



NT
LANDCARE
AWARDS⁰⁹
CATEGORY FINALIST



Land for Wildlife

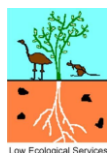
Conservation is in your hands

The Simpson Blooms again. Wildflower species are Annual Yellowtop (yellow), Native Stock (white) and a few Poached Egg Daisies if you look closely.



NEWSLETTER

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Low Ecological Services

PowerWater



 Northern Territory Government

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Alice Springs Municipality | August 2010

Land for Wildlife Update

Hi Wildlifers,

It is with great pleasure that I introduce to you Jesse Carpenter, a new member of the Garden for Wildlife/Land for Wildlife team! Jesse has come on board this month to work alongside me as the Garden for Wildlife/Land for Wildlife Co – coordinator. Jesse brings with him over 7 years of experience and knowledge about our arid Central Australian environment, as well as a friendly face, but I will allow him to introduce himself!



"Originally from Victor Harbor in South Australia, I've been in Central Australia, either in Alice Springs or down at Yulara, for most of the past 7 years. During that time, I've worked mainly as a tour operator, travelling about anywhere from Alice to the Musgrave Ranges area in northern SA and also as a horticulturalist at Ayres Rock Resort in Yulara.

I have a background in environmental management and before arriving in the centre, I worked with the South Australian Whale Centre (a museum and interpretive centre) and the SA National Parks and Wildlife Service. This work involved maintaining whale sighting data, developing museum displays and various field work activities as part of a national southern right whale population study.

Travelling around Central Australia for work over the last few years has given me the opportunity to experience many of the different environments we have here and the seasonal variations that impact on our surroundings. I've been able to observe how our wildlife (and plants) responds to the natural hardships of an arid place and also how they respond to the land management decisions we make over our properties.

I'm particularly interested in birds and lizards, so I'm looking forward to the next couple of months as the weather warms and they all become more active. With all the growth and flowering after the rain, warmer weather should bring an abundance of insects – great bird and lizard food! So keep your eyes open and let me and Ilse know what you're seeing around your backyards, and I'll let you know what I'm seeing around the place to.

I'm looking forward to working with Ilse and Bill and all Garden & Land for Wildlifers, and perhaps meeting you all at some of our workshops coming up soon! Jesse."

Making Windows Safe for Birds Competition winner!

And the winner is.... Kay Hartley! With her entry:

"For every 50 cm (approx.) of height of the window, attach a horizontal wire across the outside of the window. Attach small pieces of firm aluminium foil (such as recycled pie dishes from cheese cakes etc.) to short and long lengths of fishing line, then attach the fishing lines at about 15 cm intervals to the horizontal wires. The foil pieces will move in the breeze and scare the birds away from the window. The view through the window from inside will be blocked only slightly by the fluttering pieces of foil. It will be like a wind mobile, and even if the view is less than perfect, the result is preferable to the sickening thud of a bird in mid-flight having its neck broken."

Congratulations Kay! Kay's entry was chosen because the design is easy and economical to make at home, and it's an attractive solution that doesn't block the view through a window. Kay has won a Level 1 Water Audit conducted by Water Services, Power and Water.



The dust print of a Crested Pigeon that impacted on a clean window.

Other great ideas:

A 'Sinister Image'

This idea was sent in by Paul O'Dowd, who spent time with entomologists at the Christensen Research Institute in Madang, Papua New Guinea. Paul says,

"With birds, there is a particular pattern of simple shapes that induces a powerful fright response, a distinct set of geometric shapes which, combined, represent the eyes, ears, nose and triangular outline of the head of a generalized mammalian predator. With this pattern genetically mapped into the bird's brain, it is equipped to respond instantly and appropriately to almost any mammalian predator because nearly all will have a face that fits this general profile."

This pattern was found frequently on the backs of moths studied at the institute. The moth's head formed a dark 'nose', the wing tips were darkened to form a pair of 'ears', and in the centre of each wing was a dark 'eye'. The overall effect, at a quick glance, was that of a tiny, pointy nosed mammal face - a 'sinister image'. Upon seeing this shape a bird would instantly do a double-take, hesitating for a moment while its higher functions assessed the alarm bell issued by the primitive fright response. Hopefully for the moth, this hesitation would be enough to allow a quick escape."

While visiting my brother in Alice recently I was woken each morning by a Magpie-lark attacking its reflection in the window of the room in which I was trying to sleep. After a few mornings of this I resolved to do something about it."

I wondered if a 'Sinister Image' might make this Peewee think twice before pounding into the pane. I took a piece of A4 copy paper and cut a few triangles out of it in the general pattern employed by the moths I had seen. Next I stuck the sheet onto the window in the area stained by large amounts of bird snot from where this crazy animal had been repeatedly ramming the glass. The next morning there was no bird. I saw it fly at the window numerous times but each time it would pull up just before making contact with the pane and land nearby, looking distracted and confused..."

Threatened species day

National Threatened Species Day is held each year on the 7th September, the anniversary of the death of the last Tasmanian tiger at the Hobart Zoo in 1936.

The Alice Springs Desert Park is asking schools to get involved in the event by raising funds to donate to the Land for Wildlife program.

More information, including an application form and ideas for fund raising, can be found on the Desert Park's website www.alicespringsdesertpark.com.au/plan/pdf/Threatened_species_day.pdf

Workshops

Recent Workshop:

Making a Spotted Turtle-dove trap



New GfW member Glenis designed a square trap to resemble her rabbit hatch which Turtle-doves are already familiar with.



Max demonstrates how a funnel trap works.

Last weekend Land for Wildlife hosted a Trap-making and Information workshop for the feral Spotted Turtle-dove in Alice Springs.

Eight new traps went home with residents, new participants in this backyard trapping program. It was great to see a few kids attend and have fun making their traps and learning about these feral pests. It was also a good opportunity to mingle with the participants and hear their personal experiences of turtle

doves in their backyards.

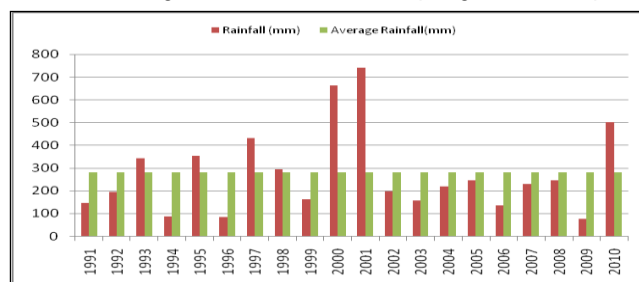
Anyone who missed the workshop and would like more information on turtle doves, to make their own trap, or loan one from Land for Wildlife, let us know by email lwf@lowecol.com.au or phone (8955 5222). Also, it would be great to hear of any observations of doves (both feral and native) you make on your properties.

Articles

Boom and Bust

Water is a crucial ingredient in any landscape or environment. Typically, arid central Australia experiences long periods with little rainfall, interspersed with infrequent events of high precipitation. Every desert inhabitant, plant or animal, is adapted to take advantage of these unusual wet periods in some way, with many experiencing the classic 'boom and bust' cycle in their populations. Simply put, animals and plants will experience a population increase in the good years, even moving into areas they may not have been seen for a long time, only to have a crash in numbers when rainfall cycles returns to 'normal'.

You can see these weather patterns illustrated in the graph below, showing the rainfall of Alice Springs over the past



20 years (red column, the green column is the long term average). Over the past few years, we have experienced below average falls, until 2010's high falls so far.

Right now, as the weather begins to warm, and plants that have grown since the rain are reaching maturity, wildlife will be taking full advantage of the good conditions. Some of this may even be apparent in your own backyards. For example, perhaps you've seen flocks of budgerigars darting about in tight, fast flying formations?

Budgerigars are a perfect example of a species whose fortunes are tied to the seasons in a boom or bust cycle. During extended dry periods, you may see few, if any of these birds, but following the first rains and the accompanying germination of grasses, you'll begin to notice small groups of birds arriving from elsewhere to take advantage of the new food source.

If conditions remain suitable, the birds will soon commence breeding in tree hollows,



raising their chicks on abundant grass seeds. Thirty days after they hatch, the chicks fledge and 6 months later are capable of breeding themselves. Within a few months, small flocks can increase their size to contain hundreds of individuals, and as previous broods reach maturity and reproduce themselves, numbers continue to grow. Already, budgies that hatched here after the first rains over summer are fledging chicks of their own.

As rainfall decreases, resources begin to diminish, until the population of budgies can no longer sustain themselves. Some birds will leave, and travel to other parts of the country, but many will die. Only a few will remain behind, waiting for the rains to return.

Boom and Bust Weeds: Mt. Gillen blushes red with Ruby Dock



Plants also capitalise on events of high rainfall, experiencing periods of fast growth and mass germination and reproduction. Many native plants are just now beginning to reach a mature stage and flower, creating rare displays like the photograph on page 1 of this newsletter. It's not only natives that benefit, however. This is also a year when weed populations can thrive.

Ruby or Rosy Dock (*Acetosa vesicaria*) is one weed that is experiencing a 'boom' period this spring. You can see its red flowers carpeting the slopes of Mt Gillen and other areas around town. Ruby Dock is an erect, annual herb, usually below 1m in height. Stems are tough but hollow with succulent heart shaped leaves. The flowers/fruit are bright pink or red with an inflated appearance. Seedlings germinate in cooler weather and can be identified by two or three large, fleshy, heart shaped, dark green leaves.

Native to Africa and Asia, it is thought that the plant was introduced to Australia by cameleers, either intentionally as a vegetable or accidentally via contamination. In the town area, you'll most likely find it growing on rocky hill sides and disturbed soils around roadsides and house sites.



Seed is small and light weight and is spread extensively by wind. If you notice Ruby Dock on your property, it is a good idea to

control it before seeds are set. Single plants and seedlings can easily be removed by hand, although for heavy infestations, you can spray using glyphosate. Initially, Ruby Dock can have a sparse germination. So if you begin control early, you may quickly overcome the problem.

Remember, native plants will be trying to take advantage of these great conditions too. Unfortunately, weeds like Ruby Dock compete with native plants for space, nutrients and water, often achieving dominance. So get on top of the weeds in your garden now, and allow your native plants and animals like budgies and hopping mice to enjoy the good year unhindered.

Reference:

Albrecht D. & Rogers L. (1999) *Weeds of the Tanami*. For Normandy NFM Limited in cooperation with the Alice Springs Herbarium.

Auld B. & Medd R. (1987) *Weeds – An Illustrated Botanical Guide to the Weeds of Australia*. Inkata Press, Melbourne.

Soil Conservation Notes: Cryptogams (soil crusts)



A cryptogam: Liverwort helping to stabilise soil along a creek bed. These resurrection plants "regain" life and form after rain.

Cryptogams are a specialised and diverse group that includes organisms as varied as single celled algae through to very large and complex colonies of lichens and fungi that may stretch over metres or even hectares. Cryptogams are the nonvascular plants that reproduce through the production of spores rather than seeds (Scott *et al.* 1987). Cryptogams include algae, lichens, bryophytes, liverworts (pictured above) and fungi (Scott *et al.* 1987).

Cryptogams, along with other microbial organisms, form the underlying ecological 'fabric' on which the patterns of more visible components of ecosystems are arranged. The role of cryptogams in the healthy functioning of ecosystems is fundamental to the supply of ecosystem services on which all of society depends (Scott *et al.* 1987). In other words if your property has soil crusting, then your soils are in a healthy state. The *Land for Wildlife* Newsletter (November 2007) has more information on Cryptogams <http://www.lowecol.com.au/lfw/lfwnews>.

Dying Desert Fish

Anyone who's been about the ranges lately will know that the gorges and waterholes are still full of water after this year's rain. Places like Ormiston Gorge, Simpsons Gap and Palm Valley are still flowing in places and may well hold water for the remainder of the year.

When I take visitors to these places, one of the most common questions they ask is, "are there any fish in there?" The answer of course is yes, there are. In fact, the larger rivers in central Australia provide a surprisingly broad range of fish habitats, from deep, sandy bottomed pools to shallow, vegetated backwaters. Larger streams like the Finke River may be home to as many as 9 different fish species. Some species, like Bony Bream and Desert Rainbow Fish, have wide distributions throughout arid catchments, while others are restricted to single rivers or even isolated spring fed wetlands. The Dalhousie Hardy Head for example, is found in only 7 springs in the Dalhousie area of the Simpson Desert.



Desert Rainbowfish

One of the larger and more widespread fish you may encounter, even in the Todd River, is the Spangled Perch. Spangled Perch (or Spangled Grunter) can reach lengths of 30cm, but more often range from 5 – 10cm. They are great desert survivors and can survive in both fresh and sea water and tolerate water temperatures from 7-40°C. They have amazing powers of dispersal and are well known for appearing in ephemeral wetlands and bore drains where they previously have not been seen, or were last recorded many years before.

It is the flooding events that allow these fish to disperse between river systems and waterholes. Perch have been seen crossing sheet flooding over open ground, swimming on their sides in water only a few millimetres deep, or using flooded wheel ruts as fish highways. When these



Spangled Perch

temporary waters dry out, many fish can be left stranded, some distance from the nearest waterhole or river.

Recently, you may have encountered many dead fish around local waterholes. There are numerous reasons why this may occur. Some pools may simply be too small when floods recede. Over population (a small waterhole such as the one at Simpsons Gap may contain several thousand perch!) depletes food reserves and oxygen levels and many fish will die. Water temperature is also important, with the cold temperatures we experience in winter impacting on fish in several ways: cold water promotes the growth of parasitic fungi on the fish's gills, which causes suffocation; cold water holds less oxygen which in a crowded pool is in short supply; it also slows down the activity of other aquatic life, such as insects, which reduces food availability.

All is rectified in summer, however, when rising water temperatures trigger surviving fish to spawn. For example, Spangled Perch will breed when water reaches the mid 20s. Young fish then just have to wait for the rain and rivers to flood again, and they will disperse and repopulate areas from which they may have died out over previous years.

To find out more, look at the Australian Desert Fish Web Page <http://www.desertfishes.org/australia/index.html>

Letters to the Editor

There has been a great response from Garden for Wildlife members regarding Mexican Poppy germinations (re: Letters to the Editor, July newsletter). It is interesting to hear some of the spots it turns up in! It generally establishes on disturbed ground, spreading along roadsides, riverbanks, sandy flats and the beds of intermittent streams. Many Garden for Wildlifers found it popping up in garden beds that had been created from transported river sand. In the NT Mexican Poppy is mainly confined to the ephemeral waterways of Central Australia. A few scattered plants have also been found on the road and rail corridors. The plant can be a troublesome competitor for our native plants. We are glad you've got your eye on it and kick out the outliers to slow its spread!

Correction: Mexican Poppy's species name is *Argemone ochroleuca*, it has been changed from *A. Mexicana*.

Hi Ilse,

I have removed numerous Mexican Poppies (maybe up to a dozen or more) from our front yard (35 Standley Crescent) over the last couple of weeks – I note a couple more still there to be removed. All young & no flowering. Front yard is sandy. We have been



Mexican Poppy

Photo: Vera Messias

there since mid-2007 and have never noted one before.

Hi

Just after reading the newsletter, thought I'd let you know that we had one Mexican poppy plant grow in our yard in Dalby Court. Might have come in with sand we used to build a tank stand in that spot, tucked away down the side of the house. Apart from that we haven't done any gardening there, and it does get a bit weedy sometimes – couch and thistles mostly.

Also reported:

- Massive germinations in the Todd near Heffernan Rd.
- 29 June - "There has been Mexican Poppy germinating in Jessie creek for about 3 weeks"
- Germinating and flowering plants in the Finke River, between Hermannsburg and Palm Valley.

In regards to an article in July's newsletter:

Hi Ilse,

We live on Milner Road and throughout May we also had a Crow feeding a Channel Billed Cuckoo (maybe the same one??) and interestingly enough, the Cuckoo was much much larger than the Crow. Not very bright the Crow!!!!

Announcements

Princess Parrot Sightings



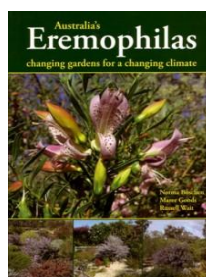
Some members may have heard that there have been numerous sightings of Princess Parrots west of Alice Springs. These highly nomadic and little known birds have responded to this year's rain and the mass seeding of spinifex and other grasses, and nectar-producing flowering plants. They have been seen in desert oak woodlands west of Alice Springs. The exact sighting locations are within Aboriginal freehold land, and access permits must be obtained from the Central Land Council (www.clc.org.au) by anyone wishing to travel into the area. However, Princess Parrots are highly nomadic, and could turn up almost anywhere in central Australia. They have even been seen in Alice Springs and Hermannsburg in the past, using

River Red Gums as nesting sites along the Todd and Finke Rivers.

So if you're out and about in the bush somewhere, be observant and keep a lookout for strange parrots and you might be lucky enough to spot one of these rare visitors.

Recommended Books

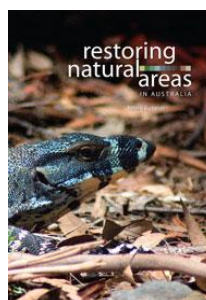
Australia's Eremophilas: changing gardens for a changing climate by Norma Boschen. This book contains a brief description, extensive cultivation and growing hints, additional notes and photographs for most of the 216



described species of *Eremophila*. It also includes many hybrids and cultivars and information on propagating from cuttings, seed, and grafts.

Restoring Natural Areas in Australia

by Robin A Buchanan. This is a practical handbook for anyone managing their land as a natural area. It covers subject such as mapping, vegetation surveying as well as techniques for managing weeds, fire and responding to climate change. Available online at <http://www.dpi.nsw.gov.au>. You can also download the first 2 chapters of the book from the site.



Websites Worth a Look

- For descriptions and photographs of invasive weeds (eg. Ruby Dock): www.weeds.org.au
- For recent sighting reports of rare birds like the Princess Parrot: www.birdsaustralia.com.au
- National Threatened Species Day at the Alice Springs Desert Park: www.alicespringsdesertpark.com.au/plan/pdf/Threatened_species_day.pdf
- Alice Springs Landcare: www.alicespringslandcare.com

Calendar of Events

Saturday 4th September – Open Garden Scheme Event. Open Garden at Lot 3485 Greatorex Rd. Ilparpa, 10am to 4.30pm. Admission \$6 – free under 18. Proceeds to the Alice Springs Rural Volunteer Fire Brigade. Alice Springs Landcare is holding a special event celebrating National Landcare week.

Tuesday 7th September - National Threatened Species Day
6 – 12 September - Landcare Week

Saturday 11th September from 7:30-10:30 - Landcare Week at Gosse Street Park:

- **7.30 -8.30 Buffel Busting.** Join in for an hour of buffel busting and help protect and restore the native species of the valley.
- **8.30-10.30 Pancake brekky stall by ALEC for coffee and pancakes!**
783 ABC radio outdoor broadcast of the **Gardening Show with Geoff Miers and Stewart Brash.** Launch of the Alice Springs Landcare website and an overview of Alice Springs Landcare by Ken Johnson .
- **Followed by a walk and talk by Dick Kimber on the History and Cultural Heritage of the Spencer Valley.**

Saturday 18 September - DesertSmart EcoFair at Olive Pink Botanic Gardens. Volunteers needed.

9-11 November - 4th Desert Knowledge Symposium - Alice Springs Convention Centre, see www.desertknowledgesymposium.com for more information.

CoolMob Gardens for Food Workshops:

Workshops are \$10 each. Places are limited, please email gardensforfood@gmail.com for more information or to book your place.

29th August - Reticulation Options

5th September - Companion planting & What to plant when

12th September - Fruit tree planting

19th September - How to make a herb Spiral

26th September - Introduction to Biodynamic gardening & composting

3rd October - Composting, pests & predators

10th October - Growing bush tucker

17th October - Seed Saving

24th October - Battling problems



Take care,

Ilse, Jesse & Bill
Land for Wildlife Coordinators

Don't forget to check out the LfW & GfW website at www.lowecol.com.au, you can download membership application forms, newsletters, vegetation type species lists, and find out about upcoming workshops!

Participate . Learn . Create
desertSMART EcoFair 2010
cycle or walk to be in the draw for BIG prizes

live music 11am -2pm

huge native plants sale

food stalls

kid's activities

ABC Garden live show 8:30 .. 10

bush foods 10am...

solar oven !bake off! 9am - 1pm

workshops and presentations 9am - 2pm

Stalls and trade displays all day

8am to 2pm
Saturday Sept 18
Olive Pink Botanic Garden
Tuncks Rd

Alice Springs Landcare Inc

Further information
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This newsletter has been produced by
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