FRIENDS OF WILSON RESERVE NEWSLETTER NUMBER 329 OCTOBER 2023

Next working bee: Sunday 19 November 10am
12noon Weeding somewhere. Then AGM at morning's end: committee reports, office-bearers.

Working bee 15 October

This month's working was a special session with Chris Callahan and Jared Stott from Banyule council's Bushland Management team. They brought a truck, weeding equipment, and plants to assist us in the site of this month, Reedy South, south of the Chelsworth sporting fields near the wetlands.

17 of us - Peter, Ro, Colin, June, Robert Bender, Patsy, Loretta, Lindo, Dean, Jessamy, Jack, Hugh, Madeleine, Diana, Robert Keystone, John and Kyoko joined the session. A huge turnout!



Figure 1 - Introduction

Chris started the session with an introductory chat about himself and the new ranger Jared, and some of us in the group talked about our stories on why we join the working bees.

Since our June working bee, there has been some vigorous weed growth. We spread out to do some weeding in the first hour, removing Tradescantia, Panic Veldt, Dock and Creeping buttercup. Poa grasses seem to be doing well even though they are surrounded by many weeds. Dean saw Striped Marsh frogs and Jessamy saw lots of small grubs and healthy-looking worms in the ground.



Figure 2 – Weeding. Lindo, Loretta and Robert Bender (L-R)

After an hour or so of weeding, Jared took some of us to plant Narrow-leaf Nardoo, *Marsilea drummondi* on the edge of the swamp. It is a species we haven't planted before.



Figure 3 - Narrow-leaf Nardoo



Figure 4 - Planting Nardoo. June and Colin (L-R)



Figure 5 - Dean found a Striped Marsh frog

It was very satisfying to see the back of the truck filled with the weeds we pulled out.



Figure 6 -Squashing the weed. Jared and Chris (L-R)



Figure 7 - possibly the world biggest pile of Trads

We ended the session with morning tea but with a table, ceramic cups and biscuits provided by Chris and Jared, and of course Patsy's famous treat.



Figure 8 - Morning tea. Patsy, Jessamy, Diana, Jared and Chris (L-R)

Because we had a huge turnout of people, we were able to clear a large area in Reedy South. The difference before and after the session is significant.



Figure 9 - Magpie taking advantage of the newly cleared area

This month's working bee also marked Ro's 20th year anniversary being part of Friends of Wilson Reserve. Ro's first session in 2003 was also Reedy South!

Thank you, Chris and Jared, for joining the working bee. We enjoyed the collaborative work and positive energy you brought in.

Thank you everyone for joining the session this month. I left the session feeling optimistic and energised. I hope you did too.

* The following sections are President Robert Bender's monthly report.

Monday after the September working bee, I visited the billabong site, which looks terrific.



Watered all the little Poa I could find, most of which now have sticks to mark their location.



A young Manna Gum *Eucalyptus viminalis* in a tree guard nearby



Visiting daily to water the new Poas and the older ones too. East end, with happy Poas among the shrubs



Kangaroo Apple in a tree guard



Watering all the new Poas several times each week, as well as some of the older Poas and shrubs. Goodenia:



East boardwalk, north side 18 Sept., we worked at the north side, clearing feral grasses, much Bittercress, Trad, Drain Flat Sedge, liberating shrubs and Poas.



Just off the timber boardwalk, a Melbourne Water team planted hundreds of sedges last autumn. They have since been invaded by weeds, mainly Dock.



Made a start at removing Dock and Nightshade 19 Sept.



Next day, after digging out about 200 dock and sundry little Nightshade, found a Sword sedge in full bloom, surrounded by Spear Thistles among the dock



Dug those out, then wandered about the billabong flat and eventually filled my tub with 70 of them. Just rosettes, so they won't seed this year.



4th tee south

Kyoko's Poas are all flourishing. We've been weeding around them mid-Sept – much Drain Flat Sedge, Trad, Panic



Cleared a patch just west of this one, 20 Sept – a good spot to plant more Poas.



Golf course track

Through mid-September we both weeded along the billabong side of the path, clearing a few metres a day. Makes a nice contrast with the weedy other side.



Finished in Sept 20, about 200 m of path margin. One surprise was finding a used syringe in a bottle



Muttonwood site between boardwalks

This was very weedy after our months of absence.



Masses of Trad, Chickweed, Nightshade, Panic Veldt and other feral grasses crowding the Poas and Muttonwood seedlings. We tackled it on 23 Sep. I cleared the path margin, patsy worked inside the fence, and got half of it done the first morning.



We finished work at the site 25 Sept., having exposed quite a few healthy seedlings that had been hidden under dense Trad.



Horseshoe Bend

Made a start on getting the weeds back under control on 25 Sept. started with the central reveg plot, clearing it of about 50 rosettes of Panic Veldt



The big glade at the northwest end, where we cleaned out thousands of Nightshade last autumn, now had hundreds of Spear Thistle, some of them starting to send up their flower stalks.



I dug out 500 and Patsy did ~100, as well as weeding at the central area. Another 260 next day, now clean.



Visited the little Rasp Fern, cleared encroaching Trad away from it – looking healthy and green.



And the Poa patch in the northwest corner, that was very weedy a year ago and took much work to clear. Now the Poas are big and cover the inter-tussock spaces, so it looks really good. Just a few Dock to clear away. Filled a couple of tubs with Trad hiding among the Poas.



And just outside the entrance, the little plot with a Hazel I planted and a self-sown Silver Wattle, plus some Poas, needed weeding, so was done on 27 Sep: lots of Panic, Flatweeds, Trad, feral grasses, Dandelions. Long overdue to expand this little plot, clear another metre or two of the Trad constantly encroaching on it



28 Sept, tackled the Hazels at the south end of the Bend, much besieged by Panic, Trad and Drain Flat Sedge..



Looked much better after a half hour's intensive work:



Did the southern Hazel next morning, 29 Sept:



The Poas beneath both trees are sending up their flower stalks, and all look beautiful



A small Hazel at the turnoff was done same morning:



And another Hazel at the south end, surrounded by Panic



A half-hour's work to clear the weeds, expose the Bidgee, Kidneyweed and several more Poas.



Playground east

Almost 2 years ago, we planted a line of Weeping Grass Microlaena just east of the pedestrian bridge. Visited them on 25 Sept, found them all a bit dry, but almost no weeds. 5 minutes work to remove a few Trad and Panic and watered them all next 2 days to revive them.



Triangle south

I've been watering the lily tubestock I found pulled out of their holes every day or two, and started weeding around a shrub each morning. On 26 Sept that was a Goodenia right on the riverbank escarpment, surrounded by dense Kikuyu



Kikuyu is very tough and tenacious, so clearing 360° around it was a challenge.



Next day, tackled a tree-guard with a Bursaria, and a Spear Thistle sending up its flower stalk next to it, plus much Kikuyu and Drain Flat Sedge



The Kikuyu was an amazing tangle, but I got it out.



New weeds: False Strawberry

Patsy and I were weeding north of the track at the east boardwalk on 18 Sept and found a big colony of this new weed, False Strawberry, *Potentilla indica*.



It is native to monsoon Asia, found in Warburton in 1937.



The species is still found in this state principally along moist channels within the eastern ranges, with scattered records from around Mount Macedon, Seymour, the Ovens River and sites in East Gippsland. https://weedsofmelbourne.org/false-strawberrypotentilla-indica. Inserted a note in the website that it is now also in Ivanhoe East. The European strawberry has a white flower.

Fungi correction: Tom May

Thank you for sending the latest Wilson Reserve Newsletter. I always enjoy them even though I only get along to occasional working bees.

The interesting red cage fungus on the last page of Newsletter 328 is Clathrus ruber rather than Colus pusillus. Clathrus ruber is an exotic species, first reported from western suburbs of Melbourne only a few decades ago, and now widespread. You can see the extent of its spread from the iNaturalist record: <u>https://www.inaturalist.org/observations?place_id=67</u> <u>44&subview=map&taxon_id=56534</u> Colus pusillus is a native fungus, not recorded for the Melbourne area. It has cross ridges on the arms. For exotic fungi such as Clathrus ruber, it is very difficult to control them, and we can see the rapid spread from the way that the orange Favolaschia claudopus is so abundant now (after just a few decades). The Favolaschia is in native vegetation, such as at Wilson Reserve, and so it will be competing with native fungi, while Clathrus ruber seems restricted to woodchip mulch in parks and gardens, but even so, the Clathrus could be removed if seen at an early stage of development before it is fully open and the slimy spore mass has developed (which is spread by flies).

Cheers Tom May



Nearest sightings to us are in Fairfield and one at Latrobe Uni, so it's spreading eastwards, but already a couple of outliers far east of us.

Retirement of secretary: Bob Thomas



Bob joined the group in 2004, has attended over 150 working bees, and been our very efficient secretary for a decade since incorporation in 2013. His knees have told

him it's time to quit working bees, so we held a dinner (and lengthy committee meeting) at Lucille in Lower Heidelberg Rd on 20 Sep to celebrate his many years of fine work for our group.

Citizen Science: The Conversation

Erin Roger, CSIRO; Cameron Slatyer, CSIRO; Dax Kellie, CSIRO, 28 September 2023

Citizen science isn't new anymore. For decades, keen amateur naturalists have been gathering data about nature and the environment around them – and sharing it. But what is new is the rate at which citizen scientists are collecting and sharing useful data. Last year, 10 million observations of species were collected. Our <u>new research</u> shows 9.6 million of those came from citizen scientists. It makes intuitive sense. There are only so many professional researchers. But nearly everyone now has a smartphone.

But if anyone can contribute data, how do you know it's reliable? Was it really an antechinus, or was it a black rat? Despite the growing success in collecting data, there has long been scepticism over how reliable the data are when used to, say, estimate how abundant a threatened species is. It turns out, citizen science is extremely useful – especially when paired with professionally collected data.

How did we test it?

It's now much simpler and quicker to be a citizen scientist than it used to be. You might take a photo of an unusual mammal you spot at a campground, record your observations, and upload it to an app or website. This, in turn, has helped standardise the data and make it even more useful. Around Australia, thousands of people contribute regularly through platforms like iNaturalist, DigiVol, 1 Million Turtles, FrogID and Butterflies Australia.

When you upload your observation, it's recorded in the database of the individual app. But data from all major citizen science apps is also shared with the <u>Atlas of Living Australia</u>, Australia's largest opensource open-access biodiversity data repository. That's important, because it means we can aggregate sightings across every app to get a better sense of what's happening to a species or ecosystem. To tackle the question of data reliability, we looked at what proportion of total records added to the data repository came from citizen scientists.

Then we chose three common species – shingleback lizards, Peron's tree frog, and the red-browed firetail finch – and compared citizen science observations

with professionally recorded data across their distribution.



For the shingleback lizard (*Tiliqua rugosa*), the majority of locations where it was sighted came from professional projects such as government programs and museums, with only 18.5% of locations drawn largely from citizen science.

These three figures show species observations by citizen science method (green) and non-citizen science (purple). This is for the shingleback lizard. Author provided, <u>CC BY-NC-ND</u>

Peron's tree-frog (*Litoria peronii*) had 33.5% of its locations mainly contributed by citizen scientists.



Peron's tree frog. Author provided, <u>CC BY-NC-ND</u> But for the red-browed firetail (*Neochmia temporalis*), citizen science was the main contributor in over 86.5% of its locations.



Red-browed firetail finch. Author provided, <u>CC BY-</u><u>NC-ND</u>

Why the difference? We believe it's due to the impact of long-running citizen science projects driven by enthusiasts. Birders are a large enthusiast community, while people who go herping (looking for reptiles) are a smaller group.

As a reflection of community enthusiasm, birds make up nearly 50% of all species observation records in the Atlas of Living Australia, with the Australian magpie the most commonly recorded species.

What about rarely recorded species?

Next, we looked at several species with fewer than 1,000 records to find out whether citizen science contributes less data when species are less conspicuous.

In fact, the reverse was often true. For some rare species, citizen science is proving invaluable in ongoing monitoring.



This map shows black rockcod observations by citizen scientists and non-citizen scientists. Author provided, <u>CC BY-NC-ND</u>

Take the threatened black rockcod (*Epinephelus daemelii*), a large, territorial fish which been decimated by spearfishing and other pressures. Here, citizen science proved its worth, adding 63% of observations. Most data came from a few high profile projects, such as annual reef and fish surveys.

Citizen science is coming of age

For decades, citizen science has struggled to feed data into professional monitoring and conservation efforts. But this is increasingly unfair. By combining citizen science data with professionally collected data, we can get the best of both worlds – a much richer picture of species' distributions.

It's only going to get better, as observation and citizen scientist numbers grow each year. There's a large spectrum of projects, many with excellent data quality controls in place.

Citizen science has come a long way. The data created by keen amateurs is now of better quality, aided by new technologies and support from researchers. Apps which add automatic time stamps, dates and locations make it much easier to validate observations. This suggests there's untapped potential for citizen science to contribute consistent data over significant parts of many species' ranges, though the strength of this contribution will vary by species.

There's still more to do to help citizen scientists contribute as usefully as they'd like to. For instance, observations tend to cluster in the regions around cities, because that's where citizen scientists live. Citizen scientists can also favour larger, charismatic and brightly coloured species.

One method of improving collection could be to focus the interest of citizen scientists on a wider range of species.

For citizen scientists themselves, a big part of the appeal is the ability to create useful data to help the environment. Citizen scientist Jonathon Dashper, for instance, spends his spare time looking for frogs and recording fish. Why? He told us:

My drive to contribute to citizen science is to further my understanding of the natural world and contribute to decision making on environmental matters. Using citizen science platforms, I have been able to learn so much about harder-to-identify organisms.

Birds

Patsy and I cleaned up the Muttonwood site over several days, which brought down a pair of Yellow Robins and a pair of Scrubwrens.



Frogs

A very dry September (driest Sept on record, it seems), but by the 26th, running out of nights to go frogging, so I went, despite the drought, and it was a good night. The usual species early spring are Pobblebonks Brown Tree Frogs, Striped Marsh Frogs and Common Froglets. All four were calling, in moderate numbers. Quite a few water bodies very dry, so the frogs were in the remaining wet ones.



Late winter/spring is Brown Tree Frog calling season, so the dominance of the species this month is no surprise.



The Pobblebonks peak Oct-Dec. The Common Froglets are heard mainly in ponds 8, 9 and 12. 9 was dry and 12 nearly so, so no Common Froglets thought it worth doing mating calls this month. Their new HQ is becoming the stormwater pond by the 9th fairway, and in the shallow ditch on its south side.

That was frog survey no. 295.

What's in flower?

Swamp Paperbark *Melaleuca ericifolia*, by pond 9 on the golf course 13th fairway



Black Wattle, south of Chelsworth, 12 Oct.



Japanese Honeysuckle, Horseshoe billabong (to be killed tomorrow) 12 Oct.



Yellow Flag iris in Bailey billabong, 12 Oct. To be killed over coming weeks







Driest September on record, says the Bureau, with only 10.8 mm, 18.7% of the month norm of 57.9 mm. Stressed plants and birds and everything else. 5 wet Septembers, and 10 quite dry ones, the current one the furthest below the norm.

And we're officially into an El Nino event, so hot and dry for a year or so. Wet autumn followed by dry winter and drier spring.



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