PTTP 2021 Cruise Planning Advisory Committee Meeting

2nd November 2021 10:00-11:00 Virtual: Microsoft Teams

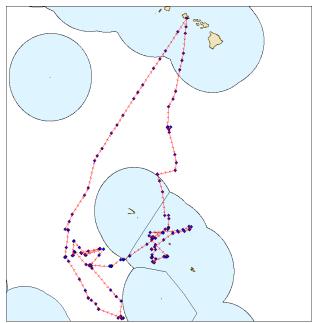
Participation: SungKwon Soh, Elaine Garvilles, Russell Dunham, Dave Itano, Ren-Fen Wu, Beth Vanden Heuvel, Chloe-Ane Wragg, Joe Scutt Phillips, Bruno Leroy, Simon Nicol (Chair), Tiare Nicholas, Lui Bell, Beau Bigler

Welcome and Preliminaries

1. The chair welcomed all participants and presented the Meeting Agenda (Annex 1). No additions or alterations to the agenda were requested.

2021 CP15 Cruise results

2. Bruno Leroy provided a recap of the cruise objectives and briefly presented the main results. The CP15 cruise was implemented within the travel restrictions imposed by the ongoing Covid-19 pandemic, requiring only Hawaiian citizens to compose the scientific team. Nevertheless, the 40-day trip at sea managed to release a total of 7,866 tagged tuna (82 % Bigeye) in the Line Islands waters and the surrounding international waters (see Picture 1). This total includes 166 archival tags deployed in 113 bigeye and 53 yellowfin tunas (see Table 1). Along with the tag releases, biological sampling was undertaken from 334 captured fish including 281 tunas not suitable for tag and release.



Picture 1: CP15 cruise track

| Tag type | BET | YFT | SKJ | others | Total |
|---------------------|------|------|-----|--------|-------|
| Lotek ArcGeo-9TS | 97 | 16 | - | - | 113 |
| Wildlife Comp. MK9 | 43 | 10 | - | - | 53 |
| Satellite (miniPAT) | - | - | - | 3 | 3 |
| Conventional Y13 | 6424 | 1344 | 98 | - | |
| Total fish tagged | 6564 | 1370 | 98 | 3 | 7869 |

Table 1: CP15 tag releases per species and tag type. Satellite tags were deployed on sharks.

3. Bruno Leroy highlighted the fact that the CP15 cruise was highly successful (resulting in the largest number of releases from all CP type cruises), again possible in large part due the great numbers (up to 400) of drifting FADs shared through industry-science partnerships. The dependence of central Pacific cruises with these fishing gears on such dFAD access is clear.

2021 and future tag recovery planning

4. Joe Scutt Phillips provided an overview of tag recaptures from CP15, which have been very positive in the initial months following the end of the cruise. Excellent engagement has been shown by fishing fleets, in particular the US and Korean vessels, who have been contacting us directly with tag recapture information including length data. The scientific benefits of such accurate and immediate tag recapture data are very clear, and the team thanked the industry for its increasing engagement with Pacific tuna science.

5. Increased reward structures for vessels who wished to participate were also again outlined, with US vessels and a number of Chinese Taipei and FSM flagged purse seiners currently included in extra rewards and seasonal bonus raffles. In addition, vessels who share their dFAD buoy positions during the tagging cruise are included in a second raffle each season. Information and season leaderboards can be found at the following website: https://www.spc.int/webtagging/Home/Raffle

6. Any national fisheries departments or fishing companies wishing to support Pacific tuna science were encouraged to contact SPC at: <u>TunaSciencePartnership@spc.int</u>

Planning 2022 PTTP cruise

7. Joe Scutt Phillips reminded participants that skipjack tuna tagging was the critical priority for 2022 in regard to collecting necessary data for the stock assessment that is scheduled for the species in 2025. As the ongoing C19 restrictions are likely to limit 2022 Pacific Island travel possibilities, a number of possible field work options to maximise skipjack releases were outlined.

8. The first of these options was to continue and potential augment current collaboration with Japanese partners and their tagging programme. An equatorial pole and line skipjack tagging cruise is currently planned by the Japanese FRA programme during Jan-Feb 2022.

Previously, SPC has provided tags to be released on behalf the PTTP (with a reciprocal agreement during PTTP cruises), and this something the team would like to continue. Furthermore, discussing the possibility of providing increased charter time, equipment, or science staff on these cruises would be welcome, should it result in increased tag releases. Unfortunately, there were no Japanese representatives present for comment at the meeting.

9. Bruno Leroy presented possible options to undertake skipjack tag releases with the collaboration of the NFD pole and line fleet in the Solomon Islands.

a) Continuous tagging during commercial P&L fishing operations

- This could be organised independently of implementing classic SPC crewed tagging cruise if possibility arise.
- Many crew are familiar with tagging processes
- All gears already available and stored at NFD/Noro base
- 50-100 tag per day easy target with one cradle (yearly min target of 5,000)
- In contact with NFD to confirm the possibility and find arrangement to put process in place with an appropriately skilled crew-member

b) Charter one NFD P&L boat for tagging in Solomon waters

• This will be linked to the possibility to travel to Solomon Islands

10. In this regard, Russel Dunham intervened to announce that the SI Government has scheduled to open the borders in June 2022 with 7 to 10 quarantine days to be applied for persons coming from low to medium risk countries. With vessel days accounting as quarantine time, Russel raised the possibility for one of their vessels to pick-up SPC staff from Noumea. He also said NFD will assure the needed overall maintenance schedule of one of their P&L boats, allowing it to be ready for charter by SPC at the appropriate time. There are currently a good number of accessible bait grounds that are mostly located closed to New Georgia, with possibilities to expand, but it would require agreement with local owners. This seems to be a very possible solution, with communities looking for increased income during the current restricts.

11. The situation will be monitored with NFD collaboration, and it seems plausible to envisage implementing a P&L tagging cruise in Solomon waters around mid-2022, though many unknowns still exist.

c) Implement a Central Pacific type of cruise (CP16)

12. Such a cruise would be orientated to deploy archival tags on skipjack along with some acoustic transmitters to study school cohesion and behavior around dFADs, alongside the typical conventional releases on bigeye and yellowfin tuna. Conventional tag releases in skipjack would be maximised, but likely to remain very low.

13. SungKwon Soh asked if there had been consideration of the experimental design in consultation with the stock assessment team, and why the Papua New Guinea and Solomon Islands area remained so critical for the tagging and release of skipjack tuna. Joe replied that the main reason was due to logistics, this being an area with a still-operating equatorial pole

and line fleet, with good access to bait grounds. However, assessment of the experimental design was an ongoing process with the stock assessment team, the principal users of the PTTP data. Examples of this were the attempt to spread tag releases out over multiple assessment regions and time periods during WP5, and the development of movement models which can quantify processes such as dispersion and mixing.

14. David Itano asked about the number of recoveries for skipjack been tagged with archival tags during the past WP5 cruise in 2019. Bruno Leroy replied that 2 tagged fish have been recovered so far.

Other Business

15. No other business was raised

Next meeting

16. Next meeting date to be determined, but anticipated as Feb-March 2022.

Annex 1. Standing Agenda

- 1. Welcome, Preliminaries
- 2. 2021 CP15 cruise summary results
- 3. Current and planned tag recovery activities
- 4. Requirements and logistics for planning 2022 PTTP cruise
- 5. Potential research cruise options with regional partners
- 7. Recommendations
- 9. Other Business

Annex 2. Terms of Reference WCPFC Pacific Tuna Tagging Programme Cruise Planning Advisory Committee

Purpose

This is a voluntary advisory committee established to assist SPC and WCPFC members with undertaking yearly PTTP Research Cruise planning and implementation. The committee role in this context is advisory only. Participants are expected to assist with setting cruise objectives (e.g. location, tagging targets, biological sampling targets), facilitating permits and access to bait grounds, and organising participation by national officers and observers.

Committee Process

The advisory committee will meet electronically The advisory committee will report annually to the PTTP steering committee Membership of the committee is open to all members of WCPFC and invited experts The advisory committee will work within the annual mandate of the PTTP set by the PTTP steering Committee and WCPFC SC