# Cocky Notes

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#### NEW RESOURCE FOR FARMERS

A new resource is available for landholders with the endangered Carnaby's Cockatoos on their farms.



The booklet has been produced by BirdLife Australia and was launched at the Albany Agricultural Show. It will be distributed as widely as possible to farmers across the range of the species.

The booklet has been designed to raise awareness of landholders about Carnaby's on their properties, and to promote actions that will help the cockatoos to survive across farming landscapes.

It contains useful information about the habitats

that the cockatoos require, as well as practical advice about protecting bushland and nesting trees, revegetating for Carnaby's, and increasing the number of nesting hollows.

Over 1000 copies have already been posted to NRM organisations, community groups and DPaW offices in regional areas. To request a copy, contact BirdLife WA on 9383 7749 or wa@birdlife.org.au. It can also be downloaded from the BirdLife Australia website: <u>http://birdlife.org.au/projects/carnabys-black-cockatoo-recovery/publications-cbc</u>

Production of the booklet was funded by South Coast NRM through the Australian Government's Caring for our Country program.

## A TALE OF TWO COCKATOOS

Baudin's and Carnaby's Black-cockatoos are very similar in their biology, ecology and appearance. Both suffer from habitat loss and are fighting for survival. But Baudin's receives far less conservation funding and support than Carnaby's. My research explored how Baudin's and Carnaby's are valued by Australians and discovered why Carnaby's is favoured over Baudin's.



Male Baudin's Black-Cockatoo in Bungendore Park, Armadale



#### birds are in our nature

The attitudes of different sectors of society, e.g. state governments, conservation organisations, the research community and the general public play a considerable role in directing conservation effort towards particular species. This means there is substantial bias and preference because of personal and organisational interests. For example, species which are more biologically or ecologically interesting to wildlife managers (e.g. migratory shorebirds), or favoured by the broader community (e.g. charismatic species like parrots), tend to receive greater research and conservation attention than those with less appeal. Sometimes one species in a family is preferred over another because of the different circumstances in which they exist.

In this case, even though Baudin's and Carnaby's are both considered beautiful, loveable and ecologically important species, the odds are stacked towards Carnaby's. Importantly, because the two species look so similar it's very hard to tell them apart so not many people realise there are two species of white-tailed black-cockatoos. Also, Carnaby's is more readily studied than Baudin's so much more is known about its requirements. For example, Carnaby's are more visible in cities so many people love seeing them in local parks and gardens whereas Baudin's lives in the wet forests south of Perth and is encountered by far fewer people; Carnaby's nest hollows are closer to the ground and therefore easier to monitor than Baudin's which are high up in the canopy. Ironically, Carnaby's visit urban areas to look for food and habitat while Baudin's geographic location means their search for food and habitat takes them to commercial orchards. Consequently, some orchardists regard Baudin's as a pest and up to 300 birds a year are illegally shot.

Baudin's and Carnaby's bring many people enormous joy and fascination but they face serious threats to their survival and their populations are declining. It is thought Baudin's may become extinct within the next few decades unless we, as a society, decide not to let that happen.

Visit <u>http://cockatoos.treehugger.com.au/</u> and watch a short animated film 'A Tale of Two Cockatoos' and find out what different people are doing to conserve Baudin's and Carnaby's.

> Gill Ainsworth PhD Candidate, Charles Darwin University

#### COCKATUBES FOR COCKATOOS

This year, the COCKATUBE <sup>®</sup> project was chosen as a finalist in Banksia Sustainability Awards. The project is a cooperative initiative with contributions from all levels of community and government. Landcare Serpentine Jarrahdale Inc. has been involved in the project through the design, construction and installation of the COCKATUBE <sup>®</sup> – an artificial nesting box for black cockatoos. The loss of natural nesting hollows is considered a key factor in the decline of black cockatoo species.

Landcare SJ member Alan Elliot started working with the WA Museum in 2005 on designing a suitable nesting box for WA's forest black cockatoos. The "chimney stack" design was settled upon as its open nature deterred bee colonisation and reflected closely conditions in the natural habitat. Construction utilised recycled black polypipe mining waste which was being donated to the group by BHP Billiton Leinster mine. The result is a durable, self draining nesting habitat which requires little maintenance.



The COCKATUBE (R) project has been encouraged by wide community support and participation including: a poster competition among local schools; Leinster school children painting a mural on the container used to ship the waste pipe; presentations and displays at fairs and other events; and, construction by many volunteers, including youth and school groups and Willing Workers on Organic Farms (WWOOFers).

To date over 500 COCKATUBES  $\ensuremath{\textcircled{B}}$  have been installed in the South West of WA. Preliminary

monitoring has indicated fledging of numerous chicks. While the COCKATUBE (R) has been most effective in known breeding areas, there has also been success of chicks fledging in non-traditional breeding locations, perhaps reflecting a change in range and habits.

> Francis Smit Executive Officer, Landcare SJ Inc.

#### RESULTS OF 2013 GREAT COCKY COUNT



A flock of Carnaby's over the Moore River estuary at Guilderton

It's taken us longer than expected but the results of BirdLife Australia's 2013 Great Cocky Count were released in November.

The 2013 count of 5800 cockies in the Swan Region was a 44% increase from 2012 but numbers are still down by 14% on the 6700 birds recorded in 2010. The increased numbers observed in 2013 were focused in the Northern suburbs and Northern Swan Coastal Plain areas.

The greater numbers of Carnaby's counted north of the Swan River is potentially due to parts of the Gnangara, Pinjar and Yanchep pine plantations being cleared, removing critical feeding and roosting habitat, and causing the cockatoos to move to coastal locations where they are more easily observed.

The 2013 results also show a change in how the cockies are utilising some of the best-monitored metropolitan roosts, which highlights the need to monitor as many sites as possible in order to pick up movements between roosts and to better assess the Swan Region population as a whole.

While the Great Cocky Count's value remains strongest in and around Perth (now with 4 years of consecutive data), confirmed roosts in regional areas will, in time, provide information on Carnaby's population changes beyond the Swan Region.

Thank you to all the volunteers that participated in this year's survey. In particular, thanks to Tam Kabat, who did an outstanding job coordinating the 2012 and 2013 Great Cocky Counts and writing the technical reports.

The 2013 report and summary is currently available from: <u>http://birdlife.org.au/media/future-looks-black-for-carnabys-cockatoos/</u>

Perth Region NRM will be funding the next Great Cocky Count, which will take place on **Sunday 6 April 2014**. Please mark the date on your calendars! We hope to welcome a new Great Cocky Count Coordinator on board in January.

### CARNABY'S COCKATOO FEED ON MINE-SITE REVEGETATION

Re-establishing native habitat via revegetation in human-modified production landscapes aids in faunal recolonisation by returning habitat resources, such as food, to these regions. This is particularly important to threatened species that persist in highly modified and fragmented landscapes.

Little is known about the use of revegetated minesites by Carnaby's Cockatoo. Therefore, part of my research was to understand the feeding ecology of Carnaby's Cockatoo (and other black cockatoos) in relation to revegetation in a mining production landscape within the jarrah forest. The revegetation zones at the study site were between 6 and 15 years of age at the time of sampling.

After three years of study, we found that Carnaby's Cockatoos were feeding in areas as young as six years post-revegetation. The birds were recorded feeding primarily on shrubby heathland species such as *Banksia* (e.g. *B. squarrosa*) and *Hakea* species (e.g. *H. undulata*). Furthermore, feeding was recorded year-round. The study found no effect of 'edge', as well as structure or floristics (i.e. the distribution and relationship of plant species over an area) of the revegetation on feeding activity of the birds. This indicates that particular food plant availability may be the key factor affecting feeding patterns.

In many landscapes across WA, replanting feeding habitat reflects vegetation succession. Understoreyforming heath species mature faster than others (e.g. overstorey-forming tree species such as jarrah and marri) and establish a thick shrub layer. The availability of these understorey food species is essential because of the apparent time lag from revegetating to when cockatoos can begin feeding on important overstorey food species such as jarrah. As revegetation ages, understorey plants start declining as they are shaded out.

These results endorse several potential approaches for restoring Carnaby's Cockatoo feeding habitat: (i) replanting with either understorey or overstorey species to sustain a steady supply of certain food plants, or (ii) replant with both understorey and overstorey food plants, recognising that succession will alter the composition of food plants over time.

With global warming and projected higher temperatures and lower rainfall in the southwest, plant species selected for revegetation will need some degree of drought tolerance. At a landscape level, efforts to revegetate should also consider the importance of conserving native vegetation, and in particular hollow-bearing trees suitable for breeding.

> Jessica Lee PhD Candidate, Murdoch University

#### CONSERVING CRITICAL HABITAT IN THE NORTHERN WHEATBELT

BirdLife Australia has recently completed an onground works project which involved managing critical habitat for Carnaby's Cockatoo across the Northern Agricultural Region.

Stakeholders, including Northern Agricultural Catchments Council (NACC), West Midlands Group, Moore Catchment Council and the Department of Parks and Wildlife's Land for Wildlife team provided input to identify habitat on private land in need of protection.

Interested farmers were visited to assess the value of their bushland remnants for Carnaby's and threatening processes affecting the cockatoos. In most cases, the farms had important feeding habitat (known as kwongan heath shrubland) in the vicinity of known or potential nesting sites. Stock grazing was the leading threat to unfenced bushland, which impacted the survival of understorey species and seedlings. Five landholders fenced off over 100 hectares of remnant native vegetation to improve its value for Carnaby's Cockatoo. Voluntary management agreements were also prepared to ensure the condition of the fencing is maintained.

BirdLife established photo points at each site to monitor the effectiveness of the work undertaken. At one site in the Shire of Irwin, large numbers of banksia seedlings were observed just two months after the fence was erected. In the years to come, it is hoped that these will provide a valuable food resource for the cockatoos.

This project was funded by NACC through the Australian Government's Caring for our Country program.



### INTO THE FOREST... FURTHER UNDERSTANDING BAUDIN'S BLACK-COCKATOOS

In September 2012, in an effort to further understand the movements of the elusive Baudin's Black-Cockatoo, researchers from Murdoch University, in collaboration with the Department of Parks and Wildlife, carried out a pilot study to satellite track two of these birds. Recently, Carnaby's Black-Cockatoos have been tracked on the Swan Coastal Plain by PhD student Christine Groom. Because of the differences in habitat and behaviour between the two species, the aim of this study was to investigate the viability of satellite tracking Baudin's, which can migrate into heavily forested areas of the state.

Two female Baudin's Black-Cockatoos that had been found injured in the wild and treated and rehabilitated at Perth Zoo and Kaarakin Black Cockatoo Conservation Centre, were fitted with tailmounted satellite transmitters by Dr Kristin Warren and Dr Anna Le Souëf from Murdoch University. The birds were then released together several days later next to a wild flock of Baudin's in Kelmscott.



Release of Baudin's Black-Cockatoos in Kelmscott

According to their satellite transmissions, the two birds remained at the release site for several days in close proximity to one other. One of the birds then flew south, (returning to the site she was originally found injured), then joined other Baudin's in a southern migration to Beela (140km south-east of Perth), covering about 250km from the release site. This southern migration was possibly associated with seasonal flock movements to breeding areas. Once she reached Beela, this cockatoo continued to transmit from the area for some time. Ground truthing revealed that there were a large number of all three species of black cockatoos in the Beela area, as well as a large amount of food in the form of flowering Marri trees, and dams close by. In short, it was a little patch of cockatoo heaven! Although the bird was not directly seen again, from the nature of her transmissions on the ground using a radio receiver, it appeared she was moving around with a flock of other birds.

Several weeks after their release, the second cockatoo moved south from Kelmscott to Cardup (35km south of Perth), where her transmitter was found using a radio receiver. The transmitter was still attached to the tail feathers, which may have moulted out. This is the first time forest black-cockatoos have been satellite tracked in the wild. It provided a lot of useful information including a contribution to our knowledge of post-release survival of rehabilitated Baudin's Black-Cockatoos. This 'proof of concept' trial will also enable the satellite tracking process to be optimised, supporting the viability of plans to undertake tracking of all three species of blackcockatoo as part of a larger health and ecology project.

> Dr Kristin Warren and Dr Anna Le Souëf Murdoch University

### UPDATE ON CARNABY'S BREEDING RANGE SURVEY

Since September BirdLife Australia has been busy encouraging people across the Wheatbelt and Great Southern regions to report their cockatoo sightings. Using funds generously donated by the Holmes à Court Family Foundation, a Carnaby's breeding range survey is currently being undertaken. This will help us understand how the species' range has changed, and importantly, identify key breeding and feeding sites where we can direct future on-ground recovery efforts. The last such survey across the breeding range was conducted in 2000.

BirdLife WA volunteers have played a key role in ensuring that as many people are aware of the survey as possible. Many have braved inclement Spring weather to promote it at regional agricultural shows across the cockatoo's range. Others have assisted with mail-outs to over 50 shires and 130 regional schools.

Carnaby's sightings have been received from over 300 locations to date, from Morawa in the north, inland to Bruce Rock and Newdegate, and Munglinup on the south coast. While the sightings information hasn't yet been reviewed in detail, several new nesting locations have been reported, which is encouraging. However, many people have indicated that they see much smaller flocks in their local areas than they did historically.

Thanks to everyone who has reported their sightings and assisted with the implementation of the 2013 breeding range survey. Special thanks to Jenny Sumpton, Lynley Davey, Jean Woodings and Richard Chyne who have contributed countless hours of their time.

The survey continues until the end of 2013. The easiest way for people to report their sightings is

via the BirdLife website: <u>http://birdlife.org.au/projects/carnabys-black-</u> <u>cockatoo-recovery/breeding-range-survey</u>

# STRATEGIC ASSESSMENT OF PERTH AND PEEL REGIONS

The WA Government is currently undertaking a Strategic Assessment of the Perth and Peel Regions (SAPPR) under the *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)*. The SAPPR is being undertaken in accordance with an agreement between the Western Australian Ministers for Planning and Environment and the Commonwealth Minister for the Environment.

The SAPPR is being led by the Department of the Premier and Cabinet (DPC) in partnership with the Commonwealth Department of the Environment. At a State level, the DPC is working closely with the Departments of Planning, Parks and Wildlife, Water, Environment Regulation, Mines and Petroleum, the Office of the Environmental Protection Authority and other relevant State agencies.

The purpose of the Strategic Assessment is to:

- significantly reduce the need for project by project Commonwealth assessment in the Perth and Peel region;
- deliver an effective long term and strategic response to key environmental issues in the Perth and Peel region;
- provide greater certainty to industry as to which areas can be developed and what the obligations will be in terms of mitigation, including environmental offsets; and
- provide greater certainty in terms of long term land supply to meet the needs of a city of 3.5 million people.

The SAPPR is the largest urban-based strategic assessment ever undertaken in Australia, covering a study area of 900,000 hectares. Carnaby's Cockatoo

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is a significant focus of the SAPPR. It is likely there will be significant commitments to implement conservation measures for the species. The SAPPR will also consider other EPBC Act listed fauna and flora, threatened ecological communities and important wetlands.

The SAPPR will be comprised of two documents: a plan for the protection of matters of national environmental significance (MNES Plan) and an impact assessment report (IAR). The MNES Plan will outline how matters such as Carnaby's Cockatoo, the Peel-Yalgorup Ramsar wetland and threatened flora will be protected and provides the opportunity for a more strategic approach to be implemented to protect MNES.

The SAPPR is intended to have effect for 20 years and can be reviewed if required. A Stakeholder Reference Group has been established to allow regular engagement with key stakeholders prior to the public release of key policy and assessment documents. The membership of the Stakeholder Reference Group and summaries of each meeting are available online.

The MNES Plan and IAR for the SAPPR will be released in draft form for a three month public consultation period in 2014.

Further information is available on the Department of the Premier and Cabinet's webpage: <u>http://www.dpc.wa.gov.au/Consultation/StrategicAs</u> <u>sessment</u> or by emailing <u>strategicassessment@dpc.wa.go.au</u>

BirdLife Australia strongly encourages everyone with an interest in wildlife, biodiversity or urban planning to engage with the Strategic Assessment process. It will decide the shape of the city and the fate of many threatened species that call this area home. As a community, it is imperative that we insist on strong conservation outcomes for our three species of black-cockatoo.



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