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Land for Wildlife

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NEWSLETTER

Low Ecological Services

Alice Springs TOWN COUNCIL

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Contents

Alice Springs Municipality April 2011

Land for Wildlife Update

On our cover this month...
Centralian Carpet Python, *Morelia bredli*.

Since the beginning of the year, Land for Wildlife Coordinators have been embarking on a membership drive and are working towards signing up some great new properties. Our aim is to expand the program beyond the boundaries of Alice Springs onto pastoral properties and Aboriginal lands.

Currently, we're talking to properties such as Ayers Rock and Glen Helen Resorts and 16 Mile Outstation north of town. We've already signed up 6 new members to the program, including the Alice Springs Correctional Facility and Tennant Creek Airport as we move up and down the highway.

All these new properties have created quite a backlog of work, however, and we'd like to thank those new members for their patience as we write and edit their property reports.

Workshops

Land for Wildlife Travels to Alcoota School

Alcoota is a small community in the Sandover district about 2 hours north east of Alice Springs. The school has been a Land for Wildlife member since 2010 and in March 2011 Jesse and Chris paid the school a visit to help with some tree-planting and look at how the kids' *nature trail* is coming along.

The Journey out...

The drive was an adventure in itself. All of the rivers had been flowing and there was a lot of debris on the roads and many floodways to cross. We made it to within 10 kilometres of the school and found the road was blocked. A local family going in to town had become stuck as they tried to cross the swollen Giles Creek. The car was stranded right in the middle of the road leaving no room to drive around it due to the flood damaged causeway. As luck would have it Lisa, the principal at Alcoota school, was stranded by the side of the road with us as she had been heading out to the school that morning as well. It was a good chance to catch up and Lisa was prepared with a satellite phone to call for someone at the community to drive down with a chain and drag the car out of the way. So we waited... and we waited...

As time dragged on, the owner of the car decided it was worth trying some improvisation to free his car and he invited Lisa to push him out backwards by nudging the bullbar of her Landcruiser up against the front of his car. With a blanket carefully draped over the front of his car to minimise the damage, this method worked a treat! The car was soon clear of the road and we were on our way to meet the students only about an hour late – and when the principal is late with you it lends your excuse a certain credibility.

A busy morning...

As soon as we arrived we saw that the students had been busy and had put up their Land for Wildlife sign on the front gate for the whole community to see. The school had a brief assembly and then the Land for Wildlife coordinators were straight into it with some tree planting around school grounds with the early years students.

We had picked up some trees from the Tangentyerre Nursery in Alice Springs to bring with us and the first job was to give the plants a bit of a drink after their long ride in the back of the ute. Each of the students picked a plant and became responsible for finding it a home in a suitable location around the schoolyard. Plants were fitted around the buildings with an eye for how big they might grow and what shape they might

take when fully grown. The students found examples of this when they searched their yard for established plants of the same species which would give them a comparison.

Next the trees were watered and carefully planted in their chosen positions. The plants were each labelled with their species name and the name of the student that planted it. We found that the students became quite possessive of their plants once they had adopted them. This will be great for the kids as they grow up and can point out the plant that, "*I planted when I was little*".

The four species chosen for planting were all matched to the local land units and vegetation types; Beefwood (*Grevillea striata*), Desert Cassia (*Senna artemesioides filifolia*), Sticky Hopbush (*Dodonaea viscosa*), and River Red Gums (*Eucalyptus camaldulensis*). This is a good mix of species to attract some wildlife to the gardens and generate some nice shady areas in years to come. With all the rain Alcoota has been having this year it was not surprising to find that a young River Red Gum had germinated right in the middle of their volleyball court, so this seedling will be dug up and relocated elsewhere in the yard.

Biodiversity in the schoolyard.

After the early years students had done their job of getting all of their trees in the ground it was time for some lunch and an opportunity for the older students to look around the yard at the work the youngsters had been doing. Everyone seemed very happy with the new additions to their garden. A bit more shade is always welcome in the Central Australian summer.

After lunch the older students took part in a habitat workshop prepared by Land for Wildlife. We gave a presentation and discussed the different levels of habitat around their school and what plants and wildlife may be found in those habitats. It was a simple introduction to the concept of ecosystems. Then it was time to go out into the garden to see what they could find and describe it in their notebooks. The students seemed to enjoy this practical task and cooperated well with each other. They had soon identified several bird and insect species and provided short descriptions and sketches of each.

We are hoping to build on this activity and encourage the students to produce their own "field guide" to the wildlife of their garden. With assistance from Land for Wildlife this will be printed and can be given to visitors to show them what can be found here. The students can conduct a biodiversity survey each term and add any new species they find to their field guide. We hope that as their garden grows so will their species list.

In all, this was a really positive workshop day for Jesse and Chris. Both the students and the teachers seemed to get a lot out of the activities and we thank the staff and students for their kind invitation to come and visit again. Certainly Land for Wildlife Alice Springs has learnt much from the partnership with Alcoota School.

The results at Alcoota have been so positive, that we are now planning to engage with more remote schools around Alice Springs. The first time Land for Wildlife visited Alcoota in 2010 we were accompanied by the Anmatyerre Rangers from Ti-tree. Unfortunately the rangers were not available this time around, but we will endeavour to involve them in future visits. One of the most positive outcomes of these visits has been showing the kids that caring for country is not just a good step towards caring for ourselves, but that it can be a viable and fulfilling career path as well. For children with fewer direct pathways into employment than any other youth in the country, this is perhaps the best result of all.

Articles

Ironwoods germinating for the first time since 1974.

Ironwood (*Acacia estrophiolata*) is a common tree of rural blocks in Alice Springs, and many large, remnant trees also exist in urban parks and even backyards in the town. These trees are very slow growing, with large individuals perhaps reaching an age of several hundred years. They also require very specific climatic conditions for the germination of seeds to occur. The exact requirements are still poorly understood, but germination seems to require periods of above

average rainfall, with this rainfall occurring across both winter and summer seasons. Typically in central Australia, rainfall events are concentrated in the warm months, with little or no rain occurring in the cool part of the year. There may also be specific temperature requirements as well. This being the case, the germination of seedlings of Ironwood is a rarely observed event.

It is exciting then to report that during a recent property assessment in the Ilparpa area, we were able to identify ironwood seedlings that were approximately 6 months of age. These have germinated in response to the exceptional climatic conditions throughout central Australia in the past 12-18 months. Ironwoods are slow growing and can reproduce by suckering from the roots, so often, small plants of seedling size are in fact much older plants. Some individuals that germinated during the last recorded event in 1973-74 may still be less than 1/2m tall!

The key to identifying a young ironwood seedling is by examining the root system. You can see from the photographs the small tap root quickly branching in to fine lateral roots in the seedling. An older plant will have a much deeper tap root and you may find it difficult to find any lateral roots close to the surface. Of course, plants that are suckering will be attached to the much larger root of a parent tree.

If you think you have new Ironwood seedling on your property, we'd love to know about it. Perhaps carefully dig around the roots to see if it looks similar to the photograph in this article. Take a picture of your own, and send them into us to record this rare and special event.

Long-haired Rats Arrive in Alice after a 25 Year Absence

Media coverage has been all over the supposed rat plague besieging Alice Springs lately. This is all very exciting but has twisted the story a bit and missed the most interesting parts.

Firstly, these are not feral rats, but native rats. Feral rats are very rarely recorded in Alice Springs and are usually the result of deliberate releases of unwanted pets - these animals don't last long in our climate.

Secondly, a grand total of 6 animals had been identified at the time which hardly constituted a plague. Several more have been found in the last few weeks, but we are a long way from surrendering the town and calling in The Pied Piper.

The animal that has everyone talking is the Long-haired Rat, *Rattus villosissimus*. This animal is known colloquially as a “plague rat” because of its ability to reproduce very rapidly during good seasons and spread out across the country to areas where it may not have been seen for decades. A female Long-haired Rat can produce 12 young every three weeks in good conditions.

This animal is usually rare, even in its core range on the cracking black soil plains of the Barkly Tablelands and further south in cracking soils along the eastern fringes of the Simpson Desert, and probably also in parts of the Tanami Desert. Its appearance is often followed by population increases in the Letter-winged Kite, *Elanus scriptus*, and Inland Taipan, *Oxyuranus microlepidotus.* Both of these animals share a similar pattern of population boom and bust and maintain

core populations in similar areas to the Long-haired Rat. Letter-winged Kites and Inland Taipans both have adaptations to make the Long-haired Rat a staple of their diet.

The Letter-winged Kite is the only predominantly nocturnal hunter among the other raptor species in its family. It has large dark markings around its eyes which aid its vision on moonless desert nights in search of the nocturnal Long-haired Rat. These markings even give the Letter-winged Kite a vaguely owl-like aspect even though it is not closely related to the actual owls (Strigidae).

A Long-haired Rat with an adult's hand to get a sense of the size of these animals. The photographs in this article were provided by members of a survey team from Low Ecological Services who trapped some animals in country east of Tennant Creek this month.

The Inland Taipan is perhaps best known as having the most toxic venom of any terrestrial snake on earth. It may have evolved this in response to the Long-haired Rat's impressive choppers. Anyone who has ever had to handle a Long-haired Rat, and been bitten, will testify to their gnawing ability. Snakes (and most reptiles) have a slower metabolism than mammals and can be very susceptible to infection of any open wounds as they take longer to heal. The typical elapid (front-fanged snakes) technique of striking *and* constricting their prey might be disadvantageous if the snake was spending most of its time hunting Long-haired Rats. The inevitable gnawing suffered while waiting for venom and asphyxiation to take effect would take a devastating toll. So the Inland Taipan has developed a unique *strike and retreat* method of hunting. To make this technique viable it has had to evolve venom so potent that its prey will be immediately immobilised. The snake can then observe the prey from nearby until it is quite sure it is safe to approach without fear of being chomped by those great teeth.

So what we are witnessing here in Alice Springs is the very pulsing of the boom and bust natural economy of our deserts in action. These rats have not been seen in Alice Springs for around 25 years and they will probably not be around for long. As sure as the rats are breeding up and spreading, so are the kites and the taipans. While it is unlikely that Inland Taipans would make it as far as Alice Springs, people down around Oodnadatta and Coober Pedy might start seeing a few more as the season progresses. The Inland Taipan's other trick is its ability to remain active right through the cold desert winter. It manages this through some impressive adaptations in its vascular system, but that is a story for another time.

The Letter-winged Kites will almost certainly be seen around The Centre in due course. As the rats make their way here, the kites will follow.

Soon enough, the rat population will dwindle, the taipans will retreat back into deep cracks in the earth, and the kites will return to their stronghold colonies out in the desert. We may not see any of these animals in such numbers again for another 25 years or more.

Announcements

Land for Wildlife's threat mitigation project for the Black-footed Rock Wallaby is set to start on four properties from next week. Funded by a Territory NRM Local Action Grant, the project is primarily aimed at removing feral dogs from potential wallaby habitat in the hope that the little wallabies can spread out and have one less predator to worry about.

We have some prime BFRW habitat lined up for the trapping project, so we're hoping to be removing problem dogs and seeing more wallabies on members' properties in the future. In other projects of

a similar nature elsewhere in Australia, marsupial populations have increased significantly in the wake of feral predator removal so we are tentatively optimistic that our project might have a similar outcome.

Any dogs caught will be processed through the standard ASTC dog trapping program and will be turned in to the RSPCA kennel to await an owner or be put down.

The plan is for three weeks of intensive trapping and monitoring on the selected properties. After this the traps can remain in the control of the property owners if there is a continued threat of feral dogs moving into the area. Then the traps will be available for loan in much the same way as our dove trap loan scheme. If there are member properties out there in need of dog trapping and the traps are sitting here unused then they will be available for loan.

We'll let you know how the project is going after the first three weeks of trapping.

Websites Worth a Look

http://www.fourmilab.ch/yoursky/

YOUR SKY MAP

This website is great to visit the day before those winter camping trips in the Red Centre. You can put in your coordinates or just select a nearby city (Alice Springs is in the list!) and this website will create a printable map of your sky for the date selected. Then you can go camping and impress your friends with your knowledge of the exact phase of the moon, all the planets and the various constellations.

http://polytelismedia.wordpress.com/

Australia: The World of Parrots

Don Kimball is a Canadian ornithologist who spent 6 months travelling throughout Australia in an effort to film all of our colourful parrot species. Previews of the results of his ambitious project can be seen here at his website and you can also purchase the finished product; an impressive 4 disc set of DVDs with almost all of our parrot species shown in their native habitat.

http://www.landforwildlifealicesprings.blogspot.com/

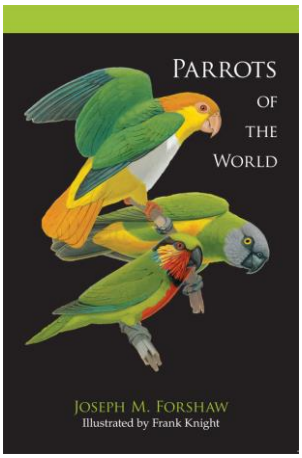
Land for Wildlife/Garden for Wildlife Blogspot

If you haven't yet acquainted yourself with our new online information portal, there is no time like the present. The blog has been steadily accumulating readership and attracting attention for our program farther afield of Alice Springs. The newsletters will continue, but we are embracing the blog as a way of distributing information to our members as it comes to hand, but without clogging your email inboxes every day. The real advantage of the blog is that all the content will remain online as a permanently accessible archive.

Recommended Books

Parrots of the World

By Joseph Forshaw and Frank Knight

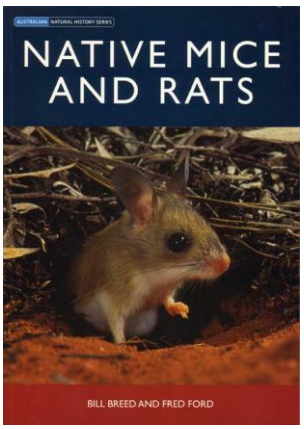


It wouldn't be a newsletter if Chris didn't put in a bird book, and this month it is Joseph Forshaw's authoritative account of the world's parrot species illustrated by Australian nature artist Frank Knight. This is less like a book and more like a box of lollies; the illustrations are just delicious and this is backed up by scholarly accounts of each species. This book is an updated edition which has been released to keep step with the frenetic pace of avian taxonomy and parrot extinctions. With Australia having many of its own endemic parrot species, some of which are little known or critically endangered, this book will be a cherished addition to the bookshelf or coffee table of anyone with a love of our native fauna.

Princeton University Press, 2010.

Native Mice and Rats

By Bill Breed and Fred Ford.



This natural history guide might be very topical at the moment with the influx of rodents into the backyards of Alice Springs. Another in the CSIRO's excellent natural history series, this book details the biology and conservation of the 70 odd species of rats and mice that constitute our largest remaining family of mammals. This book will be perfect for those members who are trapping feral mice on their properties and might wonder if they are catching the occasional native.

CSIRO, 2007. Octavo, paperback, 185 pp. colour and black and white photographs.

"The Northern Territory Government through the Department of Natural Resources, Environment, the Arts and Sport is pleased to sponsor Land for Wildlife. This publication may not represent the views of the Northern Territory Government"

Calendar of Events

7/5 – 12/6 – "Our Water" at Araluen Arts Centre
1/5/2011 – Field Nats meeting with "Camels" as the topic, CDU lecture theatre
22/5/2011 – World Biodiversity Day
23/5/2011 – World Turtle Day

Take care,

Jesse, Chris & Bill
Land for Wildlife Coordinators

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