



MarinTrust Standard V2

By-product Fishery Assessment

USA16 – Skipjack tuna in FAO Area 47 (Eastern Atlantic)

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 Area 47 |
| | Country of origin of the product: | Seychelles, South Africa |
| | Stock: | Eastern Atlantic skipjack |
| Date | June 2023 | |
| Report Code | USA16 | |
| Assessor | Sam Peacock | |
| Country of origin of the product - PASS | Seychelles, South Africa | |
| Country of origin of the product - FAIL | n/a | |

| Application details and summary of the assessment outcome | | | |
|--|-----------------------|-----------------|-----------------------------------|
| Company Name(s): The Scoular Company - Indian Ocean Tuna Ltd | | | |
| Country: USA | | | |
| 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 | Initial |
| Assessment Period | June 2023 – June 2024 | | |

| Scope Details | |
|---------------------------------------|---|
| Main Species | Skipjack tuna (<i>Katsuwonus pelamis</i>) |
| Stock | Eastern Atlantic skipjack |
| Fishery Location | FAO Area 47 |
| Management Authority (Country/ State) | International Commission for the Conservation of Atlantic Tunas (ICCAT) |
| Gear Type(s) | Longline, pole and line, purse seine |
| 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 does not appear in the CITES appendices. Eastern Atlantic skipjack is managed by the International Commission for the Conservation of Atlantic Tunas (ICCAT) relative to a target reference point (B_{MSY}), and was therefore assessed under Category C.</p> <p>The most recent stock assessment for Eastern Atlantic skipjack was conducted in 2022 using catch data up to and including 2020. Although the results produced a large potential range of biomass estimates, the stock is considered to be not overfished and not subject to overfishing with a high probability (78%). As biomass is likely to be above the target reference point, it is very likely to be above any potential limit reference point. The byproduct meets the MT requirements and should be 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 47. Skipjack tuna is managed by international or state regulations. Therefore, for this Marin Trust assessment, the skipjack tuna stock is 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 47, Skipjack tuna 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> | Eastern Atlantic skipjack tuna | Yes | C | Least Concern ³ | No |

¹ <https://www.iucnredlist.org/>

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

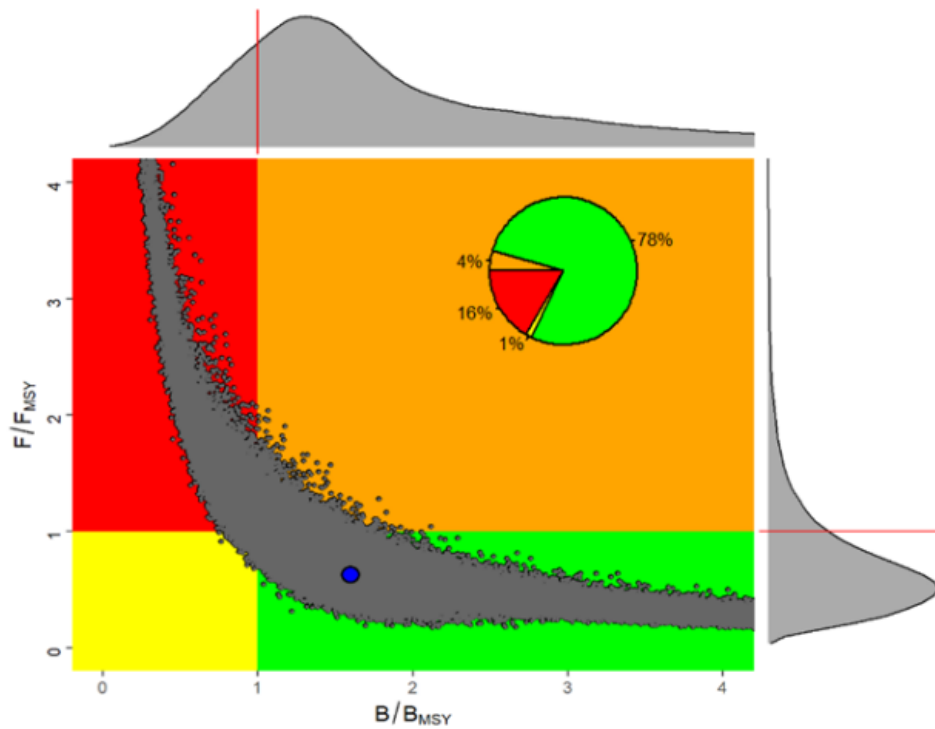
³ <https://www.iucnredlist.org/species/170310/46644566>

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>The most recent stock assessment conducted for Eastern Atlantic skipjack tuna was carried out in 2022, applying non-equilibrium and Bayesian state-space production models to integrated statistical assessment models using the available catch data up to and including 2020 (ICCAT 2022). Multiple models were used to represent potential population dynamic scenarios, and to account for uncertainty in outputs. The ICCAT stock assessment group decided to combine the results of several models to capture all major uncertainties. Despite this, there was a high degree of uncertainty in the resultant estimates of stock biomass; however, the group were able to produce management advice and have made several recommendations for the improvement of future stock assessments. Overall, the assessor considers C1.1 to be met.</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>The 2022 stock assessment of Eastern Atlantic skipjack tuna concluded that there was a 78% probability that the stock is neither overfished nor subject to overfishing (ICCAT 2022). Relative biomass (B_{2020}/B_{MSY}) was estimated to be 1.60, although the assessment produced a wide 95% confidence interval (0.50 – 5.79). However, as the biomass is likely to be above the target reference point, it is highly likely to be above any potential limit reference point, and C1.2 is met.</p> | | | |



Combined Kobe phase plot for the various models performed for Eastern Atlantic skipjack tuna in 2022. The blue point shows the median of 180,000 iterations for SSB_{2020}/SSB_{MSY} or B_{2020}/B_{MSY} and F_{2020}/F_{MSY} for the entire set of runs in the grid. Grey points represent the 2020 estimates of relative fishing mortality and relative spawning stock biomass for 2020 for each of the 180,000 iterations. The upper graph represents the smoothed frequency distribution of SSB_{2020}/SSB_{MSY} or B_{2020}/B_{MSY} estimates for 2020.

The right graph represents the smoothed frequency distribution of F_{2020}/F_{MSY} estimates for 2020. The inserted pie graph represents the percentage of each 2020 estimate that fall in each quadrant of the Kobe plot (ICCAT 2022).

References

ICCAT (2022). Species executive summary, skipjack tuna. https://www.iccat.int/Documents/SCRS/ExecSum/SKJ_ENG.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 | 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 | | 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 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 | |