

Western and Central Pacific Fisheries Commission
Twelfth Regular Session of the Science Committee (SC12)

Kuta, Bali, Indonesia, 3–11 August 2016

Greenpeace welcomes the opportunity to participate as an observer in the Twelfth Regular Session of the Science Committee (SC12) of the Western and Central Pacific Fisheries Commission (WCPFC).

The wide range of research papers being presented for review and discussion at the SC12 shows the invaluable work and high level of commitment that scientists are making in this region. Unfortunately, this is in contrast with the failure of WCPFC Parties to build on such work and agree on measures that follow the precautionary approach, in accordance with the provisions of Articles 5 and 6 of this Convention, to ensure the speedy recovery and sustainable exploitation of tuna stocks and associated species, and ultimately the health of ecosystems in the region. In light of this, *Greenpeace urges the SC to provide clear, consistent, and robust recommendations to WCPFC on the following key issues:*

- **Developing science-based recovery plans for rebuilding overfished stocks of bigeye tuna and Pacific bluefin tuna within best-practice timeframes;**
- **Agreeing an interim Harvest Control Rule for skipjack tuna, and capacity and effort reductions to achieve an interim Target Reference Point of 45%SB_{F=0} for South Pacific albacore tuna;**
- **Strengthening the current conservation measures for sharks, seabirds, and turtles;**
- **Addressing data collection and reporting issues, including measures for non-compliance.**

Rebuilding the bigeye stock

A review of recent fisheries indicators for bigeye tuna¹ indicates that the stock has probably not declined further from the 2012 status (as assessed in 2014) but still remains below the Limit Reference Point of 20% SB_{F=0} and the fishing mortality remains significantly above F_{MSY}. Given the poor state of the bigeye stock and the continued failure of the WCPFC to reduce fishing mortality to sustainable levels, particularly with regard to the high juvenile bigeye catch associated with the use of Fish Aggregating Devices (FADs) by purse seines, *the SC should recommend that:*

- The Commission agrees a new recovery plan for bigeye tuna that brings existing fishing capacity and effort, including Fish Aggregating Devices (FADs), in line with precautionary mortality limits that end overfishing and allow for the quickest possible recovery of the stock. This includes:

¹ Pilling G, Scott R, Williams P, Hampton J (2016). A compendium of fisheries indicators for tuna stocks not assessed in 2016 (bigeye and yellowfin tuna). SA-WP-03. <https://www.wcpfc.int/node/27488>

- A rebuilding plan to recover the stock to 26%SB_{F=0} (the level consistent with 10% risk of falling below the Limit Reference Point²) within 8 years (two generations times, as per best practice) and further rapid recovery to the agreed target reference point;
- Further reductions on the use of FADs in association with purse seine fishing, in terms of both the numbers employed and sets, and additional measures to reduce longline effort;
- Consideration of effort creep, particularly with regard to purse seiners and FAD use³, with clear provisions on how fishing days are reported in purse seine fisheries to improve consistency of effort data;
- Consideration of what elements contribute to the very high bigeye catches of certain purse seine vessels and fleets;⁴
- The use of precisely defined, unambiguous and quantifiable provisions with clear timelines to meet management objectives (as recommended by the SPC-OF⁵).

Rebuilding the Pacific bluefin stock

The latest stock assessment for Pacific bluefin shows that continued high fishing levels have reduced the stock to just 2.6% of its unfished level.⁶ Under best-practice fisheries management, any fishery targeting a stock in such a poor condition would have been closed to allow the best chance of recovery. Given the dangerously low state of the stock, the risk of recruitment failure, and the continued failure of both WCPFC and IATTC to adequately cut catches, *the SC should recommend*:

- A moratorium on all commercial fishing for Pacific bluefin tuna until such time that a Pacific-wide recovery plan is agreed and fully implemented;
- A Limit Reference Point of 20%SB_{F=0} and a plan to recover the stock to this level before 2030;
- The development of a target reference point and Harvest Control Rules for Pacific bluefin in line with those agreed for other WCPFC stocks, and a reasonable timeline for achieving this;
- Immediate improvements to the current poor transparency of the ISC, by making all stock assessments and meeting documents publically available in a timely manner, and opening all meetings to observers.

Developing harvest strategies for tunas

Greenpeace notes the work plan agreed by WCPFC in 2015 for developing and agreeing harvest strategies for tunas, and the significant work being presented at SC12 in support of achieving these goals. While we acknowledge that there are many options for Harvest Control Rules that could be explored, depending on which management goals are agreed, we note that according to the 2016

² Pilling G, Scott R, Hampton J (2016). Biologically reasonable rebuilding timeframes for bigeye tuna. MI-WP-02. <https://www.wcpfc.int/node/27458>

³ Pilling G, Tidd A, the PNA Office, Norris W, Hampton J (2016). Examining indicators of effort creep in the WCPO fishery. WCPFC-SC12-2016/MI-WP-08. <https://www.wcpfc.int/node/27459>

⁴ Tidd A, Tremblay-Boyer L, Pilling G (2016). Exploratory analysis under Project 77: Linking bigeye concentrations with vessel attributes. WCPFC-SC12-2016/MI-IP-07. <https://www.wcpfc.int/node/27484>

⁵ SPC-OF (2015). Evaluation of CMM 2014-01 for bigeye tuna. SC12-WCPFC12-01. <https://www.wcpfc.int/node/27498>

⁶ ISC (2016). Executive Summary of the 2016 Pacific Bluefin Tuna Stock Assessment. ISC Pacific Bluefin Tuna Working Group. <https://www.iattc.org/Meetings/Meetings2016/SAC7/PDFfiles/INF/SAC-07-INF-C%28a%29-ISC-Letter-IATTC-Executive-Summary.pdf>

skipjack stock assessment⁷ the stock is already at the agreed Target Reference Point and that action needs to be taken to ensure effort does not increase further on this stock.

In addition, recent fisheries indicators show that the South Pacific albacore stock continues to decline in line with projections made in the 2015 assessment,⁸ and that the persistently low and declining average catch rates are likely to continue to undermine vessel profitability and may force some operators out of the fishery.⁹

We also note that the SC is often reluctant to give unsolicited advice on management issues, but this is permitted under Article 12 of the Convention.¹⁰ SC members have considerable knowledge and experience of the complexities of developing, testing, and monitoring harvest strategies and can give valuable guidance to the Commission, especially with regard to fisheries best practice, and choices that are easier to model and more useful in terms of the current data available. Therefore, *Greenpeace urges the SC to recommend that:*

- The risk levels for exceeding the Limit Reference Point are set at 5% for skipjack and South Pacific albacore, and 10% for yellowfin and bigeye, as proposed by FFA members.¹¹ This is in line with best practice, was previously supported by many scientists at SC8,¹² and will help to exclude unsuitable (higher risk) candidate Harvest Control Rules.
- The Commission considers adopting an interim Harvest Control Rule for skipjack in the form similar to those presented in MI-WP-06¹³, that requires prompt action to reduce fishing mortality as soon as the stock drops below the target (i.e. a trigger at 0.48 SB/SB_{F=0}), a closure to all purse seine fishing if the stock reaches the Limit Reference Point, and an additional annual catch cap;
- The Commission adopts an interim Target Reference Point of 45% SB_{F=0} for South Pacific albacore, and immediately reduce fishing effort to allow recovery to the target within a short time frame to improve the economic viability of the fishery, especially the fleets of Pacific Islands Countries;
- Effort creep is considered in the design and evaluation of Harvest Control Rules, particularly with regard to purse seiners and FAD use.¹⁴

⁷ McKechnie S, Hampton J, Pilling GM, Davies N (2016). Stock assessment of skipjack tuna in the western and central Pacific Ocean. WCPFC-SC12-2016/SA-WP-04. <https://www.wcpfc.int/node/27490>

⁸ Pilling GM, Williams P, WCPFC Secretariat (2016). Trends in the south Pacific albacore longline and troll fisheries. WCPFC-SC12-2016/SA-WP-06. <https://www.wcpfc.int/node/27444>

⁹ Skirtun M, Reid C (2016). Analyses and projections of economic conditions in WCPO fisheries. WCPFC-SC12-2016/ST-WP-04. <https://www.wcpfc.int/node/27426>

¹⁰ Article 12 Functions of the Scientific Committee, paragraph 2(g): “make reports and recommendations to the Commission as directed, **or on its own initiative**, on matters concerning the conservation and management of and research on target stocks or non-target or associated or dependent species in the Convention Area;”

¹¹ Australia (2016). Proposal for adopting interim acceptable levels of risk for breaching limit reference points for four key tuna species in the WCPO. WCPFC-SC12-2016/MI-WP-03. <https://www.wcpfc.int/node/27481>

¹² WCPFC (2012). Summary Report. WCPFC-SC-8. Busan, Korea. Western and Central Pacific Fisheries Commission (WCPFC), Kolonia, Pohnpei. <https://wcpfc.int/meetings/8th-regular-session-scientific-committee>

¹³ Scott R, Pilling GM, Brouwer S, Hampton J (2016). Evaluation of candidate harvest control rules for the tropical skipjack purse seine fishery. WCPFC-SC12-2016/MI-WP-06. <https://www.wcpfc.int/node/27431>

¹⁴ Pilling G, Tidd A, the PNA Office, Norris W, Hampton J (2016). Examining indicators of effort creep in the WCPO fishery. WCPFC-SC12-2016/MI-WP-08. <https://www.wcpfc.int/node/27459>

Improving the current status and conservation measures for sharks

Although sharks are often described as ‘bycatch’ in longline fisheries, it is clear from the common use of practices that deliberately increase sharks catches, such as the use of wire traces, shark lines and bait that attracts sharks,¹⁵ and crew payment structures that incentivise shark finning, that most longline fisheries should be described as ‘mixed fisheries’ targeting tuna, sharks, and billfish.

Northern blue sharks assessments presented in 2014^{16, 17} suggested that the stock is rebuilding and that fishing mortality is declining; however, considerable uncertainty remains about the current status of the stock due to poor fisheries and biological data and there is a significant risk that the stock may be in an overfished state. The 2016 assessment of blue shark in the South Pacific was unable to draw a conclusion regarding the stock status due to poor data availability.¹⁸

Oceanic whitetip sharks and silky sharks, are in a very poor state, with fishing rates well in excess of the F_{MSY} and with stock declines well below SB_{MSY} .^{19, 20} The greatest impact on these shark stocks is attributed to bycatch from the longline fishery, but the drifting FAD (natural and man-made) purse seine fishery has a significant impact on silky sharks, and catches predominantly juveniles. The fishing mortality on silky sharks from the FAD purse seine fishery alone was found to be above F_{MSY} . A shift away from setting on drifting FADs to only free school sets would reduce purse seine bycatch of silky sharks by 83% and oceanic whitetip sharks by 57%.²¹

Given the importance of sharks in Pacific marine ecosystems, and the continuing poor availability of data, the SC should follow the precautionary approach and recommend:

- A ban on both wire leaders and shark lines. The current measure is likely to reduce mortality by only 6% for silky sharks and 10% for oceanic whitetip sharks, compared to 24% and 37%, respectively, if both are banned.²²
- The development of science-based limits on silky shark and oceanic whitetip shark bycatch by purse seines.

¹⁵ Bromhead D, Rice J, Harley S (2013). Analyses of the potential influence of four gear factors (leader type, hook type, “shark” lines and bait type) on shark catch rates in WCPO tuna longline fisheries. WCPFC-SC9-2013/EB-WP-02 rev 1. <http://www.wcpfc.int/node/7581>

¹⁶ Rice J, Harley S, Kai M (2014). Stock assessment of blue shark in the North Pacific Ocean using stock synthesis. WCPFC-SC10-2014/GN-WP-08. <https://wcpfc.int/node/19004>

¹⁷ ISC Shark Working Group (2014). Stock assessment and future projections of blue shark in the North Pacific Ocean. International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean (ISC). WCPFC-SC10-2014/GN-WP-14. <https://wcpfc.int/node/19204>

¹⁸ Takeuchi Y, Tremblay-Boyer L, Pilling GM, Hampton J (2016). Assessment of blue shark in the southwestern Pacific. WCPFC-SC12-2016/SA-WP-08. <https://www.wcpfc.int/node/27535>

¹⁹ Rice J, Harley S (2012). Stock assessment of oceanic whitetip sharks in the western and central Pacific Ocean. WCPFC-SC8-2012/SA-WP-06. <https://wcpfc.int/node/3235>

²⁰ Rice J, Harley S (2013). Updated Stock assessment of silky shark in the western and central Pacific Ocean. WCPFC-SC9-2013/SA-WP-03. <https://wcpfc.int/node/3685>

²¹ Peatman T, Pilling G (2016). Monte Carlo simulation modelling of purse seine catches of silky and oceanic whitetip sharks. WCPFC-SC12-2016/EB-WP-03. <https://www.wcpfc.int/node/27455>

²² Harley S, Pilling G (2016). Potential implications of the choice of longline mitigation approach allowed within CMM 2014-05 Rev 1 (13 July 2016). WCPFC-SC12-2016/EB-WP-06. <https://www.wcpfc.int/node/27456>

- A ban on shark finning that includes a requirement that all sharks landed must have their fins naturally attached. This will enable better data collection and enforcement of prohibitions on the retention of at-risk species, and is the approach recommended by the Memorandum of Understanding on the Conservation of Migratory Sharks.²³
- Measures to improve the quality and quantity of data recorded and reported for all shark catches, including details of the gear types used and the condition of each animal on release (dead, injured, alive).
- The Commission adopts the tiered approach to the development of shark management plans by all States as recommended in EB-WP-05.²⁴ Plans should be kept relatively simple for those States in the lowest tier, and capacity support funding provided where needed for their production. This would represent a significant step forward for development of shark Limit Reference Points, better management, and data collection.
- Mobula and manta rays are included in the list of key sharks for WCPFC, training in the identification of ray species is added to observer training programmes, and safe release practices for rays are developed.
- The Commission develop a more comprehensive and integrated Conservation and Management Measure (CMM) for sharks and rays that includes a work plan for the development of reference points, best practice bycatch mitigation measures, and clear and scientifically robust management goals.

Current status and conservation measures for seabirds

The current CMM 2015-03 (replacing CMM 2012-07 in 2017) on seabirds requires mitigation measures on vessels fishing at latitudes south of 30°S. A paper presented last year at SC11²⁵ clearly showed that threatened seabirds with high vulnerability to longlining are present in the latitude band between 20°S and 25°S. Although a proposal was made at WCPFC last year to extend the boundary to 25°S, consensus was not reached.

This year further evidence will be presented on threatened species of New Zealand seabirds that forage north of 30°S, and are known to be at particularly high risk of being caught in fisheries.²⁶ Given this evidence, *the SC should recommend that:*

- The current boundary for seabird mitigation measures required on longlines in the south Pacific is extended to cover the area up to south of 25°S to protect vulnerable and threatened seabirds.

Current status and conservation measures for sea turtles

Greenpeace acknowledges the work of the *First Workshop on Joint Analysis of Sea Turtle Mitigation Effectiveness*²⁷ and urges continuing support for this important work. While further analysis may be

²³ <http://sharksmou.org>

²⁴ Clarke S (2016). Elaboration of technical details regarding shark targeting and shark management plans for CMM 2014-05. WCPFC-SC12-2016/EB-WP-05. <https://www.wcpfc.int/node/27508>

²⁵ Baird K et al (2015). The overlap of threatened seabirds with reported bycatch areas between 25° and 30° South in the Western Central Pacific Fisheries Commission Area. WCPFC-SC12-2016/EB-WP-09. <https://www.wcpfc.int/node/21724>

²⁶ Debski I, Hjörvarsdóttir F, Knowles K (2016). Distribution of highly at-risk New Zealand seabirds in the Western Central Pacific Fisheries Commission area. WCPFC-SC12-2016/EB-WP-09. <https://www.wcpfc.int/node/27462>

required, the workshop has already highlighted the lack of evidence for the current CMM-2008-03 effectively reducing tuna fisheries impacts on sea turtles in the region. Given that all six species of sea turtles in the WCPFC region are considered threatened, and bycatch on longlines are a significant cause of sea turtle mortality, *the SC should recommend:*

- An immediate review of the current turtle CMM to strengthen measures with clear goals that can be more effectively assessed;
- A requirement for the use of circle hooks and fish bait (not squid) for any longline fleets that have not demonstrated effective alternative mitigation measures;
- That observer coverage for longline is increased to 20% and is representative (by gear, fleet and area) to ensure effective monitoring and reporting;
- Improvements to monitoring and reporting of bycatch, mitigation measures by all States;
- Support for further research proposed by the workshop.

Address data collection and reporting issues

Most papers presented at the SC describe considerable problems regarding the availability and quality of data for use in scientific analysis. The provision of good science advice is persistently confounded by limited operational data, bycatch data, and observer coverage. This prevents scientists from producing accurate stock assessments and assessing the effectiveness of management measures. For the future of fish and the sanity of our scientists, *Greenpeace urges the SC to recommend:*

- Strengthening of mandatory reporting requirements to ensure that fishing capacity and effort in all tuna fisheries under the remit of WCPFC are adequately measured and reported, so as to allow for the best performance of the SC and a sound basis for WCPFC CMMs;
- Imposing penalties for cases of non-compliance to ensure that States comply with all their data reporting requirements, such as the measures recently agreed at The Indian Ocean Tuna Commission (IOTC);²⁸
- A requirement for representative 20% coverage on longline fleets. Where human on-board observers are not feasible for certain fleets or vessel sizes other alternatives, such as electronic monitoring systems, must be assessed and put in place subject to minimum technical requirements that ensure the reliability of the system;
- Considering FADs in context of capacity management, and prioritising the collection of data on the number of FADs and the associated technology used by vessels, in order to assess effort creep associated with FAD use and their impacts on juvenile tuna and shark populations;
- Improvements to, and alignment of, vessel databases and information fields they contain.

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²⁷ Clarke S, Peatman T, Caillot S (2016). Results from the First Workshop on Joint Analysis of Sea Turtle Mitigation Effectiveness. WCPFC-SC12-2016/EB-WP-11. <https://www.wcpfc.int/node/27494>

²⁸ IOTC Resolution 16/06 On measures applicable in case of non-fulfilment of reporting obligations in the IOTC.