Agreement on the Conservation of Albatrosses and Petrels

Fourteenth Meeting of the Advisory Committee

Lima, Peru, 12 – 16 August 2024

Threats to ACAP species and mitigation actions.

Draft Report to MoP8.

Secretariat, Working Group Convenors, AC Chair

[DRAFT DOCUMENT TO BE UPDATED FOLLOWING AC14]

SUMMARY

This report collates information provided by ACAP Parties, some cooperating Range States, the Seabird Bycatch Working Group and the Population and Conservation Status Working Group, to enable the Advisory Committee to meet its reporting requirements to the Meeting of Parties under item 5.1 of the Agreement's Action Plan. It summarises known and suspected threats affecting ACAP species at-sea and at their breeding sites, and identifies practices by which these threats may be avoided or mitigated.

This is a draft report, which will be finalised following AC14, and submitted by the Advisory Committee to the Eighth Meeting of the Parties (MoP8), to inform MoP8 on progress made with implementation of the Agreement, as required under Article IX(6)(d).

RECOMMENDATIONS

The Advisory Committee is requested to:

1. Review the information contained in this draft document, and endorse reporting it to MoP8 to determine progress with implementation of the Agreement.
2. Agree the following recommendations to MoP8 - that Parties, and, where appropriate, participating non-Party Range States and APEC Member Economies:
   a. invest in eradication of feral species from ACAP islands and mitigate other threats at breeding sites through the development of policy and practices that follow ACAP advice and guidelines;
   b. use ACAP guidelines and advice on current best practice scientific approaches for mitigating bycatch to guide the development of policy and practice within the fisheries under their jurisdiction or management;
   c. ensure that appropriate mechanisms are established/maintained to identify and robustly assess seabird bycatch in relevant fisheries, and to monitor

the implementation of effective bycatch mitigation strategies;

d. review, based on the information provided by the Seabird Bycatch Working Group, the efficacy of seabird bycatch mitigation measures used in the fisheries that they manage, and explore the performance of new mitigation technologies and related safety and other operational issues;

e. monitor and provide information on the fisheries that they manage, and the associated seabird bycatch, as part of annual reporting to the Advisory Committee, to enable the assessment and reporting of performance indicators on seabird bycatch; and

f. support the collection and provision of seabird bycatch data by Regional Fisheries Management Organisations (RFMOs) and Regional Conservation Bodies (RCBs) that they are members of;

3. Suggest any additional recommendations for MoP8 that might arise from discussions during AC14.

1. BACKGROUND

This report collates information provided by ACAP Parties, some Range States, the Seabird Bycatch Working Group (SBWG) and the Population and Conservation Status Working Group (PaCSWG) to enable the Advisory Committee to meet its reporting requirements to the Meeting of Parties as required under Article IX(6)(d) of the Agreement. It makes particular reference to the Agreement's Action Plan Item 5.1:

d) identification and assessment of known and suspected threats affecting albatrosses and petrels;

e) identification of existing and new methods by which these threats may be avoided or mitigated;

f) reviews, and updating on a regular basis, of data on the mortality of albatrosses and petrels in, inter alia, commercial, and other relevant fisheries;

g) reviews of data on the distribution and seasonality of effort in fisheries which affect albatrosses and petrels;

h) reviews of the status at breeding sites of introduced animals, plants and disease-causing organisms known or believed to be detrimental to albatrosses and petrels;

The final version of this report to MoP8 will be prepared after the conclusion of the Fourteenth Meeting of the Advisory Committee (AC14), to reflect inputs from the Advisory Committee, and actions and decisions taken during this meeting.

2. THREATS AT BREEDING STIES

2.1. Identification and assessment of known and suspected threats affecting albatrosses and petrels (Action Plan 5.1.d)

ACAP has adopted a system for standardising the listing of threats to breeding sites adapted from criteria produced initially by IUCN and the Conservation Measures Partnership. Each threat is assessed according to the Scope (proportion of population affected) and Severity (intensity), that when combined provide an indication of the magnitude of the threat (High or Low). These consider not only current impact, but also the anticipated impact over the next decade, assuming the continuation of current conditions and trends. A breakdown of the proportion of sites, and of the global population that are subjected to threats that meet these criteria are listed below (**Table 1**). The vast majority of these relate to introduced mammals or disease and are described in Section 2.2 below. The remainder involve natural disasters or human disturbance. 17 of 31 ACAP species are affected by one or more of these population impact threats. Potential threats identified at a site, but where the population is currently increasing, are also recorded in the database, but are not included in the analysis.

Table 1. *ACAP species affected by land threats at 1% or more of their breeding sites, or when 1% or more of the global population is affected. Green cells <1%; Orange cells 1-33%; Red cells >33% (to be updated following WG and AC meetings)*

Species	No of current sites	% of sites affected							% of global population affected						
		Natural disaster	Human disturbance	Parasite or pathogen	Predation by alien species	Habitat loss or destruction by alien species	Stress by alien species	All threats	Natural disaster	Human disturbance	Parasite or Pathogen	Predation by alien species	Habitat loss or destruction by alien species	Stress by alien species	All threats
Diomedea antipodensis	6	0	0	0	16.7	0	0	16.7	0	0	0	<1	0	0	**<1**
Diomedea dabbenena	1	0	0	0	100	0	0	100	0	0	0	100	0	0	**100**
Diomedea epomophora	4	0	0	0	25	0	0	25	0	0	0	<1	0	0	**<1**
Diomedea exulans	37	0	0	2.7	2.7	0	0	5.4	0	0	7.1	3.5	0	0	**10.5**
Macronectes giganteus	125	1.6	0	0	0	0	0	1.6	?	0	0	0	0	0	**?**
Phoebastria immutabilis	17	23.5	5.9	0	5.9	0	0	35.3	27.6	<1	0	<1	0	0	**27.6**
Phoebastria irrorata	3	0	33.3	33.3	0	0	33.3	66.7	0	<1	99.9	0	0	<1	**100**
Phoebastria nigripes	15	33.3	6.7	0	0	6.7	0	40	56.9	<1	0	0	4.9	0	**56.9**
Phoebetria fusca	15	0	0	6.7	0	0	0	6.7	0	0	3.3	0	0	0	**3.3**
Phoebetria palpebrata	73	1.4	0	0	1.4	0	0	2.7	?	0	0	?	0	0	**?**
Procellaria aequinoctialis	78	0	0	0	9	2.6	0	9	0	0	0	<1	<1	0	**<1**
Procellaria cinerea	17	0	0	0	29.4	11.8	0	29.4	0	0	0	24	3.9	0	**24**
Puffinus mauretanicus	5	0	0	0	100	0	0	100	0	0	0	100	0	0	**100**
Thalassarche carteri	6	0	0	16.7	0	0	0	16.7	0	0	67	0	0	0	**67**
Thalassarche cauta	3	0	0	33.3	0	33.3	0	66.7	0	0	36.2	0	<1	0	**36.7**
Thalassarche melanophris	65	1.5	0	0	1.5	0	0	3.1	?	0	0	<1	0	0	**?**
Thalassarche steadi	5	0	0	0	20	0	0	20	0	0	0	8.6	0	0	**8.6**

2.2. Reviews of the status at breeding sites of introduced animals, plants and disease-causing organisms known or believed to be detrimental to albatrosses and petrels (Action Plan 5.1.h)

Habitat destruction and predation by introduced mammals are listed more often than any other processes as threats to breeding sites of ACAP species. Predation by feral cats *Felis catus* and rats *Rattus rattus* affected the most breeding sites (site-species combinations) (**Table 2**). The species affected at the most breeding sites were the burrow-nesting **White-chinned Petrel** *Procellaria aequinoctialis*, **Grey Petrel** *P. cinerea*, and **Balearic Shearwater** *Puffinus mauretanicus,* mainly because of predation or habitat destruction by introduced mammals. High magnitude threats (according to the agreed threat criteria) include all threat types and are listed in **Table 3**. High pathogenicity avian influenza (HPAI) H5N1 panzootic is a recent threat for ACAP species, causing mass mortality in populations of at least two ACAP species and those population-level events warrant a thorough review. Black-browed Albatross *Thalassarche melanophris* and Wandering Albatross *Diomedea exulans* at four breeding sites in the South Atlantic have been confirmed infected with HPAI H5N1 in February 2024 (see up to date information at https://www.acap.aq/resources/disease-threats/avian-flu). However, surveying effort is limited for some locations.

In interpreting the tables below and the conclusions, it should be noted that: (1) threats only include those that are documented and known or likely to cause a population decline in <10 years, (2) values in the tables are the number of breeding sites, equivalent to each species-site combination *i.e.* two species breeding in the same area constitute two breeding sites, (3) although most islands are listed as one site, a small number have been subdivided into separate sites, and (4) no attempt has been made to consider the number of birds or the percentage of the global population at each site – some affected sites comprise less than 1% of the global breeding pairs of the species.

A summary of ranked threats where priority management action could be considered is discussed in **AC14 Doc 18**.

Table 2. *Number of breeding sites of ACAP species affected by introduced animals, plants and disease-causing organisms (to be updated following WG and AC meetings)*

Nature of Threat	Threat subcategory	Threat Species	Number of breeding sites affected		
			Low	High	All
Predation by alien species	Predation by alien species	Cat	12	2	**14**
		Black (ship) rat	13		**13**
		House mouse	3	1	**4**
		Pig	3		**3**
		American mink	1		**1**
Habitat loss or destruction	Habitat destruction by alien species	Reindeer	4		**4**
	Increased competition with native species	Australasian gannet		1	**1**
	Vegetation encroachment	*Verbesina* sp.	1		**1**
Human disturbance	Military action	Humans		2	**2**
	Recreation/tourism	Humans		1	**1**
Parasite or pathogen	Pathogen	Avian pox virus	1		**1**
		Avian cholera		2	**2**
		Avian influenza	1		
	Parasite	Mosquito	1		**1**
Stress by alien species	Nest desertion	Black (ship) rat		1	**1**
All			**39**	**10**	**49**

Table 3. *Breeding sites of ACAP species affected by threats of High magnitude caused by introduced animals, plants and disease-causing organisms (to be updated following WG and AC meetings)*

Nature of Threat	Threat subcategory	Threat Species	Breeding sites affected
Habitat loss or destruction	Increased competition with native species	Australasian gannet	Pedra Branca - *Thalassarche cauta*
Human disturbance	Military action	Humans	Kaula – *Phoebastria immutabilis* – *Phoebastria nigripes*
	Recreation/ tourism	Humans	Isla de la Plata – *Phoebastria irrorata*
Parasite or pathogen	Pathogen	Avian cholera	île Amsterdam - *Phoebetria fusca* - *Thalassarche carteri* (Falaise d'Entrecasteaux)
Predation by alien species	Predation by alien species	Cat	Formentera – *Puffinus mauretanicus* Menorca – *Puffinus mauretanicus*
		House mouse	Gough Island – *Diomedea dabbenena*
Stress by alien species	Nest desertion	Black (ship) rat	Isla de la Plata – *Phoebastria irrorata*

2.3. Identification of methods by which those threats may be avoided or mitigated (Action Plan 5.1.e)

In addition to ACAP-developed Eradication Guidelines (updated September 2019), Translocation Guidelines (updated February 2020), and Biosecurity Guidelines (updated March 2020), AC12 endorsed *National Light Pollution Guidelines for Wildlife including Marine Turtles, Seabirds and Migratory Shorebirds* developed by Australia.

More recently (November 2023), ACAP's Intersessional Group on High Pathogenicity Avian Influenza, established at AC13, issued *Guidelines for working with albatrosses and petrels during the high pathogenicity avian influenza (HPAI) H5N1 panzootic*.

3. AT-SEA THREATS

3.1 Identification and assessment of known and suspected threats affecting albatrosses and petrels (Action Plan 5.1.d)

Albatrosses and petrels face many threats at sea. These threats include ingestion of marine debris including fishing hooks discarded in fish offal, entanglement in lost fishing gear and other marine debris, contamination from pollutants and over-fishing of prey species. However, direct interactions with fishing operations and associated mortality (bycatch) has been identified by ACAP and others as the major threat causing widespread declines in albatross and petrel populations. All ACAP species are at risk from this threat. A web-based reporting system was developed to capture and use fisheries and bycatch data submitted by Parties and collaborating Range States (see Section 3.2).

Another dataset which includes information on fisheries, including those operating outside exclusive economic zones (EEZs), as well as on albatross and petrel populations which might be impacted by those fisheries, underpins a prioritisation framework for at-sea threats. This expert opinion-based framework provides the basis for decision-making to set, monitor

and report on progress against priority conservation actions for ACAP species and is discussed in **AC14 Doc 18**.

3.2. Review and updating of data on the mortality of albatrosses and petrels in, *inter alia*, commercial, and other relevant fisheries (Action Plan 5.1.f)

A web-based reporting system has been progressively developed for the capture and use of fisheries and bycatch data from Parties and collaborating non-Party Range States. Initially, the data were provided at the level of the entire fishery or fleet, a temporal and spatial resolution which is too coarse to enable useful assessments of seabird bycatch levels and trends. For many fisheries, the bycatch and fisheries data submitted by Parties were also incomplete, limiting the possibility of conducting even a low level assessment of bycatch levels and trends for ACAP species. A suite of bycatch indicators were endorsed at AC9 and a programme of work to develop a reporting framework to collate bycatch estimates was agreed at SBWG7. The framework defines the data, methodological approaches to estimating bycatch, and reporting requirements necessary to report against the agreed indicators. A refined framework was presented to SBWG8, together with the results of trial reporting from a limited number of Parties using an updated reporting template. All Parties and collaborating Range States were urged to use the revised bycatch reporting template to provide bycatch information, with the reporting template finalised at SBWG9. The database currently contains 113 active fisheries from 14 Parties and Range States. 30 ACAP species were identified and reported bycaught in six (out of nine) gear types, along with 32 species identified in six additional families of seabirds. In the entire dataset, i.e. combined across all reporting years and fisheries, total bycatch was estimated for 17 ACAP species. Due to only a small proportion of fisheries (16%) currently reporting total estimated seabird mortality, it is not yet possible to address the total number of birds killed (bycaught) per year in all relevant EEZ waters. Although bycatch rates of seabirds (by species, where possible) across each of the fisheries could be calculated from observer/raw data submitted, some Parties oppose this approach.

A workshop to address the low level of reporting and lack of progress with indicators on seabird bycatch took place in 2023 prior to SBWG11. The workshop identified a range of challenges faced by Parties in reporting data to inform the current Pressure indicators on seabird bycatch. Several potential actions were identified that ACAP could take to address some of these challenges, however there has been no intersessional progress on implementing those actions. The workshop also considered the scope and focus of the current State-Pressure-Response indicators for seabird bycatch and identified some areas for improvement which could allow for more immediate reporting while actions are taken to improve reporting on key Pressure indicators. The online reporting forms have been amended to focus on mitigation use in each fishery. The outcomes of this new approach and implications for seabird bycatch indicators will be discussed at a follow up workshop prior to the SBWG12 meeting.

The ACAP Seabird Bycatch Identification Guide (developed in collaboration with the Japanese Institute of Far Seas Fisheries) is also available to assist Parties, non-Party Range States, RFMOs and others with the correct identification of albatrosses and some commonly caught petrels and shearwaters known to be killed in longline operations.

3.3. Review of data on the distribution and seasonality of effort in fisheries which affect albatrosses and petrels (Action Plan 5.1.g)

Some data on fishing effort has been provided by Parties as part of their annual reporting and forms part of the information requested in the bycatch reporting template (Section 3.2). However, there has been no recent comprehensive review of the extent of overlap of fishing effort and albatross and petrel distribution. Seabird distribution (tracking)-fishing effort overlap maps are scheduled to be updated on an ongoing basis with a focus on ACAP High Priority Populations and high-risk bycatch areas (Action 5.11 of the Advisory Committee Work Programme 2023 - 2025). These maps will provide useful information for the reviews planned by some RFMOs to assess the effectiveness of seabird bycatch mitigation measures within their areas of competence. Consequently, the scheduling and prioritisation of these updates will be influenced by the RFMOs' work plans.

3.4. Identification of methods by which these threats may be avoided or mitigated (Action Plan 5.1.e)

Based on reviews of bycatch mitigation strategies and technologies developed for pelagic longline, demersal longline and trawl gear types, the Seabird Bycatch Working Group (SBWG) has continued to update its advice on current best practice scientific approaches for mitigating bycatch in these gear types. The aim of these resources is to assist Parties, non-Party Range States, RFMOs and others to reduce bycatch in their fisheries by using measures and approaches that are considered best practice, and to ensure that Parties, non-Party Range States, RFMOs and others remain informed about updates to this advice. The best practice advice includes descriptions of measures, current knowledge, implementation guidance and research needs, and is suitable for dissemination to relevant fisheries managers. At AC12, a toolbox for seabird bycatch mitigation advice in purse seine fisheries, Guidelines on Fisheries Electronic Monitoring Systems, and Data collection guidelines for observer programmes were added to these resources. Parties, non-Party Range States, RFMOs and others are encouraged to use these materials to guide the development of policy and practice within the fisheries under their jurisdiction or management. Work on developing advice for mitigating seabird bycatch in artisanal and other small-scale fisheries is underway. A guide on hook removal from seabirds is also available, and a guide on removing entangled seabirds from nets is being developed.

The main focus of the SBWG has been on research and development of advice regarding technical bycatch mitigation measures, and this has been critical in providing evidence-based solutions for mitigating seabird bycatch. However, it was noted at SBWG8 and AC10 that there remains a gap between the research outcomes and associated advice and implementation of effective bycatch mitigation measures. It is acknowledged that further technical research is unlikely to bridge this gap, and there is an urgent need to better understand how to enhance implementation of seabird bycatch mitigation strategies. This will require expanding the social dimension of work on bycatch mitigation, and skills and expertise from outside the current membership of the SBWG, such as social scientists and educators. It was agreed that this should form a very high priority component of the SBWG work programme, and represents a shift in focus away from a predominantly research-based focus to a more holistic research-implementation framework. This continued to be the approach taken in the SBWG and the Advisory Committee in the past triennium.

The newly revised RFMO Engagement Strategy also aims to improve and focus ACAP's advocacy of implementing best practice bycatch mitigation in those fora.

4. ACHIEVEMENTS, DIFFICULTIES, AND LESSONS LEARNED WITH IMPLEMENTING THE AGREEMENT

Three key challenges in identifying and assessments of threats to ACAP species and mitigation actions for the 2022 - 2024 triennium were:

1. Collection of data on seabird bycatch in relevant fisheries.
   Although the mechanism for reporting of fisheries and seabird bycatch data for relevant EEZs is now well established through he ACAP data portal, review of fisheries data submitted by Parties highlighted that the temporal and spatial resolution of the data remain too coarse to enable useful assessments of seabird bycatch levels and trends. Capacity issues with collecting and reporting adequate data that can drive robust analyses of seabird bycatch reporting data are also ongoing. Given these challenges, the initially proposed SBWG indicators will need to be reviewed and data reporting requirements will need to be adjusted accordingly.

2. Effective implementation of ACAP' best practice seabird bycatch mitigation measures in relevant domestic and high seas fisheries.
   ACAP Best Practice Advice for mitigating seabird bycatch has been available for a number of years now, and continues to be refined. While many Parties and RFMOs have adopted fisheries management measures based on ACAP's best practice advice, in many cases this advice has only been adopted partially. The low level of observer coverage in many domestic and high seas fisheries, as well as deficiencies in data collection and reporting systems have made it difficult to assess the level of implementation being achieved and the effectiveness of conservation measures in force. ACAP products highlighting best practice fishing methods will need to be regularly assessed for their ability to clearly communicate the conservation crisis facing albatrosses and petrels, and the ways to overcome the impediments to the implementation of these methods.

3. Eradication of invasive species at breeding sties
   ACAP Parties and Range States continue to plan and implement introduced vertebrate eradication programmes at breeding sites of ACAP species. Logistics and funding of such large scale projects remain challenging.