



Western and  
Central Pacific  
Fisheries  
Commission

# SC20 Recommendations

*Not covered under other agenda items*

Agenda Item 6.3

WCPFC-21-2024-09

WCPFC-2024-09 | Suva, Fiji | 28 November – 3 December 2024



# 20<sup>th</sup> Regular Session of the Scientific Committee (SC20)

Manila, Philippines - August 14-21, 2024



Western and  
Central Pacific  
Fisheries  
Commission

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***Data and Statistics Theme*** - Convenor: Valerie Post (USA)

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***Stock Assessment Theme*** - Convenors: Hidetada Kiyofuji (Japan), Berry Muller (RMI), Michelle Sculley (USA)

3

***Management Issues Theme*** - Convenor: Emily Crigler (USA)

4

***Ecosystem and Bycatch Theme*** - Convenors: Yonat Swimmer (USA), Leyla Knittweis (NZ)



# SC20 Outcomes & Recommendations



## 1) A full list of SC20 outcomes & recommendations available:

- SC20 Outcomes Document
- SC20 Summary Report

## 2) Related documents

**[A6.3 – WCPFC-2024-09](#): Outcomes not covered under other agenda items  
(covering Data and Statistics, Stock Assessment, Budget and Administration)**

A6.4 – WCPFC-2024-10: Outcomes relating to harvest strategies

A6.6 – WCPFC-2024-15: Outcomes relating to climate change

A11 – WCPFC-2024-24: Updates on cooperation with other organizations; and  
WCPFC-2024-25: International developments and implications for WCPFC,  
including deep-sea mining

# Data and Statistics Theme

## 1. Additional LL Operational Data Fields

- SC20 recommended the Commission consider possible inclusion of additional longline operational data fields ([SC20-ST-WP-08](#), Table ST-01) in the “Scientific Data to be Provided by the Commission (Sci Data)” **as voluntary reporting items**

✓ (1) Target species; (2) Number of lightsticks; (3) Bait type; (4) Mainline length; (5) Length of branchline; (6) Length of float line; (7) Vessels speed; and (8) Speed of line setter

## 2. Additional Code for the ACTIVITY Field

- SC20 recommended the Commission consider the addition of a new activity code for any day when a "transshipment at sea occurs" within the Sci Data (SC20-ST-WP-08).

Table ST-01 Proposed new voluntary additional longline operational data fields

| DATA FIELD                        | Suggested PROTOCOL for data collection  |                              |
|-----------------------------------|---|------------------------------|
| Target species for the set        | Record the primary target species, or group of species, for this set.   |                              |
| Number of lightsticks used in set | Record the total number of lightsticks used in the set.   |                              |
| Bait type used in set             | Record the FAO code(s) <sup>3</sup> for type of bait(s) used for the set. Example types:                                      |                              |
|                                   | FAO Code  | Taxa/species categories      |
|                                   | CLP   | HERRINGS, SARDINES, NEI      |
|                                   | DPT   | DECAPHTHURUS SP. - MUROAJI   |
|                                   | MAX   | MACKERELS NEI                |
|                                   | MIL   | MILKFISH                     |
|                                   | MSD   | MACKEREL SCAD                |
|                                   | PIL   | EUROPEAN PILCHARD (=SARDINE) |
|                                   | SAP   | PACIFIC SAURY                |
|                                   | SQU   | VARIOUS SQUIDS NEI           |
| TUN                               | TUNAS NEI   |                              |
| OTHERS                            | Comment on bait type  |                              |
| Mainline length                   | Record the mainline length (in kilometers) used in the trip or set, as appropriate.   |                              |
| Length of branch line             | Record the average length in meters of the branch lines in the trip or set. (The total length from the mainline to the hook). |                              |
| Length of float line              | Record the average length in meters of the float lines in the set. (The total length from the float to the mainline).         |                              |
| Vessel speed during setting       | Record the average speed in knots of a vessel during line setting.  |                              |
| Speed of the line setter          | Record the speed in knots of the line setter (i.e., the line shooter speed).  |                              |

# Data and Statistics Theme

## 3. Revision to CMM 2018-04

- WCPFC20 tasked SC20 to review the SciData requirements to capture turtle interactions under **CMM 2018-04, paragraphs 5.c. and 7.e.**
- Some **CCMs have different interpretations of the requirements**, specifically as to whether the paragraphs require reporting through submission of operational level data or in a summary form
- **SC20 suggested the Commission consider clarifying the requirements** of these paragraphs to resolve any ambiguity.





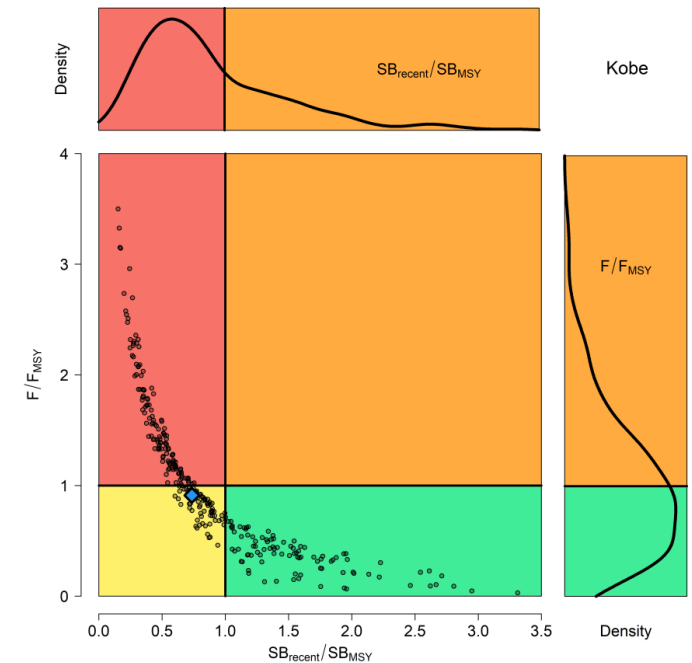
# Stock Assessment Theme

- SC20 reviewed five new stock assessments in 2024:
  - South Pacific albacore (SPC)
  - WCPO silky shark (SPC)
  - Southwest Pacific striped marlin (SPC)
  - Pacific bluefin tuna (ISC)
  - North Pacific shortfin Mako shark (ISC)
- Advice from SC20 relating to Stock Status from 2024 assessments discussed under Status of WCPO Stocks (Agenda 6.1)

# Stock Assessment Theme

## 4. Projection scenarios for next SWP Striped Marlin stock assessment

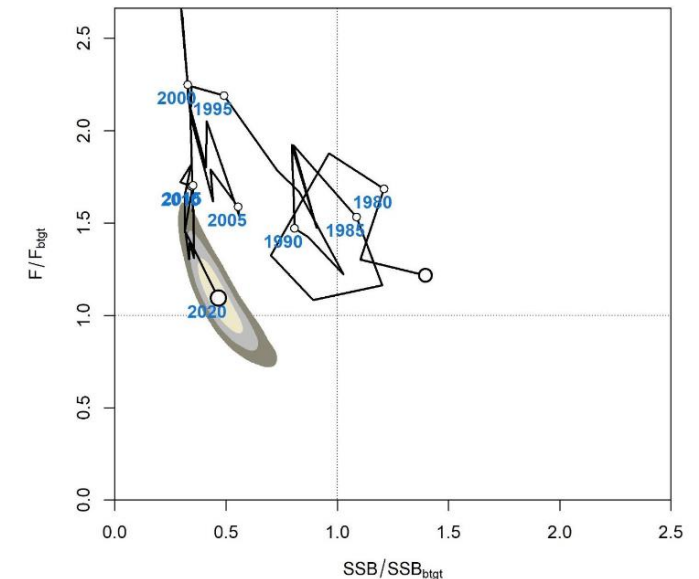
- SC20 recommended that WCPFC21 request a tractable set of projections including but not limited to the four scenarios proposed below:
  - **Status quo scenario:** Projection based on recent catch levels;
  - **Recovery scenario 1:** Projection using catch levels that result to a median depletion of 20% by 2034;
  - **Recovery scenario 2:** Projection using catch levels that result to a median depletion of 30% by 2034; and
  - **Non-retention/live release scenario:** Projection using catch levels that reflect the likely outcomes under a management measure requiring release of live animals or non-retention of all animals.



# Stock Assessment Theme

## 5. Peer review recommendations for revision of WCNPO Striped Marlin:

- **SC20 noted the following advice from ISC24:**
  - ISC24 maintained the conservation advice of WCNPO MLS from 2023
  - ISC24 provided the results of rebuilding projections which evaluated harvesting scenarios to achieve WCNPO MLS interim rebuilding target ( $20\%SSBF=0$  with more than 60% probability).
- **SC20 noted the recommendations of the peer review of WCNPO MLS stock assessment (SC20-SA-WP-13) and recommended that these be incorporated into the future stock assessment scheduled for 2027.**
- **SC20 recommended the Commission to take the above information into account when considering a possible revision of the CMM for North Pacific striped marlin.**





# Stock Assessment Theme

## Stock Status and Management Advice Template

### 6. Stock Assessment Template Review

#### *Stock Status and Management Advice:*

- **SC20** thanked the consultants for their work on Project 113b and **agreed on the need for a standardized approach to reporting stock status and management advice from stock assessments for the work of the Commission and recommended it as a guideline. SC20 recommended the Commission to review the template in Attachment 1 and advise, if necessary.**

#### a. *Stock assessment and trends*

Paragraphs (link to Figures)

1. Describe the assessment structure and rationale (Fig 1, Table 1)
2. Describe the main uncertainties considered (Table 2)
3. Describe annual catch estimates and trends (Figure 2)
4. Describe CPUE trends and other indicators of biomass trends (Figure 3)
5. Describe trends in a diagnostic model, including recruitment, spawning potential, and fishing mortality, as well as performance against diagnostics (Figures 4-6)
6. Describe the depletion of spawning stock biomass and associated uncertainty (Figure 7)
7. Describe stock assessment results compared to the previous assessment

**Table 1.** Assessment structure, including key fisheries and catch proportions. No defined format to accommodate alternative assessment methods.

**Table 2.** Summary of main sources of uncertainty in the assessment, with a degree of confidence assigned to each aspect of the assessment and potential source of uncertainty.

**Figure 1.** Spatial structure used in the 20XX stock assessment model

**Figure 2.** Time series of total annual catch (1000's mt) by fishing gear over the full assessment period

**Figure 3.** Time series of CPUE and/or other main abundance indices

**Figure 4.** Estimated annual average recruitment by model region for the diagnostic case model, including estimation uncertainty.

**Figure 5.** Estimated annual average spawning potential by model region for diagnostic case model, including estimation uncertainty.

**Figure 6.** Estimated annual average juvenile and adult fishing mortality for the diagnostic case model, including estimation uncertainty.

**Figure 7.** Plot showing the trajectories of spawning biomass and spawning biomass depletion (of spawning potential) by region, including uncertainty arising from estimation, structural, and intrinsic uncertainties (variability and process error).

# Budget & Administration

## 7. Website development to support direct submission of SC papers and proposals

### *Future Operations of the Scientific Committee*

- **SC20 recommended that the Secretariat work with SC Theme Convenors and the SC Chair to develop a process to submit all papers and project proposals through the WCPFC website, to further streamline the submission process and allow for greater organization and tracking of submissions, for implementation in advance of SC21.**

# Swan Song: Farewell Dr. Bigelow

