RECOVERY OUTLINE

Christmas Island Imperial-Pigeon

1	Family	Columbidae
2	Scientific name	*Ducula whartoni* (Sharpe, 1887)
3	Common name	Christmas Island Imperial-Pigeon
4	Conservation status	Critically Endangered: A2ce

5 Reasons for listing

The population size of this subspecies is expected to decrease by up to 80% over the next three generations (12 years; Critically Endangered: A2) as a result of a decline in habitat quality (c) and the current rate of spread of introduced ants (e).

	Estimate	*Reliability*
Extent of occurrence	*137 km²*	*high*
trend	*stable*	*high*
Area of occupancy	*100 km²*	*high*
trend	*decreasing*	*medium*
No. of breeding birds	*1,000*	*low*
trend	*decreasing*	*medium*
No. of sub-populations	*1*	*high*
Generation time	*5 years*	*low*

6 Infraspecific taxa

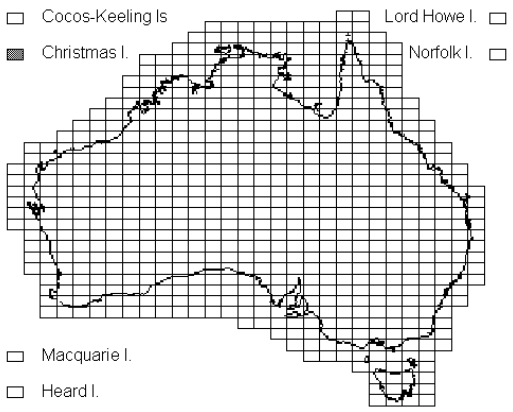
None described.

7 Past range and abundance

Endemic to Christmas I., Indian Ocean. Numbers apparently fluctuated, and possibly decreased, between island's settlement in 1888 and mid-1970s, but no hard data available (Crome, 1987, Stokes, 1988). Estimated population 10-100 birds breeding pairs in 1975 (van Tets, 1975). Unsuccessfully introduced to Cocos-Keeling Is at end of 19th century (Stokes *et al.*, 1984).

8 Present range and abundance

Range as above. Although about a third of its habitat cleared for phosphate mining, species is widespread and considered very common (Stokes, 1988).



9 Ecology

The Christmas Island Imperial-Pigeon is found mainly on the inland plateau in rainforest and, to some extent, in secondary regrowth dominated by the introduced Japanese Cherry *Muntingia calabura* (Crome, 1987, Stokes, 1988). It nests in the top of rainforest trees and other dense vegetation (Hicks and Yorkston, 1982), and feeds on rainforest and other fruits, as well as buds and leaves (Higgins and Davies, 1996).

10 Threats

In the past, numbers of Christmas Island Imperial Pigeon have been reduced by habitat clearance and hunting (Crome, 1987, Stokes, 1988). About one-third of the pigeon's preferred plateau forest was cleared for phosphate mining before this ceased in 1987, though this loss has been partly offset by introduction of the Japanese Cherry, which flourishes on many former mine fields and other disturbed areas, and provides a rich food source for much of the year (Stokes, 1988). Hunting continued after it was prohibited in 1977 (Stokes, 1988), but is now less prevalent (Higgins and Davies, 1996). Failure of the introduction to Cocos-Keeling Is has been attributed to hunting and/or lack of suitable food trees (Stokes *et al.*, 1984). The species is now threatened by the spread of the introduced Yellow Crazy Ant *Anoplolepis gracilipes*, which is thought to occupy 15-18% of the island (D. Slip), and may still be spreading rapidly. This ant kills Red Crabs *Gecaroidea natalis*, the dominant life-form, farms scale insects that damage trees, and probably kills nestling birds (O Dowd *et al.*, 1999).

11 Information required

11.1 Refine techniques for continually Yellow Crazy Ant.

12 Recovery objectives

12.1 Maintain existing population.

12.2 Control Yellow Crazy Ant.

13 Actions completed or under way

13.1 Contingency plans are being developed to establish a captive population on mainland Australia.

13.2 A three year research program has been initiated and staff have been dedicated to ant control.

14 Management actions required

14.1 Control abundance and spread of Yellow Crazy Ant.

14.2 Pending control, establish a captive population with the aim of reintroduction once ant control has been achieved.

15 Organisations responsible for conservation

Environment Australia (Wildlife Australia Branch; Parks Australia North; Christmas Island Rainforest Rehabilitation Program).

16 Other organisations involved

Birds Australia, Christmas Island Phosphates Pty. Ltd., Christmas Island Shire Council, Monash University, Australian zoos.

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

Staff resources required 2001-2005

	1.0	*Project Officer (crazy ants)* [1]
	4.0	*Technical Officer (crazy ants)* [1]

Financial resources required 2001-2005

Action	*Conservation agencies*	*Other funding sources*	*Total*
Control crazy ants [1]	$250,000	$12,000	$262,000
Establish a captive population [2]	$10,000	$50,000	$60,000
Total	$260,000	$62,000	**$322,000**

1 Costs shared with all 10 threatened Christmas I. taxa
2 Costs shared among Brown Goshawk (Christmas I.), Christmas Island Imperial-Pigeon, Emerald Dove (Christmas I.), Christmas Island Hawk-Owl, Island Thrush (Christmas I.), Christmas Island White-eye

18 Bibliography

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Text adapted from

Stokes (1992).

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