

## RECOVERY OUTLINE

# Muir's Corella

(Western Corella: southern)

1	Family	Cacatuidae
2	Scientific name	<i>Cacatua pastinator pastinator</i> (Gould, 1841)
3	Common name	Muir's Corella
4	Conservation status	Endangered: C2b

### 5 Reasons for listing

There are fewer than 2,500 mature birds of this subspecies, in a single, declining sub-population (Endangered: C2b).

	Estimate	Reliability
Extent of occurrence	3,000 km <sup>2</sup>	high
trend	stable	high
Area of occupancy	500 km <sup>2</sup>	medium
trend	stable	medium
No. of breeding birds	2,400	high
trend	stable	medium
No. of sub-populations	1	high
Generation time	5 years	low

### 6 Intraspecific taxa

*C. p. derbyi* (northern wheatbelt of Western Australia) is Least Concern, as is the species' status.

### 7 Past range and abundance

Most of south-west Australia south of Perth from Swan R. and Avon R. to Augusta and Broome Hill in the east (Johnstone, 1997, Schodde and Mason, 1997). Range contracted by the 1920s to Lake Muir and surrounding districts (Carter, 1923). Population declined to about 100 birds in 1940s, but recovered to 1,000 birds by 1978 (Smith, 1991, Saunders *et al.*, 1985).

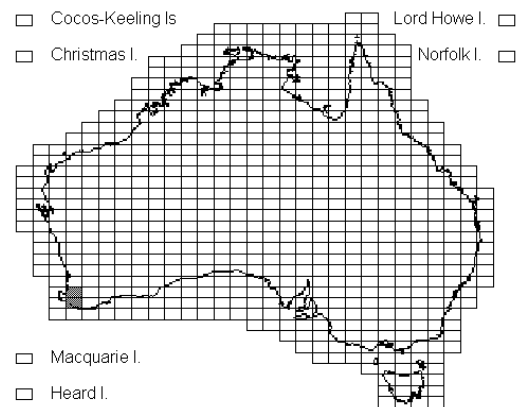
### 8 Present range and abundance

Now occurring from Boyup Brook and Qualeup South south to the lower Perup River, Lake Muir and Cambellup (Johnstone, 1997). Population size estimated to be 1,500 individuals in 1991 (Massam and Long, 1992), 3,000 individuals in 1997 (Johnstone, 1997), and 2,360 individuals in 1999 (P. Mawson).

### 9 Ecology

Muir's Corella lives in woodland on the drier, eastern side of the main forest block in south-western Australia. Though the subspecies mainly digs for corms of native and introduced plants, its diet includes grain from agricultural crops (Smith and Moore, 1991, Mawson and Johnstone, 1997). Nesting is in large hollows in eucalypts of an estimated minimum age of 160 years (Mawson and Long, 1994). Clutch size of the

northern subspecies averages 2.3, with a range of 1 to 4 (Higgins, 1999).



### 10 Threats

Because it eats grain, Muir's Corella was considered an agricultural pest, and farmers shot and poisoned large numbers during the first 20 years of the 20<sup>th</sup> century (Carter, 1912, Saunders *et al.*, 1985). Prohibition of poisoning and shooting has allowed a recovery in numbers (Massam and Long, 1992, Johnstone, 1997). Nevertheless, some birds are still shot illegally, especially at sites where grain is fed to livestock. Furthermore the agricultural habitats most favoured by the subspecies, the alluvial flats, are now being converted to hardwood plantations of Blue Gum *Eucalyptus globulus* and vegetable crops, both of which are unsuitable for corellas. Eventually a lack of nest hollows may limit abundance (Smith, 1991, Mawson and Long, 1994), nest trees being lost through clearance for agriculture and plantations, damage by stock and by salinisation of the soil. In the long term, the subspecies may also be threatened by hybridisation with the northern subspecies, *C. p. derbyi*, which is expanding its range southwards, and Long-billed Corella *C. tenuirostris*, which has been introduced from eastern Australia to Perth where its numbers are increasing (P. Mawson).

### 11 Information required

- 11.1 Develop a technique for excluding parrots from grain being fed to livestock.
- 11.2 Determine area of feeding habitat required to sustain population.

11.3 Obtain a greater understanding of breeding biology.

11.4 Clarify taxonomic status.

## 12 Recovery objectives

12.1 Maintain or increase population size.

## 13 Actions completed or under way

13.1 The population size is surveyed at two year intervals.

13.2 Characterisation of nest sites is under way.

13.3 A Recovery Plan has been written and a Recovery Team established.

## 14 Management actions required

14.1 Initiate management of breeding and feeding habitat.

14.2 Increase community involvement.

14.3 Control feral eastern Long-billed Corella.

## 15 Organisations responsible for conservation

Western Australian Department of Conservation.

## 16 Other organisations involved

Western Australian Department of Agriculture, Landcare groups.

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

Staff resources required 2001-2005

0.2

Project Officer

0.2

Extension Officer

Financial resources required 2001-2005

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Action	Conservation agencies	Other funding sources	Total
Population monitoring	\$24,500	\$3,000	\$27,500
Breeding biology research	\$0	\$30,000	\$30,000
Breeding habitat management	\$25,000	\$5,000	\$30,000
Feeding habitat management by the community	\$0	\$3,000	\$3,000
Control of eastern Long-billed Corella	\$15,000	\$7,500	\$22,500
Taxonomic research	\$0	\$2,700	\$2,700
<b>Total</b>	<b>\$64,500</b>	<b>\$51,200</b>	<b>\$115,700</b>

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### Comments received from

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