### 2<sup>nd</sup> PTTP ADVISORY COMMITTEE MEETING

**Location:** Virtual meeting (Microsoft Teams), led from SPC Headquarters, Noumea,

New Caledonia

**Date & time:** 16<sup>th</sup> February 2021, 11:00 to 12:30

**Theme:** 2021 Cruise Planning

**Attendees online:** David Itano, SungKwon Soh, Elaine Garvilles, Hide Kiyofuji,

Chris Wilson, Russell Dunham, Ren Fen Wu, Juliette Kon Kam

King, Jeff Muir, CK Rui David, Ludwig Kumoru, Brian Kumasi, Aketa Taanga, Beau Bigler, Berry Muller, Tiare-

Renee Nicholas, Kathryn Gavira O'Neill, Beth Vanden Heuvel,

Il-kang Na, Chloe-Ane Wragg

**Attendees in Noumea:** Giulia Anderson, Bradley Phillip, Joe Scutt Phillips, Bruno

Leroy, Lauriane Escalle, Jed Macdonald, Simon Nicol

### 1. Welcome and Preliminaries

The chair, Simon Nicol, opens the meeting, welcomes all participants and introduces Bruno Leroy and Joe Scutt Phillips to go through the agenda.

#### 2. Agenda

Joe briefly outlines the purpose of, and schedule for the meeting. These were:

- Chance for overview of regional partners tagging activities
- Brief presentation of 2020, CP14 tagging research cruise
- Outline and discuss logistics for cruise planning for the upcoming 2021 PTTP research cruise
- Anticipate administrative and technical requirements in good time
- Outline current and planned tag recovery activities
- Coordination of potential research objectives with regional partners

Kiyofuji-san was invited to speak on the outcomes of the recent Japanese tagging cruises.

# 3. Presentation on Japanese tagging cruises in 2020

Kiyofuji-an provided an overview of the Japanese tagging cruises conducted between October 2020 and February 2021.

Two tagging cruises took place:

### 1) Offshore PL

Ran from  $12^{th}$  to  $29^{th}$  October 2020, targeting adult skipjack (> 50 cm) in waters off Japan. Two legs: Leg  $1 - 12^{th}$  to  $19^{th}$  Oct. 2020; Leg  $2 - 22^{nd}$  to  $29^{th}$  Oct. 2020.

Releases – dart tag: 2774, archival: 160, size range 34-47 cm. Few larger fish captured.

## 2) Distant water PL

Ran from 15<sup>th</sup> December 2020 to early February 2021, targeting juvenile (<40 cm) SKJ in more equatorial waters south of Japan.

Again, two legs.

Releases: dart tags: 7300, archivals: 331, size range 31-63 cm, with the vast majority of archivals in < 45 cm SKJ.

Japan hopes to run similar cruises in late 2021.

#### 4. Presentation on PTTP cruises in 2020

Bruno presented a summary of the 14<sup>th</sup> Central Pacific cruise (i.e. CP14), which ran between 15<sup>th</sup> August 2020 to 2<sup>nd</sup> October 2020, and the planning and modifications that were necessary to handle the COVID-19 situation.

The tagging platform was the Gutsy Lady 4, chartered from Honolulu, with cruise departing from and returning to Honolulu with no port calls en route.

Multiple purse seine fishing companies shared access to their drifting FADs (dFADs).

Hawaiian-based consultants used for the fishing and scientific aspects of the work onboard.

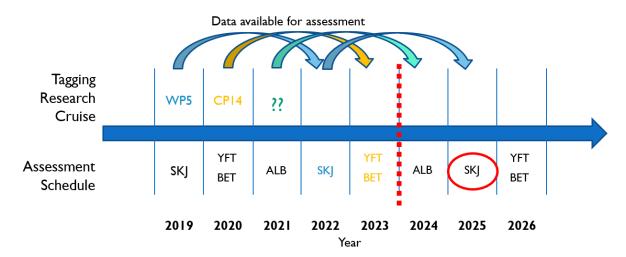
CP14 was of 49 days' duration. Normal conventional and archival tagging activities were a focus, and for this, the number of dFADs available to target tripled compared to the previous CP cruise. New genetic sample collection methods were tested, and a large, successful effort was made to publicize the cruise through SPC media and broader outlets (i.e. BBC) and to boost the profile of research cruises.

### 5. Tagging data requirements

Joe provided overview of tagging data requirements. There is a 3-year cut-off for tagging data integration into the stock assessments. Consequently, there is no benefit of the currently available tagging data for the stock assessments until 2023.

CP14 releases will contribute to 2023 YFT and bigeye assessments.

With SKJ assessment planned for 2025, it is of key importance to continue tagging time series in time for that 2025 assessment.



## 6. Current situation and 2021 cruise implementation

The current situation, cruise implementation timeline and risk assessment was summarised by Bruno.

It was noted that the planned Western Pacific (WP) pole and line cruise is now highly unlikely for 2021, given ongoing travel restrictions, with SPC not in a position to implement this cruise at this time. Bruno presented a risk assessment table.

Cruise option	Key risks	Potential Impact	Risk profile	Measures to put in place to reduce the risks
1 to 4	NFD P&L vessel status can't be externally assessed prior to the cruise due to travel restriction	Lack of access to vessel by expert consultant or SPC staff prevents WP6 implementation.	Likelihood: Likely Consequence: Critical RISK PROFILE: HIGH	Consultant/SPC staff accept to endure quarantine periods (prior and post boat expertise) if that is a possible option for travel
1 to 4	Vessel defect list can't be fixed due to absence of parts	Lack of parts and repair prevents WP6 implementation.	Likelihood: Likely Consequence: Critical RISK PROFILE: HIGH	Early Identification of defects and early ordering of parts
1	Foreign scientists can't join the vessel due to C19 travel restrictions	Lack of access to vessel by scientific crew prevents WP6 implementation.	Likelihood: Likely Consequence: Critical RISK PROFILE: HIGH	Solomon based crew selected to avoid travel restrictions  Foreign scientists accept to endure quarantine periods (prior and post cruise) if that is a possible option for travel
3 to 4	Tagging vessel is vector for C19 transmission to C19 free Pacific Island Countries.	Reputational damage to SPC WCPFC and NFD company	Likelihood: Likely Consequence: Critical RISK PROFILE: HIGH	Vessel crew to undertake COVID19 test 14 days prior to departure and vessel-isolate except for essential preparations. Further COVID19 test to be undertaken 3 days prior to departure. No vessel departure if any tests return positive until medical clearance given.
3 to 4	COVID19 test to be undertaken 14 and 3 days prior to departure are not available in Noro	No oversea cruise option possible	Likelihood: Likely Consequence: Critical RISK PROFILE: HIGH	COVID19 tests and medical expertise sent to Noro
1 to 4	Crew member(s) become sick	Reduced capacity to complete objectives of the cruise tagging objectives. Vessel denied entry in countries.	Likelihood: Unlikely Consequence: High RISK PROFILE: MODERATE	If COVID19 symptoms: Vessel crew to undertake COVID19 test 14 days prior to departure and vessel-isolate except for essential preparations. Further COVID19 test to be undertaken 3 days prior to departure. No vessel departure if any tests return positive until medical clearance given. Contact register for all essential cruise preparation activities. Vessel is medically equipped. Isolation bunk on vessel.

The chair reiterated the complexities and infeasibility of implementing a WP cruise at this time, noting thattravel restrictions are unlikely to end before the end of this year. Based on the latest advice from SPC, even with vaccinations for the whole crew, quarantining would still be required at each port.

Given the timing of the next SKJ stock assessment, there is still some contingency with regard to implementing the next WP cruise in 2022,

Bruno advised that, given the current situation, the only option available is to implement another CP cruise later this year (i.e. CP15).

Plans at the moment consist of a 40-day cruise out of Honolulu. This requires a fishing permit for Kiribati, and we will once again require increased access to dFADs to optimise cruise outcomes and tagging opportunities.

## 7. Objectives specific to the CP15 cruise

Joe outlined the potential aims of such a CP15 research cruise.

These include continued conventional tagging of BET, YFT. Electronic tagging of FAD-associated BET, YFT, including archival tagging, acoustic tagging for school cohesion and FAD density effects, Sr:Cl marking and biological sampling with updated genetic protocols (all species).

SK asked for some clarification around the timing of this CP 15 cruise and target species.

Joe responded that bigeye and yellowfin tuna will be the primary target, as is normal with CP cruises. SPC hoped to participate with Japan over Christmas to deploy electronic tags on SKJ, but this was not possible given COVID-19 travel restrictions.

No ALB tagging is planned. ALB occur in different regions and are captured using different gears. Added logistical difficulties

Timing for CP15 cruise is during the FAD closure period (July to October).

Simon reiterated that the current advice suggests that even with vaccination, there's likely to be continued travel restrictions into the regions we wish to target for the WP cruise – i.e. FSM, PNG – without any capacity to quarantine. Even if a vessel was cleared to depart from a particular port, and then entered a bait ground, if there's any contact with locals the vessels would no longer be classified as COVID-free. It is deemed unfeasible to block access of local people to the vessel. So, the practicalities of implementing the WP are untenable this year. Hence the plan is for CP15 this year, and a WP cruise next year in 2022.

Dave Itano asked if there were any plans for gathering tagging data for the South Pacific ALB stock.

Simon replied that South Pacific ALB have proven difficult to tag at a level that warrants inclusion in the stock assessment. The historical tagging data on ALB has not been included in the stock assessment. However, this data has been used to help define stock assessment regional boundaries.

Close-Kin Mark-Recapture (CKMR) is a potential alternative to provide information similar to what conventional tagging might give us. A collaborative project on South Pacific ALB with CSIRO has already commenced on this topic.

SK asked about the composition and type of the available tags, as this is mentioned in the WCPFC contract.

Bruno replied that it is intended to deploy as many conventional tags in BET and YFT as possible (with a target of about 5000 conventional releases for CP15). There are also 50 archival tags destined for BET and YFT, and an additional 100 small archivals that were scheduled to be deployed in SKJ with Japanese colleagues, before this collaboration was halted due to travel restrictions. The plan will be to deploy some (~ 50) of the latter during the upcoming CP15 cruise, but the fishing gear used will not be optimal for this purpose.

In addition, we hope to deploy between 50 and 100 sonic (i.e. acoustic) tags in BET, YFT and SKJ to aid our understanding of their movements and behaviour around dFADs.

Simon highlighted that CP15 objectives are dependent on the information received from industry on the drift trajectories of their dFADs. This information allows for much more efficient cruise planning and targeting of regions with high FAD densities.

Joe continued the presentation in detailing how critical is the access to drifting FADs for the success of, in particular, CP cruises.

Joe noted that this year it will be critical to maintain, and further increase, the buoy sharing programme to include vessels from more fleets – in particular Asian and EU fleets as well as domestic fleets. Provides mutual benefits and collaborative opportunities, facilitates engagement between science and industry, may increase tag returns using specialised tag reward schemes, as has been trailed in late 2020.

Kathryn Gavira O'Neill commented that Satlink was happy to contribute last year and will continue to help this year. Satlink hope that we will be able to replicate last year's success again and noted that the leaflet we put together was super helpful.

Il-Kang Na from Korea commented that they are really interested in industry engagement and confirmed that he would transmit any provided information to their industry, this hopefully would allow some progress in connecting with this project.

### 8. Tag recovery

Joe provided an overview of the work and efforts made to engage the industry during 2020.

Tag rewards doubled to US\$20 per tag. Aims to further increase industry engagement this year, through:

- New rewards aimed at the group rather than the individual level, for those vessels supporting the tagging programme through buoy-sharing.
- Anticipatory alerts and targeting of vessels with high probability of carrying tags.

Joe noted that SPC need good points of contact connections with fleet managers, port agents and canneries. Identifying the best contacts is critical for SPC. Requested that any of the meeting participants with good information on points of contact, particularly for China, Taiwan, please let us know.

SK commented that his experience is that local fisherman finds it difficult to contact the programme coordinators. It is important to liaise with the fleet managers. If SPC can send updates on posters / prize information, he can distribute to fleet managers in country. He can help in that context.

SPC confirmed that they will definitely send promotional information to him.

Simon agreed with SK, that the education component is critical. SPC has learnt that there can be some inertia regarding tag recovery. Timing is crucial. There is currently work focussed on predicting where the likely recipients of tags can be, so that specific and targeted advertising can be undertaken for when tags are likely to be found in specific ports.

Dave Itano asked if, following the FAD closure, there were a spike in recaptures coming into Pago or Majuro?

Simon replied that SPC did a lot of work during CP14 with vessels that participated in buoy sharing during the cruise. This has demonstrated the one to two months lag in when we see fish arriving in particular ports. That spike is beginning to be seen in Pago. The effect is not immediate, a lag of one to two months seems the norm and is not overly surprising given how fishing operations work. There is significant and ongoing work here to target specific vessels and then notify agents in port about high probability vessels (incl. fishing and carrier vessels) for tag returns.

Beau Bigler from Majuro asked if tag recovery had been woven into COVID-19 protocols, at both FFA level and national levels. In RMI, it's currently challenging to contact people at port and on vessels. It is proving very difficult for them to engage in this work at present due to COVID-related restrictions.

Simon replied that it is an important point, as access to most of our ports is not possible. The latest advice from SPC on how transmission can be avoided can be provided, and SPC have been working with a few companies that have contact with their vessels to keep an eye out for tags, and if found, to identify the tag number.

Simon stressed that the best information on tag recovery is when tags are found by observers on board, then at port, then lastly at the cannery. Traceability deteriorates rapidly once on the production line in the cannery.

His perspective is that he hopes that SPC can work closely with the observer programmes and national programmes through the next period, to be able to notify you when high probability vessels are coming into port. While frustrating at the moment, we are learning much and once COVID passes SPC will be in a much better position to manage tag recovery.

#### 9. Other business

## Questions:

#### Simon Nicol:

We have capacity, given the CP cruise this year, to do pursue other aspects of tuna research apart from tagging. Would be great to gain some understanding of WCPFC members' ideas on what they would like achieved during the CP15 cruise. We have about two to three weeks' planning time to incorporate this. Ideas and input welcome.

-Following on, under our COVID safe practices, we are looking for a crew for CP15 departing and returning to Honolulu, with no port calls. This does give us some capacity to allow participation by members. If anyone has a particular interest in joining the cruise, again we need to know about this within the next month, to see how feasible this may be. Note also the 14 days of quarantine is enforced and a number of COVID-19 tests would be required before boarding the research vessel. These rules are likely to apply even if we have vaccination certificates. Please let us know within the next 3 to 4 weeks.

SK:

- SK had a question to Kiyofuji San regarding the Japanese tagging cruises: As we know, one goal of the cruise is to identify and understand the migration of SKJ. How many times has Japan undertaken this tagging cruise?

Kiyofuji San replied that they started this tagging survey in 2011. They are now moving to the tropical region, and the distant water vessel cruise started from 2017. Hopefully they can continue these cruises for two or three more years. Benefit the tagging dataset and stock assessments.

12:20 – Meeting closed and thanks all.