Red-tail News

Issue 49 December 2019



WELCOME TO THE CHRISTMAS EDITION 49 OF RED-TAIL NEWS.

Edition 49 of Red-tail News brings you a collection of news stories including all the highs and lows of the Recovery Project since our April edition earlier this year. This includes some concerning results again from this year's flock count. Even though the number of birds counted in the Annual Cocky Count was higher compared to the last few years, the flock counts continue to show a decline in barred birds (females and juveniles), possibly due to poor food availability throughout the year.

In light of this both staff and volunteers from the Recovery Project are continuing to work hard to put more food trees in the ground for these birds, and we will hear updates from our key revegetation projects across South Australia in this edition. We will also learn more about the new Red-tail nest boxes which have been installed in priority locations across the Wimmera and hear updates from PhD student Daniella Teixeira about her bioacoustics monitoring project.

It is also the time of year when we urge the community to help us locate new nests across the range in both SA and Vic through our Nest Incentive Scheme. Anyone who sees Red-tails or has an idea about where they might be nesting is encouraged to contact 1800 262 062 or email redtail@birdlife. org.au to report their sightings.

Season's greetings and sincere thanks to all the landholders, volunteers and cocky lovers who worked with us in 2019.

Thanks, Kelsey

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NEW HOMES FOR COCKIES

In June this year members of the Recovery Team and volunteers installed 25 new nest boxes for the South-eastern Red-tailed Black-Cockatoos on private properties across the Wimmera region. The nest boxes were installed as part of the Wimmera Catchment Management Authority's 'Food for the Future' program. The installation process involved trained personnel using a cherry picker to install the boxes high in the trees. The boxes were installed at the same height on a mix of both dead and live trees.

The properties on which the boxes were installed have all been identified as high priority sites because they are close to suitable feeding habitat and there are few natural hollows available. A very big thank you to the landholders for allowing us to come onto their properties and install the boxes for the cockies (and also to the volunteers Adam Perryman, Rocky Konings and Noel Stratman who braved the cold weather to help!).

Low nest availability is a factor likely to be limiting the recovery of Red-tails and we are hoping the new nest boxes will provide a safe place for the cockies to nest and raise their chicks. The nests have been made from corrugated plastic piping with a steel coversheet for insulation and strong internal ladder to allow the birds to easily climb in and out. This new design was inspired by boxes used successfully for black-cockatoo conservation efforts in Western Australia. This followed a visit from a member of the West Australian Carnaby Cockatoo Recovery Team, who has extensive experience experimenting with the design, use and placement of nest boxes. The design includes an open top, whereas previous versions of our nest boxes had a cover. Removing the top has been found to reduce use by galahs and white cockatoos in West Australia, and we hope it will do the same here.

The boxes will be monitored this breeding season to determine whether any Red-tails are using them with bioacoustic monitoring equipment, developed with Dani Teixeira who has done her PHD developing this method. The Recovery Team will also be installing more new nest boxes early next year in the Glenelg Hopkins and South East regions.

I would like to say a big thank you to long time Recovery Team member Jim McGuire for securing the plastic material needed to collar the nest box trees to protect them from predators. I would also like to say thanks to Grampians Wimmera Mallee Water for kindly donating additional tree collaring material to the project, and DELWP's Wimmera Forest and Fire Operations Division for delivering the material to Edenhope for safekeeping. We greatly appreciate the materials and time you have provided towards the project.

Kelsey Bennett



Adam and Rocky using the cherry picker to install a nest box Photo credit: Kelsey Bennett

BIOACOUSTIC NEST MONITORING: PROJECT UPDATE

Using sound to monitor animals, or bioacoustics, is becoming more common in wildlife research. It's a 'sound' method because it doesn't disturb the animals and can collect much more data cost effectively than human observers typically can. In my PhD research, my aim is to determine if, and how, we can use bioacoustics to monitor Red-Tail breeding.

To get the most out of bioacoustic methods, we need to know what sounds Red-Tails make and what they mean. I've found that Red-Tails have 11 call types representing six different behaviours. Using this knowledge, we can now listen to a sound recording from a nest and understand what the birds are doing. We can identify behaviours like flight, perching, begging and when the female enters the nest hollow.

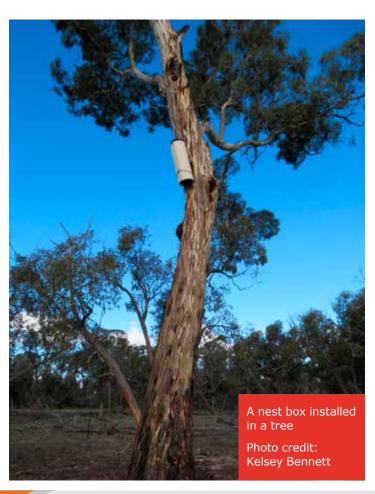
The most important sounds for monitoring are those that the nestlings make. Nestling calls are unique and, in the second half of the nesting period, are heard just about every day. This makes them great for confirming nest activity.

Since 2016, I've monitored 24 nests using remote sound recorders. These recorders remained at each nest until it fledged or failed. Most nests have several months' of sound data, which is far too much for anyone to listen to. To get through the sound data efficiently, I've built a call recognition algorithm that scans through the sound files to detect nestling calls. It works pretty well; most days, it correctly assigns a nest as "active" or "inactive". The recogniser still returns some false detections – most often calls from other cockatoo species – but it's certainly made it easier to get through the sound files.

I'm now working with Kelsey and Richard to scale-up the method, to monitor more nests using bioacoustics.

For project updates, please follow Black-Cockatoo Project on Instagram and Facebook @blackcockatooproject.

Daniella Teixeira



REWARDS OFFERED TO FIND **NESTING COCKATOOS**

The Red-tailed Black-Cockatoo Recovery Team and BirdLife Australia are calling on landholders and members of the public to report all sightings and nest activity of the endangered South-eastern Red-tailed Black-Cockatoo.

Since 2011, nest incentive payments have been offered to the public for information on new and existing nest sites across its range in the south-east of South Australia and south-west of Victoria. The scheme has been particularly effective with 31 new nests located thanks to information provided by the community. It is important we find nests so they can be protected from threats such as possums and we can learn what the birds need to successfully raise their chicks. The scheme, which offers a reward for the discovery of new nests and for information on the re-use of existing or known nests, will again be offered this season.

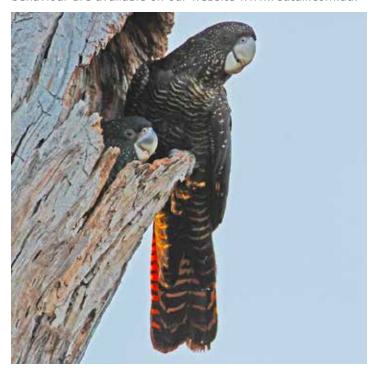
Red-tails nest in large hollows (15-50cm), which most often occur in very old, large eucalypts such as River Red Gums. Nest hollows can be in dead or live trees. Red-tails will choose to nest as close to their stringybark feeding habitat

During the last breeding season the Recovery Team did not find any new nests across the range of the Red-tails and are hoping to find new nests this year, especially in South Australia where there are very few records of nests.

Many landholders are understandably protective of their nests and would rather not have people coming onto their properties for fear of disturbing the nest. The Recovery Team has local landholders on board who would be happy to discuss with them about how they can help while remaining anonymous.

We are asking anyone that sees Red-tails or observes nesting behaviour to report their findings to the Coordinator by calling 1800 262 062 or via email redtail@birdlife.org.au. All we need is the date and time of sighting, number of Red-tails, the location (preferably a grid reference), and what the birds were doing (ie feeding, flying, drinking etc). We are particularly keen to hear from anyone who sees single adult males or pairs of Red-tails coming into water or trees with large hollows, as these are indicators of nesting birds.

There are a number of conditions required when applying for incentive payments, which are only issued once the sighting has been confirmed by the Project Team. Guidelines for the nest incentive scheme and information on Red-tail nesting behaviour are available on our website www.redtail.com.au.



A female and chick at the entrance of a nest hollow Photo Credit: Bob McPherson

RED-TAIL ABORIGINAL SCHOOL PRESENTATIONS

Students at Glenburnie Primary School, Newbury Park Primary School and Tenison Woods College had the opportunity to take part in Red-tail Aboriginal presentations conducted by Uncle Ken from Bush Repair. The students learned cultural stories about the Red-tails including how the cockatoos got the red colouring in their feathers, and the importance of the cockatoos to the Boandik people. All the students were thoroughly engaged in the session and many could remember the stories word for word and eagerly shared it with friends and parents.

The students were also given the task of creating posters based on the presentation they heard from Uncle Ken. The posters could depict either the cultural stories, facts about Red-tails, or drawings of the birds themselves. The posters were then displayed at the SA Landcare Conference held in Bordertown during the last week of October, covering the venue walls with beautiful pictures of the cockatoos. A voting station was also set up so conference attendees could vote for the poster they thought was the most creative. The students who created the winning posters were presented with prizes for their hard work!



Glenburnie Primary School students learning Red-tail cultural stories from Uncle Ken. Photo credit: Kelsey Bennett



Some of posters created by students from Tenison Woods College displayed at the SA Landcare Conference, Photo credit: Jeremy Freeman

FLOCK COUNT REPORT 2019

'Flock counts' are conducted in autumn each year to gain an indication of breeding success. Young Red-tails are for all practical purposes indistinguishable in flocks of Red-tails from one, two and three-year old birds and from females of any age, so we count the number of adult males in each flock. All other Red-tails are spotted and barred, with barred tail feathers. These are collectively called 'barred birds'. More barred birds in flocks is interpreted as indicating more successful nesting in the preceding years.

This year we estimated the number of barred birds in six flocks totalling 537 birds. Flocks this year had a slightly higher proportion of barred birds (54%) than last year (52.5%), but this is still well below the long-term average of 58% barred birds.

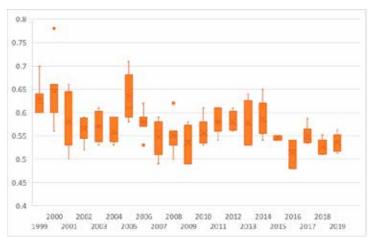


Figure 1: Proportion of barred birds in flocks.

This year most flocks were in the southern range of the birds in Brown Stringybark (Eucalyptus baxteri). Our stringybark food monitoring indicates that food availability throughout the range this year has been pretty poor which we think is a big part of the reason for the poor breeding success that the cockatoos have had this past year. The Desert Stringybark (Eucalyptus arenacea) had a big flowering event across its range in late summer/autumn this year which has now matured and is available for cockatoos. Red tails have come back into the desert stringybark areas west of Casterton as a result, and are likely to be turning up more in the northern part of the cockatoo's range where Desert Stringybark is the main species. Hopefully this flowering has translated into a good seed crop and we may see better breeding success and more barred birds in our red tail flocks next autumn. Fingers crossed.

Richard Hill



A flock of Red-tails observed on count day landing in trees Photo credit: Kristen Capewell

2019 ANNUAL COUNT RESULTS

More than 170 volunteers took part in the annual count for the endangered South-eastern Red-tailed Black-Cockatoo held on Saturday 4 May in stringybark forest across the range of the cockatoo in the South East of South Australia and South West Victoria.

The weather conditions improved this year with less wind and rain than the previous few years, which meant it was easier to both see and hear the Red-tails, which may have contributed to the higher number. After several years of lower count results it is pleasing to report that the number of birds counted increased considerably this year.

After taking into consideration double counts the final tally stands at 1193 birds, which is substantially higher than last year's total of 839 birds. Additional sightings either side of the count were also incorporated into the total including a flock of 200 birds, the largest sighting recorded in the count.

The number of sightings reported by volunteers this year was 40, which is slightly less than last year's total of 45. Flock sizes this year were larger than they have been in previous years, with seven large flocks (greater than 80 birds) recorded.

The distribution of sightings was fairly widespread, with birds again recorded as far north as McCallum (40km NE of Keith).

Volunteer effort was fantastic, with 81 groups spending over 270 hours searching for the cockatoos across the range. This year we had volunteers from a variety of different backgrounds including farmers who searched their own properties, a great team of locals who regularly take part in the count, and several participants who travelled from as far as Adelaide and Melbourne to help out with the survey.

The information gathered during the annual count is crucial to determine patterns of habitat use, the minimum number of birds in the population and most importantly, the location of large flocks. Flock sizes this year were larger than they have been in previous years, with seven large flocks (greater than 80 birds) recorded.

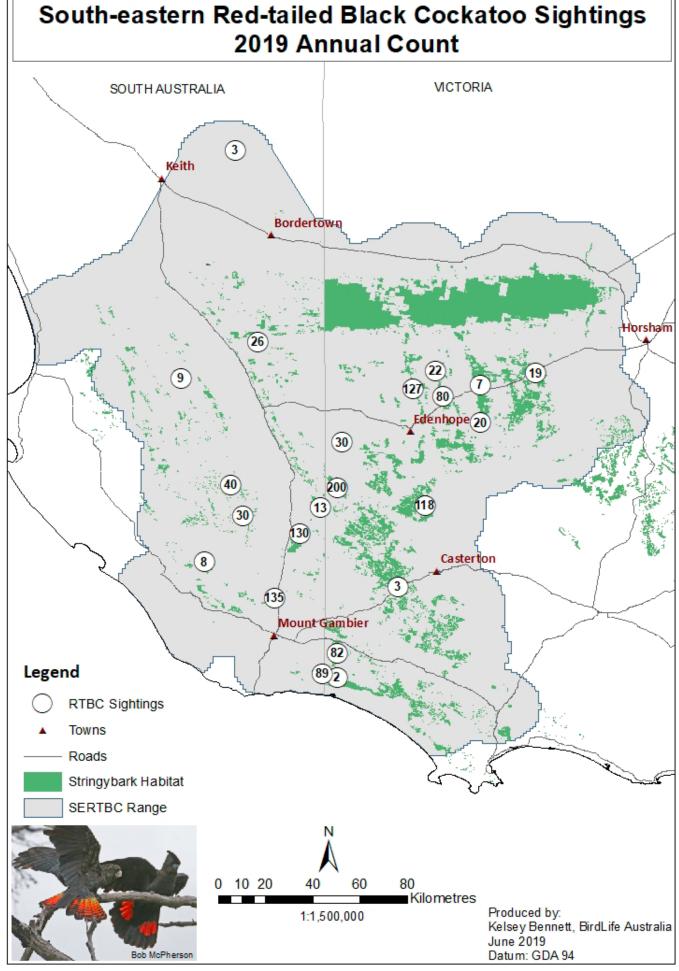
This year, large flocks were found near Edenhope, Penola, Rennick, Dry Creek, Wandilo and Kanawinka. Other sightings were made near Goroke, Harrow, Coonawarra, Dergholm, Nangwarry, Casterton, Nelson, Lucindale, Millicent, Tooan and Frances.

The annual Baileys Rocks campout was again a success, with volunteers gathering on the night to share stories on how many cockies they saw or the flock that got away.

A total of 10 volunteers also attended the Annual Count training session on the morning of the count. This session took place in Rotary Park at Casterton and volunteers learned what the Red-tails sounds like, the tell-tale feeding signs of the birds, and how to identify stringybark from other eucalypt woodland.

BirdLife Australia and the Red-tail Recovery Team would like to thank all the wonderful volunteers involved, many of whom travelled long distances to participate.

Also a special thanks to Evan Roberts, Kerry Gilkes and Jeremy Freeman for their assistance with promoting the count and supporting landholders and volunteers involved on the day, and Tim Burnard for conducting the training session at Casterton and organising the campsite at Bailey's Rocks.



Observations of South-eastern Red-tailed Black Cockatoos counted as part of the 2019 Annual Count

PLANTING FOOD FOR COCKIES IN THE SOUTH EAST: AN UPDATE FROM THE COMMUNITIES HELPING COCKIES PROJECT

The following projects are part of the 'Communites Helping Cockies' project which is supported by the South East Natural Resources Management Board through funding from the Australian Government's Regional Land Partnerships of the National Landcare Program.

Securing a future food resource for Red-tails

Providing a long term food resource for the South-eastern Red-tailed Black-Cockatoo continues to be a high priority for the Recovery Team in keeping Red-tails in our landscape. Landholders in the south east of South Australia in the Red-tails range can access funding to assist with protecting existing remnant Stringybark habitat and/or revegetating areas on their property.

30 new sites were revegetated with stringybark habitat through June and July this year totalling 12,190 tubestock. These plantings included 4500 stringybark tubestock with the remainder of the tubestock a mix of eucalypts, acacia's, hakea's, banksia's and other species you would typically find in a stringybark habitat.

This work was completed on private land covering a total of 40Ha as part of the Communities Helping Cockies Project, supported by the South East Natural Resources Management Board, through funding from the Australian Government's National Landcare Program and is delivered in partnership by Birdlife Australia, Zoos SA and Trees for Life.

Landholders benefited from fencing incentives and the supply of either tubestock or direct seeding thanks to Eucaleuca Native Services, Trees for Life and SE Direct Seeding Services. A local planting crew did the majority of the plantings ensuring the trees were planted at the optimum time for maximising establishment.

Zoos SA project officer Kerry Gilkes said "This funding is being largely directed to on-ground works targeting properties in areas where the birds are known to feed. It's a win-win for not only the birds but landholders get all the added benefits of wind protection, shade and shelter for stock and beneficial insects". The works are tailored to suit each individual property but are really on a landscape scale providing habitat linkages for the birds working from property to property, linking to roadsides, heritage sites and conservation parks.

Work for 2020 is currently being organised and if you have stringybark habitat which you would like to fence and protect and/or sandy soils suitable for stringybark habitat plantings or would like further information about the project, please contact Kerry Gilkes m: 0429 660 027.

Kerry Gilkes







Revegetating buloke: a long-term investment

Planting food trees is critical to the long-term survival of the South-eastern Red-tailed Black-Cockatoo. In the past, the majority of revegetation efforts in South Australia have concentrated on stringybark which has the ability to produce food crops suitable for red-tails in as little as seven years. However, the seeds from buloke trees are also very important to support the recovery of Red-tailed Black-Cockatoos.

Buloke (*Allocasuarina luehmannii*) is a type of Casuarina which produces seed in cones. Only female buloke trees produce cones, although some trees have male and female characteristics. Red-tails feed on buloke in late summer or early autumn when the seed is available. However, in hot weather the cones open up and drop their seeds, which means the seed is only available for a short period of time. Buloke seed is highly nutritious and red-tails can obtain their daily food requirements quickly when feeding on buloke compared to stringybark.

Buloke trees are very slow growing and studies have found that trees need to be at least 100 years old to be suitable for red-tails to feed on. Only three per cent of the original amount of buloke remains which means we urgently need to plant more.

As part of the National Landcare Program Communities helping Cockies project, Trees For Life are revegetating buloke in the red-tail's range in South Australia which occurs on the fertile heavy clay soils between Naracoorte and Bordertown. This land is highly productive for agriculture and sites available to revegetate buloke can be limited.

Through this project, we have identified sites on roadsides and disused rail lands that would be a great place to start and the Naracoorte-Lucindale Council are valuable partners in the work. We are also working with a number of interested landholders who wish to protect and restore areas of buloke woodland on their properties.

Ideally, we would like to plant female trees as these are the trees which produce cones. However, we don't yet have the ability to selectively propagate females. On one property where we have adult trees but no young trees regenerating, we will be trialling methods to encourage female trees to produce root suckers.

A further challenge for our buloke revegetation project is the heavy clays they grow on, which are often underwater in winter and then rock hard in summer. As the fact sheet titled 'starting buloke from scratch' located on our red-tail website states, you have to be a little bit mad (and very patient) to pursue revegetation with this species but long term the rewards will be well worth it.

Thankfully, Kowree Farm Tree Group's tips for establishing buloke have been put to good use and our 1000 seedlings planted over winter are looking good. In the following four years of the Trees For Life project we're hoping to significantly increase the number of buloke we plant but to do this we need to find some more sites. Are we mad? – you bet, but more importantly are you willing to join us and learn a lot with us in the process!

If you'd like to hear more about the project or get involved please get in touch with Cassie CassieH@treesforlife.org.au or 08 8406 0500.

Cassie Hlava





PLANTING FOOD FOR COCKIES IN THE SOUTH EAST: CONTINUED



Kids helping Cockies Update

Local South East schools continue to kick goals for cockies through their involvement in the popular Kids helping Cockies Program. This program helps to educate and involve kids in actions to increase the food resource for the endangered South-eastern Red-tailed Black-Cockatoo.

This year we've had up to nine schools involved in the program in varying capacities. Seven schools including Allendale East Area School, Frances Primary School, Glenburnie Primary School, Lucindale Area School, Naracoorte South Primary School, Newbery Park Primary School and Tenison Woods College have stepped their way through the entire process from seed collection to revegetation.

Approximately 1220 stringybark seedlings have been propagated by participating schools over the last year, most of which (with the exception of two schools) have now been planted out at local revegetation sites across the South East of South Australia.

Grown seedlings were planted over June and July at seven habitat revegetation sites in conjunction with Kerry Gilkes (Cockies helping Cockies), Angela Jones and Forestry SA. Stringybark seedlings were planted on farmers properties near Lucindale, Naracoorte and Frances and in Forestry SA Biodiversity Corridors near Tantanoola and Caroline Forests.

As part of this work, students helped to plant 1337 seedlings including a mix of stringybark and associated understory species across the seven sites visited. Students also helped to guard most of which was planted to protect from grazing herbivores.

Planting sessions proved popular, allowing students to get outside the classroom, get their hands dirty, experience nature and learn new skills including how to plant and guard seedlings (some of whom have never done before). Students were also treated to a sausage sizzle for their efforts on the

Of the 337 students involved in the program this year it was really rewarding to see so many kids thoroughly engaged and excited to be involved in taking action for our iconic Red-tailed Black-Cockatoos. Their action today will result in more food for Red-tails for many years to come!

By educating and providing kids with conservation experiences including those provided as part of this program, we are helping kids to learn new skills, encourage connection and appreciation for their environment, reinforce knowledge and learnings, increase awareness and create a brighter future for our cockatoos and biodiversity as a whole.

Last month we were able to share and showcase our amazing project at the 2019 SA Landcare Conference in Bordertown. Nash Perryman, representing Allendale East Area School, did an amazing job, overcoming his nerves to share his perspective and learnings on the project having been involved for the last two years. Sharni Clarke, who couldn't be there on the day, also shared her experience which was read out

If your school is interested in getting involved with the Kids helping Cockies Program please contact myself on 0438 317 024 or email bronwyn.perryman@birdlife.org.au at any stage.

Quotes from students involved in the project

What's the best thing about being involved in this project?

"Throughout the years my favourite part has probably been everything because everything was interesting and stood out and I loved helping a native Australian bird." Sharni Clarke, Allendale East Area School.

"We are learning to be scientists." Abbey, Glenburnie Primary

Why do you think it's important to save our South-eastern Red-tailed Black-Cockatoos?

"We need diversity so that nature stays in balance." Jacob, Glenburnie PS.

"Because they are important to our indigenous people." Nash Perryman, Allendale East Area School.

Bron Perryman Kids helping Cockies Coordinator





1. Planting stringybark trees. Photo credit: Kerry Gilkes 2. Revegetation on a private property. Photo credit: Kerry Gilkes 3. Newly planted trees inside a fenced off area. Photo credit: Kerry Gilkes 4. A buloke seedling ready to be planted at Locmaria Farms near Hynam in South Australia. Photo credit: Cassie Hlava 5. Buloke cones. Photo credit: Cassie Hlava 6. Glenburnie Primary School students on an excursion to collect stringybark seed in Honevsuckle Native Forest Reserve. Photo credit: Bronwyn Perryman 7. Allendale East Area School students planting stringybark seedings grown in their school nursery at Forestry SA's Honeysuckle Biodiversity Corridor. Photo credit: Bronwyn Perryman 8. Nash Perryman presenting at the SA Community Landcare Conference in Bordertown. Photo credit: Kelsey Bennett



FUNDING ACKNOWLEDGMENT:

BirdLife Australia's SERTBC Recovery Program is supported by the South East Natural Resources Management Board, Wimmera Catchment Management Authority and Glenelg Hopkins Catchment Management Authority in partnership with Trees For Life, Zoos SA, Greening Australia, Trust for Nature, Barengi Gadgin Land Council and Kowree Farm Tree Group through funding from the Australian Government's Regional Land Partnerships of the National Landcare Program.

A male displaying typical courting behaviour to a female by showing off his red tail feathers

Photo credit: Luke Leddy

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Kelsey Bennett

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