



REVISION OF THE WPTmT PROGRAM OF WORK (2020–2024)

PREPARED BY: IOTC SECRETARIAT, 30 JUNE 2022

PURPOSE

To ensure that participants at the 8th Working Party on Temperate Tunas (WPTmT08(AS)) revise the Program of Work for the WPTmT by taking into consideration the specific requests of the Commission and Scientific Committee.

BACKGROUND

Scientific Committee

At the 24th Session of the SC:

- (Para. 175) The SC **NOTED** IOTC–2021–SC24–08 which provided the SC with a proposed Program of Work for each of its working parties, including prioritisation of the elements requested by each working party.
- (Para. 176) The SC **NOTED** the proposed Program of Work and priorities for the SC and each of the working parties and **AGREED** to a consolidated Program of Work as outlined in Appendix 35a-g and in accordance with the IOTC Strategic Science Plan 2020-2024. The Chairpersons and Vice-Chairpersons of each working party will ensure that the efforts of their respective working parties are focused on the core areas contained within the appendix, taking into account any new research priorities identified by the Commission at its next Session.

Commission

At Sessions of the Commission, Conservation and Management Measures adopted contained elements that call on the Scientific Committee, via the WPTmT, to undertake specific tasks. These requests will need to be incorporated into a revised Program of Work for the WPTmT:

Resolution 13/09 On the conservation of albacore caught in the IOTC area of competence

- (para. 2) Through its IOTC Working Party on Temperate Tunas (WPTmT), to examine in relevant 2014 sessions the state of albacore stock, by considering even common working sessions with the ICCAT scientific community to improve the knowledge on the interrelation between the Indian Ocean and Atlantic albacore populations; and
- (para. 3) To advise the Commission, by end of 2014 at the latest:
- On Target Reference Points (TRPs) and Limit Reference Points (LRPs) used when assessing the albacore stock status and when establishing the Kobe plot and Kobe matrices;
 - On potential management measures having been examined through the Management Strategy Evaluation (MSE) process. These management measures will therefore have to ensure the achievement of the conservation and optimal utilisation of stocks as laid down in article V of the Agreement for the establishment of the IOTC and more particularly to ensure that, in as short a period as possible and no later than 2020, (i) the fishing mortality rate does not exceed the fishing mortality rate allowing the stock to deliver MSY and (ii) the spawning biomass is maintained at or above its MSY level.

Resolution 15/10 On target and limit reference points and a decision framework

- (para 4) These target and limit reference points, referred to in paragraphs 1, 2 and 3, shall be further reviewed by the IOTC Scientific Committee according to the program of work at **Annex 1** and in accordance with paragraph 6. The results shall be presented to the Commission for adoption of species-specific reference points.

- (para. 5) The IOTC Scientific Committee shall continue to provide advice on the status of stocks and on recommendations for management measures in relation to the reference points referred to in paragraphs 1, 2 and 3, where available, until the Commission adopts other reference points that achieve the IOTC's conservation and management objectives and are consistent with paragraph 6.

DISCUSSION

Participants at the WPTmT08(AS) are requested to consider the priorities set by the Commission and the Scientific Committee, via Conservation and Management Measures, and revise its Program of Work to match those priorities.

RECOMMENDATION/S

That the WPTmT:

- 1) **NOTE** paper IOTC–2022–WPTmT08(AS)–03, which encouraged the WPTmT to further update, develop and refine its Program of Work for 2023–2027 to align with the requests and directives from the Commission and Scientific Committee.
- 2) **RECOMMEND** a revised Program of Work for 2023–2027 to the Scientific Committee for its consideration and potential endorsement.

WORKING PARTY ON TEMPERATE TUNAS PROGRAM OF WORK (2020–2024)

The Program of Work consists of the following, noting that a timeline for implementation would be developed by the SC once it has agreed to the priority projects across all of its Working Parties:

- **Table 1:** Priority topics for obtaining the information necessary to develop stock status indicators for albacore in the Indian Ocean;
- **Table 2:** Stock assessment schedule.

Table 1. Priority topics for obtaining the information necessary to develop stock status indicators for albacore in the Indian Ocean (2020-2024)

Topic	Sub-topic and project	Priority	Est. budget and/or potential source	Timing				
				2020	2021	2022	2023	2024
1. Stock structure (connectivity and diversity)	1.1 Genetic research to determine the connectivity of albacore throughout its distribution and the effective population size.	Low (5)	1.3 m Euro: European Union					
2. Biological information (parameters for stock assessment)	2.1 Biological research (collaborative research to improve understanding of spatio-temporal patterns in age and growth and reproductive parameters)	High (1)	TBD					
	2.1.1 Age and growth studies: Uncertainty about the growth curve is a primary source of uncertainty in the stock assessment. A preliminary growth curve was developed in 2019, but there is substantial work to be done to ensure that growth curves include data from smaller size classes, and that spatio-temporal patterns in growth are quantified for use in the stock assessment.		TBD					

		Collaborative sampling programs, involving a combination of observer- and port-based sampling, are required to ensure that adequate samples are collected.							
		2..1.2 Quantitative biological studies are necessary for albacore throughout its range to determine spatio-temporal patterns in key reproductive parameters including sex ratio; female length- and age-at-maturity; spawning location, periodicity and frequency; batch fecundity at length and age; spawning fraction and overall reproductive potential, to inform future stock assessments.		TBD					
2	CPUE standardisation	3.1 Continue the development of standardized CPUE series for each albacore fishery for the Indian Ocean, with the aim of developing appropriate CPUE series for stock assessment purposes.	High (2)	CPUE Workshop (TBD)					
		3.1.1 Spatio-temporal structure and target changes need to be considered carefully, as fish density and targeting practices can vary in ways that affect CPUE indices. Developments may include changes to fishery spatial structure, new approaches for area weighting, time-area interactions in the model, and/or indices using VAST.		CPCs directly					
3	Size frequency data	5.1 Further investigate the size information provided by CPCs in order to better understand the stock dynamics and inputs into the assessment models. This is particularly necessary for the purse seine data.	High (3)	TBD					
5	Management strategy evaluation	6.1 Continue to collaborate with the WPM on input to the Management Strategy Evaluation (MSE) process.	High (4)	TBD					



Table 2. Assessment schedule for the IOTC Working Party on Temperate tuna 2022-2026.

<i>Working Party on Temperate Tunas</i>					
Species	2022	2023	2024	2025	2026
Albacore	Data preparatory Meeting Stock assessment meeting	–	–	Data preparatory Meeting Stock assessment meeting	