

TAXON SUMMARY

Red-tailed Tropicbird

1	Family	Phaethontidae
2	Scientific name	<i>Phaethon rubricauda</i> Boddaert, 1783
3	Common name	Red-tailed Tropicbird
4	Conservation status	Near Threatened: c

5 Reasons for listing

The population contains fewer than 10,000 mature individuals and a continuing decline is likely (Vulnerable: C), but there are 16 sub-populations (so not C2b), with the largest population being of over 1,000 individuals (so not C2a). There has been a decrease in density over half the species' range (Near Threatened: c), ie. in south-west Australia and on Christmas I. Global status of the species is Least Concern. As site fidelity is assumed to be high, and thus immigration rate probably low, national status of breeding population is determined independently of global status (as per Gärdenfors *et al.*, 1999).

Australian Fishing Zone	Estimate	Reliability
Extent of occurrence	6,000,000 km ²	medium
trend	stable	medium
Area of occupancy	50 km ²	medium
trend	stable	medium
No. of breeding birds	4,000	low
trend	decreasing	low
No. of sub-populations	16	medium
Largest sub-population	2,800	medium
Generation time	10 years	low
Global population share	20 %	medium
Level of genetic exchange	low	medium

6 Intraspecific taxa

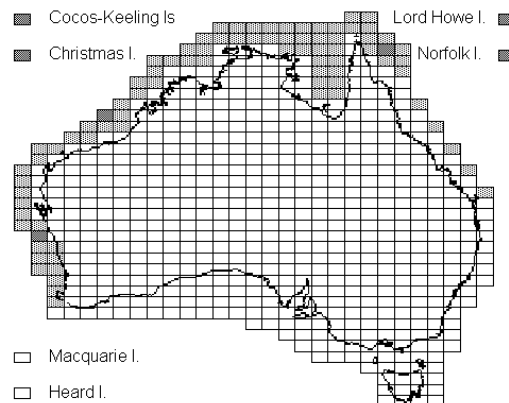
None described.

7 Past range and abundance

Breeding on numerous islands in Pacific and Indian Oceans. In Australian territory, breeding on Ashmore Reef, Rowley Shoals, Pelsaert I., Rat I., Rottnest I., Sugarloaf Rock (up to 34 pairs), and on the mainland at Busselton, W. A., Raine I., Lady Elliot I., Herald I., Coringa I. and Diamond I., Qld, Lord Howe I. and Ball's Pyramid, N. S. W., Cocos-Keeling, Christmas I., Norfolk I. and Phillip I. (Marchant and Higgins, 1990, Burbidge *et al.*, 1996). Foraging throughout central Pacific and Indian Oceans, being seen regularly off western and northern coast between Cape Naturaliste, W. A. and Cape Weymouth, Qld, and east of Great Barrier Reef, and infrequently elsewhere along the coast. Storm-wrecked birds reported in inland northern New South Wales (Marchant and Higgins, 1990).

8 Present range and abundance

No recent breeding records from Rat I., Rottnest I. or Busselton, and numbers breeding on Sugarloaf Rock have declined from up to 34 pairs to just a few (Burbidge *et al.*, 1996). At Pelsaert I., breeding recorded in 1988 (1 pair) and 1999 (3 pairs), but not in the intervening years (A. A. Burbidge). Largest sub-populations 1,400 pairs at Christmas I., about 200 pairs at each of Lord Howe I. and Norfolk I., and 250-300 pairs on North-east Herald Cay (Marchant and Higgins, 1990, B. Baker).



9 Ecology

The Red-tailed Tropicbird nests alone or in loose colonies on inaccessible islands, stacks, atolls, cays or coastal cliffs. It is a pelagic feeder, preferring waters of intermediate salinity and temperature, mainly taking fish and cephalopods (Marchant and Higgins, 1990).

10 Threats

The largest sub-population, on Christmas I., is threatened by Yellow Crazy Ants *Anoplolepis gracilipes*, which occupy about 15-18% of the island (D. Slip) and are probably spreading rapidly. These ants are particularly prevalent on the terraces where Red-tailed Tropic-birds nest and are likely to kill nestlings (O'Dowd *et al.*, 1999, D. O'Dowd). Outside Australian Territory, the Red-tailed Tropicbird is harvested for food. Predation by cats, rats, or an inflated numbers of gulls, human interference, and mining disturbance have all been implicated in nest failures and/or desertion of breeding colonies (Marchant and Higgins, 1990). The decline in south-western Australia is unexplained, but may be related to variations in the Leeuwin Current. Banding studies indicate a high

turnover in individuals attempting to breed on Sugarloaf Rock, and no successful recruitment (A. H. Burbidge).

11 Recommended actions

- 11.1 Refine and institute techniques for controlling the Yellow Crazy Ant on Christmas I.
- 11.2 Determine cause of decline in south-western Australia.
- 11.3 Continue monitoring major breeding colonies at Christmas, Lord Howe, Norfolk and Raine Is, and North-east Herald Cay.
- 11.4 Maintain strict quarantine at nesting islands.

12 Bibliography

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

O'Dowd, D. J., Green, P. T. and Lake, P. S. A. 1999. Status, impact and recommendations for research and management of exotic invasive ants in Christmas Island National Park. Report to Environment Australia.

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