Agreement on the Conservation of Albatrosses and Petrels

Sixth Meeting of the Parties

Skukuza, South Africa, 7 - 11 May 2018

Indicators to measure the Success of the Agreement

Secretariat and BirdLife International

SUMMARY

MoP5 approved an updated list of breeding sites and status and trend indicators, as well as two new indicators on tracking data availability, and noted progress concerning seabird bycatch and capacity building indicators. Some indicators are now in use while others continue to be under development.

RECOMMENDATIONS

That the Meeting of the Parties:

1. note the breeding sites, status and trend, and tracking data availability indicators;
2. note the progress made in relation to seabird bycatch indicators; and
3. approve the continued development of seabird bycatch indicators and the reporting required by Parties to populate them.

1. BACKGROUND

The Fourth Meeting of the Parties (MoP4) approved the use and further development of a series of State-Pressure-Response indicators for bycatch, breeding sites and population status and trends as recommended by AC6 in MoP4 Doc 23 (MoP4 Final Report, item 7.5). It was also recommended that updates to the existing interim ACAP indicator, the IUCN Red List Status of ACAP species, continue to be presented at each MoP.

Some indicators, including those proposed for breeding sites and population status and trends, were built with data available in the ACAP database and presented at MoP5 (MoP5 Doc 20 Rev 1). A number of candidate indicators relating to seabird bycatch were also proposed, but it was noted that further refinements in data reporting will be needed before these can be populated.

MoP5 approved the updated list of breeding sites and status and trend indicators, as well as the two new indicators on tracking data availability, and noted progress concerning seabird bycatch indicators. It is important to note that the accuracy of these indicators will depend on the availability and quality of data submitted to the ACAP database.

Capacity building indicators are discussed separately in **MoP6 Doc 21.**

2. BREEDING SITES, POPULATION STATUS AND TRENDS, AND TRACKING INDICATORS

2.1 IUCN Red List Status of ACAP species

BirdLife International provided an updated IUCN Red List Status of ACAP species. This was hindcast to 1988 (the first year for which Red List Index (RLI) data are available) for (i) the original ACAP species (southern hemisphere albatrosses, both *Macronectes,* and all *Procellaria*), and (ii) all current ACAP species including Balearic Shearwater, Pink-footed Shearwater and the three North Pacific albatross species (**Figure 1**). The dates used to derive the RLI are retrospectively assigned based on current information on when species crossed RL thresholds.

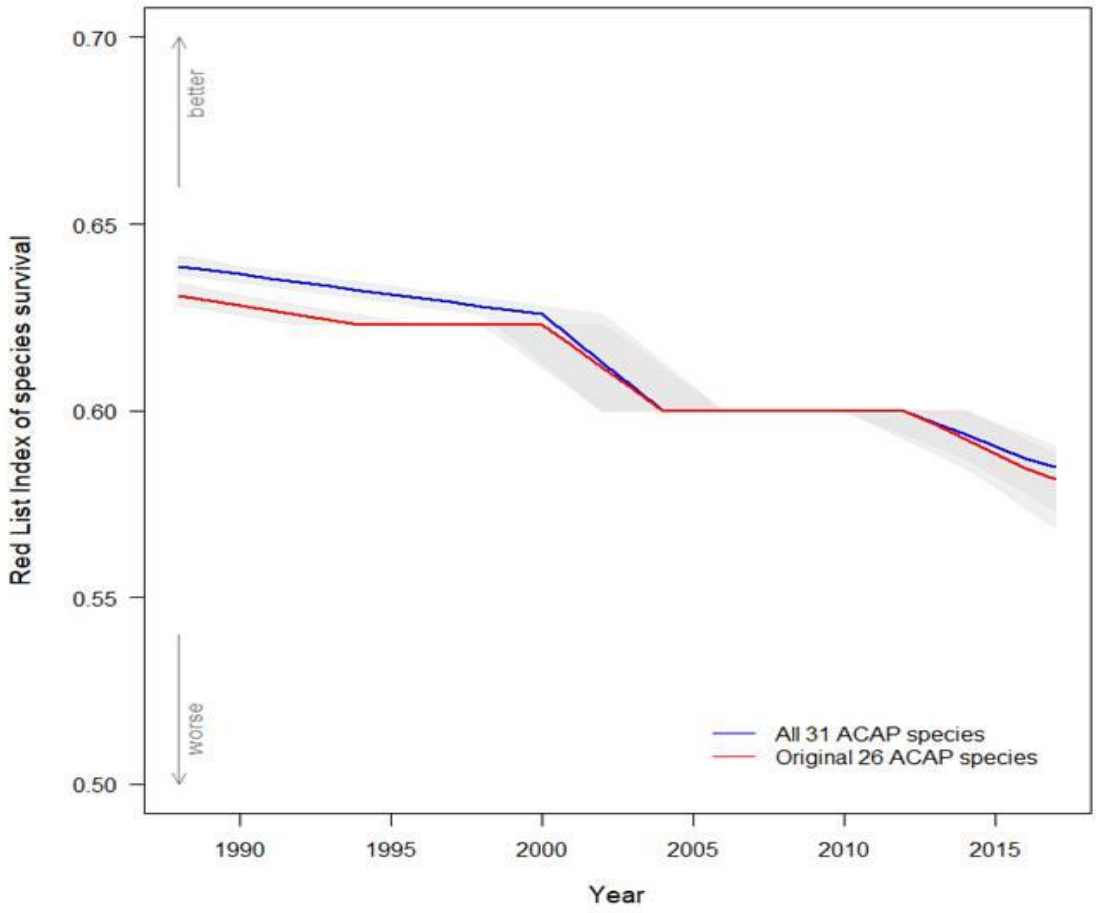

Figure 1. Red list indicators for ACAP species

Recent changes in the underlying data include the down-listing of both Black-browed Albatross and Black-footed Albatross to Near Threatened in 2013, based on improved understanding of their population trends over the last few decades, rather than genuine improvements in status. Both are now estimated to have qualified as Near Threatened since 1988, with the Black-browed Albatross further downlisted to Least Concern in 2017, and hence no longer drive the decline in RLI value.

The species driving the negative trends in the ACAP RLI are as follows:

Phoebastria irrorata	Waved Albatross	Qualified for up-listing from Vulnerable to Critically Endangered in 2000-2004
Diomedea dabbenena	Tristan Albatross	Qualified for up-listing from Endangered to Critically Endangered in 1988-1994
Phoebetria fusca	Sooty Albatross	Qualified for up-listing from Vulnerable to Endangered in 2000-2004
Puffinus mauretanicus	Balearic Shearwater	Qualified for up-listing from Vulnerable to Endangered in 1994-2000, and from Endangered to Critically Endangered in 2000-2004
Diomedea antipodensis	Antipodean Albatross	Qualified for up-listing from Vulnerable to Endangered in 2012-2016
Procellaria westlandica	Westland Petrel	Qualified for up-listing from Vulnerable to Endangered in 2012-2016

In addition, Grey-headed Albatross was up-listed in 2013 from Vulnerable to Endangered, but this was a consequence of improved knowledge rather than genuine deterioration in status. This affects the absolute value of the RLI, but not its trend.

2.2 Breeding sites

Four 'State-Pressure-Response' Breeding Site Indicators are presented in **ANNEX 1**, showing progress for the original 26 ACAP species (**Figure 2**), as well as for all species covered by the Agreement in 2008 (29 species, including the three North Pacific albatross species) and 2014 (30 species, including the three North Pacific albatross species and the Balearic Shearwater). The most noticeable change since 2004 is in the percentage of sites with biosecurity protocols. 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 almost 15% in 2017. Nevertheless, this figure is still likely to be an underestimate due to biosecurity components being unreported in management plans. All data providers are encouraged to check this information for their sites in the ACAP database.

The other three indicators are also trending in the right direction for all scenarios considered – the proportion of islands with alien species and sites with threats is decreasing, while the proportion of sites where action against threats is being taken is increasing.

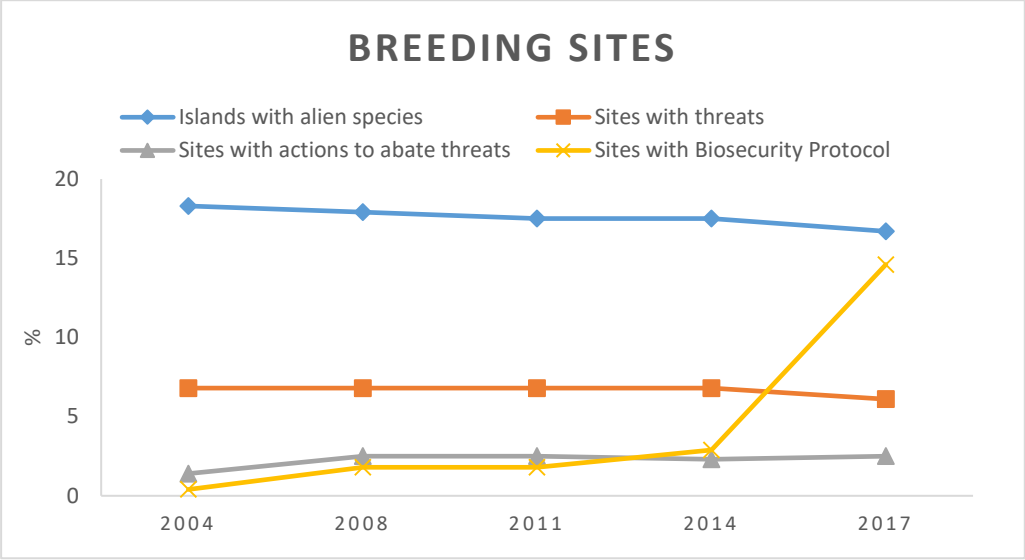

Figure 2. Breeding site indicators for the original 26 ACAP species.

2.3 Populations

Five 'State' Population indicators are presented in **ANNEX 1**, showing progress for the original 26 ACAP species (**Figure 3**), as well as for the total species covered by the Agreement in 2008 (29 species) and 2014 (30 species). The apparent decreases in population monitoring over the last decade (for all scenarios) are most likely a reflection of a lag period in data entry rather than a reflection of a declining monitoring effort. It is expected that the downturn apparent between 2014 and 2017 will be rectified by the availability of more recent data in the coming months.

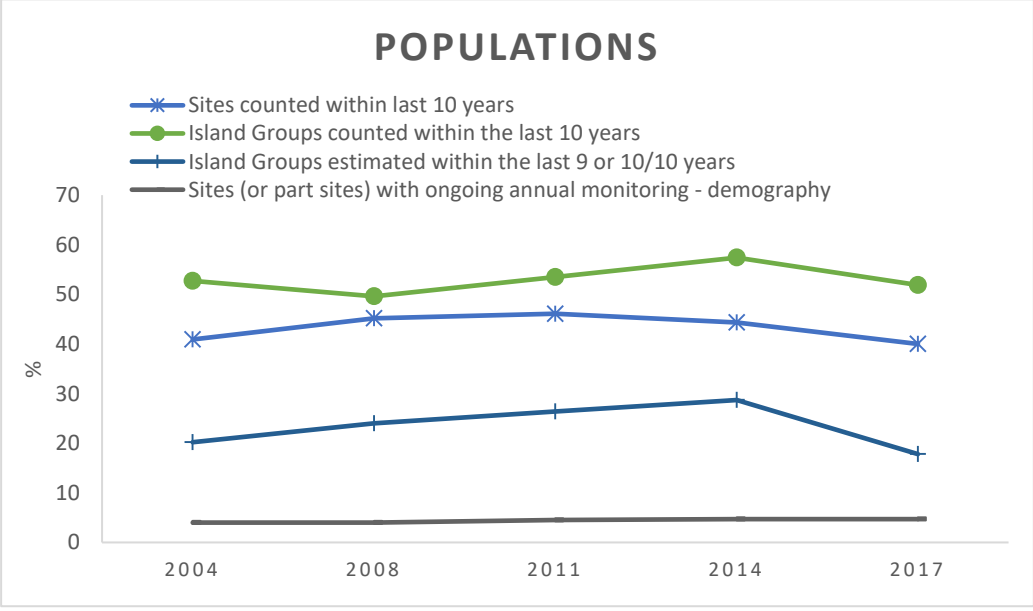

Figure 3. Population monitoring indicators for the original 26 ACAP species.

Trends (S4b) were calculated based on information submitted to the ACAP database. Trends were calculated if at least three data points were available, with at least one data point in each half of the decade. Trends were only used if they applied to more than 50% of the population at the Island Group. Consequently, the number of populations meeting these criteria was low for all scenarios. Nevertheless, the number of populations where trend was increasing or stable appears to have increased over time. However, this could also be a reflection of better data availability over time.

2.4 Tracking

Two 'State' Tracking Indicators are presented in **ANNEX 1**, showing progress since 2011 for the 26, 29 and 30 species covered by the Agreement since 2004, 2008 and 2014, based on data in the Seabird Tracking Database, *Tracking Ocean Wanderers (TOW)*, which is managed by BirdLife International (http://www.seabirdtracking.org/). Both indicators have increased since 2014, with breeding and non-breeding adults consistently better represented in tracking studies than juveniles/immatures. However, Island Groups with at least 15 tracks from juveniles/immatures have doubled from 3 to 6 in 2017. These numbers do not change when 26, 29 and 30 species are considered, indicating that this progress is due to the species initially listed in 2004 being tracked, rather than those added more recently.

3. SEABIRD BYCATCH INDICATORS

Following MoP5, AC9 noted the intersessional progress made on Seabird Bycatch Indicators (SBWG7 Doc 05) and endorsed the further development of the seabird bycatch reporting framework as part of the national reporting mechanism. The reporting template was re-developed for Parties to trial in the lead up to SBWG8 and AC10. Although some trial data was received, only one Party (New Zealand) fully populated the new format. Some suggestions to further refine the template were also provided.

At AC10, the Committee requested all Parties and collaborating Range States to use the revised bycatch reporting template to provide bycatch information as part of the next round of annual reporting, so that further discussions to finalise the reporting format may take place at SBWG9 and AC11.

State (S)

1) A State Indicator for Bycatch will measure the currency and accuracy of estimates being provided. As a number of methodological approaches are available and used by Parties to estimate bycatch rates and levels, the indicator should report on the availability of estimates by method over time. Progress would be then measured as an increasing number of Parties and/or fleets reporting bycatch estimates over time, and a change in methods used to those producing most robust estimates. A table will be developed to summarise this information.

Pressure (P)

1) Bycatch rates and levels of ACAP species

→ the Pressure Indicator for Bycatch (P1) should comprise two linked components:

i) the total number of birds killed (bycaught) per year of ACAP species (by species where possible), and

ii) their bycatch rate, across each of the fisheries of member Parties.

There are a number of issues to consider when estimating and interpreting these two measures, such as undetected mortality, uncertainty in estimation, and uncertainty in species identification.

Response (R)

1) Implementation of seabird bycatch mitigation within EEZs

→ a change will be made to the ACAP reporting template to enforce a more categorical response and will be implemented for the next round of reporting.

2) Engagement with RFMOs on seabird bycatch issues

→ A mechanism has yet to be developed to assess the degree of implementation of seabird conservation measures by tuna and other RFMOs.

→ The development and implementation of methods to review the effectiveness of seabird bycatch mitigation measures across tuna and other RFMOs is currently underway.

→ The adoption of recommendations, including changes to bycatch mitigation measures, that arise from these reviews has not yet commenced.

3) Research and development for effective seabird mitigation measures

→ the relevance of mitigation research reported to SBWG meetings to be assessed as a measure for this indicator.

3. CAPACITY BUILDING INDICATORS

A contact group has developed performance indicators for capacity building under the Agreement with participation by Argentina, Australia, Brazil, Chile, New Zealand and the United Kingdom. The latest version of these indicators following the ‘State – Pressure – Response’ approach was endorsed by the Advisory Committee at AC10 and is presented for the consideration of the Meeting of the Parties in **MoP6 Doc 21**.

ANNEX 1. BREEDING SITES, POPULATIONS AND TRACKING DATA INDICATORS

Table 1. 26 species, 2004 - 2017

INDICATOR		2004		2008		2011		2014		2017	
Breeding Sites		**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**
S1	Islands with alien species	44	**18.3**	43	**17.9**	42	**17.5**	42	**17.5**	40	**16.7**
P1	Sites with threats[1]	38	**6.8**	38	**6.8**	38	**6.8**	38	**6.8**	34	**6.1**
R1	Sites with eradications or management actions to abate threats [1]	8	**1.4**	14	**2.5**	14	**2.5**	13	**2.3**	14	**2.5**
R2	Sites with Biosecurity Protocol (Biosecurity Plan or Quarantine) [1]	2	**0.4**	10	**1.8**	10	**1.8**	16	**2.9**	81	**14.6**
Populations											
S1 b)	Sites counted within last 10 years	227	**40.9**	251	**45.2**	256	**46.1**	246	**44.3**	222	**40**
S1 b)	Island Groups counted within the last 10 years (at least 50% of sites per Island Group counted)	68	**52.7**	64	**49.6**	69	**53.5**	74	**57.4**	67	**51.9**
S2	Island Groups where breeding numbers at at least 1 site (including part-sites) estimated within the last 9 or 10/10 years	26	**20.2**	31	**24**	34	**26.4**	37	**28.7**	23	**17.8**
S3	Sites (or part sites) with ongoing annual monitoring - demography	22	**4**	22	**4**	25	**4.5**	26	**4.7**	26	**4.7**
S4 b)	Island Groups – population trend increasing/stable over last 10 years	4	**3.1**	1	**0.8**	4	**3.1**	6	**4.6**	12	**9.3**
Tracking											
S1	Island Groups with at least 15 tracks each from incubation, brood guard, post–guard chick rearing, non-breeding adults (from any island)	-	-	-	-	8	**6.2**	8	**6.2**	9	**10**
S2	Island Groups with at least 15 tracks from juveniles/immatures (from any island)	-	-	-	-	3	**2.3**	3	**2.3**	6	**4.7**

[1] Unique list, some sites have multiple threats/plans

Total Sites = 555, Total Islands = 240 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 - 2017

INDICATOR		2011		2014		2017	
Breeding Sites		**N**	**%**	**N**	**%**	**N**	**%**
S1	Islands with alien species	51	**19.3**	51	**19.3**	49	**18.6**
P1	Sites with threats[1]	51	**8.7**	51	**8.7**	47	**8**
R1	Sites with eradications or management actions to abate threats [1]	21	**3.4**	20	**3.4**	22	**3.7**
R2	Sites with Biosecurity Protocol (Biosecurity Plan or Quarantine) [1]	10	**1.7**	16	**2.7**	81	**13.8**
Populations							
S1 b)	Sites counted within last 10 years	283	**48.1**	269	**45.7**	244	**41.4**
S1 b)	Island Groups counted within the last 10 years (at least 50% of sites per Island Group counted)	79	**56.4**	82	**58.6**	75	**53.6**
S2	Island Groups where breeding numbers at at least 1 site (including part-sites) estimated within the last 9 or 10/10 years	37	**26.4**	40	**28.6**	26	**18.6**
S3	Sites (or part sites) with ongoing annual monitoring - demography	25	**4.2**	26	**4.4**	26	**4.4**
S4 b)	Island Groups – population trend increasing/stable over last 10 years	4	**2.9**	7	**5**	20	**14.3**
Tracking							
S1	Island Groups with at least 15 tracks each from incubation, brood guard, post–guard chick rearing, non-breeding adults (from any island)	9	**6.4**	9	**6.4**	11	**7.9**
S2	Island Groups with at least 15 tracks from juveniles/immatures (from any island)	3	**2.1**	3	**2.1**	6	**4.3**

[1] Unique list, some sites have multiple threats/plans

Total Sites = 589, Total Islands = 264 and Total Island Groups = 140.

Taxa = 29: *Diomedea amsterdamensis, Diomedea antipodensis, Diomedea dabbenena, Diomedea epomophora, Diomedea exulans, Diomedea sanfordi, Macronectes giganteus, Macronectes halli, Phoebastria albatrus, Phoebastria immutabilis, Phoebastria irrorata, Phoebastria nigripes, 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 3. 30 species, 2014 & 2017

INDICATOR		2014		2017	
Breeding Sites		**N**	**%**	**N**	**%**
S1	Islands with alien species	53	**19.7**	51	**19**
P1	Sites with threats[1]	56	**9.4**	52	**8.7**
R1	Sites with eradications or management actions to abate threats [1]	22	**3.7**	24	**4**
R2	Sites with Biosecurity Protocol (Biosecurity Plan or Quarantine) [1]	16	**2.7**	81	**13.6**
Populations					
S1 b)	Sites counted within last 10 years	274	**46.1**	249	**41.9**
S1 b)	Island Groups counted within the last 10 years (at least 50% of sites per Island Group counted)	83	**58.9**	76	**53.9**
S2	Island Groups where breeding numbers at at least 1 site (including part-sites) estimated within the last 9 or 10/10 years	40	**28.4**	26	**18.4**
S3	Sites (or part sites) with ongoing annual monitoring - demography	27	**4.5**	27	**4.5**
S4 b)	Island Groups – population trend increasing/stable over last 10 years	7	**5**	20	**14.2**
Tracking					
S1	Island Groups with at least 15 tracks each from incubation, brood guard, post–guard chick rearing, non-breeding adults (from any island)	9	**6.4**	11	**7.8**
S2	Island Groups with at least 15 tracks from juveniles/immatures (from any island)	3	**2.1**	6	**4.3**

[1] Unique list, some sites have multiple threats/plans

Total Sites = 594, Total Islands = 269 and Total Island Groups = 141.

Taxa Count 30: *Diomedea amsterdamensis, Diomedea antipodensis, Diomedea dabbenena, Diomedea epomophora, Diomedea exulans, Diomedea sanfordi, Macronectes giganteus, Macronectes halli, Phoebastria albatrus, Phoebastria immutabilis, Phoebastria irrorata, Phoebastria nigripes, Phoebetria fusca, Phoebetria palpebrata, Procellaria aequinoctialis, Procellaria cinerea, Procellaria conspicillata, Procellaria parkinsoni, Procellaria westlandica, Puffinus mauretanicus, Thalassarche bulleri, Thalassarche carteri, Thalassarche cauta, Thalassarche chlororhynchos, Thalassarche chrysostoma, Thalassarche eremita, Thalassarche impavida, Thalassarche melanophris, Thalassarche salvini, Thalassarche steadi*