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ANNUAL REPORT ON THE REGIONAL OBSERVER PROGRAMME

WCPFC-TCC21-2025-RP02
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Submitted by the Secretariat

1. This paper presents the 17th Annual Report on the WCPFC Regional Observer Programme (ROP) covering the period 2023–2025, for the information and consideration of the Technical and Compliance Committee at the 21st Regular Session (TCC21).

Introduction

2. The ROP was established pursuant to Article 28 of the WCPFC 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 the Conservation and Management Measure 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 conduct. This paper reports on aspects of the ROP as required by the WCPFC Convention and CMM 2018-05.

Background

4. This report covers the information and data that have been entered and collected by observers in 2024, and for the early part of 2025. As of 28 April 2025, data for 528 purse-seine trips and 270 longline trips had been entered.

5. On 1 January 2023, the suspension of ROP coverage which had been in place during the COVID-19 pandemic was lifted. The requirement for 100% coverage resumed for purse-seine vessels operating between 20°N and 20°S. Observer placements continued to be carried out by national programmes for national and bilaterally licensed vessels, while the Parties to the Nauru Agreement Observer Programme (PNAOB) provided observer coverage for vessels fishing under the US Treaty and Federated States of Micronesia Arrangement (FSMA).

6. Pacific Island national and sub-regional observer programmes experienced a loss of trained observers during the pandemic due to employment instability but began rebuilding during 2022 and 2023. When 100% observer coverage for carriers and purse-seine vessels was reinstated, extra training was implemented to increase the number of trained observers, offsetting losses during the pandemic.

7. The Secretariat continued to support observer programmes during 2023 and 2024, assisting with training and advice to support CCM's continued rebuilding 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 matters. ROP observer data continue to be used in the online Compliance Case File System (CCFS). The Regional Observer Programme Intersessional Working Group (ROP-IWG) continues to be supported by the Secretariat to meet Commission taskings to develop or review existing policies and procedures.

8. In 2024-2025, the Secretariat (including the ROP Training and Audit Consultant) attended various in-person and virtual meetings including observer-specific meetings such as PNA Observer meetings.

The ROP Training and Audit Consultant represented the Secretariat at several key observer-related meeetings and events including:

a. the annual Regional Observer Coordinators Workshop in the Cook Islands.

b. observer training sessions in the Philippines and Marshall Islands.

c. ongoing support to the cross endorsement of observers as part of WCPFC's cooperation with IATTC.

9. The consultancy also provided support to the Secretariat in supporting intersessional working group processes that review aspects of the WCPFC regional framework for the ROP and its integration into reporting and monitoring programmes such as for transhipment monitoring, annual reporting, and compliance case file management.

10. During 2024-2025, several ROP Programme Audits were conducted online, and in-person audits were successfully carried out for Chinese Taipei and the Philippines. As a result of the audits, the following programmes were authorized to continue their participation in the WCPFC Regional Observer Programme: China, Cook Islands, European Union (Portugal), Fiji, Republic of Korea, New Caledonia, Chinese Taipei, Tuvalu, the Philippines, and Vanuatu.

Observer data and coverage

11. The minimum standard ROP data fields for purse-seine and longline fisheries have remained unchanged since 2016. As was noted in ROP Report 13 (2021), experience with existing ROP data collection and processes has identified some 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's intersessional activities undertaken through the Transhipment Intersessional Working Group (TS-IWG), until it was disestablished in 2024, and the IWG on the ROP (ROP-IWG) include reviews of key CMMs that have and will impact the ROP data fields and supporting processes. With the development of electronic reporting (ER), several fields should be automatically generated from existing databases where the information fields remain the same. Additionally, there is discussion within the ROP-IWG to review data fields to ensure they continue to be aligned with current CMMs and data collection obligations.

12. The Commission at WCPFC19 considered several recommendations from TCC18 for observer monitoring of transhipments, and adopted new Minimum Data Fields for Observer Transhipment Monitoring to be collected during transhipment events as of 1 April 2023. The Agreed Minimum Standards and Guidelines for the Regional Observer Programme were amended to require that for transhipments on the high seas, transhipment ROP providers shall send the ROP Minimum Data Fields to the Secretariat within 90 days of the disembarkation of the observer from the carrier.

13. The paper SC21-ST-IP-05_Rev02 on the Status of ROP Data Management indicates the amount of observer data that have been entered, and highlights CCMs with fleets active in the WCPFC Convention Area (WCPFC-CA). The implementation of 100% observer coverage from 1 January 2023 has led to an increase in available data since the suspension of observer coverage during the COVID-19 period. SPC has included additional tables and figures to indicate the spatial coverage of purse-seine and longline observer coverage over recent years in the report.

14. The data summary of observer coverage for purse-seine and longline vessels provides an overview for the period between 2012 to 2024 (Table 1). The raw, unraised data collected on these trips is used to populate all the tables in this report, including Annex A, noting that in the 13-year period between

2012 and 2024, there were 15647 ROP purse-seine trips and 5837 ROP longline trips; these trips were for a total of 21484 regional observer trips, and 782159 observer sea days, when ROP observers collected data and information. Observer-collected information and data significantly assists science, management, and compliance in the sustainability of the WCPO tuna fishery.

15. The average observer trip time on longliners pre-COVID-19 was 35 - 40 days from 2012 to 2016. This time increased to 48 - 51 days per trip from 2016, after observers overcame their original reluctance to work on the large freezer longline vessels that typically stay at sea longer than other longline vessels. During the early COVID-19 period, when ports and country borders started to close, some observers found themselves stranded on vessels, and unable to be offloaded in ports that would allow for their return travel back to their homes. This situation caused some observers to experience an increase to 59 days at sea for 2020. In 2021, this number started to decrease back to 49 days, as travel restrictions eased and observers were able to be repatriated.

16. In 2024, the ROP coverage of the purse-seine fishery at the time of writing reflected 528 observer purse-seine trips (Table 1).

Authorized observer providers and update on ROP audits

17. A list of authorised observer programmes in the ROP, and relevant contact details of their National Observer Coordinator are available on the WCPFC website. National Observer programmes are reminded of the requirement (CMM 2018-05 paragraph 14) to keep the Secretariat informed of any changes to contact information for coordinators. The list of observer coordinators on the WCPFC website enables CCMs to update their information directly through their national CCM Party Administrator on the WCPFC website. The list of ROP Observer Coordinators is important for observer safety responses, and is essential as an official source of contacts for use by observers, vessels, fishing companies, flag CCMs, and members.

18. The Secretariat continues to audit ROP observer programmes against the required ROP minimum standards. The online auditing process, which includes consultation via Zoom, is being used by some programmes to receive audits, in addition to in-person audits, where requested. CCMs with ROP-authorised national observer programmes can check the website for information on their valid audit period, and arrangements can be made with the ROP Audit Consultant on scheduling any required updates.

Intersessional Working Group on the ROP

19. The ROP-IWG was tasked by the Commission to carry out some additional work on the ROP data fields and other areas related to observer roles and conditions. A workplan for the ROP-IWG was developed with the assistance of ROP-IWG members. All ROP-IWG materials including the workplan are available at this link. For 2025, the ROP-IWG has been focused on increasing the efficiency of the process for WCPFC to receive notification of potential infringements identified in observer reports. This focus has been in view of the scope of ROP Minimum Standard Data Fields (MSDF) that support identification of potential alleged infringements of CMM obligations, such as those for “Species of Special Interest”, and considering the removal of redundant ROP data fields. Agreed data fields will be removed from observer collection if they have become redundant or more reliable sources of the same data are available. The ROP-IWG Chair reported to SC21 (SC21-ST-WP-10), and an updated report will also be provided to TCC21 (TCC21-2025-17).

Table 1: Overview of observer coverage in the Regional Observer Programme for purse-seine and longline fisheries between 2012 and 2024.

	Purse seine					Longline					Total	
Year	Trips	Observer sea days	Sets observed	Fishing days	Average days/trip	Trips	Observer sea days	Hooks observed	Fishing days	Average days/trip	Trips	Observer sea days
2012	1 267	39 692	31 617	32 655	31.5	350	12 300	15 059 587	7 728	35.0	1 617	51 992
2013	1 511	50 277	38 295	41 006	33.5	379	14 540	18 969 371	9 631	38.5	1 890	64 817
2014	1 626	53 818	39 106	42 343	33.0	369	14 318	16 424 998	8 199	39.0	1 995	68 136
2015	1 629	52 214	37 065	39 414	32.0	466	17 328	18 307 361	9 825	37.0	2 095	69 542
2016	1 591	52 350	34 532	41 047	33.0	466	17 945	19 401 346	10 077	38.5	2 057	70 295
2017	1 508	53 342	36 538	42 849	35.5	528	25 324	30 941 256	14 241	48.0	2 036	78 666
2018	1 840	59 228	42 453	46 512	32.0	584	29 551	36 800 635	17 221	50.5	2 424	88 779
2019	1 863	57 503	43 628	44 323	31.0	609	29 745	38 910 920	17 531	49.0	2 472	87 248
2020	725	27 451	15 953	21 033	38.0	403	23 662	30 998 683	13 262	58.5	1 128	51 113
2021	132	8 315	3 826	6 393	63.0	422	20 473	26 493 188	11 552	48.5	554	28 788
2022	185	8 071	4 195	6 172	43.5	468	22 088	29 244 727	12 593	47.0	653	30 159
2023	1 242	41 281	29 977	33 559	33.0	523	24 786	36 986 584	15 315	47.5	1 765	66 067
2024	528	18 199	12 625	13 918	34.5	270	8 358	11 624 017	4 638	31.0	798	26 557
Total	15 647	521 741	369 810	411 224	33.5	5 837	260 418	330 162 673	151 813	44.5	21 484	782 159

Observer trip monitoring

20. The "Observer Trip Monitoring Summary" is part of the minimum data standards of the Commission, commonly referred to as the GEN-3 format. The ROP data are a "tick" (an answer in the affirmative) by the observer against the relevant trip monitoring summary codes (see Table 2 for a list of the codes). Observers will then include the reasons for circling "Yes" for a code in their report.

21. For 2024, data from the Observer Trip Monitoring Summary are available from 528 purse-seine trips and 270 longline trips across all fishing fleets (Table 2). The data document the number of reports made by observers when "Yes" was indicated in the summaries. These reports included target species discards, the inaccurate recording of species on purse seiners, the inaccurate recording of retained bycatch species, and discards. These discrepancies are reported every year, highlighting the value of the observer data as the only source of information that is dependable and currently available in these areas.

Observer welfare and safety

22. For observer welfare and safety, of concern are trips where observers reported obstruction, intimidation, and interference, and also a lack of adequate accommodation. The Conservation and Management Measure 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 (under codes 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) (see Tables 3, 4, and 5 for summaries of the outcomes of investigations by flag CCMs of ROP observer-reported alleged observer obstruction incidents, notified in ROP observer data for the period from 1 January 2015 to 2024).

23. Since 2017, the WCPFC has had a dedicated CMM for the Protection of observers in the WCPFC Regional Observer Programme (CMM 2016-03/ 2017-03). The CMM outlines the requirements that observer providers, flag States, and vessel captains are required to take in the event that 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.

24. 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 the 2020 calendar year, one (1) in the 2023 calendar year, and one (1) in 2024. A summary of reported incidents and the flag CCM investigation response is provided in Table 6.

25. The agreed minimum standard for the issuing of independent two-way communications devices and other safety protocols is well supported. ROP audits have confirmed that all programmes have introduced such devices for observers at the commencement of a trip. CCMs are reminded that these devices need to be activated and properly maintained to ensure they are functioning as required in event of an emergency. As part of the routine ROP Programme audits, the Secretariat checks that observer programmes are implementing the safety measures adopted by the Commission to safeguard observers.

26. Paragraph 14 of CMM 2017-03 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 proposed changes to CMM 2017-03.

Table 2: Observer Trip Monitoring Summary Codes and the corresponding number of reports for each code for purse-seine (PS) and longline (LL) fisheries.

Code	Observer rights/social behaviour	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	6	1
RS-B	Request that an event not be reported by the observer	0	0
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 to officers of the vessel	2	2
Code	**National regulations**	**PS**	**LL**
NR-A	Fish in areas where it is not permitted to fish	3	1
NR-C	Use a fishing method other than the method the vessel was designed or licensed	10	0
NR-D	Not display or present a valid (and current) licence document onboard	2	6
NR-E	Transfer or tranship fish from or to another vessel	1	30
NR-F	Was involved in bunkering activities	212	1
NR-G	Fail to stow fishing gear when entering areas where they were not authorized to fish	7	0
Code	**WCPFC CMMs**	**PS**	**LL**
WC-A	Fail to comply with any Commission Conservation and Management Measures	17	0
WC-B	High-grade the catch	3	16
Code	**Log sheet recording position & catch**	**PS**	**LL**
LC-A	Inaccurately record retained 'Target Species' in the vessel logs	65	29
LC-B	Inaccurately record 'Target Species' discards	113	38
LC-C	Record species inaccurately	133	1
LC-D	Inaccurately record retained bycatch species, and discards	108	52
LC-E	Inaccurately record retained bycatch species	50	22
LC-F	Inaccurately record discarded bycatch species	57	5
LP-A	Inaccurately record vessel position on vessel log sheets for sets, hauling and catch	1	2
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	1

Continued on next page

Table 2: Observer Trip Monitoring Summary Codes and the corresponding number of reports for each code for purse-seine (PS) and longline (LL) fisheries (Continued).

Code	Species of special interest	PS	LL
SI-A	Land on deck Species of Special Interest (SSIs)	224	17
SI-B	Interact with non-target species	56	42
Code	**Pollution**	**PS**	**LL**
PN-A	Dispose of any metals, plastics, chemicals, or old fishing gear	25	7
PN-B	Discharge any oil	3	0
PN-C	Lose any fishing gear	1	0
PN-D	Abandon any fishing gear	13	0
PN-E	Fail to report any abandoned gear	3	0
Code	**Safety at sea**	**PS**	**LL**
SS-A	Fail to monitor international safety frequencies	1	1
SS-B	Carry out-of-date safety equipment	4	4

Table 3: Information from the Observer Trip Monitoring Summary Codes under RS-A for the period from 1 January 2015 to 2024: "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".

Year	New case	In progress	Completed – Infraction status				Total
			No infraction	Warning	Sanction	Total	
2015		16	29	4	2	35	51
2016		12	12	1		13	25
2017	2	6	8	3		11	19
2018		17	14	1		15	32
2019		23	6			6	29
2020		10	2			2	12
2021		2					2
2022	1	4					5
2023	3	4					7
2024							
Total	6	94	71	9	2	82	182

Table 4: Information from the Observer Trip Monitoring Summary Codes under RS-B for the period from 1 January 2015 to 2024: "Request that an event not be reported by the observer".

Year	New case	In progress	Completed – Infraction status				Total
			No infraction	Warning	Sanction	Total	
2015		25	24	4	2	30	55
2016		11	4			4	15
2017		5	3	2		5	10
2018	1	11	9	1	1	11	23
2019	3	15	3			3	21
2020	1	7	2			2	10
2021		2					2
2022		2					2
2023	2	2					4
2024							
Total	7	80	45	7	3	55	142

Table 5: Information from the Observer Trip Monitoring Summary Codes under RS-D for the period from 1 January 2015 to 2024: "Did the operator fail to provide the observer, while on board the vessel, at no expense to the observer or theobserver'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".

Year	New case	In progress	Completed – Infraction status				Total
			No infraction	Warning	Sanction	Total	
2015		10	18	3	9	30	40
2016		3	9	1		10	13
2017	1	2	2			2	5
2018		7	11	1		12	19
2019	1	17	1	2	1	4	22
2020	2	4	1			1	7
2021		2					2
2022		1					1
2023	1	2					3
2024							
Total	5	48	42	7	10	59	112

Table 6: Summary of outcome of flag CCM investigations of alleged infringements related to observer safety and welfare under CMM 2016-03/2017-03.

Year	In progress	Completed – Infraction Status			Total
		No infraction	Sanction	Total	
2017		3		3	3
2020	1	1		1	2
2023		1		1	1
2024		1		1	1
Total	1	6	0	6	7

ROP data for compliance monitoring

27. This year the ROP-IWG has been focusing on streamlining the process for WCPFC to receive notifications of potential infringements from observer reports, supported by the ROP Minimum Standard Data Fields (MSDF) and the removal of redundant data fields. Additional information will be provided in the ROP-IWG update to TCC21 (TCC21-2025-17).

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 CMMs intended to minimize the impact of fishing on Species of Special Interest (SSI), including non-target species; 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 SSI such as seabirds, cetaceans, sea turtles, whale sharks, silky and oceanic whitetip sharks, and mobulid rays (see Appendix A). All catches of these species are a concern to Commission members. Different mitigation methods and guidelines are in place to assist in reducing catch and enhancing life status of these species if caught (see supplementary information on CMMs at this link).

29. Reports of catches of SSI were reduced during the years 2020 to 2022 due to COVID-19 exemptions on observer placements. As a result, there was less trip reporting. Appendix A of this paper shows trends in CCFS cases related to cetaceans, whale sharks, and sharks.

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, the Philippines commenced training of national observers in 2009. Training sessions have been held regularly every year, and approximately 710 observers and 28 debriefers have been trained to WCPFC standards. Strict in-country COVID-19 requirements during the pandemic prevented training from taking place during 2020 and 2021. Observer training courses resumed in late 2022 when the Philippines placed observers on its vessels. The Secretariat has continually assisted the Philippines observer training programme as part of the WPEA project, and attended the Philippines observer training held in Navotas, Philippines in June and November 2023, and in May 2024. Philippines observers collect data and information using SPC forms and formats, and are employed domestically and in the High Seas Pocket No. 1 Special Management Area (HSP1-SMA).

31. Training has been conducted for the development of observer programmes in Vietnam, and data collection formats for the collection of data from gillnets and other gear types have been developed. No training was requested in 2024.

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

32. The IATTC/WCPFC Cross-Endorsement (CE) arrangement was established to allow WCPFC ROP observers to continue their duties on vessels that may operate in both the Western and Central Pacific Ocean (WCPO) and the Eastern Pacific (EPO) on a single trip. The most recent training sessions were held during 2023, in Tuvalu, Fiji, and Kiribati. This training increased the numbers of CE observers to pre-pandemic levels, when several observers from Pacific Island countries who had IATTC/WCPFC cross-endorsement qualifications left observer programmes to find other employment. Since the reinstatement of 100% observer coverage, demand for CE observers has increased particularly from the United States purse-seine fleet.

33. The Secretariat has received requests from ROP Observer Programmes and flag CCMs for additional CE training. Although there are approximately 100 trained and active CE observers, it is often difficult to find a CE observer available for a trip, as many observers on the CE list are regularly at sea observing trips, or have just returned from a trip and are not immediately available. To date, in 2025, there have been 41 requests by United States vessels for CE observers. Of these vessels, 21 vessels crossed into the EPO to either fish or transit to EPO ports. This trend was a similar in 2024, with 75 requests by United States vessels for CE observers, but only 36 vessels actually crossed into the EPO.

34. Proposed CE training is only possible if sufficient funding is available and the IATTC observer trainer is available to deliver the course. CCMs that requested CE training at the 2025 Regional Observer Coordination Workgroups (ROCW) were Tonga, the Republic of Marshall Islands, and the Federated States of Micronesia. The five- to six-day CE training course is conducted by the IATTC Observer Trainer and the WCPFC ROP Training and Audit Consultant. Current budgetary constraints limit training to one in-country session per year. Sub-regional training would enhance capacity building across more countries, making better use of resources, and sharing knowledge more widely. If additional funding is not available, a more strategic funding mechanism could be explored to introduce greater flexibility in the use of funds, for example by allowing unused balances to be carried over and accumulated over time.

35. Table 7 shows cross-endorsement placements since 2012, noting that there were no CE placements in 2021 and 2022 during the pandemic.

Table 7: Number of ROP trips with fishing activities in the Western and Central Pacific Ocean and Eastern Pacific Ocean by flag and ROP provider each year between 2012 and 2025.

Flag CCM	ROP provider	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Ecuador	KI	1	9	3												13
El Salvador	KI		4	3	3		1									11
EU-Spain	VU									1						1
EU-Spain	CK													1		1
USA	FFA	1		3	7	12	14	14	21	8						80
USA	PNA												29	36	21	86
Total		2	13	9	10	12	14	15	21	8	0	0	29	37	21	192

Post-COVID-19 resumption of mandatory observer coverage

36. During the latter part of 2022, it was deemed safe to travel and place observers on vessels in various ports. Travel restrictions had eased throughout many locations. Although up-to-date COVID-19 vaccinations were still required to gain entry to some countries, the requirements for 100% coverage on purse-seine vessels resumed from 1 January 2023. Consequently, there was a need to train additional observers to be able to maintain the required 100% coverage levels in 2023. Some programmes held virtual observer training courses during the pandemic months to boost numbers, but most programmes organised in-person training sessions to take place as early as possible. To date, there are sufficient numbers of ROP-trained observers available to meet the requirement of 100% observer coverage for purse-seine vessels.

Secretariat observations

37. The Secretariat continued to support CCMs' ROP programmes in restoring and maintaining agreed levels of coverage to ensure compliance with Commission agreed standards. Upon request, the Secretariat provides guidance on key areas such as observer safety, training, and day-to-day programme operations, and offers clear explanations of observer roles in monitoring CMMs and Commission requirements.

38. The ROP Training and Audit Consultant continues, on behalf of the Secretariat, to support ROP-authorised programmes in meeting the expected standards of operation, working closely with those facing challenges to provide ongoing assistance and practical solutions.

39. Many of the current ROPs are well-organised and supported by their national governments. Nevertheless, questions often arise regarding the specific duties of observers, their responsibilities at sea, and appropriate procedures for reporting data. The Secretariat staff and the consultant are frequently called upon to provide assistance and advice in these areas, as well as to respond to data-related enquiries, thereby ensuring observers can perform their roles effectively and consistently across the region. This ongoing support from the Secretariat underpins the quality and reliability of observer programmes as a cornerstone of management, science, and compliance monitoring in the WCPFC.

Administrative notes

40. 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.

41. 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 information includes an updated set of guidelines on WCPFC ROP requirements on the handling of different Species of Special Interest (SSI).

Appendix A: ROP observer data focused on Species of Special Interest

42. ROP observers also collect data on SSI through the monitoring of the Commission's CMMs intended to minimize impacts of fishing on these species (see fishery and life status codes of SSI used by observers in Table A-1). Information from the SSI report is held by SPC, and is available to the Secretariat through the TUFMAN2 database. All data shown here represent raw data collected by observers who were debriefed and whose data were reviewed for quality assurance. A separate TCC20 paper provided information on past trends in CCFS cases based on observer data (refer TCC20-2025-09).

Table A-1: Fishery and life status codes used for the reporting of Species of Special Interest by ROP Observers.

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

A.1 Cetacean and pinniped fishery interactions

43. For interactions of cetaceans and pinnipeds, SPC produced an identification guide ("On Deck Species ID Guides"), which was issued to many observers. The guide supports a more accurate identification of each cetacean and pinniped at sea.

44. To date, observer-reported cetacean and pinniped interactions have been entered from 528 purse-seine trips and 270 longline trips for 2024.

45. Observers recorded 18 different species of cetaceans and pinnipeds, including an unidentified whale species, that interacted with the fisheries on observed vessels in 2024 (Table A-2).

46. For the 528 purse-seine trips, observer records for 2024 were predominantly of dolphin species interactions (Table A-2).

47. For purse-seine fisheries, there were 21 deceased animals included in the total observer records of 391 cetaceans and pinnipeds in 2024.

48. Longline vessels caught or interacted with 20 cetaceans and pinnipeds in 2024, and 1 of these captures was reported as deceased.

49. The CMM for Cetaceans, CMM 2011-03, was agreed upon in 2012. Data collected since 2012 are a combination of all data collected over this period by mainly Pacific Island programme observers using the early versions of General Form 2 (Gen-2) format (Table A-3, Figures A-1 and A-2). These data have been updated here to reflect more accurate information of catches and conditions of cetaceans, as contained in the current data held by SPC.

Table A-2: Number of landings and interactions of cetacean species, including interaction outcomes, in purse-seine (PS) and longline (LL) fisheries as reported by ROP Observers in 2024. There were no records of pinniped interactions in 2024.

Species	Observed		Escaped		Interacted or landed & discarded					
					Alive		Dead		Unknown	
	PS	LL	PS	LL	PS	LL	PS	LL	PS	LL
Bottlenose dolphin	8	1			3	1	5			
Bryde's whale	5				5					
Common dolphin	21				20		1			
Cuvier's beaked whale		1				1				
False killer whale	243	5		1	66	3	2	1	175	
Humpback whale		1				1				
Indo-pacif. bottlenose dolphin	12				8		4			
Long-beaked common dolphin	2				2					
Pantropical spotted dolphin	2						2			
Pygmy killer whale	14				14					
Risso's dolphin		4				4				
Rough-toothed dolphin	44	5			42	5	2			
Sei whale	7				7					
Short-finned pilot whale	10	2		1	2	1			8	
Spectacled porpoise	1								1	
Spinner dolphin	11				6		5			
Striped dolphin	11				11					
Whale (unidentified)		1				1				
Total	391	20	0	2	186	17	21	1	184	0

Table A-3: Number of landings and interactions of cetaceans, including interaction outcomes, in purse-seine (PS) and longline (LL) fisheries as reported by ROP Observers for the period from 2012 to 2024.

Year	Observed		Escaped		Interacted or landed & discarded					
					Alive		Dead		Unknown	
	PS	LL	PS	LL	PS	LL	PS	LL	PS	LL
2012	1 452	50		1	1 168	15	222	5	62	29
2013	2 209	69	8	3	1 552	26	562	8	87	32
2014	1 895	89		4	1 560	41	245	3	90	41
2015	1 273	98		1	1 026	70	200	13	47	14
2016	1 143	46	1		967	40	135	3	40	3
2017	1 488	87	6	15	1 202	37	150	7	130	28
2018	1 190	66	1	2	800	39	204	17	185	8
2019	1 665	105	10	9	1 026	47	338	47	291	2
2020	855	46		2	496	36	260	5	99	3
2021	278	57		4	236	42	34	8	8	3
2022	279	52		2	241	38	37	8	1	4
2023	856	46	9		646	33	177	12	24	1
2024	391	20		2	186	17	21	1	184	
Total	14 974	831	35	45	11 106	481	2 585	137	1 248	168

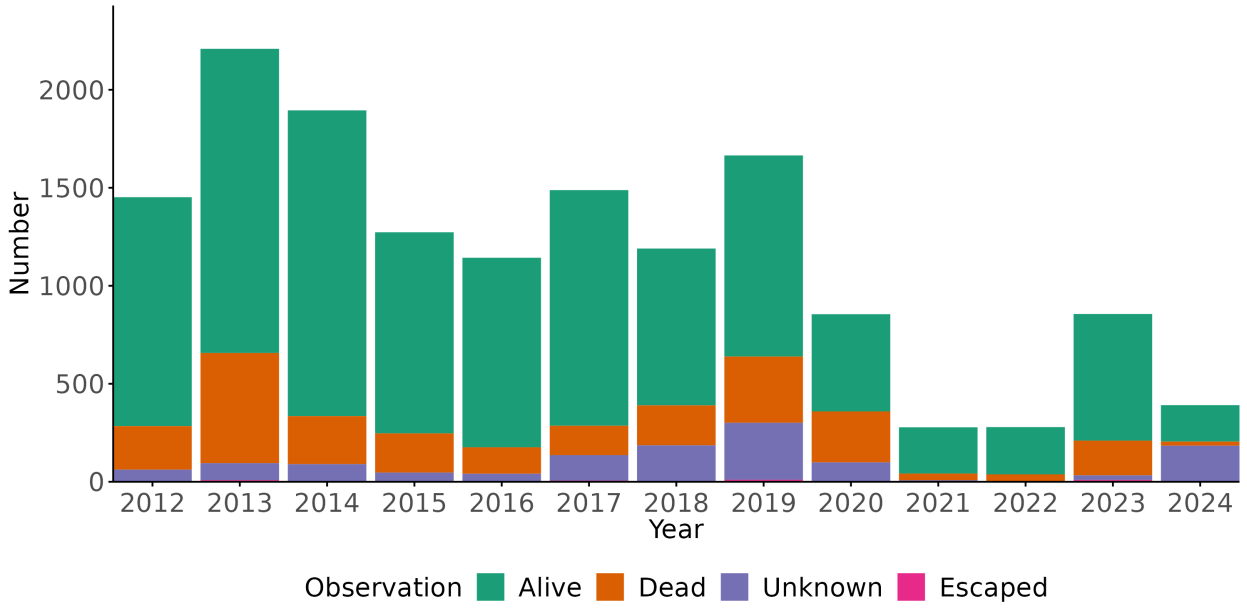

Figure A-1: Number of interactions of cetaceans and pinnipeds in purse-seine fisheries as reported by ROP Observers for the period from 2012 to 2024. Interaction outcomes were reported as alive, dead, escaped before landing, or unknown.

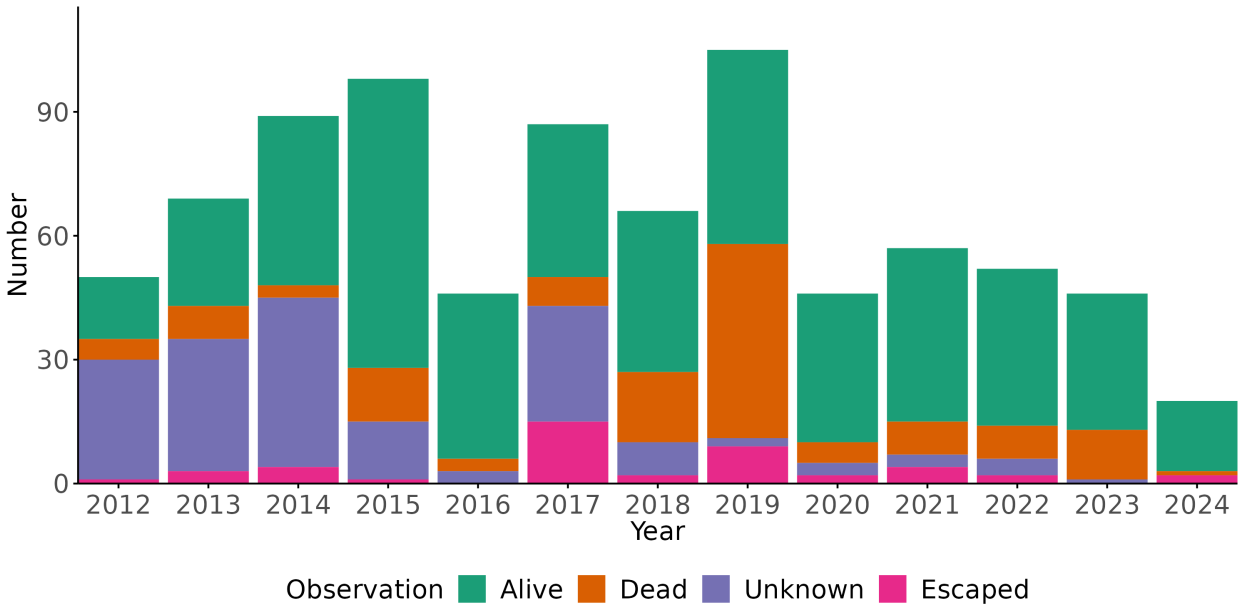

Figure A-2: Number of interactions of cetaceans and pinnipeds in longline fisheries as reported by ROP Observers for the period from 2012 to 2024. Interaction outcomes were reported as alive, dead, escaped before landing, or unknown.

A.2 Seabird fishery interactions

50. Observer data of seabird landings and interactions in longline fisheries in 2024 were collected by observers from China, Fiji, French Polynesia, New Caledonia, New Zealand, Chinese Taipei, United States-Hawaii and Vanuatu. Observer data from 2024 entered to date documented seabird landings and interactions for 270 longline trips.

51. There were no recorded landings or interactions of seabirds for purse-seine fisheries in 2024.

52. For the 270 longline trips, there was a total of 207 seabird landings and interactions reported by observers, including records of 68 birds that were released alive and 139 birds that were dead (Table A-4, Figure A-3). Most of the observer records were from longline fishing locations at latitudes greater than 23°N.

53. Across the seabird records, Laysan albatross and black-footed albatross were the most prevalent species reported by observers.

Table A-4: Number of landings and interactions of seabird species or species groups in longline fisheries, including locations and interaction outcomes, as reported by ROP Observers in 2024. "Nei" indicates identification to species group only.

Species	Total	Alive	Dead	Unknown	<23° N >30° S	<30° S	>23° N
Bird (unidentified)	39		39		39		
Black-footed albatross	48	24	24		1		47
Boobies & gannets nei	1		1		1		
Brown booby	1		1		1		
Gulls, terns & skuas	2		2		2		
Laysan albatross	103	43	60				103
Petrels & shearwaters nei	13	1	12		13		
Total	207	68	139	0	57	0	150

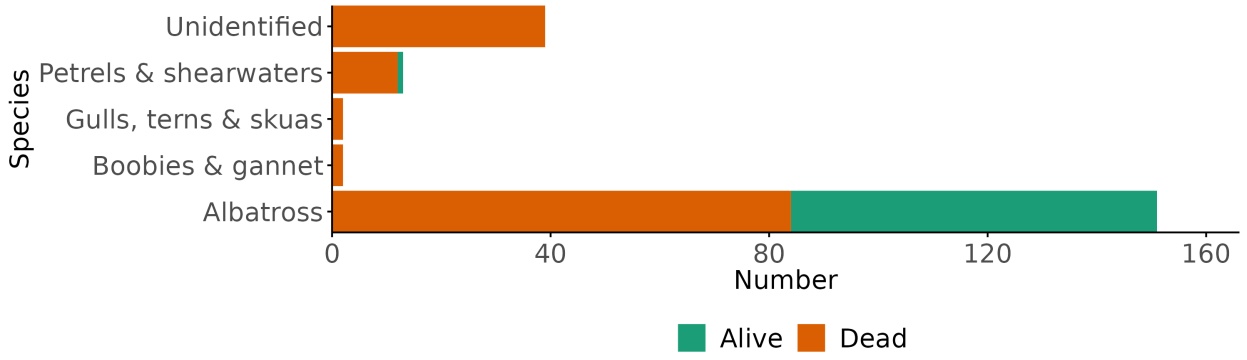

Figure A-3: Number of landings and interactions of seabird species groups in longline fisheries, including interaction outcomes, as reported by ROP Observers in 2024.

54. Observers on longline and purse-seine vessels also recorded seabird sightings, including their locations (Tables A-5 and A-6). These records provide an indication of the variety of species surrounding fishing vessels, and of the predominance of particular species that were sighted during a fishing trip. Nevertheless, the numbers are less reliable indicators of seabird abundance, as the same birds may be counted multiple times during a set or a particular period of a fishing trip.

55. There were 3506 seabird sightings reported by observers from longline vessels (Table A-5). Most of the sightings were of Laysan albatross and black-footed albatross.

56. For purse-seine fisheries, there were 684 seabird sightings recorded by observers (Table A-6). The highest number of sightings was of seabirds in the species grouping "gulls, terns, and skuas".

Table A-5: Seabird sightings and their locations in longline fisheries, as reported by ROP observers in 2024. "Nei" indicates identification to species group only.

Species	Observed	<23° N >30° S	<30° S	>23° N
Bird (unidentified)	2	2		
Black-browed albatross	1	1		
Black-footed albatross	1 806			1 806
Boobies and gannets nei	25	25		
Laysan albatross	1 608			1 608
Petrels and shearwaters nei	60	60		
Shearwaters nei	4	4		
Total	3 506	92	0	3 414

Table A-6: Seabird sightings and their locations in purse-seine fisheries, as reported by ROP observers in 2024. "Nei" indicates identification to species group only.

Species	Observed	<23° N >30° S	<30° S	>23° N
Albatrosses nei	1	1		
Bird (unidentified)	65	65		
Black-footed albatross	11	11		
Boobies and gannets nei	31	31		
Gulls, terns & skuas	526	526		
Petrels and shearwaters nei	50	50		
Total	684	684	0	0

57. The first seabird measure, CMM 2012-07, was adopted in 2012, leading to the subsequent recording of annual seabird landings and interactions by ROP observers (Tables A-7 to A-11, Figures A-4 to A-8). Early in the period, observers lacked reliable identification guides to support the accurate at-sea identification of seabird species. Subsequent improvements in seabird identification skills through the development of comprehensive identification manuals and restructuring of observer training led to improvements in the at-sea identifications. Since 2012, albatross has been the most numerous seabird species grouping recorded by observers on longline vessels, followed by the petrels and shearwaters grouping.

A.2.1 Albatross

Table A-7: Number of landings and interactions of albatross reported by observers in longline and purse-seine fisheries for the period between 2012 and 2024. Also shown are the number and proportion of birds per interaction outcome: A, alive; D, dead; U, unknown.

Year	Total	Alive	A (%)	Dead	D (%)	Unknown	U (%)
2012	140	52	37	76	54	12	9
2013	136	38	28	90	66	8	6
2014	130	55	42	71	55	3	2
2015	877	47	5	802	91	28	3
2016	1 472	72	5	1 346	91	23	2
2017	522	61	12	449	86	12	2
2018	577	29	5	524	91	24	4
2019	1 625	51	3	1 574	97		
2020	273	83	30	190	70		
2021	249	62	25	186	75	1	0
2022	315	114	36	199	63	2	1
2023	570	95	17	468	82	7	1
2024	151	67	44	84	56		
Total	7 037	826	12	6 059	86	120	2

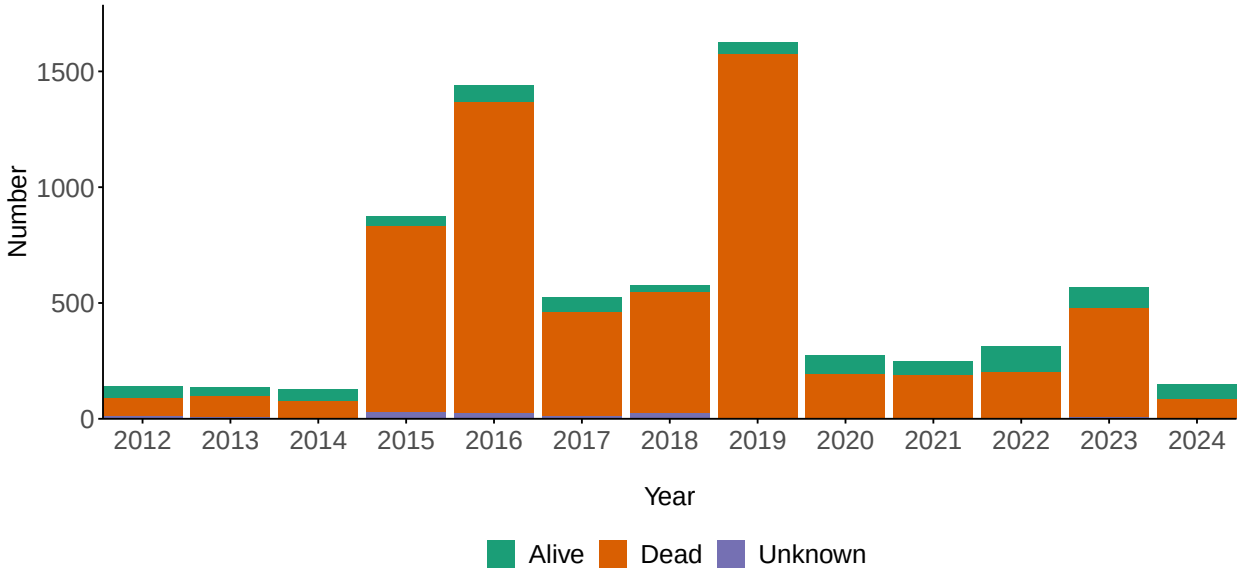

Figure A-4: Number of landings and interactions of albatross reported by observers in longline and purse-seine fisheries for the period between 2012 and 2024, including interaction outcomes.

A.2.2 Petrels and shearwaters

Table A-8: Number of landings and interactions of petrels and shearwaters reported by observers in longline and purse-seine fisheries for the period between 2012 and 2024. Also shown are the number and proportion of birds per interaction outcome: A, alive; D, dead; U, unknown.

Year	Total	Alive	A (%)	Dead	D (%)	Unknown	U (%)
2012	6			6	100		
2013	15			15	100		
2014	18	3	17	13	72	2	11
2015	108	5	5	100	93	3	3
2016	181	11	6	152	84	16	9
2017	54			46	85	8	15
2018	84	2	2	80	95	2	2
2019	154	1	1	153	99		
2020	48	8	17	40	83		
2021	43	11	26	32	74		
2022	47	5	11	42	89		
2023	54	1	2	51	94	2	4
2024	13	1	8	12	92		
Total	825	48	6	742	90	33	4

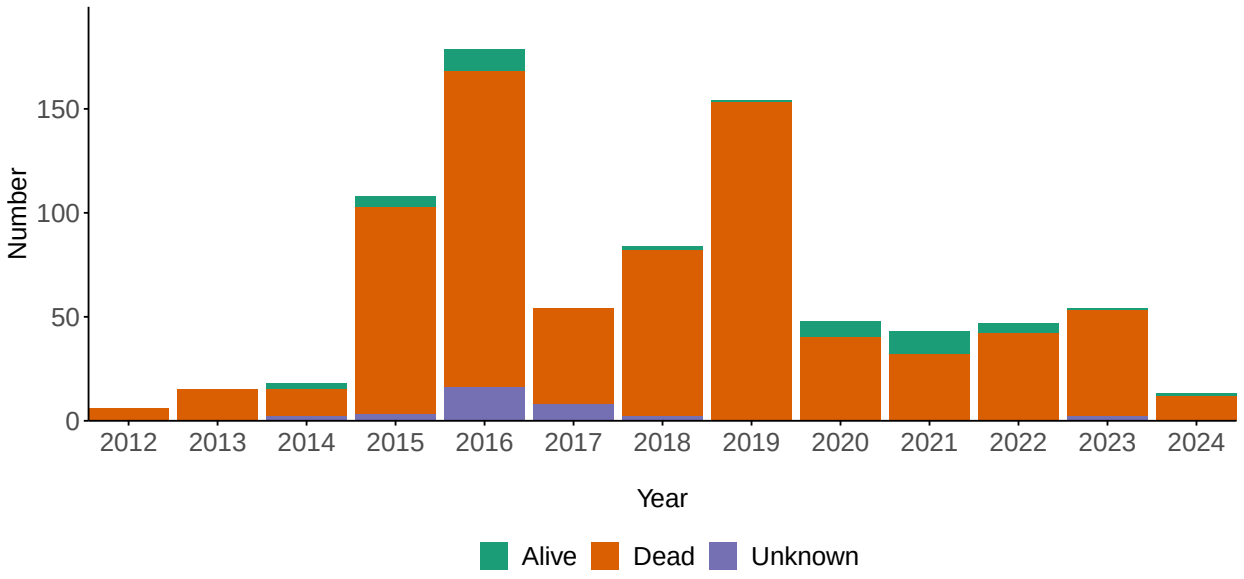

Figure A-5: Number of landings and interactions of petrels and shearwaters reported by observers in longline and purse-seine fisheries for the period between 2012 and 2024, including interaction outcomes.

A.2.3 Gulls, terns, and skuas

Table A-9: Number of landings and interactions of gulls, terns, and skuas reported by observers in longline and purse-seine fisheries for the period between 2012 and 2024. Also shown are the number and proportion of birds per interaction outcome: A, alive; D, dead; U, unknown.

Year	Total	Alive	A (%)	Dead	D (%)	Unknown	U (%)
2012							
2013	3			2	67	1	33
2014	2			2	100		
2015							
2016							
2017	2			2	100		
2018	1			1	100		
2019	1			1	100		
2020							
2021							
2022	1			1	100		
2023							
2024	2			2	100		
Total	12	0	0	11	92	1	8

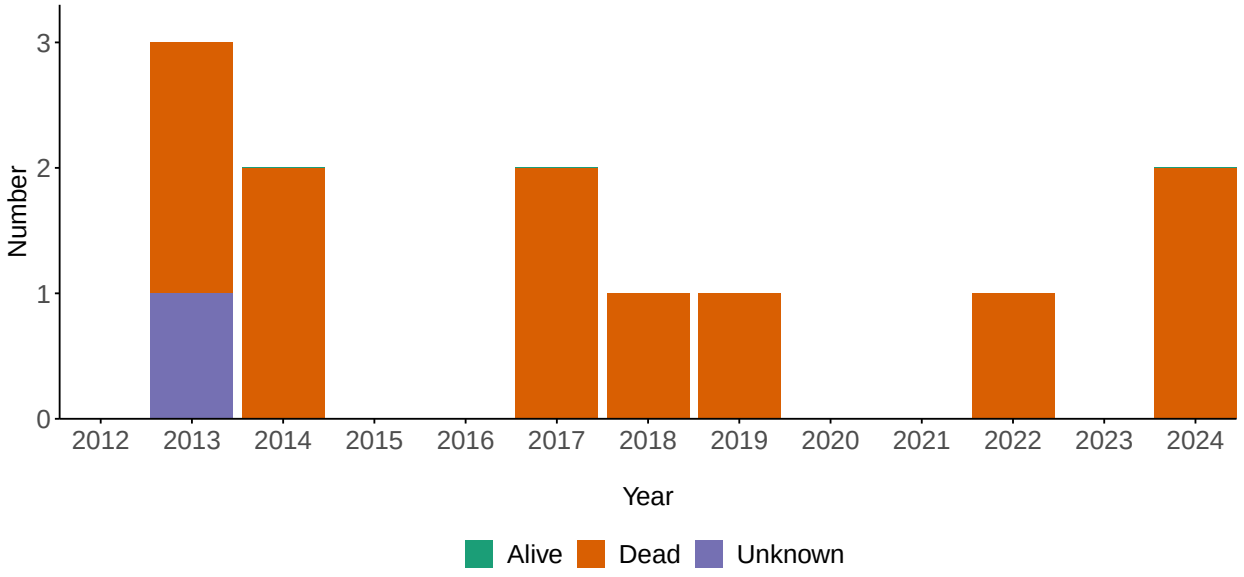

Figure A-6: Number of landings and interactions of gulls, terns, and skuas reported by observers in longline and purse-seine fisheries for the period between 2012 and 2024, including interaction outcomes.

A.2.4 Boobies and gannets

Table A-10: Number of landings and interactions of boobies and gannets reported by observers in longline and purse-seine fisheries for the period between 2012 and 2024. Also shown are the number and proportion of birds per interaction outcome: A, alive; D, dead; U, unknown.

Year	Total	Alive	A (%)	Dead	D (%)	Unknown	U (%)
2012							
2013							
2014	2	2	100				
2015	2	1	50	1	50		
2016	1	1	100				
2017	3	1	33	2	67		
2018	1			1	100		
2019	3			3	100		
2020	2			2	100		
2021	2			2	100		
2022	3	1	33	2	67		
2023	3			3	100		
2024	2			2	100		
Total	24	6	25	18	75	0	0

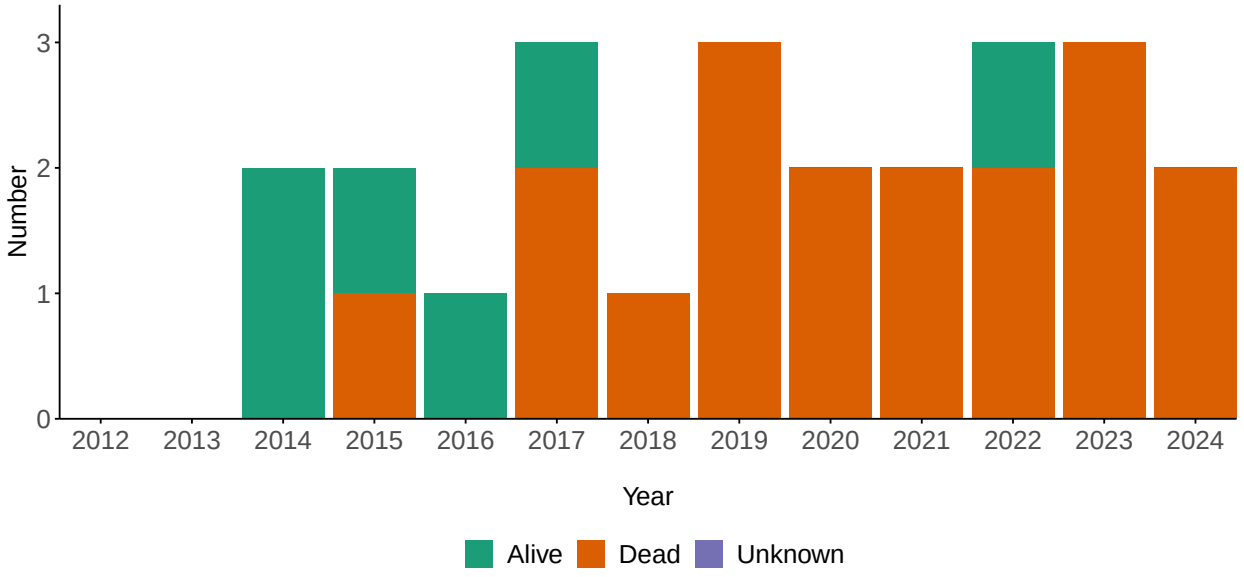

Figure A-7: Number of landings and interactions of boobies and gannets reported by observers in longline and purse-seine fisheries for the period between 2012 and 2024, including interaction outcomes.

A.2.5 Unidentified seabirds

Table A-11: Number of landings and interactions of unidentified seabirds reported by observers in longline and purse-seine fisheries for the period between 2012 and 2024. Also shown are the number and proportion of birds per interaction outcome: A, alive; D, dead; U, unknown.

Year	Total	Alive	A (%)	Dead	D (%)	Unknown	U (%)
2012	12	2	17	10	83		
2013	6			5	83	1	17
2014	3	1	33	2	67		
2015	24	1	4	21	88	2	8
2016	23	2	9	20	87	1	4
2017	14	1	7	13	93		
2018	7			7	100		
2019	10			10	100		
2020	2			1	50	1	50
2021	16			16	100		
2022	8			8	100		
2023	40	2	5	38	95		
2024	39			39	100		
Total	204	9	4	190	93	5	2

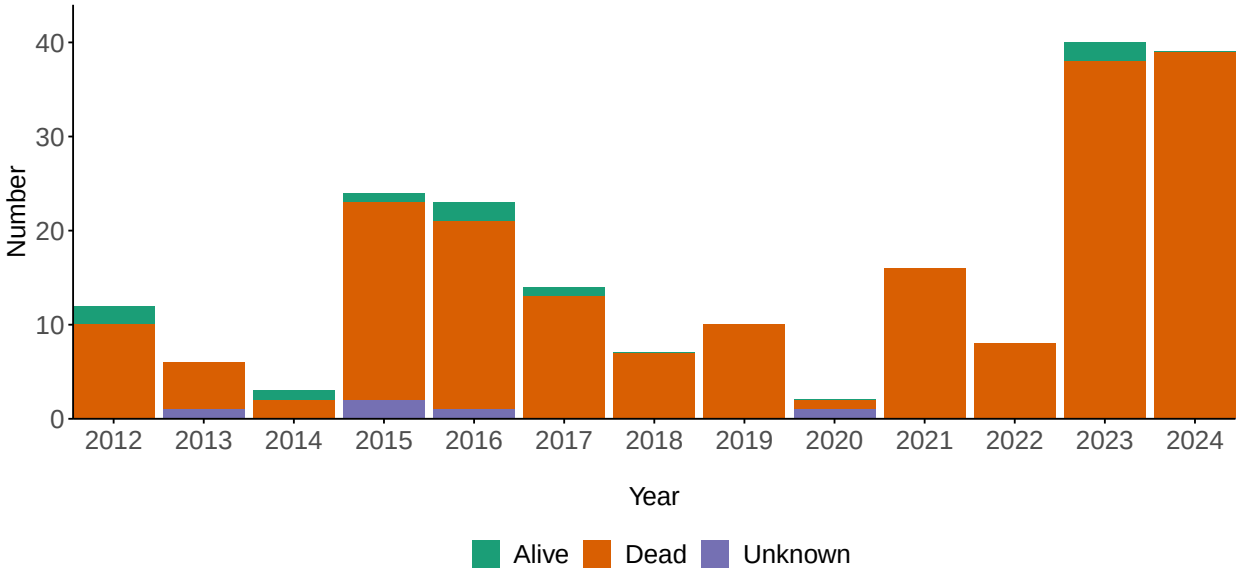

Figure A-8: Number of landings and interactions of unidentified seabirds reported by observers in longline and purse-seine fisheries for the period between 2012 and 2024, including interaction outcomes.

A.3 Sea turtle fishery interactions

58. Landings and interactions of sea turtles were reported by observers from 528 purse-seine trips and 270 longline trips in 2024. Across these trips, observer records documented a total of 97 landings and interactions of sea turtles.

59. In longline fisheries, there were 79 landings and interactions of turtles reported by observers (Table A-12, Figure A-9). Of these captures, 53 turtles were released alive, and 24 turtles were deceased when discarded. Observers reported that crews assisted with the recovery of live turtles landed onboard longline vessels, and all turtles recorded as deceased were in this state when landed.

Table A-12: Number of landings and interactions of sea turtle species in longline fisheries, including interaction outcomes, as reported by ROP observers in 2024.

Species	Observed	Retained	Discarded	Discarded dead	Unknown condition	Released alive before landing
Green turtle	17		7	10		6
Leatherback turtle	10		7	3		6
Loggerhead turtle	37		36	1		36
Olive ridley turtle	15		5	10		5
Total	79	0	55	24	0	53

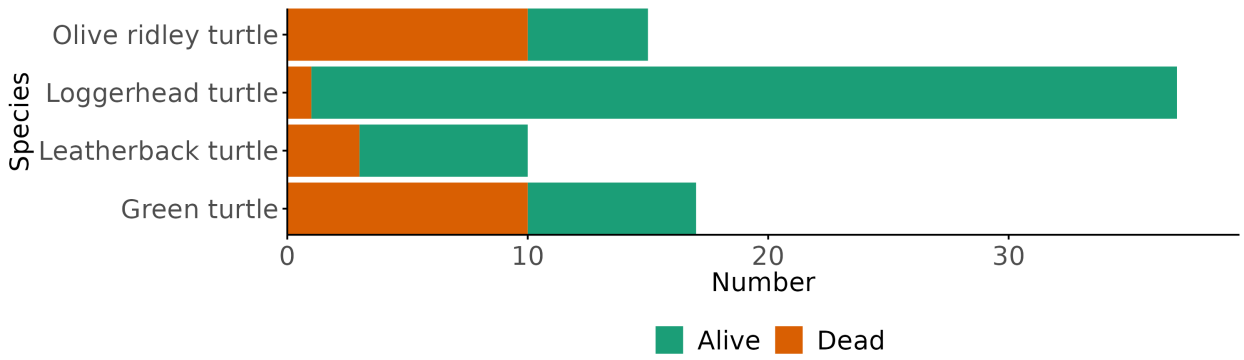

Figure A-9: Number of landings and interactions of sea turtle species in longline fisheries, including interaction outcomes, as reported by ROP observers in 2024.

60. In purse-seine fisheries, there were 18 landings and interactions of turtles reported by observers in 2024 (Table A-13). Of this total, 1 turtle was reported as deceased, and 2 turtles were released from the net before landing. The crew assisted turtles when brailed aboard and landed on deck, and turtles were released in the same condition as when landed.

Table A-13: Number of landings and interactions of sea turtle species in purse-seine fisheries, including interaction outcomes, as reported by ROP observers in 2024.

Species	Observed	Retained	Discarded	Discarded dead	Unknown condition	Released alive before landing
Green turtle	8		8			
Hawksbill turtle	2		2			
Loggerhead turtle	4		3	1		1
Marine turtles nei	1		1			
Olive ridley turtle	3		3			1
Total	18	0	17	1	0	2

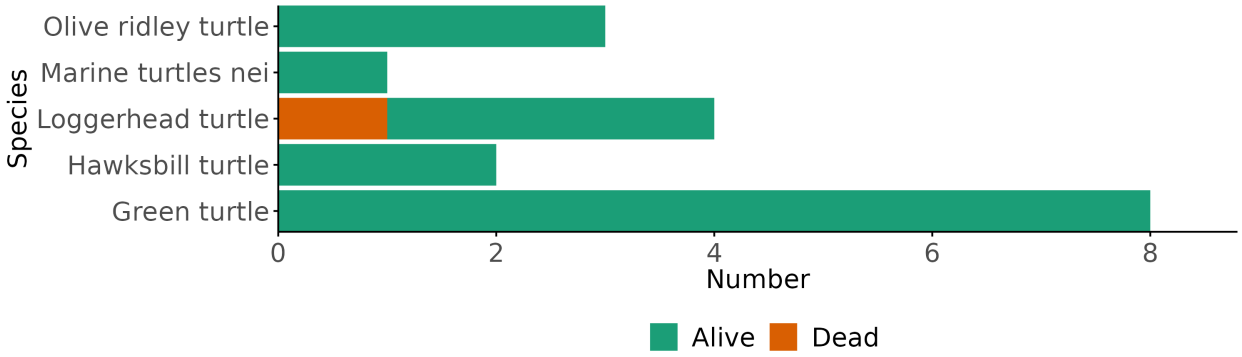

Figure A-10: Number of landings and interactions of sea turtle species in purse-seine fisheries, including interaction outcomes, as reported by ROP observers in 2024.

61. For all turtle species, observer records are available from the period from 2012 to 2024 (Tables A-14 to A-20; Figures A-11 to A-17).

62. Observer records for this period included a total of 469 unidentified turtles (see Table A-20, Figure A-17). These turtles were recorded by observers, but could not be identified to species. For these unidentified turtles, turtles were recorded as released alive, which included releases before they were landed on deck. For live releases, species identifications are difficult. Overall, between 2019 and 2023, there has been a decrease in unidentified turtles due to a combination of observer placement restrictions during COVID-19 when less trips were made, and improved turtle identification manuals available to observers.

A.3.1 Flatback turtle

Table A-14: Number of landings and interactions of flatback turtle reported by observers in longline and purse-seine fisheries for the period between 2012 and 2024. Also shown are the number and proportion of turtles per interaction outcome: A, alive; D, dead; U, unknown.

Year	Total	Alive	A (%)	Dead	D (%)	Unknown	U (%)
2012	5	5	100				
2013	9	5	56	3	33	1	11
2014	6	2	33	3	50	1	17
2015	8	8	100				
2016	7	6	86	1	14		
2017	3	3	100				
2018	8	6	75	2	25		
2019	2			2	100		
2020	3	3	100				
2021	1	1	100				
2022	2			2	100		
2023	2	2	100				
2024							
Total	56	41	73	13	23	2	4

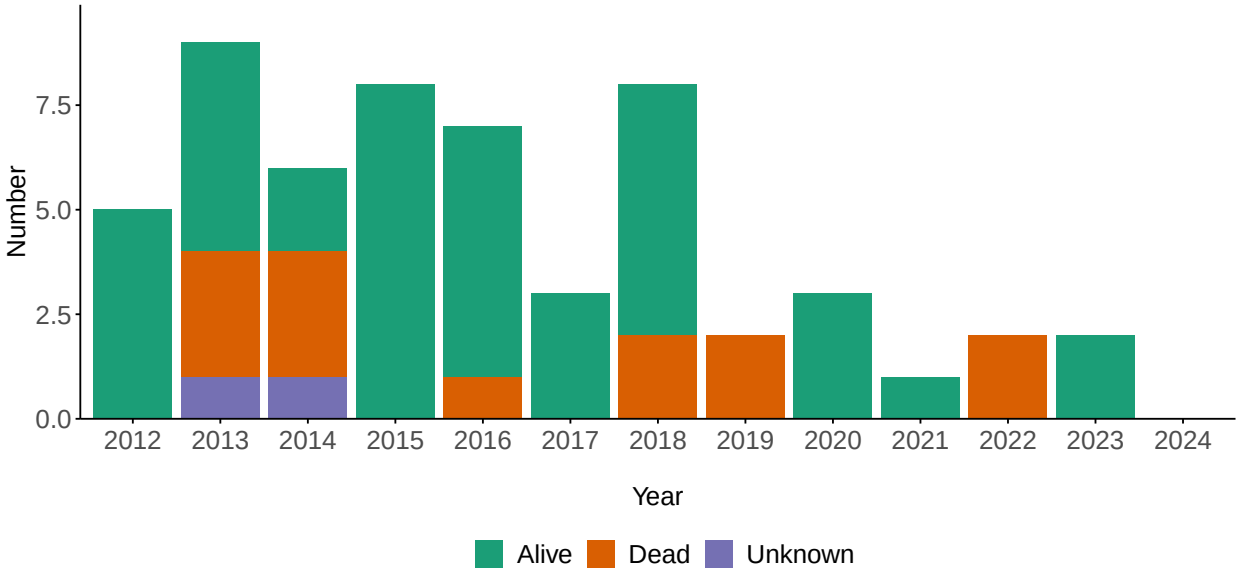

Figure A-11: Number of landings and interactions of flatback turtle reported by observers in longline and purse-seine fisheries for the period between 2012 and 2024, including interaction outcomes.

A.3.2 Green turtle

Table A-15: Number of landings and interactions of green turtle reported by observers in longline and purse-seine fisheries for the period between 2012 and 2024. Also shown are the number and proportion of turtles per interaction outcome: A, alive; D, dead; U, unknown.

Year	Total	Alive	A (%)	Dead	D (%)	Unknown	U (%)
2012	68	52	76	6	9	3	4
2013	121	90	74	16	13	11	9
2014	80	54	68	15	19	5	6
2015	103	85	83	14	14	3	3
2016	79	48	61	16	20	14	18
2017	88	53	60	19	22	16	18
2018	154	93	60	56	36	2	1
2019	116	86	74	27	23	2	2
2020	40	22	55	16	40	2	5
2021	11	3	27	8	73		
2022	20	5	25	15	75		
2023	36	26	72	9	25	1	3
2024	25	15	60	10	40		
Total	941	632	67	227	24	59	6

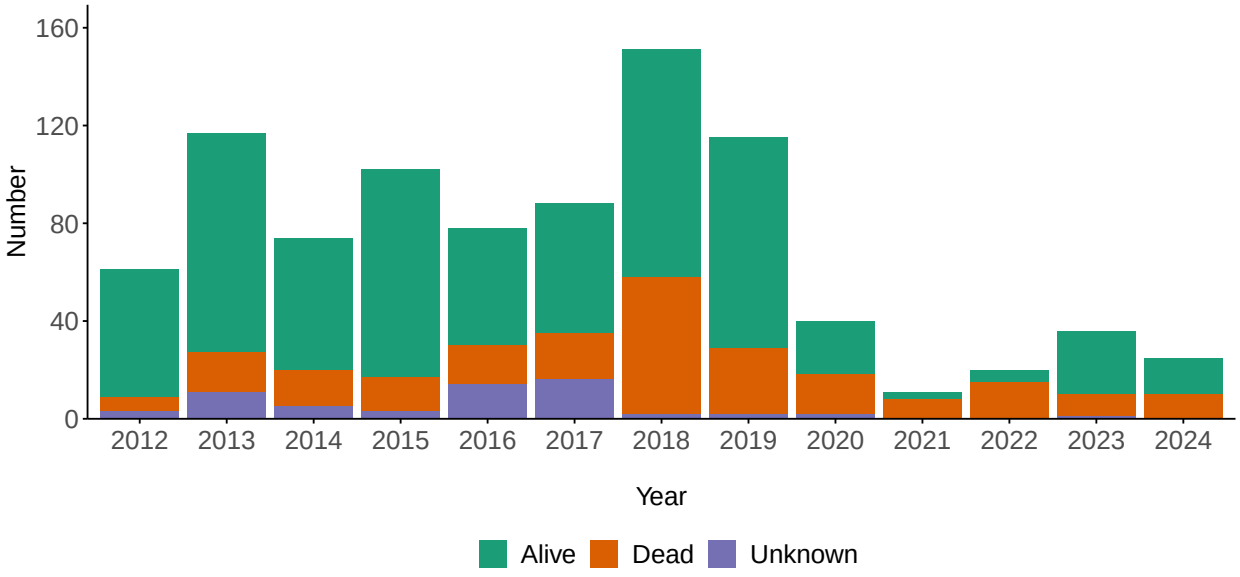

Figure A-12: Number of landings and interactions of green turtle reported by observers in longline and purse-seine fisheries for the period between 2012 and 2024, including interaction outcomes.

A.3.3 Hawksbill turtle

Table A-16: Number of landings and interactions of hawksbill turtle reported by observers in longline and purse-seine fisheries for the period between 2012 and 2024. Also shown are the number and proportion of turtles per interaction outcome: A, alive; D, dead; U, unknown.

Year	Total	Alive	A (%)	Dead	D (%)	Unknown	U (%)
2012	32	25	78	5	16	2	6
2013	66	51	77	7	11	7	11
2014	72	54	75	10	14	7	10
2015	31	24	77	6	19	1	3
2016	40	32	80	6	15	2	5
2017	44	33	75	10	23	1	2
2018	55	44	80	9	16	2	4
2019	54	45	83	8	15	1	2
2020	14	10	71	4	29		
2021	8	3	38	5	62		
2022	5	1	20	4	80		
2023	13	9	69	3	23	1	8
2024	2	2	100				
Total	436	333	76	77	18	24	6

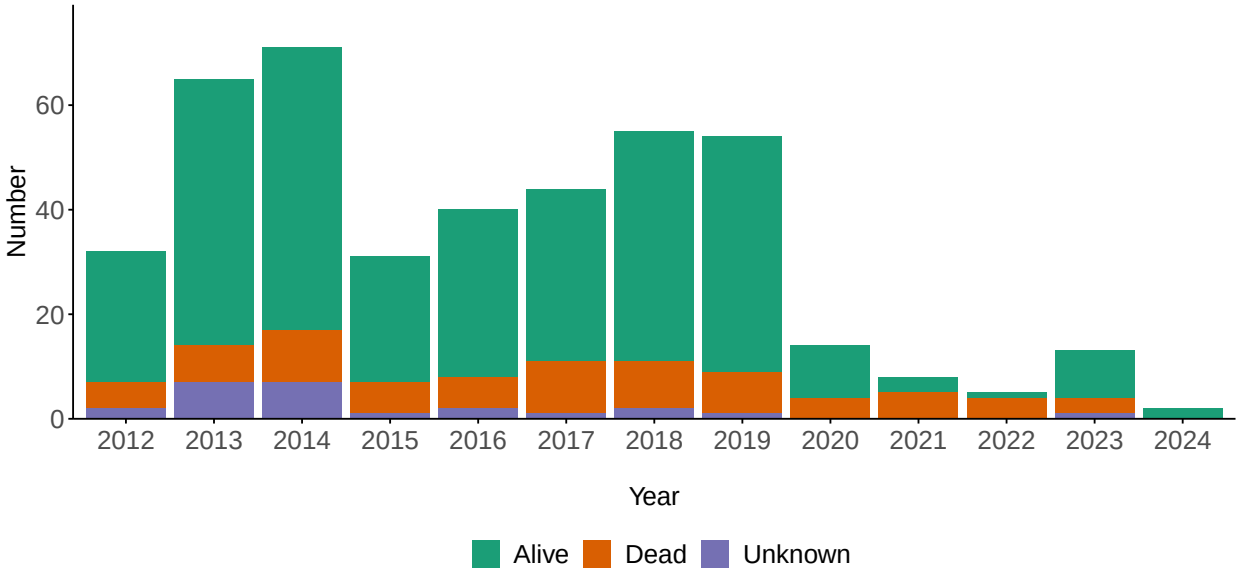

Figure A-13: Number of landings and interactions of hawksbill turtle reported by observers in longline and purse-seine fisheries for the period between 2012 and 2024, including interaction outcomes.

A.3.4 Leatherback turtle

Table A-17: Number of landings and interactions of leatherback turtle reported by observers in longline and purse-seine fisheries for the period between 2012 and 2024. Also shown are the number and proportion of turtles per interaction outcome: A, alive; D, dead; U, unknown.

Year	Total	Alive	A (%)	Dead	D (%)	Unknown	U (%)
2012	19	12	63	1	5	1	5
2013	39	30	77	4	10		
2014	34	27	79	2	6	1	3
2015	29	19	66	6	21	3	10
2016	30	24	80	3	10	3	10
2017	38	21	55	2	5	15	39
2018	48	25	52	15	31	3	6
2019	22	14	64	7	32	1	5
2020	21	18	86			3	14
2021	10	6	60	3	30	1	10
2022	27	21	78	4	15	2	7
2023	33	27	82	5	15	1	3
2024	10	7	70	3	30		
Total	360	251	70	55	15	34	9

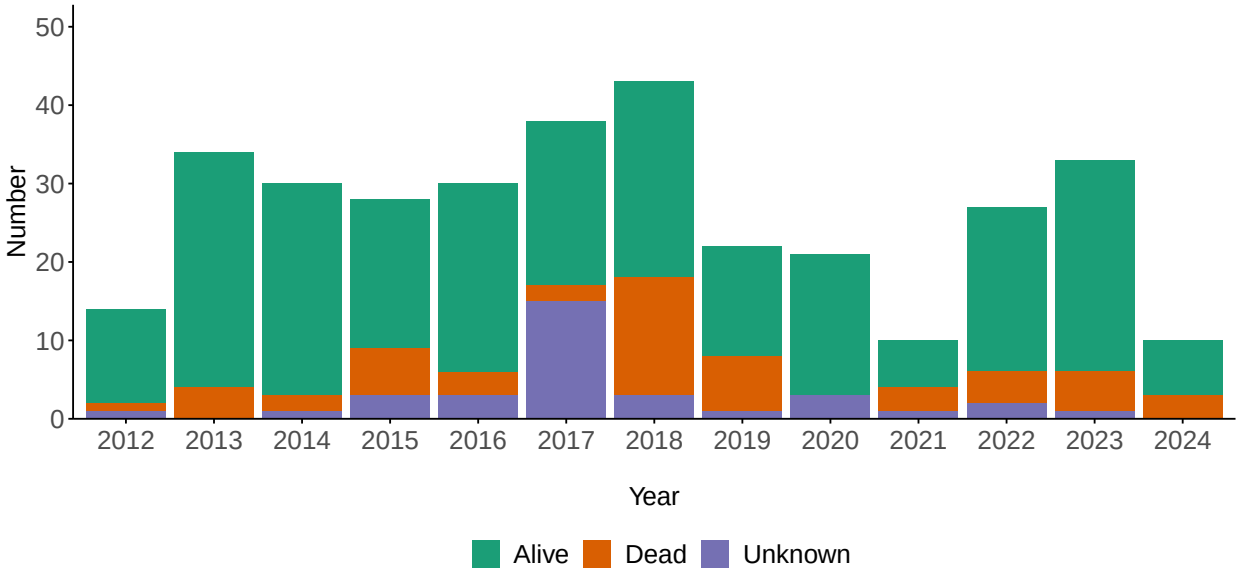

Figure A-14: Number of landings and interactions of leatherback turtle reported by observers in longline and purse-seine fisheries for the period between 2012 and 2024, including interaction outcomes.

A.3.5 Loggerhead turtle

Table A-18: Number of landings and interactions of loggerhead turtle reported by observers in longline and purse-seine fisheries for the period between 2012 and 2024. Also shown are the number and proportion of turtles per interaction outcome: A, alive; D, dead; U, unknown.

Year	Total	Alive	A (%)	Dead	D (%)	Unknown	U (%)
2012	62	48	77	6	10	6	10
2013	82	65	79	7	9	9	11
2014	67	50	75	9	13	2	3
2015	133	57	43	12	9	64	48
2016	149	132	89	15	10	2	1
2017	81	61	75	15	19	5	6
2018	151	129	85	19	13	3	2
2019	228	199	87	26	11	1	0
2020	77	63	82	12	16	1	1
2021	42	42	100				
2022	38	37	97	1	3		
2023	239	228	95	9	4	2	1
2024	41	39	95	2	5		
Total	1 390	1 150	83	133	10	95	7

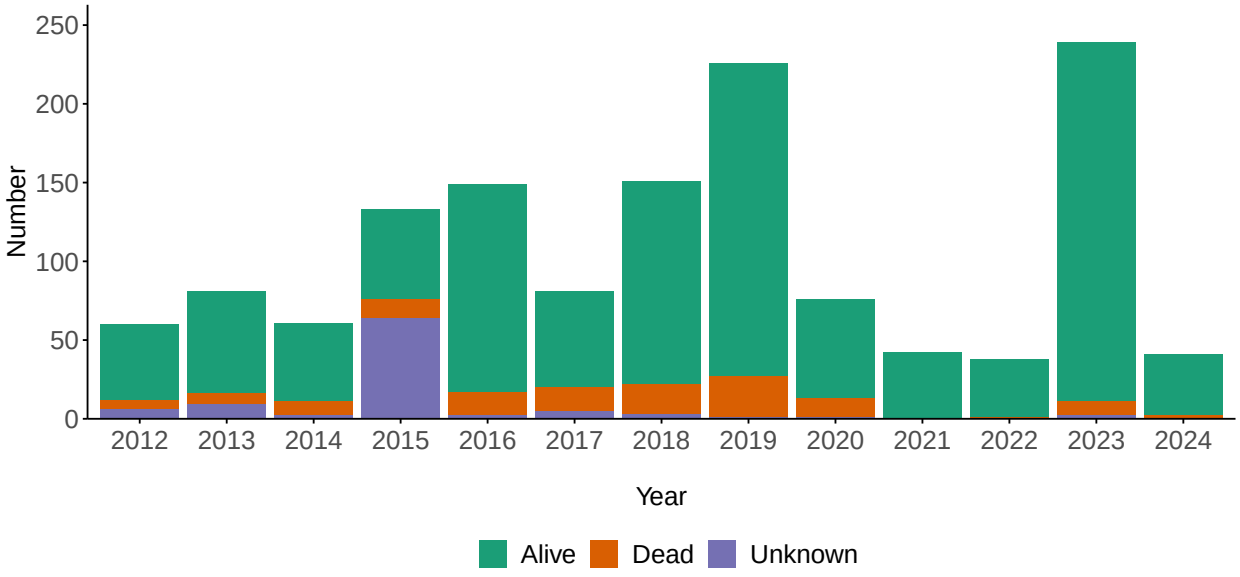

Figure A-15: Number of landings and interactions of loggerhead turtle reported by observers in longline and purse-seine fisheries for the period between 2012 and 2024, including interaction outcomes.

A.3.6 Olive ridley turtle

Table A-19: Number of landings and interactions of olive ridley turtle reported by observers in longline and purse-seine fisheries for the period between 2012 and 2024. Also shown are the number and proportion of turtles per interaction outcome: A, alive; D, dead; U, unknown.

Year	Total	Alive	A (%)	Dead	D (%)	Unknown	U (%)
2012	130	68	52	52	40	10	8
2013	113	72	64	35	31	5	4
2014	59	36	61	19	32	1	2
2015	153	67	44	76	50	9	6
2016	157	64	41	74	47	18	11
2017	209	85	41	105	50	18	9
2018	315	80	25	227	72	5	2
2019	192	57	30	133	69	2	1
2020	50	22	44	25	50		
2021	114	25	22	86	75	1	1
2022	103	22	21	81	79		
2023	64	37	58	25	39	2	3
2024	18	8	44	10	56		
Total	1 677	643	38	948	57	71	4

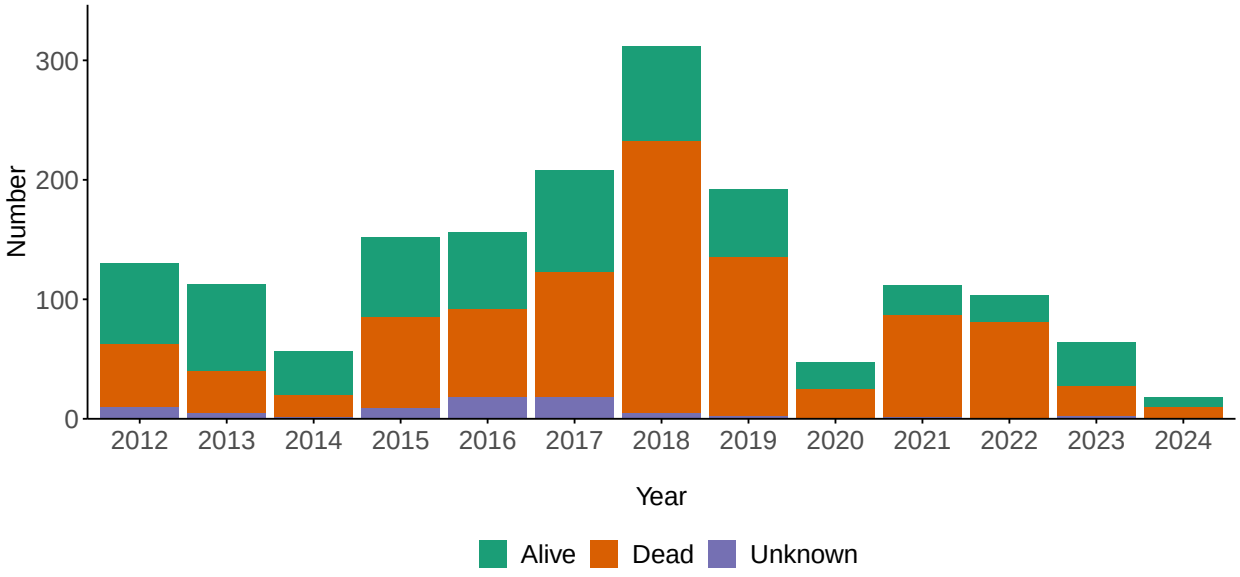

Figure A-16: Number of landings and interactions of olive ridley turtle reported by observers in longline and purse-seine fisheries for the period between 2012 and 2024, including interaction outcomes.

A.3.7 Unidentified turtles

Table A-20: Number of landings and interactions of unidentified turtles reported by observers in longline and purse-seine fisheries for the period between 2012 and 2024. Also shown are the number and proportion of turtles per interaction outcome: A, alive; D, dead; U, unknown.

Year	Total	Alive	A (%)	Dead	D (%)	Unknown	U (%)
2012	5	3	60	2	40		
2013	8	5	62			3	38
2014	7	6	86			1	14
2015	35	1	3	5	14	29	83
2016	86	73	85	2	2	11	13
2017	123	105	85	18	15		
2018	132	120	91	10	8	2	2
2019	18	10	56	4	22	4	22
2020	11	8	73				
2021	6	3	50	1	17	1	17
2022	3	2	67	1	33		
2023	34	29	85	2	6	3	9
2024	1	1	100				
Total	469	366	78	45	10	54	12

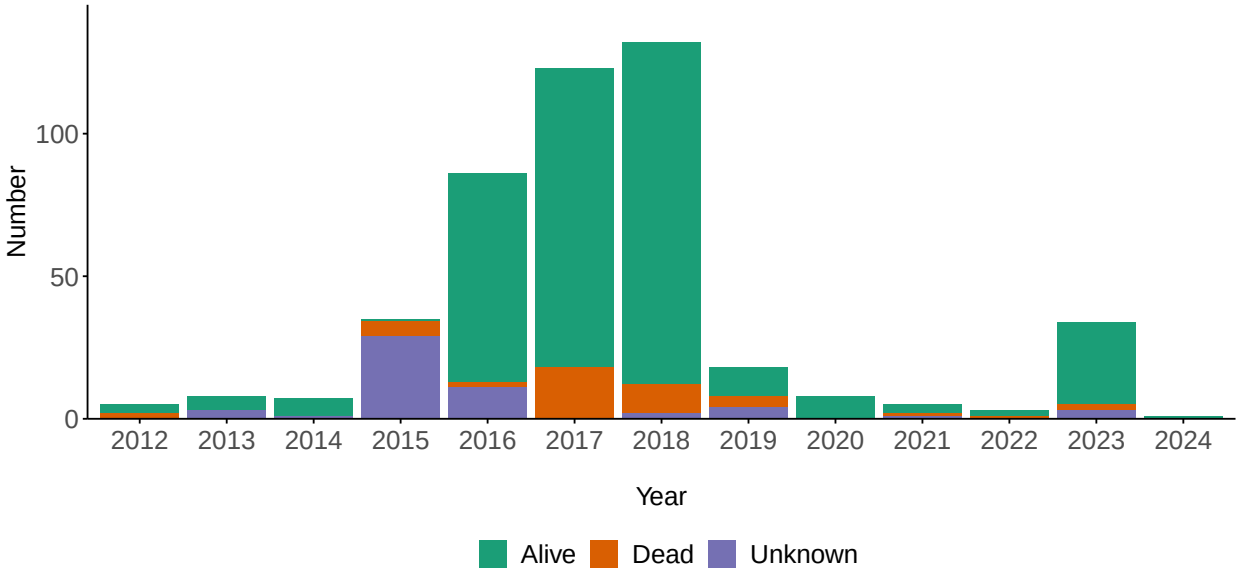

Figure A-17: Number of landings and interactions of unidentified turtles reported by observers in longline and purse-seine fisheries for the period between 2012 and 2024, including interaction outcomes.

A.4 Whale shark fishery interactions

63. Whale shark interactions with purse-seine vessels in the Western and Central Pacific Ocean have been monitored by Pacific Island observer programmes since the early 1990s. The shark CMM 2022-04 (which replaced CMM 2012-04 on 1 November 2020) prohibits the deliberate setting of fishing gear on whale shark; it also requires the making of best efforts to ensure the safe release of whale shark when an encirclement occurs. For 2024, observer data documented interactions and landings of 32 whale shark for 528 ROP purse-seine trips (Tables A-21 and A-22).

Table A-21: Number of landings and interactions of whale shark, including interaction outcomes, in purse-seine fisheries as reported by ROP Observers in 2024.

Activity	Total	Released/ escaped alive and healthy	Released/ escaped alive injured or distressed	Alive unknown condition	Deceased	Unknown
Landed	6			5	1	
Interaction	26	12	8	3	2	1
Total	32	12	8	8	3	1

64. For the period from 2012 to 2024, the number of landings and interactions of whale shark reported by observers in purse-seine fisheries revealed an overall decrease over time (Table A-22, Figure A-18).

Table A-22: Fishing and observer effort, and landings and interactions of whale shark in purse-seine fisheries as reported by ROP Observers for the period from 2012 to 2024.

Year	Interactions & landings	Trips analysed	Vessels	Sets	Sets reported	Observations per 1000 sets
2012	363	1 267	139	31 617	336	11
2013	361	1 511	148	38 295	354	9
2014	374	1 626	151	39 106	361	10
2015	390	1 629	148	37 065	376	11
2016	194	1 591	100	34 532	184	6
2017	294	1 508	118	36 538	253	8
2018	321	1 840	128	42 453	313	8
2019	585	1 863	168	43 628	563	13
2020	147	725	75	15 953	141	9
2021	25	132	14	3 826	22	7
2022	3	185	2	4 195	3	1
2023	130	1 242	70	29 977	124	4
2024	30	528	13	12 625	23	2
Total	3 217	15 647	1 274	369 810	3 053	99

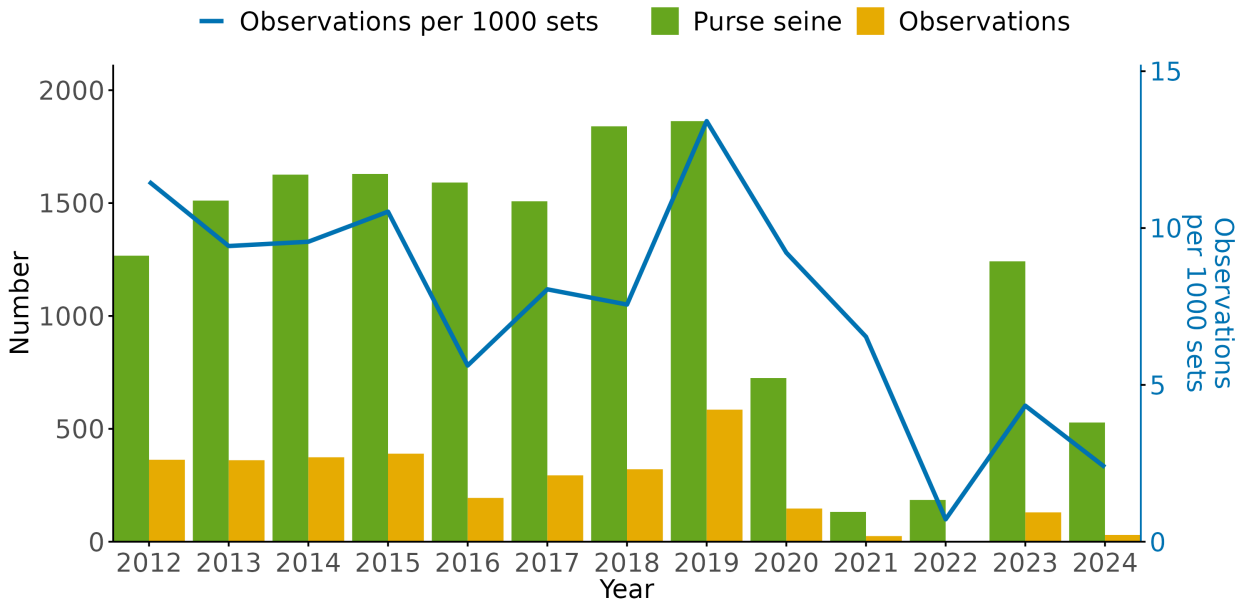

Figure A-18: Number of observer trips and of landings and interactions of whale shark (left y-axis), and interaction rates (right y-axis) in purse-seine fisheries as reported by ROP Observers for the period from 2012 to 2024.

A.5 Shark (other than whale shark) fishery interactions

A.5.1 Silky shark

65. The CMM for sharks, CMM 2022-04, prohibits vessels from retaining on board, transhipping, or storing or landing silky shark, in whole or in part, in the fisheries covered by the Convention.

66. Observer records for 2024 included landings and interactions of "silky shark" in longline and purse-seine fisheries (Table A-23). It is noted that the counting and identification of silky shark observed caught in nets are often difficult, so that numbers reported here are estimates.

67. Data for 2024 show that observer records indicated a total of 547 silky shark landings and interactions in longline fisheries (Table A-23). Most of these records were live releases.

68. Estimates of silky shark landings and interactions in purse-seine fisheries were markedly higher than in longlines, with 12,018 observer records in 2024. The majority (9,240) of these records were live releases.

Table A-23: Number of landings and interactions of silky shark, including interaction outcomes (A, alive; D, dead; U, unknown), in longline (LL) and purse-seine fisheries, as reported by ROP Observers in 2024. For purse-seine fisheries, the total number is an estimate, owing to the difficulty of counting and identifying silky sharks observed caught in the net.

Gear	Total	Fins retained	All retained	Condition caught			Condition discarded			LL cut free before landing		
				A	D	U	A	D	U	A	D	U
Longline	547	0	398	174	13	360	218	7	153	27	3	2
Purse seine	12 018	6	4 161	3 800	5 053	3 165	9 240	609	0	0	0	0
Total	12 565	6	4 559	3 974	5 066	3 525	9 458	616	153	27	3	2

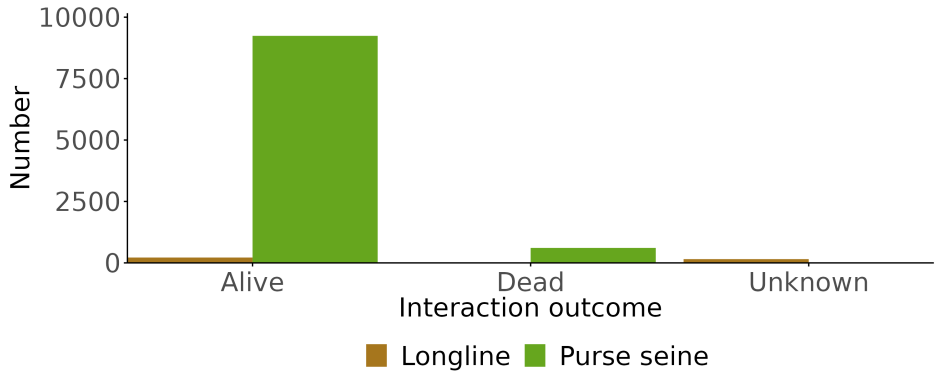

Figure A-19: Outcomes of landings and interactions of oceanic whitetip shark in longline and purse-seine fisheries in 2024.

69. Observer programmes are requested to ensure their observers collect the status of the shark's condition on discard. These data are available for the period from 2012 to 2024 (Table A-24, Table A-25, Figure A-20, Figure A-21).

Table A-24: Number of landings and interactions of silky shark reported by observers in longline (LL) fisheries for the period between 2012 and 2024. Also shown are interaction outcomes (A, alive; D, dead; U, unknown), the proportion of silky shark released alive, and the number of silky shark cut free from longlines.

Year	Total	Fins retained	All retained	Condition discarded			Released alive (%)	LL cut free before landing
				A	D	U		
2012	393	2 940	2 059	190	3 441	5	0	170
2013	359	1 685	1 717	231	2 106	18	0	268
2014	773	517	1 071	334	892	146	2	349
2015	2 086	513	1 867	1 136	1 105	195	1	325
2016	2 231	316	2 592	1 308	1 739	424	9	860
2017	4 239	112	4 510	1 697	3 768	385	3	1 097
2018	5 000	231	3 320	1 749	1 990	851	1	652
2019	4 250	20	2 997	1 358	1 556	582	0	493
2020	1 927	141	1 469	711	327	115	1	63
2021	2 287	0	906	328	565	110	0	15
2022	3 260	56	5 713	1 598	5 167	127	0	39
2023	1 629	586	1 251	610	678	277	1	34
2024	547	0	398	218	7	153	5	32
Total	28 981	7 117	29 870	11 468	23 341	3 388	23	4 397

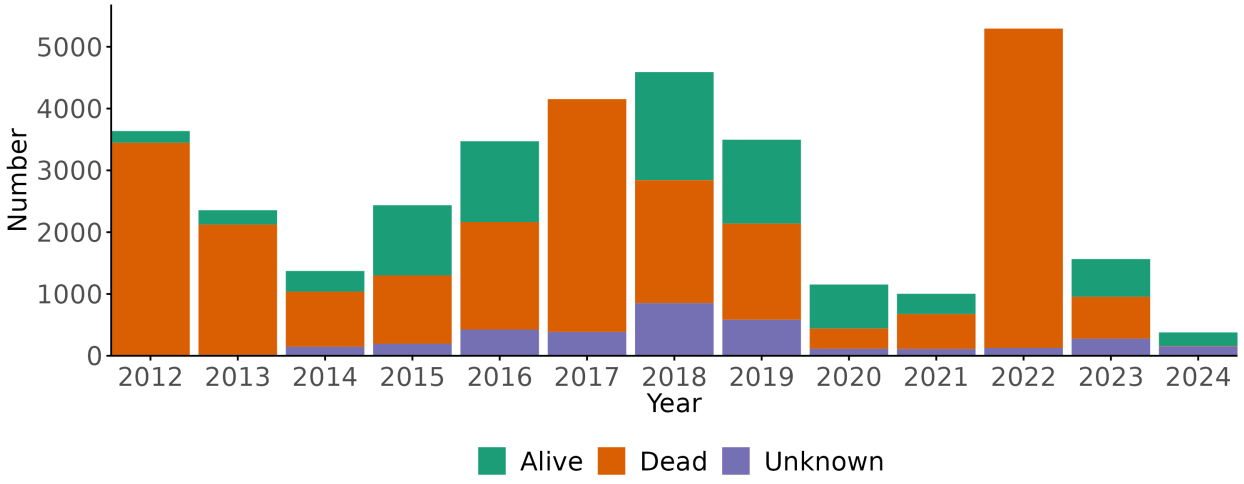

Figure A-20: Number of landings and interactions of silky shark reported by observers in longline fisheries for the period between 2012 and 2024, including interaction outcomes.

Table A-25: Number of landings and interactions of silky shark reported by observers in purse-seine fisheries for the period between 2012 and 2024. Also shown are interaction outcomes (A, alive; D, dead; U, unknown), the proportion of silky shark released alive. Total numbers are estimates owing to the difficulty of counting and identifying silky sharks observed caught in the net.

Year	Total	Fins retained	All retained	Condition discarded			Released alive (%)
				A	D	U	
2012	25 443	602	38	7	25 400	0	0
2013	34 269	749	26	11	34 234	0	0
2014	41 580	850	1 211	3 021	37 742	0	0
2015	33 841	99	6 357	20 684	10 424	0	0
2016	51 579	86	13 431	40 490	8 601	0	0
2017	64 317	71	22 568	46 876	5 537	0	0
2018	52 492	44	30 181	40 160	3 342	0	0
2019	80 940	28	39 347	60 898	6 476	0	0
2020	34 045	44	11 949	23 224	3 063	0	0
2021	1 902	0	708	1 102	118	0	0
2022	2 968	0	1 091	1 817	220	0	0
2023	43 194	47	16 909	26 262	2 375	0	0
2024	12 018	6	4 161	9 240	609	0	0
Total	478 588	2 626	147 977	273 792	138 141	0	0

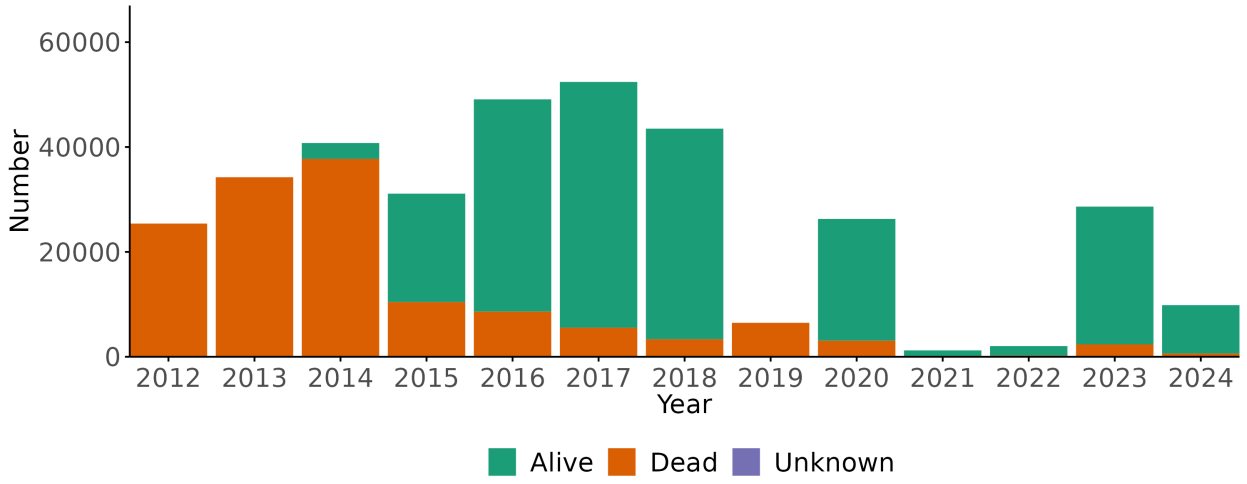

Figure A-21: Number of landings and interactions of silky shark reported by observers in purse-seine fisheries for the period between 2012 and 2024, including interaction outcomes.

A.5.2 Oceanic whitetip shark

70. CMM 2022-04 prohibits vessels from retaining on board, transhipping, or storing or landing oceanic whitetip shark, in whole or in part, in the fisheries covered by the Convention.

71. For 2024, observers recorded landings and interactions of oceanic whitetip shark from 528 purse-seine and 270 longline trips.

72. There were comparatively more observer records of landings and interactions of oceanic whitetip shark in longline than in purse-seine fisheries (Table A-26).

73. The observer data indicated that both the reporting and adherence to the CMMs has improved since the first CMM for oceanic whitetip shark was implemented in 2013.

Table A-26: Number of landings and interactions of oceanic whitetip shark, including interaction outcomes (A, alive; D, dead; U, unknown), in longline (LL) and purse-seine fisheries, as reported by ROP Observers in 2024.

Gear	Total	Fins retained	All retained	Condition caught			Condition discarded			LL cut free before landing		
				A	D	U	A	D	U	A	D	U
Longline	792	0	573	212	7	551	235	6	105	17	0	3
Purse seine	508	0	302	75	131	264	204	40	0	0	0	0
Total	1 300	0	875	287	138	815	439	46	105	17	0	3

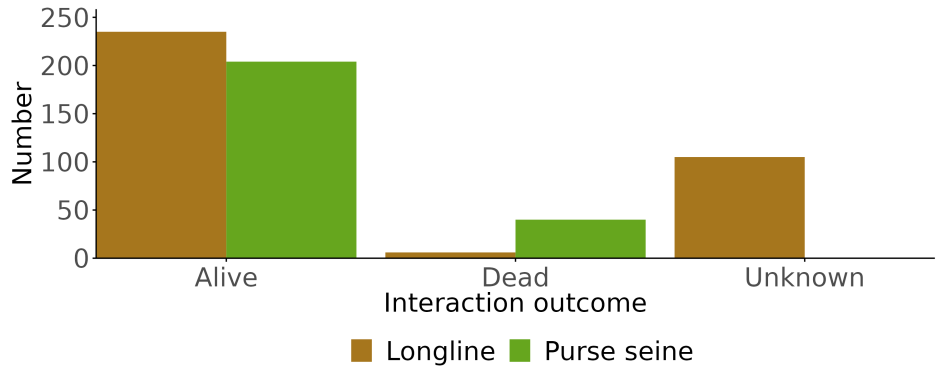

Figure A-22: Outcomes of landings and interactions of oceanic whitetip shark in longline and purse-seine fisheries in 2024.

Table A-27: Number of landings and interactions of oceanic whitetip shark reported by observers in longline (LL) fisheries for the period between 2012 and 2024. Also shown are interaction outcomes (A, alive; D, dead; U, unknown), the proportion of silky shark released alive, and the number of silky shark cut free from longlines.

Year	Total	Fins retained	All retained	Condition discarded			Released alive (%)	LL cut free before landing
				A	D	U		
2012	530	105	332	69	434	10	0	118
2013	618	64	436	176	331	27	0	188
2014	545	43	395	127	285	57	2	226
2015	782	52	497	218	110	87	3	67
2016	909	10	587	234	447	67	3	240
2017	1 246	5	898	290	609	72	2	80
2018	1 937	20	1 519	1 294	71	167	1	68
2019	1 269	0	936	413	154	94	1	56
2020	932	1	584	370	59	143	1	18
2021	1 013	0	513	438	71	61	1	11
2022	1 945	1	1 241	596	553	106	0	22
2023	1 305	0	986	434	45	63	0	33
2024	792	0	573	235	6	105	2	20
Total	13 823	301	9 497	4 894	3 175	1 059	16	1 147

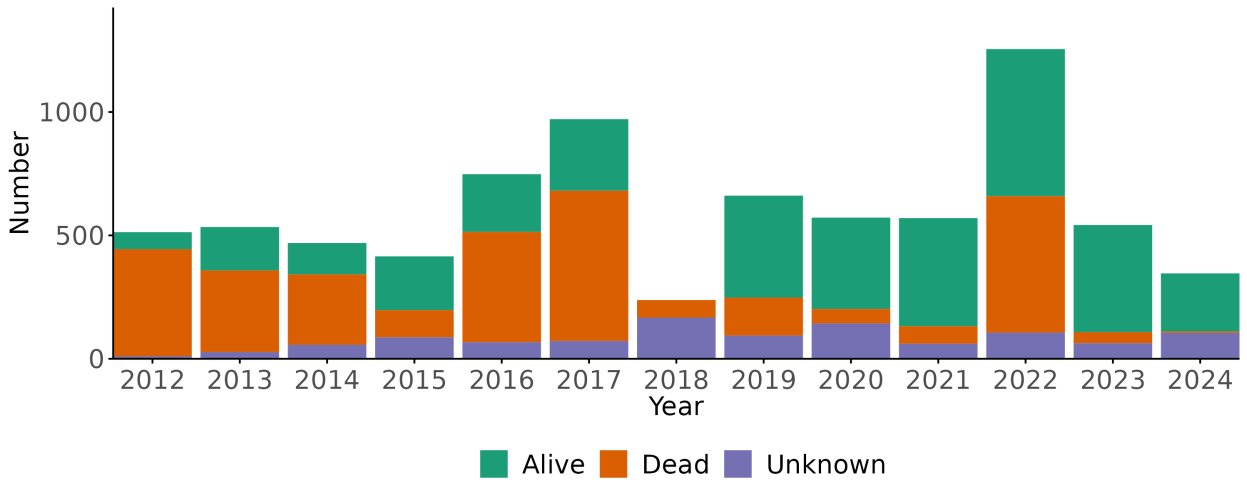

Figure A-23: Number of landings and interactions of oceanic whitetip shark reported by observers in longline fisheries for the period between 2012 and 2024, including interaction outcomes.

Table A-28: Number of landings and interactions of oceanic whitetip shark reported by observers in purse-seine fisheries for the period between 2012 and 2024. Also shown are interaction outcomes (A, alive; D, dead; U, unknown), the proportion of silky shark released alive. Total numbers are estimates owing to the difficulty of counting and identifying silky sharks observed caught in the net.

Year	Total	Fins retained	All retained	Condition discarded			Released alive (%)
				A	D	U	
2012	216	4	0	0	216	0	0
2013	262	3	8	7	249	0	0
2014	401	18	48	44	325	0	0
2015	418	7	166	132	139	0	0
2016	435	1	219	182	64	0	0
2017	555	0	245	315	29	0	0
2018	846	1	521	376	39	0	0
2019	971	2	606	402	70	0	0
2020	304	0	143	152	32	0	0
2021	21	0	15	6	0	0	0
2022	95	0	60	28	7	0	0
2023	1 658	6	1 022	584	87	0	0
2024	508	0	302	204	40	0	0
Total	6 690	42	3 355	2 432	1 297	0	0

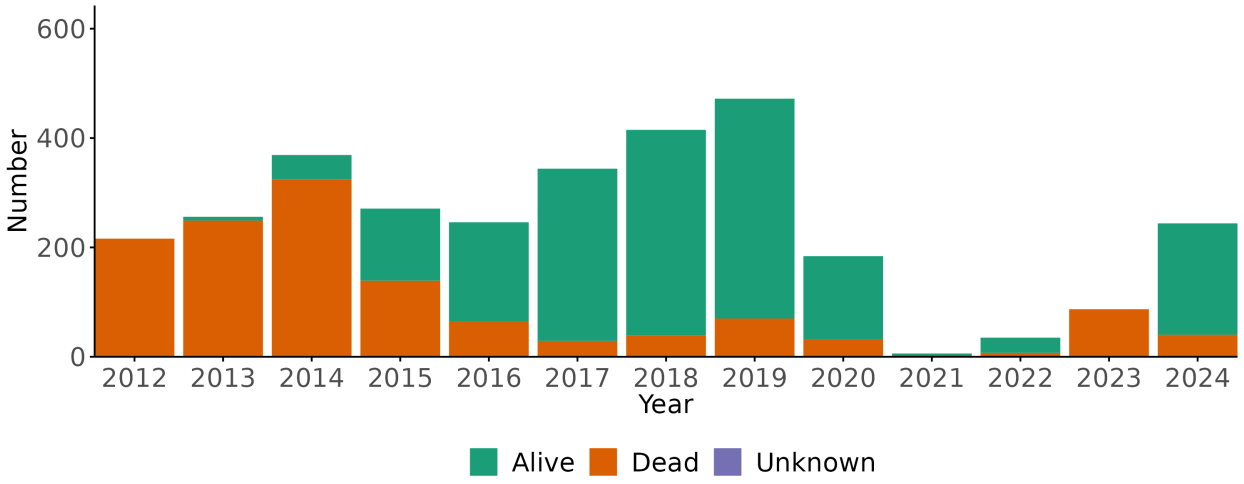

Figure A-24: Number of landings and interactions of oceanic whitetip shark reported by observers in purse-seine fisheries for the period between 2012 and 2024, including interaction outcomes.

A.5.3 Other sharks

74. For shark species other than whale, silky, and oceanic whitetip sharks, observer records for 2024 documented a total of 23, 856 landings and interactions in longline fisheries (Table A-29). Most (over 20,000) of these records were of blue shark.

75. For purse-seine fisheries, there was a total of 186 “other shark” landings and interactions reported by observers in 2024 (Table A-30).

Table A-29: Number of landings and interactions of shark species (other than whale, silky, and oceanic whitetip sharks), including interactions outcomes, in longline fisheries, as reported by ROP observers in 2024. “Nei” indicates identification to species group only.

Shark species	Catch	Retained	Discard	Unknown	All retained	Fins retained
Bigeye thresher shark	1 465	6	1 458			
Bignose shark	11		11			
Blacktip shark	16		16			
Blue shark	20 126	4 451	15 637	1 865		
Bronze whaler shark	64		64			
Cookie cutter shark	2		2			
Crocodile shark	317		317			
Galapagos shark	45		45			
Great hammerhead	3		3			
Great white shark	3		3			
Grey reef shark	5		5			
Longfin mako	92	6	84			
Mako sharks	5		5			
Pelagic thresher shark	48		48			
Salmon shark	4		4			
Sandbar shark	11		11			
Scalloped hammerhead	5	3	2			
Shortfin mako	1 392	184	1 208			
Silvertip shark	13		13			
Smooth hammerhead	12	3	9			
Thresher shark (vulpinus)	11		11			
Thresher sharks nei	23		23			
Tiger shark	15		15			
Various sharks nei	87		84			
Velvet dogfish	81		81			
Total	23 856	4 653	19 159	1 865	0	0

Table A-30: Number of landings and interactions of shark species (other than whale, silky, and oceanic whitetip sharks), including interactions outcomes, in purse-seine fisheries, as reported by ROP observers in 2024. "Nei" indicates identification to species group only.

Shark species	Catch	Retained	Discard	Unknown	All retained	Fins retained
Blacktip shark	18		16			
Blue shark	2		2			
Bronze whaler shark	9		9			
Galapagos shark	8		8			
Great hammerhead	2		2			
Hammerhead sharks nei	15		15			
Longfin mako	1		1			
Sandbar shark	13		13			
Scalloped hammerhead	40		40			
Silvertip shark	30		30			
Smooth hammerhead	3		3			
Various sharks nei	45		45			
Total	186	0	184	0	0	0

A.6 Mobulid rays

76. The Commission's measure (CMM 2019-05) on mobulid and manta rays arose out of the concern that species within the Mobulidae family, which includes mobulid and manta rays, are vulnerable to overfishing. They are vulnerable because they are slow-growing, experience late sexual maturity, have long gestation periods, and often give birth to only a few pups. Since 1 January 2021, CCMs have been obliged to:

    - prohibit their vessels from targeted fishing or intentional setting on mobulid rays in the Convention Area.
    - prohibit their vessels from retaining on board, transhipping, or landing any part or whole carcass of mobulid rays caught in the Convention Area.
    - require their fishing vessels to promptly release alive and unharmed, to the extent practicable, mobulid rays as soon as possible, and to do so in a manner that will result in the least possible harm to the individuals captured.
    - encourage their fishing vessels to implement the handling practices detailed in Annex 1 of the CMM 2019-05 while taking into consideration the safety of the crew.

77. Observer records for 2024 documented landings and interactions of a number of mobulid species, including manta rays (Table A-31).

78. Considering the observer data from the period between 2012 and 2024, landings and interactions of mobulids were high before 2019, often with unknown outcomes when released, because mobulid data collected by observers was reported as bycatch (Table A-32).

79. During the COVID-19 period, there were fewer trips and fewer recorded landings and interactions. Nevertheless, following the adoption of CMM 2019-05, conditions as stated above highlighted the

issues with mobulid catches as a SSI. Observers were asked to conduct additional vigilance about mobulid catches, and report the handling, fate, and condition when mobulids were caught and discarded. This enhanced awareness led to the increase in reported information of the interaction outcome (alive or deceased).

Table A-31: Number of landings and interactions of mobulid and manta ray species, including interaction outcomes, in purse-seine and longline fisheries as reported by ROP Observers in 2024. "Nei" indicates identification to species group only.

Species	Total	Purse seine	Longline	Retained	Discarded/released		
					A	D	U
Giant manta	151	145	6		50	41	60
Mantas, devil rays nei	8	8					8
Mobula	135	113	22		41	49	45
Pelagic stingray	2 896	7	2 889	36	2 084	700	112
Spinetail mobula	4		4			4	
Stingrays, butterfly rays nei	1	1					1
Total	3 195	274	2 921	36	2 175	794	226

Table A-32: Number of landings and interactions of mobulid rays reported by observers in longline and purse-seine fisheries for the period between 2012 and 2024, including interaction outcomes.

Year	Total	Purse seine	Longline	Retained	Discarded/released		
					A	D	U
2012	6 251	4 295	1 956	174	794	185	5 272
2013	6 619	3 826	2 793	652	1 086	366	5 167
2014	6 699	3 121	3 578	186	1 688	458	4 553
2015	8 531	2 710	5 821	272	2 969	891	4 671
2016	9 798	3 380	6 418	452	2 688	1 030	6 080
2017	10 717	2 539	8 178	277	4 590	1 156	4 971
2018	14 837	3 673	11 164	323	7 105	2 789	4 943
2019	15 956	4 378	11 578	210	8 045	3 288	4 623
2020	8 486	927	7 559	154	3 796	2 468	2 222
2021	6 806	253	6 553	51	3 038	1 738	2 030
2022	9 452	147	9 305	128	5 113	1 811	2 528
2023	11 249	1 935	9 314	146	6 170	3 042	2 037
2024	3 195	274	2 921	36	2 175	794	226
2025	2		2		2		
Total	118 598	31 458	87 140	3 061	49 259	20 016	49 323