Cocky Notes

Issue 34: February 2022

2022 GREAT COCKY COUNT!

Registrations for the 2022 Great Cocky Count (GCC) are now open! This year the Count will be held on Sunday, April 3, at sunset. We need your help to make it bigger & better than last year. Register online by March 13 by scanning the QR code below or going to:

https://forms.gle/QaL9yJUCN3PsBYvk7

If you know of any areas where black-cockatoos roost overnight, please let us know at greatcockycount@birdlife.org.au so that we can include it in this year's count.

To find out more about the GCC go to: https://www.birdlife.org.au/projects/southwest-black-cockatoo-recovery/great-cocky-count-swbc

BIRDLIFE WA 2021 BLACK-COCKATOO SYMPOSIUM

Suzanne Mather
BirdLife WA Volunteer

Sharing information about a threatened species is seen as essential in conservation recovery. With such limited resources we don't want to be re-inventing the wheel. Therefore it was timely that BirdLife Western Australia was able to organise and successfully run the third black-cockatoo Symposium on the 7th December 2021. This event was held in the Mandurah Performing Arts Centre, ideal for the occasion with a good auditorium capable of accommodating the hundred or so attendees and plenty of space for information desks, displays, catering and informal meetings.

Funding from the Alcoa Foundation through the Alcoa Community Black-cockatoo Recovery Project supported this event. BirdLife's Merryn Pryor and Alcoa's environmental scientist Dr Justine Barker explained the project aims of raising awareness and building knowledge through a range of citizen science activities, and restoring nesting and food habitat across the Kwinana, Peel and upper south west regions. Dr Barker also provided an insight to managing the interface between bauxite mining and black-cockatoo habitat in the northern Jarrah forest thus reducing the impact on these threatened birds.

Dr Chris Warren from Murdoch University spoke of the long term research on the health, demographics and ecology of the three black-cockatoo species. The data collected through tracking tagged birds have enabled a better understanding of habitat use and flock movement through the landscape.

Dr Mike Craig from The University of Western Australia spoke on the problems arising with the reduction in water availability due to climate change. The results of the work done in the Jarrah forest of the south-west, a region experiencing a recent 25% decline in rainfall, suggest that artificial water points can be an effective management tool to offset reductions in water availability. The work showed that nests were significantly closer to both permanent and ephemeral drink sites. This revelation reminded me of the suggestion some years ago that nest hollows were the limiting factor in the survival of Carnaby's Black-Cockatoos. This was, and has continued to be addressed as was explained in Francis Smit's talk on the development and manufacture of COCKATUBE artificial hollows. Francis is Executive Officer of Landcare SJ, well known since 2005 and working closely with research that has been done on these artificial nests.

Then on to the practical side of conservation effort with Rick Dawson who has been working on black-cockatoos for 23 years, first as a Wildlife Officer with DBCA and now a

consultant. He has installed and monitored more than 360 artificial hollows and successfully repaired 200+ natural hollows. His experience places him in the ideal position to advise on the development of artificial hollows, particularly with the published results of both artificial and natural hollows in the eight-year study at Coomallo. Dr Sam Rycken, Carnaby's Black-Cockatoo Coordinator for BirdLife, talked about the fieldwork involved with the breeding program He outlined what BirdLife is aiming to achieve with this work.

BirdLife WA works closely with the Peel-Harvey Catchment Council on several areas of bird conservation, not the least black-cockatoos, so Megan LeRoy's talk on their Protecting WA Black Cockatoo Project showed how it plays a key role in supporting landholders in the catchment to manage and improve the habitat values of black-cockatoo nesting and feeding sites. The PHCC is working with landholders, BirdLife WA and community groups in this project.

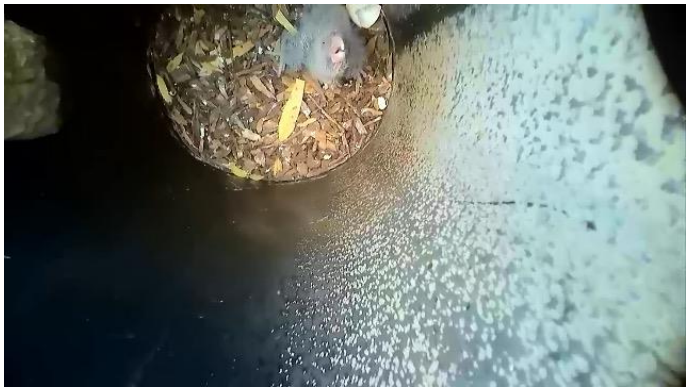
Some of these speakers had presented or been present at all three black-cockatoo symposia, not the least the chair of the Department of Biodiversity, Conservation and Attractions (DBCA) recovery team, Dr David Mitchell. Under the Biodiversity Conservation Act 2016 DBCA has responsibilities for the conservation of threatened species such as the black-cockatoos. So advice is sought from DBCA on planning and environmental impact assessment by various decision making authorities. He pointed out the willingness of many people and organisations to contribute to the conservation of these species. A positive note towards the end of the day.

The value of providing a focus for all organisations and individuals concerned with the conservation of black-cockatoos cannot be underestimated. One could feel confident that most of the attendees at the Symposium went away with new knowledge, new ideas and new people to add to the network of black-cockatoo lovers.

CARNABY'S COCKATOO BREEDING PROGRAM UPDATE

Sam Rycken
Carnaby's Black-Cockatoo Project Coordinator

On Thursday 20th of January, I finally drew a line under this season's monitoring effort. I joined Megan from Peel Harvey Catchment Council to follow up on a lead about a black cockatoo sitting on an artificial hollow (Cockatube). When we arrived at the site we did not see any sign of the bird, but upon inspection of the tube with the camera pole we found a hen with a nestling of nearly two weeks of age! Talk about a long season, especially since we received breeding reports from Kalbarri in June last year. For me this little one signalled the end of this monitoring season, as it is time to start preparing for next breeding season.

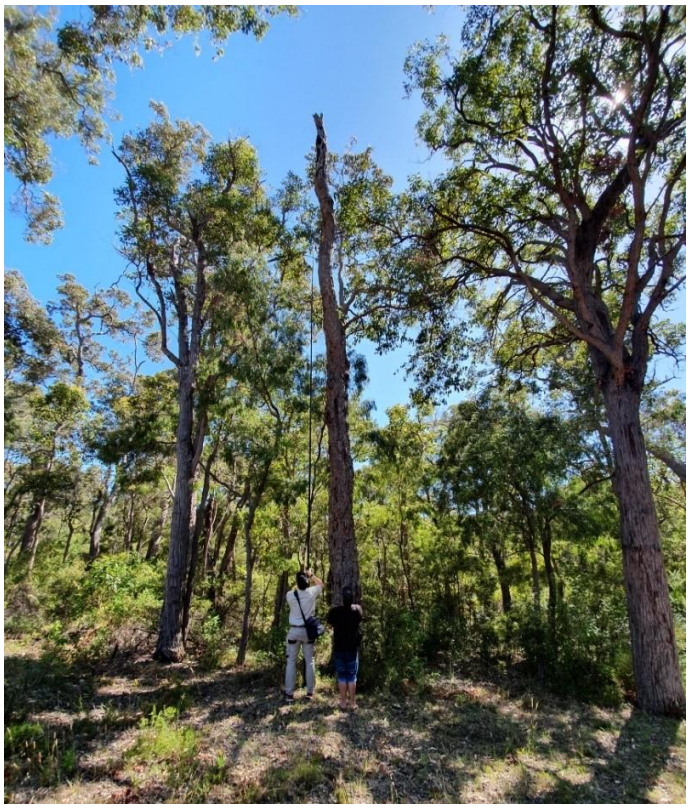


Nestling at Marlee Reserve 20th of January.
Photo: Cocky Cam

Next season, I am aiming to fill in some of the blanks in our database and will therefore be doing a lot of surveying in new areas, especially in the Southwest and around Albany and Denmark. Prior to the Christmas holidays I went down to Torbay to monitor a few hollows together with Pip Tilbrook from Torbay Catchment Group. We went around the area and visited different landholders with artificial hollows on their property. Most hollows were older, and were not in use, but we found one with a nestling. As we are certain that there is breeding in the area, I'll be back next year to survey for new breeding sites.

Tania Scoles and partner, and Pip Tilbrook in Torbay.
Photo: Sam Rycken

Over Christmas, I then met up with Christine Wilder in Augusta and Margaret River. She showed me around and we visited some trees with breeding activity. This region proves a bit more tricky as most tree hollows are incredibly high. Although I couldn't inspect most of them, I would like to return to this part of the Southwest to gather some more breeding sites for Carnaby's and possibly for the other two species of black cockatoo that breed in this area.



Checking a tree hollow in Margaret River.
Photo: Sam Rycken

For next season, I will therefore direct my attention to the south and try and get a glimpse of the breeding activity in the southern Jarrah Forest region. These are notoriously hard areas in which to follow the birds and although we know black cockatoos breed in these forests, we have yet to gather a lot of this information. Therefore, if you know of potential sites, anywhere from Nannup down to Augusta and East to Denmark, please get in touch and I'll make sure to visit these next season. Any breeding site for black cockatoos adds a level of protection to surrounding habitat regarding clearing practices, so it is crucial that we try and gather as many as we can. Wishing you all the best for 2022!

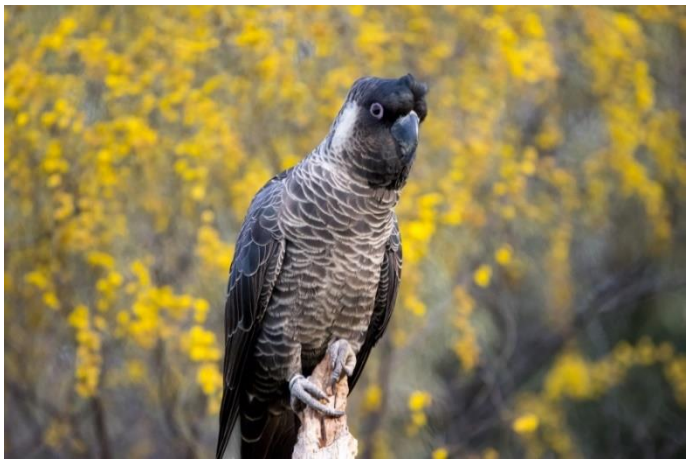
CARNABYS COCKATOOS FLY WILD AFTER REHABILITATION

Kayley Usher
Honorary Research Fellow, UWA

Sweetie is a very special Carnaby's cockatoo. Hatched in an artificial nest and banded in the Perth hills in 2013, in October 2014 he was brought to the Perth Zoo vets, weak, in pain and unable to fly after being shot in the head. With a shotgun pellet lodged just millimetres behind his left eye and suffering from infection, he wouldn't have survived much longer. Thankfully, though, he was picked up by a kind passer-by then given antibiotics and pain relief, soon regaining much of his strength. His story of survival was published in The West Australian.

After extensive rehab Sweetie was microchipped and released. He had been a year old when shot and would have still been learning how to make his way in the world, making his future in the wild look uncertain. But nine months after release Sweetie was resighted at his birthplace.

In 2018, Sweetie delighted everybody again when he and his mate returned with a fledgling in tow. Sweetie was then the first Carnabys proven to have reproduced after release from rehab, his story making an appearance in The West Australian again. Now 8 years old, he is still a regular visitor at his hills home.

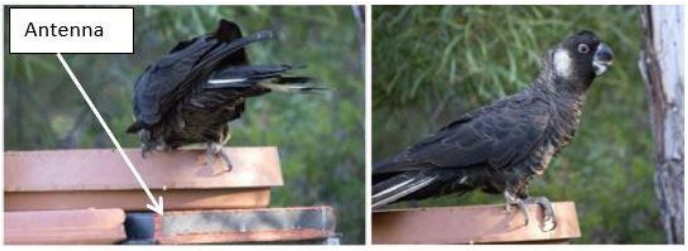


Sweetie in 2021.
Photo: Kayley Usher

The rehabilitation of injured and sick Carnabys cockatoos is a key part of the effort to conserve this charismatic species. Successful veterinary treatment and rehabilitation takes considerable expertise, effort and expense, with some birds needing up to a year to recover their strength. It's therefore important to know how many rehab Carnabys survive after release. This information primarily depends on the public to report re-sightings, with band numbers traditionally playing the central role. However, band numbers are difficult to photograph, requiring expensive photographic equipment and considerable time.

Consequently, we recently investigated the possibility of automatically logging the unique microchip numbers that all rehab Carnabys have. These microchips, about the size of a grain of rice, are implanted under the skin in much the same way as is done with pets. However, several challenges needed to be considered with a major one being how to bring the Carnabys close enough to the antenna for the microchip number to be detected?

After consultation with Microchips Australia, who cheerfully provided expert support, we settled on purchasing a Trovan LID650 decoder and ANT612 panel antenna. The antenna has two coils enclosed in a waterproof casing. The antenna was placed under a water bowl that the Carnabys frequent, and as the bird leans down to take a sip of water its microchip is detected and the unique number, time and date are logged on the decoder. A solar panel and battery provide power to the setup, all cabling is protected from curious beaks with heavy duty covers and the data logger is protected from rain.



Sweetie drinking while his microchip number is being automatically logged.
Photo: Kayley Usher

The setup cost around $4,000 with the battery and solar panel, but the price will vary according to the value of the Australian dollar and the solar panel that is chosen. Some interconnection wiring of the solar panel to the battery and from the battery to the logger is required.

This setup has been in place for several months and has recorded the daily movements of Sweetie and another rehab male, who was released following a car strike near Lancelin. Another rehab Carnabys, a female, has been recorded on two days, with the setup proving its worth by detecting the bird in our absence.

Microchip data logger set-up with bird bath.
Photo: Kayley Usher

Subsequently, a friend has purchased the same microchip data logger set-up. She sees larger numbers of Carnabys and has recorded 52 rehab birds to date. Most of these have been by photographing band numbers but only 7 weeks after installing the data logger an additional 11 birds have been identified by their microchip numbers. Two of these were males released 10 and 12 years ago - one was a victim of the severe hail storm in 2010. These records were the first since their releases and show that the birds have prospered back in the wild.

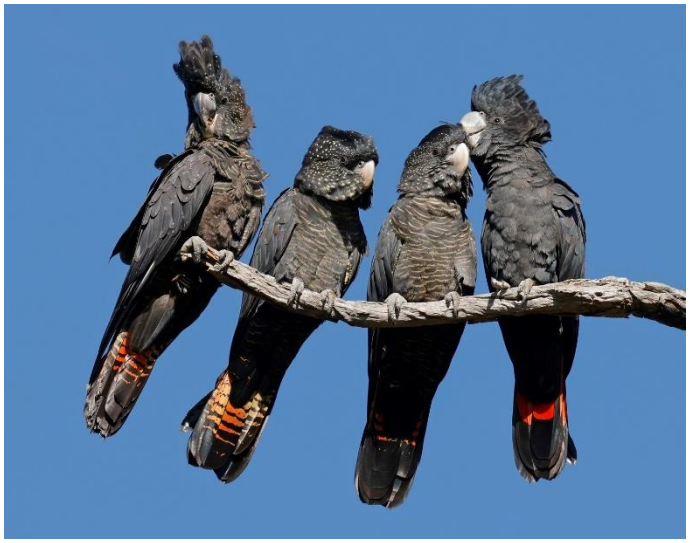
We believe this to be the first time that the microchip numbers of rehabilitated birds have been automatically logged in the wild. Over time these data loggers will provide essential information on the survival and movements of rehabilitated Carnabys cockatoos without disturbing the birds and without many hours behind a heavy camera and lens.

2021 SPRING FRTBC COUNT

Merryn Pryor
Black-Cockatoo Project Coordinator

The Spring Forest Red-tailed Black-Cockatoo Roost Count returned in October last year, with over 80 registered volunteers counting at roost sites across the Greater Perth-Peel Region. The Spring count has occurred annually since 2018 and was introduced to more closely monitor the numbers and seasonal movements of FRTs given the large increases of numbers recorded on the Swan Coastal Plain during the Great Cocky Count in recent years. This was the first year that volunteer registrations for the count were opened to the wider public. The increase in volunteer numbers enabled us to count 65 roost sites across the region, up from 45 last year. Three of these sites were new roost sites that were added after reports of roosting by volunteers, and have not previously been counted during any Great Cocky Counts. It is possible that these roost sites may only be used during the spring months, and it will be interesting to monitor if they are used during this year's Great Cocky Count.

On the 10th October a total of 921 Forest Red-tailed Black-Cockatoos and 132 White-tailed Black-Cockatoos were counted across the Perth-Peel Coastal Plain and Northern Darling Scarp and Plateau. This was still substantially lower than counts within these regions during recent Great Cocky Counts (5,771 in 2021), but was the highest Spring Count recorded thus far. The overall average count for all sites was 14, well below the average of 62 recorded from the same sites during this year's GCC, though identical to last year's Spring Count average. The overall occupancy rate remained stable at 58% compared to 61% and 60% from the 2019 and 2020 counts respectively. This means that even with the addition of 20 extra sites the number of sights occupied increased proportionately.



A small group of perching FRTBCs.
Photo: Keith Lightbody

Of the FRTBCs counted within the Greater Perth-Peel regions, almost three-quarters of them (75%) were recorded in the Northern Darling Scarp area. The occupancy rate and average count were also much higher in this region compared to the Coastal Plain, although there were less sites surveyed in this area. This continues to support observations that the majority of FRTBCs that visit the Swan Coastal Plain during the Summer and Autumn move up to the scarp and inland during the Spring months, similar to the movement patterns of Carnaby's Black-Cockatoos. Below is a table summarising the main findings of the October counts thus far. Please note that some of the statistics from past years may be different from what has previously been presented due to a review and reallocation of some roost sites to either the Perth-Peel Coastal Plain or Northern Darling Scarp and Plateau. This ensures that they align with the DBCA administrative areas as specified in previous GCC reports.

Table 1: Summary of Spring FRTBC Counts from 2018 to 2021.

	Oct-18	Oct-19	Oct-20	Oct-21
No. roost sites surveyed	15	36	45	65
hills	*2*	*18*	*26*	*28*
plains	*13*	*18*	*19*	*37*
Average Count	3	21	14	14
hills	*15*	*23*	*15*	*24*
plains	*1*	*20*	*13*	*7*
No. sites occupied (Occupancy rate (%))	3(20)	22(61)	27(60)	38(58)
hills	*1(50)*	*11(61)*	*18(69)*	*20(71)*
plains	*2(15)*	*11(61)*	*9(47)*	*18(49)*
Total no. counted	43	772	648	921
hills	*29*	*419*	*402*	*670*
plains	*14*	*353*	*246*	*251*

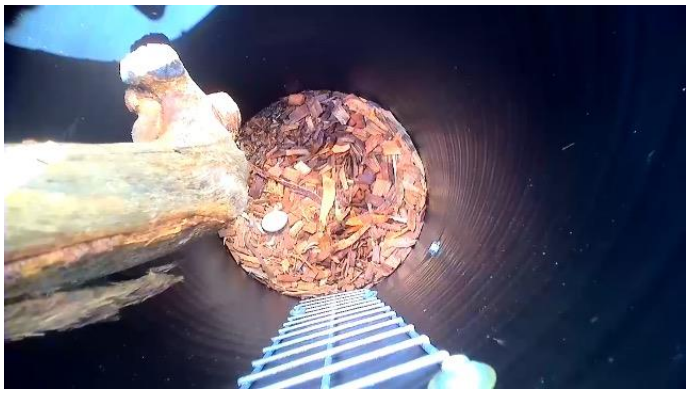
A huge thank you to all the volunteers that took part in the October count, as well as the private property owners that allowed access to their properties for surveys. Our ongoing research and monitoring would not be possible without your continued support. We plan to continue the Spring FRTBC Count over the next three years to facilitate long-term monitoring of the seasonal movements of FRTBCs in the Greater Perth-Peel Region.

The Spring Forest Red-tailed Black-Cockatoo Count was delivered as part of the Alcoa Community Black-Cockatoo Recovery Project through funding from the Alcoa Foundation.

ADOPT A COCKY NEST UPDATE

Merryn Pryor
Black-Cockatoo Project Coordinator

The 39 artificial hollows installed as part of the *Adopt a Cocky Nest* project have now seen their first breeding season. We are pleased to report that despite only being installed for several months, some of the hollows have already recorded breeding action in their first year. Five tubes were found to be occupied when monitoring took place in October last year. There were also reports of many other hollows being visited by prospecting pairs of Carnaby's, with prospecting behaviour still occurring at the time of monitoring. As such, it is possible that more hollows may have become active after the monitoring took place. This is a great start and gives us high hopes of more tubes being taken up and used by Carnaby's in future years.



A Carnaby's Black-Cockatoo egg in one of the artificial hollows.
Photo: Cocky Cam

Donors and nest hollow hosts received updates about their tubes after monitoring, as well as a newsletter with information about the breeding of Carnaby's Black-Cockatoos and the overall outcomes of the first breeding season of the project. We will continue to monitor the tubes over the coming years and provide updates to hosts and donors.

Thanks again to all our generous donors and nest hollow hosts. Thanks also to project partners Carnaby's Crusaders, for the manufacture and installation of the nest hollows, and Hesperia, for funding the installation, staff time and monitoring.

THE COCKY CONSERVATION TEAM

Merryn Pryor, Black-Cockatoo Project Coordinator

Merryn Pryor continues to work primarily on our Alcoa Foundation funded work (Great Cocky Count, Cocky Watch, Spring Count and revegetation) and Adopt a Cocky Nest project. Contact Merryn on merryn.pryor@birdlife.org.au or 0424 735 770

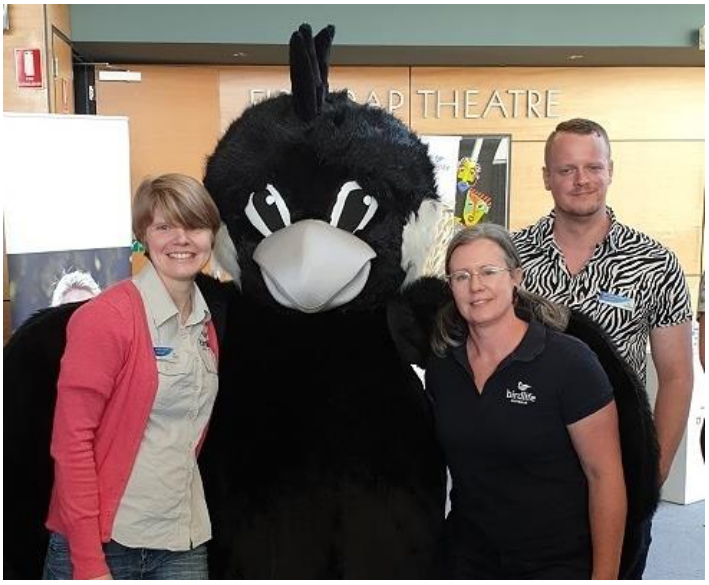
Sam Rycken, Carnaby's Black-Cockatoo Coordinator

Sam Rycken works on the federally funded Protecting WA Black-Cockatoos project. The project is focussed on monitoring the breeding of black-cockatoos and implementing on-ground actions to improve breeding outcomes in partnership with regional NRM groups. Contact Sam on sam.rycken@birdlife.org.au or 0497 530 868

Tegan Douglas, WA Woodland Bird Program Manager

Tegan Douglas has taken over the management of BirdLife's Western Australian black-cockatoo projects and is also in charge of the new Birds on Farms project that has started up again this year. Contact Tegan on tegan.douglas@birdlife.org.au.

Cocky Notes is published with funding from The Alcoa Foundation. The Southwest Black-Cockatoo Recovery Program is funded and supported by a number of organisations, including State NRM and those represented here:



The Cocky Team at the recent Black-Cockatoo Symposium
Photo: Francis Smit

HAD A CHANGE OF ROOST?

If you've moved homes or changed email addresses, or if you don't want to receive Cocky Notes in the future, please let us know at wa@birdlife.org.au