Spring 2023

FRIENDS OF WAITE CONSERVATION RESERVE Inc.





COMING EVENTS

Bushcare Days

September 2 & 17

October 7 &15

November 4 & 19

December 2 & 17

Bioblitz

November 25

See pages 2 & 3 for details



President's page

Our group is a member of Friends of Parks Inc. (FoP), the umbrella organisation that represents all South Australian 'Friends' groups in supporting parks and nature. The following assessment of national volunteer trends is paraphrased from a recent letter from President of FoP, Duncan McKenzie to member groups:

"One of the immediate and ongoing challenges that FoP has is access to and ongoing involvement of volunteers. The patterns of volunteering are changing in Australia:

- 1. There has been a decrease in volunteering since COVID.
- 2. Volunteers are moving towards flexible, episodic (short term, time limited & irregular) rather than formal volunteering.
- 3. Those ≥ 65 intend reducing their volunteering over the next 5 years.

These findings demonstrate the need for FoP to create avenues for new volunteers or risk declining over time".

These trends paint a sobering picture for our future capacity to manage the challenges that face the reserve. One way to increase flexibility (point 2) might be to create more opportunities for people to volunteer on week days.

Clint and I are usually in the reserve 3-4 days each week and already receive help from volunteers on specific tasks like carrying materials for trail construction; tree planting and weed control.

The tasks are endless. Perhaps you can help for a couple of hours on a week day. Here are a few opportunities over the next 3 months: Hand weeding, Weed spraying; Walk & weed olive



the next 3 Volunteer Mary weeds Sparaxis on Quartz Hill

seedlings; Maintain tubestock at Urrbrae TAFE; Maintain Graminetum; Collect seed. Let me know if you can help.



FRIENDS OF WAITE CONSERVATION RESERVE

Where:

198A Mt Barker Rd Leabrook Gardens



Great Waite Bioblitz II

The Great Southern BioBlitz is an intensive biological survey of all living species carried out by citizen scientists across the Southern Hemisphere. It is a massive event which collects important data on species diversity and increases biodiversity awareness. This year the event is 24-27 November.

Help make Waite Conservation Reserve a biodiversity hotspot by participating in our own chapter on Saturday 25 November.

Join us on a morning walk or come for an evening spotlight tour. Use the *iNaturalist* phone app to learn about and contribute records of our fauna and flora.

When:

Nature walk

Sat 25 Nov 2023 9.00am - noon

Spotlighting

Sat 25 Nov 2023 6.00 - 9.00pm

Enquiries:

Peter Bird 0418 853 834











ALL WELCOME

Please RSVP info@friendsofwaitereserve.org.au by 18 Nov

Bushcare Days

Seasonality rules our Bushcare days. Each year we tend to seasonally re-treat the same old weeds in the same old places using the same old techniques. Until last month.

Last month we introduced a new technique, the quaintly-coined 'Tongs of Death', used to control strappy-leaved weeds growing amongst desirable vegetation. Herbicide is applied to the sponges and the tongs drawn along the leaves, evenly coating both sides with chemical.



'Tongs of death'

In August we compared Tongs of -

Death with digging for the control of Sparaxis on Quartz Hill. ToD was more than twice as quick as digging, with 3500 plants treated by four of us using the technique.

The next three months will see us continue on weed bulbs then mix it up with targeting Boneseed, Perennial Veldt Grass, African Daisy and olive seedlings.

Tree planting

When most of this year's plantings were grasses and other understorey species, it seems incongruous to call it 'tree' planting. All up, we planted 1150 tubestock of 83 species including 400 tubestock of 21 grasses. Another 200 lilies and small ground-covers will be carried over for planting next year once they have bulked up. The reason we grew mainly understorey species was in hope to counter damage from kangaroos and deer. This was not entirely successful. Many were still eaten or trashed. One area where they survived well was the small triangular patch outside Gate 82 off Hillside Rd (above). Amazingly, some were still damaged by deer. Apparently the deer even graze on the local resident's front lawns across the road.

Restoration Days are held on the *first* Saturday & third Sunday of each month 9.00 am - 12.00 noon. Reminders are sent earlier in the week. We'll continue to meet via Springwood Park (see map & directions) through October but probably move back downhill in late November & December when fire risk increases.

All tools supplied.

Pete Bird

Program

Sat 2 Sept	Sun 17 Sept
Sat 7 Oct	Sun 15 Oct
Sat 4 Nov	Sun 19 Nov
Sat 2 Dec	Sun 17 Dec





Pete Bird

Tongs of Death - Clint Garrett

When I started working on my patch at the Crossroads of the Waite and Sheoak Loops four years ago, I tried to control the Cape Tulips and Sparaxis by digging them out. Many hours were spent by me crawling across the site and digging out plants. Last year (2022) I spent 6 hours weeding on the patch, but this time I used the Tongs of Death. In 2023, I have spent about 2 hours weeding my patch, again using the Tongs of Death.

There is a similar story at the Geological Quarry. I used to hand weed Sparaxis at the Quarry, but in 2022, changed to using the Tongs of Death. In late July I checked the quarry for Sparaxis and found just 124 Sparaxis plants, which I then treated using this method.

I see the advantages of tonging to be as follows.

- It is quick I can deal with a larger number of weeds in less time.
- It does not disturb the soil which minimizes more weed proliferation.
- It is highly specific as only target species are killed.

Sparaxis seems to be particularly susceptible as it has a large leaf area relative to its bulb and it is very easy to get good coverage of those leaves. I have also used the Tongs successfully on Bridal Creeper growing in amongst Old Man's Beard.



The equipment: tongs, squirt bottle and gloves

The technique is simple.

- Take a pair of kitchen tongs and flatten the ends in a vice.
- Attach kitchen sponge to the flattened sections. I used to use Selleys Kwikgrip for this, but found that the additives in Glyphosate dissolve the glue. The Spray Shop staff alerted me to this issue when a seal in my backpack sprayer was partly dissolved by the additives. I then tried using Araldite, which also failed. Now the sponge is held on using fine tie-wire thanks to a suggestion from Penny Paton.
- Washout a squirt bottle of your choice and label it.
- Mix Glyphosate at a rate of 1 part Glyphosate to 5 parts water and add a few drops of a wetting agent and some marker dye.



Wipe the weed from base to tip

Once you are onsite, find your target weed species. Wear chemical resistant gloves. Wet the sponges with Glyphosate mix and grasp the leaf/leaves near the base and stroke up their length. Repeat on the next weed etc etc.

As a method, it is highly specific and can be used close to desirable plants without harming them. I recommend it.

Note: all Friends must be suitably trained before using chemicals in the reserve.

New committee member

I, Sue Last, would like to introduce myself. I am a new committee member on the Friends of Waite Conservation Reserve committee. I am a long-time user of the reserve having lived in the area for the past 30 years plus, but I am a new member to the Friends group.

I am a newly retired Intensive Care nurse, who continues to complete a visual arts degree at the Central School of Art. I am beginning to focus my studies within the natural world and my neighbourhood conservation park is a wonderful place to glean ideas for my art.

My skills in conservation and plant management have been gained in a number of ways. I have been a 20 plus year member of Trees For Life and have grown and planted trees for many landholders. I have assisted friends and schools etc with native plantings. I am also a new member of the Friends of the Botanic Gardens. I have a passion for gardening and we have a large garden in Mitcham, which has mixed planting with many natives.

I have recently joined the SES and am a probationary member, training and undergoing courses to learn new skills.

I am a member of the Cruising Yacht Club of



SA and am a crew member who regularly participates in yacht races. I also enjoy paddle boarding, canoeing, bush walking, camping and the great outdoors.

I am enjoying being a member of the Friends group, and hope to make positive contributions to the continued improvements and biodiversity in the reserve. Looking forward to seeing you all in the park in the near future.

New tree waterer

Andy Baker you are a star. Andy recently converted the old Waite Arboretum spray trailer to a new mobile water cart to more easily water our plantings. This is timely given predictions of a hotter and drier *el nino* on the way.

The system couples a surplus 1000-litre Intermediate Bulk Container with a new Onga pump, 5.5 HP Honda motor and hose-reel. Thanks to Andy for his engineering skills and to the Commonwealth Department of Social Security for the grant which funded the pump and equipment.

Pete Bird



New water trailer assembled by Andy will help with tree watering

On the Trail - Clint Garrett

In July and August the last 10 steps in Wild Dogs Glen were put into place. That brought the total to 182 built on the Waite Loop in the last 4 years There are also 95 steps that have built on the Sheoak Loop. Walkers are grateful for the steps, which have made both of these trails safer to walk.

The wooden steps should last about 20-30 years and the stone steps for much longer than that.

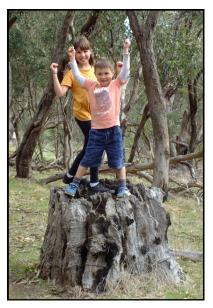
30 metres of walking trail in Netherby Gully have been boarded up and leveled, which largely completes work on the Waite Loop. Much of this work is done on side slopes of 30-45 degrees which makes doing set-up for quite challenging. Choosing where to work is determined by observing where walkers have slipped off the edge of the trail. The timber edging reduces erosion and provides a solid edge, while the dolomite provides a relatively non slip surface. In total 670 metres of trail has been re-laid and more than 25 tonnes of dolomite has been carried – mainly by bucket and sometimes by wheelbarrow.



Grading one of the last sections of trail

The trail edging is made from 150 mm X 25 mm timber, which is cut lengthwise to create two pieces 75 mm X 25 mm. That way, we get two pieces for the price of one. The timber cutting has been done at no cost by Gray Hawk and Andrew Bartlett at Gray Hawk Design. They are wood craftsman who have donated their time and the use of their machinery to help my trail work. They have also cut the timber for the lower sections of the wooden steps, with better accuracy than mine, which results in a better job.

There is a large stump near the crossroads of the two trails. It happens to be the highest point on the Waite Loop, which is the reason like for children the two pictured below, to climb up on it and to celebrate. In previous years, children have been about 15% of our walkers; this year however, the number of children walking in the Reserve has fallen to 9%. On weekdays, female walkers out-number male walkers 2 to 1, but on weekends the ratio becomes more even; 47% female, 44% male. So far this year, there have been 25,848 walkers past the counters.



The site for the memorial table on Harold's Lookout has been finished and has been planted with low growing plants. The Waite Centenary Committee have been alerted that we will celebrate the Centenary dedicated with setting to Harold Woolhouse, the Director at Waite who was responsible for the Reserve being created.



Visitors to the reserve- Pete Bird

TAFE tree planters

Rachel Eckermann and 18 *Urrbrae TAFE* students broke the back of our planting efforts on 23 May by knocking off a tidy 540 tubestock of 37 species. We planted mainly grasses but with a few more exotic species such as Blue pincushion, Plantain and Everlastings on upper Netherby Spur and Tanks Track. Good rains prior to and soon after, but thankfully not on, planting day got the tubestock off to a good start.



TAFE students break for lunch after a morning tree planting



Biological deer visit

On 15 July we were visited by 15 members of the **Bi-ological Society of SA** to experience, first hand, the impacts of feral deer on the reserve. Clint had done his homework and was able to show examples of damage including thrashing and rubbing on shrubs, piles of olive seeds regurgitated by deer and the resultant germinated seedlings.

Clint shows deer damage to BSSA members

Fungal Foray 3.0

Our third Fungal Foray with the Adelaide Fungal Studies Group saw 25 participants search for fungi on western Stone Reserve/Quartz Hill, led by Teresa Lebel & Tijana Petrovic. Luckily, the rain held off. Report on fungi in the next issue.



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.

Moths of Waite - Pete Bird

When, last spring, I was looking for a way to bump up our stats for the Great Waite Bioblitz I happened upon moths. I strung up an ultraviolet light and a couple of old sheets and waited. Cool windy conditions made for modest results. Things have picked up since. The tally is now on the way to 100 species from just a few surveys. Compare this with a paltry 25 butterflies in 20 years.







Concealer moth sp. Syringoseca rhodoxantha Oecophoridae Eucalyptus leaves



Glatigny's tiger moth Ardices glatignyi Erebidae Woolly bear caterpillar eats wide range of plants

The Australian moth fauna is both hugely more speciose (25x more described species) and more varied (14x more families) than butterflies.

At the risk of alienating mottephobics (spelled correctly) I share with you some of the moths that frequent our patch. Captions below include common name, scientific name, family and food plants.



Emerald moth sp. Chlorocoma melocrossa Geometridae Twiggy Bush-pea Pultenaea largiflorens



Green-blotched moth Cosmodes elegans Noctuidae Wahlenbergia



Blotched satin moth Thalaina angulosa Geometridae Acacias



Two-ribbed footman Palaeosia bicosta Erebidae Lichens



Long-spurred Valerian Centranthus macrosiphon

Looking more at home in a garden bed, this pretty little annual looks innocent enough but already it has gone beyond eradication in part of the reserve ...which means we have to be super vigilant elsewhere to keep it in check. **Long-spurred Valerian** is one of two *Centranthus* species recorded in the reserve. There is a single record of Red Valerian *Centranthus ruber*, now eradicated, but it lurks close by below the quarries along the freeway. Introduced as a garden plant from southern Spain. Ole

Identification

Plant: smooth erect annual to 40 cm

Stems: single, later branching; grass green Leaves: in pairs; toothed or with deep lobes

Flowers: terminal cluster of several pink or white

flowers with long tube & 5 rounded petals; spur at base

Fruit: ovoid with feathery projections

Similar species: Red Valerian is a much larger perennial shrub with crimson flowers. Branched centaury Centaurium tenuiflorum has similar terminal clusters of pink flowers but leaves have smooth margins. Unlikely to be confused with any native plant.

Current locations

- Extensive infestation along Sheoak Trail in vicinity of big quarry, especially on scree slopes. Carpets of 1000s of plants present
- 40 m directly below Gate 88
- SW Pultenaea Hill near corner in fence

Monitoring & control

High seed production & long-lived seeds require regular vigilance during the growing season. Seedlings emerge following autumn-winter rains and can be pulled May-Nov. Carefully search infestations every 2-3 weeks for bright green scalloped leaves and clusters of pink flowers.

Small numbers easily pulled & discarded. Bag & remove later in season if seed present. Larger infestations can be sprayed with a broadleaf mix. Concentrate on removing outliers.









Oh Deer!!!

A July 2023 press release from PIRSA estimates that there are 40,000 feral deer in South Australia. The National Feral Deer Action Plan estimates that there are between one and two million deer of six species across Australia.

There are increasing numbers of Fallow Deer in the Reserve and they are creating problems.



This photo was not taken in some English park, this was in Koala Gully There were 5 deer more close-by that did not make it into the photo. Clint Garrett

Ring barking of Acacias, Exocarpos and Allocasuarina can be seen in many places across the Reserve. In this group of Golden Wattles (at right) 9 out of 15 plants had been ring-barked and were either dead or would die because they had been ring barked. These were saplings 1.5 to 3 metres tall. Nearby 20 seedling Acacias had been eaten to the ground though tree guards had been used protect them. The deer either smash the guards or lift them off of the stakes.

Male deer also thrash shrubs so as to distribute their scent. There are many examples of shrubs which have been thrashed severely, sometimes fatally.





Deer also spread olives. The photo at left shows 1219 olive seeds from a single deer vomit. Some of those pits germinate to add to our olive problem. As an example, I recently collected 242 seedlings from an area approximately 50 cm X 25 cm.

Deer may be pretty to look at, but they are an environmental disaster.

Clint Garrett

The Willie Wagtail - a perennial favourite - Penny Paton

Willie Wagtails (*Rhipidura leucophrys*) live all over mainland Australia and are one of our best-known and popular birds. They are tolerant of human activity and can be found nesting near houses or sheds, often year after year. They are a bird of open areas and prefer lawns, grasslands or grassy woodlands, avoiding the thick vegetation of forests.

As with most Australian birds, they were named for apparent likeness to their European counterparts, starting with White-eyebrowed Thrush (clearly not right!), then Black Fantailed Fly-

catcher (what a mouthful, John Gould), and later Blackand-white Fantail or Flycatcher (Peter 2023). None of these are short or catchy and, by the early twentieth century, they were often called wagtails, even though they are not related to the Northern Hemisphere wagtails. One theory for the addition of 'Willie', which started to appear in the 1880s and gradually became the accepted name, was that it harked back to the Irish name for their Pied Wagtail (Peter 2023). The large number of Irish immigrants in rural Australia in the middle years of

the nineteenth century, due to high immigration after the potato famines, supports such a theory.

The characteristic sashaying of their tail and bold nature endear them to humans, although in some Indigenous Nations Willie Wagtails are regarded with suspicion, as gossip-mongers and the bringers of bad news.

The "sweet pretty creature" call is often given on moonlit nights during the breeding season as an advertisement of the birds' territory and is one of the attractions of sleeping with an open window on summer's nights. Their other well-known call is a scolding chatter, often directed at birds or animals coming close to them or their nests.

Willie Wagtails pair for life and breed around Adelaide in the spring and summer, often raising multiple broods if conditions are suitable. Their nests are neat small cups of grass woven with spider webs and lined with fur, hair or soft grasses. As they often lay three or four eggs, the young birds, when close to fledging, appear to be about to spill out of their nest. Wagtails vigorously defend their nests and young, even harassing much larger birds like ravens and eagles.

Like many small birds, Willie Wagtails are unable to withstand high numbers of the native Noisy Miners which have become so common across some of the Wagtails' range. Forty years ago there were up to ten pairs of Willie Wagtails in the Botanic Park in Adelaide but, since Noisy Miners have invaded and dominate the Park, they are no longer found there. They are also absent from most of the Adelaide Parklands and increasingly rare in the suburbs. Wagtails persist along the River Torrens in Gilberton near our home, albeit at lower numbers, only because of a

dense thicket of bamboo, where they nest and seek refuge from Miners. Our Council's recent removal of this thicket may have sounded their death knell.

In the Waite area, John Sutton recorded Willie Wagtails as resident at Netherby and the urban part of the Waite lands from 1928 to 1938 and they were resident and bred at Torrens Park, a nearby suburb, in the 1970s and early 1980s (P. Horton pers. comm.). More specifically Saunders (1983) considered them a breeding resident in the Waite Arboretum through the period from 1972 to 1981. But by the early 2000s, they were considered one of the less common ground-feeders in the Arboretum (Possingham 2001) and Gardner listed them as vagrants in a 2017 Checklist of

birds of the Arboretum.



Photo: (c) Aaron Stevenson



Our President, Peter Bird, has trawled through his records for the Waite Conservation Reserve based on 392 bird 'counts' from 2000 to July 2023 and only has five records of probably three single birds in April and May 2012, April 2017 and July 2023 (two records). These may have been dispersing immature birds given the timing of the observations and certainly suggest that this species is vagrant in the Waite Conservation Reserve. Whether this was always the case, or whether they were more common when the species was more abundant in the pre-2000 period is a moot point.

References

Peter, J. 2023. A Willie Wag Tale. *Australian Birdlife* 12: 37

Possingham, M. 2001. Birds of the Waite Arboretum and the Waite Conservation Reserve Part 2. *Friends of the Waite Arboretum Newsletter No. 26*, Summer 2001.

Saunders, J. 1983. Birds of Waite Arboretum: 1972 -81. South Australian Ornithologist 29: 40-41.

Photo web address:

https://www.inaturalist.org/photos/111406624

Pete's Nature Diary

Pet Maggie

I first recall meeting this **Australian Magpie** two years back. You can tell she's a female from her scalloped greyish back, not pure white as in males. At the time I was scrabbling around under a Golden Wattle in Netherby Gully collecting the fallen seed. She flew in to investigate and, shoulder to shoulder, we shared the booty. I reckon she got two seeds for my every one!

I noticed her again recently hanging around at Netherby Spur looking for hand-outs from passers-by. Hubby is much more circumspect and stays well clear. Interestingly, I've never been swooped in the reserve; males can be very protective in the breeding season. They say magpies remember faces & only swoop unfamiliar ones, especially from cohorts that have caused them past grief. Having spent a fair bit of time in the reserve the last few years, I count myself as a familiar face.



New orchid

The Fungal Foray on 22 July yielded more than just a couple of new fungi; it resulted in the discovery of a new orchid on Quartz Hill, the Red-banded Greenhood *Pterostylis sanguinea*. Orchids are known for some weird pollination strategies but this species takes it next level, employing sexual deception, mimicry and entrapment to boost seed production. At the heart of the story is the orchid's labellum, a highly modified petal which is touch-sensitive, hinged at the base and secretes attractants that mimic the female sex pheromones of a species of fungus gnat. When a besotted male gnat lands on the finely balanced labellum, it immediately tips backwards imprisoning the hapless gnat inside the flower 'hood'. In attempting to escape, the gnat stumbles around in the dark and in the process boosting pollination in the clever orchid.



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, Clint Garrett, Simon Treloar, Sue

Last

Address: Friends of Waite Conservation Reserve, University of Adelaide, Waite Campus,

Email: info@friendsofwaitereserve.org.au Website: https://friendsofwaitereserve.org.au/

Newsletter photo credits: Photos by authors unless otherwise indicated.