

Land for Wildlife and Garden for Wildlife

Central Australia Newsletter

September 2016

From the Land for Wildlife Coordinator

Spring is here and the warm weather it brings has been a delight! Here at Land for Wildlife, I've been busy contacting members and doing a host of property revisits to see what great work our members have been getting up to over the years. It's a great time for property visits—the native plants are flowering (and this makes plant ID easier). Anything flowering in your yard that you want identified? Send us a photo and we can let you know. October is a great time to get active in your garden—see page 8 to read about what you can do in the garden at this time of year.

I'm off on holidays for a few weeks so things will be quiet from the team for a while, but stay posted for the next newsletter in November... Spring is here!
I'm so excited I
wet my plants!

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Rock Isotome (*Isotoma petraea*) is a perennial found in rocky outcrops—this specimen was seen at Trephina Gorge, East MacDonnell Ranges.



Central Australia has some amazingly diverse habitats, in turn supporting a huge variety of fauna. *Pictured:* Four species of *Ptilotis* within view, including Large Green Pussytails (*Ptilotis macrocephalus*), Hairy Mulla Mulla (*Ptilotis helipteroides*), Crimson Fox Tail (*Ptilotis sessilifolius*) and Long Tails (*Ptilotis polystachyus*).

A Month for Considering the World Around Us

September has seen a host of days dedicated to recognising the world around us – National Wattle Day, National Threatened Species Day, National Bilby Day and National Landcare Week. September is also Biodiversity month!

Residents of Alice Springs are fortunate to live in such a unique region with undeveloped landscapes on our doorstep, threatened species such as the black-footed rock wallaby in our backyard, and a host of rare plants that set down their roots in central Australia. Alice Springs gardens support a huge variety of insects, which have a hugely important role in pollinating flowers, breaking down nutrients in the soil and providing a food source for other animals in the food web. The range of native birds in central Australian gardens is also high, with residents commonly observing Australian Ringnecks (Barnardius zonarius), White-Plumed Honeyeaters (Lichenostomus penicillatus) and Western Bowerbirds (Ptilonorhynchus guttatus). Pet-free yards tend to possess a huge range of reptiles, such as geckos, skinks, dragons and snakes. While, very few of the native small mammals persist around human habitation, the Sandy Inland

Mouse (*Pseudomys hermannsburgensis*) is occasionally seen visiting some of the blocks that contain diverse habitats. Macropods often frequent properties with a decent amount of green pickings, especially those that back onto the ranges. Check out the list of the <u>native fauna of Alice Springs</u> to see what could be calling your property home. Alice Springs also has a diverse plant-life, consisting of 27 recognised <u>vegetation types</u> (thanks to some diligent mapping by Albrecht and Pitts, 2004) and 680 distinct plant species.

Despite the extensive list of amazing wildlife in the region, there is a seemingly never-ending list of factors putting pressure on the environment and threatening biodiversity. Introduced weeds such as Buffel Grass (*Cenchrus ciliaris*) can impact biodiversity by favouring more frequent and hotter fires and outcompeting native grasses or forbs for space, sunlight and nutrients. High on the threat list are feral cats (*Felis catus*), which can impact biodiversity by increasing the predation pressure on small to medium-sized native mammals. Even the seemingly harmless Spotted Turtle-dove (*Spilopelia chinensis*) can out-compete native birds for food and nesting resources.

(Continued on page 3)

(Continued from page 2)

Humans too, have their place in the system of change. A horde of animals have joined the threatened species list in the last few decades.

Many areas such as Ilparpa Valley retain high biodiversity values, and even the smallest of blocks can be species-rich – and it's worth preserving! There are a number of positive actions that landholders across Alice Springs can take to preserve biodiversity.

- Planting local native plants will provide food and shelter for native birds, mammals and reptiles, while sustaining natural interactions with other plants.
- ⇒ Creating multiple layers of habitat will attract a diversity of wildlife – from the top of tall trees, to shrubs, herbs and ground cover.
- ⇒ Controlling weeds or other invasive plants will allow natives to naturally re-seed and establish.
- ⇒ Allowing native mistletoe to establish in low numbers will provide nectar and berries for a range of birds and insects.

- ⇒ Avoid using chemicals for weed control, or choose a bio-friendly alternative.
- ⇒ Retaining dead trees, fallen logs, rocks and leaf litter will provide habitat for a range of fauna.
- ⇒ Providing a water source in a predator-free safe place will attract wildlife such as frogs and birds.
- ⇒ Consider responsible pet ownership to minimise their impact on wildlife.
- Minimise water use and consider installing a rainwater tank.
- ⇒ Take up a feral animal trapping program to reduce the impact that ferals have on the system. This includes feral Cat trapping, Spotted Turtle-doves and Rabbit control.
- ⇒ Live-trap for small rodents, learn to identify the native mice (Sandy Inland Mouse, Desert Mouse) for release and dispose of introduced House Mice ethically.
- ⇒ Maintain fire-breaks to manage the frequency that wildfire burns the habitat on your block. *Blog*▶

What actions are you taking to preserve Biodiversity?

National Threatened Species Day

National Threatened Species Day was declared on the 60th anniversary of the last Tasmanian Tiger's death. The last Tasmanian Tiger was named Benjamin, a captive at Hobart Zoo for three years before dying due to exposure to the cold on the 7th of September 1936.

This month marks the 80th anniversary of Benjamin's death and the Thylacine remains a powerful symbol for conservation of threatened species. Threatened Species Day is opportune to reflect on species loss or decline and how people can help to protect Australia's threatened species. A list of the locally threatened animals and plants can be found on the Northern Territory Government website, which includes the Greater Bilby (Macrotis lagotis) and Black Flanked Rock Wallaby, among others. You can help to protect biodiversity on your patch and contribute to protecting habitat for threatened species - see 'A Month for Considering the World Around Us'.

To commemorate National Threatened Species Day, the Alice Springs Town Council organised a Pop Up Gallery in the Todd Mall. The exhibition 'Battle for the Spinifex' featured the full range of paintings by Land for Wildlife member, Kaye Kessing. They are stunning pieces that showcase the interactions between native fauna and a host of threats to the environment. Battle of the Spinifex ran until the 30th of September, but on-going information is available in Kaye's books (see Page 12 Further Reading).



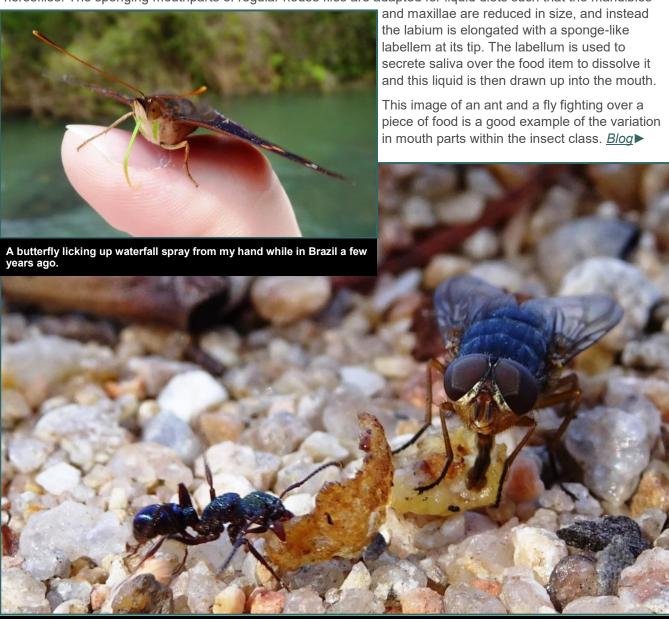
Kaye Kessing's paintings were on display at the Battle of the Spinifex exhibition in Todd Mall, Alice Springs.

Up Close and Personal with Insect Mouthparts

Have you ever looked at an insect mouth up close? There's a huge amount of variation in morphology that is related to the type of food an insect consumes. Mouth-parts of insects are composed of external appendages that project outwards, known as *ectognathous* mouth-parts (Greek: *ecktos* for outside, *gnathos* for jaw).

Many insects have chewing or mandibulate mouthparts, composed of mandibles (for grinding solid food), maxillae (for collecting food and assisting mandibles with mastication) and a labium (assists with manipulation of food). The three mouthparts work in conjunction to bring food to the mouth and grind it before ingestion. For example, some ants have a highly serrated pair of mandibles for chewing a range of foods, from seeds to other invertebrates.

What about insects that prefer a liquid lunch? For butterflies and moths, the maxillae are modified into a siphoning proboscis to suck nectar or other fluids. Female mosquitos have piercing-sucking mouth-parts elongated so that the blood from an animal can be siphoned through the stylet (a fusion of maxillae and mandibles). There are several bloodsucking or predator flies that also adhere to this morphology, such as horseflies. The sponging mouthparts of regular house flies are adapted for liquid diets such that the mandibles



An ant and a fly compete for the same food, but attack it with different tools.

LfW on YouTube

» Red-capped Robin

The Red-capped Robin (*Petroica goodenovii*) is a gorgeous little bird that can be found through much of semi-arid and temperate Australia including rural areas around Alice in woodland habitats. A juvenile and two adults was snapped by the Land for Wildlife coordinator at Newhaven Wildlife Sanctuary, while on a trip with the Alice Springs Field Naturalists Club last month.

The Red-capped Robin breeding season extends from June to January each year, with females producing two to three small eggs, which are incubated over a 14-day period. Breeding territories are established and defended by the male, who also feeds the female during the nest construction and incubation process. While the female takes the sole responsibility of incubating, the male assists with feeding the young.



View the Red-Capped Robin Video on YouTube

The juvenile in the video sat quietly for some time calling for food and ate enthusiastically when fed by two very busy parents. Do you love birds? Newhaven Wildlife Sanctuary has a huge diversity of habitats and is a renowned arid zone bird watching destination, supporting over 170 species – head up there for a visit, it's well worth it! Blog
ightharpoonup



L to R: A Red-capped Robin (Petroica goodenovii) juvenile, who is the star of the show in the video; a female Red-capped Robin who was seen hurriedly foraging to keep up with the hungry chick.

New Land for Wildlife Members

» Bruce Pascoe

Bruce has taken on a property that has been in the Land for Wildlife network for many years under the previous owners. There is a large Ghost Gum (*Corymbia aparrerinja*) stand on the property and a host of wildlife (including kangaroos, reptiles and a host of invertebrates).



L to R: A Golden Orb Weaving Spider (Nephila edulis) and some Kangaroos wait out the rain at Bruce's LFW property.

» Billy Lewis

Land for Wildlife were thrilled to be able to give a helping hand to Billy Lewis and his team of Buffel-bashing boys on their hillside block. The fertile soil with run-off from the hills has resulted in a wonderful self-sustaining native garden with a biodiverse structure and the plant list to match it is epic. Their property is home to an abundance of natives, including three different species of Fuchsia, three Cassia species, and Large Green Pussytails (*Ptilotis macrocephala*). They



The Lewis family show off their excellent LFW property.

have a drinking trough for wildlife to the rear of the property frequented by birds, Euros (*Macropus robustus*) and a 2 m Perentie (*Varanus giganteus*) that uses it to cool down in the summer!

» The Kangaroo Sanctuary

The Kangaroo Sanctuary (Brolga and his 45 kangaroo friends) join the Land for Wildlife family. The property has a largely Witchetty Bush (*Acacia kempeana*) upper story with Buffel Grass understory, some of which will be managed by Brolga's camel control unit.

You can visit the Kangaroo Sanctuary on a <u>guided tour</u> and check out the BBC TV Series <u>Kangaroo Dundee</u>.



Above: Brolga and his Kangaroo Sanctuary join Land for Wildlife (Image C. Barnes). Below L: One of the Buffel-bashing camels that will graze on the property. Below R: Crested Pigeons (Ocyphaps lophotes) rest in a tree on the property.



New Land for Wildlife Members (cont.)

» Pitchi Richi Heritage Sanctuary

Pitchi Richi, located at the southern entrance to Heavitree Gap, is aptly named after the Arrernte words for 'Gap in the Range'. It is an important historical property in Alice Springs. The residence is that of central Australia's first newspaper magnate, Charles Chapman, who founded the Centralian Advocate and the Granites Goldmine. In 1955, Leo Corbett (a former worker for Chapman) inherited the property and set about creating a sculpture and bird sanctuary with renowned Victorian sculptor William Ricketts. Corbett was a staunch environmentalist and was considered to be one of central Australia's earliest conservationists.



Above: Pitchi Richi's original entrance; Below: Boobialla (Myoporum montanum) and other natives plants and animals call Pitchi Richi home, including a host of birds and reptiles.

The property was heritage listed in 2008 and has been managed by Heritage Alice Springs Inc. ever since. It is home to a diversity of plants and wildlife (several species of birds and reptiles) and joins the Land for Wildlife team, while under the maintenance and care of the current caretaker, Chris Warren.



Above: Native Passionfruit (Capparis spinosa var. nummularia) and Large Pink Pussy-tails (Ptilotus exaltatus) in lan's GFW property. Below: A European Honeybee (Apis mellifera) feeds on some Eremophila nectar, collecting large pollen sacks along the way.



New Garden for Wildlife Members

» Ian Towns

lan Towns was a member of Garden for Wildlife several years ago but lost contact. Garden for Wildlife have issued Ian with a new member pack and welcomed him back into the fold. I was delighted to visit his property and see the wonderful reptiles he provides habitat for, including the Long-nosed water dragon (Lophognathus longirostris, see right).



» Tricia Bruce

Tricia Bruce has worked tirelessly to remove Buffel Grass from her block, resulting in a haven for wildlife. Her yard attracts several lizards, Mistletoe Birds (*Dicaeum hirundinaceum*) and a range of honeyeaters.



Silver Cassia (Senna artemisioides nothosubsp. artemisioides) flowering on LFW property, Campfire in the Heart.

Get Gardening in October!

October is the time to get active in the garden. The weather is warming up so get outside and stock up on vitamin D. With spring ramping up, it's best to finish planting before the season progresses any further.

It's also an excellent time to propagate your native plants with cuttings or collecting seeds for germination in protected nursery areas, as winter flowering seeds have ripened for the picking.

If you wish to get brutal you can give some winter-flowering shrubs a pruning to stimulate fresh growth. A good example of a native shrub you can prune now is the prolific flowering *Senna* sp. (*pictured above*).

Make Every Bird Count!

The Aussie Backyard Bird Count takes place from the 17th to the 23rd of October. Register as a counter and submit your numbers through the Aussie Bird Count App or through the Submit a Count tab on the Aussie Bird Count website.





A Rainbow Bee-eater (*Merops ornatus*) perched in a tree outside a Land for Wildlife property in Connellan.

Bee-Eaters are Back in the Burbs

Garden for Wildlife signs around Alice Springs stand out for their colour – containing a representation of the Rainbow bee-eater (*Merops ornatus*). The first week of September marked the first sighting of the Rainbow bee-eater for spring in Alice! Winter has been quiet without their scissorgrinder trill, but it seems a few individuals have returned. The seasonal movement patterns of Rainbow Bee-eaters are complex and understanding their movements is a work in progress.

While northern Australian populations are resident throughout the year, there may be some movement from riparian breeding areas to more open areas for the non-breeding season. Southern populations, on the other hand, are migratory and travel north to Australia's top end, Papua New Guinea and Indonesia for the Australian winter. Movement begins in February following the breeding season and they remain in warmer climates until the southern-Australia weather begins to warm. Central Australian populations also seem to head north from mid-April, though Alice Springs residents may see individuals passing through from southern regions until June.

Southward movements begin in late August, passing over the Timor Sea, Arafura Sea or Torres Straight in their passage home. Migrating flocks travel high above the ground while on passage, with populations assembling before migration and travelling in groups of hundreds or more. Read more on the seasonal movements and habitat of Rainbow Bee-eaters at the Australian Government website. Blog

Air Bee n Bee: Creating Hotels for Native Pollinators

Spring is here and gardens are a buzz! Insects play an important role in the environment as pollinators and nutrient recyclers. While it is easy to get carried away with the huge role that introduced European Honeybees (*Apis mellifera*) play in pollinating crops, there are many more species of native solitary bees (harmless and non -aggressive) that play a very active role in pollinating flowers. Not to mention the ants, butterflies, beetles and other invertebrates that are responsible for pollination. Attracting these critters not only increases biodiversity in your yard, but they will help to keep unwanted insects away.

When the rain comes and you feel the need for a vacation, you might book a hotel to stay in or organise accommodation on Airbnb. But what about the insects? Where do they go when it gets cold and wet? Many insects hunker down when it's raining and lay eggs in safe, dry places. But many town yards are kept tidy and the lack of debris can mean that there are fewer places for insects to take refuge and lay eggs. An insect hotel can be the key to giving the native insects a helping hand. What about an Air Bee n Bee?!

While spring is here and you're seeing insects active in your yard, use the warm weather to build an insect hotel ready for the next rains. Insects will use the hollows created to lay eggs, which will hatch in the next round of warm weather. It's best to place the insect hotel in a dry place with protection from cold winds (a sheltered spot under the eves, in front of a window). Ideally, the insect hotel opening of the hotel should be facing north or north-east with exposure to the sun, as it's unlikely to be successful if placed in the shade. Finally, it should be firmly fixed so that it doesn't sway in the wind.

You can use smooth (splinter-free), cylindrical spaces from a variety of materials, ranging in size from 3mm holes to 13 mm holes (most commonly used around 5-6.5 mm) and depths of 70 mm to 150 mm (according to Tim Heard, author of <u>The Australian Native Bee Book</u>, available at Red Kangaroo Books). A variety of sizes and shapes will cater to different insects and scattering a couple of small insect hotels around the property will increase your chances of providing for competing insects.

Materials used can include bamboo segments, holes drilled into solid untreated wood cubes, hose, paper

straws, seed pods or rolls of cardboard. A length of polypipe filled with clay can attract insects that would normally burrow in the ground, which includes over half of Australia's bee species. The items can be stacked in an empty wooden box or tied together with a sloping roof to keep the hotel dry. Ensure that it has a backing so that it doesn't turn into an open-ended wind tunnel. You can place a strip of chicken mesh over the front of the insect hotel if you wish to protect the larvae from birds without deterring the hotel guests. The insect hotel can be decorated with old metal for a rustic style or shiny items for that bit of extra 'bling'. Use anything that you find (recycled items are free or very cheap!), there is no standard design and you are only limited by your imagination!

This time next year when the hotel apartments are emptying out, you can report sightings of your insect guests on Bowerbird and have them identified. Once the insect hotel is vacant again, maintain it by cleaning out any used cells and replace parts if fungus moulds develop. Check out the Valley Bees factsheet for more information on creating an insect hotel.

If you don't have the capacity to make in insect hotel for your town block, you can provide natural homes for insects by retaining some leaf litter, planting local native trees that produce peeling bark and leave dead branches in situ.

Blog



Insect hotel (Image Wiki Commons).

Fighting Feral Cats

Researchers and Rangers from around Australia descended on Alice Springs last week for the Australian Mammal Society's annual conference, which included a symposium dedicated to feral cat research and management. It was great to hear about the actions being taken by dedicated individuals around Australia. Gregory Andrews, the Threatened Species Commissioner, spoke to the symposium attendees about the impact that feral cats are having on Australia's wildlife and the need to control the feral cat population, stating "It's not about demonising feral cats; it's about loving our native wildlife enough to save it". Shortly after, Brett Murphy

outlined some staggering statistics about feral cat numbers in Australia – his team have used population density estimates and aridity patterns to extrapolate to

"It's not about demonising feral cats; it's about loving our native wildlife enough to save it"

- Gregory Andrews, Threatened Species Commissioner

2.7 million feral cats

across Australia!

With the spring weather warming up, the reptiles become more active and this means there is plenty of food available for feral cats. As a result, feral cats are also active and so it's time to get trapping. The Alice Springs Town Council have been busy catching cats over the last few weeks and suggest that Land for Wildlife members consider joining in.

Pet cats are good companions for people, but also eat wildlife unless they are contained—more information on responsible pet management can be found in our brochure '*Where is Your Cat Now*?'.

Land for Wildlife has plenty of cat traps available for loan and can provide information and advice regarding trapping of feral kitties on your block. Already have a trap? Download the <u>Cat Trapping</u> information from the Land for Wildlife fact sheets page. The ASTC Rangers can assist you by collecting any cats caught (contact the ASTC, Ph 08 8950 0500) and delivering them to the Alice Springs Animal Shelter. *Blog*▶





Upcoming Events

» White Ribbon Day: 25 November

Land for Wildlife associates, The Tjuwanpa Women Rangers, will be hosting a White Ribbon Day March at Ntaria/Hermannsburg on the 16th of October to educate about preventing men's violence against women.

» TNRM Conference and Awards: 22-24 November

Land for Wildlife will be presenting information on the Land for Wildlife and Garden for Wildlife program at the TNRM Conference in Darwin. Keep your eyes open for Urban NRM group award voting!

» Cat Monitoring and Awareness Summer Session: Late November

Land for Wildlife are still looking for volunteers to take place in the Domestic Cat Monitoring and Awareness program in Alice Springs. We have filled the urban spaces but are looking for domestic cat owners in the rural areas of Ilparpa, White Gums, Connellan and Ross. Please get in touch if you live in any of these areas, own a cat and are interested in taking part in the program to see where cats wander and what they see.

Feedback: Creating a Freshwater Ecosystem

Last month, we posted a blog and newsletter article by Jen Kreusser about converting pools to create freshwater ecosystems (<u>Blog</u>►). Field Naturalist and local Plant Society gurus, Barbara and Jim Gilfedder, gave us some feedback on what has worked on their property:

"We used to have a fish pond - about two metres by one metre but it developed a leak in the liner which we were unable to fix. We passed the goldfish onto a neighbour. We left the liner in place and filled it up—first with a mix of soil and compost, then a good layer of river sand. We try to keep it moist, but not with water exposed as we don't want to encourage mozzies. We planted it with mixture of sedges, reeds, Stemodia and Nardoo. They are all doing really well. I think it



Barbara Gilfedder's lush "bog garden" (Image B. Gilfedder).

looks pretty with all the rocks still around it. It fills up when it rains, or hails, then we don't have to put water in it for ages." ~ Barbara Gilfedder



Spa converted to a garden bed at the Land for Wildlife Coordinator's property.

From some personal experience, it's wise to pick the right plants. I reside in a rental property, which includes a garden that has been converted from a spa or small pool, however the 'converter' didn't choose the best plants for the project. The garden is set up with irrigation to several introduced species, but the irrigation rarely needs activating, as rain water accumulates and causes 'wet feet'. I would suggest that some water-happy plants would have been more appropriate, or measures taken to increase drainage prior to filling the space. Plants are picky and so you need to pick the right plants for the job (preferably local natives). Plant appropriateness is something to consider if you are modifying an old leaky pool, spa or pond.

Further Reading

Click the link symbol to be redirected to the article



Article • Our Gondwanan gum trees: the ancient and fascinating story of Australia's eucalypts



Article • Earth's CO₂ levels just crossed a really scary threshold - and it's permanent



Article • Drunk birds: inebriation in the wild



Article • Invasive predators are eating the world's animals to extinction – and the worst is close to home



Article • Prey switching - What will happen when the second strain of calicivirus hits?



Article • New wildlife BioBank open in Australia



Article • Wildlife scientists take steps to protect endangered species like quokkas following bushfires



Book • Bilby's Ring Novels: Out of the Spinifex, Across a Great Wide Land, Into the Bowels of the Biggest City

Do you have any stories or images to share? Get in touch! We are always looking for members to share their experiences via our social media and newsletter. Email us with your suggestions of articles or topics that you wish to hear more about.

Cheers,

Caragh and Bill

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