

Spencer Hill Reserve Billy Buttons blooming after dedicated Buffel-busting.

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## WELCOME LETTER

Dear Land and Garden for Wildlifers,

We're excited to bring you the final newsletter for 2024. What a year it's been! From buffel-busting events to welcoming new members to winning an award for the program at the TNRM awards, the Land for Wildlife community has continued to grow and thrive.

In this edition, we'll revisit the highlights of this year's events, spotlight local species in the *Flora and Fauna in Focus*, and take a closer look at two feral species. We'll also share how many new members joined us in 2024 to support native wildlife on their properties. Be sure to check out the quiz at the end!

Thank you for your ongoing commitment to caring for this unique environment. On behalf of the Land for Wildlife coordinators, we look forward to staying connected next year, collaborating on events, actions, skill-sharing, and enhancing habitats together. Have a safe, cool and fun holiday season!

Warm wishes,

Bill, Jessie and Jaida The Land for Wildlife Coordinators, Central Australia Team

P.S. If you capture photographs of any interesting flora or fauna over the hot season, please let us know!

### 2024 SUMMARY OF EVENTS

This year has been full of opportunities for Land for Wildlife and Garden for Wildlife members to come together, share knowledge, and work towards conservation goals. From hands-on workshops to biodiversity surveys, it's been a busy and rewarding year for our community.

In April, the Pitchi Richi Biodiversity Survey brought members together to assess species diversity at the heritage conservation site and learn surveying skills. Thanks to everyone who participated! We're looking forward to making this a regular event to monitor changes in species abundance and biodiversity over time.

In May, we visited Maria McCoy's property, inspiring a future event where members came together to roll up their sleeves and tackle buffel grass. Later that day in June, we visited Jimmy's inspiring buffel-free property, where wildflowers are now flourishing in the absence of this invasive species.

This year, we partnered with The Plants Society and Olive Pink Botanic Garden to deliver workshops: a Propagation Workshop and a Native Seed Collecting Workshop. Open to both members and the public, these sessions focused on practical skills for establishing and restoring native habitats—topics we know many of you were eager to explore!



Left: Doug McDougall and Sam Hussey at the opening day of Olive Pink Botanic Garden's gift shop.

Right: Volunteers bird watching at Pitchi Richi Heritage Sanctuary Biodiversity Survey (top), A trailer full of Buffel-grass removed by volunteers (centre), Volunteers removing Buffel-grass (bottomleft), determined Maria McCoy, removing Buffel-grass from her property (bottomright).







### 2024 SUMMARY OF EVENTS



Volunteers KP and Kelly making compostable pots for native seeds



Attendees listening to Sam Hussey at the propagation workshop

Another highlight was our Feral Spotted Dove Trap-Making Workshop, where participants learned practical methods for managing this invasive species. You can find more details about this workshop elsewhere in the newsletter.

To round off the year, we partnered with the Vegemap research team from James Cook University for a Pollen Trap Making Workshop. Members learned how to construct pollen traps to monitor plant diversity and distribution on their properties in and around Mparntwe/Alice Springs, combining citizen science with conservation efforts.

In addition to these events, we reached out to the wider community through stalls at The Alice Springs Show shared with the Plant Society, buffel grass events, including the Buffel Grass Film Night at the Roastery. These moments allowed us to meet new people, share our work, and encourage more locals to join us in supporting Central Australia's wildlife.

Thank you all for your enthusiasm and dedication this year. As we look ahead to 2025, we're excited to keep building skills, sharing knowledge, and making an impact. If you have ideas for future workshops or activities, we'd love to hear from you!



One of many LFW stalls of 2024



### NEW MEMBERS OF 2024! WELCOME TO LAND AND GARDEN FOR WILDLIFE

#### Garden for Wildlife

Jayne Chandler and Nat Philips Emma Snare Phillip Mangion Nick Rickard

#### Garden for Wildlife

Emma Worsley Aia Newport Tamara Morgan Georgia Vassiliadis Domenico Pecorari

#### Land for Wildlife

Stephanie Gilbert and Angus Newey Kate Lyons-Dawson Angela and Rachel Teasdale

#### Photographs of some of this year's new memebrs:



Nat, Jayne and their newborn





Emma S

Angus and Steph



Angela busting buffel



Kate pointing out Mistletoe



### 2024 TNRM AWARD WINNER AN EXCITING END TO A BUSY YEAR

The Territory Natural Resource Management Awards celebrate 'outstanding achievements in natural resource management' done with 'dedication and innovation'. It rewards winners with public exposure and encouragement to continue their good work.

Our LFW central Australia program was strong enough to be the joint winner of the award in our category, which was announced in Darwin on the 20th of November at the 2024 NT Natural Resource Management Awards Gala Dinner. Such a great way to celebrate the year's achievements and learn about other inspiring environmental projects across the Northern Territory.

We are grateful to all our members for championing our efforts to support biodiversity in Central Australia, and we recognise your contribution to this award. Thank you!



The TNRM trophy amongst native vegetation

# Win for Land for Wildlife

#### CHARLES GEARY

LAND for Wildlife Central Australia has been recognised once again for its incredible work helping locals restore the wildlife habitat across Alice Springs and the Red Centre, walking away with a trophy from the 2024 Northern Territory Natural Resource Management (NRM) Awards.

The group won the Environment and Conservation Award, which they shared with Casurina Coastal Reserve Landcare Group.

Land for Wildlife, as part of the win, was also recognised for its Garden for Wildlife program, which extends their goals of habitat protection and restoration to the urban spaces of Alice Springs.

The awards night took place at the Darwin Convention Centre on Wednesday, November 20. Back in Alice Springs, Bill Low, senior coordinator of the group, said it was great to receive the recognition.

He said it was due to the dedication and eagerness of the people running the programs and those taking part.

"It's continuing a tradition which we've established years ago," Mr Low said.

"I think this is the fifth time we've won an award over the last 20 years of running the program, so we must be doing something right.

"But it's working with very enthusiastic people, including the coordinators, but also the people who really want to make a difference on their block of land."

Mr Low said the work the group did with property owners and the community showed the importance Centralians placed on protecting their



NATURE: Land for Wildlife's Jaida Buck and Bill Low are thrilled for the recognition at the NT Natural Resource Management Awards.(Charles Geary: 445663)

natural landscapes and reflected the benefits of protecting the local environment.

"It's also the health of the community...having a suitable place where you live which is up to standard, it's better for your mental health as well as for the beauty of the community," Mr Low said.

Other Centralian winners included the Northern Tanami and Southern Tanami Indigenous Protected Areas, and the Central Land Council, who took out the Indigenous Natural Resource Management Award.

Lajamanu's Jerry Jangala Patrick was awarded the Lifetime Achievement Award for his work with the CLC and the Northern Tanami IPA.

An article clipping from the Centralian Today 28th November

#### Love native wildlife? Let's work together!

Are you, or do you know someone interested in supporting and protecting wildlife on your/their property? Join us in 2025, and we'll help you get started with a personalised property visit. Get in touch today!

# JOIN US THROUGH <u>THIS LINK</u>

() @Ifwalice

### FAUNA IN FOCUS CENTRAL ROCK-RAT Zyzomys pedunculatus

#### Written by Aimee Blundell

The Central Rock-rat, known as Antina by the Arrernte people, is a small nocturnal rodent weighing 70-100g. They have a distinctive thick, furry tail and big bright eyes which make them identifiable amongst other species.



Central Rock-rat from The Desert Park breeding program

Breeding can occur at any time of year, usually during favourable environmental conditions and natural boom cycles. Populations boom during times of high rainfall and dwindle during long dry periods. When conditions are right, females will produce 1-4 pups in a single litter. Their diet consists predominantly of seeds, leaves and the occasional plant stems and invertebrates.

As their name suggests, the Central Rock-rat uses crevices in rock piles to nest. Shrubs and grasses are commonly used as cover whilst foraging. The Rock-rat typically forages on the genus Triodia, also known as Tjanpi, favouring hard-leaved spinifex. In captivity, Central Rock-rats have been known to forage on kangaroo grass (*Themeda triandra*), wooly oat grass (*Enneapogon polyphyllus*), multiple species of saltbush (*Amaranthaceae*) and desert petunia (*Dipteracanthus australasicus*). The Central Rock-rat is one of five native rock rat species and is the only species living in arid Australia. Listed as critically endangered on the IUCN Red List, the decline of this species is predominantly due to introduced predators such as cats and foxes, along with inappropriate fire regimes and introduced buffel grass, which causes more intense and frequent bushfires. Buffel grass also competes with the native flora that Central Rock-rats rely on for their natural diet.

Once a widespread species across the rugged quartzite ranges and peaks of Central Australia and WA, the Central Rock-rat has now disappeared from over 95% of pre-European distribution. Some of the remaining populations are still surviving in a select few high mountain ridges within Tjoritja/West MacDonnell National Park.

After a sighting in 1960, the species seemed to have disappeared and was thought extinct for close to 30 years. Hope was restored when a small population was discovered near Ormiston Gorge in 1996 by Julie Trembath of the ATCV (Australian Trust for Conservation Volunteers) team when constructing an early stage of the Larapinta Trail.



Aimee proudly sharing about the Rock-rat breeding program

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### FAUNA IN FOCUS CENTRAL ROCK-RAT Zyzomys pedunculatus

Central Rock-rats are one of 20 native mammal species that the Australian Government has prioritised to support species recovery, and Parks NT have implemented fire management plans specifically aimed at protecting known Central Rock-rat habitat. Feral animal control measures have also been increased, targeting species such as cats. A breeding project for the species commenced at the Alice Springs Desert Park in 2022 with 16 individuals collected from multiple sites within the Australian Wildlife Conservancy's Newhaven Sanctuary. Nine pups were bred at the Desert Park in 2023 and were later successfully released within the Newhaven Sanctuary. As a result of these efforts, we are seeing a brighter future for this already resilient species. New sightings of two Central Rock-rats have been recorded on camera traps in April 2024 at Narwietooma and Glen Helen cattle stations, north-west of Alice Springs, indicating larger populations may be close by. These sightings give us hope for the preservation of this once-thoughtextinct species in Central Australia.

For interested people, below is a clipping of a historic reading. Article by Shona Whitfield and Gary Bastin.

#### **ATCV Rediscovers the Central Rock-Rat**

In August last year while working on the Larapinta Trail in a particularly remote part of the MacDonnell Ranges an ATCV crew found a population of the endangered central rock-rat (*Zyzomys pedunculatus*), almost 40 years after it was last recorded. Under the guidance of Parks and Wildlife Commission rangers, Julie Trembath and her team established a trapping program adjacent to their work sites. Rock-rats were trapped in two different habitats, but not wishing to harm the individuals or disturb the population, the volunteers released the animals after having photographed them and recorded some data.

Julie Trembath thought that the group had trapped something unusual but a search through several mammal reference books did not yield a positive identification. Park Rangers were the first to suggest the central rock-rat but after such a long absence, who could truly believe it?

The precious film was processed and shown to a number of scientists. Their reactions ranged from pure amazement to disbelief. The central rock-rat is considered to be one of Australia's rarest rodents and is listed as critically endangered. It was first collected in 1894 and has been recorded on only five other occasions. The last confirmed sighting was in 1960 when a female was caught raiding a stockman's supplies near Haast Bluff, 300 km west of Alice Springs.

No live animals were known to exist until now and only a limited number of laboratory specimens are held in collections around the world. The most recent scientific survey of country covering the rat's probable habitat was in 1990 when 52,000 sq. kms were covered and 4650 traps set. No central rock-rats were found.

Mature animals are approximately 30 cm long and have a characteristic and unusual carrot-shaped tail. Under certain circumstances the tail has been recorded as having withered and dropped off. Apart from this, little more is known about the creature, including such vital information as what it eats, whether it is totally nocturnal, its preferred habitat, mating habits and lifecycle.

The Parks and Wildlife Commission has conducted further trapping to determine the probable size and extent of the population. Some individuals have been transferred to the new Desert Park in Alice Springs to allow more intensive study. This research will allow a management plan to be developed to protect the existing population.

This discovery by the ATCV brings us hope that there are other small pockets and safe havens for animal species thought to have disappeared from inland Australia. ATCV looks forward to the day when another presumed extinct species is rediscovered.



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### FLORA IN FOCUS RUBY SALTBUSH Enchylaena tomentosa

#### Written by Jessie Longmuir

One of my favourite plants is the ruby saltbush (*Enchylaena tomentosa*), a resilient and versatile plant. Lining the paths at the Land for Wildlife office, this plant is a key component of the arid landscapes of Central Australia. Belonging to the Chenopodiaceae family, this perennial shrub plays a crucial role in sustaining the desert ecosystem. Known for its drought tolerance and multiples of berries, ruby saltbush is an excellent plant to grow in your garden as it can thrive in many soil types and circumstances.

Ruby saltbush is characterised by its small, succulent leaves that exhibit a silvery-grey hue due to a dense layer of fine hairs. These adaptations minimise water loss by reducing transpiration and reflecting sunlight, helping the plant survive in the extreme heat of Central Australia. The shrub typically grows to a height of 1 meter but will climb up to 2 meters. It produces small, round berries that turn bright red when ripe, giving the plant its common name. These berries are edible and taste delicious when ripe! Please make sure you have correctly identified this In Central Australia, ruby saltbush serves multiple ecological functions. It stabilises soil with its extensive root system, reducing erosion in a landscape prone to harsh winds and infrequent but intense rainfall. The plant provides a habitat and food source for a variety of fauna. Its berries are particularly favoured by birds and small mammals, while its foliage offers shelter to insects and reptiles.

Despite its hardiness, ruby saltbush faces challenges from land degradation and invasive species. Overgrazing by livestock and herbivores such as rabbits can significantly impact its population. Propagation of ruby saltbush in revegetation projects can enhance biodiversity and ecosystem resilience. If you are thinking about which midstory plants to grow on your property, look no further than ruby saltbush. Overall, this is a resilient and versatile plant vital to Central Australia's desert ecosystem, it stabilises soil, provides habitat and food for wildlife, enhances biodiversity, and gifts you with a tasty garden snack, making it an excellent choice for your garden.



Examples of Ruby Salt bush- wonderful groundcover and lower story habitat for wildlife

### FERAL FOCUS CATS, CATS, CATS Felis catus

#### Written by Amit Rotenberg

The rate of decline in Australian small mammals is the highest in the world, and several factors indicate that feral predators *Felis* catus (feral cats) and Vulpes vulpes (red foxes) are a primary cause (Woinarski et al. 2015). One piece of evidence is the small mammal "critical weight range" of 35-550g, a size range which most mammal extinctions seem to fall into (Woinarski et al. 2015). It has been suggested that feral predators preferentially hunt mammals within this size range, putting them at greater risk of extinction (Burbridge and McKenzie 1989 in Doherty et al. 2017). The spatial and temporal pattern of decline adds to the evidence, with native species declining immediately following local feral predator invasion (Burbridge and McKenzie 1989 in Doherty et al. 2017). Thus far, feral cats specifically are said to be the main cause of 22 endemic mammal extinctions, one of these being the lesser bilby (Woinarski et al. 2015 in Doherty et al. 2017) (See below).

Because feral cats have been spread by humans all around the globe, they have adapted to almost every terrain and climate (Doherty et al. 2017). This makes them highly successful in arid environments, despite harsh weather conditions and long periods of low water availability. They are extremely efficient hunters and meet most of their water requirements through consumption of live prey (Burrows 2018). They are now widespread throughout much of arid Australia.



A cat caught in a cat trap in Alice Springs



### FERAL FOCUS CATS, CATS, CATS Felis catus

Whilst there have been several successful feral cat eradication programs on offshore islands, eradication is currently not feasible on the Australian mainland (Burrows 2018). Baiting using 1080 poison is the most promising cat control method currently available (Burrows 2018). 1080 is derived from a naturally occurring native plant, and native animals have adapted a resistance to the poison (Marlow et al. 2015). However, its effectiveness in reducing cat populations is limited, especially because feral cats prefer to hunt live prey (Burrows 2018).

For this reason, baiting is usually undertaken during winter months when prey availability is lower (Burrows 2018).

Because the arid zone is so vast and cats are so widespread, baiting programs are undertaken in priority refuge habitats. Refuge habitats are areas in which species have persisted due to elements that provide shelter from predation, such as rock crevices or shrubs. For example, the previously abundant central rock-rat was restricted to a refuge west of Alice Springs (McDonald et al. 2015), but good seasons and cat control have resulted in sudden increases in their range. Because refuges contain some of the last known populations of certain species, baiting programs are specifically targeted to control cats in these areas of high urgency.



A cute yet threatening cat

Trapping is also used to control cat abundance and can be done in urban areas where poisons may affect domestic animals. Land for Wildlife and Garden for Wildlife members may borrow traps free of charge, and we are happy to guide you through the trapping process and ethical requirements for managing feral cats on your property.



#### Feral Cat Trap Loans

Land for Wildlife offers feral cat traps—contact us to check availability.

Trapped cats must be delivered to the Len Kittle Drive pound (please call the mobile number on the gate).

To ensure ethical trapping, please adhere to the Animal Welfare Act. A Feral Animal Trapping Agreement must be completed before use.

For further guidance on trapping, baiting, and cat disposal, visit our website for more details or give us a call at (08) 8955 5222.

The link can be found here



### FERAL FOCUS SPOTTED DOVE TRAP-MAKING WORKSHOP

#### Written by Jaida Buck

The Spotted Dove (*Streptopelia chinensis*, previously the Spotted Turtledove) is an introduced species in Mparntwe (an aviary escapee!) that competes with smaller native species such as the Crested Pigeon and the Diamond and Peaceful Doves for resources and nesting sites.



Feral birds (left: Spotted Dove, middle: Barbary Dove - now eradicated from Mparntwe) dominate food sources, pushing out native species (e.g. Crested Pigeon, right). It is not a good idea to feed birds in your yard as it encourages feral species.

Our workshop, held at Olive Pink Botanic Garden on the 14th of September, allowed us to learn about feral doves and explore ethical concerns with controlling feral species for conservation. It highlighted the value of gathering data to track invasive species and the importance of controlling growing numbers of Spotted Doves to benefit biodiversity. Trapping is a significant part of this population control. Olive Pink itself has seen a rise in Spotted Doves visiting the gardens. Those who attended the workshop described the doves nesting in their backyards. To help us better understand the Spotted Dove problem, members report Spotted Dove sightings on their properties and many have taken part in recent bird counts. The value-added benefit of taking trapped birds

to the Desert Park assists in training raptors for the Park's raptor show. Thank you for these efforts! Whilst most came to observe the trap-making process, a group of keen conservationists brought their own chicken wire and demonstrated how easy it is to make a trap from cheap and simple materials.



their finish trap

**Build your own Feral Spotted Dove Trap** If you are interested in making your own trap, you can find everything you need to know (including instructions) **on our website here.** 

Get in touch with us if you have any questions.



An example of a DIY feral dove trap you can make at home!

### THE QUIZ

### Have you been paying attention? All quiz answers are in this newsletter. Good luck!

- 1.We conducted a workshop to make pollen traps. What were the data used for?
- 2. The Central Rock-rat was considered extinct for almost thirty years. In what year was it rediscovered, and where?
- 3. What adaptations in its leaves allow the Ruby Saltbush to minimise water loss?
- 4. Most mammal extinctions seem to fall within the "critical weight range". What is this range in grams?
- 5. The Spotted Dove is an introduced species, but what are two native bird species that it competes with?
- All answers can be found in the newsletter. We hope you enjoyed it. Thanks for reading!

BONUS QUESTION: Can you identify this bat found on Gap Road?





### FURTHER RESOURCES FOR INTERESTED MEMBERS

1. To Read: ABC News: Australia has the highest mammal extinction rate globally. The Wild Deserts

- program is trying to reverse that.
- 2.To listen:
  - Conversations: The Rise of the Super Bilby
  - Soils for Life
  - Bush Heritage: Learning Garawa
- 3. To watch: The Secret World of Sound- David Attenborough,



We welcome feedback from our members - it's the best way to improve! Please get in touch with us at **lfw@lowecol.com.au** 



5.Peaceful dove, diamond dove, and crested pigeon.

2. In 1996 by Julie Trembath of ATCV near Ormiston Corge. 3. The leaves are small, succulent, and exhibit a silvery-grey

hue due to a dense layer of fine hairs.

I.To monitor plant diversity and distribution.

-smerg ucc-cc.4

Quiz Answers: