

RECOVERY OUTLINE

Carnaby's Black-Cockatoo

(Short-billed Black-Cockatoo)

1	Family	Cacatuidae
2	Scientific name	<i>Calyptorhynchus latirostris</i> Carnaby, 1948
3	Common name	Carnaby's Black-Cockatoo
4	Conservation status	Endangered: A1abc+2abc

5 Reasons for listing

Direct counts (a), numbers of breeding females (b) and a decline in area of occupancy and quality of habitat (c) indicate this species' abundance has at least halved over the last three generations (45 years; Endangered: A1). This decline is likely to continue (2abc).

	Estimate	Reliability
Extent of occurrence	32,000 km ²	medium
trend	stable	high
Area of occupancy	2,000 km ²	low
trend	decreasing	high
No. of breeding birds	60,000	medium
trend	decreasing	high
No. of sub-populations	4	low
Largest sub-population	20,000	medium
Generation time	15 years	medium

6 Intraspecific taxa

None described.

7 Past range and abundance

Endemic to south-western Australia (Schodde and Mason, 1997). Breeding mostly in areas receiving 350 - 700 mm annual rainfall. Flocks of non-breeding birds then move to coastal areas (Saunders *et al.*, 1985).

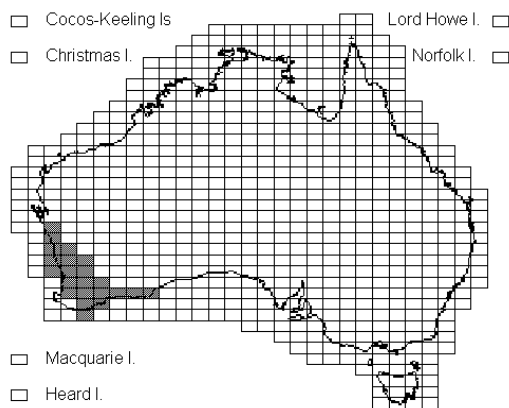
8 Present range and abundance

Between 1970s and 1990s, disappeared from over one third of former range, with both reduced density and local extinctions (Saunders and Ingram, 1995). Population estimated at fewer than 60,000 birds (Saunders and Ingram, 1995), possibly now separated into 3-5 sub-populations (northern wheatbelt, upper southern wheatbelt, south-eastern wheatbelt and Esperance coast; P. Mawson).

9 Ecology

Carnaby's Black-Cockatoo forages in woodland and kwongan heath that is dominated by proteaceous species (Saunders and Ingram, 1995). Its main foods are seeds of hakeas, grevilleas, banksias and eucalypts, but the cockatoos also take seeds of weeds and exotic pines *Pinus radiata*, as well as insect larvae (Saunders, 1979, 1980, Saunders *et al.* 1985, Higgins, 1999). They nest in hollows in large eucalypts, primarily Salmon

Gum *Eucalyptus salmonophloia* and Wandoo *E. wandoo* (Saunders 1979). Two eggs are laid, from which only one chick usually survives to fledging (Saunders *et al.* 1985).



10 Threats

Since the 1950s, most feeding habitat of breeding birds has been cleared for agriculture. The remnants are fragmented, threatened by rising soil salinity and weed invasion, and often so far from nesting areas that growth rate and survival of nestlings are reduced. Breeding has ceased altogether in many remnants (Saunders *et al.*, 1985, Saunders, 1990, 1991, Saunders and Ingram, 1987, 1998). Breeding habitat has also been extensively cleared, and for at least 60 years there has been little regeneration of nest trees because of grazing by sheep and rabbits. Nest hollow availability, though not currently limiting, is likely to be so in the future, especially if competition with Galahs *Eolophus roseicapillus* (Saunders and Ingram, 1987, 1998) increases. Nest-robbing for the bird trade also results in damage to nest hollows (Saunders *et al.*, 1985, Mawson, 1997). Though domestic demand has declined, some birds are still taken for illegal export, resulting in hollow damage (P. Mawson). Feeding habitat of non-breeding birds has also been cleared and cockatoos in the northern wheatbelt now feed largely on pines. These pines have now reached maturity and will inevitably be harvested, leaving a possible food shortage.

11 Information required

- 11.1 Determine conservation status of breeding sub-populations in southern wheatbelt.

- 12 Recovery objectives
- 12.1 Retain breeding population and reverse decline in remaining breeding areas. for keeping the species in captivity, manage captive breeding stock and develop DNA fingerprinting in order to identify source of all captive birds.
- 13 Actions completed or under way
- 13.1 Some known nests are protected and maintained. 13.6 An extensive program of public awareness is being implemented by Perth Zoo.
- 13.2 Significant breeding areas, particularly stands of Salmon Gum, are being identified and protected. 13.7 A Recovery Plan has been drafted (Cale, in press) and a Recovery Team established.
- 13.3 Feeding habitat is being re-established, notably with kwongan heath species. 14 Management actions required
- 13.4 A captive breeding studbook aimed at maintaining a genetically viable regional captive population at Perth Zoo is being maintained. 14.1 Satisfy avicultural demand with collaborative captive breeding program.
- 13.5 Western Australian Department of Conservation and the avicultural industry are cooperating to improve husbandry techniques 15 Organisations responsible for conservation
Western Australian Department of Conservation.
- 16 Other organisations involved
Birds Australia, CSIRO Wildlife and Ecology, Landcare groups, Perth Zoo, private land-holders.

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

Staff resources required 2001-2005

1.0

Extension Officer

Financial resources required 2001-2005

Action	Conservation agencies	Other funding sources	Total
Management of feeding habitat in non-breeding areas	\$43,700	\$2,700	\$46,400
Population monitoring	\$100,000	\$0	\$100,000
Habitat management in priority areas	\$3,300	\$26,500	\$29,800
Community involvement	\$0	\$3,000	\$3,000
Captive breeding program	\$1,500	\$0	\$1,500
Total	\$148,500	\$32,200	\$180,700

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