

**CARNABY'S BLACK COCKATOO
RECOVERY TEAM**

Annual Report

2004

by

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for the Carnaby's Black Cockatoo Recovery Team

Introduction

The Team met twice during the year, in July and December.

Current membership of the Recovery Team is:

- John Blyth, DCLM (WATSCU) chair;
- Kat Miller, Threatened Species Network (WWF)
- Dr Stephen Davies, Curtin University;
- Alison Doley, 'Koobabbie', Coorow.
- Dr Rob Davis; Birds Australia
- Neil Hamilton; DCLM (ex Perth Zoo)
- Dr Bob Humphries; Water Corporation (sub. Caroline Minton)
- Ron Johnstone, WA Museum;
- Kevin Marshall, DCLM (Geraldton District);
- Dr Peter Mawson, DCLM (Wildlife Branch);
- Adam Meyer, DCLM, (Moora District);
- David Mitchell, (DCLM Swan Region);
- Dr Denis Saunders, CSIRO (sub. John Ingram)
- (Leonie McMahon Project officer.)

Cheryl Gole (Birds Australia) and Raquel Carter (TSN/WWF) both resigned during the year because of changes in jobs. The Recovery Team thanked them both for their hard work over several years and for substantial input to the recovery program.

The Carnaby's Black Cockatoo Recovery Project, being implemented by the Project Officer Ms Leonie McMahon (employed by Birds Australia WA), was funded for the first nine months of this year by the Lotteries Commission WA. Late in 2004, the recovery team was successful in obtaining funding to continue and expand somewhat the project for another three years through a Cross Regional NHT project with Northern Agricultural Council as the lead group.

This new project, with the likelihood of three years funding, continues to provide a major thrust for implementation of recovery actions. However, because not all of the funds sought were granted, a major planned sub-project in Swan Region and very significant extra effort in other regions (represented by South West Catchment Council and South Coast Regional Initiative Team) will only be possible if new funds can be obtained. The Recovery Team and Project Officer are continuing to seek opportunities to fund parts of the project that are not currently funded. This new emphasis on liaising with NRM groups and other potential funders to support the project through their investment strategies and to source on-ground funding represents a significant shift in the way the project operates.

Many other significant steps relevant to the recovery of Carnaby's Black Cockatoo were taken throughout 2004 and a selection of these are discussed below.

Main Activities and Achievements of the Carnaby's Black Cockatoo Recovery Project

In 2004 the project continued to focus particularly on recovery actions 5.1, involving identification and improved management of feeding and breeding habitat in priority areas, 5.3, monitoring and 5.4, community involvement. However, the Recovery Team has also been involved with actions relating to 5.2, feeding habitat during the non-breeding season, and 5.5, captive breeding, as noted below.

Action 5.1.1, Identifying priority areas.

Eight priority breeding sites have now been identified by the Project Officer, as listed below.

- Site 1 Shire of Coorow (predominantly private property)
- Site 2 Shire of Moora (Townsite, road and rail reserves and surrounding district)
- Site 3 Shire of Moora (predominantly private property)
- Site 4 Shires of Dandaragan and Coorow (predominantly private property)
- Site 5 Shire of Victoria Plains (predominantly private property)
- Site 6 Shires of Katanning and Kent (two reserves with various classifications)
- Site 7 Shire of Victoria Plains (predominantly private property)
- Site 8 Shire of Victoria Plains (predominantly private property)

Detailed and hands-on activities by the Project Officer were concentrated on those sites during most of 2004. However, more breeding sites are being identified and advice and information is increasingly being provided to help management of them.

In addition, work conducted by Recovery Team member Ron Johnstone for the Department of Defence has shown that the Bindoon Artillery Range is a highly significant breeding site for Carnaby's Black Cockatoo, perhaps supporting more than 100 breeding pairs. Ron and others on the Recovery Team as appropriate are providing advice to the Department of Defence personnel, who are keen to ensure the present excellent condition of the area can be maintained.

Action 5.1.2, management of breeding habitat within priority areas.

Emphasis is on this action at all eight key breeding sites listed above, and some specific activities are discussed briefly below.

In 2004 the Project Officer was successful in obtaining a Community Conservation grant from the WA Minister for Environment to fund a team of Birds Australia volunteers to repair damaged nesting hollows at key breeding sites and to train interested landholders in the methods. This is important because the aging of hollow-bearing trees is causing the loss of useable hollows for Carnaby's Cockatoo throughout the wheat-belt. Monitoring of the first 90 of the repaired hollows in 2004 showed that significant numbers of the repaired nests were used in the next breeding season. Uptake rates are highest in hollows that have a history of previous use, followed by hollows located amidst other active hollows. The results to date have been very encouraging and indicate that this program is a time, resource and cost effective way to increase the breeding potential of Carnaby's Black-Cockatoo. Funding has now been obtained from the Minister for the Environment's community projects fund for a second year of this project.

The control of Galahs and Western Corellas on "Koobabbie" (owned by Recovery Team member Alison Doley and her husband John) continues to be successful. Each year more hollows used by Carnaby's Black-Cockatoos are being found on the property. Fifty hollows have now been identified that are used by Carnaby's Black-Cockatoo but not every hollow is used in each breeding season. In 2004, 24 natural hollows were identified as being active and five artificial hollows were also active.

Culling of Galahs and Western Corellas at Koobabbie and on other properties at key sites was also conducted by two Perth-based shooting associations. The program was coordinated by the Department's Wildlife Officer in the Northern Agricultural Region. As a result of the information gathered from this first round of culling, guidelines were drawn up to ensure future culling occurs in a manner that will produce the best results with the least likely impact on other species.

Feral bees are likely to compete significantly with Carnaby's Cockatoos for nest hollows. Efforts to improve the control of feral bees are continuing with the intention to trial a successful method of controlling feral bees with the use of a poison bait developed in New Zealand. The potential for queen excluders being included in commercial hives is also being investigated.

Nest box trials have been conducted on several properties in the northern agricultural area, including a project funded by the Threatened Species Network. Recovery Team members Stephen Davies and Ron Johnstone have conducted and/or assessed a number of such trials. Both projects indicated that Carnaby's Cockatoos will use artificial hollows of various designs. With the possible exception of PVC hollows (Ron Johnstone's work suggests that PVC may be less attractive to competing species) regular inspection and servicing was found to be essential to avoid their use by corellas, Galahs and honeybees.

A draft protocol for the use of artificial nest boxes has been written by the Project Officer, and includes issues arising from the recent trials described above. The protocol will help to guide the Recovery Team on what sort of projects involving the establishment of artificial nest boxes should be supported and the advice to be provided.

Birds Australia and the Recovery Team continue to help write funding applications for landholders to implement works favourable to Carnaby's Cockatoos to bodies such as NHT2, Envirofund and Threatened Species Network.

Departmental Wildlife Officers continue to conduct field surveys of known nesting sites during the breeding season to help minimise illegal poaching and have also been very helpful with surveys and contact with landowners in the northern areas.

Action 5.1.3 Management of feeding habitat within priority areas.

The first requirement is the retention of existing feeding habitat. Much of this is on publicly owned land managed by the Department, and ongoing management is being conducted to maintain the health of these habitats through dieback hygiene and appropriate fire management. In other areas the retention of feeding habitat involves the Project Officer and other members of the Recovery Team liaising with landholders and other organisations in which the land is vested.

The second element of managing feeding habitat is replacing such habitat where it has been lost, particularly from around key breeding sites. This is being pursued, with the continuing selection of sites to be targeted for re-vegetation to provide food close enough to key breeding sites. This information is being gathered with the help of farmers, local community members and Birds Australia volunteers.

Replanting efforts around key breeding sites are continuing, along with identifying and helping to find sources of species and seedlings that are favoured food plants for Carnaby's Cockatoos. The higher cost of several species of such plants, particularly Grevilleas and Dryandras, is a significant factor affecting the implementation of this action. The project officer is identifying nurseries that may be able to produce such species more cheaply or provide expert advice on the most effective germination and seed collection methods, sourcing ways of funding the growing of such species and developing strategies to encourage farmers to grow these important food species.

Action 5.2 Management of feeding habitat in non-breeding areas.

Much of the work, particularly investigation of species and their availability for rehabilitation planting, being done in relation to the last action is also relevant to this one.

The Recovery Team is also involved in issues regarding potential or planned clearing around Metropolitan Perth of vegetation used as feeding habitat during the non-breeding season.

5.2.1 Native feeding habitat The Swan Coastal Plain has long been a significant feeding area for large flocks of Carnaby's Cockatoos outside the breeding season. As development gradually spreads around Perth, and other regional centres, more and more of this habitat is being cleared, and the Carnaby's Cockatoo Project Officer receives an increasing number of enquiries from members of the public seeking advice on ways of protecting the species and its habitat. In addition, feeding habitat outside the breeding season is identified in the

Recovery Plan as Critical Habitat for this species. This, and the status of Carnaby's Cockatoo as an Endangered species, is creating many enquiries from developers and their consultants about the requirements in relation to this species during planning and assessment of their projects. These matters were taking much time for the Project Officer and others on the Recovery Team and the Team has agreed on a more strategic approach to deal with them, but these issues continue to be significant.

5.2.2 Non-native feeding habitat

The most important such habitats currently are the very large pine plantations over the Gngangara Mound. Now that an industrial plant has been established to use this timber, it is planned to remove most of these pines within about 20 years, to allow more rapid replenishment of the waters of the Gngangara Mound. Members of the Recovery Team are preparing an issues paper to clarify what the possible effect of clearing the Gngangara pines may be on Carnaby's Cockatoo and how adverse effects could be avoided. A draft brief for the studies necessary to clarify management needs is being prepared, and a strategic approach to the inclusion of the needs of Carnaby's Black Cockatoo into planning of the Gngangara Regional Park is being developed.

Action 5.3 Monitoring of populations

This continues, with landholders and other volunteers being trained in methods of counting nesting birds and key sites being monitored regularly. Monitoring of active nesting hollows and searches for new hollows was carried out by Landholders, the Birds Australia project officer, Birds Australia WA volunteers, Volunteers local to the breeding site, DCLM staff (specifically staff of the Special investigations Unit and regional Wildlife officers). An additional aspect of monitoring in 2004 was the targeted searches of hollows that had been repaired as part of the hollow repair program earlier in the year.

Monitoring has been conducted at most key breeding sites throughout the breeding season just completed. Monitoring by BAWA volunteers also occurred for the first time at Koobabbie and throughout Waddi Forest. At Koobabbie the volunteers were able to determine that at least 107 Carnaby's Cockatoos were roosting in the salmon gum woodlands of an evening. The survey in areas of Waddi Forest to the north of the Coorow-Latham Rd demonstrated that approximately 26 Carnaby's Black Cockatoos, in three smaller flocks, were using the area at that time

Monitoring of active hollows took two forms:

Tracking cockatoos to active hollows and observing breeding activity (female entering/exiting hollow, male feeding female, either parent feeding chick);
Conducting nest searches of hollows that have a history of breeding activity, appear to be in use or meet the requirements of Carnaby's Black-Cockatoo.

About 15 regular volunteers took part in surveys for Carnaby's Cockatoos. The emphasis in 2004 was on consolidating information about active hollows and numbers of birds present at key sites. Observations of feeding sites were made at all sites but the tracking of birds from breeding to feeding sites was only emphasised at Waddi Forest.

A project was begun last year to paint the tails of chicks in the hollow and to track their movements.

The trial had two main purposes:

- To test a tracking method that used tail-painting as a means of marking individual birds, and members of the public as the main providers of observations; and
- To gather information about where Carnaby's Black-Cockatoos from particular breeding populations travel to after they leave their breeding sites.

This project was concluded in June 2004 and the Recovery Team agreed that although some interesting results had been gained the project had been very labour intensive for relatively

small gains in information and was not worth continuing. Emphasis for monitoring movements will be placed on banding and completion of planned genetic work.

Action 5.4 Community Involvement, producing publicity and education material about Carnaby's Cockatoo.

The Project Officer was involved in the following public awareness activities.

Public events attended:

Wagin Woolarama, Wagin, 4-5 March 2004
Oldham Fair, Two Rocks, 5th June 2004
Victoria Plains Wildflower Walk, Calingiri, 12th September 2004

Public Presentations:

Darling Ranges Naturalists Club, 9th July 2004
Dongara High School, Dongara, 10th August 2004
Catholic Agricultural College, Bindoon, 11th August 2004
Central Midlands Tafe, Moora, 11th August 2004
Midland Tafe, Midland, 26th August 2004

Newsletters:

Two editions of the project newsletter, Cocky Notes, were published and sent to over 800 recipients. These were Edition 5 (April 2004) and Edition 6 (September 2004).

Volunteer Updates:

An update of volunteer opportunities and general information about the project is provided to Birds Australia volunteers as and when their services are required. Two updates were issued to approximately 40 volunteers in 2004, one in April and one in August.

Information Sheets:

The following information sheets were produced and distributed at public events and on request to members of the public:

About Carnaby's Black-Cockatoo
What do Carnaby's Black-Cockatoos need to successfully breed?
What you can do to help Carnaby's Black-Cockatoo
Carnaby's Black-Cockatoo Recovery Project
Native plant species used by Carnaby's Black-Cockatoo

Publicity from Painted Tail Trial:

The second part of this trial (reported on above) was a publicity campaign that encouraged people to report birds with painted tails, and a series of surveys conducted by volunteers. This part of the trial had the side effect of alerting a lot of people from otherwise unexposed areas to the endangered status of the species. As a result a number of people phoned with observations and questions not related to the trial.

Methods used to publicise the trial and encourage observations by people in relevant areas were:

- Articles published in 13 community newsletters or regional newspapers, three e-newsletters and three specialist publications;
- Information posted on two web pages (Birds Australia WA and Cockatoo Care)
- Two radio interviews (ABC Geraldton);
- Presentation to CALM Volunteers at Yanchep National Park;
- Approximately 120 fliers distributed to businesses and individuals, or placed on public notice boards in target areas; and
- Attendance at Oldham Bush Fair, Wanneroo, with display and fliers.

Methods used to search for painted chicks were:

Five surveys conducted by BAWA project officer and BAWA volunteers

Independent searches conducted by a number of individuals
Agreement with staff from Yanchep NP, Whiteman Park and CALM staff involved with
Gnangara Pine Plantation to observe cockatoos.

All reports to funding bodies have been completed and forwarded on time.

Action 5.5 Captive-breeding program.

CALM's Wildlife and Nature Protection Branches remain responsible for the delivery of Carnaby's Cockatoos from the rehabilitated birds program to licensed aviculturists for the derelict birds breeding program, or to be released into the wild.

Other Activities aiding the Recovery of Carnaby's Black Cockatoo

Recovery Team member Ron Johnstone of the WA Museum continues to employ a field ornithologist to conduct or assist in surveys of south western cockatoos. The Project is funded by the Water Corporation's Cockatoo Care program. These surveys have located a number of new breeding sites for Carnaby's Cockatoos, including about ten on the Swan Coastal Plain. This survey work is suggesting that over the last few tens of years Carnaby's Cockatoo has shifted its centre of distribution from the wheat-belt to much further west.

Conclusion

2004 has been another active and successful year for the Carnaby's Black Cockatoo Recovery Team. The species continues to meet IUCN criteria for Endangered, but many positive things are being achieved to bring about a gradual improvement in its status.