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(TCC18-2022-RP02)

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14th ANNUAL REPORT FOR THE REGIONAL OBSERVER PROGRAMME

WCPFC-TCC18-2022-RP02

2 September 2022

Paper by the Secretariat

1. This paper presents the 14th Annual Report of the WCPFC Regional Observer Programme (ROP), for 2021 for the information and consideration of TCC18.

Introduction

2. The ROP was established pursuant to Article 28 of the Convention and has the stated function “to collect verified catch data, other scientific data and additional information related to the fishery from the Convention Area and to monitor the implementation of the conservation and management measures adopted by the Commission.”

3. Paragraph 2 of Article 28 of the WCPFC Convention states that: “The observer programme shall be coordinated by the Secretariat of the Commission and shall be organized in a flexible manner which takes into account the nature of the fishery and other relevant factors.”

4. Paragraph 3 of CMM 2018-05 for the ROP states that: “The Secretariat of the Commission shall provide an annual report to the Commission with regard to the Commission ROP and on other matters relevant to the efficient operation of the programme.”

5. Paragraph 13 of CMM 2018-05 on the “Role of the Secretariat” lists several ROP activities that the Secretariat is required to carry out.

6. This paper reports on the several aspects of the ROP as required by the Convention, CMM 2018-05 and the outcomes of WCPFC18.

7. The structure of the Report is as follows:

- General
- Available Observer Data and observer coverage
- Authorised Observer Providers to the ROP and update on ROP audits
- ROP Compliance-related Matters
- Data and monitoring through the ROP of the Commission’s CMMs intended to minimize impacts of fishing on species of special interest including non-target species.
- Observer Safety Matters
- Support from the Secretariat to National and Regional Observer Programmes
- Cross Endorsement of observers to collect data on behalf of other tuna RFMOs
- Implications of COVID-19 Intersessional decisions and travel restrictions – as of 1 September 2022
- Secretariat observations
- Administration notes
- Recommendations

Annex A - Counts of cases in the compliance case file system based on ROP observer data by year as at July 2022

Annex B - Data and monitoring through the ROP of the Commission’s CMMs intended to minimize impacts of fishing on species of special interest including non-target species.

General

8. The year 2020 saw the implementation of several suspensions of observer coverage requirements due to the “COVID-19 Pandemic”, which continued throughout 2021. COVID made it challenging to move observers between countries because of travel and flight limitations and internal entry restrictions imposed by various countries. Despite the problems of moving observers about there were 105 purse seine trips reported in 2021 which is about 8% of the normal 100% coverage. Whilst the ROP longline catch data was reduced to 512 trips domestic data continued to be collected by a few national programmes. This report covers the information and data that was collected by observers in 2021. (Source: **TCC18-2022-IP02** *Status of Observer Data Management*)

9. At the time of preparing this paper, several Pacific Island national and subregional programmes have lost experienced observers because they were unable to be employed within the programme throughout the 32 month purse seine and at-sea transshipment observer coverage suspension. Many of these observers found employment elsewhere and most are not expected to return to observer work. Therefore, many programmes will require additional training so they have sufficient observers to accommodate the return of 100% coverage of purse seiners and at sea transshipment carriers that will be required by early 2023. Refresher training will be required for current observers who are out of practice on their data collection roles; comprehensive debriefing will become crucial in checking the information collected is accurate and help support the observer’s confidence as a ROP Observer.

10. The Secretariat continued to support observers programmes where possible and assisted with online training and advice given on request to help CCM programmes with problems associated with COVID and the effects it had on their observer programmes. The Secretariat continues also to assist national and sub-regional observer programmes on matters regarding provider and observer roles in relation to Commission requirements of CMMs, data collection issues and other ROP observer related issues that may occur during COVID-19. The Secretariat continued to utilize ROP observer data in the online “WCPFC online Compliance Case File System” (CCFS) and in other papers and reports prepared for WCPFC meetings.

11. Since the 13th annual ROP report in 2020, all observer-related meetings that the Secretariat participated in 2021 were held via online “Zoom”. There was no travel by the Secretariat’s Observer Programme Coordinator and Data Quality Officer during the year 2021, and they participated in several observer related meetings, workshops and training, such as the Regional Observer Coordinators Workshop, PNA Observer Coordinators Workshop, online observer training in Vietnam, and all online Commission meetings plus other relevant online meetings for IWG issues. ROP audits were organized so that they could be completed electronically using a procedure developed for online auditing of ROP programmes. The observer programme coordinator was pleased to attend the first face to face meeting for WPEA countries held in Brisbane, Australia. in June 2022.

Data Entry Staff “Pohnpei”

12. The Secretariat currently employs two data entry staff, who primarily enter data collected by the ‘FSM Observer Programme’ into SPC databases, and on behalf of SPC. When this is completed, the data entry staff continues to enter observer data sent by SPC to the Secretariat. In 2021, as there was less observer data sent by SPC, so the Secretariat assigned the staff to assist with other Compliance and MCS data entry work and meeting support tasks. The Data Quality Officer and the ROP Coordinator regularly offer advice and assistance to the team on observer data entry problems and questions.

Available Observer Data and ROP Coverage

ROP Data Fields

13. There were no additions to the minimum standard data fields in 2021/22. The list of minimum standard data fields are available on the WCPFC website: - <https://www.wcpfc.int/regional-observer-programme>. As was noted in ROP Report 13 last year, a few CMMs have requirements that have to be followed by vessels, however there are insufficient observer data fields collected to monitor these requirements. There were no changes to the Standard Data fields of the Commission since 2016, but new CMMs have been introduced requiring changes to observer data field collection if the observers are to assist in monitoring implementation of these measures. This year TCC agreed in the TCC workplan 2022 – 2024 to consider some improvements to the ROP minimum standard data fields. The paper **TCC18-2022-17** *Supporting paper for TCC18 consideration of potential improvements to*

the ROP minimum standard data fields for impacts of fishing on whale sharks and cetaceans provides further supporting information around this topic.

14. To date the Commission still has not defined a set of specific approved minimum ROP required data fields for observers to collect when monitoring high seas transshipment activities. Although a set of forms² that could be used as guidelines were developed on request by some programmes. The Secretariat understands that SPC and FFA through the Data Consultative Committee are working on the development of a set of minimum data fields for Pacific Island observer programmes to collect whilst deployed on carrier vessels operating in the Convention Area, including when involved in high seas and in port transshipments. It should be noted that the paper **TCC18-2022-20 TS-IWG Chairs' Discussion paper for TCC18** specifically addresses this topic.

15. The paper **TCC18-2022-IP02 Status of Observer Data Management** indicates the amount of observer data that has been entered and highlights CCMs with fleets active in the WCPFC Convention Area (WCPFC-CA), it is noted that the lower coverage by most fleets is due to the suspension of coverage requirements for purse seiners by the Commission because of COVID-19 restrictions. The suspension of observer coverage did not prevent some CCMs placing observers provided it was safe to do so and these programmes also made sure that the observer could be repatriated to their home port. This year there are additional tables and figures that SPC has helpfully included in this paper to indicate the spatial coverage of purse seine and longline observer coverage over recent years, and which spatial areas there is lesser observer coverage that can be used to monitor implementation of measures.

ROP Observer Coverage 2012-2021

16. Table 1 represents the observer trips and observer sea days between 2012 to 2021, the data collected on these trips is used for the rest of the tables in this report. Noting that in the 10-year period 2012-2021 there were 19642 observer trips made and that observers spent 696047 observer sea days collecting data. The average observer trip time on purse seiners pre COVID (2019) was around 35 days, in 2020 this increased to 42 days per trip and further increased to 73 days in 2021. The increase time onboard vessels were due to COVID-19 restrictions in many countries and the inability of observers to travel, therefore staying aboard for longer periods until they could get back to their home port or a port that enabled them to disembark for travel. It is expected that when coverage recommences in 2023 that trip time will reduce back to near pre COVID levels.

17. Longline observer day coverage for the period 2012-2021 was approximately 35 days a trip, in 2021 this dropped to 23.5 days, this was due to COVID-19 where many long liners were not able to be observed as the ability to place and retrieve observers was difficult, therefore the majority of the long line coverage in 2021 came from observers placed on vessels that were based in a few countries and departed and returned to the same port.

Table 1 2012 to 2021 Total Observer PS & LL Trips and Sea days.

Trip Year	No of PS Trips	Observer PS Sea days	No of Sets	Average days per PS trip	No of observed LL Trips	Observer LL Sea days	Number of Hooks observed	No of sets	Average days per LL trip	Total Observer Trips	Total Observer Sea Days
2012	1197	40998	32170	34.3	570	17151	17655882	9984	30.1	1767	58149
2013	1409	50459	38280	35.8	623	17338	21613971	14023	27.8	2032	67797
2014	1494	52247	37714	35.0	650	19447	20160244	11894	29.9	2144	71694
2015	1443	49391	34443	34.2	768	24323	23927617	13121	31.7	2211	73714
2016	1472	51196	33754	34.8	742	24746	26803931	13715	33.4	2214	75942
2017	1387	52326	36011	37.7	847	35963	39148312	19005	42.5	2234	88289
2018	1731	59713	42497	34.5	876	37759	44996677	21527	43.1	2607	97472
2019	1766	57429	43276	32.5	856	34572	45626658	20588	40.4	2622	92001
2020	606	25010	14616	41.3	588	26248	34978903	15321	44.6	1194	51258
2021	105	7688	3730	73.2	512	12043	15182891	6324	23.5	617	19731
Total	12610	446457	316491	35.4	7032	249590	290095086	14550	35.5	19642	696047

* Data as of August 4, 2022.

² The guideline published by the Secretariat that could be considered by ROP observer programmes when developing their monitoring programmes for transshipment activities, including in high seas waters: = Form FC1 - Fish Carrier General Description; Form FC2 - Observer at Sea Transshipment Report; Form FC3 - Catch Destination Form (access from <https://www.wcpfc.int/regional-observer-programme>)

Observer Coverage purse seine vessels 2021

17. Observer coverage information for purse seine vessels is supplied by observer, flag CCMs, and some from providers for purse seine vessels when fishing in the Convention area 20N – 20S. Table 2 (below) shows reported observer trips for 2021, the table shows observer placements for purse seine fleets that were able to make observer placements. Due to COVID restrictions and the agreement by the Commission to suspend the obligation to meet 100% observer coverage requirement from March 2020, many fleets found it difficult to pick up and disembark observers where they were able to travel safely back to their countries. The table indicates that the Philippines continued with their coverage during 2021 and PNG also had limited observer purse seine coverage across the year.

Observer Coverage longline vessels 2021

18. The minimum ROP coverage rates for longline are set at 5%, which is based on one of the approved and agreed metrics for longline coverage. As per CMM 2018-05, which replaced CMM 2007-01, the 5% ROP coverage rate was to be achieved by 30 June 2012. Prior to COVID many fleets had achieved this coverage rate. However due to COVID the overall observer coverage on total effort measured in hooks (both ROP and non-ROP) and sea days was reduced, noting that most data came from fleets that fished domestically, and other fleet had very little coverage for ROP trips in 2021 (see Table 1 above).

Table 2 – Available ROP Purse Seine Observer Placement information by fleet Jan - Dec 2021

Flag	RFV Vessels	Active Vessels	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
EU-Spain	33	2	2	2	2	0	0	0	0	0	0	0	0	0
KR	53	1	1	0	0	0	0	0	0	0	0	0	0	0
PG	36	4	0	0	0	1	2	3	2	2	2	0	0	0
PH	401	44	27	27	33	34	38	35	10	3	5	25	27	26
Total	523	51	30	29	33	35	40	38	12	5	7	25	27	26

*Data as available 4th august 2022

Authorized Observer providers to the ROP and update on ROP audits

19. A list of ROP authorised observer programmes and their National Observer Coordinator contacts are available on the WCPFC website (<http://www.wcpfc.int/regional-observer-programme>); National Observer programmes are reminded of the requirement (CMM 2018-05 paragraph 13) to keep the Secretariat informed of any changes to contact information for coordinators. The list has also been made more member friendly so that members can update their own information through their national CCM portal on the WCPFC website, however the Secretariat has observed that observer programme contact information was infrequently updated by programmes. The ROP Observer Coordinators list is an extremely important list of contacts for observers, vessels, fishing companies and flag states, and members are urged to ensure their observer programme contacts remain current and up to date.

20. The Secretariat continued to audit required minimum standards in ROP observer programmes and has continued the 3rd phase of audits in 2021/22. It was intended to visit countries due for audit in 2021 however, because of the FSM travel border restrictions and the commencement of the WCPFC meeting period, the online auditing process was used for countries scheduled to receive audits in 2021/22.

ROP Compliance related matters

Observer Trip Monitoring Summary

21. The “Observer Trip Monitoring Summary” is part of the minimum data standards of the Commission; the Pacific Island observer programmes use workbooks that contain a general form “GEN -3” that is used as a “Trip Monitoring Summary”. The form is not a written report but is an indicator of activities allegedly conducted by vessels and witnessed by the observer. The observer indicates by circling ‘YES or NO’ to the questions on the form. A response of ‘YES’ is an indicator only and does not indicate that there has been any infringement by a vessel. Often the observers will include in their written report the reasons “Yes” were circled. Table 3 below represents data available from 105 Purse seine and 512 longline trips across all fishing fleets for 2021. The data shows the number of reports made by observers when “Yes” was indicated. Of concern are trips where observers

reported obstruction, intimidation and interference and not being accommodated properly. Despite a low coverage there was a high number of reports of vessels inaccurately recording retained and discarded target and by catch species in their vessel catch logs. (LC-a to LC-e).

22. At WCPFC14, the Commission noted that TCC13 did not consider the information contained in the ROP Pre-notification List for assessing any obligations for which it was relevant, except for those cases related to observer interference or obstruction. WCPFC14 approved that this process be followed in future years.

23. Advance notification to flag States of alleged infringements reported on observer trip monitoring summary continue to be delivered through the upgraded WCPFC online compliance case file system as Observer Obstruction Alleged Infringements (OAI), Marine Pollution (POL) and Pre-notification (PAI) cases. Table 4 (see page 7 below) provides summary information related to the outcomes of flag State investigations of observer obstruction alleged incidents based on Observer Trip Monitoring indications. Annex B Table 22 provides summary information related to the outcomes of flag State investigations of Marine Pollution incidents based on Observer Trip Monitoring indications (see page 24 below).

Table 3. – 2021 Observer Trip Monitoring Summary Indications (as at 3 August 2022).

GEN-3 Codes	Observer Trip Monitoring Summary		
Observer Rights		PS	LL
RS -a	Did the operator or any crew assault, obstruct, resist, delay, refuse boarding to intimidate or interfere with observers in the performance of their duties	1	3
RS -b	Request that an event not be reported by the observer	2	1
RS -d	Did the operator fail to provide the observer, while on board the vessel, at no expense to the observer or the observer's government, with food, accommodation, and medical facilities of a reasonable standard equivalent to those normally available and medical facilities of a reasonable	1	3
National Regulations			
NR-a	Fish in area16s where it is not permitted to fish	0	1
NR-c	Use a fishing method other than the method the vessel was designed or licensed	11	0
NR-e	Transfer or transship fish from or to another vessel	2	0
NR-g	fail to stow fishing gear when entering areas where they were not authorized to fish;	4	21
WCPFC CMMs			
WC-a	Fail to comply with any Commission Conservation and Management Measures	6	0
WC-b	High-grade the catch	0	0
Log Sheet Recording Position & Catch			
LP-a	Inaccurately record vessel position on vessel log sheets for sets, hauling and catch	0	0
LP-b	Fail to report vessel positions to countries, where required when entering and leaving an EEZ (crossing to or from an EEZ into or out of the High Seas)	0	3
LC-a	Inaccurately record retained "Target Species" in the Vessel logs	13	0
LC-b	Inaccurately record "Target Species" Discards	21	20
LC-c	Record species inaccurately	23	55
LC-d	inaccurately record By catch species discards;	25	0
LC-e	Inaccurately record retained bycatch Species.	6	65
Species of Special interest			
SI-b	Interact with non-target species	45	21
Pollution			
PN-a	Dispose of any metals, plastics, chemicals, or old fishing gear	5	64
PN-b	Discharge any oil	3	17
PN-c	Lose any fishing gear	0	1
PN-d	Abandon any fishing gear	1	6
PN-e	Fail to report any abandoned gear	0	0
Sea Safety			
SS-a	Fail to monitor international safety frequencies	0	1

*Data entered as of August 4th, 2022.

Current approach used to create CCFS cases using observer data

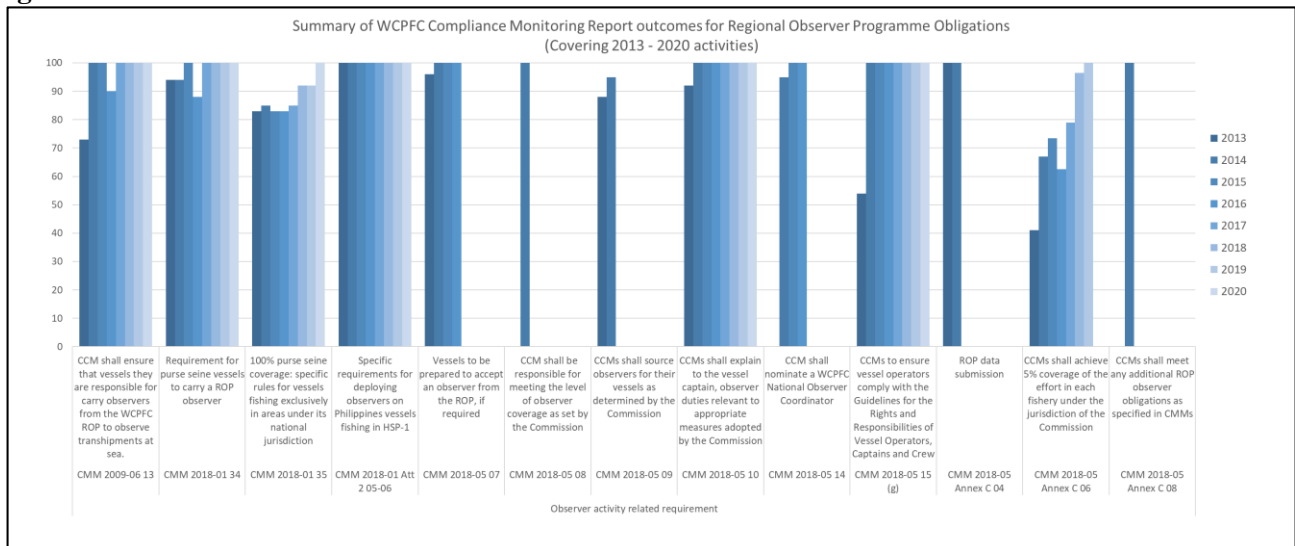
24. Since 2016, ROP observer data has been used in the CCFS to assist CCMs with tracking alleged violations by their flagged vessels. The Compliance Monitoring Scheme measure confirms which CCMs should have access to a case, that notifications should be sent when new cases are created and guides what the aggregated summary tables generated from the CCFS should contain and what information flag CCMs are to provide in response to each case related to their vessels. Updates to the CCFS with new cases based on ROP data occurs periodically and through procedures that have been developed by the Secretariat and SPC-OFP. The creation of cases is in part through scripted queries that the Secretariat runs over the ROP observer data. The TCC18 Paper by the Secretariat *Update on improving the WCPFC online compliance case file system and proposed approaches for receiving CCM feedback* ([WCPFC-TCC18-2022-15](#)) provides an update on the recent upgrade of the CCFS, including on the trial messaging tool to track observer report requests.

25. Annex A Table I provides the annual counts cases based on ROP observer data and notified for flag CCM investigation for the period 1 January 2015 – July 2022. This summary provides an indication of the scope of the continuing challenges that some CCMs have reported in accessing observer reports from ROP observer providers, some CCMs appear to have issues with obtaining the ROP observer report necessary to complete their flag CCM investigations cases notified in the ‘WCPFC Online Compliance Case File System’ based on ROP observer data. The Secretariat notes there have been recent improvements in CCFS records of observer reports received in response to cases in the CCFS.

Review of ROP implementation by applicable CCMs under the Compliance Monitoring Scheme (CMS) 2014 - 2021

26. Figure 1 below provides an overview of the outcome of the evaluation of ROP-related obligations under the CMS over recent years. Previously CMM 2007-01 now replaced by CMM 2018-05 indicates the implementation of observer coverage requirements that has been evaluated annually by the Compliance Monitoring Scheme since 2014 for the Reporting Year 2013 (RY2013) to 2021 (RY2020). For example, CMM 2007-01 paragraph 13 (now CMM 2018-05 paragraph 13) shows that consistently most ROP observer programs have provided some advice of their points of contact for their programmes. In recent years there has been small improvements in the implementation by applicable flag CCMs of ROP observer coverage requirements, just over half of applicable flag CCMs are fully implementing the longline ROP coverage rate of 5% and/or associated reporting requirements. There is improvement in recent years for CMM 2018-05 paragraph 15(g) (formerly CMM 2007-01 paragraph 14(vii)) since the notification of “observer obstruction alleged infringements” through the WCPFC online compliance case file system.

Figure 1



Observer Welfare and Safety Matters

27. In support of ensuring observers welfare and safety in their discharge of their duties, the WCPFC has required through the Conservation and Management Measure for the ROP, that CCMs are to ensure that their vessel operators comply with specified Guidelines (CMM 2018-05 15(g), and previously CMM 2007-01 14(vii)). The Observer trip monitoring summary provides an opportunity for observers to record an indication when the discharge of their duties has been obstructed (RS-A, RS-B and RS-D). Advance notification to flag States of alleged infringements reported on observer trip monitoring summary continue to be delivered through the upgraded WCPFC online compliance case file system as Observer Obstruction Alleged Infringements (OAI). Table 4 provides a summary of the outcomes of investigations by flag CCMs of ROP observer reported alleged observer obstruction incidents notified in ROP observer data for the period 1 January 2015 – 1 July 2022.

Table 4. Summary of Observer Obstruction Alleged Infringement cases (related to (CMM 2007-01 14(vii) and CMM 2018-05 15(g)) notified in the WCPFC online Compliance Case File System that were based on Observer Trip Monitoring Summary data (2016 – 2021)

4a. RS-A: Did the operator or any crew member assault, obstruct, resist, delay, refuse boarding to, intimidate or interfere with observer in the performance of their duties

	NEW CASE	Investigation IN PROGRESS	Investigation COMPLETED			Grand Total
			No infraction	Infraction - warning	Infraction - sanction	
2016	0	14	12	0	3	29
2017	3	7	7	2	1	20
2018	0	14	14	1	0	29
2019	9	21	1	0	3	34
2020	2	10	0	0	0	12
2021	1	0	0	0	0	1
	15	66	34	3	7	125
	15	66	34	3	7	125

4b. RS-B: Request that an event not be reported by the observer

	NEW CASE	Investigation IN PROGRESS	Investigation COMPLETED			Grand Total
			No infraction	Infraction - warning	Infraction - sanction	
2016	0	12	3	0	6	21
2017	1	4	3	2	2	12
2018	1	12	9	1	1	24
2019	5	17	1	0	1	24
2020	3	7	0	0	0	10
2021	1	0	0	0	0	1
	11	52	16	3	10	92
	11	52	16	3	10	92

4c. RS-D: Did the operator fail to provide the observer, while on board the vessel, at no expense to the observer or the observer's government, with food, accommodation and medical facilities of a reasonable standard equivalent to those normally available and medical facilities of a reasonable standard equivalent to those normally available to an officer on board the vessel

	NEW CASE	Investigation IN PROGRESS	Investigation COMPLETED			Grand Total
			No infraction	Infraction - no sanction	Infraction - warning	
2016	0	3	9	0	1	14
2017	2	3	1	0	0	6
2018	0	5	11	0	1	18
2019	7	12	1	1	1	22
2020	4	3	0	0	0	7
	13	26	22	1	3	67
	13	26	22	1	3	67

28. Since 2017, the WCPFC has had a dedicated CMM for the 'Protection of WCPFC Regional Observer Programme Observers' (CMM 2016-03/2017-03) and indicate the requirements that observer providers, flag States and vessels are to follow if an observer dies, is missing or presumed fallen overboard, suffers from a serious illness or injury that threatens his or her health or safety, or if an observer has been assaulted, intimidated, threatened, or harassed such that their health or safety is endangered.

29. To date there have been 5 incidents reported to the Secretariat in reference to CMM 2017-03, three (3) incidents related to the calendar year 2017 and two (2) for 2020 calendar year. A summary of reported incidents and the flag CCM investigation response is provided in Table 5 below.

Table 5: Summary of outcome of flag CCM investigations of alleged infringements related to observer safety and CMM 2016-03/2017-03

	Investigation in progress	Flag CCM Investigation Completed No infraction	Grand Total
CMM 2016-03-03-06			
2017	1	2	3
CMM 2017-03-03-06			
2020	1	1	2
Grand Total	2	3	5

30. To support the implementation of CMM 2016-03/17-03; WCPFC13, agreed on new minimum standards adopted for ‘Regional Observer Programmes to support safety of observer which commenced in February 2017. The Secretariat has been checking during ROP audits that observer programmes are duly ensuring that the safety measures for observers are in place. The standard agreed regarding the issuing of independent two-way communications devices is well supported and introduced in many of the ROP’s by the date of required implementation. Programmes are reminded about the requirements of the agreed safety standards adopted by the Commission for the ROP.

31. CMM 2017-03 Para 14 states “The Technical and Compliance Committee and the Commission will review this Conservation and Management Measure no later than 2019, and periodically thereafter. Notwithstanding this provision CCMs may submit a proposal to amend this CMM at any time.” To date there has been no changes to CMM 2017-03.

Data and monitoring through the ROP of the Commission’s CMMs intended to minimize impacts of fishing on species of special interest including non-target species

32. The ROP was established pursuant to Article 28 of the Convention and includes as its functions to collect verified catch data on WCPO fisheries and to monitor the implementation of the conservation and management measures adopted by the Commission. The Commission has adopted several Conservation and Management Measures intended to minimize the impacts of fishing on species of special interest including non-target species, and there are also guidelines that stipulate best practice handling of certain non-target species. Many of these Conservation and Management Measures task the Secretariat to provide summary reporting based on observer data of the interactions and catches of species of special interest such as Sea Birds, Cetaceans, Turtles, Whale Sharks, Silky and Oceanic White Tip Sharks and recently Mobulid Rays. All catches are a concern to Commission members and different mitigation methods and guidelines have been recommenced and developed to assist in reducing catch and enhancing life status if caught (see supplementary information on Conservation and Management Measures at this link <https://www.wcpfc.int/conservation-and-management-measures>) For the years 2020 and 2021 there were reduced catches of species of special interest reported, and this is most probably due to COVID restrictions on observer placements. **Annex B** contains the data, figures, and monitoring of the Commission’s CMMs intended to minimize impacts of fishing on species of special interest for the period 2012 to 2021. Summary information as recorded in the WCPFC online compliance case file system is also included for each species, for the tropical tuna purse seine fishery FAD closure 2015 – 2021 and for marine pollution indications through the Observer Trip Monitoring Summary reporting.

Support from the Secretariat to National and Regional Observer programmes

33. The last physical meeting that the Secretariat Regional Observer Programme Coordinator (ROPC) attended before COVID restrictions were applied was the Regional Observers Coordinators Workshop (ROCW) February 2020 hosted by the Fisheries Division in Tuvalu. Due to COVID no physical meetings were attended in 2021. Although the ROP section did have a face-to-face audit discussion with the FSM National Oceanic Resource Management Authority (NORMA) observer programme. The staff of the observer section attended many virtual meetings via Zoom, this includes all Commission, subsidiary body, IWG’s meetings, plus several other relevant meetings, some of these meetings would not normally be attended physically.

34. In 2022, the Secretariat’s ROPC took part in a meeting to review the training of observers in both Indonesia and Vietnam through the West Pacific East Asia Project / Improved Tuna Monitoring (WPEA / ITM). Training has been organised to occur in late 2022 for Vietnam and Indonesia on a date to be determined. The training will be conducted face to face.

35. Initially as part of the first WPEA project Philippines commenced the training of their observers in 2009, since that time they have regularly held training sessions every year and have trained approximately 600 observers and 28 debriefers to WCPFC standards; These debriefers and observers are spread across the many Philippine ports from where fishing vessels operate. Because of strict COVID restrictions there was no training held during 2020 and 2021 and no observers were trained; Observer training courses recommenced in 2022 and Philippines made observer placements on vessels. SPC developed observer data forms and formats that are used during Philippine training, observers also use them when they collect data on board vessels. The Secretariat has continually assisted with this training programme as part of the WPEA project. Philippine observers are used domestically and on the high seas.

Cross Endorsement of ROP Observers to collect data on behalf of other tuna RFMOs.

36. There are many observers from Pacific Island countries who have IATTC/WCPFC cross endorsement qualifications. These observers can conduct work in both ‘Convention Areas’ on the same trip, on vessels approved to fish in both convention areas. Before COVID-19, “Cross Endorsed” (CE) trained observers were in high demand with vessels wishing to cross over to the IATTC area on a regular basis. Since placement on purse seine vessels has been limited because of the suspension of the requirement to meet the 100% coverage requirements in the tropical tuna CMM; very few observer placements have been made on purse seiners, especially by the fleets that cross over to fish in IATTC waters. The availability of cross endorsed observers will be required when the placement of observers recommences. Pre COVID, USA purse seiners were the dominant fleet asking for CE certified observers to be placed on their vessels. The CE programme was initiated to save approved vessels from having to carry IATTC observers and a WCPFC ROP observer if the vessel departs from a WCPO port and decide to fish both in the WCPO and in the Eastern Pacific. No request for CE observers was made in 2021 and 2022. Table 5 shows previous years CE placements.

Table 5 ROP Trips with fishing activities in the WCPO & EPO by year by flag and Provider

Flag CCM	ROP Provider	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total
Ecuador	KI	1	9	3	0	0	0	0	0	0	0	0	13
El Salvador	KI	0	4	3	3	0	0	1	0	0	0	0	11
EU- Spain	VU	0	0	0	0	0	0	0	0	1	0	0	1
USA	FFA	1	0	3	7	12	14	14	22	6	0	0	79
Total 2012 - 2022		2	13	9	10	12	14	15	22	7	0	0	104

37. A Transshipment Memorandum of Cooperation (MoC) was agreed between WCPFC and the Commission for the Conservation of Southern Bluefin Tuna (CCSBT) in 2016 and was subsequently signed in April-June 2017. This MoC provides for High Seas transshipments involving southern bluefin tuna (SBT) to be carried out within the High Seas of the WCPFC Convention Area if observed by CCSBT - endorsed WCPFC Regional Observer Program (ROP) transshipment observers. At the time of writing, there is no further progress to report on the options available to for WCPFC and CCSBT to try to facilitate implementation of the Transshipment MoC

Implications of COVID-19 Intersessional decisions and travel restrictions.

38. Many observer programmes have indicated that they have lost observers during the COVID restrictions. A few programmes did not lose any observers and a few observers managed to continue working as observers, a few programmes had some level of local coverage whereas others had no coverage or work for their observers. There may be a need to train extra observers when it returns to previous coverage levels in 2022. A couple of programmes have held observer courses during the pandemic months to boost their numbers when coverage eventually returns. In June 2022, the Commission has agreed that the requirements for 100% coverage on purse seine vessels and for at-sea transshipment will resume from 1 January 2023. Since June 2022, during the transitional period, many placements have recommenced on transshipment vessels and some purse seine vessels.

Secretariat observations

39. The year 2020/21/22 were disappointing years for many observer programmes with observers being stranded, not being able to work and many having no income. Many countries rallied behind their observers to give them some work opportunities in other areas, a few countries continued to place observers on vessels operating in their own EEZ and others just closed all together. Unfortunately, the years 2020 to 2022 will be like no other, observer roles, trips and travel were suspended and there is hope things will get back to some form of normal coverage in 2023. The Secretariat continues to monitor national programmes and developed online audit procedures for the audits. It is hoped that in 2023 Audits can once again be carried out face to face. Many meetings were held online which enabled many observers to attend meetings they would normally not attend.

40. The COVID-19 pandemic started early in 2020 has had a significant impact on observers in the Western Central Pacific. Overall, the 25 observer programmes that are part of the Commission ROP had operations curtailed and were not able to operate in a manner that enabled them to place and retrieve observers in a safe manner. A few programmes continued to operate, these were mainly long line vessel observer programmes that had vessels operating in and out of the same port in their country. Purse seining and transshipment had very little observer coverage for the year 2021. It is pleasing that since the Commission Special Session in June 2022, the Secretariat has seen in email communications collaboration between ROP observer providers and flag CCMs that has successfully led to the facilitation of observer placements on most, if not all, at-sea transshipment vessels as well as some purse seine vessels.

Administrative notes

41. For several years, the Secretariat has compiled an updated booklet of the current Conservation and Management Measures and Resolutions that are relevant to ROP observers. It was decided at the WCPFC15 that the booklet no longer be published as a paper printed booklet. However, the booklet will still be compiled each year and year 2022 booklet is placed on the WCPFC Website, where it can be downloaded for electronic use, or if required for a printed copy. <https://www.wcpfc.int/regional-observer-programme>

42. General information on the WCPFC ROP, including ROP Minimum Standards for Observer Programmes, the list of ROP Observer Programmes and the ROP Minimum Data fields, are publicly available at this link: <https://www.wcpfc.int/regional-observer-programme>. This includes an updated set of guidelines on WCPFC ROP requirements as requested by TCC13.

43. The Secretariat welcomes TCC's focus through the TCC Workplan 2022 – 2024 to consider potential improvements to the ROP minimum standard data fields commencing in 2022. The Secretariat has prepared a paper to support the commencement of this work **TCC18-2022-17 Supporting paper for TCC18 consideration of potential improvements to the ROP minimum standard data fields for impacts of fishing on whale sharks and cetaceans** which suggests that the reactivation of the IWG-ROP could usefully assist with this TCC task. The Secretariat has also identified in this Report and previous years Reports, that there are aspects of a number of CMMs where ROP data fields could be included or refined so that observers can more fully assist in efforts to support monitoring the implementation of WCPFC CMMs.

Recommendation

44. TCC18 is invited to note and discuss the 14th Annual Report of the WCPFC Regional Observer Programme.

Counts of cases in the compliance case file system based on ROP observer data by year showing count of cases by Investigation Status and counts of cases where ROP Observer Report was received (based on ROP data available for the period 1 January 2015 – 1 July 2022, and updates from CCMs received as at July 2022)

Table I: Counts of cases in the compliance case file system based on ROP observer data or Observer Trip Monitoring Reports by year showing count of cases by Investigation Status and counts of cases where ROP Observer Report was received

FAI: FAD Sets Alleged infringements

OAI: Observer Obstructions Alleged Infringements

SHK: Shark Catch Alleged Infringements

CWS: Cetacean and Whale Shark purse seine fishery interactions

POL: Marine Pollution Incidents

PAI: ROP Pre-Notification Issues

	Total Compliance			Total ROP Observer	
	NEW CASE	Investigation IN PROGRESS	Investigation COMPLETED	Case Count	Report received
2015	6	200	391	597	187
FAI	6	11	238	255	27
OAI	0	55	96	151	100
SHK	0	134	57	191	60
2016	248	906	572	1726	596
CWS	1	250	227	478	275
FAI	0	7	222	229	62
OAI	0	29	35	64	35
PAI	247	586	78	911	203
SHK	0	34	10	44	21
2017	578	574	804	1956	518
CWS	74	310	177	561	274
FAI	25	32	589	646	112
OAI	6	14	18	38	24
PAI	465	204	8	677	86
SHK	8	14	12	34	22
2018	818	770	271	1859	551
CWS	68	332	181	581	253
FAI	3	30	23	56	19
OAI	1	31	39	71	50
PAI	740	334	11	1085	169
SHK	6	43	17	66	60
2019	1946	1186	164	3296	455
CWS	435	595	127	1157	203
FAI	54	152	7	213	12
OAI	21	50	9	80	25
PAI	1093	291	14	1398	153
POL	338	74	2	414	55
SHK	5	24	5	34	7
2020	684	329	16	1029	162
CWS	175	177	13	365	97
FAI	2	2	0	4	2
OAI	9	20	0	29	12
PAI	364	101	0	465	35
POL	132	23	0	155	12
SHK	2	6	3	11	4
2021	55	0	0	55	0
CWS	28	0	0	28	0
OAI	2	0	0	2	0
PAI	20	0	0	20	0
POL	5	0	0	5	0
Grand Total	4335	3965	2218	10518	2469

Data and monitoring through the ROP of the Commission's CMMs intended to minimize impacts of fishing on species of special interest including non-target species.

1. Table 1 indicates the codes used in this Annex. The information in this report is held by SPC and all figures represents raw data collected by the observers that have been debriefed and checked for mistakes or errors

Table 1 Life Status & Gear Codes used in Annex B

Codes	Explanation	Codes	Explanation
R	Retained whole or processed	U	Unknown Condition when released or discarded.
A	Alive when released or discarded	PS	Purse-seine
D	Deceased when discarded	LL	Longline

Whale Shark Interactions in purse seine fisheries as reported by ROP Observers.

2. Whale shark interactions between purse seine vessels in the 'WCPO' have been monitored by Pacific Island observer programmes since the early 1990's, and the CMM 2019-04 (which replaced CMM 2012-04 on 1st Nov 2020) prohibits deliberate setting on whale sharks and requires best efforts be made to ensure safe release where an encirclement occurs. Table 2 shows the number of whale shark interactions and landings for 105 purse seine trips reported from ROP data entered for 2021.

Table 2 - Whale Shark 'Landings and Interactions' for 2020*

Activity	Total Number	Released/ Escaped Alive and Healthy	Released Alive Injured or Distressed	Alive Unknown Condition	Deceased	Unknown
Landings	7	5	2	0	0	0
Net	18	3	9	5	1	0
Total	25	8	11	5	1	0

*Data entered as August 3rd, 2022.

3. Table 3 (below) and Chart 1 & 2 (next page) shows previous year's figures reported from the date of the first implementation of the Whale Shark CMM 2012-04. Noting figures for 2020 and 2021 are reduced due to lack of observer coverage due to COVID-19 travel restrictions and suspension of the need to attain 100% coverage.

Table 3 Observer Reported Whale Shark Interactions and Landings from 2012-2020*

Year	Observer Report Whale Shark Interactions & Landings	Trips analyzed for ROP Annual Report	No's of Vessels that caught Whale Sharks	Total No of Sets Made	No's of Sets Whale Sharks reported
2012	367	1197	134	32170	330
2013	365	1409	146	38280	360
2014	369	1494	137	37714	343
2015	373	1443	152	34443	356
2016	184	1472	93	33754	174
2017	298	1387	117	36011	253
2018	319	1731	122	42497	310
2019	588	1766	158	43276	568
2020	146	606	73	14616	140
2021	25	105	13	3730	24
Total 2012-2021	3034	12610	1145	316491	2858

* Data entered for all years as of August 4th, 2022

4. During 2020 and 2021 because of the greatly reduced observer trips the numbers of whale sharks reported are not indicative of a 100% coverage across the WCPO. Of the 25 reported in 2021, 7 whale sharks landed on deck; all where a smaller size and came aboard in the brail. There were 18 interactions with the net reported during the sets with sizes reported to be between 0.2 to 20 Metric Tonnes. All landed whale sharks were returned to the water alive and were expected to survive. Of the 25 sharks landed or interacted 1 was recorded as deceased. Observers reported in most cases the whale sharks that interacted with the net were assisted by the crew to escape from the nets

Chart -1

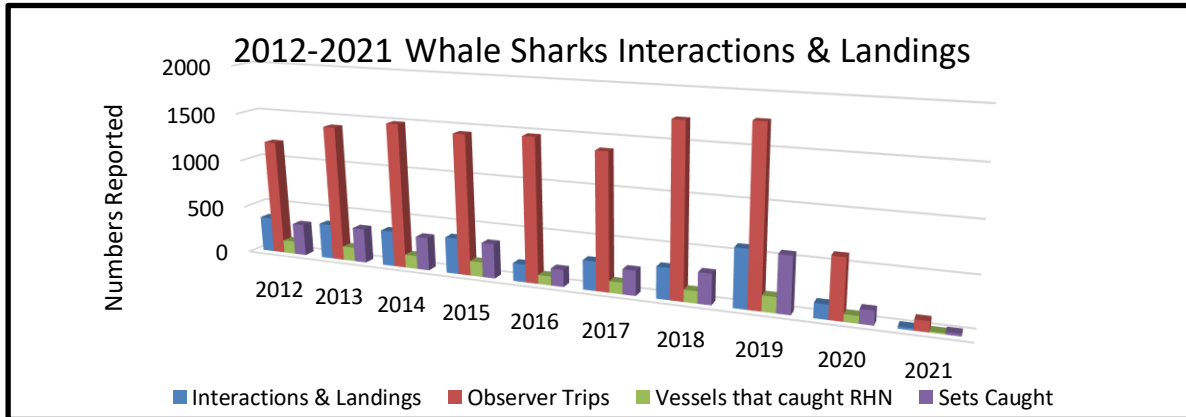
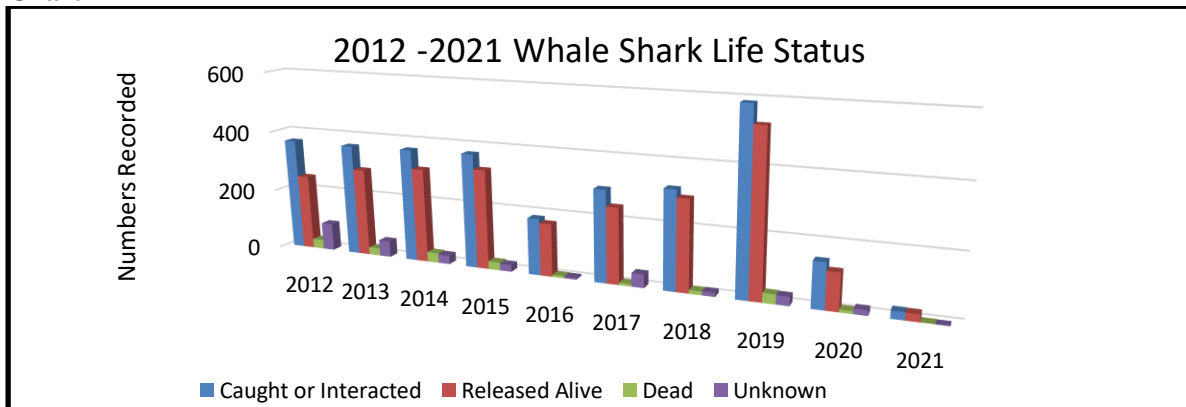


Chart -2



5. Since 2016, ROP observer data has been used in the WCPFC online compliance case file system to record observer recorded interactions with whale sharks and the outcome of flag State investigations of these incidents. Table 4 provide a summary of the outcomes of investigations by flag CCMs of ROP observer reported interactions with whale sharks based on ROP observer data that were notified for flag CCM investigation in the WCPFC online compliance case file system, for the period 1 January 2016 – July 2022. Relevant WCPFC requirements include prohibiting purse seine vessels from setting if a whale shark is sighted prior to the commencement of the set; required reporting of any incidents of unintentional encircling; and guidelines for safe release.

Table 4. Summary of purse seine Whale Shark fishery interactions notified in the WCPFC online Compliance Case File System that were based on ROP data (2016 – 2021)

	NEW CASE	Investigation IN PROGRESS	Investigation COMPLETED			Grand Total		
			No infraction	Infraction - no sanction	Infraction - warning		Infraction - sanction	
2016	1		250	214	0	4	9	478
2017	74		310	160	0	14	3	561
2018	68		332	178	1	1	1	581
2019	435		595	112	0	3	11	1157
2020	175		177	13	0	0	0	365
2021	26		0	0	0	0	0	26
	779		1664	677	1	22	24	3168
	779		1664	677	1	22	24	3168

Cetacean interactions in purse seine fisheries as reported by ROP Observers.

6. Many varied species of whales, dolphins and a species of seal are observed by ROP observers. The SPC produced ‘On Deck ID Guides’ allowed for a more accurate identification of each animal. Fur-seals are usually the predominate species interacting or being caught by long line vessels, whereas purse seine observers have recorded up to 24 different species with the predominance being, False Killer Whales, Rough Toothed, Bottle Nose, Indo Pacific and Spinner Dolphins.

7. Table 5 (below) shows Cetacean interaction data from 105 Purse seine trips and 502 longline trips in 2021. There were 24 interactions or landings with longliners; most were released alive, however 2 were reported deceased when discarded. Purse seine observers recorded 273 interaction or landings. Observers reported that 93 animals had the crew of the vessels assisting their escape from the net, 16 broke out through the net by their own accord and 4 were pulled from the net by using ropes. There were 23 rough tooth, 6 bottlenose, 3 spinner dolphins and 2 whales recorded as deceased by observers on purse seine trips.

Table 5 Cetaceans Observer Reported Catch - 2021

Species	PS	LL	Escaped, Cut-off, Assisted Escape Alive before Landing		Interacted or landed Discarded Alive		Interacted or landed Discarded Dead		Unknown Condition when Discarded	
Baleen Whale	6		5				1			
Beaked Whales Unidentified		1				1				
Bottle Nose Dolphin	20	4	8		6	4	6			
Brydes Whale	19		15		2		1		1	
Common Dolphin	3		3							
Cuvier’s Beaked whale	1		1							
False Killer Whale	11	11	7		4	10		1		
Fraser Dolphin	2				2					
Ind/Pac Bottle Nose Dolphin	37		10		27					
Rough Tooth Dolphin	154	2	54		77	1	23	1		
Risso’s Dolphin	7								7	
Sei Whale	4		4							
Short Finned Pilot Whale	4	2	4			2				
Spinner Dolphin	4	1	1		0	1	3			
Striped Dolphin	1		1							
Toothed Whales		1				1				
Unidentified Whale		2				2				
Totals	273	24	113	0	118	22	34	2	8	0

* Data entered as of August 4th, 2022

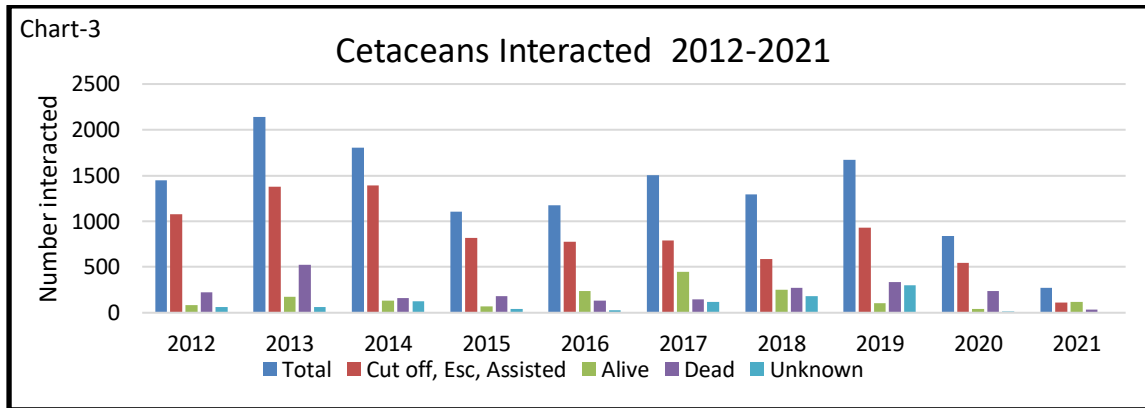
8. Table 6 & Chart 3 (next page) shows total purse seine and longline Cetaceans caught since 2012 to 2021, Numbers caught in 2020 & 2021 should be viewed with the understanding that available observer coverage in the respective fisheries was reduced substantially due to the COVID-19 coverage exemptions, difficult travel, and restrictions on entry to different countries. Due to these factors, there was a decline in observer coverage and therefore reduced reported interactions (273) in the Purse seine fishery for 2021. In the longline fishery there was also lower levels of observer coverage, and therefore reported interactions (24) cetacean included 1 false killer whale and 1 rough tooth dolphin deceased.

9. Chart 3 (next page) indicates the “Fate” of the Cetacean after an interaction with the vessel from 2012 to 2021, an interaction being landed on deck or in most cases caught in the net after the net has been closed. As can be seen in all years the total released or assisted by crew to get out of the nets, or escaping from the nets happens in the majority of cases, the deceased animals that were reported as deceased, died in the nets before they could be released or in some cases before, they were seen. The main species that were deceased were dolphins with rough tooth, bottle nose and spinner dolphins being prominent, of the whale species the main species that were deceased were false killer and pilot whales, although there were a few larger whales reported as deceased on release during the period.

Table 6 Total Cetaceans caught from 2012-2021

Year	Total caught or interacted		Escaped, Cut-off, Assisted Release, Alive		Interacted or landed (Discarded Alive)		Interacted or landed Dead		Unknown Condition when Discarded	
	PS	LL	PS	LL	PS	LL	PS	LL	PS	LL
2012	1450	49	1080	0	86	40	222	6	62	3
2013	2138	66	1381	0	172	47	526	8	59	11
2014	1805	83	1390	0	132	51	160	2	123	30
2015	1108	97	815	0	69	69	181	8	43	20
2016	1177	46	778	0	239	40	130	3	30	3
2017	1504	73	791	0	447	38	146	7	120	28
2018	1293	64	589	0	250	39	271	17	183	8
2019	1670	96	927	0	104	47	338	47	301	2
2020	840	42	546	0	43	34	240	5	11	3
2021	273	24	113	0	118	22	34	2	8	0
Total 2012- 2020	13258	640	8410	0	1660	427	2248	105	940	108

* Data entered as of August 4th, 2022



10. Since 2016, ROP observer data has been used in the WCPFC online compliance case file system to record observer recorded interactions with cetaceans and the outcome of flag State investigations of these incidents. Table 7 (below) provide a summary of the outcomes of investigations by flag CCMs of ROP observer reported interactions with cetaceans based on ROP observer data that were notified for flag CCM investigation in the WCPFC online compliance case file system, for the period 1 January 2016 – July 2022. Relevant WCPFC requirements include prohibiting purse seine vessels from setting if a cetacean is sighted prior to the commencement of the set; required reporting of any incidents of unintentional encircling; and guidelines for safe release.

Table 7. Summary of purse seine Cetacean fishery interactions notified in the WCPFC online Compliance Case File System that were based on ROP data (2016 – 2021)

	NEW CASE	Investigation IN PROGRESS	Investigation COMPLETED			Grand Total
			No infraction	Infraction - warning	Infraction - sanction	
2016	0		173	149	4	331
2017	46		214	104	13	380
2018	25		169	107	1	303
2019	228		316	52	1	605
2020	105		125	10	0	240
2021	26		0	0	0	26
	430		997	422	19	1885
	430		997	422	19	1885

Seabird fishery interactions as reported by ROP observers for 2021.

11. Table 8 shows available 2021 Observer data collected by observers from Fiji, Hawaii, French Polynesia, & New Zealand, which indicates that birds were recorded as caught and landed on 512 longline trips carried out in 2021. The observer collected data shows that observers confirmed 152 deceased and 55 released alive birds with Laysan Albatross (49) and Black footed Albatross (113) caught being the predominant species recorded, due to COVID-19 observer coverage was reduced during the year.

Table 8. Observer Reported 2021 Seabird Bycatch - Long Line Vessels

Gear	Species	Number Caught	Released Alive	Dead	<23N >30S	<30S	>23N
LL	Birds Unidentified	16	0	16	16	0	0
LL	Black Browed Molly hawk	1		1	1		
LL	Black-Footed Albatross	113	40	73	7	0	106
LL	Boobies & Gannet	2	0	2	2	0	0
LL	Giant Petrel	1		1	1		
LL	Laysan Albatross	49	12	37	1	0	48
LL	Petrels and Shearwaters	21	1	20	21	0	0
LL	Shearwater Nei	3	1	2	3	0	0
LL	Sooty Shearwater	1	1	0	0	0	1
Longline		207	55	152	52		155

* Data entered as of August 4, 2022.

Table 9 Bird Sightings in 2021

Gear	Species	Sighted	<23N >30S
LL	Boobies & Gannets	51	51
LL	Gulls, Terns and Skuas	21	21
LL	Laysan Albatross	3	3
LL	Petrels and Shearwaters	251	251
LL	Bird (Unidentified)	328	328
	Longline Birds Sightings	654	654

12. Observers reported 654 sightings (Table 9) on long line vessels with, Petrel and Shear Waters being the most predominant sighting of known species. There was a high recording of unknown species sighted on long line vessels. All sightings recorded on long line and purse seine vessels were between 23N to 30S latitudes. Purse seine observers did not record any interactions or landings but did record 377 sightings between 23N to 30S. Purse seiners fish mainly in the equatorial waters and do not normally record sightings of albatrosses but many terns skuas petrels and shearwaters were sighted. It is noted that the overall sightings of bird numbers are difficult to record for accuracy, as often the same bird may be counted more than once over the period of a trip.

13. Tables 10a to 10e & Chart 4 (next page) shows recorded observer seabird catches since the first seabird measure, (CMM 2012-07). In the early periods observers had little training and ID guides to assist in identifying species of birds. Improvements in seabird ID is due to the development of ID manuals and training updates. Albatross and petrels are the predominant species caught on long line vessels. The figures for 2020/21 are lower than previous years because of the drop in observer coverage due to COVID-19. Chart 4 show that most hooked or entangled line birds are deceased when landed. On checking the information collected by observers from several long liners that caught birds, indications were that observers reported most vessels did not have tori poles or any mitigation devices on their vessels.

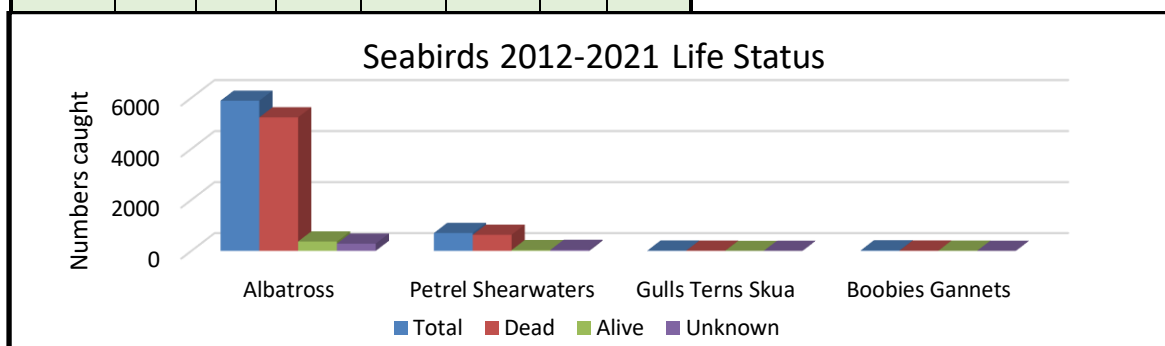
Tables 10 (a - e) Total Catches of Identified Birds since implementation of CMM 2012-07

a		Albatross						b		Petrel & Shearwaters					
Year	Total	A	%	D	%	U	%	Total	A	%	D	%	U	%	
2012	140	0	0	76	54	64	46	6	0	0	6	100	0	45.5	
2013	136	6	4	90	66	40	27	16	0	0	16	100	0	12	
2014	131	25	19	71	54	35	27	20	5	21	12	63	3	16	
2015	880	46	5	803	91	31	4	111	5	5	99	89	7	6	
2016	1444	18	2	1348	92	78	5	181	10	5	153	85	18	10	
2017	523	62	12	449	86	12	2	57	0	0	49	86	8	14	
2018	577	29	5	524	91	24	4	84	0	0	82	98	2	2	
2019	1626	51	3	1575	97	0	0.0	153	1	0	152	99	0	0.0	
2020	267	80	30	187	70	0	0	48	8	17	40	83	0	0	
2021	163	52	32	111	68	0	0	26	3	12	23	88	0	0	
Total	5887	369	6.%	5234	89%	284	5%	702	31	4%	632	90%	38	6%	

c		Gulls Terns Skua						d		Boobies and Gannets					
Year	Total	A	%	D	%	U	%	Total	A	%	D	%	U	%	
2012	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2013	3	0	0	2	67	1	33	1	0	50	1	50	0	0	
2014	2	0	0	2	100	0	0	2	2	100	0	0	0	0	
2015	2	0	0	0	0	2	100	2	1	50	1	50	0	0	
2016	0	0	0	0	0	0	0	1	1	100	0	0	0	0	
2017	3	0	0	3	100	0	0	5	1	20	2	40	2	40	
2018	1	0	0	1	100	0	0	2	0	0	2	100	0	0	
2019	1	0	0	1	100	0	0	3	0	0	3	100	0	0	
2020	0	0	0	0	0	0	0	2	1	50	1	50	0	0	
2021	0	0	0	0	0	0	0	2	0	0	2	100	0	0	
Total	12	0	0%	9	75%	3	25%	20	6	30%	12	60%	2	10%	

e		Birds Unidentified					
Year	Total	A	%	D	%	U	%
2012	12	2	17	10	83	0	0
2013	6	0	0	5	83	1	17
2014	4	2	50	2	50	0	0
2015	24	1	4	21	88	2	8
2016	25	1	4	22	88	2	8
2017	14	1	7	13	93	0	0
2018	7	0	0	6	86	1	14
2019	10	0	0	10	100	0	0
2020	2	0	0	1	50	1	50
2021	16	0	0	16	0	0	0
Total	120	7	6%	106	88%	7	6%

Chart-4



14. Presently ROP observer data is not being used in the WCPFC online compliance case file system as the basis for cases related to seabird fishery interactions. It should be noted that the latest CMM 2018-03 on seabirds, there are mitigating devices listed in the CMM that does not have corresponding Commission data collection fields for ROP observers to monitor and collect. There is no ROP data fields for Hook Shielding Devices and Night Setting light intensity, and while observers are asked to collect information on whether a long line vessel has tori poles there is no information asked on tori line lengths and streamer attachment spacing. To enable reporting on these devices it is suggested that these data fields be discussed and added to the Commission Data Fields to be collected by observers. This means that it is presently difficult based on the current ROP minimum data fields to ascertain the combination of mitigation measures used by longline vessels as compared to CMM 2018-03 requirements.

Sea turtle interactions as reported by ROP observers.

15. Observer 2021 catch data figures of turtles was greatly reduced due to COVID where only 105 Purse Seine trips and 512 Longline trips were recorded. A total of 51 observed turtle landing and non-landed interactions on purse seiners and on longliners were recorded by observers. Table 11 shows the number of reported landings/interactions and life status of the turtle when released or discarded on longline vessels. There were 47 turtles reported caught by longliners, 30 were released alive while 16 were deceased on landing; Crews generally assisted with the recovery of any live turtles bought on board longline vessels. Table 12 shows that there were only 4 turtles recorded caught by purse seiners, the crew assisted the turtles when brailled aboard and landed on deck in all cases they carefully handled and were generally released in the same or in better condition than when landed.

Table 11 Longline Turtle Landings and Interactions for 2021

Gear	Species	Number Observed	Retained	Number Discarded Alive	Number Discarded Dead	Unknown Condition	Released Alive before landing
LL	Flatback Turtle	1	0	1	0	0	1
LL	Green Turtle	7	0	1	6	0	1
LL	Hawksbill Turtle	6	0	1	5	0	1
LL	Leatherback Turtle	4	0	3	1	0	3
LL	Loggerhead Turtle	19	0	19	0	0	18
LL	Marine Turtle	2	0	1	0	1	1
LL	Olive Ridley	8	0	4	4	0	4
Long-Line Turtles Caught 2021		47	0	30	16	1	29

Table 12 Purse-seine Turtle landings and interactions for 2021

Gear	Species	Number Observed	Retained	Number Discarded Alive	Number Discarded Dead	Unknown Condition	Released Alive before landing
PS	Flatback Turtle	0	0	0	0	0	0
PS	Green Turtle	0	0	0	0	0	0
PS	Hawksbill Turtle	2	0	1	0	1	1
PS	Leatherback Turtle	0	0	0	0	0	0
PS	Loggerhead Turtle	0	0	0	0	0	0
PS	Marine Turtle	0	0	0	0	0	0
PS	Olive Ridley Turtle	2	0	2	0	0	0
PS Turtles Caught 2020		4	0	3	0	1	1
Total Turtles LL & PS Caught in 2020		51	0	33	16	2	30

*Data entered as of August 3rd, 2022

Tables 13a- Flatback, Green and Hawksbill Turtle observed in the period 2012-2021

Year	Flatback	A	D	U	Green	R	A	D	U	Hawksbill	R	A	D	U
2012	5	4	0	1	66	5	52	5	4	32	0	25	5	2
2013	9	5	3	1	121	5	90	12	14	65	0	51	7	7
2014	6	2	3	1	76	5	51	10	10	69	1	52	9	7
2015	7	7	0	0	97	1	80	13	3	29	0	22	6	1
2016	7	6	1	0	64	0	45	15	4	40	0	31	6	3
2017	3	3	0	0	287	0	252	14	21	42	0	29	10	3
2018	7	4	2	1	151	0	92	56	3	54	0	43	9	2
2019	2	0	2	0	116	1	86	27	2	53	0	44	8	1
2020	3	3	0	0	39	0	21	16	2	14	0	10	4	0
2021	1	1	0	0	7	0	1	6	0	8		2	5	1
Total	50	35	11	4	1024	17	770	174	63	406	1	309	69	27

Table 13b Leatherback, Loggerhead & Olive Ridley Turtles observed 2012-2021

Year	Leather back	R	A	D	U	Loggerhead	R	A	D	U	Olive Ridley	R	A	D	U
2012	16	2	7	1	6	62	3	44	6	9	129	0	67	48	14
2013	36	2	18	3	13	80	1	59	6	14	112	0	71	27	14
2014	32	1	13	3	15	62	5	37	7	13	56	0	34	15	7
2015	29	0	19	6	4	131	1	54	7	69	148	1	62	67	18
2016	30	0	19	0	11	148	0	114	15	19	155	0	58	39	58
2017	38	0	21	1	16	177	0	58	12	107	206	0	80	90	36
2018	43	0	25	14	4	151	0	129	19	3	312	0	80	227	5
2019	22	0	14	7	1	225	0	198	26	1	192	0	57	133	2
2020	21	0	18	0	3	62	1	50	11	0	46	0	22	24	0
2021	4	0	3	1	0	19	0	19	0	0	10	0	6	4	0
Total	271	5	157	36	73	1117	11	762	109	235	1366	1	537	674	154

*Data entered as of August 4th, 2022

Table 13c – Turtles Unidentified 2012-2021

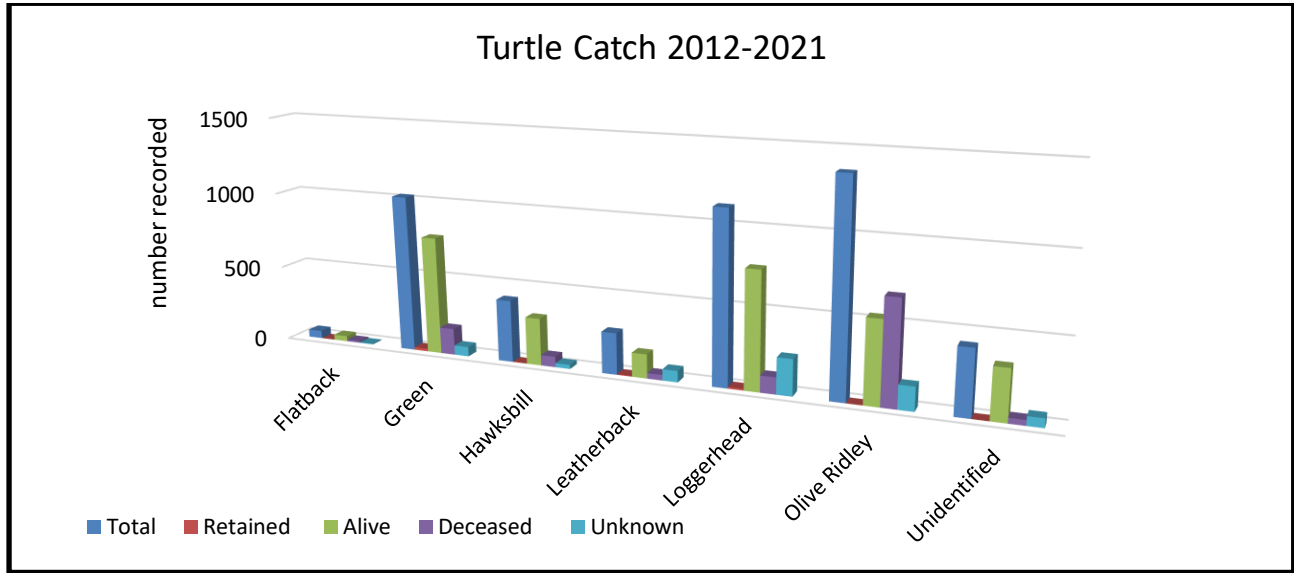
Year	Unidentified	R	A	D	U
2012	5	0	3	2	0
2013	8	0	4	0	4
2014	7	0	5	0	2
2015	35	0	1	0	34
2016	86	0	73	1	12
2017	124	1	105	18	0
2018	132	0	120	10	2
2019	18	0	10	4	4
2020	7	0	7	0	0
2021	2	0	1	0	1
Total 2012-2020	424	1	329	35	59

16. It is noted that a large majority of turtles caught by purse seiners were returned to the sea alive and in a reasonable condition. Most deceased turtles were from long lining and in all cases the turtles were deceased before landing. Table 13a to 13c (above) & Chart 5 (next page) shows total catches of turtles recorded by observers for the period 2012-2021 and indicates that Green, Loggerhead and Olive Ridelys are the most predominant species turtle caught in the WCPO.

17. During the period 2012-2021, the unidentified turtles in table 13c (above) represent the turtles that were viewed by observers, and they were unable to positively identify the species of turtle. Noting that 329 out of 424 of these turtles are recorded as released alive; many of these were released before landing on deck

therefore making it difficult to positively identify. The introduction of excellent on deck waterproof identification manuals for turtles produced by SPC has increased identification markedly.

Chart-5



18. Presently ROP observer data is not being used in the WCPFC online compliance case file system as the basis of sea turtle fishery interaction cases. The Secretariat has identified the potential for ROP observer recorded interactions with sea turtles to be used to create cases for investigation by flag CCMs. It would be beneficial if the ROP data fields were further refined to align with the requirements of CMM 2018-04 more clearly, including that a fishing vessel had made best attempts to ensure safe release and to ascertain if a vessel had used mitigation measures where this is required under the CMM.

Sharks (other than Whale Shark) fishery interactions as reported by ROP Observers

Silky Sharks.

19. WCPFC’s conservation and management measures for sharks prohibit vessels from retaining on board, transshipping or storing or landing silky sharks, in whole or in part, in the fisheries covered by the Convention. Table 14 (next page) indicates that the catches of silky sharks are low probably because of the limited observer coverage on purse seiners (105 Trips) in 2021. The figures in previous years per trip indicate that between 40 to 60 silky sharks are recorded per observer purse seine trip of 35 days, the figures given for the low coverage in 2021 indicate an average of 20 sharks per trip were caught despite almost double the time (72 days) per observer trip.

20. “Silky Shark” landings or net interactions indicates that of the 1915 recorded on purse seiners 623 (32%) were reported alive and 868 (45%) deceased when discarded. For a small number of recorded catches on purse-seiners the counting of silky sharks observed caught in the nets was difficult; observers found difficulty in counting the exact number, so estimates were made on the catch reported. For longline vessels in 2021 758 silky sharks were recorded caught and landed, 493 (65%) were recorded as being discarded alive and 216 (28%) deceased.

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Table 14 Silky Shark Catches 2021

Gear	Total Number Caught	Discard Body, Fins Retain	Retain Body Whole + Fins	Condition Caught			Condition Discarded			LL Cut free before landing			Unhooked Before Landing
				A	D	U	A	D	U	A	D	U	
Purse- seine	1915	0	0	659	137	1119	623	868	424	0	0	0	0
Longline	758	0	0	506	195	57	493	216	49	110	9	1	8
Total Catch	2673	0	0	1165	332	1176	1116	1084	473	120			8

*Data entered as of August 4th, 2022.

21. Table 15 (below) indicates catches of silky sharks since 2012 to 2021 and shows that reporting of shark finning and retention has decreased noticeably. Figures for 2021 indicates no fins were retained. The alive status of released silky sharks has improved since the implementation of the CMM 2013-08 from 0.5% in 2013 to 28% in 2020. Figures reported for 2021 indicates 40% of silky sharks were released alive however this figure is affected by the low number of observers reporting for purse seiners; long liners do have a higher ratio of silky and other sharks released alive.

Table 15 Silky Shark Catches 2012-2021

2012-2020 Silky sharks	Estimated Number Caught	Discarded Body, Fins Retained	Retained Body, Fins Whole	Condition when Cut/Struck off or Discarded			Alive released %	Cut/Struck off / Esc before landing on LL
				Alive	Dead	Unknown		
2012	25241	2024	3540	123	117	25001	.5	84
2013	34123	3120	2421	138	159	33826	.4	126
2014	40009	994	1372	1092	3122	35795	2.7	267
2015	35120	334	569	5153	20252	9715	14.7	330
2016	59493	130	361	8164	38279	12050	13.7	1085
2017	76214	27	154	17827	46900	11487	23.4	933
2018	66294	32	58	21052	40750	4492	31.8	783
2019	96775	21	46	28255	61470	7050	29.2	655
2020	37409	2	41	10562	23727	3120	28.2	183
2021	2763	0	0	1116	1084	473	40.3	120
2012-2021	473441	6684	8562	93482	235860	143009	20%	4566

* Data entered as of August 4th, 2022.

22. Since 2015, ROP observer data has been used in the WCPFC online compliance case file system to record observer recorded retention of silky sharks and the outcome of flag State investigations of these incidents. Table 16 provides a summary of the outcomes of investigations by flag CCMs of ROP observer reported alleged incidents related to retention of silky sharks by vessels, based on ROP observer data from 1 January 2015 - 1 July 2022.

Table 16. Summary of silky shark retention alleged infringements notified in the WCPFC online Compliance Case File System that were based on ROP data (2016 – 2021)

	NEW CASE	Investigation IN PROGRESS	Investigation COMPLETED			Grand Total
			No infraction	Infraction - warning	Infraction - sanction	
2016	0		30	7	0	1
2017	8		13	10	1	0
2018	1		20	14	0	5
2019	4		20	5	0	0
2020	2		5	3	0	0
	15		88	39	1	6
	15		88	39	1	6

Oceanic White-tip Sharks

23. WCPFC conservation and management measures prohibit vessels from retaining on board, transshipping or storing or landing oceanic white-tip sharks, in whole or in part, in the fisheries covered by the Convention. Table 17 & 18 (below) show the total catches reported as discarded and retained by observer reported data for the years since the CMM 2011 - 04 (Oceanic White Tip Sharks) became effective from Jan 1st,

2013, note that from 1 Nov 2020 this CMM was replaced by CMM 2019-04. The figures indicate that both the reporting and adherence to the CMMs measures has improved since the implementation in 2013 (see Table 18 and Chart 6 below). Reports of oceanic white tip sharks being retained and process, has been reduced to zero with no observer reports of fins or bodies being retained in 2020 & 2021. The status of releasing alive has also improved from .in 2013 (20%) to around 51% of all caught oceanic white tip sharks in 2020 and 48% in 2021.

Table 17. Ocean Whitetip Sharks (2021)

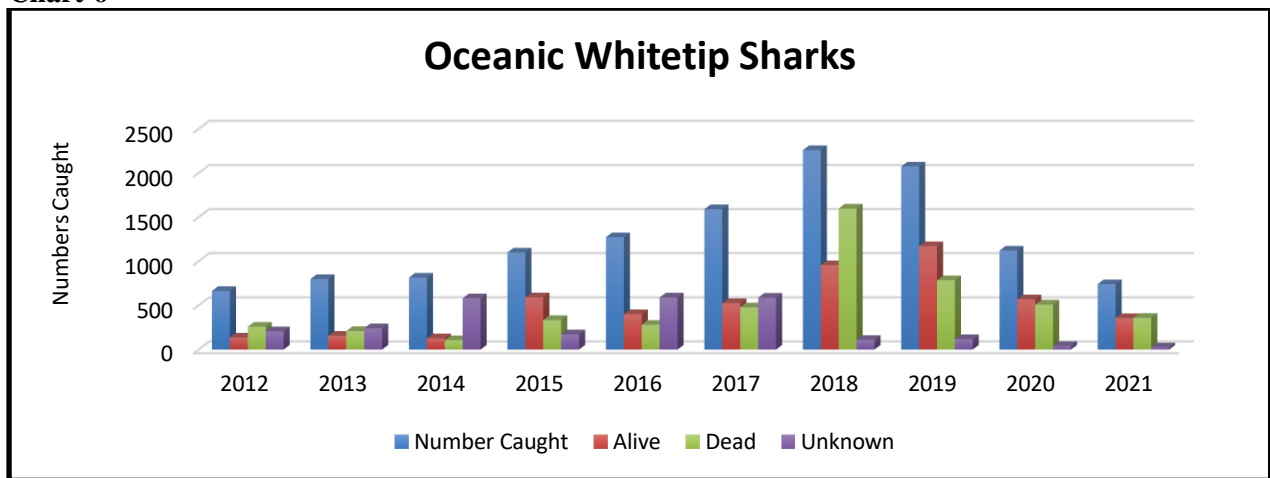
Gear	Number Caught	Discard Body, Fins Retain	Retain Body Whole + Fins	Condition Caught			Condition Discarded			LL Cut free before landing		
				A	D	U	A	D	U	A	D	U
Purse- seine	21	0	0	14	6	1	6	6	11	0	0	0
Longline	720	0	0	385	315	20	352	355	13	60	6	2
Total A D U	741	0	0	399	321	21	357	359	25	60	6	2
Total Catch		0		741			741			68		

Table 18 Ocean Whitetip Sharks 2012 to 2021

2014-2020 Oceanic White tip Sharks	Estimated Number Caught	Discarded Body, Fins Retained	Retained Body, Fins Whole	Condition when Cut/Struck off or Discarded			Alive Released %	Cut/Struck off / Esc before landing
				Alive	Dead	Unknown		
2012	664	48	79	136	259	207	20	104
2013	799	73	36	157	210	242	20	142
2014	815	25	4	128	106	581	16	221
2015	1100	10	5	592	335	173	54	132
2016	1273	2	1	401	281	591	32	269
2017	1591	0	2	527	478	588	33	145
2018	2261	10	1	956	1598	109	42	186
2019	2075	6	0	1172	785	118	56	131
2020	1122	0	0	571	510	41	51	138
2021	741	0	0	357	359	25	48	68
2012-2020	11027	174	220	4174	3307	3152		1536

* Data entered as of August 4th, 2022.

Chart-6



24. Since 2015, ROP observer data has been used in the WCPFC online compliance case file system to record observer recorded retention of oceanic whitetip sharks and the outcome of flag State investigations of these incidents. Table 19 (next page) provides a summary of the outcomes of investigations by flag CCMs of ROP observer reported alleged incidents related to retention of oceanic whitetip sharks by vessels, based on ROP observer data from 1 January 2015 - 1 July 2022.

Table 19. Summary of oceanic whitetip shark retention alleged infringements notified in the WCPFC online Compliance Case File System that were based on ROP data (2016 – 2021)

	NEW CASE	Investigation IN PROGRESS	Investigation COMPLETED		Grand Total
			No infraction		
2016	0		1	0	1
2017	0		0	1	1
2018	0		5	1	6
2019	1		3	0	4
	1		9	2	12
	1		9	2	12

Shark finning activities (of sharks other than of silky shark or oceanic white tip sharks)

25. WCPFC conservation and management measure CMM 2019-04 (which replaced CMM 2010-07) prohibit vessels from retaining on board, transshipping or storing or landing fins harvested in contravention of shark CMMs. Since 2015, ROP observer data has been used in the WCPFC online compliance case file system to record where observers have recorded fate codes indicative of shark finning activities (of sharks other than of silky shark or oceanic white tip sharks) and the outcome of flag State investigations of these incidents. Table 20 provides a summary of the outcomes of investigations by flag CCMs of ROP observer reported alleged incidents related to potential finning of other sharks by vessels, based on ROP observer data from 1 January 2015 - 1 July 2022.

Table 20. Summary of potential finning alleged infringements (of sharks other than of silky shark or oceanic white tip sharks) notified in the WCPFC online Compliance Case File System that were based on ROP data (2016 – 2021)

	NEW CASE	Investigation IN PROGRESS	Investigation COMPLETED		Grand Total
			No infraction	Infraction - sanction	
2016	0		3	4	10
2017	0		1	4	5
2018	5		18	0	27
2019	0		2	3	10
2020	1		2	0	3
2021	2		0	0	2
	8		26	11	57
	8		26	11	57

FAD Sets Alleged infringements cases based on data reported by ROP Observers

26. Since 2015, the tropical tuna conservation and management measures have had time and area specific FAD closures in the tropical purse seine fishery. Since 2015, ROP observer data has been used in the WCPFC online compliance case file system to record where observers have recorded incidents of a purse seine vessel setting on a FAD during a specified time period and/or in specific waters when the prohibition on setting on FADs was in effect. The outcome of flag State investigations of these incidents are also recorded. Table 21 (next page) provides a summary of the outcomes of investigations by flag CCMs of ROP observer reported alleged incidents related FAD set alleged infringements by vessels, based on ROP observer data from 1 January 2015 - 1 July 2022.

Table 21. Summary FAD Sets alleged infringements notified in the WCPFC online Compliance Case File System that were based on ROP data (2016 – 2021)

21a. 3-month FAD closure Tropical Tunas (1 July - 30 Sept FAD closure)

Year 2015 = CMM 2014-01 14 Year 2016 = CMM 2015-01 14 Year 2017 = CMM 2016-01 14

Year 2018 = CMM 2017-01 16 Year 2019 - 2020 = CMM 2018-01 16

	NEW CASE	Investigation IN PROGRESS	Investigation COMPLETED			Grand Total
			No infraction	Infraction - warning	Infraction - sanction	
2016	0		7	218	0	228
2017	21		22	480	0	523
2018	3		25	22	1	51
2019	54		152	6	0	212
2020	2		2	0	0	4
	80		208	726	1	1018
	80		208	726	1	1018

21b. 4th Month FAD Closure (1 - 31 Oct FAD closure) FAD Sets Alleged infringements
 Year 2015 = CMM 2014-01 16 Year 2016 = CMM 2015-01 16 Year 2017 = CMM 2016-01 16

	Investigation IN PROGRESS	Investigation COMPLETED		Grand Total
		No infraction		
2016	0		1	1
2017	1		90	91
	1		91	92
	1		91	92

21c. High Seas FAD closure for two additional sequential months of the year (April – May or November – December)

Year 2017 = CMM 2016-01 18 Year 2018 = CMM 2017-01 17 Year 2019 - 2020 = CMM 2018-01 17

	NEW CASE	Investigation IN PROGRESS	Investigation COMPLETED		Grand Total
			No infraction	Infraction - sanction	
2017	4		9	3	16
2018	0		5	0	5
2019	0		0	1	1
	4		14	4	16
	4		14	4	16

Marine Pollution incidents based on observer trip monitoring report data reported by ROP Observers

27. The Commissions Conservation and Management Measure on Marine Pollution entered into force on 1 January 2019. The Observer trip monitoring summary provides an opportunity for observers to record an indication when there was a marine pollution incident during the trip (PN-a, PN-b, PN-c, PN-d and PN-e). Advance notification to flag States of marine pollution alleged infringements reported on observer trip monitoring summary is also delivered through the upgraded WCPFC online compliance case file system as Marine Pollution incidents (POL) cases. Table 22 provides a summary of the outcomes of investigations by flag CCMs of ROP Marine Pollution incidents notified in ROP observer data for the period 1 January 2019 – 1 July 2022.

Table 22. Summary of Marine Pollution potential incidents notified in the WCPFC online Compliance Case File System based on observer trip monitoring reported data (2016 – 2021)

22a. PN-a Dispose of any metals, plastics, chemicals, or old fishing gear

CMM 2017-04 02 = CCMs shall prohibit their vessels operating within the Convention Area from discharging any plastics including plastic packaging, items containing plastic and polystyrene) but not including fishing gear.

	NEW CASE	Investigation IN PROGRESS	Grand Total	
2019		210	34	244
2020		83	12	95
2021		5	0	5
		298	46	344
		298	46	344

22b. PN-b Discharge any oil PN-c Lose any fishing gear PN-d Abandon any fishing gear

PN-e Fail to report any abandoned gear

CMM 2017-04 03-07 = CCMs are encouraged to prohibit their vessels from discharging oil or fuel products or oily residues into the sea; garbage, including fishing gear* (Fishing gear, for the purposes of this measure, that are released into the water with the intention of later retrieval such as FADs, traps and static nets, are not considered garbage), food waste, domestic waste, incinerator ashes and cooking oil; and sewage, except as would be permitted under applicable international instruments. CCMs shall encourage their fishing vessels within the WCPFC Convention Area to retrieve abandoned, lost or discarded fishing gear and retain the material on board, separate from other waste for discharge to port reception facilities. Where retrieval is not possible or does not occur, CCMs shall encourage their fishing vessels to report the latitude, longitude, type, size and age of abandoned, lost or discarded fishing gear.

	NEW CASE	Investigation IN PROGRESS	Investigation COMPLETED	Grand Total
2019	128	40	1	170
2020	49	11	0	60
	177	51	1	230
	177	51	1	230

