SCIENTIFIC COMMITTEE
TWENTIETH REGULAR SESSION

WCPFC PACIFIC MARINE SPECIMEN BANK
STEERING COMMITTEE

ELECTRONIC MEETING
1st August 2024 (from 10:30-11:00 hours Pohnpei time (UTC+11 hours))

Report of the Pacific Marine Specimen Bank Steering Committee

WCPFC-SC20-2024/RP-P35b-02 (Rev.01)
19 August 2024

PMSB Steering Committee

1. PRELIMINARIES

The 5th meeting of the Pacific Marine Specimen Bank Steering Committee was held via video conference through Microsoft Teams at 10:30-11 am, Noumea time, on 1st August 2024, in preparation for the 20th Regular Session of the WCPFC Scientific Committee (SC20).

A list of meeting participants is provided in Annex 1 of this report.

Background

The WCPFC Pacific Marine Specimen Bank (hereafter, PMSB) is a repository of biological samples from marine specimens collected from across the WCPO, and its ongoing operation is now funded by WCPFC through Project 35b. WCPFC established its PMSB so that national and international fisheries research institutes could access the collections needed to advance our understanding of the dynamics of tuna and related species in the WCPFC region (including analyses to estimate spatially- and temporally-explicit age, growth and reproductive parameters, and to investigate stock structure, for consideration within future stock assessments). In a broader ecosystem context, the collections are also used for trophic analyses, including diet studies, measurement of stable isotopes, mercury and other biochemical elements for exploring trophic structure and movement, in addition to taxonomic studies. The dedicated website of the PMSB is accessible at: https://www.spc.int/ofp/PacificSpecimenBank.

The objective of Project 35b is to maintain the PMSB, with particular emphasis on WCPO bigeye, yellowfin, albacore and skipjack tunas and swordfish, and, to facilitate transmission of samples to specified researchers with due cognizance of the WCPFC PMSB Access Protocols. SPC as the Scientific Services Provider (SSP) is tasked with maintaining and developing the PMSB, and through the biological sampling programme, expanding the inventory of samples held.

In 2018, it was agreed to run the process of PMSB reporting in a similar manner to the PTTP (Project 42) at SC15, with a brief report of the PMSB Steering Committee presented to the SC Plenary by its chair (i.e. this report). This serves to expedite the work of the Scientific Committee whilst giving adequate time to discuss details of the PMSB activities during the Steering Committee meeting.

1.1: Review and adoption of agenda

The provisional agenda for the PMSB Steering Committee meeting was adopted and is provided in Annex 2.

2. PMSB PROGRESS REPORT

Prior to the PMSB Steering Committee meeting, a progress report to SC20 on PMSB activities during 2023-24 (SC20-RP-35b-01) was finalised, posted on the SC20 website at https://meetings.wcpfc.int/node/23017 and made available to meeting participants. A presentation summarising the progress report was given at the meeting by SPC and the presentation file was made available to the participants during the steering commitee. Below we outline the key information presented to participants under Agenda item 2.

2.1: PMSB activities – Between 1 July 2023 and 30 June 2022, 48,068 new biological samples, taken from 16,723 fish, were added to PMSB holdings. The PMSB now houses 273,116 biological samples taken from 101,032 individual animal specimens.

2.2: Observer-based sampling – The number of observer trips in 2023 is low, SPC and the Fisheries Authorities in countries have been working on the writing of LOAs to restart the biological sampling programme which shows sign of progress in 2024.

2.3: Port sampling – Since 2020-21, port sampling effort has been increased to compensate for the uncertainty around at-sea sample collection (Covid 19 restrictions). Since then, the number of fish sampled at port increased exponentially. Number of fish sampled was 5,499 in 2023 and in the Jan-Jun 2024 period it already reached 14,979 fish sampled. This important increase is linked to the implementation of the Close-Kin Mark Recapture project (CKMR project using genetics to support stock assessment) which requires a lot of sampling, and it has been conducted in collaboration with many partners, particularly from the fishing industry.

2.4: Training – Over the past 12 months, 55 observers, port samplers and fisheries officers undertook training in biological sample collection; and training sessions were conducted in three countries

The observer training course is now hosted on the Moodle platform allowing access to training material online and remotely.

2.5: *OnShore* and *OLLO* apps – During 2023-24, the ER applications *OnShore* for port samplers and *OLLO* for longline fisheries observers were used to collect biological sampling data in addition to the routine recording of species and length data.

In 2024, data for 96% of the fish sampled at port were entered using OnShore, and 25% of the fish collected by observed were recorded using *OLLO*. SPC will continue to generalise the use of biological sampling ER by developing a new application that allows data collection on fish sampled on purse seiners and during scientific cruises.

2.6: PMSB access and outputs

At present, 42 projects using samples from the PMSB are in progress ('pending'). The projects are led by SPC and/or other national and international organisations. 32 projects using PMSB samples are 'completed' as at 30 June 2024.

A total of nine scientific publications (books, peer-reviewed journal articles, conference papers or popular articles) associated with PMSB work were published during the 2023-24 reporting period (see SC20-RP-35b-01 for details).It includes a paper on tuna mercury available on the scientific committee website as EB-IP-32 (https://meetings.wcpfc.int/node/22982).

2.7: Some 2023-2024 highlights

- Quality Management System: As the PMSB is expanding in terms of infrastructure, staff, number of samples and activity diversification, it has been decided to develop a quality management system based on international standards (ISO9001 standard). By developing procedures, audits, review and controls this system will allow to guaranty the quality of the samples and data collected and stored. The process started in 2024 and a consultant has been hired to evaluate our practises in comparison to the ISO9001 standard. This work is expected to last about 1 year.

- Genetics laboratory at SPC Nouméa – The genetics laboratory at SPC is now functional and equipped with hi-throughput and automated instrumentation that will allow the analyses of hundreds of samples and multiple genes in parallel. Some current and future projects are for example the analysis of tuna stomach samples for prey identification based on genetics and the quality control of DNA samples, in particular to verify sex and species identification (e.g. marlins).

Steering Committee discussion on Agenda item 2 PMSB progress report

The Steering Committee asked if the quality management system will include compliance with the Nagoya protocol. SPC indicated that this subject is being worked on and that there will likely be an update on this by next year's steering committee.

3. WORK PLAN 2023-24

3.1 : General work plan

The PMSB work plan for the coming year was presented. Actions planned for 2024-25, continuing from previous years, include:

- Completion of a document on standard operating procedures for the PMSB.
- Continue to update and improve training materials for biological sampling.
- Continue the development and enhancement of electronic recording ER apps and associated training.
- Continue the development of a WCPO-wide sampler network for the collection of tuna genetics samples.
- Continue the development of our quality management system to meet international standards of the PMSB.
- Development of the PMSB website to better highlight the use of the PMSB samples and associated outputs.
- Completion of the construction of the wet laboratory extension and renovation of the taxonomy laboratory in Noumea.

New actions planned for 2024-25 include:

- Transfer of BioDaSys to a web-based technology
- Quality Management System implementation based on ISO9001 standard.
- Improve the reporting of PMSB activities through PMSB website.
- Encourage the use of ER for biological sampling data collection.

4. ADMINISTRATIVE MATTERS

4.1: Budget – The annual cost of supporting the PMSB is USD 97,200 baselined in 2018, with an annual inflation adjustment agreed by the Commission in 2018 for out-years.

The Steering Committee was reminded that the approved budget for 2024 was USD 107,373 with indicative annual budgets for 2025 and 2026 are USD 109,520 and USD 111,711 respectively.

4.2: Recommendations to SC20 – The PMSB Steering Committee endorsed the SC20 recommendations specified in SC20-RP-P35b-01:

- Continue to support initiatives to increase rates of observer biological sampling, noting that this contribution is essential to the ongoing success of the WCPFC's work.
- Incorporate the identified budget into the 2025 budget and the 2026 indicative budgets, as development of the WCPFC PMSB is intended to be ongoing, and is considered essential.
- Endorse change for Project 35b to report on the 12 months of the civil year (Jan-Dec) preceding SC instead of reporting on the 12 months before SC (July-June) which would allow to publish better quality data.
- Endorse that the work plan in Section 5 of the report SC20-RP-P35b-01 should be pursued by the Scientific Services Provider, in addition to standard duties associated with maintenance and operation of the WCPFC PMSB in 2024-25.

Steering Committee discussion on Agenda item 4 Administrative matters

The Steering Committee asked if the fourth recommendation on changing the reporting period from July-June to Jan-Dec would be compatible with the activities of the PTTP. SPC indicated that no issue is foreseen in changing the reporting period and that communication with PTTP will ensured that no problem arise from the change.

5. ADOPTION OF REPORT

A draft report of the Steering Committee of the PMSB was provided to members on the 5th of August 2024 through email. Steering Committee members were invited to make comment until, and provide endorsement by, the 13th of August. These comments were collated into the final report, which was posted to the 19th of August 2024.

Annex 1 – Attendee list of the 2024 PMSB Steering Committee.

Name	Affiliation
Joe Scutt Phillips	SPC
Simon Nicol	SPC
Bradley Phillip	SPC
Matthew Cunningham	SPC
CT_Ren-Fen WU (Unverified)	Chinese Taipei
MATSUBARA Naoto	Japan
Elaine G. Garvilles (External)	WCPFC
Valerie Allain	SPC
SungKwon Soh (External)	WCPFC
Leyla Knittweis	New Zealand
Jed Macdonald	SPC
Nicholas Ducharme-Barth (NOAA) (Unverified)	USA
Sebastien Gislard	SPC
FM-NORMA (Unverified)	NORMA
Giulia Anderson	SPC
mike Batty	Tuvalu
Monte Depaune	Nauru
OKAMOTO Kei	Japan
Caroline Sanchez	SPC
Marion Boutigny	SPC

Annex 2 – Adopted agenda of the 2024 PMSB Steering Committee.

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AGENDA

WCPFC-SC20-2024/RP-P35b-02

1. PRELIMINARIES

1.1 Review and adoption of agenda

2. PMSB PROGRESS REPORT

2.1 PMSB Activities (WCPFC-SC20-2024/RP-P35b-01)
2.2 Observer-based sampling
2.3 Port sampling
2.4 Training
2.5 *OnShore* and *Ollo* apps
2.6 PMSB access and outputs
2.7 Some 2023-2024 highlights

3. WORK PLAN 2023-24

3.1 General work plan
3.2 Other initiatives

4. ADMINISTRATIVE MATTERS

4.1 Budget
4.2 Recommendations to SC20

5. ADOPTION OF REPORT