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Review of SIOFA Seabird Bycatch and Data Standard CMMs against ACAP advice

Relate to agenda item: 7.4

Working paper ☐ Info paper ☒ Restricted ☐

Delegation of the Agreement on the Conservation of Albatrosses and Petrels

Abstract

The Eighth Meeting of the Parties to SIOFA tasked SC with reviewing, by SC7, the seabird data collection and bycatch mitigation measures stipulated in CMM 2019/13 and CMM 2019/02 (now CMM 2021/02) against Agreement on the Conservation of Albatrosses and Petrels (ACAP) best practices, while taking into consideration SC-03-06.2 (05). This paper provides such a review and identifies a number of proposed amendments to the relevant SIOFA CMMs to achieve more complete alignment to ACAP advice.

Based on a review of CMM 2019/13 and CMM 2021/02 against ACAP advice, the following amendments would achieve closer alignment:

a. amendments to paragraph 2 of CMM 2019/13 regarding general seabird bycatch mitigation provisions, as detailed in section 2.1 of this paper (p. 3-4).

b. amendments to paragraphs 3 and 4 (and potentially Annex 1) of CMM 2019/13 regarding seabird bycatch mitigation specification for demersal longline fishing, as detailed in section 2.2 of this paper (p. 4-5).

c. amending CMM 2019/13 to include seabird bycatch mitigation requirements for trawl vessels based on ACAP best practice advice and encourage development of vessels plans, similar to the plan provided in SC-03-06.2(05).

d. amending CMM 2019/13 to include seabird bycatch mitigation requirements for pelagic longline fishing based on ACAP best practice advice.

e. amending CMM 2021/02 to include those variables recommended by ACAP, with a priority focus on those variables identified as critical for assessing seabird bycatch, as detailed in section 3 of this paper (p. 6-7).

f. appending detailed and standardised protocols for seabird abundance and warp strike observers to CMM 2021/02 based on those recommended by ACAP.

Given the number of technical amendments identified, SC may wish to convene a workshop to draft proposed amendments to CMM2019/13 and CMM 2021/02 to ensure the effectiveness of SIOFA's management measures to reduce the impact of relevant fisheries on seabirds.

1. Background

The Eighth Meeting of the Parties to SIOFA endorsed the recommendations arising from SC6 to task the SC with reviewing, by SC7, the seabird data collection and bycatch mitigation measures stipulated in CMM 2019/02 (Data Standards) (now CMM 2021/02) and CMM 2019/13 (Mitigation of Seabirds Bycatch) against Agreement on the Conservation of Albatrosses and Petrels (ACAP) best practice, while taking into consideration SC-03-06.2 (05) (Vessel Seabird Management Plan, Cook Islands) to ensure that SIOFA's measures are effective and efficient.

This paper reports on such a review of relevant SIOFA CMMs against ACAP best practice and advice. A full update on the activities of ACAP since SC6, including updates to ACAP advice at their Twelfth Advisory Committee Meeting (AC12), are provided in a separate information paper (SC-07-INFO-10). That paper also provides updates to the conservation status and trends of ACAP-listed species and links to a wide range of advice and resources.

In this paper we first assess the specifications of seabird bycatch mitigation outlined in CMM 2019/13 and SC-03-06.2 (05) against current ACAP advice for reducing the impact of longline and trawl fisheries on seabirds (i.e. ACAP best practice advice). We then identify other relevant ACAP advice for best practice mitigation in fishing methods not currently included in CMM 2019/13 and SC-03-06.2 (05). Finally, we review the specification of data collection requirements related to seabird bycatch in CMM 2021/02 (which replaced CMM 2019/02) against ACAP data collection guidelines for observer programmes.

The key ACAP advice documents used in this review can be downloaded from the ACAP website through the following links:

ACAP 2021 DEMERSAL Longlines mitigation review & best practice advice

ACAP 2021 TRAWL mitigation review and best practice advice

ACAP 2021 PELAGIC longlines mitigation review & best practice advice

ACAP Data collection guidelines for observer programmes

2. Review of current provisions of CMM 2019/13 (Mitigation of Seabird Bycatch) and SC-03-06.2 (05) (Vessel Seabird Management Plan, Cook Islands)

2.1 General provisions

Paragraph 2 of CMM 2019/13 provides general provisions for demersal longline and other demersal fishing gears. We note that there are other types of fishing method managed by SIOFA, notably pelagic longline, which would not be covered by these provisions. National reporting to SC6 highlighted that seabird bycatch has been observed in pelagic longline fishing effort for oilfish (SC-06-20), and it would therefore be appropriate to include all relevant fishing methods under the general provisions.

Recommendation: Amend paragraph 2 of CMM 2019/13 so that it applies to all fishing methods.

Paragraph 2a of CMM 2019/13 provides brief specification of light minimisation. ACAP bycatch mitigation advice is focussed on bycatch in fishing gear, and ACAP does currently does not provide its own advice on mitigating the risks associated with vessel lighting. However, ACAP AC12 endorsed the National Light Pollution Guidelines for Wildlife, including Marine Turtles, Seabirds and Migratory Shorebirds developed by Australia. The guidelines provide comprehensive information about how to manage the effects of artificial light while ensuring human activities may be carried out safely at night. The guidelines provide a seabird mitigation toolbox that offers light management options for seabirds, both for land-based facilities and at-sea operations. The full guidelines are available online, and would provide comprehensive advice on light minimisation by SIOFA fishing vessels to minimise impacts on seabirds and other fauna.

Recommendation: Amend paragraph 2a of CMM 2019/13 to require vessels to follow the National Light Pollution Guidelines for Wildlife, including Marine Turtles, Seabirds and Migratory Shorebirds developed by Australia.

Paragraph 2c of CMM2019/13 refers to the safe handling and release of live-caught seabirds. ACAP has developed bird handling advice targeted for longline fishing methods (Hook Removal from Seabirds) and is developing advice regarding entanglement of seabirds in trawl nets. These guidelines provide practical and detailed advice to maximise survival of live caught seabirds.

Recommendation: Amend paragraph 2c of CMM 2019/13 to require vessel crew follow ACAP seabird handling advice as relevant to the fishing method used.

2.2 Demersal longline

ACAP best practice advice to reduce incidental catch of seabirds in demersal longline fisheries is the combination of:

- use of an appropriate line weighting regime to sink baited hooks as close to the vessel as possible to reduce their availability to seabirds,
- actively deterring birds from baited hooks by means of bird scaring lines, and
- setting longlines at night.

ACAP best practice advice also notes that

- Temporary closure of important foraging areas (e.g. areas adjacent to important seabird colonies during the breeding season when large numbers of aggressively feeding seabirds are present) has been a very effective mechanism to reduce incidental mortality of seabirds in fisheries in those areas.
- Seabirds are highly attracted to offal discharged from vessels. To prevent large numbers of seabirds attending line setting operations, offal and discards should be retained onboard prior to and during line setting.
- The use of Bird Exclusion Devices and offal and discard management are best practice measures during hauling.

Paragraphs 3 and 4 of CMM 2019/13 provides a number of requirements regarding seabird bycatch mitigation for demersal longline vessels. Paragraph 3b refers to use of "white lines", but does not specify which lines this refers to. Further clarification on this is required in order to assess how this aligns with ACAP advice. A small number of changes to CMM 2019/13 will achieve closer alignment with current ACAP advice, as outlined below.

Recommendation: Amend paragraph 3a of CMM 2019/13 to require all demersal longlines to be set at night.

Recommendation: Amend paragraph 3c of CMM 2019/13 to require two (paired) bird scaring lines to be used simultaneously on large vessels (≥24 m in length) and one or two (paired) bird scaring lines used on small vessels (<24m in length). Alternatively, this amendment can be included in Annex 1 of CMM 2019/13.

Recommendation: Amend paragraph 3e of CMM 2019/13 to stipulate a minimum of 5 kg at no more than 40 m intervals for non-IW longlines.

Recommendation: Revoke paragraph 4 of CMM 2019/13 (noting that different specifications for bird scaring lines used by small vessel can be included in paragraph 3c and Annex 1 of CMM2019/13).

2.3 Trawl

ACAP best practice advice to reduce incidental catch of seabirds in trawl fisheries includes:

- measures to reduce general attractiveness to seabirds, through management of offal and discards,
- measures to reduce cable strikes through deployment of bird scaring lines and not using net monitoring cables, and
- measures to reduce net entanglement through cleaning nets and minimising the time the net is on the water surface during hauling.

CMM2019/13 currently has no seabird mitigation requirements specifically for trawl vessels, but SC-03-06.2 (05) outlines a Vessel Seabird Management Plan (VSMP) for a Cook Islands trawl vessel. The VSMP includes information on offal and discard management, measures to reduce cable strikes and measures to reduce net entanglement. The information provided varies from ACAP best practice advice in the following ways:

- the mechanism through which fish discards are managed is not explicitly stated (preferably they should be retained during fishing activity),
- no management of discharge via sump pumps is described,
- the primary bird scaring device is a bird baffler (rather than bird scaring line), and
- the specification of bird scaring lines is not provided, other than reference to "NZ industry standards" (note Appendix 1 provides generic specifications for seabird scaring devices including for bird scaring lines, which align with ACAP best practice advice, though also including specification for devices not recommended by ACAP).

The VSMP provides various further information including operational procedures, contingency plans, maintenance of seabird scaring, seabird handling guidelines and audit procedures. These make useful additions to the core seabird mitigation specifications.

Recommendation: Amend CMM 2019/13 to set specifications for seabird bycatch mitigation across all trawl vessels in accordance with ACAP best practice advice, specifically measures to reduce general attractiveness to seabirds, reduce cable strikes and reduce net entanglement.

Recommendation: Encourage the development of VSMPs, or equivalent, for all trawl vessels to document the practices and processes to implement required seabird bycatch mitigation specifications outlined in CMM 2019/13.

2.4 Other fishing methods

In addition to demersal longline and trawl, other fishing methods used in SIOFA fisheries may also pose considerable seabird bycatch risk. In particular, pelagic longline fishing is well known to pose considerable seabird bycatch risk in fisheries targeting tuna, and seabird bycatch mitigation requirements are in place in all tuna-RFMOs. Reporting to SC6 highlighted that seabird bycatch has been observed in SIOFA pelagic longline fishing effort for oilfish (SC-06-20), but there are no bycatch mitigation measures for this method specifically required in CMM 2019/13.

ACAP recommends that the most effective way to reduce seabird bycatch in pelagic longline fisheries is to use the following three best practice measures simultaneously:

- branch line weighting,
- night setting, and
- bird scaring lines.

Alternatively, the use of an assessed hook-shielding device or underwater bait setting device is recommended. The ACAP Summary Advice for Reducing the Impact of Pelagic Longline Fisheries on Seabirds provides minimum specifications for each of these methods.

Recommendation: Amend CMM 2019/13 to set specifications for seabird bycatch mitigation for pelagic longline fishing in accordance with ACAP best practice advice.

3. Review of current provisions of CMM 2021/02 (Data Standards)

The management of seabird-fisheries interactions, particularly the reduction of incidental mortality, relies on the effective collection, analyses and reporting of seabird bycatch and associated data. It is well recognised that the implementation of observer programmes that include the collection and management of seabird bycatch and associated data, is a highly effective means of monitoring fisheries performance with respect to seabird bycatch and use of mitigation measures. ACAP recently formalised data collection guidelines for observer programmes, drawing on a number of reviews, workshops and other initiatives. These guidelines aim to inform the establishment and implementation of effective and standardised data collection and reporting protocols for fishery observer programmes.

This review of CMM 2021/02 focuses on comparing the standards outlined in Annex B (but also considering any relevant data specified in Annex A) to the recommended data collection variables for longline and trawl fisheries outlined in Tables 1a and 1b, respectively, of the ACAP guidelines. The following variables recommended by ACAP (those in bold being identified by ACAP as critical for assessing seabird bycatch) are not included in CMM2021/02.

General/all methods:

- **Vessel length**
- **Other mitigation measures used (provide details)**
- Sea state (Beaufort Scale)
- Moon phase (note, this can be calculated by date)
- Wind strength and direction
- Cloud cover

Longline:

- Depth fished for pelagic longline
- Number of hooks between floats
- Whether any offal dumped during haul was on the opposite side to the hauling bay
- Composition of bait used (%)
- Bait status (live/fresh/frozen/thawed/whole/cut)

Trawl:

- Location of trawl turns
- Number of codends
- **Net monitoring cable (yes/no).** If used, where does the cable enter the water in relation to warps.
- Side of bird scaring line deployment (port or starboard or both)
- **Number of bird scaring lines used**
- Length of bird scaring line (m)
- **Aerial coverage achieved (m)** Are all warps and net monitoring cables covered?
- Attachment height (m above water line)
- Number of streamers
- Distance between streamers
- How is any dumping of offal managed (e.g. full retention of waste during fishing activities, mealing or batching).
- Deck lighting astern of the vessel (yes/no)

Recommendation: Amend CMM 2021/02 to include those variables listed above that are recommended by ACAP, with a priority focus on those variables listed in bold as critical for assessing seabird bycatch.

Seabird abundance observations are included in CMM 2021/02, but are not defined in detail and differ in specification by fishing method. This limits the ability to use and compare the data

collected. ACAP provides a recommended protocol for seabird abundance counts by fisheries observers as Annex 2 to their data collection guidelines.

Similarly, for trawl fisheries, warp strike observations are included (as optional) in CMM 2021/02, but no detailed protocol is provided. ACAP provides a recommended protocol for seabird abundance counts by fisheries observers as Annex 3 to their data collection guidelines.

Recommendation: Append detailed and standardised protocols for seabird abundance and warp strike observers to CMM 2021/02 based on those recommended by ACAP.