



Agreement on the Conservation of Albatrosses and Petrels

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**Developing Indicators to measure success in achieving
the ACAP objective of favourable conservation status
for albatrosses and petrels**

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Requirements for indicators under the ACAP Agreement

The ACAP Agreement requires the Advisory Committee to develop a system of indicators to measure the collective success of Parties in achieving and maintaining a favourable conservation status for albatrosses and petrels listed in Annex 1 of the Agreement. (Attachment 1 includes extracts of the Agreement text which relate to indicators).

Although not explicitly stated in the Agreement it therefore appears that indicators should relate to the species of albatross and petrel listed on Annex 1 of the Agreement and that these indicators should be based on the component requirements for favourable conservation status for each species.

Under the Agreement, a species is said to be in favourable conservation status when the following conditions are met:

- i. population dynamics indicate that the migratory species is maintaining itself on a long-term basis*
- ii. the range of the migratory species is neither currently being reduced, nor is it likely to be reduced, on a long term basis*
- iii. there is, and will be in the foreseeable future, sufficient habitat to maintain the population of the migratory species on a long-term basis; and*
- iv. the distribution and abundance of the migratory species approach historic coverage and levels to the extent that potentially suitable ecosystems exist and to the extent consistent with wise wildlife management”*

The text of the Agreement as written does not imply that the indicators should be applied to Parties to measure their success in implementing the Agreement. However, because of the distribution of ACAP species, it is inevitable that some Countries will shoulder a higher proportion of conservation actions than others in implementing the agreement.

Consideration of indicators at ScM1 and MOP1

The informal Scientific meeting which preceded MOP1 noted the requirements for indicators and suggested that the Advisory Committee should seek guidance from the Meeting of the Parties and make use, where possible, of existing indicators such as the IUCN / BirdLife Red List criteria (Paragraph 6.28 of

ACAP/ScM1/Doc.6 / ACAP/MOP1/Doc.16). MOP1 further asked Parties to provide the Advisory Committee with suggestions as to how this requirement might be progressed most efficiently (paragraph 7.10 of MOP1 report).

South Africa has provided a paper for the first meeting of the ACAP Advisory Committee on *Indexing the health of the environment for breeding seabirds in the Benguela ecosystem* (ACAP/AC1/Inf.4).

Key requirements for indicators

Ideally the indicators should answer the following questions:

- Which ACAP-listed species are at favourable conservation status (FCS) and which are not?
- For species not at FCS, which of the criteria for FCS are not being met?
- What is the status of each island-population of an ACAP listed species which are not at FCS?
- And ultimately:
 - What actions are needed to bring a species not currently at FCS into FCS and where must these actions be applied?

Discussion

While the importance of accurately assessing the success of the Agreement is recognised, it is recommended that initially a simple system of indicators is adopted which avoids unnecessary work in addition to the compilation of reports on the implementation of the Agreement.

It has been suggested that the IUCN / BirdLife criteria might be used as indicators for ACAP. These criteria have the advantage of being globally recognised. They also take account, to a considerable extent, of the variable quality and quantity of data which may be available on the distribution and abundance of different species. The value of the IUCN criteria for listing purposes is recognised, however in terms of applicability for ACAP purposes it is arguable that they do not encompass or adequately address all the components of FCS as defined by the Agreement. In addition for red-listing purposes the IUCN criteria are applied at a species level, whereas for ACAP indicators may need to be applied at the island population level. Finally, it is noted that under the existing IUCN criteria, species of albatross or petrel which are endemic to a single island or island group will never be removed from the red list, although they might be considered to be in FCS according to the definition in the ACAP Agreement.

An alternative approach for ACAP is to consider the development of a specific set of indicators. These could be based on the four components of FCS; each of which is considered briefly below.

With respect to FCS component (i), demographic parameters such as the population growth rate could be used to assess whether or not a species is maintaining itself. Ongoing work by the Status and Trends Working Group seeks to collate population data for all ACAP species and could be used to underpin this assessment. It is likely however that many species populations are currently data-deficient and demographic parameters cannot be estimated with any confidence.

For FCS component (ii), both breeding range and foraging range will presumably need to be considered. Up to date information on breeding range can be derived from the ongoing reviews of the status and trends of ACAP species and albatross and petrel breeding sites and compared with previous accounts of the distribution of these species. The recent widespread application of satellite tracking technology has allowed researchers to quantify the foraging ranges of many species of albatrosses and petrels for the first time. However in the absence of historical data, assessing whether these ranges are changing or declining at present is likely to present some difficulties.

An assessment of the availability of sufficient habitat to maintain populations ACAP species (FCS component (iii)) should also presumably consider the availability of breeding and foraging habitats. Assessing the extent and quality of marine habitats for albatrosses and petrels could be a complex issue if it is considered that account should be taken of the distribution and abundance of food resources.

FCS condition (iv) covers a number of variables which are likely to be difficult to quantify and therefore problematic in terms of assessment through indicators.

Based on the current availability of data on the distribution and abundance of albatrosses and petrels; and current knowledge of their habitat requirements, at this stage it appears that the development of indicators relating to all four components of FCS may be an ambitious and complex exercise. It is suggested that this should be considered a medium to long term goal.

The Advisory Committee may therefore initially wish to consider a simplified system of indicators based on a subset of the components of FCS. A recent analysis of predictors of extinction risk in vertebrates (O'Grady *et al.* 2004) has identified population size and trend as the most important indicators of extinction risk.

Action by the Advisory Committee

It is recommended that the Advisory Committee initially develop a specific and simple set of indicators for ACAP species based on a subset of the components of favourable conservation status (FCS) as defined in the Agreement, with particular emphasis on population size and population trend.

Consideration should be given to the requirement to apply these indicators at the island population level for species which occur on more than one island or island group.

In the longer term it is seen as desirable that these indicators should be expanded to take into account all the components of FCS.

Reference

O'Grady, JJ, Reed, DH, Brook, BW and Frankam, R, 2004. What are the best correlates of predicted extinction risk? *Biological Conservation* 118: 513-520.

ATTACHMENT 1

ACAP Agreement Text Relating to Indicators

Article IX 6 (f) of the Agreement requires the ACAP Advisory Committee to:

“develop a system of indicators to measure the collective success of the Parties to the Agreement in addressing the objective set out in Article II (1), and subsequently apply it in the reports made under paragraph 6 d) of this Article”

Article II (1) states that:

“The objective of this Agreement is to achieve and maintain a favourable conservation status for albatrosses and petrels”¹

The reports under Article IX 6 d) relate to the:

“implementation of the Agreement, with particular reference to the Action Plan and the conservation measures undertaken. Each such report shall include a synthesis of such information as the Parties are required to submit to the Committee through the Secretariat under Article VII (1) c), and an assessment of the status and trends of albatross and petrel populations”

Article VII (1) c) requires each Party to:

“in relation to each ordinary session of the Meeting of the Parties, beginning with the second session, provide information through the Secretariat to the Advisory Committee so that it may prepare a synthesised report on the implementation of the Agreement, with particular reference to the conservation measures undertaken, in accordance with Article IX (6) d)”

Favourable Conservation Status is defined in Article I (2) n) of the Agreement as follows:

“Conservation status will be taken as favourable when all of the following conditions are met:

- (i) population dynamics indicate that the migratory species is maintaining itself on a long-term basis*
- (ii) the range of the migratory species is neither currently being reduced, nor is it likely to be reduced, on a long term basis*

¹ As Article I states that the Agreement applies to the species of albatrosses and petrels listed in Annex 1 to the agreement, it is assumed that Article 2 applies to these species also

- (iii) there is, and will be in the foreseeable future, sufficient habitat to maintain the population of the migratory species on a long-term basis;*
- and*
- (iv) the distribution and abundance of the migratory species approach historic coverage and levels to the extent that potentially suitable ecosystems exist and to the extent consistent with wise wildlife management”*

Article I (2) o) notes that:

“Conservation status will be taken as “unfavourable” if any of the conditions set out in subparagraph n) of this paragraph is not met”.