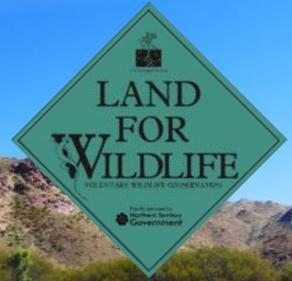


# LAND FOR WILDLIFE



## & GARDEN FOR WILDLIFE

### Land for Wildlife and Garden for Wildlife Central Australia Newsletter

January 2018

## From the Land for Wildlife Coordinator

Well hello again from the Land for Wildlife team! I hope that you have all had a great festive season and have launched into 2018 nicely refreshed. Land for Wildlife has been busy wrapping up some assessment reports for new and renewed members. We've also been getting some fun fact sheets together and updating the NT Register of Significant Trees.

Our website designer has been busy with updating the web layout, which should be released in the next couple of weeks so stay posted! The new layout will make for a more user friendly experience. In addition to a change in design and layout, the website is going to a mobile-friendly format so you can view the resources and blog with ease on the go.

Candice and I are off on holidays as of the end of the month—South America here we come! While the office and communications will be going quiet, the wildlife will still be here to keep you company and bring you joy. Let us know what fun wildlife you have observed on your block and we can share it with the members on our return.

Enjoy the rest of the summer warmth and we will see you in March. Adios!

*The Land for Wildlife team will be away until mid-March as we take a break. If you have any urgent enquiries during that time, you can still email them through and we may be able to respond sporadically.*



**It's crazy, it's wild, it's the funkiest caterpillar in the garden!**

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A Red-backed Kingfisher (*Todiramphus pyrrophygius*) at the Mt Zeil Wilderness Reserve property.

## New Members

### » Mt Zeil Wilderness Reserve

Mt Zeil Wilderness Reserve has joined the Land for Wildlife team! The property is located approximately 200 km (by road) north-west of Alice Springs. The property is owned by Chris Connellan and is in the initial stages of being set up as a reserve with campsites, which will be managed by his daughter, Sam Connellan. Chris was previously the owner of the larger neighbouring property, Narwietooma Station, which had been in the family since 1942 and was signed up as a Land for Wildlife property during Chris's ownership in March 2015. Chris split Mt Zeil Wilderness Reserve from Narwietooma Station in 2015 and was eager to establish membership for the sub-lease.

The property is located across two bioregions (Burt Plain and MacDonnell Ranges) and is listed as a region of conservation significance, sitting adjacent to the West MacDonnell National Park. The property also overlaps an area of registered botanical significance, with the broad vegetation type "Triodia (Spinifex) open-hummock grassland with *A. aneura* tall sparse-shrubland overstorey" as the predominant vegetation over the property. Mount Zeil Wilderness Reserve sits on the traditional country of Mbabghana. Chris has involved the local Indigenous communities in extensive consultation to ensure that they are satisfied with any developments to the area.

It was a delight being able to spend some time at Chris Connellan's block last year to record the flora and fauna as part of the property assessment. In a little over 24 hours we observed 100 plant species, 29 bird species and many invertebrates. No doubt a bigger survey would uncover much more! In addition to those observed during the assessment, two threatened plant species (*Clematis decipiens* and *Babingtonia behrii*), two threatened avian species (*Polytelis alexandrae* and *Erythrotriorchis radiatus*) and a range of threatened mammals have been observed in the region. Chris has done a great job at preserving the biodiversity on the block and we look forward to watching the progression of the reserve in the years to come.



Left: Southern Whiteface (*Aphelocephala leucopsis*) looking out over the woodland. Right: A Black-faced Woodswallow (*Artamus cinereus*) in a Desert Bloodwood (*Corymbia opaca*).

## Bush Foods: Vegetation Type 17

Are you in Veg Type 17? Find out by visiting the [Vegetation Maps](#) page on the [Land for Wildlife](#) website.

Land for Wildlife members regularly ask us about edible plants that can be grown in their garden. We often hear about the well known bush foods: Quandong (*Santalum acuminatum*), Plumbush (*Santalum lanceolatum*), Native Fig (*Ficus brachypoda*), and Desert Raisins (*Solanum centrale*). But what about the other species that look a little inconspicuous and grow in the everyday Alice Springs garden? The most common vegetation type in Alice Springs is 17 (Ironwood and Fork-leaved Corkwood on alluvial flats), and within this vegetation list there are a range of species that can be eaten to one degree or another. From grass seeds to vine roots as entrée, to leafy greens and flowers for the main, a side of fleshy fruits, and sticky gum for desert.

You can learn more about the local species that are considered edible by checking out Peter Latz's book *Bushfires and Bushtucker: Aboriginal Plant Use in Central Australia*.

Taxon Name	Common Name	Bush Food
<b>Grasses</b>		
<i>Cyperus bulbosus</i>	Yalka, Nutgrass	Roots produce small bulbs that are sometimes eaten raw or roasted in hot coals.
<i>Dactyloctenium radulans</i>	Button Grass, Finger Grass, Toothbrush Grass	Seeds are dehusked and eaten.
<i>Eragrostis dielsii</i>	Mallee Lovegrass	Seeds are dehusked and eaten, whole or ground.
<i>Eragrostis eriopoda</i>	Woollybutt Grass, Naked Woollybutt, Wire Wanderrie Grass, Never Fail	Seeds are dehusked and eaten, whole or ground.
<b>Forbs and Groundcovers</b>		
<i>Abutilon otocarpum</i>	Keeled Lantern-bush, Desert Chinese Lantern, Desert Lantern	Seeds can be eaten without preparation and have a pleasant nutty flavour.
<i>Boerhavia repleta</i>	Tar Vine	Roots are edible and collected once active growing has ceased.
<i>Cleome viscosa</i>	Tickweed, Mustard Bush	Seeds may be eaten?
<i>Lepidium muelleriferdinandi</i>	Muellers Peppergrass	Plant eaten immediately after being steamed, stems hammered to a pulp before being eaten. Eaten raw but strong flavour. Seeds in pods also eaten.
<i>Lepidium phlebopetalum</i>	Veined Peppergrass	Plant eaten immediately after being steamed, stems hammered to a pulp before being eaten. Eaten raw but strong flavour. Seeds in pods also eaten.
<i>Portulaca oleracea</i>	Munyeroo, Pigweed, Purslane	Seeds roasted and ground to a paste before being eaten. Roots cooked and eaten. Leaves and stems steamed and eaten.
<i>Vigna lanceolata</i> var. <i>latifolia</i>	Pencil Yam, Maloga Bean, Parsnip Bean	Swollen roots (juicy, starchy organs) of the plant are edible, eaten raw or baked in hot sand and ashes.
<i>Wahlenbergia tumidifructa</i>	Tugid-fruited Bluebell	Flowers of <i>Wahlenbergia</i> species can be eaten.
<i>Marsdenia australis</i>	Bush Banana, Lungkwa, Doubah	Flowers and young fruits are eaten raw. Mature fruits are cooked and eaten whole or outer rind eaten. Young leaves eaten without preparation. Mature leaves steamed before being eaten.



L to R: Button Grass (*Dactyloctenium radulans*), Tar Vine (*Boerhavia repleta*), and Peppergrass (*Lepidium* sp.) can all be eaten.

Taxon Name	Common Name	Bush Food
<b>Shrubs</b>		
<i>Capparis spinosa</i> var. <i>nummularia</i>	Caper Bush, Wild Passionfruit, Nipan	Fruit is edible.
<i>Enchylaena tomentosa</i> var. <i>tomentosa</i>	Ruby Saltbush, Sturts Saltbush, Plum Puddings, Berry Cottonbush	Berries are eaten when ripe and juicy. Dried berries can be reconstituted in water.
<i>Senna artemisioides</i> subsp. <i>filifolia</i>	Desert Cassia, Broom Bush, Punty Bush	Seeds eaten after treatment.
<b>Trees</b>		
<i>Acacia estrophiolata</i>	Ironwood, Southern Ironwood	Seeds are removed with some difficulty and eaten, white gum exuded from the trunk by boring insects is edible.
<i>Acacia murrayana</i>	Colony Wattle, Murrays Wattle	Seeds are roasted and ground to make an edible paste, or eaten green after roasting the pod. White gum exuded from insect damage is edible.
<i>Acacia tetragonophylla</i>	Dead Finish, Kurara	Green seeds are cooked in the pod before being eaten.
<i>Acacia victoriae</i> subsp. <i>arida</i>	Acacia Bush, Bramble Wattle, Victoria Wattle	Green seeds are lightly roasted in the pod before being eaten. Hard-coated mature seeds are ground before being eaten. White gum exuded from the trunk is sometimes eaten.
<i>Atalaya hemiglauca</i>	Whitewood	White sap exuded from the trunk is edible.
<i>Capparis mitchellii</i>	Wild Orange, Native Orange, Bumble, Native Pomegranate	Yellow pulp of fruit is edible and pleasant initially, with unpleasant aftertaste.
<i>Eucalyptus coolabah</i>	Coolabah	Seeds are left to dry for several days before being cleaned and ground to a paste, which is eaten raw or cooked.
<i>Grevillea striata</i>	Beefwood	Seeds are eaten.
<i>Hakea divaricata</i>	Fork-leaved Corkwood	Seeds are eaten without preparation. Honey is sucked from flowers or steeped in water.
<i>Ventilago viminalis</i>	Supplejack, Vine Tree	White sap exuded from the trunk from insect wounds is edible.

Download the full fact sheet that includes all images for [Bush Foods of Veg 17](#)



## Bagworm Moths / Case Moths: A Case of Invertebrate Fever over the Psychidae

Bagworm Moths or Case Moths belong to the family Psychidae. They are ranked in the Tineoidea with the family Coleophoridae (also known as Case Moths), though this latter family generally build with silk alone and have females that develop wings following pupation, unlike the females of Psychidae. The Psychidae adult female is largely wingless (has vestigial wings), while the male has transparent wings and a black body.

Their name comes about as the caterpillars in this family construct a protective case in which to hide, which is covered completely with plant materials and generally has no silken case exposed. The caterpillar larvae construct and live in a silken case, to which they attached pieces of leaf or twigs to disguise it. Sand, soil, lichen and other plant materials may also be used in the construction of the case. Some individuals have been known to attach pieces of artificial material such as aluminium foil to their case in captivity.

While some species are monophagous, meaning that they are specialised to their host, many are polyphagous (can feed on a variety of plant species). The leaves and twigs are often taken from the host plant to which the case is attached, though they can also be found attached to rocks or other structures such as fences. The case itself can be up to 5 cm long, though are often smaller. The bag is broadest in the middle and tapers at each end.

In the larval stage, Bagworms stay within their constructed case and extend their head and thorax to feed of leaves of the host plant. The head and thorax are heavily armoured and they have three pairs of legs that are strong enough to drag the case around. As the larvae grow, they can attach further materials to the front of the case and once they have fed sufficiently, they attach to their host, reverse their body so that their head faces downwards and then pupate. Once they have pupated, the adult male leaves the case to find a mate, whereas the female stays within her case for protection. She can remain in the case throughout copulation and then lay eggs in the case before dying.



In central Australia, there are several species of Case Moth, common species being the Leafy Case Moth (*Hyalarcta huebneri*) and the Ribbed Case Moth (*Hyalarcta nigrescens*). The Leafy Case Moth uses small pieces of leaf from the host plant to decorate the case. Because this species is polyphagous, the look of the case itself can vary widely. The Ribbed Case Moth has a case that consists of a silken bag that unlike others is not decorated with plant material, but rather has several ridged ribs running along its length. One of these

was reported at Owen Springs by Barbara Gilfedder of the Alice Springs Field Naturalists in their [February 2016 Newsletter](#). The Faggot Case Moth (*Clania ignobilis*) and Stick Case Moth (*Clania lewinii*) are common around Australia and so you may have seen them around. These species have cases that are constructed from long parallel twigs like a log cabin, often with one or two of the twigs extending longer than the others for the Faggot Case Moth and of equal length for the Stick Case Moth. [Blog](#) and [Fact sheet](#)

*More information on the life stages of Leafy Case Moths can be found in the article [Life History and Biology of the Leaf Bagworm, Hyalarcta Huebneri](#) by N.W. Heather (1975, Australian Journal of Entomology, 14(4), 353-361).*



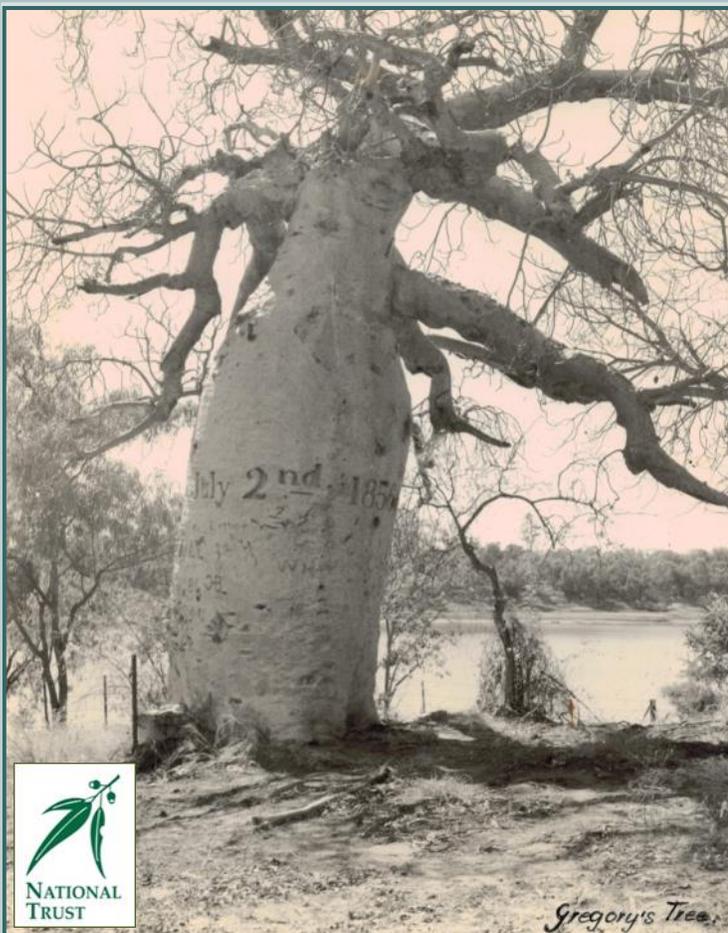
**Top to Bottom:** Leafy Case Moth (*Hyalarcta huebneri*) attached to an Acacia at Standley Chasm, Stick Case Moth (*Clania* sp) with a haywire arrangement of sticks, Faggot Case Moth (*Clania ignobilis*) attached to a Spinifex Seed Stem at Devil's Marbles with a clean arrangement of sticks. **Bottom Left:** Ribbed Case Moths (*Hyalarcta nigrescens*) attached to a *Eucalyptus* sp. trunk. *Image courtesy of B. Gilfedder.*

## A Roadside Treat of a Different Kind

On a recent trip to Adelaide I was seeing a strange plant flowering heavily along the roadside south of the border in flat open country. Curiosity got the better of me and I had to stop to check it out. The ID has come in and it turns out to be *Arabidella glaucescens*. This plant has a Near Threatened status to it. Found more commonly in SA, it can also be found around Alice Springs. Something to keep an eye out for! It flowers from April to December but hasn't been described in detail.



*Arabidella glaucescens*, a near threatened species was found south of the border on a recent trip.



## A Snippet from Significant Trees NT

### » Gregory's Tree

Gregory's Tree (pictured left) is a large Boab (*Adansonia gregorii*) located 17km west of Timber Creek in the Top End. Registered as listing 3 on the Katherine grouping of the NT Register of Significant Trees for aesthetic and historical reasons. The words 'letter in oven' and the date 'July 2nd 1856' was carved in the tree by a member of Augustus C. Gregory's WA Survey Department expedition to the Victoria River area, where they camped and explored the region.

You may remember how the Land for Wildlife team attended the TNRM Conference in Darwin last month. We paired it up with a trip to the National Trust Office and had a great catch up with the team there. The Darwin register was collected and has returned to Alice Springs on loan so that it can be scanned and converted to the online register format. We are hoping that the Darwin and Katherine registers will be available online later this year!

In the meantime, you can explore the Alice Springs component of the register by heading to the [Land for Wildlife website](#) and even nominate one that you think is great.

*The NT Register of Significant Trees was established by the National Trust NT and Greening Australia and is managed by Land for Wildlife Central Australia.*



## Bird Bath Biodiversity Survey Videos

Land for Wildlife conducted a Bird Bath Biodiversity Survey in 2017, where camera traps were used to record the visits of birds (native and introduced) to Garden for Wildlife and Land for Wildlife bird baths. The visitation data was recorded and submitted online to the Birds in Backyards Aussie Backyard Bird Count.

We've since been busy and time got away from us. But the videos for the Garden for Wildlife properties that took part have been put together and uploaded to the Land for Wildlife [YouTube channel](#). You can view the individual videos by clicking on the links below. Alternatively, you can watch the whole [playlist](#) in one go by clicking the link inset when viewing the newsletter on your computer.

We will hopefully find a spare moment to put some videos together for the Land for Wildlife members that took part after we return from our break. Stick with us, friends!

Read more about the [Bird Bath Biodiversity Survey 2017](#) in the downloadable report, or find out more about the range of other [biodiversity surveys](#) we conduct at the Land for Wildlife website.

### Watch the Bird Bath Biodiversity Survey Playlist

[Click Here!](#)

Property	Link
Madonna Tomes and Victoria Leontios	<a href="https://youtu.be/8pk64h3ZkIQ">https://youtu.be/8pk64h3ZkIQ</a>
Ian Sweeney	<a href="https://youtu.be/0Kh0Xq80gj8">https://youtu.be/0Kh0Xq80gj8</a>
Charlie Carter	<a href="https://youtu.be/3NGEqMfj-vo">https://youtu.be/3NGEqMfj-vo</a>
Andrew Crouch	<a href="https://youtu.be/Gn-VWVTBIAI">https://youtu.be/Gn-VWVTBIAI</a>
Heather Wilson	<a href="https://youtu.be/p2ImXWIObCg">https://youtu.be/p2ImXWIObCg</a>
Pamela Bladon and Peter Yates	<a href="https://youtu.be/HRfU1Oz7YVw">https://youtu.be/HRfU1Oz7YVw</a>
Jen Noble	<a href="https://youtu.be/PPrdh6oLM8Q">https://youtu.be/PPrdh6oLM8Q</a>
Graham and Julie Heller	<a href="https://youtu.be/okgBaTAQrel">https://youtu.be/okgBaTAQrel</a>



A Grasshopper nymph

## Grasshoppers

There have been plenty of Grasshopper nymphs around in the last few weeks. Don't forget that Land for Wildlife have a great [Grasshopper Identification](#) fact sheet available on Land for Wildlife website. Check it out!

While you are there, browse the other [fact sheets and resources](#) that are available (there are many!).

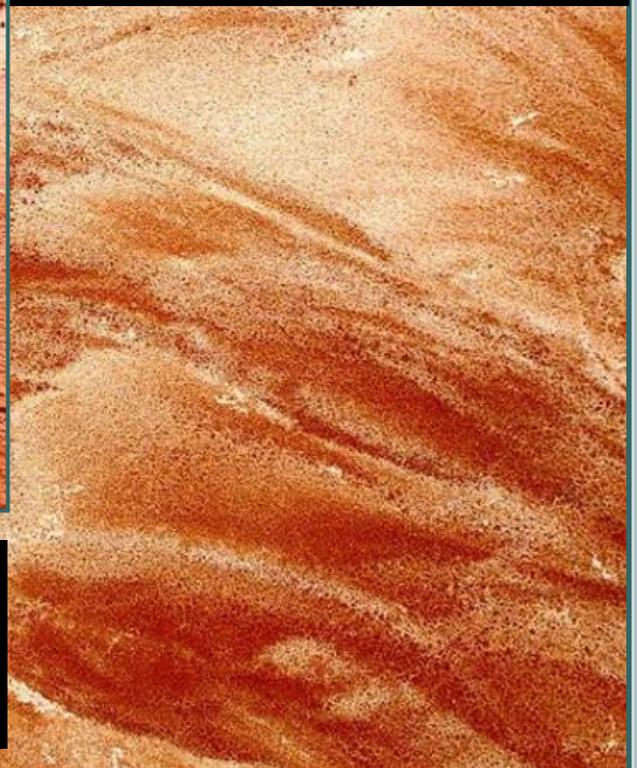
## In Case You Missed It!

Land for Wildlife has been ramping up the images that we share on social media lately. We have so many great photos (too many to share in the newsletters) and it would be a shame to keep them all to ourselves! You can follow us on social media to keep posted about the latest images—just click the links on the last page of the newsletter. If you missed some of this month's selection, here are a few as a teaser!



**Above:** One of our lovely members, Rosalie Breen, explained to me that these neat structures are Praying Mantis egg cases. Also known as an ootheca. I learnt something new and now I see them everywhere! The little holes are where the tiny praying mantis emerge. Also in this photo you might be able to see a small Gall Wasp to the right hand side. A female, possibly searching for somewhere to deposit her eggs.

**Above:** Symmetry in nature - Desert Oak (*Allocasuarina decaisneana*) cone in balanced perfection - Desert oaks are fire tolerant and frost tolerant, and survive in poor nutrient soils due to nitrogen-fixing nodules on the roots. Their ability to cope easily in drought conditions is due to their ability to tap into water resources up to 10 m deep and the downsizing of leaves to reduce the number of stomata (pores for transpiration). Instead they have needle-like cladodes that are photosynthetic and house a ring of very tiny leaves - Smart trees...



**Above:** Here at Land for Wildlife we are pro all aspects of flora that provide food, safety, protection from the elements, breeding habitat or otherwise for native fauna. FYI Spinifex makes for excellent Hopping Mouse habitat. As it grows, it gets bigger and wider and the middle dies off, in turn creating rings in the landscape... or as is the case here, a divine heart. My, my, central Australia - don't you come as a surprise!

Tiny grains suspended  
In water rushed along  
Pushed around by currents  
That swirl against river banks  
Banks that go dry so quickly  
Banks that warp and wind  
The grains often move  
But some are left behind

A Black-footed Rock Wallaby (*Petrogale lateralis*) taking some time for a snack at the Alice Springs Telegraph Station earlier this month.



## Further Reading

Click the link symbol to be redirected to the article



Article • Tracking elusive echidna populations



Article • This is why Aussie 'firehawk' raptors are spreading bushfires



Article • Killing a snake is a risk to your health and the law means it may come back to bite you



Article • Bird dads that sing to their eggs get more attentive chicks



Article • The marsupial mole: an enduring enigma

Cheers,

*Caragh, Candice and Bill*

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.

All images and articles by C. Heenan, unless specified otherwise.  
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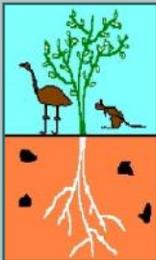
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