



**SCIENTIFIC COMMITTEE  
NINTH REGULAR SESSION**

Pohnpei, Federated States of Micronesia  
6-14 August 2013

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**ISSUES ARISING FROM THE COMMISSION**

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**WCPFC-SC9-2013/GN-WP-03**

**Secretariat**

**ISSUES ARISING FROM SC8 AND WCPFC9**

<b>Issues</b>	<b>References</b>	<b>Outputs/Comments</b>
<b>ISSUES ARISING FROM SC8 (Paras indicated below)</b>		
PS species composition	89. Project 60 be continued through 2013 with a 2013 budget request of USD 75,000 based on USD 5,000 per trip for the remaining 15 trips	<u>Outputs:</u> SC9-ST-WP-02. Report on Project 60: Collection and Evaluation of Purse-Seine Species Composition Data  Three independent peer review reports on Project 60
Peer review of 2011 bigeye stock	117-118. There were 26 general recommendations and 12 recommendations specific to MULTIFAN-CL. Budget implications were estimated at USD 160,000 annually to the science services provider to	<u>Outputs:</u> SC9-SA-WP-08. Overview of the implementation of the recommendations from the Independent

assessment	address the general recommendations and USD 40,000 to complete the MFCL recommendations.	Review of the 2011 bigeye tuna stock assessment  SC9-SA-IP-07. Recent developments in the MULTIFAN-CL stock assessment software
Indicator analysis	125. SC8 noted that fishery indicators provide information on trends in the fishery for years when a stock assessment is not conducted, and SC8 recommended that future indicator papers should present explanatory detail for the figures and a brief interpretation of the trends.	<u>Outputs:</u> SC9-SA-WP-06. Fishery indicators for bigeye, skipjack, and yellowfin tunas in the WCPO, and albacore in the southern WCPO
Project 35. Refinement of bigeye parameters	129. SC8 noted the progress of Project 35 and recommended its continuation in 2013.	<u>Outputs:</u> SC9-SA-WP-01. Project 35: Bigeye tuna age and reproductive biology progress report
South Pacific swordfish	180. SC8 recommended that, if possible, sex-specific growth and other biological parameters should be incorporated prior to undertaking the next stock assessment. SC8 recommended that SPC conduct the South Pacific swordfish stock research under the proposed work plan as follows: <ul style="list-style-type: none"> <li>a. finalize the development of the method of sex-specific stock assessment;</li> <li>b. stock assessment conducted through collaboration from EU and the results presented at SC9;</li> </ul> 183. Because there was no stock assessment conducted in 2012, SC8 recommended that the provision of management advice to the Commission be deferred to SC9.	<u>Outputs:</u> SC9-SA-WP-05. Stock assessment of swordfish in the southwest Pacific Ocean  SC9 will provide management advice based on the results of stock assessment.
Southwest Pacific striped marlin	201. Recognizing that striped marlin is often caught as a non-target species, SC8 recommended that data analysis be conducted to identify areas of high catch concentration that could be subject to targeted management	<u>Outputs:</u> SC9-SA-WP-07. Determination of hotspots for catches of southwest Pacific striped marlin
North Pacific striped marlin	223. SC8 recommended that ISC conduct an additional set of projections of western and central North Pacific striped marlin based on the 2012 stock assessment results, and probabilities of stock recovery as well as trajectories of spawning biomass and catch should be documented and presented to WCPFC9.	<u>Outputs:</u> SC9-WCPFC9-11. Future Projections of the Western and Central North Pacific Striped Marlin Stock (WCPFC9-2012-IP-18)
Reference	261. Reference points for non-target species, including oceanic whitetip	WCPFC has not progressed this to date, possibly

<p>points for non-target species</p>	<p>sharks, should be developed as envisaged under Articles 5 and 10 of the WCPF Convention</p> <p>282. Reference points for non-target species, including silky sharks, should be developed as envisaged under Articles 5 and 10 of the WCPF Convention</p>	<p>due to the focus on finalizing limit reference for target tuna stocks. SC9 will consider any specific request on this issue and a possible reprioritization, such as selection of LRPs and an appropriate level of risk that any particular fishing strategy could have of violating the LRPs.</p>
<p>Limit reference points</p>	<p>298. SC8 recommended, noting the current level of research and the uncertainties in our knowledge on steepness, particularly on the level where recruitment overfishing may start, that LRPs for bigeye, yellowfin and South Pacific albacore be set at Level 2 with regard to the biomass-based LRP of <math>20\%SB_{recent,F=0}</math>, with deferral of a recommendation on the value of X% in the Level 2 fishing mortality-based LRP of <math>F_{x\%SPR}</math> to SC9 (note that SPR refers to the spawning-potential-per-recruit and <math>SB_{recent,F=0}</math> refers to the estimated average spawning biomass over a recent period in the absence of fishing). The LRP for skipjack was recommended to be set at Level 3, <math>20\%SB_{recent,F=0}</math>.</p> <p>304. SC8 recommended that further work be undertaken by SPC on the identification of:</p> <ul style="list-style-type: none"> <li>• the appropriate period for estimating the average recruitment for each species in the LRP <math>20\%SB_{recent,F=0}</math>, and</li> <li>• the appropriate values of X for each species in the LRP <math>F_{x\%SPR}</math>,</li> </ul> <p>and that this work be presented to SC9 for review and for final specification of these LRPs.</p> <p>306. SC8 recommended that SPC further develop a common approach to characterization of uncertainty and estimation of risk in relation to LRPs, in order to ensure consistency in the provision of management advice to the Commission, and that this approach be reviewed at SC9.</p>	<p><u>Outputs:</u></p> <p>SC9-MI-WP-02. Determination of appropriate time-windows for calculation of depletion-based limit reference points</p> <p>SC9-MI-WP-03. Proposed F-based limit reference points for bigeye, yellowfin, and south Pacific albacore tuna</p> <p>SC9-MI-WP-04. Approaches to describe uncertainty in current and future stock status</p> <p>Recommendations in the three paragraphs will be presented at SC9.</p>
<p>Ecosystem effects of fishing</p>	<p>364. SC8 noted the progress of the Kobe Technical Working Group for bycatch, and provided the following advice: a) the participation of the WCPFC Secretariat (or its delegate) in the harmonization of longline observer data is desirable; b) encourages development of the Bycatch</p>	<p><u>Outputs:</u></p> <p>SC9-EB-IP-04. Progress Report on the Development of a Seabird Identification Guide for use by tRFMOs</p>

	Mitigation Information System into a tuna RFMO-wide resource; and c) submission of the ACAP harmonized seabird identification guide to the WCPFC Secretariat to coordinate its review.	
Shark identification guides	392. SC8 recommended that the Commission assist in providing or identifying funds to distribute existing shark identification guides, and promote the development of species identification guides harmonized, where appropriate, with other RFMOs in order to improve data reporting.	At no cost to WCPFC, SPC to date has produced and distributed existing shark identification guides to SPC members for their locally based longline vessels, with the distribution being done by SPC or Fisheries Dept. staff hand-carrying copies back to the countries. In future, if more copies needed to be printed and distribution to DWFNs required, SPC may require substantial funding support for the production and distribution of further shark guides and related materials.
Whale shark	394. SC8 recommended that the science services provider conduct a study on the spatial and temporal distribution of whale sharks in the WCPO based on observer data and other data sources as appropriate.	<u>Outputs:</u> SC9-EB-IP-01. Spatial and temporal distribution of whale sharks in the WCPO based on observer data and other data sources
Seabirds	422. SC8 reiterated advice that a spatial management approach be employed for seabird mitigation and recommended that the Commission <u>consider</u> the following advice when it revises the seabird CMM 2007-04: d. Vessel length SC8 recommended that the potential impacts of the North Pacific vessel size exemption be addressed. Nations conducting longline fishing in the North Pacific to the north of 23°N should provide vessels numbers for those <24 m and ≥24 m for recent years. Annual Reports-Part 1 have statistics on vessel size by gross registered tons, however statistics on vessel length should be presented to SC9.	WCPFC7 adopted a revised seabird measure CMM 2012-07, which shall be implemented no later than 1 July 2014 in areas north of 23°N and south of 30°S.  (Para 10 of the CMM) “In 2013 the SC will assess to the extent possible the implications of the North Pacific small-vessel exemption on seabird interaction rates and make any appropriate recommendations, the TCC will evaluate the constraints and opportunities for small vessels to employ seabird mitigation measures in the North Pacific, and the Commission will consider appropriate seabird mitigation requirements for vessels less than 24m in length in the North Pacific.”

		<p>RFV list of active vessel less than 24 metres in length (July 2013)</p> <table border="1"> <thead> <tr> <th>Flag</th> <th>Number of Vessels</th> </tr> </thead> <tbody> <tr><td>Australia</td><td>64</td></tr> <tr><td>Belize</td><td>1</td></tr> <tr><td>Cook Islands</td><td>6</td></tr> <tr><td>China</td><td>14</td></tr> <tr><td>Fiji</td><td>2</td></tr> <tr><td>Federated States of Micronesia</td><td>4</td></tr> <tr><td>Indonesia</td><td>1</td></tr> <tr><td>Japan</td><td>305</td></tr> <tr><td>Kiribati</td><td>1</td></tr> <tr><td>New Caledonia</td><td>11</td></tr> <tr><td>New Zealand</td><td>2</td></tr> <tr><td>French Polynesia</td><td>81</td></tr> <tr><td>Papua New Guinea</td><td>12</td></tr> <tr><td>Philippines</td><td>3</td></tr> <tr><td>Tonga</td><td>1</td></tr> <tr><td>Tuvalu</td><td>2</td></tr> <tr><td>Chinese Taipei</td><td>985</td></tr> <tr><td>United States of America</td><td>101</td></tr> <tr><td>Vanuatu</td><td>36</td></tr> <tr> <td></td> <td><b>1,632</b></td> </tr> </tbody> </table> <p>SC9 will review paragraph 9 and 10 of the CMM.</p>	Flag	Number of Vessels	Australia	64	Belize	1	Cook Islands	6	China	14	Fiji	2	Federated States of Micronesia	4	Indonesia	1	Japan	305	Kiribati	1	New Caledonia	11	New Zealand	2	French Polynesia	81	Papua New Guinea	12	Philippines	3	Tonga	1	Tuvalu	2	Chinese Taipei	985	United States of America	101	Vanuatu	36		<b>1,632</b>
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Food security issues with bycatch	450. SC8 requested that the Commission’s science services provider continue to produce and update the type of analysis presented in “Estimation of catches and fate of edible bycatch species taken in the equatorial purse-seine fishery” (SC8-EB-WP-18) for presentation to the SC.	<p><u>Outputs</u></p> <p>SC9-EB-IP-02. Estimation of catches and condition of edible bycatch species taken in the equatorial purse seine fishery</p>																																										

Sailfish	472. SC8 tasked the science services provider with undertaking a review of data holdings for sailfish in order to inform discussions at SC9 regarding the necessary budget for undertaking further analyses	SPC will prepare and add sailfish to the WCPFC data catalogue tables on the web site: <a href="http://www.wcpfc.int/wcpfc-data-catalogue">http://www.wcpfc.int/wcpfc-data-catalogue</a>
Other matters	503. Some CCMs questioned the need for support rapporteurs to be provided by national delegations, given the presence of a lead rapporteur and several members of the Secretariat's staff at SC. It was noted that other subsidiary bodies of the Commission do not make use of support rapporteurs.  504. One CCM suggested that better use could be made of the meeting website, rather than email, as a clearinghouse for meeting documents, proposed recommendation text, and other information.  505. The Secretariat agreed to further consider these issues and to provide options to CCMs for consideration prior to SC9.	Outputs: The adopted Guidelines for the SC Chair and Theme Convenors (Attachment J, SC8 Summary Report) addressed the issues.
<b>ISSUES ARISING FROM WCPFC9</b>		
Data provision shortfalls	136. ...Data provision shortfalls by other CCMs were noted and SC and TCC were requested to provide a paper to WCPFC10 on the implications for the Commission's science, monitoring and compliance functions due to the ongoing failure by several major fleets to provide operational data.	SC9 may discuss on SC9-ST-WP-01 (Scientific data available to the Western and Central Pacific Fisheries Commission) and provide implications for the Commission's science, monitoring and compliance functions due to the ongoing failure by several major fleets to provide operational data.
F-based reference points	269. WCPFC9 adopted paragraph 298 of the SC8 Summary Report (regarding LRP of $20\%SB_{recent,F=0}$ ) and noted that SC will continue further work on F-based reference points for discussion at SC9.	Outputs: SC9-MI-WP-03. Proposed F-based limit reference points for bigeye, yellowfin, and south Pacific albacore tuna
Other key science issues adopted by WCPFC9	270. WCPFC9 adopted SC8 recommendations concerning amending the Commission's data provision requirements (SC8 Summary Report, para. 71 c-e); shark identification guides (SC8 Summary Report, para 392); use of longline logsheets showing key shark species (SC8 Summary Report, para. 393); listing the whale shark as a key shark species (SC8 Summary Report, para. 395); approving Project 60, BET Multifan-CL improvements, and stock assessment improvements; extending the	1. Shark identification guides – covered under Issues arising from SC8  2. Project 66 (Identification and Evaluation of Target Reference Points) was approved but no budget was allocated. Candidate TRPs will be presented at SC9 via SC9-MI-WP-05 ('Strawman')

	Shark Research Programme (SC8 Summary Report, para. 474); approving Projects 58 and 66; and conducting a scientific peer review of the PBF stock assessment (SC8 Summary Report, para. 484). (Attachment J)	Document developed through MO Roadmap process )  3. Regarding the review of PBF stock assessment, ISC will provide an update on the progress of a CIE review of the stock assessment.
South Pacific albacore	328. One CCM asked that the paper prepared by the Secretariat (WCPFC9-2012-IP/07) be updated for SC9, TCC9 and WCPFC10 to show i) by fleet the number of longline vessels actively fishing south of the equator separated as follows 0-10, 10-20, 20-30, 30+, annually from 2000 to 2012; ii) the tuna species proportions for each longline fleet in these areas; and iii) the seasonal distribution of the longline effort for each fleet south of the equator using Commission VMS data.	<u>Outputs:</u> SC9-GN-IP-04. South Pacific albacore fishery
Whale shark handling and safe release guidelines	363. WCPFC9 adopted a CMM on the protection of whale sharks from purse seine fishing operations (WCPFC9-2012/DP-12 (rev 2)). As this measure does not include handling and safe release guidelines, WCPFC9 noted the need to continue development of such science- based guidelines through discussions at SC and TCC, including establishing field tests to assess handling, post-release mortality, practicality and effectiveness. (Attachment R CMM 2012-03)	An Informal Small Group will cover this at SC9.
MOW2	425. WCPFC9 agreed that the Secretariat would continue to work with the existing expert group to progress work on management objectives taking into consideration the need to involve CCMs who expressed an interest in the expert group to bring forward options on target rather than limit reference points for MOW2 to be held prior to WCPFC10. These recommendations will progress through SC9 and NC9 for comment and suggestions for improvements. (Attachment X, MOW agreed process for future action on management objectives.	<u>Outputs:</u> SC9-MI-WP-05. 'Strawman' Document developed through MO Roadmap process