



**Agreement on the Conservation of Albatrosses and Petrels**  
*Interim Secretariat provided by the Australian Government*

## **First Meeting of Advisory Committee**

*Hobart, Australia, 20 – 22 July 2005*

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*Agenda Item No .9*  
*ACAP/AC1/Doc.11*

**Chair, Status and Trends Working Group**

**Towards a Review of the Population Status and Trends of  
Albatrosses and Petrels listed within the Agreement**



## **TOWARDS A REVIEW OF THE POPULATION STATUS AND TRENDS OF ALBATROSSES AND PETRELS LISTED WITHIN THE AGREEMENT**

1. The first Meeting of the Parties (MOP1) to the Agreement of the Conservation of Albatrosses and Petrels (ACAP) agreed to recommend to the Advisory Committee a proposal to review the population status, trends and demography of albatrosses (21 species) and petrels (seven species) listed on Annex 1 of the Agreement (MOP1 report, paragraph 7.2).
2. To progress this review, Resolution 1.5 provided for the establishment by the Advisory Committee of a Working Group to collect and collate information on breeding numbers and critical population and demographic parameters for each species. It was anticipated that this synthesis would enable gaps in information to be identified; and facilitate the prioritisation of actions to collect information to fill these gaps.
3. The data for this review would be sought from Parties and Signatories to ACAP that are Breeding Range States for the ACAP listed species. It was agreed that Rosemary Gales (Australia) would chair the Working Group. Working Group members were sought from both breeding-range Parties and non-Party Signatory states. The Terms of Reference of the Status and Trends Working Group specifying the work program, the membership (as at June 2005), and the timetable for progress are provided in Attachment 1.

### **Progress to Date**

4. The Chair of the Working Group developed a draft proforma for population status and trends information that was circulated to the members of the Working Group in mid-March 2005. Some members requested that the proforma be broadened from the draft summary tables to include provision of all data for all years so that this initial review was as comprehensive as possible. The proformas were then expanded to include a request for both summary and raw time-series data.
5. Members of the Working Group agreed that an expanded request for data was appropriate and realistic, despite the ambitious timetable of work. The Working Group also recognised that time-series data would not be available for all taxa at all localities, and it was important that data at a lower level be submitted for consideration by the AC in July 2005.
6. Finalised proformas were circulated to members in late April 2005 (Attachment Two) with a request for members to provide the information for taxa within their jurisdiction by the end of May 2005. Three members provided the information by early June, a fourth member providing the information in early July.
7. The completed forms that were returned provide extremely useful and comprehensive data for a range of species breeding within the jurisdictions of Australia, New Zealand, South Africa and the U.K. All submitted information has been archived as spreadsheets in a central database administered by the ACAP Secretariat.
8. A preliminary review of the data that was submitted by members is provided in Attachment Three. This preliminary review reflects information submitted by four jurisdictions, and comprises population specific data for 19 species of albatross and seven petrel species. No information was made available for only two species of albatross.

## **Timeframe for Future Work**

9. The work program prescribed in the terms of Reference of the Working Group envisaged that an initial gap analysis would be undertaken in June 2005 in order to identify priority actions to fill the gaps in information. It was anticipated that the Advisory Committee would consider and further refine a prioritisation of actions based on the review at its first meeting. However, as the required suite of information remains incomplete, compilation of a comprehensive and meaningful gap analysis for consideration at the 2005 AC meeting is premature. It is recommended therefore that the work program is revised and that a gap analysis is progressed as further data are made available.

## **ACTION BY ADVISORY COMMITTEE**

10. Incomplete population specific data has hindered significant progress towards a review of albatrosses and petrels listed within ACAP, Consequently the Advisory Committee is asked to:
  - (i) Consider whether any amendments are required to the population status and trends proforma (Attachment Two);
  - (ii) In particular, before parties and Signatories are asked to provide further information, the Committee is asked to consider the request for raw time-series data, and to consider the complexities in reconciling comparisons of vital rates calculated by different methodologies;
  - (iii) Consider and agree a revised work program and timeframe for provision of the information required for a global assessment;
  - (iv) Advise on guidelines for access and use of the data supplied to the Working Group and Advisory Committee, in particular with respect to unpublished and/or raw data that may be provided;
  - (v) Advise on the format of a population database that may be collated following provision of information from other Parties;
  - (vi) Consider requesting other groups including SCAR Group of Experts on Birds and Birdlife International for access to information that has been compiled for other purposes;
  - (vii) Consider the advisability of undertaking a pro-active search for relevant published and unpublished information from sources other than Working Group members by the Working Group Chair with the assistance of the Secretariat and interested individuals.

## ATTACHMENT ONE

### AGREEMENT ON THE CONSERVATION OF ALBATROSSES AND PETRELS WORKING GROUP TO REVIEW STATUS AND TRENDS OF SPECIES LISTED ON ANNEX I OF THE AGREEMENT

#### TERMS OF REFERENCE

Resolution 1.5 of the First Session of the Meeting of the Parties (MOP1) to ACAP provides for the establishment by the Advisory Committee of a Working Group on the Status and Trends of albatross and petrel species covered by the Agreement.

The aim of this group is to collect and collate the most up to date information on breeding numbers of each species of albatross and petrel listed on Annex 1 of the ACAP Agreement and to produce an assessment of the status and trends of each species.

The data for this review will be sought from Parties and Signatories to ACAP who are Breeding Range States for (ie are home to breeding populations of) the ACAP listed species.

These terms of reference include the work programme for the review, details of the membership of the working group, a timetable for actions and details of the conditions for use of albatross and petrel data submitted for the purposes of this review.

#### Work Programme for Status and Trends Review Group

The remit of the group is set out below (taken from section two of the work programme for the Advisory Committee; Annex 2 of Resolution 1.5 adopted at the first session of the Meeting of the Parties to ACAP).

- 2.1 Establish Working Group
- 2.2 Develop terms of reference
- 2.3 Develop data proforma and database template
- 2.4 Identify national coordinators to compile and submit data
- 2.5 Collate and submit data
- 2.6 Populate database
- 2.7 Conduct initial gap analysis to identify requirements for additional data for species/populations
- 2.8 Collect additional data to fill gaps and complete review

#### Membership of Working Group

The group will be chaired by Rosemary Gales of Australia with a membership comprised of representatives from Breeding Range States for ACAP albatrosses and petrels which are Parties and Signatories to ACAP; and invited experts from ACAP observer organisations.

Party / Signatory/ Observer	Member	Organisation / position
Australia	Rosemary Gales, CHAIR	Department of Primary Industries, Water and Environment
Ecuador	<i>To be advised</i>	
New Zealand	Susan Waugh	Ministry of Fisheries

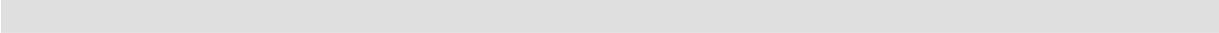
Party / Signatory/ Observer	Member	Organisation / position
South Africa	John Cooper Rob Crawford	University of Cape Town Department of Environmental Affairs and Tourism
United Kingdom	Richard Phillips	British Antarctic Survey
Argentina	Adrian Schiavini  Maria Tombesi	Southern Scientific Research Centre Environmental and Sustainable Development
Chile	<i>To be advised</i>	
Ecuador	<i>To be advised</i>	
France	<i>To be advised</i>	
BirdLife International	Stuart Butchart	Birdlife International
Scientific Committee on Antarctic Research	Eric Woehler	SCAR Group of Experts on Birds

### Timetable for progress

The following timetable has been updated from the Advisory Committee (AC) work programme (Annex 2 of Resolution 1.5) to provide for a progress report to the first meeting of the ACAP Advisory Committee (AC1), 20-22 July 2005.

Action	To be completed by	Responsibility
2.1 Establish Working Group: identify Working Group Chair and membership	End February 2005	Interim Secretariat / AC
2.2 Develop terms of reference	End February 2005	Rosemary Gales / AC
2.3 (i) Circulate draft proforma and database format (for data on breeding albatrosses and petrels) to Working Group (WG) Members (ii) Provide comments on draft data proforma	End February 2005  End March 2005	Rosemary Gales  WG Members
2.4 Notify Interim Secretariat of national coordinators to compile and submit data	End March 2005	Parties and Signatories (Breeding Range States)
2.5 (i) Circulate final data proforma to Breeding Range States (ii) Provide data in completed proforma	Beginning April 2005  End May 2005	Rosemary Gales  National Co-ordinators for Breeding Range States (Parties and Signatories)
2.6 Populate database	Mid June 2005	Rosemary Gales
2.7 (i) Conduct initial gap analysis (ii) Compile progress report for AC1	End June 2005	Rosemary Gales, WG Members
2.8 Population data collection	Timeframe 2006/2007	Breeding Range States (Parties and Signatories)

**Data Submitted to the ACAP Working Group on Status and Trends**

- (i) Data supplied to the Working Group will be used only for the purposes of reviewing the status and trends of albatross and petrel species listed on Annex 1 of the Agreement.
  - (ii) Ownership of data provided for the review will be clearly set out in any report(s) of the Working Group.
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# ACAP GLOBAL REVIEW STATUS AND TRENDS DATA PROFORMA

## Contribution Request

The Terms of Reference of the Working Group to Review Status and Trends of species listed in Annex 1 of the Agreement on the Conservation of Albatrosses and Petrels states that:

*The aim of this group is to collect and collate the most up to date information on breeding numbers and critical population/demographic parameters of each species of albatross and petrel listed in Annex 1 of the ACAP Agreement. This will enable gaps in the information on trends and demographic parameters to be identified; and will facilitate the prioritisation of actions to collect information to fill these gaps.*

This proforma has been developed following consultation with the Working Group and includes five information tables for consideration.

Tables 1 and 2 summarise information of population size and trends, and estimates of production and survival. These tables should be completed where possible for all breeding populations of ACAP species within the jurisdiction of the Members.

Tables 3 and 4 require year-specific data and percentile assessments of annual population change. Provision of this additional information, where possible, will enable accurate comparisons of status and trends between populations and species.

Table 5 requires Members to assess the priority requirements and gaps for the information on population status and trends of ACAP species breeding within their jurisdiction.

Information should be provided wherever possible. Where information is lacking, this should be stated ("unknown").

As stipulated in the Terms of Reference, the data supplied to the Working Group will be used only for the purposes of reviewing the status and trends of albatross and petrels species listed in Annex 1. Ownership of the data provided for the review will be clearly set out in any report(s) and publications of the Working Group.

## Contribution Details

<b>Member/ Party/ Signatory</b>	<b>Contributor</b>	<b>Site</b>	<b>Species (common name)</b>	<b>Species (Latin name)</b>	<b>Date submitted to WG</b>



**TABLE 2 SUMMARY OF POPULATION PRODUCTION AND SURVIVAL ESTIMATES FOR ACAP SPECIES**

This table is intended to summarise estimates of breeding productivity and survival (adult and juvenile) of ACAP listed seabirds. Where possible and if necessary, provide separate values for different time periods (for populations that show distinct changes over time).

Species	Site	Method	Production		Adult Survival		Juvenile survival (define)		Citation/Publications Reference Number (Data Custodian)
			Years (n)	Mean +/- s.d (range)	Years (n)	survival est (error.)	Years (n)	survival est (error)	



**TABLE 5 ASSESSMENT OF PRIORITY REQUIREMENTS AND GAPS**

<p><b>Species:</b></p> <p><b>Region (Jurisdiction):</b></p> <p><b>Assessment of priority requirements and gaps in population trends and demographic parameters:</b></p> <hr/>
<p><b>Species:</b></p> <p><b>Region (Jurisdiction):</b></p> <p><b>Assessment of priority requirements and gaps in population trends and demographic parameters:</b></p> <hr/>
<p><b>Species:</b></p> <p><b>Region (Jurisdiction):</b></p> <p><b>Assessment of priority requirements and gaps in population trends and demographic parameters:</b></p> <hr/>
<p><b>Species:</b></p> <p><b>Region (Jurisdiction):</b></p> <p><b>Assessment of priority requirements and gaps in population trends and demographic parameters:</b></p> <hr/>

## CITATION DETAILS FOR SUMMARY TABLES

Citation Number	Citation Details
1	
2	
3	

### NOTES

#### (i) Years.

Please use the “split-year” system. That is any count (whether breeding pairs or fledglings) made in the austral summer (e.g. of 1993/94) should be reported as the second half of this split year (i.e. 1994).

The only species which present potential problems in this respect are *Diomedea* albatrosses, which lay in December-January, but whose fledglings do not depart until the following October-December. In order to keep records of each breeding season together, it is suggested that breeding counts from e.g. December 1993-January 1994 and productivity counts (of chicks/fledglings) of October-December 1994 should both be reported as 1994.

If the years of monitoring are discontinuous, please indicate the actual years in which monitoring occurred. If a range of years is presented, it shall be assumed that the monitoring was continuous during that time.

#### (ii) Methods Rating Matrix (based on NZ rating system)

Provide BOTH alphabetic method and numeric reliability scores (eg A1, B3 etc)

#### METHOD

- A** **Counts of nesting adults** (Errors here are detection errors (the probability of not detecting a bird despite its being present during a survey), the “nest-failure error” (the probability of not counting a nesting bird because the nest had failed prior to the survey, or had not laid at the time of the survey) and sampling error).
- B** **Counts of chicks** (Errors here are detection error, sampling and nest-failure error. The latter is probably harder to estimate later in the breeding season than during the incubation period, due to the tendency for egg- and chick-failures to show high interannual variability compared with breeding frequency within a species).
- C** **Counts of nest sites** (Errors here are detection error, sampling error and “occupancy error” (probability of counting a site or burrow as active despite it’s not being used for nesting by birds during the season).
- D** **Aerial-photo** (Errors here are detection errors, nest-failure error, occupancy error and sampling error (error associated with counting sites from photographs).
- E** **Ship- or ground- based photo** (Errors here are detection error, nest-failure error, occupancy error, sampling error and “visual obstruction bias” (the obstruction of nest sites from view from low-angle photos, always underestimating numbers)
- F** **Unknown**

#### RELIABILITY

- 1** **Census with errors estimated**
- 2** **Distance-sampling of representative portions of colonies/sites with errors estimated**
- 3** **Survey of quadrats or transects of representative portions of colonies/sites with errors estimated**
- 4** **Survey of quadrats or transects without representative sampling but with errors estimated**
- 5** **Survey of quadrats or transects without representative sampling nor errors estimated**

**(iii) Population survey reliability**

High Within 10% of stated figure;

Medium Within 50% of stated figure;

Low Within 100% of stated figure (eg coarsely assessed via area of occupancy and assumed density)

Unknown

**(iv) Population Trend (reliability)**

Decreasing, stable or increasing with reliability:

High Trend documented for years monitored (as sited in table)

Medium Trend considered likely based on documentation (eg discontinuous years)

Low Trends suspected but evidence equivocal

Unknown

**(v) Productivity**

Define as proportion of eggs that survive to chicks at/near time of fledging

Please indicate if other than counts of chicks at/near time of fledging.

**(vi) Juvenile survival**

Juvenile survival needs defining as:

1. Survival to first return;
2. Survival to x age (x will need to be specified), or
3. Survival to recruitment into breeding population

**(vii) Citation/Publication**

Research can be cited as “Unpublished” or, if published, a reference be given by numbers (1.2.3) which will correspond to a list of publications given in a footnote to the Table. If unpublished please cite the custodian of the data.

## ATTACHMENT THREE

### Preliminary Review of Information Provided

1. The information that was provided by New Zealand, Australia, South Africa and the U.K. has been summarised in Tables 1a-e.
2. For ACAP species breeding within Australian jurisdictions, information was provided for populations breeding in Tasmania, Heard and Macquarie Islands. Demographic studies are underway for four of the albatross species and there are ongoing long term population monitoring studies for albatrosses and petrels breeding on Macquarie Island and in Tasmania. Current trends for the ACAP species breeding on Macquarie Island indicate that these populations are either increasing or stable in numbers. Fewer data are available for the species breeding on Heard Island, in particular there is a lack of reliable information on population trends for the species breeding at this site.
3. Extensive information was provided by New Zealand for species breeding within their jurisdiction. Population estimates are available for most breeding sites, although for some species (eg Light mantled albatross), the reliability of these estimates is low. Very little information is available for a number of species including Pacific, White capped and Salvin's albatrosses and Westland Petrels. Information for these species is essentially restricted to limited point estimates of population size with no robust information on population trends. Population trend information is available for 18 of the 40 populations in the New Zealand region. Of these, 16 (89%) are reported as being either stable or increasing. The two populations that are reported to be in decline are Salvin's albatrosses at the Bounty Islands and Grey-headed albatrosses breeding on Campbell Island.
4. South Africa also submitted comprehensive information for the nine ACAP species breeding at both Marion and Prince Edward Islands. Considerably greater knowledge exists for the eight species breeding at Marion Island. The population trends of seven species at this site are known with at least moderate reliability, and of these four are stable and three (Sooty albatross, Southern Giant Petrel, and White-chinned petrel) are decreasing. Information is most limited for Grey and White-chinned petrels. Much less information was presented for species breeding at Prince Edward Island, with information essentially restricted to population estimates conducted in 2001-02.
5. The UK submitted data for three Overseas Territories: Tristan da Cunha and Gough, the Falklands/Islas Malvinas and South Georgia/Georgias del Sur. The most comprehensive dataset was available for South Georgia, derived largely from long-term demographic studies on Bird Island, but also with recent archipelago-wide surveys of Wandering, Black-browed and Grey-headed albatross confirming long-term declines. There are reliable estimates of productivity, adult and juvenile survival from Bird Island for these three albatrosses, and this will be available in the future for both giant petrels. Population trend information for six ACAP species breeding at South Georgia showed that most (five) are in decline, with only Southern Giant Petrels being stable in numbers. There is very little information on demography, current population size and status of the Light-mantled albatross and White-chinned petrel, except that the latter is in long-term decline.

6. Similarly, little is known about long-term demographic processes or status of the three Falklands/Islas Malvinas ACAP species except that the Black-browed albatross population has recently undergone a rapid decline, and a survey in 2004 of Southern giant petrels recorded many more birds than anticipated. At Tristan da Cunha/Gough, the limited data on population size suggest that the Tristan, Atlantic yellow-nosed and Sooty albatross are in decline, and Southern giant petrel and spectacled petrel apparently increasing. With the exception of two (of the three) albatrosses breeding on Gough, there is very little recent data on vital rates.
7. Information from all sites are consistent in showing that considerably more data is available for albatross and giant petrel species, with very little known about the population status and trends of the *Procellaria* species.
8. Comparing the available regional data on population trends suggests that, for populations in the Australian/New Zealand region are generally more secure than populations elsewhere. For other ACAP populations the situation is more serious. The most extensive suite of data for ACAP species is from South Georgia /Georgias del Sur, and at this site five of the six species for which data are available are in decline.