Agreement on the Conservation of Albatrosses and Petrels

Fourth Meeting of the Population and Conservation Status Working Group

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IUNC Red List status of ACAP-listed species

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SUMMARY

Since the Agreement entered into force, assessment of conservation status has been undertaken using the criteria established by the IUCN Red List System. This system is widely recognised internationally, and the IUCN Criteria and Guidelines for their use are now used widely by multilateral environmental agreements, as well as by numerous governmental and non-governmental organisations. Such broad and extensive use has meant the criteria are regularly reviewed to ensure their applicability to a wide range of organisms, including long-lived species such as albatrosses and petrels.

When recently applying the criteria to an albatross species, we identified several issues that seem to potentially apply to many previous assessment of ACAP-listed species. We formed the view that for some species the IUCN Criteria may have been applied incorrectly because the detail provided in the *Guidelines for using the IUCN Categories and Criteria* (IUCN 2017) have not been taken into account when assessments have been undertaken. We provide examples of where this may have occurred, and suggest that resolution of the conservation status for all ACAP species would be best achieved by a comprehensive review of all taxa by the PaCSWG.

RECOMMENDATIONS

It is recommended that the PaCSWG:

1. Review information concerning the global threat status (IUCN Red List Category of Extinction Risk) for all ACAP listed species to ensure consistency and strict adherence to the IUCN Categories and Criteria (IUCN 2012) and the Guidelines for using the IUCN Categories and Criteria (IUCN 2014).
2. Convey the outcomes of the review to BirdLife International with recommendations for revisions, if necessary, to the global threat status (IUCN Red List Category of Extinction Risk).
3. Undertake intersessional work necessary to complete the conservation status review before the Fifth meeting of the PaCSWG.

1. INTRODUCTION

1.1. Background to the IUCN Red List System

The Terms of Reference for the Population and Conservation Status Working Group (PaCSWG) require the working group to, amongst other activities, oversee reviews and analyses of information, and produce assessments of the population and conservation status of listed and candidate ACAP species. Since the Agreement entered into force, assessment of conservation status has been undertaken using the criteria established by the IUCN Red List System

The IUCN Red List System is a hierarchical classification system developed to assess and highlight species of animals and plants under higher extinction risk. First conceived in 1964 and originally used by the IUCN's Species Survival Commission (SSC), the IUCN Red List System has set a global standard for species listing and conservation assessment efforts. For 50 years SSC has been evaluating the conservation status of species and subspecies on a global scale – highlighting those threatened with extinction and promoting their conservation.

Over time, IUCN has recognised that a more objective and scientific system for determining threat status was needed, as well as a more accurate system for use at the national and regional level. The IUCN Red List Categories and Criteria were reviewed in the early 1990s in a process that included extensive consultation and testing. This resulted in a more precise and quantitative approach that was adopted by IUCN in 1994. Since then, the Categories have become widely recognised internationally, and they are now used by multilateral environmental agreements (e.g. CMS), as well as by numerous governmental and non-governmental organisations. Such broad and extensive use has meant the criteria are regularly reviewed to ensure their applicability to a wide range of organisms, including long-lived species such as albatrosses and petrels, and species under intensive management. The most recent revision was in 2012 (IUCN 2012).

Guidelines for using the IUCN Categories and Criteria were last revised in March 2017 (IUCN 2017). It should be noted that for several years, the IUCN has not reviewed or revised the criteria themselves, but rather has refined the guidance around how to use them.

1.2. Description of the listing categories and criteria

IUCN (2014) recognises the following categories of threat:

Extinct (EX) – A taxon is Extinct when there is no reasonable doubt that the last individual has died.

Extinct in the Wild (EW) – A taxon is Extinct in the Wild when it is known only to survive in cultivation, in captivity or as a naturalised population (or populations) well outside the past range.

Critically Endangered (CR) – A taxon is Critically Endangered when the best available evidence indicates that it meets any of the criteria A to E for Critically Endangered (IUCN 2011, Table 2.1), and it is therefore considered to be facing an extremely high risk of extinction in the wild.

Endangered (EN) – A taxon is Endangered when the best available evidence indicates that is meets any of the criteria A to E for Endangered (IUCN 2011, Table 2.1), and it is therefore considered to be facing a very high risk of extinction in the wild.

Vulnerable (VU) – A taxon is Vulnerable when the best available evidence indicates that it meets any of the criteria A to E for Vulnerable (IUCN 2011, Table 2.1), and it is therefore considered to be facing a high risk of extinction in the wild.

Near Threatened (NT) – A taxon is Near Threatened when it has been evaluated against the criteria but does not qualify for Critically Endangered, Endangered or Vulnerable now, but is close to qualifying for or is likely to qualify for a threatened category in the near future.

Least Concern (LC) – A taxon is Least Concern when it has been evaluated against the criteria and does not qualify for Critically Endangered, Endangered, Vulnerable or Near Threatened. Widespread and abundant taxa are included in this category.

Data Deficient (DD) – A taxon is Data Deficient when there is inadequate information to make a direct, or indirect, assessment of its risk of extinction based on its distribution and/or population status. A taxon in this category may be well studied, and its biology well known, but appropriate data on abundance and/or distribution are lacking. Data Deficient is therefore not a category of threat.

Not Evaluated (NE) – A taxon is Not Evaluated when it is has not yet been evaluated against the criteria.

Listing to one of the above categories requires that a taxon be assessed against five quantitative criteria – meeting any one of these criteria qualifies a taxon for listing at that level of threat. The five criteria are described in detail in IUCN (2012) and IUCN (2017), and are:

A. Reduction in population size;

B. Restricted geographic range in the form of either in extent of occurrence or the area of occupancy;

C. Small population size and decline;

D. Very small or restricted population; and

E. Quantitative analysis showing a high probability of extinction.

The criteria can be applied at any taxonomic unit at or below the species level. They can also be applied at various geographic scales. The IUCN Red List Categories are intended to be an easily and widely understood system for classifying species at high risk of global extinction. The general aim of the system is to provide an explicit, objective framework for the classification of the broadest range of taxa according to their extinction risk.

2. APPLICATION OF THE CRITERIA TO ALBATROSSES AND PETRELS

BirdLife Australia, the Australian partner in the BirdLife International partnership, regularly assesses the conservation status of Australian bird taxa, leading to the provision of advice to BLI and the periodic publication of an Action Plan for Australian birds. In our role as members of BirdLife Australia's Threatened Species Committee, we recently responded to an invitation from BirdLife International to discuss the proposed revision to the global threat status of the shy albatross *Thalassarche cauta*. This process highlighted a number of issues that potentially seem to apply to many previous assessments of other albatross species. In particular, we

formed the opinion that the IUCN Criteria may have been applied incorrectly to some albatross species without due consideration of the guidelines (IUCN 2017). To illustrate this, we provide some examples below:

Criterion B2 Restricted geographic range

Shy albatross occurs on three small Tasmanian islands and the population is thought to be declining because of fishing. Atlantic yellow-nosed and waved albatross are in the same situation. All have declining populations and nest on a few islands, leading to the latter two being listed as Endangered and Critically Endangered, respectively, under B2ab(v). However, with respect to the application of Criterion B2, the guidelines (IUCN 2017) state:

"*The term 'location' defines a geographically or ecologically distinct area in which a single threatening event can* ***rapidly affect*** *all individuals of the taxon present. The size of the location depends on the area covered by the threatening event* …"

But later states:

"*When parts of the distribution are not affected by any threat, the following options will be appropriate under different circumstances: (a) number of locations is not used (i.e., the subcriteria that refer to the number of locations consequently are not met), especially if the unaffected area is more than half the taxon's range; (b) number of locations in the unaffected areas is set to the number of subpopulations in those areas, especially if there are several subpopulations; (c) the number of locations is based on the smallest size of locations in the currently affected areas; (d) the number of locations is based on the most likely threat that may affect the currently-unaffected areas in the future. In any case, the basis of the number of locations should be documented. In the absence of any plausible threat for the taxon, the term "location" cannot be used and the subcriteria that refer to the number of locations will not be met."*

The fishing threat is over a huge area, far exceeding AOO (Area of Extent) or EOO (Extent of Occurrence) thresholds, but "*The size of the location depends on the area covered by the threatening event.*" There are no plausible reasons why the breeding locations might be subject to "a single threatening event (fishing) [that] can **rapidly affect** all individuals of the taxon present". In such cases the following appears to be applicable: "**number of locations is not used (i.e., the subcriteria that refer to the number of locations consequently are not met**)".

Further discussions with Professor Resit Akcakaya, chair of the IUCN Red List Standards and Petitions Subcommittee, which develops guidelines for threatened and endangered species assessments, and evaluates petitions against the red-listing of these species, clarified our understanding that '*if there are no threats on the breeding areas*, then … "*considering the breeding islands as locations does not fit the criteria'*.

On this basis, Waved and Atlantic Yellow-nosed Albatrosses appear to be wrongly categorised under Criterion B, and the shy albatross would be Least Concern. As many albatross species are threatened by fishery bycatch, this criterion may also have been applied incorrectly in the assessment of other species.

Applying the Criteria under climate change

We see a number of proposals to list species following an assessment of the impacts of climate change, often with scant attention given to the IUCN guidelines on this topic (IUCN 2017, pp 82-97). There are a number of challenges in applying the criteria to species impacted by

global climate changes to thresholds or time horizons specified in the IUCN criteria. Climate change can affect populations via many mechanisms and thinking about how this will occur for a given taxa can clarify the parameters and criteria relevant for a Red List assessment. Relevant parameters for assessment under climate change include “very restricted distribution”, “plausibility and immediacy of threat”, “number of locations”, “severe fragmentation”, “continuing decline”, “extreme fluctuations”, and “population reductions”. The relevant criteria for future effects of climate change include A3, A4, B1, B2, C1, C2, D2 (VU), and E (IUCN 2017).

An increasing number of studies in recent years have focused on potential impacts on ACAP species of climatic variation, demonstrating effects of annual variation in sea surface temperature and marine productivity, and of global cycles (reviewed in Phillips et al 2016). Further work in this area is likely, potentially leading to projected impacts relevant to changes in Red List status, and ACAP would benefit from a clear understanding of interpreting the relevant guidelines for assessment of long-lived seabirds and applying them in a consistent manner for all ACAP-listed species.

3. SUGGESTED WAY FORWARD

Given the central role of ACAP in the conservation of albatrosses and petrels, and the access, sometimes privileged, to the latest information on populations, trends and threats, we see benefit in ACAP reviewing information concerning the global threat status for all ACAP listed species to ensure consistency and strict adherence to the Red List Categories and Criteria (IUCN 2012) and the Guidelines for using the IUCN Categories and Criteria (IUCN 2017). Such an assessment could be undertaken through intersessional work and be completed before the Fifth Meeting of the PaCSWG. The outcomes of the review should be conveyed to BirdLife International with recommendations for revisions, if necessary, to the global threat status (IUCN Red List Category of Extinction Risk).

REFERENCES

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