

**SCIENTIFIC COMMITTEE**

**EIGHTEENTH REGULAR SESSION**

Electronic Meeting

10 – 18 August 2022

**PROVISIONAL ONLINE DISCUSSION FORUM TOPICS**

**WCPFC-SC18-2022/04 (Rev.02)**

**BACKGROUND**

The Secretariat introduced the online discussion forum (ODF, <https://forum.wcpfc.int>) webpage in 2020, and SC16 was the first meeting to use the ODF platform. The purpose of the use of the ODF was to facilitate discussions mostly on the SC projects and other items that were omitted from the SC abbreviated agenda but required acknowledgment by the SC in order to facilitate the progression of the project. Those items omitted from the abbreviated agenda are covered by the ODF as “Topics” of the ODF, and this paper provides a list of Topics for consideration on the ODF platform for SC18.

During the use of the ODF platform, two points are highlighted, namely:

1. how to incorporate the outcomes of the ODF exchanges into the SC plenary work if the ODF is not formally part of the SC plenary; and
2. how to manage the ODF discussions on SC projects that may require formal determination by the SC plenary as to their extension or closure.

Regarding the first point in 1), the Secretariat produces a *Summary of the SC Online Discussion Forum* which will be considered under the SC Plenary Agenda Item “*Other Matters,”* noting with substantial discussions will be deferred next year. Regarding the second point in 2), the *Summary of the SC Online Discussion Forum* also highlights the outcomes of communications of each SC project-related Topic under the heading “*Summary of Input from CCMs on the Progress of the SC Projects*”. Where there were no objections raised from CCMs on the outputs of the project, the Secretariat would consider that the project can be formally closed or extended, as the case may be. At the plenary, progress of those projects will be briefly introduced and completed under the Agenda Item *SC Work Programme and Budget*. This practice will be applied in general for online SC meetings.

The Secretariat found that the ODF was a useful tool for some authors who wished to get any feedback from SC participants on their work as those information papers would not be covered at all at the plenary meeting. So, the Secretariat accommodates requests from authors who wish to post their papers on the ODF webpage, noting that they will be responsible to respond to any comments and questions as needed.

**GUIDELINES FOR THE USE OF ODF IN 2022**

Reviewing the progress we had for 2-years, the following guidelines are generally proposed for the use of the ODF for SC18:

1. All SC projects that are omitted from the abbreviated agenda of the virtual plenary session will be considered on the ODF and their outputs will be finalized in plenary under the Agenda Item 7 (*SC Work Programme and Budget*);
2. Some information papers can be posted on the ODF if requested by the authors who wish to get feedback on their papers, noting that authors are fully responsible to provide feedback for any comments or questions, as needed.
3. This website is accessed by any approved SC18 participants. After the closure of the ODF, the Secretariat will produce a *Summary of the SC18 Online Discussion Forum* that summarizes the exchanges on each Topic, which will be noted under the SC18 Agenda Item “Other Matters,” and may take an appropriate action as required. Considering the continued overall disruptive impacts of the global COVID-19 pandemic on the work of the Commission, any substantive discussions and decisions related to Topic issues can be deferred to SC19. Any ‘non-controversial’ recommendations that are not requiring substantial discussions or negotiations, e.g., “This project will continue in 2023,” can be introduced and endorsed under appropriate SC18 agenda items, either “*Work Programme and Budget*” or “*Other Matters*.”

Finally, for the efficient Q&A process, all participants are requested to prefix a comment or question when starting your input as shown below for efficient response by the authors:

COMMENT: My comment on section 3.5 of the paper SC18-GN-IP-01 is …

QUESTION: My question on section 3.5 of the paper SC18-GN-IP-01 is …

**LIST OF ONLINE DISCUSSION FORUM TOPICS**

# Overview of tuna fisheries in the WCPO, including economic conditions – 2021

* **Task**: SC participants will review the WCPO tuna fisheries report and raise questions or provide comments as needed.
* **Responsibility**: SPC and FFA
* **Related papers:**

|  |  |
| --- | --- |
| **SC18-GN-IP-01** | P. Williams and T. Ruaia. **Overview of tuna fisheries in the Western and Central Pacific Ocean, including economic conditions – 2021** |

# The Tuna Fishery in the Eastern Pacific Ocean in 2021

* **Task**: SC participants will review the EPO tuna fisheries report and raise questions or provide comments as needed.
* **Responsibility**: IATTC
* **Related papers:**

|  |  |
| --- | --- |
| **SC18-GN-IP-02** | IATTC. **The Tuna Fishery in the Eastern Pacific Ocean in 2021** |

# Project 60 – Progress towards achieving SC17 recommendations

* **Task**: WCPFC18 approved to carry over the 2020 unused project funds into 2022 as activities were limited due to COVID-19 restrictions. SC participants will review the progress and outcomes of Project 60 and raise questions or provide comments/suggestions/recommendations as needed.
* **Responsibility**: SPC
* **Related papers:**

|  |  |
| --- | --- |
| **SC18-ST-IP-03** | T. Peatman, P. Williams, S. Nicol. **Project 60: Progress towards achieving SC17 Recommendations** |

# Project 90 update – Better data on fish weights and lengths for scientific analyses

* **Task**: WCPFC17 endorsed the extension of Project 90 to 57 months from January 2019 through September 2023. SC participants will review the progress of Project 90 and raise questions or provide comments as needed for 2022 - 2023 project activities.
* **Responsibility**: SPC
* **Related papers:**

|  |  |
| --- | --- |
| **SC18-ST-IP-04** | J. Macdonald, P. Williams, C. Sanchez, E. Schneiter, S. Prasad, M. Ghergariu, M. Hosken, A. Panizza, T. Park, and S. Nicol. **Project 90 update: Better data on fish weights and lengths for scientific analyses** |

# Project 109 – Training observers for elasmobranch biological sampling

* **Task**: WCPFC17 endorsed Project 109 for the training of observers to collect elasmobranch biological material for age growth and reproduction. WCPFC18 approved the request to carry over unused funds into 2022, as activities were disrupted due the impacts of COVID-19 pandemic. SC participants will review the progress of this project and raise questions or provide comments as needed.
* **Responsibility**: SPC
* **Related papers:**

|  |  |
| --- | --- |
| **SC18-ST-IP-05** | Tim Park. **Training observers for elasmobranch biological sampling (Project 109)** |

# Designing EM reviewing rates for WCPFC fisheries

* **Task**: SC participants will review this paper and raise questions or provide comments as needed.
* **Responsibility**: SPC
* **Related papers:**

|  |  |
| --- | --- |
| **SC18-ST-IP-06** | SPC-OFP. **Designing EM reviewing rates for WCPFC fisheries** |

# FAD Minimum Data Fields to be Recorded by WCPFC Purse Seine Vessel Operators

* **Task**: The paper describes requirements for provision of data on FAD design and construction and FAD activity by the operators of purse seine vessels licensed to fish in the waters of PNA and Tokelau. The paper proposes revision of the Scientific Data to Be Provided to the Commission to include compatible FAD data requirements, noting that many of the more detailed technical data fields in the current ROP minimum data fields could then be removed, allowing observers to focus on collection of information for verification of FAD activities and FAD design and construction. SC participants will review this paper and raise questions or provide comments as needed
* **Responsibility**: PNA Members
* **Related papers:**

|  |  |
| --- | --- |
| **SC18-ST-IP-09** | PNA and Tokelau. **FAD Minimum Data Fields to be Recorded by WCPFC Purse Seine Vessel Operators** |

# A compendium of fisheries indicators for target tuna stocks in the WCPFC Convention Area

* **Task**: Indicator papers provide empirical information on recent patterns in fisheries for SC’s consideration related with bigeye, yellowfin and South Pacific albacore tuna, not having full stock assessments in 2022. The SC participants will review updates on fisheries indicators and raise questions or provide comments as needed.
* **Responsibility**: SPC
* **Related papers:**

|  |  |
| --- | --- |
| **SC18-SA-IP-01** | S. Hare, G. Pilling, and P. Williams. **A compendium of fisheries indicators for target tuna stocks in the WCPFC Convention Area** |

# Updated draft research plan for ‘key’ tuna species in the WCPO, 2022-2025

* **Task**: SPC updated the *Draft research plan for ‘key’ tuna species in the WCPO* (SC16-SA-IP-20) with the latest understanding of SC activities to highlight some important research and development areas arising from the most recent stock assessment discussions. SC participants should consider the draft and raise questions or provide comments, inputs and updates as needed.
* **Responsibility**: SPC
* **Related papers:**

|  |  |
| --- | --- |
| **SC18-SA-IP-04** | SPC-OFP. **Updated draft research plan for ‘key’ tuna species in the WCPO, 2022-2025** |

# Review and new analyses of skipjack growth in the WCPO

* **Task**: Growth is a key uncertainty in the skipjack stock assessment for the WCPFC convention area. Three new growth curves were produced as possible alternatives for use in the 2022 WCPFC skipjack assessment. SC participants will review this paper and raise questions or provide comments as needed.
* **Responsibility**: SPC
* **Related papers:**

|  |  |
| --- | --- |
| **SC18-SA-IP-06** | J. Macdonald, J. Day, A. Magnusson, M. Maunder, Y. Aoki, N. Matsubara, Y. Tsuda, S. McKechnie, T. Teears, B. Leroy, C. Castillo-Jordán, J. Hampton, and P. Hamer. **Review and new analyses of skipjack growth in the Western and Central Pacific Ocean** |

# DRAFT TOR for an independent peer review of treatment of uncertainty characterisation including ensemble model approach

* **Task**: TOR for Project 17X4 (*Further development of ensemble model approaches for presenting stock assessment uncertainty*) in SC17-GN-IP-07 is provided in SC18-SA-IP-09. WCPFC18 allocated USD 20,000 to this project for 2023. SC participants will review the proposed TOR for uncertainty characterization, raise questions and/or provide comments as needed.
* **Responsibility**: SPC
* **Related papers:**

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| --- | --- |
| **SC18-SA-IP-09** | SPC-OFP. **DRAFT Terms of reference for an independent peer review of uncertainty characterisation including ensemble model approaches in WCPFC stock assessments** |

# Progress towards a Close-Kin Mark-Recapture application to South Pacific albacore

* **Task**: SC participants will review this paper and raise questions or provide comments as needed.
* **Responsibility**: SPC
* **Related papers:**

|  |  |
| --- | --- |
| **SC18-SA-IP-10** | SPC-OFP. **Progress towards a Close-Kin-Mark-Recapture application to South Pacific Albacore**  |

# No Population Structure of Bigeye Tunas (*Thunnus obesus*) in the Western and Central Pacific Ocean Indicated by Single Nucleotide Polymorphisms

* **Task**: SC participants will review this paper and raise questions or provide comments as needed.
* **Responsibility**: Natasha et al.
* **Related papers:**

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| --- | --- |
| **SC18-SA-IP-11** | J. Natasha, B. L. Stockwell, A. D. Marie, J. Hampton, N. Smith, S. Nicol and C. Rico. **No Population Structure of Bigeye Tunas (*Thunnus obesus*) in the Western and Central Pacific Ocean Indicated by Single Nucleotide Polymorphisms** |

# Estimating post-release mortality of long-line caught tropical tunas in the Pacific Ocean

* **Task**: SC participants will review this paper and raise questions or provide comments as needed.
* **Responsibility**: Muir et al.
* **Related papers:**

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| --- | --- |
| **SC18-SA-IP-12** | J. Muir, R. Barker, M. Hutchinson, B. Leroy, S. Nicol and J. Scutt Phillips. **Estimating post-release mortality of longline caught tropical tunas in the Pacific Ocean** |

# Progress report on bomb radiocarbon age validation for yellowfin and bigeye tunas in the WCPO (Project 105) – 2022

* **Task**: This paper describes the progress made for Project 105 aimed at using bomb radiocarbon (14C) dating to test the validity of age estimates from purported annual growth zones in otolith sections of yellowfin (YFT) and bigeye (BET) tuna of the western central Pacific Ocean. The SC participants will review updates on fisheries indicators and raise questions or provide comments as needed.
* **Responsibility**: A. Andrews, K. Okamoto, K. Satoh, F. Roupsard, J. Farley, C. Welte.
* **Related papers:**

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| --- | --- |
| **SC18-SA-IP-14** | A. Andrews, K. Okamoto, K. Satoh, F. Roupsard, C. Welte, and J. Farley. **Progress report on bomb radiocarbon age validation for yellowfin and bigeye tunas in the WCPO (Project 105) - 2022** |

# Examining Indicators of Effort Creep in the WCPO Purse Seine Fishery

* **Task**: SC participants will review this paper and raise questions or provide comments as needed.
* **Responsibility**: SPC (Hamer et al.)
* **Related papers:**

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| --- | --- |
| **SC18-MI-IP-02** | P. Hamer, T. Teears, and the PNAO. **Examining Indicators of Effort Creep in the WCPO Purse Seine Fishery** |

# Key decisions for the WCPFC Commission and Scientific Committee under the harvest strategy approach for WCPO tuna stocks and fisheries UPDATE to SC14-MI-WP-05

* **Task**: SC participants will review this paper and raise questions or provide comments as needed.
* **Responsibility**: SPC (Hamer et al.)
* **Related papers:**

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| --- | --- |
| **SC18-MI-IP-03** | G. Pilling, R. Scott, P. Hamer, J. Hampton, F. Scott, and N. Yao. **Key decisions for the WCPFC Commission and Scientific Committee under the harvest strategy approach for WCPO tuna stocks and fisheries UPDATE to SC14-MI-WP-05** |

# Report of Project 110: Non-entangling and biodegradable FAD trial in the Western and Central Pacific Ocean

* **Task**: The Commission endorsed Project 110 funded mainly by the EU and 20% matching fund provided by the USA and ISSF. The project is scheduled to start on 1 February 2021 and complete by 31 July 2023 (30 months). SC participants may consider the progress and future plan of the project and raise questions or provide comments as needed. Attention is drawn to the request that, in light of ongoing COVID-related restrictions on planned fieldwork, the paper seeks a no-cost extension to the project time period of at least a further year.
* **Responsibility**: SPC (Escalle et al.)
* **Related papers:**

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| --- | --- |
| **SC18-EB-IP-01** | L. Escalle, G. Moreno, S. Hare and P. Hamer. **Report of Project 110: Non-entangling and biodegradable FAD trial in the Western and Central Pacific Ocean** |

# Preliminarily analyses of the regional database of stranded drifting FADs in the Pacific Ocean

* **Task**: SC participants will review this paper and raise questions or provide comments as needed.
* **Responsibility**: SPC
* **Related papers:**

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| --- | --- |
| **SC18-EB-IP-03** | Escalle L., Mourot J., Bigler B., Jaugeon B., Kutan M., Lynch J.M., Nicholas T.R., Pollock K., Prioul F., Royer S.J., Thellier T., Wichman J., Jon Lopez, the PNA Office, Hare S., and Hamer P.. **Preliminarily analyses of the regional database of stranded drifting FADs in the Pacific Ocean** |

# Can Stomach Content and Microbiomes of Tuna Provide Near Real-Time Detection of Ecosystem Composition in the Pacific Ocean?

* **Task**: SC participants will review this paper and raise questions or provide comments as needed.
* **Responsibility**: Trujillo Gonzalez et al.
* **Related papers:**

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| --- | --- |
| **SC18-EB-IP-05** | A. Trujillo-Gonzalez, T. Li, J. Potts, S. Nicol, V. Allain, S. C. Godwin, E. Vourey, A. Portal, B. Kumasi, T. Usu, A. Rodrigo and D. Gleeson. **Can Stomach Content and Microbiomes of Tuna Provide Near Real-Time Detection of Ecosystem Composition in the Pacific Ocean?** |

# Outcomes of the FAD Management Options IWG – 1) Guidelines for non-entangling and biodegradable FADs, and 2) Preliminary Review of Available Information on Biodegradable FADs

* **Task**: As noted in the tropical tuna measure, the SC shall continue to review research results on the use of biodegradable material on FADs and shall provide specific recommendations to the Commission in 2022 including on a definition of biodegradable FADs, a timeline for the stepwise introduction of biodegradable FADs, potential gaps/needs and any other relevant information (Paragraph 19, CMM-2021-01). SC participants will review this paper and raise questions or provide comments as needed.
* **Responsibility**: FAD Management Options IWG
* **Related papers:**

|  |  |
| --- | --- |
| **SC18-EB-IP-06** | WCPFC FAD Management Options IWG. **Guidelines for Non-entangling and Biodegradable FAD Materials** (FADMO-IWG-04-2020-WP-02) |
| **SC18-EB-IP-13** | WCPFC FAD Management Options IWG. **Preliminary Review of Available Information on Biodegradable FADs** |

# A Review of cetacean diversity, status and threats in the Pacific Islands region, 2022

* **Task**: This report provides an overview of the state of knowledge on threats to the 34 known cetaceans (whales and dolphins) in the Pacific Islands region. The main threats identified are: incidental catch (by-catch) and fishing gear interactions, harvesting (direct take), pollution, vessel traffic, pathogens and introduced species, resource depletion and ocean-physics alteration including climate change. The SC participants will review the paper and raise questions or provide comments, suggestions, as needed.
* **Responsibility**: Cara Miller
* **Related papers:**

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| --- | --- |
| **SC18-EB-IP-07** | Cara Miller. **Review of cetacean diversity, status and threats in the Pacific Islands region 2021** |

# Graphics for Best Practices for the Safe Handling and Release of Cetaceans

* **Task**: SC17 discussed the Draft Best Handling Practices for the Safe Handling and Release of Cetaceans (SC17-EB-WP-02), which includes guidelines for purse seine gear and longline gear. SC17 further recommends that the Commission develop graphics to be included with the Best Handling Practices for the Safe Handling and Release of Cetaceans for consideration at WCPFC19 (paragraph 389, SC17 Summary Report). The SC participants will review graphics associated with the Best Handling Practices for the Safe Handling and Release of Cetaceans and raise questions or provide comments, suggestions, as needed.
* **Responsibility**: Secretariat (Consultancy)
* **Related papers:**

|  |  |
| --- | --- |
| **SC18-EB-IP-12** | Secretariat (Consultancy). **Graphics for Best Practices for the Safe Handling and Release of Cetaceans** |

# Practicality and Efficacy of Tori Lines to Mitigate Albatross Interactions in the Hawaii Deep-set Longline Fishery

* **Task**: The SC participants will review the paper and raise questions or provide comments, suggestions, as needed.
* **Responsibility**: Cara Miller
* **Related papers:**

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| --- | --- |
| **SC18-EB-IP-14** | Gilman, E., Naholowaa, H.A., Ishizaki, A., Chaloupka, M., Brady, C., Carnes, M., Ellgen, S., Wang, J., and Kingma, E. **Practicality and Efficacy of Tori Lines to Mitigate Albatross Interactions in the Hawaii Deep-set Longline Fishery** |

# Could tori lines replace blue-dyed bait to reduce seabird bycatch risk in the Hawaii deep-set longline fishery?

* **Task**: The SC participants will review the paper and raise questions or provide comments, suggestions, as needed.
* **Responsibility**: Cara Miller
* **Related papers:**

|  |  |
| --- | --- |
| **SC18-EB-IP-15** | Chaloupka, M., Gilman, E., Carnes, M., Ishizaki, A., Brady, C., Swimmer, Y., Wang, J., Ellgen, S., and Kingma, E. **Could tori lines replace blue-dyed bait to reduce seabird bycatch risk in the Hawaii deep-set longline fishery?** |

# Proposed procedures in accordance with "Access to genetic resources and Benefit-Sharing" (ABS) concept for publishing scientific paper in the Western and Central Pacific Fisheries Commission

* **Task**: Japan submitted Japan’s proposal related to publishing a scientific paper for the species covered by the WCPFC convention under the concept of *Access to Genetic Resources and Benefit-Sharing*. Japan seeks any feedback from SC18 participants.
* **Responsibility**: Keisuke Satoh, Yuichi Tsuda, Kei Okamoto, Jun Matsubayashi and Hiroshi Minami
* **Related papers:**

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| --- | --- |
| **SC18-GN-IP-08** | K. Satoh, Y. Tsuda, K. Okamoto, J. Matsubayashi and H. Minami. **Proposed procedures in accordance with "Access to genetic resources and Benefit-Sharing" (ABS) concept for publishing scientific paper in the Western and Central Pacific Fisheries Commission** |

# Statistical and Monte Carlo Analysis of the Hawaii Deep-Set Longline Fishery with Emphasis on Take and Mortality of Oceanic Whitetip Shark

* **Task**: The SC participants will review the paper and raise questions or provide comments, suggestions, as needed.
* **Responsibility**: K. Bigelow and F. Carvalho
* **Related papers:**

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| --- | --- |
| **SC18-EB-IP-18** | K. Bigelow and F. Carvalho. **Statistical and Monte Carlo Analysis of the Hawaii Deep-Set Longline Fishery with Emphasis on Take and Mortality of Oceanic Whitetip Shark** |

# WPEA Project Update

* **Task**: The SC participants will review the paper and raise questions or provide comments, suggestions, as needed. SC18 will review and endorse the recommendations in the report if supported.
* **Responsibility**: Lars Olsen
* **Related papers:**

|  |  |
| --- | --- |
| **SC18-RP-WPEA-01** | Lars Olsen. **WPEA-ITM Project Update** |

# Consideration of the robustness set of operating models for skipjack tuna in the WCPO

* **Task**: To assist in the final selection of a preferred MP for skipjack tuna, a second level of testing can, if necessary, be performed using the robustness set of OMs which comprises a reduced set of more extreme, though still plausible, scenarios. The SC participants will review the paper and raise questions or provide comments, suggestions, as needed. SC participants are also invited to provide advice on three specific issues raised in the paper.
* **Responsibility**: Robert Scott et al.
* **Related papers:**

|  |  |
| --- | --- |
| **SC18-MI-IP-12** | R. Scott, F. Scott, N. Yao, P. Hamer, and G. Pilling. **Consideration of the robustness set of operating models for skipjack tuna in the WCPO** |

# An update on the options for a baseline of the “large-fish” Handline fishery fishing in Indonesia’s EEZ (IEEZ) with vessels >30GT for the WCPFC Tropical Tuna Measure

* **Task**: SC18 may continue discussions on the Indonesian baseline catch under this Topic.
* **Responsibility**: Indonesia and SPC-OFP.
* **Related papers:**

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| --- | --- |
| **SC18-ST-WP-02** | Indonesia and SPC-OFP. **An update on the options for a baseline of the “large-fish” Handline fishery fishing in Indonesia’s EEZ (IEEZ) with vessels >30GT for the WCPFC Tropical Tuna Measure** |