

FRIENDS OF WAITE CONSERVATION RESERVE Inc.



COMING EVENTS

Bushcare Days

June 4 & 19

July 2 & 17

August 6 & 21

September 3 & 18

Fungal Foray

July 23

See pages 4 & 5 for details



THE UNIVERSITY
of ADELAIDE

President's page – *plant a tree & save the planet*

Koringal Road Public School, where I did my primary schooling in southern NSW, is long gone. Closed for dwindling numbers, the little weatherboard ended up as shearing quarters on a neighbour's farm. The school house is gone but the 1-hectare school yard is still there, visible from space, its perimeter raggedly outlined by trees. Trees that I planted in the 1960s, along with the other 20-odd school kids.

We planted the trees for **Arbor Day**, the international day of tree-planting. It was an American invention (hence arbor, not arbour), first celebrated in Australia on 20 June 1889. Arbor Day seems to have been re-badged **National Tree Day** in Australia, now celebrated on the last Sunday in July.

I'm hoping by then we will already have planted most of the 1500 tubestock we have grown this year, including some from cuttings or division at Burnside nursery. The trees await us at Urrbrae TAFE, seeded by the Friends and students over three days in November and February. Look out for 'pop-up' week-day planting sessions in July.



Meg Byrt with grandchildren Arthur & Imogen make an early start on tree-planting in Koala Gully last working bee

Are you MAD enough?

Make a Difference Week (MAD-Week) is a week-long program 4-11 June hosted by the Society for Ecological Restoration. It invites individuals and partners to engage in three ways: 1) by hosting MAD-Week events in your region; 2) by participating in MAD-Week events; and 3) by financially supporting MAD-Week.

Launched in conjunction with the UN Decade on Ecosystem Restoration, MAD-Week embodies the spirit of the Decade's rallying cry to heal the planet. It provides a way for SER members to engage with local partners and volunteers within communities and inspire restorative action to repair damaged ecosystems. Everyone, everywhere, can play a role in healing the planet and even the smallest actions can add up to real impact. Be crazy MAD and come along to our next Bushcare day/ Working Bee on **Saturday 4 June** to plant a tree and help heal the planet. Details inside.

Pete Bird

The Waite Conservation Reserve turned 30 this year and it is 21 years since the Friends group was formalised to support the University of Adelaide to protect and restore it. Over the last 12 months the Friends have continued to grow, with 62 Friends and others contributing 5,025 volunteer hours. This included 740 hours spent at 18 working bees. This is equivalent to almost 3 full time employees worth \$225,000.

Visitation to the reserve, which increased dramatically in response to early COVID lockdowns, has remained strong with 50,375 visitors based on our people-counters.

The main focus of our effort has been on restoration through weed control and revegetation, but also on trail maintenance and community engagement. Highlights include:

- Walking the entirety of the reserve to remove 5,000 olive seedlings, about half that of the previous year. At the same time we also controlled other widespread weeds such as Buckthorn, Cottonbush, Hawthorn, Boneseed, St John's Wort and African Daisy.
- We targeted outliers of a range of other weeds, especially Fountain Grass, Silverleaf Nightshade, Perennial Veldt Grass, False Caper, Onion Weed and Kikuyu.
- We supported the University's Olive Control Plan by spraying re-growth on the 14-ha of olives that we have Basal Bark Treated over the past 5 years. We also thinned, dragged and burnt olive thickets in Pittosporum Gully to improve accessibility. Particular thanks to Simon Treloar, John Glover & Chloe Park for assistance.
- We contracted Grant Joseph to undertake strategic weed control for the third year.
- After a long gestation, we commenced our *Adopt-a-patch* program where Friends manage their own small part of the reserve. It is a great way for people to contribute to restoration at their own time and pace. Thanks to Sarah Thomas, Marg Brown and Kelly Wright for dipping their toes in the water.
- We re-photographed our 55 photopoints – which we redo every 4 years – and scored percent cover of native understorey species on 10 x 10m quadrats at each of the photopoint sites – which we redo every 3 years.
- Last winter we planted 1440 tubestock of 50 species grown at the Urrbrae TAFE nursery. These we mostly planted in highly disturbed areas including amongst BBT-killed olives. Thanks to those who came out for several extra-curricular planting days.
- We have produced another 1500 tubestock of 80 species ready for this year. Some we seeded ourselves and others by students under our direction at Urrbrae TAFE. Others again we produced by cutting or division with the help of Mark Ellis' 'humidicrib' at the City of Burnside nursery. We started planting last Sunday – all help welcome.
- We hosted 124 TAFE Conservation and Land Management students over 11 days for seed collection, tree planting, direct seeding, site assessment and weed control.
- We also hosted 11 University of Adelaide Landscape Architecture students for their Advanced Ecology subject and the Post-Graduate Adelaide Waite Students (PAWS) group. We are also about to start overseeing Mercedes College high school students for weekly bushcare sessions so we truly are promoting research and education in the reserve, one of its intended purposes.
- I am pleased to report that we have recently received three separate grants to help us with our volunteering efforts:
 - ◇ - Revitalising Private Conservation in SA Grant of \$10,890 to consolidate past feral olive control work by chainsawing and follow-up treatment;
 - ◇ - Volunteer Small Equipment Grant of \$3,100 for drill equipment for 'Drill & Fill' olive control, another backpack sprayer for general weed control and a pump and hoses to create a trailer-mounted water cart for watering trees; and

- ◇ - My Mitcham Community Grant of \$1,500 to help reprint the Loop Trail guide.

Thank you to Department for Environment & Water, the Department for Social Security, and City of Mitcham respectively for the three grants.

- Clint Garrett is a machine. He continues to spend 1000 hours a year designing, constructing and maintaining trails, signs and infrastructure. He removes fallen branches, records visitation, designs and prints brochures and flyers and regularly adds to our social media page. More than this, he is the face of the reserve. Because he spends so much time on the trails, he is constantly engaging with people. He knows their names and their stories. They know him. This raises our profile, our membership base and our bank balance through donations.
- Thanks to Andy Baker and Errol Mattig who have continued to investigate new solutions for managing the feral deer population.
- Meg Robertson produced our usual 4 newsletters, Glenn Gale kept our new website updated and Clint posted regularly weekly on our Facebook page.

- The Loop Trail App is within touching distance. Jennifer Gardner and Marian McDuie have put a huge effort into readying it for launch sometime soon.
- Thanks to Richard Brooks who has started us down the path to achieve Deductible Gift Recipient status so that those who donate to the Friends group are able to claim a tax deduction. What started out as a seemingly straightforward process has become a somewhat more complicated but Richard has the tenacity to see it through.
- Thanks to all those who took part in Bushcare days (our re-badged Working bees) or contributed in other ways to the Friends group. Thanks especially to the Committee for their many contributions including to the University's ex-officio Kate Delaporte in her increasingly busy world.

Finally, Lynda Yates is stepping down tonight after a record 21 years on the Committee. She is the last of our foundational Committee members and was Treasurer for the entire time. It is testament to her steady hand that we are not only still solvent but, as she will show in a minute, are in very good financial shape. I'll hand over to her to present her last financial report.

Architects visit our landscape

Looking back down Wild Dogs Glen it is easy to see how vegetation associations are not randomly distributed but are predestined by such things as slope, aspect, soils and moisture. How, for instance, Blackwoods elect for the cool, damp valleys and south-facing slopes. Or how Sheoaks are restricted to free-draining rocky cliffs.

In March the reserve played classroom to Scott Hawken and 11 Adelaide Uni Landscape Architecture students to experience how landscape informs vegetation. The students undertaking the Advanced Ecology subject returned later to map vegetation along their own transects. We are also hoping they might undertake additional projects in the reserve.

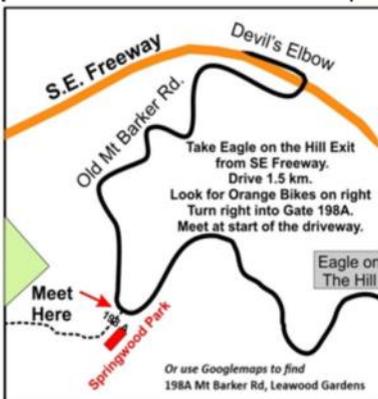




FRIENDS OF WAITE CONSERVATION RESERVE

Where:

198A Mt Barker Rd
Leabrook Gardens



The fungi of the reserve are a poorly known but important part of the biodiversity of Waite Conservation Reserve.

Join Teresa Lebel, mycologist at the State Herbarium, Anita Xian, convener of the Adelaide Fungal Studies Group and AFSG members for a

Fungal Foray

Teresa will demonstrate tools to identify fungi including iNaturalist to help us to catalogue the species that occur in the reserve.



When:

Saturday
23 July 2022
10.00am - noon

Enquiries:

Peter Bird
0418 853 834



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All welcome, but numbers limited

Please RSVP to info@friendsofwaitereserve.org.au by 13 July

Bring lunch for afterwards

Bushcare Days

Winter time is digging time. Digging holes to plant trees and digging out weedy bulbs. Your choice for which you'd prefer, or mix and match. We've already made a start on tree planting but there are still plenty to go. As well as Bushcare days I also hope to run extra midweek planting sessions in late June and July. I'll email invitations later.

Weed bulbs of varying types, all nasty, also keep us busy throughout winter and into late spring when the last of them go to seed. Synnotia is first cab off the rank followed by Harlequin Flower, African Weed Orchid and One-leaf Cape Tulip. Equipment is minimal – a chisel and a bag – the chisel inserted down beside the leaves and the bulb gently levered out of the ground and bagged for later green-binning. All tools supplied. Demonstrations on the day.

Bushcare days (formerly Working Bees) are held on the *first Saturday and third Sunday* of each month. We meet at 9.00am and finish at noon for lunch. Add these upcoming dates to your calendar. Clint or I send a reminder with details before each. Assume we meet up top at Springwood Park (see map) for these dates unless advised otherwise.

Sat 4 June	Sun 19 June
Sat 2 July	Sun 17 July
Sat 6 Aug	Sun 21 Aug
Sat 3 Sept	Sun 18 Sept

Contact Peter Bird for more information:

pjbird1@bigpond.com 418 853 834



The flattened, grass green leaves of Synnotia (*Sparaxis villosa*) are first of the winter bulb line-up for control (Pete Bird)



Notes on *Sparaxis villosa*

The flat fan of leaves looks a bit like a much smaller version of Watsonia, another garden escapee. The corms are up to 1.5 cm diameter, leaves 5-20 cm long, to 1.5 cm wide, with a prominent mid-vein. As a small plant occurring abundantly and widely scattered amongst native understorey in the Waite Reserve, each plant must be dealt with individually. Therefore the Friends are committed to manual removal of the corms, preferably before seeding.

Meg Robertson

Adopt-a-patch

Since my call in the last newsletter we've had several people express interest in adopting a patch in the reserve. We are currently working with the University to come up with processes to keep adopters safe but always carry a mobile, work with a friend and let others know where you will be working and your expected time home.

The new crop of weeds is starting to emerge and it can be daunting identifying

the tiny bits of green. It's important to concentrate on those weeds that you are familiar with until later when they become more recognisable. It is also the time of year to add more diversity by planting tubestock or direct seeding. See Sarah Thomas's story below.

Pete Bird

Sarah's Patch – southern boundary

I became involved in the 'Adopt-a-patch' scheme in August last year. Although I had been a volunteer for a couple of years, 'life'



seemed to get in the way of attending bush care days on a regular basis. One day I saw Clint while walking on the Waite loop and when I lamented my lack of attendance, he suggested 'Adopt-a-patch'.

Being a complete novice at identifying either weeds or native plants, Pete's help has been invaluable. I am now feeling confident with identifying the major weeds and differentiating them from the native plants, but remembering the names is a work in progress! I am also enjoying learning about bushcare basics, i.e. 'start with the best bits and work out'.

My patch has some lovely views and I enjoy the bird life (some very cheeky magpies sometimes follow me around and kookaburras like to have a good laugh at my efforts). So far (in the cooler weather) I have managed to spend around three hours a week on the patch. It is certainly a good physical work out and a mental break as well.



I definitely have the bushcare bug and would recommend 'Adopt-a-patch' to anyone who has a spare few hours a week. Finally, thanks to all who helped out with the plantain weeding effort at the December Bushcare day; it was wonderful to see how much progress had been made.

Sarah Thomas

Pete's Nature Diary

D'ya notice the Ctenotus

Spraying regrowth olives in late summer and autumn I saw more Robust Striped Skinks *Ctenotus spaldingi* than I ever remember. These are the large (200mm), lightning-fast skinks that live on our rocky slopes. Ctenotus is a huge genus that lives predominantly in hot parts of Australia.

Last year I helped survey reptiles at sites in the Coorong National Park that I last trapped 20 years ago. We found that the heat-adapted Ctenotus had increased at the expense of some other cool-climate reptiles that had declined. Not on its own significant, but perhaps a result of increasingly warmer conditions and potentially an early indication of climate change. I wonder whether our Ctenotus are responding similarly, despite last summer being pleasantly cool.



Pete's Little Helpers

In March I noticed the leaves on our normally infuriatingly healthy feral olives were looking very mottled and diseased. On closer inspection I found the undersides of the leaves infested with **Olive lace bug** *Froggattia olivine*.

Turns out it is a native sap-sucker whose original host is Mock olive *Notelaea longifolia* of eastern Australian rainforests. Presented with another tasty member of the family Oleaceae, the bugs have apparently embraced the European variant with gustatory delight.



So successful have they been that the Olive lace bug is now a serious pest of cultivated olives, reducing yields and even killing trees if left untreated. The bugs have followed their new host across the country wherever it has been planted. While this is a bother for olive growers, it would be nice to think they might suck the life out of our feral olive problem just a little. Isn't it grand to see nature fighting back!



This month's weed was only discovered in the reserve as a handful of plants in one small patch in 2017. Not before going to seed though. Since then it has turned up, and been removed, from another half dozen locations. Mostly occurs in drier areas. Has the potential to become a serious local weed as conditions become hotter and drier with climate change.

Onion Weed *Asphodelus fistulosus*



Identification

Plant: open to dense clumps to knee high; *Leaves:* greyish-green, fleshy, onion-like; *Flowers:* star-shaped, white with 6 petals, each with a brown central line; many along stems extending above the clump; mostly in spring; *Fruit:* round, green turning brown at maturity.

Current location

Known from several populations in far eastern Stone Reserve, especially in the north-east corner above the freeway. Also along, and immediately outside the boundary fence, often associated with animal pads. Steep and difficult to access amongst dead olives.



Monitoring & control

Check all sites in early spring and again in mid-spring, and after summer rains. Easiest to dig up and remove whole clump, especially when small. Alternatively spray with glyphosate/ metsulfuron methyl. Bag and remove flowers and seed if present.

Weed warriors needed

Volunteers needed to adopt-a-weed. Are you able to undertake surveillance three times each year to check for Onion Weed, and undertake control if necessary? Or adopt another alert weed of your choosing? I can supply you with everything you need.

Contact Pete 0418 853 834

Birds of a feather - *Pete Bird*

In previous segments we have covered tracks and traces of mammals, often the only way we know these mostly nocturnal and cryptic species are around. Not so much for birds. For most we need only look up or listen out. But birds also leave traces, in the form of scats, tracks, nests ...and feathers.

Feathers wear out, fade and become brittle. Feather condition is critical for flight, insulation and maintaining colour, the latter important for sexual selection and camouflage. Most birds replace their entire plumage annually in a process called moult. Old feathers fall out and new ones grow in a staged process of renewal.



Images: A selection of feathers found in the reserve from top left: Rainbow Lorikeet, Grey Currawong, Sulphur-crested Cockatoo (wing primary & crest), Little Raven, Tawny Frogmouth, Crested Pigeon, Eastern Rosella, Australian Magpie, Galah, Peregrine Falcon, Pacific Black Duck, Adelaide Rosella.

It's just not Pc

Horror of horrors, last winter I noticed a bald patch on top! Not on my head, but on north-eastern Quartz Hill near photopoint PP02. It consisted of a distinct thinning and loss of understorey in a circular patch about 10 metres across (see photo). Was this my worst nightmare, the first sign of the dreaded 'phytophthora dieback'?

Phytophthora cinnamomi is a water mould, an exotic soil-borne pathogen that attacks the roots of plants and causes catastrophic disease in susceptible native vegetation communities. It affects most plants but is particularly severe on a suite of indigenous Australian genera including *Xanthorrhoea* (grass-trees), *Epacris* (heaths) and *Banksia*.



With increasing apprehension, I sent a soil sample for Pc testing to the plant pathology laboratory at Royal Sydney Botanic Gardens last October. I followed the sampling protocols carefully to maximise the likelihood of detection, bulking together about 20 individual samples for the DNA test. Samples were collected when soils were warm and moist, from the root zone of affected plants: *Hibbertia crinita*, *Lomandra densiflora* and *Styphelia* (formerly *Astroloma*) *humifusa*.

After an agonizing wait, the test results came back negative. Like with Covid testing, this could be a false negative, but I am increasingly confident we don't have the beast, after noticing further thinning in a band extending **across** the slope for 100 metres along the north-west contour. This is atypical for Pc which tends to travel with gravity, **down** the slope. I suspect that the plant ill-health is a response to previously dry conditions on the hot, north-west aspect, exacerbated by the shallow, free-draining soils.

Phytophthora is spread by movement of soil, plant material and water containing their microscopic spores. Pc management is difficult. There are no cures; simply maintaining good hygiene to slow or prevent spread by minimising movement or disturbance of contaminated soil, especially during wet conditions.

Unfortunately, we do exactly what we are not supposed to do, habitually spending the wetter months disturbing the soil by digging Sparaxis, Cape Tulip and Perennial Veldt Grass on Quartz Hill. Without continuing to do this however we risk losing our best patch of vegetation under a sea of weeds. My hope is that, with few highly susceptible plant species in the reserve, we are less likely to be invaded by Pc. In the meantime we should all continue to maintain Pc (Phytophthora correctness) and practice good hygiene by cleaning boots and tools before visiting our best spots.

Pete Bird

Grant successes - Peter Bird

I am pleased to report that we have recently received \$15,490 in three separate grants to help us with our volunteering efforts. Thank you to SA Department for Environment & Water, Commonwealth Department for Social Security, and City of Mitcham respectively for the three grants below.

Revitalising Private Conservation in SA Program (\$10,890)

This grant will help us consolidate past feral olive control by funding contractors to undertake chainsawing and follow-up Basal Bark Treatment in Stone Reserve, Urrbrae Gully and the Western Slopes.



Volunteer small equipment grant (\$3,100)

This has enabled the purchase of:

- Pump & hoses to assemble a trailer-mounted water cart to water and increase the survival of planted trees
- Battery drill drivers & equipment for 'Drill & Fill' control of large feral olives
- 15L Backpack sprayer for general weed spraying



My Mitcham Community Grant (\$1,500)

Increased visitation since the pandemic had exhausted our supply of Waite Loop Trail brochures. This grant has enabled us to reprint 5000 more.

Photopoints redone

In April 1993 Phil Shearman knocked in 26 numbered steel posts across the reserve, loaded up the SLR with a roll of film, and photographed the views N, S, E and W of each post. In April, 29 years later I repeated the process, minus the film, for what are now 55 Photopoints. Four of these were added this year to measure changes on newly adopted patches.

For those original Photopoints, this was their ninth snap. These days we aim to retake the 220 photos every 4 years, in what has become the year of the Winter Olympics. The photos below show the sequence 2011, 2018 & 2022 with alive, dead and removed olives respectively looking north from Photopoint 26 on the Western Slopes overlooking the city.



A copper worth gold

Native Sorrel *Oxalis perennans* is the main larval food plant for the **Chequered Copper** or **Grassland Copper Butterfly** *Lucia limbaria*. We have lots of Native Sorrel so I had always wondered if we were a sneaky chance of one day catching a glimpse of copper in the reserve. Two problems: the butterfly is very rare, known only from a handful of places near Adelaide, and it is very small and unobtrusive. But then, on lucky 13 April, a single female turned up in Stone Reserve visiting clumps of kangaroo grass. April is very late in the season so we hope to reconvene with experienced CCB spotters in October to see if this was a lone individual or if we have a population of these diminutive but pretty little butterflies. Pete Bird



The undersides of the Chequered Copper Butterfly seen in Stone Reserve (left) and the dorsal view of a male from the Pakapakanthi/Victoria Park population (right) (Photos: Pete Bird)

Join the Friends of Waite Conservation Reserve!

Ordinary membership \$15

The Membership/renewal form and details can be found at:

<https://friendsofwaitereserve.org.au/>

Forms can be submitted electronically or printed. Email: info@friendsofwaitereserve.org.au

Non-members are welcome at our activities

New members

The Friends of Waite Conservation Reserve welcome new members who have joined recently including:

Rob Last
Martin Schumacher

FWCR contacts

President: Peter Bird (0418-853 -834) pbjbird1@bigpond.com

Secretary: Glenn Gale (0428-812-902)

Newsletter editor: Meg Robertson

Committee: Kate Delaporte, Grant Joseph, Penny Paton, Meg Robertson, Richard Brooks, Clint Garrett, Simon Treloar

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