

FRIENDS OF WAITE CONSERVATION RESERVE Inc.



COMING EVENTS

Working Bees

July 16th

August 5th

August 20th

September 2nd

September 17th



THE UNIVERSITY
of ADELAIDE

President's message

As bush regenerators we spend a large part of our time killing weeds. And let's face it, we're not running out of things to do. Bushcare for us generally has been about the careful, mostly mechanical removal of weeds to provide space for native plants. Chemicals are generally a dirty word except for glyphosate, essential for the control of olives and a select few other woody things. But things are a-changing. For example, see over for news of a Basal Bark Treatment trial we are conducting in the reserve using the herbicide Triclopyr with BioOil.

It was also evident from Peter Watton's presentation to our May AGM that chemicals have the potential to become an important part of the arsenal for controlling weeds in bushland. Coming from Peter this is indeed noteworthy. Peter is the highly respected overseer of the *Trees For Life* bush-care program *Bush For Life* and is responsible for technical advice and supervision of many bush-care sites in SA.

Peter spoke on the evolution of weed control methods over his *TFL* journey. Like us, *TFL* have generally been quite conservative in endorsing

chemical use on their sites, but past and ongoing trials are showing great promise.

Careful choice of chemical, rate, timing and application method suggests it is possible to safely treat a range of weeds growing among native vegetation - even to the extent that some native plants might be over-sprayed using specific herbicides with little or no impact.

It suggests that careful use of chemicals in specific situations is likely to provide useful control of some of our worst weeds. Peter gave examples of using low rates of metsulfuron methyl for everything from bridal creeper and soursobs to plantain; triclopyr for blackberries; and fusilade for annual grasses.

We will of course tread slowly and continue to liaise with *TFL* and others before embarking on any new methods but it sounds promising. In the meantime we have plenty of olives to keep us amused.

Peter Bird

AGM Report

Another year has passed and again the Friends of Waite Conservation Reserve has added immeasurably to the management and recovery of the reserve by providing critical support to the University of Adelaide.

Ecological recovery after years of sheep grazing and weed invasion is always going to be slow, but some years are better than others. Such was the case with the past growing season when the wet spring and early summer promoted a major regeneration event of a broad range of species. This included many shrubs, Acacias, Dodonaeas, Bursarias, salt bushes and others, progeny of those planted years earlier by the Friends group. The extended good season also resulted in a bountiful seed production which will only enhance future recovery.

Of course these same conditions also advantaged particular weed species, especially Silverleaf Nightshade and Kikuyu, that similarly enjoyed the summer growing season. Not to mention the dastardly olive!

The Friends group is a very friendly group, but not to olives. Following the removal of sheep 25 years ago, olives spread across most of the 121 hectares of the reserve, quickly transforming it effectively into an olive grove. Since then the university has invested hugely into their control. Olives are exceedingly difficult to kill and the usual 'drill and fill' technique is laborious and, at a minimum \$30,000 per hectare, very expensive.

So when the whisper came that the alternative and very much cheaper technique of Basal Bark Treatment (BBT) was producing good results, the Friends group made the decision to conduct a trial to determine its applicability to the reserve.

(BBT involves spraying the trunks and lignotubers of olives with Triclopyr herbicide in a BioOil carrier).

To do this we sought, and were successful, in receiving a \$5,000 NRM Community Action Grant to:

- ⌋ Employ a contractor to undertake BBT control on a trial patch
- ⌋ Purchase materials to undertake further BBT ourselves, and
- ⌋ Conduct a public workshop

We completed these three things in March. We contracted Donovan's Earthcare for 40 person/hours over three days during which they treated exactly 1 ha of olives on the western slopes.

The Friends group purchased spray equipment and sufficient herbicide and treated a further 0.4 ha. We also conducted a very successful workshop which attracted 34 people including representatives of Friends groups, Environmental contractors, and Lecturers and students of relevant TAFE courses. .



Greg Donovan describing Basal Bark Treatment to workshop participants

AGM Report

Our aim from here is to closely monitor the treated olives over the next 10 years to determine the long-term effectiveness of the method. But workshop feedback from others using the technique suggests it is indeed very effective, even better than 'drill and fill'. With treatment costs less than 20 percent of 'drill and fill' we hope to use BBT to seriously tackle the remaining 17 hectares of mature olives in the reserve over the next few years.

The major task of the Friends group over the previous 3-4 years has been to make good the primary olive clearance done by contractors. We do this by systematically walking all cleared areas of the reserve pulling and grubbing seedlings and treating re-growth. We continued this work over the past year removing tens of thousands of seedlings. I am very comfortable that our current efforts are successfully preventing olives from re-establishing in treated areas but we will need to maintain the rage, especially if we increase the rate of primary clearance using BBT.

Apart from this we continued to control other selected weeds with restricted distributions which have the potential to become major problems. These include Perennial Veldt Grass, Fountain Grass, Coolatai Grass, False Caper, African Weed Orchid, Silverleaf Nightshade, Hawthorn and Buckbush. Kikuyu is another emerging threat in the Amphitheatre and Easement areas and I recently met with University campus managers to collaborate on a control program next spring.

Each year we undertake a member activity, usually of a biological nature. Last year it was a Beetle Bee led by our own beetle expert Peter Lang. Unfortunately unseasonably cold and windy weather meant that both participants and beetles were sparse. Many thanks to Pete.



Our AGM Speaker: Peter Watton

In July last year we lost Enid Robertson, best known for her restoration of Watiparinga Reserve, but also a great friend and supporter of our group. Enid was instrumental in the establishment of the Friends and in early bush regeneration efforts in the reserve. I thank Penny Paton for overseeing acquisition of a plaque to commemorate Enid, and Andy Baker who recently installed it mid way up Wild Dogs Glen. We look forward to Enid's family joining us to unveil it in the next couple of months.

Thanks also to Andy Baker for continuing to monitor deer numbers in the reserve and liaising with the Australian Deer Association to remove them.

I'd like also to thank the entire committee for their contributions – to our wonderful Secretary and promoter of the reserve Helen Pryor, Treasurer Lynda Yates, Newsletter Editor, Fountain Grass eradicator and entrance stile engineer Clint Garrett, Penny Paton, Peter Lang, Luke Day and Erinne Stirling. Not only do they keep the Friends group ticking along but they are the beating heart at working bees.

I'd also like to thank the many others who participated at working bees and other activities. Last year 30 people contributed a total of around 1,000 hours of volunteer labour in the reserve.

One last thank you to Jennifer Gardner who inspired and nurtured the Waite Conservation Reserve and Friends group from inception until now and who recently "retired" from the University and her job as Reserve Manger.

And just to finish off, my perennial invitation to you all to visit the reserve, especially at an upcoming working bee where you can put into practice all the bushcare tips you'll learn from Peter Watton tonight.

Peter Bird

Peregrine Falcon—the fastest bird in the world

Known to reach speeds of 320kph (200mph), the Peregrine Falcon *Falco peregrinus* is not just the fastest bird, but the fastest animal, in the world. And they are on our doorstep! While there are sightings of Peregrine Falcons in the city of Adelaide roosting on the tall building they are also encountered in the Waite Conservation Reserve, just a few kilometres southeast of the city. Researchers are coy about giving up the location of breeding Peregrines (due to the dangers from egg thieves and human interference with nesting attempts), but the cliffs of the Mt Lofty Ranges near the Waite CR provide ideal nesting habitat, so seeing them flying over the Reserve should come as no surprise.

They are an awesome sight, with their powerful barreled chests and tapering wings that allow for tremendous flight speed. The birds can soar to great heights and then dive on their prey at lightning speed. Like so many birds of prey, the female is much bigger than the male – 920 grams versus 610 grams – and they are quite distinctive with their black head, cream chest and belly, barred black, and dark grey back. Their size, relatively short tail and yellow eye-ring and bill help distinguish them from their smaller and slighter relative, the Australian Hobby *Falco longipennis*.

The Peregrine has a world-wide distribution and is the world's most widespread raptor. In the 1960s concern was raised over the effect of DDT and such chemicals on raptor eggshells, as the chemicals in these insecticides are concentrated as they move up the food chain. World-wide the populations of several birds of prey, including Peregrines, declined due to egg breakages, leading to the eventual withdrawal of these chemicals from the market. In Australia eggshell thinning was detected in Peregrine Falcon eggs, but by the 1990s the levels of contamination of the Peregrine falcon and its prey had fallen and populations began to expand, possibly back to their pre-organochlorine levels (Olsen 1995).

In Australia these wonderful birds occur near coastal and inland cliffs as well as in woodlands and along timbered watercourses. They chiefly prey on birds, but also take small mammals, frogs and fish. Their bird prey is often larger than they are, so their beak and feet are astonishingly strong to enable them to catch the prey, to snap their necks and then to dismember them. Typical prey species include Galahs, rosellas, pigeons and starlings. Hollands (1984) documents these falcons taking an Eastern Great Egret *Ardea alba*, as well as Coot and Banded Lapwing *Vanellus tricolor*.

Peregrines are unable to build their own stick nests and often nest on rock ledges or in a cavity of a cliff face, with the eggs laid into a scrape in the earth. Other sites include open tree hollows and the disused nests of other birds, like the Wedge-tailed Eagle *Aquila audax*, corvids *Corvus* spp or other raptors (Cupper and Cupper 1981).

Two or three eggs are the norm, with four the exception, and eggs are laid from August to November. Incubation is about 30 days and the young fledge at about 40 days. The young, like many raptor chicks, are snow white when hatched, gradually losing this white down and acquiring their wing and tail feathers at about two and a half weeks. By Day 30 they still retain some white down but are as heavy as their parents – an impressive thirty-fold increase in weight in just 25 days of so (Olsen 1995).

So next time you are wandering the trails at the Waite, remember to look skyward and you might be lucky enough to see this amazing bird in flight.

Penny Paton

References

- Cupper, J. & Cupper, L. 1981. Hawks in Focus. Jaclin Enterprises, Mildura.
- Hollands, D. 1984. Eagles, Hawks and Falcons of Australia. Thomas Nelson Australia, Victoria.
- Olsen, P. D. 1995. Australian Birds of Prey. University of New South Wales Press, Sydney.
- https://en.wikipedia.org/wiki/Peregrine_falcon (accessed 28 June 2017)



Peregrine Falcon
Aviceda - Own work, CC BY-SA 3.0, <https://commons.wikimedia.org/w/index.php?curid=3688621>

Peregrine Falcon
Bob Gress—www.BirdsInFocus.com



A un-welcome present from the deer. Olive seeds!

Fog in Netherby Gully, June 18th Working Bee



Stylish Stiles

Until recently some of the stiles at entries to the Reserve looked like the one shown below at Gate 85. They were a hazard to walkers and a poor entry statement to the Reserve. Over the last few months Clint Garrett with the help of his mate Charlie Vassollo have reworked the stiles so as to improve both their safety and appearance.

Over the years, as walkers have stepped over the stiles, the turning acting of their feet has powdered the soil and allowed it to be eroded away. As a result, the relative height of the stile rail increased. Wire and wire netting had been damaged and have created a trip hazard.

The stiles have been re-floored with stone paving or with a board walk to remove the erosion issue. Trip hazards have been removed and some new fencing put into place. The result is a much better, safer set of entrance points into the Reserve.

Clint Garrett



Stile 85 at Gate 85 before and after repair



Above: New Stile at Gate 83
Below: New Stile at Gate 61



Working Bees

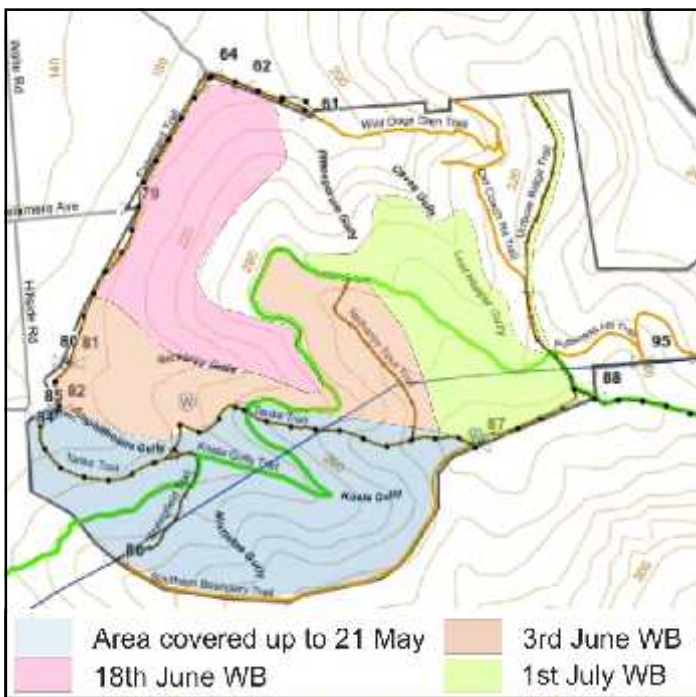
The dry start to the season has not deterred olives from germinating. On the plus side, we have had 21 volunteers take part in the first 5 working bees of the year. Pleasingly, 7 of them are fresh faces. We thank all of these people for their work.

Sam Arnold, Peter Bird, Richard Brooks, Meg Byrt, Ben Forsyth, Jennifer Gardner, Clint Garrett, Peter Lang, Lyn Lang, Rizwan Mahmood, Noel Nicholls, Penny Paton, Alexander Pring, Helen Pryor, Meredith Retallack, Janis Richardson, Meg Robertson, Erinne Stirling, Sarah Thomas, Lynda Yates, Chloe Yu.

Our volunteers have contributed 130 hours to the cause, plus there is the extra time that Richard and Peter have spent on their individual forays against olives. As you can see from the map, an impressive amount of the reserve has been covered to date. This is in at least partly due to the lower numbers of olives as a result of our previous work on pulling out seedlings.

The next series of working bees will be in the top of the reserve. We will meet at the Springwood Park Gate. See map below right.

* The August 5th Working bee will probably be an exception to the above and will start from Gate 61 Wild Dogs Glen (far end of Harley Grove). Members will be emailed with details closer to the date.



Winter Schedule

All from Springwood Park via Eagle on the Hill

Saturday 1st July

Sunday 16th July

* Saturday 5th August *

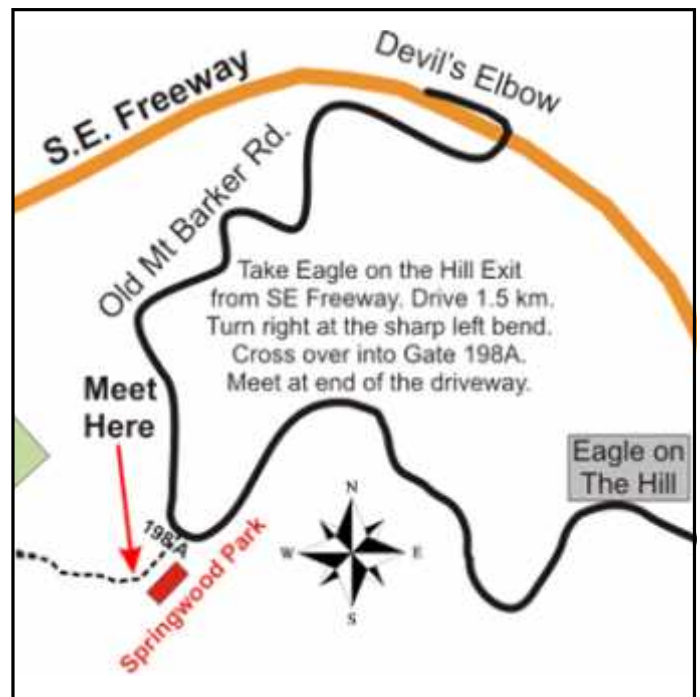
Sunday 20th August

9:00am—12:30pm

Walking (Working) Bees are held on the first Saturday and third Sunday of the month, from mid April to early December. Start time is 9:00 am and we generally try to finish at about 12:30pm.

Please bring lunch with you, so that we can sit and share time at the end of the walking bee.

Working bees will continue to concentrate on walking cleared parts of the reserve pulling seedling olives. In some areas we will also use tree-poppers to remove larger plants and spray or drill & fill regenerating olives



From the Committee

Committee:

Peter welcomed Kate Delaporte and Meg Robertson to the committee and thanked Erinne Stirling for her service. The remainder of the committee is as in 2016.

Enid Roberson Commemorative Plaque

Penny has designed the plaque and has had it made by Innovative Engineering. Andy Baker has installed it in Wild Dogs Glen. There will be a ceremony in August or September depending on availability of members of Enid's family.

Treasurer

Our bank balance is \$6031 as at 31-5-17. There are a number of members who have not renewed their membership at this stage. Clint to re-design the membership form. The form is included with this newsletter.

AGM

The speaker, Peter Watton, gave a comprehensive overview of bush care techniques. It was disappointing that the event was poorly attended. Issues with presentation equipment need to be addressed prior to the next AGM.

Walking Trail in Wild Dogs Glen

Clint will do some repairs on this trail to make it safer. In the long term, re-aligning the trail to the standards of the SA Trail Support Group will be considered. Rob Marshall from that group has already taken a walk through with Clint and has offered his assistance with the re-design.

Weeds

Peter has been in contact with the Campus Manager, Andrew Brokenshire,, regarding Silverleaf Nightshade and Kikuyu. Peter has sprayed several thousand Nightshade plants on the easement and in the reserve. Kikuyu is spreading and now covers about 1 hectare. This will be sprayed in late spring.



MEMBERSHIP

Individuals \$15

Families \$20

Corporate \$40

Form included with this newsletter

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