

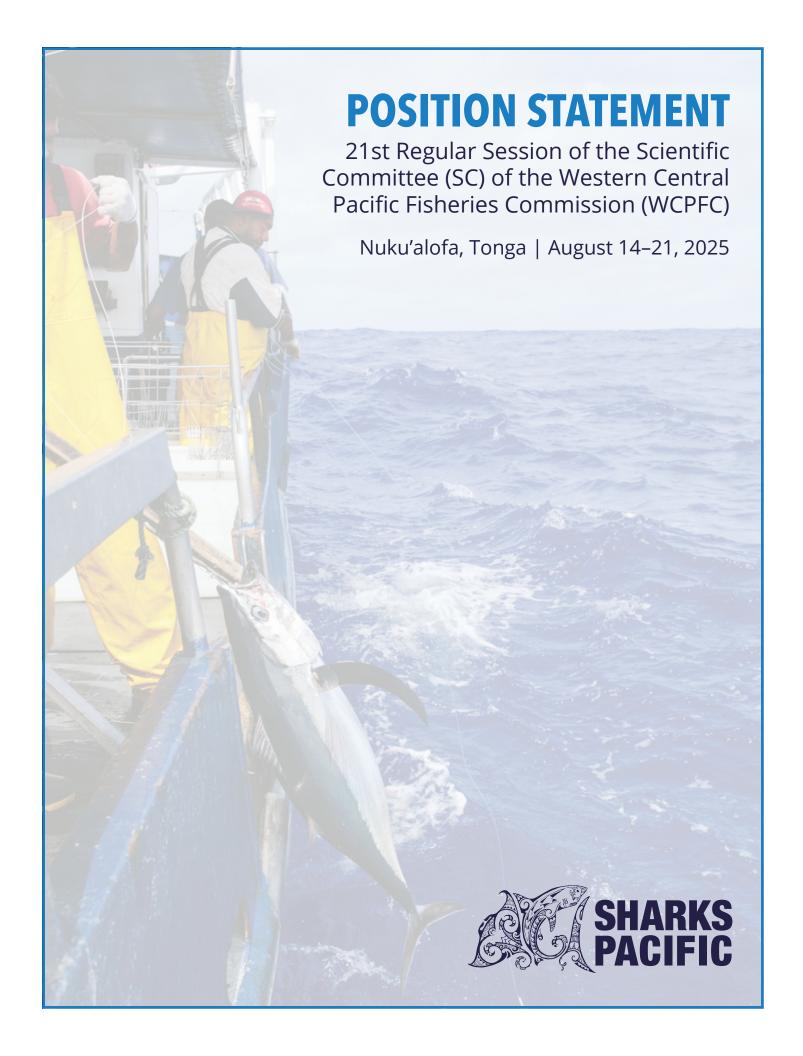
SCIENTIFIC COMMITTEE TWENTY-FIRST REGULAR SESSION

Nuku'alofa, Tonga 13 August to 21 August 2025

Position Statement

WCPFC-SC21-2025-OP-04 5 August 2025

Submitted by Sharks Pacific



POSITION STATEMENT

21st Regular Session of the Scientific Committee (SC) of the Western Central Pacific Fisheries Commission (WCPFC)

Nuku'alofa, Tonga | August 14-21, 2025

Sharks Pacific wishes to express its appreciation to the Scientific Committee (SC) of the Western and Central Pacific Fisheries Commission (WCPFC) for the opportunity to participate in the 21st Regular Session (SC21). We are grateful for the chance to engage with the SC in our new capacity as an accredited observer and contribute to its vital role in the sustainable management of fisheries within the Western and Central Pacific Ocean (WCPO).

The positions that follow reflect key priorities for Sharks Pacific, which we believe warrant particular scientific attention at this session.

OBSERVER COVERAGE

Aligned with other NGO observer organisations, Sharks Pacific believes that robust observer coverage, by human or electronic means, remains a key priority for fisheries conservation and management of all species in the WCPO, but particularly for vulnerable endangered, threatened, and protected species. [1] The best available science suggests that data collected by observers remains critically important to ensure that scientists and managers possess the information they need to make appropriate decisions for everything from stock assessments to nontarget species impacts [2,3]. Additionally, observers play an indispensable role in monitoring and documenting compliance with key Conservation and Management Measures (CMMs) in the WCPO [3,4]. Recent research has also demonstrated strong social and economic support for robust observer coverage [5]. Therefore, the WCPFC must consider securing increased observer coverage levels as a top priority, and member states must make a concerted effort to achieve that coverage.

Over 18 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 [6]. For clarity, when we reference "nonpurse seine fisheries," as a matter of priority, we mean the longline fishery because it represents the highest risk gear type in terms of both economic and ecological impact. Some members and observers have repeatedly called for action to meet the commitment imposed by CMM 2007-01, while also acknowledging that the 5% coverage level for non-purse seine fisheries was only considered a starting point for a stepwise progression to more appropriate coverage. Despite these calls and justification for improving observer coverage based on the best science, several members continue to fail to meet appropriate coverage levels [7].

Additionally, the WCPFC continues to allow four different methodologies (days at sea, days fished, number of trips, and number of hooks) to calculate observer coverage rates, which does not reflect best practice and complicates effective analyses by creating analytical complexity. 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 relatively rare bycatch events [8,9,10].

Furthermore, the best available scientific evidence continues to indicate that even a consistently applied level of 5% coverage is statistically and functionally ineffective to achieve most management [11,12] or compliance objectives [13,14]. Low observer coverage also leads to bias, uncertainty, and, ultimately, management failures [15]. Poor data quality and quantity resulting from inadequate observer coverage represents the single largest obstacle to establishing appropriate and effective conservation and management measures [16].

The WCPFC must take action to meet its obligations and implement scientifically valid and consistent observer coverage levels across all longline vessels operating in the WCPFC Convention Area.

Therefore, Sharks Pacific supports and urges the SC to:

- Remind members of the current 5% observer coverage targets they are expected to meet;
- Reaffirm calculation of observer coverage on the basis of "number of hooks" as best practice;
- Recommend a staged transition for all fleets to calculate 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 as soon as possible.

SHARKS AND RAYS

As key predators and vital indicators of ecosystem health, sharks and rays (collectively "elasmobranchs") are fundamental to maintaining the balance of marine ecosystems globally and across the Western and Central Pacific Ocean (WCPO) [17,18,19]. However, elasmobranchs continue to represent a disproportionately large

component of annual bycatch in regional fisheries [20]. This persistent fishing impact has resulted in unsustainable mortality rates for many elasmobranchs, as evidenced by current stock assessment trends that paint a concerning picture for the future of many species [21,22]. While Sharks Pacific acknowledges the WCPFC's recent positive steps to prohibit shark lines and wire trace, along with guidelines promoting safe handling procedures and the use of line cutters to minimize trailing gear, we remain deeply concerned about the inadequate conservation and management of elasmobranchs throughout the WCPO region.

Like other observer organisations, Sharks Pacific remains particularly troubled by the systemic failures in data collection that continue to undermine overall effective fisheries conservation and management, but especially elasmobranch conservation efforts. The lack of standardized bycatch definitions, combined with inconsistent retention policies, creates significant barriers to understanding the true scope of elasmobranch mortality in our waters. Similar to other RFMOs, the WCPFC maintains substantially incomplete records of bycatch discards, largely due to these definitional inconsistencies [23].

While we recognize the efforts of the Scientific Services Provider (SSP) and Data Collection Committee (DCC) to address these data gaps, we emphasise that substantial improvements in minimum data reporting requirements remain urgently needed. The current submission protocols for operational catch and effort data, as well as bycatch estimates in longline fisheries, fall far short of what is necessary to protect relatively low interaction species including sea turtles and vulnerable elasmobranch species [23,24]. Enhanced operational catch and effort data would improve our ability to accurately estimate bycatch for elasmobranchs by providing more granular data on operational aspects, such as hooks between floats.

Therefore, Sharks Pacific strongly recommends and urges the SC to:

 Mandate the timely submission of current and historic operational data by all members.

Silky Sharks

Sharks Pacific is encouraged by the continued improvement in the population level and conservation status of silky sharks (FAL) across the WCPO. However, while models indicate that recent fishing mortality for FAL in the WCPO remains below levels that would prevent stock rebuilding, which suggests that the stock is not currently experiencing overfishing, significant data gaps remain (e.g., stock boundaries), and mortality is not being fully assessed or accounted for in the management system [25]. The assumption that non-retention measures and changes in fishing practices are effective in reducing

bycatch mortality depends on accurate observer reporting, which is currently diminished by both low observer coverage and the inability for observers to accurately identify species because of common operational practices (e.g., cutting longline gangions near the mainline before the observer can sufficiently identify the species). In addition to obscuring accurate reporting even when observers are present, this practice leaves a large amount of trailing gear on the shark, which increases post-release mortality [26,27].

Additionally, the WCPFC must address significant uncertainties that remain in historical catch estimates and biological parameters for FAL. While a multi-model approach might increase confidence in the current assessment, the WCPFC must address data gaps to ensure that the data inputs of each model adequately represent the true state of the stock. While we generally support the recommendation to use surplus production models for FAL, and other shark stocks with similarly sparse composition data, the most important course of action is to improve the robustness, completeness, and precision of data collection on key processes and parameters used in the models (e.g., effort, fishing mortality) through increased observer coverage and improved log sheet submissions. Moreover, we similarly agree that members should use risk assessments carefully to prioritise conservation across species when time series data are lacking, but that the WCPFC should place a priority on improving data collection and data quality.

Therefore, Sharks Pacific supports and urges the SC to:

- Recommend or support the collection of additional movement data (e.g. through satellite tagging) to clarify migration, stock structure, connectivity, and sex specific site fidelity;
- Advance growth studies to resolve conflicting information about growth rates in different regions;
- Support genetic and genomic studies to better define stock boundaries and possible sub-stocks;
- Endorse supporting improvements in bycatch and discard data collection, given the reliance on reconstructions due to sparse logsheet and observer data.

Oceanic Whitetip Sharks

Sharks Pacific also remains very concerned with the current conservation status of oceanic whitetip sharks (OCS) across the WCPO. Recent genetic evidence confirms that OCS in the WCPO represent a distinct and demographically isolated stock, highlighting the importance of localized recovery and management efforts [28]. While we commend the effort of the SSP to incorporate new catch-per-unit-effort (CPUE) indices and

improved length composition estimates aimed to address previous data uncertainties and improve confidence in the upcoming stock status estimate, the 2025 stock assessment continues to indicate only very modest improvement in stock status trends for OCS. We would also like to specifically commend the SSP's efforts to incorporate catch reconstructions that attempt to better capture fishing mortality history and avoid unrealistic assumptions. We note that several members have not provided complete historic operational data for their longline fleets, including accurate accounting of hooks between floats, which complicates any representation of historic fishing mortality.

We highlight that observer coverage remains extremely limited for some fleets, preventing adequate data collection required for accurate stock assessments. Similar to FAL, we also note that non-retention measures and cryptic discard mortality [29] further compromise catch estimation. Furthermore, we highlight that length samples for purse seine fisheries remain sparse, further complicating assessment performance.

Therefore, Sharks Pacific supports and urges the SC to:

- Recommend maintaining the retention prohibition for OCS;
- Recommend requiring mandatory operational requirements to pull all sharks within view of the observer, use extendable line cutters, and cut gangions as close to the hook as possible; and
- Recommend requiring the submission of all historic operational data for all longline fleets.

ENSURING EVIDENCE-BASED SHARK MORTALITY ESTIMATES

Sharks Pacific wishes to highlight the challenge of unreliable catch data due to poor reporting and inadequate observer coverage and other contributing factors. For example, weak policy elements contained in the current CMM 2024-05 aimed at addressing shark finning contribute to unrepresentative shark mortality estimates by obscuring species and number of sharks caught. Alternative measures contained in CMM 2024-05 that allow binding fins to a carcass, or corresponding numbered tags on fins and carcasses, effectively prevent adequate catch accounting. Further, these provision present opportunities to high-grade fins or obscure landings of prohibited species. Moreover, proponents of the alternative measures have failed to bring forward substantive evidence that show these measures facilitate shark mortality estimates comparable to a fins naturally attached (FNA) policy. Best practice and evidence show that a FNA policy represents the best solution to ensure both meaningful compliance with shark retention measures and, ultimately, accurate catch accounting [30,31]. By ensuring that sharks are landed with their fins attached, it allows for better monitoring

of species-specific catch rates, contributes to better science, and, thus, results in better overall management of elasmobranchs.

Lastly, as indicated in the recent IATTC 2nd Circle Hook Workshop (April 29-May 1, 2025), there is a growing body of evidence indicating that circle or "C" hooks perform better than equivalent standard "J" hooks at reducing mortality of vulnerable bycatch species, which, on balance, offer an overall conservation benefit based on the best science [32]. Specifically, the use of large "C" hooks results in a reduction in sea turtle mortality, particularly of highly endangered leatherback turtles [33–39]. Additionally, several studies indicate mortality reduction across other ETP species, including elasmobranchs, due to hook design. Elasmobranchs get hooked more frequently in the jaw (externally) with "C" hooks, rather than the gills or guts (internally), which reduces post-release mortality [40–43].

Therefore, Sharks Pacific supports and urges the SC to:

- Reaffirm that FNA represents best practice to ensure appropriate elasmobranch data collection and science and, thus, conservation and management; and
- Recommend further research and coordination with IATTC to consider transitioning to circle or "C" hooks as best practice mitigation to increase post-release survivorship for elasmobranchs and other non-target species.
- ¹ Bridger, S. (2019) Leading Environmental NGOs Stand Together to Call for 100% Observer Coverage on Industrial Tuna Fishing Vessels, 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.
- ² Davies, S. (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.
- ³ Domingo, A., et al. (2025). Sea turtles in the Atlantic and Indian Oceans, a step towards understanding bycatch and management of these species in tuna fisheries. Biological Conservation. 302. 10.1016/j. biocon.2025.110966.
- ⁴ 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.
- ⁵ Kim, Y., et al. (2025). Data-Based Analysis on the Economic Value of Fishery Observer Programs in International Fisheries Management: Insights from Korea's Distant Water Fisheries. Water. 17. 133. 10.3390/w17010133.
- ⁶ WCPFC (2007). 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].
- ⁷ WCPFC (2022), Status of Observer Data Management, SC20-2022/

- ⁸ Dietrich, K. et al. (2007). 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]...")
- ⁹ IATTC (2019), 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.")
- ¹⁰ IATTC (2019). 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.")
- ¹¹ 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 Billifsh, 9–16 July 2003, Mooloolaba, Queensland, Australia.
- ¹² 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.
- ¹³ Benoit, H., et al. (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.
- ¹⁴ Babcock, E., et al. (2003). How Much Observer Coverage is Enough to Adequately Estimate Bycatch? Pew Institute for Ocean Science, Miami, FL, and Oceana. Washington.
- ¹⁵ Gilman, E. et al. (2018). Meeting the objectives of fisheries observer programs through electronic monitoring. 10.13140/RG.2.2.28000.99846.
- ¹⁶ WCPFC (2025), Summary of bycatch in WCPFC longline fisheries at a regional scale, 2003–2023. WCPFC-SC21-2025/ST-WP-09, ([recommendation to] note the difficulties in robust estimation of longline catches from observer data, particularly forrarely caught species, given the low levels and imbalanced nature of observer coverage.) (July 21, 2025).
- ¹⁷ Su, H. et al. (2025). What can we learn from the loss of sharks?. Trends in Ecology & Evolution. 40. 10.1016/j.tree.2025.04.012.
- ¹⁸ Dedman, S. et al. (2024). Ecological roles and importance of sharks in the Anthropocene Ocean. Science (New York, N.Y.). 385. adl2362. 10.1126/science.adl2362.
- 19 Ahilan, B. et al. (2021). Ecological Importance of Sharks. Journal of Aquaculture in the Tropics. 36. 31-38. 10.32381/JAT.2021.36.1-4.4.
- ²⁰ Peatman, T., et al. (2023). Estimating trends and magnitudes of bycatch in the tuna fisheries of the Western and Central Pacific Ocean. Fish and Fisheries, 24, 812–828. https://doi.org/10.1111/faf.12771.
- ²¹ Edgar, G., et al. (2024). Stock assessment models overstate sustainability of the world's fisheries. Science (New York, N.Y.). 385. 860-865. 10.1126/science.adl6282.
- ²² Pacoureau, N., et al. (2021). Half a century of global decline in oceanic sharks and rays. Nature. 589. 567-571. 10.1038/s41586-020-03173-9.
- ²³ Gilman, E., et al. (2017). Discards by global tuna fisheries. Marine Ecology Progress Series. 582. 10.3354/meps12340.
- ²⁴ WCPFC, Coverage Levels for Operational Data Fields Submitted to the WCPFC, WCPFC-SC21-2025/ST-IP-02, (August 13, 2025).
- ²⁵ Kraft, D.W., et al. (2025) Global stock structure of the Silky shark (Carcharhinus falciformis, Carcharhinidae) assessed with high-

- throughput DNA sequencing. PeerJ, 13:e19493. doi: 10.7717/peerj.19493.
- ²⁶ Hutchinson, M., et al. (2021). Quantitative estimates of post-release survival rates of sharks captured in Pacific tuna longline fisheries reveal handling and discard practices that improve survivorship. https://doi.org/10.25923/0m3c-2577.; see also
- ²⁷ Francis, M.P., et al. (2023). Post-release survival of shortfin mako (Isurus oxyrinchus) and silky (Carcharhinus falciformis) sharks released from pelagic tuna longlines in the Pacific Ocean. Aquatic Conservation: Marine and Freshwater Ecosystems, 33(4), 366–378. https://doi.org/10.1002/aqc.3920
- ²⁸ Ruck, C.L. et al. (2024). Cross ocean-basin population genetic dynamics in a pelagic top predator of high conservation concern, the oceanic whitetip shark, Carcharhinus longimanus. Conserv Genet 25, 677–695. doi: 10.1007/s10592-023-01596-1
- ²⁹ Scott, M., et al. (2025). Using photo identification to assess demographics and fishery interactions of oceanic whitetip sharks Carcharhinus longimanus in the main Hawaiian Islands. Mar Ecol Prog Ser, 759:51-69. doi: 10.3354/meps14835
- 30 Ziegler, I. (2024). Fins Naturally Attached, the globally acknowledged best practice to prevent finning REV 1 IOTC WPEB 2023.
- ³¹ Gutteridge, A., et al. (2024). How are appropriate performance levels developed for MSC certification? A case study assessing shark finning, Marine Policy, Volume 163, 106119, ISSN 0308-597X.
- ³² Inter-American Tropical Tuna Commission. (2025) Chair's Report: 2nd Circle Hook Workshop, 28–30 April 2025. IATTC, Apr. 2025. https://www.iattc.org/en-US/Event/DetailEvent/Event-WSHKS-02
- ³³ Andraka, S., et al. (2013). Circle hooks: developing better fishing practices in the artisanal longline fisheries of the Eastern Pacific Ocean. Biol Conserv.; 160:214-24;
- ³⁴ Curran, D., et al. (2011). Effects of circle hooks on pelagic catches in the Hawaii-based tuna longline fishery. Fish Res.; 109:265-75
- ³⁵ Foster D., (2012). 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
- ³⁶ Huang, H., et al. (2016). Influence of hook type on catch of commercial and bycatch species in an Atlantic tuna fishery. Mar Policy.; 65:68-75
- 37 Pachecoa J., et al. (2011). A comparison of circle hook and J hook performance in a western equatorial Atlantic Ocean pelagic longline fishery. Fish Res.; 107:39-45
- ³⁸ Promjinda, S., et al. (2008). Efficiency of the circle hook in comparison with J-hook in longline fishery. Consortium for Wildlife Bycatch Reduction. https://www.bycatch.org/articles/efficiency-circle-hook-comparison-j-hook-longline-fishery
- ³⁹ Sales G., et al. (2010) 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, 20:428-36.
- ⁴⁰ Saïdi, B. et al. (2020). Are circle hooks effective management measures in the pelagic longline fishery for sharks in the Gulf of Gabès?. Aquatic Conservation: Marine and Freshwater Ecosystems. 30. 10.1002/aqc.3315.
- 41 Reinhardt, J. et al. (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.
- ⁴² Gilman, E. et al. (2015). A cross-taxa assessment of pelagic longline by-catch mitigation measures: Conflicts and mutual benefits to elasmobranchs. Fish and Fisheries. 17. 10.1111/faf.12143.
- ⁴³ Cosandey, G. et al. (2012). The Effect of Circle Hooks on Shark Catchability and At-Vessel Mortality Rates in Longlines Fisheries. Bulletin of Marine Science. 88. 10.5343/bms.2011.1054.