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Interactions with species of concern in bottom fisheries 2022 - 2023

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Interactions with marine mammals, seabirds, reptiles, and other species of concern in bottom fisheries 2022 - 2023

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1. Purpose

This paper summarises information available on interactions with marine mammals, seabirds, reptiles, and other species of concern in bottom fisheries for 2022-2023 to meet the requirements of [CMM-03-2023](#). This paper does not include reporting on interactions that occurred during exploratory fisheries, such interactions are reported on under agenda item 8 of SC12 (Exploratory Fisheries).

2. Background

During the development of the cumulative bottom fishery impact assessment, Australia and New Zealand jointly requested information held by the Secretariat on reported interactions with marine mammals, seabirds, reptiles, and other species of concern. The extract was provided on 8 July 2020 and included observer data from 2007 to 2018 (except 2011 to 2015) for Australia and from 2013 to 2018 for New Zealand, and fishing activity data from 2007 to 2019. These interactions were presented to the Scientific Committee ([SC8-DW14](#)) and based on this report the Scientific Committee:

- Agrees that captures of marine mammals, seabirds, reptiles and other species of concern are rare in midwater trawl for benthic-pelagic species and bottom trawl fisheries and appears to be rare in bottom line fisheries, but requests bottom fishing Members to collaborate to develop a framework for providing precautionary advice on such captures;
- Agrees that monitoring of the implementation and effectiveness of mitigation approaches should continue, including periodic review of mitigation measures applied by other RFMOs and CCAMLR or as advised by ACAP, to ensure best practice and consistent or complementary arrangements;
- Agrees that periodic exchanges of information held in SPRFMO databases with Members who submitted the data would assist in the maintenance of an accurate record of captures of marine mammals, seabirds, reptiles or other species of concern in fisheries in the SPRFMO Convention Area;
- Agrees that information collection and checking should continue with a view to including information from SPRFMO bottom fisheries in the Southern Hemisphere Seabird Risk Assessment.

3. Requirements of CMM-03-2023 and CMM-02-2022

[CMM-03-2023](#) has two paragraphs related to interactions with marine mammals, seabirds, reptiles, and other species of concern:

20. *Members and CNCPs shall require vessels flying their flag and undertaking bottom fishing to implement seabird mitigation measures in accordance with CMM 09-2017 (Seabirds), and shall report annually to the Commission on bycatch rates and total bycatch estimates in accordance with CMM 02-2022 (Data Standards) and the Guidelines for Annual National Reports to the SPRFMO Scientific Committee.*

21. *The Scientific Committee shall provide advice biennially to the Commission on:*

- a) direct and indirect interactions between bottom fishing and marine mammals, seabirds, reptiles and other species of concern;*

- b) any recommended spatial or temporal closures or spatially/temporally limited gear prohibitions for any identified hotspots of these species; and
- c) any recommended bycatch limits and/or measures for an encounter protocol for any of these species.

The categories marine mammal, seabird and reptile are straightforward to interpret and report against. Annex 14 of [CMM02-2022](#) specifies other species of concern for the purpose of data collection, which are presented in Table 1.

Table 1: Taxa specified as “other species of concern” for the purpose of data collection (as of January 2017) by Annex 14 of CMM02-2022.

Scientific name	English name	3-alpha (FAO) code
<i>Carcharhinus longimanus</i>	Oceanic whitetip shark	OCS
<i>Carcharodon carcharias</i>	Great white shark	WSH
<i>Cetorhinus maximus</i>	Basking shark	BSK
<i>Lamna nasus</i>	Porbeagle shark	POR
<i>Manta</i> spp.	Manta rays	MNT
<i>Mobula</i> spp.	Mobula nei	RMV
<i>Rhincodon typus</i>	Whale shark	RHN

The measures in place to mitigate bycatch of seabirds in SPRFMO bottom fisheries undertaken under [CMM-03-2023](#) are close to world best practice, as defined by Agreement on the Conservation of Albatrosses and Petrels (ACAP). Australian and New Zealand vessels fishing in the SPRFMO Area are required to deploy seabird mitigation commensurate with [CMM 09-2017](#) (seabirds).

4. Reported interactions

New Zealand, in collaboration with Australia, requested information held by the Secretariat on reported interactions with marine mammals, seabirds, reptiles, and other species of concern, for bottom fishing undertaken under CMM03 between 2022-2023.

Interactions with marine mammals, seabirds, reptiles and other species of concern are reported to the SPRFMO Secretariat by Members and CNCPs by fishers and observers on fishing vessels. For the reporting period that data was requested (2022-2023) there were two sources of information for captures. The first, included fisher reported captures from 2022-2023; the second are from observer data reported interactions from 2022 (noting 2023 observer data is not due for submission until 30 September 2024).

Table 2: Summary of seabirds, marine mammals, reptiles, and other species of concern reported captured in bottom fisheries undertaken under to CMM03 in the SPRFMO Area for 2022-2023, together with the IUCN threat classification categories and life status.

Year	Species code	Scientific name	English name	IUCN category	Flagged vessel - Method	Captures	Life status
2022	PRK	<i>Procellaria parkinsoni</i>	Black petrel	Vulnerable	NZ - BLL	1	Alive - uninjured

4.1 Marine mammals

No interactions with marine mammals were reported between 2022-2023.

4.2 Seabirds

One seabird interaction was reported between 2022-2023. Australia initially reported an interaction with a Southern Giant Petrel in its 2023 report, but subsequently identified that this was a data entry error when following up discrepancies. This is fully explained in the Australian 2024 report.

Black Petrel

During bottom longline fishing targeting wreckfish/bass in the Three Kings area by a New Zealand flagged vessel in March 2022 a black petrel became entangled in the snood/branch line. There was an observer onboard the vessel and the black petrel was released alive and uninjured. The black petrel was observed flying away normally after it was released.

The observer reported that tori lines were used on all bottom longline sets, all setting occurred at night and that the vessel recorded the bird capture.

Black Petrels are designated as 'Vulnerable' by the IUCN Red List of Threatened Species and were last assessed in August 2018.

4.3 Reptiles

No interactions with reptiles were reported between 2022-2023.

4.4 Other species of concern

No interactions with other species of concern were reported between 2022-2023.

5. Discussion

As per the requirements of [CMM-03-2023](#) bottom fishing vessels are required to carry observers, with coverage specified as 100% for trawling and at least 10% for bottom line methods for each year. Consequently, where accurate reporting relies on the collection of data by an observer, there is the potential for fisher reported interactions with marine mammals, seabirds, reptiles, and other species of concern for bottom line fisheries to underrepresent these interactions.

It should also be noted this paper does not include reporting on interactions that occurred during exploratory fisheries, such interactions are reported on under agenda item 8 of SC12 (Exploratory Fisheries).

Noting the level of observer coverage in the bottom longline fishery, the available data suggests interactions with marine mammals, seabirds and reptiles are likely to be rare in bottom fisheries in the SPRFMO area.

6. Recommendations

It is recommended that the Scientific Committee:

- **Notes** the summary of seabirds, marine mammals, reptiles, and other species of concern reported captured in bottom fisheries undertaken under CMM03 in the SPRFMO Area from 2022-2023, together with the IUCN threat classification categories and life status, is contained in Table 2, and that this will be reviewed again in 2026.
- **Notes** that captures of marine mammals, seabirds and reptiles are rare in bottom fisheries conducted under CMM03.
- **Agrees** that no [additional](#) spatial/temporal closures, spatially/temporally limited gear prohibitions, bycatch limits or measures for an encounter protocol for any of these species are required [under CMM03](#) at this time.

7. Acknowledgements

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