

RECOVERY OUTLINE

Light-mantled Albatross

1	Family	Diomedidae
2	Scientific name	<i>Phoebastria palpebrata</i> (J. R. Forster, 1785)
3	Common name	Light-mantled Albatross
4	Conservation status	
	Australian breeding population:	Vulnerable: A2d, D2
	Population visiting Australian territory:	Vulnerable: A2d

5 Reasons for listing

On the basis of limited evidence of decrease, trends in other albatross species and the extended generation time, it is considered highly likely that both the Australian and the global population will decrease by 20-50% over the next three generations (120 years): Vulnerable: A2) as a result of fishing bycatch (d), although officially listed as Data Deficient. The Australian population, which is assumed to be genetically isolated so is assessed independently of the global status (as per Gärdenfors *et al.*, 1999), also breeds at only two locations (Vulnerable: D2).

Australian breeding colonies	Estimate	Reliability
Extent of occurrence	5,000,000 km ²	medium
trend	stable	medium
Area of occupancy	40 km ²	medium
trend	stable	medium
No. of breeding birds	4,000	low
trend	stable	low
No. of sub-populations	2	high
Largest sub-population	3,300	low
Generation time	40 years	medium
Global population share	7 %	high
Level of genetic exchange	low	medium

6 Intraspecific taxa

None described.

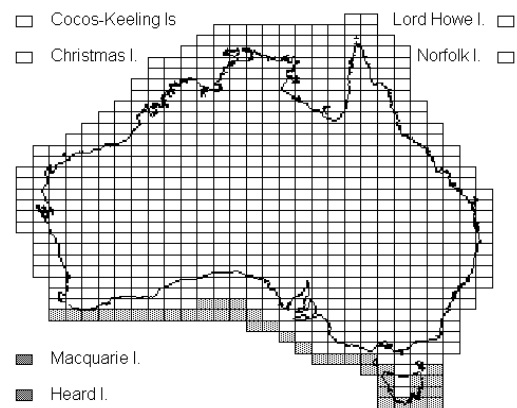
7 Past range and abundance

In Australian territory, breeding on Heard and Macquarie Is (Marchant and Higgins, 1990, Woehler, 1991, Gales, 1998). Elsewhere, breeding on islands in southern Pacific, Indian and Atlantic Oceans (Marchant and Higgins, 1990, Gales, 1998). Circumpolar foraging range, generally south of 35°S, but not infrequently reaching subtropical latitudes. Breeding and non-breeding birds common visitors to the open ocean south and west of Tasmania (Marchant and Higgins, 1990).

8 Present range and abundance

Current global population estimated at 140,000 individuals, with 21,600 pairs breeding annually

(Gales, 1993, 1998, EABG, 1999). Sub-population at Macquarie I. 1,000-1,150 pairs in 1992-1993 (Terauds and Hume, 1997) and at Heard I. was 200-500 pairs in 1954 but has not been surveyed since (Downes *et al.*, 1959). Insufficient information to determine overall population trends but surveys of the small colony on Possession I. (Crozet Is) and at-sea observations both suggest population size has decreased (Woehler, 1996, Weimerskirch and Jouventin, 1998).



9 Ecology

Probably among the longest-lived of all birds (Croxall and Gales, 1998), the Light-mantled Albatross breeds every two or even three years in dispersed pairs or small colonies among the steep tussock grassland and on cliffs of subantarctic islands (Marchant and Higgins, 1990). It feeds on squid, crustaceans and fish and associates with fishing vessels (Gales, 1998, Weimerskirch, 1998).

10 Threats

Although data are available to document a decrease only on one island, Light-mantled Albatrosses are likely to be killed by longlines throughout their global range at rates unlikely to be sustainable (Gales, 1998), particularly when they move north during the non-breeding season (Weimerskirch, 1998). Breeding success and/or nest-site selection have probably been adversely affected by cats and an elevated number of Subantarctic Skuas *Catharacta lonnbergi* on Macquarie I. where human disturbance could also be a problem (EABG, 1999).

- 11 Information required
- 11.1 Determine diet and foraging areas of breeding sub-populations.
- 11.2 Develop genetic profiles for breeding sub-populations.
- 11.3 Determine acceptable levels of at-sea threats.
- 12 Recovery objectives
- 12.1 Reduce at-sea threats to acceptable levels.
- 12.2 Reduce land-based threats to acceptable levels.
- 12.3 Obtain global agreement on conservation measures required.
- 12.4 Promote public awareness of the conservation needs of albatrosses.
- 13 Actions completed or under way
- 13.1 A Threat Abatement Plan (TAP) to minimise fishing bycatch has been prepared (EABG, 1998).
- 13.2 Effective mitigation techniques have been developed and are being improved.
- 13.3 Bycatch rates in the AFZ and the success of mitigation measures are monitored and the results quickly analysed.
- 13.4 Measures known to be effective in mitigating seabird bycatch within the AFZ are promoted by legislation, a code of practice and education programs.
- 13.5 Continued monitoring of breeding population size and success.
- 13.6 Ongoing feral animal control on Macquarie I.
- 13.7 Tourists on breeding islands are managed to prevent disturbance.
- 13.8 A Recovery Plan has been written and a Recovery Team is in place.
- 14 Management actions required
- 14.1 Limit further construction on breeding islands.
- 15 Organisations responsible for conservation
- Australian Antarctic Division, Environment Australia, Tasmanian Parks and Wildlife Service.
- 16 Other organisations involved
- Antarctic Science Advisory Committee, Australian Department of Foreign Affairs and Trade, Australian Agriculture, Fisheries and Forestry - Australia, Australian Fisheries Management Authority, Convention for Conservation of Migratory Species of Wild Animals, Ecologically Related Species Working Group of the Commission for the Conservation of Southern Bluefin Tuna, Food and Agricultural Organization of the United Nations and its Committee on Fisheries, Incidental Mortality Arising from Longline Fishing – ad hoc Working Group of the Working Group on Fish Stock Assessment of Convention for the Conservation of Antarctic Marine Living Resources, Tasmanian Fisheries Service, professional fishing industry groups.

17 Staff and financial resources required for recovery to be carried out

<i>Staff resources required 2001-2005</i>	1.0	<i>Project Officer (international liaison)¹</i>
	2.0	<i>Project Officer (diet, foraging range)²</i>
	3.0	<i>Technical Officers (fisheries observers)¹</i>
	1.0	<i>Technical Officer (monitoring)²</i>
	1.0	<i>Technical Officer (ferals)³</i>
	1.0	<i>Technical Officer (monitoring)³</i>
	1.0	<i>Extension Officer¹</i>

Financial resources required 2001-2005

<i>Action</i>	<i>Conservation agencies</i>	<i>Other funding sources</i>	<i>Total</i>
<i>Develop improved fishing bycatch mitigation¹</i>	\$10,500	\$10,500	\$21,000
<i>Monitor bycatch rates in the AFZ and success of mitigation measures¹</i>	\$3,600	\$8,600	\$12,200
<i>Analysis of annual bycatch data¹</i>	\$8,300	\$0	\$8,300
<i>Educate fishers in the AFZ in mitigation techniques¹</i>	\$6,300	\$5,400	\$11,700
<i>Inform national fora about the TAP¹</i>	\$2,300	\$0	\$2,300
<i>Inform international fora about the TAP and pursue international threat abatement¹</i>	\$3,900	\$0	\$3,900
<i>Maintain currency of TAP and report annually¹</i>	\$2,100	\$0	\$2,100
<i>Demographic and foraging studies²</i>	\$64,000	\$28,300	\$92,300
<i>Monitoring breeding sub-populations³</i>	\$21,900	\$0	\$21,900
<i>Feral animal control on Macquarie I.³</i>	\$277,900	\$0	\$277,900

<i>Research on plastics, parasites, disease and genetics</i> ⁴	\$7,000	\$7,000	\$14,000
<i>Research on plastic pollution</i> ⁴	\$6,500	\$6,500	\$13,000
<i>Research on genetics</i> ⁵	\$500	\$500	\$1,000
<i>Managing recovery process</i> ⁵	\$4,600	\$1,800	\$6,400
Total	\$419,400	\$68,600	\$488,000

- 1 Costs for TAP actions divided amongst all 20 albatrosses, 2 giant-petrels, White-chinned Petrel and Grey Petrel; costs to fishing industry assumed to be offset by improved catch of fish
- 2 Costs for diet and foraging range studies on Macquarie I divided among Rockhopper Penguin, four breeding albatrosses and two giant-petrels; Heard I. divided among Rockhopper Penguin, three albatrosses and Southern Giant-Petrel
- 3 Costs of Macquarie I. monitoring and feral animal control shared among 19 threatened taxa; Heard I. monitoring divided among 17 taxa
- 4 Costs shared among 2 penguins, 2 giant-petrels, Wandering, Black-browed, Grey-headed, Shy and Light-mantled Albatrosses
- 5 Costs shared among 20 albatrosses and 2 giant-petrels

18 Bibliography

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Comments received from

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