



**COMMISSION
TWELFTH REGULAR SESSION**
Bali, Indonesia
3-8 December 2015

REFERENCE DOCUMENT FOR BYCATCH MITIGATION CMM REVIEWS

**WCPFC12-2015-16
23 November 2015**

Paper prepared by the Secretariat

A. Introduction

1. The purpose of this paper is to provide a quick reference guide to the recommendations of the Scientific Committee (SC) and the Technical Compliance Committee (TCC) of relevance to the discussions in support of the review of bycatch mitigation CMMs. It highlights key recommendations drawn from the SC and TCC report, which are effective.

B. Scientific Committee Recommendations

2. The relevant recommendations of the Scientific Committee, with appropriate referencing, are listed below:

Sharks

Oceanic whitetip shark

- a) Overfishing is occurring and the stock is in an overfished state: $F_{\text{current}}/F_{\text{MSY}} = 6.69$ and $SB_{\text{current}}/SB_{\text{MSY}} = 0.15$. (*SC8 para 226-228*).
- b) Management measures to reduce fishing mortality and to rebuild spawning biomass have been agreed to under CMM 2011-04, but mitigation to avoid capture is recommended. Given the bycatch nature of most fishery impacts, mitigation measures provide the best opportunity to improve the status of the WCPO oceanic whitetip shark stock. (*SC8 paras 259-261*).

Silky shark

- c) Overfishing is occurring and the stock is in an overfished state: $F_{\text{current}}/F_{\text{MSY}} = 4.32$ and $SB_{\text{current}}/SB_{\text{MSY}} = 0.72$. (*SC9 paras 229*).
- d) Current catches are higher than MSY (7,123 mt vs. MSY = 2,937 mt) and further catches at current levels of fishing mortality would continue to deplete the stock below SB_{MSY} . The greatest impact on the stock is attributed to bycatch from the longline fishery in the tropical and subtropical areas, but there are also significant impacts from the associated purse-seine fishery that catches predominantly juvenile sharks. The Commission should consider measures directed

at bycatch mitigation as well as measures directed at targeted catch, such as from shark lines (SC9 paras 229-300).

North Pacific blue shark

- e) The North Pacific blue shark stock is likely not experiencing overfishing and likely not to be in an overfished condition: $F_{2011}/F_{MSY} = 0.34$ and $SB_{2011}/SB_{MSY} = 1.62$. (SC10 paras 458-464).
- f) SC10, therefore, recommended that all targeted shark fisheries be required to submit management plans with robust catch limits to the Commission by WCPFC12. Given the uncertainties regarding the estimated catch and choice of input parameters for the assessment, SC10 recommended that the catch and fishing effort on blue shark be carefully monitored. (SC10 paras 465-469).

CMM for sharks in general

- g) Regarding CMM 2010-07 (CMM for Sharks), SC11 recommends that the Commission:
 - a. 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.
 - b. Notes that according to the most recent information provided by SPC, finning still occurs in the Convention Area.
 - c. 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.
 - d. 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. (SC11 para 553).
- h) 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:
 - a. 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;
 - b. 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. (SC11 para 581).

Seabirds

- i) Regarding the risk of seabird bycatch, 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). (*SC11 para 638*).

C. Technical and Compliance Committee Recommendations

3. The relevant recommendations of the Technical and Compliance Committee, with appropriate referencing, are listed below:

Sharks

(CMM 2010-07, CMM 2011-04, CMM 2012-04, CMM 2013-08 & CMM 2014-05)

Guidelines – safe release by-catch spp.

- a) TCC11 recommends WCPFC12 endorse the “Guidelines for Safe Release of Encircled Animals including whale sharks”. (SC11 Executive Summary Report Attachment F) (*TCC11 para 459 and Attachment G*).
- b) TCC11 supports the ongoing development by SC of more comprehensive guidelines pertaining to the safe release of sharks and rays. (*TCC11 para 460*).

TCC11 Summary Report Attachment G. Recommended Guidelines for Safe Release of Encircled Animals including whale sharks”. (SC11 Executive Summary Report Attachment F)

RECOMMENDED GUIDELINES FOR THE SAFE RELEASE OF ENCIRCLED ANIMALS, INCLUDING WHALE SHARKS

General principles

- Safety of the crew is a paramount consideration.
- When releasing encircled whale sharks, the stress the animal receives should be minimized to the extent possible.
- The following possible release methods should be used as general guidelines.
- The effectiveness of the following possible release methods has not been fully evaluated. Further scientific research is necessary in order to investigate survival after the release by various release methods. Therefore, CCMs are encouraged to conduct analysis on methods used by their purse seine vessels. In addition, several agencies have initiated a program of satellite tag deployments by experienced observers to assess survival of encircled animals associated with various release techniques.
- The appropriate release method should be chosen in a flexible manner depending on the circumstances and condition of the particular purse seine set, e.g. the size and orientation of the encircled animal, amount of fish in the purse seine set, weather conditions and brailing operation style.

As noted in the TCC9 Summary Report, Para 318, the PNA requires that when a whale shark is encountered in a purse seine net in PNA waters the net roll must be immediately stopped and the whale shark released.

In the WCPFC Convention Area the following actions are not recommended when releasing encircled whale sharks (see WCPFC-SC11-2015/EB-WP-03 Rev.1).

- Vertically lifting sharks by tail
- Pulling sharks by a loop hooked around its gill or holes bored into a fin

- Gaffing
- Leaving attached any towing ropes
- Brailing whale sharks larger than 2 meters
- Brailing whale sharks onto the deck

Sharks -CMM 2010-07 and CMM 2014-05

- c) TCC11 taking note of:
- a. Table 5 and 6 of WCPFC-TCC11-2015-RP02 Annual Report on the Regional Observer Programme indicating that finning still occurs in the WCPFC CA in both LL and PS fisheries;
 - b. SC11 recommendation that the Commission notes that according to the most recent information provided by SPC finning still occurs in the WCPFC CA;
 - c. SC11 was unable to confirm the validity of using a 5% fin to carcass ratio in CMM 2010-07 and that subsequently 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.
 - d. Reports from a CCM that, in the course of high seas boardings and inspections, it has been very difficult to verify whether the 5% ratio obligation has been satisfied.

recommends that:

- a. WCPFC12 recognises that it is not possible for TCC to assess compliance with the application of the fins to carcass weight ratio,
- b. WCPFC12 considers means to strengthen CMM 2010-07 with respect to ensuring compliance with the obligation in paragraph 6. (*TCC11 para 462*).
- d) TCC11 noted SC11 difficulties in assessing the sharks management plans submitted by two CCMs in accordance with CMM 2014-05, 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. (*TCC11 para 463*).
- e) TCC11 endorses SC11 recommendation to consider the development of a list of minimum requirements that such plans should include, guidelines to evaluate such plans, and the definition of a target shark fishery for future review by SC, TCC and the Commission. (*TCC11 para 464*).
- f) TCC11 notes that the FAO International Plan of Action for Conservation and Management of Sharks may be an interesting source of guidance, among others, on what should be incorporated into shark management plans developed in order to refine CMM 2014-05. (*TCC11 para 465*).

Seabirds (CMM 2012-07)

- g) TCC11 notes most CCMs supported that the boundary of the mitigation requirements of CMM 2012-07 as they apply in the South Pacific Ocean, as described in para 1 of the CMM, be moved north to 25°S (excluding the EEZs of those CCMs with less than 15% of their EEZ in the area south of 25°S, which are the EEZs around French Polynesia, New Caledonia, Tonga, Cook

Islands and Fiji). Most CCMs agreed that moving the boundary to 25°S would improve the ability of longline fishing vessels to comply with the mitigation requirements of this measure, and improve monitoring, control and surveillance of the Convention Area south of 25°S. (TCC11 para 469).

Reports from CCMs on practical and technical constraints to seabird mitigation measures (para. 10 of CMM 2012-07)

- h) In accordance with paragraph 10 of CMM 2012-07, the TCC has evaluated the constraints and opportunities for small vessels to employ seabird mitigation measures in the North Pacific Ocean. Based on reports provided by Chinese Taipei (TCC10-DP11), Japan (TCC10-DP10 and TCC11-DP05), and the USA (TCC9-DP05) in accordance with paragraph 387 of the report of TCC8, the TCC finds that:
- a. No constraints for small vessels have been identified with respect to the use of side setting, night setting, blue-dyed bait, deep-setting line shooters, or management of offal discharge, but it was noted that some small vessels in some fleets do not normally engage in night-setting.
 - b. Small vessels face constraints with respect to the use of some types of tori lines, which are subject to tangling with the fishing gear due to the size of the vessel.
 - c. There is an opportunity and need to develop alternative minimum specifications for a tori line that is tailored for small vessels.
 - d. There are opportunities to identify areas in which seabirds are rare and in which seabird mitigation methods are not needed or can be relaxed. (TCC11 para 474).