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'COCKATOO CARE' - A PUBLIC PROGRAMME

Ron Johnstone and Tony Kirkby

Since the launch of 'Cockatoo Care', a joint initiative of the Water Corporation and the Western Australian Museum, in 2001, there has been an overwhelming response to help the survival of cockatoos in Western Australia. Visits to the Cockatoo Care website have averaged over 300,000 per annum, the Cockatoo Observation cards and Frequent Sighting forms, forums, school programs, newspaper articles and radio and television events have all helped promote community support for this program.

The forest red-tailed black cockatoo, Baudin's cockatoo and Carnaby's cockatoo are all endemic to the south-west of this State and all have undergone a marked decline in range and status over the past 50 years. All of these spectacular, iconic birds are still losing feeding and breeding habitat through factors such as land clearing for agriculture, forestry and mining; through salinity; through competition with invading native species and through the introduction of exotic pest species.

All of these cockatoos live for about 50 years, begin breeding at 4 years of age, mate for life, tend to use the same nest hollow each breeding season, lay only one or two eggs but rear only one young each breeding season. In many areas the cockatoos that you see are from an ageing population with little or no recruitment.

'COCKATOO CARE' OBJECTIVES

The main objectives of this joint project are:

- Research into the distribution and ecology of each of the three species of cockatoos and the threats to their survival,
- Habitat enhancement through habitat planting and installation of artificial nest boxes,
- Assessing the impact of feral honey bees on hollow-nest sites in south-west forests and the development of effective eradication and control methods, and
- Community education and involvement.

ABOUT THE COCKIES

Forest Red-tailed Black Cockatoo

The forest red-tailed black cockatoo, *Calyptorhynchus banksii naso*, is a very distinct subspecies, named by John Gould in 1837. This population is confined to the jarrah-marri and karri



forests of the deep south-west. Its distribution is closely tied to that of its main food and nest tree, the marri and ranges north to Gingin (formerly to Dandaragan), and south and east to the Green Range.

Formerly common but now rare to uncommon and very patchily distributed, it has disappeared from about 30% of its former range. This cockatoo is listed as 'Near Threatened' but its conservation status is currently under review.

Major threats

These include the loss of feeding and breeding habitat and the competition for nest hollows, especially by feral honey bees, but also by invading galahs at edges of forest. In addition, there appears to be a retraction westward in its distribution into higher rainfall areas, perhaps due to climate change.

There has also been a dramatic change in its feeding ecology in the northern part of its range since their discovery in 1995 of Cape lilac as a new food resource. Small flocks are now regular visitors to suburban gardens that have Cape lilac trees, leaving the Darling Scarp in early morning and returning the late afternoon. What impact these sometimes exhausting flights are having on their breeding success is as yet unknown.

Of the 42 nest sites being monitored by the WA Museum, only one was successful in raising a chick in 2004!

Baudin's Cockatoo

Baudin's cockatoo, *Calyptorhynchus baudinii*, was named after the French explorer Nicolas Baudin.

This species is confined to the humid south-west corner of the State, including the Coastal Plain from Perth

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southwards, north to Morangup and east to Kojonup and the King River, as well as the Stirling and Porongurup



Ranges and east along the south coast to Waychinicup National Park.

It is a post-breeding nomad, aggregating into large flocks after breeding and moving between March and September from the deep south-west to the central and northern Darling Range and adjacent Coastal Plain. Along with the forest red-tail this is our rarest cockatoo. It is most numerous in the deep south-west during the spring breeding season and in the northern Darling Range during the autumn-winter. It is usually in small flocks (up to 15) occasionally in larger flocks (up to 50) or loose aggregations (up to 1200) at drinking sites or roosts. The estimate of total population is 10,000. It nests during spring in large deep hollows of marri, karri and wandoo. We have very few breeding records and judging from our work so far, it only breeds every two years like the forest red-tail.

It feeds mainly on the seeds of marri and other eucalypts, banksias, hakeas and dryandras, also the flowers of banksias and eucalypts as well as fruiting apples, pears and persimmons. They also like the seeds of weeds such as corkscrew, and insect larvae from live or dead trees and shrubs.

Major threats

Currently illegal shooting by orchardists is no doubt the most important threat. Both Baudin's and Carnaby's cockatoos were proclaimed as vermin in many south-west districts from 1926 to the 1980s and many thousands were shot. Baudin's cockatoo has an interval of seven years between generations and an annual reproductive rate of 0.6 chick per pair, so it cannot replace the large number shot by orchardists. Although now protected, illegal shooting continues with anecdotal evidence of up to 200 birds shot in one day in early 2005.

Other major threats include the loss of feeding and breeding habitat and the impact of feral honey bees taking

over breeding hollows. Last year 2 of our 14 known breeding hollows of Baudin's cockatoo were lost to feral bees, one of these with the female cockatoo apparently blocked from leaving the hollow by the invading swarm (her fate unknown).

Carnaby's Cockatoo

Carnaby's cockatoo, *Calyptorhynchus latirostris*, was named after the Western Australian naturalist Ivan Carnaby. This species ranges north to the lower Murchison, across the wheatbelt to Lake Cronin, south



to the Ravensthorpe Range and east along the south coast to Cape Arid. It is also casual on Rottnest Island.

Carnaby's cockatoo is also a postnuptial nomad tending to move west to cooler coastal areas after breeding. It is usually found in pairs or small flocks, also large flocks (up to 7000) in non-breeding season (late spring to mid-winter) especially on the Coastal Plain in pine plantations. For many Perth residents the appearance of migrating flocks in the autumn, with their distinctive wailing call, has earned them the reputation as harbingers of rain. It breeds in large hollows of mature, mainly smooth-barked, eucalypts especially salmon gum and wandoo. The one or two eggs are laid from early July to December but usually only one young is reared. They feed mainly on the seeds of banksias, dryandras, hakeas, grevilleas, eucalypts and pines, also fruiting almonds and macadamia, wild geranium and wild radish.

Major threats

Carnaby's cockatoo has lost the bulk of its feeding and breeding habitat in the past 60 years and what remains is generally in decline. Currently listed as 'Endangered', its population is believed to have halved in the past 30 years, the current population is about 50,000 and still declining. The major reasons for this continuing decline are habitat fragmentation, the degradation of surviving woodland and competition for hollows. Many bush remnants have become too small or too isolated to support

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viable populations of this cockatoo. As a consequence of this, and possibly in tandem with other impacts such as climate change, the centre of gravity of this cockatoo's distribution has shifted considerably southwards and westwards since the middle of last century. It has now colonised parts of the Darling Scarp, Coastal Plain and many southern forest areas including Nannup and Northcliffe.

Competition for nesting hollows especially from invading galahs, western long-billed corellas and feral honey bees is of great concern. Galahs and corellas have greatly increased their range and numbers since the 1950s and were both originally absent from much of the wheatbelt until the 1970s. The impact of feral honey bees has also greatly increased since the 1970s. Galahs and corellas remove eggs and chicks of cockatoos from hollows and galahs in particular cause tree death by scarring and ring barking at nest sites.

'COCKATOO CARE' RESCUE PLAN

1. Monitor cockatoo numbers and nesting success.
2. Locate and monitor nest hollows.
3. Identify the problems and causes of decline.
4. Provide information to the public about cockatoos through 'Cockatoo Care'.
5. Improve habitat management to protect feeding and nesting areas and so also benefit other threatened fauna and flora communities.

6. Revegetate degraded areas and promote eucalypt regeneration.
7. Increase potential nest sites with the provision of nest boxes suitable for cockatoos and repair substandard hollows. Conduct ongoing experiments with nest boxes, especially PVC tubes.

HOW CAN YOU HELP?

- Record your black cockatoo sightings by completing an 'Observation card' or 'Frequent Sighting form'; both are obtainable either from the Cockatoo Care 'downloads' web page or the Water Corporation on 9420 2182. Observation cards are also available at selected water supply dam sites.
- Help promote eucalypt regeneration and be involved in tree planting.
- If you live on the land, develop a cockatoo-friendly property.
- Lobby your Shire Council to protect local remnant vegetation.
- Protect your local bushland and large trees, particularly veteran and stag trees.
- Visit the www.cockatooocare.com website – more ideas, details of events and lots of other useful information is available.

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