



**SCIENTIFIC COMMITTEE
THIRTEENTH REGULAR SESSION**

Rarotonga, Cook Islands
9-17 August 2017

**ISSUES ARISING FROM THE COMMISSION
(SC12 and WCPFC13)**

WCPFC-SC13-2017/GN-WP-03

Secretariat

ISSUES ARISING FROM SC12 (Report paragraphs indicated below)		
Issues	References	Outputs/Comments
Data gaps	93. SC12 recommended that: b) The Scientific Services Provider calculate annual coefficients of variation for (the CPUE of) various taxa collected from longline observer data for 2013, 2014 and 2015, and present this information to SC13.	SC13-ST-WP-01 (Scientific Data to be provided to the Commission) – Section 2.5
	103. SC12 recommended that the Scientific Services Provider proceed with the proposed work plan for Project 60 (Collection and evaluation of purse seine species composition data) as endorsed by SC12.	SC13-ST-WP-02 (Better purse seine catch composition estimates: recent progress and future work plan for Project 60) SC13-ST-WP-03 (Improving the quality of Japanese purse seine catch composition estimates: a Project 60 collaboration) SC13-ST-IP-03 (Estimates of purse seine catches by species based on alternative data sources)
	123. SC12 recommended that WCPFC continue the work which would include exploring mechanisms for obtaining complete cannery receipt or equivalent data for validating the purse seine catch and evaluating the usefulness of these data.	SC13-ST-IP-04 (Summary of cannery data with potential use to the WCPFC) SC13-ST-IP-05 (Pilot Study of the Potential for using Non-ISSF Associated Cannery Receipt Data for the work of the WCPFC)
	126. The Scientific Committee endorsed the recommendations as outlined in SC12-ST-WP-07 (Agreed recommendations from ERandEM-WG2). 132. SC12 supported outcomes and recommendations from the	WCPFC13 Report 583. The Commission adopted the Summary Report of the ERandEM Working Group second meeting (WCPFC-TCC12-2016-17) and noted the update on progressing the development of

	<p>second meeting of the WCPFC E-Reporting and E-monitoring Working Group (ERandEM WG-2, August 2016) and that they are taken forward to TCC12.</p> <p>133. SC12 noted that CCMs agreed to provide comments on the draft WCPFC E-Reporting standard data fields for logsheet and observer data prior to 10th September 2016, so that the WCPFC Secretariat and Science Services Provider can compile comments for presentation to TCC12.</p>	<p>draft standards, specifications and procedures for Electronic Reporting (WCPFC13-2016-28).</p> <p>584. The Commission adopted the standards, specifications and procedures for Electronic Reporting, which presently include E-reporting standards for operational catch and effort data (Attachment T).</p> <p>585. The draft E-reporting standards for observer data, high seas pocket reporting and reporting in the event of VMS malfunction should continue to be revised based on comments provided by CCMs in 2017.</p> <p>586. The Commission supported TCC12 recommendation (TCC12 paragraph 330) that the ERandEMWG continue its work under the same terms of reference for another two years.</p> <p>587. The Commission noted that FAC had allocated a budget for a meeting of the ERandEMWG in 2017, but agreed that a budget for a formal meeting of the ERandEMWG in 2017 was not necessary.</p> <p>SC13-ST-IP-07 (A brief update on ER and EM progress in the region)</p>
	<p>144. SC12 recommended that the WCPFC Secretariat consider the requests of several CCMs to expand the support of the Port Coordinators initiative and report a proposal at TCC12.</p>	<p>WCPFC13 Report</p> <p>197. The Commission noted the report of the WCPFC Port Coordinators Programme Trial 2015–2016 (WCPFC13-2016-26) and tasked TCC13 to further consider the recommendations to extend the Port Coordinators Programme.</p>
	<p>152. SC12 noted the work of the SC12 informal small working group on data (ISG-4) and that the recommendations in the report of ISG-4 (available as SC12-ST-WP-09_rev2) are taken forward.</p> <p>a) With respect to “the proposal to modify the definition of the WCPFC public domain data to align to the IATTC definition”, the changes proposed by ISG-4 are to be forwarded to TCC12 for consideration.</p> <p>b) With respect to the review of the elements proposed in SC12-ST-WP-05, (European Union proposal for an amendment of the "Scientific data to be provided to the Commission"), the revised document by ISG-4 are to be forwarded to TCC12 for further work.</p>	<p>TCC12 Report</p> <p>338. The TCC Chair noted that there was no agreement on proposed revisions to para. 9 and 10 of the excerpt from the Rules and Procedures for the Protection, Access to, and Dissemination of Data Compiled by the Commission (2007), Section 3 (Dissemination of Public Domain Data).</p> <p>WCPFC13 Report</p> <p>127. The Commission agreed to adopt the revised “<i>Scientific Data to be Provided to the Commission</i>” decision (Attachment G)</p>
	<p>177. SC12 recommended that:</p> <p>a) An annual update of “Analyses and projections of economic conditions in WCPO fisheries”, in a similar manner to SC12-ST-WP-04, continue to be provided at SC meetings.</p> <p>b) These economic analyses be made available to, and be</p>	<p>SC13-ST-WP-08 (Analyses and projections of economic conditions in WCPO fisheries)</p> <p>SC13-ST-WP-09 (Development of Guidelines for the Voluntary Submission of Economic data to the Commission)</p>

	<p>used by, the Commission in the development of harvest strategies and management measures.</p> <p>c) SC13 considers guidelines for the voluntary submission of economic data to the Commission by CCMs, recognizing the value of economic data to the work of the Commission.</p>	
Skipjack	316. SC12 noted that skipjack spawning biomass is now around the adopted TRP and SC12 recommends that the Commission take action to keep the spawning biomass near the TRP and also advocates for the adoption of harvest control rules based on the information provided.	
	317. In order to maintain the quality of stock assessments for this important stock, SC12 recommends 1) continued work on developing an index of abundance based on purse seine data; 2) regular large scale tagging cruises and complementary tagging work continue to be undertaken in a way that provides the best possible data for stock assessment purposes.	<p>SC13-SA-WP-02 (A compendium of fisheries indicators for tuna stocks)</p> <p>SC13-SA-IP-06 (Background analyses for the 2017 stock assessments of bigeye and yellowfin tuna in the western and central Pacific Ocean)</p> <p>SC13-MI-IP-04 (Updating indicators of effort creep in the WCPO purse seine fishery)</p>
	319. There is ongoing concern by at least one CCM that high catches in the equatorial region may be causing a range contraction of WCPO skipjack tuna, thus reducing skipjack tuna availability to fisheries conducted at higher latitudes than the Pacific equatorial region. SC12 reiterates the advice of SC11 whereby there is no demonstrated statistical evidence for SKJ range contraction. As a result, SC12 recommends that ongoing research on range contraction of skipjack tuna be continued in the framework of Project 67.	SC13-SA-WP-07 (Impacts of Recent High Catches of Skipjack on Fisheries on the Margins of the WCPFC Convention Area)
South Pacific albacore	340. SC12 recommends that the Commission note the information presented on economic conditions in the south Pacific longline fishery. Information in SC12-ST-WP-04 indicated that declining catch rates are contributing to declines in economic conditions that are likely to undermine profitability in the fishery.	SC13-SA-WP-08 (Recent trends in the south Pacific albacore fishery)
South Pacific blue shark	466. SC12 noted the recommendations in the working papers (SC12-SA-WP-08 and SC12-SA-WP-09) for data improvements and other analytical work needed to improve the assessment for South Pacific blue shark, and recommends prioritizing such work.	SC13-EB-WP-07 (Review of shark data and modelling framework to support stock assessments (Project 78))
Reference points – SP albacore	543. SC12 reviewed information related to the biological and economic consequences of alternative catch trajectories to achieve a candidate south Pacific albacore target reference point (SC12-MI-WP-01) and provided a number of suggestions to clarify aspects of the paper before a revised version is forwarded to WCPFC13. SC12 recommends that WCPFC13 note the biological and economic	<p>WCPFC13 Report</p> <p>313. WCPFC13 requested that existing analyses of the implications of different TRP levels – in terms of total catch and effort changes required – should be re-circulated to CCMs by FFA before the end of December 2016, and that the Scientific Services Provider assist CCMs in understanding the economic implications of different</p>

	<p>consequences of the various trajectory options modelled in this paper in making a decision on an appropriate target reference point for south Pacific albacore. In particular, SC12 draws the attention of WCPFC13 to the importance of assumptions on key bycatch species catch levels for economic estimates; and the need to include additional economic losses due to the exit of vessels from the fishery.</p>	<p>TRPs for their vessels before SC13.</p> <p>314. WCPFC13 agreed to defer the possible adoption of an interim Target Reference Point for the South Pacific Albacore stock, which had originally been agreed to take place in 2015 under the Harvest Strategy Work Plan, until December 2017 at the latest.</p> <p>315. The Commission directed that further discussion of the TRP should take place over the course of 2017 as part of the ongoing consultative process for the development of a Bridging Measure for the Conservation and Management of the South Pacific Albacore stock, and should include a report on progress by the Convenor of that process to the 13th WCPFC Scientific Committee.</p> <p>SC13-MI-WP-01 (Implications of a range of Target Reference Points for the south Pacific albacore stock)</p>
<p>Reference points – Bigeye</p>	<p>553. SC12 reviewed information related to biologically reasonable rebuilding timeframes for bigeye tuna (SC12-MI-WP-02) and provided a number of suggestions to clarify aspects of the paper before a revised version is forwarded to WCPFC13. SC12 recommends that WCPFC13 note the various options modelled in this paper in making a decision on an appropriate rebuilding timeframe for bigeye tuna. In particular, SC12 draws the attention of WCPFC13 to i) the estimated bigeye generation time of 4 years, and minimum rebuilding time in the absence of fishing of 2-4 years, ii) that consideration of acceptable risk for the bigeye stock falling below the limit reference point will influence the findings, and iii) it will be important to examine not only the timeframe but also the stock trajectory of rebuilding.</p>	<p>WCPFC13 Report</p> <p>304. In accordance with the Work Plan for the adoption of harvest strategies under CMM 2014-05, the Commission is scheduled to agree a timeframe for rebuilding bigeye tuna to [or above] its LRP.</p> <p>305. The Commission agreed to an interim timeframe of up to ten years for rebuilding the bigeye tuna stock to the agreed Limit Reference Point of $0.2SB_{F=0}$.</p> <p>306. The Commission shall use this timeframe in its development and evaluation of strategies and conservation and management measures relevant to the rebuilding of bigeye tuna. Amongst other matters, the Commission will consider the probability of the bigeye stock being at or above the limit reference point at the end of the rebuilding timeframe.</p>
<p>Acceptable levels of risk</p>	<p>570. SC12 reviewed a proposal for adopting interim acceptable levels of risk for breaching limit reference points in the WCPO (SC12-MI-WP-03) and provided a number of suggestions to clarify aspects of the rationale within the paper before a revised version is forwarded to WCPFC13. Noting that WCPFC13 is scheduled to agree levels of risk for the four key tuna species, SC12 recommended that WCPFC13 take into consideration the rationale outlined in this paper for identifying acceptable levels of risk and again notes that the UN Fish Stocks Agreement states that the risk of exceeding LRPs should be very low. SC12 also recommends that adopted risk levels be seen as interim and be reviewed in light of the outcomes of the Management Strategy Evaluation work-plan. SC12 recommended that WCPFC13 notes that levels of risk for breaching LRP should be considered coupled with the corresponding conservative or liberal nature of the LRP. For example, the bigeye tuna LRP (20% of</p>	<p>WCPFC13 Report</p> <p>296. After discussion of the proposals of the FFA members and the USA, and based on the recommendation of the working group, the Commission agreed to:</p> <ul style="list-style-type: none"> i) not specify, at this time, acceptable levels of risk of breaching the limit reference point for each stock; ii) consider any risk level greater than 20 percent to be inconsistent with the LRP related principle in UNFSA (as referenced in Article 6 of the Convention) including that the risk of breaching limit reference points be very low; and iii) determine the acceptability of potential HCRs where the estimated risk of breaching the limit reference point is between 0 and 20%.

	<p>unfished spawning biomass) is very close to the depletion expected to occur (0.21) if the fishery attained the spawning biomass at MSY. Therefore the bigeye tuna LRP is viewed as conservative and could have associated higher levels of risk for breaching the LRP.</p>	
<p>Performance indicators</p>	<p>580. SC12 reviewed candidate performance indicators and monitoring strategies for skipjack and South Pacific albacore commensurate with candidate management objectives for the tropical purse seine and southern longline fisheries (SC12-MI-WP-04) and provided a number of suggestions to clarify aspects of the paper and expand on the list of performance indicators before a revised version is forwarded to WCPFC13. SC12 recommends that WCPFC13 note the candidate performance indicators and monitoring strategies listed in this paper, and noting that the number of key performance indicators should be kept to a tractable level, provide advice on what performance indicators and monitoring strategies should be included for the development of harvest strategies under CMM 2014-06.</p>	<p>WCPFC13 Report 286. The Commission accepted the suggested initial list of performance indicators for tropical purse-seine fisheries as developed by the Small Working Group on Management Objectives at WCPFC13 for the purpose of the evaluation of harvest control rules (This list is attached at Attachment M). 322. There was no discussion on Monitoring Strategy (South Pacific albacore and skipjack).</p> <p>SC13-MI-WP-02 (Performance indicators and monitoring strategies for South Pacific Albacore compatible with candidate management objectives for the Southern Longline Fishery)</p> <p>SC13-MI-WP-03 (Performance indicators and monitoring strategies for Bigeye and Yellowfin Tuna compatible with candidate management objectives for the Tropical Longline Fishery)</p> <p>SC13-MI-IP-01 (Operationalising the monitoring strategies for tropical purse seine and southern longline fisheries: Information requirements and data availability.)</p>
<p>Development of the MSE framework for WCPFC</p>	<p>595. SC12 reviewed the report of the expert consultation held at SPC in June 2016 on the development of a management strategy evaluation framework for WCPFC tuna stocks (SC12-MI-WP-05). SC12 endorsed the scope of the work to be undertaken as outlined in this report and recommended that i) while a model-based management strategy may be appropriate for skipjack, the concern of the workshop was on the future availability of abundance indices and tagging data for skipjack and WCPFC13 should consider how these necessary data can continue to be provided to support the assessment and MSE, and ii) that both empirical and model-based management strategies could be tested for South Pacific albacore but that CPUE based methods may be dependent on access to operational longline logbook data.</p>	<p>WCPFC13 Report Attachment V, Annex 1 – The Commission approved \$250,000 for Pacific Tuna Tagging Program</p> <p>SC13-MI-WP-04 (Developments in the MSE modelling framework)</p> <p>SC13-MI-IP-02 (Generating pseudo data in MFCL)</p>
<p>Harvest control rules and management strategy evaluation</p>	<p>596. SC12 also recommended that WCPFC13 support the recommendation of the MSE workshop for the continued involvement of experts to provide technical advice on the MSE work as well as a process for ongoing science and management dialogue to</p>	

	<p>facilitate stakeholder involvement in the development of harvest strategies. The SC12 considers both of these additional processes are essential for completion of the harvest strategies work-plan under CMM 2014-06, with separate consideration required for each of the species included in this work-plan. SC12 recommends that expert technical advice to the Scientific Service Provider be facilitated via informal meetings and/or workshops similar to the arrangements for the annual Pre-Assessment Workshop. With respect to science and management dialogue, SC12 recommended that stakeholder involvement should be undertaken via in-country stakeholder engagement with the Scientific Service Provider together with a higher-level meeting or workshop for broader stakeholder engagement (to be held as needed) to finalise input to the MSE analyses (e.g. performance indicators and harvest control rules) as well as subsequent refinements and feedback based on preliminary and ongoing results. WCPFC13 is encouraged to explore mechanisms and options for facilitating and funding these arrangements.</p>	
<p>Evaluation of candidate harvest control rules</p>	<p>597. SC12 reviewed an evaluation of candidate harvest control rules for the tropical skipjack purse seine fishery (SC12-MI-WP-06). SC12 recommends that WCPFC13 note i) the utility of the approach taken for evaluating harvest control rules, ii) the associated need to develop appropriate performance indicators to adequately track effort creep in this and other fisheries in the WCPO, and iii) the need to identify an appropriate time-frame for evaluating the effectiveness of a harvest control rule.</p>	<p>WCPFC13 Report 286. The Commission accepted the suggested initial list of performance indicators for tropical purse-seine fisheries as developed by the Small Working Group on Management Objectives at WCPFC13 for the purpose of the evaluation of harvest control rules (This list is attached at Attachment M).</p> <p>SC13- MI-IP-04 (Updating indicators of effort creep in the WCPO purse seine fishery)</p>
<p>MSE – int'l cooperation</p>	<p>598. SC12 was informed about the work undertaken by the Northern Committee and the ISC on the development of harvest control rules and Management Strategy Evaluation for Pacific bluefin and North Pacific albacore stocks (SC12-MI-WP-07). SC12 recommends that WCPFC13 note these developments and consider the need to facilitate discussion on Management Strategy Evaluation between those groups undertaking such work within the WCPO (i.e. the Scientific Service Provider and ISC) and across all t-RFMOs.</p>	<p>Website for tRFMO-MSE: http://groupspaces.com/tRFMO-MSE/pages/meetings-kickoff</p> <p>SC13-MI-IP-09 (Report of the 1st Joint tuna RFMO management strategy evaluation working group)</p>
<p>CMM 2015-01 – Yellowfin tuna catch limit</p>	<p>622. SC12 discussed the request from WCPFC12 to provide comments and/or recommendations to the Commission on how to further develop catch limit options for yellowfin tuna as specified in paragraphs 28, 29 and 43 of CMM-2015-01. SC12 reiterated its advice from SC11 that yellowfin tuna stock status in the WCPO is relatively insensitive to whether purse seine effort is comprised of mainly associated sets or unassociated sets. SC12 also noted that the latest catch estimates for 2015 suggest that catch of yellowfin in the</p>	<p>WCPFC13 Report 404. In reference to CMM 2015-01 paragraph 28 and 43, the Commission agreed that no limits for yellowfin tuna would apply in 2017 for purse seine and longline fisheries.</p>

	<p>longline and purse seine fisheries appears relatively stable and as such several CCMs do not consider yellowfin catch limits in the longline and purse seine fisheries to be immediately necessary. Nevertheless, some concern was expressed with the increase in yellowfin catch reported in the “other” fisheries category, particularly in the Indonesian and Philippines handline fisheries, though it was noted that these catches are presently provisional and increases may be attributed to changes in data collection in recent years. SC12 therefore recommended WCPFC13 consider the need for continued improvements for data collection in these fisheries and the need for CCMs to provide information to the Commission on the management tools they have available to them to bring these catches under control.</p>	
<p>CMM 2015-01 – Options to limit bigeye catches on purse seine vessels</p>	<p>643. SC12 reviewed a management option to limit bigeye catches on purse seine vessels with higher percentage of bigeye tuna catch to assist the recovery of the bigeye tuna stock in the WCPO (SC12-MI-WP-09) though noted that further work on this option was required to clarify and validate specific outcomes. SC12 was also informed about additional options considered by some CCMs (e.g., the introduction of FAD charges to manage FAD usage in PNA waters) to achieve this same objective. SC12 recommends that WCPFC13 note that there are various options to limit bigeye catches on purse seine vessels when considering additional management measures for rebuilding the bigeye tuna stock within the WCPO.</p>	<p>SC13-MI-WP-07 (Development of potential measures to reduce interactions with bigeye tuna in the purse seine fishery in the western and central Pacific Ocean (‘bigeye hotspots analysis’))</p> <p>SC13-EB-WP-02 (Review of research into drifting FAD designs to reduce species of special interest bycatch entanglement and bigeye/yellowfin interactions)</p>
<p>CMM 2015-01 – Additional FAD measure for 2017</p>	<p>644. SC12 discussed the request from WCPFC12 to provide comments and/or recommendations to the Commission on proposals from CCMs that wish to claim exemption from the 2017 high seas FAD closure on the basis of footnote 5 of CMM 2015-01. SC12 was informed that the EU would be requesting such an exemption on the basis of the 2015 bigeye catch in the purse-seine fishery according to SC12-MI-IP-06. However SC12 has not been able to review this proposal due to the lack of guidance on how this review should be done. SC12 also noted that the present CMM is unclear as to how this exemption is to be applied as it does not specify a time period over which the drop in bigeye bycatch to no more than the 55% level of 2010-12 average needs to be sustained. SC12 recommends that TCC12 and WCPFC13 clarify how this assessment should be done.</p>	<p>WCPFC13 Report 387. Without agreement on new language that the Chair had provided in WCPFC13-2016-38, the Commission accepted WCPFC13-2016-DP01, which maintained the existing language and added some clarifying language. The Commission agreed that footnote 5 of Paragraph 18 of CMM 2016-01 is replaced by the following text:</p> <p><i>“The high seas FAD closure in paragraph 18 does not apply in 2017 to a CCM that has achieved a verifiable reduction in bigeye catches by its purse seine vessels to 55% from current levels (2010-2012), to be reviewed on the basis of the advice of the Scientific Committee. The measures that the Philippines will take are in Attachment C. A CCM that has qualified for the above mentioned exemption shall maintain a verifiable reduction in bigeye catches by its purse seine vessels to 55% from the reference levels (2010-2012) also in the course of 2017.”</i></p> <p>SC13-MI-IP-08 (Tables of bigeye purse seine catch by gear and</p>

		flag, 2010-2016.)
Effort creep in the WCPO purse seine fishery	645. SC12 reviewed candidate indicators of effort creep in the WCPO purse seine fishery (SC12-MI-WP-08) noting that SPC had undertaken the work for the PNA to inform consideration of adjusting the Vessel Day Scheme TAE for effort creep. SC12 strongly supported this work, noting that this work was also directly relevant to the development of a harvest control rule for skipjack. SC12 also identified effort creep as an important issue related to all fleets operating in the WCPO and recommends that WCPFC13 note of these comments and prioritise continued research on this important issue.	SC13- MI-IP-04 (Updating indicators of effort creep in the WCPO purse seine fishery)
SEAPODYM	659. SC12 recommended that WCPFC13 endorses the results of the review of SEAPODYM (SC12-EB-IP-14) as follows: SEAPODYM has the potential to be a useful complementary model to MULTIFAN-CL for MSE work that includes spatial management. Similarly, the capacity of SEAPODYM to include alternate oceanographic states (e.g. ENSO phases and climate change projections) would allow climate proofing (reducing risks and capitalizing on opportunities presented by climate change) to be a consideration in the MSE work undertaken by WCPFC.	SC13-EB-WP-01 (Modelling the impact of climate change including ocean acidification on Pacific yellowfin tuna)
Review of CMM 2010-07 (CMM for Sharks)	714. With regard to CMM 2010-07 (CMM for Sharks), especially related with Paragraphs 4, 8, and 13 with reference to data provision, fin to carcass ratios, and the need for a revised or new CMM, SC12 recommended that TCC12 and WCPFC13 note that SC12 was able to review the ratio of fin weight to shark carcass weight from one study (SC11-EB-IP-03). This study demonstrated that shark fin weight data have some serious limitations, potential biases and errors. SC12 was unable to confirm the validity of using a 5% fin to carcass ratio in CMM 2010-07 and forwards these concerns to TCC, noting that an evaluation of the 5% ratio is not currently possible due to insufficient information for all but one of the major fleets implementing these ratios. SC12 took note of SC12-EB-IP-02 that confirms that the information which can be used to evaluate the effectiveness of the WCPFC ban on shark finning (CMM 2010-07) is currently very limited.	WCPFC13 Report 505. The Chair noted the lack of consensus on the EU proposal but also support to keep strengthening CMM 2010-07. The Chair noted Japan's reference to a requirement to include information in CCMs' Annual Reports Part 2 demonstrating how full utilisation was being implemented and why it was impracticable to implement a fins naturally attached policy. And TCC had asked to strengthen the measure for compliance purposes as it has not been able to assess the ratio. So the issue was circular. The Chair sought a way forward that commits the Commission to looking at the issue in alternative ways, for example doing a comprehensive review of the shark measures or tasking SC and TCC to do more specific work. Refer to Para 507, WCPFC13 Report below and SC13- EB-WP-06 (Development of a comprehensive shark conservation and management measure for the WCPFC)

<p>Shark targeting and management plans</p>	<p>737. SC12 considered that it is problematic to agree and apply a definition of longline fisheries “targeting” sharks, noting that fisheries need not be targeting sharks to be having a significant impact on vulnerable shark stocks. The Commission may wish to refer to the potential definitions in SC12-EB-WP-05 as a starting point for further consideration, if required.</p> <p>738. SC12 recommended that the Commission adopt the contents list at Attachment G for the development of any new shark management plans.</p> <p>739. SC12 recommended that the Commission review newly submitted shark management plans for completeness and quality, with a view toward encouraging continuous improvement and documenting the scientific basis for all national management measures referenced in the shark management plans.</p>	<p>TCC12 Report</p> <p>405. TCC12, taking note of SC12 recommendation (SC12 summary report, paragraphs 738 and 739) and TCC12-2016-19 “Elaboration of technical details regarding shark targeting and shark management plans for CMM 2014-05” recommended that:</p> <ol style="list-style-type: none"> a. WCPFC13 adopt the template developed in Annex E of TCC12-2016-19 for the development of future shark management plans under CMM 2014-05 (Attachment F, TCC12 Report) b. WCPFC13 agree to continue working towards a common definition of a longline fishery targeting sharks; and c. WCPFC13 task SC to continue working toward the evaluation of the impacts of shark management plans on the conservation status of WCPFC shark stocks. <p>WCPFC13 Report</p> <p>512. The Chair commented on how difficult it has been for WCPFC to agree a definition of “targeted” shark fishing and noted the excellent work Dr Shelley Clarke (Secretariat) did at SC trying to take the Commission forward on this, though agreement had not been reached. The Chair reiterated the need for the Commission to find an alternative way of dealing with the issue.</p>
<p>Information on non-key-shark species</p>	<p>769. SC12 recommended that the process for the designation of key shark species should be clarified by the WCPFC Secretariat and TCC.</p> <p>770. SC12 recommended that TCC12 clarifies that the designation of a shark species as WCPFC “key shark species for assessment”:</p> <ol style="list-style-type: none"> 1. is not involving any change in the reporting requirements and logsheets of CCMs; 2. meets the requirements of para 4 of CMM 2010-07; 3. results in its listing under the Sharks Research Plan. <p>771. SC12 recommended that purse seine observer training programmes add emphasis to Mobula spp. identification as part of their curricula.</p> <p>772. SC12 recommends that WCPFC13 takes note of SC12-EB-WP-08 and SC12-EB-IP-09 and considers adopting guidelines for safe release of Manta and Mobula rays caught incidentally in WCPFC fisheries.</p>	<p>SC13-ST-WP-07 (Clarification of WCPFC Shark Designations in Response to WCPFC13 Decisions regarding Manta and Mobulid Rays)</p> <p>SC13-EB-IP-08 (Developing best handling practice guidelines for the safe release of mantas and mobulids captured in commercial fisheries)</p> <p>WCPFC13 Report:</p> <p>550. WCPFC13 adopted the following:</p> <ol style="list-style-type: none"> 1. CCMs shall record where possible, through observer programs, the number of discards and releases of Manta and Mobula rays with indication of species (to the best extent possible), length, sex, status (dead or alive) and location caught. 2. Manta and Mobula rays shall be considered WCPFC key shark species for assessment and thus listed under the Shark Research Plan, noting that data gaps may preclude a traditional stock assessment approach.

		3. SC13 shall review, as appropriate, a revision of the ROP minimum standards data fields and develop safe release guidelines for Manta and Mobula rays, with a view to their adoption by WCPFC14.
Seabird boundary	<p>790. Regarding the results of research on seabird distributions, SC12 recommended that the Commission:</p> <ol style="list-style-type: none"> 1. Note that the northern limit of the spatial distribution of seabird density data presented extends to areas north of 30°S. 2. Within the southern hemisphere part of the WCPO the main area of distribution for New Zealand’s vulnerable seabirds, especially the Antipodean albatross and the black petrel, is south of 25°S. 3. Note that use of effective bycatch mitigation measures across the full range of at-risk seabirds should enhance conservation of those seabirds. 4. Note the above information from SC12 and other relevant information when discussing seabird mitigation measures and request that the TCC consider reviewing the 30°S boundary of the seabird CMM further north. 	<p>WCPFC13 Report</p> <p>528. On 9 December, New Zealand noted SC12’s advice that “within the southern hemisphere part of the WCPO the main area of distribution for New Zealand’s vulnerable seabirds, especially the Antipodean albatross and the black petrel, is south of 25°S.” However, after discussions in the margins and in plenary, New Zealand reported that consensus was not reached on where the boundary should be. FFA and colleagues at ACAP and Birdlife International looked forward to progressing this issue in the future.</p>
Tori line	<p>809. Regarding the results of tori line research, SC12 recommends that the Commission:</p> <ul style="list-style-type: none"> • Note the tori line options reported here (EB-WP-10 and EB-WP-13), developed especially for small longline vessels, and recognise that some of the options may have the potential to be effective in reducing seabird bycatch. SC12 recommends the Commission to continue the experimental trials of tori line designs and procedures adapted to the activities of small-scale longline vessels. • Consider these tori line designs, together with the information on their effectiveness in reducing seabird bycatch and usability in actual fishing operations, during the review or development of any updated tori line specifications, as will be required for the review of specifications set out in CMM 2015-03. 	SC13-EB-WP-08 (Tori line designs and specifications for small pelagic longline vessels)
Sea turtles mitigation	<p>822. SC12 recommends that the Commission notes:</p> <p>The results from the first workshop on Joint Analysis of Sea Turtle Mitigation Effectiveness in Longline Fisheries. The workshop considered data from 31 fleets and factors associated with 2,300 observed sea turtle interactions. The results indicated that interactions rates are lower when large circle hooks are used, higher at the two hooks closest to the floats and higher when squid baits are used.</p>	SC13-EB-WP-10 (Joint Analysis of Sea Turtle Mitigation Effectiveness – Final Report)

	The recommendations for future work are noted and look forward to receiving the results from the second workshop to be held in November 2016	
Bycatch Data Exchange Protocol	<p>840. SC12 considered the following three options for future work:</p> <ul style="list-style-type: none"> A. Basic, no-cost (reprioritise other data management tasks). Continue trial in 2017-18 (1), publish on web (2), with any issues addressed in the generic data gaps paper. B. Enhance, low cost. As for A., plus, resolve purse seine form links (3), provide table of observer effort (4), resolve vessel identifiers (5), report seabirds to the species level (6), include marine mammals (7). C. Focus, moderate cost. As for B., plus, review and update L:L and L:W relationships for SSIs (Species of Special Interest) (8), and undertake regional trial (9). <p>841. SC12 recommended that the Commission notes that SC12 recommends the choice of Option A (Basic, no cost).</p>	<p>SC13-EB-WP-09 (The redevelopment of the Bycatch Management Information System and future work including integrating regional bycatch data summaries)</p> <p>SC13-EB-IP-15 (Bycatch data exchange protocol – Summary tables)</p>

ISSUES/INFORMATION ARISING FROM WCPFC13

(Report paragraphs indicated below)

Issues	References	Outputs/Comments
Harvest Strategy Work Plan	326. The Commission adopted the Updated Harvest Strategy Work Plan (Attachment N, WCPFC13 Report).	SC13-WCPFC13-07
Review of CMM 2015-01	354. In reference to CMM 2015-01 paragraph 61, the Commission noted that the SPC evaluation (WCPFC13-2016-15) had reviewed CMM 2015-01.	SC13-WCPFC13-05
CMM 2016-01	405. The Commission agreed to adopt CMM 2016-01 CMM for Bigeye, Yellowfin and Skipjack tuna in the WCPO (Attachment O, WCPFC13 Report), which will replace CMM 2015-01.	
CMM for Pacific bluefin tuna	480. The Commission agreed to adopt CMM 2016-04 CMM to establish a multi-annual rebuilding plan for Pacific Bluefin tuna (Attachment Q, WCPFC13 Report), which will replace CMM 2015-04.	
Bridging Tropical Tuna CMM	<p>492. WCPFC13 noted the following issues would also be progressed as part of or alongside the development of the bridging measure: purse seine capacity management and high seas transshipment controls.</p> <p>493. WCPFC13 agreed on the following process for tropical bridging measure:</p> <ul style="list-style-type: none"> a. commence work on bridging measure electronically in the early part of 2017, focussing on the structure of the measure and provisions that are not dependent on scientific advice (noting the intention to move MCS measures into existing MCS measures as needed). Best efforts will be made to make this electronic process as inclusive as possible. b. agree to task the Secretariat with exploring options and potential funding for hosting a WCPFC meeting following SC13, to further progress the bridging measure on tropical tuna. 	Intersessional Meeting: 22 – 24 August 2017, Honolulu, Hawaii.

<p>Development of a comprehensive measure for shark and ray</p>	<p>507. WCPFC13 requested that SC13 and TCC13, with support from the Secretariat, work towards the development of a comprehensive approach to shark and ray conservation and management with a view to adopting a new CMM at the Commission’s annual meeting in 2018. The new CMM should seek to i) unify the WCPFC’s existing shark CMMs; ii) take account of relevant national and international policies and measures; and iii) provide a framework for adopting new components as needs and datasets evolve. Elements that could be considered for the new CMM include:</p> <ul style="list-style-type: none"> - policies on full utilization/prohibition on finning; - no retention policies; - safe release and handling practices; - gear mitigation, size limits or closures; - management plans/catch limits; - key species and their assessment schedules; - species-specific limit reference points; and - any data reporting requirements beyond those contained in “<i>Scientific Data to be Provided to the Commission.</i>” 	<p>SC13- EB-WP-06 (Development of a comprehensive shark conservation and management measure for the WCPFC)</p>
<p>Manta and Mobula rays</p>	<p>550. WCPFC13 adopted the following:</p> <ol style="list-style-type: none"> 1. CCMs shall record where possible, through observer programs, the number of discards and releases of Manta and Mobula rays with indication of species (to the best extent possible), length, sex, status (dead or alive) and location caught 2. Manta and Mobula rays shall be considered WCPFC key shark species for assessment and thus listed under the Shark Research Plan, noting that data gaps may preclude a traditional stock assessment approach. 3. SC13 shall review, as appropriate, a revision of the ROP minimum standards data fields and develop safe release guidelines for Manta and Mobula rays, with a view to their adoption by WCPFC14. 	<p>SC13-ST-WP-07 (Clarification of WCPFC Shark Designations in Response to WCPFC13 Decisions regarding Manta and Mobulid Rays) SC13-ST-IP-06 (Handling and damage codes currently being used in the HI and AS LL fisheries)</p>
<p>FAD Management Options IWG</p>	<p>601. The Commission adopted the Report of the second meeting of the FADMgmtOptions-IWG (WCPFC13-2016-FADMgmtOptions-IWG02_rev2), and agreed that the outcomes therein should be further considered at SC13 and TCC13.</p> <p>603. The Commission noted the invitation from ICCAT related to the 2017 FAD-IWG Joint tuna RFMO meeting (WCPFC13-2016-35). The Secretariat was tasked to convey WCPFC’s regrets to the ICCAT Secretariat.</p>	<p>SC13 agenda for ST, MI and EB themes</p> <p>SC13-MI-IP-03 (Report of Joint t-RFMO FAD Workshop meeting)</p>
<p>Cooperation with CCSBT</p>	<p>664. The Commission agreed that the Memorandum of Cooperation on the Exchange and Release of Data with CCSBT should be signed (Attachment X, WCPFC13 Report).</p> <p>665. The Commission agreed that the Memorandum of Cooperation on the Endorsement of WCPFC ROP Observers for Observing Transhipments of Southern Bluefin Tuna on the High Seas of the WCPFC Convention Area with CCSBT should be signed (Attachment Y, WCPFC13 Report).</p>	

