



**COMMISSION
TWELFTH REGULAR SESSION**

Bali, Indonesia
3-8 December 2015

Synopsis of SC11 Summary Report

**WCPFC12-2015-17b
29 November 2015**

Para No.	SC11 Decisions and Recommendations	Potential Commission Actions
<i>Progress report on Project 35 (Refinement of bigeye parameters Pacific-wide)</i>		
172	SC11 recommends that funding be continued to maintain the Project 35 Bigeye Biology and WCPFC Tuna Tissue Bank, with particular emphasis on WCPO bigeye, yellowfin, and skipjack tunas. SC11 also recommends that the Commission adopt the “WCPFC Tissue Bank Access Protocols” developed within Project 35 and modified by ISG-2 at SC11 (Attachment D).	Approve continuation of Project 35 (maintenance of tissue bank) and adoption of <i>WCPFC Tissue Bank access protocol</i>
173	SC11 recommends that funding be provided for the analysis of Project 35 Tissue Bank samples, with a short-term focus on characterizing spatial and temporal variation in the growth of bigeye tuna.	Endorsement
<i>Evaluation of North Pacific blue shark as a northern stock</i>		
341	SC11 noted that ISC provided a bibliography of studies undertaken on North Pacific blue sharks. SC11 also noted that it is important for ISC, in collaboration with SPC, to continue to work to provide information regarding the stock distribution north and south of 20°N in order to enable the SC to provide a recommendation to the Commission about whether this should be considered a northern stock.	The Commission to note
<i>North Pacific striped marlin</i>		
373	SC11 expressed concerns about the updated stock status of WCNPO striped marlin, noting that the stock was overfished (SSB_{2013} at 61% below SSB_{MSY}) and that overfishing was occurring ($F_{2010-2012}$ exceeds F_{MSY} by 49%). Although a LRP for billfish species has not been adopted by the WCPFC, SC11 noted that $SSB_{current}/SSB_{current,F=0} = 0.12$ and is below the LRP adopted for tunas. SC11 also noted that projections indicate that $Prob(SSB_{2020} > SSB_{2015}) < 50\%$ for all constant catch scenarios over 2,850 mt (under the three recruitment hypotheses modelled), which means that in order to allow the spawning biomass to rebuild then catches need to be reduced to less than 2,850mt.	The Commission to note the current stock status of NP striped marlin

374	SC11 recommends that the Commission develop a rebuilding plan for North Pacific striped marlin with subsequent revision of CMM 2010-01 (CMM for NP striped marlin) in order to improve stock status.	The Commission to accept
<i>Independent review of stock assessments</i>		
386	SC11 recommends that the Secretariat develops a proposal to establish a formal process and its cost implication to independently review stock assessments. This proposal will be presented to SC12.	The Commission to endorse
<i>Implications of alternative levels of acceptable risk</i>		
390	Noting that SC10 had considered levels of risk associated with breaching the LRP within the range 5-20%, that the identification of acceptable risk is a management issue, SC11 reaffirmed the recommendation made by SC10 that WCPFC12 identify the level of acceptable risk which should be applied to breaching a LRP for the key target species, noting that the UN Fish Stocks Agreement states that the risk of exceeding LRPs should be very low.	The Commission's decision on risk levels
<i>Identifying appropriate LRPs for elasmobranchs within the WCPFC</i>		
394	SC11 noted the work undertaken in support of identifying appropriate LRPs for elasmobranchs within the WCPFC, in particular the report of the Pacific shark life history Expert Panel Workshop (SC11-EB-IP-13) and that other work necessary to identify and support the development of LRPs for sharks has been included in the updated shark research plan. SC11 recommends that the WCPFC12 continues to support this work.	The Commission to support
<i>Skipjack and yellowfin tuna purse-seine associated and unassociated set effort</i>		
456	Noting the request in paragraph 584 of the SC10 report, SC11 reviewed working paper SC11-MI-WP-05 which analysed the relative impact of associated and unassociated set types on skipjack tuna stock status. Results indicated that skipjack stock status is relatively insensitive to the proportions of associated or unassociated sets of purse seine effort, with slight benefits to stock status with a higher proportion of unassociated sets. In addition, SC11 noted that the analyses had assumed a linear relationship between CPUE and stock abundance (potentially unrealistic in purse seine fisheries) and had not taken account of effort creep in purse-seine effort, for both associated and unassociated sets. SC11 also noted that a decrease in days searching and an increase of days in transit in logbooks might partially explain the increased CPUE observed. SC11 recommends that WCPFC12 take note of this paper and that further analyses be undertaken taking into account the issues identified above.	The Commission to endorse further analyses on purse seine set types
492	SC11 reviewed working paper SC11-MI-WP-09 which analysed the relative impact of associated and unassociated set types on yellowfin tuna stock status. SC11 advises WCPFC12 that based on the results of the analyses described in this paper yellowfin tuna stock status in the WCPO is relatively insensitive to whether purse seine effort is comprised of mainly associated sets or unassociated sets and these results are consistent with working paper SC10-MI-WP-05. SC11 also noted that a slightly better stock status (higher spawning biomass) for yellowfin tuna and slightly lower average catch of yellowfin tuna occurred when purse seine effort compositions favoured unassociated sets. SC11 recommends that WCPFC12 take note of these conclusions and that further analyses be undertaken taking into account alternative relationships between CPUE and abundance.	

<i>Other issues related to CMM 2014-01</i>		
511	<p>SC11 reviewed analyses undertaken to estimate potential tropical purse seine fleet sizes given existing effort limits and candidate target stock levels (SC11-MI-WP-10). SC11 noted that these analyses are an important contribution to the development of a purse seine capacity management scheme for the WCPFC and supported further work to identify patterns of participation by full-time and part-time vessels within the fishery, the need to relate both participation and effort creep to vessel characteristics, and the expansion of similar analyses to the longline fleets. SC11 recommends that WCPFC12 take note of these preliminary analyses and requests the Commission identify any specific analyses which may assist the Commission's consideration of fleet capacity.</p>	<p>The Commission to identify any specific analyses to assist consideration of fleet capacity</p>
<i>Spatial Ecosystem and Population Dynamics Model (SEAPODYM)</i>		
527	<p>SC11 recommends that:</p> <ol style="list-style-type: none"> a. the Commission/WCPFC12 acknowledge the funding received from ISSF for an external review of the SEAPODYM project and further notes the outcomes from that review will assist the Commission in evaluating potential applications and future directions. b. the Commission/WCPFC12 provide guidance to the SC on whether they would like the SC to move forward with the further development of ecosystem indicators for possible incorporation in the MOW process, building on the work of other international fisheries bodies, e.g. ISC and ICAAT. 	<p>Commission acknowledge ISSF's funding for the review of SEAPODYM, and endorse further development of ecosystem indicators</p>
<i>Review of potential mitigation measures to reduce fishing-related mortality on silky and oceanic whitetip sharks</i>		
544	<p>SC11 recommends that the Commission:</p> <ol style="list-style-type: none"> a. Consider the Monte Carlo analysis of longline shark mitigation methods (e.g. hook type, leader material, non-deployment of shallow hooks, and a prohibition on shark lines) presented in SC11-EB-WP-02, in order to inform WCPFC12's further consideration of revising shark CMMs to incorporate shark mitigation requirements that reduce catch rates and at-vessel mortality. b. Note the Monte Carlo simulations run presented in EB-WP-02, which showed that given the model assumptions, banning wire trace and shark lines would further reduce fishing mortality of oceanic whitetip and silky sharks by longline compared to the current choice between the two mitigation measures. c. Note that the Monte Carlo mitigation model and its inputs can be improved through an increase in available observer data and more studies on post-release survival rates for key shark species. d. Request that the Monte Carlo simulation work be expanded to a) account for flag-state choice between prohibition of shark lines and/or of wire leader with respect to CMM 2014-05, b) additional modeling of combinations of available mitigation options, and c) inclusion of purse seine fisheries to assess the effects on fishing mortality of sharks when effort on FAD sets was re-distributed to unassociated sets. e. Request that CCMs quantify and describe longline gear configuration inputs and provide these to SPC to inform the Monte Carlo simulation work. 	<p>The Commission endorse further work on Monte Carlo mitigation analysis</p>

<i>CMM 2010-07 (CMM for Sharks)</i>		
553	<p>SC11 recommends that the Commission:</p> <ol style="list-style-type: none"> SC11 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 suffered from some serious limitations, potential biases and errors. SC11 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. Notes that according to the most recent information provided by SPC, finning still occurs in the Convention Area. Notes that information which can be used to evaluate the effectiveness of the WCPFC ban on shark finning (CMM 2010-07) is currently very limited. Encourages CCMs to gather and submit information on the implementation of CMM 2010-07, including data on fin to carcass ratios where CCMs apply that approach, to the Secretariat, in their AR-Part 2 reports or other formats, in order to support future evaluation. 	Commission to note
<i>CMM 2012-04 (CMM for protection of whale sharks from purse seine fishing operations)</i>		
572	<p>SC11 recommends that WCPFC12 adopt the guidelines for safe release of encircled animals including whale sharks as contained in the ISG-4 report (Attachment F) and recommends that TCC11 provide any additional considerations for the Commission's decision.</p>	Adoption of the guidelines
<i>CMM 2014-05 (CMM for sharks)</i>		
581	<p>After considering the shark management plans submitted by Japan and Chinese Taipei - in accordance with paragraph 2 of CMM 2014-05, review by SC11 was made difficult due to the lack of guidance on what should be incorporated into the shark management plans, what is considered a target fishery, and how the review should be performed. SC11 recommends that the Commission:</p> <ol style="list-style-type: none"> Consider development of a list of minimum requirements that such a plan should include, guidelines to evaluate such a plan, and the definition of a target shark fishery for future review by SC, TCC and the Commission; Notes the need for plans to contain species specific information and a rationale for how catch, effort or capacity limits are derived, amongst other minimum requirements. 	Request to improve CMM 2014-05 (shark management plan)
<i>Indicators for key shark species</i>		
599	<p>Recognizing that the analysis on north Pacific blue shark and north Pacific shortfin mako shark did not cover some data used in the ISC analysis on these stocks, SC11 recommends that the Commission:</p> <ol style="list-style-type: none"> Notes the results of analysis described in paper EB-WP-04 are useful for prioritizing the stock assessment of the various shark stocks. Take note of the following recommendations from the SC: <ul style="list-style-type: none"> Increase observer monitoring (at least to CMM requirements) in order to: <ul style="list-style-type: none"> Support to develop stock assessments Monitor the impact of CMMs 	The Commission to endorse: <ol style="list-style-type: none"> several technical suggestions to improve shark stock assessment, and SPC to review available

	<ul style="list-style-type: none"> – Reconcile differences in logbook and observer reporting • Develop a stock assessment schedule • Develop catch histories for unassessed stocks • Collect information on post release mortality rates, especially for silky, oceanic whitetip and whale sharks • Develop a time series of whale shark interactions and mortalities. • Repeat the indicator analysis in 2-3 years. <p>c) Requests that SPC be tasked with reviewing available information on mobulid species (mantas and devil rays) and their interactions with fisheries managed by the WCPFC and prepare a paper for SC12 for consideration of these species for designation as WCPFC key sharks.</p> <p>d) Notes that there are limitations imposed on shark analyses due to low levels of observer coverage and lack of representativeness in the observer data.</p>	information on mobulid species
<i>Shark Research Plan 2016-2020 and stock assessment schedule</i>		
612	SC11 adopts the Shark Research Plan and Stock Assessment Schedule (Attachment H) and recommends that WCPFC12 endorses it.	The Commission to endorse
<i>Risk of seabird bycatch</i>		
638	SC11 recommends that the Commission take note of SC11-EB-WP-09 (The overlap of threatened seabirds with reported bycatch areas between 25° and 30° South in the WCPFC area).	The Commission to note the proposed geographical changes
<i>Development of the 2016 Work Programme and budget, and projection of 2017-2018 provisional Work Programme and indicative budget</i>		
693	SC11 adopted the SC work programme and budget as shown in Table 1. Total budget for 2016 is \$1,732,200.	Refer to FAC's report
<i>Administration matters</i>		
699 and 700	Aisake Batibasaga (Fiji) was nominated and accepted by SC11 as the SC Vice-Chair, and Indonesia confirmed to host SC12 in Bali, Indonesia, scheduled to take place from 3-11 August 2016.	Endorsement
<i>Adoption of SC11 Summary Report</i>		
703-704	The SC11 Summary Report was adopted intersessionally.	The Commission to accept SC11 Summary Report