



Agreement on the Conservation of Albatrosses and Petrels

Fourth Meeting of Status and Trends Working Group

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**Title: Request to ACAP from the Committee for
Environmental Protection seeking advice about Southern
Giant Petrels**

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Request to ACAP from the Committee for Environmental Protection seeking advice about Southern Giant Petrels

Overview

To suggest that the Status and Trends Working Group (STWG) provide advice to the Advisory Committee regarding a request from the Antarctic Treaty's Committee for Environmental Protection (CEP) to ACAP seeking advice about future census methodology and other issues relating to Southern Giant Petrels (SGPs). Details of the CEP's request and suggested draft advice for the STWG are set out below.

Background

Antarctic Treaty Parties have considered the need for additional protection of SGPs and their breeding colonies at several annual meetings and sought advice from the Scientific Committee on Antarctic Research (SCAR) about the status and trend of SGP populations within the Antarctic Treaty area (south of 60° S), including whether SGPs should be designated as a Specially Protected Species.

SCAR held a two day workshop in May 2008 to consider these matters and to develop advice to the CEP. The workshop was attended by a small group of Antarctic Treaty Party researchers and representatives of ACAP (F. Quintana, Argentina), Birdlife International and SCAR. The workshop's report (Attachment 1) was tabled at the eleventh meeting of the CEP held in Kyiv, Ukraine, from 2–6 June 2008 and its subsequent consideration by the CEP is described in the report of CEP XI (extract at Attachment 2). The results of most relevance to ACAP are:

- SCAR compiled an extensive database on abundance and trends of the species at all known breeding sites, and scrutinized the data according to the IUCN Red List criteria for regional assessments. New, unpublished data were made available for the workshop and resulted in a near doubling of the size of the breeding population;
- SCAR concluded that while SGP data are extensive, the data for several sites are not current; that data on fledging success, juvenile and adult survival, and breeding frequency are available for only a few breeding sites; there was much variation between site-specific data, so precluding demographic modelling of future trends; and that census data at sites are often not comparable among years;
- SCAR recommended that additional censuses of breeding sites and of fledging success should be undertaken in a consistent scientific manner, and that further collection of time series, demographic information and censusing of sites not visited within the last ten years should occur;
- the CEP accepted these recommendations and SCAR's advice that the population status of SGPs south of 60°S is of "Least Concern" and thus did not warrant Specially Protected Species status; and
- the CEP referred the SCAR's draft standardised methodology for future SGP censuses to ACAP for its consideration and further advice to the CEP if required.

Comment

Australia welcomes the request to ACAP from the CEP and believes it would be helpful if ACAP could respond to this request before the next meeting of the CEP, scheduled for April 2009. Australia considers that co-operation on this matter will assist the conservation and

environmental protection objectives of ACAP and the Antarctic Treaty, as well as offer an excellent opportunity to promote the work of ACAP within the Antarctic Treaty.

Australian researchers have extensively reviewed Australian and several other countries' SGP data, in support of both the SCAR workshop and the completion of the current ACAP global species assessment of SGPs. This work highlighted several significant problems with SGP population data, summarised in a short paper to the SCAR Workshop. Australia strongly supports the call by SCAR and the CEP for a standardised methodology to be used in future SGP censuses in order to improve consistency and comparability of data. Australia urges ACAP to also endorse this approach.

Australian researchers did not attend the SCAR Workshop but, using the knowledge gained in their recent SGP work, have since reviewed the draft methodology referred to ACAP by the CEP. Noting that it is intended to be used by field persons, including those with little or no experience, some refinements are suggested, principally to:

- remove ambiguous terminology about what is to be counted and to clarify that the goal is to count incubating birds rather than occupied nests;
- provide better guidance on how to conduct censuses and to ensuring that minimal disturbance is caused; and
- strengthen the request that all census data be submitted to ACAP to assist with its work.

A revised draft methodology for the consideration of the STWG and the Advisory Committee is at Attachment 3.

In responding to the CEP, it would be appropriate that ACAP thank the CEP for its request for advice; inform the CEP of current progress with the ACAP global species assessment for SGPs, including the likely completion date, and advise the CEP that, when complete, the completed ACAP species assessment will be submitted to the CEP for its consideration.

Recommendation

That the STWG:

1. consider and, following any further amendments, endorse the revised standardised methodology for SGP censuses at Attachment 3 and forward it to the Advisory Committee;
2. recommend that the Chair of the Advisory Committee write to the data-owners who submitted SGP data, especially unpublished data, to the SCAR workshop asking that they submit those data to ACAP for use in the current global species assessment and related ACAP tasks; and
3. recommend to the Advisory Committee that it respond to the CEP's request for advice before the next meeting of the CEP in April 2009 and provide the revised standardised methodology, information about the current ACAP global species assessment of SGPs and commit to submitting a copy of that assessment to the CEP when it is completed.

Attachment 1

Report to CEP XI of the SCAR Workshop on Southern Giant Petrels, May 2008

Attachment 2

Extract from Report of the Committee for Environmental Protection XI, 2–6 June 2008

(270) SCAR introduced *WP 10 rev 1 Status of the Regional, Antarctic Population of the Southern Giant Petrel – Progress*, and summarized the steps taken by SCAR to advise the ATCM on whether the Southern Giant Petrel should be listed as a Specially Protected Species under Annex II to the Protocol on Environmental Protection, particularly a workshop held in Cambridge in May 2008, where members of several parties, SCAR, BirdLife International and ACAP had participated. For the purposes of this workshop, SCAR compiled an extensive database on abundance and trends of the species at all known breeding sites, and scrutinized the data according to the IUCN Red List criteria for regional assessments.

(271) SCAR also raised several caveats. First, that data for several sites are not current, but that by comparison with assessments for other bird species globally, the data are extensive. Second, that data on fledging success, juvenile and adult survival, and breeding frequency are available for only a few breeding sites, and much variation exists between these site-specific data, so precluding demographic modelling of future trends. Third, that census data at sites are often not comparable among years.

(272) SCAR concluded that:

- According to the IUCN Red List Categories and Criteria, the Southern Giant Petrel population south of 60°S is of Least Concern under Criteria A2 and B-E. Therefore it does not qualify as Critically Endangered, Endangered, Vulnerable or Near Threatened, and the present data and analysis do not support the designation of the southern giant petrel as a SPS under Annex II.
- Additional censuses of breeding sites and of fledging success should be undertaken in a consistent scientific manner, which SCAR outlined, to enable better estimates to be made of current trends in the southern giant petrel population (north and south of 60°S). Should such work indicate a change in the status of the species, it should be reassessed.
- Further quantitative work should be undertaken, using both current and new data, so that quantitative demographic models can be applied to the species. Because these models rely on carefully collected, time series information, the collection of such information was encouraged.
- Sites that have been censused more than 10 years ago should be revisited at an appropriate time so that an assessment of the status of the species at these sites can be made.
- The lessons learned from this process should be applied to other species.

(273) A number of Members thanked SCAR for the quality of its advice, noting it was a good example of cooperation between the CEP and SCAR. The SCAR recommendations were supported.

(274) Australia stated that making the workshop data available to ACAP would assist with its global assessment of the species and would also help with determining the level of uncertainty with the Antarctic regional assessment. Australia strongly supported the development of a standardised methodology for population counts, and suggested the guidance contained in SCAR's paper could be referred to ACAP for consideration and further advice to the CEP if required. It also noted that the current assessment does not reduce the sensitivity of the species to disturbance, so the Parties should continue the commitments made in earlier Resolutions to limit such disturbance, including by taking steps to protect breeding habitat. These sentiments were endorsed by the Committee.

(275) The UK described its future plans for survey and for continued convening of the ACAP breeding sites working group, and noted that advice and cooperation from experts within SCAR and CEP would be appreciated.

Attachment 3

Suggested changes to standardised SGP methodology in SCAR Report

Requirements for censuses

To obtain trend estimates for Southern Giant Petrel, when observers experienced with the species are available, breeding sites should be censused in the following way

- (1) The census should be conducted as soon as possible after all pairs at a site have laid eggs (c. November 25th for the Peninsula area but differs by site) or as close as possible to that date (keeping to the same date each year a census is done) INCUBATING ADULTS should be counted.
- (2) Incubating adults are those birds observed to be incubating an egg or chick.
- (3) The required information for such a census is:
 - i. Locality name and position to the nearest decimal minute, or second.
 - ii. Date (day, month, year) of census.
 - iii. Name and employing institution of observer(s).
 - iv. Weather conditions with wind speed, snow cover and visibility given as a minimum.
 - v. A description of the census methodology and observation procedure used, including the approach distance to the breeding birds.
 - vi. As accurate a description as possible of the area covered by the census and where the breeding birds are located; photographs and maps are highly desirable. .
 - vii. The number of incubating adults.

If observers experienced with the species are not available, the following census method should be applied:

- (1) The census should be conducted as soon as possible after all pairs at a site have laid eggs (c. November 25th for the Peninsula area but differs by site) or as close as possible to that date (keeping to the same date each year a census is done) APPARENTLY INCUBATING ADULTS should be counted at a distance from the breeding site that does not disturb the birds.
- (2) Apparently incubating adults are birds either observed to be incubating an egg or brooding a chick or on well-constructed nests, apparently incubating an egg or chick.
- (3) The required information for such a census is:
 - i. Locality name and position to the nearest decimal minute, or second.
 - ii. Date (day, month, year) of census.
 - iii. Name and employing institution of observer(s).
 - iv. Weather conditions with wind speed, snow cover and visibility given as a minimum.
 - v. A description of the census methodology and observation procedure used, including the approach distance to the breeding birds.
 - vi. The approximate area covered by the breeding birds (state the units used).
 - vii. The number of apparently incubating adults.
 - viii. Provided it does not cause significant disturbance, the apparently incubating adult count could be done on several different days under different conditions. The results of all censuses should then be recorded.

General considerations for all censuses

1. The above census methods should be undertaken on an annual basis, ideally for several consecutive years, if the aim is to collect data on population trends. Data on a less frequent basis may not enable assessment of inter-annual variability and could make trend assessments more difficult.
2. Ideally, there will be sufficient knowledge of the "breeding chronology" for each site to determine the optimum time to conduct surveys or censuses, regardless of the "unit" (eg eggs, incubating adults, fledglings, etc) being counted. "Breeding chronology" refers to the timing of key breeding events, such as when birds arrive, when eggs begin to be laid, when laying finishes, when chicks begin to fledge, and so on. The breeding chronology will vary between sites for a range of reasons, including differences in prevailing weather conditions (eg subantarctic or Antarctic) and other factors and typically requires several years' observations to be accurately determined.
3. Inherently, there are different levels and types of errors likely to occur with all censuses, no matter when during the season they are conducted. It is important to consider and, where possible, quantify counting errors or biases. Where they are possible, several censuses during a season may assist in estimating errors and, if the censuses are spread throughout a season, they may also provide data on other valuable aspects, such as fledging success.

4. If multiple censuses are done (eg by multiple observers on one day), all results for each day or person should be recorded. Typically, the goal might be to repeat a census until two results are within say 5% of each other and then use the average of the two; censuses results which exceed the set variation limit would be discarded, however note that multiple persons and censuses is likely to increase disturbance.
5. If censuses are conducted too early, less birds (and eggs) may be present, leading to an under-estimate; censuses occurring too long after all eggs are laid will also tend to be an under-estimate as some eggs from early layers will have been lost due to depredation or other failure. The census should be conducted as close as possible (say within a week) after all eggs are laid (note that eggs not being incubated should not be included). Chicks will only be present well after laying time.
6. Once the breeding chronology for a site is known, it is preferable that censuses occur on the same date (or as near to it as possible) each year and use the same methodology and procedures; this will help maximise the inter-annual comparability of data gathered.
7. No participating personnel should approach so closely that birds incubating eggs or brooding chicks are disturbed or leave the nest.
8. Thorough documentation of the censuses is essential and will greatly assist in interpretation of results as well as help personnel undertaking future counts to consistently repeat the count. Scaled maps (with co-ordinates and other units identified, preferably by using a GPS) and or photographs and descriptive text (state the spatial units used) should be recorded wherever possible.
9. Additional data on fledging success, breeding frequency, and juvenile and adult mortality can ensure that a better understanding of likely future trends in the population can be obtained and may help identify potential causes of population change. To estimate fledging success on an annual basis the following approach should be adopted only by observers experienced with this species:
 1. Undertake a census of incubating adults as above.
 2. Undertake a chick count when the chicks are older and unguarded (by a parent), but have not yet fledged, *c.* mid-February at the earliest, and preferably later (between mid-March and early April).
 3. Do not attempt to census the numbers of young chicks because of the high risks of nest desertion.
10. If sites are unlikely to be visited annually, and only an estimate of the number of birds present can be made, then this should be made by counting the apparently incubating adults. If the birds are not nesting provide all the data that are usually reported for incubating adult counts, but then give a count of the number of birds present, stating clearly that no birds appeared to be nesting.
11. For areas that are not frequently visited, stating that no Southern Giant Petrels are present is important. Modern distribution and abundance modelling techniques are improved considerably if real absence (rather than presumed absence) data are available.
12. Observers are requested to send all data, including maps and other supporting documentation to the Secretariat of the Agreement on the Conservation of Albatrosses and Petrels (www.acap.aq). Any data submitted will only be used for the purposes of ACAP.