

News of Friends of Grasslands

Supporting native grassy ecosystems

ISSN 1832-6315

November-December 2014

FOG dates to note

Stirling Park spring wildflower walk:

26 October, Sunday, 2.00-3.30 pm. Details p. 2.

'Grass half full or grass half empty? Valuing native grassy landscapes' 30 October – I November. Details on p. 3. The program is at http://www.fog.org.au/forumfullprogram.pdf

Grassland monitoring, Scottsdale:

5 November, Wednesday, 9.30–3.30. Details are on p. 2. Please register with linda.spinaze@fog.org.au

Hall Cemetery working bee:

8 November, Saturday, 9.00 - 12.30. Please register with John Fitz Gerald. Details are on p. 2.

National Land workparties, October-January:

26 October: Sunday, 9.00 – 12.30, Stirling Park

19 November: Wednesday, 9.00 – 12.30, Stirling Park22 November: Saturday, 8.30 – 12.00, Yarramundi Reach

30 November: Sunday, 9.00 - 12.30, Scrivener's Hut.

Please register for each of these with Jamie.pittock@fog.org.au, ph. 0407 265 131. Details are on p. 2.

Celebrations of 20 years and hard work

On 12 November, FOG turns 20!

A celebratory birthday dinner or lunch will be held in early December, possibly on 6 December.

Please look out for an invitation to all FOG members.

We would like to celebrate with everyone who has been, or is now, a member of FOG. If you can help us contact past members, please email margaret.ning@fog.org.au

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Cultivation Corner: Forest 20 at the National Arboretum

Scarlet Robin by Michael Bedingfield Contacts for FOG groups & projects

Did you know? You can see the newsletter in colour when it first comes out, by asking to be emailed it as a pdf file. You can have it as well as, or instead of, the grey printed version. To join the 'emailed newsletter' list, please contact Margaret.Ning@fog.org.au or Ann Milligan (newsletter@fog.org.au). Your wish is our command ... in this instance, anyway.



Membership matters

Membership renewals are due on I January. Help propagate the next 20 years of FOG by renewing your membership **now** for the 2015 calendar year. How? See below.

Membership of Friends of Grasslands Inc. costs \$20 per calendar year (for individuals, families, not-for-profit organisations), \$5 per year for students or concessions, or \$50 per year (corporate).

To inquire about Life Membership contact membership@fog.org.au

Payment can be made by EFT to BSB 633 000, A/c 124770835, adding your name in the reference/description; or by posting a cheque to: PO Box 440, Jamison Centre ACT 2614.

Left: The wetland at Forest 20, National Arboretum Canberra. Photo: Andy Russell.

Coming events

Stirling Park wildflower walk

Sunday 26 October, 2.00-3.30 pm

Iamie Pittock

Our annual ramble through Stirling Park will start from the junction of Clarke St and Fitzgerald St in Yarralumla ACT, at 2 pm. Local expert Sarah Sharp and Margaret Ning will lead us. For more information: jamie.pittock@fog.org.au

Scottsdale grassland monitoring, Bredbo

Wednesday 5 November, 9.30 – 3.30

Linda Spinaze

Since March 2008 FOG has held an annual monitoring day at the Bush Heritage property 'Scottsdale', near Bredbo, NSW. Now that the property is no longer grazed we monitor native plant species competition, and this time we will possibly start some new revegetation monitoring.

All are welcome to attend and help. No experience is necessary. Lunch will be provided.

Please register for 5 November by emailing linda.spinaze@fog.org.au, or linda@xamax.com.au, who can give you further information and directions, and ensure you are included in the numbers for catering.

Hall Cemetery workparty 8 November, Saturday, 9.00–11.30

John Fitz Gerald

This early-summer work-morning will continue our control of fleshy weeds and selected patches of exotic grasses. The major action will again be spot-spraying of herbicide through the grassy woodland. Some physical removal (cut and daub) of briar regrowth can also be done, and some grass trimming. Morning tea is provided. The wildflowers will be attractive. Please dress for the weather and tall grass, which is likely to have seeded by this date.

MOST IMPORTANT — so that enough equipment (and morning tea) is on hand to match the enthusiasm of volunteers, REGISTER with john.fitzgerald@fog.org.au by Thursday 6 November.

Launch of 'Woodland Flora' ... coming soon!

At the FOG forum, 30 October - I November, we shall be taking pre-orders for FOG's forthcoming book 'Woodland Flora', by Sarah Sharp, Dave Mallinson, David Eddy and Rainer Rehwinkel.

If you would like to pre-order but are not attending the forum, please email booksales@fog.org.au with your details and the number of copies you would like to reserve.

Volunteers wanted for workparties, at three sites on four dates

Iamie Pittock

Spring has sprung and it is a magnificent time of year to be out in our bushland sites. We need all the help that we can get for the following workparties.

Sunday 26 October 9.00 to 12.30, Stirling Park

The workparty will be led by Peter McGhie, and it will continue to dispatch woody weeds at the north-east end of Stirling Park. The workparty will be based on the footpath parallel to Alexandrina Drive and will cart cut woody weeds out to that road (walk to the north end of the ridge and descend towards the lake, turn right/east on the footpath within the fence and follow it to the workparty site). The closest place to park is by the rusty sculpture and picnic area on the north side of Alexandrina Drive. Cross the road (south) go through the fence and turn left/east on the footpath. Please remember: gardening clothes, solid footwear, eye protection, sunburn cream and drinking water. There will, of course, be morning tea.

The wildflower walk (top left, this page) is in the afternoon.

Wednesday 19 November 9.00 to 12.30, Stirling Park

This midweek workparty will be led by Peter McGhie, and will continue the work outlined above, at the north-east end of Stirling Park. Please remember: gardening clothes, solid footwear, eye protection, sunburn cream and drinking water. There will, of course, be morning tea.

Saturday 22 October 8.30 to 12.00, Yarramundi Reach,

Lady Denman Drive, ACT

Here we shall continue our work on woody weed regrowth (cut and daub) and spot-spraying of Blackberry, St John's Wort and Chilean Needlegrass. We particularly need people willing to spray — the early start is so we can complete spraying before the wind picks up. Please remember: gardening clothes, solid footwear, eye protection, sunburn cream and drinking water. There will, of course, be morning tea.

Sunday 30 November 9.00 to 12.30, Scrivener's Hut, State Circle, ACT

Park at the hut carpark, and follow the signs across the dry stream on the path till you find us. In January we succeeded in clearing out all the woody weeds from this habitat for the threatened Button Wrinklewort Rutidosis leptorrhyncoides. We shall be doing a search of the entire site for any remaining woody weeds and cutting out Mahonia. We shall also spray, focusing on Vinca (Periwinkle), African Lovegrass, Chilean Needlegrass and any Blackberry regrowth. Please remember: gardening clothes, solid footwear, eye protection, sunburn cream and drinking water. There will, of course, be morning tea.

I hope to hear you will be at one or more of these workparties. Please phone or text 0407 265 131; or email jamie.pittock@fog.org.au

Coming events: Friends of Grasslands 20th anniversary forum 30 October – 1 November, CSIRO Discovery, Canberra

Grass half full or grass half empty? Valuing native grassy landscapes

The forum is next week, as this newsletter goes to press! We hope to see you there, at this milestone for native grassland groups across SE Australia.

The title tells the story: after two decades of activity and advocacy for grassy landscapes, is it *Grass half full or grass half empty*?

Are we succeeding in raising awareness and building understanding of the value and management of native grassy landscapes? Can people involved with the land now use better knowledge when comparing the value of native grassy landscapes versus exotic pastures or pastures planted with trees?

We shall find out in the two days of talks and interactive workshops, including displays, posters and demonstrations of relevant apps.

A great range of people have agreed to give presentations, displays, demonstrations and more informal talks. They research, administer, manage, produce from and assess native grassy landscapes in NSW, Victoria and ACT, and we look forward to being able to put out a meaningful summary of the achievements and ideas they present. Just look at the program (http://www.fog.org.au/forumfullprogram.pdf)!

On the Thursday, after a spring-evening ramble through the Australian National Botanic Gardens, we shall meet for dinner at the gardens' Floresco restaurant. Our guest speaker is

Larry O'Loughlin, former Chief of Staff for 'Greens' Minister Shane Rattenbury MLA (who is in charge of management of Canberra's grassland reserves, among other things). Larry currently directs policy and communication at the Conservation Council ACT Region, and we can look forward to amusing anecdotes and serious insights.

At the top of our forum layer-cake is the field trip, visiting native grasslands and grassy woodlands in the ACT. We shall hear on the spot from ten or more people involved in these areas' cultural and ecological significance, management, governance and future. There will be time to wander, look and chat about the vegetation, lizards, reintroduced mammals, moths, birds and management of kangaroos. On our return to Yarramundi Reach the Burrunju Art Gallery will still be open for us to visit.

Registrations close on 22 October (for catering reasons). However, if you have suddenly found you will, after all, be free on the Thursday, Friday and/or Saturday and would like to attend, email Sarah.sharp@fog.org.au immediately!

The following organisations are giving FOG much-appreciated in-kind or financial support for this forum: CSIRO, Greening Australia, Conservation Council ACT Region, Regional Landcare Facilitator, Kosciuszko2Coast, Office of the ACT Commissioner for Sustainability and the Environment, EarthBasics.





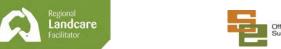
(left) Street view of Clunies Ross St roundabout and road into CSIRO Black Mountain site where the forum is being held, at the Discovery Centre (not in the photo). (right) ATSIC Cultural Centre, Yarramundi Reach, Lady Denman Drive, where we start Saturday's field trip.













FOG Advocacy

Naarilla Hirsch

August

- I. A proposal to extend Ellerton Drive in East Queanbeyan, NSW, was referred to the Commonwealth under the EPBC Act. FOG had substantial concerns about this proposal, as FOG believes it will have a significant impact on Box-Gum Woodland and on a large population of the Hoary Sunray (*Leucochrysum albicans* var. *tricolor*), an impact on the connectivity between populations of this and other species, and also affect other natural vegetation communities. FOG's view was that this proposal should be considered in conjunction with a more strategic approach both to conservation of high quality areas and to future developments such as changes to traffic arrangements in and around Queanbeyan. The offset arrangements are not clear for the Box-Gum Woodland area, and non-existent for the Hoary Sunray population.
- 2. Territory Plan variation DV319: Zone and Overlay changes to Public Land in the Gungahlin District (ACT) was released for public comment, and included a Structure Plan for East Gungahlin and the Throsby Concept Plan. FOG asked that principles from the new Strategic Bushfire Management Plan 3 be included in these Plans. FOG also asked for clarification on whether or not the agreed lack of development within 100 m of any tree used by Superb Parrots (*Polytelis swainsonii*) for nesting would be within bushfire Inner and/or Outer Asset Zones.

FOG also wrote to the ACT Economic Development
Directorate about the Throsby Development Plan. As well as
drawing attention to the Throsby Concept Plan above, FOG
asked that plantings in Throsby be compatible with conservation
values of the reserves and that there be no use of exotic species
that would be likely to spread. Given the quality and sensitivity
of the reserves we suggested that pedestrian access-points to
the reserves be 400 m apart rather than the proposed 200 m.
Other suggestions included establishment of appropriate signage
prior to estate development in the hope that ecological values
will be respected during estate development, and proactive
communication with the local community, such as through Bush
on the Boundary.

September

- 3. The draft approval bilateral agreement between the Commonwealth and the ACT in relation to approvals under the EPBC Act was released for public comment. Once again, FOG expressed its concern over the potential conflict of interest for the ACT Government: it owns land put up for development and obtains income from its sale to developers, and also makes decisions about the extent to which a development can affect threatened species and communities. For this reason, FOG asked that the public definitely be given the opportunity to comment in the bilateral agreement review process. It also asked that this Agreement definitely (rather than 'may') include a review of the effectiveness of the ACT Offsets Policy in meeting the objectives of the agreement.
- 4. A development on the Amtech block in Symonston, ACT, has been referred to the Commonwealth under the EPBC Act. FOG has had an interest in this site for some time, and drew attention to its earlier concerns (see our submission of 2 April 2012). The design of the development footprint minimises loss of Natural Temperate Grassland, but FOG still had some issues with the proposal. FOG supported the proposal to prepare and implement a Public Land Management Strategy to manage the areas of the site not developed as part of the proposed action, but again drew attention to the lack of identification of the source of resources to implement the Strategy. FOG also expressed concern over the neglect of the site which is contributing to its deterioration over time and the potential consequences of that neglect, including the proliferation of noxious weeds such as Serrated Tussock and African Lovegrass. Another of FOG's concern related to impacts on the Striped Legless Lizard (Delma impar), which has been found to occur throughout substantially more of the study area than was previously thought.

The full text of FOG submissions appears on our website.

Some non-FOG events on soon

Grasslands workshop, Sydney *Tuesday 11 November*, 8.30–4.30

'The conservation and protection of the world's indigenous temperate grasslands: Current status and strategic directions for the next decade' is a workshop run by the Temperate Grasslands Conservation Initiative, open to everyone interested; no cost. Sydney Olympic Park aquatic centre, Dawn Fraser Room. Book with bdownie@thekeshotrust.org

www.iucn.org/about/work/programmes/ gpap_home/gpap_biodiversity/gpap_ wcpabiodiv.gpap_grasslands/ Erosion control workshops Saturdays 15 & 22 November 9.00-4.30

Workshops for Landcarers and Parkcarers, run by Southern ACT Catchment Group. Hands-on, low-cost erosion control techniques.

Free, with lunch and tea provided. RSVP essential to: Martine Franco phone 6296 6400; info@sactcg.org.au by I November. ANTHOLOGY: Performance, Installation, Sound, Video, Live music, Song, Dance and Tea

26-29 November; 3-6 December, 6 pm

A theatrical journey through Westlake, now known as **Stirling Park**, ACT. Booking is advisable. For tickets and information: www.anthology.net.au While nothing to do with grassy ecosystem conservation, this event will raise community awareness of places where FOG's volunteers have been

working for several years.

Articles

Visit to Jerrabomberra East Grassland, Saturday 23 August

John Fitz Gerald

An eager group joined ACT Government Ranger Ms Maree Gilbert on 23 August to walk through the Jerrabomberra East grassland nature reserve.

Michael Bedingfield suggested this activity, having been involved in assisting TAMS (ACT Government) to prepare a new set of interpretive signs for the Dragon's Trail in this nature reserve. Maree Gilbert was most enthusiatic, so a date was set.

This reserve is accessed from a public parking area at the western side of Lanyon Drive in the ACT, just before the NSW border is crossed when travelling north towards Queanbeyan.

Maree gave us a good familiarisation with the past and present of the area, and the faunal and floral links to surrounding high-value grasslands, including those just across the border and rail line (which includes the Poplars Grassland described

in recent FOG newsletters). She concentrated on efforts directed at local threatened species, notably the Grassland Earless Dragon and the Button Wrinklewort. It was therefore terrific to have a couple of NSW residents along on the trip, including FOG's good friend Tom Baker who has long worked on conservation in areas near Queanbeyan like the Poplars.

Our walk took us past the new signs (see photo), and over the top of Mike's Trig (in the background of the photo). After admiring terrific views including one to the north as far as Black Mountain Tower and the city skyline, we slowly walked back around the base of this hill. The reserve is a mixture of very weedy patches where control and replanting of native grasses is showing positive effects. Intervening patches have some attractive forbs and some short grass tufts — clear evidence of plenty of grazing by kangaroos. One large area is currently fenced off for research by University of Canberra's Institute for Applied Ecology.

Maree took us in and showed us some of the pitfall traps for monitoring the Grassland Earless Dragon, and an area where she has translocated some Button Wrinklewort tubestock obtained from Greening Australia. Maree explained that growth from seed has not been successful here, hence the importance of using established plants. Not surprisingly, grass cover was far higher inside the exclusion fence.

One memorable aspect of the walk was the large number of caterpillars as long as 5 cm crawling around the open ground. Alison Rowell enlightened us that these were larvae of the Pasture Day Moth in the process of excavating burrows to pupate. She encouraged us to take a close look at the apparently drab brown grubs — the magnificently coloured micro-markings and hairs (see photo) are possibly all that is needed to keep hungry birds from taking the larvae.



The FOG group surrounds the new interpretive sign near the entry to Jerrabomberra East Grassland Reserve with Mike's Trig in background. Maree Gilbert is standing at far left.



A caterpillar of a Pasture Day Moth, ~5 cm long when straight.

A pleasant morning was made all the more enjoyable by the company, especially that of Ranger Maree with all her experience, knowledge and commitment to returning quality to as much as possible of the grassland reserve.

If you missed this walk, you have another chance to visit this interesting grassland — this time during FOG's forum field trip on Saturday 1 November.

Photos: John Fitz Gerald

Articles continued

Button Wrinklewort response to fire

John Fitz Gerald

The FOG Newsletter of September–October 2011 reported that students at the Fenner School of Environment & Society at the Australian National University were monitoring in Stirling Park. They were documenting the way that the endangered Button Wrinklewort Rutidosis leptorrhynchoides and coexisting vegetation responded to a controlled burn that the National Capital Authority had conducted in a small area earlier that year. The initial results were published in 2012 in Australasian Plant Conservation 20(4), 13–15.

FOG has continued the surveying since that time, with further valuable student input.

In 2012, Fenner School (ANU) graduates Catherine Ross and Amy Macris helped FOG to collect a new round of data. In early September 2014 Lynette Matthews, a student at Canberra Institute of Technology, collected more data. She is currently analysing the trends. Lynette is herself a member of FOG and a regular volunteer in weed-control workparties at Stirling Park. Her recent monitoring was supported by a small FOG team this year.

The initial finding in the 2012 paper was that fire treatment had no measurable effect on the Button Wrinklewort population. We are eagerly waiting to find out what the measurements show over the longer term. However, anyone walking today through the area that was control-burnt would be tempted to say that Button Wrinklewort is surviving well.

Photos: John Fitz Gerald



Lynette Matthews (left) being assisted by Alison Rowell at one of the monitoring sites near Alexandrina Drive.

Many Button Wrinklewort plants in 2014, at a site that had a high-intensity burn in 2011.



Help needed with plant surveys

Volunteers are needed to help with plant surveys alongside invertebrate trapping in an exciting PhD project. We are studying the movement of ground-level arthropods (both beneficial predators and pests) in mixed cropping landscapes, in relation to plant dispersal. The study will be in the Lachlan–Riverina area.

The surveys are being conducted during November-December around Wombat, Young, Grenfell and Barellan.

Field trips last for between I and 4 days, and weekend sessions are available. Transport, basic accommodation and food are all provided.

Please contact me, Katherina Ng, if you can help or would like more information.

katherina.ng@anu.edu.au mob: 0498 757 179 phone: 02 6125 8148

Achievements in Hall Cemetery, Saturday 13 September

John Fitz Gerald

A small but determined team of five volunteers swung into action on the morning of 13 September, controlling weeds in the Cemetery woodlands and planting some small groups of lilies. This is a lovely time of year to visit the site, with its range of spring flowers.

While FOG's volunteers' work has essentially destroyed large woody weeds, there are still the fleshy weeds, such as thistles and Capeweed, which require continued treatment, as does our old foe *Galium aparine* (Cleavers). Common Vetch also looks likely to be troublesome this year.

FOG would like to thank Greening Australia for donating the lily plants from stock retired from their seed production area. And we thank Ginninderra Catchment Group for lending a motorised backpack sprayer. It certainly saved a lot of arm pumping!

Our next workparty is on Saturday 8 November; see pages 1 and 2.

Articles continued

Visit to Lake Bathurst, near Tarago, NSW

Margaret Ning

It was a glorious spring day and sixteen of us fitted into four vehicles to make the trip to Lake Bathurst from nearby Tarago village. Rainer Rehwinkel wanted us to see some special species in this pretty good year, and although he couldn't join us he had armed us with comprehensive notes on where to find things.

We had five main targets, and one by one we ticked them off: the endangered Omeo Storksbill *Pelargonium* sp. (G.W. Carr 10345), one of four known populations in Australia, which contrary to predictions had begun to flower; the vulnerable Creeping Hopbush *Dodonaea procumbens*, the only NSW population outside the Monaro (some of it was flowering also); the endangered Round-leaved Wilsonia *Wilsonia rotundifolia*, one of very few populations in NSW, a handful of which was flowering; patches of Shiny Bog-rush *Schoenus nitens*, the only known population in the Southern Tablelands; and large areas of Fan-flower Mudwort *Selliera radicans*, confined to a few drainage lines and lake beds in our local region. We also saw a couple of Salt Lawrencia *Lawrencia spicata*, the only known population in NSW.



Omeo Storksbill *Pelargonium* sp. (G.W. Carr 10345). Photo: Jackie Miles



Large granite boulders beside Lake Bathurst, ideal for lunch.

Photo: John Fitz Gerald

Another unusual find was a bright orange prostrate perennial parasitic Dodder *Cuscuta tasmanica*, known from saline areas and often, but not exclusively, found with plants of other *Wilsonia* species. The National Herbarium has a specimen from the western edge of Lake Bathurst.



Salt Lawrencia *Lawrencia spicata*, only known to live here, in NSW.

Photo: Jackie Miles







Bright orange prostrate perennial parasitic Dodder *Cuscuta tasmanica*, viewed from three heights, with *Wilsonia rotundifolia* beneath (centre photo). Photos, left–right: Andrew Zelnik, John Fitz Gerald, Jackie Miles.

Visit to Lake Bathurst, continued



Looking north-east at Lake Bathurst, NSW. Photo: Andrew Zelnik

In terms of 'regular' grassland plants, it was difficult to find them among the Serrated Tussock Nassella trichotoma bordering and sometimes growing on the lake bed, but over time we accumulated a list with Narrow-leaved New Holland Daisy Vittadinia muelleri, Common Sunray Triptilodiscus pygmaeus, one Purple Burr-daisy Calotis cuneifolia, Common Billy Buttons Craspedia variabilis, a light pink bindweed, possibly Convolvulus graminetinus, Kidney Weed Dichondra repens, Common Woodruff Asperula conferta, and the cryptic Grass Cushion Isoetopsis graminifolia. There was a paucity of native grasses, apart from a mass of Australian Saltmarsh Grass Puccinellia stricta in the centre of the lake bed.

The highlights for the day not only included the species Rainer wanted us to see, but also half a dozen interesting weed species. In fact, most of us had never seen these species before; an exotic *Crassula* species, *Spergularia marina*, *Scorzonera laciniata*, Hexham Scent *Melilotus indicus*, *Arenaria serpyllifolia* and *Parapholis incurva*. There was also a mystery Chenopod, which may still require some research, and may even be native.

Speaking of weeds, the Serrated Tussock was an eye opener! It went as far as the eye could see to the east, and a good wick wiper would be the only possible management device to combat it, and obviously over many many years. There were also obvious signs of many drowned tussocks, so maybe extended inundation also does the job?



Solanum linearifolium. Photo: Andrew Zelnik

Some of our group strode off intrepidly into the distance to see what they could find. Given that the lake is nearly dry again, the only waterbirds they saw were a Red-capped Plover and White-faced Heron. There was also a Wedge-tailed Eagle, a Richard's Pipit, and a couple of skink species. They also sighted many spectacular flowering Mountain Kangaroo Apple Solanum linearifolium.

The weather was as good as it could get; warm enough, but with a light breeze all day, although we still sought the shade of large granite boulders in order to eat our lunch in comfort. All in all, most of us traversed a circuit of 5.3 km, at an average of 1.2 kph!

Our thanks go to the lessee for permission to visit the site, and to Dave Mallinson, Sue McIntyre and Jackie Miles for their day-long responses to all our questions. In addition, I had full reception for my iPad in the middle of the lake, so all ID discussions were backed up by a significant contribution from PlantNet.









Puccinellia stricta (top); Selliera radicans (middle); Dodonaea procumbens (below left) otherwise only in the Monaro in NSW; and Schoenus nitens (below right), the only known population in the Southern Tablelands. Photos: John Fitz Gerald.

Articles, continued

Restoration at Stonequarry Cemetery, Taralga, NSW, 26-28 September

Margaret Ning and Rita Sofea

Cemeteries often preserve remnants of native grassland species. The historic Stonequarry Cemetery at Taralga, NSW, is being restored in a project run by International Volunteers for Peace. This is not a FOG project, though FOG supports the restoration idea, and some FOG members were at the first working bee (see May–June 2014 newsletter) and also at this second weekend of activity.

What a successful weekend — and it looks like lots of people will be coming back next time!

We had six full participants, and on the Saturday we were joined by a local Taralga resident for a few hours, and we also had a surprise visit from another local with his bulldozer!

The bulldozer created tensions within the group but it was agreed that we would see what happened if Jason pulled out large hawthorn in an experimental area with a totally degraded *Vinca* understorey. It would be very disappointing if such an effective resource as the bulldozer was eschewed at later working bees, because such opportunities ensure that our efforts at the site do not go backwards.

The Hawthorn in that *Vinca* area was put to one side and it became a potential site for an experimental fire for biomass reduction at a later stage. Could there be merit in sterilising the *Vinca* area in that way?

Other weed action included:

- · chain sawing of larger Hawthorns;
- · cutting and daubing of smaller Hawthorn, Broom, and Briar;
- 'pulling' some Broom, which was made possible by the relative moistness and softness of the soil;
- · simply cutting, not daubing, some Blackberry.

Most of the Broom was placed on an area of *Vinca*, in another experiment, but the cut Hawthorns were piled up in the hope that Council will remove them.

Monitoring occurred. A prolific photographer (Kerrin Swords) took plenty of photos, before- and after- shots, action shots, plus lots of plants. We added half a dozen new plant species to our list.











This was a very successful weekend's work.
Perhaps the new Green Army could visit too one day?
Photos: Kerrin Swords.

Articles, continued

Restoration at Stonequarry Cemetery, Taralga, continued

There were some thoughts of using the new Green Army at the site. Also an idea for a schools day: tree planting.

A short evaluation at the end of Sunday was very positive with all volunteers saying they were interested in returning for the next working bee.

Suggested ideas for the future include: sculpture; invite painting groups; install paths and signage; install a composting toilet; build picnic tables.

There remain several outstanding issues.

- Discussion is needed about a strategy to avoid disturbing nesting birds.
- We were also confronted with the reality of what happens when a broom thicket is cut and daubed. We were confronted by a 'fuzz' of broom seedlings on arrival for this working bee, because the improved light and clear ground had encouraged or ensured their germination! However, regardless of this recruitment, it is an improvement on the I-2 m high thicket we removed in the past. If anyone has suggestions for the removal of broom fuzz please let me know!
- And it would be counter productive to have a repeat of any cutting that is not followed by daubing. Cutting without daubing is essentially just pruning the plant ... and we all know that this just makes them grow more vigorously.

The next working bee at Taralga cemetery will be Friday–Sunday 14–16 November.





The volunteers, both this weekend and at the previous working-bee weekend, were very enthusiastic and keen to continue restoring the vegetation composition in this historic cemetery. Much has been achieved and there remains quite a bit yet to be done. Photos: Kerrin Swords.





Cultivation corner

Observations from Forest 20, National Arboretum Canberra

Andy Russell

The Southern Tablelands Ecosystems Park (STEP) group has designed and managed Forest 20 at the National Arboretum Canberra since its inception. Forest 20 is an exception to the Arboretum plan in that there are 16 or more eucalypt species here in one forest whereas other forests consist of a single tree species. Our forest also differs in the fact that it is designed, managed and worked on by volunteers.

Tree planting commenced on 15 March 2009 with an event at which the ACT Chief Minister Jon Stanhope planted the first tree, and he was joined by STEP members and others from the ACT community who all planted trees. This was part of the Festival of the Forests for that year. The first tree species planted were Snow Gum *Eucalyptus pauciflora* and Blakely's Red Gum *E. blakelyi* and they were donated by Warren Saunders from Seeds and Plants Australia. Our volunteers continued the planting of about 540 trees and completed that during the autumn of 2010.

Issues that have affected the trees have chiefly been waterlogging associated with drainage from the adjacent grassed car park. In particular there have been losses of Snow Gums, Red Stringybark *E. macrorhyncha* and the Large-flowered Bundy *E. nortonii*. We have held discussions with the Arboretum management about how this can be resolved, and a stone-lined drain has now been constructed on the edge of the grassed car park adjacent to Forest 20 to channel water to a nearby dam. There has also been minor damage to trees by kangaroos and arboretum mowing equipment.

Another issue has been how to grow trees whose natural habitat is quite different to our locality. Two species that come into this category are the Alpine Ash *E. delegatensis* and the Mountain Gum *E. dalrympleana* for which the natural habitat is montane wet sclerophyll forest. Few of the Alpine Ash have survived and some have been replaced with other species.

Control of weeds will always be an issue and one of our worst weeds is St John's Wort Hypericum perforatum. We aim to continue an annual spraying program for this and have had the use of spray equipment made available by the Southern ACT Catchment Group. Other weed species include Purple Top Verbena bonariensis and the sedge Cyperus eragrostis, which have appreciated the wetter conditions in parts of the understorey planting. Verbascum species have been relatively easy to control simply by chipping.

Planting the understorey is Stage 2 of the STEP program. Barbara Payne of Quandong Designs worked pro bono in conjunction with David Shorthouse to provide a representation of understorey species that are associated with the trees of Forest 20. The planting program commenced in March 2011 and there are now close to 100 different species in small plots running down the slope between two sets of paths. Plot preparation and planting are continuing through our regular Thursday morning working bees. The heavy frost through the recent winter has been a challenge for some species such as *Hardenbergia violacea* though these have



Precautions against future waterlogging of Forest 20



The Hardenbergia violacea plot



Asperula conferta, a volunteer at STEP

Forest 20, the Southern Tablelands Ecosystem Park, continued

recovered well. Goodenia ovata was another species affected and it has also recovered. A particular success story has been the rescue of Blue Devil Eryngium ovinum from within the Molonglo development to a planting site adjacent to one of our paths.

Two species that did not survive waterlogging were the Gold Dust Wattle Acacia acinacea and Dodonaea viscosa (both are known for frost tolerance but not for withstanding waterlogging), and the Native Violet Viola hederacea has survived in one position and not in another. Looking a picture at present is a display of white flowered Dusky Daisy Bush Olearia phlogopappa. The Wee Jasper Grevillea Grevillea iaspicula, an endangered species, has done well and is coming into flower while the Australian Indigo Indigofera australis has also flowered particularly well. A small plot of Hoary Sunray Leucochrysum albicans has done well and has shown good recruitment. There are plans for another planting of this species.

A number of grass species are included in our plantings. These include Kangaroo Grass *Themeda australis*, Windmill Grass *Chloris truncata*, Spear grass *Stipa scabra* and Red Grass *Bothriochloa macra*, the latter occurring naturally across some of Forest 20. Other volunteer native species include the Herons bill *Erodium crinitum*, Variable Glycine *Glycine tabacina*, Australian Bindweed *Convolvulus angustissimus* and *Asperula conferta*.

The ephemeral pond has been planted with Carex appressa and Schoenoplectus validus and Juncus usitatus is also present. The exotic sedge Cyperus eragrostis has taken some work to keep out of the pond. Wood duck are seen there from time to time.

Recently we had some unwelcome visitors, feral pigs, which have caused damage and seem to return regularly at night. National Arboretum management and the ACT Parks and Conservation are aware of the problem and we hope it can be dealt with promptly.

Crushed granite paths now border sections of the understorey planting and (see photo below) connect with our recently constructed Education Space and run down to meet the boundary road near our shed. The paths have been gravelled so they are a more suitable surface for strollers than paths with mulch. Setting up the Education Space has been our major project for this year and is a credit to Bill Handke and



Dusky Daisy Bush Olearia phlogopappa



Hoary Sunray Leucochrysum albicans (above and below)





his team and the contractor Rech Building Group. This project has been made possible through a grant from the ACT Government and some generous donations.

FOG members are invited to view the progress at Forest 20 and a STEP committee member would be pleased to provide a guided tour at an appropriate time.

To find out more, see the STEP website at www.step.asn.au, or contact Andy Russell at <membership@step.asn.au>.

Photos: Andy Russell

The Scarlet Robin Petroica boodang, a pretty and valuable woodlands bird

Michael Bedingfield

Scarlet Robins are exquisitely beautiful birds, and are a delight to see in the cooler months around Canberra. The male's plumage is black above with a white streak on the wings, a black throat, a white forehead spot, white tummy and a scarlet red breast. The female dresses more modestly, and is greyish-brown with a white forehead spot, but she is the only female robin to have a pink breast. They are about 130 cm in length, and are found in south-eastern Australia and south-west Western Australia, and all states except Northern Territory. The most similar species is the Flame Robin *Petroica phoenicea*; its males have slate grey plumage above, a smaller white forehead spot and an orange-red breast and throat, and the female's breast is pale brown.

Despite these lovely birds' aesthetic and ecological value, and their own intrinsic value as wild creatures, from an economic viewpoint they have little value. They produce no goods, consume no products, and neither buy nor sell. They earn no money and pay no taxes. They borrow not, pay no interest and are not listed on the stock exchange. So in any decisions of an economic nature their welfare is not considered.

Economics is a useful system of study that has enabled modern society to better understand and manage the complexities of an industrialised world. Ecology looks at the natural world and relationships between living organisms. Both these words have as their root the Greek word oikos, meaning 'house', but their understanding of the house that we live in is quite different.

Unfortunately, governments are quite familiar with economics, but give ecology far less attention. Because economic activity takes resources from the environment, there is often conflict between their experts. Some people have tried to unite the different philosophies, and several decades ago 'ecological economics' gained momentum in an attempt to integrate the two fields. Ecological economists hope to promote economic and social well-being and the health of the natural world at the same time. Apart from material wealth they consider such things as air and water quality, biodiversity and people's health. Their purpose is to make human activity sustainable within a healthy and biodiverse natural world. For them, the welfare of wild

animals such the robins and all the other woodland birds is quite important.

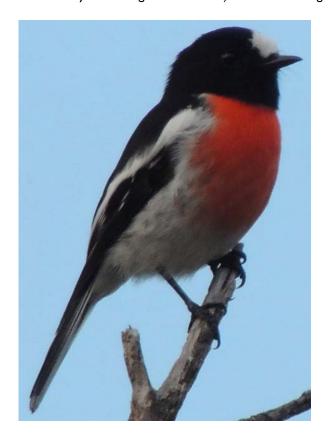
Scarlet Robin couples form lifetime bonds, maintaining territories all year round. The females build the nest and the males help by gathering materials. A male will bring food to his mate while she is sitting on the eggs. Both feed the young.

These birds are altitudinal migrants, normally seen in the Canberra area in winter but absent in summer. The habitats they like best are open forests and grassy woodlands, and they spend time in grasslands, farmlands and urban parks in winter. They eat mainly insects, foraging on or near the ground. They like to wait on a low perch, such as a shrub, small tree or log, and swoop down to catch prey. A grassy and shrubby understorey with logs and other woody debris is necessary to their lifestyle. Populations have declined because of land clearing and particularly clearing of the understorey.

I took the photographs of these birds last autumn. They are the most commonly seen robins around Canberra, but the species is listed as vulnerable in NSW.

The complexities of the natural world are baffling, and the intricate and sometimes delicate relationships between plants and animals have evolved over millions of years. We only understand some of the natural world, and our decision-makers try to cope mainly by excluding it. But we can do things better, and so provide a safe future for animals such as the Scarlet Robin.

My references include these websites: environment.nsw.gov.au, birdsinbackyards.net, wikipedia.org, anzsee.org(Australia New Zealand Society for Ecological Economics) and isecoeco.org.



Contacts for FOG groups and projects

General inquiries

Contact info@fog.org.au or Sarah Sharp (0402 576 412).

Activities organises FOG field trips, talks, workshops, onground work, support to other groups, property visits and FOG's calendar. *Inquiries*: activities@fog.org.au

Advocacy prepares submissions and advocates on grassy ecosystem issues. It holds occasional meetings and workshops. *Inquiries*: advocacy@fog.org.au

Committee & correspondence. The committee organises, coordinates and monitors FOG activities. Members: Sarah Sharp (President), Kris Nash (Secretary), Leon Pietsch (Treasurer), John Fitz Gerald, Naarilla Hirsch, Stephen Horn, Tony Lawson, Ann Milligan (newsletter), Katherina Ng, Margaret Ning, Kim Pullen, Rainer Rehwinkel, Andrew Zelnik.

Public Officer: Andy Russell.

Inquiries or correspondence: committee2@fog.org.au Postal address: PO Box 440, Jamison Centre ACT 2614.

Communication produces FOG e-Bulletin.

Inquiries: ebulletin@fog.org.au

Financial matters, excluding membership,

contact: treasurer@fog.org.au

Grassland flora and other sales. FOG sells and distributes the book *Grassland Flora*, other books, cards and T-shirts. *Inquiries*: booksales@fog.org.au

Grassland monitoring. FOG holds monitoring days at the Bush Heritage property 'Scottsdale' near Bredbo, NSW. *Inquiries*: linda.spinaze@fog.org.au

Hall Cemetery. FOG with ACT Public Cemeteries Authority holds regular working bees to enhance the natural values of the area of grassy woodland that surrounds Hall Cemetery. *Inquiries*: john.fitzgerald@fog.org.au

Media spokesperson: Sarah Sharp (0402 576 412).

Membership. New members are welcome. We have two new membership categories: \$20 per year for not-for-profit organisations, and a new 'voluntary life membership' category. Membership forms are at the website. For inquiries, or to help with newsletter dispatch, contact: membership@fog.org.au

National land. FOG, with the National Capital Authority, holds regular working bees at Yarramundi Reach (grasslands) and Stirling Park (woodlands), ACT. Inquiries: jamie.pittock@fog.org.au

Newsletter. News of Friends of Grasslands is dispatched on the fourth Tuesday of February, April, June, August, October, December. Please send photos and articles about FOG or related grassland activities before the third Tuesday of those months to editor Ann Milligan at: newsletter@fog.org.au

Old Cooma Common. FOG, with Cooma-Monaro Shire Council, holds working bees twice yearly at the Old Cooma Common Grassland Reserve.

Inquiries: margaret.ning@fog.org.au

Southern Tablelands Ecosystems Park (STEP).

STEP is a regional botanic garden and recovery centre at the National Arboretum Canberra. STEP showcases local ecosystems, especially native grasses and forbs. *Inquiries:* secretary@step.asn.au, *or* The Secretary, STEP Inc., PO Box 440, Jamison Centre ACT 2614.

Website, www.fog.org.au The website holds information about FOG and grasslands, back issues of the newsletter, and program details. *Inquiries*: webmanager@fog.org.au

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