

Land for Wildlife and Garden for Wildlife
Central Australia Newsletter

December 2019

From the Land for Wildlife Coordinators

Hi everyone

Much is being loudly reported about species extinction, biodiversity loss, climate change, fires. Its all very worrying and often seems to be backed by increasingly dire statistics and predictions. Well, not here. Here we are happy to focus on the good news, and that good news is YOU.

- Congratulations to ALL our members for creating & increasing habitat, & supporting the conservation of biodiversity and wildlife in their gardens and on their properties;
- Land for Wildlife and Garden for Wildlife membership has increased by 8 new members this year;
- These members have increased the habitat registered under Land for Wildlife and Garden for Wildlife by just over 9,000 m² and means a total of 633,316.5 ha's of habitat now being protected by private landowners in Central Australia;
- Members have regaled me with stories and pictures of wildlife using their gardens (see Kingfisher below), and I get to witness their delight and joy and share it with you, our readership;
- Members continue to have extraordinary trapping success of feral animals which reduces the number of effective predators in the area instantly. A best guestimate of wildlife saved this year would be in the order of 11,100 individuals (calculated using national figures of wildlife destruction by feral cats)

Thank you providing, sharing and just *BEING*, the good news. We extend our sincerest wishes to you all for a safe and joyous holiday period and provide you with a thought-provoking quote (below) worthy of contemplating at this time of year.

~ Kate and Bill

"We need to be looking at every decision, every action, we make in our daily lives and how that impacts the environment and climate change...

Do you really need to consume as much?"

- Patricia Espinosa

Sacred Kingfisher *Todiramphus sanctus Image: Siri Omberg*



In This Issue

From the Coordinators • 1

Our newest LfW & GfW

members • 2-4

Biodiversity matters • 5

A weed in profile: Couch • 6

Hung up on Hakeas • 6

Ecocide and

rights of nature • 7

Are you firebreak ready? • 7

Firebreak requirements

and regulators • 8

December Habitat Quiz • 9

A selection of CA native

grasses• 10

October Quiz Answers • 11

Contact & bank details • 11

Thank you to our special members who have generously donated to Land for Wildlife recently:

Krissy Tonkin Sue Roth Connie Spencer

In this season of giving please support us to support you....

Every bit helps

MEET OUR NEWEST GARDEN FOR WILDLIFE MEMBER...

AN ARTIST IN HER OWN RESIDENCE



Siri looks on with delight as a Bowerbird alights in her huge River Red Gum, one of many bird species that utelise habitat she provides in her back garden.

The garden benefits from applications of woodchips and mulch, which not only provide lots of goodies at ground level for birds, but also reduces watering requirements of the garden. As an avid bird lover, Siri also provides plenty of watering holes for birds throughout the garden; birdbaths on stands, in full sun and others in shady places. She has noticed that bees tend to use the baths that are located in full sun (see right).



The dainty flower of the Caustic Vine features in the garden and is known to be effective in treating warts!

Siri Omberg, a local jewelry artisan, is our newest GfW member. Visiting Siri in her home in East Side, I was immediately struck by the health and wealth of biodiversity in her front garden, which was resplendent with continuous activities of wildlife utilising healthy habitat. Siri has lived in her home in old East Side for 15 years. Siri draws gardening inspiration and ideas from noting native plants growing well in nearby gardens and has vegetated her own garden with local natives such as Old Man Saltbush and different

Eremophilia species. Siri prefers to choose hardy local plants that can look after themselves without requiring regular watering and discovered that Desert and Dense Senna are particularly successful in being self-sustaining in her locality. However, she has also found that new plants require a couple of good waterings to establish successfully.



One of the River Red Gums that provide habitat, shade, oxygen and adds to a delightfully lush view of the back garden.



One of the hundreds, if not thousands, of bees (circled in yellow) that drink from birdbaths in full sunlight.

Ground baths provide water for species such as Magpie Larks and Crested Pigeons, and even a Collared Sparrowhawk which Siri saw drinking from the bath last week! Adding to the impressive bird list, many other animals make her habitat garden their home, including skinks, geckos, ants, many and varied insects and a Mouse Spider, one animal I am relieved to say I *didn't* see during my visit.

Siri tends her garden with a philosophy of fostering soil and habitat health first, through building up leaf litter and ground covers. From observations of the life in her garden, the combination of what Siri believes and is doing, is working!!!

MEET ANOTHER OF OUR NEW GARDEN FOR WILDLIFE MEMBERS...A GARDENER WITH A VISION

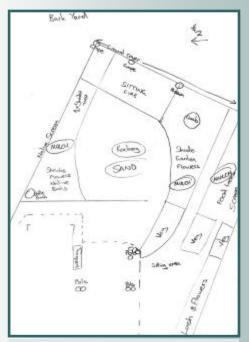
Kyran Smith has plans for his property...BIG plans.

Kyran wants to reinvent his sparsely vegetated garden, into a place of healthy habitat proffering safety, food and shelter for our local wildlife. Kyran's home is in the eastern Alice Springs suburb of Sadadeen and he contacted Garden for Wildlife (GfW) looking for information about native vegetation and plants that are well suited to his area. It turns out that Kyran's property is located in a drainage floor and has four remnant vegetation types overlying the area. While Kyran admitted to being challenged with the idea of "whittling down the lists of plants and creating a pleasant garden ...with little baseline knowledge", the Garden for Wildlife program was able to provide him with the very baseline information he desired. Only, instead of 'whittling down...' the list of local species, we provided several lists of suitable plants native to the area and that are well adapted to the local environment. The GfW vegetation lists give Kyran plenty of options and choice of suitable plants to create the garden he envisions.



The front yard provides opportunity to build on current native vegetation which already provides habitat for wildlife, reduce temperatures by adding tall shrubs and shade trees and planting attractive native flowers.

Starting from scratch can be a daunting place to begin, but it also provides an easy template from which to shape ideas and form a vision for a future garden. Kyran's garden wish list is to incorporate waterwise, energy efficiency and low maintenance principles into the planning. He aims to create areas that not only look good but



Kyran's map of future garden plantings will help to visualise an end result and provides a good baseline to move forward from.

provide resources for wildlife, such as native flora species that produce flowers with nectar and pollen. Bush foods will also be a prominent feature of the garden, while making sure that no poisonous plants are included.

The garden already supports wildlife. Kyran has noticed a small flock of Zebra Finch roosting in one of two large bushy Bottlebrush on the property. To increase the vegetative strata around this bush, a small garden bed will be established around the base and planted up with native shrubs or a few smaller native screening plants, creating a diversity of habitat structure for different species to use.

The front yard is also in the sights of a complete overhaul. This area provides opportunity to plant many natives that will become effective shade-providers during the high temperatures of summer and will include species such as Witchetty Bush, Coolabah and Fork-leaved Corkwood, all of which are naturally occurring species in the area. In addition to the taller trees, Kyran plans to include smaller shade trees to shade west-facing windows and natural ground covers, thereby creating a 'lush' desert vista of natural habitat active with wildlife life! Kyran's garden offers plenty of opportunity for some hearty and committed physical labor, but the payoffs will be endless. Kyran can expect to experience a burgeoning and ongoing sense of life and healthy wellbeing. Delight, satisfaction and pride cannot be bought in a bottle, but it can be gained through providing care and support to others.......plants and wildlife included!

MEET OUR NEWEST LAND FOR WILDLIFE MEMBERS...

A PASTORAL FAMILY WITH STRONG COMMUNITY CONNECTIONS



Liz holds up the property's new Land for Wildlife sign beside the Grey-crowned Babbler artwork at the Bird's front gate.

The Bird Family are no strangers to the extremes of the Central Australian desert climate. Living nearly 200 km north-east of Alice Springs on Indiana Station has provided the family with an up-close and personal experience of the natural processes and native ecological desert communities surrounding them on their expansive property. As the children, Jack and Alice, grew into young adults, Alice Springs provided opportunities for employment and social activities so the Birds decided it was time to have a more local base nearer to Alice. Since early 2018, the Birds have owned a (second, *much* smaller) property in the Alice Springs rural living suburb of Ross. Both Jack and Alice live on the property with their many and varied pets, while Liz and David visit regularly.

You may already know Liz, as she is highly active in the NT and Alice Springs community. Liz holds a variety of committee positions or is

involved at some level with 10 local and Territory community groups or organisations, such as Territory Natural Resource Management, Centralian Land Management Association, Desert Poppies, Bushfires NT and the Connellan Airways Trust. With such a busy schedule, Liz visits Alice regularly but has less time than she would like to attend to garden matters on the Ross property. While the purchase of the property has been recent and length of visits vary, Liz and David are still planning how to increase the gardens ability to provide

habitat and easier management. Some of these plans include increasing the number of local native trees on the property as well as planting native ground covers while managing the Buffel Grass. But planting activities are currently on hold waiting more favourable weather conditions.

Becoming a member of Land for Wildlife has provided the Bird's with a plethora of information about natural processes, vegetation types and geological characteristics spe-

An Eremophila longifolia providing habitat, shade, oxygen and viable seed to build up the natural seed bank in the soil of the garden.



There are corridors and patches of habitat throughout the Bird property at Ross, and which provide different vegetation strata to support a diversity of wildlife species.

cific to their property, as well as ongoing support to assist in providing habitat for the conservation of wildlife.

Liz was impressed with the property assessment report we provided as well as the assessment process, which included two visits, one to assess the environmental attributes of the property and the other to go through the detailed report and present the Birds with their new Land for Wildlife sign (see top picture, this article).

What is biodiversity and why does it matter?

More than 1.9 million species of animals, plants, fungi, and microorganisms have been scientifically described and named to date. Add to that mass of living things the unknown number of species yet to be discovered and you start to

appreciate how the Earth is *teeming* with life. Living organisms, including humans, come in thousands of shapes, sizes and colours and are found everywhere; from the ocean depths, to the highest mountain peaks, to your own back or front yard. All of these variations of life forms are collectively termed 'biodiversity'. The term originates from an amalgamation of the words 'biological' and 'diversity' and simply put, means a diversity of biology.

Troublingly for all, biodiversity is continuing to decline every day as more and more species lose their battle to survive. This loss of biodiversity results from an endless combination of threats: decreasing areas of available habitat; remaining habitat has been and/or is continuing to be adversely effected by human-driven activities e.g. changes in natural fire patterns, behaviour and temperatures; introduced invasive plants; introduced highly competitive or predatory feral animals; infrastructure in both urban and rural areas,



An Australian Ringneck Parrot increases the quantity (and quality) of biodiversity of the natural environment surrounding it (and choosing to perch on human infrastructure!)

and; increasingly unstable and unknown climate variables. A loss of biodiversity in and of itself, is profoundly concerning, but it also endangers all requirements to support human life on earth.

Conservation by the natural world

Effective conservation of our Earth requires effort from the global community which includes each and every one of us. The Earth and human nature are interconnected .Look around you and take note how one organism for instance, is working in unison with other life around it. For example: trees keep the soil in place and the soil supports terrestrial animals movement and dispersal. The tree also provides shade for cooling of earth and animals beneath its canopy, and *produces oxygen*. The tree provides food in the form of nectar for animals that will transport pollen from the tree to



Ants on the trunk of a River Red Gum, utilizing food resources, soil stability and cooler temperatures provided by the tree.

fertilise other trees. This in turn, supports gene flow and facilitates genetic diversity across the landscape for that one tree. This is a simplistic description of the inherent conservation which is provided by biodiversity continuously. These types of integrated natural processes are just one of the endless important reasons *why* biodiversity matters.

Community conservation

You can share or increase your understanding of the local environment, and be proactive in supporting our plants and wildlife, by joining the local Landcare Group and/or or registering in the Land for Wildlife or Garden for Wildlife programs of Central Australia. By joining one or more of these community programs, you will be supported to support our extraordinary local biodiversity, which supports everything!

A COMMON WEED IN PROFILE; COUCH GRASS

Do you have a problem with Couch Grass?

Couch (pronounced 'cooch'), Cynodon dactylon, is a native plant species of Africa. The grass is particularly popular as a lawn species in Australia and is often seen in residential gardens and public parklands. The grass is also considered one of the worst weeds in Central Australia. As an effective generalist species (i.e. high adaptability and reproductive capability in new environments) smothers and out-competes native species for critical resources such as water, and ultimately replaces native plants in many of the natural drainage systems in our region. Often the introduction of a non-native species has negative flow on effects, with devastating results for native species diversity and resource availability for wildlife.



A highly successful invasive weed species, Couch, is a native grass of Africa and adapts well to the harsh Central Australian environment.

How does it spread?

Couch is capable of establishing in well watered loamy areas even with little or no disturbance to the soils. Couch expands relatively quickly above and below the ground through the growth of underground stem networks (rhizomes). Seed is also dispersed by water or by vehicles and machinery, and is often imported in horse manure. Couch seeds germinate after rains during warmer months.

Contd. on page 8

Hung up on Hakeas

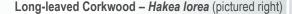
Hakea is a genus of about 150 species of plants in the Proteaceae Family and which are endemic to Australia. Together with Grevilleas, Banksias and a few other genus, Hakea are a distinctive component of Australia's tree and shrub flora. Both Hakea and Grevillea grow in Central Australia, with species found in the sandy deserts of south west NT to the hills and ranges around Alice Springs. Due to their flower shape and inflorescence, Hakeas are often confused with Grevilleas. However, their hard, woody seed pods which are persistent (i.e. do not fall off) are unique to the Hakea genus.

There are three Hakea species commonly found within the Alice Springs region:



Fork-leaved Corkwood - Hakea divaricate (pictured left)

This Hakea is easily distinguished by it's distinctive foliage which forks into several sharp, tough needles and is dull green in colour. The flowers occur in spikes 5-15cm long and are an important food resource for many nectar-feeding birds, insects and mammals. *H. divaricata* occurs as scattered trees in floodplain woodlands around Alice, and can be the dominant canopy species within small areas. They are the common Corkwood that grows in the company of Ironwoods (*Acacia estrophiolata*) on the alluvial flats south of Heavitree Gap.



Hakea lorea, while similar in form to *H. divaricate*, is a gnarled species with long, singular, cylindrical leaves that can grow up to 30cm long. The leaves are tough and greyish in colour. Although growing in a wide variety of habitats, this species often replaces *H. divaricata* on stony hills and slopes at the base of higher ranges.



Needle Bush - Hakea leucoptera (pictured left - Image; Wikipedia)

Hakea leucoptera is a large shrub with short (8 cm), rigid, cylindrical leaves that end in a needle-sharp tip. Flowers are cream or white and occur in clusters of 18-45. This shrub often occurs on saline soils of depressions and relict drainage channels, where it can occasionally be the dominant shrub species such is found around Brewer Estate, south of Alice Springs. Its bark is smooth and grey and never forms the course, wrinkled corky growths of *H. divaricata* and *H. lorea*.

Ecocide; the destruction of nature, and the new global laws emerging to enshrine natures legal rights

The idea of providing nature with legal rights gained prominence in the 1970's and was first suggested by Christopher D. Stone, a legal scholar in the US. Since then, the theory has gained enough traction that new laws allowing nature to bring legal actions against those who harm it, is becoming a reality.

Ecuador and Bolivia have enshrined in their constitutions, the 'right to integral respect' of nature. This allows a legal understanding that ecosystems need to live and flourish and cannot be killed by companies or governments.

New Zealand passed its first 'rights for nature' law in 2017. The Whanganui River in the North Island has been granted 'rights of personhood'. This means the river can act as a person in a court of law; it has legal standing for the protection and use of it's resources. In another first, India's Ganges River has recently also been granted human rights.

We now wait with anticipation, the outcome of the review of the Australian EPBC Act to see if natures rights have been strengthened or eroded. Lets all hope for the former.

Are you firebreak ready??

In the Northern Territory, installation of firebreaks is a regulatory requirement for all rural property owners and which is administered by Bushfires NT and the Fire and Rescue Service. Under Regulations of two Acts, firebreaks need to be installed on the perimeter of a property to enable firefighter access. They can be constructed by slashing, mowing, ploughing, grading, spraying with herbicide, rolling, raking, burning, concentrated grazing, or a combination of these. Regardless of the construction method, firebreaks must meet minimum standards stipulated by the NT Government. Some firebreak construction methods may not be appropriate in more densely populated areas, smaller peri-urban blocks, or in particular environments.



Bare-earth firebreaks can be effective in the spread of fire but are also susceptible to erosion and top soil loss

Bare-earth breaks constructed by earthmoving equipment are advantageous for firefighting and may halt the spread of low intensity fires in limited circumstances. Breaks constructed and maintained in this manner require highly skilled operators and can be highly susceptible to erosion. The inevitable soil disturbance and windrows may also aid the establishment of weeds and decreases the diversity of native species. In some sensitive environments the use of graded breaks is highly undesirable, such as on slopes and within threatened species communities.

Slashed or mown breaks must be maintained regularly to limit the height of flammable material. Rollers can be used to knock down and break the stems of grasses so that the material ceases to grow and dries out. Herbicides offer another alternative for eliminating plant growth for firebreak establishment. Areas rolled or sprayed can be burned, which is best done in autumn when the surrounding vegetation is still green. A Permit for burning must first be obtained (if required in your area) and adjacent fuel loads must be taken into account.

Fire and Rescue Services contact details for your area

BUSHFIRES NT

Tennant Creek 8962 4522 Alice Springs 8952 3066 NT Bushfire Volunteers Association 8988 1579

www.nt.gov.au/bushfires

FIRE AND RESCUE SERVICE

Tennant Creek 8962 4403 Alice Springs 8951 6688 Yulara 8956 2061 Elliot (c/- Elliott Police) 8969 2010 www.fire.nt.gov.au

Frequently Asked	Regulators and requirements	
Questions	FIRE AND RESCUE REGIONS	BUSHFIRES NT REGIONS
Where do I need to put firebreaks on my property?	Firebreaks should be installed on the internal perimeter of your property. Firebreaks are to be maintained year round. If a fire occurs on your property and your firebreaks do not comply, you can be issued with an on the spot infringement. Penalty for Infringement Notice \$310.	Firebreaks are basically access trails that enable fire fighting. They must be continuous around all external boundaries, however they can deviate around wet or rocky areas and large trees. Firebreaks should also be established around assets and may be required in other areas of a large property.
How should firebreaks be constructed?	Must be a minimum of four metres wide. Methods include: graded or slashed to a maximum height of 50 mm with all slashed material removed; lawn or cultivated garden; see page 7 of this newsletter for a discussion of other construction methods.	
I have a road along one boundary of my proper- ty. Do I still require a firebreak on that side?	Firefighters must be able to retreat from wildfire directly onto the road if there is no continuous firebreak. You may not need a firebreak if the road boundary is not fenced, and there is no other barrier such as a deep drain along the roadside.	
What is a Warning?	After annual inspections, a Letter of <i>Instruction</i> is issued to landowners who are not in compliance with firebreak requirements.	After annual inspections a Letter of <i>Warning</i> is issued to landowners who are not in compliance with the firebreak requirements.
What is a Notice?	If a Letter of Warning or Instruction is issued and a further inspection indicates that fire-breaks have not been installed, a Notice will then be issued specifying the work to be done and setting a time for its completion. Failure to comply with a Notice is an offence against the Act and may attract an Infringement Notice.	
What is an Infringement Notice?	After 21 days from the issue of a Letter of Instruction, a second inspection is carried out. If the firebreaks still don't comply an Infringement Notice is issued (Penalty \$310) with a second Letter of Instruction. The Infringment Notice and further instruction is posted to the last known address of the landowner.	be issued for a variety of offences includ- ing failure to install a firebreak or lighting a fire without a Permit. Penalty for In- fringement Notice is \$25 000 or imprison-
What is an Order?	Fourteen days after the issue of the Infringement Notice a further inspection is carried out. If the property still does not comply an Order is issued to allow a contractor to carry out the work. A debit note for the cost of the work is sent to the property owner. Failure to pay the debit note will result in a statutory charge being registered against the property until such time as the debt is paid. Penalty for failure to comply \$300.	costs. If this is not paid, a statutory charge

Contd. from page 5

Management options for controlling Couch invasion

Unfortunately, Couch is not easy to control. Even a small piece of stem left behind can develop into a new plant. Be vigilant during Couch growing times and keep a close watch on grass seedlings germinating in soil fertilised with horse manure . You can control small infestations without the use of chemicals by digging it out, being careful to follow all of the underground rhizome networks and remove all far-reaching stems from the area. Larger infestations, such as illustrated on page 4 of this newsletter, can be controlled by smothering the area with items that block the sunlight, including black plastic, old carpet, newspaper, cardboard etc, for a minimum of 6 months .

If you are considering using chemical control, the best time to apply chemicals is when the plant is growing rapidly, green and healthy and early in the morning when temperatures are cooler for greater uptake by the plant. If using Roundup®, there needs to be enough leaf material above the ground to carry the poison through the veins of the plant to kill the roots. Therefore don't mow or cut the grass before applying the poison. Be aware it may take two to three applications to effectively control it. Don't use stronger strength glyphosate than the instructions state as this only kills the tops and doesn't get down to the roots. You could also cultivate the area a week after your first spray, which will bring the rhizomes to the surface to dry out.



The unique spinifex grasslands of the Central Australian rangelands, which provide valuable habitat to many iconic Australian Wildlife species such as the Thorny Devil (*Moloch horridus*) and Spinifex Hopping Mouse (*Notomys alexis*)

This Months Habitat Quiz...??

- 1. What are the 3 native flora species that are classified as critically endangered in the NT?
- 2. How many vagina's does a doe Kangaroo have?
- 3. What native Australian animal doesn't require water to survive and why? The animal has large ears, a long pointy nose and lives in burrows. It's range is now restricted to arid and semi-arid regions of northern Australia.
- 4. In January 2013 the Bureau of Meteorology added a new colour to the official heat scale to represent temperatures between 50 and 54 degrees. What colour was it?
- 5. What are you doing to support wildlife during increasing and continuing hot temperatures in Central Australia?

Answers will be in the next newsletter

A SELECTION OF CENTRAL AUSTRALIAN NATIVE GRASS SPECIES



Native Oatgrass, Enneapogon avenaceus



Grassy patch dominated by Woolly Oatgrass, Enneapogon polyphyllus



Woolly Oatgrass, Enneapogon polyphyllus



Creek Windmill Grass, Enteropogon ramosus



Perennial Ryegrass, Lolium perenne



Sock Grass, Tragus australianus



Fairy Grass, Sporobolus caroli



Kangaroo Grass, Themeda triandra

Further reading

Hold Ctrl & click the link symbol (right) to be redirected to the article



Factsheet • NT rural properties fire safety advice



Article • The secret world of bird baths



Article • An animal's lifespan is written in the DNA. For humans, it's 38 years



Article • In defence of invasive alien species



Podcast • Leila Jeffreys: turning bird photography into fine art

October's Habitat Quiz Answers

- The term that is used to describe the sensory hunting skills employed by bat species is **echolocation**.
- 2. **Kere artewe** is the Arrernte name for the bird pictured in the banner of October's newsletter. It is also referred to as an Australian Bustard or Bush Turkey (Ardeotis australis). The Arrernte people hunt the bird for food.
- 3. The French word 'environ' means 'to surround'. Hence environment is essentially referring to 'the surrounds'.
- 4. The acronym 'BED' stands for (wait for it...) Banana Equivalent Dose and is used as an informal measurement of ionizing radiation exposure.
- 5. In the NT, 4,515 native flora species have been classified using the assessment guidelines of the IUCN Red List. No species are listed as extinct. However, 3 are critically endangered, 24 endangered, 54 vulnerable, 417 near threatened, 862 do not have enough data to enable classification and 7 species remain unclassified. There are 3,148 listed in the 'least concern' category. Plant one of these critically endangered species in your garden to help the conservation of these 3 species.

Happy reading, and please consider donating (see right) to help support us to support you to support wildlife Kate and Bill



Please deposit your donations to the following bank account:

Account Name:

Low Ecological Services P/L

BSB: 015-881

Account Number: 900189742

Insert reference:

LFW [YourSurname]

Stay Connected with LfW



Visit our website to read blogs, access previous newsletters or download fact sheets



Follow Land for Wildlife on Facebook



Follow Land for Wildlife on Instagram: @LfW_Alice



Subscribe to Land for Wildlife on Twitter: @LfW Alice



You Tube Subscribe to Land for Wildlife on YouTube

All images and articles included here are by staff of Land for Wildlife Central Australia and Low Ecological Services unless specified otherwise. Copyright © 2019 Low Ecological Services P/L, all rights reserved.





Hosted by

Low **Ecological Services**



Contact Us

Land for Wildlife & Garden for Wildlife Central Australia **Low Ecological Services** P.O. Box 3130 Alice Springs NT 0871 (+61) 8 89 555 222 lfw@lowecol.com.au wildlife.lowecol.com.au

Land for Wildlife & Garden for Wildlife Central Australia Newsletter is published by Land for Wildlife, a voluntary conservation program hosted by Low Ecological Services P/L and supported with nominal funding from the Alice Springs Town Council.

Opinions expressed by contributors to the Land for Wildlife & Garden for Wildlife Central Australia newsletter are not necessarily those of the Land for Wildlife program, nor any of the supporting agencies.