# Cocky Notes

Issue 32: January 2021

### URBAN TREES PROVIDE HABITAT FOR BLACK-COCKATOOS

We are very fortunate across the metropolitan area of Perth and the Peel region to share the remaining bushland in reserves, and trees in our local parks, gardens and along our streets with threatened Black-cockatoos. The endangered Carnaby's Black-Cockatoo spends the non-breeding season between January and July in the suburbs and the vulnerable Red-tailed Black-cockatoo has become a frequent summer visitor to the Perth and Peel regions over the past decade.

BirdLife has known for some time from our annual Great Cocky Count just how important remaining trees are across the urban landscape, particularly for roosting. In 2019-2020, with the support of the State NRM office and the observations and knowledge of residents across the Perth and Peel regions, BirdLife WA has been able to develop a growing register of trees used by Black-cockatoos for foraging, roosting and nesting.



Forest Red-tailed Black-Cockatoo feeding on a Pin-cushion Hakea (*Hakea laurina*).

Photo: Adam Peck

So far the register comprises hundreds of trees across 18 local government areas spanning from the City of Joondalup south to the City of Mandurah and east to the Shire of Serpentine-Jarrahdale. Significant trees have been identified across many land tenures including reserves, parks, private properties and street verges. In fact, the project supports the work of Murdoch University researchers

in revealing how important street trees are for the birds in providing food resources, resting places in the day and evening roost sites, all of which facilitate their safe movement across the modified urban landscape. Some volunteers located important trees that Carnaby's use every year when they return from breeding to leave dependant juveniles during the day while the adults go off to feed.

Volunteers submitted records of trees used by Carnaby's and Red-tailed Black-cockatoos for feeding, roosting and even breeding. The tree species used are very varied and include typical native species which we would expect such as Marri, Tuart, Jarrah, Sheoak, Banksias and Grevilleas, and many non-native or non-local species such as Cape Lilac, Lemon-scented Gums, Macadamia trees and Olive trees. As a result of the project we have first time records of Red-tails feeding on olives and Hakea laurina.

New roost sites where birds rest during the evening have been identified and added to the BirdLife Great Cocky Count database. Nest trees have been located in the Mandurah, Lake Clifton and Joondalup areas and in Cockburn where breeding pairs of Carnaby's or Red-tailed Black-cockatoos have been confirmed.

Another revealing aspect of the project has been identifying trees that birds visit yearly, particularly for feeding. Their repeated use across months or between years is a strong indication of the high food value of these trees and emphasises the need to identify and protect these trees, because not all trees are equal in their habitat value.

BirdLife has and continues to collate all this valuable information and is making it available to local councils and state government departments to be used to inform land management decisions and protect important habitat for Black-Cockatoos across the Perth-Peel region.

Many thanks to all participants and we hope to continue to build the register and share the information for the benefit of the birds. Without them our urban landscapes would be a little dull.

Vicki Stokes WA Program Manager, Birdlife Australia



## COCKATUBES FOR FIRE-AFFECTED GLOSSY BLACK-COCKATOOS

Around this time last year Australia's east coast was ablaze, with wildfire spreading along the Eastern seaboard. In the aftermath of the fires, we learnt about the loss of hundreds of thousands of animals and the destruction of habitat which has resulted in changes to bird and animal behaviour. The wildfires made worldwide headlines, not just for property and human losses, but also for the devastating impact on Australia's wildlife. The bushfires motivated worldwide generosity and philanthropy in support of bushfire recovery including an enormous support for unique Australian fauna species.

The Glossy Black-Cockatoo (Calyptorhynchus lathami) is endemic from south-east Queensland to eastern Victoria, with a distinct population on Kangaroo Island, off the coast of South Australia. The population on Kangaroo Island had previously increased from 100 individuals to around 400 through ongoing local efforts, which included an artificial nestbox program, but around one third of the island was burnt, including significant Glossy Black-Cockatoo breeding and forage habitat. Kangaroo Island recovery projects received considerable attention and support, including from a West Australian landcare group based in Serpentine-Jarrahdale - Landcare SJ.

Artificial hollows for Black Cockatoos became part of the focus in recovery efforts of Carnaby's Cockatoo by Landcare SJ in the early 2000's. Carnaby's Cockatoo were notably in decline, and loss of natural breeding habitat was identified as a contributing factor. Many natural hollows were lost to agriculture and urbanisation, and feral bees were also known to colonise natural hollows to the detriment of WA's three Black-Cockatoo species. In 2004, Ron Johnstone of the WA Museum gave a community presentation on Black-Cockatoos in Serpentine-Jarrahdale, attended by members of Landcare SJ. After the presentation some discussions were had about a suitable design for a Black Cockatoo artificial hollow.

At the time, Landcare SJ was receiving black PVC pipe by the container load as a mining waste product, and recycling into various products including garden beds and fencing posts. After the discussion with Ron Johnstone, a design concept evolved into the Cockatube®, Landcare SJ's response to the need for Black-Cockatoo artificial hollows. After some careful research into what was happening around Australia in terms of artificial nesting hollows for Black Cockatoos, Landcare SJ came across the Kangaroo Island program. Their design helped inform Landcare SJ efforts. For a number of years, Landcare SJ continued to use the heavy weight PVC pipe, until 2014, when a lightweight option was trialled. Since then, the focus

has been on the lightweight pipe to manufacture Cockatubes and efforts have been made to share the design and inform other Australian Black-Cockatoo enthusiasts about the benefits of the Cockatube.

After the 2019/20 wildfires Landcare SJ decided to send five Cockatube nestboxes to support the program on Kangaroo Island, and assist in their bushfire and Glossy Black Cockatoo recovery. After some discussion however, Vinidex Australia, whose pipe products are used in the manufacture of Cockatubes, agreed to donate enough pipe to manufacture 100 Cockatubes. Before long, all suppliers of component parts were on-board donating materials and hardware. Two local mining companies supplied base material for the nestboxes, the Keysbrook Volunteer Fire Brigade raised \$2000 toward the project, local businesses, board and community members contributed additional cash Staff from Peel-Harvey Catchment Council, Alcoa Kwinana Refinery, Landcare SJ and local community members spent the constructing the Cockatubes. Through support of the local MLA, and the Hon. Senator Linda Reynolds, Minister of Defence - the Cockatubes were delivered by the ADF Joint Logistics Unit (West).



Volunteers with a truck loaded with Cockatubes ready to be delivered after a hard day's work. Photo: Francis Smit

In the end, a total of 112 Cockatube artificial nestboxes were sent to Kangaroo Island, Southern Queensland, and Mallacoota in Victoria, to support bushfire recovery efforts for the Glossy Black-Cockatoo. The \$2000 raised locally was donated to the Nature Foundation SA, for additional recovery work on Kangaroo Island. It was only a small contribution to bushfire relief and Black-Cockatoo recovery, but the generosity of the community in contributing time, cash and materials to support wildlife recovery was incredible.

Francis Smit Executive Officer, Landcare SJ Inc.

#### NEST DEFENDING

Anecdotal reports show evidence some endemic birds may be adapting to increased nest competition. Ringneck parrots in Perth compete for hollows with Galahs and Rainbow Lorikeets. In the past their nest occupancy behaviour seemed to be quite passive: if competitors show interest in a nest Ringnecks would rarely defend it vigorously. However in recent years they seem to be much more actively defending nests. I have seen this behaviour in my artificial hollow, where an extended family group defends the hollow year round from Galahs and nests there in spring. Mark Binns has also seen this behaviour in his artificial hollows, with Ringnecks defending nests from both Galahs and Rainbow Lorikeets. In Moora Carnaby's have been seen defending and even evicting Galahs from artificial hollows. This may also explain why Carnaby's hens seem to be increasingly less likely to flush from hollows when inspections are carried out with Cocky Cam. This is good news for Carnaby's but bad news for surveyors, who cannot see eggs or chicks! Hopefully this adaptive behaviour will continue and our endemic birds will benefit by increasing their breeding rates.

Adam Peck Black-Cockatoo Project Coordinator

## FOREST RED-TAILED ROOST COUNT

The GCC may have been cancelled last year thanks to Covid, but the annual Spring Forest-Red-tailed Black-Cockatoo Count went ahead in October. Started in 2018 the Spring count was introduced to monitor the activity and movements of Forest Red-tailed Black-Cockatoos (FRTBC) after large increases in numbers of the species were recorded on the Swan Coastal Plain in recent years.

On the evening of the 18th October forty-five roost sites were surveyed across the Swan Coastal Plain (SCP) and in the Hills, with a total of 648 Red-tailed Black-Cockatoos counted. Similar to previous years, this year's Spring count total was substantially lower than the totals from recent April Great Cocky Counts, demonstrating a seasonal redistribution of FRTBC away from coastal areas during the winter and spring months. The average count for all sites was 14, also well below the April Great Cocky Count average of 59for the same sites over the last few years. The total count and average count were lower this year than the 2019 Spring count with 772 individuals counted last year with an average count of 21. Despite this the occupancy rate of roost sites was very similar in the 2019 and 2020 spring counts at around 60%.

Of the FRTBCs remaining in the area and counted this spring, a higher proportion (60%) were recorded on the SCP, where birds were recorded breeding and feeding on a broad variety of plant species. The average count of 18 for SCP sites was also much higher than the average count of 11 recorded for sites surveyed in the Hills. Below is a table summarising the main findings of the October counts thus far. It is hoped that data from future years will help us better understand the recently detected seasonal movements of Forest Red-tailed Black-Cockatoos over the greater Perth region and surrounding areas.

Table 1: Summary of October and GCC night roost counts for FRTBC.

	Oct-18	Oct-19	Oct-20	Av Oct Count	Av GCC 2014 - 2019
Number of roost sites surveyed	15	36	45	-	-
Average count	3	21	14	13	59
hills	15	24	11	17	32
plains	1	20	18	13	86
No. sites occupied (Occupancy Rate (%))	3(20)	22(61)	27(60)	-	-
hills	1(50)	10(63)	<i>15</i> (65)	-	-
plains	2(15)	12(60)	12(55)	-	-
Total number counted	43	772	648	-	-

A total of 15 White-tailed Black-Cockatoos were also counted from four sites.

A huge thank you to all the volunteers and land owners for their time and access to their properties. Our ongoing research and monitoring would not be possible without you. This work was funded by the Alcoa Foundation.

Merryn Pryor Black-Cockatoo Project Officer

#### COCKY BREEDING CAPERS

2020 has been a huge year for our breeding survey team! A new project Protecting WA Black-Cockatoos has begun, led by myself for BirdLife. This project is funded by the federal Department of Agriculture, Water and Environment. The aim of this project is to:

- Locate new breeding sites
- Engage land owners and the wider community in conservation and monitoring
- Implement on ground works at key breeding sites on private land to improve breeding outcomes for the species.

Five NRM regions (NACC, Wheatbelt NRM, PHCC, SWCC and SCNRM) are delivering this project, with BirdLife contracted to give advice, training, data and to do surveys on request. Many surveys have taken place in spring this year and land owners contacted to assess interest. On ground works may include a mix of revegetation, fencing, artificial hollows and

feral animal or hollow competitor control. There have been some early successes in terms of locating new sites. A small reserve near Nyabing was identified as a new breeding site. Also, Carnaby's breeding was found in a Cockatube in Lake Clifton installed under our Alcoa Foundation funded project. This is the first time BirdLife have found breeding in this area. Most exciting of all was a trip I made to Kalbarri. The region is a known Carnaby's breeding area but no reliable breeding records exist since the 1990s. After two fruitless days of searching in rugged terrain, I almost gave up hope, but on the last morning I found my prize — an occupied nest with an egg! This single nest is a very significant find, since Kalbarri is right on the very edge of this endangered species' range — 280 km north of the nearest known, current breeding site! We often hear about the impacts of climate change and the range of species like Carnaby's contracting, so it's wonderful news to hear this species is hanging on at the northern edge of their range. A subsequent survey found a second nest. The find may open up opportunities for further research such as more surveys, leg banding, genetics work and even satellite tracking, so the sky's the limit for this special population of this iconic species.



Carnaby's egg found in an occupied hollow in Kalbarri. Photo: Cocky Cam

It seems to have been a bumper year for Forest Red-tailed (FRT) breeding, with many reports of breeding throughout their range. One great example was a nest in a natural hollow in Cockburn. An FRT (assumed to be the mother) was sighted at the hollow by Claire Greenwell. On inspection with Cocky Cam she was at the hollow entrance, but she ducked down to the bottom which meant we could not view the contents. Was there an egg or chick in there? We waited around a while and were rewarded. At around 5pm we heard a pair of FRT calling and fly into a nearby tree. The FRT at the nest popped its head out on hearing the call and soon after the pair flew to the nest. It was then clear the bird we had seen in the hollow was a chick, very close to fledging. The male was then viewed feeding the chick at the hollow. This is apparently very rare (Tony Kirkby has studied FRT for 20 years and only seen this twice!). The last FRT breeding record for this area is from an artificial hollow in 2013 at Murdoch University. All in all a very important record, congratulations to Claire on bringing it to my attention. 5 days later the chick was seen leaving the nest, we hope it thrives and goes on to breed itself one day.

I would like to thank all the volunteers and land owners who have helped out this year, we couldn't do it without you. The full results of this year's breeding surveys will be published in the next few months.

Adam Peck Black-Cockatoo Project Coordinator



Forest Red-tailed Black-Cockatoos breeding in a natural hollow in Cockburn.
Photo: Claire Greenwell

#### **BLACK-COCKATOO REVEG UPDATE**

Over the winter last year 12,500 seedlings were planted in strategic locations across the southern Swan Coastal Plain to provide food species for Black-Cockatoos into the future and connect habitat between the coast and scarp. Thanks to some good winter and spring rains the seedlings are off to a flying start, with some already bursting out of the top of their plant guards. A revisit to some of the sites in November found the Marri seedlings growing particularly well, alongside some healthy Hakea, Banksia and Jarrah seedlings. There was also evidence of seedlings that had failed to establish and died. In large-scale revegetation projects an attrition rate is always expected, which is why we plant large numbers of plants so densely.

The seedlings were not the only plants to enjoy the rains with the weeds springing up and overtaking seedling growth at many sites. Many of the weeds will die off over summer and some additional weed management will be done at some sites to give the seedlings a better head start with less competition for resources.



A thriving Marri seedling outgrowing its tree guard. Photo: Merryn Pryor

Thank you to all the private landowners, volunteers and community groups who helped to facilitate the plantings and get the seedlings in the ground, as well as the Alcoa Foundation for their support of this project. We are planning to plant another 10,000 black-cockatoo food plants in the coming winter. Community planting days will be advertised on our Facebook page and via the Birdlife WA eNews. We hope to see you there!

#### **COCKYWATCH UPDATE**

Launched in 2018, CockyWatch is a citizen science road transect survey program that was designed to assist in better estimating and tracking changes in populations of all three threatened Black-Cockatoos species across their southwest range. The year 2020 was a relatively quiet year on the CockyWatch front due to travel restrictions and other disruptions caused by Covid-19. However a new year is a great time to get involved in CockyWatch surveys, regardless of whether you're a first timer or getting back into the swing of things after a turbulent year. The surveys are easy to do and can be fun for the whole family. Any time you are going for a drive in the southwest that's longer than 20km you can do a CockyWatch survey.

Covid also overshadowed the release of CockyWatch surveys on Birdlife's online survey and data portal, Birdata, in January last year. Birdata streamlines the CockyWatch survey process by automatically recording GPS coordinates of start, finish and sighting locations, recording the duration time of the survey and providing handy prompts and reminders on resetting your odometer and what information to record. No paper, pen, clipboard or GPS required. To learn more about Birdata qo https://birdata.birdlife.org.au/. Datasheets are still available online for those who prefer this method, with details on how to submit at the bottom. We have also been busy updating our online material, <u>FAQs</u> regarding <u>instructions</u> and CockyWatch surveys. To find out more and start surveying head

over to the <u>CockyWatch</u> webpage at <u>https://www.birdlife.org.au/projects/southwest-black-cockatoo-recovery/cockywatch</u>. We look forward to receiving your surveys so we can bring you more results later in the year! Wishing you safe and happy travels in the meantime!

#### ADOPT A COCKY NEST

Over the years many people have asked me whether it's a good idea to install an artificial cocky nest in urban Perth. Our data show that most of the time the answer is no (most tubes are used by Galahs and Corellas; cockies that do breed here are also at greater risk from car strike and Raven attack). People are obviously disappointed with this answer, but BirdLife now have a solution. The Adopt a Cocky Nest project will take donations to install artificial hollows in areas where they are needed. The system will work like this:

- Donations taken (half a nest/full nest); cost to be confirmed
- Expression of Interest form for land owners to host tubes
- BirdLife will select most appropriate sites and facilitate installation
- BirdLife will do annual surveys and send results to donors
- Hesperia will cover the costs of installation,
   BirdLife staff time and surveys

Did you know that 70% of Perth's Carnaby's roost just north of the city? We think many of these birds breed in the Bindoon/Chittering/Bullsbrook area, so we have selected this area for the first year of this project. If you own property in this area please fill in the EOI form <a href="here">here</a>. Carnaby's Crusaders will manufacture and install the hollows using an experienced tree climber, Dean Arthurell.

The donation page will be up and running shortly on the Birdlife website under the Southwest Black-Cockatoo Recovery Program. Our aim is to get 24 tubes installed this year! Many thanks to Hesperia and Carnaby's Crusaders for helping us to launch this project.



Carnaby's Black-Cockatoos at the top of an artificial hollow.

Photo: Adam Peck

### THE COCKY CONSERVATION TEAM

#### Merryn Pryor, Black-Cockatoo Project Officer

Merryn Pryor has joined us as Black-Cockatoo Project Officer. She will mainly be working on our Alcoa Foundation funded work (GCC, Cocky Watch and revegetation) and Adopt a Cocky Nest. Contact Merryn on <a href="mainto:merryn.pryor@birdlife.org.au">merryn.pryor@birdlife.org.au</a> or 0424735770

#### Adam Peck, Black-Cockatoo Project Coordinator

Adam Peck is still the Black-Cockatoo Project Coordinator. However, for the next three years he will mainly be working on the new Protecting WA Black-Cockatoos project. He will also be assisting Merryn to coordinate the GCC. Contact Adam on <a href="mailto:adam.peck@birdlife.org.au">adam.peck@birdlife.org.au</a> or (08) 9287 2251.

#### Vicki Stokes, WA Program Manager

Vicki is our Perth-based manager for BirdLife Australia's WA funded projects, including the Southwest Black-Cockatoo program.

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:

### 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

### 2021 GREAT COCKY COUNT!

Registrations for the 2021 Great Cocky Count are now open! This year the Count will be held on Sunday, March 28, at sunset. We need your help to make it bigger & better than last year. Register online by March 7 at:

#### https://forms.gle/rwaocc7PTBW5Ejhm8

If you know of any areas where black-cockatoos roost overnight, please let us know at <a href="mailto:greatcockycount@birdlife.org.au">greatcockycount@birdlife.org.au</a> so that we can include it in this year's count.



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