



News of Friends of Grasslands

Supporting native grassy ecosystems

ISSN 1832-6315

November–December 2017

Things to do, places to see – with FOG (*continues on page 2*)

Weekday visit to Conder 9 grassy landscape, Tuggeranong ACT, Tuesday 14 November

On **14 November at 4.45 pm**, we will meet at the corner of Templestowe Ave and Jane Sutherland St in Conder. Then we will explore a section of Tuggeranong Hill Nature Reserve which was intended to be a residential estate (part of Conder 9), but because of the lobbying efforts of FOG in response to Action Plan 10 on the Yellow Box–Red Gum Grassy Woodlands it was set aside as a reserve. It is a patch of woodland bounded on two sides by creeks and has a wonderful array of native plants, with over 170 species within the approximately 16 hectares. We will be guided by Conder resident Michael Bedingfield, who brought FOG's attention to this wonderful patch just before the turn of the century and recorded a detailed list of the native plants present. The terrain is a gentle slope, and we will cross a dry creek or two. To register for this visit, email ann.milligan@fog.org.au



Monaro Golden Daisy Day Thursday 23 November, Cooma

Showcasing the daisy, 10.30 – noon,
Old Cooma Common Grassland Reserve*

Workshop, 1.30 – 3.30 pm,
Snowy Monaro Regional Council Offices

See and discuss the Monaro Golden Daisy
and the conservation of this and other
threatened grassland species.

Enquiries & booking: geoff.robertson@fog.org.au,
or phone 0403 221 117.

*The walking terrain is flat hilltop. Parking is also on the hilltop.

End of year 'picnic', Thursday 14 December

From 5.30 pm at Jerrabomberra Wetlands, ACT.

A BYO gathering to catch up with FOG friends. See page 2.

Welcome new members!

We welcome five new members to FOG:

Sarah Bates,
Kyle Hemming,
Catherine Ross,
Jessica Giovanelli, all of Canberra,
and
Bronwyn James, in Victoria.

For this newsletter's contents list, see p.16.

Science in action at 'Scottsdale' Thursday 16 November, 9.30 am – 3.00 pm



One of the sites. For info on the monitoring & the property see *News of FOG* Jan–Feb 2017 & Nov–Dec 2016.

If you haven't been to 'Scottsdale' yet, the Bush Heritage (BHA) property near Bredbo, or have been (perhaps on a cold day) and would like to revisit in spring, why not join the monitoring on 16 November? You don't need any special knowledge: only to be willing to hold one end of a tape measure, or write things down as they are called out. The monitoring sites are scattered across the property so you see a fair bit of it. The monitoring – by noting plant categories under marks along a tape laid out at each place – is a scientifically valid way of tracking the BHA's progress in controlling African Lovegrass *Eragrostis curvula*, so you will be contributing to knowledge as well as having fun. 'Scottsdale' is about 1 hour south of Canberra on the Monaro Highway, and lunch is provided. Contact linda.spinaze@fog.org.au to join in, and to ask for more information. You don't need to be a FOG member.

Gungarlin River (NSW) adventure, 5 days 8–12 December

'Get away from it all' on an adventure to Gungarlin River with FOG and the Australian Native Plant Society, **8–12 December**. Gungarlin River is in Kosciuszko National Park, an hour north-west of Berridale, near the boundary with the Jagungal Wilderness. This will be a tents and campervans trip, staying at a campsite with one pit toilet. Alternatively, you could stay in Berridale and drive out each day. There will be grassy plains, a Kosciuszko hut, and alpine flowers which should be fabulous at that time. Dr Roger Farrow will lead the adventure. To find out expected walking distances, terrain, etc., and to register, email margaret.ning@fog.org.au.

Margaret's photos from her visit there in December 2015 will give you an idea of the area: see page 2.

More things to go to

Workparties before Christmas

Weeding workparties are coming up at **Stirling Park woodland**, **Hall Cemetery woodland** and **Yarramundi Grassland** on the dates below, all **starting at 9 am**.

Your help is needed and always welcome. Tools are provided, but you need to wear protective gear and footwear appropriate for the work and the weather, and bring your own drinking water.

Each workparty convenor provides morning tea, making these into pleasant social occasions.

Please **register by two days before the date** of the workparty so there are enough tools and tea for everyone, and to find out where to meet if you are not sure, and so you can be told if the weather forecast has led to a cancellation.

*Stirling Park**, Sundays 29 October and 26 November,
pmcghie@optusnet.com.au, jamie.pittock@fog.org.au

Hall Cemetery, Saturday 11 November,
John.Fitzgerald@fog.org.au

Yarramundi, Sunday 26 November,
John.Fitzgerald@fog.org.au

*Both the Stirling Park workparties will be near the Empire Circuit–Forster Crescent intersection, Yarralumla (follow the signs), and the work will include watering and maintaining plantings, rubbish removal and weeding.



Some of the working party at Stirling Park woodland on 24 September, with outputs of their work removing woody weeds, mainly Boxthorn, Cotoneaster and Cootamundra Wattle. *Photo: Andrew Zelnik*

Group wander in the woodland, Sunday 12 November 2 pm

Walk on unpaved but flat tracks through Stirling Park on Sunday 12 November to view the amazing wildflowers in this grassy woodland, led by Jamie Pittock. Meet at 2 pm at the dirt carpark on Fitzgerald St, Yarralumla, behind the Danish and Norwegian Embassies. The walk will end probably around 3.30 pm. **To register, email:** pmcghie@optusnet.com.au or jamie.pittock@fog.org.au.

End of year 'picnic', Thursday 14 December

Dear Members of FOG, We are all invited to join in the end-of-year picnic on **Thursday 14 December from 5.30 pm**, at **Jerrabomberra Wetlands, ACT**. As in the two previous years, this is an evening simply for 'getting to know other FOG members' *cum* 'catching up with FOG friends'. Please bring your own picnic, etc., and you are welcome to bring guests. There is plenty of parking. We will be using the wetlands building with its pleasant outer deck and inner room. There are also bird-watching hides overlooking the wetlands, and once again we hope groups can be led on a short walk through the area. The FOG newsletter for January–February 2018 will be being packed and labelled that evening, from 5.30 pm in the inner room, and you are welcome to help or not, as you choose. FOG will provide some finger foods and wines. Please register with ann.milligan@fog.org.au, for catering reasons and for more information.

This evening is for FOG members and guests only.



Three photos taken near Gungahlin River, Kosciuszko National Park, in December 2015, *by Margaret Ning*.

See page 1 for an outline of the adventure to this area of NSW this December.

General news about FOG

President's report

Federal Golf Course & MBark Development

Over the years the Federal Golf Course has sought to resolve its number one issue: finding a sustainable way to water the golf course, which is its largest ongoing cost. Federal, to be sustainable, needs to boost its income and to update the irrigation system and make it more efficient. It has entered a partnership with MBark Development which plans to build a residential village for the aged.

To consider a way forward, the ACT Environment Planning and Sustainable Development Directorate (EPSDD) called together a community panel to meet three times to discuss the proposal. The Conservation Council, Red Hill Regenerators and FOG, which have long lobbied against earlier proposals, were invited to participate in the panel, along with community councils, and resident, ageing, business and heritage groups.

As FOG's representative, I canvassed many people and held many discussions with various stakeholders as well as participating in a community group meeting. FOG's key objective is to ensure that the extensive areas of the Yellow Box – Red Gum Grassy Woodland endangered ecological community currently within the golf course are reserved and managed for conservation, and that any development proposal does not encroach on the woodland. Potential impacts could include road construction and widening, fire management, weed invasion, water management, cat containment, possibly offsets, etc. Additionally, and ideally, people living in the proposed village should have a pro-biodiversity focus, and plantings should extend the habitat values of the woodlands. These issues were thoroughly debated in the consultation as were a number of other issues with which as a concerned citizen I have much sympathy.

Those who participated in the panel had a great variety of views and values. Personally I was impressed by the way Federal and MBark had done their homework and met many of the objectives that I have just outlined.

FOG signed a statement prepared by a number of groups suggesting that EPSDD needs to develop a plan that considers this proposal and other development proposals and their impact on woodlands and open areas in the Red Hill region. MBark announced that it would be going ahead with a development application.

Happy to discuss further.

Walk the Border, ACT

May I say this is a great initiative by Rod Griffiths who has spent many months, taking time off work, to prepare to walk the ACT border. This is a fundraising activity for the Conservation Council, but much more it highlights the natural, cultural and historical values of the landscapes along the long border that joins the ACT and high country of NSW. I joined the send-off on day one, and walked with Rod and other enthusiasts, including several FOG members, on the Queanbeyan–Gilmore and Royalla–Ingledene legs. There is one further leg that I plan to participate in.

Rod has attracted much interest in the media and many people have joined in. Being part of the walk is a great way to learn and contribute to that learning. Personally, I found great delight in seeing many great displays of rare and threatened grassland plants, despite the poor rainfall we have had this year. I hope that many of you will loosen those purse strings and contribute to this event. Also check out the blog, great photos (see the links in the box on this page).

Geoff Robertson

Why not join a FOG group to finish 'Walk the Border ACT' on Friday 27 October!

Members of Friends of Grasslands will join Rod Griffiths of the Conservation Council ACT Region and others, on the last day of Walk the Border ACT, to see some significant grassland remnants. **You can be one of the group.**

After the walk, Rod and walkers will join FOG at the high quality grassy woodland which we help maintain at Hall Cemetery.

This final day, from Holt to Hall, passes through once thriving Natural Temperate Grassland and some good remnants. We shall be discussing the special features of these remnants, and also hear from Rod about his experiences over the previous 3 weeks. The walk finishes at the Rest Area to the west of Hall Village, just off Barton Hwy near the ACT/NSW border, at Victoria Street Hall.

Contact: Geoff.Robertson@fog.org.au to arrange to join the FOG group.

Meet: In the carpark 46 Percy Begg Cct, Dunlop at 10 am. We hope Rod will arrive at 10.30–11 am. We will arrange to transport you back to the carpark after the walk. (See below for an outline of the terrain to be encountered.)

Other options: (i) Meet at the carpark of The Link, Strathnairn, 90 Stockdill Street, Holt at 9 am on the day to do the whole 11 km.

(ii) Meet the walkers at the finish.

According to the walk schedule (see <https://walktheborderact.wordpress.com/walk-schedule-2/>) the finish should be 4.5 hours after the start, i.e. around 1330 hours. The schedule link above gives distances, times and terrains.

The Walktheborder link (<https://walktheborderact.wordpress.com/>) has fabulous photos and a few words about each day of the walk so far. Days 1, 2, 6 and 8 have included, variously, Paul & Sue Archer, and Margaret Ning & Geoff Robertson from FOG.

For the proposed FOG walk from Dunlop, the distance to walk will be about 4 km, or possibly more if we also walk over to Hall Cemetery. This walking starts on the clear and flat Bicentennial trail, but soon moves onto an uneven and untracked route through grasslands, maybe thick in exotic pasture, and includes a small creek crossing or two, but overall is flat. Possibly a fence or two will need to be climbed.

General news about FOG, continued

FOG in the media recently

Asthma not from native grasses

FOG Secretary John Fitz Gerald defended native grasslands in a letter (below) to the *Canberra Times* and *Chronicle* clarifying misleading words in an article warning about grass pollen for asthmatics. The letter was published on Sunday 17 September in the *Canberra Times* (scroll through the Letters at <http://www.canberratimes.com.au/comment/ct-letters/canberra-times-letters-to-the-editor-obscene-subsidy-from-nationals-20170915-gyim1m.html>)

‘IN DEFENCE OF GRASSLANDS

Andrew Brown (p1 Sep 12 Chronicle) reported asthma threats from Canberra’s grasslands, quoting local expert Simon Haberle.

Searching Prof Haberle’s web resources will show that pollens from grasses in spring come entirely from species introduced into Australia and widely grown in regional pastures. The ANU Pollen Team’s website specifies: “proximity of the Gungahlin, Belconnen and Tuggeranong suburbs to open pasture may be a factor” in supply of spring pollens. Importantly, native grasses do not flower until mid-summer so cannot contribute to the major pollen peak locally each spring.

Friends of Grasslands respects serious public health issues like asthma. However, our group is troubled that native grasslands and grassy woodlands, already feared by some residents as places of snakes and uncontrolled fire, could next be blamed for respiratory problems. Pollens come out of rural pastures surrounding Canberra, and are supplemented by urban weeds. These weeds are the same grasses planted for pastures, and unfortunately they flourish in our urban parks and around our houses and transport routes. Our group argues that, if “grasslands” are linked to spring pollens, then native grasslands and grassy woodlands, jewels of the ACT’s nature reserves, must be judged as “not guilty”.

John Fitz Gerald, Friends of Grasslands’

Don’t undo Golden Sun Moth protection

FOG committee members John Fitz Gerald and Margaret Ning were photographed with two residents of Barton, ACT, for an article* in the *Canberra Times* on Sunday 1 October. They were standing on the grassland block, corner of Sydney Avenue and National Circuit, which is part of York Park. As reported in the Advocacy report (page 5), the federal Dept of Finance is looking to sell this block which is preserved as Natural Temperate Grassland and Golden Sun Moth habitat (see the notice board in the photo on page 5). York Park, named after commemorative plantings by HRH the Duke of York in 1927, includes an Oak Plantation and all the land between National Circuit, Canberra Avenue, State Circle and Kings Avenue.

*See: <http://www.canberratimes.com.au/act-news/departments-of-finance-asks-to-delete-critically-endangered-species-provisions-from-barton-block-near-york-park-20170928-gyqccx.html>

Geoff Robertson was interviewed on 15 September by Dan Bouchier, ABC radio, also, about this matter. See or listen: <http://www.abc.net.au/radio/canberra/programs/breakfast/york-park-questions-grasslands-friends-geoff-robertson/8948716>

Grassy Woodland Garden at ANBG

One focus for horticulture at the Australian National Botanic Gardens has been a Grassy Woodland Garden created right at the main visitor entrance.

FOG was involved in the advisory group assembled at the start of the project. It’s fair to say the Garden has been slow to get going but now has reached a very attractive stage. The impact of grazing by kangaroos and rabbits seems to be low now and the diversity of species, especially of herbs like daisies and Blue Devils, is good (photo below).

Another priority for ANBG is conservation of threatened species, and the Grassy Woodland Garden is used to showcase this too. A patch of endangered Button Wrinklewort grows well, and caged *Swainsona recta* has flowered and set pods again this year (photos on pages 11 & 15). This cage no doubt protects the little pea plants against occasional nibbles by passing animals.

John Fitz Gerald



Grassy Woodland Garden boardwalk through areas of grasses, daisies and boulders. Photo: John Fitz Gerald

Tree week 2018 – call for ideas

The Tree Week team at ACT Government’s TCCS directorate has invited FOG to run a Canberra Tree Week event in 2018. FOG has held Tree Week events previously, in 2015 at Stirling Park and again this year at Hall (e.g. see *News of FOG* July–August). Can you suggest suitable places or activities in relation to trees in grassy landscapes that FOG could offer for Tree Week next year? The dates will be 30 April–6 May 2018. Please email your ideas to activities@fog.org.au.

This year’s Tree Week events are reported at <http://www.tccs.act.gov.au/city-living/trees/canberra-tree-week>

FOG advocacy *by Naarilla Hirsch & Sarah Sharp*

The full text of FOG submissions appears on the website www.fog.org.au

August

1. In July FOG sent a letter to the Threatened Species Commissioner, Department of Environment and Energy, requesting he intervene to prevent the **Kosciuszko National Park Draft Wild Horse Management Plan** being amended to downgrade the control of feral horses. The Commissioner responded to FOG, and pointed out that state and territory governments are responsible for undertaking control programs for wild horses, but advised that he remains engaged with the relevant government officials and is continuing the conversation on the issue. He also drew our attention to the activities of the Threatened Species Recovery Hub in examining better methods for communication and community support for threatened species conservation, including as a case study the control of wild horses in Kosciuszko National Park. The Commissioner concluded with the following supportive words for FOG:

“Finally, I would like to thank you and the Friend of Grasslands for your commitment and passion towards the protection of grasslands and grassy woodlands in south-eastern Australia. We all have a role to play in the fight against extinction, and ‘Friends of’ groups and the community in general are crucial partners in this.”

2. The Commonwealth asked for public comment on a referral concerning a **residential development in Mawson**. FOG noted that the development layout has been designed in a manner that will permit the retention of all remnant eucalypt trees within the site and supported ongoing control of weeds on the site. We also suggested that planting could enhance conservation values after weeds are removed, with possible extension into the park opposite in Shackleton Street.

3. A major concern this month was the application for an exemption of an Environmental Impact Statement for **Molonglo Valley Stage 3 urban development**, presented for public comment by the ACT Government. The Exemption Report states that “It is considered that the outcomes of the NES Plan appropriately account for losses to native vegetation and species”. FOG did not support the proposed exemption and argued that the Exemption Report does not demonstrate that the Development Project will meet all existing requirements concerning Matters of National Environmental Significance (MNES). In particular, we were concerned about the reduction in width of the buffers for Kama Reserve and the Molonglo River, lack of availability of Plans of Management for Molonglo River Reserve and Kama Nature Reserve to date, the status of Patches C, H and N, and the loss of areas being revegetated in accordance with the NES Plan. FOG also argued that the Development Project as identified in the Exemption Report is likely to result in destruction of additional MNES as well as other matters covered or potentially protected under ACT legislation, including destruction of Pink-tailed Worm-lizard habitat and of endangered grassy ecosystems, and tree removal.

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September

4. The Department of Finance is seeking to divest itself of **York Park in Barton**, and make the Park available for development. FOG has responded to both an EPBC referral and a draft amendment to the Territory Plan on this. FOG opposed both actions for a number of reasons. The first is that the reduction in Natural Temperate Grassland (NTG) and Golden Sun Moth (GSM) habitat has come about because of inadequate management, despite earlier EPBC referrals approved with the condition that the block be managed for conservation. As well, the impact of removal of York Park on the newly-discovered Striped Legless Lizard population in the area has not been assessed, nor have the scientific values of York Park been considered. With regard to the offset proposal in the EPBC referral, FOG thought that the offset analysis significantly understates York Park’s values and that there is likely to be a net loss of GSM and NTG in the offset block over time based on past evidence that the Department of Finance lacks the processes to manage such an offset. There has also been a lack of consideration of alternatives to the current proposal that might retain our biodiversity.

Instead, FOG recommended that both proposals be rejected, and that Department of Finance provide funding now for appropriate weed control in the NTG at York Park, as compensation for non-compliance with conditions of previous approvals, and that it professionally surveys the current GSM

status in and around the site in October–December 2017. We also recommended that the land use of York Park be changed to ‘Nature Conservation Area’ in the Territory Plan, and that York Park be directly and permanently added to the national conservation estate and managed by an area of government that has expertise in conservation.

The Advocacy Group was contacted by several other non-environmental organisations that put in submissions opposing the divestment for reasons of the loss to natural heritage and loss of important scientific knowledge being collected on site.



Update on CNM, new releases and two recommendations

Canberra Nature Map Update

There was a good response to my recent articles about Canberra Nature Map (May and July newsletters), so I have added an edited version of them to the Canberra Nature Map website (<http://canberra.naturemapr.org/>). Just click on the words 'Canberra Nature Map' on the top toolbar, and the dropdown menu shows the subjects that are covered and makes clear what we are all about. My two articles are called: 'A short history'; and 'Explaining a few things'.



To keep you up to date, here is the latest (to mid-October) on what we are doing:

In the winter of 2017 we increased our coverage to include fish.

In the first of the above-mentioned articles I said we were in a period of consolidation and I just wish to explain that in more detail. This year our membership grew to well over 1000. The volume of users grew with it to the point where our success was a problem in itself.

- Firstly, a number of key modules in the system were failing intermittently due to the volume of traffic on the website. So Aaron did the task of rewriting some of the software to make it more efficient. At the moment he is diverting his energy toward improving the performance of the smartphone Apps.
- Secondly, the size and complexity of the NatureMapr system is such that the work of maintenance of the software is a very large job. So what was originally a hobby for Aaron is now much more than that and requires a lot of dedicated time, more than can be provided by a person who needs to earn a living. We need to recruit a paid assistant for part-time involvement in software maintenance.
- Thirdly, the expense of supporting the system and paying the various servers has grown.

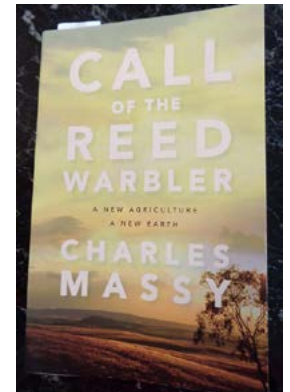
For these reasons, long-term committed funding is needed.

Our current situation is not practical for the future. So the next major step for us is to create a project model that is sustainable in terms of workload and finance.

Michael Bedingfield

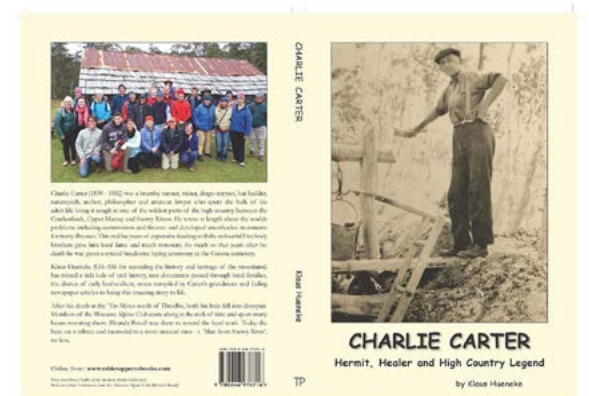
New books & others recommended

FOG member Charlie Massy launched his latest book early in October at a well-attended evening at the National Library. At the event, he spoke about the book and its background in a conversation with Genevieve Jacobs (of the ABC). *Call of the Reed Warbler* offers 'a clear vision of a sustainable future for our food supply, our landscape, our health and our Earth', with its focus on regenerative agricultural practices which support landscape function.



Incidentally, another launch of this book, near Orange NSW, coincides with the launch of a new Australian Institute of Ecological Agriculture. Blurb about this new institute says it is 'a farmer support and research organisation,' ... "formed to support farmers seeking an eco-friendly path."

FOG member Klaus Huenneke has just released his 13th book, *Charlie Carter – Hermit, Healer and High Country Legend*. Charlie Carter (1870–1952) lived in the wildest parts of the high country between the Crackenback, Upper Murray and Snowy Rivers. The book calls on oral history, rare documents, diaries of early bushwalkers, and other sources. Contact Klaus for details on how to order: tabletoppress@bigpond.com.au.

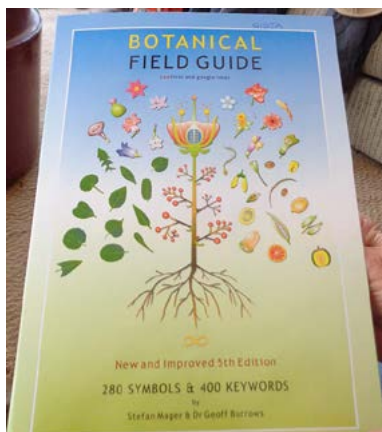


Recommended by folk at 'Mt Oak' (see p. 8)

Botanical Field Guide. Mager & Burrows (5th edition). A botanical glossary in the form of an A4 fold-out laminated brochure (8 pp.) showing plant parts in relation to their botanical terms (*photos, left*)

Also,

Weeds of the South-East: An Identification Guide for Australia. Richardson, Richardson & Shepherd (2nd edition 2016, 546 pp.).



Check online for sources and prices of the publications mentioned here (apart from Klaus's).

Close-up: Fire resistance

John Fitz Gerald

For this issue, I have chosen a close-up of a local favourite, *Eryngium ovinum*, commonly known as Blue Devil. Most people will know its delightful blue flower of mid-summer, that dries off to a very spiny sphere a few centimetres in diameter. PlantNet advises “Fruit 2.5–4 mm long, covered with acute bladdery scales”. These fruit are released by crushing or scraping the spiny dry flower, and the scales give each small dry fruit a white fluffy appearance. One split fruit is imaged here (image 1) and shows many bright white scales attached to the dark and narrow seed.

Blue Devil sprang to my mind after two recent ecological burns (April and September) at Yarramundi Grassland (at Yarramundi Reach), managed by the National Capital Authority. In the true grassland, the fires were quite hot and burned tussocks almost down to ground level but left a little plant litter and other vegetation in places. Most Blue Devil plants were burned but short stems and leaves remained and resprouting was active. Of course, effectively all fruits would have been destroyed, so this regrowth is essential.

At Yarramundi, a woodland patch dominated by planted *Eucalyptus viminalis* also contained many Blue Devil plants. This patch had a high fuel load of bark and litter (partly from dense *Poa* tussock growth) and must have burned very hot indeed. Fire (on 2 September) has left some patches of the ground between trees totally bare, even after 6 weeks. The one exception (image 2) is our friend the Blue Devil, no doubt due to its stout taproots. The new shoots took a week or so, but did emerge actively, even in this very dry spell, and these plants could go on to flower this year.

It's not difficult to understand that plants with extensive or deep root systems are best equipped to survive fire, and presumably they benefit from both reduced competition and the flush of minerals available in the ashes. Certainly, blackened grassland areas are now a magnificent green carpet, even with little rain. Terrific regrowth has occurred from *Themeda* and *Poa* tussocks (image 3), and from *Tricoryne*, Bulbine Lily and even *Goodenia pinnatifida*. In the area burned in April, thousands of Bulbines are flowering (image 4).

Unfortunately, fire resistance has also seen many exotic species come back. Regrowing tussocks of Chilean Needle Grass, Tall Fescue, *Paspalum*, *Phalaris* and Serrated Tussock are particularly annoying, as are other strongly rooted weeds like *Hypochaeris radicata* and St Johns Wort. The only positive is that regrowth is convenient for herbicide attack.



Blue Devil seed image ©ANBG, recorded at National Seed Bank, Australian National Botanic Gardens. White scale bar represents a length of 1 millimetre.



Blue Devil sprouting in an area of heavy burn under trees.



Poa tussocks resprouting in blackened grassland.

Learning about weed control and ecology at 'Mt Oak' communal property

*Sarah Hnatiuk, Libby Keen, Dierk & Rosemary von Behrens,
Di Fett, Steve and Adrian and Margaret, Ann Milligan*



On Saturday 23 September, 12 members of FOG and local landholders interested in weed control methods and tools met at 'Mt Oak'. This property, just south of Bredbo NSW, became famous for its association with politician Jim Cairns and his assistant Junie Morosi, and for the first ConFest in 1976 (conference+festival) to which 15,000 turned up, unexpectedly.

Gidja Walker, Philip Jensen and their colleague Ian Faithfull were our guides. They have enormous expertise in natural resources and weed elimination, with Ian adding knowledge of fauna including invertebrates.

Along the track to the Commi Shed at the heart of 'Mt Oak', we stopped to inspect patches of sprayed St Johns Wort. Some that seem dead pull out easily, but may have sprouts on the roots. Gidja (green shirt, centre) showed us several uncommon grassland forbs and grasses in this area. (See three photos this page.)

At the Commi Shed, which houses the kitchen (but the communal fire pit outside is used for cooking and boiling water etc.) and the sitting and eating area, we examined various weeding tools and discussed methods. (See photos.)

To end the day, we had a walk alongside the dry creek and up the hill behind the shed, spotting several uncommon species including *Swainsona sericea* and other evidence of ecology in the raw. A few of the group then camped overnight and joined their hosts to walk the property the next day, including finding two handsome brown snakes.

Gidja, Philip and Ian gave generously of their knowledge, and showed us so much! The day yielded far more than we had expected. It was an outstanding experience.

Here are comments sent afterwards by other participants.

Dierk von Behrens: Images of a range of tools designed to attack weeds and a long, rough, winding track in and out, come to mind when remembering our visit to this historic property. A flaming torch, various portable or drag-able weed-spray or -dab units, earth-piercers and hoes stand

out, including a one-handed weeding hoe based on a design originally fashioned to my (Dierk's) specifications as a one-off example by a company known as Digadoo.

While the mind-boggling statistic that by 2010 some 28,000 plant species had been introduced to Australia since European settlement, of which some 10% (2770) have become naturalised and weedy, was not highlighted, the implied importance of tackling these weeds formed the thrust of the Saturday's discussions. That, according to Professor Brian Sindel, around two thirds of these weeds (65%) are considered a problem for natural ecosystems and around one third (35%) trouble agricultural systems, is also worth highlighting retrospectively: Search for www.ruralfutures.une.edu.au – 'Weed Detection and Control on Small Farms' to download the pdf of his useful and complementary booklet.

Though not specifically spelled out, the lessons I took from the Saturday include the need for planning or deliberation in the field of weed control; the importance of vigilance or diligence in systematic observation and monitoring for new potential weeds and their early and accurate

... continued on next page



Weed control methods and tools at 'Mt Oak', continued

identification and control before they reproduce (e.g. seed); diversity of control measures; and dedication or persistence in follow-up monitoring and control. This could be called the **4D** approach to weed management.

Thank you to all those involved in planning, organising and conducting this visit.

Rosemary von Behrens: One amusing moment occurred when a participant pointed to some scats which, at first glance, could have been from a kangaroo or wombat.

Participant: Are these from a wombat?

Gidja: A wombat!

Participant: Why are they always square?

Gidja: So they don't roll off the rocks!

Libby Keen: I gained useful information and ideas, especially what tools are available and how to use them; tips on identifying weeds and use of herbicides; the My Maps app to record locations.



Philip (orange shirt) explains the tools laid out at the Commi Shed.

I thought 'Mt Oak' a rich and challenging environment and felt welcomed by its kind and knowledgeable residents. It felt a privilege to be there. I greatly enjoyed the Apple Box woodland (trees of all ages) and discovering that spiders' eyes sparkle in torchlight!

Di Fett: Try using 1/500 glyphosate for St John's Wort. Gidja's experiment with this looks promising and worth a try given that Grazon hasn't worked! And slay those sweet briars by painting 1/10 glyphosate on the cut rootball. Again, this saves on Grazon, and is likely to have better results. And it was wonderful to see the Commi Shed and to meet its fascinating folk.

Sarah Hnatiuk: Saturday at Mt Oak was a fantastic experience. Looking back at my notes, I am reminded just how much ground Gidja covered, outlining a highly adaptive, multi-pronged approach to weeding that matches a mixture of biological controls, tools, and the occasional use of low concentrate herbicides with the characteristics of each weed species, its history at a particular site, and how it fits within the ecosystem where it is growing. My first mission since the day is to trial a Tree Popper on our local blackberries.

Steve, Adrian and Margaret: We found the history of 'Mt Oak' very interesting – its Aboriginal and non-Aboriginal history. Great to see the Aboriginal artifacts and the remnants from 'Mt Oak's time with ConFest. It is really heartening to see people working together with a long-term commitment to rehabilitation and regeneration of woodlands degraded by farming. It was heartening to see those areas



Far left: Gidja shows how to use the Fiskars Xact 4-prong Weed Puller: push it into the soil over the target weed (top); use the foot pedal to close the claws; and pull back and up (below).

Left: Margaret, in the Apple Box grove beside the shed, shows off the Smucker: its handle is a clear plastic tube to hold the herbicide, and the applicator is a roller made of foam rubber and sheepskin.

Weed control methods and tools at 'Mt Oak', continued

on the property that are now showing improvement. This is encouraging for us as we have just embarked on a conservation project at a property at Williamsdale.

Learning from Ian about the biological agents and broader ecosystem as part of a multi-pronged approach to weed management was extremely helpful. We now know we have these agents on our property and are comfortable to leave weeds affected by those agents alone.

The session about different tools that can assist in weed control was very beneficial and we have already adopted some of them. The steak knives work very well.

We were interested to hear about experimental use of different ratios of glyphosate on some of the more invasive weeds in areas of high infestation. Like most of the other attendees, we have found chemical spraying has had varying rates of success.

Attending such a practical and hands-on event was a wonderful opportunity to learn how to identify certain weeds and natives. Identification can be challenging when relying on texts and photographs. The occasion made us



Ian (with haversack) talks about fauna beside the very big Apple Box by the dry creek.



Two brown snakes seen at Mt Oak. Photos by Steve.



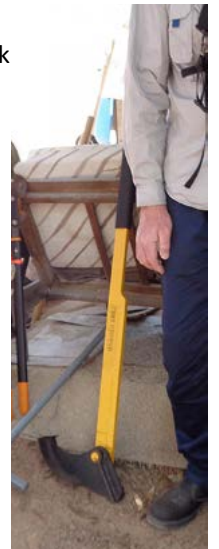
realise how many different plant species are co-located in one small area and to think about the adverse impact chemical spraying can have if not done correctly.

We also enjoyed hearing about simple technology options to help with weed prioritisation, planning and monitoring. I think we will have to invest in a set of those smart phone lenses that Philip was showing off.

Overall, it was a terrific weekend. We are new to land management and conservation and really appreciated the opportunity to hear experts share their knowledge and experience in such a practical way.

Thank you FOG, Margaret, Gidja, Philip, Ian and JD.

The tools, except 'Peter's Lever' and Dierk's weeding tool, are available commercially. To buy Dierk's tool (head only), contact info@fog.org.au. Gidja and Philip also recommend steak knives for detailed weeding, and heavy agricultural tarpaulin to smother aquatic weeds.



Right top: Tree Popper.

Right below, on ground: 'Peter's Lever' – a car leaf spring welded to a length of galvanised pipe. Sharpen the spring and use it on bulbous weeds.

On white post: Velpar L backpack with spot gun (red) for precise targeting.

Behind: Parrots beak loppers (orange handles) – 2 sizes; and the Tree Popper.



Odds and ends

Birds in Gardens – new fact sheet

Greening Australia (a member of FOG) has produced a handy fact sheet (compiled by Nicki Taws and Catherine Ross) to share when you get asked what to grow to attract native birds to gardens in the ACT region. *Planting guide for native birds* is at:

https://www.greeningaustralia.org.au/uploads/knowledge-portal/Planting_for_birds_brochure.pdf

Wild Pollinator Count! – 12–19 November

If you heard Karen Retra (a FOG member) speak at the mid-winter talks afternoon, you may be inspired to join in the spring **Wild Pollinator Count** which she co-runs. It is the week of **Sunday 12 November – Sunday 19 November**. All you need to do is watch a flower for 10 minutes on any warm, sunny day during that week and submit your observations via the website, which also gives the simple instructions: <https://wildpollinatorcount.com/count-pollinators>.

Analysis of warm-season pastures

A South Australian land management group (Upper River Torrens Landcare Group) has produced a new information sheet: *Analysis of green warm season native pastures*. It is available online at:

<http://www.torrenslandcare.org/project-details>

or

<https://uploads.strikinglycdn.com/files/1e0b2a88-235f-4d44-a0f3-0d572001bd6e/Information%20Sheet%20-%20Analysis%20of%20green%20Warm%20Season%20Native%20Pasture.pdf>

Study of historic stock routes

A team of local (ANU) researchers has published a study of stock routes and their ecological value, in the *Australian Journal of Botany* in September, and written about it in an article in *The Conversation*: ‘**Review of historic stock routes may put rare stretches of native plants and animals at risk**’, <http://theconversation.com/review-of-historic-stock-routes-may-put-rare-stretches-of-native-plants-and-animals-at-risk-84049>



Swainsona recta flowers in the Grassy Woodland Garden at the ANBG (see p. 4). Photo: John Fitz Gerald

Talbingo cottage for sale, \$190,000

A 2-bedroom 1-bathroom Snowy Mountains cottage is for sale at Talbingo NSW. It is set up as a nature retreat, with a food forest (berries, nuts, fruit, vegetables and herbs mixed with native plants to attract pollinators, and worm farm). Surrounded by picturesque mountain scenery with stunning views over Jounama Pondage from one deck. Wood stove heating. Garage, carport and long driveway. Please phone Mary Ormay on 0415 629 924.



Advance notice

Spring on the Victorian Volcanic Plains Native Grasslands 18–20 November

An invitation to join in an interesting natural history and geological weekend around the Lake Condah area. It will include visits to Grassland sites, the Byaduk region and Tyrendarra Indigenous protected area near Narrawong.

Experience the diverse original natural habitats, and learn about the threats to the region's values, and the priority actions for conservation. A number of local experts will explain the various features.

Friday night 17 November to Sunday 19 November
(Monday 20 November tours optional).

The \$65 cost covers lunches Saturday and Sunday and Saturday dinner. Bookings will be by Eventbrite soon. For more information, contact vvpbiosphere@gmail.com.

This is a driving tour, travelling in convoy to each site, then getting out of cars to observe and learn, walking around each site and listening to experts explain the features. Some sites will involve more walking than others. There will be options for longer and shorter walks possible and car pooling is encouraged.

You'll need to organise your own travel and accommodation. Once you've registered, you will be sent a list of suggested accommodation options, with a range of prices. It is recommend you book early for this inspiring weekend learning about the interesting values of the region with like-minded people.

**Australasian Pipit *Anthus novaeseelandiae*,
a ground-dwelling bird that likes the open spaces**
by Michael Bedingfield

Australasian Pipits make their nest on the ground in a small depression enhanced with pieces of grass and other plant material to create a shallow cup. The nest may be placed near a tussock, stone or branch for shelter. They also feed on the ground eating predominantly insects and their larvae but also some seeds. When foraging they will search in grass tussocks, or scamper swiftly along the ground in pursuit of highly mobile insects such as grasshoppers. They also sleep on the ground, making a very earthy lifestyle. The female incubates the eggs and is virtually invisible when sitting on the nest. The male stands watch. If an intruder approaches he will attempt to draw the threat away by attracting attention to himself. He will run swiftly along the ground or fly short distances to ensure he is seen.

At any time, when running along the ground these birds do so in short sprints, stopping at intervals to bob their tails up and down. They are well coloured for camouflage among the grass tussocks. They are streaked and mottled all over in shades of brown, cream or buff. The breast is more lightly coloured, the underparts are cream/buff and eyebrows are buff. They have a narrow, curved beak and the males, females and juveniles are similar in colour. The length of the adults is 150 to 170 mm from head to tail. The song is a thin 'tswee' or chirrup, and trilling notes in flight.

It would be very unusual to see this bird perching in a tree. It prefers low objects from which to survey its surroundings, such as rocks, stumps, low shrubs or fences posts. During breeding season the male uses a perch such as these from which to take off in his elaborate display flights. As he rises he sings in a trilling fashion, doing a series of dipping curves in flight. The display finishes suddenly with an abrupt dive to the ground.

There is differing opinion regarding the bird's name. I've chosen Australasian Pipit and *Anthus novaeseelandiae*, the common and scientific names that are used by Canberra Ornithologists Group (COG) and the Atlas of Living Australia on their websites. In their book, Taylor and Day prefer the name 'Australian Pipit' with scientific name *Anthus australis*. It was formerly known as Richard's Pipit. The Atlas lists a number of subspecies.

There are two birds that are very similar in colour and size. There is Horsfield's Bushlark *Mirafra javanica*, which can be identified by its stouter finch-like bill and cinnamon coloured shoulder patch. It is a breeding summer migrant and is quite rare locally. We also have the introduced Eurasian Skylark *Alauda arvensis*, which has a distinctive short crest, a thicker bill and a beautiful melodious sustained song that it uses when soaring.



The Australasian Pipit is common in open country anywhere in Australia, and at all altitudes from the coast to the summit of Mount Kosciuszko. The habitat can be grassland, pasture, open clearings in woodland, heathlands or low shrublands, but never forests. According to COG, it is a breeding resident locally with some altitudinal migration. It has greatly benefited from European settlement in Australia, and is quick to colonise cleared land.

Taylor and Day describe it as 'The most common "grass bird" ... Found throughout most grasslands.' If you are fond of the wide, open spaces that are so familiar in Australia you are sure to see this perky little dry-grass-coloured bird, the Australasian Pipit.

References

- Taylor M. and Day N. (2013) *Field Guide to the Birds of the ACT*. 2nd edition. National Parks Association of the ACT.
- Readers Digest Complete Book of Australian Birds* (1979). Numerous authors.
- http://www.australianbushbirds.info/infa/anthus_australis.html
- <http://canberrabirds.org.au/birds/australasian-pipit/>
- <http://www.birdsinbackyards.net/species/Anthus-novaeseelandiae>
- <http://www.ozanimals.com/Bird/Australasian-Pipit/Anthus/novaeseelandiae.html>
- <http://bie.ala.org.au/species/urn:lsid:biodiversity.org.au:afd.taxon:0ef0c924-9823-44a7-9c12-cfbd03c0c75a>
- <http://www.birdlife.org.au/bird-profile/australasian-pipit>

Landscape function assessment at Mt Fairy, after fire in January 2017

David Tongway

The Mt Fairy fire swept upslope at the property of landholders Anne and Owen on 17 January 2017. A very small party of FOG members with suitable expertise visited the property on 2 September to see if we could (or needed to) give any advice in regard to re-establishment of the understorey to minimise soil erosion.

This report may help others deciding if they need to take action following fire.

Much of the ground cover was burnt and tree canopies variously scorched and fully burnt. The slope is at about 25 degrees, which would have exacerbated the increase in intensity going upslope.

I looked at upslope and downslope gradients in a vee-shaped traverse to observe the effect of slope on the damage done to landscape function, using the indicators in Landscape Function Analysis (LFA).

LFA acquires information addressing this principal question: 'How does this landscape work as a biophysical system?', and the subsidiary questions: 'What was the effect of a recent disturbance?', 'Are active rehabilitation efforts needed?' and 'What might those treatments be?'.

Here are my observations, in summary.

- The top of the hill is covered in large jumbled rocks with considerable micro-topographic roughness. Already, tree litter is significantly accumulating in the hollows (image **top right**).
- There are tree-dominated and grassland-dominated zones alternating downslope. Most of the shrubs were destroyed in the fire so there is currently very little evidence of their pre-fire location, abundance and functional role. However, no soil accumulation was observed at shrub bases still remaining (image **mid-right**). Under trees, most of the fine litter was burnt in the fire and some of the smaller woody litter (image **below**). Some larger pieces of wood survived. Grass plants were sparse here, but always have been.



- The grasslands had recovered a reasonable grass plant density (image **top overleaf**) and 'bulk', such that water runoff and loss of physical and biological materials is now very small and accumulation quite clear (image **immediately above**). However, kangaroo grazing of the grass plants was very evident and nearly every plant had been affected (see 'Ongoing stress and disturbance', below). Current water run-off patterns in the grassland strata (image **top overleaf**) is via thin sheet overland flow, implying that water flow is slow, and well obstructed by the grass butts, and that net losses of water from the hill slope are

...continued next page

Landscape function assessment after January 2017 fire, continued



now small. In fact, almost no signs of focused water run-off were seen anywhere (rills, gullies) except in some kangaroo tracks, but these were minimal in number and in their effect on increasing runoff.

- There was a verbal suggestion that a spring is active, implying that water absorbed near the hill crest percolates through broken rock and emerges in the slope flank.

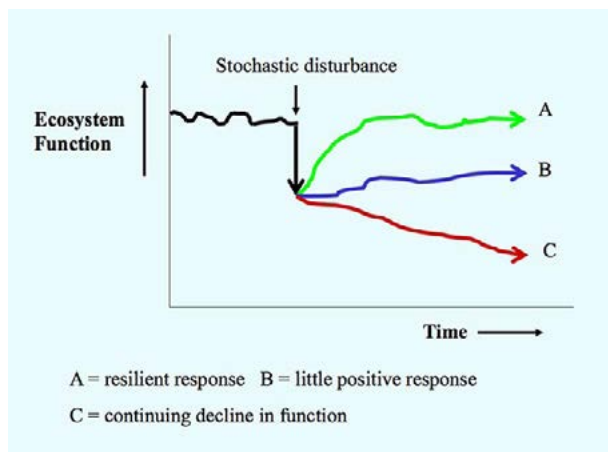
Ongoing stress/disturbance

1. Uncontrolled kangaroo grazing is substantially reducing the leaf area index of the grasses (see images **below left and below right** showing much higher grass growth under a fallen branch) which will result in smaller root biomass accumulation and less photosynthate being transported into the roots where it is used by soil microbes to process organic matter and keep the nutrient cycle running. Kangaroos also directly disturb the soil (no image taken) when digging resting places, etc. This can release finely divided soil particles which would then be subject to wind and/or water erosion. These particles might leave the local hill slope as dust clouds.
2. The up-coming drought may result in the death of a proportion of grass plants and diminish the capacity of the sward to 'control' the rate of overland flow. The image at **top left** shows a near-sward situation.

Summary

Although the fire may have been a traumatic event for observers, its effects have not been substantial on this property, because of the very good landscape function prior to the fire. The degree of 'bounce-back', given not much rain, has been appreciable and accords with my interpretation of a resilient landscape.

In the diagram below, fire would be the stochastic disturbance, and response type A is what we have observed here. The dynamics from here on depend on the season and possible control of kangaroo grazing.



Photos and diagram by David Tongway.

Cultivation corner

Surprises in The Pottery

Janet Russell

Cultivation Corner is a commentary on grassland species, now from a 9th floor apartment in Reid, and formerly from a house in Aranda ACT

Spring has arrived in Reid and the freezing winds have moderated and allowed us to enjoy the occasional lunch on the balcony. Having had a vergola installed we can create some shade for ourselves and give some protection to the plants as well so they get relief from all-day sun.

After two winters being buffeted about by freezing winds and baking in the summer sun the white *Waratah* (right) has produced 11 wonderful blooms. The last year in Aranda, it produced one. The Vine Gum, *Aphanopetalum resinosum* (below), has always done well in the pot. This specimen started life in Aranda and I did wonder how it would fare here. The following description

of habit and habitat comes straight from the NSW Plantnet site – this plant is a “climber in most types of rainforest, often a straggling shrub in more open sites or along streams in open forest”. Nowhere does it mention that they thrive in pots on exposed Canberran ninth floor balconies with a south-westerly aspect, but this one certainly has.

The Pink Mulla Mulla, *Ptilotus nobilis* (right), seems to be a plant for all seasons. We bought

and potted it in November last year and it has surprised us by flowering constantly since. In Aranda, we also tried to grow one in a pot and it failed to thrive even though it was in a north-facing courtyard which seems to be counterintuitive.

I have no idea of the reasons why some plants do well and why others do not. I never cease to be amazed by how well some plants do in what seem inappropriate conditions. It has happened often enough that I am always ready to experiment with what we can grow.

The photos show the plants I have mentioned, and also the Rock Lily, *Bulbine glauca* (below), that is also flowering this week.



Photos by Janet Russell



Swainsona recta in protective cage in the Grassy Woodland Garden, ANBG (see p. 4), with many pods set after flowering.

Photo: John Fitz Gerald

Contacts for Friends of Grasslands Inc. groups and projects

Refer to the website www.fog.org.au for more information

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Promoting wider knowledge of grassy landscapes

Publications: *Woodland Flora*, *Grassland Flora*, other books
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Yarramundi Reach & Stirling Park jamie.pittock@fog.org.au

Old Cooma Common, NSW margaret.ning@fog.org.au

Education: Southern Tablelands Ecosystems Park (STEP) at
National Arboretum Canberra: secretary@step.asn.au

Activities: activities@fog.org.au

Media contact: Geoff Robertson (mob: 0403 221 117)

FOG (and others') dates ahead

Sunday 29 October, morning: Stirling Park workparty.

Saturday & Sunday 4 & 5 November: Weed swap.

Saturday 11 November, morning: Hall Cemetery woodland workparty.

Sunday 12 November, afternoon: Annual wildflower walk, Stirling Park.

Week 12–19 November: Wild Pollinator Count.

Tuesday 14 November, 4.45 pm: Visit to Conder 9 grassy landscape.

Thursday 16 November, all day: Monitoring at 'Scottsdale'.

Weekend 18–20 November: Spring on the Victorian Volcanic Plains.

Thursday 23 November, 10.30–3.30: Monaro Golden Daisy Day, Cooma.

Sunday 26 November, morning: Stirling Park workparty.

Sunday 26 November, morning: Yarramundi Grassland workparty.

Friday 8 – Tuesday 12 December: Adventure to Gungarlin River, KNP.

Thursday 14 December: FOG BYO picnic, Jerrabomberra Wetlands.

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