

News of Friends of Grasslands

Supporting native grassy ecosystems

ISSN 1832-6315

September-October 2019

Will you be joining in these activities of FOG and others this spring?

Mid-winter talks & tea, Saturday 31 August, 12.45-4.30

This year's 'talks and tea' afternoon is in the **Banks Building** at the Australian National Botanic Gardens. We can look forward to three fascinating illustrated talks from our speakers:

Juliey Beckman: 'Assessing grassland use by small native marsupials'. Sue McIntyre: 'Putting climate-adjusted provenancing into practice'. Bill Willis: 'Small-scale propagation techniques for some grassland species'.

Juliey is a lecturer at ANU, and a member of the FOG committee. Sue is an Honorary Fellow of CSIRO, very knowledgeable on grasslands and grassy woodlands in this region. Bill is a long-standing member of FOG, known for his expertise with native plants and involvement in Landcare.

Please plan to arrive by **12.45** to make yourself a tea, hot chocolate or (instant) coffee on arrival, or the Pollen café is nearby. Afternoon tea is provided and there will be good time for networking.

Parking: There is parking outside the Gardens, or paid parking within, and a drop-off area beside the building.

Please register with ann.milligan@fog.org.au immediately if you are going to attend, for reasons of catering and seating.

Visit to The Rock & TSRs around Narrandera NSW

An interesting FOG excursion is coming up on **Friday 20 – Sunday 22 September** led by Rainer Rehwinkel.

- 20 September day 1: independently travel to The Rock Nature Reserve. Meet at the park's entrance at 2.00 pm. Spend the afternoon exploring this site. Leave at 4.00 pm. Travel to Narrandera and your accommodation there. Meet at the Lazy Lizard for dinner (7.00 pm).
- 21 September day 2: muster at Lake Talbot caravan park at 9.00 am. Head to Gillenbah Travelling Stock Reserve* (west of the village of Gillenbah on the Sturt Hwy), meeting at the gate at 9.30. This is a very large reserve, so we'll probably spend the morning here and have lunch under the trees. At 1.30 we'll head northwards to a couple of sections of the Murrumbidgee Valley Woodlands National Park, and an abandoned TSR, all near Yanco. These will take the rest of the afternoon. Meet at the Charles Sturt Hotel for dinner (7.00 pm). *If unforeseen heavy grazing at Gillenbah has rendered that site unsuitable, we shall visit an alternative site at Rocky Waterholes.
- 22 September day 3: muster at Lake Talbot caravan park at 9.00 am, then meet at Wire Yards TSR just north of Narrandera along Barellan Rd at 9:30 am. Then several sites along Barellan Rd (TSRs, wide road reserves, lakeshores, etc) will end the trip.

Please book your own accommodation at Narrandera (Lake Talbot caravan park or one of the several motels in town), and **when you register** with me, ann.milligan@fog.org.au, tell me if you will join in the dinners, so we can book appropriately.

Help appreciated, Fri 13 - Sun 15 September!

FOG will be (as usual) part of the annual display about landcaring activities in ACT, at Jamison Shopping Centre (Macquarie). Any member who would be willing to spend about an hour chatting about FOG with interested passers-by will be very welcome. For a spot on the roster, please email ann.milligan@fog.org.au.

Visit two Canberra grasslands, Sat 12 October

A group will be visiting St Marks grassland in Barton, and also the Blue Devil grassland at Umbagong Park in Latham on Saturday 12 October. To be part of the group, please register with ann.milligan@fog.org.au. More detail will be available in mid-September.

Twilight walk at Stirling Park, Sat 19 October

From 7.30 to 10.30 pm on this spring Saturday, there will be a twilight wildilfe-survey walk in Stirling Park, Yarralumla ACT. Observation only: no fauna will be trapped or handled. To register and find out meeting place details, contact Jamie.Pittock@fog.org.au. (There will be another such walk on 16 November.)

Tree planting invite: RSVP by 29 September!



The view goes on for ever at 'Crookshanks' where FOG is invited to join in a weekend of planting and fun. See page 2.

Sunday 20 October - Bioblitz, Mulanggari, ACT

FOG will be working with 'young rangers' on a Bioblitz at Mulanggari grassland, 10 am – noon on 20 October. Others in the team will be staff of ACT Environment Planning & Sustainable Development Directorate, and the Woodlands & Wetlands Trust. To join in, please register with Marce. Gilbert@fog.org.au.

More activities on page 2 ...

Join in FOG's and others' activities, continued

Victorian Volcanic Plains Biosphere visit to Mooramong

You are invited to join other FOG members on the VVP Biosphere Spring field trip to Mooramong/Tiverton, Victoria, **Friday 18 – Monday 21 October**. The itinerary includes:

Friday night: BBQ at Mooramong Shearers quarters;

Saturday: tour of Mooramong homestead; tour of Mooramong Bushland area and search for the elusive Hairy Anchor Plant; BBQ around the Mooramong pool and VVP Biosphere AGM; spotlighting for Eastern barred bandicoot.

Sunday: Tour of Tiverton in Spring; working bee at Tiverton; dinner at the Elephant Bridge Hotel in Derrinallum with guest speaker TBA.

Monday: ecological burn at Cressy grassland property.

If you would like to be part of this trip (note, the VVP Biosphere group is also a member of FOG), **email** <u>stuartmccallum@westnet.com.au</u> **promptly.**

FOG trips ahead in early November (details to come)

- Visit to Frogmore Cemetery, NE of Boorowa NSW, Saturday 9 November.
- Searching for Picris, near Royalla NSW, Sunday 10 November.
- Revisit rare plant species at Nerriga NSW, Friday 15 Sunday 17 November.

Invitation to a 'wild' October long-weekend (trees, fun & exploration) NW of Cooma

FOG members Narelle Moody and John Boyd have invited other FOG members to visit their property 'Crookshanks' to help with a Greening Australia/Upper Snowy Landcare tree planting event on **Saturday 5 October, 10 am–4pm**. Everyone is also invited to camp and **stay the whole long weekend**, to spend the Sunday and Monday exploring the 719 ha of the property's dry sclerophyll forest, rugged mountains, 12 km of creek frontage, native grasslands and wildlife refuge; it is under in-perpetuity conservation agreements. Species lists available on request. 'Crookshanks' is approx. 20 km north-west of Cooma, a 30-minute drive from Cooma, at 1227 Dry Plains Rd, GPS: 36.10S/149E.

For the planting, there will be trees, tools, moral support and technical advice from Greening Australia and Upper Snowy Landcare, as well as portaloos, bottled water and bbqs. All food is provided on the Saturday. There will be a celebrity DJ ('DJ Snow') on the mountain tree-planting site and a pool-party that night. For potential campers on flat spots in the garden around the house, there are warm showers in the covered pool area, portaloos, gas barbeques (Weber Qs and others) on the verandahs, and refrigerator space.

Access to the tree-planting stretch is only by 4WD vehicles, so please bring one if you have it, as well as the usual gloves, boots, hats, raincoats, camping kit and your own food for Sunday and Monday.

RSVP by Sunday 29 September please, to John Boyd and Narelle Moody – Phone: 02 64537209, narelle@crookshanks.com.au, or via Margaret.Ning@fog.org.au.

2019 ACT workparties at <u>Stirling Park</u> and <u>Yarramundi</u> and at <u>Hall Cemetery</u>

Your help is needed and always welcome.

Tools are provided. You need to wear gardening clothes (including hat) and solid footwear appropriate for the work and the weather, and bring your own drinking water. The workparty convenor provides morning tea, making these into pleasant social occasions.

Please **register by two days before** the workparty so there are enough tools and tea for everyone, and so you can be told if the weather forecast has led to a cancellation. Workparties are cancelled if there is lightning; or there is heavy rain; or the forecast is for 35°C or more; or there is a total fire ban.

When you register, you'll be sent more details about the workparty, such as tasks, targets, and where to meet for Stirling Park in Yarralumla. Yarramundi Grassland is at 245 Lady Denman Drive, ACT 2611.

<u>Stirling Park - Gurubung Dhaura,</u> 9 - 12.30

Sunday 29 September and
Sunday 27 October and, looking ahead,
Sunday 24 November also.

To register: Jamie.Pittock@fog.org.au, ph. 0407 265 131.

<u>Yarramundi Grassland, 9–12.30</u> 245 Lady Denman Drive, ACT

Sunday 29 September

To register: Jamie.Pittock@fog.org.au, ph. 0407 265 131.

Hall Cemetery woodland, 9–12.30 Wallaroo Road, near Hall, ACT

Saturday 5 October and Saturday 2 November.

To register: John.Fitzgerald@fog.org.au



Two other tempting views of 'Crookshanks', including Peak Creek in 2018

(at far right). Photos from Narelle Moody.



FOG Advocacy by Naarilla Hirsch

July

- 1. The final draft of the Molonglo River Reserve Reserve Management Plan has been completed by the ACT Government. The next step is for the plan to be tabled as a disallowable instrument in the Legislative Assembly. Both the Plan and a report of the consultation undertaken during preparation of the Plan are available on the ACT Government's 'Your Say' website, https://www.yoursay.act.gov.au/. FOG made a submission concerning this Plan in March 2018. While I haven't been through it in detail, on a quick look it appears that some of our comments have been addressed, but others not. In some cases the argument was that it wasn't necessary not a view we would agree with in terms of action on the ground.
- 2. The Commonwealth asked for comment on another part of the Snowy 2.0 project, a proposed segment factory on Polo Flat Road in Cooma. The proposed site avoids much of the remaining Natural Temperate Grassland (NTG), and the quality of the NTG is low, but after drawing attention to FOG's work on the grasslands at the nearby Old Cooma Common with its threatened species the Monaro Golden Daisy, FOG suggested that protection and enhancement of larger NTG patches in the area would be worth investigating as a way to ensure no net loss of critically endangered NTG.
- **3.** The National Capital Authority asked for comment on the proposed Concept Plan and revised Development Control Plan for Blocks 4 & 5 Section 38 Campbell. FOG understood that there are no identified conservation values within the development area. However, it expressed concern about inadvertent damage to the critically endangered NTG and Yellow Box—Blakely's Red Gum Woodland adjacent to the development site, and recommended several actions, including cat containment, fencing of the entire grassland and woodland area during the construction period, and landscaping within the development area to exclude species that may become invasive.
- 4. There has been an Environment Protection and Biodiversity Conservation Act (EPBC) referral concerning the ACT City-to-Commonwealth-Park Light Rail and Commonwealth-Park-to-Woden Light Rail projects. The areas of Golden Sun Moth (GSM) population and habitat to be impacted are relatively small but are nearby other areas subject to EPBC referrals in the past two years. FOG expressed its concern about the piecemeal approach with development applications in this part of Canberra, as well as its concern about the effectiveness of biodiversity offsets, particularly when the offset is small. FOG considered it important that an Environmental Impact Statement be produced for this project, to determine the impact on the GSM.

Other

The *Canberra Times* reported (22 July) that Boral have been granted approval to clear native vegetation for an upgrade to its Symonston quarry, ACT. The article quoted from FOG's submission (4 March 2019) about concerns with the referral.

The full text of FOG submissions appears on our website.

A warm welcome to our newest members!

Peter Woodbury, NSW; Julia Rayment, NSW.

Message from the President

As usual I am pleased to report that FOG's endeavours, across a huge range of our activities, are going not only well but spectacularly well.

This year, our supported projects team led by Andrew Zelnik attracted 11 applications for FOG grants, through wider advertising. Applicants have been informed of their success or otherwise, and those who missed out have been advised about other assistance FOG may be able to provide. We will report more about this, probably in the next edition of the newsletter.

Thank you everyone who has made donations to the FOG Public Fund, enabling our grants program to continue. Just before the end of June we received nearly \$2000 in donations to the Fund, taking the total balance to just below \$4000. This was a welcome influx, and it came after the May–June 2019 Newsletter published articles about the FOG Supported Projects. In fact, anyone (members and non-members) can make tax-deductible donations to the Fund at any time. Details are provided on our website at http://www.fog.org.au/donations, and on the back page of this newsletter.

A recent 'workshop in the field' at Franklin Grassland Reserve (north Mitchell, ACT) was attended by (ACT) Minister Gentleman, Suzanne Orr MLA, a representative from the office of James Milligan MLA, and a number of staff of ACT's Environment, Planning and Sustainable Development Directorate (EPSDD). There were also representatives from the office of the Commissioner for Sustainability and the Environment, and from Ginninderra Catchment Group and from Gungahlin Community Council, as well as many members of FOG. FOG's Committee has established a project group to further our contribution to the establishment of a Franklin Grassland conservation and recreation reserve. The draft concept plan for the reserve can be found at my personal dropbox (accessible to all): https://www.dropbox.com/s/atedpacgbdqjrdc/Franklin%20Grassland%20Concept%20Plan.pdf?dl=0 . Please let me have your comments.

Our advocacy role behalf of grassy ecosystems seems to have no pause. Recently the *Canberra Times* publicised one of our submissions on grasslands. And on 29 July, I attended the planning forum at Yass Valley Council to talk through our recent submission on the 'Ginninderry' development in NSW, north-west of ACT.

The media interest in involvement of MP Angus Taylor in grassland clearing on the Monaro has led a number of people to comment to me on the matter. I hope the media attention has raised the importance of Natural Temperate Grasslands in the public's mind.

FOG has become a large, highly skilled and complex organisation. We need volunteers to continue and coordinate this effort. Sometimes even a little effort can go a long way, and I would be more than pleased to talk to anyone who wonders if he or she may be able to make a contribution.

Margaret and I are enjoying a trip to Cape York. We will be back around 15 September and we hope to hear from many of you then.

Geoff Robertson



Articles

Stubble Quail Coturnix pectoralis - a ground dwelling bird that's shy and rarely seen

Michael Bedingfield

Whenever I've seen a quail I've been walking through long grass and been startled by a flurry of wings as one or two of them emerged from just in front of me and flew, rapidly and low for 50 metres or so, then dropped to the ground, only to disappear into the grass. They have always been too quick for me recognise what species they were. But I've discovered that if you have a good eye it is possible to recognise these shy creatures in flight.

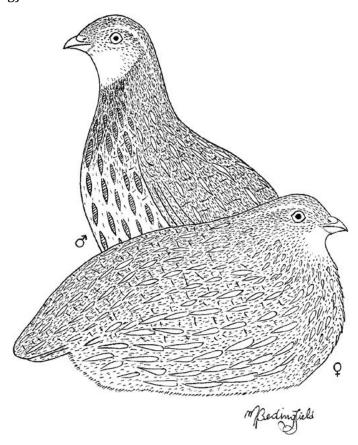
Stubble Quails are ground-dwelling birds that feed on seeds and insects. They inhabit natural grasslands, but are also happy with exotic grassy areas, green crops, cereal stubble, shrublands, saltbush country and swamp margins. They occur mainly in temperate Australia, especially in the south-east and south-west. They prefer areas with good rainfall but they can be nomadic and will move into the arid areas after heavy rain. They will sometimes also drift into northern tropical areas but they have become extinct in Tasmania. Land-clearing by European settlers has increased their habitat possibilities, but grazing by introduced herbivores has reduced some of their former territory. Overgrazing of any kind makes their habitat unsuitable and that includes by kangaroos. Their main predators are foxes and cats but in some parts of the country it is legal for people to hunt them too.

They make their nests on the ground, making a scrape on the bare earth lined with a little grass. Reasonably dense cover is required, and in grasslands the nests are concealed amongst the tussocks. Usually 7–8 eggs are laid but they are known to lay up to 14. In the Canberra region they will breed from August into the warmer months. But throughout their range they can breed at any time of the year. They respond to rainfall, the growth of vegetation and the availability of food. Several broods may be produced in a given season. The female incubates the eggs alone for 18–21 days. The chicks are led away from the nest very soon after hatching. Both parents protect the chicks until they are almost full size. Despite the period required for egg laying, quails' eggs hatch at the same time. This is an interesting accomplishment and studies have been done to try to work out how the embryonic chicks synchronise so well.

The Stubble Quail has the scientific name *Coturnix pectoralis*. There is only one other quail species that resides and breeds in the ACT, and that is the Brown Quail *Synoicus ypsilophorus*. We also have the Painted Button Quail *Turnix varius*. The scientific names have been revised and you will see different names if you explore further. The names I've chosen for this article are from the website of the Canberra Ornithologists Group (COG).

The Stubble Quail is very similar in appearance to the Brown Quail and both are grassland birds. When flushed from cover they both take off with a rapid burst of wing beats. If you look carefully at them in flight you can distinguish them from the colours on their backs. The Stubble Quail has a streaked back and the Brown Quail a dark brown back.

The Stubble Quail is a plump bird with a short tail and is well camouflaged. Above, it is dark and light shades of brown and grey with off-white streaks. Below, it is cream-coloured with darker streaks. The male has an orange or light chestnut throat while the female has a whitish throat. It has a high-pitched whistle of 'tichyee-weep' or 'cuck-ee-whit' as well as a sharp 'too-weep'. If you can



recognise their call it is possibly the best way of knowing their presence. The male calls at dawn and dusk as a territorial statement. The adult male is about 18 cm from beak to tail and female about 19 cm.

The most similar local bird is the Brown Quail. It has the same body shape and size and is coloured shades of brown with the underside being lighter.

While the Painted Button Quail is similar in appearance to these two quails it is quite different in other ways. It dwells in forests and woodlands and, more interestingly, it is polyandrous. This means that the larger female has a dominant role and will defend her territory against other females. She has a loud call, "oom-oom-oom...", while the male is usually silent. She will court with several males in a breeding season, leaving each male after the eggs are laid. The males raise the chicks.

According to the COG website the Stubble Quail is an uncommon, breeding resident of grasslands in the ACT. There is a lot to learn about natural grasslands, and secretive birds like this one add a mysterious charm to their exploration.

References:

Taylor M. & Day N. (2013) *Field Guide to the Birds of the ACT*, 2nd edition. National Parks Association of the ACT.

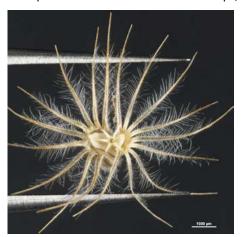
Numerous authors (1976) Readers Digest Complete Book of Australian Birds.

https://en.wikipedia.org/wiki/Stubble_quail http://www.birdsinbackyards.net/species/Coturnix-pectoralis http://canberrabirds.org.au/birds/stubble-quail/

Close-up on spiky spikelets by John Fitz Gerald

This time I've looked into two small native grasses with inflorescences that are both pretty and astonishing when viewed at higher magnification.

The first is *Enneapogon nigricans*, Nine-awned Grass. This tough little plant is often found in thin stony ground where other bigger grasses cannot get established. Its inflorescences are easy to find and, when just mature, show many structures poking out in all directions (photo 1). Many spikelets drop out of this assemblage and are moved about by wind and water. Each spikelet has two developed florets, one fertile, one infertile, both of which bear nine soft awns (photo 2). This image, of a spikelet balanced on two tweezer tips, reveals the sets of attractive



2. A spikelet of Nine-awned Grass showing two developed florets, each with nine plumose awns. Spikelet is balanced on fine-pointed tweezers (top and bottom of image). Scale bar = 1 millimetre.



4. Part of an inflorescence of Tragus australianus showing branches, spikelets and florets with curved spines on their backs. Scale bar = 1 millimetre.

I'd like to thank the Grass Group of ACT's Australian Native Plant Society who guite

often give me information and inspiration for closeups. Linda Spinaze provided the

the Parliamentary areas.

plumose and curved awns extending from two florets. A small five-branched structure at its centre appears to be, as far as I can work out, an incomplete third floret. The florets also have an impressively hairy surface - see one to the right in photo 3. A fertilised floret contains one seed; I gathered plump and shiny seeds from six of them

into this image.

This grass grows mostly in South Australia, New South Wales and Victoria but has been collected in all states and territories

> My second choice is Tragus australianus, Small Burrgrass. It is a truly spiny plant, with many reddish spikelets branched along each inflorescence (photo 4, left). Each floret here is covered by curved stiff spines. In this grass, if spikelets and florets break off the inflorescence, they can be distributed.

Photo 5 (right) shows one broken branch with several florets and their curved spines. Four seeds are imaged to the right; I collected these by breaking

open some florets. This grass grows across mainland Australia, generally, but not everywhere, away from the coasts. A note about it in the ACT: it is an introduced species here and not very common. It seems to have been trucked in with fine white gravels that have been used to surface some roadsides, particularly around

5. A branch (left side) broken to show detail of the florets and curved spines. Four seeds (right side) were broken out of other florets. Scale bar = 0.5 millimetre.

Tragus specimen here. Two other members of the Grass Group I'd particularly like to acknowledge are also FOG members: Merren Sloane and Ros Cornish. Thanks to all.

These micrographs were taken at the National Seed Bank of the Australian National Botanic Gardens. They can be reproduced freely if attributed and linked to the Creative Commons licence CC BY, http://creativecommons.org.au/learn/licences/.



1. Inflorescences on a tussock of Nine-awned Grass.



3. Abundant hairs along the nine awns of a floret to the left, which also is covered in dense hairs. Six seeds are shown to the right, gathered from six florets. Scale bar = 0.5 millimetre.

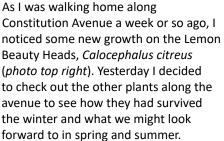
Sources of information include: Grasses of New South Wales, Fourth Edition, by S.W.L. Jacobs, R.D.B. Whalley & D.J.B. Wheeler. University of New England; and Atlas of Living Australia, www.ala.org.au

Accentuating the positive - native plantings on Constitution Avenue, ACT

by Janet Russell



When Constitution Avenue, Reid, was revamped in recent years, the plant beds on either side of the road and the median strip were almost exclusively planted with grassland and woodland species. In one section, exotic lowgrowing shrubs were planted close to Coranderrk Street. There has been extensive use of *Lomandra*, and particularly along the median strip they are thriving. They provide a striking visual impact (*photo top left*).



A seemingly hardy survivor I found surprising was the Leek Lily, Bulbine semibarbata (photo left). They are annual or biennial herbs. They have been touched by frost and displayed some rusty leaves. They have been planted amongst Weeping Grass, Microlaena stipoides. This grass has struggled to flower so far but in spite of that they persist. The grasses (photo right) would certainly do much better and look more attractive after a good fall of rain.





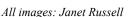


One of the flowering species that is not a local is Drumsticks, *Pycnosorus globosus* (*photo left*). They had a beautiful long-flowering display last year. The plants shoot from the base and I noticed that the silvery new growth is now about 10 cm high. I also looked more closely at the Lemon Beauty Heads and there are quite large numbers of these plants and all looking good. I even came across one plant with

several flowers showing their yellow colour already (see photo above).

Two Hoary Sunrays, Leucochrysum albicans, were flowering (photo right), and there seemed to be some recruitment. There were what I thought were Cut-leaf Daisies, Brachyscome multifida, planted. Not many appeared to have survived, and the ones I did see were burned by the frost.





I took a walk again today without my eyes focused on the native plants and was dismayed by the number of weeds evident. It speaks to the preparation needed to successfully create a grassland landscape. It also speaks to the benefits of spending more of one's time looking closely at the native plants instead of the weeds.

When is a weed not a weed? by John Stafford (member of NGRG, South Australia)

This article is reprinted, with permission, from NGRG eGrassnotes, no.52, Autumn 2019.

An answer to the question that is posed in the above heading might be: When a friend is sadly mistaken for a foe.

Morphology alone rarely defines any plant as a weed. Rather, it is an economic rationale that declares a plant species to be the cause of financial losses in farm production through competition and/or crop contamination: for example, *Chloris truncata* is known for its ability to deplete summer fallows of their moisture reserves, along with soluble nitrogen.

Uncultivated summer fallows in minimal tillage cereal cropping are currently under threat from increased invasion by this *Chloris* species. As a more specific example, in a Native Grass Resources Group vineyard trial, *C. truncata* that was established as a mid-row ground-cover reduced fruit yields by 45%. The Grains Research and Development Corporation now regards this native grass as a major weed.

The majority of weeds on our island continent have at least one consistent distinction: they are of exotic origin. Having escaped the various forms of predation that existed in their native ecosystems, they now exhibit an unfettered vigour by which they invade and wreak havoc in their new environment.

In contrast, *C. truncata* is even more Aussie than meat pies and AFL football. If there is one true team player in our landscape, it ought to be this one.

Yes, this short-lived perennial grass can be very invasive of disturbed sites – thus exhibiting a weed-like behaviour – but might we be confusing this activity with a very different trait?

Chloris truncata is seldom found growing in a well-established native grass pasture. However, it can form an initial monoculture when soil is left exposed. I vaguely recall reading of a trial where C. truncata and Microlaena stipoides were sown together. Initially, the Chloris grew as the dominant species but eventually gave way to an increasingly invigorated Microlaena. Might it be that our currently maligned native has not turned rogue to become a weed, but is maintaining a long-established trait as coloniser?

2 3 L 5 6

These six pots have sweet corn growing in them. Three of them (pots 1, 3 & 5) have had *Chloris truncata* leaf litter added. This was subsequently inoculated with the plant-based suite of aerobically generated microorganisms.

Efforts are now being made to apply the basic components and/or functions of this procedure to pastures and commercial cereal crops.

Photo courtesy of John Stafford.

The aforementioned trial with *C. truncata* in a vineyard produced some results that were initially very difficult to interpret. Moisture-sensing gypsum blocks were located at depths of 20, 40 and 60 cm in the vine mid-rows of three plots:

- (1) under a Rytidosperma sp.,
- (2) under an annual cover crop which varied from year-to-year, and
- (3) under *C. truncata*.

As expected, the majority of readings obtained via the gypsum blocks showed that the depletion of soil moisture began in the topsoil and ended in the subsoil at 60 cm.

However, under *Chloris*, there was an exception. The soil at a depth of 40 cm was shown to finally hold more moisture than that at 60 cm. A later installation of capacitance probes showed the gypsum block readings to be misleading. When, after five years, the deteriorating *Rytidosperma* was displaced by invading *C. truncata*, the same misleading readings reoccurred.

Gypsum blocks measure soil moisture by varying the flow of electric current between two separated wires. The more moisture in the block, the greater the flow of electric current through an amp meter. However, any rise in soil acidity that is transferred to the gypsum blocks would also increase the flow of electric current.¹

Was this false interpretation of soil moisture levels simply an indication that *C. truncata* (our probable coloniser) was doing something far more significant within the soil than we were aware of?

The vineyard trial was about to produce even further surprises.

With no substantial benefits having been observed from the presence of native grasses in the vineyard, a solution

of aerobically digested biomass produced from the foliage of a broad selection of herbaceous plants was applied to the base of vines in just two rows of a ten-row block. Subsequent comparison with adjacent vine rows showed no visual response from this application. Only when vine fruit yields from the whole block were examined did it become obvious that vines that were associated with *C. truncata* had trebled their previously depleted yields to almost double the fruit yield of the control.

Fantastic results can also prove to be very frustrating. Despite numerous attempts at growing a variety of potted plants in a hot house, both with and without *C. truncata*, along with an application of the digested biomass, no significant or consistent results were obtained.

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That wasp's real identity: Hatchet Wasp, Evaniidae sp. (family)

Michael Bedingfield

In our last newsletter (July—August) we had a nice article from Jenny Liney about her seeing a mysterious bug that she could not identify. On seeing my story about the Grass-carrying Wasp *Isodontia* sp. (genus) in the May—June newsletter Jenny thought she had found a name for it. However, the photos she submitted to our editor were actually of a Hatchet Wasp, of the family Evaniidae.

Like the Grass-carrying Wasp, Jenny's insect (as in her photo below) was black and had a narrow waist or petiole. But the shape of the abdomen and the overall body posture are quite different. The abdomen of a Hatchet wasp is quite flat on each side, being compressed laterally, and resembles a hatchet or flag. When at rest it pulls the abdomen forward so the petiole is hard to see and the posture becomes quite compact. When moving around the wasp jerks the abdomen up and down constantly. It is a parasitic wasp and the female lays her eggs into the freshly laid egg cases of cockroaches. The egg cases



are known as oothecae and one egg is laid for each ootheca. When the wasp egg hatches, the larva eats the cockroach eggs and then pupates, later emerging as an adult.

Hatchet Wasps are also known as Ensign Wasps and the adults feed on flower nectar. The specimen in the photo below, taken at my home, was 10–12 mm in body length.

Thanks to Jenny for unintentionally introducing us to this interesting wasp!



Wasps can be difficult to identify and many look very similar to the untrained eye. Some that are superficially similar may be, as in this case, from a quite different family. So we are fortunate to have the free identification services of such websites as Canberra Nature Map with its NatureMapr platform covering the local area of ACT and south-east NSW. It is continuing to grow and a new addition is the Southern Highlands Nature Map website. More to come!

When is a weed not a weed? continued from previous page

I had assumed that *C. truncata* had created a pool of organic nutrients that probably resided in or adjacent to the soil rhizosphere. It now appears that this was my big mistake. Current observations seem to be confirming that the acquisition of organic nutrients takes place only when a specific plant-based aerobically-generated inoculant is applied to deposited *C. truncata* leaf litter. This new revelation could be great news for our much-maligned native *Chloris*. This "weed" that is occupying summer fallows might need only to be mown and then treated by the simple process of applying the liquid inoculant via a boom sprayer in order to procure very beneficial nutrients for a subsequent winter cereal crop.

Any advance on doubling the yield of a vineyard??

Further reading:

Jacoby R., Peukert M., Succurro A., Koprivova A., Kopriva S. (2017).

Microorganisms in plant mineral nutrition – current knowledge and future directions. *Frontiers in Plant Science* **8**:1617.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5610682/

Pizzio G.A., Regmi K., Gaxiola R. (2015). Rhizosphere Acidification Assay. *Bioprotocol* **5**(23): e1676. DOI: 10.21769/BioProtoc.1676.

¹ "Rhizosphere acidification is a central mechanism for plant mineral nutrition since it contributes to nutrient solubility ..." [quoting G.A. Pizzio and co-authors].

'Rhizosphere' is the general name that is given to the parts of the biosphere in which roots grow.

Windmill Grass Chloris truncata Image by Michael Bedingfield



This photo is on Canberra Nature Map, and is reproduced here with Michael's permission, just in case others (besides this editor) are not sure what the native grass *Chloris truncata* looks like.

A reminder to readers who do not already get two newsletters: you are able to receive both the printed version and the emailed pdf version of News of FOG if you wish. Just tell the editor, newsletter@fog.org.au. You can ask for the smallish web file or a hi-res larger file. In the pdf files the photos are in glorious colour!

Recent FOG activities

Stirling Park - Gurubung Dhaura workparties, 29 June and 25 August

Top 2 rows: Vinca-slaying working bee along Haines Creek at Stirling Park on Saturday 29 June.

Top row, left & right: View of the workers from upslope.

Next row, left to right: The team in action, with FOG secretary Paul Archer, in foreground with his trusty 'Victa the Vinca slayer'; the trio of Vinca vanquishers in action, with Paul Archer in the background in yellow vest; The resident Grey Butcherbird who was very busy taking full advantage of the bush tucker we were scaring up for it;

and ... Vinca revenge! Paul holding a rusty engine exhaust manifold that could have done Victa in.

Photos in top row and at bottom page are by Jamie Pittock. Middle row photos are by Andrew Zelnik.













Below: On Sunday 25 August, grassy woodland restoration by chainsaw was undertaken by 11 FOG volunteers at Stirling Park. Blue Gum saplings (weeds in this area) were felled, and the cut timber was used to protect woodland regrowth from roos and mowers. In further good news, extensive spraying by National Capital Authority contractors 'EnviroAg' has commenced, to mop up weed infestations that FOG teams have mapped.







Franklin 'Workshop-in the Field', 16 July by Rosemary Blemings (with Ann Milligan)



Suzanne Orr MLA, a local resident (now an ACT Government Minister), speaking at the start of the walk, in the remnant and planted woodland area at the site's north-west corner. *Photo: Andrew Zelnik.*



Lemon Beauty Heads *Calocephalus citreus*, a dormant beige clump in the winter grassland. *Photo: Ann Milligan*.



Above: The dam beside Well Station Rd, with native *Typha* spp. The distant apartments are along Flemington Rd. *Photo: Andrew Zelnik.*



Flemington and Well Station roads and two suburban Franklin streets frame the 22 hectare space, perhaps awaiting a suitable Ngunawal name, and currently known as the North Mitchell or Franklin Grassland. The light-rail line runs right past it. If they glance up at all, passengers might wonder why the expanse of winter-beige rank grass has not been built on.

The area has been spared development because it provides habitat for the rare Striped Legless Lizard *Delmar impar* and the Olive Legless Lizard *Delmar inornata*. Also, in 2012, populations of the endangered Ginninderra peppercress *Lepidium ginninderrense* were discovered here by Nicki Taws (of Greening Australia). Prior to that, the Lawson Grasslands 6 km away were considered the only site in the world where the small plant existed.

Geoff Robertson MC'd this Workshop-in-the-Field he had organised to assemble grassland experts, landscape restoration proponents, citizen scientists and land management specialists to share experiences, knowledge and suggestions for how to develop the site as a special place. See Geoff's President's Report above (p. 3) for his notes, and for a link to the Concept Plan for this site.

In a two-hour walk through the site, participants saw the ephemeral wetland at the south-west corner, the weedy woodland at the entry point, patches of good grassland groundcover towards the south, and the dam at the north-east side. Guest speakers included Suzanne Orr MLA, who said this area is a community asset and she wants it seen as that. Peter Hazell, of the Mulloon Institute, showed us how to look for steps – from large to very small – in the landscape, directing rainfall runoff and catching seeds and nutrients as well as moisture. Then Donna Hazell, of NSW Biodiversity Conservation Trust, an expert on plants around wetlands, pointed out the drainage lines through the site and the values of the ephemeral wetland at the south-west fenceline. She also explained how the thick *Phalaris* growth there offers protective structure for frogs, lizards, etc. It doesn't like dry soil and overgrazing. Its deep roots build up soil organic matter at depth.

On marginally higher ground farther on we found grassland forbs including *Tricoryne elatior, Chrysocephalum apiculatum*, a few Blue Devils and surprisingly plentiful beiged-off Lemon Beauty Heads. These reminded us of native species' usual need for 'good drainage' as they were often on gravelly patches with only lichens and sparser mosses as companions. Later we found *Asperula conferta*, Common Woodruff, that was present in clayey places scattered among the other habitats. Guest speaker Karissa Preuss of Ginninderra Catchment Group pointed out that this site is an opportunity for urban learning of the value of grasslands.

Clare McInnes, ACT Manager of Environmental Offsets, also a guest speaker, said this site is a category 1 offset for the development on Dudley St in Yarralumla — that is, it has highest priority for protection. Greg Baines (ACT Parks & Conservation) spoke of 13 years of monitoring at Franklin, with changes in the grass species including the *Themeda* in the lower-lying areas. Kangaroo Grass (*Themeda*) is a good coloniser and provides biomass as food and cover for fauna.

In the concluding discussions, suggestions included an asphalt path around the grasslands; nature-play raw materials in the woodland to stimulate imaginations; signage to explain why the grassland will have no paths nor shrubs and trees among the wildflowers and native grasses; that the debris piles at south-east could be set aside for cyclists to create BMX-style tracks (away from the grassland). Such a play area might be a challenge for some ecologists to swallow, but perhaps it can be a 'sacrifice' area to conserve other species?

Equally exciting from this final discussion were the varied prospects for interagency co-operation, sharing of skills and the inevitable costs of bringing people closer to their own neighbourhood's nature; trying to respectfully utilise the grassland asset for the community's needs simultaneous to preserving Franklin Grassland's natural treasures.

Left: One of the debris piles south of the dam and between Well Station Road and the drainage line, suggested as a potential BMX-style bike play area that would be more fun than biking through grassland. Photo: Ann Milligan.

Visit to Travelling Stock Reserves near Bungendore NSW, 23 August by Andrew Zelnik

On a glorious spring day, 37 people wandered around the Sweeneys, Duck Flat and Doughboy TSRs, north and south of Bungendore. Thank you, Rainer, for leading us and sharing your knowledge and joy with us, making it a very enjoyable day!



Our group, including ecology students from Canberra Institute of Technology (light green safety vests), being addressed at Sweeneys TSR by Lesley Peden (Molonglo Conservation Group) & Rainer Rehwinkel (FOG).



A male native ground weevil, Amycterus sp., playing dead on Kim Pullen's hand at Sweeneys TSR.



Above: Snow gums (Eucalyptus pauciflora) at the low end of Sweeneys TSR. All three TSRs visited have Werriwa Tablelands Cool Temperate Grassy Woodland, recently listed (28 June 2019) in NSW as a Critically Endangered Ecological Community. It is woodland characterised predominantly by Snow Gum and codominated by candlebark (Eucalyptus rubida subsp. rubida).
 Yellow-Box-dominated Box-Gum Woodland is also here, listed as Endangered in NSW and Critically Endangered nationally.



Above: Bitter Cryptandra Cryptandra amara at Sweeneys; each flower was about 1/3 the size of a visiting blowfly (not shown).



Purple Wiregrass *Aristida* ramosa at Doughboy TSR.



Above: Variable Sword-sedge Lepidosperma laterale, among the tussocks of Red-anthered Wallaby Grass Rytidosperma pallidum at Doughboy TSR, and (photo at left) close-up of the flower head. L. laterale is moderately common and widespread on the Southern Tablelands.



Black Gum *Eucalyptus aggregata* at Duck Flat TSR. This rare, threatened species is listed as Vulnerable. It occurs across the Southern Tablelands and on the NSW Central Tablelands and in Victoria.





Left: Ploughshare Wattle Acacia gunnii close up, with fruit pods, creamy flowerheads and small sharp triangular (and finely hairy), phyllodes, at Doughboy TSR. This small shrub is not common but is widespread in

grassland, woodland and dry forest on the NSW Southern Tablelands.

Left: Approaching the dam on Duck Flat, with E. aggregata beyond the dam. We found a mussel shell and yabby claw here. Photo by Rainer Rehwinkel.

All other photos by Andrew Zelnik.

Visit to Rick Farley Reserve. 8-12 July

Cathy Robertson

I was one of 52 people who visited Rick Farley Reserve from 8 to 12 July to take part in Malleefowl Dreaming organised by fabulous elders Mick Kelly and Geoff Simpson, of Mothers Ancestral Guardians Indigenous Corporation (MAGIC). Mick and Geoff work with the Knowledge Services Team at Department of Planning Industry and Environment (previously NSW Office of Environment & Heritage).

The reserve is an area of 12,500 acres (5060 ha) bordering Lake Mungo National Park and the Willandra Lakes World Heritage Area, recognised for its cultural and spiritual significance for Aboriginal people. FOG members were given the opportunity to participate in the event, although eventually only four attended.

Day 1, Monday, was a laid-back time, settling into the camp and meeting other people. Due to earlier rain, we had to travel via Mildura, rather than Balranald as originally planned, arriving late in the afternoon. Sandy Booth, Principal Research Officer, Knowledge Services Team, working with Mick and Geoff, asked us to complete a survey on our thoughts and feelings the previous day with regard to country, kinship, culture and lore. Further surveys followed activities over the next few days.

Day 2, Tuesday, we drove to 'The Amphitheatre' and looked around at animal tracks, etc., before continuing up higher to see where water had reached long before. The last stop was at a source of white ochre, where we had a great view (and younger group members were happy to find we had phone reception)! This was followed by a ceremony, around a large depiction, in white ochre, of the malleefowl sculpture, surrounded by a number of small fires. Geoff talked about the head, neck, heart, gut and feet – their connections to each other and to the mother. He asked us to reflect

L–r, t–b: Malleefowl mound; Cathy at Malleefowl sculpture; visit to the Amphitheatre; the four-way camera trap. *Photos: Geoff Robertson*.







At top l-r: Cathy Robertson, Eren Turak, Mick Kelly and Geoffrey Simpson.

Below: Sunrise near our campsite. Photos: Geoff Robertson.

on our part, or our responsibility, in life, but also said we should follow what we love. It was a moving experience as we engaged in reflection and I realised that Geoff was not just describing but really *including* all of us there. That night we were pleasantly surprised to be invited to a delicious dinner of kangaroo and/or goat curry, freshly caught by Mick that morning!

Day 3, Wednesday, began just near the camp, where CCTV cameras have been set up to get photos of animals coming from all directions. This is a big improvement on the pit trapping method used previously, and even on a CCTV camera from just one direction. Eren Turak,

(Principal Scientist Biodiversity Research and Assessment, Department of Planning Industry and Environment), who with Mick had

designed the set up, also placed different sand below the camera to capture animal tracks. Since this initiative a much greater amount of data has been collected, e.g. 32 species of reptiles have been recorded in approximately one year, as against 26 recorded over 24 years! Eren is looking for volunteers to help with identifying what has been captured under the new system, and a library of video images is being put together.

This activity was followed by a return to the malleefowl sculpture to recall what we'd remembered. Geoff also explained the four kinship groups and how they function. Next we went for what was a longish walk for some (6 km return) looking for malleefowl nests. Children were given iPads with an app set up by Eren listing the recorded and potential species at the Reserve. Mick also handed out a piece of mallee root and explained

Visit to Rick Farley Reserve, continued



L-r, t-b: Blue Bonnet parrots (not previously sighted at the reserve) looking over the Amphitheatre. A Brachyscome daisy; An Eremophila flower; A tree lichen; A shining skink (Cryptoblepharus carnabyi).

Photos: Geoff Robertson.

that water comes from the roots, and rope or even spears can be made out of them. Although we only found one old malleefowl nest, people enjoyed trying to photograph and identify native birds and flowers. Eren proudly announced that two new bird species had been identified during the activity. The day extended into evening with more delicious food, then sitting together around a large fire while Geoff played the guitar, accompanied by his daughter Ivy and others singing.

On Day 4 in the early hours (for this writer anyway) there was a wild wind humming loudly for around an hour, followed by light rain. Later we had a talk by Mick who drew an Aboriginal lifecycle in the earth, explaining how we start from spirit and move through life to a phase beyond elders. He also explained how Aboriginal moieties determine one's life partner. This was

followed by another drive and short walk to look for more malleefowl nests. This time we found two, plus another possible one. In the evening we sat around a big fire again – a smaller group, as some people had left earlier in the day.

Day 5, our last day, we set off at around 8.30 am, reaching Balranald for brunch and a final goodbye, before the long trip back home to Wagga for some and Canberra, even Sydney, for others. This non-indigenous, non-scientist felt she learnt a lot from the trip, about Aboriginal culture, how it is being shared, and how society and the environment could gain so much through this. I thoroughly recommend the experience of the Rick Farley Reserve. Thanks to Mick, Geoff and my fellow travellers for a truly out-of-this-world experience and a chance to learn.

A useful link for using mapping software

Sarah Sharp writes:

'Here's a link that might be useful to guide people aiming to produce maps with Google Earth Pro (a free download):

https://www.environment.nsw.gov.au/resources/grants/180063-mapping-guide-restoration.pdf

Editor comments: The link opens 'Guide to Developing Maps for NSW Environmental Trust grant applications' (2018), which provides a link to Google Earth Pro (for Mac or PC) on its page 2. The remaining 18 pages give instructions for producing a map of your site of interest in NSW, with markings on it showing (in this case)

project area and relevant elements of interest in relation to that site.

Another link, https://www.google.com/earth/versions/, seems to be generic. It says on that page: 'Create maps with advanced tools. Google Earth Pro on desktop is free for users with advanced feature needs. Import and export GIS data, and go back in time with historical imagery. Available on PC, Mac, or Linux.' And then there is a link to 'Download Earth Pro on desktop'.

Awn study by Annette Cavanagh now published

Annette writes:

I have successfully had my Honours study on grass awns, which FOG funded back in 2017–18, published in the *Australian Journal of Botany* (2019) vol **67**, pages 309–334. https://doi.org/10.1071/BT18216

'An awn typology for Australian native grasses (Poaceae)', by Annette Cavanagh, Robert Godfree and John Morgan.

. . . .

Annette wrote about her work for FOG: 'Awn structure influences dispersal and burial of Australian grass seeds', in *News of FOG*July–August 2018, on pages 8 & 9.

Ngulla Firesticks Cultural Burning by Geoff Robertson

I was very flattered and pleased to receive an invitation through the ACT Parks and Conservation Service (PCS) Fire Unit to attend the Ngulla Firesticks Cultural Burning Forum in Ulladulla on 14 June 2019. The forum was open to Aboriginal and non-Aboriginal persons who were "keen to actively develop and promote a Ngunnawal Cultural Burning program, develop networks or would like to learn more about Cultural Burning".

About 100 people, mostly Aboriginal people, attended. The participants included a large contingent Rural Fire Service staff and volunteers plus a contingent of PCS staff. All had some experience with fire. I was super impressed by the presentations. Many young presenters showed they had learnt that through burning "done the right way" they had become fluent with culture, lore, language and nature. Less than ten years ago, a few isolated people such as Rod Mason were demonstrating traditional methods of burning. That ignition has led to a raging fire – excuse the analogy. One gifted presenter said that five years ago he could not have imagined talking to such an audience because he couldn't read or write.

People involved in traditional burning have managed to negotiate rolling back many of the health and safety restrictions, such as wearing hard hats, as burning is considered safe. One presenter told a story about his own experience when leading a fire team. A fire fighter observing a fire expressed concern that young burners were not wearing shoes. The leader said he always wore fire boots. The observer remarked that the leader was wearing thongs. "That's right," said the leader, who then used his thong to beat out a fire.

On a more serious note, most speakers argued well and forcibly about the need to use traditional fire management practices. They argued that normal 'control burns' need to be reconsidered. Many speakers said that we should not think of cool burning, cultural burning nor fire stick farming (terms used for traditional burning) as a peculiar Aboriginal culture method. After all, fire is fire and it needs to be managed the right way. The right way results in removing unwanted litter but does not destroy the vegetation in the process nor cause crown fires which many 'control burns' do.

Several short films illustrated how forest floors, littered with dead leaves and no understorey, came to life with many grasses, herbs and small shrubs following a burn. These new patches attracted insects and smaller animals and also their predators such as quolls.

Another example illustrated repeated cool burns around a house surrounded by forest. In the devastating 2016 Tathra fire, the forest was badly burnt but the fire did not enter the previously burnt area nor burn the house. Other aerial photos showed surviving green patches which had been culturally burnt. Speakers stressed burning often but burning less; that is, frequent fires keep vegetation alive and avoid major conflagration.

Another speaker talked about the important link between fire and culture. Use of fire helped people to understand the Aboriginal knowledge and their affinity to the land. People should be discouraged from divorcing fire from its broader cultural context.

Some FOG members will be familiar with Dean Freeman who heads up PCS Fire Unit, the Murrumbung Rangers. He spoke of the use of fire in the ACT, and how it was used to protect rock art sites in Namadgi NP. Some readers will be familiar with Chris Allen and may have accompanied him on koala counts. He spoke very favourably about traditional burning which he said was a key factor in avoiding forest fires that killed koalas. A similar example was burning to protect the habitat of glossy back cockatoos. There was some discussion that fire might be a good tool against dieback.

While the male to female ratio in the forum was about 60:40, Vanessa Cavanagh, a mature age PhD student, spoke of the role of women and cultural fire. She spoke about the importance of fire to women. As she spoke about her life experience and studies, which were truly amazing, tears came to her eyes and to the eyes of many others in the audience (including me).

A bunch of links to articles, and a publishing opportunity that may be of interest

https://www.theland.com.au/story/6334226/shining-a-light-on-photosynthesis/?src=rss&utm_email=988015c936d, 'Shining a light on photosynthesis', in *The Land* online.

https://www.sciencedirect.com/science/article/pii/S2351989419302720, 'Eating away at protected areas: total grazing pressure is undermining public land conservation', in *Global Ecology and Conservation*.

https://appliedecologistsblog.com/2019/08/13/pollinators-road-verge-management/, 'Protecting pollinators through better road verge management', a UK study in *The Applied Ecologists' Blog* and the *Journal of Applied Ecology*.

https://theconversation.com/can-we-really-restore-or-protect-natural-habitats-to-offset-those-we-destroy-121213, 'Can we really restore or protect natural habitats to 'offset' those we destroy?', in *The Conversation*.

https://www.theguardian.com/environment/2019/aug/05/nsw-makes-it-easier-for-landholders-to-clear-grassy-woodlands-for-agriculture, 'NSW makes it easier for landholders to clear grassy woodlands for agriculture', in *The Guardian*.

https://www.theland.com.au/story/6287961/restoring-native-grasslands/?src=rss&utm_email=2042b192d8, 'Native grasslands have important part to play', in *The Land* online.

Rosemary Blemings writes: Here's an attractive introduction to grasses (it uses overseas examples): https://prairieecologist.com/2019/08/14/grasses-have-flowers-too/?wref=pil

Opportunity...

Andrew Zelnik writes: Here's a possible opportunity for FOG members and our network of contacts: to contribute to a special issue of EIANZ Australasian Journal of Environmental Management due out in late 2020.

A chance to publicise grassy ecosystems! You need to express interest and send an abstract **by 30 September**, via https://www.eianz.org/eianznews/call-for-expressions-on-interest-australasian-journal-of-environmental-management.

FOG's Griffith Woodland hilltop visit, 21 July by Ann Milligan

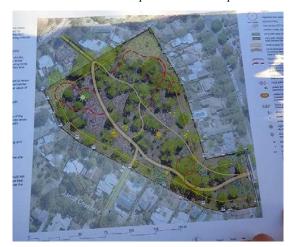


On a glorious cool winter afternoon, this group met to explore Griffith Woodland as featured in *News of FOG* in May–June (pp. 7–8). Libby McCutchan (3rd from left) told us about the site's history and how their team of local residents is rescuing this woody grassland area. At 1st left is Alex Kirk, another key member of the group. Centre front (black jacket, backview) is Barbara Payne who has guided the group's replanting with a master plan like the draft pictured below.



The site has five old Yellow Box *Eucalyptus melliodora* trees (background, above) now listed on the ACT Tree Register. In the foreground are two stringed areas that the group has replanted, with flags identifying where particular grassland species have been added.

Stringed areas are scattered all across the site.





Alex and Barbara are progressively measuring and identifying each of the trees on the site.

Right: Kangaroo grass (Themeda triandra) grows well among the boulders: Sarah (behind), Libby (left), Margaret (right), and Sue (background right).

Below: The group uses signage to alert the surrounding householders to potential issues caused by dumping garden waste and removing fallen wood.





All of us enjoyed the hospitality of Libby and Alex who showed us all the significant features of their site and the work their teams are doing to progressively reestablish a landscape of Yellow Box grassy woodland. A few shrubs will also be added. We saw the site after the teams' substantial work to remove abundant grassy weeds and woody weeds before they began planting.

After we had had a good look around, we retreated to Libby's garden and fire pit, abutting onto the site, for delicious cake and biscuits and warming afternoon tea and conversation.

Thank you so much, Libby and Alex, for letting us visit and for your warm welcome.

Weed control at Griffith Woodland was supported by a FOG grant in 2018.



Contacts for Friends of Grasslands Inc. groups and projects

Website www.fog.org.au

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To join in FOG activities/events: activities@fog.org.au

To join FOG working bees:

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FOG merchandise info (books, etc.): booksales@fog.org.au

(order forms are at www.fog.org.au)

Applying for FOG small grants: supportedprojects@fog.org.au
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Accounts: treasurer@fog.org.au

Newsletters & e-bulletins: $\underline{newsletter@fog.org.au},$

or ebulletin@fog.org.au

To contribute to FOG advocacy:

advocacy@fog.org.au

Website matters: webmanager@fog.org.au

FOG's comprehensive website gives: the calendar of FOG happenings; information about grasslands and grassy woodlands; proformas for applications & orders; all advocacy submissions; all newsletters (including the most

recent).

Dates to note, August - November

Sat 31 August Mid-winter talks and tea, ANBG 13-15 Sept Jamison landcaring display, ACT 21-23 Sept TSRs Narrandera area, and The Rock NSW Sun 29 Sept Workparties Stirling Park & Yarramundi ACT Workparty Hall Cemetery woodland, ACT Sat 5 October 5-7 October Tree planting fun near Cooma NSW 5-24 October Walk the ACT border, with Conservation Council Sat 12 October Visit two ACT grasslands Sat 19 October Wildlife walk, evening, Stirling Park ACT Sun 20 October Bioblitz at Mulanggari grassland ACT 18-21 October VVP Biosphere adventure, Victoria Sun 27 October Workparty Stirling Park, ACT

You can donate (tax-deductible) to support our FOG grants!

Workparty Hall Cemetery woodland, ACT

By direct debit: BSB 633 000, A/c 15349360 (Bendigo Bank). Be sure to (i) put your name in the reference/description box, AND (ii) email treasurer@fog.org.au giving your name, address and phone number, to identify your payment. Janet will then send you a receipt. By cheque: make it payable to 'Friends of Grasslands', and mail it to Treasurer, Friends of Grasslands Inc., PO Box 440, Jamison Centre, ACT 2614. THANKS!

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Calling for a new newsletter editor to start later this year! Please email Ann Milligan, at newsletter@fog.org.au

Friends of Grasslands Inc. PO Box 440 Jamison Centre ACT 2614

Sat 2 November