



News of Friends of Grasslands

Supporting native grassy ecosystems

January-February 2012

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Program - take the diary out now

February

SUN 5 FEBRUARY, 9.00-12.00 & 1.00-4.00.

FOG/Fenner Working Bee, Scrivener's Hut, Capital Hill

We'll need all the help we can get to rescue this neglected site in National Capital lands just a hop, step and jump from the federal parliamentary zone! Lunch will be provided. Please register with jamie.pittock@fog.org.au and bring drinking water, sun protection and sturdy footwear.

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Necklace fern and common maidenhair fern



Photos: (by G Robertson - clockwise from above) a worked stone from the Cascades (see page 4), Greg Chatfield, Rod Mason & Adrian Brown at the Indigenous Values workshop (see page 8), and FOG volunteers at Old Cooma Common Grassland Reserve. Over ten years of dedicated work has made an amazing difference at this grassland site (see page 5).



Upcoming FOG Events

Please register for FOG activities with the **FOG contact person** who can assist with directions and possibly car pooling. By registering, you assist FOG to organise any catering and to provide you with other information you may need.

February

FOG/Fenner Working Bee, Scrivener's Hut, Capital Hill

9.00am-12.00pm & 1.00pm-4.00pm
Sun 5 Feb

We'll finish clearing the southern end of this important button wrinklewort site of woody weeds on this only day of work scheduled for 2012 in this area of grassy woodland. We need all the help we can get to rescue this neglected site in National Capital lands just a hop, step and jump from the federal parliamentary zone! Meet in the Scrivener's Hut car park between State and Capital Circles, entrance off State Circle, between Commonwealth Avenue and Flynn Drive (on the bike path from the lake beside Flynn Drive up to Parliament House).

The work site is in the bush across the streamline from the carpark. Lunch will be provided. Please register with jamie.pittock@fog.org.au and bring drinking water (though this site also does have tap water available), sun protection and sturdy footwear. The work involves cutting and daubing woody weeds, piling of cut branches, some hand weeding near sites of important species. The site has partial shade, so work can still proceed if this midsummer's day turns out very hot.

FOG Membership To join or renew

FOG membership entitles you to receive our newsletter and e-Bulletin, to attend FOG's many and diverse activities, and much more.

The cost is small: \$20 for individuals and families, \$5 for students/concessions and \$50 for organisations. Membership is due on 1 January each year.

Membership forms are available on our website: www.fog.org.au and you may pay by cheque or electronically.

While donations are not tax deductible, they are always very welcome.

For inquiries contact Margaret Ning on 02 6241 4065 or membership@fog.org.au

Other Events

Indigenous Grass and Sedge Display Newport Lakes Native Nursery, VIC 15/12/11 to 29/02/12

2 Lakes Drive, Newport, Victoria.

Over 45 species of local Indigenous Grasses, sedges and threatened herbs in full seed/flower will be on display. Many other plants indigenous to the Western Basalt Plains of Victoria will also be on display, including several critically endangered species. Ph: (03) 9391 0044. FREE entry.

ACTHA Snakes Alive Exhibition Australian National Botanic Gardens

10.00am -4.00pm weekdays
10.00am-6.00pm Sat & Sun
23 - 29 Jan 2012

Get up close and see live displays of snakes, lizards, turtles, frogs and crocodiles. \$2 child \$4 concession \$5 adult. Proceeds assist with research into herpetology.

STEP Working Bees, NAC 8-11:00 am, every Thursday

The Southern Tablelands Ecosystems Park (STEP) was established at the behest of FOG and the ANPS. If you would like to help out at any of our regular working bees, please contact Tony Lawson at tony.lawson@fog.org.au.

FOG T-shirts

FOG has a batch of new t-shirts for sale: 100% cotton, plain white or light camel coloured, crew neck, with "Friends Of Grasslands" + FOG logo, surrounded by grassland plants, sketched and designed by Michael Bedingfield, all printed in black. Sizes available are S, M, L and XL - since the shirt sizes are generous, you could afford to err on the small side. \$15 each. Postage (\$5 extra) can be organised for members outside ACT. Orders to: david.eddy@fog.org.au



News Roundup

Scottsdale Monitoring

Linda Spinaze

26 OCTOBER We started out with wonderful weather for the Scottsdale monitoring Day, but on the drive down to Bredbo it started to sprinkle. I'd left all my wet-weather gear at home! But the weather held, and we had a great day checking out all that African lovegrass!

Nine lovely volunteers helped on the day. A perfect number to divide into three groups of three, one group to do the monitoring of the grazed valley areas, and two groups to monitor the slightly more time consuming hilly areas where the native vegetation is more dominant.

After a great lunch provided by Bush Heritage we drove up onto the hills beside the Murrumbidgee and admired the fabulous views as we finished off a couple of the last monitoring sites.

Many thanks to the volunteers, and especially to Sarah who takes home all the filled-in sheets and photographs and makes sense of all that information.

See you all next year again!

Grassland restoration

Grasscover

27 OCT It was a privilege to be invited to the annual meeting of Greening Australia Capital Region (GA) held at the Australian National Botanic Gardens on a pleasant spring evening. A wonderful spread, interesting talks, and a network of many of the region's leaders in ecosystem restoration made the event a very enjoyable and rewarding one.

Peter Davidson, the Chair of GA spoke of the challenges that GA has faced and overcome. GA is extremely fortunate to have him at its helm. Peter is truly impressive, as anyone who knows him will testify. He has nearly forty years

professional and practical experience in agriculture, natural resource and catchment management at local, state, national and international levels.

Jason Cummings, GA's CEO, who joined the GA team in May last year gave a presentation on GA activities and catalogued its amazing statistics in terms of land restored, volunteers involved, etc. Jason also has a strong background in natural resource management as an academic, consultant and policy adviser, as well as a PhD in ecosystem rehabilitation, and is extremely capable.

However, the highlight for me was a talk by Paul Gibson Roy from Greening Australia Victoria's Grassy Groundcover Restoration Project (GGRP), which aims at protecting and restoring species-rich native wildflower grasslands that once covered large areas of south-eastern Australia. His team won the 2011 Earthwatch Rio Tinto Prize for Citizen Science - a \$25,000 prize.

I have followed Paul's pioneering work on grassland re-establishment for a number of years now and it is truly amazing.

Seed sourcing has been a key element. Seed is collected from wild populations, ensuring a biodiverse sample is collected. It is then on-

grown in seed orchards and harvested from these orchards where it can be used in restoration work. Now GA have established seed orchards for a number of our rarer grassland species at its Aranda base and Scottsdale.

Good site preparation is also essential. Often the top level of soil is scraped to achieve significantly reduced weed re-emergence and lower nutrient levels. Paul reported that a large number of grassland species established successfully from field-sown seed mixtures and many have expanded their range over time through recruitment. The project has successfully developed methods that allow for sowing complex seed-mixtures at field scales.

Fascinatingly, Paul reported that now the sites are being repopulated with invertebrates and small reptiles, a great sign of success, and that many sites are now being managed by normal natural resource management techniques such as fire, widely practiced in Victoria to manage natural grassland remnants.

The GGRP publishes an electronic newsletter the Grassy Gazette, a great read: <http://www.greeningaustralia.org.au/our-solutions/biodiversity/restoring-grassy-groundcover>.

Too many superlatives! I don't think so.



The Cascades with Rod Mason

Michael Goonrey

THURS 3 NOV Geoff and Margaret arranged for a FOG visit to the Tuross Falls area with Rod Mason. This field trip was part of the workshop and field trip project, *Indigenous Values in the Landscape*, a Murrumbidgee CMA community project.

Rod showed us a number of different things - the healing pools at the Cascades (here you can call and see the spirits from the past), an ancient orchard, the multi-uses of plants, stones from Lake Cargelligo found there, and he spoke to the local rainmaker.

Names of areas There were special camp areas – up to 200 camped in these areas – and they were visited seasonally. The ceremonies performed in the areas come from the bush and everything in it. They are important like church is for white people. Rod mentioned the following areas – Billiga; Williga; Tidbilliga (here you can meet your ghost who will touch you); and Mount Gilligumba (local rainmaker).

Plants Rod pointed out a number of native trees and bush fruits and referred to the multi-uses for plants – food, fibre (e.g. string), medicine and shelter:

- Geebung fruit tree – native olive, which has been marketed commercially as Aussie olive. Good for blood – liver and kidney
- Tea tree - good for arthritis
- Lomandra – bush rice – needs fire to regenerate. Spreads nutrients.
- Lemonade bush
- Mountain plum with pigeon berries
- Snowy mountain plum - brought from Snowy Mountains and planted here in ancient times.
- Deua tree – an endangered tree
- Baby Wadbilliga ash tree – when these are lost then we will



lose the giant golden gliders – they live and mate in these trees.

Fire Aboriginals used fire to regenerate plants. Note that seed can last in the soil for 14-15 generations.

His people did spot burns when foggy and in early morning or late afternoon and when not windy. It was a cool/wet rather than a hot burn. With the Deua tree there should be a burn when the bark is up to waist height (the high tide mark for a tree) – beyond that the bark is too high and burning can kill the tree. Many trees in the area were beyond the high tide mark. Geoff suggested people might investigate the possibility of arranging for some small trial burning with the local Rural Fire Service in attendance.

Future Rod's grandfather was an Aboriginal king, but today there is little recognition of the presence of local aboriginal people and their land management role in the area. Rod is a traditional custodian and he wants the duty of care given back to his people, and an acknowledgement of traditional Aboriginal land management practices and the encouragement to reintroduce those practices. Suggestions made for the future included establishing cadetships for both indigenous and non-indigenous rangers and co-management (which is currently being discussed). It was agreed by those attending the field day that a letter should be sent to EPA/OEH by those present stressing the need for recognition of the importance of Indigenous land management practices being reintroduced in such areas.



Photos: (left) A view from the Cascades. Rod's ancestors came up from the coast plain through the Cascades and Tuross Fall and then on to Numeralla before heading to the Snowy Mountains (above) Questions and answers in the camp. Rod's desire is to have traditional land management practices reintroduced and (opposite) putting in the hard yards at Old Cooma Common (G Robertson)

War of wills at OCCGR

Geoff Robertson

SAT 5 NOV FOG working bees have now been held at Old Cooma Common Grassland Reserve for over a decade, and on this Saturday in November, there was a return to the fray.

When FOG, over ten years ago, decided to apply for a grant for OCCGR, then referred to as Radio Hill, it was known that it was a large area and weedy. In those early days, from a distance, Radio Hill looked like many neglected areas, with large areas dominated by woody weeds, especially hawthorn and briar. Closer inspection would reveal large areas dominated by African love grass and in early summer, some areas yellowed with St John's wort (SJW).

In the initial year or two there was a concerted effort to be rid of woody weeds, African love grass (ALG) and verbascum. In the beginning with regular FOG working bees and funding to pay for occasional professional weeding efforts on the ALG, a large impact was made on woody weeds and the ALG.

However, the weeds were not going to give up easily, and after the initial intensive phase was over, viper's bugloss and St John's asserted themselves and the lamb's ear kept on keeping on. The struggle was a little overwhelming but with grit and determination, an emerging better strategy and added resources, the battle was rejoined.

A new strategy has clearly emerged. Probably the most important is the fact that Jim and Margaret have now conducted a few three day working bees with Jim undertaking well targeted boom spraying in areas dominated by weeds, especially St John's, and Margaret spot spraying in the



high quality grassland areas. This protects the threatened and rare plants (Monaro golden daisy (*Rutidosia leiolepis*) and hoary sunray (*Leucochrysum albicans* var. *tricolor*)) - this year the Monaro golden daisy flowering was spectacular. This activity plus FOG's regular working bees is making a difference.

On 5 November, the big guns came out for the working bee, with Jim and me spraying from tanks on quad bikes and Margaret spraying from a tank in the back of her Hilux. June and Bob put on backpacks, while Andrew and John undertook cutting and daubing woody weeds and Trish used a hoe. By day's end much progress has been made.

Compared to ten years ago, what has been achieved? Woody weeds have been largely reduced and while they still emerge en masse in a wet year like last year, few can be seen rising above the height of the grass. ALG is well under control. Lamb's ear stalks unfortunately persist and smooth hawksbeard (*Crepis capillaris*) and goats beard (*Tragopogon dubia*) are becoming a problem, though the intended grazing will hopefully put paid to them. While areas outside the reserve glow yellow with SJW, relatively little yellow is found within the reserve. Hopefully the blue

flower of the vipers bugloss will no longer be seen once grazing commences. It looks like a grassland should look. However, the effort will need to be constant.

Cooma-Monaro Shire Council weeds unit has also played an important role. It has organised funding for some professional weeding and the purchase of herbicide. The Murrumbidgee CMA has also provided great assistance with a grant of almost \$5,200 through its Community Action grant funding to finance FOG's targeted approach to control the SJW.

Well done OCCGR organisers and volunteers!

Wildflower walk in Stirling Park

Jamie Pittock

12 NOV FOG's annual wildflower walk at Stirling Park proceeded amongst a verdant display of button wrinklewort. A group of 27 enthusiasts, including a group of visitors from academic institutions from countries in the Mekong River, spent two hours enjoying the late spring weather. A full array of grassy woodland wildflowers were in bloom and were easier to see thanks to FOG's work over the past three years removing woody weeds. However late spring rains have also reinvigorated many weeds, including the Maderia Vine infestation.

Do you want to advertise an event, job, etc through FOG?

The FOG Newsletter only advertises FOG activities. However, non-FOG activities, of interest to FOG members, are included in the FOG e-Bulletin, which appears frequently (usually before a major FOG activity).

To publicise an activity, etc., please provide a short description to FOG e-Bulletin editor (see back page).

Fireweed Control at Nunnock Swamp

Peter Tuckerman

SUN 13 NOV An enthusiastic group of people gathered in an endeavour to ameliorate the threat from fireweed (*Senecio madagascariensis*) to the grasslands of the South-East Forests National Park. We gathered at the Nunnock Swamp Camping area, off Packers Swamp Road on the Coastal Range. The day was a joint effort of National Parks and Wildlife Service (NPWS), Friends of Grasslands (FOG) and Friends of Alexander's Hut, with a few additional volunteers.

The grasslands and Nunnock Swamp reflect the wetter conditions that have prevailed over recent years and the great effort and good management provided by NPWS. The structures and facilities provided by NPWS are not intrusive yet control the vehicle access to protect the natural environment while giving good access to visitors. The walking tracks are discreet, providing good access while managing traffic to protect the grassland.

A number of native species of fireweed ("good fireweed") were found in addition to the focus of our attention, the exotic fireweed *Senecio madagascariensis* ("bad fireweed"). Guided by the expert botanist in the group, our skills were improved in the identification and distinguishing of, and between, indigenous and exotic species of fireweed. It appears that the different species of fireweed can hybridise and so the most appropriate strategy to avoid fireweed contamination is to remove all species.

To add an extra dimension to our appreciation of this area, a retired farming couple who once owned land in the area described some of their history and how the land was used prior to becoming part of the National Park.

NPWS staff provided and cooked an excellent barbecue lunch for those attending.

We all had a very pleasant day, great environment, good company, ideal weather and hopefully we made some progress to ameliorate the threat from fireweed. Naturally follow up work and monitoring is required to avoid fireweed becoming established in this beautiful grassland.

Visit to Bunhybee Grasslands

Linda Spinaze and Roger Clarke

19 NOV Bunhybee is a 50-hectare conservation property 35km south of Braidwood. FOG visited it twice in 2007-08, when the Nature Conservation Trust acquired it and the adjacent Parlour property, and visited Bunhybee again in May 2009 after it was purchased by FOG member Linda Spinaze: <http://www.rogerclarke.com/Bunhybee/FOG-090509.html>

A party of 9 members (plus 2 visitors from the Muehlviertel in Northern Austria) paid a 2-hour visit to the property on Saturday 19 November 2011. It's recovered very well from the drought of 2000-09, during which rainfall was at 77% of its long-term average of 750mm (30in) p.a. 2010 was about 150% and 2011 to date 95%. A brief history of Bunhybee was provided. See:

<http://www.rogerclarke.com/Bunhybee/PropBrochure.html>

The original list of 160 native species that was developed by a combination of FOG members and Rainer Rehwinkel has since grown by 40%. The species list is in three parts, accessible at:

<http://www.rogerclarke.com/Bunhybee/PS-FP.html>

Margaret Ning's rapid-fire id'ing of 60 species included two that are new to the list - *Geranium retrorsum* and *Gonocarpus micranthus*. With a further 4 new species photos on the day, the web-site now includes local photos of 170 of the 225 species.

Weeding with a chainsaw in Stirling Park

Jamie Pittock

20 NOV FOG's final weeding event on National Capital lands finished on a loud note as President John 'have chainsaw certification' FitzGerald demolished extensive infestations of Cootamundra wattle and pines. The work party cleared an estimated 120m³ of woody weeds out of the majority of the southern end of Stirling Park, ahead of a planned burn in the cooler months of 2012. Nine volunteers braved the cold and damp conditions to systematically remove thickets of cotoneaster, hawthorn, pines, Cootamundra wattle and other horrors. Freeing populations of golden everlasting, clustered everlasting, yellow buttons and button wrinklewort from imminent invasion was particularly pleasing.

The damp conditions prevented spraying of some nasty weeds, such as African lovegrass. One infestation of broom has resprouted with recent rain but happily the other two infestations appear to be largely under control after three years of FOG labour.

In the past three years FOG and the ANU Fenner School have held 19 work parties involving over 1,700 volunteer hours work and resulting in removal of over 729 m³ of weed biomass, and held three public nature walks with 63 participants on NCA lands. In 2012 we resume with a work party at Scrivener's Hut on the side of Capital Hill on 5 February.

FOG e-Bulletin

The FOG e-Bulletin contains the latest information on FOG happenings and more. It contains no pictures so its size is minimal.

If you haven't been receiving it, and you want to, please provide Margaret (membership@fog.org.au) with your e-mail address. Also, please let Margaret know of address changes.

Conservation Council AGM

John Fitz Gerald

24 NOV Almost ten FOG members attended the Council's AGM. Three major items should interest all FOG members.

(1) **John Hibberd** stepped down as Executive Director after many years of distinguished service and hard work championing conservation of



the environment in the ACT region. John paid tribute in particular to the Council's office team for supporting him fully, especially this year

while he faced some daunting health issues. He also thanked the member groups, including FOG, for their assistance. In closing, he was pleased to be able to tick off most of the list of objectives that he had set for the Conservation Council.

John moves into a new position as Director of Projects at the Council. FOG thanks him for his sterling efforts as ED in advocating for change by continued discussions with the ACT government, and for efforts to keep the whole community abreast of the many issues in local conservation and sustainability. FOG understands that John will continue for

some time in project direction but plans then to do some well deserved travelling and relaxing – our best wishes for the future go to him.

(2) **Clare Henderson** has been appointed to the Executive Director position. Clare had a brief stint as interim director in 2003 and brings wide experience having worked in government and public sectors, plus a passion for the environment and a commitment to sustainability. FOG welcomes Clare to her new key role and looks forward to working closely with her in many different issues in grassy ecosystems, such as offsetting.

(3) The **Biodiversity Mapping Project** was formally launched just prior to the Council's AGM. At this launch, John took to the controls of the GIS software to give his audience some appreciation of the potentials of the new mapping tool. The ACT is fully covered as a digital map which allows multiple overlays of layers of information about any mapped element in biodiversity. John displayed a map of the northern edge of the ACT and demonstrated how easy it was to overlay patterns including the extent and connectivity of Box-Gum Grassy Woodland.

Sarah Sharp then demonstrated how data collected across the ACT in a new survey of African lovegrass (see newsletter page 10) was readily imported into the mapping system.

Access to this powerful analysis tool will basically be free to member groups such as FOG (apart from ink costs for large colour prints). CONSACT will run specially planned courses (currently being designed by David Wong) to train individuals from member groups in operational use.

The establishment of the Project has been made possible through the sponsorship and ongoing support of the Fenner School of the ANU, the ESD Directorate of the ACT government (principally Research and Planning Section), and the software company ESRI Australia which granted a licence for CONSACT's use of its ARC/INFO mapping system. EPSON Australia generously donated a costly A2 colour printer and both ACTPLA and TAMS have provided access to their geographic datasets. The first two major activities for the new system are the Gungahlin Rim Conservation Plan and the SACTCG African lovegrass mapping survey.

Photo: John Hibberd (Susanna Chung)

LANDCARE AWARD

Congratulations to Sarah Hnatiuk and Steve Welch.

Dr Chris Bourke presented awards to FOG member Sarah Hnatiuk and well-known grasses and weeds enthusiast Steve Welch, who were among the ten impressive environmental achievers recognised at the 2011 ACT Landcare Awards in September

Australian Government Individual Landcarer Award

Sarah Hnatiuk was selected as the ACT region's Individual Landcarer for 2011 in recognition of her pivotal role in the work of Mount Painter Park Care, for her significant contribution to the work of Greening Australia and in recognition of her contribution to ACT-wide conservation strategies. Sarah works extensively to extend the Landcare experience to corporate groups and ADFA cadets, never failing anyone who puts their hand up to work. Sarah's efforts are easily recognisable from William Hovell Drive; where the restoration work of Mount Painter is obvious through the multitude of fluorescent pink tree guards.

The Environment Community Support Award (ACT category)

Steve Welch, in recognition of his efforts as a Community Coordinator of the SACTCG supporting ACT community activities. Steve Welch has had an ongoing involvement with Landcare from both the community and Government perspective. Steve spent many years as a ranger with the ACT Government and is especially fond of his work at Tidbinbilla. Steve has held various Landcare support positions in both local and Federal governments and as past volunteer President of the Upper Murrumbidgee Catchment Coordinating Committee and is currently its Vice President. He has brought this depth of experience to his current role as coordinator of the Southern ACT Catchment Group, where his passion for community based Landcare is bearing fruit. He has made a significant contribution to the continuing vitality of that Group and their contribution to local environmental education, raising awareness of weeds and tackling issues at a practical level.

Fourth Indigenous Values Workshop

Geoff Robertson



tea-tree drainage line and eventually onto the area that we now call Rod's classroom. Throughout the walk Rod would stop and explain particular plants, their growth habits, and how they were managed traditionally. He pointed out those parts of the landscape where plants were appropriately placed and where some of the landscape function had broken down and needed attention. Much of his discussion was on the role of fire management

20-21 OCTOBER 17 people, excluding Rod, Margaret and me, attended the fourth Indigenous values workshop at Garuwanga conducted by FOG with funding from the Murrumbidgee CMA under the Community Grants Program. On this occasion we had a large contingent from the Indigenous Unit of the ACT NRM Council and the ACT Chief Minister's Department including people from many Indigenous groups.

The program covered much the same material as in previous workshops with more on some issues and less on others. The workshop only started minutes late. Many people had made great efforts to travel a long distance to arrive on time.

The workshop started with me giving an introduction to Rod and a run down on what had been learnt at previous workshops. Then everyone introduced themselves. People were very open about their motives for attending and even right from the start people mentioned some very strong emotion about their need to learn about country, to learn about their lost culture, or to reconcile themselves to Indigenous people and country. As we went around the room, Rod responded to each person individually, obviously touched by people's wanting to learn.

We then adjourned outside for Rod's smoking ceremony and welcome to country. He then elaborated on some of the themes that had already been mentioned and helped people understand the broader landscape through Ngarigo eyes. Morning tea was then taken, with some of the participants bringing out some wonderful cakes and other goodies.

Next Rod brought out various plant material and described the different plants, and the foods, medicines, tools, weapons, materials (such as twine and baskets) that they provided, enriching this presentation as usual by explaining the Ngarigo words used to describe the plants and their products.

After lunch we walked from the Garuwanga Barn, through the wood, past the fruit orchards, as Rod describes them, through the grassland, then through the

and how this was best approached. We then visited areas that had been burnt and an explanation of the before and after effects was provided.

Then we returned to the barn for afternoon tea and a slide show by Rod where he showed some of his favourite shots. Largely we were treated to a walk through the traditional camping grounds from the coast to the high country and how each camping site was managed so that on the seasonal return to the camp site, the plants and animals were ready to be harvested.

Rod accompanied us on the tour of Garuwanga. We visited Ten-eighty, the highest point at Garuwanga, for its views, land management issues, and its different northern and southerly aspects. We visited the beach, the sandy riverbank areas of the Numeralla River, for its sheer natural beauty and in the hope of possibly seeing platypus, water dragons, and even a water rat. None of these were seen. However, the trout put on a most impressive display of breaking the water surface. According to Dierk, he had never before seen such a display. Next we travelled along the fire trail and then took a short walk to another spectacular section of the Numeralla River where there is a large pond, a waterfall, and a huge area of rocks where the water disappears - many explorers chanced their skills on the rocks. Our final stop was the creek crossing on Winifred Creek, where Garuwanga joins Dangelong Nature Reserve. Rod accompanied us on most of this journey explaining what was happening in different parts of the landscape. Then it was time to sit around the fire for a cook-up and further story telling.

On the second morning, we had a recap on Day one and Rod answered many questions about culture, traditional practice, language and landscape management. Then it was off for another walk, this time past a number of boulder areas which provided the basis of natural gardens which may be harvested for fruits, seeds and animals. Rod emphasised the importance of micro habitats for food and shelter and pointed out one site that would be used as a shelter particularly for women. We then returned for morning tea which did not take long because we were then outside again where Rod demonstrated



some spear throwing and then produced his popular kangaroo coat, which many people modelled and were photographed in. The best was Greg Chatfield who had snuck off with Rod who painted him with white ochre that Greg had brought along.

Following lunch, while conditions were not ideal, Rod organised the lighting of a fire. I had applied for a licence for this. This was readily granted when I explained what we were doing, how we were doing it and the precautions we were taking. Rod explained to participants what was burning and not burning (or protect-

ing), how we would control the fire, etc. Perfect and impressive result.

Then it was time to give some brief evaluations, say thank you all round, and indicate what was next, which we might talk about on another occasion. All those that attended were delighted and deeply moved by the new insights that they obtained about our landscapes, biodiversity, and vegetation management and restoration.

Photos: (above) participants in the Indigenous values workshop, (opposite) lighting a fire at Garuwanga (G Robertson).

Cultivation Corner:

Blow-ins, volunteers, self-sowers and weeds

Janet Russell

Over the past two years, we have had a number of native plants self-sow in our garden. In all, three *Cassinia* species have appeared. The first to arrive was cauliflower bush (*Cassinia longifolia*) two years ago. We allowed it to get to nearly a metre high before removing it. It had established itself on the front of a garden bed right next to the pavers in the back garden. It wasn't able to be taken out and transplanted because of damage to the roots and it was too large to stay where it was, in front of small ground-covers, so we had to dispose of it.

The other two appeared in the front garden over the past year. The first to arrive was dolly bush (*Cassinia aculeata*) which is now also approaching a metre in height. This plant and *C. longifolia* are both found in the Aranda Bushland. I thought the third one *Cassinia arcuata* was a bit more of an unusual arrival but I found it on the list of plants on Black Mountain which is being maintained by the Australian National Botanical

Gardens (ANBG). Laurie Adams is developing a key for all these plants based on leaves. I assume that is a work-in-progress as only some of the plants are indicated as being in the key.

Some of the other plants to arrive have been Jersey cudweed (*Pseudognaphalium luteoalbum*), *Euchiton sphaericus* and cotton weed (*Senecio quadridentatus*). There are also at least three species of wood sorrel (*Oxalis* spp.) in our garden. I find Flora of the ACT by Burbidge and Gray, a useful reference for plants that arrive in the garden. I have to confess, I didn't think it would be useful at first because it was published in 1970. I used to consult Vascular Plant Census of the



ACT on the ANBG web site when I couldn't but notice how many entries had the name M Gray against them. The only two listed wood sorrel in Flora of the ACT were *O. articulata* and yellow wood sorrel (*O. corniculata*) which are shown as declared noxious weeds on the Herbarium of NSW website. *O. articulata* is pink and so easier to identify when it is flowering and according to the Eurobodalla garden escape website the pink-flowering species do not produce seed in Australia. Yellow wood sorrel is hard to distinguish from native *Oxalis*. Two of the species in our garden only have yellow flowers.

I decided that I want to know which ones we have in the garden so I have given a sample of one to the ANBG plant id service as a start. We have one form that we have never seen flower as Andy digs them up before they get the chance. I have looked at the key on the NSW herbarium site and as far as I can tell, it looks like *Oxalis brasiliensis*. We are going to allow it to flower this time so we can confirm its identity. We have generally allowed the more weedy natives to survive and thrive as they arrive.

Photo (left) *Oxalis brasiliensis* (J Russell)

African Lovegrass Awareness Campaign

John Fitz Gerald

Steve Welch and the Southern ACT Catchment Group (SACTCG) have been busy this spring and summer taking advantage of grant funding to increase awareness of the problems that this grass (ALG) is causing in homes, farms and other properties throughout the ACT and south-eastern New South Wales. ACT readers have probably seen advertisements in local newspapers under the banner “Don’t love this grass! It’s nobody’s Friend”. An informative new brochure with a similar title is also readily available from SACTCG.

There has also been much more happening in the SACTCG’s battle against ALG.

Firstly, two information sessions have been held in conjunction with the Upper Murrumbidgee Catchment Coordinating Committee, Regional Landcare Facilitator, ACT Natural Resource Management Council, with support from the Australian Government. On 18 November a morning workshop was run at Westwood Farm in Kambah. On 22 October a field day was partnered by Bush Heritage at their Scottsdale property near Bredbo. Both of these well-attended events involved a set of high quality lectures supplemented by discussions and plant identification activities plus, at Scottsdale, two paddock inspections.

Secondly, SACTCG engaged Sarah Sharp to lead a program to survey ALG. Sarah spent many days being chauffeured around major roads in the ACT and region by husband Phil while she mapped ALG ‘on the go’ through the car window and fought back motion sickness. This extensive monitoring was complemented by over 30 community submissions about ALG presence in many of the reserves, nature parks and adjacent suburbs, in some cases reported with amazing detail. All this information has been compiled and projections made about future ALG levels based on different control scenarios. Sarah presented the current survey results and projections at both of the information sessions. The formal report will be finalized and become publicly available in the near future.

Finally, some important information shared in the sessions:

- *ALG outcompetes native species, potentially overwhelming grasslands with monocultures.
- *ALG has done particularly well during the recent drought. It is highly competitive in low-nutrient soils.
- *In the ACT, ALG has been known since at least 1995 in the Murrumbidgee River corridor but was not recognized as a threat until more recently.
- *The wide spread of ALG through many southern and western Canberra suburbs is possibly related to the importing of tons of topsoils from Bredbo.
- *ALG grows across most of urban ACT, but is minimal in the new suburbs of Gungahlin where there is some

chance that it can be contained by quick action.

*ALG moves not only via river corridors but also roadsides. New control procedures, including better mowing practices, are required along road reserves.

*ALG is a particularly variable species. In the ACT, the common form is low growing (approx. 40cm) and blue-green, whereas south-coastal NSW is dominated by a much taller (100 cm and over) and greener form. This tall ALG also grows in the ACT and appears to need a different control regime.

*Glyphosate spraying in summer is effective at knocking off ALG plants in seed, but of course kills all plants growing alongside. In contrast, Fluproponate is effective even when sprayed in winter, and is kinder to some natives including *Austrostipa* sp. In the ACT, a rural roadsides program of experienced contractors spraying fluproponate is being evaluated.

*ALG, a summer grower, can be suppressed by active completion from dense stands of cool season C3 grasses. Recent improvements in seed sourcing (suppliers include Ian Chivers’ company, Native Seeds P/L) mean that substantial volumes of native seeds are now on the market at competitive prices. Available C3 types currently recommended include Wallaby, Weeping and Wheat grasses.

*ALG can be reduced by short bursts of intensive grazing, an approach advocated by Tobias Koenig, an organic grower at Ingelara near Scottsdale. Coupled with some slashing, Tobias recommends a period of heavy stocking with cattle (at live weights over 60,000 kilos per hectare) followed by resting of pastures for at least half of the year. In this way Koenig is finding native and perennial grasses increasing even in paddocks that were once 95% ALG.

*Trials of Koenig’s cell grazing approach are under way at Scottsdale. FOG has been involved for three years in monitoring their progress, though it appears too early to interpret solid long term trends.

*Nature reserves in the southern ACT, such as Tuggeranong Hill, are basically islands in seas of ALG. Careful monitoring and treatment for ALG and other weeds along all boundaries and tracks is already operated by ACT Parks and Conservation.

Congratulations to SACTCG and its partners for this initiative. More detailed information on ALG can be obtained from the web at www.sactcg.org.au, from NSW Primary Industries (www.industry.nsw.gov.au), and many other weeds sites.

Photo: (opposite page) Participants enjoy lunch during the ALG field day which was centred around the shearing shed of Bush Heritage’s Scottsdale property (J Fitz Gerald)

FOG advocacy

Naarilla Hirsch
September 2011

A proposed Bonner 4 East residential extension was released for public comment under the EPBC Act. FOG's concern with this proposal is the use of a previous offset area as an outer asset protection zone for bushfire protection of the adjoining urban area. In FOG's view conservation areas should be managed for conservation purposes, not as urban asset protection zones – such zones should be located outside conservation areas, including Nature Reserves.

October 2011

The National Capital Authority (NCA) asked for public comment on three options for new diplomatic estate. The three sites are; south west of Stirling Ridge, near the Yarralumla brickworks, and adjacent to the Federal Golf Course. FOG recommended that the sites be assessed for the presence or absence of threatened species and ecological communities by recognized botanical and zoological experts in grassy ecosystems, that areas of habitat for species and ecological communities identified as threatened under ACT and Commonwealth legislation be ruled out of further consideration, and that sites where the local community opposes development be

excluded from further consideration. In particular, FOG recommended that the Stirling Ridge site is not further considered for development, that the Dudley Street (Yarralumla) grasslands (plus a buffer zone) be excluded from any further consideration of the Yarralumla brickworks site, and that the Federal Golf Course site is not further considered for development. Instead, FOG suggested that the area known as the Curtin horse paddocks be considered as it understands that this area has low biodiversity values.

The Commonwealth Minister for Sustainability, Environment, Water, Population and Communities is undertaking to reform Australia's national environment law, and has released several papers for public comment, including papers about the Government's biodiversity and offsets policies, and on cost recovery under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). FOG has submitted its views on each of these.

In response to the offsets policy paper, FOG reiterated its view that no development should impact on vulnerable or endangered species habitat or ecosystem communities, therefore creating no need for offsets. However, FOG offered comments on details within the paper in recognition of the reality of the current situation where offsets are mandated by government for the destruction of

native vegetation. Particular issues raised by FOG included the importance of the principle of "like for like", the need to declare high diversity or "core areas" as "no go", connectivity between high quality sites, concerns about indirect offsets such as research in terms of delivering a positive outcome for the environment, timing of offsets, and independent monitoring of compliance. FOG's view is that offsets should be aimed at "net gain" rather than maintenance of the status quo, which would minimize the risk of net loss if an offset is only partially successful. We remain concerned that the use of offsets will result in a net loss of native species and ecosystems across the landscape.

In general, FOG supports the principles outlined in the biodiversity policy paper. In particular, we are pleased to see support for a landscape-wide approach to management of ecosystems and land use planning in the paper, and the continuing commitment to engage all Australians in partnerships in land management. FOG raised concerns about lack of effective implementation in relation to grassy ecosystems, such as the piecemeal rather than strategic approach to developments in the Gungahlin area, the lack of proper knowledge or available material to restore some areas after damage has occurred, and factors inhibiting conservation of connecting corridors as well as high quality sites.



FOG advocacy cont.

The third paper FOG commented on was the consultation paper on cost recovery under the EPBC Act. FOG put the view that our native grassy ecosystems and dependent species have high values (both monetary and environmental), so that placing a cost on the assessment of the impact of development proposals merely reflects that value. FOG considers it essential that such cost recovery supports post-approval monitoring and audits over the longer term, in addition to covering the initial referral/assessment/approval process.

The NCA released for public comment a discussion paper on the National Capital Open Space System (NCOSS). FOG considers conservation of the NCOSS not merely a question of unique urban amenity for the ACT, but also of national importance for biodiversity conservation due to the threatened species and ecological communities contained within the NCOSS. However, FOG believes that resources provided to manage these areas have not kept up with legislative and other responsibilities, and we are concerned that as a result the open spaces are becoming more degraded. FOG's view is that professional bush regeneration teams need to be employed to work across the open space system, regardless of who the land manager is. There are a number of open space areas that should be protected in Canberra Nature Park, as federal nature reserves and/or embargoed from development (and that have been identified by the Commissioner for Sustainability and the Environment as of high conservation value), including Yarramundi Reach grassland, Stirling Park and Scrivener's Hut grassy woodlands, and grasslands in Yarralumla, on Lake Ginninderra and in the Glenloch interchange.

An environmental impact statement for the proposed District Playing Fields in Throsby was released for comment by ACTPLA. FOG expressed concerns about three areas.

The first is the mitigation strategy, in particular translocation of any Striped Legless-Lizard found in the construction area, and the timing allowed for revegetation. The other concerns are more general concerns also raised about other recent development proposals: the offset strategy and a strategic approach to conservation matters in Gungahlin.

ACTPLA released for comment a development application for the suburb of Coombs, Weston Creek. FOG's concerns about this relate to the lack of the strategic and correlating process that we believe should be undertaken, to provide details on the management of recreation, bushfire hazard and conservation within the riparian zone in the proposed development. FOG believes that the residential boundary should be pulled back to provide an adequate buffer to the corridor. This will mitigate against the need to undertake high intensity bushfire management actions in the riparian corridor, protect habitat and provide for a range of high intensity recreation activities outside the corridor. Other concerns relate to the lack of detail on how open spaces within Coombs and in the inner asset zone will be used to reduce inappropriate recreation within the river corridor, and with some of the species identified for planting in urban parks and in the streets. FOG supports the establishment of a reserve in the Lower Molonglo River Corridor, together with production of a Management Plan before any residents move into the suburbs adjacent to the river corridor.

November 2011

Dr Allan Hawke's review of the NCA was released for public comment. After noting that the NCA's management of Yarramundi Reach and Stirling Park has not featured in recent reviews of the organisation, FOG recommended two actions be considered. The first is to improve the conservation tenure of these lands by reserving Stirling Park and Yarramundi Reach as nature reserves or extensions of the Australian National Botanic Gardens. The second

is to allocate adequate resources for management of these areas.

FOG provided comments on the proposed Canberra Centenary Trail route, particularly in relation to the sections running through Mulligan's Flat Nature Reserve and Gorooyaroo Nature Park. We are concerned about the impact of proposed new or upgraded track through high conservation areas in these reserves and along the ACT's northern boundary, the possible spread of grassy weeds from weed infested areas into the above (and other) nature reserves, and the potential for inappropriate use by trail bikes. FOG also notes that the management costs include marketing and promotion, community engagement and insurance, but make no mention of actual trail maintenance or management of any undesirable impacts of the trail on the reserves it passes through.

FOG provided comments on the draft ACT Planning Strategy, also out for public consultation. While we are pleased to see recognition of the conflicting demands of urban development and biodiversity conservation in the Strategy document, a major concern is the lack of concrete targets and outcomes for biodiversity values. FOG proposes setting concrete targets that are achievable over the next five years. One of these is no further urban developments or development proposals on land with biodiversity values until a strategic assessment has been done of all of the higher conservation value land within that part of the ACT, with stakeholder agreement to areas retained for conservation (and, for that matter, to strategic offset proposals). Others are production of a synthesised data base and maps of areas with high ecological value or connectivity, and identification of land of high conservation value, both inside and outside reserves, as "no go" for urban development (including infrastructure). Habitat that connects such areas should also be identified.

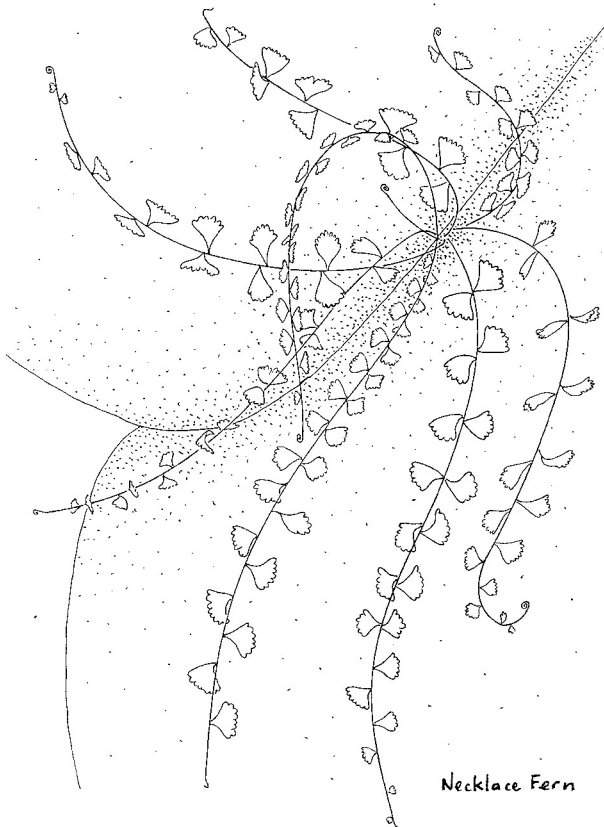
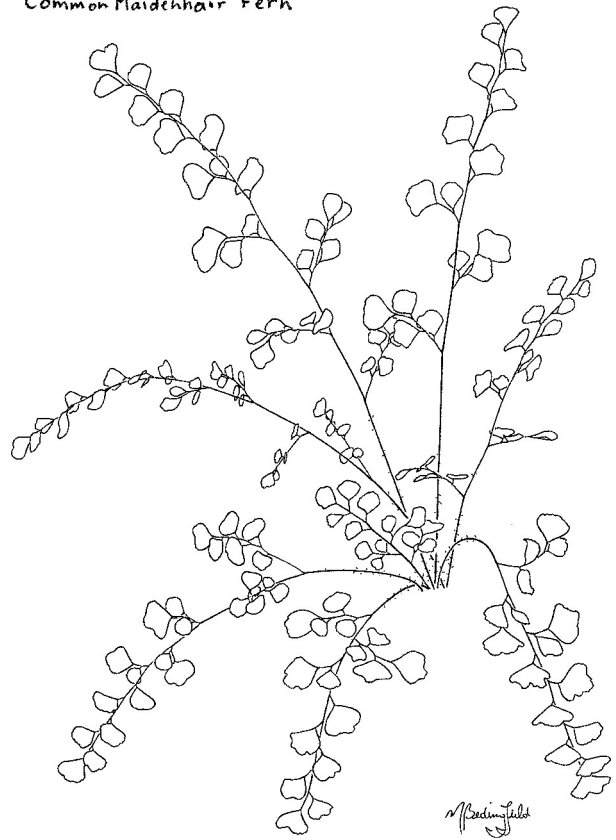
The full text of FOG submissions appears on our website.

Necklace fern and common maidenhair fern – if you're fond of fronds

By Michael Bedingfield

I like the maidenhair fern, and I've had one in my kitchen for about 19 years. So it was a pleasant surprise to find a patch of it, growing on a rocky south-facing slope, in the foothills to Mt Rob Roy. Occasionally I have neglected watering mine and it has withered completely. However with a bit of water, it has recovered, producing new growth from the roots. The wild plants, too, have the habit of disappearing in dry weather and in winter, but recover when there is sufficient warmth and moisture. In dry times they are difficult to find, except for those that grow close to a creek. These wild specimens are the common maidenhair fern, known as *Adiantum aethiopicum*. The leaves are bright green, the stems brown, and they spread with underground rhizomes, creating patches of ferny growth. The species is distributed widely, occurring in Australia, Africa, New Zealand and Norfolk Island. In Australia it grows in moist places, near creeks, in woodlands and in open forests, in small patches or large colonies. The specimens I observed growing among the rocks were about 20 to 25 cm tall, with upright stems. But they can vary from 10 cm up to 50 cm, depending on the conditions.

Common Maidenhair Fern



Necklace Fern

Another pretty local fern is the necklace fern, known botanically as *Asplenium flabellifolium*. The fronds are trailing or prostrate, with fan-shaped leaflets occurring alternately, spread along slender stems that are 10 to 20 cm long. The roots have short rhizomes. Locally it occurs in woodlands and open forests, and can be found growing in rock crevices or on stream banks, in shaded, sheltered positions. Elsewhere, it can be found in other places that are moist, such as near waterfalls or in caves, or in rainforest, where it can grow on fallen logs or tree trunks. It occurs in all states of Australia and in NZ. The necklace fern is more common locally than the maidenhair fern, and shady rocky places are worth checking for its presence.

The drawings show both plants at about half size. The delicate character of these ferns is very appealing, but contrasts their ability to survive through frosty winters and a drought prone climate.

FOG groups and projects

Activities organises FOG field trips, talks, workshops, on-ground works, support to other groups, property visits, and the FOG calendar.

Inquiries: activities@fog.org.au.

Advocacy prepares submissions and advocates for 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 are John Fitz Gerald (Pres.), Isobel Crawford (Vice Pres), Sarah Sharp (Vice Pres.) Al Gabb (Sec.), Sandra Hand (Treas), Kim Pullen, David Eddy, Naarilla Hirsch, Stephen Horn, Tony Lawson, Margaret Ning, Benjamin Whitworth & Evelyn Chia. Andy Russell is public officer.

Inquiries/correspondence: committee@fog.org.au.

Postal address: FOG, PO Box 987, Civic Square, ACT 2608.

Communication produces *News of Friends of Grasslands* and *FOG e-Bulletin*. Inquiries: heather.sweet@fog.org.au (newsletter), and tony.lawson@fog.org.au (e-Bulletin).

Cultivation and Conservation encourages growing of local grasses and wild flowers to learn about their horticulture and ecology, and produces *Cultivation Corner*. Inquiries: janet2.russell@fog.org.au.

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

Financial matters, excluding membership, contact sandra.hand@fog.org.au or Sandra on 02 4846 1096.

Grassland Flora FOG is now responsible for sales of *Grassland Flora*. Inquiries: booksales@fog.org.au.

General inquiries Contact info@fog.org.au, Janet Russell (6251 8949).

Grassland monitoring, Scottsdale holds monitoring days at the Bush Heritage property at Scottsdale. Inquiries: linda.spinaze@fog.org.au.

Hall Cemetery, with ACT Government, holds regular working bees to protect the Hall leek orchid and generally restore the site. Inquiries: andy.russell@fog.org.au.

Media spokesperson Sarah Sharp (0402 576 412). FOG is a regular contributor on Radio Landcare, Tues 9-10am on (2XX, Canberra 98.3FM).

Membership and newsletter despatch See Membership box (page 2). Newsletter despatch is fourth Tuesday of Feb, Apr, June, Aug, Oct. To help, contact membership@fog.org.au.

Old Cooma Common (OCC) with Cooma Monaro Shire Council manages the OCC Grassland Reserve. Working bees are held twice yearly. Inquiries: margaret.ning@fog.org.au or david.eddy@fog.org.au.

Southern Tablelands Ecosystems Park (STEP) FOG helped establish STEP (at Canberra's International Arboretum), a regional botanic gardens and recovery centre to showcase local ecosystems, especially native grasses and forbs. Inquiries: limestone@grapevine.com.au.

Woodland Flora *Woodland Flora*, the sequel to the popular *Grassland Flora*, is now at advanced production stage. Inquiries: sarah.sharp@fog.org.au.

Website (www.fog.org.au) full of FOG information, back issues of *News of Friends of Grasslands*, and program details. Inquiries: webmanager@fog.org.au.