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Update on the Common Oceans (ABNJ) Tuna Project's Shark and Bycatch Components, 2018-2019

WCPFC-SC15-2019/RP-ABNJ-01

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1 Background

The WCPFC, along with the four other tuna Regional Fisheries Management Organizations (t-RFMOs), has been a partner in the Areas Beyond National Jurisdiction (ABNJ) – also referred to as Common Oceans – Tuna Project (<u>www.commonoceans.org</u>). The objective of this project has been to achieve efficient and sustainable management of fisheries resources and biodiversity conservation in marine areas that do not fall under the responsibility of any one country. Within this set of activities WCPFC committed to leading three components:

- Shark Data Improvement and Harmonization
- Shark Assessment and Management
- Bycatch Information and Management

The first two components involved working in partnership with the Inter-American Tropical Tuna Commission (IATTC) to improve shark monitoring and management across the Pacific. The third component was global in scope and focused on developing a database of bycatch mitigation and management information and conducting workshops to analyse mitigation data.

WCPFC's tasks commenced when an Execution Agreement between the implementing agency, the Food and Agriculture Organization of the United Nations (FAO), and the WCPFC was signed on 25 October 2014. A Memorandum of Understanding between WCPFC and the Pacific Community (SPC) for activities under the ABNJ Tuna Project was signed on 20 January 2015 and was updated in June 2017, February 2018 and March 2019. A Technical Coordinator-Sharks and Bycatch (TCSB), Dr. Shelley Clarke, was hired in June 2014 and was based at the WCPFC Secretariat in Pohnpei, Micronesia until December 2017. At that time, based on a recommendation from the Common Oceans (ABNJ) Tuna Project's mid-term review, the TCSB's Micronesia-based contract was terminated and she was employed directly by FAO in the same role from 12 February 2018 onward.

Under the original programming the project was designed to run through 14 January 2019. However, the funding agency (the Global Environmental Facility (GEF)) granted a no-cost extension to allow the project more time to complete its work within its original budget. To implement this extension, an amendment to the FAO-WCPFC Execution Agreement was signed on 21 February 2019, and the duration of the agreement was extended to 30 September 2019. At that time, all WCPFC-led project activities will cease and administrative close-out procedures will be completed before the end of the year. Under the amended WCPFC-FAO Execution Agreement, the TCSB continues to handle coordination tasks associated with the WCPFC activities from Rome until her contract with FAO terminates on 16 August 2019.

2 Status of Work

2.1 Shark Data Improvement and Harmonization

The objective of this component was to work toward developing a practical and consistent approach to monitoring the status of sharks caught by ABNJ tuna fisheries. It focused on identifying the data deficiencies which inhibit assessment, and thus management, and proposed strategies to obtain more data through field studies and better information return from fisheries.

Highlights for the fifth and final year of the project (July 2018-June 2019) include:

• The WCPFC shark post-release mortality tagging project, co-financed by the Common Oceans (ABNJ) Tuna Project and the European Union, was completed in April 2019. A total

of 117 shortfin mako and silky sharks were tagged in New Zealand, Fiji, New Caledonia and the Republic of the Marshall Islands (Common Oceans (ABNJ) Tuna Project 2019).

- SPC developed new identification materials and training to observer trainers to support better identification of shark and ray species. For observer trainers, key-based approaches to identifying species and associated training materials have been developed and introduced at the regional trainers' workshop. This included expanding the existing Pacific Island Regional Fishery Observer shark species guides to include a key based approach to identification, a greater range of species including the mantas and mobulids, multiple illustrations per species to identify distinguishing features and the key-based approach, and tips for distinguishing between similar species, as proposed in Park et al. (2018). The new guide will be available from September 2019.
- SPC provided Bycatch Data Exchange Protocol (BDEP) tables for WCPFC data for 2018, including updates on data received for 2013-2017, and enhanced the reports to include seabirds and marine mammals to species level where possible (Fitzsimmons et al. 2019).
- A study on operational planning for the collection of shark biological samples was conducted by James Cook University and submitted to SC15 (Chin & Simpfendorfer 2019).

The shark data improvement and harmonization component was awarded a project progress rating of "Highly Satisfactory" at the annual Common Oceans (ABNJ) Tuna Project Steering Committee in July 2019.

2.2 Shark Assessment and Management

The objective of this component was to identify risks and priorities for shark conservation through assessment, using new data generated by the Shark Data Improvement and Harmonization component (see Section 2.1) and improved tools developed under this component as appropriate. It was designed to evaluate the existing management framework and develop measures to strengthen shark management by t-RFMOs.

Highlights for the fifth and final year of the project (July 2018-June 2019) include:

- The third and fourth of four Pacific-wide shark stock status assessments, on silky shark and whale shark, were presented to SC14 and finalized (Clarke et al. 2018, Neubauer et al. 2018).
- The second of four Pacific-wide shark stock status assessments on the southern hemisphere porbeagle shark was presented to and accepted by the CCSBT Ecologically-Related Species Working Group (Hoyle et al. 2017).
- Input to and assistance for the effort to develop a comprehensive shark CMM for consideration at WCPFC15 in December 2018 was provided by the TCSB at the request of the Inter-sessional Working Group-Sharks Chair (WCPFC 2019).
- A study by CSIRO on the development of shark limit reference points begun in the previous reporting period was finalized (Zhou et al. 2019). This study was co-financed by a \$30,000 contribution from the Common Oceans (ABNJ) Tuna Project to supplement WCPFC funding.
- An additional assessment activity on alternative methods applied to the oceanic whitetip shark was funded in support of Project 92 and presented to SC15 (Neubauer et al. 2019).
- An additional data preparation activity for blue and shortfin mako sharks in the Chilean swordfish fishery was undertaken through a research collaboration between Chile's Instituto de Fomento Pesquero (IFOP) and New Zealand's National Institute of Water and Atmospheric Research (NIWA). The product is submitted to SC15 for use in future stock assessments (Quiroz & Hoyle 2019).

The shark assessment and management component was awarded a project progress rating of "Highly Satisfactory" at the annual Common Oceans (ABNJ) Tuna Project Steering Committee in July 2019.

2.3 Bycatch Information and Management

The objective of this component, which was co-led by SPC, was to collate, catalyze and disseminate new information that directs effective management to mitigate impacts on bycatch species including sharks, seabirds, sea turtles and cetaceans. This was aimed at helping to reduce technical uncertainties across a range of stakeholders, allowing t-RFMO discussions to focus on management issues such as cost and feasibility.

Highlights for the fifth and final year of the project (July 2018-June 2019) include:

- Enhancements to the Bycatch Management Information System (BMIS) were made (Fitzsimmons et al. 2019) including:
 - Updating and expansion of references and other site maintenance;
 - Changes in response to peer reviews and workshop input (Common Oceans (ABNJ) Tuna Project 2018);
 - Updating and incorporation of the shark tagging information system (STAGIS);
 - Further work on management and population-level assessment modules;
 - Development of mapping and data visualisation capabilities;
 - Incorporation of the t-RFMO shark browser into BMIS; and
 - Integration of BDEP summaries.
- The joint analysis workshop for shark post-release mortality tagging results was held from 4-6 June 2019 in Wellington New Zealand with experts representing six WCPFC member countries and participating territories, as well as independent academic and technical experts. The workshop analyzed the WCPFC study's data and interpreted the results in conjunction with similar studies in different fisheries (Common Oceans (ABNJ) Tuna Project 2019).
- Utilizing residual funding remaining after the completion of initially programmed tasks, WCPFC contracted SPC in 2018 to undertake WCPFC Project 68 on seabird bycatch estimates (Peatman & Smith 2018); the work was completed in 2019 for presentation to SC15 (Peatman et al. 2019).
- The Technical Coordinator presented BMIS to a WWF regional shark workshop in Karachi, Pakistan in February 2019 and to the International Whaling Commission's Bycatch Mitigation Initiative workshop in Nairobi, Kenya in May 2019.

The bycatch information and management component was awarded a project progress rating of "Satisfactory" at the annual Common Oceans (ABNJ) Tuna Project Steering Committee in July 2019.

3 Planning for a Potential Second Phase

Consultation for scoping of a potential second phase of the Common Oceans (ABNJ) Tuna Project began in December 2018 with an FAO-convened workshop on designing a theory of change. A second programme design workshop was held in April 2019 at which participants presented "capsule" proposals for new activities. Draft theory of change diagrams and narratives, criteria for the selection of proposals, and a succinct statement of the impact of the project's first phase are currently being prepared and shared with potential funders, implementing agencies, partners and stakeholders. Any additional proposals for consideration for a second phase should be forwarded to the Global Common Oceans (ABNJ) Tuna Project Coordinator (<u>Alejandro.anganuzzi@fao.org</u>) by the end of August 2019.

The terminal evaluation of the project has just been initiated and is scheduled for completion by the beginning of 2020. A proposal for a second phase of the project cannot be submitted to the Global Environment Facility (GEF) for consideration until the terminal evaluation of the existing project is finalized.

4 References

Chin, A. and C. Simpfendorfer. 2019. Operational Planning for Shark Biological Data Improvement. WCPFC-SC15-2018/EB-IP-04.

Clarke, S., A. Langley, C. Lennert-Cody, A. Aires-da-Silva and M. Maunder. 2018. Pacific-wide silky shark (*Carcharhinus falciformis*) stock status Assessment and Addendum. WCPFC-SC14-2018/SA-WP-08. Accessed online at https://www.wcpfc.int/file/216441/download?token=z-3zT7J5 and https://www.wcpfc.int/file/218012/download?token=ipk7p5fs

Common Oceans (ABNJ) Tuna Project. 2018. Report of the Workshop on WCPFC Bycatch Mitigation Problem-Solving. WCPFC-SC14-2018/EB-WP-12. Accessed online at https://www.wcpfc.int/file/216437/download?token=LXIb_A6z

Common Oceans (ABNJ) Tuna Project. 2019. Report of the Workshop on Joint Analysis of Shark Post-Release Mortality Tagging Results. WCPFC-SC15-2019/EB-WP-01. Accessed online at <u>https://www.wcpfc.int/node/42977</u>

Fitzsimmons et al. 2019. An update on the Bycatch Management Information System (BMIS). WCPFC-SC15-2019/EB-IP-01. Accessed online at <u>https://www.wcpfc.int/node/42980</u>

Hoyle, S. D., C.T.T. Edwards, M.-J. Roux, S. Clarke, S. and M. Francis. 2017. Southern hemisphere porbeagle shark stock status assessment. WCPFC-SC13-2017/SA-WP-12 (rev. 1). Accessed online at <u>https://www.wcpfc.int/file/157946/download?token=yJnmNMW4</u>

Neubauer, P., Y. Richard and S. Clarke. 2018. Risk to the Indo-Pacific whale shark population from interactions with Pacific purse seine fisheries. WCPFC-SC14-2018/SA-WP-12. Accessed online at <u>https://www.wcpfc.int/file/218497/download?token=10UpFgoI</u>

Neubauer, P., Y. Richard and L. Tremblay-Boyer. 2019. Alternative assessment methods for oceanic whitetip shark. WCPFC-SC15-2019/EB-WP-13. Accessed online at <u>https://www.wcpfc.int/node/43050</u>

Park, T., S. Fukofuka, L. Bell, and N. Smith. 2018. An update on development of observer training materials and training to support the designation of manta and mobulids as WCPFC key species. WCPFC-SC14-2018/EB-IP-11. Accessed online at https://www.wcpfc.int/file/217063/download?token=vPnZZmkE

Peatman, T. and N. Smith. 2018. A short note on the development of WCPFC seabird bycatch estimates for Project 68. WCPFC-2018-SC14/EB-WP-03. Accessed online at https://www.wcpfc.int/file/216200/download?token=xY824 k1

Peatman, T. et al. 2019. Development of WCPFC seabird bycatch estimates (Project 68). WCPFC-2019-SC15/EB-WP-03. Accessed online at <u>https://www.wcpfc.int/node/42979</u>

Quiroz, J.C. and S. D. Hoyle. 2019. Data Preparation for Southeast Pacific blue and shortfin mako sharks. WCPFC-SC15-2019/SA-IP-14. Accessed online at https://www.wcpfc.int/node/43055

WCPFC (Western and Central Pacific Fisheries Commission). 2019. Summary Report, Fifteenth Regular Session of the Commission, Honolulu, USA, 10-14 December 2018. Accessed online at https://www.wcpfc.int/system/files/WCPFC15%20Summary%20Report%202018 final%20issue https://www.wcpfc.int/system/files/WCPFC15%20Summary%20Report%202018 final%20issue

Zhou, S., R. Deng, S. Hoyle and M. Dunn. 2019. Identifying appropriate reference points for elasmobranchs within the WCPFC. WCPFC-SC15-2019/MI-IP-04. Accessed online at <u>https://www.wcpfc.int/node/42963</u>