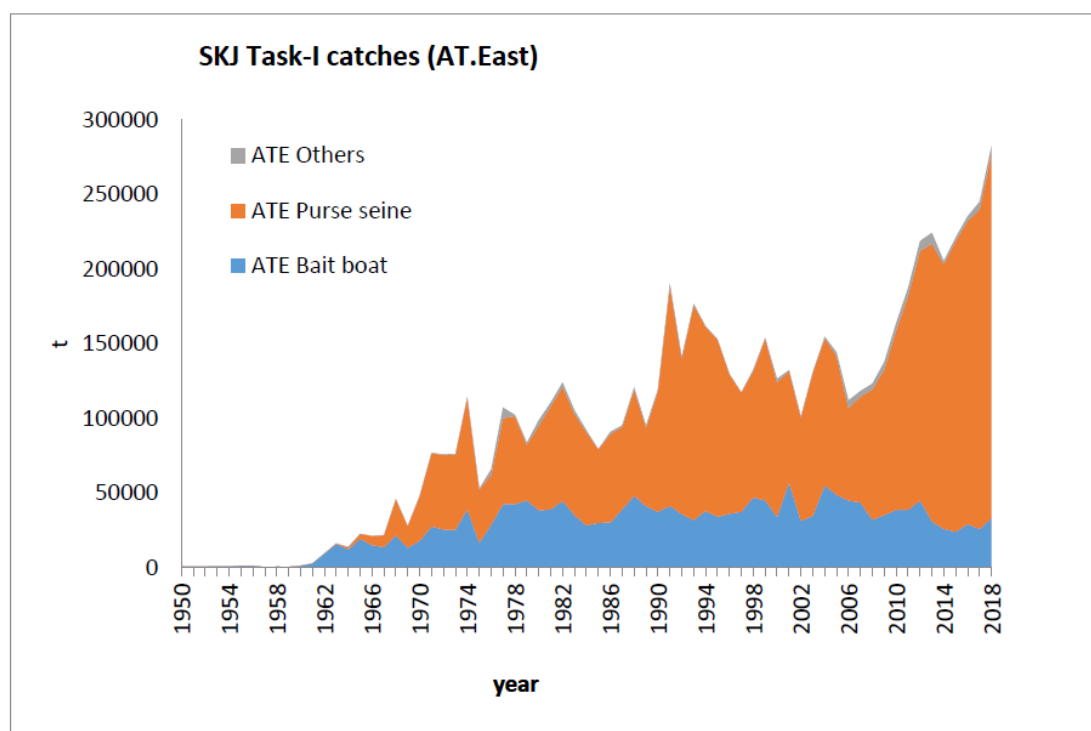


Figure 1. Skipjack catches in the eastern Atlantic, by gear (1950-2018), after correction of Ghana's data by species (1996-2014).

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.

A stock assessment was conducted by ICCAT in 2014 using catch data available to 2013. The most recent stock assessment report is an update of that of 2018 covering the most recent information on the stock status. Three models were used: two surplus

biomass production models and a model based only on catch and mortality estimation based on the average sizes of fish caught. Regardless of the model used, it was not possible to provide a reliable estimate of MSY. However, there is no evidence of a fall in yield or in the average weight of fish caught. ICCAT concludes that there is no evidence that the stock is overfished and that overfishing is occurring (Table 4). B_{2013} is likely to be above B_{MSY} .

Therefore, the assessor determines that, the stock is considered to have a biomass above the limit reference point, it **PASSES** Clause C1.2.

Table 4. East Atlantic skipjack tuna stock status summary.

	East Atlantic
Maximum Sustainable Yield (MSY)	
Current yield (2018 ¹)	282,427 t
Current Replacement Yield	Unknown
Relative Biomass (B_{2013}/B_{MSY})	Likely >1
Mortality due to fishing (F_{2013}/F_{MSY})	Likely <1
Stock Status	
Overfished:	Not likely
Overfishing:	Not likely
Management measures in force	Rec. 16-01

¹ Reports of catches for 2018 should be considered provisional.

References

Collette, B., Acero, A., Amorim, A.F., Boustany, A., Canales Ramirez, C., Cardenas, G., Carpenter, K.E., de Oliveira Leite Jr., N., Di Natale, A., Fox, W., Fredou, F.L., Graves, J., Guzman-Mora, A., Viera Hazin, F.H., Juan Jorda, M., Kada, O., Minte Vera, C., Miyabe, N., Montano Cruz, R., Nelson, R., Oxenford, H., Salas, E., Schaefer, K., Serra, R., Sun, C., Teixeira Lessa, R.P., Pires Ferreira Travassos, P.E., Uozumi, Y. & Yanez, E. 2011. *Katsuwonus pelamis*. *The IUCN Red List of Threatened Species* 2011: e.T170310A6739812. <https://dx.doi.org/10.2305/IUCN.UK.2011-2.RLTS.T170310A6739812.en>.

ICCAT Stock Assessment and Executive Summary – Skipjack tuna
<https://www.iccat.int/en/assess.html>

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 make up less than 5% of landings and 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
	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
	Overlap of adult species range with fishery		
	Distribution		
	Habitat		
	Depth range		
	Selectivity		
	Post-capture mortality		
	Average Susceptibility Score		
	PSA Risk Rating (From Table D3)		
	Compliance rating		
References			
<i>Standard clauses 1.3.2.2</i>			

Table D2 - Productivity / Susceptibility attributes and scores.

Productivity attributes	Low productivity/ High risk	Medium productivity/ Medium risk	High productivity/ Low risk
	Score 3	Score 2	Score 1
Average age at maturity (years)	>4	2 to 4	<2
Average maximum age (years)	>30	10 to 30	<10
Fecundity (eggs/spawning)	<1 000	1 000 to 10 000	>10 000
Average maximum size (cm)	>150	60 to 150	<60
Average size at maturity (cm)	>150	30 to 150	<30
Reproductive strategy	Live bearer, mouth brooder or significant parental investment	Demersal spawner "berried"	Broadcast spawner
Mean trophic level	>3.25	2.5–3.25	<2.5

Susceptibility attributes		High susceptibility/ High risk	Medium susceptibility/ Medium risk	Low susceptibility/ Low risk
		Score 3	Score 2	Score 1
Availability	1) Overlap of adult species range with fishery	>50% of stock occurs in the area fished	Between 25% and 50% of the stock occurs in the area fished	<25% of stock occurs in the area fished
	2) Distribution	Only in the country/ fishery	Limited range in the region	Throughout region/ global distribution
Encounterability	1) Habitat	Habitat preference of species make it highly likely to encounter trawl gear (e.g. demersal, muddy/sandy bottom)	Habitat preference of species make it moderately likely to encounter trawl gear (e.g. rocky bottom/reefs)	Depth or distribution of species make it unlikely to encounter trawl gear (e.g. epi-pelagic or meso-pelagic)
	2) Depth range	High overlap with trawl fishing gear (20 to 60 m depth)	Medium overlap with trawl fishing gear (10 to 20 m depth)	Low overlap with trawl fishing gear (0 to 10 m, >70 m depth)
Selectivity		Species >2 times mesh size or up to 4 m length	Species 1 to 2 times mesh size or 4 to 5 m length	Species <mesh size or >5 m length
Post capture mortality		Most dead or retained Trawl tow >3 hours	Alive after net hauled Trawl tow 0.5 to 3 hours	Released alive Trawl tow <0.5 hours

Note: Availability 2 is only used when there is no information for Availability 1; the most conservative score between Encounterability 1 and 2 is used.

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		