





# **Smart Fishing Initiative**

# **WWF POSITION**

11th Regular Session of the Scientific Committee (SC) of the Western Central Pacific Fisheries Commission (WCPFC): Pohnpei, Federated States of Micronesia – August 5-13, 2015

# Introduction

The World Wide Fund for Nature (WWF) would like to once again thank the Western and Central Pacific Fisheries Commission (WCPFC) Scientific Committee (SC) for the opportunity to attend the 11<sup>th</sup> Regular Session of the SC (SC11) as an observer and to address the critically important role that it plays in the proper management of the (Western Central Pacific Ocean) WCPO fisheries.

WWF would like to offer the following position and recommendations to the SC regarding significant scientific issues that WWF deems important.

# Reference Points, Harvest Control Rules, and Harvest Strategies

WWF laments the slow pace with which management measures that should have been adopted at the inception of the WCPFC or shortly thereafter is progressing. However, WWF remains supportive of the continued work of the WCPFC and subsidiary bodies in pursuing the implementation of Reference Points (RP), Harvest Control Rules (HCR), and Harvest Strategies (HS). At this meeting, WWF encourages SC11 to further endorse and support the adoption of explicit Limit Reference Points (LRPs) and Target Reference Points (TRPs) for all WCPO fishery stocks under WCPFC authority as well as consider steps toward implementation of effective HCRs.

WWF again notes that the WCPFC has discussed and considered RPs since 2006 and that, despite several recommendations by the SC to the WCPFC on appropriate RPs, the WCPFC has failed to adopt formal explicit RPs. However, WWF commends the significant progress that some participants in the WCPFC process, notably that conducted by the Parties to the Nauru Agreement (PNA) and Pacific Islands Forum Fisheries Agency (FFA), have made with

respect to proposed LRPs and TRPs for skipjack (SKJ) and South Pacific albacore (SPA) stocks.

WWF also wishes to commend the work initiated by Australia and carried forward by the FFA to pursue HSs and associated management measures as part of the WCPFC process. The SC should endorse the approach of *Conservation and Management Measure (CMM) 2014-06: Conservation and Management Measure to develop and implement a harvest strategy approach for key fisheries and stocks in the WCPO¹ and further recommend RPs for all stocks consistent with previous recommendations of the SC.* 

WWF acknowledges the complexity of establishing TRPs, given the multiple factors that go into their consideration. However, while TRPs require additional consideration of socioeconomic factors, current understanding of the biological and socio-economic conditions does not prevent the implementation of sufficiently precautionary *interim* TRPs at this time. The interim TRP would serve as an advisory benchmark under which a more refined TRP could be established.

WWF continues to strongly urge the SC to formally endorse the adoption of robust and effective LRPs, TRPs, and HCRs. The adoption of explicitly determined RPs for at least the four key tuna species, namely skipjack (SKJ), albacore (ALB), yellowfin (YFT), and bigeye (BET), must be considered an absolute priority for the sustainable management of these resources in the WCPO. Additional steps should also be taken by the SC to establish RPs for other non-tuna species as well. Consistent with previous WCPFC advice, WWF encourages SC11 to review available information on this topic and provide advice on the progress on RPs and HCRs for the WCPFC's consideration.

#### WWF recommends that the SC:

- Support the designation of Limit and Target Reference Points as a priority for proper management of stocks under WCPFC authority;
- Further recommend precautionary B-based Limit Reference Points<sup>2</sup> (preferably based on Spawning Biomass)<sup>3</sup> for all WCPO fish stocks under its authority;
- Endorse adoption of precautionary F-based Limit Reference Points as an <u>interim</u> measure to attempt to control the exploitation rate for all WCPO fish stocks under its authority;<sup>4</sup>
- Recommend interim precautionary Target Reference Points as a benchmark for further consideration by the Management Objectives Workshop (MOW) and WCPFC in 2015; and
- Consider the probability of breaching the Limit Reference Points and limiting this to 10% or less as a precautionary measure.<sup>5</sup>

# **Tropical Tunas**

In December 2014, WCPFC11 adopted *CMM 2014-01 Conservation and Management Measure for bigeye, yellowfin and skipjack in the WCPO* in a continued attempt to address ongoing conservation challenges involving BET.<sup>6</sup> While WWF maintains that that the evidence shows that the policy choices made at previous WCPFC Regular Meetings continue to fail to achieve meaningful conservation of BET, we believe that there could be substantial improvements to the understanding of the impact of Fish Aggregating Devices (FADs) if the SC recommends the aggressive pursuit of improved monitoring, control, surveillance, and

general research involving FAD construction and use. WWF is encouraged by the formation of the FAD Working Group and hopeful that it will be able to complement the additional efforts within the SPC and PNA to pursue greater understanding of FAD dynamics. Thus, WWF believes that the SC should support a strong recommendation in support of FAD research aided by monitoring, control, and surveillance mechanisms which could, for instance, improve the understanding of the impacts on species composition resulting from:

- FAD type/size
- · Geographic location
- Drift patterns and prevailing currents
- · Ocean depth and depth of FAD materials
- Proximity to benthic relief/hydrogeographic features

Because a significant reduction in fishing mortality on BET remains elusive, additional measures to reduce the fishing mortality on BET must be considered. While WWF supports precautionary measures to protect vulnerable stocks like BET, WWF also believes that a better understanding of FAD dynamics would help inform the "additional and alternative targeted measures" that the FFA seeks to implement.

### WWF recommends the SC:

• Endorse the further research and monitoring of FADs used in fisheries that target bigeye, yellowfin, or skipjack tuna stocks.

# **Sharks and Rays**

Many shark species in the WCPO remain subject to high levels of fishing mortality that current stock assessment trends suggest could be unsustainable. Sharks play a critical role in the WCPO marine ecosystem as apex predators and indicators of ecosystem health. WWF is concerned with shark conservation and sustainability in the WCPFC region as a whole and considers responsible management, trade, and consumption where shark mortality occurs in all fishing activities, not just in circumstances where tuna fishing is occurring. Therefore, WCPFC must also recognise the needs of coastal States in the WCPFC region to manage their shark populations.

Although WWF supports the minor action taken by the WCPFC in *CMM 2014-05 Conservation and Management Measure for Sharks*<sup>9</sup>, WWF continues to support recommendations made previously by the SC and drawn from the discussion regarding a proposed comprehensive and integrated shark CMM.<sup>10</sup> By way of reference, we again endorse the recommendations contained in sections 4.1 and 4.2 of the paper previously presented by Dr. Shelley Clarke in addition to measures recommended below.<sup>11</sup>

Furthermore, WWF endorses the recent action taken by the Inter-American Tropical Tuna Commission (IATTC) to support best practices for safe handling and release manta rays (genus *Mobula* and *Manta*) aboard purse seiners. WWF encourages the WCPFC to pursue equivalent or consistent measures for mantas in the WCPFC.

#### WWF recommends the SC:

 Develop, endorse, and recommend adoption of a Comprehensive Shark CMM that includes efforts to:

- Mandate bycatch best practices consistent with those found in the Compendium of Best Practice of Conservation and Management Measures (CMMs) for the of Species Bycatch in Tuna RFMOs;
- Implement the recommendations for bycatch that were endorsed at Kobe III and adopt an annually updated report card system against these recommendations for all of the WCPFC fisheries;
- Require, through data collected from observer programs and other means, estimation of the number of captures and releases of all sharks and rays, including the status upon release (dead or alive), and reporting of this information to the WCPFC;
- Require, through observer programs, recording what gear is used in longline activities including the use of wire traces and any multimonofilament traces in order to avoid bite-off by sharks;
- Introduce a scheme to document the capture and trade of sharks whereby it allows for traceability through to the final market state; and
- o Ensure the implementation requirements for CITES listed sharks are undertaken by CITES Parties and Non-Parties trading with CITES Parties where they are required to make non-detriment and legal findings in order to issue export permits for trade in these species.<sup>12</sup> Where WCPFC members make non-detriment findings for shark species they should share with the WCPFC details of those findings so that the WCPFC Secretariat can provide information to the CITES Standing Committee working group on sharks before January 2016.<sup>13</sup>
- Develop, endorse, and recommend safe handling and release practices for manta rays (genus *Mobula* and *Manta*) aboard purse seiners;
- Encourage the development of reference points and management for non-target species, including all shark and ray species, as envisaged under Articles 5 and 10 of the WCPF Convention;
- Encourage CCM's to report all shark and ray catches from domestic fleets operating in territorial and archipelagic waters; and
- Endorse recommendations made in EB-WP-03, EB-IP-05, EB-WP-06, and EB-WP-08 submitted for SC11, including;
  - Introducing safe handling practices for whale sharks (*Rhincodon typus*) caught within WCPFC purse seine fisheries; and
  - o Revise and amend the shark reporting processes to WCPFC to streamline shark-related data and to close data gaps.

# Pacific Bluefin Tuna

Technical reports of both the International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean (ISC) and the IATTC indicate that the Pacific Bluefin tuna stock is in extremely poor condition. The ISC confirmed that overfishing is occurring, the stock is heavily overfished, and its spawning stock biomass has declined by as much as

96%.<sup>14</sup> This is a clear indicator that the management measures taken both in the Western and Central Pacific and in the Eastern Pacific are proving insufficient to conserve the biological integrity of this stock. The IATTC and WCPFC must assume their share of responsibility.

The last assessment confirms that the stock is highly depleted, that fishing mortality exceeds all reasonable proxies for  $F_{msy}$ . The recovery of the stock may be further delayed if the current scenario of low recruitment continues which is heavily reliant on a major adult cohort in the population. While the WCPFC adopted conservation measures calling for reductions in catch for Pacific bluefin tuna of <30 kg in size, conservation of spawning stocks is also needed.

WWF maintains deep concerns regarding this stock with an aim of restoring and rebuilding this ecologically, sociologically, and economically important fishery resource. The current science strongly indicates that there is only one reproductive cohort that is reaching the end of its life. Additionally, about 90% of the stock fished is comprised of young fish that have not yet reproduced. Thus, the continued reproductive success of the entire stock depends on the reproductive success of a single cohort, leaving the stock in a critical situation that may seriously jeopardize recruitment.

WWF encourages close monitoring of fisheries and catch as well as completion of a revised stock assessment for Pacific bluefin in early 2016. WWF urges both IATTC and WCPFC to adopt a long-term Pacific bluefin tuna recovery plan targeting  $20\%SSB_0$ , and harvest control rules that are well-defined, pre-agreed, and contain mandatory actions for a determined course of management action in response to changes in indicators of stock status with respect to reference points.

The SC, consistent with the best scientific information, must recommend that fishing mortality on Pacific bluefin tuna be urgently reduced, especially on juveniles, in order to reduce the risk of recruitment collapse and allow spawning stock to rebuild. If sufficient management measures are not adopted, the SC should consider that fishing should not be allowed to continue on such a depleted stock.

### WWF recommends that the SC:

- Recommend a long-term Pacific bluefin tuna recovery plan targeting at least 20%SSB<sub>0</sub> by 2030; and
- Recommend implementation of a size limit for Pacific bluefin tuna of >30kg to conserve spawning stock in addition to the current temporary management measure.

### **Sea Turtles**

WWF continues to believe that *CMM 2008-03 for the Conservation and Management of Sea Turtles* has not demonstrably reduced bycatch impacts on threatened and endangered sea turtles in the region. The cumulative impact of increasing numbers of longline vessels in the WCPO on sea turtles remains problematic, and there has been insufficient uptake of proven bycatch mitigation measures such as circle hook and/or finfish bait. All 6 species of sea turtles in the WCPO remain threatened or endangered. With no evidence of CMM 2008-03 having slowed or reversed negative trends on threatened and endangered sea turtle populations, the burden of proof remains on the WCPFC to demonstrate that sea turtle bycatch impacts in tuna operations are being minimized, and to take stronger measures if they are not being minimized.

WWF believes that there exists a strong basis for revising CMM 2008-03 to: (1) ensure more suitable requirements for the determination of optimal bycatch mitigation packages (*i.e.* circle hooks and/or other measures, such as finfish bait) for individual fisheries; (2) reduce the ambiguity in language; and (3) improve the definition of the desired outcomes of the CMM. Moreover, evidence suggests that the WCPFC and member states have not suitably monitored the CMM for effectiveness with some parts of the CMM distinguished as providing "excessive room for creative compliance." While CMM 2008-03 requires all longline vessels to carry turtle de-hookers and line cutters, WCPFC has provided no monitoring and evaluation of the effectiveness of this requirement, and only a small fraction of member countries have conducted dedicated research on sea turtle mitigation techniques. Indeed, as recently as 2010 over three quarters of CCMs either did not report on compliance with CMM 2008-03 or did not meet all the CMM measures. Furthermore, only a small fraction of member countries have conducted dedicated research on sea turtle mitigation techniques, and current observer coverage falls well below the recommended level for effectively determining optimal mitigation approaches (*i.e.* 10% coverage over 3 years).

The precautionary principle requires that all CCMs must determine optimal bycatch mitigation strategies based on research and sound science. Most importantly, WWF believes that the WCPFC should reconsider CMM 2008-03 in light of new information available regarding fisheries impacts on sea turtles and the impacts of various mitigation measures on turtle bycatch.<sup>17</sup> Specifically, recent studies in the Eastern Pacific Ocean, as well as at-sea trials by WWF in Vietnam and Papua New Guinea, further confirm the positive impact of turtle bycatch mitigation using circle hooks, thereby indicating a need for further consideration and adoption of circle hooks in the WCPO longline fisheries.<sup>18</sup>

#### WWF recommends the SC:

- Review all pertinent scientific data and reporting related to sea turtle bycatch and clarify whether a scientifically defensible interim catch rate can be assigned, in particular, to consideration of sea turtle population status and recovery requirements, and if such a determination cannot be made, to recommend a catch rate as close to zero as possible;
- Endorse the consideration of CMM 2008-3 revisions aimed at:
  - o reducing the ambiguity in language, strengthening key language and reducing the vagueness in desired outcomes of the CMM, thereby enabling better monitoring of CMM effectiveness;
  - introducing new binding measures for the use of circle hooks in all longline fleets, exempted only if an equally effective solution for the mortality of sea turtles can be demonstrated;
  - introducing stronger measures for conducting research on mitigation techniques and reporting on sea turtle impacts, as a means of determining optimal mitigation packages for individual fleets; and
  - o setting an appropriate interim catch rate that would trigger moveon provisions.
- Encourage member state involvement and participation in the research conducted under the analysis of sea turtle mitigation measure effectiveness in tuna longline fisheries described in EB-WP-05.

# Conclusion

WWF calls on the SC11 to continue to address scientific issues in the WCPFC CA such that they ensure the quality, objectivity, utility, and integrity of information. With respect to each of the agenda items addressed at the SC11 meeting, we call on the SC members to carefully and genuinely address each issue with logic, intellectual rigor, personal integrity, and an uncompromising respect for truth.

The WCPFC shares the distinction as both the youngest RFMO and also, arguably, the most effective. However, we all must constantly guard against the complacency that leads to poor decision making resulting in a lack of management action and a risk of collapsing fish stocks which is occurring in other regions.

The WCPFC currently maintains the ability and opportunity to chart the course towards sustainable fishery resources, especially tuna, in the WCPO. Science plays an irreplaceable role in the WCPFC process by representing the foundation of all decision making by the WCPFC. The WCPFC and its subsidiary bodies must continually promote and adopt strong and effective conservation and management action to maintain and rebuild tuna stocks, implement appropriate monitoring and enforcement measures, promote a viable tuna industry, and support vibrant coastal communities throughout the South Pacific.

# **Our Smart Fishing Vision and Goals:**

Vision: The world's oceans are healthy, well-managed and full of life, providing valuable resources for the welfare of humanity.

2020 Goals: The responsible management and trade of four key fishery populations results in recovering and resilient marine eco-systems, improved livelihoods for coastal communities and strengthened food security for the



# Why we are here

To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature. panda.org

© 1986 Panda Symbol WWF - World Wide Fund For Nature (Formerly World Wildlife Fund) ® "WWF" is a WWF Registered Trademark.

#### For more information

Alfred "Bubba" Cook WCP Tuna Program Manager acook@wwf.panda.org Tel: +64 (0)27 833 0537

WWF Smart Fishing Initiative Moenckebergstr. 27 20095 Hamburg

Tel. +49 40 530 200 310

www.panda.org/smartfishing

# References

<sup>6</sup> WCPFC (2014) Summary Report of the Eleventh Regular Session of the Western Central Pacific Fisheries Commission (Adopted version) - 29 July 2015, WCPFC, Apia, Samoa, 1-5 December 2014. Attachment F. p.149.

<sup>7</sup> Clarke, Shelley C., et al. (2013). Population Trends in Pacific Oceanic Sharks and the Utility of Regulations on Shark Finning. Conservation Biology, Volume 27, Issue, pages 197–209, February.

<sup>8</sup> See Stevenson, C., et al. (2007). High apex predator biomass on remote Pacific islands. Coral Reefs 26: 47-51; See also Friedlander, A.M. and DeMartini, E.E. (2002). Contrasts on density, size, and biomass of reef fishes between the northwestern and the main Hawaiian islands: the effects of fishing down apex predators. Marine Ecology Progress Series 230: 253-264.

WCPFC (2014) Summary Report of the Eleventh Regular Session of the Western Central Pacific Fisheries Commission (Adopted version) 29 July 2015, WCPFC, Apia, Samoa, 1-5 December 2014. Attachment S. p.262.

10 Clarke, Shelley C. (2013). Towards an Integrated Shark Conservation and Management Measure for the Western and Central Pacific Ocean. WCPFC-SC9-2013/EB-WP-08. WCPFC-SC, Pohnpei, Federated States of Micronesia, 6-14 August 2013. <sup>11</sup> Id at 24-27.

12 Into the deep: Implementing CITES measures for commercially-valuable sharks and manta rays. TRAFFIC Wildlife Trade Monitoring Network. Available from http://www.traffic.org/home/2013/7/30/new-study-gets-its-teeth-into-shark-trade-regulations.html.

Mundy-Taylor, V., et al. (2014). CITES Non-detriment Findings Guidance for Shark Species. A Framework to assist Authorities in making Non-detriment Findings (NDFs) for species listed in CITES Appendix II. Report prepared for the Germany Federal Agency for Nature Conservation (Bundesamt für Naturschutz, BfN).

14 Yukio Takeuchi, et al., 2014, Updated future projections of Pacific bluefin tuna with draft results to answer the requests from

NC9.,ISC/14/PBFWG-1/10re.

15 WCPFC Scientific Committee (2009) Monitoring the Effectiveness of Conservation and Management Measures for Bycatch, EB-WP-09, Port Vila, Vanuatu, 10-21 August 2009.

16 WCPFC (2012) Performance Assessment of RFMO Bycatch Governance: Criteria Suite Design and Results for Assessment of the WCPFC, WCPFC8-2011-OP/02, 10 August 2012, WCPFC, Guam, USA, 26-30 March 2012.)

See e.g. Lewison, Rebecca L. et al. (2014). Global patterns of marine mammal, seabird, and sea turtle bycatch reveal taxa-specific and cumulative megafauna hotspots. PNAS 2014; published ahead of print March 17, 2014, doi:10.1073/pnas.131896011, March; Wallace, Bryan P. et al. (2013). Impacts of fisheries bycatch on marine turtle populations worldwide: toward conservation and research priorities. Ecosphere 4:art40. http://dx.doi.org/10.1890/ES12-00388.1, March; Shamblin B.M., et al. (2014) Geographic Patterns of Genetic Variation in a Broadly Distributed Marine Vertebrate: New Insights into Loggerhead Turtle Stock Structure from Expanded Mitochondrial DNA Sequences. PLoS ONE 9(1): e85956. doi:10.1371/journal.pone.0085956. January.; Beverly, Steve, and Mark Schreffler. (2012). Preliminary comparison of fishing efficiency of circle hooks and Japan tuna hooks in the Port Moresby, Papua New Guinea-based longline fishery. Unpublished. Available on request.; WWF. (2011). Results of Testing Circle Hook in the Tuna Long Line Fisheries in the Offshore Waters of Central and Southeast Vietnam, Ministry of Agriculture and Rural Development, Research Institute of Marine Fisheries. Unpublished. Available on request.

<sup>18</sup> Andraka, Sandra, et al. (2013) Circle hooks: Developing better fishing practices in the artisanal longline fisheries of the Eastern Pacific Ocean. Biological Conservation, Issue 160, pages 214–224, March.

WCPFC (2014) Summary Report of the Eleventh Regular Session of the Western Central Pacific Fisheries Commission (Adopted version) 29 July 2015, WCPFC, Apia, Samoa, 1-5 December 2014. Attachment T. p.264.

<sup>&</sup>lt;sup>2</sup> Norris, W. (2009). The Application of Reference Point Management in WCPO Tuna Fisheries: An Introduction to Theory and Concepts. WCPFC-SC5-2005/ME-WP-01. (Biomass (B) represents the weight of all fish in the water.)

3 Id. (Spawning biomass (SB or SSB) is the weight of all mature [reproductive and generally female] fish in the water, or [preferably] the

reproductive potential of the population. Gives a better indication than B of the reproductive capacity of the stock, and tends to be more stable.)

<sup>4</sup> Id. (Fishing Mortality (F) relates to the proportional impact of fishing on the total deaths in a stock during a given period.)

<sup>6</sup> Id. (Fishing Mortality (F) relates to the proportional impact of fishing on the total deaths in a stock during a given period.)

<sup>&</sup>lt;sup>5</sup> United Nations Fish Stocks Agreement, 34 ILM 1542 (1995); 2167 UNTS 88. (Fishery management strategies shall ensure that the risk of exceeding limit reference points is very low. If a stock falls below a limit reference point or is at risk of falling below such a reference point, conservation and management action should be initiated to facilitate stock recovery. Fishery management strategies shall ensure that target reference points are not exceeded on average. (Annex II UNFSA 1995)).