



20th Regular Session of the Scientific Committee (SC) of the Western Central Pacific Fisheries Commission (WCPFC):

Manila, Philippines - August 14 - 21, 2024

Introduction

The World Wide Fund for Nature (WWF) sincerely thanks the Western and Central Pacific Fisheries Commission (WCPFC) Scientific Committee (SC) for again allowing WWF to attend and contribute to the 20th Regular Session of the SC (SC20) as an observer and to address the important role it plays the management of the Western Central Pacific Ocean (WCPO) fisheries.

The following positions represent highlights and are not meant to exclude or diminish other important work currently considered by the SC. However, WWF would like to offer the following position and recommendations to the SC regarding significant scientific issues that WWF believes to be priority.

Fisheries Observers

Because of the importance of this issue to the successful outcome of multiple agenda items, most importantly Agenda Item 3, WWF has chosen to make this issue a standing position until such time as progress is made. It is unquestionable that information collected as part of a successful observer programme is critically important to the proper conservation and management of a fishery. Data collected by observers plays a central role in informing fisheries scientists and managers on everything ranging from stock assessments to non-target species impacts.¹ Furthermore, observers play an indispensable role in monitoring and documenting compliance with very important CMMs in the WCPO.² Therefore, securing appropriate observer coverage must be considered a top priority and member states must make a concerted effort to achieve that coverage.

All CCMs agreed to the Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean (WCPFC Convention) text and other Commission obligations to ensure the *best scientific information or evidence available* is used in WCPFC decisions.³ By its plain reading, this obligation not only requires members to actively *seek out* and *use* the best available scientific evidence, but also compels CCMs to ensure that measures taken result in the *generation* of the best available scientific evidence.⁴ Any other interpretation would be illogical. Therefore, the WCPFC is obligated under the WCPFC Convention to put data collection processes, including observer coverage, in place that secures the production and use of the best available scientific evidence for use in the WCPFC decision making process.

Calculation of Observer Metric

Over 17 years ago, the WCPFC established CMM 2007-01, which specified that coverage is to be 5% of effort in each non-purse seine fishery under the jurisdiction of the Commission and shall be achieved no later than 30 June 2012.⁵ Specifically, low observer coverage in the longline fishery was identified as a significant conservation risk. Moreover, as indicated by the discussion at that time as well as discussion among members at WCPFC forums since, the arbitrary benchmark established at 5% was considered a starting point for a stepwise progression to appropriate observer coverage, never a final target as implied by some CCMs. Unfortunately, not only has achieving the principal objective of CMM 2007-01 proven difficult, but even measuring how it is achieved remains unsettled.

At the moment members self-report their longline observer coverage under four separate metrics including:⁶

- Days at Sea - days observer is at sea compared to number of days fleet is at sea;
- Number of Trips - number of observer trips compared to trips by the fleet;
- Days Fished - observed fishing days compared to fleets fishing days; and
- Number of Hooks - number of hooks observed compared to fleet hooks used.

Because these metrics are each calculated differently and subject to different biases, it places an unnecessary burden on the scientific service provider to standardise data in such a way as to properly assess coverage. In effect, it forces the scientific services provider, and ultimately the WCPFC, to “compare apples with oranges” in a way that frustrates efficient analysis and, ultimately, timely and proper management. Moreover, because of the biases of the different metrics, it creates inequity among members that places more of the conservation burden on those using a more accurate and precise metric that is less susceptible to bias and manipulation.

The best scientific information available suggests that “number of hooks” represents the best method for achieving multiple objectives, including effectively calculating effort and accurately assessing rare events like seabird interactions.⁷ Several member states are currently assessing their observer coverage based on “number of hooks,” proving it is practically feasible. Consequently, WWF recommends that the SC reaffirm that “number of hooks” represents the best practice metric for all members calculating observer coverage on longline vessels.

Level of Observer Coverage

There is simply no longer an acceptable excuse for observer coverage rates on the non-purse seine fleet to remain unacceptably low. Recent efforts by the Pacific Community to standardise observer coverage data indicate that region-wide observer coverage remains less than 5%.⁸ However, the best available scientific evidence indicates that even a consistently applied level of 5% coverage is statistically and practically useless to effectively achieve most management⁹ or compliance objectives.¹⁰

Low observer coverage exacerbates bias as a result of fishers altering their fishing practices (*e.g.* discarding practices, handling and release practices, effort) and gear when an observer is present, which is a phenomenon known as the “observer effect.”¹¹ The higher the observer coverage rate, the lower the bias from an observer effect, while the larger the proportion of fishing effort that is observed, the more accurately the monitoring data characterize or represent the fishery. Notwithstanding the observer effect, at just 5%, current observer coverage is not producing the quality or quantity of data necessary to properly manage the WCPO non-purse seine tuna fisheries. At present, a lack of sufficient data that is typically generated through adequate observer coverage represents the single largest obstacle to establishing appropriate management measures. Uncertainty is continually cited in the WCPFC process as a reason for inaction, while the certainty offered by improved observer coverage seems to be consistently rejected, deferred, and delayed.

WWF accepts that different minimum levels of observer coverage may be necessary for different management or compliance purposes, depending on specific identified objectives. However, data collected under less than 100% coverage may be biased and misrepresent the fishery overall, resulting in management failures. Alternatively, 100% observer coverage, through human or electronic observers, would result in no bias from an observer effect. Thus, along with a consortium of other NGOs and with the support of prominent market partners, we have determined that because of conservation and compliance problems such as illegal fishing, misreported or unreported catch, and bycatch of endangered, threatened and protected species, that only an observer coverage rate of no less than 100%, through human observers or electronic monitoring, is acceptable.¹²

By continuing to fail to secure a scientifically or statistically valid level of observer coverage, particularly on longline vessels, the WCPFC fails to meet the charge of the WCPF Convention to generate and use the best available scientific information. Therefore, the WCPFC must take action to improve observer coverage across all longline vessels operating in the WCPFC Convention Area.

WWF recommends the SC:

- **Reaffirm the calculation of observer coverage on the basis of “number of hooks” as best practice and recommend a transition to calculation of observer coverage based on “number of hooks”; and**
- **Endorse a plan to increase observer coverage, by human observers or electronic monitoring, across all longline vessels operating in the WCPFC Convention Area on an annual basis to achieve 100% coverage by 2026.**

Sharks and Rays

Sharks play a critical role in the WCPO marine ecosystem as apex predators and indicators of ecosystem health.¹³ Sharks and rays also continue to make up a large percentage of annual bycatch.¹⁴ Thus, many shark species in the WCPO remain subject to high levels of fishing mortality that current stock assessment trends suggest is unsustainable.¹⁵ Despite the recent commendable efforts of the WCPFC to prohibit shark lines and wire trace as well as provide guidelines to keep sharks in the water and use line cutters to cut branch lines close to the hook, WWF remains concerned with shark conservation and sustainability in the WCPFC region.

WWF also notes that shark conservation and management is further frustrated due to poor data collection exacerbated by inconsistent bycatch definitions as well as retention policies that can prevent adequate data collection. Several RFMOs, including the WCPFC, maintain incomplete records concerning bycatch discards due in part to inconsistent definitions of bycatch.¹⁶ Additionally, while we appreciate the steps taken by the Scientific Services Provider and Data Collection Committee (DCC) of the WCPFC to address data gaps related to bycatch, we note the continued need for significant improvements in minimum data reporting requirements and submission of operational catch and effort data as well as bycatch estimates in the longline fishery. WWF specifically notes how improved operational catch and effort data could significantly inform bycatch estimates for sharks and rays, thus we strongly encourage exclusive adoption of more frequent submission “within 30 days of the end of a trip and, where applicable, at the end of every transshipment at sea” recognizing that recent requirements for electronic reporting and rapidly advancing technology facilitating it makes doing so wholly practical and feasible.

Lastly, we note there is still necessary progress to achieve adequate catch information on sharks as evidenced by poor data collection due, in part, to the lack of enforceability of the current shark CMM provisions on shark finning. Therefore, WWF continues to recommend the implementation of a fins naturally attached (FNA) policy as the only method to ensure both proper catch accounting as well as compliance with shark retention measures.

WWF recommends the SC:

- **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;**
- **Enact recovery plans for the most depleted shark and ray 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;**
- **Develop uniform bycatch definitions to support comprehensive and accurate records of annual bycatch discards;**
- **Encourage exclusive adoption of more frequent submission of operational catch and effort data “within 30 days of the end of a trip and, where applicable, at the end of every transshipment at sea; and**
- **Encourage CCMs to develop NPOAs with measures to report all shark and ray catches from domestic fleets operating in territorial and archipelagic waters to assist CCMs to meet obligations for shark and ray species incorporated under CITES Appendix II, including making any non-detriment finding publicly available.**

Pacific Bluefin Tuna

The Pacific Bluefin Tuna (PBF) Working Group of the International Scientific Committee for Tuna and Tunalike Species in the North Pacific Ocean (ISC) completed a baseline assessment in 2024 (SAC-15 INF-N). The ISC determined the PBF population reached the second recovery target of

20%SSB_{F=0} in 2021, 13 years earlier than initially planned. The Working Group is also carrying out a Management Strategy Evaluation (MSE) scheduled for completion in 2025.

Although the Pacific bluefin tuna stock recovered to the rebuilding target, WWF maintains deep concerns regarding the health of the Pacific bluefin tuna stock and remains committed to restoring and rebuilding this ecologically, sociologically, and economically important fishery resource. Therefore, WWF recommends the WCPFC to take a precautionary approach for maintaining and further rebuilding this stock.

WWF recommends the SC:

- **Continue MSE development and establish a precautionary Limit and Target Reference Point for PBF by 2025;**
- **Allow no increase in catch quotas unless each member country confirms they will adopt the MSE in 2025; any increase from current catch levels must be underpinned by scientific advice and ensure the increasing stock abundance trend is preserved, and**
- **Develop a Catch Documentation Scheme (CDS) for the thorough monitoring of PBF to ensure proper stock assessment and reduce IUU fishery risk by 2025.**

Sea Turtles

WWF is encouraged by the continued interest in addressing the effectiveness of *CMM 2018-04 for the Conservation and Management of Sea Turtles*. WWF maintains that this CMM must be strengthened to protect the six sea turtle species that are currently listed as threatened or endangered and declining.¹⁷ We remind the SC that the cumulative impact of largely unmonitored longline vessels in the WCPO on sea turtles remains problematic, and there is also insufficient uptake of proven bycatch mitigation measures such as adoption of the use of both circle hooks and finfish bait.

We again emphasise the previous conclusions of the **Workshop on Joint Analysis of Sea Turtle Mitigation** 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*”.¹⁸ We further note that subsequent repeated scientific inquiry confirms those conclusions.¹⁹ We also reference the fact that repeated studies indicate that the use of circle hooks is not only highly effective in mitigating bycatch of sea turtles, but also results in improved fishing efficiency for target species such as bigeye and yellowfin tuna.²⁰ In fact, the most recent meta-analysis identifies a high degree of confidence in the circle hook and finfish bait mitigation techniques, thereby affirming its status as the best available science.²¹ Lastly, there is some evidence that circle hooks reduce mortality of other bycatch species²² and improve catch quality²³ that requires further investigation.

WWF also supports the recommendations to reduce the potential impacts of Fish Aggregating Devices (FADs) on sea turtles discussed during SC19.²⁴ We particularly support the provisions to require fully non-entangling and biodegradable FAD materials to reduce mortality of sea turtles and other species as a result of entanglement.

Accordingly, WWF proposes that the language of CMM 2018-04 be revised to be made consistent with the US sea turtle bycatch mitigation requirement under the following recommendations:

WWF recommends the SC:

- **Endorse revisions to CMM 2018-4 aimed at:**
 - **Requiring the use of large circle hooks (18/0 or larger with an offset not to exceed 10 degrees, or 16/0 or larger non-offset circle hooks);**
 - **Requiring the use of only whole finfish as bait;**
 - **Amending the measure to include the deep set longline fisheries based on the best available science;²⁵ and**
 - **Clarifying 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.**
- **Encourage further investigation of the capability of circle hooks to improve catch and bycatch mortality and condition on haul back; and**
- **Endorse the Recommendations to reduce the potential impacts of Fish Aggregating Devices (FADs) on sea turtles contained in WCPFC-SC19-2023/EB-WP-12.**

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¹ See e.g. Davies, S.L. 2003. Guidelines for Developing an at-Sea Fishery Observer Programme. FAO Fisheries Technical Paper 414, ISSN 0429-9345. Food and Agriculture Organization of The United Nations, Rome.

² *Id* at 5. (Observers can register compliance with fisheries management laws, regulations and plans; record catch composition, prohibited species, by-catch, size limits, discarding, area and gear restrictions; validate vessel logbooks and the labelling of processed fish.); see also Palma, M.A.E. 2010. Promoting Sustainable Fisheries: The International Legal and Policy Framework to Combat Illegal, Unreported and Unregulated Fishing. Volume 6 of Legal Aspects of Sustainable Development, ISBN 9789004175754. Martinus Nijhoff Publishers, p. 142.

³ The Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western Pacific Ocean (WCPFC Convention) establishes the Western and Central Pacific Fisheries Commission (WCPFC). Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean, Part II, Article 5, paragraph (b) ("...the members of the Commission shall...ensure that such measures are based on the best scientific evidence available..."), Sept. 5, 2000, 2275 U.N.T.S. 40532, <https://www.wcpfc.int/system/files/text.pdf>.

⁴ *Id* at Part III, Article 10, paragraph (1)(e) ("...the functions of the Commission shall be to...compile and disseminate accurate and complete statistical data to ensure that the best scientific information is available...").

⁵ WCPFC, *Conservation and Management Measure for the Regional Observer Programme*, at 9, CMM 2007–01 (Dec. 2-7, 2007), <https://www.wcpfc.int/doc/cmm-2007-01/conservation-and-management-measure-regional-observer-programme> [Superseded by CMM 2018–05, which consolidated other observer related issues into a single measure]

⁶ WCPFC, Status of Observer Data Management, WCPFC-SC20-2024/ST-IP-03 (Rev.01), Status of Observer Data Management, at 20, Table 4 (July 16, 2024)

⁷ Dietrich, K. *et al.* Best Practices for the Collection of Longline Data to Facilitate Research and Analysis to Reduce Bycatch of Protected Species, NOAA Technical Memorandum NMFS-OPR-35 March 2007. at 25, March 2007. ("Fishing effort can be derived from information collected on number of hooks deployed or retrieved. The number of hooks deployed was ranked as critical or preferred by 81% of data user[s]..."); see also IATTC, Scientific Advisory Committee, SAC-10-04 – Longline observer program reports, at 2 (13-17 May 2019)("Number of hooks is considered a more accurate measure of longline effort."); see also IATTC, Scientific Advisory Committee, SAC-10 INF-H - Standardization of Reporting Formats and Effort Reporting for Longline Fisheries (Resolution C-11-08), at 3, (13-17 May 2019) ("...number of hooks is the most precise, and is the standard metric used both by the other tuna RFMOs and by the IATTC for scientific purposes.")

⁸ *Supra* note 6 at 15-20, Tables 2, 3, and 4. (July 16, 2024).

⁹ See Lawson, T. 2003. Observer coverage rates and the accuracy and reliability of estimates of CPUE for offshore longline fleets targeting South Pacific albacore. Working Paper SWG–4. Sixteenth Meeting of the Standing Committee on Tuna and Billfish, 9–16 July 2003, Mooloolaba, Queensland, Australia. Oceanic Fisheries Programme, Secretariat of the Pacific Community, Noumea, New Caledonia; See also Lawson, T. 2004. Observer coverage rates and reliability of CPUE estimates for offshore longliners in tropical waters of the Western and Central Pacific Ocean. Working Paper SWG–4, Seventeenth Meeting of the Standing Committee on Tuna and Billfish, 9-18 August 2004, Majuro, Republic of Marshall Islands.

¹⁰ Benoit, H., Allard, J. 2009. Can the data from at-sea observer surveys be used to make general inferences about catch composition and discards? *Can. J. Fish. Aquat. Sci.* 66: 2025-2039.; Babcock, E.A., E.K. Pikitch, G. Hudson. 2003. How Much Observer Coverage is Enough to Adequately Estimate Bycatch? Pew Institute for Ocean Science, Miami, FL, and Oceana. Washington.

¹¹ Gilman, Eric & Zimring, Mark. 2018. Meeting the objectives of fisheries observer programs through electronic monitoring. 10.13140/RG.2.2.28000.99846.

¹² Leading Environmental NGOs Stand Together to Call for 100% Observer Coverage on Industrial Tuna Fishing Vessels (June 29, 2019) retrievable at <https://www.prnewswire.com/news-releases/leading-environmental-ngos-stand-together-to-call-for-100-observer-coverage-on-industrial-tuna-fishing-vessels-300873686.html>.

¹³ 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.

¹⁴ Status of pelagic esasmobranchs (sharks and rays) of the Western and Central Pacific Ocean as prepared by the IUCN Shark Specialist Group at the New Zealand and Oceania Shark Red List Assessment Workshop, Auckland, (June 2017)

¹⁵ 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 4, pages 197–209, February.

¹⁶ Discards by Global Tuna Fisheries, Eric Gilman, Petri Suuronan, Milani Chaloupka, *Marine Ecology Progress Series* 582: 231-252, WCPFC-SC14-2018/EB-IP-09

¹⁷ Clarke S, Peatman T, Caillot S. Results from the first workshop on joint analysis of sea turtle mitigation effectiveness. In Proceedings of the 12th Regular Session of the Scientific Committee. 2016 Bali: Indonesia.

¹⁸ *Id.*

¹⁹ Lee MK, Kwon Y, Lim JH, Ha Y, Kim DN. International community's efforts to mitigate sea turtle bycatch and status of implementing relevant measures by Korean tuna longline fishery. *Fish Aquat Sci* 2022;25(12):589-600. <https://doi.org/10.47853/FAS.2022.e54>

²⁰ Andraka S, Mug M, Hall M, Pons M, Pacheco L, Parrales M, et al. Circle hooks: developing better fishing practices in the artisanal longline fisheries of the Eastern Pacific Ocean. *Biol Conserv*. 2013; 160:214-24; ; Curran D, Bigelow K. Effects of circle hooks on pelagic catches in the Hawaii-based tuna longline fishery. *Fish Res*. 2011; 109:265-75; Foster DG, Epperly SP, Shah AK, Watson JW. Evaluation of hook and bait type on the catch rates in the western North Atlantic Ocean pelagic longline fishery. *Bull Mar Sci*. 2012; 88:529-45; Huang HW, Swimmer Y, Bigelow K, Gutierrez A, Foster DG. Influence of hook type on catch of commercial and bycatch species in an Atlantic tuna fishery. *Mar Policy*. 2016; 65:68-75; Pacheco JC, Kerstetter DW, Hazin FH, Hazin H, Segundo RSSL, Graves JE, et al. A comparison of circle hook and J hook performance in a western equatorial Atlantic Ocean pelagic longline fishery. *Fish Res*. 2011; 107:39-45; Promjinda S, Siriraksophon S, Darumas N, Chaidee P. Efficiency of the circle hook in comparison with J-hook in longline fishery [Internet]. Consortium for Wildlife Bycatch Reduction. 2008 [cited 2024 Jul 24]. <https://www.bycatch.org/articles/efficiency-circle-hook-comparison-j-hook-longline-fishery>; Sales G, Giffoni BB, Fiedler FN, Azevedo VG, Kotas JE, Swimmer Y, et al. Circle hook effectiveness for the mitigation of sea turtle bycatch and capture of target species in a Brazilian pelagic longline fishery. *Aquat Conserv Mar Freshw Ecosyst*. 2010; 20:428-36.

²¹ Yan H, Zhou C, Zhu J, et al (2023) Methods for mitigating sea turtle bycatch in longline fisheries: a meta-analysis. In: IOTC - 19th Working Party on Ecosystems & Bycatch. IOTC-2023-WPEB19-30_rev1, La Saline Les Bains, Reunion, France.

²² Reinhardt, James & Weaver, Jen & Latham, Pamela & Dell'Apa, Andrea & Serafy, Joseph & Browder, Joan & Christman, Mary & Foster, Daniel & Blankinship, David. (2017). Catch rate and at-vessel mortality of circle hooks versus J-hooks in pelagic longline fisheries: A global meta-analysis. *Fish and Fisheries*. 19. 10.1111/faf.12260.

²³ Serafy, JE; Cooke, SJ; Diaz, GA; Graves, John; and al, et, Circle Hooks In Commercial, Recreational, And Artisanal Fisheries: Research Status And Needs For Improved Conservation And Management (2012). *Bulletin of Marine Science*, 88(3), 371-391. 10.5343/bms.2012.1038

²⁴ Moreno G (2023) Guidelines to reduce the impact of drifting Fish Aggregating Devices on sea turtles (WCPFC SC19). In: WCPFC Scientific Committee 19th Regular Session. WCPFC-SC19-2023/EB-WP-12, Koror, Palau

²⁵ Swimmer Y, Zollett EA, Gutierrez A (2020) Bycatch mitigation of protected and threatened species in tuna purse seine and longline fisheries. *Endang Species Res* 43:517-542. <https://doi.org/10.3354/esr01069>

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