TECHNICAL AND COMPLIANCE COMMITTEE
Twenty-First Regular Session
24 - 30 September 2025
Pohnpei, Federated States of Micronesia (Hybrid)

ANNUAL REPORT ON THE REGIONAL OBSERVER PROGRAMME

WCPFC-TCC21-2025-RP02_rev1[1]
19 September 2025

Submitted by the Secretariat

[1]Rev1 replaces the original paper dated 29 August 2025. Appendix 1 has been revised with updated and corrected data (as of 18 September 2025), and minor layout changes to tables to better clarify table column headings.

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 18 September 2025, data for 1128 purse-seine trips and 444 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 meetings 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 16289 ROP purse-seine trips and 6017 ROP longline trips; these trips were for a total of 22306 regional observer trips, and 817199 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 1128 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	1 522	53 829	36 865	43 213	35.5	528	25 324	30 941 256	14 241	48.0	2 050	79 153
2018	1 856	59 650	42 526	46 616	32.0	584	29 551	36 800 635	17 221	50.5	2 440	89 201
2019	1 872	57 726	43 674	44 373	31.0	609	29 745	38 910 920	17 531	49.0	2 481	87 471
2020	726	27 500	15 956	21 035	38.0	403	23 662	30 998 683	13 262	58.5	1 129	51 162
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	472	22 636	29 496 268	12 812	48.0	657	30 707
2023	1 244	41 320	30 021	33 616	33.0	525	25 312	37 103 734	15 377	48.0	1 769	66 632
2024	1 128	34 737	27 866	27 092	31.0	444	24 566	32 365 839	13 768	55.5	1 572	59 303
Total	16 289	539 499	385 544	424 975	33.0	6 017	277 700	351 273 186	161 224	46.0	22 306	817 199

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 1128 purse-seine trips and 444 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, interference, and 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	11	2
RS-B	Request that an event not be reported by the observer	10	1
RS-D	Did the operator fail to provide the observer, while on board the vessel, at no expense to the observer or the observer's government, with food, accommodation, and medical facilities of a reasonable standard equivalent to those normally available to officers of the vessel	6	3
Code	**National regulations**	**PS**	**LL**
NR-A	Fish in areas where it is not permitted to fish	14	1
NR-C	Use a fishing method other than the method the vessel was designed or licensed	29	0
NR-D	Not display or present a valid (and current) licence document onboard	3	6
NR-E	Transfer or tranship fish from or to another vessel	25	65
NR-F	Was involved in bunkering activities	868	4
NR-G	Fail to stow fishing gear when entering areas where they were not authorized to fish	24	0
Code	**WCPFC CMMs**	**PS**	**LL**
WC-A	Fail to comply with any Commission Conservation and Management Measures	77	0
WC-B	High-grade the catch	8	15
Code	**Log sheet recording position & catch**	**PS**	**LL**
LC-A	Inaccurately record retained 'Target Species' in the vessel logs	272	48
LC-B	Inaccurately record 'Target Species' discards	399	67
LC-C	Record species inaccurately	433	1
LC-D	Inaccurately record retained bycatch species, and discards	385	80
LC-E	Inaccurately record retained bycatch species	147	32
LC-F	Inaccurately record discarded bycatch species	187	7
LP-A	Inaccurately record vessel position on vessel log sheets for sets, hauling and catch	6	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)	3	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)	893	21
SI-B	Interact with non-target species	248	54
Code	**Pollution**	**PS**	**LL**
PN-A	Dispose of any metals, plastics, chemicals, or old fishing gear	95	12
PN-B	Discharge any oil	24	1
PN-C	Lose any fishing gear	3	33
PN-D	Abandon any fishing gear	21	1
PN-E	Fail to report any abandoned gear	3	1
Code	**Safety at sea**	**PS**	**LL**
SS-A	Fail to monitor international safety frequencies	2	2
SS-B	Carry out-of-date safety equipment	34	3

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 at this link: 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 TCC21 supplementary paper provided information on past trends in CCFS cases based on observer data (refer TCC21-2025-RP02_suppl).

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 1128 purse-seine trips and 444 longline trips for 2024.

45. Observers recorded 22 different species of cetaceans, including an unidentified whale species, that interacted with the fisheries on observed vessels in 2024 (Table A-2).

46. For the 1128 purse-seine trips, observer records for 2024 were predominantly of dolphin species interactions (Table A-2). In one (1) purse seine set, 100 False killer whales were documented by the observer as interacting with the vessel. This accounted for 41% of the total recorded catch of the species in 2024.

47. For purse-seine fisheries, there were 40 deceased animals included in the total observer records of cetaceans in 2024.

48. Longline vessels caught or interacted with cetaceans in 2024, and 7 of these captures was reported as deceased. Cetaceans that escaped capture were all alive when escaping.

49. The CMM for Cetaceans, CMM 2011-03, was adopted 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 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
Baleen whales nei	7				7					
Bottlenose dolphin	15	1			6	1	9			
Bryde's whale	14				12		1		1	
Common dolphin	25				20		5			
Cuvier's beaked whale		1				1				
False killer whale	284	10		1	163	7	6	2	115	
Humpback whale	4	1			4	1				
Indo-pacif. bottlenose dolphin	22				14		8			
Long-beaked common dolphin	18				17		1			
Melon-headed whale		1				1				
Pantropical spotted dolphin	2	2					2	2		
Pygmy killer whale	14				14					
Risso's dolphin	1	4			1	4				
Rough-toothed dolphin	94	6			91	6	3			
Sei whale	34				31				3	
Short-finned pilot whale	32	2		1	23	1			9	
Spectacled porpoise	5	1							5	1
Sperm whale	1				1					
Spinner dolphin	11				6		5			
Striped dolphin	11	1			11	1				
Toothed whales nei		12				9		3		
Whale (unidentified)		1				1				
Total	594	43	0	2	421	33	40	7	133	1

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	1 522	87	6	15	1 236	37	150	7	130	28
2018	1 188	66	1	2	798	39	204	17	185	8
2019	1 666	105	10	9	1 027	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	594	43		2	421	33	40	7	133	1
Total	15 210	854	35	45	11 374	497	2 604	143	1 197	169

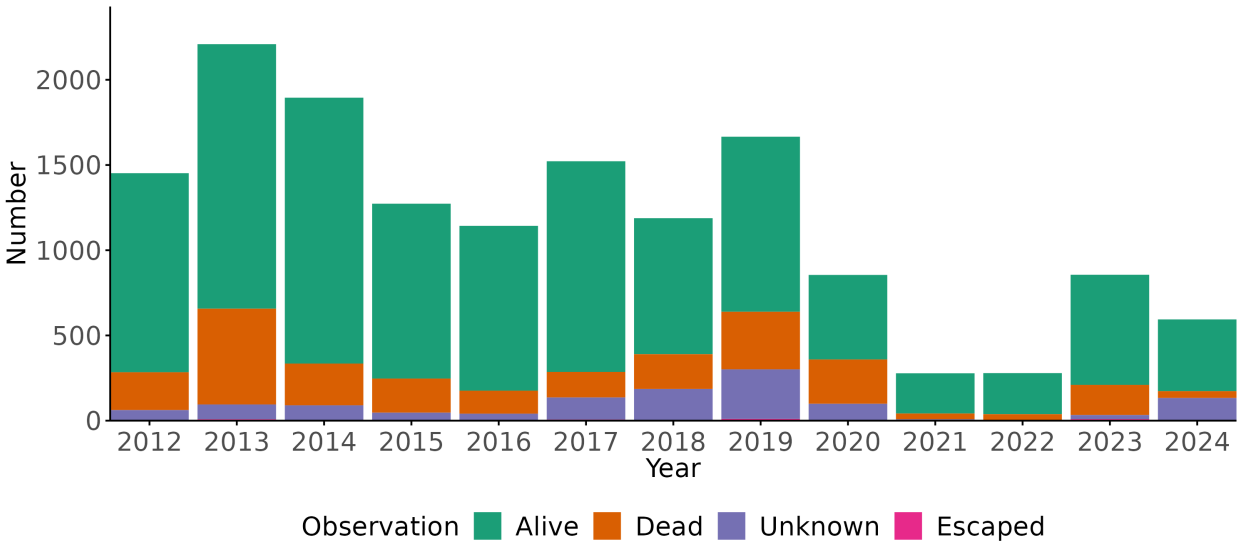

Figure A-1: Number of interactions of cetaceans and pinnipeds in purse-seine fisheries as reported by ROP Observers for the period from 2012 to 2024. Interaction outcomes were reported as alive, dead, escaped before landing, or unknown.

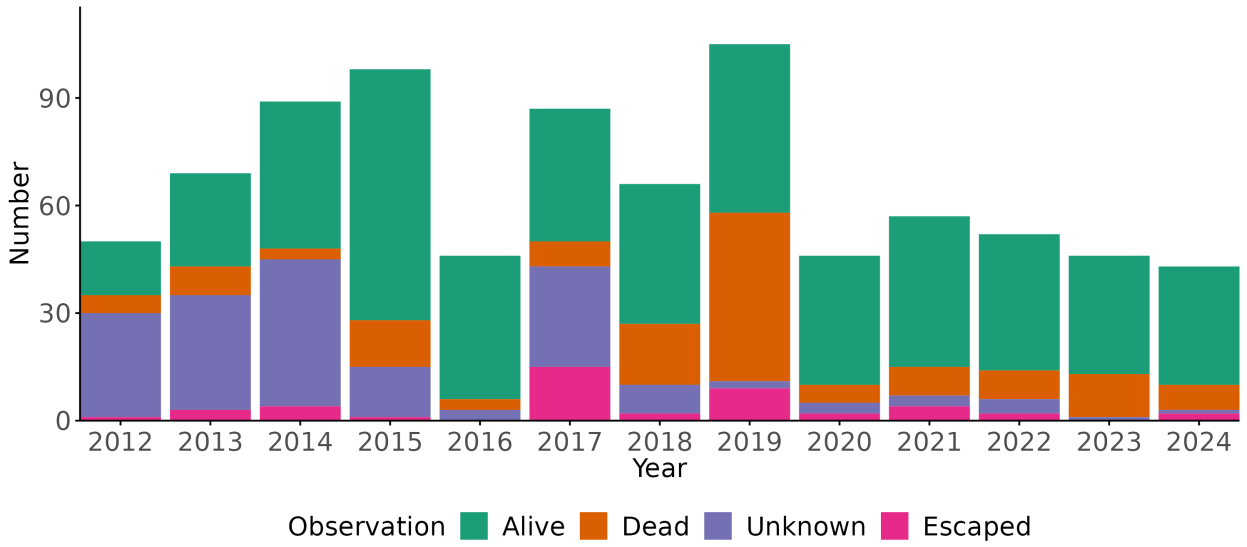

Figure A-2: Number of interactions of cetaceans and pinnipeds in longline fisheries as reported by ROP Observers for the period from 2012 to 2024. Interaction outcomes were reported as alive, dead, escaped before landing, or unknown.

A.2 Seabird fishery interactions

50. Observer data of seabird landings and interactions in longline fisheries in 2024 were collected by observers from Fiji, French Polynesia, New Calledonia, Chinese Taipei, United States-Hawaii and Vanuatu. Observer data from 2024 entered to date documented seabird landings and interactions for 444 longline trips.

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

52. For the 444 longline trips, there was a total of 742 seabird landings and interactions reported by observers, including records of 252 birds that were released alive and 490 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. Data from New Zealand was not available at the time this report was prepared.

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

54. Of the 742 birds recorded as caught on longlines (Table A-4), 26 individuals were found entangled in fishing line. A total of 60 birds were hooked either in the mouth or beak or had ingested the hook. An additional 26 birds were hooked in other areas of the body, including the wings, body, legs or feet. For the remaining 95 birds, the specific location of hooking was not documented by observers.

55. 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 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.

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
Albatrosses nei	30	1	29		11	15	4
Bird (unidentified)	39		39		39		
Black-footed albatross	178	39	139		2		176
Boobies & gannets nei	2		2		2		
Brown booby	2		2		2		
Gulls, terns & skuas	2		2		2		
Laysan albatross	269	52	217		1		268
Northern royal albatross	36		36				36
Petrels & shearwaters nei	23	4	19		23		
Shearwaters nei	1		1				1
Short-tailed shearwater	4	1	3		4		
Wandering albatross	1		1			1	
Gulls, terns & skuas	155	155			155		
Total	742	252	490	0	241	16	485

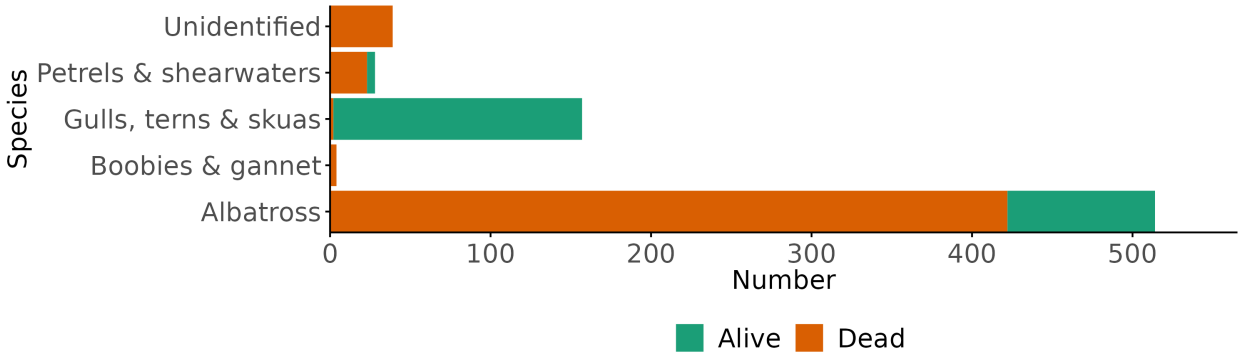

Figure A-3: Number of landings and interactions of seabird species groups in longline fisheries, including interaction outcomes, as reported by ROP Observers in 2024.

56. There were 9761 seabird sightings reported by observers from longline vessels (Table A-5). Most of the sightings were of Laysan albatross and black-footed albatross.

57. For purse-seine fisheries, there were 2536 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
Albatrosses nei	35	25	5	5
Bird (unidentified)	3	3		
Black-browed albatross	761	112	649	
Black-footed albatross	3 986	155		3 831
Boobies and gannets nei	54	54		
Grey petrel	876	326	550	
Gulls, terns & skuas	193	183	10	
Laysan albatross	3 649	83		3 566
Masked booby	8	8		
Petrels and shearwaters nei	167	124	43	
Petrels nei	1			1
Shearwaters nei	4	4		
Sooty shearwater	21	21		
Westland petrel	3	3		
Total	9 761	1 101	1 257	7 403

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	118	118		
Bird (unidentified)	89	89		
Black-footed albatross	14	14		
Boobies and gannets nei	208	208		
Gulls, terns & skuas	1 830	1 830		
Laysan albatross	28	28		
Petrels and shearwaters nei	249	249		
Total	2 536	2 536	0	0

58. The first seabird measure, CMM 2012-07, was adopted in 2012 (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 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	514	92	18	422	82		
Total	7 400	851	12	6 397	86	120	2

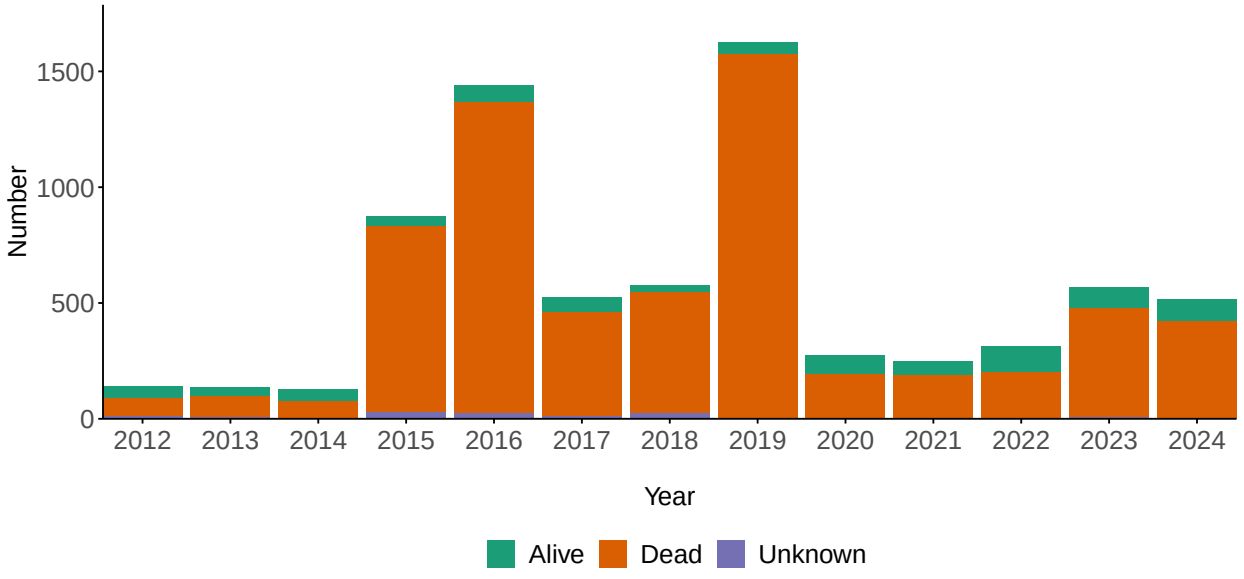

Figure A-4: Number of landings and interactions of albatross reported by observers in longline fisheries for the period between 2012 and 2024, including interaction outcomes.

A.2.2 Petrels and shearwaters

Table A-8: Number of landings and interactions of petrels and shearwaters reported by observers in longline 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	28	5	18	23	82		
Total	840	52	6	753	90	33	4

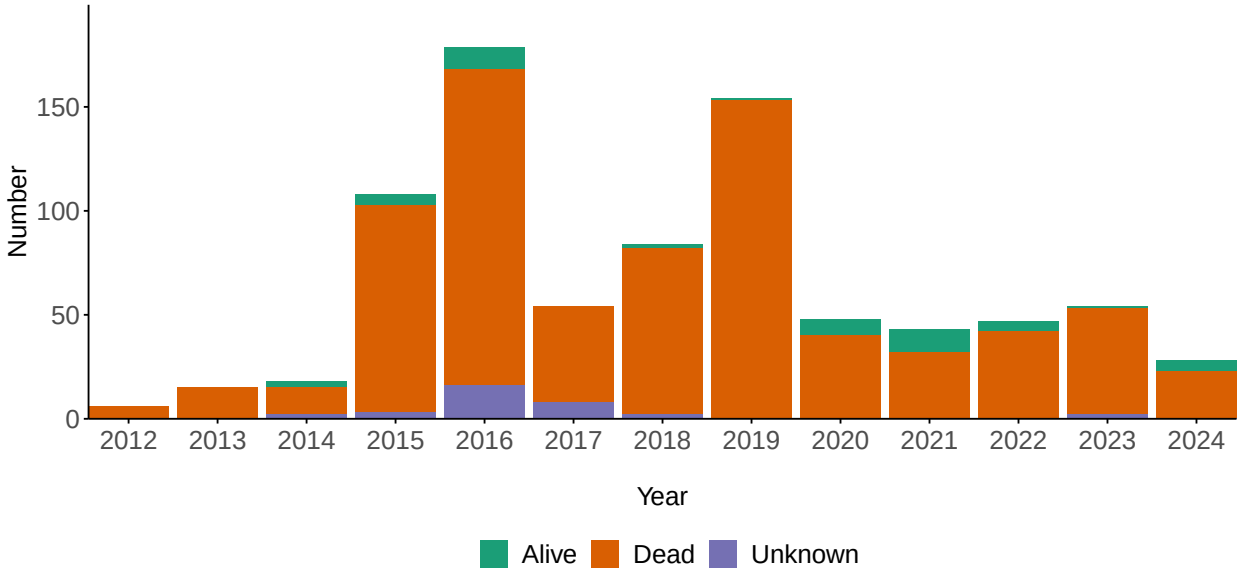

Figure A-5: Number of landings and interactions of petrels and shearwaters reported by observers in longline fisheries for the period between 2012 and 2024, including interaction outcomes.

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 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	157	155	99	2	1		
Total	167	155	93	11	7	1	1

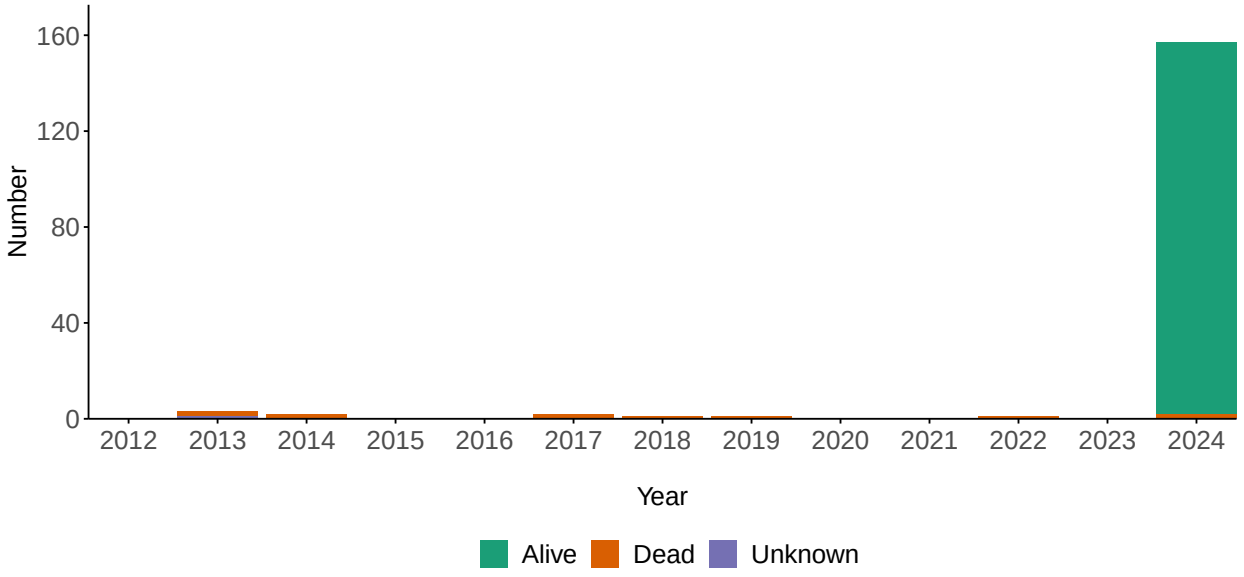

Figure A-6: Number of landings and interactions of gulls, terns, and skuas reported by observers in longline fisheries for the period between 2012 and 2024, including interaction outcomes.

A.2.4 Boobies and gannets

Table A-10: Number of landings and interactions of boobies and gannets reported by observers in longline 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	4			4	100		
Total	26	6	23	20	77	0	0

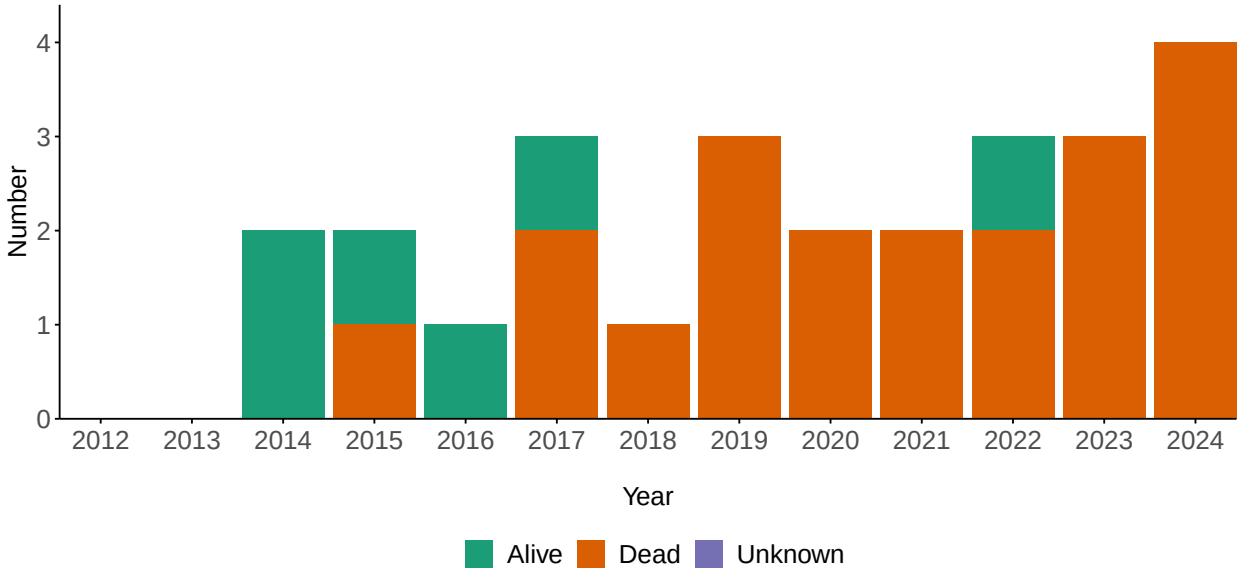

Figure A-7: Number of landings and interactions of boobies and gannets reported by observers in longline fisheries for the period between 2012 and 2024, including interaction outcomes.

A.2.5 Unidentified seabirds

Table A-11: Number of landings and interactions of unidentified seabirds reported by observers in longline 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

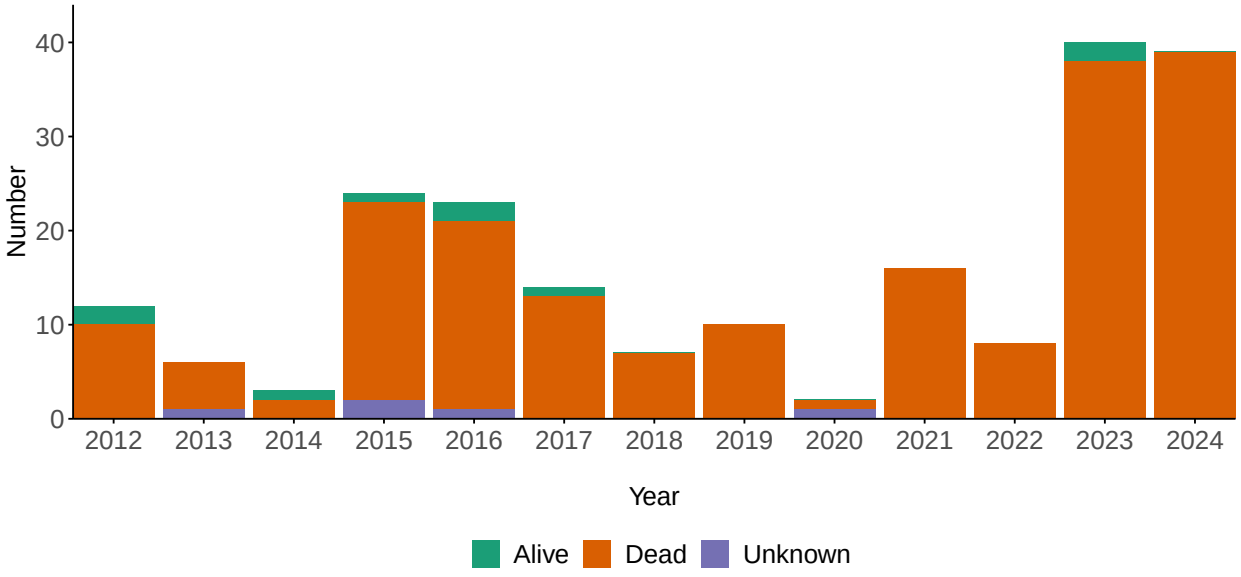

Figure A-8: Number of landings and interactions of unidentified seabirds reported by observers in longline fisheries for the period between 2012 and 2024, including interaction outcomes.

A.3 Sea turtle fishery interactions

59. Landings and interactions of sea turtles were reported by observers from 1128 purse-seine trips and 444 longline trips in 2024. Across these trips, observer records documented a total of 412 landings and interactions of sea turtles.

60. In longline fisheries, there were 331 landings and interactions of turtles reported by observers (Table A-12, Figure A-9). Of these captures, 258 turtles were released alive, and 66 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. Number of sea turtles released alive is a subset of sea turtles discarded alive. Total number observed is the number of sea turtles discarded alive, discarded dead, and in unknown condition.

Species	Observed	Retained	Discarded alive	Discarded dead	Unknown condition	Released alive before landing
Flatback turtle	1		1			1
Green turtle	25		12	13		11
Leatherback turtle	28		23	5		18
Loggerhead turtle	211		206	5		206
Marine turtles nei	12		11	1		11
Olive ridley turtle	54		12	42		11
Total	331	0	265	66	0	258

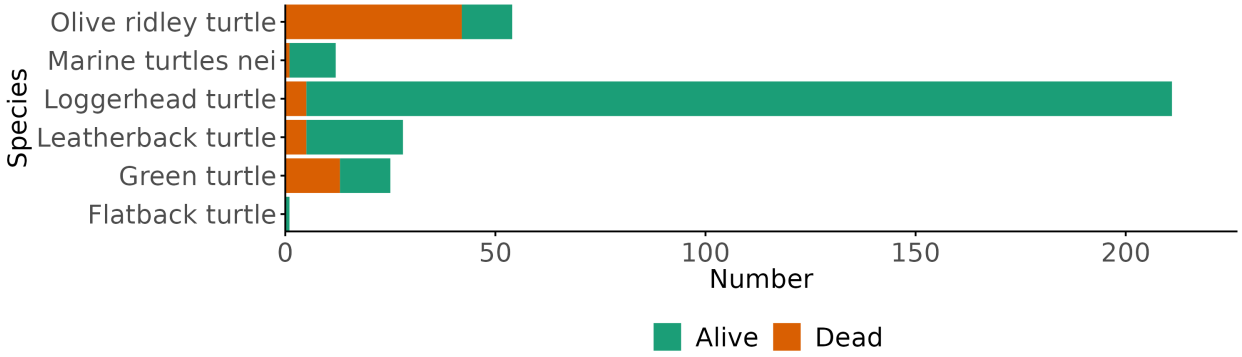

Figure A-9: Number of landings and interactions of sea turtle species in longline fisheries, including interaction outcomes, as reported by ROP observers in 2024.

61. In purse-seine fisheries, there were 81 landings and interactions of turtles reported by observers in 2024 (Table A-13). Of this total, 3 turtles were reported as deceased, and 17 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. Number of sea turtles released alive is a subset of sea turtles discarded alive. Total number observed is the number of sea turtles discarded alive, discarded dead, and in unknown condition.

Species	Observed	Retained	Discarded alive	Discarded dead	Unknown condition	Released alive before landing
Green turtle	30		29	1		5
Hawksbill turtle	7		7			2
Leatherback turtle	4		4			
Loggerhead turtle	22		20	2		5
Marine turtles nei	1		1			
Olive ridley turtle	17		15		1	5
Total	81	0	76	3	1	17

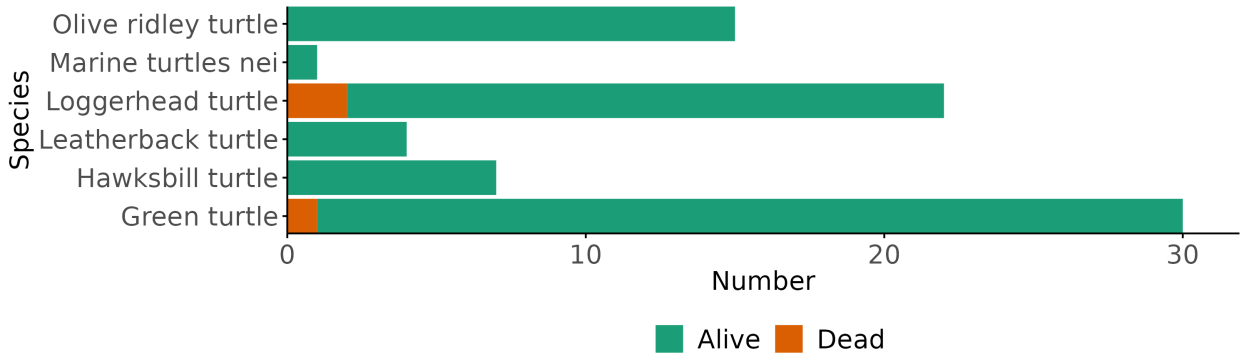

Figure A-10: Number of landings and interactions of sea turtle species in purse-seine fisheries, including interaction outcomes, as reported by ROP observers in 2024.

62. 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).

63. Observer records for this period included a total of 481 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	1	1	100				
Total	57	42	74	13	23	2	4

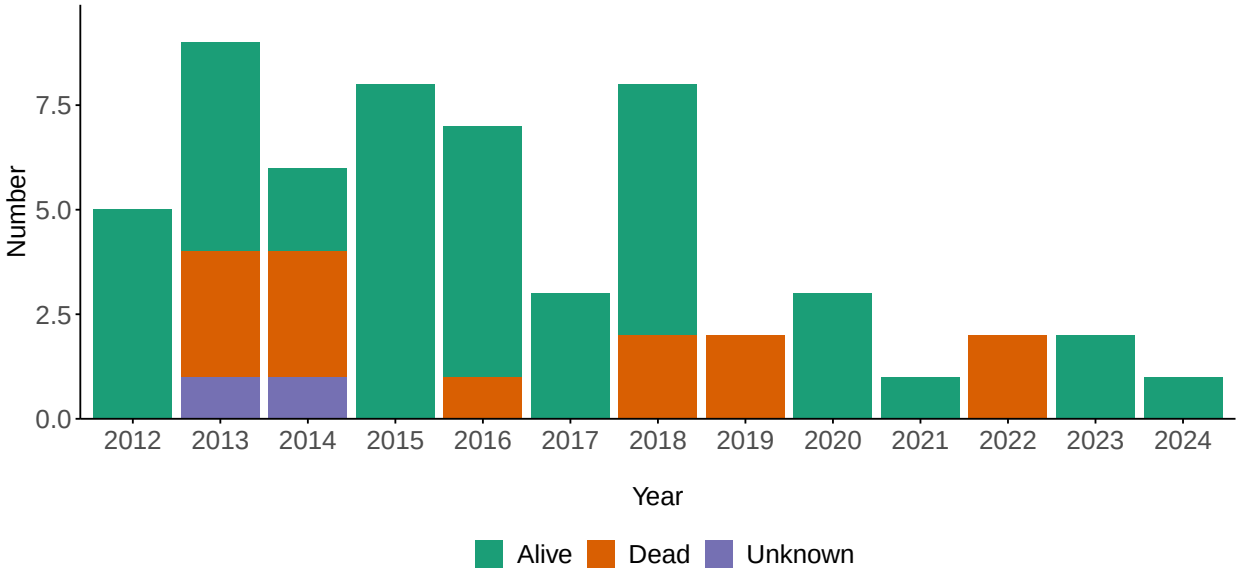

Figure A-11: Number of landings and interactions of flatback turtle reported by observers in longline and purse-seine fisheries for the period between 2012 and 2024, including interaction outcomes.

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	89	54	61	19	21	16	18
2018	154	93	60	56	36	2	1
2019	116	86	74	27	23	2	2
2020	41	23	56	16	39	2	5
2021	11	3	27	8	73		
2022	20	5	25	15	75		
2023	36	26	72	9	25	1	3
2024	55	41	75	14	25		
Total	973	660	68	231	24	59	6

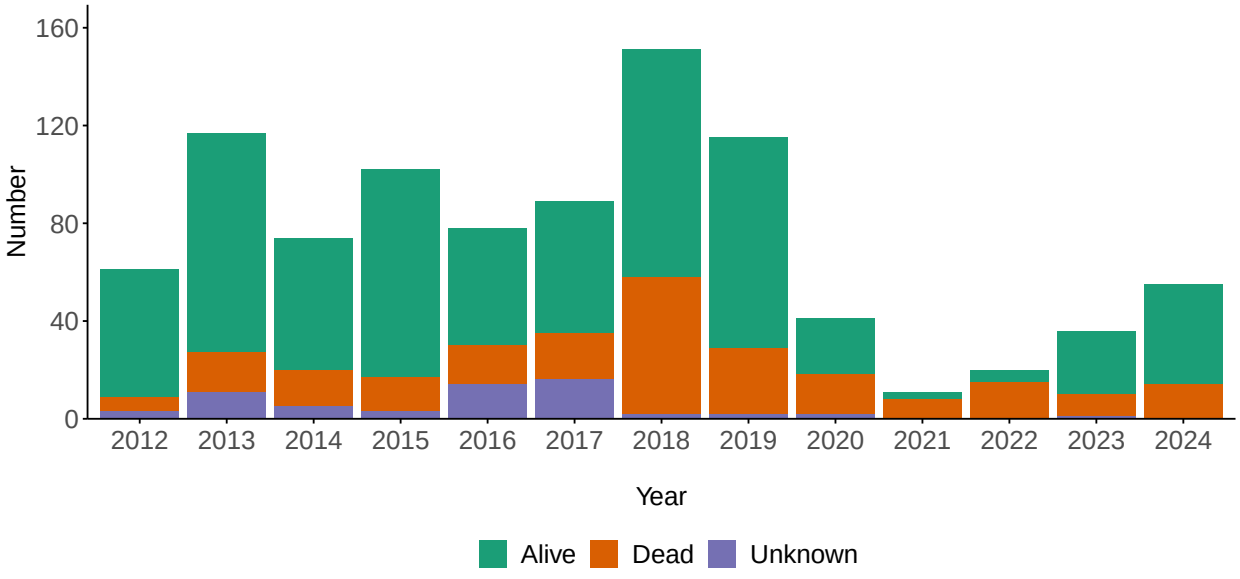

Figure A-12: Number of landings and interactions of green turtle reported by observers in longline and purse-seine fisheries for the period between 2012 and 2024, including interaction outcomes.

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	7	7	100				
Total	441	338	77	77	17	24	5

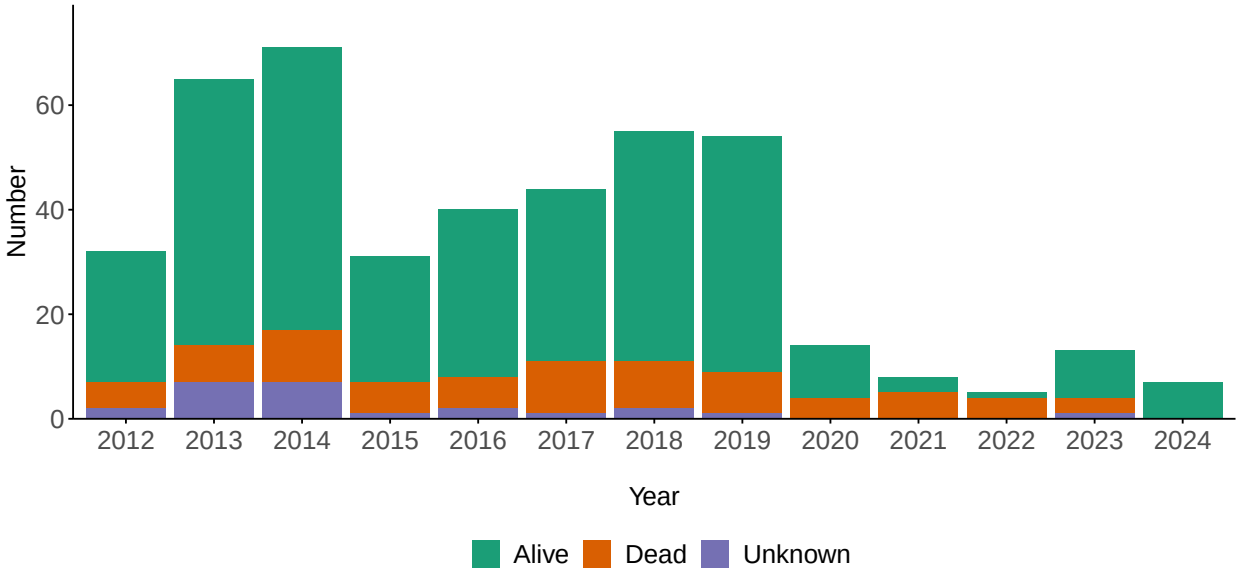

Figure A-13: Number of landings and interactions of hawksbill turtle reported by observers in longline and purse-seine fisheries for the period between 2012 and 2024, including interaction outcomes.

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	32	27	84	5	16		
Total	382	271	71	57	15	34	9

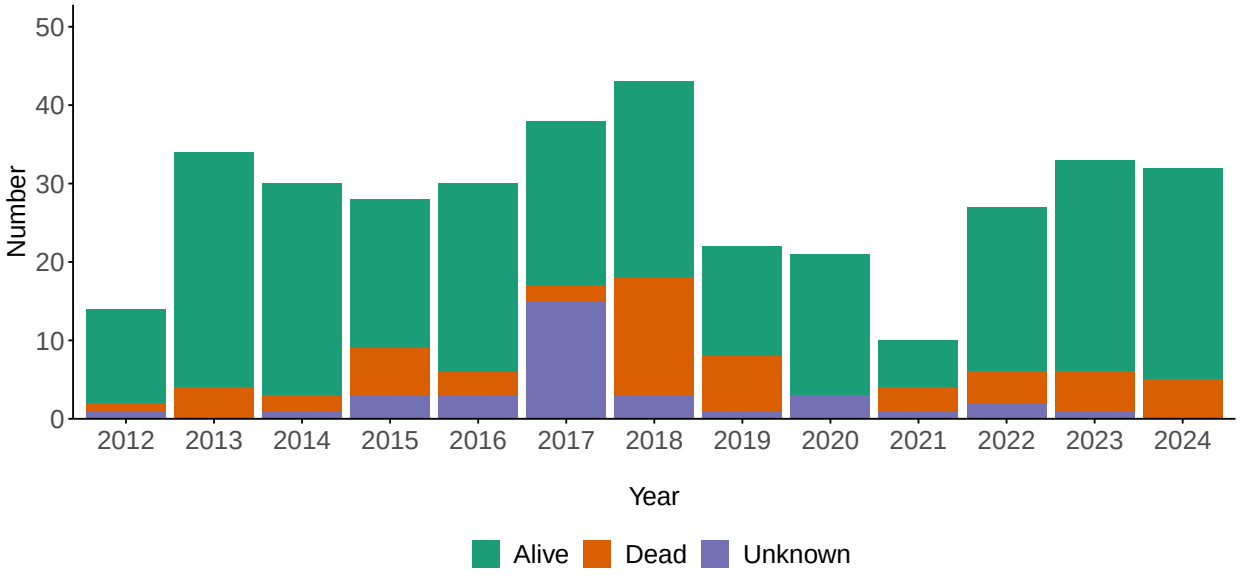

Figure A-14: Number of landings and interactions of leatherback turtle reported by observers in longline and purse-seine fisheries for the period between 2012 and 2024, including interaction outcomes.

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	233	226	97	7	3		
Total	1 582	1 337	85	138	9	95	6

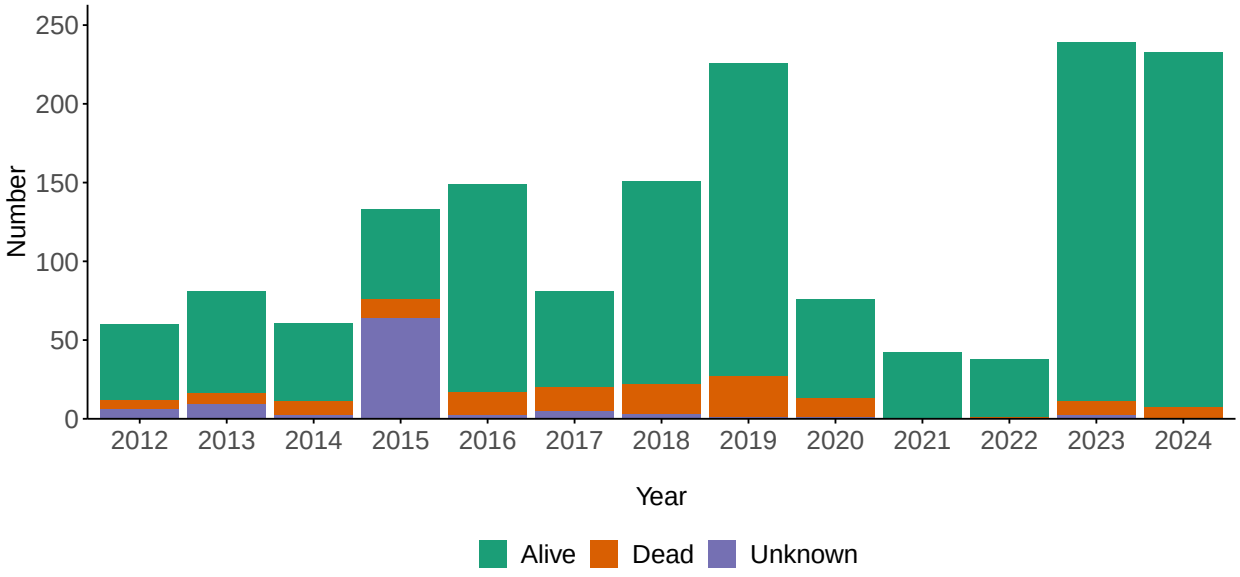

Figure A-15: Number of landings and interactions of loggerhead turtle reported by observers in longline and purse-seine fisheries for the period between 2012 and 2024, including interaction outcomes.

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	71	27	38	42	59	1	1
Total	1 730	662	38	980	57	72	4

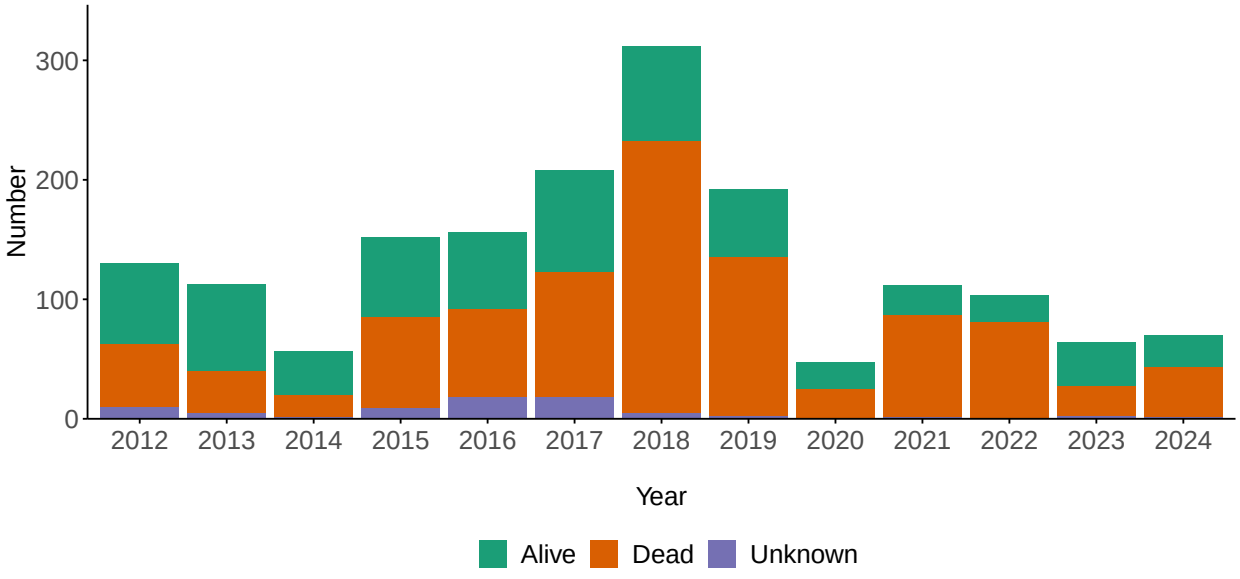

Figure A-16: Number of landings and interactions of olive ridley turtle reported by observers in longline and purse-seine fisheries for the period between 2012 and 2024, including interaction outcomes.

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	13	12	92	1	8		
Total	481	377	78	46	10	54	11

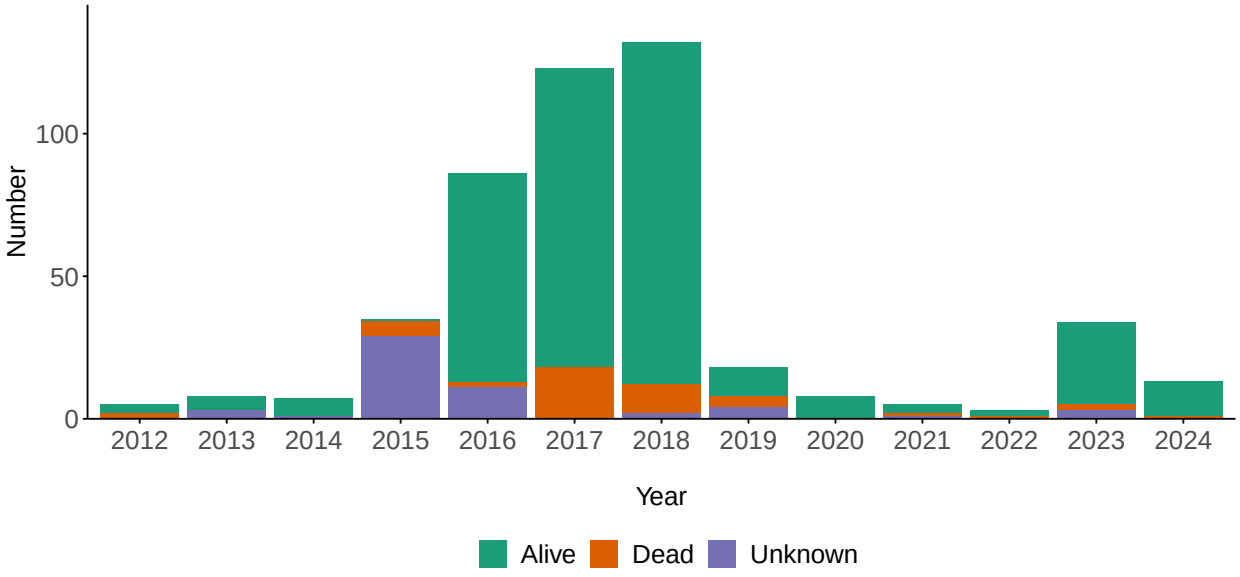

Figure A-17: Number of landings and interactions of unidentified turtles reported by observers in longline and purse-seine fisheries for the period between 2012 and 2024, including interaction outcomes.

A.4 Whale shark fishery interactions

64. 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 93 whale shark for 1128 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	Discarded/ escaped alive and healthy	Discarded/ escaped alive injured or distressed	Alive unknown condition	Deceased	Unknown
Landed	13		1	11	1	
Interaction	80	27	38	6	4	5
Total	93	27	39	17	5	5

65. 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	138	31 617	336	11
2013	361	1 511	147	38 295	354	9
2014	374	1 626	150	39 106	361	10
2015	390	1 629	147	37 065	376	11
2016	194	1 591	100	34 532	184	6
2017	299	1 522	118	36 865	257	8
2018	323	1 856	127	42 526	315	8
2019	585	1 872	167	43 674	563	13
2020	147	726	75	15 956	141	9
2021	25	132	14	3 826	22	7
2022	3	185	2	4 195	3	1
2023	131	1 244	70	30 021	125	4
2024	83	1 128	49	27 866	77	3
Total	3 278	16 289	1 304	385 544	3 114	100

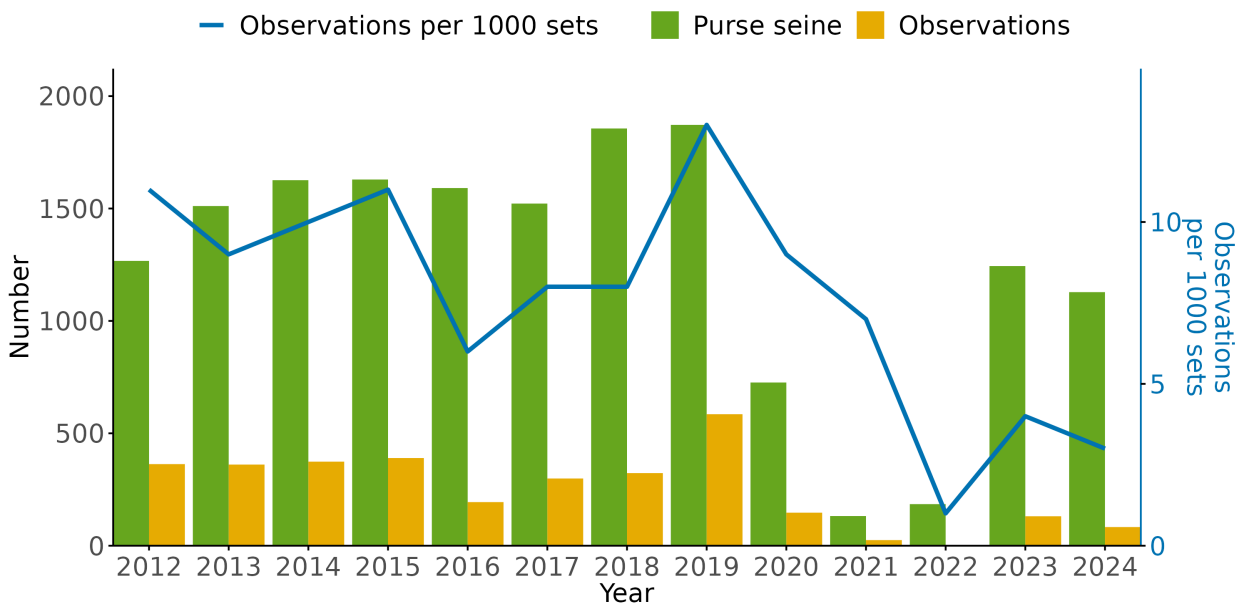

Figure A-18: Number of observer trips and of landings and interactions of whale shark (left y-axis), and interaction rates (right y-axis) in purse-seine fisheries as reported by ROP Observers for the period from 2012 to 2024.

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

A.5.1 Silky shark

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

67. Observer records for 2024 included landings and interactions of “silky shark” in longline and purse-seine fisheries (Table A-23). It should be noted that the counting and identification of silky sharks observed caught in purse seine nets can be challenging, and therefore, the figures reported here represent observer estimates.

68. Data for 2024 shows that observer records indicated a total of 3,945 silky shark landings and interactions in longline fisheries (Table A-23). Most of these records were live releases.

69. Estimates of silky shark landings and interactions in purse-seine fisheries were markedly higher than in longlines, with 47,517 observer records in 2024. The majority (12,776) of these records were deceased 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. LL cut free before landing includes longline cut, struck off, or unhooked before landing.

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	3 945	0	0	2 962	761	222	2 431	1 410	104	163	29	5
Purse seine	47 517	0	22	15 230	12 775	19 512	12 776	31 109	3 610	0	0	0
Total	51 462	0	22	18 192	13 536	19 734	15 207	32 519	3 714	163	29	5

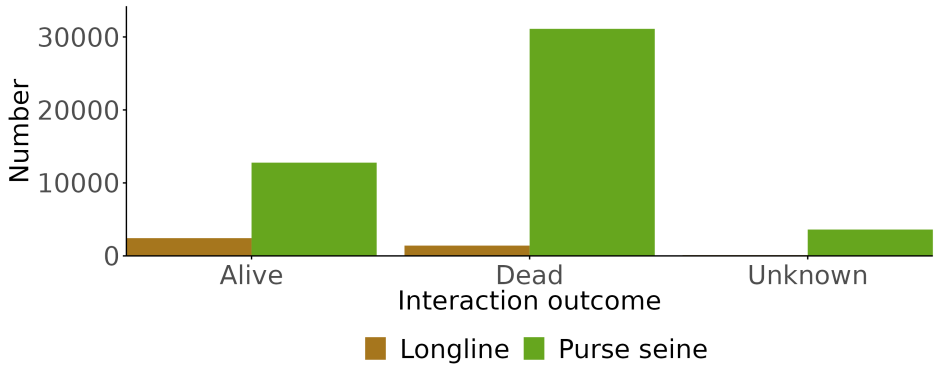

Figure A-19: Outcomes of landings and interactions of silky shark in longline and purse-seine fisheries in 2024. LL cut free before landing includes longline cut, struck off, or unhooked before landing.

70. 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 number of silky shark cut free from longlines, and the proportion of silky shark discarded alive. LL cut free before landing includes longline cut, struck off, or unhooked before landing.

Year	Total	Fins retained	All retained	Condition discarded			LL cut free before landing	Discarded alive (%)
				A	D	U		
2012	3 737	110	2 940	96	97	494	175	0
2013	2 453	97	1 685	99	155	417	286	1
2014	1 655	132	517	423	221	362	495	9
2015	3 191	109	513	946	1 029	594	520	6
2016	4 008	0	316	960	1 307	1 425	1 284	11
2017	7 127	0	112	1 659	1 646	3 710	1 482	5
2018	6 070	24	231	2 325	1 654	1 836	1 503	14
2019	5 083	1	20	2 169	1 352	1 541	1 075	11
2020	2 253	0	141	1 215	711	186	178	5
2021	2 043	0	0	1 150	328	565	125	5
2022	7 872	0	56	1 107	1 598	5 111	166	2
2023	2 374	0	586	1 082	614	92	312	12
2024	3 945	0	0	2 431	1 410	104	199	4
Total	51 811	473	7 117	15 662	12 122	16 437	7 800	85

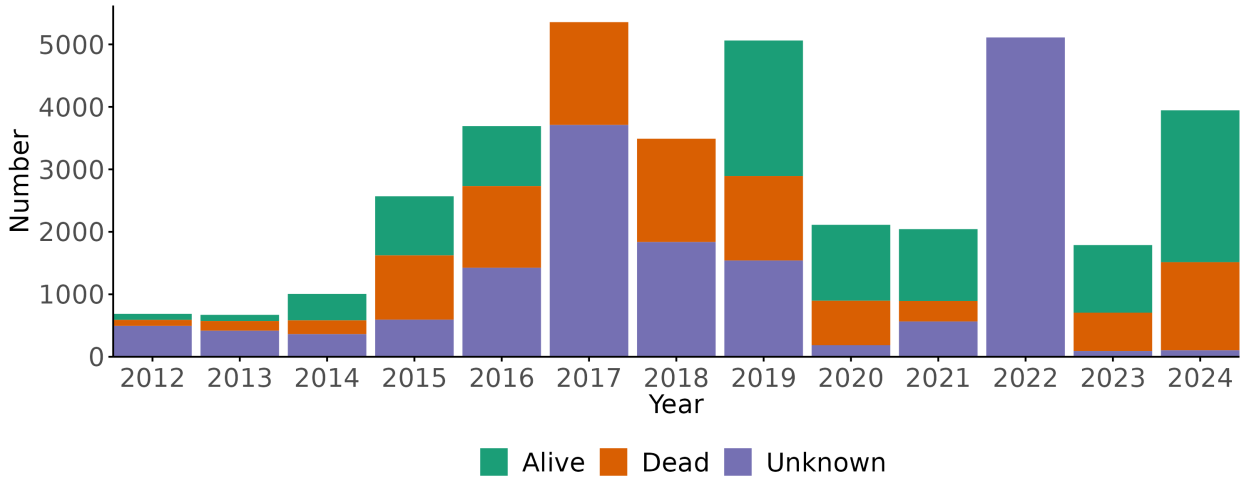

Figure A-20: Number of landings and interactions of silky shark reported by observers in longline fisheries for the period between 2012 and 2024, including interaction outcomes.

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 discarded 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			Discarded alive (%)
				A	D	U	
2012	25 444	1 920	602	37	6	22 879	0
2013	34 270	2 457	749	25	11	31 028	0
2014	41 777	909	850	1 014	3 020	35 984	0
2015	35 657	220	99	4 549	20 651	10 138	0
2016	57 059	257	86	7 964	40 440	8 312	0
2017	70 586	35	71	17 515	47 501	5 464	0
2018	63 192	10	44	19 600	40 241	3 297	0
2019	94 020	21	28	26 459	61 068	6 444	0
2020	36 148	2	44	9 855	23 229	3 018	0
2021	1 915	0	0	695	1 102	118	0
2022	3 048	0	0	1 011	1 817	220	0
2023	44 825	0	47	15 761	26 644	2 373	0
2024	47 517	0	22	12 776	31 109	3 610	0
Total	555 458	5 831	2 642	117 261	296 839	132 885	0

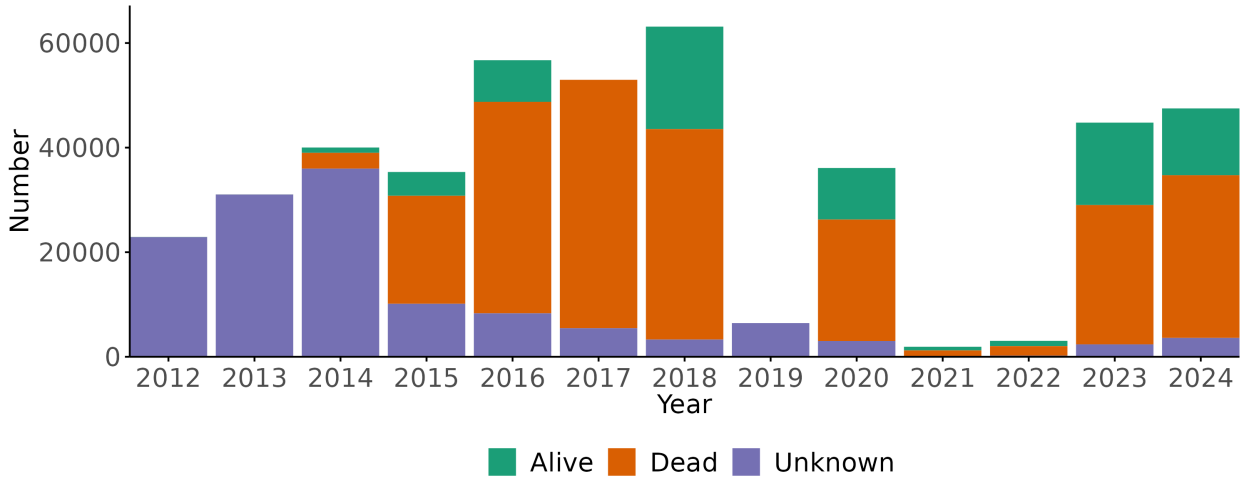

Figure A-21: Number of landings and interactions of silky shark reported by observers in purse-seine fisheries for the period between 2012 and 2024, including interaction outcomes.

A.5.2 Oceanic whitetip shark

71. 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.

72. For 2024, observers recorded landings and interactions of oceanic whitetip shark from 1128 purse-seine and 444 longline trips.

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

74. 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. LL cut free before landing includes longline cut, struck off, or unhooked before landing.

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	2 072	0	0	1 573	424	75	1 375	659	38	114	18	1
Purse seine	1 434	0	0	896	182	356	827	535	72	0	0	0
Total	3 506	0	0	2 469	606	431	2 202	1 194	110	114	18	1

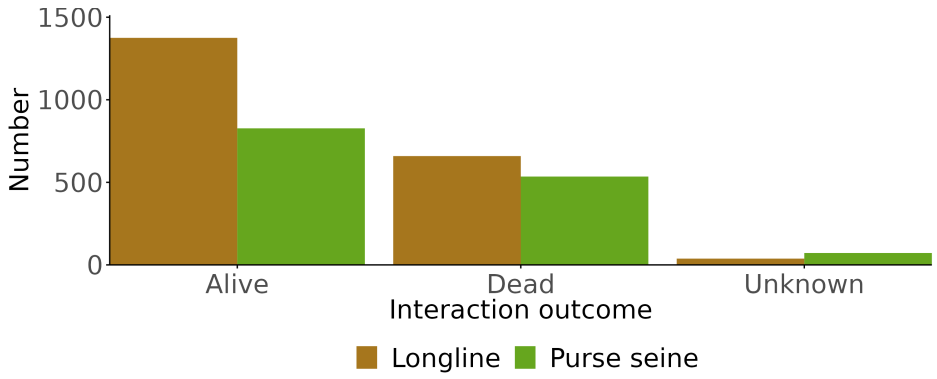

Figure A-22: Outcomes of landings and interactions of oceanic whitetip shark in longline and purse-seine fisheries in 2024.

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 number of oceanic whitetip shark cut free from longlines, and the proportion of oceanic whitetip shark discarded alive. LL cut free before landing includes longline cut, struck off, or unhooked before landing.

Year	Total	Fins retained	All retained	Condition discarded			LL cut free before landing	Discarded alive (%)
				A	D	U		
2012	530	40	105	26	42	317	124	2
2013	618	67	64	107	119	261	199	4
2014	545	20	43	130	122	230	265	10
2015	782	7	52	454	211	58	147	11
2016	909	1	10	227	234	437	306	7
2017	1 246	0	5	345	288	608	150	6
2018	1 937	7	20	569	1 272	69	224	9
2019	1 269	4	0	702	409	154	148	7
2020	932	0	1	503	370	58	158	15
2021	1 013	0	0	504	438	71	69	6
2022	1 945	0	1	796	595	553	114	5
2023	1 311	0	0	830	435	46	69	5
2024	2 072	0	0	1 375	659	38	133	6
Total	15 109	146	301	6 568	5 194	2 900	2 106	93

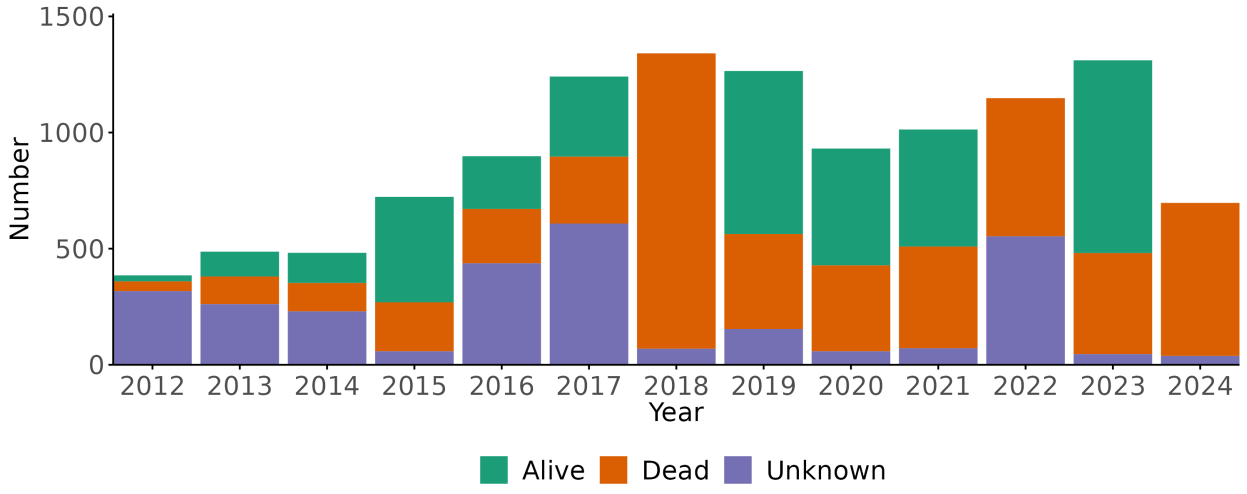

Figure A-23: Number of landings and interactions of oceanic whitetip shark reported by observers in longline fisheries for the period between 2012 and 2024, including interaction outcomes.

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 oceanic whitetip shark discarded alive. Total numbers are estimates owing to the difficulty of counting and identifying oceanic whitetip shark observed caught in the net.

Year	Total	Fins retained	All retained	Condition discarded			Discarded alive (%)
				A	D	U	
2012	216	10	4	0	0	202	0
2013	262	8	3	6	7	238	0
2014	401	10	18	32	41	300	0
2015	418	3	7	147	131	130	0
2016	435	1	1	189	180	64	0
2017	559	0	0	214	316	29	0
2018	846	3	1	431	376	35	0
2019	971	2	2	498	401	68	0
2020	304	0	0	120	152	32	0
2021	21	0	0	15	6	0	0
2022	95	0	0	60	28	7	0
2023	1 665	0	6	991	586	82	0
2024	1 434	0	0	827	535	72	0
Total	7 627	37	42	3 530	2 759	1 259	0

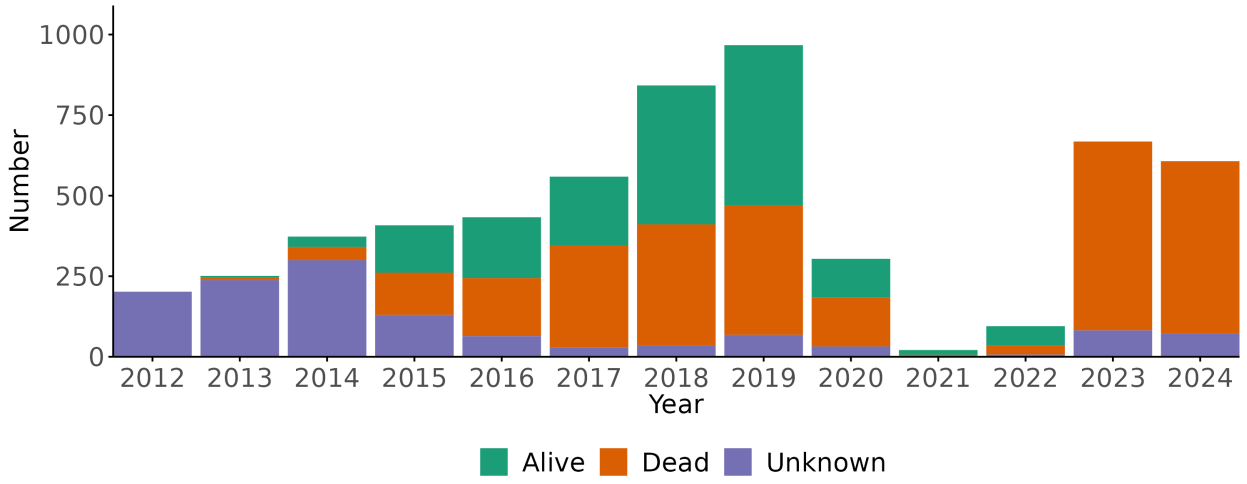

Figure A-24: Number of landings and interactions of oceanic whitetip shark reported by observers in purse-seine fisheries for the period between 2012 and 2024, including interaction outcomes.

A.5.3 Other sharks

75. For shark species other than whale, silky, and oceanic whitetip sharks, observer records for 2024 documented a total of 77, 619 landings and interactions in longline fisheries (Table A-29). Most (over 20,000) of these records were of blue shark.

76. For purse-seine fisheries, there was a total of 495 “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	Discarded	Unknown	All retained	Fins retained
Bigeye sand tiger shark	4		4			
Bigeye thresher shark	2 841	87	2 704			
Bignose shark	26		26			
Blacktip reef shark	5		5			
Blacktip shark	22		22			
Blue shark	66 413	30 634	30 313	10 030		1
Bronze whaler shark	147		146			
Cookie cutter shark	4		4			
Crocodile shark	1 472	1	1 412			
Galapagos shark	45		45			
Great hammerhead	12		12			
Great white shark	5		5			
Grey reef shark	7		6			
Hammerhead sharks nei	3		3			
Longfin mako	211	31	159	2		
Mako sharks	24		19			
Pelagic thresher shark	221	1	179			
Porbeagle shark	124	32	2			
Requiem sharks nei	24					
Salmon shark	87	23	50			
Sandbar shark	11		11			
Scalloped hammerhead	16	9	7			
Sharks, rays, skates, etc. nei	80		80			
Shortfin mako	3 505	1 250	1 735	6		37
Silvertip shark	32		32			
Smooth hammerhead	29	3	24			
Thresher shark (vulpinus)	22		18			
Thresher sharks nei	101		43			
Tiger shark	25	1	20			
Various sharks nei	1 515		1 431			
Velvet dogfish	586	1	560			
Total	77 619	32 073	39 077	10 038	0	38

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	Discarded	Unknown	All retained	Fins retained
Bignose shark	27		27			
Blacktip reef shark	23		23			
Blacktip shark	88		86			
Blue shark	17		17			
Bronze whaler shark	16		16			
Bull shark	3		3			
Galapagos shark	17		17			
Great hammerhead	14		14			
Hammerhead sharks nei	15		15			
Longfin mako	2		2			
Pelagic thresher shark	5		5			
Sandbar shark	30		30			
Scalloped hammerhead	47		47			
Shortfin mako	24		24			
Silvertip shark	39		39			
Smooth hammerhead	4		4			
Tiger shark	2		2			
Various sharks nei	122	1	121			
Total	495	1	492	0	0	0

A.6 Mobulid rays and other rays

77. 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.

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

79. 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).

80. 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 Species of Special Interest. Observers were asked to be extra vigilant in monitoring mobulid catches, and reporting the handling, fate, and condition when mobulids were caught and discarded. This enhanced awareness led to the increase in reported information on the interaction outcome (alive or deceased).

Table A-31: Number of landings and interactions of mobulid and manta ray species, and other rays, 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	1 197	1 147	50	1	371	266	560
Manta rays	4		4		4		
Mantas, devil rays nei	79	68	11	2	10	4	65
Mobula	1 320	1 280	40	1	426	434	460
Rays, stingrays, mantas nei	1		1		1		
Shortfin devil ray	11	11			9		2
Spinetail mobula	31		31		9	22	
Subtotal	2 643	2 506	137	4	830	726	1 087
Other rays	8 104	84	8 020	125	5 334	1 860	910
Total	10 747	2 590	8 157	129	6 164	2 586	1 997

Table A-32: Number of landings and interactions of mobulid and manta 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	4 060	3 943	117	98	70	13	3 977
2013	3 076	2 981	95	78	37	14	3 025
2014	3 012	2 723	289	56	73	7	2 932
2015	3 172	2 360	812	14	146	112	2 914
2016	3 628	3 169	459	56	137	71	3 420
2017	3 132	2 414	718	30	265	316	2 551
2018	4 062	3 468	594	25	808	323	2 931
2019	4 638	4 187	451	5	1 520	488	2 630
2020	1 014	907	107		238	106	670
2021	313	200	113	1	161	47	105
2022	363	139	224		168	66	129
2023	2 034	1 840	194	2	640	417	977
2024	2 643	2 506	137	4	830	726	1 087
Total	35 147	30 837	4 310	369	5 093	2 706	27 348