



SCIENTIFIC COMMITTEE
FOURTEENTH REGULAR SESSION
 Busan, Republic of Korea
 8-16 August 2018

ISSUES ARISING FROM THE COMMISSION
 (SC13 and WCPFC14)

WCPFC-SC14-2018/GN-WP-03

Secretariat

ISSUES ARISING FROM SC13 (Report paragraphs indicated below)		
Issues	References	Outputs/Comments
Data gaps	81. SC13 recommended that the Scientific Services Provider conduct a gaps analysis and compile the requirements for enhancing conversion factor information required for future WCPFC work and present this information to SC14, including a proposal for how the gaps can be addressed.	SC14-ST-IP-05 (Requirements for enhancing conversion factor information)
	82. SC13 recommended that the Scientific Service Provider review the importance and practicalities for including the provision of estimates of longline discards in number of individuals discarded/released in the “Scientific Data to be provided to the Commission”, with a definition for discards/releases, and report to SC14.	ST Theme Agenda 3.1.1 SC14-ST-WP-01 (Scientific Data Available to the Western and Central Pacific Fisheries Commission)
	83. SC13 acknowledged the necessary assistance that the SPC-facilitated “Regional Tuna Data Workshop (TDW)” provides in building technical capacity for SIDS, territories and developing states to produce annual catch estimates and Part 1 reports. SC13 recommended that the Commission continue to support SIDS, territories and developing states participation at future TDWs through the “Regional Capacity Building Workshops” fund.	TDW12, conducted in April 2018, was supported through the WCPFC Regional Capacity building budget (WCPFC14 decision)
	84. SC13 recommended that the Scientific Services Provider proceed to enhance the set of WCPFC public domain data available on the WCPFC web site, with the assurance that the WCPFC rules for public domain data will be applied	
	98. SC13 recommended that the future work proposed by the Scientific Service Provider under Project 60 (Improving purse seine species composition) continue over the coming year with a report to SC14 and agreed that this work should continue in the medium-term subject to annual review.	ST Theme Agenda 3.1.2 SC14-ST-WP-02 (Better purse seine catch composition estimates: progress on the Project 60 work plan)

	99. SC13 recommended that the Scientific Services Provider explore opportunities to undertake comprehensive comparisons of corrected grab sample based species compositions with accurate composition estimates from in-port sampling with other CCMs who hold the required data	
	100. SC13 recommended that trials of electronic monitoring based approaches to species composition estimation be undertaken in a separate project.	Reported in the WCPFC ER&EM-3 Workshop
	101. SC13 recommended that the Scientific Services Provider include the original purse seine tuna species catch estimates provided by CCMs in the WCPFC Tuna Fishery Yearbook.	The WCPFC Tuna Fishery Yearbook for 2016 includes original purse seine tuna species catch estimates.
	102. SC13 recommended that the Scientific Services Provider be tasked with designing and co-ordinating the systematic collection of representative samples of length measurements of bycatch species.	SC14-ST-IP-05 (Requirements for enhancing conversion factor information)
	103. SC13 recommended that the Scientific Services Provider be tasked with a project to design and co-ordinate the systematic collection of length:length, length:weight and weight:weight data on all species to better inform bycatch estimation.	SC14-ST-IP-05 (Requirements for enhancing conversion factor information)
	113. SC13 recommended that the Scientific Services Providers continue the work on purse seine bycatch estimates and extend this work to producing estimates of bycatch in the longline fisheries for presentation at SC14, acknowledging the issues related to the 5% observer coverage in these fisheries. 114. SC13 recommended that the Scientific Services Provider produce WCPFC-area estimates of longline bycatch on a regional fishery basis.	ST Theme Agenda 3.1.4 SC14-ST-WP-03 (Summary of longline fishery bycatch at a regional scale, 2003-2017) SC14-ST-IP-04 (Summary of purse seine fishery bycatch at a regional scale, 2003-2017)
Regional Observer Programme	124. SC13 recommended the following revisions to the ROP Minimum Standard Data Fields: <ul style="list-style-type: none"> • Addition of a new section “FAD Information” that will include inventories of the FAD buoys on board at the start and end of each trip. • Addition of a new field for FAD Identification. • Deletion of FAD Data fields related to a) materials FAD is made from and b) estimated size of FAD. 125. SC13 noted that the revisions of the ROP minimum standards will require careful planning and implementation to ensure that the value of WCPFC data on FADs is maintained. In particular, there may need to be a period of overlap in reporting of FAD data where observers continue to report on FAD design and construction while the new reporting requirements for vessel operators are introduced. 126. SC13 recommended that the revisions to the ROP Minimum Standard Data Fields be forwarded to TCC13 for review and WCPFC14 for adoption.	WCPFC14 Report 385. The Commission noted the need for FAD data to be provided by ROP observers for all vessels involved in FAD activities, including support vessels.
	128. SC13 recommended that the currently implemented procedure to convert from weight to numbers, and vice versa, should be reviewed by the Scientific Services Provider to ensure that resulting estimates are appropriate and report to SC14.	ST Theme Agenda 3.1.5 SC13-ST-IP-05 (Requirements for enhancing conversion factor information)
Electronic	139. SC13 recommended that the latest draft version of the WCPFC E-Reporting	WCPFC14 Report

Reporting	observer data standards be forwarded to WCPFC14 for adoption.	401. The Commission adopted the E-reporting standards for observer data (WCPFC14-2017-20_rev1), and agreed to include them in the standards, specifications and procedures for Electronic Reporting which presently include E-reporting standards for operational catch and effort data (Attachment T).
Bigeye	<p>239. SC13 recognized that future work is required to improve the assessment and to reduce uncertainty. Future research should concentrate on the two axes (e.g. growth, regional structure) of uncertainty which are the most influential. The growth analysis should continue with the emphasis on providing length at age estimates for larger fish between 130 and 180 cm FL. Additional research is also required for the regional structure uncertainty to consider options in addition to the structures used in the 2014 and 2017 assessments, for example, by using statistical approaches (e.g. tree models).</p> <p>240. In addition, SC13 considers that the model ensemble or weighting will be increasingly important as SC moves to uncertainty grid approaches in stock assessments and requests the Scientific Services Provider to study those methods further.</p> <p>241. SC13 requested that SPC undertake projections of potential changes in spawning biomass in the future under current levels of fishing mortality. This would be similar to the projections delivered in SC13-SA-IP-22, but would be based on the weighted uncertainty grid as described above.</p>	<p>SA Theme Agenda 4.1.1.1 SC14-SA-WP-01 (Update on age and growth of bigeye tuna in the WCPO – WCPFC Project 81) SC14-SA-WP-03 (Incorporation of updated growth information within the 2017 WCPO bigeye stock assessment grid, and examination of the sensitivity of estimates to alternative model spatial structures)</p> <p>WCPFC14-2017-10_rev1 (An Evaluation of the Management options for purse seine and longline fisheries defined by the TT CMM Intersessional meeting - revision 1)</p>
Yellowfin	279. SC13 recognized that reviewing yellowfin growth through a study of yellowfin otoliths collected from the WCPO and incorporating this into future assessments should be encouraged.	<p>SA Theme Agenda 4.1.2.1 SC14-SA-WP-13 (Yellowfin tuna age and growth)</p>
Sea bird	598. SC13 noted from a number of CCM Part 1 Reports that high bycatch rates of seabirds, and in particular albatross, continue to be reported by some CCMs fishing in waters south of 30°S. Therefore, SC13, taking note that SPC is about to initiate a project to assess seabird interactions with WCPFC fisheries and will report the results to SC14, recommends that TCC and the Commission review both observer coverage rates (used to estimate total seabird interactions) and the application of mitigation by fleets operating in this area, to inform what further action, if any, may be required by the Commission to address this issue.	<p>EB Theme Agenda 6.3.1 SC14-EB-WP-03 (A short note on the development of WCPFC seabird bycatch estimates for Project 68)</p>
ISSUES/INFORMATION ARISING FROM WCPFC14 (Report paragraphs indicated below)		
Issues	References	Outputs/Comments
SP albacore target reference point	<p>188. The Commission agreed to prioritise the development and adoption of a Target Reference Point for South Pacific albacore through the following actions:</p> <p>a. All CCMs with an interest in the Southern albacore fishery jointly commit to review available scientific and economic information to inform their position about appropriate goals for the fishery and corresponding candidate target reference points;</p>	<p>MI Theme Agenda 5.1.2 SC14-SA-WP-05 (Stock assessment of South Pacific albacore tuna)</p>

	<ul style="list-style-type: none"> b. Regardless of the results of the 2018 stock assessment and the management advice from SC14 to WCPFC15, SC14 shall dedicate sufficient time in the Management Issues Theme to develop advice for WCPFC15 on candidate target reference points c. CCMs will work together in advance of WCPFC15 to develop TRP proposals; and d. WCPFC15 shall adopt a Target Reference Point for South Pacific albacore. 	
Science-management dialogue	215. The Commission agreed to reprioritise as needed the annual agenda of the Commission and Scientific Committee to allow sufficient additional time for consideration of harvest strategy issues. In addition, WCPFC recognised that there may also be a need for a dedicated science/management dialogue.	MI Theme Agenda 5.1.5 SC14-MI-WP-05 (Key decisions for managers and scientists under the harvest strategy approach for WCPO tuna stocks and fisheries) SC14-MI-WP-06 (Consultative Draft Terms of Reference for a WCPFC Science-Management Dialogue meeting)
Roadmap for South Pacific albacore	<p>264. The Commission agreed to the formation of a virtual intersessional process to develop a Roadmap to implement the elements needed for the effective conservation and management for South Pacific albacore. The roadmap will take into account the outcome of a revised stock assessment for South Pacific albacore in 2018 and recommend an overall limit for the fishery, how it could be distributed (taking into account the interests of SIDS) and the actions required to achieve biological and economic stability in the fishery. This roadmap will include recommendations for a review of the existing CMM for South Pacific albacore. The terms of reference of this intersessional group will be to consider management issues for South Pacific albacore including:</p> <ul style="list-style-type: none"> a. The elements necessary for the implementation of a Harvest Strategy approach to the management of the stock; b. an allocation process; and c. monitoring and reporting priorities, and addressing of gaps, for all fisheries taking South Pacific albacore within the WCPFC convention area. <p>265. Also in support of the development of a Roadmap for South Pacific albacore, the Commission also agreed to task:</p> <ul style="list-style-type: none"> a. SC14 to provide WCPFC15 with advice on technical aspects of the South Pacific albacore harvest strategy including, for example, a consideration of scientific elements of candidate harvest control rules, and potential components of the management procedure (e.g. the use of CPUE (vulnerable biomass) indices to inform on stock status); b. TCC14 to evaluate monitoring and reporting gaps in the South Pacific albacore fishery, as well as SIDS and Participating Territories implementation considerations; and c. SC14 and TCC14, based on their evaluations, will provide any appropriate advice or recommendations to WCPFC15 with respect to informing the development of the Roadmap for improving South Pacific albacore management. <p>266. The Commission accepted New Zealand's offer to lead this intersessional working</p>	MI Theme Agenda 5.1.3 SC14- MI-WP-02 (Technical aspects of a potential South Pacific albacore harvest strategy)

	group, and noted New Zealand's request that all CCMs with an interest in participating in this intersessional working group nominate a point of contact to New Zealand before the conclusion of WCPFC14.	
Guidelines for safe release of rays and sharks	331. The Commission agreed to task SC14 to develop proposed guidelines for safe release of rays and sharks and taking into account existing standards or guidelines adopted on other fora. The Commission agreed that priority should be given to the development of guidelines for safe release of silky shark and oceanic whitetip sharks.	EB Theme Agenda 6.2.3 SC13-EB-IP-03 (Draft safe release guidelines for sharks and rays)
Comprehensive shark CMM	332. The Commission agreed to form an intersessional working group to develop a draft comprehensive shark CMM for discussion at WCPFC15 (IWG-Sharks). The IWG-Sharks will primarily work virtually and will be formed through the issuance of a Circular from the WCPFC Secretariat inviting all parties to nominate representatives to participate in the activities of the group. The IWG-Sharks will be chaired by Japan. Terms of reference for the IWG-Sharks are attached at Attachment Q. 333. WCPFC14 agreed that the first phase of work will begin with the IWG Chair codifying WCPFC's existing shark measures, taking into account comprehensiveness, and distributing this draft to participants by the end of February 2018. The IWG Chair will request that comments on the codified draft, as well as contributions on new elements, from IWG-Sharks participants be received by the end of March 2018. The IWG Chair will then compile these comments on the codified draft and new elements into a revised draft, requesting technical advice as necessary, and circulate it to IWG-Sharks participants on a timeline to be determined by the IWG Chair, giving due consideration to the timelines for SC14 and TCC14.	EB Theme Agenda 6.2.1 SC14-EB-WP-05 (Draft Consolidated Text for the Conservation and Management Measures for Sharks)
Seabird – hook shielding device	347. The Commission tasks SC14 and TCC14 to review the available research on hook shielding devices and advise WCPFC15 if they are effective options for seabird bycatch mitigation in WCPFC fisheries and whether to incorporate them in the seabird CMM as additional mitigation options.	EB Theme Agenda 6.3.2 SC14-EB-WP-10 (Hook-shielding devices to mitigate seabird bycatch: review of effectiveness) SC14- EB-WP-13 (ACAP advice for reducing the impact of pelagic longline fishing operations on seabirds)
Sea turtle mitigation	362. The Commission tasks SC14 and TCC14 to evaluate the expected effects of several potential sea turtle management scenarios, including, but not limited to, ones in which vessels in all longline fisheries in the Convention Area are required to: (1) use either large circle hooks or whole finfish for bait; (2) use large circle hooks and whole finfish for bait; or (3) use any other combination of mitigation methods identified by the SC as being potentially effective. The SC may consider a range of specifications for large circle hooks. SC's evaluation should focus on expected effects on sea turtle interactions and mortalities and on target and bycatch species catch rates. TCC's evaluation should focus on implementation and compliance implications, as well as SIDS implementation considerations. Based on the evaluations, SC14 and TCC14 will provide any appropriate advice or recommendations to WCPFC15 with respect to improving CMM 2008-03.	EB Theme Agenda 6.4.2 SC14-EB-IP-06 (Blue shark and swordfish catch rates in Hawaii's shallow-set longline fishery: Comparisons before and after regulations to reduce sea turtle bycatch)

	363. WCPFC14 tasks SC14 to consider the recommendations of the recent Joint Analysis of Sea Turtle Mitigation Effectiveness workshops to modify the ROP Minimum Standard Data Fields with respect to improving the collection of data related to sea turtle interactions, taking into account capacity of observers and priority of data collection, and to recommend any modifications for the consideration of the ROP Coordinator, TCC14 and WCPFC15. SC may also consider possible modifications to operational level data requirements.	
North Pacific striped marlin and North Pacific blue shark	378. The Commission agreed to task SC14 to prioritise determination of whether the North Pacific striped marlin and North Pacific blue shark are northern stocks and as applicable provide updated management advice and recommendations to WCPFC15. To support the SC's consideration of these matters in 2018, the Scientific Services Provider (SPC-OFP) and ISC were requested to provide to SC14 papers that provide available information on the status of these stocks and the catch levels in their associated fisheries.	SA Theme Agenda 4.3.4 and 4.4.3 SC14-SA-WP-10 (Indicators of the spatial distribution of blue shark (<i>Prionace glauca</i>) in the North Pacific) SC13-SA-WP-10 (Stock Assessment and Future Projections of Blue Shark in the North Pacific Ocean through 2015) SC14-SA-IP-11 (Estimation of the ratio of spawning biomass of striped marlin above 20°N in the Central and Western North Pacific Ocean using the Japanese Distant Water Longline Fleet and the 2007 Stock Assessment) SC14-SA-IP-12 (Stock assessment update for striped marlin (<i>Kajikia audax</i>) in the western and central North Pacific Ocean through 2013)
ISSUES/INFORMATION ARISING FROM 2018 HARVEST STRATEGY WORKPLAN		
Issues	References	Outputs/Comments
South Pacific albacore	<ul style="list-style-type: none"> SC provide advice on performance of candidate harvest control rules. 	SC14-MI-WP-02 (Technical aspects of a potential South Pacific albacore harvest strategy)
Skipjack tuna	<ul style="list-style-type: none"> Develop harvest control rules and management strategy evaluation SC provide advice on performance of candidate harvest control rules. 	SC14-MI-WP-03 (Selecting and conditioning operating models for WCPO skipjack) SC14-MI-WP-04 (Performance indicators for comparing management procedures using the MSE modelling framework) SC14-MI-WP-05 (Key decisions for managers and scientists under the harvest strategy approach for WCPO tuna stocks and fisheries) SC14-MI-IP-02 (Technical developments in the MSE modelling framework) SC14-MI-IP-03 (Generating pseudo data in MULTIFAN-CL) SC14-MI-IP-05 (Updating indicators of effort creep in the WCPO purse seine fishery)
Bigeye tuna	<ul style="list-style-type: none"> SC updated advice on bigeye tuna status. SC and SPC provide advice to the Commission on the likely outcomes of revised tropical tuna measure. 	SC14-MI-WP-08 (Evaluation of CMM2017-01 for bigeye tuna) SC14-MI-IP-04 (Catch and Effort tables on tropical tuna CMMs) SC14-MI-IP-01 (Work plan for the adoption of harvest strategies under

	<ul style="list-style-type: none"> • SC and Commission discussion of management objectives for fisheries and/or stocks, and subsequent development of candidate TRPs for bigeye and yellowfin tuna. 	CMM 2014-06 (WCPFC14 Summary report Attachment L))
Yellowfin tuna	<ul style="list-style-type: none"> • SC and Commission discussion of management objectives for fisheries and/or stocks, and subsequent development of candidate TRPs for bigeye and yellowfin tuna. 	SC14-MI-WP-01 (Minimum TRPs for yellowfin consistent with alternative LRP risk levels) SC14-MI-IP-01 (Work plan for the adoption of harvest strategies under CMM 2014-06 (WCPFC14 Summary report Attachment L))