



**Antarctic Treaty  
Consultative Meeting**

Stockholm 6 - 17 June 2005



**ATCM XXVIII**

ANTARCTIC TREATY  
XXVIII CONSULTATIVE MEETING

TRAITÉ SUR L'ANTARCTIQUE  
XXVIII RÉUNION CONSULTATIVE

TRATADO ANTÁRTICO  
XXVIII REUNIÓN CONSULTIVA

ДОГОВОР ОБ АНТАРКТИКЕ  
XXVIII КОНСУЛЬТАТИВНОЕ СОВЕЩАНИЕ

**WP 34**

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Agenda Item: ATCM 14,  
ATCM 15,  
CEP 4 d

Presented by: SCAR

Original Language: English

**Proposal to List a Species as a Specially Protected Species  
under Annex II**

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## Proposal to List a Species as a Specially Protected Species under Annex II

### *Introduction*

1. The origins of the designation of Specially Protected Species go back to III ATCM in 1964 at which the Agreed Measures for the Conservation of the Antarctic Flora and Fauna were adopted. Article VI paras 5–7 and Annex A indicate that any native mammals or birds listed in Annex A are considered “Specially Protected Species” and “shall be accorded special protection by Participating Governments”. The paragraphs also indicate that permits are required for killing, wounding, capturing or molesting any of these species and such permits can only be issued for “compelling scientific reasons”.
2. Neither in the drafting of the Agreed Measures nor in their later incorporation into Annex II of the Protocol was any attempt made to establish what criteria should be used for designating a Specially Protected Species nor what special protection should then be accorded to them by Parties.
3. The United Kingdom presented XXIII ATCM/WP24 which questioned how this category of special protection should be defined and managed. This resulted in the adoption of Resolution 2 (1999) which requested SCAR, in consultation with the Parties, CCAMLR and other expert bodies as appropriate, to examine the status of the species currently designated in Annex II Appendix A, with the assistance of IUCN to determine the conservation status of native Antarctic fauna and flora and advise the CEP on which species should remain or be designated as Specially Protected Species.
4. At this meeting an Intersessional Contact Group, chaired by Argentina, was established to discuss the criteria that could be used to designate Specially Protected Species. This ICG reported initially at CEP IV through XXIV ATCM/WP5.
5. The Final ICG report was presented as XXV ATCM/ WP8. The advice to the ATCM was encapsulated in Resolution 1 (2002) which noted that the CEP had decided to adopt the IUCN criteria on endangerment to establish the degree of threat to species, requested SCAR to assist in reviewing those species which were classed as “vulnerable”, “endangered” or “critically endangered” (taking into consideration regional differences in status) as well as reviewing those species classed as “data deficient” or “near threatened” which occurred in the Antarctic Treaty Area.
6. SCAR agreed to begin this process and suggested that it would first assess the species for which there were already extensive data. This Working Paper proposes how the IUCN criteria can be applied to Antarctic bird species and provides a classification of threat for endangered bird species. The paper then suggests a procedure and provides a format, using data for the Southern Giant Petrel as an example, for the process by which future proposals could be made to the Committee for Environmental Protection for listing species as Specially Protected Species.

### *Setting the Criteria*

7. The CEP has already discussed the application of the IUCN endangerment criteria and has accepted that they provide a useful framework in which to consider threats to Antarctic species. The full current listing of the criteria is provided as Annex 1.

8. The IUCN criteria are well-established, universally recognized and applied, and have been in use for a sufficient time to validate their usefulness and applicability. However, the application of the criteria at regional scales is less well-developed and tested at present and SCAR therefore proposes that regional concerns for any group should only be addressed after the criteria have been applied for globally threatened species.
9. The IUCN Red List has three categories for species considered to have a high to extremely high risk of extinction (“threatened” species) – Critically Endangered, Endangered and Vulnerable. A fourth category – Near Threatened – applies to species close to qualifying as threatened in the near future. It is unlikely that many Antarctic species will meet the criteria for Critically Endangered or Endangered status within the Treaty area. On conservation grounds, it is considered appropriate to be able to designate species in all three threatened categories (Critically Endangered, Endangered and Vulnerable) as Specially Protected Species. This would provide an effective framework for developing and implementing management plans to improve the status of all threatened Antarctic species. It may also be appropriate to establish monitoring schemes for those species evaluated as Near Threatened in order to provide early warning of possible worsening status.
10. SCAR considers that, at least at present, the Specially Protected Species category should be applied for the whole Antarctic population of any species. If some populations show regional decreases within the Antarctic, protection may well be achievable by practical local means instead of designation as a Specially Protected Species.
11. Designating Specially Protected Species in cases where not enough information is available (the precautionary approach for Data Deficient species) is not considered appropriate. Concern for these species should initially trigger new efforts to obtain the necessary information on the distribution, abundance, and where possible, trends in extent and population, upon which an informed judgement can be based through the application of the IUCN criteria. The current review of all Antarctic bird species will provide an up to date summary of which species are in need of urgent study.
12. Considering the present level of agreement on the extent of the revision of Annex II acceptable to all Parties, SCAR suggests that the Specially Protected Species status should be available for all species covered by Annex II, including those migratory species that visit the Antarctic Treaty Area on a seasonal or annual basis. This would appear to be within the common ground established at previous meetings of the CEP and provides for links with associated and dependent ecosystems outside the Treaty Area.

### ***Procedure for proposal of a species for Special Protection***

13. SCAR is continuing to build databases on the distribution, populations and ecological characterisation of species found not only in the Treaty and CCAMLR areas but associated and dependent ecosystems farther north. In many cases these data can already be linked with databases held elsewhere to provide global summaries for species. It is assumed that all these available data will be used to assess the degree of endangerment.
14. General agreement is needed first on the grounds for exclusion of any group of organisms or particular species from this designation. Such grounds could include the application of existing legislation outside the ATS, restriction of the designation only to

those species breeding south of 60°S, etc. As suggested above it would appear that migratory species and those that use the Antarctic Treaty Area for substantive foraging could be included under a recognition of their importance in associated and dependent ecosystems.

15. The CEP needs also to consider how to interact both with other parts of the Antarctic Treaty System (eg. CCAMLR, CCAS) over any proposal for designation where the jurisdiction may be shared, and with other international conventions (eg. ACAP) which may have global responsibilities for particular groups of organisms.
16. It is suggested that either a Party, the Committee or SCAR would be able to propose a species for special protection. The proposal would set out a general description of the species, including details of its distribution (including both breeding and foraging ranges if appropriate), information on its populations and their trends (inside the Antarctic Treaty Area and outside as appropriate) and details of any national or international protection already being accorded outside the ATS.
17. On the basis of the available data the degree of endangerment for the species would be proposed to the CEP and a recommendation for listing, if appropriate, could then be made to the ATCM.
18. Such a listing would require the preparation of an Action Plan to allow all Parties to agree on what actions were necessary to conserve the species and assist in the recovery of its threatened populations.
19. Such management plans already exist in a variety of forms for endangered species in territories outside the Antarctic. It is suggested that these could be used as the basis for developing such a plan for Antarctic Specially Protected Species.
20. SCAR would provide periodic reports on Specially Protected Species to allow the CEP to judge the success of the Action Plan.

### ***Assessment of Bird Species***

21. The global status of all the world's birds is evaluated for the IUCN Red List by BirdLife International. The most recent global assessment was published in BirdLife International (2004) and IUCN (2004). Of the species that breed regularly in Antarctica, the Macaroni Penguin and Southern Giant Petrel are globally considered Vulnerable, and the Gentoo Penguin is Near Threatened. Of the species that regularly visit Antarctica, the Black-browed Albatross is Endangered, the Rockhopper Penguin, Wandering Albatross and Grey-headed Albatross are Vulnerable, and the Light-mantled Albatross, Northern Giant Petrel, Mottled Petrel and Sooty Shearwater are Near Threatened.
22. SCAR has begun applying the IUCN Red List Categories and Criteria at the regional level for Antarctica in order to assess the regional extinction risk for all 19 species that breed in the region, and for all non-breeding visitors that are of conservation concern outside the region (eight species).
23. Preliminary results suggest that some species may warrant categories of higher extinction risk at the regional than global level (e.g. Chinstrap Penguin, Southern Giant Petrel, and Antarctic Prion) while others may warrant categories of lower extinction risk at the regional than global level (e.g. Gentoo Penguin, and Mottled Petrel).

24. More detailed regional analyses of trends and patterns will be taking place over the next year and so for birds it should be possible in due course to consider if actions at a regional level were required for individual species.
25. For species of Albatrosses and Petrels there will be continuing consideration of status and threat under the Agreement for the Conservation of Albatross and Petrels on a global basis which will overlap with any actions initiated by the Antarctic Treaty.

### ***Recommendations***

SCAR was asked to provide a proposal on the selection and application of criteria for the selection of species which should be considered for special protection, and indicate how the process of selection might be undertaken. SCAR now recommends:

- a. unless otherwise proscribed, all organisms subject to consideration under Annex II should be eligible for designation as Specially Protected Species;
- b. a proposal could be made by a Party, by the CEP or by SCAR and would contain information on ecology (including foraging and breeding areas), size and trends in the breeding populations, identification of threats and any relevant conservation actions initiated outside the Antarctic Treaty Area;
- b. the IUCN internationally agreed criteria for endangerment should be used to determine in which category a species is placed and the methodology used to calculate this should be the same as applied elsewhere in the world;
- c. at present the assessments should be applied initially to global populations but with the intention of reviewing the regional and local populations in due course;
- d. species assessed to be in the Critically Endangered, Endangered and Vulnerable categories should be considered as at high risk of extinction within three generations and therefore suitable for designation as Specially Protected Species; species considered Near Threatened should be considered for monitoring initiatives;
- e. a recommendation to the ATCM for designation would initiate the development of an Action Plan for the species, the format for which still needs to be agreed;
- f. an analysis of the global data for native bird species living and breeding south of 60°S shows that there are two species – Macaroni Penguin and Southern Giant Petrel – whose global populations are in the Vulnerable category and thus warrant consideration for SPS designation;
- g. the application of this designation with respect to CCAMLR activities needs consideration;
- h. the relationship between any conservation actions initiated by the ATCM for bird SPS inside the Treaty Area and those initiated by Parties to the Agreement for the Conservation of Albatross and Petrels outside the Antarctic Treaty Area needs consideration.

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### Example Data for the Southern Giant Petrel

1. The Southern Giant Petrel *Macronectes giganteus*, is a large seabird of body length 85–100cm and wingspan 150–210cm. The species is sexually dimorphic, with males larger than females. Within populations, two colour morphs occur: the most common is the dark morph with a white head and neck, and a dark grey-brown body; and a white morph with scattered black feathers.
2. The Southern Giant Petrel has a circumpolar oceanic range from Antarctica to approximately 20°S. Over summer, the species nests in colonies amongst open vegetation on Antarctic and subantarctic islands. A single chick is raised and although breeding occurs annually, approximately 30% of the potential breeding population does not nest.
3. The Southern Giant Petrel is an opportunistic scavenger and predator. The species regularly attends fishing vessels and scavenges animal carcasses on land. Southern Giant Petrels are also an active predator of cephalopods and euphausiids, as well as smaller birds (particularly penguins) both at land and at sea.
4. The current global population of Southern Giant Petrels was recently estimated to be 29,385 breeding pairs (BirdLife International 2004). This estimate represents a population reduction of approximately 23% from a previous estimate of 38,000 pairs (Hunter 1985).
5. A significant threat to Southern Giant Petrels is mortality via long-line fishing. 'Incidental catch (or by-catch) of seabirds during oceanic long-line fishing operations' is an increasingly important source of loss in many Southern Ocean bird populations. On some of their breeding islands, Southern Giant Petrels are threatened by predation from Feral Cats and Black Rats, and by habitat degradation from introduced Reindeer, Sheep and Rabbits. Human disturbance, both from tourism, science and logistic operations also does result in breeding failure.
6. Environmental changes potentially exacerbate the impact of threats to the Southern Giant Petrel. A recent southerly shift in the Antarctic Polar Frontal Zone has resulted in increased sea and air temperatures and may have altered up-welling patterns and hence marine prey availability (Patterson *et al.*, in press.).
7. In view of the above points, the SCAR is of the opinion that the Southern Giant Petrel *Macronectes giganteus*, is at risk of extinction as a breeding species within the Antarctic region unless the circumstances and factors adversely affecting its breeding are mitigated.
8. The conservation status of Southern giant petrel will be considered by the meeting of the Parties to the Agreement on the Conservation of Albatrosses and Petrels later this year in Hobart.

### References

- BirdLife International (2004) *State of the world's birds 2004: indicators for our changing world*. Cambridge, UK: BirdLife International.
- Hunter, S. (1985) The role of the Giant Petrels in the Southern Ocean ecosystem. In '*Antarctic Nutrient Cycles and Food Webs*'. (Eds W.R. Siegfried, P.R. Condy and R.M. Laws.) pp. 534-542. Springer-Verlag: Berlin.

Patterson, D.L., Woehler, E.J., Croxall, J.P., Poncet, S. and Fraser, W.R. (in press). Breeding distribution and population status of the Northern Giant Petrel (*Macronectes halli*) and the Southern Giant Petrel (*M. giganteus*). *Marine Ornithology*.

### Regional Population Estimates, and Breeding Population Trends for Southern Giant Petrels

Region	Breeding population (pairs)	Trend(s)
Indian Ocean islands*	9500	Stable or Decreasing
Antarctic Continent	270-280	Recovering after decreases
Southern Antarctic Peninsula	1300	Stable
South Shetland Is	4500	Decreasing
Elephant & Seal Is	875	Insufficient data
South Orkney Is (includes Signy & Laurie Is)	2200	Decreasing at some localities
South Sandwich Is	1550	Insufficient data
South Georgia	4650	Decreasing
Falkland Is / Islas Malvinas	3200	Decreasing?
South America	1350	Increasing?
South Atlantic Ocean (includes Tristan da Cunha and Gough I)	50	Decreasing
<b>TOTAL</b>	<b>29,385</b>	<b>Decreasing</b>

\* Includes Bouvet, Marion & Prince Edward Is, Iles Crozet, Heard & McDonald Is, Iles Kerguelen and Macquarie Is

**ANNEX 1**

**Summary of the five criteria (A-E) used to evaluate if a species belongs in a category of threat (Critically Endangered, Endangered or Vulnerable).**

Use any of the criteria A-E	Critically Endangered	Endangered	Vulnerable
<b>A. Population reduction</b>	Declines measured over the longer of 10 years or 3 generations		
<b>A1</b>	≥ 90%	≥ 70%	≥ 50%
<b>A2, A3 &amp; A4</b>	≥ 80%	≥ 50%	≥ 30%
<b>A1.</b>	Population reduction observed, estimated, inferred, or suspected in the past where the causes of the reduction are clearly reversible <b>AND</b> understood <b>AND</b> have ceased, based on and specifying any of the following:		
	(a) direct observation		
	(b) an index of abundance appropriate to the taxon		
	(c) a decline in AOO, EOO and/or habitat quality		
	(d) actual or potential levels of exploitation		
	(e) effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites.		
<b>A2.</b>	Population reduction observed, estimated, inferred, or suspected in the past where the causes of reduction may not have ceased <b>OR</b> may not be understood <b>OR</b> may not be reversible, based on (a) to (e) under A1		
<b>A3.</b>	Population reduction projected or suspected to be met in the future (up to a maximum of 100 years) based on (b) to (e) under A1.		
<b>A4.</b>	An observed, estimated, inferred, projected or suspected population reduction (up to a maximum of 100 years) where the time period must include both the past and the future, and where the causes of reduction may not have ceased <b>OR</b> may not be understood <b>OR</b> may not be reversible, based on (a) to (e) under A1.		
<b>B. Geographic range in the form of either B1 (extent or occurrence) AND/OR B2 (area or occupancy)</b>			
<b>B1.</b> Extent of occurrence	< 100 km <sub>2</sub>	< 5,000 km <sub>2</sub>	< 20,000 km <sub>2</sub>
<b>B2.</b> Area of occupancy	< 10 km <sub>2</sub>	< 500 km <sub>2</sub>	< 2,000 km <sub>2</sub>
<b>AND at least 2 of the following:</b>			
a (i) Severely fragmented <b>AND/OR</b>			
(ii) # locations	= 1	≤ 5	≤ 10

b Continuing decline in any of: (i) extent of occurrence; (ii) area of occupancy; (iii) area, extent and/or quality of habitat; (iv) number of locations or subpopulations; (v) number of mature individuals

c Extreme fluctuations in any of: (i) extent of occurrence; (ii) area of occupancy; (iii) number of locations or subpopulations; (iv) number of mature individuals

**C. Small population size and decline**

Number of mature individuals | < 250 | < 2,500 | < 10,000

**AND either C1 or C2:**

**C1.** An estimated continuing decline of at least: | 25% in 3 years or 1 generation | 20% in 5 years or 2 generations | 10% in 10 years or 3 generations  
(up to a maximum of 100 years)

**C2.** A continuing decline **AND** (a) and/or (b):

a (i) # mature individuals in each subpopulation: | < 50 | < 250 | < 1,000  
a (ii) or % individuals in one subpopulation at least | 90% | 95% | 100%

b extreme fluctuations in the number of mature individuals

**D. Very small or restricted population**

**Either:**

**D1.** number of mature individuals | ≤ 50 | ≤ 250 | ≤ 1,000

**AND/OR**

**D2.** restricted area of occupancy | na | na | AOO < 20 km\_ or # locations ≤ 5

**E. Quantitative Analysis**

Indicating the probability of extinction in the wild to be: | ≥ 50% in 10 years or 3 generations (100 years max) | ≥ 20% in 20 years or 5 generations (100 years max) | ≥ 10% in 100 years