



Manila, Philippines

14 – 21 August 2024

---

**PROVISIONAL ANNOTATED AGENDA**

---

WCPFC-SC20-2024-03 (Rev.02)

25 July 2024

**AGENDA ITEM 1      OPENING OF THE MEETING**

The meeting will open at 08:30 AM on Wednesday, 14 August 2024.

**1.1      Welcome address**

The Chair will welcome delegations of WCPFC Members, Cooperating Non-members, participating Territories (CCMs), and Observers to the Twentieth Regular Session of the Scientific Committee (SC20).

A senior official from the Philippines, the Commission Chair, the Executive Director, and the SC Chair will be invited to deliver an opening address.

**1.2      Meeting arrangements**

The Chair will outline procedural matters, including the meeting schedule, administrative arrangements, and the list of Theme Convenors.

Chair	Emily Crigler: <a href="mailto:emily.crigler@noaa.gov">emily.crigler@noaa.gov</a>
Vice Chair	Vacant
ST Theme	Valerie Post: <a href="mailto:valerie.post@noaa.gov">valerie.post@noaa.gov</a>
SA Theme	Hidetada Kiyofuji: <a href="mailto:kiyofuji_hidetada20@fra.go.jp">kiyofuji_hidetada20@fra.go.jp</a> Berry Muller: <a href="mailto:bmuller@mimra.com">bmuller@mimra.com</a> Michelle Sculley: <a href="mailto:michelle.sculley@noaa.gov">michelle.sculley@noaa.gov</a>
MI Theme	Emily Crigler: <a href="mailto:emily.crigler@noaa.gov">emily.crigler@noaa.gov</a> (Acting convenor for) Laura Tremblay-Boyer: <a href="mailto:laura.tremblay-boyer@csiro.au">laura.tremblay-boyer@csiro.au</a> )
EB Theme	Yonat Swimmer: <a href="mailto:yonat.swimmer@noaa.gov">yonat.swimmer@noaa.gov</a> Leyla Knittweis: <a href="mailto:leyla.knittweis@mpi.govt.nz">leyla.knittweis@mpi.govt.nz</a>

Deadlines for submitting meeting papers

- 1) Annual Report – Part 1

- Due by 7 July 2024 to the WCPFC Secretariat (BOTH [sungkwon.soh@wcpfc.int](mailto:sungkwon.soh@wcpfc.int) and [contact.ar@wcpfc.int](mailto:contact.ar@wcpfc.int))
- 2) Titles and abstracts
  - Due by 10 July 2024 to the Secretariat, SC Chair, and relevant Convenors
- 3) Full papers
  - Due by 27 July 2024 to the Secretariat, SC Chair, and relevant Convenors

### **1.3 Issues arising from the Commission**

SC20 will be briefed on issues arising from the previous meetings of the Commission and the Scientific Committee.

### **1.4 Adoption of agenda**

The Provisional Agenda for SC20 was posted on 16 May 2024 following Rule 1 of the Commission’s Rules of Procedure. Any Member of the Commission, the Chair, or the Executive Director may, at least 30 days before the opening of the Regular Session, request the inclusion of supplementary items in the Provisional Agenda. A request for the inclusion of a supplementary item in the Provisional Agenda shall be accompanied by a written explanation of the proposed supplementary item, which will be communicated to all CCMs and observers at least 20 days before the opening of the Session.

Other matters to be discussed under Agenda Item 12 may be proposed here.

### **1.5 Reporting arrangements**

In accordance with Rule 33 of the Commission’s Rules of Procedure, the text of all decisions adopted by the SC20 will be distributed to all members, territories, and observers within seven working days following the adoption of such decision.

SC20 will develop a DRAFT Summary Report, which will be adopted intersessionally with an Executive Summary. The Executive Summary will include a synopsis of stock status and management advice and implications, research plans, findings or conclusions on the stock status, reports, and recommendations as directed by the Commission or at the initiative of the SC (Paragraph 2, Article 12 of the Convention).

The WCPFC Secretariat will hire a lead rapporteur to produce a DRAFT Summary Report, and the Theme Convenors will arrange their own support rapporteurs as needed.

### **1.6 Intersessional activities of the Scientific Committee**

The Chair, with support from the Secretariat, will report on the SC's intersessional activities.

## **AGENDA ITEM 2      REVIEW OF FISHERIES**

### **2.1 Overview of Western and Central Pacific Ocean (WCPO) fisheries**

The Pacific Community – Oceanic Fisheries Programme (SPC-OFP) and the Pacific Islands Forum

Fisheries Agency (FFA) will present an overview of the WCPO key fisheries.

As SC14 (paragraph 119) recommended, analyses and projections of economic conditions in WCPO fisheries will be presented under this Agenda. SC20 will be invited to provide supplementary information, questions, and comments.

## **2.2 Overview of Eastern Pacific Ocean (EPO) fisheries**

The Inter-American Tropical Tuna Commission (IATTC) will present an overview of the fisheries for highly migratory species in the EPO region. SC20 will be invited to provide supplementary information, questions, and comments.

## **2.3 Annual Report – Part 1 from Members, Cooperating Non-Members, and Participating Territories**

All CCMs shall submit Part 1 of the Annual Report (the amended template is available at [SC-1 under Guidelines](#) on the WCPFC website) to the Secretariat (BOTH [sungkwon.soh@wcpfc.int](mailto:sungkwon.soh@wcpfc.int) and [contact.ar@wcpfc.int](mailto:contact.ar@wcpfc.int)) by 7 July 2024.

The Submitted Part 1 reports are posted on the SC20 website. All annual reports are assumed to have been read before the meeting. This agenda item is an opportunity for questions and clarifications ONLY concerning these reports.

## **2.4 Reports from regional fisheries bodies and other organizations**

The deadline is 27 July 2024 for submitting meeting documents from regional fisheries bodies and other intergovernmental or non-governmental organizations to the Secretariat ([sungkwon.soh@wcpfc.int](mailto:sungkwon.soh@wcpfc.int)). Regional fisheries bodies and other intergovernmental or non-governmental organizations observing SC20 may make a brief presentation (3 minutes) on key issues relevant to the work of the SC. Such presentations must be arranged with the Chair and the Secretariat by sending a 1-2 paragraph summary of the presentation to the Secretariat by 27 July 2024.

## **AGENDA ITEM 3 DATA AND STATISTICS THEME**

### **3.1 Data gaps of the Commission**

#### **3.1.1 Report of the WCPFC scientific data**

SC20 will review the summary report of the WCPFC scientific data, including the status of observer data management, and where relevant, recommend actions on how to address any identified data gaps.

#### **3.1.2 Species composition of purse-seine catches (Project 60)**

SC20 will review the results of Project 60, the final year of this project contract. The TOR is available at [SC19-GN-WP-07](#).

#### **3.1.3 Better data on fish weights and lengths for scientific analyses (Project 90)**

SC20 will review the progress report of Project 90 and provide comments as needed. TOR is available at [SC19-GN-WP-07](#).

#### **3.1.4 Improved coverage of cannery receipt data (Project 114)**

SC20 will review Project 114's progress report and provide comments as needed. The TOR is available at [SC19-GN-WP-07](#).

#### **3.1.5 Minimum data reporting requirements**

SC20 will consider any proposals for additional data fields to be reported for the Commission's work, to have ST-Theme recommendations as needed.

SC20 will review the [SciData](#)<sup>1</sup> requirements to capture turtle interaction reporting requirements under CMM 2018-04, paragraphs 5c and 7e, and provide any proposals to address the inconsistency between the two requirements.

SC20 will review the progress of the FADMO-IWG related to requirements for the transmission of satellite buoy data from drifting FADs to promote effective and sustainable FAD management in the WCPFC (see paragraph 551, WCPFC20 Summary Record) and provide advice to the Commission.

#### **3.1.6 Regional bycatch estimates of purse seine fishery**

SC20 will review a summary of purse seine fishery bycatch estimates at a regional scale and provide recommendations on further work as needed.

#### **3.2 Evaluation of purse seine fishing effort**

SC20 will review a new paper on evaluating purse seine activities relative to fishing effort and the management framework.

#### **3.3 Regional Observer Programme**

##### **3.3.1 Review of an observer training project for elasmobranch biological sampling (Project 109)**

WCPFC17 (2020) endorsed this observer training project, but implementing this project was deferred due to the COVID-19 pandemic and travel restrictions. This project will be terminated by the end of 2024. SC20 will review the project report and provide any comments or actions as needed.

##### **3.3.2 ROP Data Issues**

SC20 will receive an update on the work of the IWG-ROP related to any improvements to ROP Minimum Data Fields, including more information on species of special interest, removal of

---

<sup>1</sup> Scientific Data to be Provided to the Commission

redundant ROP data fields, modification to the FAD data fields, and provide advice to TCC and Commission as needed.

### **3.4 Electronic Reporting and Electronic Monitoring**

#### **3.4.1 ER and EM IWG Update**

SC20 will receive an update from the ER&EM-IWG on developing a set of interim EM standards for adoption at WCPFC21 in 2024.

#### **3.4.2 Requirements for increased observer coverage in longline fisheries under CMM 2023-01**

The footnotes to [CMM 2023-01 Attachment 1, Table 3](#) provides an option for certain CCMs to notify that they will increase their bigeye catch limit by committing to a proportionate increase in observer coverage level (e.g., observer + Electronic Monitoring (EM)) above the minimum 5% ROP coverage level. Noting that intersessional work led by the ER&EM-IWG is to develop WCPFC's EM program, SC20 will review updates and provide advice to TCC and the Commission on interim steps to support reviews of requirements for increased observer coverage levels (e.g., observer + Electronic Monitoring (EM)) for longline fisheries under CMM 2023-01.

## **AGENDA ITEM 4 STOCK ASSESSMENT THEME**

### **4.1 Improvement of MULTIFAN-CL software**

#### **4.1.1 Update of MULTIFAN-CL software**

SC20 will note ongoing improvements to the MULTIFAN-CL software. It will briefly review these updates and provide comments as necessary.

#### **4.1.2 Review of Project 123 outcomes**

SC20 will review the outcomes of Project 123, which focuses on scoping the next generation of tuna stock assessment software, and provide recommendations to the Commission as needed.

### **4.2 WCPO Tunas**

#### **4.2.1 South Pacific albacore tuna (*Thunnus alalunga*)**

##### **4.2.1.1 South Pacific albacore stock assessment**

SC20 will review the results of the 2024 South Pacific albacore stock assessment, noting the Commission's request that SC20 refer to the adopted iTRP in its assessment of stock status and in reporting to the Commission on management advice and implications for the stock.

##### **4.2.1.2 Provision of scientific information to the Commission**

- a. Stock status and trends
- b. Management advice and implications

## **4.2.2 WCPO skipjack tuna (*Katsuwonus pelamis*)**

### **4.2.2.1 Indicator analysis**

An indicator paper provides empirical information on recent patterns in fisheries for all 'key' target tuna species (skipjack, bigeye, yellowfin, and South Pacific albacore tuna) for those years when a stock assessment is not conducted. The paper includes explanatory details for the figures and a brief interpretation of the trends. The SC20 will review the paper and provide comments or questions.

### **4.2.2.2 Long-term recruitment and CPUE trends of skipjack tuna (Project 115)**

Stability in the fishery-dependent pole and line CPUE indices influences model estimations of a stable long-term biomass trend. To account for the stable biomass trend of skipjack tuna in the face of increased catches over time the stock assessment predicts a trend of increased recruitment. Project 115 will explore any evidence for an increased recruitment trend and the occurrence and degree of effort creep and its influence on the pole and line CPUE. SC20 will review the research outcomes and provide recommendations to the Commission as needed.

[The SSP also provided additional effort creep-related work, which is contained in SC20-SA-IP-16.](#)

## **4.2.3 WCPO bigeye tuna (*Thunnus obesus*) and yellowfin tuna (*Thunnus albacares*)**

### **4.2.3.1 Further analyses for bigeye and yellowfin tuna assessment**

SC20 will review follow-up analyses for the 2023 bigeye and yellowfin stock assessment and provide advice as needed.

### **4.2.3.2 Indicator analysis**

The SC20 will review the indicator paper and provide comments or questions.

### **4.2.3.3 Reproductive biology of yellowfin tuna (Project 120)**

Project 120 covers updated reproductive biology of all tropical tuna and SC20 will review the progress of reproductive biology for yellowfin tuna this year.

## **4.3 Northern stocks**

Annex I of the Commission's Rules of Procedure defines 'northern stocks' to be 'stocks which occur mostly in the area north of 20° north parallel' and currently are 'northern Pacific bluefin<sup>2</sup>, northern albacore<sup>3</sup> and the northern stock of swordfish<sup>4</sup>'.

---

<sup>2</sup> Pacific bluefin tuna

<sup>3</sup> North Pacific albacore

<sup>4</sup> North Pacific swordfish

According to the MOU between WCPFC and ISC<sup>5</sup>, the ISC's scientific information and advice will be presented at the annual meetings of the Scientific Committee. The ISC Chair, or his designate, will be invited to brief SC20 on the activities of ISC since SC19, including the ISC's 2024 stock assessments and future plans.

#### **4.3.1 Pacific bluefin tuna (*Thunnus orientalis*)**

##### 4.3.1.1 Pacific bluefin tuna stock assessment

Since 2012, the ISC has conducted the benchmark stock assessment of Pacific bluefin tuna every four years, and an updated assessment is in the middle of the consecutive benchmark assessments. According to the MOU between WCPFC and ISC, SC20 will consider scientific information and advice received from the ISC.

##### 4.3.1.2 Provision of scientific information to the Commission

- a. Stock status and trends
- b. Management advice and implications

#### **4.4 Billfish**

##### **4.4.1 Southwest Pacific striped marlin (*Kajikia audax*)**

##### 4.4.1.1 Stock assessment of Southwest Pacific striped marlin

SC20 will review the results of the 2024 stock assessment for Southwest Pacific striped marlin and provide the Commission with scientific information.

##### 4.4.1.2 Provision of scientific information to the Commission

- a. Stock status and trends
- b. Management advice and implications

##### **4.4.2 Western and Central North Pacific striped marlin (*Kajikia audax*)**

The ISC conducts three billfish stock assessments, including North Pacific swordfish, Pacific blue marlin, and Western and Central North Pacific striped marlin. Of these, North Pacific Swordfish and Pacific blue marlin are in healthy condition. However, WCNP striped marlin are overfished and experiencing overfishing. The Commission provided the following recommendations on this stock:

- WCPFC16, paragraph 452. The Commission adopted the [Interim Rebuilding Plan for North Pacific Striped Marlin \(Attachment L\)](#).
- WCPFC18, paragraph 236. The Commission noted that the ISC would undertake a stock assessment of North Pacific striped marlin in 2022 and that the proposed revised workplan would permit updating of the rebuilding plan using the latest data from the stock assessment.

---

<sup>5</sup> International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean

- WCPFC19, paragraph 267. WCPFC19 noted that a proposed CMM on North Pacific striped marlin was deferred until 2023 and expressed concern regarding the continued delay in the rebuilding plans for the stock.
- WCPFC20, paragraph 694. *The Commission noted the less than healthy state of North Pacific Striped Marlin, SC19s management advice and the precautionary approach, and the planned independent peer review of the North Pacific Striped Marlin stock assessment in 2024 and agreed to await the outcome of the peer review with a view to considering potential revisions to CMM 2010-01 at WCPFC21.*

#### 4.4.2.1 Peer review of the 2023 stock assessment for Western and Central North Pacific striped marlin

The Commission endorsed ISC23's proposal to have an independent peer review of the North Pacific striped marlin stock assessment in 2024. According to the peer review terms of reference, the ISC Vice-Chair will be invited to report to SC20 the review panel's findings.

#### 4.4.2.2 Western and Central North Pacific striped marlin rebuilding analysis

SC20 will review the additional projections provided in support of the WCPFC rebuilding plan and provide recommendations to the Commission as needed.

### 4.5 Sharks

#### 4.5.1 Silky shark (*Carcharhinus falciformis*)

##### 4.5.1.1 Stock assessment of silky shark in the WCPO (Project 108)

SC19 recommended that integrated assessment and alternative assessment methods (e.g., risk assessment) be conducted concurrently for silky shark stock assessment. SC20 will review the results and provide the Commission with the current stock status and management advice.

##### 4.5.1.2 Provision of scientific information to the Commission

- a. Stock status and trends
- b. Management advice and implications

#### 4.5.2 Oceanic whitetip shark (*Carcharhinus longimanus*)

Shark projects last two years. In 2024, SC20 will review the outcomes of the first-year work on data compilation, fishery characterization, and catch reconstruction to prepare for the 2025 stock assessment. SC20 will advise on the stock assessment approach to explore in year 2.

#### 4.5.3 North Pacific shortfin mako shark (*Isurus oxyrinchus*)

##### 4.5.3.1 North Pacific shortfin mako shark stock assessment

ISC conducted a North Pacific shortfin mako shark stock assessment in 2024. According to the MOU between WCPFC and ISC, SC20 will receive scientific information and advice from the ISC.

##### 4.5.3.2 Provision of scientific information to the Commission



- a. Stock status and trends
- b. Management advice and implications

#### **4.6 Projects and Requests**

##### **4.6.1 Stock Status and Management Advice Template (Project 113b)**

After consulting with assessment teams and fisheries managers, this project provides a reporting template for stock status and management advice from WCPFC stock assessments. SC20 will review the project's results and agree on a template for use in future meetings.

##### **4.6.2 Application of Close-Kin-Mark-Recapture Methods (Project 100c)**

Under the EU-funded Project 100c (*Preparing WCP tuna fisheries for application of CKMR methods to resolve key stock assessment uncertainties*), the CKMR feasibility and design study for South Pacific albacore is expected to be completed and presented to SC20, and scoping studies for Pacific bigeye and Southwest Pacific swordfish will be introduced at SC21.

SC20 will review Project 100c's outcomes and, as needed, provide advice and recommendations on further research on the application of CKMR.

##### **4.6.3 Scoping study on longline effort creep in the WCPO (Project 122)**

Effort creep in longline fisheries can lead to overestimating fish stock abundance and underestimating fishing pressure, resulting in inaccurate stock assessments, flawed management decisions, and ineffective conservation measures, ultimately threatening the sustainability of fish stocks. This project's tasks include a literature survey on longline effort creep in WCPO stock assessments, approaches to investigating longline effort creep, and quantifying longline effort creep. SC20 will review these research outcomes and advise on the next steps.

##### **4.6.4 WCPFC Tuna Biological Sampling Plan (Project 117)**

The goal is to identify gaps in the biological data related to the age and growth of tuna stored in the SPC Tuna Tissue Bank. To address these gaps, a biological sampling plan will be created to collect the necessary age and growth information for key tuna species in the WCPFC region. SC20 will review the project document for finalization.

##### **4.6.5 WCPFC Billfish Biological Sampling Plan (Project 118)**

Biological information is crucial for integrated age-structured assessment models and data-limited assessment approaches but is often hard to estimate. The ISC created the IBBS program for North Pacific billfish species to collect data for robust biological parameters, including growth and maturity, and to address spatially varying characteristics. In WCPFC, biological data collection is ad-hoc without a formal plan, potentially hindering representative data development for stock assessment. SC20 will review the project document for finalization.

##### **4.6.6 Research Plan Update**

SC20 will review the progress of the following research plans and provide recommendations for

any plan update.

#### 4.6.6.1 Tuna Assessment Research Plan (2023 – 2026) update

SC20 notes that research recommendations in Para 262<sup>6</sup> of the SC19 Summary Report were suggested to be included in the Tuna Assessment Research Plan.

#### 4.6.6.2 Billfish Research Plan (2023 – 2030) update

[SC20 will review the Billfish Research Plan and provide any updates as needed.](#)

#### 4.6.6.3 [Review of the Shark Research Plan 2021-2030](#)

[SC20 will review the results of ISG-Sharks and provide recommendations or any amendments to the Shark Research Plan 2021-2030.](#)

## **AGENDA ITEM 5      MANAGEMENT ISSUES THEME**

### **5.1      Development of the WCPFC harvest strategy framework for key tuna species**

SC20 will note the following key updates to the *Indicative Workplan for the Adoption of Harvest Strategies under CMM-2022-03* (see Attachment 4, WCPFC20 Summary Record):

- The plan was extended for an additional year to 2027;
- SC20 will agree on the operating models for the South Pacific albacore tuna MSE and provide advice to inform the review of the South Pacific albacore tuna Target Reference Point;
- SC20 will provide advice on the monitoring strategy for skipjack tuna; and
- SC agreement on operating models for bigeye and yellowfin tuna has been rescheduled for 2025.

In 2024, the Commission is scheduled to adopt a management procedure for South Pacific albacore and the monitoring strategy for skipjack tuna, and agree on TRPs for bigeye and yellowfin tuna.

#### **5.1.1      Skipjack tuna**

##### 5.1.1.1 Skipjack tuna management procedure

Sufficient data were available to run the MP for skipjack tuna in 2023. However, it was noted that pole and line fishing efforts in tropical regions continue to decline, which presents a potential problem for the future running of the MP. Therefore, as recommended by SC19, a re-evaluation of the estimation method (which may require a re-evaluation of the modeling framework) was

---

<sup>6</sup> SC19 adopted several research recommendations for the further development and improvement of the WCPO bigeye tuna stock assessment, and suggested these be considered for potential inclusion in the Tuna Assessment Research Plan (TARP): (14 research items listed under paragraph 212.)

recommended as a high priority before the next implementation of the MP for skipjack tuna in 2026. SC20 will review the planned approach to investigate this.

#### 5.1.1.2 Monitoring strategy for skipjack tuna

The Commission noted a need for intersessional work, led by the SC and TCC Chairs, to facilitate the development of a monitoring strategy by SSP for adoption at WCPFC21, using the information in Attachment B of WCPFC20-2023-14 as a reference. SC20 will review any updates on the monitoring strategies and provide further inputs and advice as needed.

### 5.1.2 South Pacific albacore tuna

#### 5.1.2.1 Target reference points

SC20 will note that WCPFC20 agreed on an interim TRP for SP albacore as  $0.96SB_{2017-2019}/SB_{F=0}$ . This TRP will be reviewed at WCPFC21 following the 2024 stock assessment and further development of candidate management procedures. SC20 will provide advice to the Commission on the review of the interim TRP.

SC20 will review the results of the following task (see paragraph 242, WCPFC20 Summary Record) and provide advice to the Commission:

242. *The Commission tasked the SSP to undertake:*

- *evaluation of a range of alternative candidate South Pacific albacore target reference points between  $SB/SB_{F=0}$  0.42-0.56 (long-term average  $SB/SB_{F=0}$  (WCPFC-CA), or preferably equivalent levels defined in terms of reference period) that will be considered in the context of the review of the adopted iTRP.*

#### 5.1.2.2 South Pacific albacore operating models

Following SC19's advice, the reference set of the operating models was further developed to allow for the continued progress and evaluation of candidate management procedures. SC20 will consider formally adopting the reference set of operating models for management strategy evaluation, noting the potential for other changes in light of the 2024 South Pacific albacore stock assessment.

#### 5.1.2.3 South Pacific albacore management procedure (Both papers, SC20-MI-WP-06 and SC20-MI-IP-01, will not be available to SC20 due to unresolved technical challenges)

SC20 will review relevant papers and provide advice for the adoption of a management procedure noting the following specific task from the Commission (see paragraph 242, WCPFC20 Summary Record):

242. *The Commission tasked the SSP to undertake:*

- *evaluations of some selected candidate management procedures for South Pacific albacore where the output of the harvest control rule is total allowable effort and alternatively where the output of the same or similar harvest control rule is total allowable catch.*

#### 5.1.2.4 Monitoring strategy for South Pacific albacore

SC20 will review and advise on relevant elements to be considered by TCC and the Commission for the monitoring strategy of candidate management procedures for South Pacific albacore.

#### 5.1.2.5 Updates on SP Albacore Roadmap IWG

The IWG Chair will provide a brief on the outcomes of the online IWG meeting held on 31 July 2024. SC20 will review and respond to any requests from the IWG.

### 5.1.3 Mixed fishery MSE framework

#### 5.1.3.1 Target reference points for bigeye and yellowfin tuna

SC20 will review analyses required to support decision-making on TRPs for bigeye and yellowfin tuna for the Commission's agreement in 2024 and provide advice on potential TRPs.

#### 5.1.3.2 Mixed fishery MSE framework update

SC20 will review any updates from the SSP on developing the mixed fishery modeling framework and future work plan and provide advice as needed for further development.

### 5.1.4 Progress of the WCPFC Harvest Strategy Work Plan

Considering the progress of developing the harvest strategy framework along with the work plan, SC20 will advise the Commission for further updates of the harvest strategy work plan as needed.

## 5.2 Review of effectiveness of CMM 2023-01

According to Paragraph 52 of CMM 2023-01 (*CMM for bigeye, yellowfin, and skipjack tuna in the WCPO*), SC20 will review the effectiveness of various provisions and provide the Commission with advice as needed.

## AGENDA ITEM 6 ECOSYSTEM AND BYCATCH MITIGATION THEME

### 6.1 Ecosystem and Climate Indicators

#### 6.1.1 Ecosystem and Climate Indicator Report Card

SC20 will review the outcomes of an Expert Workshop on methodology for developing and testing candidate indicators (Project 121), various indicators in the updated Ecosystem and Climate Indicator Report Card, available data on climate change impacts on stocks and ecosystems, and the potential effects of climate change on related fishing activities, and any other related issues.

#### 6.1.2 Research proposal

SC20 will consider any further proposed research on climate change issues.

SC20 will provide input to the Commission's DRAFT Climate Change Workplan<sup>7</sup>.

SC20 will also review a DRAFT WCPFC Climate Change Workplan and a preliminary assessment of selected CMMs for their vulnerability to climate change impacts and consider the need for further work. SC20 will also consider additional climate change-related tasks<sup>8</sup> and cooperation with other RFMOs on activities related to climate change (see paragraph 223, WCPFC20 Summary Record), and provide feedback to inform future work.

## **6.2 FAD impacts**

### **6.2.1 Research on non-entangling and biodegradable FADs**

SC20 will review various research outputs related to non-entangling and biodegradable FADs, including the progress of Project 110 (Non-entangling and biodegradable FAD trials in the WCPO) funded by the EU, US, and ISSF, which will be completed in December 2025. Project 110a is to enhance Project 110 by deploying additional non-entangling and biodegradable FADs. SC20 will review and provide comments on the progress of Project 110 and 110a.

### **6.2.2 Updates on FAD Management Options IWG**

WCPFC20 tasked the FADMO-IWG with considering i) ways to implement FAD recovery programs and ii) developing a FAD logbook for vessel operators (see paragraphs 384-385, WCPFC20 Summary Record):

- 384. The Commission further tasks the FADMO-IWG to consider ways to implement FAD recovery programs/strategies, including economic aspects and standards required for programs to be effective, to be a standing agenda item for the FADMO-IWG in 2024.*
- 385. In the development of 2024-2026 FADMO-IWG Workplan, the FADMO-IWG shall incorporate the following:*
  - a. Provide advice to WCPFC23 on the implementation of stepwise introduction of bio-degradable dFADs;*
  - b. Provide advice to WCPFC23 on the effectiveness of the limit on the number of dFADs deployed as set in paragraph [21] of the CMM 2023-01 and;*
  - c. To develop a FAD logbook for vessel operators and to review the IWG workplan accordingly to action recent developments.*

[The Commission also tasked the FADMO-IWG to consider requirements for the transmission of satellite buoy data from drifting FADs in 2024 to promote effective and sustainable FAD management in the WCPFC \(refer to paragraph 550, WCPFC20 Summary Record\).](#)

SC20 will review the progress of the FADMO-IWG work and provide feedback to facilitate the IWG's progress.

---

<sup>7</sup> Intersessional work is led by co-Chairs from the US and RMI.

<sup>8</sup> i. how to capture potential effects of climate change on WCPFC fisheries and fish stocks.

ii. mechanisms to test the robustness of existing and candidate management procedures under plausible climate change scenarios within the MSE framework.

## **6.3 Bycatch management**

### **6.3.1 Bycatch Management Information System**

SC20 will review any updates related to bycatch management, including Bycatch Management Information System (BMIS), any feedback on the bycatch management site at [www.wcpfc.int/bycatch-management](http://www.wcpfc.int/bycatch-management) or [www.bmis-bycatch.org](http://www.bmis-bycatch.org) and Bycatch Data Exchange Protocol (BDEP) within the BMIS.

### **6.3.2 Bycatch Assessment and Management**

SC20 will review any research outcomes related to bycatch assessment and management to identify the status of bycatch species and associated mitigation tools.

## **6.4 Sharks**

### **6.4.1 Estimating the impact of fishing on sharks (Project 116)**

As requested in paragraph 28 of CMM 2022-04<sup>9</sup>, SC20 will review estimates of shark mortalities and risks associated with interactions with WCPFC fisheries, including the impact of WCPFC-managed fisheries on oceanic whitetip shark and silky shark inside and outside the area between 20°N and 20°S, and provide recommendations on mitigation methods as needed to the Commission.

## **6.5 Seabirds**

### **6.5.1 Review of seabird research**

SC20 will review any seabird research if available and provide recommendations as needed to the Commission.

### **6.5.2 Review of CMM on seabirds (CMM 2018-03)**

As agreed at WCPFC20, New Zealand organized two informal online intersessional meetings on 20 February and 7 May 2024 to review CMM 2018-03 (*CMM to mitigate the impact of fishing for highly migratory fish stocks on seabirds*). SC20 will review [recommendations for a revision of CMM 2018-03 based on information from these two informal intersessional meetings, and relevant information and working papers, and provide recommendations to the Commission.](#)

## **6.6 Sea turtles**

### **6.6.1 Review of sea turtle research**

---

<sup>9</sup> 28. *In 2024, and commencing periodically thereafter, the SC shall review the impact of fishing gear on sharks that are not retained, including oceanic whitetip shark and silky shark, inside and outside of the area between 20 N and 20 S, and provide advice on potential mitigation measures that would benefit such shark species.*

Noting the *Sea Turtle Data Collection and Research Programme* adopted at WCPFC3 in 2006, SC20 will review any new information from sea turtle mitigation research and provide recommendations as needed to the Commission.

#### **6.6.2 Review of Conservation and Management of Sea Turtles (CMM 2018-04)**

The Commission at WCPFC20 noted the need to develop best practices and guidelines to minimize the impact of FADs on sea turtles to inform CCMs of potential impacts, including detailed information on fully non-entangling FADs and ideas related to a “FAD WATCH” programme. SC20 will review any additional or new mitigation measures or draft guidelines to minimize the impact of FADs on sea turtles and provide findings and recommendations as appropriate to the Commission.

#### **6.7 Cetaceans**

SC20 will review any research on mitigating impacts on cetacean stocks from tuna fishery activities and provide recommendations to the Commission as appropriate.

#### **6.8 Deep-sea mining**

In response to concerns raised by an Observer delegation at WCPFC20 on the potential impacts of deep-sea mining on tuna fisheries, the Secretariat contacted the International Seabed Authority to gather information on the ISA’s activities that overlap with the WCPFC Convention Area.

The IATTC’s 1<sup>st</sup> Working Group on Ecosystem and Bycatch held in May 2023 provided the following three recommendations to the Scientific Advisory Committee, which were endorsed by the 14<sup>th</sup> SAC meeting and recommended to the Commission. Also refer to IATTC brief: *Potential Interactions between Deep-Sea Mining and Tuna Fisheries*:

- Be attentive to, and monitor the development of mining in the international seabed area in terms of its potential effects on the ocean ecosystem and populations of tuna and tuna-like species;
- Participate, as appropriate, in the process of discussions on the subject within the framework of the International Seabed Authority (ISA), as an observer and/or through appropriate collaborative mechanisms;
- Collaborate, in a manner consistent with its mandate, work program, and the financial, human, and material resources at its disposal, in research on the potential effects of mining in the international seabed area among others on the ocean ecosystem and populations of tuna and tuna-like species.

As this is a new issue, SC20 will consider issues related to deep-sea mining impacts on WCPFC fisheries and provide any advice as needed to the Commission.

### **AGENDA ITEM 7 OTHER RESEARCH PROJECTS**

#### **7.1 Pacific Marine Specimen Bank (Project 35b)**

SC20 will review the outcomes of the 6<sup>th</sup> Steering Committee meeting, noting two specific issues raised by the Committee, and provide recommendations to the Commission or other subsidiary bodies.

## **7.2 Pacific Tuna Tagging Project (Project 42)**

SC20 will review the progress of the Pacific Tuna Tagging Project (Project 42) and the results of its 16<sup>th</sup> PTTTP Steering Committee Meeting. SC20 will provide recommendations to the Commission for the continuity of the project.

## **7.3 West Pacific East Asia Project**

SC20 will note the completion of the New Zealand-funded WPEA Improved Tuna Monitoring Project (WPEA-ITM) as of June 30, 2024. SC20 will also be introduced to the next phase of the project that commenced on July 1, 2024: *WPEA Sustainable Pacific Fisheries Activity (WPEA-SPF)*, also funded by New Zealand. This phase will build on the work of the WPEA-ITM over the next three years. SC20 will review the draft final report from WPEA-ITM, and provide comments and recommendations on the planned activities for WPEA-SPF.

## **7.4 Japan Trust Fund activities**

SC20 will receive the outcomes of the JTF Steering Committee meeting and provide advice as needed.

## **7.5 Other Projects**

SC20 may consider any other projects funded through voluntary contributions of WCPFC CCMs.

## **AGENDA ITEM 8 COOPERATION WITH OTHER ORGANISATIONS**

SC20 will review the status of cooperation with other organizations and, if necessary, provide recommendations for the Commission's consideration.

## **AGENDA ITEM 9 SPECIAL REQUIREMENTS OF DEVELOPING STATES AND PARTICIPATING TERRITORIES**

SC20 will consider intersessional activities to build capacity in the science of developing States and participating territories, including those supported by the Commission's Special Requirements Fund.

## **AGENDA ITEM 10 FUTURE WORK PROGRAM AND BUDGET**

### **10.1 Development of the 2025 work programme and budget, and projection of 2026-2027 provisional work program and indicative budget**

SC20 will develop the 2025 SC work program and budget and provisional work program and indicative budget for 2026-2027 for the Commission's consideration and endorsement. All project proposers will submit their proposals with detailed terms of reference, including objectives,



rationale, assumptions, scope of work, data requirements (public or non-public domain data), time frame, budget, and references for SC's review and ranking priorities.

SC20 will note a recommendation from the Finance and Administration Committee to the Commission (Para 71, FAC9 Summary Report) that *“WCPFC12 task SC with carefully considering proposed scientific projects in the context of the indicative budget agreed for the coming year.”*

## **AGENDA ITEM 11      ADMINISTRATIVE MATTERS**

### **11.1      Future operation of the Scientific Committee**

SC20 will consider proposals, if any, for the efficient operation of the Scientific Committee, including streamlining the agenda, rapporteuring, process of theme sessions, and other related aspects.

The Commission at WCPFC20 requested that the Secretariat, SC Chair, SC Vice-Chair, SC Convenors, TCC Chair, and TCC Vice-Chair further explore and consider options discussed at SC19 and TCC19 relating to addressing time challenges in the SC review of WCPFC stock assessment inputs<sup>10</sup> and report the intersessional discussions to WCPFC21 for its consideration. SC20 will review the progress of the intersessional discussions and provide advice to the Commission as needed.

### **11.2      Election of Officers of the Scientific Committee**

SC20 will recommend a Scientific Committee Vice-Chair to the Commission for consideration at WCPFC21. The SC Vice-Chair shall hold office for two years and shall be eligible for re-election.

### **11.3      Next meeting**

Members are invited to confirm the dates and venue for SC21 in 2025 and to propose dates and venue for SC22 in 2026.

## **AGENDA ITEM 12      OTHER MATTERS**

SC20 will consider any other issues raised under Agenda Item 1.4, [including those arising from the Online Discussion Forum](#).

## **AGENDA ITEM 13      ADOPTION OF THE SUMMARY REPORT OF THE TWENTIETH REGULAR SESSION OF THE SCIENTIFIC COMMITTEE**

SC20 will adopt all recommendations of the Scientific Committee, and the SC20 Summary Report will be adopted intersessionally after SC20.

## **AGENDA ITEM 14      CLOSE OF MEETING**

---

<sup>10</sup> [SC19-SA-WP-14](#) (Options to address time challenges in the SC review of WCPFC stock assessment inputs)

The meeting will close at 17:00 on Wednesday, 21 August 2024.