

 <p>Agreement on the Conservation of Albatrosses and Petrels</p>	<p style="text-align: center;">Eighth Meeting of the Parties <i>Dunedin, New Zealand, 19 - 23 May 2025</i></p> <p style="text-align: center;">Threats to ACAP species and mitigation actions</p> <p style="text-align: center;"><i>Advisory Committee, Secretariat</i></p>
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SUMMARY

This report 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. The report is based on collated information provided by ACAP Parties, some cooperating Range States, the Seabird Bycatch Working Group and the Population and Conservation Status Working Group, to inform MoP8 on progress made with implementation of the Agreement, as required under Article IX.6(c),(d) and (f) and enable the Advisory Committee to meet its reporting requirements to the Meeting of Parties under item 5.1 of the Agreement's Action Plan.

RECOMMENDATIONS

That Parties, and, where appropriate, participating non-Party Range States and APEC Member Economies:

1. Eradicate feral species from the breeding sites that impact on ACAP species.
2. Mitigate other threats at breeding sites through the development of policy and practices that follow ACAP advice and guidelines.
3. Invest in, and implement, comprehensive management plans for breeding sites of ACAP species.
4. Use ACAP guidelines and Best Practice Advice for seabird bycatch mitigation to guide the development of policy and practice within the fisheries under their jurisdiction or management, and the RFMOs of which they are members.
5. Establish and maintain programs to determine the magnitude and species composition of seabird bycatch in relevant national and high seas fisheries and to monitor the implementation of effective bycatch mitigation strategies.
6. Assess the efficacy of seabird bycatch mitigation measures used in the fisheries they manage, and in RFMOs they are members of, and explore the

performance of new mitigation techniques and technologies, as well as related safety and other operational issues.

7. Monitor and provide information on the fisheries 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.
8. Support the collection and provision of seabird bycatch data by Regional Fisheries Management Organisations (RFMOs) and Regional Conservation Bodies (RCBs).

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(c),(d) and (f) of the Agreement. It makes particular reference to the Agreement's Action Plan Item 5.1:

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- 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;
- i) reviews of the nature of, coverage by, and effectiveness of, protection arrangements for albatrosses and petrels;
- l) a directory of legislation concerning albatrosses and petrels.

2. THREATS AT BREEDING SITES

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

ACAP has adapted adopted a system for standardising the listing of threats to breeding sites based on criteria developed by the IUCN and the Conservation Measures Partnership. Each threat is assessed according to the Scope (proportion of population affected) and Severity (intensity), which when combined provide an indication of the magnitude of the threat (High or

Low). The assessment considers not only current impact, but also the anticipated impact over the next decade, assuming the continuation of current conditions and trends.

Table 1 presents the number of sites and proportion of the global population that are subjected to land-based threats at 1% or more of their breeding sites or when 1% or more of the global population of a species is affected. Of ACAP's 31 species, 17 are known to be affected by one or more of these land-based threats. Of these 17 species, impacts from alien species by direct predation or habitat loss/destruction was the most common threat, followed by the threat of natural disaster (e.g. volcanic eruptions) and then parasites and pathogens. Potential threats identified at a breeding site, but where the population is currently increasing, are also recorded in the ACAP database, but were not included in the assessment.

Table 1. ACAP species affected by land-based threats at 1% or more of their current breeding sites, or when 1% or more of the global population is affected. Highlighted cells indicate a third or more of breeding sites or of the global population are affected by the threat.

Species	No of current sites	Number of sites affected						% of sites affected by one or more threats	% 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		Natural disaster	Human disturbance	Parasite or Pathogen	Predation by alien species	Habitat loss or destruction by alien species	Stress by alien species	% affected by one or more threats
<i>Diomedea antipodensis</i>	6	0	0	0	1	0	0	17%	0	0	0	<1	0	0	<1%
<i>Diomedea dabbenena</i> ¹	2	0	0	0	1	0	0	50%	0	0	0	99.8	0	0	99.8%
<i>Diomedea epomophora</i>	4	0	0	0	1	0	0	25%	0	0	0	<1	0	0	<1%
<i>Diomedea exulans</i>	37	0	0	1	1	0	0	5%	0	0	7	3	0	0	10%
<i>Macronectes giganteus</i>	125	2	0	0	0	0	0	2%	<1	0	0	0	0	0	<1%
<i>Phoebastria immutabilis</i>	17	3	1	0	0	0	0	24%	23	<1	0	72	0	0	95%
<i>Phoebastria irrorata</i>	3	0	1	1	0	0	1	67%	0	<1	99.9	0	0	<1	99.9%
<i>Phoebastria nigripes</i>	15	5	1	0	0	1	0	40%	54	<1	0	0	5	0	54%
<i>Phoebetria fusca</i>	15	0	0	1	0	0	0	7%	0	0	3	0	0	0	3%
<i>Phoebetria palpebrata</i>	73	1	0	0	1	0	0	3%	<1?	0	0	2.2	0	0	>2.2%
<i>Procellaria aequinoctialis</i>	78	0	0	0	7	2	0	9%	0	0	0	<1	<1	0	<1%
<i>Procellaria cinerea</i>	17	0	0	0	5	2	0	29%	0	0	0	24	4	0	24%
<i>Puffinus mauretanicus</i>	5	0	0	0	5	0	0	100%	0	0	0	100	0	0	100%
<i>Thalassarche carteri</i>	6	0	0	1	0	0	0	17%	0	0	67	0	0	0	67%
<i>Thalassarche cauta</i>	3	0	0	1	0	1	0	67%	0	0	45	0	<1	0	45%
<i>Thalassarche melanophris</i>	65	1	0	0	1	0	0	3%	<1?	0	0	<1	0	0	<1%
<i>Thalassarche steadi</i>	5	0	0	0	1	0	0	20%	0	0	0	9	0	0	9%
Totals		12	3	5	24	6	1								

¹ If Inaccessible Island is included as a current site (only 2-3 breeding pairs in 2015)

2.2. Threats from introduced animals, plants and disease-causing organisms known at breeding sites (Action Plan 5.1.h)

Table 2 presents the number of breeding sites affected by introduced animals, plants and disease-causing organisms. These data indicate the impacts of introduced mammals though predation or habitat destruction are the most common threats at the breeding sites of ACAP species. Predation by feral cats *Felis catus* and rats *Rattus rattus* affect the most breeding sites (site-species combinations). The ACAP species affected at the most breeding sites are the burrow-nesting **White-chinned Petrel** *Procellaria aequinoctialis*, **Grey Petrel** *Procellaria cinerea*, and **Balearic Shearwater** *Puffinus mauretanicus*, mainly because of predation or habitat destruction by introduced mammals. Threats classified as ‘high magnitude’ occur across all five 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 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. In October and November 2024, there were suspected cases detected in *D. exulans* and Southern Giant Petrel *Macronectes giganteus* in the Indian Ocean. However, surveying effort is limited for some locations.

Table 2. Number of breeding sites of ACAP species affected by introduced animals, plants and disease-causing organisms where threat magnitude was assessed as Low or High.

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	4	1	5
		Pig	3		3
		American mink	1		1
Habitat loss or destruction by alien species	Habitat destruction by alien species	Reindeer	4		4
	Increased competition with native species	Australasian gannet		1	1
	Vegetation encroachment	<i>Verbesina</i> 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		1
	Parasite	Mosquito	1		1
Stress by alien species	Nest desertion	Black (ship) rat		1	1
All			41	10	51

Table 3. Breeding sites of ACAP species affected by threats of High magnitude caused by introduced animals, plants and disease-causing organisms

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

In interpreting Tables 2 and 3 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.

The recommended priority conservation actions to address threats at the breeding sites of ACAP species are presented in **MoP8 Doc 15**.

2.3 ACAP Breeding Site Indicators

The Advisory Committee and its Working Groups have developed four 'State-Pressure-Response' Breeding Site Indicators to assess progress on actions to address threats at islands and breeding sites (see **ANNEX 1** and **Figure 1**).

Breeding sites - 26 species

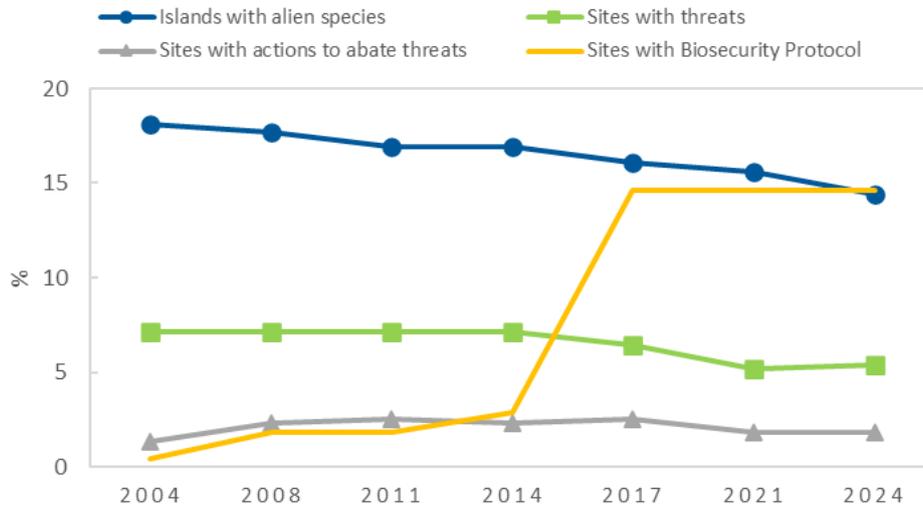


Figure 1. Breeding site indicators for the original 26 ACAP species. Number of islands = 243, number of breeding sites = 561.

Importantly, since the Agreement came into force in 2004 the number of islands where introduced vertebrates (habitat modifiers and/or predators) are present has steadily decreased. This is due to many ACAP Parties and non-Party Range States implementing a number of successful eradication campaigns (see **Table 4**). Consequently, the number of breeding sites with threats has also declined. Forty-nine islands (18.5%) currently have introduced vertebrates present, including inhabited islands where eradication of those species is not possible.

While threats from habitat modifiers and/or predators have decreased, the number of breeding sites affected by the HPAI H5N1 panzootic will need to be updated on an ongoing basis during the 2024/2025 austral spring - summer.

The most noticeable change since 2004 is in the percentage of sites with biosecurity plans. A new Conservation Management Strategy for New Zealand’s subantarctic islands published in 2016 considerably increased the proportion of sites with a biosecurity protocol to 13.6% (N=82) when all 31 species are considered. Nevertheless, this figure is likely to be an underestimate due to biosecurity components being underreported in management plans. [Management plans](#) for ACAP species and breeding sites include National Plans of Action (NPOAs), Threat Abatement Plans, Conservation Strategies, Conservation Action Plans, Recovery Plans and Site Management Plans. Currently, 79% of ACAP breeding sites have protected status. Parties are encouraged to review this information and provide updates on those protection arrangements and their effectiveness through the ACAP database (Action Plan 5.1.i).

The ACAP database also holds information on legislation relevant to species listed on Annex 1 to the Agreement and their breeding sites (Action Plan 5.1.i). Site editors (researchers and managers responsible for reviewing site and species information in the database) are encouraged to keep these up to date.

Table 4. Islands with breeding population of ACAP species where eradication of introduced vertebrates has occurred since 2004 or where eradications are planned.

Management Responsibility	Island	Year eradicated/ planned	Threat	
Australia	Macquarie Island	2014	<i>Mus musculus</i>	
		2014	<i>Oryctolagus cuniculus</i>	
		2014	<i>Rattus rattus</i>	
Chile	Albatross Islet	Planned for 2015	<i>Neovison vison</i>	
Disputed	Bleaker Island	2022	<i>Rattus norvegicus</i>	
	Governor	2008	<i>Rattus norvegicus</i>	
	Keppel Island	2007	<i>Felis catus</i>	
	Sea Lion	2009	<i>Ovis aries</i>	
	Harcourt Island	2015	<i>Rattus norvegicus</i>	
	Saddle Island	2015	<i>Rattus norvegicus</i>	
	South Georgia (Islas Georgias del Sur) ¹	New Island	2018	<i>Rattus norvegicus</i>
			2018	<i>Mus musculus</i>
			2016	<i>Rangifer tarandus</i>
			Planned	<i>Rattus rattus</i>
Ecuador	Isla de La Plata	Planned	<i>Mus musculus</i>	
		Planned	<i>Oryctolagus cuniculus</i>	
Ecuador	Isla de La Plata	2009	<i>Felis catus</i>	
		2008	<i>Capra hircus</i>	
France	Amsterdam	2010	<i>Bos taurus</i>	
		Commenced 2024	<i>Mus musculus</i>	
		Commenced 2024	<i>Rattus norvegicus</i>	
Japan	Mukojima	Planned for 2010	<i>Rattus rattus</i>	
Mexico	Isla Guadalupe	2007	<i>Canis familiaris</i>	
		2010	<i>Capra hircus</i>	
New Zealand	Auckland Island	Planned	<i>Felis catus</i>	
		Planned	<i>Mus musculus</i>	
		Planned	<i>Sus scrofa</i>	
	Antipodes Island	2016	<i>Mus musculus</i>	
South Africa	Marion Island	Planned for 2027	<i>Mus musculus</i>	
Spain	Cabrera	Planned	<i>Felis catus</i>	
United Kingdom	Gough Island	2021 failed, Planned	<i>Mus musculus</i>	
USA	Lehua	2006	<i>Oryctolagus cuniculus</i>	
		2009 failed, 2017	<i>Rattus exulans</i>	
	Midway Atoll	2023 failed	<i>Mus musculus</i>	
	Wake Atoll	Commenced 2024	<i>Rattus exulans</i>	
		2012	<i>Rattus tanezumi</i>	

¹ A dispute exists between the Governments of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Islas Malvinas), South Georgia and the South Sandwich Islands (Islas Georgias del Sur e Islas Sandwich del Sur) and the surrounding maritime areas.

2.4. Identification of methods by which land-based threats may be avoided or mitigated (Action Plan 5.1.e)

ACAP has developed a suite of Guidelines for how to avoid or mitigate land-based threats:

- [Eradication Guidelines](#) (updated September 2019, due to be updated in 2025-2026 in light of recent failed eradications)
- [Translocation Guidelines](#) (updated February 2020)
- [Biosecurity Guidelines](#) (updated March 2020)

AC12 also endorsed Guidelines on light pollution developed by Australia: [National Light Pollution Guidelines for Wildlife including Marine Turtles, Seabirds and Migratory Shorebirds](#).

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](#). These have been updated in November 2024, and in December 2024 a complementary [infographic on Avian Flu](#) safety for crews onboard fishing vessels was published on the ACAP website.

3. AT-SEA THREATS

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

ACAP species encounter many threats at-sea such as interactions with fisheries, entanglement or ingesting marine debris, pollution, intentional harm, diseases, competition for resources, and collision with ships or marine infrastructure.

Of these threats, it has long been recognised that the incidental mortalities of seabirds in domestic and high-seas fishing operations are likely to have the greatest impact on many seabird species, particularly threatened albatrosses and petrels ([Brothers 1991](#), [Dias et al. 2019](#), [Phillips et al. 2016](#)).

Annual fishing effort by coastal states and distant water fishing nations likely exceeds a billion hooks each year ([Anderson et al. 2011](#)) and a global review estimated that at least 160,000 (and potentially in excess of 360,000) seabirds are killed annually in longline fisheries worldwide (Anderson et al. 2011). Trawl, gillnet and purse-seine fisheries are also known to kill many tens of thousands of seabirds each year (e.g. [Żydelis et al. 2013](#), [Phillips et al 2024](#)). Such levels of incidental mortality are known to have resulted in or are contributing to population declines for a number of these species (e.g. [Wanless et al. 2009](#); [Weimerskirch et al. 1997](#)).

ACAP has developed a prioritisation framework for at-sea threats which provides the basis for decision-making to set, monitor and report on progress against ACAP's priority conservation actions for its listed species (see **MoP8 Doc 15**).

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)

To further ACAP's assessment of the mortality of albatrosses and petrels in global fisheries 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.

Unfortunately, for many fisheries, the bycatch and fisheries data submitted by Parties has been incomplete. This has limited the possibility of conducting even a low-level assessment of bycatch levels and trends for ACAP species. Following SBWG7, all Parties and collaborating Range States were urged to use a revised bycatch reporting template to provide bycatch information. The database currently contains information on 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. However, 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 the domestic fisheries of ACAP Parties.

For further information see 'Challenges for the Agreement' (**MoP8 Doc 11**, Section 3.2).

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)

ACAP continues to collaborate closely with BirdLife International which maintains a global database on the tracking data for seabirds including ACAP species. ACAP has also identified priority breeding sites for the collection of further tracking data (see **MoP8 Doc 13** Section 4). The collection and collation of tracking data facilitate updates to the distribution maps in ACAP's Species Assessments and can facilitate the assessment of the spatial and temporal overlap of ACAP species with global fisheries (e.g. [Beal et al 2021](#)).

There has been no recent comprehensive review of the extent of overlap of fishing effort and albatross and petrel distribution. ACAP's seabird distribution (tracking)-fishing effort overlap maps need to be updated (Task 5.11 of the Advisory Committee Work Programme 2023 - 2025), with a focus on ACAP High Priority Populations and high-risk bycatch areas. 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' workplans.

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 (see Section 3.2 above). All Parties are encouraged to facilitate submission of fishing effort data.

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

The Advisory Committee's Seabird Bycatch Working Group (SBWG) has continued to update its [Best Practice Advice](#) for mitigating bycatch in pelagic longline, demersal longline and trawl fisheries. Changes to the advice are based on targeted studies and reviews of bycatch mitigation strategies. ACAP's Best Practice Advice aims to be a resource to assist Parties, non-Party Range States, RFMOs and other organisations to reduce seabird bycatch in their fisheries. The 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 development of best practice advice for seabird bycatch mitigation and its ongoing refinement has been critical in providing evidence-based solutions for mitigating seabird bycatch. However, it is now recognised (see [AC10 Report](#)) that there remains a gap between well-supported best practice advice and the actual implementation of effective bycatch mitigation measures in fisheries. It is acknowledged that further technical research is unlikely to bridge this gap. As such there is now an urgent need to better understand how to enhance the 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. This holistic technical research-implementation framework for seabird bycatch mitigation adopted in the current triennium by SBWG and the Advisory Committee was reflected in the support of relevant Small Grants and Secondments (see **MoP8 Doc 16 and MoP8 Doc 25**), and in the further development of the RFMCO Engagement Strategy (**MoP8 Doc 24**) and Communications Strategy (**MoP8 Doc 26**).

ANNEX 1. BREEDING SITES DATA INDICATORS

Table 1. 26 species, 2004 - 2024

INDICATOR		2004		2008		2011		2014		2017		2021		2024	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%
Breeding Sites															
S1	Islands with alien species	44	18.1	43	17.7	41	16.9	41	16.9	39	16.1	38	15.6	35	14.4
P1	Sites with threats ¹	40	7.1	40	7.1	40	7.1	40	7.1	36	6.4	29	5.2	30	5.4
R1	Sites with eradications or management actions to abate threats ¹	7	1.3	13	2.3	14	2.5	13	2.3	14	2.5	10	1.8	10	1.8
R2	Sites with Biosecurity Protocol (Biosecurity Plan or Quarantine) ¹	2	0.4	10	1.8	10	1.8	16	2.9	82	14.6	82	14.6	82	14.6

¹ Unique list, some sites have multiple threats/plans

Total Sites = 561, Total Islands = 243 and Total Island Groups = 129

Taxa = 26: *Diomedea amsterdamensis*, *Diomedea antipodensis*, *Diomedea dabbenena*, *Diomedea epomophora*, *Diomedea exulans*, *Diomedea sanfordi*, *Macronectes giganteus*, *Macronectes halli*, *Phoebastria irrorata*, *Phoebetria fusca*, *Phoebetria palpebrata*, *Procellaria aequinoctialis*, *Procellaria cinerea*, *Procellaria conspicillata*, *Procellaria parkinsoni*, *Procellaria westlandica*, *Thalassarche bulleri*, *Thalassarche carteri*, *Thalassarche cauta*, *Thalassarche chlororhynchos*, *Thalassarche chrysostoma*, *Thalassarche eremita*, *Thalassarche impavida*, *Thalassarche melanophris*, *Thalassarche salvini*, *Thalassarche steadi*

Table 2. 29 species, 2011 - 2024

INDICATOR		2011		2014		2017		2021		2024	
		N	%	N	%	N	%	N	%	N	%
Breeding Sites											
S1	Islands with alien species	50	18.7	50	18.7	48	18	47	17.6	45	17.5
P1	Sites with threats ¹	53	8.9	53	8.9	49	8.2	42	7.1	43	7.2
R1	Sites with eradications or management actions to abate threats ¹	21	3.5	20	3.4	22	3.7	18	3	18	3
R2	Sites with Biosecurity Protocol (Biosecurity Plan or Quarantine) ¹	10	1.7	16	2.7	82	13.8	82	13.8	82	13.8

¹ Unique list, some sites have multiple threats/plans

Total Sites = 596, Total Islands = 268 and Total Island Groups = 141.

Taxa = 29: As per Table 1 plus *Phoebastria albatrus*, *Phoebastria immutabilis*, *Phoebastria nigripes*.

Table 3. 30 species, 2014 - 2024

INDICATOR		2014		2017		2021		2024	
		N	%	N	%	N	%	N	%
Breeding Sites									
S1	Islands with alien species	52	19.1	50	18.4	49	18	47	18
P1	Sites with threats ¹	58	9.7	54	9	47	7.8	48	8
R1	Sites with eradications or management actions to abate threats ¹	22	3.7	24	4	20	3.3	20	3.3
R2	Sites with Biosecurity Protocol (Biosecurity Plan or Quarantine) ¹	16	2.7	82	13.6	82	13.6	82	13.6

¹ Unique list, some sites have multiple threats/plans
 Total Sites = 601, Total Islands = 273 and Total Island Groups = 142.
 Taxa = 30: As per Table 2 plus *Puffinus mauretanicus*.

Table 4. 31 species, 2017, 2021 & 2024

INDICATOR		2017		2021		2024	
		N	%	N	%	N	%
Breeding Sites							
S1	Islands with alien species	52	18.9	51	18.5	49	17.8
P1	Sites with threats ¹	54	9	47	7.8	48	8
R1	Sites with eradications or management actions to abate threats ¹	24	4	20	3.3	20	3.3
R2	Sites with Biosecurity Protocol (Biosecurity Plan or Quarantine) ¹	82	13.6	82	13.6	82	13.6

¹ Unique list, some sites have multiple threats/plans
 Total Sites = 604, Total Islands = 276 and Total Island Groups = 144.
 Taxa = 31: As per Table 3 plus *Ardeanna creatopus*,