

MarinTrust Standard V2

By-product Fishery Assessment ESP04 Bluefin tuna (Thunnus thynnus) in FAO 27, 37 (Eastern Atlantic and Mediterranean waters)

MarinTrust Programme

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Table 1 Application details and summary of the assessment outcome

	Species:	Bluefin tuna (Thunnus thynnus)	
Fishery Under	Geographical area:	FAO Area 27, 37 (Eastern Atlantic and Mediterranean waters)	
Assessment	Country of origin of the product:	Spain (Flag country)	
	Stock:	Eastern Atlantic and Mediterranean waters Bluefin tuna, FAO 27 and 37	
Date	May 2024		
Report Code	ESP04		
Assessor	Ana Elisa Almeida Ayres		
Country of origin of the product - PASS	Spain (Flag country)		
Country of origin of the product - FAIL	N/A		

Application details and summary of the assessment outcome						
Company Name(s): Hijos de Emilio Ramirez SA - Pescave						
Country: Spain						
Email address:		Applicant Code	Applicant Code:			
Certification Body Deta	Certification Body Details					
Name of Certification Body:		Global Certification Trust/NSF				
Assessor	Peer Reviewer	Assessment Days	Initial/Surveillance/Re-approval			
Ana Elisa Almeida Ayres	meida Matthew Jew 0.5 Surveillance 2		Surveillance 2			
Assessment Period	May 2024 – May 2025					

Scope Details			
Main Species	Bluefin tuna (Thunnus thynnus)		
Stock	East Atlantic and Mediterranean bluefin tuna		
Fishery Location	FAO 27 (Northeast Atlantic) and 37 (Mediterranean waters)		
Management Authority (Country/ State)	International Commission for the Conservation of Atlantic Tunas (ICCAT) and Contracting (State) Parties		
Gear Type(s)	Longlines and purse seines		
Outcome of Assessment			
Peer Review Evaluation	Agree with assessor's recommendation		
Recommendation	APPROVED		



Table 2. Assessment Determination

Assessment Determination

If any species is categorised as Endangered or Critically Endangered on Union for Conservation of Nature's Red List of Threatened Species - IUCN's Red List, or if it appears in the Convention on International Trade in Endangered Species of Wild Fauna and Flora - CITES appendices, it cannot be approved for use as MarinTrust raw material. Bluefin tuna (*Thunnus thynnus*) is not categorised as Endangered or Critically Endangered on IUCN's Red List and does not appear in CITES appendices; therefore, Bluefin tuna (*Thunnus thynnus*) is eligible for approval for use as Marin Trust by-product raw material.

Bluefin tuna in the eastern Atlantic and the Mediterranean (known as eastern bluefin tuna) is managed by International Commission for the Conservation of Atlantic Tunas – ICCAT. In 2022, the ICCAT Commission implemented a Management Procedure (MP) for both the western Atlantic and eastern Atlantic and Mediterranean management areas. The next assessment is scheduled for 2026 or 2027. In the interim, the Committee relies on the stock status determinations from the most recent assessments for both the West and East Atlantic and Mediterranean. Three modelling platforms were used to conduct the assessment of the and eastern Atlantic and Mediterranean in 2022 and catches were included in the process, thus C.1.1 is met. Although the 2022 stock assessment made no reference to the BMSY or other biomass-based reference point, SSB is projected to be higher than 750,000 tonnes and hence the stock is highly likely to have a biomass above the limit reference point (or proxy). Furthermore, given the large biomass increase and the low fishing mortality it is highly likely that the stock is not reproductively impaired (i.e. below limit reference point). Thus, C.1.2 is met.

Therefore, Bluefin tuna (*Thunnus thynnus*) in FAO 27 and 37 is **APPROVED** for the production of fishmeal and fish oil under the current MarinTrust v2.3 by-products standard.

Fishery Assessment Peer Review Comments

The assessor correctly classified bluefin tuna (Thunnus thynnus) in FAO 27 and 37 as Category C, the stock is subject to a specific management regime (ICCAT).

Fishery removals are considered in the stock assessment process. The most recent stock assessment shows that the stock is not considered overfished by ICCAT. Therefore, the stock is considered to have biomass above the limit reference point (or proxy).

Bluefin tuna (*Thunnus thynnus*) in FAO 27 and 37 passes both clauses (C1.1 and C1.2) and therefore should be approved under the MarinTrust Standard v.2.3

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'A	



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
Bluefin tuna	Thunnus thynnus	East Atlantic and Mediterranean bluefin tuna	Yes	С	LC ³	No

¹ https://www.iucnredlist.org/

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

³ https://www.iucnredlist.org/species/21860/46913402



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.

Spe	Species Name Bluefin tuna (Thunnus thynnus)				
C1	Category C Stock Status - Minimum Requirements				
CI	C1.1	1.1 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 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.

In 2022, the ICCAT Commission implemented a Management Procedure (MP) for both the western Atlantic and eastern Atlantic and Mediterranean management areas. This adoption signifies a fundamental shift in the management approach for bluefin tuna as it will integrate the Total Allowable Catch (TAC) for eastern and western areas into a unified management framework, offering joint management recommendations and necessitating common or closely related sections in the Executive Summaries for both stocks (ICCAT, 2023). This procedure liberates the assessment process from the obligation to provide annual TAC advice, allowing for a return to the traditional focus on determining relative stock status. As per the MP, stock assessments will continue but with reduced frequency, with the next assessment scheduled for 2026 or 2027, subject to further discussions between the Committee and the Commission. In the interim, the Committee relies on the stock status determinations from the most recent assessments for both the West and East Atlantic and Mediterranean.

The current MP uses five indices in each management area. For the eastern Atlantic and Mediterranean stock, two CPUE indices and three surveys were used. Three modelling platforms were used to conduct the assessment of the and eastern Atlantic and Mediterranean in 2022. A virtual population analysis (VPA) was conducted, and two additional platforms, Stock Synthesis (SS) and the age-structured assessment programme (ASAP), were applied (ICCAT, 2023).

Reported catches in the East Atlantic and Mediterranean peaked at over 50,000 t in 1996 before experiencing a significant decline, eventually stabilizing around the TAC levels set by ICCAT for the most recent period (Figure 1). Catches from 2018 to 2022 (as of September 2023) were respectively 27,782 t, 31,134 t, 35,038 t, 35,095 t, and 35,102 t for the East Atlantic and Mediterranean, with the Mediterranean accounting for 19,624 t, 22,090 t, 24,164 t, 24,786 t, and 24,625 t during those years (ICCAT, 2023). The Committee acknowledges the presence of ongoing, unquantified, illegal, unreported, and unregulated (IUU) catches, which pose a significant challenge to accurately assessing stock productivity and providing reliable TAC advice. Consequently, the Committee emphasizes the importance of identifying and quantifying IUU catches to enhance the accuracy of biomass-based catch advice and improve scientific understanding of stock productivity.



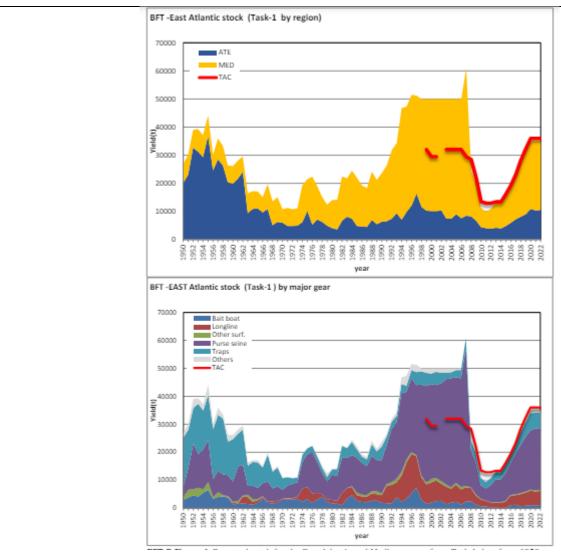


Figure 1. Reported catch for the East Atlantic and Mediterranean from Task 1 data from 1950 to 2022 split by main geographic areas (top panel) and by gears (bottom panel) together with unreported catch estimated by the Committee from 1998 to 2007 and TAC levels since 1998 (ICCAT, 2023).

Fishery removals of the species in the fishery under assessment are included in the stock assessment process. C.1.1 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 three models showed similar trends in spawning stock biomass (SSB), with a progressive decline in SSB from the 1970s until the implementation of a Recovery Plan developed in 2006 (Figure 2). Since the late 2000s there has been a strong increase in SSB, although the magnitude and rate of increase differ among the three models, with VPA indicating the lowest biomass while ASAP indicates the largest increase.

Uncertainty in the rate and magnitude of the increase in SSB is evident for all three platforms and in the sensitivity tests conducted for each platform, especially in recent years. The fishing mortality of the age group 2-5 and age 10+ fish showed an increasing trend since the 1970s, whereas the F for both the age group 2-5 and age 10+ shows a drastic decline in fishing mortality since the establishment of the 2006 Recovery Plan. Recently, fishing mortality has been increasing, however, when average over all three models, fishing mortality is still below fishing mortality target.

Recruitments estimated by the three assessment platforms show considerable variability, especially over the recent period. In general, however, there are two distinct periods, one with low recruitments before 1990 and the other with higher recruitments thereafter.



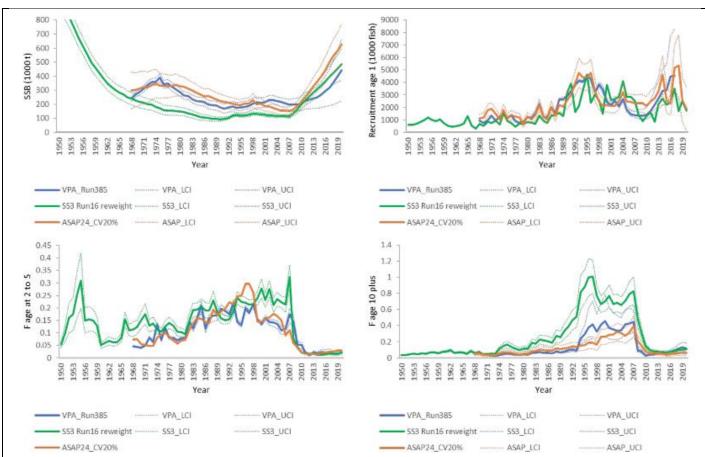


Figure 2. Comparisons of the trends in estimated spawning stock biomass (SSB), recruitment (age 1), F at age 2 to 5, and F at age 10 plus group between base cases by model platform: VPA (blue lines), Stock Synthesis (green lines), and ASAP (orange lines). The time series of recruitments for the VPA have the terminal three years removed as it is standard practice not to consider these due to their estimates being unreliable (ICCAT, 2023).

The current perception of the stock status depends on recruitment estimates which are highly uncertain. The different models showed a relatively wide range of stock status estimates relative to the F0.1 reference level, ranging from overfishing to not overfishing (FCURRENT/F0.1): VPA = 1.16; SS = 0.72 and ASAP = 0.54. To inform stock status, the Committee recommended that the results of the three models be considered equally, by integrating the results. The resultant point estimate of FCUR is below F0.1 (FCURRENT/F0.1= 0.81; 95% CI 0.48-1.62), indicating a stock status determination of not overfishing. Furthermore, fishing mortality rates are much lower than those during the 1998-2007 period.

The 2017 assessment estimated BMSY to be around 270,000 tonnes. Although the 2022 stock assessment made no reference to the BMSY or other biomass-based reference point, SSB is projected to be higher than 750,000 tonnes and hence the stock is highly likely to have a biomass above the limit reference point (or proxy). Furthermore, given the large biomass increase and the low fishing mortality it is highly likely that the stock is not reproductively impaired (i.e. below limit reference point).

The MP established set a TAC for eastern Atlantic and Mediterranean blue tuna of 40,570 t for 2023 to 2025 (EU, 2023) [Table 1].



Table 1. Summary of East Atlantic and Mediterranean bluefin tuna data (ICCAT, 2023).

EAST ATLANTIC AND MEDITERRANEAN BLUEFIN TUNA SUMMARY		
Current reported catch (2022)	35,102 t*	
FCURRENT/F0.1 ² (2020)	0.81 (0.48-1.62)1	
Stock Status (2020) ³	Overfishing: No	
TAC 2023-2025	40,570 t	

¹Mean and approximate 95% CI from integrating across the uncertainty for each model.

The species is considered, in its most recent stock assessment, to have a biomass above the limit reference point (or proxy). C.1.2 is met.

References

ICCAT. 2023. BFT – Atlantic bluefin tuna. EXECUTIVE SUMMARY BFT-E. https://www.iccat.int/Documents/SCRS/ExecSum/BFT_E_ENG.pdf

REGULATION (EU) 2023/2053 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 13 September 2023 establishing a multiannual management plan for bluefin tuna in the eastern Atlantic and the Mediterranean, amending Regulations (EC) No 1936/2001, (EU) 2017/2107, and (EU) 2019/833 and repealing Regulation (EU) 2016/1627. https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32023R2053

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

² F_{CURRENT} refers to the geometric mean of the estimates (a proxy for recent F levels) for 2017-2020 for VPA, and for 2018-2020 for ASAP and SS. For the VPA and ASAP, F is measured as apical F, for SS F is exploitation rate in biomass.

³ Biomass reference points to determine stock status were not estimated since the 2017 assessment due to uncertainty in recruitment potential.

^{*} As of September 2023.