

## RECOVERY OUTLINE

# Norfolk Island Green Parrot

1	Family	Psittacidae
2	Scientific name	<i>Cyanoramphus cookii</i> (G. R. Gray, 1859)
3	Common name	Norfolk Island Green Parrot
4	Conservation status	Endangered: D

### 5 Reasons for listing

There are very few Norfolk Island Green Parrots (Endangered: D), although positive population and habitat trends are being sustained by concerted conservation management.

	Estimate	Reliability
Extent of occurrence	12 km <sup>2</sup>	medium
trend	stable	high
Area of occupancy	5 km <sup>2</sup>	high
trend	increasing	high
No. of breeding birds	100	high
trend	increasing	high
No. of sub-populations	1	high
Generation time	3 years	low

### 6 Intraspecific taxa

None described. Suspicions that the species belongs to a distinct subgenus within *Cyanoramphus* (McAllan and Bruce, 1989) have only recently been confirmed (Boon *et al.*, in press).

### 7 Past range and abundance

Throughout Norfolk I. (Schodde and Mason, 1997). There were thought to be 190 pairs before the island was settled (Fortescue *et al.*, 1999).

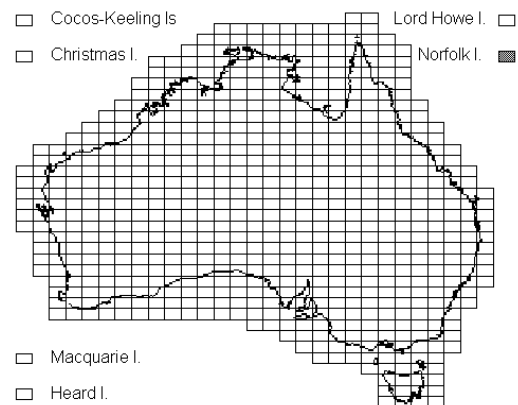
### 8 Present range and abundance

Now virtually confined to Mt Pitt region, being found only in Norfolk Island National Park and adjacent forested areas and orchards (Schodde *et al.*, 1983), with approximately 13 pairs breeding in the wild in 1996 (Lane *et al.*, 1998). From 1985 to 1999, 58 chicks have been banded in the captive population and from 1985 to 16 March 2000 325 chicks were banded in the wild. Also flocks of up to 13 unbanded birds have been seen in the wild (M. Christian).

### 9 Ecology

Norfolk Island Green Parrots are almost entirely restricted to the forested parts of Norfolk I., though they visit orchards to feed on soft fruits when these are ripening. They also feed on seeds, fruits, flowers and leaves of both native and introduced trees and shrubs including the fallen seeds of Guava *Psidium cattleianum*, African Olive *Olea africana* and Lantana *Lantana camara* (Hicks and Preece, 1991, Davidson, 1997, M. Christian). The Parrot usually nests in tree hollows, mostly in Ironwood *Nestegis apetala*, and

usually less than 2 m from the ground (Hicks and Greenwood, 1990).



### 10 Threats

Before 1950, clearance of forests for timber, agriculture and plantations severely reduced the habitat of Norfolk Island Green Parrots, particularly of their nest trees, the Ironwood being particularly favoured for fenceposts (M. Christian). Since then, the structure and composition of the remaining native vegetation has changed dramatically, with increasing weed invasion (Anon, 1984). While clearance has now stopped, recovery of the parrots requires that new habitat becomes available. Nest site availability has been further reduced by competition from introduced Crimson Rosellas *Platycercus elegans*, although culling has reduced this threat (Fortescue *et al.*, 1999). While Common Starlings *Sturnus vulgaris* and honeybees also use hollows (Hermes *et al.*, 1986), they appear to impinge little on Green Parrot nesting (Fortescue *et al.*, 1999). Most known nest-failures have resulted from predation by Black Rats *Rattus rattus*, which were introduced in the 1940s (Robinson, 1988, Fortescue *et al.*, 1999). Feral cats are also thought to be significant predators, and have been implicated in the extinction of *Cyanoramphus* subspecies on other islands (Fortescue *et al.*, 1999). There is also a high level of Psittacine Circoviral Disease (PCD) in the population, and this has resulted in the deaths of a small number of parrots (Hicks and Preece, 1991, Stevenson *et al.*, 1995, Yorkston, 1995).

### 11 Information required

- 11.1 Develop effective rat-proof artificial nesting hollows.

- 11.2 Investigate feasibility of PCD immunisation of banded wild chicks and adults, especially those being considered for establishing a breeding population outside Norfolk I.
- 11.3 Determine constraints on population growth, including cause and timing of mortality, seasonal variation in quality and availability of food and the relationship between hollow characteristics and breeding success, leading to a revised Population Viability Analysis (PVA).

## 12 Recovery objectives

- 12.1 Increase the numbers in the wild from 13 to over 25 breeding pairs.
- 12.2 Establish a second sub-population on Phillip I.

## 13 Actions completed or under way

- 13.1 Monitoring of the size and breeding success of the wild population is continuing and Population Viability Assessment has been undertaken.
- 13.2 Known and potential parrot nest sites are identified, monitored and protected, and introduced competitors using these sites (notably Crimson Rosellas and Common Starlings) are destroyed.
- 13.3 Rat-proof nesting hollows are being installed and maintained at appropriate spacing in suitable habitat in Norfolk Island National Park, on adjacent private land and on Phillip I.
- 13.4 A captive breeding program has been operating on Norfolk I.

- 13.5 Rat baiting and cat trapping is occurring in Norfolk Island National Park.
- 13.6 Responsible cat ownership on Norfolk I. is being encouraged through sponsorship of a cat de-sexing clinic, and a ban on the importation of reproductively-competent cats is being supported.

## 14 Management actions required

- 14.1 Establish cooperative rodent control programs throughout Norfolk I, with a view to rat eradication.
- 14.2 Enhance rat baiting and cat trapping on Norfolk I. and monitor its efficacy.
- 14.3 Close captive breeding facility on Norfolk I., establish breeding population at Taronga Park Zoo.
- 14.4 Introduce birds to Phillip I. following the provision of sufficient suitable habitat when revegetation works are advanced and after erecting artificial hollows for breeding.
- 14.5 Investigate establishing a population on the mainland and reintroduction of the species to Lord Howe I.

## 15 Organisations responsible for conservation

Environment Australia, Norfolk Island Administration.

## 16 Other organisations involved

Norfolk Island Fauna and Flora Society, Norfolk Island Conservation Society, Taronga Park Zoo.

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

*Staff resources required 2001-2005*                    0.4        Project Officer  
    1.0        Technical Officer

*Financial resources required 2001-2005*

<i>Action</i>	<i>Conservation agencies</i>	<i>Other funding sources</i>	<i>Total</i>
<i>Determine constraints on population growth</i>	\$80,000	\$0	\$80,000
<i>Develop rat-proof, artificial nesting hollows</i>	\$20,000	\$0	\$20,000
<i>Investigate, and undertake if necessary, PCD immunisation</i>	\$20,000	\$0	\$20,000
<i>Rat baiting in Norfolk Island National Park<sup>1</sup></i>	\$10,000	\$0	\$10,000
<i>Island-wide cooperative rodent control<sup>1</sup></i>	\$10,000	\$0	\$10,000
<i>Cat trapping<sup>1</sup></i>	\$5,000	\$0	\$5,000
<i>Encourage responsible cat ownership<sup>1</sup></i>	\$2,000	\$0	\$2,000
<i>Install breeding hollows on Norfolk I.</i>	\$10,000	\$0	\$10,000
<i>Establish captive population at Taronga<sup>2</sup></i>	\$0	\$254,000	\$254,000
<i>Install breeding hollows on Phillip I.</i>	\$40,000	\$0	\$40,000
<i>Investigate reintroduction to Lord Howe I.</i>	\$2,500	\$0	\$2,500
<i>Monitor wild population on Norfolk I.</i>	\$50,000	\$0	\$50,000
<i>Total</i>	<b>\$249,500</b>	<b>\$254,000</b>	<b>\$503,500</b>

1 Cost divided among all threatened taxa on Norfolk I.

2 Costs as per Hibberd *et al.* (1999).

## 18 Bibliography

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### Comments received from

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