



MarinTrust Standard V2

By-product Fishery Assessment *Kawakawa in the Western Pacific & Indian Ocean*

MarinTrust Programme

Unit C, Printworks

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Table 1 Application details and summary of the assessment outcome

Fishery Under Assessment	Species:	Kawakawa (<i>Euthynnus affinis</i>)
	Geographical area:	Western Pacific and Indian Ocean, FAO Areas 57 & 71
	Country of origin of the product:	Thailand
	Stock:	Indian Ocean
Date	November 2022	
Report Code	THA21	
Assessor	Sam Peacock	
Country of origin of the product - PASS	Thailand	
Country of origin of the product - FAIL	NONE	

Application details and summary of the assessment outcome			
Company Name(s):			
Country: Thailand			
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	Surveillance
Assessment Period	November 2022 – November 2023		

Scope Details	
Main Species	Kawakawa (<i>Euthynnus affinis</i>)
Stock	Indian Ocean
Fishery Location	Western Pacific and Indian Ocean, FAO Areas 57 & 71
Management Authority (Country/ State)	Indian Ocean Tuna Commission (IOTC)
Gear Type(s)	Purse seine, gillnet, hand line, trolling
Outcome of Assessment	
Peer Review Evaluation	Pass
Recommendation	Maintain approval

Table 2. Assessment Determination

Assessment Determination
<p>Kawakawa, also known as mackerel tuna, has been categorised by the IUCN Red List as a species of Least Concern, and does not appear in the CITES appendices. Kawakawa in the Indian Ocean is managed by the Indian Ocean Tuna Commission relative to established reference points, and therefore was assessed under Category C.</p> <p>The most recent stock assessment remains the one identified in the 2021 MT surveillance assessment, and therefore continues to meet the Category C requirements. The stock assessment takes account of international catch data and concluded that stock biomass was above the target and limit reference points. The by-product should continue to be approved for use as a raw material in MT-certified marine ingredients.</p>
Fishery Assessment Peer Review Comments
<p>The by-product fishery under assessment here is Mackerel tuna (<i>Euthynnus affinis</i>) fishery is pursued by Thai vessels in FAO fishing areas 57 and 71. Mackerel tuna is managed by the Indian Ocean Tuna Commission (IOTC) and local governments. For this Marin Trust assessment, the Mackerel tuna stock is scored as a category C species.</p> <p>All species scoring tables have 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 both stocks of 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
Kawakawa	<i>Euthynnus affinis</i>	Indian Ocean	Yes	C	Least Concern ³	No

¹ <https://www.iucnredlist.org/>

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

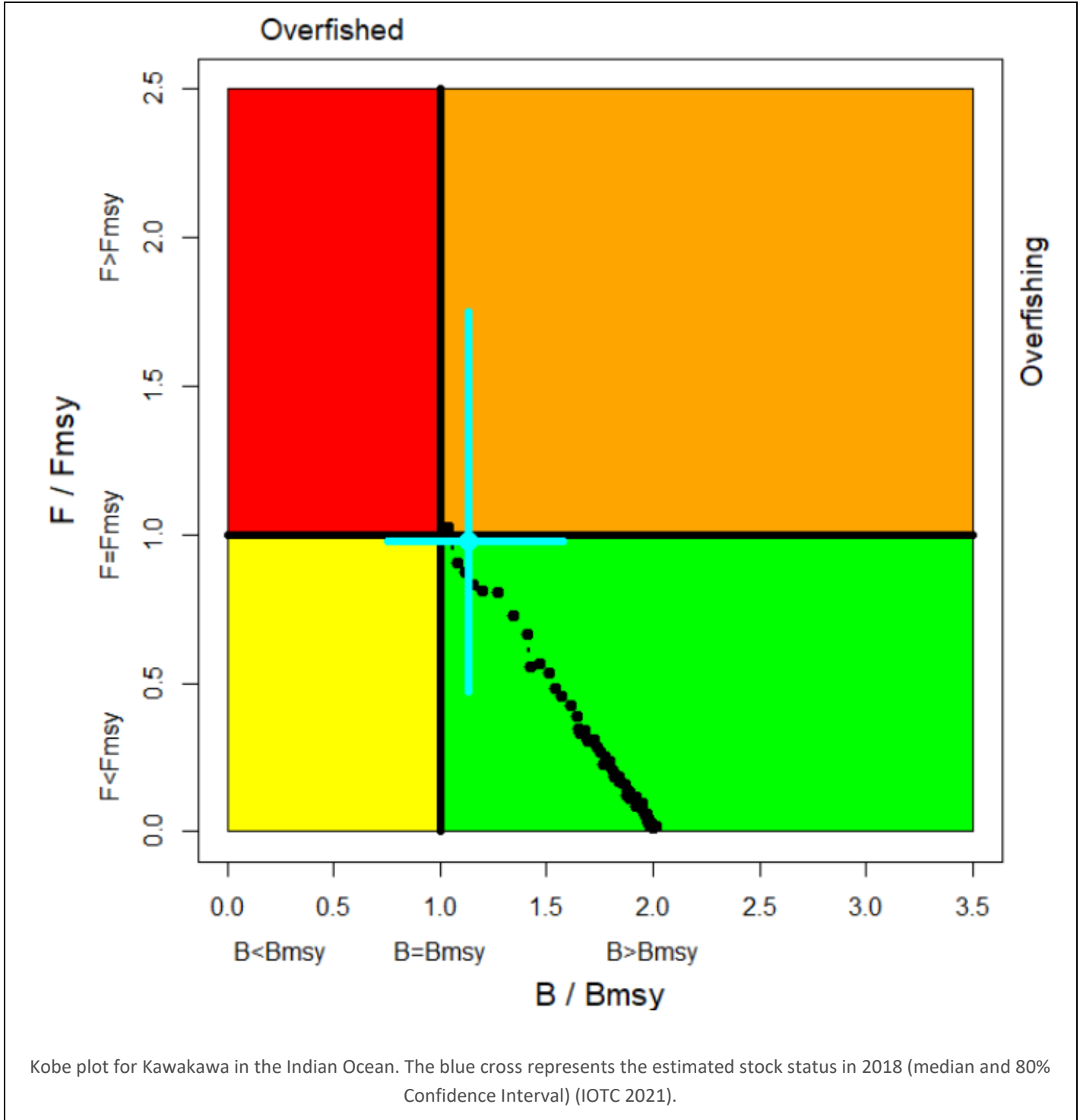
³ <https://www.iucnredlist.org/species/170336/6753804>

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		Kawakawa	
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>Kawakawa is subject to regular stock assessment by the Indian Ocean Tuna Commission (IOTC). The most recent assessment remains the one identified in the previous MT assessment, conducted in 2020 (an updated assessment is scheduled for 2023). As the stock assessment remains unchanged, it continues to meet the requirements of C1.1; fishery removals are considered, with the average annual international landings between 2015 and 2019 estimated to be 148,084t (IOTC 2021).</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 most recent stock assessment continues to be the one identified by the 2021 MT surveillance assessment, in which the Indian Ocean Kawakawa stock was determined to not be overfished nor subject to overfishing with a probability of 50%. Biomass was estimated to be 1.13 times larger than B_{MSY}. Stock biomass is estimated to be above the target and limit reference points and C1.2 is met.</p>			



References

IOTC (2021). Kawakawa stock assessment and current status, Executive Summary.
https://iotc.org/sites/default/files/documents/science/species_summaries/english/12_Kawakawa2021E.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
	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
	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		
	<i>Standard clauses 1.3.2.2</i>		

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	