RECOVERY OUTLINE

Shy Albatross

1 Family Diomedeidae

2 Scientific name Thalassarche cauta (Gould, 1841)

3 Common name Shy Albatross

4 Conservation status Vulnerable: A2d, D2

5 Reasons for listing

The population size of this species is likely to decrease by at least 20% over the next three generations (45 years: Vulnerable: A2) as a result of fishing bycatch (d). Breeding occurs at fewer than five locations (Vulnerable: D2).

	Estimate	Reliability
Extent of occurrence	5,000,000 km²	high
trend	stable	high
Area of occupancy	6 km^2	high
trend	stable	high
No. of breeding birds	25,000	medium
trend	increasing	medium
No. of sub-populations	3	high
Largest sub-population	14,000	medium
Generation time	15 years	medium

6 Infraspecific taxa

Separation of *T. steadi* from *T. cauta* (Robertson and Nunn, 1998) is controversial, but adopted here pending publication of genetic analysis.

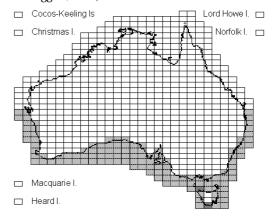
Past range and abundance Endemic to Australian territory, breeding on Albatross I., Bass Strait, and Mewstone and Pedra Branca, off southern Tasmania (Marchant and Higgins, 1990, Gales, 1998). Non-breeding adults rarely travel more than 700 km from their breeding island, and breeding birds rarely more than 200 km, but immatures from Mewstone migrate to waters as far as South Africa, and those from Albatross I. range as far west as Fremantle, W. A., and as far north as southern Queensland (Brothers *et al.*, 1997, 1998). Formerly 20,000 pairs bred on Albatross I., but this was greatly reduced in the late 18th C, to about 300 pairs present in early 20th century, but slowly recovering (Johnstone *et al.*, 1975, Gales, 1998).

8 Present range and abundance Breeding distribution unchanged, with 5,000 pairs breeding Albatross I., 7,000 on Mewstone and 250 on Pedra Branca (Croxall and Gales, 1998, Gales, 1998). Current global population estimated at 55,000 to 60,000 individuals, including immatures (Gales, 1998).

9 Ecology

The Shy Albatross nests annually in colonies on three rocky islands and feeds in waters over the continental

shelf, including in harbours and bays. It follows fishing vessels in flocks (Marchant and Higgins, 1990, Gales, 1998, Brothers *et al.*, 1998). The main foods taken are fish, cephalopods, crustaceans and tunicates (Marchant and Higgins, 1990).



10 Threats

Although numbers of Shy Albatross have been increasing through the 20th century, the species is still vulnerable to deaths associated with commercial fishing (Gales, 1998). Around 10% of the feeding ground off Tasmania and 100% of that used by birds from Pedra Branca and Mewstone are also used by longline fishing vessels (Brothers et al., 1998) and the species is among the most frequently killed by longlines in the Australian Fishing Zone (AFZ; Brothers, 1991, Gales, 1993). Such mortality rates are unlikely to be sustainable. Trawl fisheries throughout the species' range also pose a threat to Shy Albatrosses, which drown if they get trapped in the nets or trawl gear or are killed by collisions with cables (Adams, 1992, Gales, 1993, Brothers et al., 1998). They are also shot off Tasmania to reduce bait stealing (T. Reid) and for bait and food in South African waters (Adams, 1992, EABG, 1999). Avian pox virus, probably transmitted by parasitic fleas and ticks, also kills an unknown number of birds (Johnstone et al. 1975, EABG, 1999). Commercial overexploitation of squid or fish reserves in Bass Strait could pose a threat to Shy Albatrosses in the future by direct competition for food (Gales, 1998). Formerly killed for feathers (Johnstone et al., 1975).

11 Information required

11.1 Study of diet at Mewstone and Pedra Branca.

- 11.2 Determine movements and foraging areas of Mewstone and Pedra Branca adults and of immature s from all colonies using satellite telemetry.
- 11.3 Identify and determine the impact of avian diseases and parasites.
- 11.4 Compare genetics between Australian subpopulations and between Australian birds and closely related New Zealand birds.

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.
- 12.5 Continue current rate of increase in breeding sub-populations.

13 Actions completed or under way

- 13.1 Continued ground-based monitoring of breeding sub-populations.
- 13.2 A Threat Abatement Plan (TAP) to minimise fishing bycatch has been prepared (EABG, 1998).
- 13.3 Effective mitigation techniques have been developed and are being improved.
- 13.4 Bycatch rates in the AFZ and the success of mitigation measures are monitored and the results quickly analysed.

- 13.5 Measures known to be effective in mitigating seabird bycatch within the AFZ are promoted by legislation, a code of practice and education programs.
- 13.6 Monitoring of breeding sub-populations using aerial photography and studies of demography.
- 13.7 A Recovery Plan has been written and a Recovery Team is in place.
- 14 Management actions required None

15 Organisations responsible for conservation

Environment Australia, Tasmanian Parks and Wildlife Service.

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

Staff resources required 2001-2005 1.0 Project Officer (international liaison)¹

1.0 Extension Officer¹

3.0 Technical Officers (fisheries observers)¹

0.2 Technical Officer (monitoring and research)

Financial resources required 2001-2005

Action	Conservation agencies	Other funding sources	Total
Develop improved fishing bycatch mitigation ¹	\$10,500	\$10,500	\$21,000
Monitor bycatch rates in the AFZ and success of mitigation measures ¹	\$3,600	\$8,600	\$12,200
Analysis of annual bycatch data ¹	\$8,300	\$0	\$8,300
Educate fishers in the AFZ in mitigation techniques 1	\$6,300	\$5,400	\$11,700
Inform national fora about the TAP^{I}	\$2,300	\$0	\$2,300
Inform international fora about the TAP and pursue international threat abatement I	\$3,900	\$0	\$3,900
Maintain currency of TAP and report annually I	\$2,100	\$0	\$2,100
Continue monitoring breeding sub-populations	\$25,000	\$0	\$25,000

Determine movements of Pedra Branca sub-population	\$45,000	\$0	\$45,000
Demography and foraging studies	\$15,000	\$0	\$15,000
Research on plastic pollution, parasites and disease ²	\$6,500	\$6,500	\$13,000
Research on genetics ³	\$500	\$500	\$1,000
Total	\$129,000	\$31,500	\$160,500

- 1 Costs shared 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 shared among 2 penguins, 2 giant-petrels, Wandering, Black-browed, Grey-headed, Shy and Light-mantled Albatrosses (although Shy Albatrosses are treated separately from other seabirds, the nature of the research and the expertise required is the same)
- 3 Costs shared among 20 albatrosses and 2 giant-petrels

18 Bibliography

Adams, N. J.1992. *The Distribution, Population Status and Conservation of Southern African Seabirds.* Stichting Greenpeace Council, Amsterdam.

Brothers, N. P. 1991. Approaches to reducing albatross mortality and associated bait loss in the Japanese long-line fishery. *Biol. Conserv.* 55:255-268.

Brothers N. P., Reid, T. and Gales, R. 1997. At sea distribution of Shy Albatrosses *Diomedea cauta cauta* derived from records of band recoveries and colourmarked birds. *Emu* 97: 231-239.

Brothers, N. P., Gales, R., Hedd, A. and Robertson, G. 1998. Foraging movements of the Shy Albatross *Diomedea cauta* breeding in Australia: implications for interactions with longline fisheries. *Ibis* 140: 446-457.

Croxall, J. P. and Gales, R. 1998. An assessment of the conservation status of albatrosses. Pp. 46-65. in *The Albatross: Biology and Conservation*. G. Robertson, and R. Gales (eds). Surrey Beatty and Sons, Chipping Norton.

EABG 1998. Threat Abatement Plan for the incidental catch (or by-catch) of seabirds during oceanic longline fishing operations. Environment Australia Biodiversity Group, Canberra.

EABG 1999. Draft Recovery Plan for Albatrosses and Giant Petrels. Environment Australia Biodiversity Group, Canberra.

Gales, R. 1993. *Co-operative mechanisms for the conservation of Albatrosses*. ANCA. Tasmanian Government Printer, Hobart.

Gales, R. 1998. Albatross populations: status and threats. Pp. 20-45 in *The Albatross: Biology and Conservation*. G. Robertson and R. Gales (eds). Surrey Beatty and Sons, Chipping Norton.

Johnstone, G. W., Milledge, D. and Dorward, D. F.1975. The White-capped Albatross of Albatross Island: numbers and breeding behaviour. *Emu* 75:1-11.

Marchant, S. and Higgins, P. J. (eds) 1990. *The Handbook of Australian, New Zealand and Antarctic Birds.* Oxford University Press, Melbourne.

Robertson, C. J. R. and Nunn, G. B. 1998. Towards a new taxonomy for albatrosses. Pp. 13-19 in *The Albatross: Biology and Conservation*. G. Robertson and R. Gales (eds). Surrey Beatty and Sons, Chipping Norton.

Comments received from

Barry Baker, Nigel Brothers, Rosemary Gales, Tim Reid.