

NEWSLETTER

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Editor: Peter Bird



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New members are welcome. Contact Jennifer Gardner, Manager Waite Conservation Reserve, above

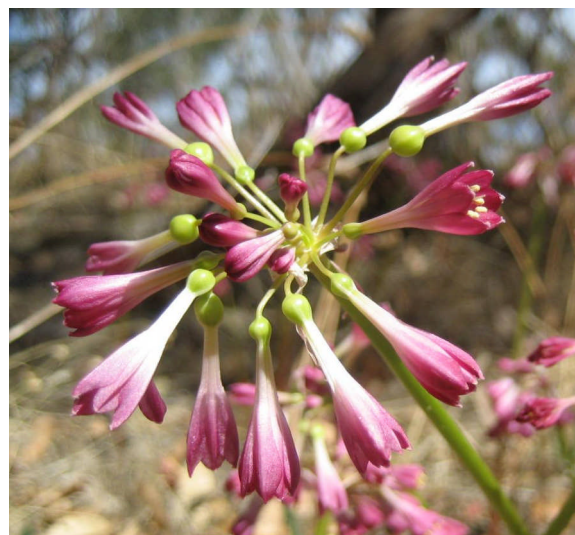
President's Page

As the weather has been cooling off after a hot summer I've started to do more walks through the reserve. A welcome surprise was some bright pink and purple patches of Garland Lilies (*Calostemma purpureum*). They stand out beautifully against the surrounding dry grass, fallen bark and twigs.

But it wasn't just the colour and contrast, it was the size of the clumps scattered along the top of Urrbrae Ridge and upper slopes that particularly caught my attention. A quick estimate of one of the larger patches came to about 300 flowers. The botanical texts reveal that these bulbs multiply vegetatively and reputedly flower best after dry periods. You can say that again I thought as my mind went back to the ferociously hot days we had in January and February. In winter the glossy green strap like leaves will mark the location of these favourite flowers.

In the same area it was also pleasing to see that many of the seedlings planted in the understorey over the last few years had survived the summer. Stephen Wait reported that Dodonaea seedlings planted out last year were looking yellow and stressed, but after the few brief showers in March they had rejuvenated, turning a healthier, darker green colour.

Working Bee dates are enclosed in the newsletter and I encourage everyone to participate as much as circumstances permit. The Working Bees include the popular BBQ at the lunchtime conclusion. In addition to contributing to the regeneration of the reserve it provides an opportunity to enjoy the seasonal flowers and changing views.



Garland Lily

Jennifer Gardner

Jennifer Gardner and the committee have continued to chase funding and we currently have applications in to partner other groups to continue revegetation works.

President's Page (cont.)

This may become significant later in the year when we consider the regeneration of what some people have called 'Big Dirt Heap'. Soil from new construction work near the entrance to Wild Dog Glen has been transported along the easement track and placed in the Amphitheatre area below the large tank in the southern section of the reserve. Previously this area supported scattered eucalypts which have been retained and a large area of kikuyu grass. A recommendation that this area of consolidated soil be revegetated with local provenance species has been made and the committee hopes this will occur.

Thanks to a lot of work by botanists including most recently by committee members Peter Lang and Grant Joseph we have an up to date plant list for the reserve. Now thanks to

last year's Biological Survey we have much more accurate knowledge of the reserve's fauna. Peter Bird and Grant Joseph have been writing up the survey results and will be guest speakers at this year's AGM. Besides looking forward to the photos of the large and small animals found in the reserve I'm also conscious that this sort of baseline data is invaluable for the long-term management of the reserve.

The committee welcomes suggestions from members regarding future events. If you have specific ideas or would like to be involved with the committee please don't hesitate to let me know. We look forward to a successful 2009 and your continuing support.

Regards Chris Kaczan

Friends of Waite Conservation Reserve invite you to an illustrated presentation by

PETER BIRD & GRANT JOSEPH

RESULTS OF THE WAITE CONSERVATION RESERVE BIOLOGICAL SURVEY

following a brief AGM

The Waite Biological Survey was conducted with assistance from 44 Friends & others over an intensive 9-day period in November 2008. Hundreds of trap nights & hours of searching yielded a diverse fauna including 4 frogs, 13 reptiles, 10 mammals & 45 birds. Peter and Grant discuss the distribution & abundance of these in relation to the physical and vegetative characteristics of the reserve & the implications for management.

Urrbrae House

University of Adelaide, Waite Campus
(Enter from Claremont Avenue or
Gate 3, Waite Road)

Wednesday 20 May 2009 at 7.30 pm

Waite Biological Survey Results

Measured in participation alone the biological survey of last November was a grand success. Forty-four Friends and significant others turned out to crowbar pitfall traps into the hard rocky ground, brave steep slippery slopes to set, check and pick up Elliott and cage traps, and search and spotlight for hours in the heat and cold to uncover the reserve's biological wealth.

The 9-day intensive survey was designed to systematically sample each of the 14 vegetation communities identified by Grant Joseph in the reserve's re-vegetation manual. Fourteen quadrats were accordingly identified across the four major woodland associations of Red Gum, Blue Gum, Grey Box and Drooping Sheoak.

Techniques and effort

Our combined labours resulted in 2,800 trap/nights and 170 hours of targeted searches. Breaths were held on the first day of trap checking to see if our novel pitfall trap setup would bear fruit. In the rocky soils, the usual deep pitfall buckets and fly-wire drift-fence were abandoned for the technique of sinking shallow buckets underneath pre-placed squares of corrugated iron.



Setting traps during survey

Peter Bird

We needn't have worried; the technique worked a treat, with 124 individuals of 7 species of lizards falling into our sneaky pitfalls.

Reptiles

In all we captured or opportunistically recorded about 350 individuals of 13 species of reptiles (Table 1). In the process we added a new species (Lined Worm-lizard *Aprasia striolata*) and confirmed the identity of another (Eastern Striped Skink *Ctenotus robustus*). We also added hugely to our knowledge of the distribution and abundance of others. We established for instance that the Garden Skink prefers moist Red Gum Valleys whereas the Common Dwarf Skink thrives on hot north and west facing slopes.



Eastern Striped Skink confirmed for reserve P. Bird

We found that Bougainville's Skink is not as rare as the paltry two previous records had indicated but is common and widespread – you just need pitfalls to catch them. We also confirmed Bluetongues and Sleepy Lizards really do occur in the reserve but you never see them, except in Elliott or cage traps.

Mammals

The same applied to the Echidna. Hundreds of hours of search time failed to record a single one, yet two were captured in cage traps. I still struggle to understand the attraction of Echidnas for peanut butter and rolled oats but perhaps they were following trails of ants leading to the bait!

Trapping otherwise drew a blank for mammals except for House Mice and Black Rats. The mice were typically caught in dense annual weedy grasses such as Wild Oats and the rats in Olives.

Waite Biological Survey Results...cont.

In time it would be nice to think numbers of both rodents will diminish as Olives and exotic grasses are replaced with native vegetation.

Arboreal mammals dominated the mammal scene. Ten spotlighting sessions resulted in sightings of 363 Ringtail and 38 Brushtail Possums and 45 Koalas, the latter including some daytime observations. Tree use statistics showed that ringtails preferred Grey Box; Brushtails preferred Grey Box and Red Gum; and Koalas preferred Red and Blue Gum relative to availability.



Common Ringtail Possum

Peter Bird

The record-breaking Jan-Feb heatwave was tough on those of us without air-conditioners but was catastrophic for the arboreal mammals of the reserve. Ringtail numbers fell from 9.7/ spotlight km to 3.8/ km while koalas fell from 1.5/ km to 0.15/ km. Virtually all possums and koalas disappeared from central parts of the reserve. Only those in peripheral areas of the reserve, perhaps those with access to water in suburbia, appeared to survive.

A worrying sign was the damage noted to Native Cherries (*Exocarpos cupressiformis*) by feral Fallow Deer. The Native Cherry is quite uncommon in the reserve yet saplings especially appear to be selectively targeted by deer for rubbing posts to remove the velvet from their hardening antlers. In the process they ring-bark the trees or simply bulldoze them flat. Examples of both can be seen along the track at Pultenaea Hill.

Birds

Three 20-minute counts on each of the 14 sites plus additional opportunistic sightings recorded 45 bird species. This included four species not on the current list: Common Bronzewing, Rufous Whistler, Cockatiel and Australian Ringneck, the later two likely aviary escapees.

The most frequently recorded species were Striated Pardalote, Rainbow Lorikeet, Adelaide Rosella and Red Wattlebird. Mean numbers of birds seen per count at each site ranged 9-40 of 4-11 species. Most birds and species were seen at Blue Gum sites followed by Red Gum, Grey Box and Sheoak.

Ten species were recorded breeding including three small declining? insectivores Buff-rumped Thornbill, Tree Martin and Striated Pardalote. Other observations of note include the sighting of 4 Peregrine Falcons, a general lack of small insectivores and honeyeaters except for the Pardalote and the Superb Fairy-wren (which ranked sixth in abundance); and several Boobooks and Tawny Frogmouths seen during spotlight searches,

Acknowledgements

Thanks to all who helped in the survey especially Peter Matejcic and the SA Herpetology Group; Penny Paton and Philippa Horton for bird surveys; and Rod Belchamber, Meg Byrt, Chris Kaczan, Rob Wallace and Ian Williams for additional help with checking traps.

Come along to the AGM on Wed 20 May to hear more.

Peter Bird

EARTHWORKS REHABILITATION

The University is currently constructing a new plant research building situated just below Claremont Gate and the Easement off Hartley Grove. For a while work at the site prevented normal access to the reserve through Wild Dogs Glen, but the road is now diverted around the construction site and access is restored.

Prior to construction, thousands of tonnes of soil had to be removed to level the site. This rubble or landfill has been dumped in the reserve above the Easement near Hillside Rd and contoured to best fit the landscape. The area falls outside the Heritage Agreement of the reserve, was degraded by weeds and had little natural vegetation. The established Red Gums and Grey Box present have been preserved.

Using a reserve as a dump for landfill would not usually be an approved activity but has been done in the most sensitive way possible in one of the least sensitive areas of the reserve. It also does now provide us with the impetus and opportunity to improve the vegetation quality in the effected area. Prior to the dumping the area was dominated by Kikuyu and Phalaris which for the time being is buried under at least a metre of dirt.

Weed control has begun in the immediate surrounds and the disturbed area will be closely monitored for emergence of weeds which will be controlled before they become a problem. Planting and direct seeding should result in a big improvement in the diversity of vegetation in the area. Being just above the Easement and adjacent to the Hillside Rd entrance, this area is visible to the public and visitors to the reserve. I am hopeful that it can be transformed from a neglected part of the reserve and a suitable site for a landfill dump into a successful revegetation project.

SUMMER IN THE RESERVE

This year we experienced a very dry summer which included an extremely hot spell. This took its toll on some of the wildlife in the reserve, with staff and visitors finding several dead koalas and ringtail possums during and after the heatwave. Isolated gum trees also died over summer but there is a normal attrition over summer anyway.

There was a concerted effort by staff to control the olives growing on the south facing slope of Koala Gully and on the southern boundary above Koala Gully and the upper section of Netherby Gully. The results of this work can be seen by walkers on the Yurrebilla trail.



Olive control in Leafhopper Gully

Peter Bird

Survival of plantings from last year has been surprisingly good, particularly in Koala and Leafhopper Gullies. Plantings by staff on the western slopes last September had a poor success rate, easily explained by the lack of rain last spring, coupled with the harsher aspect. Overall though, positive results can be seen through the reserve from last years planting and that of previous years.

Stephen Wait

But then you already knew the reserve was special!

Just when I thought the ground and grasses couldn't get any drier some light showers fell and great patches of bright cyclamen pink Garland Lilies appeared in our Grey Box woodland.

The first time I saw them four years ago I thought they must be introduced weeds so large and spectacular were their flowers. I went home and luckily found a picture of them in a reference book.

Their colour ranged from a dark reddish pink through to light pink and even white but in a group they are dramatically dark pink which takes your breath away. Read all about them in Peter Lang's article in the Autumn 2005 Newsletter at our website.

Garland Lilies are part of the understorey of the Grey Box woodland ecological community which has been nominated for listing under the Australian Government's *Environment Protection and Biodiversity Conservation Act 1999*.

Only 8% of this community still exists in South Australia in the Southern Mt Lofty Ranges and the South East. More work is required before the Threatened Species Scientific Committee is able to provide the Minister with sound scientific advice on whether or not this ecological community qualifies for listing under the Act.

You can view the listing and workshop report at: www.environment.gov.au/biodiversity/threatened/communities/inland-grey-box-woodland.html

Helen Pryor

Working Bees

Working Bees will be held on the first Saturday and third Sunday of each month, beginning on Saturday May 2nd.

On May 2nd and 17th and June 6th and 21st, meet at 9 am at Gate 82 into the reserve just off Hillside Rd, Springfield.



A host of pink Garland Lilies

Jennifer Gardner

On July 4th and 19th, meet at 9 am at the entrance to Wild Dogs Glen at the end of Hartley Grove.

Working Bees for August to December will be held in the top section of the reserve, meeting at Springwood Park, but more details about that later.

Weed control and planting seedlings are planned activities through the year.

Direct seeding of the landfill site is planned for the first working bee. Plantings will also be made into this area, but direct seeding can be done before rain, whereas plantings are best after a break in the season.

Contact: Stephen Wait 0410 695 719