

Agreement on the Conservation of Albatrosses and Petrels

Fourth Meeting of Advisory Committee

Cape Town, South Africa, 22 - 25 August 2008

Process for Identification of ACAP Priorities for Albatross and Petrel Conservation

Author: Various

AC4 Doc 48 Agenda Item No. 9

Process for Identification of ACAP Priorities for Albatross and Petrel Conservation

Authors: AC Chair and Vice-Chair, Working Group Conveners, Secretariat Purpose

Article IX (6)d) of the Agreement requires the Advisory Committee (AC) to prepare a synthesis of the information that Parties submit to the AC in accordance with Article VII(1)c), and an assessment of the status and trends of albatross and petrel populations. The Species Assessments will provide the AC with information with which to carry out the required assessment of the status and trends of albatross and petrel populations and, importantly, to also identify those conservation issues at a population and/or species level that need to be addressed as a high priority. Action 1.1.3 in the ACAP Action Plan requires that the Secretariat co-ordinate the development, harmonisation and implementation of conservation strategies for particular species of albatross or petrel. There is also a requirement for the Advisory Committee to identify gaps in information, with a view to addressing these in future priorities (Action Plan Item 5.2). This paper outlines a process that could be adopted to identify both gaps and also to prioritise conservation strategies. We recommend that the results of this analysis be incorporated into the Advisory Committee's Report to MoP3 on Implementation of the Agreement.

Methods

The current population numbers and general trends for each of the 26 species currently covered by the Agreement are summarised in Attachment A.

The information compiled in the Species Assessments and the ACAP database will be used to examine each species against four key criteria: (1) population trend, (2) demographic parameters, (3) threats at breeding sites, and (4) threats at sea.

The analyses will be conducted at the level of breeding site/population. This approach will better focus potential recommendations or conservation actions and strategies, and will avoid duplicating existing global evaluations, such as the IUCN Red List of Threatened Species. It will also assist each Party to the Agreement to prioritise conservation and research efforts for species or sites under their jurisdiction and facilitate coordinated efforts between Parties and Range States for the development of regional programmes.

The following tables are suggested as a framework for collating information for the analysis. Amsterdam, Tristan and Shy albatrosses are used throughout the document to demonstrate the approach.

Species analysis

(1) Population trend at breeding site

Key questions: Are sufficient data available to assess trends?

Is the trend information current (within 10 years)?

Is the population increasing, declining or stable?
Is the population at critically low levels (less than 50(?) pairs)?

Priority would be given to declining populations, critically low populations, or those with insufficient data.

Table 1. Population trends (with trend period) and percentage of the population at that site on which the trend is based for Amsterdam, Tristan and Shy albatrosses.

Species	Breeding site	Annual breeding pairs	Trend	% of population assessed
Diomedea amsterdamensis	Amsterdam Island	26	▲ (1983-2003)	100
Diomedea	Gough Island	1 763	▼ (?)	?
dabbenena	Inaccessible Island	1	_	-
Thalassarche	Albatross Island	5 025	▲ (1999-2007)	100
cauta	Mewstone	9 000 – 11 000	?	-
	Pedra Branca	220	▼ (1993-2007)	100

(2) Demographic parameters at breeding sites

Key questions: Have any demographic data been collected?

Is the estimate current (within 10 years)?

Is mean juvenile/immature or adult survival lower than the minimum needed to maintain/increase the population, or has survival increased or

decreased recently?

Priority would be given to populations with low or decreased juvenile/adult survival, or those with insufficient data.

Table 2. Survival rates (and study period) estimated for juvenile/immature and adult individuals of Amsterdam, Tristan and Shy albatrosses at different breeding sites.

Species	Breeding site	Juvenile/ immature survival	Change in survival	Adult survival	Change in survival	% of population assessed
Diomedea amsterdamensis	Amsterdam Island	70.4%		95.7% (1983- 1993)		
Diomedea	Gough Island	In progress	-	91% (1985-2007)		
dabbenena	Inaccessible Island	-	-	-	-	-
Thalassarche	Albatross Island	In progress	-	In progress	-	
cauta	Mewstone	No data	-	No data	-	-
	Pedra Branca	No data	-	No data	-	-

(3) Threats at breeding sites

Key questions: What levels (low, medium, high) of threats impact the population?

What number of threats impact the population?

Priority would be given to populations facing one or more threat of high level.

Table 3. Threats at different breeding sites for Amsterdam, Tristan and Shy albatrosses. Level of threat as H= high, M= medium, L= low

Species Breeding													Th	reat	Le	/el											
	site	Recreation/tourism	Military action	Science	Hunting of adults or chicks	Egg collection	Fire	Flood	Landslide	Toxins - natural	Tsunami	Volcanic activity	Sea-level rise	Pathogen	Parasite	Predation by alien species	Plastics	Toxins - man made	Onshore oil	Increased competition with native species	Habitat destruction by native species	Habitat destruction by alien species	Agriculture	Infrastructure development	Vegetation encroachment	Aquaculture	Extraction
Diomedea amsterdamensis	Amsterdam Island													Н		Н											
Diomedea	Gough Island															Н											
dabbenena	Inaccessible Island																										
Thalassarche	Albatross Island													L													
cauta	Mewstone																										
	Pedra Branca							Н												Н							

(4) Threats at sea

Key question: Is the species or population known to or likely to be killed in a range of fishing operations, or as a result of direct take, or is it known to be negatively impacted by plastic ingestion?

Priority would be given to species or population known to be killed or negatively impacted by threats at-sea.

N.B. Other threats in this category (e.g. climate-induced oceanographic change, competition with (or ecosystem changes resulting from) human fisheries, chemical pollution) are currently not well defined/understood or cannot be addressed, and will not be assessed here.

Table 4. Threats at sea for different populations and species, identified by breeding sites where possible..

Species	Breeding site	Industrial longlining	Artisanal longlining	Industrial trawling	Artisanal trawling	Other fishing operations	Direct take	Plastic ingestion
Diomedea amsterdamensis	Amsterdam Island	likely						
Diomedea		known		likely	likely			
dabbenena	Gough Island							
	Inaccessible Island							
Thalassarche								
cauta	Albatross Island	known		known				
	Mewstone	known		known				
	Pedra Branca	likely		likely				

Priority Species/Populations

Summarise problems and data gaps for each population (Table 5).

Assign weighted values as agreed to each issue or problem category and calculate a "Priority Score" for each breeding site.

In the example below, no data or data >10 yrs old =1; declining population, critically low population, low or declining survival, 1 known marine threat, 1 high breeding site threat =2 (these categories could be separated further, with different threats attracting different values).

Populations with the highest score are of highest priority:

Table 5. Analysis combining Tables 1-4 to identify conservation issues of high priority.

Species	Breeding site	Population size	Trend	Juvenile survival low or change in survival	Adult survival low or change in survival	No. of breeding site threats	Marine threats	Priority Score?
Diomedea amsterdamensis	Amsterdam Island	Critically low		low	Data >10 yrs old	2H		9
Diomedea dabbenena	Gough Island		declining	In progress	low	1H	1 known	8
	Inaccessible Island		-	-	-			0
Thalassarche cauta	Albatross Island			In progress	In progress		2 known	4
	Mewstone		No data	No data	No data		2 known	7
	Pedra Branca		declining	No data	No data	2H		8

Once priority populations are identified, recommend actions or conservation measures to the Parties.

Future applications

The proposed process will not only identify conservation priorities but will draw attention to any existing data gaps at the breeding site level. Addressing any deficiencies in data can then be prioritised to further aid conservation efforts.

The synthesis report will also constitute a baseline dataset against which future progress and effectiveness of the Agreement could be assessed, in effect providing the basis for developing performance indicators to measure the success of the Agreement.

Recommendation

That the Advisory Committee discusses the merits of using this approach to identify the priority conservation issues that need to be addressed for species listed under the Agreement.

Attachment A

Summary of Status of ACAP Albatross and Petrel species - 2008

	Population decline	Restricted breeding range	Limited population size	Decline in habitat	Endemic to single country	No subpopulations	Annual breeding pairs	Breeding Frequency	Current population trend
CRITICALLY ENDANGER	RED								
Chatham albatross		*		*	New Zealand	1	4 575	Α	stable
Amsterdam albatross	*	*	*		France	1	26	В	increasing
Waved albatross	*	*		*	Ecuador	2	< 9 600	Α	decreasing
Tristan albatross	*	*			United Kingdom	1	1 763	В	decreasing
ENDANGERED									
Northern royal albatross	*	*		*	New Zealand	3	6 500 - 7 000	В	decreasing
Black-browed albatross	*					7	530 000	Α	decreasing
Atlantic yellow-nosed	*				United Kingdom	1	26 600 - 40 600	Α	decreasing
albatross					<u> </u>				
Indian yellow-nosed albatross	*					4	32 580	Α	decreasing
Sooty albatross	*					5	12 500-19 000	Α	decreasing
VULNERABLE		'				l			J
Wandering albatross	*					5	8 050	В	decreasing
Antipodean albatross	?	*			New Zealand	3	11 000	В	unknown
Southern royal albatross		*			New Zealand	2	8 400	В	stable
Salvin's albatross		*			New Zealand	2	30 750	Α	stable
Campbell albatross		*			New Zealand	1	23 500	Α	stable
Grey-headed albatross	*					7	92 300	В	decreasing
White-chinned petrel	*					8	>195 855-333 855#	Α	decreasing
Spectacled petrel		*			United Kingdom	1	10 000	Α	increasing
Black petrel		*			New Zealand	1	1 700	Α	stable
Westland petrel		*			New Zealand	1	c. 5 000	Α	unknown
NEAR-THREATENED									
Buller's albatross		*			New Zealand	3	32 000	Α	Stable?
White-capped albatross	?	*			New Zealand	2	110 000	?	unknown
Shy albatross	?	*			Australia	3	12 585	Α	Increasing?
Light-mantled albatross	?					6	19 000 - 24 000	В	unknown
Northern giant petrel						10	14 000	Α	Increasing
Southern giant petrel						10+	37 000	Α	increasing
Grey petrel	?					9	?? 100 000's	Α	unknown

[#] current estimate for Crozet, Kerguelen and Falklands (Malvinas) only