



## MarinTrust Standard V2

# By-product Fishery Assessment Report: Yellowfin Tuna FAO 61 & 71

**MarinTrust Programme**

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**Table 1 Application details and summary of the assessment outcome**

Fishery Under Assessment	Species:	Yellowfin tuna, <i>Thunnus albacares</i>
	Geographical area:	FAO Areas 61 Pacific Northwest and 71 Pacific Western Central
	Country of origin of the product:	El Salvador, Ecuador, Spain, USA, Phillipines, Panama, Portugal
	Stock:	1. Western Central Pacific Ocean yellowfin tuna (WCPO) 2. Eastern Pacific Ocean yellowfin tuna (EPO)
Date	20 April 2021	
Report Code	BP58	
Assessor	Geraldine Criquet	
Country of origin of the product - PASS	El Salvador, Ecuador, Spain, USA, Phillipines, Panama, Portugal	
Country of origin of the product - FAIL	NA	

Application details and summary of the assessment outcome			
Address:			
Country: Spain & Portugal, El Salvador		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	Virginia Polonio	0.5	Surveillance 2
Assessment Period	April 2021		

Scope Details	
Main Species	Yellowfin tuna, <i>Thunnus albacares</i>
Stock	1. Western Central Pacific Ocean yellowfin tuna (WCPO) 2. Eastern Pacific Ocean yellowfin tuna (EPO)
Fishery Location	FAO Areas 61 Pacific Northwest and 71 Pacific Western Central
Management Authority (Country/ State)	The Western and Central Pacific Fisheries Commission (WCPFC) and the Inter-American Tropical Tuna Commission (IATTC).
Gear Type(s)	Longline and Purse seine
Outcome of Assessment	
Peer Review Evaluation	Agree with assessor's determination
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. Yellowfin tuna (<i>Thunnus albacares</i>) is not listed as Endangered or Critically Endangered on IUCN’s Red List, nor is it listed in CITES appendices; therefore, Western Central Pacific Ocean and Eastern Pacific Ocean yellowfin tuna is eligible for approval for use as MARIN TRUST by-product raw material.</p> <p>For assessment and management purposes, two discrete stocks of yellowfin are recognised in the Pacific Ocean delimited based on their being east and west of 150°W longitude:</p> <ol style="list-style-type: none"> <li>1. Western Central Pacific Ocean (WCPO) yellowfin (west of 150°W), managed via the Western and Central Pacific Fisheries Commission (WCPFC).</li> <li>2. Eastern Pacific Ocean (EPO) yellowfin (east of 150°W), managed by the Inter-American Tropical Tuna Commission (IATTC).</li> </ol> <p>FAO areas 61 and 71 have their western boundary at 175°W such that yellowfin tuna taken in these areas may come from either of the Western Central Pacific or Eastern Pacific stocks; therefore, both stocks are considered in this assessment.</p> <p>Fishery removals of both Pacific yellowfin tuna stocks are considered in their respective stock assessment processes such that the fishery <b>PASSES</b> Clause C1.1.</p> <p>As of the latest assessments, both stocks are considered to have a biomass above their respective limit reference points such that the fishery <b>PASSES</b> Clause C1.2.</p> <p>In order to be approved, the stock under assessment must pass both Clauses C1.1 and C1.2. Western Central Pacific Ocean and Eastern Pacific Ocean yellowfin tuna passe both Clauses C1.1 and C1.2, and therefore are 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>The species has been correctly categorised following Marin Trust criteria as there is a management plan for both stocks. Fisheries removals are considered in the stock assessment for both stocks.</p> <p>The Western Central Pacific yellowfin tuna stock is in the green area of Kobe plot, so it is not occurring overfishing and it is not overfished.</p> <p>The last stock assessment Eastern Pacific yellowfin tuna has not presented any perdition with biomass below limits.</p> <p>Therefore, removals are considered and both stocks are above limits and pass clauses C1.1 and C1.2. Consequently, they are APPROVED for the production of fishmeal and fish oil under the current Marin Trust v.2.0 by-product Standard</p>

**Notes for On-site Auditor**

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## 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 <sup>1</sup>	CITES Appendix 1 <sup>2</sup>
Yellowfin tuna	<i>Thunnus albacares</i>	1. Western Central Pacific Ocean yellowfin tuna 2. Eastern Pacific Ocean yellowfin tuna	WCPFC and IATTC	C	NT	No

<sup>1</sup> <https://www.iucnredlist.org/>

<sup>2</sup> <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.

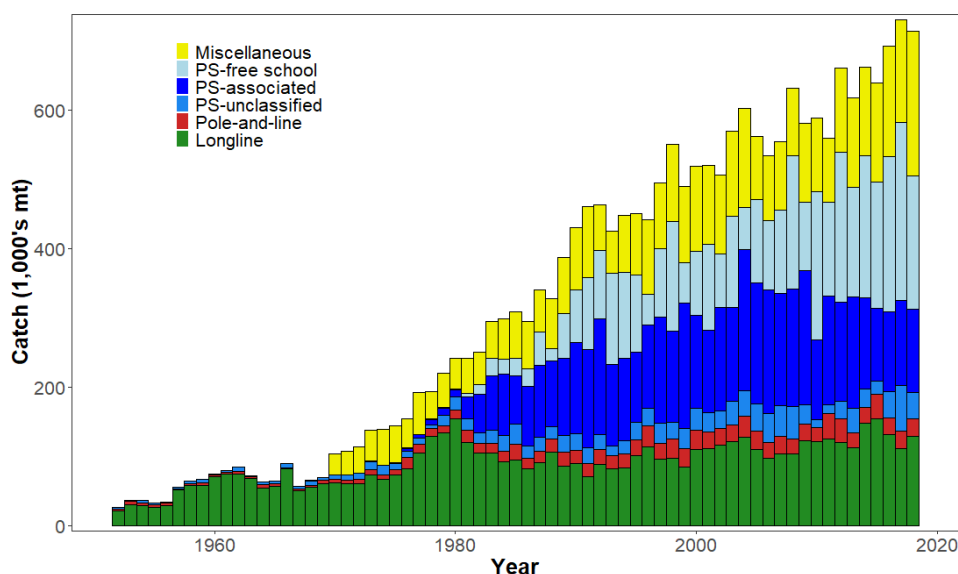
Clause C1 should be completed for **each** Category C species. If there are no Category C species in the fishery under assessment, this section can be deleted. Where a species fails this Clause, it should be assessed as a Category D species instead.

<b>Species Name</b>		Yellowfin tuna, <i>Thunnus albacares</i>	
<b>C1</b>	<b>Category C Stock Status - Minimum Requirements</b>		
	<b>C1.1</b>	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.	<b>PASS</b>
	<b>C1.2</b>	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.	<b>PASS</b>
			<b>Clause outcome: PASS</b>

**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.**

### WCPO yellowfin tuna

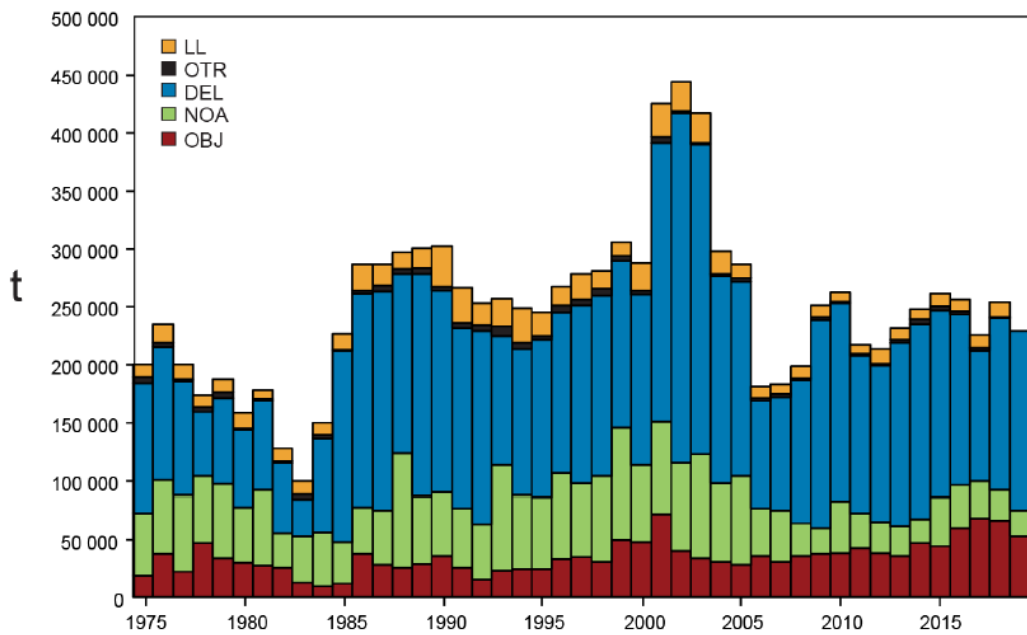
Fishery removals of the stock (Figure 1) in the fishery under assessment are included in the stock assessment process via Western and Central Pacific Fisheries Commission (WCPFC) processes.



**Figure 1.** Time series of total annual catch (1000s mt) by fishing gear over the full assessment region and time period. The different colours denote longline (green), pole-and-line (red), purse seine unclassified (blue), purse seine-associated (dark blue), purse seine-unassociated (light blue), miscellaneous (yellow). Source: WCPFC 2021

### Eastern Pacific yellowfin tuna

Catches of tunas within the IATTC area of competence are reported to the IATTC (Figure 2) and these catches are subsequently included in the IATTC stock assessment process.



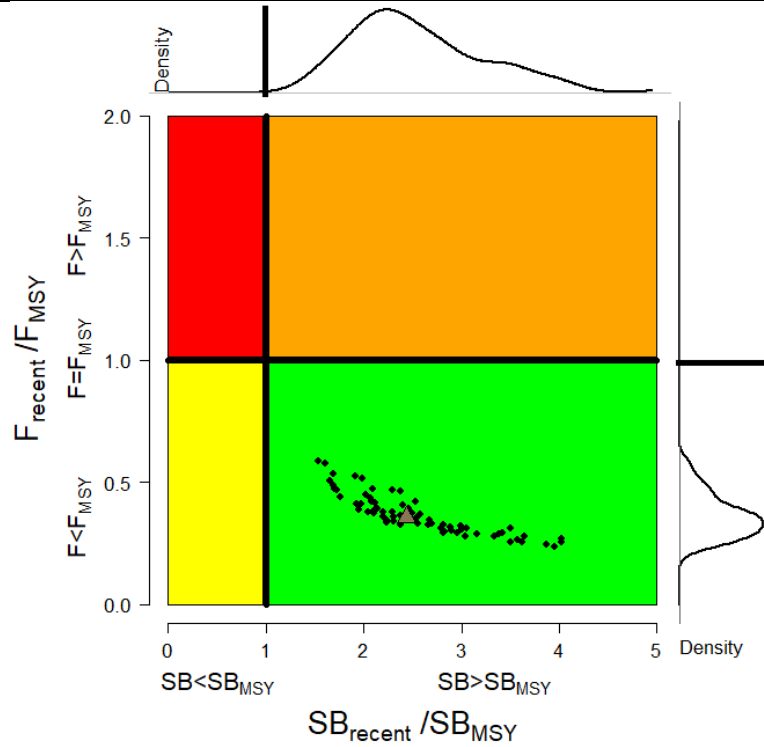
**Figure 2.** Total catches (retained catches plus discards) for the purse-seine fisheries, by set type (DEL, NOA, OBJ), and retained catches for the longline (LL) and other (OTR) fisheries, of yellowfin tuna in the eastern Pacific Ocean, 1975-2019. The purse-seine catches are adjusted to the species composition estimate obtained from sampling the catches. The 2019 data are preliminary. Source: WCPFC 2021

Therefore, fishery removals of both stocks of relevance to this assessment are included in their respective stock assessment processes such that **the fishery achieves a PASS against C1.1.**

**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.**

**Western Central Pacific yellowfin tuna**

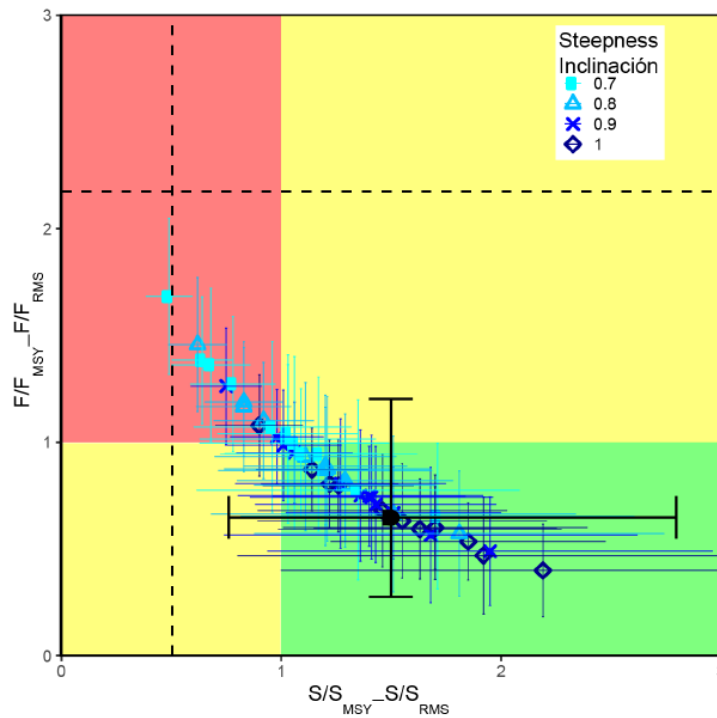
The most recent stock assessment for WCPO yellowfin was carried out in 2020. Based on the uncertainty grid adopted by SC16, the WCPO yellowfin tuna spawning biomass is above the biomass LRP and recent  $F$  is below  $F_{MSY}$  (Figure 3). The stock is not experiencing overfishing (100% probability  $F < F_{MSY}$ ) and is not in an overfished condition (0% probability  $SB/SB_{F=0} < LRP$ ). Additionally, stochastic projections predict there to be no risk of breaching the LRP (0% probability  $SB_{2048}/SB_{F=0} < LRP$ ).



**Figure 3.** Kobe plot for the recent spawning potential (2015–2018) summarizing the results for each of the models in the structural uncertainty grid. The plots represent estimates of stock status in terms of spawning biomass depletion and fishing mortality relative to *MSY* quantities and marginal distributions of each are presented with the median of the structural uncertainty grid displayed as a brown triangle. Source: WCPFC 2021

**Eastern Pacific yellowfin tuna**

In 2020, stock status indicators (SSIs) were developed for yellowfin using the data collected in the EPO as a whole. At the beginning of 2020, the spawning biomass (*S*) of yellowfin ranged from 145% to 345% of the limit reference level (SLIMIT); no models suggest that it was below that limit.





**Figure 4.** Kobe (phase) plot of the time series of estimates of spawning stock size ( $S$ ) and fishing mortality ( $F$ ) of yellowfin tuna relative to their MSY reference points. The colored panels are separated by the target reference points ( $S_{MSY}$  and  $F_{MSY}$ ). Limit reference points (dashed lines), which correspond to a 50% reduction in recruitment from its average unexploited level, based on a conservative steepness ( $h$ ) of 0.75 for the Beverton-Holt stock-recruitment relationship, are merely indicative, since they vary by model and are based on all models combined. The center point for each model indicates the current stock status, based on the average fishing mortality ( $F$ ) over the last three years; The solid black circle represents all models combined; to be consistent with the probabilistic nature of the risk analysis and the HCR, it is based on  $P(S_{cur}/S_{LIMIT} < x) = 0.5$  and  $P(F_{cur}/F_{MSY} > x) = 0.5$ . The lines around each estimate represent its approximate 95% confidence interval. Source: WCPFC 2021

As both Pacific Ocean yellowfin tuna stocks have biomasses above their limit reference points (or proxies), **the fishery achieves a PASS against C1.2.**

**References**

Collette, B., Acero, A., Amorim, A.F., Boustany, A., Canales Ramirez, C., Cardenas, G., Carpenter, K.E., Chang, S.-K., de Oliveira Leite Jr., N., Di Natale, A., Die, D., Fox, W., Fredou, F.L., Graves, J., Guzman-Mora, A., Viera Hazin, F.H., Hinton, M., Juan Jorda, M., Minte Vera, C., Miyabe, N., Montano Cruz, R., Masuti, E., Nelson, R., Oxenford, H., Restrepo, V., Salas, E., Schaefer, K., Schratwieser, J., Serra, R., Sun, C., Teixeira Lessa, R.P., Pires Ferreira Travassos, P.E., Uozumi, Y. & Yanez, E. 2011. *Thunnus albacares*. *The IUCN Red List of Threatened Species* 2011: e.T21857A9327139. <https://dx.doi.org/10.2305/IUCN.UK.2011-2.RLTS.T21857A9327139.en>.

WCPFC Current Stock Status and Advice – Yellowfin tuna  
<https://www.wcpfc.int/doc/02/yellowfin-tuna>

IATTC Tuna Fishery, stocks and ecosystem in the eastern Pacific Ocean in 2019  
<https://www.iattc.org/FisheryStatusReportsENG.htm>

**Links**

MARINTRUST Standard clause	1.3.2.2
FAO CCRF	7.5.3
GSSI	D.3.04, D5.01