

**Committee for Environmental Protection  
The Hague, The Netherlands, 11–15 September 2000**

**SPECIALLY PROTECTED SPECIES**

**Working Paper submitted by SCAR**

1. Resolution 2 (ATCM XXIII) requested SCAR, in consultation with CCAMLR and other expert bodies, to review the list of Specially Protected Species referred to in Article 3(4) of Annex II and listed in Appendix A to the Environmental Protocol.
2. The Terms of Reference requested SCAR to
  - i) examine the status of species which
    - are native to the Antarctic Treaty Area or occur there through natural migration
    - whose status might be of concern
  - ii) with the assistance of IUCN, use the information contained in the IUCN Red Lists to help determine the conservation status of native Antarctica flora and fauna
  - iii) provide expert scientific advice to the Committee for Environmental Protection as to which species should remain, or be designated as Specially Protected Species.
3. SCAR examined these questions in its appropriate committees, and provided copies of its preliminary recommendations to CCAMLR and IUCN  
[the final version of this paper will incorporate any comments received from both organizations]
4. Whilst undertaking this review it became clear that Annex II provides inadequate definitions of the purpose of designation, the criteria for designation or the extra protection afforded by designation. In order to proceed with the review SCAR has made the following assumptions:
  - i) *purpose of designation*: to draw attention to those species where the total population is small enough to threaten the viability of the species or where the existing population is showing a marked, significant and persistent decrease
  - ii) *criteria*: SCAR accepted the IUCN criteria on endangerment (see Annex)
  - iii) *extra protection*: SCAR assumed that designation of a species would ensure that issue of a permit for taking or harmful interference was less likely than for species not so designated, it would be afforded special consideration in any environmental impact assessment procedures and might initiate the development of species-specific conservation measures.
  - iv) SCAR noted that invertebrates are currently excluded from the Specially Protected category.
5. Designation under Annex II is only available for species indigenous to the Antarctic Treaty Area or occurring there seasonally through natural migrations. In applying the Terms of Reference SCAR noted that the increasing data on foraging patterns and migration routes obtained using electronic positioning devices is radically changing

previous assumptions on where and when birds and seals use the Antarctic Treaty Area. More new information of this type will become available over the next few years and may suggest further revisions are required of the Specially Protected Species list.

6. SCAR considered that, at present, there are sufficient data available only for birds and some marine mammals on which to apply the criteria outlined above.
7. A review of data on seals concluded that:
  - i) the size of existing populations of *Arctocephalus* sps, together with demographic trends, suggest that these species no longer require Special Protection
  - ii) data on the Ross seal *Ommatophoca rossii* are as yet incomplete, and on a precautionary basis this species should remain on the list until the Antarctic Pack Ice Seals programme has completed analysing its data.
  - iii) data on all other species of seals native to the Antarctic or using the Treaty Area for feeding or migration indicate that they do not need designation
8. A review of population data for the Southern Ocean seabirds concluded that there were several species whose conservation status, as identified by IUCN criteria, warranted consideration. The species proposed are:
  - a) macaroni penguin *Eudyptes chrysolophus*
  - b) wandering albatross *Diomedea exulans*
  - c) grey-headed albatross *Thalassarche chrysostoma*
  - d) southern giant petrel *Macronectes giganteus*
  - e) white-chinned petrel *Procellaria aequinoctialis*

All these species are classed as Vulnerable. It is recommended that all be designated as Specially Protected Species.

The *IUCN Criteria for Critically Endangered, Endangered and Vulnerable* are attached to this paper as an annex on the following four pages.

## The IUCN Criteria for Critically Endangered, Endangered and Vulnerable

### Critically Endangered (CR)

A taxon is Critically Endangered when it is facing an extremely high risk of extinction in the wild in the immediate future, as defined by any of the following criteria (A to E):

- A) Population reduction in the form of either of the following:
1. An observed, estimated, inferred or suspected reduction of at least 80% over the last 10 years or three generations, whichever is the longer, based on (and specifying) any of the following:
    - (a) direct observation
    - (b) an index of abundance appropriate for the taxon
    - (c) a decline in area of occupancy, extent of occurrence and/or quality of habitat
    - (d) actual or potential levels of exploitation
    - (e) the effects of introduced taxa, hybridisation, pathogens, pollutants, competitors or parasites.
  2. A reduction of at least 80%, projected or suspected to be met within the next ten years or three generations, whichever is the longer, based on (and specifying) any of (b), (c), (d) or (e) above.
- B) Extent of occurrence estimated to be less than 100 km<sup>2</sup> or area of occupancy estimated to be less than 10 km<sup>2</sup>, and estimates indicating any two of the following:
1. Severely fragmented or known to exist at only a single location.
  2. Continuing decline, observed, inferred or projected, in any of the following:
    - (a) extent of occurrence
    - (b) area of occupancy
    - (c) area, extent and/or quality of habitat
    - (d) number of locations or subpopulations
    - (e) number of mature individuals.
  3. Extreme fluctuations in any of the following:
    - (a) extent of occurrence
    - (b) area of occupancy
    - (c) number of locations or subpopulations
    - (d) number of mature individuals.
- C. Population estimated to number less than 250 mature individuals and either:
1. An estimated continuing decline of at least 25% within 3 years or one generation, whichever is longer or
  2. A continuing decline, observed, projected, or inferred, in numbers of mature individuals and population structure in the form of either:

- (a) severely fragmented (i.e. no subpopulation estimated to contain more than 50 mature individuals)
  - (b) all individuals are in a single subpopulation.
- D. Population estimated to number less than 50 mature individuals.
- E. Quantitative analysis showing the probability of extinction in the wild is at least 50% within 10 years or 3 generations, whichever is the longer.

### **Endangered (EN)**

A taxon is Endangered when it is not Critically Endangered but is facing a very high risk of extinction in the wild in the near future, as defined by any of the following criteria (A to E):

- A) Population reduction in the form of either of the following:
1. An observed, estimated, inferred or suspected reduction of at least 50% over the last 10 years or three generations, whichever is the longer, based on (and specifying) any of the following:
    - (a) direct observation
    - (b) an index of abundance appropriate for the taxon
    - (c) a decline in area of occupancy, extent of occurrence and/or quality of habitat
    - (d) actual or potential levels of exploitation
    - (e) the effects of introduced taxa, hybridisation, pathogens, pollutants, competitors or parasites.
  2. A reduction of at least 50%, projected or suspected to be met within the next ten years or three generations, whichever is the longer, based on (and specifying) any of (b), (c), (d), or (e) above.
- B) Extent of occurrence estimated to be less than 5000 km<sup>2</sup> or area of occupancy estimated to be less than 500 km<sup>2</sup>, and estimates indicating any two of the following:
1. Severely fragmented or known to exist at no more than five locations.
  2. Continuing decline, inferred, observed or projected, in any of the following:
    - (a) extent of occurrence
    - (b) area of occupancy
    - (c) area, extent and/or quality of habitat
    - (d) number of locations or subpopulations
    - (e) number of mature individuals.
  3. Extreme fluctuations in any of the following:
    - (a) extent of occurrence
    - (b) area of occupancy
    - (c) number of locations or subpopulations
    - (d) number of mature individuals.
- C) Population estimated to number less than 2500 mature individuals and either:

1. An estimated continuing decline of at least 20% within 5 years or 2 generations, whichever is longer, or
  2. A continuing decline, observed, projected, or inferred, in numbers of mature individuals and population structure in the form of either:
    - (a) severely fragmented (i.e. no subpopulation estimated to contain more than 250 mature individuals)
    - (b) all individuals are in a single subpopulation.
- D) Population estimated to number less than 250 mature individuals.
- E) Quantitative analysis showing the probability of extinction in the wild is at least 20% within 20 years or 5 generations, whichever is the longer.

### **Vulnerable (VU)**

A taxon is Vulnerable when it is not Critically Endangered or Endangered but is facing a high risk of extinction in the wild in the medium-term future, as defined by any of the following criteria (A to E):

- A) Population reduction in the form of either of the following:
1. An observed, estimated, inferred or suspected reduction of at least 20% over the last 10 years or three generations, whichever is the longer, based on (and specifying) any of the following:
    - (a) direct observation
    - (b) an index of abundance appropriate for the taxon
    - (c) a decline in area of occupancy, extent of occurrence and/or quality of habitat
    - (d) actual or potential levels of exploitation
    - (e) the effects of introduced taxa, hybridisation, pathogens, pollutants, competitors or parasites.
  2. A reduction of at least 20%, projected or suspected to be met within the next ten years or three generations, whichever is the longer, based on (and specifying) any of (b), (c), (d) or (e) above.
- B) Extent of occurrence estimated to be less than 20,000 km<sup>2</sup> or area of occupancy estimated to be less than 2000 km<sup>2</sup>, and estimates indicating any two of the following:
1. Severely fragmented or known to exist at no more than ten locations.
  2. Continuing decline, inferred, observed or projected, in any of the following:
    - (a) extent of occurrence
    - (b) area of occupancy
    - (c) area, extent and/or quality of habitat
    - (d) number of locations or subpopulations
    - (e) number of mature individuals.
  3. Extreme fluctuations in any of the following:
    - (a) extent of occurrence

- (b) area of occupancy
  - (c) number of locations or subpopulations
  - (d) number of mature individuals.
- C) Population estimated to number less than 10,000 mature individuals and either:
- 1. An estimated continuing decline of at least 10% within 10 years or 3 generations, whichever is longer, or
  - 2. A continuing decline, observed, projected, or inferred, in numbers of mature individuals and population structure in the form of either:
    - (a) severely fragmented (i.e. no subpopulation estimated to contain more than 1000 mature individuals)
    - (b) all individuals are in a single subpopulation.
- D) Population very small or restricted in the form of either of the following:
- 1. Population estimated to number less than 1000 mature individuals.
  - 2. Population is characterised by an acute restriction in its area of occupancy (typically less than 100 km<sup>2</sup>) or in the number of locations (typically less than 5). Such a taxon would thus be prone to the effects of human activities (or stochastic events whose impact is increased by human activities) within a very short period of time in an unforeseeable future, and is thus capable of becoming Critically Endangered or even Extinct in a very short period.
- E) Quantitative analysis showing the probability of extinction in the wild is at least 10% within 100 years.