

MarinTrust Standard V2

By-product Fishery Assessment

SLV11 - Skipjack Tuna in FAO Areas 77 and 87

MarinTrust Programme

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Table 1 Application details and summary of the assessment outcome

| | Species: | Skipjack tuna (Katsuwonus Pelamis) | | |
|---|-------------------------------------|--|--|--|
| Fishery Under | Geographical area: | FAO 77 Pacific, Eastern Central FAO 87 Pacific, Southeast | | |
| Assessment | Country of origin of the product: | El Salvador, Ecuador, Spain, Panama | | |
| | Stock: | Eastern Pacific Ocean skipjack tuna | | |
| Date | June, 2024 | | | |
| Report Code | SLV11 | | | |
| Assessor | | Jose Peiro Crespo | | |
| Country of origin of the product - PASS | El Salvador, Ecuador, Spain, Panama | | | |
| Country of origin of the product - FAIL | | None | | |

| Application details and | d summary of the as | sessment outcom | е | | | | |
|---|---------------------|--------------------|--------------------------------------|--|--|--|--|
| Company Name(s): Calvo Conservas El Salvador SA de CV | | | | | | | |
| Country: El Salvador | | | | | | | |
| Email address: | | Applicant Code: | | | | | |
| Certification Body Det | ails | | | | | | |
| Name of Certification | Body: | LRQA | | | | | |
| Assessor | Peer Reviewer | Assessment Days | Initial/Surveillance/ Re-approval | | | | |
| Jose Peiro Crespo | Sam Peacock | 0.5 | Surveillance 2 | | | | |
| Assessment Period June 2024 – June 2025 | | | | | | | |

| Scope Details | |
|---------------------------------------|---|
| Main Species | Skipjack tuna (Katsuwonus pelamis) |
| Stock | Eastern Pacific Ocean skipjack tuna |
| Fishery Location | FAO 77 (Pacific, Eastern Central) FAO 87 (Pacific, Southeast) |
| Management Authority (Country/ State) | Inter-American Tropical Tuna Commission (IATTC) |
| Gear Type(s) | Longlines and purse seines |
| Outcome of Assessment | |
| Peer Review Evaluation | Agree with assessment outcome |
| Recommendation | Pass |



Table 2. Assessment Determination

Assessment Determination

Skipjack tuna (*Katsuwonus pelamis*) meets the eligibility criteria for approval as Marin Trust by-product raw material, as it is not categorized as Endangered or Critically Endangered on the Union for Conservation of Nature's Red List (IUCN) and it does not appear in the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) appendices.

The stock is managed and assessed by the Inter-American Tropical Tuna Commission (IATTC). The first benchmark assessment for skipjack tuna in the EPO was conducted in 2024 which represents a significant improvement from the interim assessment conducted in 2022. Fishery removals of the species were considered during the stock assessment process. The conclusion of the benchmark assessment is that the skipjack stock is healthy (the spawning biomass (SB) is currently above the target proxy of 30% of the unexploited SB under dSBR). As a result, the fishery effectively complies with clauses C1.1 and C1.2.

Consequently, skipjack tuna (*Katsuwonus pelamis*) caught in FAO areas 77 and 87 is granted **approval** for the production of fishmeal and fish oil, adhering to the existing MarinTrust v2.3 by-products standard.

Fishery Assessment Peer Review Comments

The peer reviewer agrees that this species is eligible for assessment under the MarinTrust byproduct assessment methodology, and that the stock falls into Category C. The most recent stock assessment was adequate to meet the requirements of C1.1, and biomass is currently estimated to be above the target reference point level, meeting the requirements of C1.2. Overall, the peer reviewer agrees that this stock should be approved as a source of byproduct raw material for MarinTrust certified facilities.

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 | Katsuwo nus | Skipjac k tuna | IOTC | С | Least concern ³ | No |
| | pelamis | | | | | |

¹ https://www.iucnredlist.org/

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

³https://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.

| Speci | es N | ame | Skipjack tuna (<i>Katsuwonus pelamis</i>) | | | |
|-----------|---|---------------|--|------|--|--|
| C1 | Categ | ory C Stock S | Status - Minimum Requirements | | | |
| CI | 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. | | | | | |
| | 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 | | nce point (or proxy), OR removals by the fishery under assessment are considered | Yes | | |
| | • | | 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.

One stock of skipjack is defined in the eastern Pacific Ocean (EPO). Catch data is available and it is used by the IATTC to assess the stock status of skipjack tuna in the EPO. Catch of the stock is primarily taken by the purse-seine fisheries, especially from the Floating-object associated (OBJ) and Unassociated (NOA) sets.



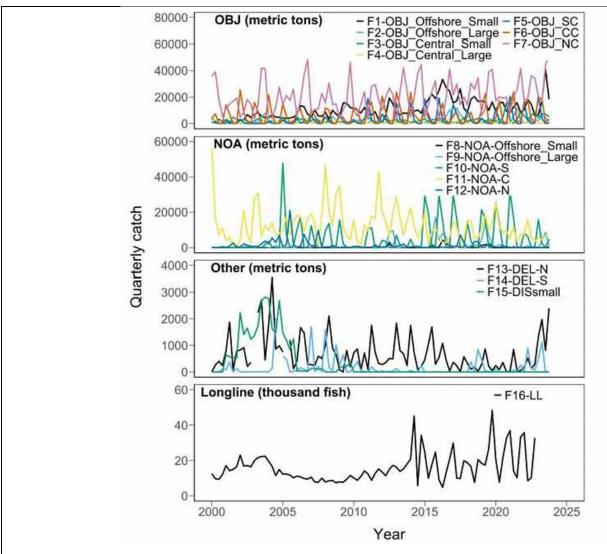


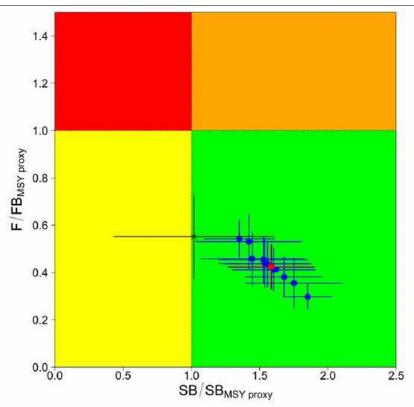
FIGURE 1 CATCH OF SKIPJACK FROM DIFFERENT FLEETS (IATTC 2024)

Fishery removals are considered in the assessment process, C1.1. is met.

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 first benchmark assessment for skipjack tuna in the EPO was conducted in 2024. That assessment represents a significant improvement from the interim assessment conducted in 2022. It reflects major advancements in the assessment methodologies and incorporates new data sets, including an updated index of relative abundance based on recently developed echosounder buoy data, and an absolute biomass estimate derived from the tagging data collected under the Regional Tuna Tagging Program in the EPO. It was based on Stock Synthesis (v3.30.22.beta), an integrated age-structured assessment model. A dynamic spawning biomass ratio (dSBR) of 0.3, which accounts for variability in recruitment was used, as a target reference point. The limit reference point was set at SBR 0.077. There is substantial uncertainty about several model assumptions and sensitivity analyses were conducted and determined that the management advice is robust to the uncertainty. The reference model and most sensitivity models estimate that the spawning biomass (SB) is currently above the target proxy of 30% of the unexploited SB under dSBR. The conclusion that the skipjack stock is healthy is generally robust to data usage and model assumption (IATTC 2024).





*Each dot is based on the average F over the most recent three years, 2021-2023.

FIGURE 2 SKIPJACK TUNA, STOCK STATUS (IATTC 2024).

The biomass of the stock is above the limit reference point. C1.2 is met.

References

IATTC 2024. Stock assessment of skipjack tuna in the eastern Pacific Ocean: 2024 benchmark assessment (Rujia Bi, Mark N. Maunder, Haikun Xu, Carolina Minte-Vera, Juan Valero, and Alexandre Aires-da-Silva). 15th Meeting of the Scientific Advisory Committee – 10-14 June 2024. Available at: https://www.iattc.org/GetAttachment/2245af0e-c8ba-4ff3-ae0a-f2f552a6e77c/SAC-15-PRES SKJ-benchmark-assessment.pdf

IATTC 2022. Skipjack tuna in the Eastern Pacific Ocean, 2021: Interim assessment. DOCUMENT SAC-13-07. https://www.iattc.org/GetAttachment/0acfc999-fbcd-4b07-9e8d-fc5f85fd88e8/SAC-13-07_Skipjack-tuna-interim-assessment2022.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 | n/a | | | | | |
|--------|---|-----|----------------------------|-------|--|--|--|
| | Productivity Attribute | e | 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 Attribut | te | Value | Score | | | |
| | Availability (area overlap) | | | | | | |
| | Encounterability (the position of the within the water column relative to t | | | | | | |
| | Selectivity of gear type | | | | | | |
| | Post-capture mortality | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | Compliance rating | | | | | | |
| | Further justification for susceptibility scoring (where relevant) For susceptibility attributes, please provide a brief rationale for scoring of parameters where there may be uncertainty affecting your decision | | | | | | |
| Refere | nces | | | | | | |
| Standa | rd 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 | | ow susceptibility ow risk, score = 1) | | edium susceptibility nedium 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 | а | Individuals < size at maturity are rarely caught | а | Individuals < size at maturity are regularly caught. | а | Individuals < size at maturity are frequently caught | |
| Potential of the gear to retain species | b | Individuals < size at maturity can escape or avoid gear. | b | Individuals < half the size at maturity can escape or avoid gear. | ь | 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 | hat, if pecies ased and be in a mitting | | 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 | O4 Species Name n/a | | | | | | |
|--|--|----------------------------------|--|--|--|--|--|
| | 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 species. | evidence that the fishery has a significant negative impact on the | | | | |
| | | <u>.</u> | Outcome: | | | | |
| D4.2 T | here is ı | no substantial evidence t | hat the fishery has a significant negative impact on the species. | | | | |
| Refere | ences | | | | | | |
| Links | | | | | | | |
| Marin | Trust St | andard clause | 1.3.2.2, 4.1.4 | | | | |
| FAO C | CRF | | 7.5.1 | | | | |
| GSSI | | | D.5.01 | | | | |