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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 12th Regular Session of the SC (SC12) 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 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). WWF is encouraged by the recent progress at WCPFC12 to adopt a defined workplan and establish a TRP for SKJ. At this meeting, WWF encourages SC12 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 in accordance with the agreed workplan.

WWF 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. WWF applauds the recent adoption 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 WCPO*[1] by WCPFC12. WWF also commends the

independent work of the PNA to develop and propose a formal HCR for the SKJ purse seine fishery.

WWF again acknowledges the complexity of establishing TRPs, noting that TRPs require additional consideration of social and economic factors. However, WWF also notes that these complex factors did not prevent the implementation of sufficiently precautionary *interim* TRP for SKJ at WCPFC12. WWF encourages the further implementation of similarly precautionary TRP's based on bioeconomic factors, particularly for South Pacific albacore at WCPFC13.

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 SC12 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[2] (preferably based on Spawning Biomass)[3] for all WCPO fish stocks under its authority;
- Endorse adoption of precautionary F-based Limit Reference Points as an *interim* measure to attempt to control the exploitation rate for all WCPO fish stocks under its authority;[4]
- Recommend interim precautionary Target Reference Points as a benchmark for further consideration by the WCPFC in 2016; and
- Consider the probability of breaching the Limit Reference Points and limiting this to 10% or less as a precautionary measure.[5]

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.[6] Sharks play a critical role in the WCPO marine ecosystem as apex predators and indicators of ecosystem health.[7] 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 previous minor action taken by the WCPFC in *CMM 2014-05 Conservation and Management Measure for Sharks*[8], WWF continues to support recommendations made previously by the SC and drawn from the discussion regarding a proposed comprehensive and integrated shark CMM.[9] 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.[10]

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:

- Fully supports the development and resourcing of the Bycatch Data Exchange Protocol (BDEP), and as a minimum continue the process as already undertaken by SPC.
- 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 multi-monofilament traces in order to avoid bite-off by sharks;
- Designate mobula and manta rays as a key shark species.
- 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

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 remains in extremely poor condition. The ISC confirmed that overfishing continues, even though the stock is heavily overfished, and its spawning stock biomass has declined to as low as 2.6% of its unfished level.[11] This is a clear indicator that the stock is no longer in the status to support industrial fisheries and the management measures taken both in the Western and Central Pacific and in the Eastern Pacific have proven insufficient to conserve the biological integrity of this stock in timely manner. The IATTC and WCPFC must take immediate actions and assume their share of responsibility.

The latest assessment conducted by ISC confirms that the stock is highly depleted, that fishing mortality exceeds all reasonable proxies for F_{msy}. Without the robust and precautionary long-term rebuilding target, 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, the stock requires conservation of *all size classes* of Pacific bluefin tuna, in particular the spawning stocks.

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. 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 2016. WWF urges both IATTC and WCPFC to adopt a long-term Pacific bluefin tuna recovery plan targeting at least $20\%SSB_0$, 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 and substantially reduced in both juveniles and adults in order to reduce the risk of recruitment collapse and allow spawning stock to rebuild. If sufficient management measures are not adopted in 2016, the SC should recommend a moratorium on all harvest of Pacific Bluefin until such measures are agreed.

WWF recommends that the SC:

- Recommend a long-term Pacific bluefin tuna recovery plan targeting at least $20\%SSB_0$ 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.

Seabirds

Recent technical reports from the Agreement on the Conservation of Albatrosses and Petrels (ACAP) indicate that “hook pods” meet the line-weighting requirement under the mitigation requirement of the WCPFC because the hook pods weigh more than 25g. Therefore, we recommend that the SC take note of the recent work from ACAP and acknowledge their finding that use of the hook pods are consistent with the line-weighting requirement of CMM 2015-03 Conservation and Management Measure for Mitigating Impacts of Fishing on Seabirds.

WWF recommends the SC:

- Confirm that hook pods, as specified by ACAP, meet the line-weighting requirement of CMM 2015-03.

Sea Turtles

WWF is very encouraged that the WCPFC indicates renewed interest in addressing the effectiveness of *CMM 2008-03 for the Conservation and Management of Sea Turtles*. In particular, we acknowledge the outcomes of the first workshop on Joint Analysis of Sea Turtle Mitigation Effectiveness in Longline Fisheries, held in Honolulu, Hawaii, USA, from 16-19 February 2016, and support the proposed sea turtle analysis initiative.

However, while further analysis is important, there remains no new evidence that CMM 2008-03 has demonstrably reduced bycatch impacts on threatened and endangered sea turtles in the region, and thus, WWF maintains that this CMM must be revised immediately with interim measures. We remind the SC that 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.

We note with interest the commentary in the WCPFC-SPC report following the Hawaii workshop that "*most of the evidence suggests that circle hooks, particularly those which have large minimum widths and are large relative to mouth size of susceptible sea turtles, can reduce hooking interactions or mortality or both. Use of finfish bait, rather than squid bait, is also a promising mitigation technique*".

Accordingly, WWF proposes that the language of CMM 2008-03 is revised to: (1) ensure requirements for the determination of optimal bycatch mitigation packages (*i.e.* circle hooks and/or other measures, such as finfish bait) are undertaken 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."[12]

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.[13] Indeed, the majority of CCMs either have not fully reported on compliance with CMM 2008-03 or have not met 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.[14] 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.[15]

WWF recommends the SC:

- 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:
    - 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
    - setting an appropriate interim catch rate that would trigger move-on 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 previously in EB-WP-05 and further proposed in the Workshop on Joint Analysis of Sea Turtle Mitigation Effectiveness

Conclusion

WWF calls on the SC12 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 SC12 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.

For more information

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References

[1] 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.
[2] 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.)
[4] *Id*. (Fishing Mortality (F) relates to the proportional impact of fishing on the total deaths in a stock during a given period.)
[5] 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)).
[6] 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.
[7] *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.
[8] 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.
[9] 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.
[10] *Id* at 24-27.
[11] 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.
[12] WCPFC Scientific Committee (2009) Monitoring the Effectiveness of Conservation and Management Measures for Bycatch, EB-WP-09, Port Vila, Vanuatu, 10-21 August 2009.
[13] 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.)
[14] *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.*
[15] 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.