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**ANNUAL REPORT ON THE REGIONAL OBSERVER PROGRAMME**

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**WCPFC -TCC19-2023-RP02**  
**9 September 2023**

1. This paper presents the 15th Annual Report on the WCPFC Regional Observer Programme (ROP), for 2022-2023 for the information and consideration of TCC19.

**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.” 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.”

3. 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.” Paragraph 13 of CMM 2018-05 on the “Role of the Secretariat” lists several ROP activities that the Secretariat is required to carry out. This paper reports on the several aspects of the ROP as required by the Convention, CMM 2018-05 and the outcomes of WCPFC19.

4. The structure of the Report is as follows:

- General
- Observer Data and Observer Coverage
- Authorised Observer Providers to the ROP and update on ROP audits
- IWG-ROP
- ROP Compliance-related Matters
- Observer Welfare & Safety Matters
- Data and Monitoring of Species of Special Interest
- 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.
- Secretariat observations
- Administration notes
- Recommendations

Annex A - 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

5. From March 2020 to end of December 2022 there were several suspensions of observer coverage requirements due to the COVID-19 Pandemic which made it challenging to move observers between countries because of travel and flight limitations, as well as internal entry restrictions imposed by various countries. Despite the problems of moving observers around, there were 123 purse seine trips reported in 2022 which is about 9% of the normal 100% coverage. The longline trips observed in 2022 was higher with 641 trips as observers continued to be placed by a few national programmes on vessels that fished and returned to the same ports as their departure. Many of these observer trips were on vessels that fish domestically as well as on the high seas. This report covers the information and data that was collected by observers in 2022.

6. At the time of preparing this paper, several Pacific Island national and subregional programmes had lost experienced observers during the pandemic because they were unable to be employed within the programme. When 100% coverage for carriers and purse seiners was reinstated on 1 January 2023, some programmes realized that they needed extra training to bring their pool of observers up to the required numbers ensure availability for placement at short notice. Despite the shortages, most observer programmes have managed to support the requirement for 100% coverage on purse seine vessels, many by allowing observers to complete multiple trips in a row.

7. The Secretariat continued to support observer programmes where possible throughout the pandemic and assisted with training and advice to assist CCMs to rebuild their programmes up to pre-COVID numbers. The Secretariat continues 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. 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.

8. From March 2020 to October 2022, most observer-related meetings that the Secretariat participated in were held online via “Zoom”, and limited travel in 2022 by the Secretariat in support of Observer Programme activities. The ROP Coordinator attended an in-person meeting for WPEA countries held in Brisbane, Australia, in June 2022, and the Commission’s Annual Meeting in Da Nang, Vietnam in 2023. The ROP Coordinator also attended the 2023 Regional Observer Coordinators Workshop in Hobart, a PNA observer meeting and the International Observer Conference in Australia, and a Cross Endorsement course in Tuvalu.

### *Staff matters*

9. The Secretariat employs two data entry staff, who primarily enter data into the Tufman2 SPC database collected by the FSM’s National Observer Programme, and when required, from other national observer programmes. In 2022, there were less observer trips therefore less data to enter. During the pandemic when fewer observer trips were available for data entry, the Secretariat’s data entry staff were engaged to assist with other Compliance data entry duties. This arrangement has largely continued into 2023 due to the volume of ROP data available. In early, 2023, the Secretariat’s ROP Data Quality Officer, Mr. Donald David, resigned from his post to take up a new position at SPC’s Pohnpei office. The Secretariat is currently considering alternative options for covering the work required of this position, including adjusting the duties to support a broader range of the Commission’s current monitoring tools.

## Observer Data and Observer Coverage

10. The [minimum standard ROP data fields for purse seine and longline fisheries](#) remain unchanged since 2016. As was noted in [ROP Report 13 \(2021\)](#), experience with existing ROP data collection and processes has identified a few CMMs that have requirements that must be followed by vessels, however there are insufficient observer data fields collected to monitor and verify compliance with these requirements. The Commission and TCC current work program include reviews of key CMMs that have and will impact the ROP data fields and supporting processes, including TS-IWG and IWG-ROP.

11. The Commission at WCPFC19 in December 2022 considered several recommendations from TCC18 in respect of observer monitoring of transshipments, and adopted new [Minimum Data Fields for Observer Transshipment Monitoring](#) to be collected during transshipment events as of 1 April 2023. The [Agreed Minimum Standards and Guidelines for the Regional Observer Programme](#) were amended to require that for transshipments on the high seas, transshipment ROP providers shall send the ROP Minimum data fields to the Secretariat within 90 days of the disembarkation of the observer from the Carrier. The [Transshipment IWG](#) is continuing to progress a workplan in 2023 and an update from the Co-Chairs will be provided to TCC19. In 2023, the Secretariat is also tasked to work with SPC-OFP to provide an update to TCC19 and WCPFC20 on the progress related to the implementation of the observer monitoring of transshipment outcomes.

12. The paper [SC19 -ST-IP-2 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 not all trip data is available to WCPFC and the lower coverage by most fleets is due to the suspension of coverage requirements for purse seiners by the Commission due to COVID-19 restrictions. However, the suspension of observer coverage did not prevent some CCMs placing observers, provided it was safe to do so, including ensuring that the observer could be repatriated to their home port. Since last year, SPC has included additional tables and figures to indicate the spatial coverage of purse seine and longline observer coverage over recent years, and in which spatial areas there is low observer coverage and hence, less data available for monitoring implementation of measures.

13. Table 1 represents the observer trips and observer sea days between 2012 to 2022. The raw unraised data collected on these trips is used to populate all the tables in this report, noting that in the 11-year period of 2012-2022m there were 13,015 ROP purse seine trips and 7,797 ROP longline trips, for a total of 20,812 observer trips and 755,830 observer sea days where observers collected data and information. Observer-collected information and data significantly assists science, management, and compliance in the sustainability of the WCPO tuna fishery.

14. The average observer trip time on longliners pre COVID was 35 to 40 days; in 2020 this increased to 51 days per trip. This was because observers were stranded on vessels and could not be dropped off in ports that allowed travel back to their home ports. Vessels either transferred observers to other vessels to get back to home ports or the vessel diverted to drop the observer in home ports after their fishing [trip?] had finished. Some observers were dropped off in foreign ports and some took up to 15 months to get back to their homes. During the COVID period in 2021 and 2022, many longline observer trips were made on vessels operating in and out of one port which influenced days spent on vessels during this period. The reopening of ports and travel mid to late 2022 allowed the time for observers onboard longliners to decrease to pre COVID levels of around 40 days. It is expected that 2023 will see the pre COVID coverage days for longliners.

15. Table 1 shows that the ROP purse seine coverage entered at the time of this report for 2022 was 123 observer purse seine trips. The 2022 figures also show an increase of days observers spent on purse seine vessels in 2020 and 2021, most likely due to the same reasons as explained in the previous paragraph. In 2022, several observers were asked to extend their trip times because of a shortage of observer availability in some programmes and therefore trip times were slightly reduced, though still around 68 days.

**Table 1 ROP Observer Coverage 2012-2022**

Trip Year	No of PS Trips	Observer PS Sea days	No of Sets	Average days per PS trip	No of LL Trips	Observer LL Sea days	Number of Hooks observed	No of sets	Average days per LL trip	Total Observer LL & PS Trips	Total Observer LL & PS Sea Days
2012	1202	41173	32243	34	570	17151	17655882	9984	30	1772	58324
2013	1409	50459	38280	36	623	17338	21613971	14023	28	2032	67797
2014	1559	54244	39386	35	691	20246	21642230	12565	29	2250	74490
2015	1552	52561	36770	34	768	24323	23927617	13121	32	2320	76884
2016	1531	53309	35269	35	742	24746	26803931	13715	33	2273	78055
2017	1408	52978	36519	38	847	35963	39148312	19005	42	2255	88941
2018	1746	60139	42807	34	876	37759	44996677	21527	43	2622	97898
2019	1770	57535	43441	33	856	34572	45626658	20588	40	2626	92107
2020	610	25092	14696	41	605	30924	38943101	17273	51	1215	56016
2021	105	7688	3730	73	578	25317	30676634	13990	44	683	33005
2022	123	8438	4517	68	641	23875	29126206	12652	37	764	32313
<b>Total</b>	<b>13015</b>	<b>463616</b>	<b>327658</b>	<b>36</b>	<b>7797</b>	<b>292214</b>	<b>34016121</b>	<b>168443</b>	<b>37</b>	<b>20,812</b>	<b>755830</b>

Figures as of 24 July 2023

16. Table 2 shows ‘Observer monthly observer Coverage information for purse seine vessels when fishing in the Convention area 20N – 20S during 2022. The table shows observer placements for purse seine fleets were negligible for most of the months for 2022 due to COVID restrictions and the agreement by the Commission to suspend the obligation to meet 100% observer coverage requirement from March 2020. Because of this, many fleets chose not to place observers when they were fishing until the 100% requirement was reinstated from 1<sup>st</sup> Jan 2023. This is reflected in the table for the total as at Dec 2022, when the number of observers increased to 78% placement in the active fleet to ensure observers were on board by 1<sup>st</sup> Jan 2023. The table also reflects Philippines’ continuous observer coverage throughout 2022.

**Table 2 Purse-Seine ROP Coverage 2022 - 20N to 20S**

Flag	RFV Vessels	Active Vessels	Jan 2022	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan 2023
AU	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CN	79	2	0	0	0	0	0	0	0	0	0	0	0	2	2
CK	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EC	7	0	0	0	0	0	0	0	0	0	0	0	0	0	1
EU	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SV	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FM	26	13	0	0	0	0	0	0	0	0	0	0	1	13	15
ID	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JP	66	7	0	0	0	0	0	0	0	0	0	0	0	7	9
KI	11	4	0	0	0	0	0	0	0	0	0	0	0	4	4
KR	43	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MH	11	7	0	0	0	0	0	0	0	0	0	0	1	7	9
NR	19	11	0	0	0	0	0	0	0	0	0	0	5	11	8
PG	17	3	0	0	0	0	0	0	2	3	2	2	2	1	1
PH	78	32	27	26	25	23	22	20	1	2	2	18	18	17	18
SB	9	2	0	0	0	0	0	0	0	0	1	2	2	2	2
TV	6	1	0	0	0	0	0	0	0	0	0	0	0	1	1
TW	29	3	0	0	0	0	0	0	0	0	0	0	0	3	5
US	13	6	0	0	0	0	0	0	0	0	0	0	2	4	4
VU	8	1	0	0	0	0	0	0	0	0	0	0	0	1	2
<b>Total</b>	<b>471</b>	<b>92</b>	<b>27</b>	<b>26</b>	<b>25</b>	<b>23</b>	<b>22</b>	<b>20</b>	<b>3</b>	<b>5</b>	<b>5</b>	<b>22</b>	<b>31</b>	<b>73</b>	<b>81</b>

\*Figures as of 24 July 2023

### Authorized Observer providers to the ROP and update on ROP audits

17. A list of ROP authorised observer programmes and their National Observer Coordinator contacts are available on the WCPFC website: <https://www.wcpfc.int/wcpfc-national-observer-coordinator>. 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 observer coordinators list on the

WCPFC website enables CCMs to update their information directly through their national CCM portal on the WCPFC website. The ROP Observer Coordinators list is important for observer safety responses and is an extremely important list of contacts for use by observers, vessels, fishing companies, flag states, and members.

18. The Secretariat continued to audit required minimum standards in ROP observer programmes throughout the pandemic, including the 3rd phase of audits in 2022. The online auditing process, which includes consultation via Zoom meeting, is being used by some programmes scheduled to receive audits in 2023. CCMs can also request an in-person audit. CCMs with ROP programmes can check the website for information on when their programme is due for an Audit, and arrangements can be made with the Secretariat on scheduling, noting that due to COVID, a small backlog of audits has occurred: <https://www.wcpfc.int/authorised-rop-observer-providers>. As of the time of writing, the PNA Observer Agency and the Japanese Observer programme have been audited in 2023 and both have been authorised to continue operating as part of the WCPFC ROP.

## **IWG-ROP**

19. The [IWG-ROP](#) has been reinstated by the Commission and has been tasked to carry out some important work on ROP data fields and other areas related to observer roles and conditions. The IWG-ROP will develop working and information papers to report to the Commission and its subsidiary bodies on chosen priority tasks. A work plan for the IWG-ROP was developed with the assistance of IWG-ROP members. A copy of all IWG-ROP materials including the workplan can be found at this [link](#). To commence work for the IWG-ROP, the Chair has selected from the IWG-ROP work plan “Observer data fields for “Species of Special Interest” **1(b)** and “Consider removal of redundant ROP data fields” **1(d)**. Some data fields can be retired from observer collection either due to redundancy or the availability of better sources of the same data.

## **ROP Compliance related matters**

20. A separate TCC19 paper provides additional information related to the use of ROP data in the Compliance Monitoring Scheme ([TCC19-2023-09](#)).

### *Observer Trip Monitoring Summary*

21. The “Observer Trip Monitoring Summary” is part of the minimum data standards of the Commission, commonly this is called the FFA/SPC GEN-3 form. The ROP Data is essentially a tick (an answer in the affirmative) by the observer against the relevant Trip Monitoring Summary Codes (see Table 3 for a list of the codes). Observers will then include in their written report the reasons “Yes” were circled.

22. Table 3 represents data available from 123 purse seine and 641 longline trips across all fishing fleets for 2022. 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 low observer coverage on purse seine trips, there was a high percentage of reports of vessels inaccurately recording retained and discarded target and bycatch species in their vessel catch logs. (*LC-a to LC-e*). Not stowing fishing gear when in an area where fishing is not permitted also had a very high percentage of reports (58%)

**Table 3 Trip Monitoring Summary Codes which often are collected on FFA/SPC GEN-3 form**

<b>TMI Codes</b>	<b>Observer Trip Monitoring Summary</b>		
<b>Observer Rights</b>		<b>PS</b>	<b>LL</b>
<i>RS -a</i>	<i>Did the operator or any crew assault, obstruct, resist, delay, refuse boarding to intimidate or interfere with observers in the performance of their duties</i>	4	1
<i>RS -b</i>	<i>Request that an event not be reported by the observer</i>	2	2
<i>RS -d</i>	<i>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 to officers of the vessel.</i>	1	4
<b>National Regulations</b>			
<i>NR-a</i>	<i>Fish in area16s where it is not permitted to fish</i>	1	4
<i>NR-c</i>	<i>Use a fishing method other than the method the vessel was designed or licensed</i>	15	0
<i>NR-e</i>	<i>Transfer or transship fish from or to another vessel</i>	1	6
<i>NR-g</i>	<i>fail to stow fish4ing gear when entering areas where they were not authorized to fish;</i>	72	84
<b>WCPFC CMMs</b>			
<i>WC-a</i>	<i>Fail to comply with any Commission Conservation and Management Measures</i>	19	0
<i>WC-b</i>	<i>High-grade the catch</i>	3	1
<b>Log Sheet Recording Position &amp; Catch</b>			
<i>LP-a</i>	<i>Inaccurately record vessel position on vessel log sheets for sets, hauling and catch</i>	1	2
<i>LP-b</i>	<i>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)</i>	0	0
<i>LC-a</i>	<i>Inaccurately record retained "Target Species" in the Vessel logs</i>	27	70
<i>LC-b</i>	<i>Inaccurately record "Target Species" Discards</i>	30	104
<i>LC-c</i>	<i>Record species inaccurately</i>	37	4
<i>LC-d</i>	<i>inaccurately record By catch species discards;</i>	25	109
<i>LC-e</i>	<i>Inaccurately record retained bycatch Species.</i>	14	61
<b>Species of Special interest</b>			
<i>SI-b</i>	<i>Interact with non-target species</i>	58	33
<b>Pollution</b>			
<i>PN-a</i>	<i>Dispose of any metals, plastics, chemicals, or old fishing gear</i>	11	15
<i>PN-b</i>	<i>Discharge any oil</i>	3	6
<i>PN-c</i>	<i>Lose any fishing gear</i>	0	30
<i>PN-d</i>	<i>Abandon any fishing gear</i>	6	4
<i>PN-e</i>	<i>Fail to report any abandoned gear</i>	3	0
<b>Sea Safety</b>			
<i>SS-a</i>	<i>Fail to monitor international safety frequencies</i>	0	0

\*Figures as of 24 July 2023

**Observer Welfare and Safety Matters**

23. CMM 2018-05 on the WCPFC ROP requires CCMs to ensure that their vessel operators comply with observer safety guidelines specified in the CMM. The *Observer Trip Monitoring Summary* provides an opportunity for observers to record an indication of 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 the *Observer Trip Monitoring Summary* continues 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 – to 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 – 2022)**

*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			Investigation COMPLETED Total	Grand Total
			No infraction	Infraction - warning	Infraction - sanction		
			2016	0	14		
2017	2	8	7	2	1	10	20
2018	3	14	14	1	0	15	32
2019	4	25	2	0	3	5	34
2020	0	11	1	0	0	1	12
2021	0	2	0	0	0	0	2
2022	1	0	0	0	0	0	1
<b>Grand Total</b>	<b>10</b>	<b>74</b>	<b>36</b>	<b>3</b>	<b>7</b>	<b>46</b>	<b>130</b>

*RS-B: Request that an event not be reported by the observer*

	NEW CASE	Investigation IN PROGRESS	Investigation COMPLETED			Investigation COMPLETED Total	Grand Total
			No infraction	Infraction - warning	Infraction - sanction		
			2016	0	12		
2017	1	4	3	2	2	7	12
2018	2	12	9	1	1	11	25
2019	4	17	2	0	1	3	24
2020	2	6	2	0	0	2	10
2021	0	2	0	0	0	0	2
2022	1	0	0	0	0	0	1
<b>Grand Total</b>	<b>10</b>	<b>53</b>	<b>19</b>	<b>3</b>	<b>10</b>	<b>32</b>	<b>95</b>

*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				Investigation COMPLETED Total	Grand Total
			No infraction	Infraction - no sanction	Infraction - warning	Infraction - sanction		
			2016	0	3	9		
2017	2	2	1	0	0	1	2	6
2018	1	6	11	0	1	1	13	20
2019	5	13	1	1	2	0	4	22
2020	3	4	0	0	0	0	0	7
2021	0	2	0	0	0	0	0	2
2022	1	0	0	0	0	0	0	1
<b>Grand Total</b>	<b>12</b>	<b>30</b>	<b>22</b>	<b>1</b>	<b>4</b>	<b>3</b>	<b>30</b>	<b>72</b>

24. Since 2017, the WCPFC has had a dedicated CMM for the Protection of WCPFC Regional Observer Programme Observers (CMM 2016-03/[2017-03](#)). The CMM outlines 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.

25. To date there have been six (6) incidents reported to the Secretariat in reference to CMM 2017-03, three (3) incidents related to the calendar year 2017, two (2) for 2020 calendar year and one (1) in 2023. 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
<b>CMM 2016-03-03-06</b>			
2017	1	2	<b>3</b>
<b>CMM 2017-03-03-06</b>			
2020	1	1	<b>2</b>
2023		1	<b>1</b>
<b>Grand Total</b>	<b>2</b>	<b>4</b>	<b>6</b>

26. To support the implementation of CMM 2016-03/17-03, WCPFC13 agreed on minimum standards adopted for Regional Observer Programmes to support safety of observers, which commenced in February 2017. The agreed minimum standard regarding the issuing of independent two-way communications devices and other safety protocols is well supported and audits have confirmed that all programmes have introduced independent 2-way communication devices in their programmes to issue to observers when commencing a trip. CCMs are reminded that these devices need to be activated and maintained to ensure they are working as required in case of an emergency. As part of the routine ROP Programme audits, the Secretariat checks that observer programmes are duly ensuring that the safety measures adopted by the Commission for observers are in place.

27. 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 have 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**

28. The Commission has adopted several CMMs 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 CMMs task the Secretariat to provide reporting based on observer data of the interactions and catches of species of special interest such as seabirds, cetaceans, sea turtles, whale sharks, silky and oceanic white tip sharks and mobulid rays. All catches of these species are a concern to Commission members and different mitigation methods and guidelines have been recommended 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>)

29. Reports of catches of species of special interest was reduced during the years 2020-2022 due to COVID restrictions on observer placements. **Annex A** 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 Dec 2022. A separate TCC19 paper provides information on trends in CCFS cases related to cetaceans, whale sharks and sharks (refer [TCC19-2023-09](#)).

**Support from the Secretariat to National and Regional Observer programmes**

30. As part of the Western Pacific-East Asia Improved Tuna Monitoring (WPEA-ITM) project, Philippines commenced training of observers in 2009. Training sessions have been held regularly every year and approximately 600 observers and 28 debriefers have been trained to WCPFC standards. Strict in-country COVID restrictions during the pandemic prevented trainings from taking place during 2020 and 2021. Observer training courses resumed in late 2022 when Philippines placed observers on their vessels. (Refer Table 2). The Secretariat has continually assisted with Philippines’ observer training programme as part of the WPEA project and attended the latest Philippine observer training held in Navotas, Philippines during June 2023.



Philippine observers collect data and information using SPC forms and formats and are employed domestically and in the high seas pocket one special management area.

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

31. The IATTC/WCPFC Cross-Endorsement arrangement was initiated to permit a WCPFC ROP observer to continue their duties on vessels that may operate in both the WCPO and the Eastern Pacific on the same trip. Pre-pandemic, there were many observers from Pacific Island countries who had IATTC/WCPFC cross endorsement qualifications. During the pandemic, there was little demand for cross-endorsed observers and several cross-endorsed observers left their programmes. Since the resumption of 100% observer coverage requirements there has been a high demand for observers who have completed the cross-endorsement training particularly from the USA fleet. Early in 2023, a training in Tuvalu was completed which saw 12 new observers certified by the IATTC trainer which helped increase the availability of cross-endorsed observers. Table 6 shows pre pandemic cross-endorsement placements noting that 2021 and 2022 had no placements. But since the recommencement of 100% observer coverage, 37 cross-endorsement placements have been made on USA vessels so far in 2023, 19 vessels of which have crossed over to the IATTC Convention Area.

**Table 6 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
<b>Total 2012 - 2022</b>		<b>2</b>	<b>13</b>	<b>9</b>	<b>10</b>	<b>12</b>	<b>14</b>	<b>15</b>	<b>22</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>104</b>

### **Implications of COVID-19 Intersessional decisions and travel restrictions**

32. Some CCM observer programmes have indicated that they have lost observers during COVID restrictions, whereas some programmes did not lose any observers and a few observers managed to continue working. A small number of programmes had some level of local coverage whereas others had no coverage or work for their observers.

33. The requirements for 100% coverage on purse seine vessels resumed from 1 January 2023. Consequently, there is a need to train extra observers to maintain the required 100% coverage levels in 2023. Some programmes held virtual observer training courses during the pandemic months to boost their numbers, however most programmes are organizing in person training sessions to take place as early as possible. An increase of observer placements was noted from October 2022 during the transitional period leading up to 1 January 2023.

### **Secretariat observations**

34. The years 2020/21/22 were challenging years for many observer programmes with observers being stranded or unable to work, and consequently without a steady source of income. Many CCMs provided work opportunities for their observers in other areas, some national observer offices suspended their observer operations completely, while others continued to place observers on vessels operating in their own waters.

35. During 2022, most countries started to lift travel restrictions, making it possible to resume 100% observer coverage on purse seine vessels from 1 January 2023. Purse seine observer placements started to come back to pre-COVID levels, and it is expected the reporting year for 2023 will see data and information figures that are back to near pre-COVID levels. To support member country programmes in returning to agreed levels of coverage, the Secretariat will continue to assist CCM observer programmes where this is requested. Areas of assistance may include observer and safety issues, observer training, programmes operations and clarifications of observer roles in monitoring CMMs and other Commission requirements.

## **Administrative notes**

36. 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. Following a Commission decision at WCPFC15 that the booklet should no longer be printed, the Secretariat maintains an updated, electronic version on the WCPFC website: <https://www.wcpfc.int/regional-observer-programme>

37. 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 on the handling of different species of special interest (SSI).

38. 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 2023. The IWG-ROP will assist in many tasks to update and correct aspects of several 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**

39. TCC19 is invited to note and discuss the 15th Annual Report of the WCPFC Regional Observer Programme.

## Data and monitoring through the ROP of the Commission's CMMs intended to minimize impacts of fishing on species of special interest

1. Table 1 indicates the codes used in this Annex. The information in the Species of Special Interest (SSI) report is held by SPC and is available to the Secretariat through the Tufman2 database. All figures represent raw data collected by the observers that have been debriefed and checked for mistakes or errors.

2.

**Table A1- Life Status & Gear Codes used in Annex A**

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

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

3. 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 shark CMM 2022-04 (which replaced CMM 2012-04 on 1st Nov 2020) prohibits deliberate setting on whale sharks and requires best efforts to be made to ensure safe release of the whale shark where an encirclement occurs. Table A2 shows the number of whale shark interactions and landings for 123 purse seine trips reported from ROP data entered for 2022. The low interaction rate of 3 Whale sharks for 123 purse seine trips may be due to vessels choosing to not set around whale sharks but is more than likely the location of the 3370 sets recorded by observers for the 123 purse seine trips; noting that around a third of the sets (1077) were recorded by Philippine vessels that fish predominately on anchored FADS, which are less likely to have a whale shark associated with the set.

**Table A2 Whale Shark 'Landings and Interactions' for 2022**

Activity	Total Number	Released/ Escaped Alive and Healthy	Released Alive Injured or Distressed	Alive Unknown Condition	Deceased	Unknown
<b>Landings</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Net Caught</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>

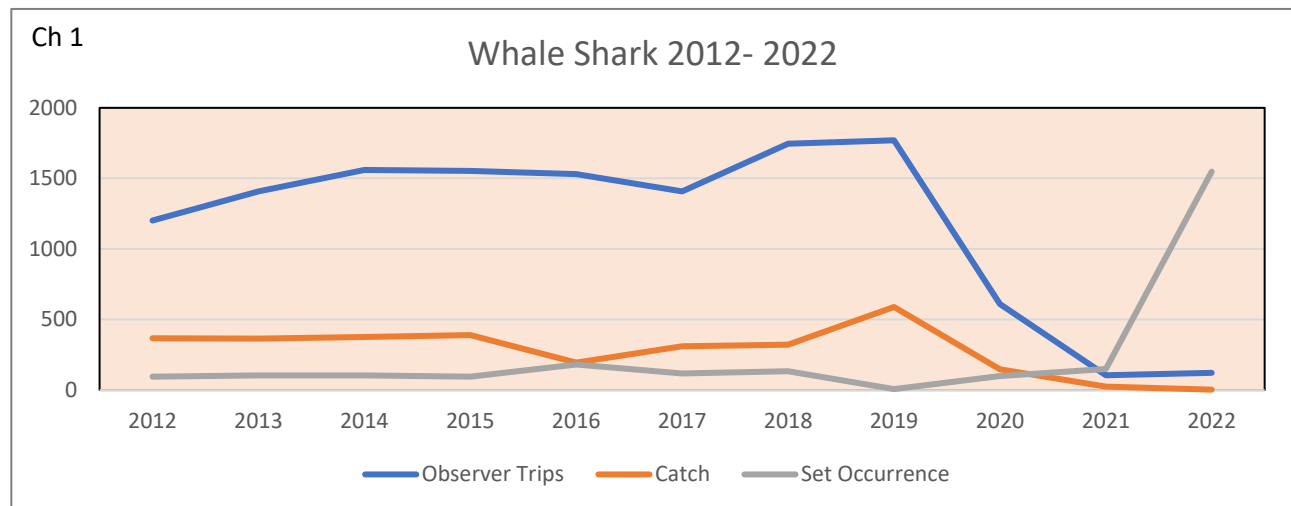
\*Figures as of 24 July 2023

3. Table A3 and Ch1 shows the updated figures for whale sharks since 2012 and as can be seen the occurrence 2012 to 2022 was about an average of 1 whale shark caught about every 106 sets. The additions of the 2022 figures show 1 caught every 1548 sets. Early figures for 2023 since the 100% observer coverage for purse seiners recommended on 1st January 2023, shows an increase in interactions for whale sharks with 73 observer trips recorded for 14 whale sharks' interactions.

**Table A3 Observer Reported Whale Shark Interactions and Landings from 2012-2022**

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	Occurrence of 1 Whale Shark by #Set
2012		1202	134	32243	336	96
2013		1409	146	38280	354	105
2014		1559	141	39386	361	104
2015		1552	156	36770	376	94
2016		1531	96	35269	184	182
2017		1408	118	36519	253	118
2018		1746	122	42807	313	133
2019		1770	159	43441	563	7
2020		610	75	14696	141	100
2021		105	13	3730	22	149
2022		123	2	4644	3	1548
<b>2012-2022</b>	<b>3089</b>	<b>13015</b>	<b>1162</b>	<b>327785</b>	<b>2906</b>	<b>106</b>

\*Figures as of 24 July 2023



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

4. Table A4 & Ch 2 shows Cetacean interaction data from 123 Purse seine trips and 641 longline trips in 2022. Many varied species of whales, dolphins and seals were observed by ROP observers. The SPC produced ‘On Deck Species ID Guides’ issued to many observers allows for a more accurate identification of each animal. Purse seine observers recorded up to 11 different species and long line observers 14 different species interacted with their fishing gear in 2022.

5. During 2022 the 123 purse seine trips recorded a predominance of dolphin species interactions 243 of the 260 interactions were rough toothed, bottle nose, indo pacific spinner dolphins, and false killer whales with most of the whales being baleen whales; fourteen brydes whales and one sei whale; there were also two toothed whales recorded, both sperm whales.

6. There were 30 deceased animals from the catch of 260 animals by Purse seine vessels; 25 from 30 of the deceased animals were dolphins -rough tooth, spinner, and bottle nosed dolphins -. Observers reported that 173 animals caught in the net had the crew of the vessels assisting their escape from the purse seine net, 21 animals broke through or jumped out of the net by their own accord; 57 animals were landed on deck of which

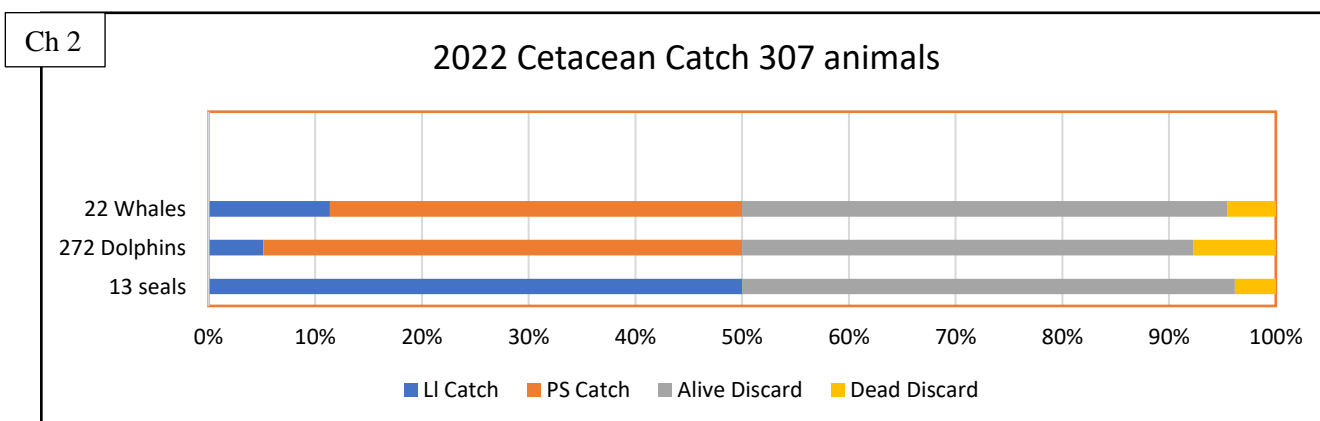
27 were deceased on landing. It was noted that 13 animals (rough tooth and spinner dolphins) died during the process of trying to release them from the net.

7. Fur-seals, and dolphins were the predominate species interacting or caught by long line vessels, there were 14 different species interactions or landings with longliners; most were released alive, however 8 of the 47 captures were reported deceased. There were 24 animals hooked internally including all the 13 seals caught, one the guadalupe seal was deceased, the rest were released alive - two animals were externally hooked, two entangled in gear of which one spinner dolphin was deceased. 19 animals were reported as landed on deck of which six were deceased.

**Table A4 Cetaceans and Seals Observer Reported Interactions - 2022**

Species	PS	LL	Escaped, Cut-off, Assisted Escape		Interacted or landed		Interacted or landed.		Unknown Condition when Discarded	
			Alive before Landing		Discarded Alive		Discarded Dead			
Antarctic Fur Seal		10		0		8		0		2
Beaked Whales Unidentified		2		1		0		1		0
Bottle Nose Dolphin	9	2	2	0	3	1	4	1	0	0
Brydes Whale	14		13		1		0		0	
Common Dolphin	1		1		0		0		0	
Dolphins Nei		9		0		7		1		1
False Killer Whale	5	10	2	0	2	10	1	0	0	0
Guadalupe Fur Seal		2		0		1		1		0
Hawaiian Monk Seal		1		0		1		0		0
Ind/Pac Bottle Nose Dolphin	47	1	43	0	4	1	0	0	0	0
Killer Whale		1		0		1		0		0
Long Beaked Common Dolphin	2		2		0		0		0	
Pan Tropical Spotted Dolphin	1	1	0	0	0	0	1	1	0	0
Rough Tooth Dolphin	125		93		20		12		0	
Risso's Dolphin		3		0		3		0		0
Sei Whale	1	1	1	0	0	0	0	1	0	0
Sperm Whale	2		2		0		0		0	
Spinner Dolphin	53	2	33	0	0	0	19	2	1	0
Unidentified Whale		2		0		2		0		0
<b>Totals</b>	<b>260</b>	<b>47</b>	<b>192</b>	<b>1</b>	<b>30</b>	<b>35</b>	<b>37</b>	<b>8</b>	<b>1</b>	<b>3</b>

\*Figures as of 24 July 2023

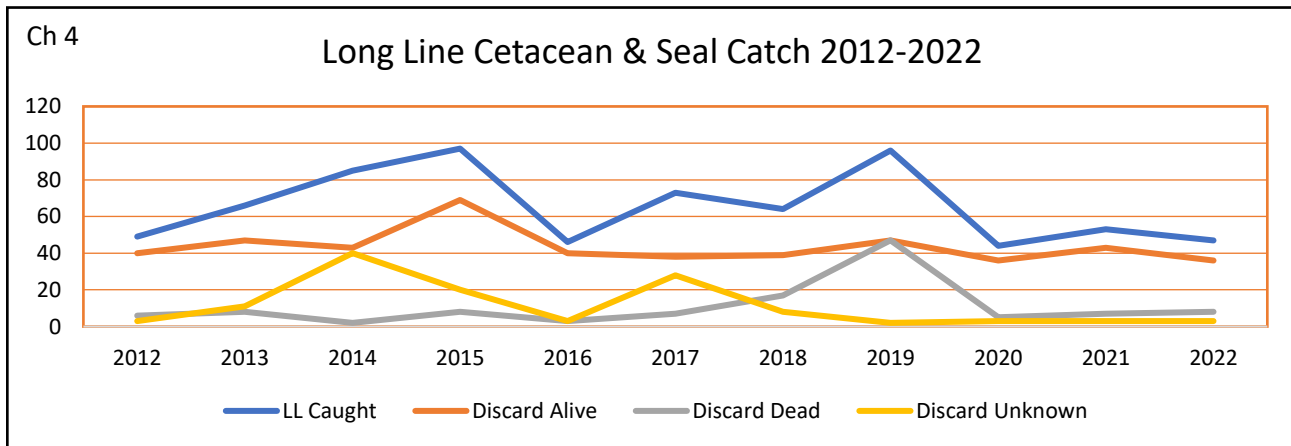
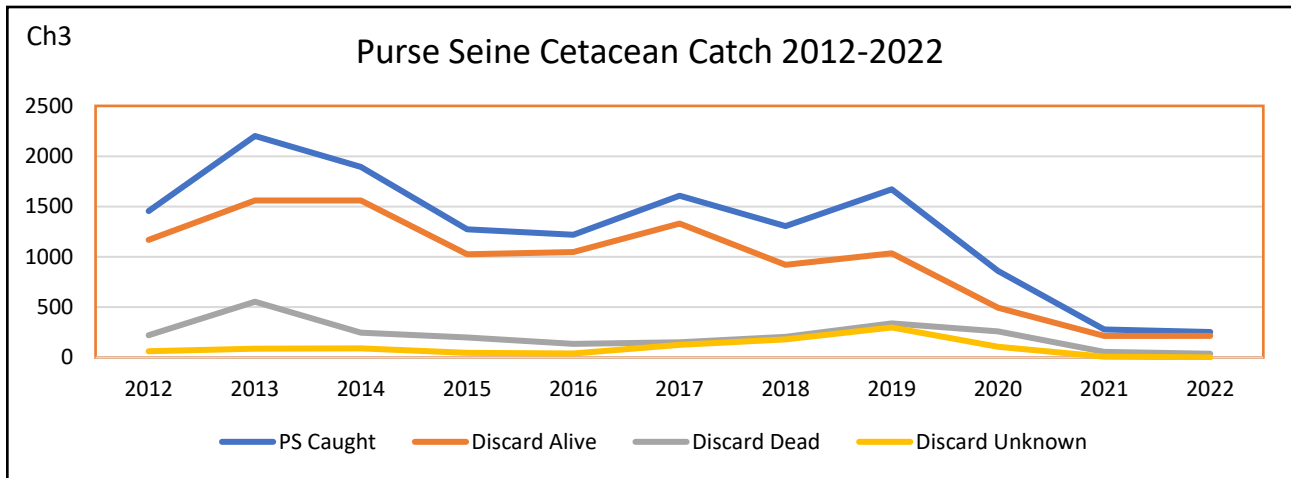


8. Table A5, Ch 3 & 4 shows the catch rates on purse-seine and longlines since 2012 when the CMM for Cetaceans CMM 2011-03 was agreed, following a combination of all the data over the years collected by mainly pacific observers using the old General Form 2 (Gen-2) format all the figures from 2012 in the table have been updated to better reflect catches and conditions of Cetaceans. The table reflects the current data held by SPC,

**Table A5 Cetaceans caught from 2012-2022**

Year	Total caught or interacted		Assisted Cut-off, Escaped Released		Interacted or landed. (Discarded Alive) Inc Assisted		Interacted or landed Dead. inc Assisted		Unknown Condition when Discarded	
	PS	LL	PS	LL	PS	LL	PS	LL	PS	LL
2012	1454	49	368	0	1170	40	222	6	62	3
2013	2201	66	355	0	1560	47	554	8	87	11
2014	1895	85	202	0	1560	43	245	2	90	40
2015	1273	97	341	0	1026	69	200	8	47	20
2016	1221	46	340	0	1048	40	134	3	39	3
2017	1607	73	343	0	1330	38	150	7	127	28
2018	1305	64	373	0	921	39	204	17	180	8
2019	1670	96	703	0	1034	47	338	47	298	2
2020	861	44	383	2	496	36	260	5	105	3
2021	277	53	123	0	214	43	54	7	9	3
2022	253	47	194	1	215	36	37	8	1	3
<b>Total 2012- 2022</b>	<b>14107</b>	<b>720</b>	<b>3725</b>	<b>3</b>	<b>10574</b>	<b>478</b>	<b>2398</b>	<b>118</b>	<b>1045</b>	<b>124</b>

\*Figures as of 24 July 2023



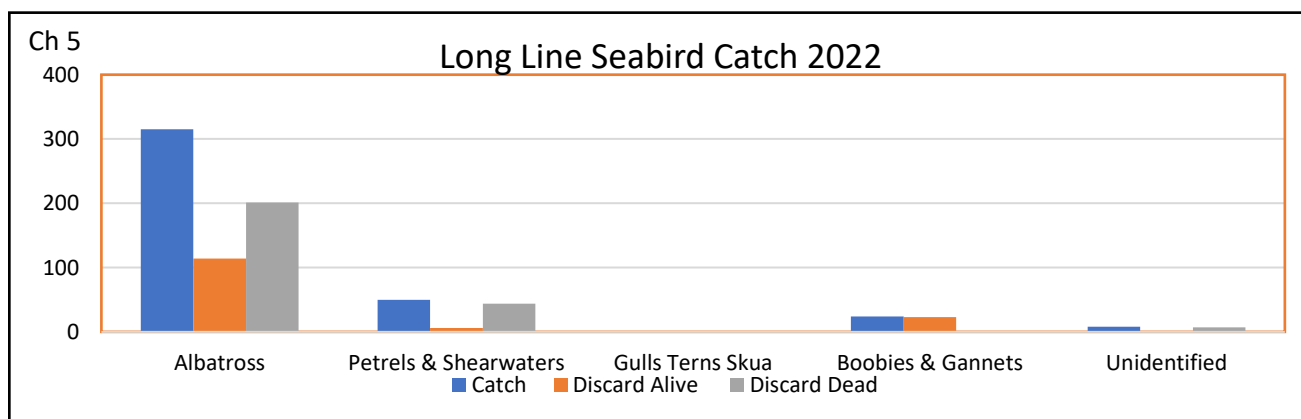
**Seabird fishery interactions as reported by ROP observers for 2022.**

9. Table A6 & Ch 5 shows available 2022 Observer data collected by observers from China, Hawaii, Fiji, New Caledonia, French Polynesia, Chinese Taipei, New Zealand, and Vanuatu which indicates that birds were recorded as caught and landed on 641 longline trips carried out in 2022. The observer collected data shows that observers confirmed 253 deceased and 145 released alive birds with Laysan Albatross (158), Black-footed Albatross (138) and White Chin Petrels (28) being the predominant species recorded. No catches were recorded on the 123 purse Seine trips in 2022.

**Table A6 -Observer Reported 2022 Seabird Bycatch - Long Line Vessels**

Gear	Species	Number Caught	Released Alive	Dead	<23N >30S	<30S	>23N
LL	Antipodean albatross	1		1	1		
LL	Birds Unidentified	8	1	7	8		
LL	Buller's Albatross	8	0	8		8	
LL	Black-Footed Albatross	138	63	75	2		136
LL	Boobies & Gannet	24	23	1	24		
LL	Flesh Footed Shearwater	2	2	0		2	
LL	Grey Petrel	4	1	3		4	
LL	Gulls, Terns, Skuas	1	0	1	1		
LL	Laysan Albatross	158	51	107	1		157
LL	Light Mantled Sooty Albatross	1	1		1		
LL	Parkinson's Petrel	2	2			2	
LL	Petrels and Shearwaters	10		10	10		
LL	Wandering Albatross	2		2		2	
LL	Westland Petrel	4		4		4	
LL	White Capped Albatross	7		7		7	
LL	White Chinned Petrel	28	1	27		28	
<b>Longline</b>		<b>398</b>	<b>145</b>	<b>253</b>	<b>48</b>	<b>57</b>	<b>293</b>

\*Figures as of 24 July 2023



10 Observers reported 10210 sightings (Table A7) on long line vessels with albatrosses being the most predominant sighting of known species. All sightings recorded on long line were recorded at various latitudes, noting high sightings reported of northern hemisphere albatrosses, Laysan and Black-footed Albatrosses north of 23N. The southern hemisphere sea bird sightings saw Royal and Wandering Albatrosses as the predominant species recorded as well as a number of Petrel and Shearwater species. 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.

**Table A7 - Longline Seabird Sightings 2022**

Gear	Species	Number Sighted	<23N >30S	<30S	>23N
LL	Albatross nei	116	45	71	
LL	Antipodean Albatross	4		4	
LL	Black Browed Mollymawk	49	2	47	
LL	Black footed Albatross	2584	15		2569
LL	Boobies & Gannets	332	310		22
LL	Buller's Albatross	8		8	
LL	Cape Petrel	48	1	47	
LL	Flesh Footed Shearwater	40	40		
LL	Grey Petrel	75		75	
LL	Gulls, Terns and Skuas	8	8		
LL	Laysan Albatross	4516			4516
LL	Light Mantled Sooty Albatross	2	1	1	
LL	Petrels and Shearwaters	533	177	217	159
LL	Petrels Nei	413	20	390	3
LL	Salvin's Albatross	9		9	
LL	Shearwaters Nei	93	48	45	
LL	Short Tailed Shearwater	20	20		
LL	Sooty Shearwater	2	2		
LL	Southern Royal Albatross	379	1	378	
LL	Wandering Albatross	549	13	536	
LL	White capped Albatross	39	39		
LL	White chinned Petrel	11	5	6	
LL	Bird (Unidentified)	380	72	205	3
<b>Longline Birds Sightings</b>		<b>10210</b>	<b>819</b>	<b>2039</b>	<b>7272</b>

\*Figures as of 24 July 2023

11. Tables A8a, A8b, A8c & Ch 6a-6d show recorded observer seabird catches since the first seabird measure, (CMM 2012-07). In the early periods observers did not have ID guides to assist in properly 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 reported figures for 2020 to 2022 are lower than previous years because of the drop in observer coverage due to COVID-19.

**Table A8 (a) Seabird Catch Information 2012 to 2022**

Year	Albatross							Total	Petrel & Shearwaters						
	Total	A	%	D	%	U	%		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	
2022	315	114	36	201	64	0	0	50	6	12	44	88	0	0	
<b>Total</b>	<b>6202</b>	<b>483</b>	<b>8%</b>	<b>5435</b>	<b>88%</b>	<b>284</b>	<b>4%</b>	<b>752</b>	<b>38</b>	<b>5%</b>	<b>676</b>	<b>90%</b>	<b>38</b>	<b>5%</b>	

\*Figures as of 24 July 2023



**Table A8(b)**

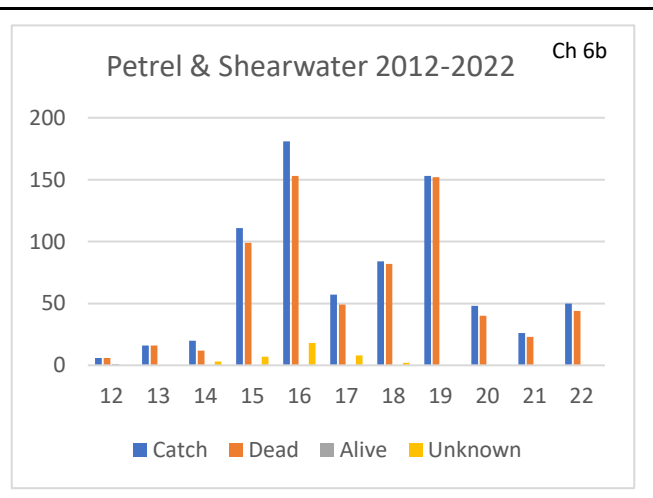
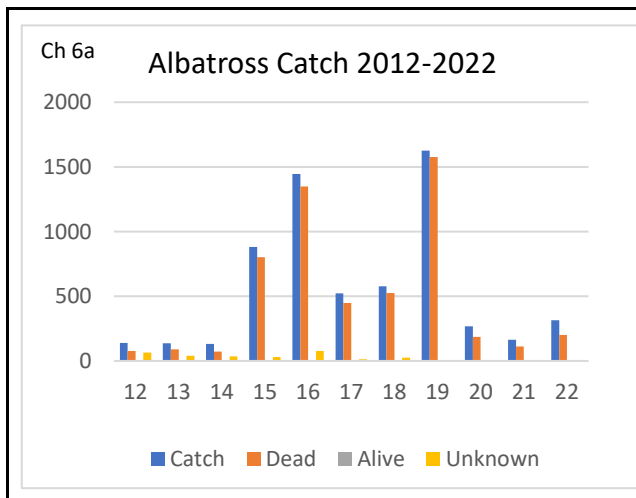
Year	Gulls Terns Skua							Boobies and Gannets						
	Total	A	%	D	%	U	%	Total	A	%	D	%	U	%
2012	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2013	3	0	0	2	67	1	33	1	0	50	1	50	0	0
2014	2	0	0	2	100	0	0	2	2	100	0	0	0	0
2015	2	0	0	0	0	2	100	2	1	50	1	50	0	0
2016	0	0	0	0	0	0	0	1	1	100	0	0	0	0
2017	3	0	0	3	100	0	0	5	1	20	2	40	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
2022	1	0	0	1	100	0	0	24	23	96	1	4	0	0
<b>Total</b>	<b>13</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>77%</b>	<b>3</b>	<b>23%</b>	<b>44</b>	<b>29</b>	<b>66%</b>	<b>13</b>	<b>30%</b>	<b>2</b>	<b>4%</b>

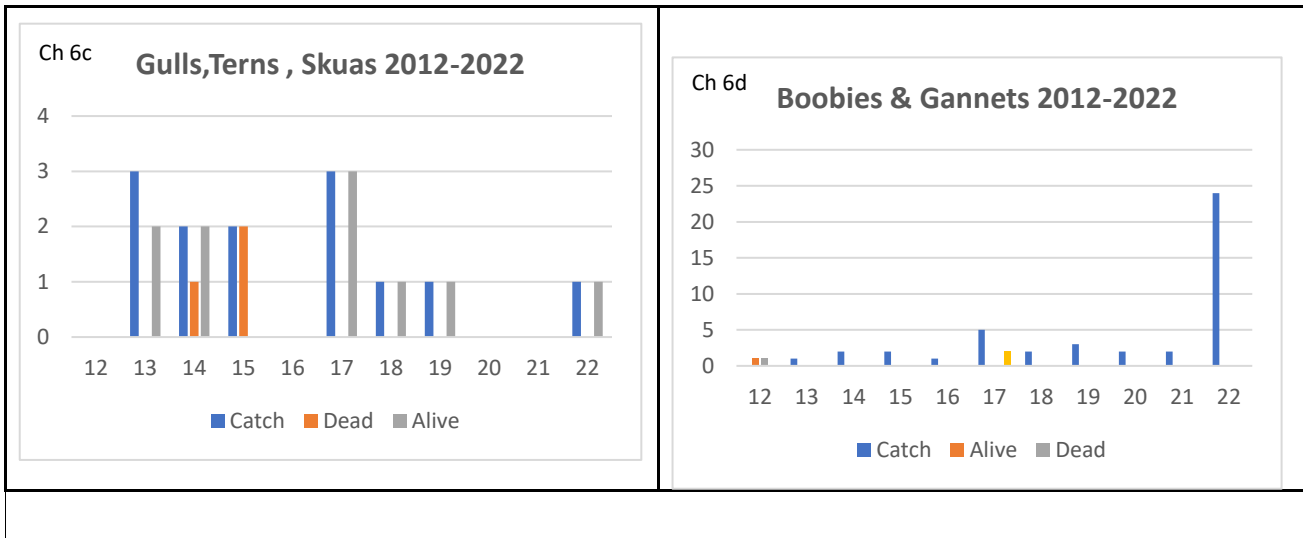
\*Figures as of 24 July 2023

**Table A8 (c)**

Year	Birds Unidentified						
	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
2022	8	1	12	7	88	0	0
<b>Total</b>	<b>128</b>	<b>8</b>	<b>6%</b>	<b>113</b>	<b>88%</b>	<b>7</b>	<b>6%</b>

Figures as of 24 July 2023





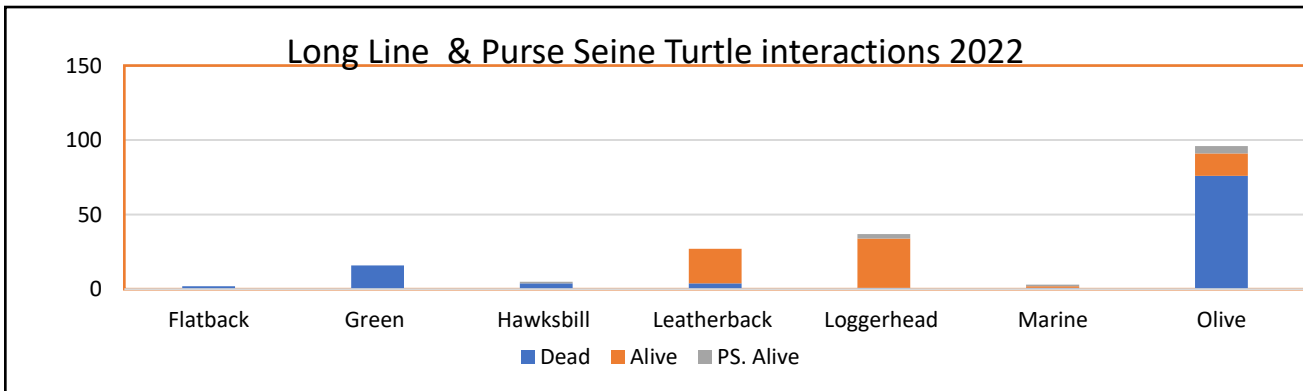
**Sea turtle interactions as reported by ROP observers.**

12 Observer catch data figures of turtles were lower in 2022 due to the reduction in observer coverage caused by COVID. Observed turtle catches for 123 Purse Seine trips and 641 Longline trips are reported in Table A9 & Ch 7. A total of 186 observed turtle landing and non-landed interactions on purse seiners and longliners were recorded by observers in 2022. There were 176 turtles reported caught by longliners, 70 were released alive 104 were deceased when discarded; Observers reported that some crews assisted with the recovery of live turtles landed on board longline vessels. But many were deceased before being discarded. olive ridley turtles continue to be the predominant species caught by longliners.

**Table A9 Longline Turtle Landings and Interactions for 2022**

Gear	Species	Number Observed	Retained	Number Discarded Alive	Number Discarded Dead	Unknown Condition	Released Alive before landing
LL	Flatback Turtle	2	0	0	2	0	
LL	Green Turtle	16	0	0	16	0	
LL	Hawksbill Turtle	4	0	0	4	0	
LL	Leatherback Turtle	27	0	21	4	2	16
LL	Loggerhead Turtle	34	0	33	1	0	32
LL	Marine Turtle	2	0	1	1	0	
LL	Olive Ridley	91	0	15	76	0	13
<b>Long-Line Turtles Caught 2022</b>		<b>176</b>	<b>0</b>	<b>70</b>	<b>104</b>	<b>2</b>	<b>61</b>

Figures as of 24 July 2023



13. Table A10 shows that there were 10 turtles recorded caught by purse seiners, no turtles were reported as deceased, six were released from the net before landing and one was untangled from the net and released, it was noted that two were caught in free school sets and eight were caught in five anchored FAD and two Drifting FAD sets. The crew assisted the three turtles when brailled aboard and landed on deck, they were released in the same condition as when landed.

**Table A10 Purse-seine Turtle landings and interactions for 2022**

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	1	0	1	0	0	1
PS	Leatherback Turtle	0	0	0	0	0	0
PS	Loggerhead Turtle	3	0	1	0	2	1
PS	Marine Turtle	1	0	1	0	0	1
PS	Olive Ridley Turtle	5	0	5	0	0	4
<b>PS Turtles Caught 2020</b>		<b>10</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>2</b>	<b>7</b>
<b>Total Turtles LL &amp; PS Caught in 2022</b>		<b>186</b>	<b>0</b>	<b>78</b>	<b>104</b>	<b>4</b>	<b>69</b>

Figures as of 24 July 2023

14 Table A11a to A11c show the catches between 2012 and 2022. It is noted that a large majority of turtles caught by purse seiners are returned to the sea alive and in a reasonable condition. Most deceased turtles occur in long lining and in most cases where a turtle is recorded as deceased it has expired before being landed. The figures indicate that green, loggerhead and olive ridleys are the most predominant turtle species caught in the WCPO.

**Tables A11a- Flatback, Green and Hawksbill Turtle observed in the period 2012-2022**

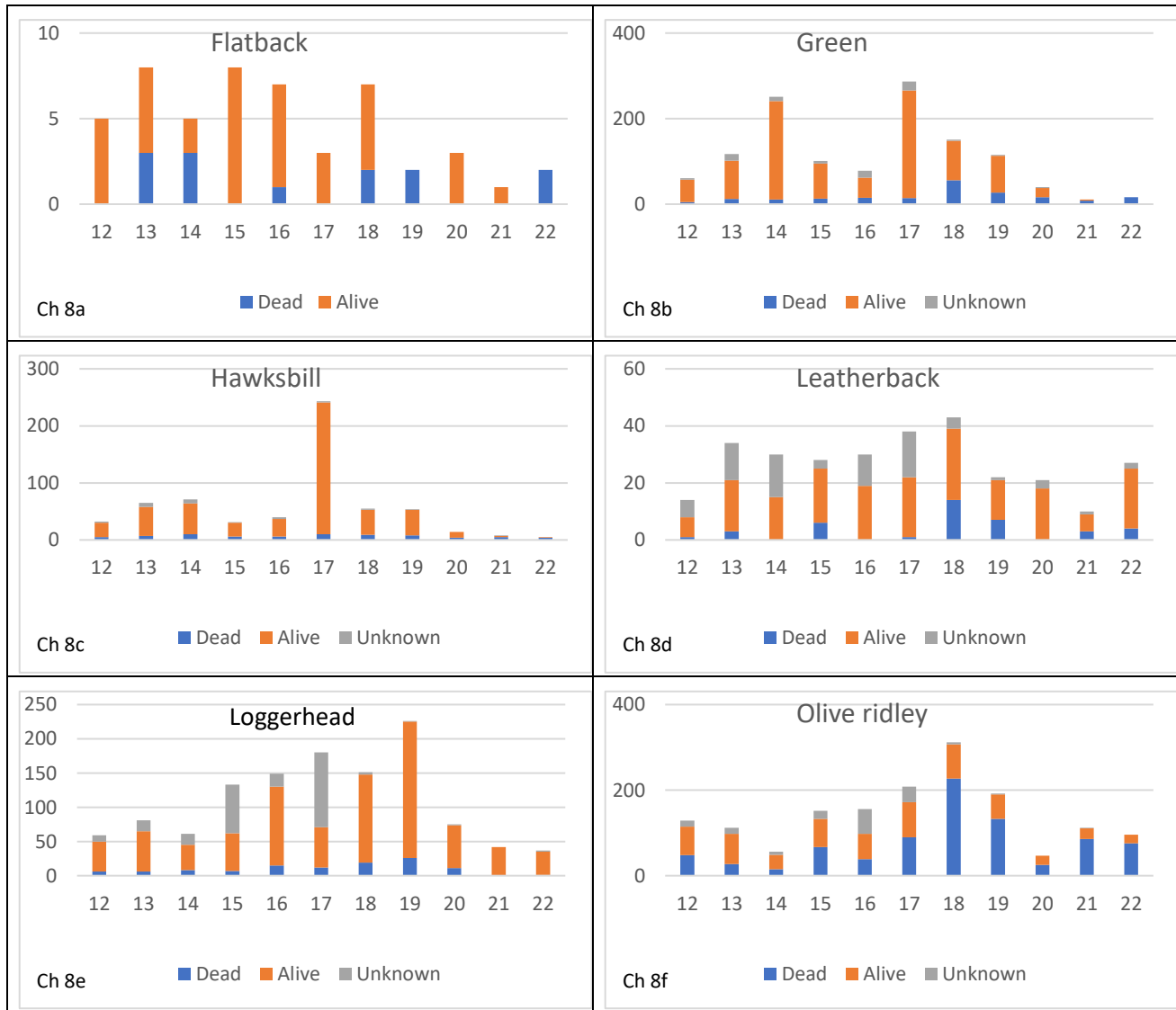
Year	Flatback	A	D	U	Green	R	A	D	U	Hawksbill	R	A	D	U
2012	5	5	0	0	66	5	52	5	4	32	0	25	5	2
2013	9	5	3	1	121	4	90	12	15	65	0	51	7	7
2014	6	2	3	1	256	5	230	11	10	72	1	54	10	7
2015	8	8	0	0	102	1	82	13	6	31	0	24	6	1
2016	7	6	1	0	78	0	47	15	16	40	0	31	6	3
2017	3	3	0	0	287	0	252	14	21	243	0	231	10	2
2018	8	5	2	1	151	0	92	56	3	55	0	44	9	2
2019	2	0	2	0	116	1	86	27	2	54	0	45	8	1
2020	3	3	0	0	40	0	22	16	2	14	0	10	4	0
2021	1	1	0	0	11	0	3	8	0	8	0	2	5	1
2022	2	0	2	0	16	0	0	16	0	5	0	1	4	0
<b>Total</b>	<b>54</b>	<b>38</b>	<b>13</b>	<b>3</b>	<b>1244</b>	<b>16</b>	<b>956</b>	<b>193</b>	<b>79</b>	<b>619</b>	<b>1</b>	<b>518</b>	<b>74</b>	<b>26</b>

Figures as of 24 July 2023

**Table A11b Leatherback, Loggerhead & Olive Ridley Turtles observed 2012-2022**

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	82	1	59	6	16	112	0	71	27	14
2014	31	1	15	0	15	66	5	37	8	16	56	0	34	15	7
2015	28	0	19	6	3	133	0	55	7	71	152	0	66	67	19
2016	30	0	19	0	11	149	0	115	15	19	156	0	59	39	58
2017	38	0	21	1	16	180	0	59	12	109	208	0	82	90	36
2018	43	0	25	14	4	151	0	129	19	3	312	0	80	227	5
2019	22	0	14	7	1	226	0	199	26	1	192	0	57	133	2
2020	21	0	18	0	3	75	0	63	11	1	47	0	22	25	0
2021	10	0	6	3	1	42	0	42	0	0	112	0	25	86	1
2022	27	0	21	4	2	37	0	34	1	2	96	0	20	76	0
<b>Total</b>	<b>302</b>	<b>5</b>	<b>183</b>	<b>39</b>	<b>75</b>	<b>1203</b>	<b>9</b>	<b>836</b>	<b>111</b>	<b>247</b>	<b>1572</b>	<b>0</b>	<b>583</b>	<b>833</b>	<b>156</b>

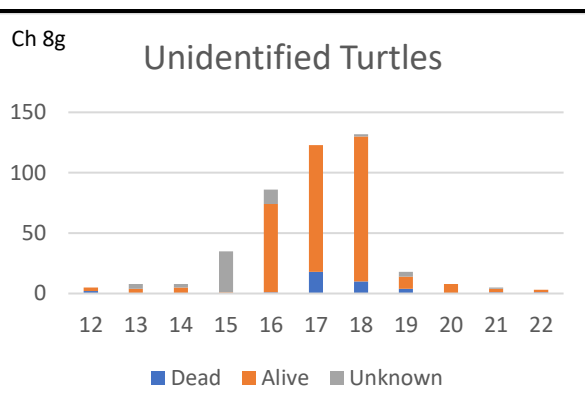
Figures as of 24 July 2023



15. During the period 2012-2021, the unidentified turtles in table A11c & Ch 8g 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, and therefore were hard to identify correctly.

**Table A11(c) Unidentified Turtles 2012-2022**

Year	Unidentified	R	A	D	U
2012	5	0	3	2	0
2013	8	0	4	0	4
2014	8	0	5	0	3
2015	35	0	1	0	34
2016	86	0	73	1	12
2017	123	0	105	18	0
2018	132	0	120	10	2
2019	18	0	10	4	4
2020	8	0	8	0	0
2021	5	0	3	1	1
2022	3	0	2	1	0
<b>Total 2012-</b>	<b>431</b>	<b>0</b>	<b>334</b>	<b>37</b>	<b>60</b>



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

*Silky Sharks.*

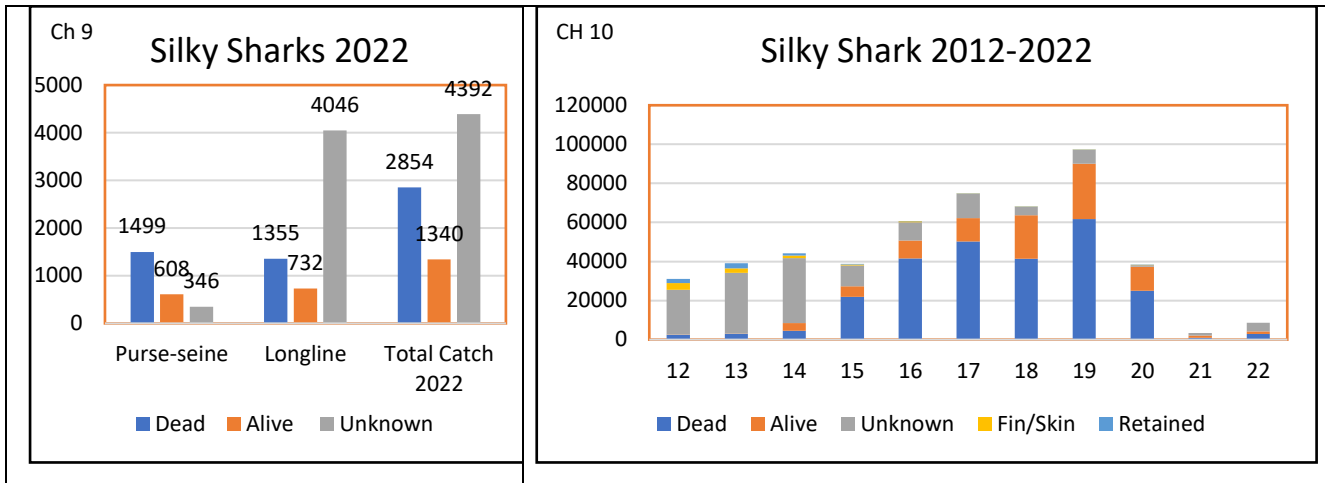
16. WCPFC’s conservation and management measures for sharks prohibit vessels from retaining on board, transshipping, or storing or landing silky sharks, in whole or in part, in the fisheries covered by the Convention. Table A12 & Ch 9 indicates that the catches of silky sharks are lower than pre COVID reports because of the limited observer coverage on purse seiners (123 Trips) in 2022. 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 2022 indicate an average of around 20 sharks per trip were reported despite almost double the time (68 days) per observer trip.

17. “Silky Shark” landings or net interactions indicates that of the 2453 recorded on purse seiners, 688 (28%) were reported alive and 1094 (48%) 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, so , estimates were reported. For longline vessels in 2022, 758 silky sharks were recorded caught and landed, 493 (65%) were recorded as being discarded alive, and 216 (28%) as deceased.

**Table A12 Silky Shark Catches 2022**

Gear	Total Number Caught	Discard Body Fins Retain	Retain Body Whole	Condition Caught			Condition Discarded			LL Cut Free before Landing			Unhook before landing
				A	D	U	A	D	U	A	D	U	
Purse-seine	2453	0	0	868	910	855	608	1499	346	0	0	0	0
Longline	6133	0	0	4458	1309	366	732	1355	4046	138	24	1	0
<b>Total Catch</b>	<b>8586</b>	<b>0</b>	<b>0</b>	<b>5146</b>	<b>2219</b>	<b>1221</b>	<b>1340</b>	<b>2854</b>	<b>4392</b>	<b>138</b>	<b>24</b>	<b>1</b>	<b>0</b>

Figures as of 24 July 2023



18. Table A13 & CH 10 indicate catches of silky sharks from 2012 to 2022 and shows that reporting of shark finning and retention has decreased noticeably. Figures for 2022 indicate no fins or body parts were retained. The alive status of released silky sharks has improved since the implementation of the CMM 2013-08 from 1% in 2012 to an overall 19%. Figures reported for 2022 indicates 16% of silky sharks were released alive, however this figure is affected by the low number of observers reporting for purse seiners and the very high reporting of unknown or no indicated status on discard by some observer programmes. Programmes are requested to ensure their observers can collect the status of the shark’s condition on discard.

**Table A13 Silky Shark Catches 2012-2022**

2012-2022 Silky Sharks	Estimated Number Caught	Discarded Body, Fins / Skins 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	29007	2025	3532	207	2351	22917	1	84
2013	36506	2554	2402	259	2847	30998	11	126
2014	43107	1039	1357	3878	4554	33318	12	267
2015	38507	329	566	5367	21897	10677	24	330
2016	60527	257	402	9134	41617	9374	20	1085
2017	74822	35	93	11916	50322	12491	30	933
2018	68003	34	21	22278	41388	4316	42	783
2019	97211	4	45	28272	61728	7166	29	655
2020	38206	131	42	12261	25044	859	32	183
2021	3354	0	0	1143	879	1332	34	120
2022	8586	0	0	1340	2854	4392	16	112
<b>2012-2022</b>	<b>497836</b>	<b>6408</b>	<b>8460</b>	<b>96055</b>	<b>255481</b>	<b>137840</b>	<b>19</b>	<b>4678</b>

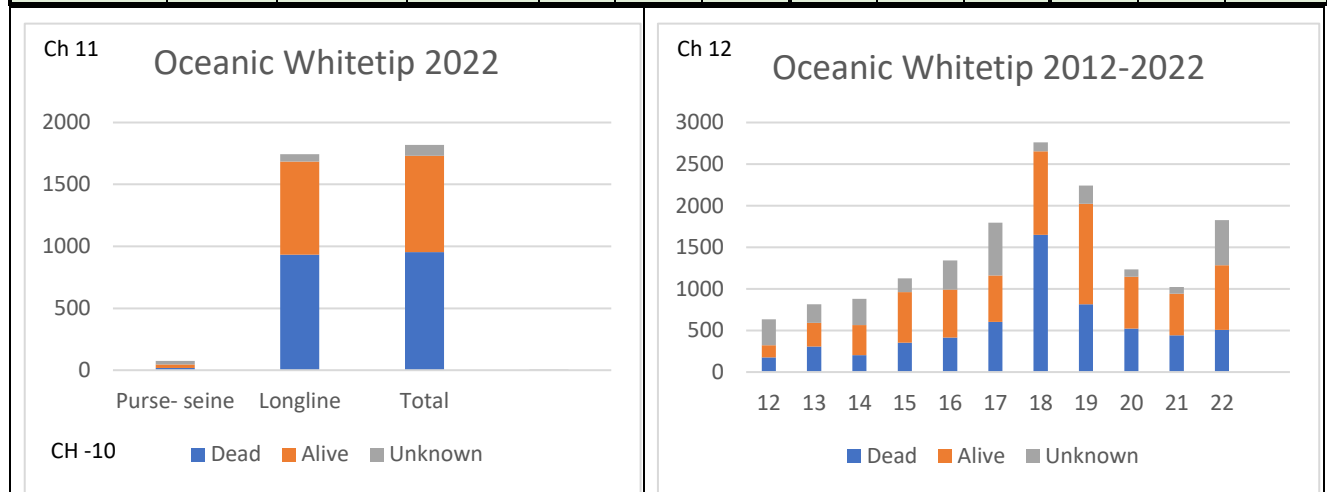
Figures as of 24 July 2023

*Oceanic White-tip Sharks*

19. 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 A14 shows the total catches reported by observers as discarded in 2022 from 123 purse seine trips and 641 longline trips. Oceanic whitetip sharks are predominantly caught by longline vessels with purses seine vessels catching one about every 60 sets compared to longline catch of one every 7 sets.

**Table A14. Ocean Whitetip Sharks (2022)**

Gear	Number Caught	Discard Body, Fins Retain	Retain Body Whole	Condition Caught			Condition Discarded			LL Cut free before landing		
				A	D	U	A	D	U	A	D0	U
Purse- seine	74	0	0	28	18	28	28	19	27	0	0	0
Longline	1745	0	0	1129	463	153	751	934	60	118	8	0
<b>Total</b>	<b>1819</b>	<b>0</b>	<b>0</b>	<b>1157</b>	<b>481</b>	<b>181</b>	<b>779</b>	<b>953</b>	<b>87</b>	<b>118</b>	<b>8</b>	<b>0</b>



20. CMM 2022-04 for Sharks para 22 indicates the requirements when a oceanic white tip shark is caught. The figures indicate that both the reporting and adherence to the CMMs measures has improved since the first CMM was implemented in 2013. Table A15 & Ch 12 show reports of oceanic white tip sharks being retained and processed has been reduced to zero with no observer reports of fins or bodies being retained in 2021/22. The status of releasing alive has improved from 2012 (19%) to 49% of all caught oceanic white tip sharks in 2021 and 43% in 2022.

**Table A15. Oceanic Whitetip Sharks 2012-2022**

2012-2022 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	744	50	109	144	178	313	19	104
2013	880	75	66	285	308	221	32	142
2014	942	30	61	359	205	317	38	265
2015	1197	10	69	607	354	167	51	149
2016	1344	11	2	577	415	350	43	306
2017	1801	0	5	557	605	634	31	155
2018	2783	10	21	1006	1648	108	36	224
2019	2243	6	0	1207	815	221	54	149
2020	1234	0	1	623	521	90	50	158
2021	1021	0	0	499	442	80	49	69
2022	1825	0	0	777	508	540	43	112
<b>2012-2022</b>	<b>16014</b>	<b>192</b>	<b>334</b>	<b>6641</b>	<b>5999</b>	<b>3041</b>	<b>41%</b>	<b>1833</b>

Figures as of 24 July 2023

## Shark Catches 2022

21. Shark catches for all shark species in 2022 are shown in Table A16 for purse seine vessels and table A17 for longline vessels. All sharks were discarded on purse seine vessels, and on longliners big-eye thresher, blue shark. mako sharks were the predominant species retained, a few other species hammer head were retained but in small numbers. Fins from blue sharks and makos were reported retained along with the trunks.

**Table A16 Purse seine Shark Catch -2022**

SHARK SPECIES	CATCH	RETAINED	DISCARD	FINS RETAINED with Trunk	FINNED-TRUNK DISCARDED
GREAT HAMMERHEAD	1	0	1	0	0
OCEANIC WHITETIP SHARK	74	0	74	0	0
SCALLOPED HAMMERHEAD	1	0	1	0	0
SILKY SHARK	2453	0	2453	0	0
SILVERTIP SHARK	1	0	1	0	0
VARIOUS SHARKS NEI	4	0	4	0	0
WHALE SHARK	3	0	3	0	0
WINGHEAD SHARK	1	0	1	0	0

**Table A17 Long Line Shark Catch 2022**

SHARK SPECIES	CATCH	RETAINED	DISCARD	FINS RETAINED with Trunk	FINNED TRUNK DISCARDED
BIGEYE THRESHER SHARK	2934	51	2883	0	0
BIGNOSE SHARK	15	0	15	0	0
BLACKTIP REEF SHARK	6	0	6	0	0
BLACKTIP SHARK	15	0	15	0	0
BLUE SHARK	46748	11149	35599	3758	0
BRONZE WHALER SHARK	104	2	102	0	0
BULL SHARK	1	0	1	0	0
COOKIE CUTTER SHARK	5	0	5	0	0
CROCODILE SHARK	1925	0	1925	0	0
DUSKY SHARK	14	14	0	0	0
GALAPAGOS SHARK	11	0	11	0	0
GREAT HAMMERHEAD	7	3	4	0	0
GREY REEF SHARK	9	0	9	0	0
HAMMERHEAD SHARKS NEI	3	0	3	0	0
KITEFIN SHARK	19	0	19	0	0
LONGFIN MAKO	239	65	174	0	0
MAKO SHARKS	7	0	7	0	0
OCEANIC WHITETIP SHARK	1745	0	1745	0	0
PELAGIC THRESHER SHARK	800	0	800	0	0
PORBEAGLE SHARK	107	1	106	0	0
SALMON SHARK	13	0	13	0	0
SANDBAR SHARK	6	0	6	0	0
SCALLOPED HAMMERHEAD	158	1	157	0	0
SCHOOL SHARK	1	1	0	0	0
SHARK SUCKER	18	0	18	0	0
SHARKS (UNIDENTIFIED)	1	0	1	0	0
SHARPNOSE SEVENGILL SHARK	1	0	1	0	0
SHORTFIN MAKO	2485	494	1991	24	0
SILKY SHARK	6133	56	6077	0	0
SILVERTIP SHARK	7	0	7	0	0
SMOOTH HAMMERHEAD	136	19	117	0	0
THRESHER SHARK (VULPINUS)	31	0	31	0	0
THRESHER SHARKS NEI	171	0	171	0	0
TIGER SHARK	24	0	24	0	0
VARIOUS SHARKS NEI	580	1	579	0	0
VELVET DOGFISH	740	0	739	0	0
WHALE SHARK	1	0	1	0	0
WHITETIP REEF SHARK	2	0	2	0	0
<b>Total Shak Catch 2022</b>	<b>67760</b>	<b>11857</b>	<b>55903</b>	<b>3782</b>	<b>0</b>

Figures as of 24 July 2023