



COMMISSION

Second Science-Management Dialogue (SMD02)

10:00 – 15:00, Pohnpei Time, 10-12 September 2024 (Online)

Outputs from the SC20 Management Issues Theme Session

WCPFC-SMD02-2024/BP-03

SC20 Management Issues Theme Convenor Emily Crigler

SMD02 Agenda Item	SC20 MI Theme Recommendations (paragraphs from the SC20 Outcomes Document)
<p>AGENDA ITEM 4.</p> <p>4.2 Review of SPA iTRP</p>	<p>5.1.2.1 Target reference points</p> <p>106. SC20 recognized that WCPFC20 adopted an interim TRP for South Pacific albacore, defined as 4% below the estimated average spawning potential depletion of the stock over the period 2017-2019 (0.96 SB2017- 2019/SBF=0). SC20 recommended the Commission note that the biomass depletion associated with the adopted interim TRP has been re-estimated to be 50% according to the 2024 SPA stock assessment outcomes. This biomass depletion when the interim TRP was adopted by WCPFC20 was previously estimated at 47% based on the 2021 SPA stock assessment.</p> <p>107. SC20 recommended the SMD and the Commission consider results from the evaluation of a range of alternative candidate south Pacific albacore target reference points provided in SC20-MI-WP-03, in reviewing the interim TRP and other scenarios recommended by SC20.</p> <p>108. SC20 recommended that both catch numbers and weight be used for projections to inform the</p>

	<p>Commission discussion on reviewing the interim TRP for South Pacific albacore noting that projections conducted in terms of weight are more consistent with the MP evaluations and management through, for example, a TAC. SC20 further recommended that SPC present trends in vulnerable biomass among specific WCPFC-CA longline fleets, and for WCPFC-CA catch levels to also be related to 2017-2019 levels.</p> <p>109. SC20 recommended including more scenarios for projections by fixing EPO catch at 2017-2019 levels and using multiple catch levels in the WCPFC-CA related to 2017-2019 levels.</p>
<p>AGENDA ITEM 4.</p> <p>4.3 South Pacific albacore management procedures</p>	<p>5.1.2.2 South Pacific albacore operating models</p> <p>110. SC20 adopted the operating model (OM) reference set, together with the proposed robustness set (Table 2, SC20-MI-WP-04), for the evaluation of candidate south Pacific albacore MPs.</p> <p>111. SC20 noted there are concerns about the range of uncertainty covered by the current operating model set. SC20 recommended that future work to elaborate the OM sets be conducted through the monitoring strategy and could include:</p> <ul style="list-style-type: none"> a) development of scenarios for the impacts of climate change b) consideration of potential effects of effort creep and/or hyperstability in CPUE c) development of models that address uncertainties around stock structure to the robustness set. <p>112. SC20 recommended that simulations be conducted to explore the implications of assuming a single stock OM when there could be multiple stocks. If ongoing genetics work confirms the presence of multiple-stocks and the simulations indicate that the single-stock assumption made in the OMs is problematic, then exceptional circumstances should be considered and the OM sets should be revised to account for multiple reproductive stocks in the South Pacific.</p> <p>5.1.2.3 South Pacific albacore management procedure</p> <p>113. SC20 recommended that SPC focus primarily on the following two ASPM-derived estimators with a view to having a robust estimator, without obvious future data vulnerabilities:</p> <ul style="list-style-type: none"> a) direct biomass depletion approach using mean $SB/SB_{F=0}$ of the last three years; and b) A ratio approach that uses Mean $SB/SB_{F=0}$ of the last three year (same as in 1.a) relative to 2019-2022.

	<p>114. SC20 noted that there was bias in estimation model performance at low predicted stock sizes. SC20 recommended that this bias be addressed through the design of the HCR and its significance or otherwise will be evaluated through evaluation of candidate MPs. Should the estimation model bias become problematic in the MP design context, then steps will need to be taken to address that issue.</p> <p>115. SC20 recommended that SPC conduct a Management Strategy Evaluation of a range of candidate MPs, using updated estimators together with HCR and maximum change metarule specifications similar to those presented at SC19 (SC19-MI-WP-06).</p> <p>116. SC20 recommended that SPC, in addition to running projections assuming a single baseline for all fisheries within the Management Procedure evaluations, explore the potential implications of using different reference periods for different fisheries and gears within the MP.</p> <p>117. SC20 recommended that EPO catches be assumed to remain constant at recent levels but with an exploration of a case where the EPO is subject to MP controls (in a similar way to SC20-MI-WP-03).</p> <p>118. SC20 noted that it was desirable to constrain the number of candidate MPs evaluated for consideration and recommended that steps be taken to manage this, including using one-off variations from a base-case scenario, rather than a full factorial grid of options.</p> <p>119. SC20 recommended that, to the extent possible, the results of the above candidate MP evaluations be provided to the SMD and the Commission for their consideration or decision.</p>
<p>AGENDA ITEM 5. DEVELOPMENT OF BIGEYE AND YELLOWFIN TRPS</p>	<p>5.1.3.1 Target reference points for bigeye and yellowfin tuna</p> <p>120. SC20 recommended that the SSP include the following updates to SC20-MI-WP-07 for presentation to the Commission:</p> <ul style="list-style-type: none"> a) Update tables 2-7 with the equivalent depletion levels for South Pacific albacore based on the 2024 South Pacific albacore stock assessment; b) Include additional columns in the evaluation of candidate TRPs for YFT and BET which provide the impact on vulnerable biomass within the tropical longline fishery and the southern longline fishery. <p>121. SC20 recommended that the SMD and Commission take into account the analysis contained in</p>

	<p>SC20-MI-WP-07 including the following when considering target reference points for bigeye and yellowfin tuna:</p> <ul style="list-style-type: none"> a) Based on the 2023 stock assessment for yellowfin, the miscellaneous fisheries are estimated to account for approximately 37% of the impact on the spawning potential over the period 2016 - 2018 (see Table 5 of WCPFC20-2023-16), but recent catch for yellowfin is higher. b) Based on the analysis in SC20-MI-WP-07, the CMM 2023-01 objectives for yellowfin and bigeye tuna cannot both be met simultaneously – if precisely achieved for one stock, the other will be above or below that level. <p>122. SC20 recommended that an additional working paper be submitted to WCPFC21, which will include a re-evaluation of the candidate yellowfin and bigeye tuna TRPs using more recent fishing conditions for the domestic fisheries of Indonesia, Philippines, and Vietnam. The 2016-18 average catches are significantly lower than the recent fishing level, likely leading to a more optimistic projected stock status for yellowfin tuna.</p>
<p>AGENDA ITEM 6. APPLICATION OF THE SKIPJACK MANAGEMENT PROCEDURE - MONITORING STRATEGY</p>	<p>5.1.1.1 Skipjack tuna management procedure</p> <p>99. SC20 noted that the Interim Skipjack Management Procedure (CMM 2022-01 Attachment G) calls for the review of the performance of the Management Procedure in 2025 and that WCPFC20 noted that a re-evaluation of the skipjack estimation method may need to be undertaken prior to the next implementation of the MP. SC20 recommended that the SSP evaluate the following potential approaches to modify the estimation method for the WCPO skipjack interim MP, using the current OM grid and HCR, to evaluate whether the performance of the MP would change if the EM is revised, and report back to SC21 on outcomes and recommendations:</p> <ul style="list-style-type: none"> a) Modification of tropical CPUE abundance indices in the existing estimation method along the lines of the approach taken using unassociated set purse seine CPUE data by the 2022 stock assessment. b) Further investigation of alternative stock assessment platforms and modelling approaches. <p>100. SC20 recommended that the SSP provide the information presented in SC20-MI-WP-01 as well as outcomes from the discussions at SC20 to SMD for further discussion and consideration.</p> <p>101. SC20 further recommended that SC21 review the outputs from the re-evaluation and provide recommendations to WCPFC22 regarding the potential need to revise the current interim skipjack MP</p>

(CMM 2022-01).

5.1.1.2 Monitoring strategy for skipjack tuna

102. SC20 requested that the SSP conduct the following analyses related to the monitoring strategy for skipjack:

- a) Evaluate whether changes in the FAD closure duration (as adopted in CMM 2023-01) will affect the performance of the interim MP;**
- b) Representativeness and appropriateness of candidate CPUEs for use in MP.**

103. SC20 recommended that in years when an assessment is not conducted, the monitoring strategy could be reviewed by SC and feedback provided through the Online Discussion Forum.

104. SC20 was invited to review the information provided in the Monitoring Strategy included in Table 1 of SC20-MI-WP-02, and to update the text in column 1 (SC) as appropriate. SC20 recommended the following modifications to Table 1 (Monitoring strategy for the skipjack Management Procedure):

- a) Amend sub-paragraph a) of Element 1.a) (comparison of predicted MP performance against the latest stock assessment outcomes) to read “The performance of the MP in managing skipjack tuna to achieve defined objectives, including the TRP”.**
- b) Amend element 1.b) (Data availability to run the MP) to include a new comment for SC20: “The effect of changes made to the historical data is not known”.**

105. SC20 recommended the monitoring strategy be forwarded to the SMD, TCC and the Commission for their consideration.