



News of Friends of Grasslands

Supporting native grassy ecosystems

September-October 2011

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Program - take the diary out now

September

FRI 9 – SUN 11 SEPTEMBER, **Artist's Society of Canberra Annual Members' Spring Exhibition, Wesley Centre, Forrest.** Details page 2.

SUN 18 SEPTEMBER, 9.00am-12.00pm & 1.00pm-4.00pm **FOG/Fenner Working Bee at Yarramundi Reach.** Details page 2.

SAT 24 –SUN 25 SEPTEMBER, **South Coast weekend—3 cemeteries and heath-land.** Contact margaret.ning@fog.org.au. Details page 2.

October

SAT 8 OCTOBER, 9.00am start **Scottsdale back blocks field trip.** Register by Wed 5th. Contact linda.spinaze@fog.org.au. Details page 2.

SUN 16 OCT, 9.00am-12.00pm & 1.00pm-4.00pm **FOG/Fenner Working Bee at Yarramundi Reach.** Details page 2.

THURS 20 – FRI 21 OCTOBER, 9.00am-4.00pm **Indigenous values workshop, Nimmitabel.** Workshop limited to 25 people. To inquire and/or register contact geoff.robertson@fog.org.au or ring Geoff on 02 6241 4065. Details page 2.

SAT 22 OCTOBER, 10.00am-1.00pm **Hall cemetery working bee.** Contact andy.russell@fog.org.au or ring Andy on 6251 8949.

SAT 22 – SUN 23 OCTOBER, 9.00am-4.00pm **Indigenous values workshop, Nimmitabel.** Details page 2.

SAT 29 OCTOBER, **Royalla Burra field trip.** Contact linda.spinaze@fog.org.au. Details page 2.

November

WED 2 NOVEMBER, 9.30am-3.30pm **African lovegrass monitoring at Scottsdale.** Contact linda.spinaze@fog.org.au to register. Details page 2.

THURS 3 NOVEMBER, 1.00pm-4.00pm **Indigenous values field trip to Tuross Falls.** Limited to 25 people, priority given to workshop attendees. To inquire and/or register contact geoff.robertson@fog.org.au or ring Geoff on 02 6241 4065. Details page 2.

SAT 5 NOVEMBER, 9.30-3.00pm **Old Cooma Common working bee.** Contact margaret.ning@fog.org.au.

SAT 12 NOVEMBER 10.00am-12.00pm **Stirling Ridge Annual Wildflower Walk.** Contact jamie.pittock@fog.org.au.

SUN 13 NOVEMBER, 10.00am start **Nunnock Swamp fireweed control.** Contact margaret.ning@fog.org.au Details page 2.

SAT 19 NOVEMBER 9.30am – approx. 3.00pm **Bunhybee field trip.** Meet at Braidwood Bakery 9:30am. Contact linda.spinaze@fog.org.au Details page 2.

SUN 20 NOVEMBER 9.00am-12.00pm & 1.00pm-4.00pm **FOG/Fenner Working Bee at Stirling Ridge.** Contact jamie.pittock@fog.org.au

THURS 24 NOVEMBER, 1.00pm-4.00pm **Indigenous values field trip to Bullocks Flat & Perisher Valley.** Limited to 25 people, priority given to workshop attendees. To enquire and/or register contact geoff.robertson@fog.org.au or ring Geoff on 02 6241 4065.



Photos: from FOG's indigenous workshops show John Blay (top) and Rod Mason (bottom) explaining soil amendments. More on page 8.

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Red-leaved wattle, one of
many that will colour
spring

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.

September

Artist's Society of Canberra Annual Members' Spring Exhibition, Wesley Centre, Forrest

10am – 8pm Friday 9 Sept

10am – 5pm Saturday 10 Sept

10am – 4pm Sunday 11 Sept

FOG is sponsoring a prize this year in the special category looking at treasures of native grasslands around the Molonglo, a category promoted for some years by the Molonglo Catchment Group. Gallery is on the corner of National Cct and Fitzroy St., Forrest.

FOG/Fenner Working Bee, Yarramundi Reach

9am-12pm and 1pm-4pm, Sunday 18 September

Come and help restore the ecologically significant grasslands at Yarramundi Reach. We will continue our efforts to re-establish indigenous species in place of Chilean needle grass and other horrors. There will be 500 seedlings to plant and grass seed straw to lay on previously weeded areas. Further weeding will be undertaken. We will meet behind the Aboriginal Cultural Centre on Lady Denman Drive. Lunch provided. Sturdy footwear and sun protection required. Bring drinking water. Please register with Jamie Pittock jamie.pittock@fog.org.au or phone 0407 265 131 for more information.

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.

South coast weekend, Towamba Valley and Eden

10 am, Saturday 24 – Sunday 25 September

On Saturday Jackie Miles will lead one or more coastal options, involving heath or forest, both burnt in the last three years or so. We may walk part of the light to light walk (Boyd's tower to Green Cape lighthouse) in Ben Boyd NP. Be prepared to wade across the mouth of the creek, though it is most often closed and can be crossed dry-shod. The second option takes in a couple of spots on the Princes Highway about 30km south of Eden, where a broad slashed grassy verge contains many coastal forbs, and an interesting adjacent forest beckons. On Sunday we will visit three cemeteries in the Towamba Valley with Paul McPherson. These carry secondary grassland dominated by kangaroo grass, with a range of grassy woodland species now rare in the region. Is this a product of land use (Aboriginal and/or European), or is it a remnant of an undescribed lowland grassy woodland community?

Accommodation: People can stay at Garuwanga (Nimmitabel) on Friday night. Saturday night will be cabins at Eden caravan park (or camping).

Meet Saturday morning at parking area, corner of Princes Hwy and Edrom Rd (chipmill turn-off) c. 18km south of Eden. (Approx 2hrs from Nimmitabel via Bemboka, Candelo, Wolumla). Contact margaret.ning@fog.org.au for details & to confirm accommodation numbers.

October

Back blocks field trip, Scottsdale, Bredbo

9:30 am start, Sat 8 October

We will leave the low flat and weedy agricultural areas of this Bush Heritage property behind and head into the rich vegetation on high and rocky "back blocks". Be prepared for some rough walking. It may be wet along the Murrumbidgee. Registration required by Wed 5th. Contact linda.spinaze@fog.org.au

FOG/Fenner Working Bee, Yarramundi Reach

9am-12pm and 1pm-4pm, Sunday 16 October

We will continue our efforts to re-establish indigenous species in place of Chilean needle grass and other horrors. We will meet behind the Aboriginal Cultural Centre on Lady Denman Drive. Sturdy footwear and sun protection are required. Bring drinking water. Lunch will be provided. Please register with Jamie Pittock, phone 0407 265 131 or jamie.pittock@fog.org.au.

Indigenous values workshop, Garuwanga near Nimmitabel,

9am-4pm, Thursday – Friday 20-21 October

Cost of \$25, to be paid in advance, for lunches, morning and afternoon teas. Those wishing to stay at Garuwanga on the nights before, during and after the workshops are welcome. Workshops will be limited to 25 people. To enquire &/or register contact Geoff on 02 6241 4065 or geoff.robertson@fog.org.au See enclosed flier for more information on topics.

Indigenous values workshop, Garuwanga near Nimmitabel,

9am-4pm, Saturday – Sunday 22-23 October

Details as above.

Royalla Burra field trip

Saturday 29 October

FOG has recently become aware of some high quality grassland sites in this area, and this season provides a great opportunity to see them at their peak. *Swainsonia recta* should be one of the highlight species on display. Leader Roger Farrow. Contact linda.spinaze@fog.org.au

Upcoming events

continued

November

African lovegrass monitoring, Scottsdale

9.30am-3.30pm, Wednesday 2
Nov

Since March 2008, FOG and Bush Heritage Australia have been monitoring the impact of grazing on ALG and the interplay between native grassy vegetation and ALG in sites at Scottsdale where both are present. These are fun days and a great learning opportunity, plus free lunch. To register contact linda.spinaze@fog.org.au

Nunnock Swamp fireweed control

10am start, Sunday 13 November
This activity is in conjunction with NSW Parks and Wildlife and ANPS on the edges of Nunnock Swamp in the South East Forest National Park between Bombala and Tantawangalo. We'll enjoy the national park, while keeping our eye out for the sinister senecio. Travel and accommodation arrangements are possible. Lunch will be provided. Contact margaret.ning@fog.org.au

Bunhybee field trip

9.30am – 3.00pm, Saturday 19
November

Great range of plants in flower on a local property owned and conserved by FOG members Linda and Roger. Meet at Braidwood Bakery 9.30am. Bring your own lunch and water.

Contact linda.spinaze@fog.org



News Roundup

Stirling Park work party

Jamie Pittock

JUNE 19 As the thick frost thawed, an intrepid group of 18 ANU Fenner School and FOG volunteers set out to restore more of Stirling Park. Six new volunteers were a particularly welcome addition to the team.

A key task was the planting of tubestock of 40 x *Acacia dealbata* and 40 x *Bursaria spinosa* shrubs in exotic grasslands to link the two areas of good quality grassy woodland and provide more habitat for bush birds in lieu of some of the woody weeds that we are removing. Pleasingly more than 90% of the 60 eucalypts and shrubs planted last winter have thrived, and soon after lunch they had been checked and joined by the new plants. At various times David, Sarah, Kelly, Hannah, Peter A, Peter W, John, Tamsyn, Sam, Kate and Jamie wielded mattocks and water to complete the task.

After a wet spring and summer, Cootamundra wattle seedlings had sprung up in some previously cleared areas, and these were removed by Peter and Christine. Similarly the largest broom infestation was culled of all the large specimens by Lorraine and Andrew in preparation for spraying small seedlings later in the year. A key corridor was cleared of around 2 cubic metres of cotoneaster to link previously weeded areas by Michael and Rebecca. Of concern was the resprouting of some isolated clumps of cotoneaster where earlier treatment failed to kill the rootstock, highlighting the need for rigorous daubing (these shoots will be sprayed in spring).

The remaining work undertaken was the first weeding of a major population of button wrinklewort high up on the middle of Stirling Ridge. Barbara, Sarah, Peter W, John, Tamsyn, Sam, Kate and Jamie removed about 6 cubic metres of cotoneaster and other woody weeds. I estimated the total volunteer hours provided as 81 and another 8 cubic metres of green woody weed material was cut



(bringing FOG and Fenner's investment in restoring Stirling Park to over 1000 volunteers hours since 2009). The help provided by David, Sarah, Barbara and John in transporting participants and equipment, along with Geoff Robertson's splendid catering made for a particularly successful work party.

The next work party at Stirling Park on 20th November this year will focus on the southern end of Stirling Ridge, closer to the residential areas of Yarralumla, where we can conserve another button wrinklewort population and assist the National Capital Authority to prepare for a planned fuel reduction burn. The next FOG-Fenner work party will be on 18th September at Yarramundi Reach, where we will have 500 grassland plant seedlings to plant in place of invading Chilean needle grass.

Photos: President John Fitz Gerald mulches the woodland species planted by FOG in Stirling Park (far left), and volunteers Sam and Kate get to the bottom of a particularly tough Cotoneaster infestation in Stirling Park (above).



Monaro Regional Weeds Committee Report

Margaret Ning

22 JUNE At their most recent meeting, the MRWC decided to direct unexpended funds towards the setting up of a 'glove box guide' for the Monaro, focussing on the region's significant weeds and their potentially confusing native look-alikes. Jackie Miles will set up the booklet, guided by Brett Jones and other southern Monaro weeds officers as to content, and by the publisher as to layout.

Examples of weeds to be considered for inclusion are: serrated tussock vs Poa tussock/corkscrew; African lovegrass vs hairy panic; fireweed vs daisies/dandelions/ native senecios; gorse vs egg and bacon plant; Chilean needle grass vs tall Stipa/Phalaris/Fescue; Patterson's curse vs vipers bugloss; St Johns wort; Scotch/English broom; Cape broom; thistles as per current booklet; spiny burr grass and other common weeds/ native grass identification if there is sufficient space for their inclusion.

Brett envisages that he will distribute the booklet to existing and prospective landholders

FOG Midwinter Presentation on Restoration

Rosemary Blemings and Tony Lawson

16 JULY The FOG Midwinter presentation at the Education Centre at Mugga Mugga in Symonstown was well attended, especially given the mid-winter weather. The famous wood-fire took a while to assert its welcome influence but Sue McIntyre's presentation kept us focussed on the *Prospects for restoring function and diversity in grassy woodlands*. Following a warming afternoon tea Jason Cummings presented Greening Australia's (GA) achievements in *Big picture, little picture*.

Sue's presentation focussed on the careful experimentation being carried out in Mulligans Flat and Goorooyarroo Nature Reserves. This was supplemented with more practical experience from her restoration work on her property Gang Gang. Sue chose to involve the audience in a conversation and many appreciated the chance to participate throughout her presentation.

Sue reviewed some of the history of environmental change in Australia, some of the biggest problems and some of the scientific approaches being currently used to improve our practices of regeneration and restoration. One aspect of this is expanded in the following news item. The audience was most interested to hear her assessments of what works and what doesn't, how the best biodiver-

sity objectives still remain difficult to nail down, and how difficult it can be to define the best approaches at individual sites. Past agricultural practices plus weed and pest management were also discussed.

After tea, Jason began his talk with GA's 'Big picture' efforts with whole of paddock rehabilitation (WOPR) on a number of properties in the region. (Incidentally this work is written up in the June – August 2011 edition of Australasian Plant Conservation, Vol. 20, No. 1.). He then went on to 'little picture' efforts to restore particular areas as part of offset agreements. These include grasslands at Canberra Airport and ACTEW's grassy woodland offsets at Williamsdale, both of which are being actively followed by FOG's advocacy group.

One of the hardest parts of restoration work is finding suitable seed or seedlings for the many species of plants that make up a healthy grassy ecosystem. Jason reported on GA's efforts to collect seed and grow quite a large number of species, including threatened species such as Rutidosis. These should become available to use on its local restoration projects and also perhaps to other restorers. Many eyes lit up at this news.

In both presentations we were able to link familiar landscapes and their attendant problems with the science and realities of local restoration efforts. This was enormously encouraging and energizing as each of us could relate to sites that exhibited the disastrous effects of years of misunderstanding and sites that were on their way towards recovery.

A greater strength came from our networking with colleagues in FOG and comparing notes on our varied restoration journeys. It was wonderful to be in a room with committed people asking valuable questions prompting others to provide empathetic answers based on their experiences, knowledge and, more importantly, their love of country.

Selection criteria for ground-layer vegetation restoration

John Fitz Gerald

Despite the large number of active restoration programs, relatively little is known about the weightings that managers consciously, or sub-consciously, give to specific traits when selecting plant sources to restore degraded sites. Anecdotal evidence suggests that the practicalities in the task strongly guide restoration decisions. This is particularly the case for herbaceous vegetation where the wide potential choice of species is not generally selected. In anticipation of increasing use of ground layer species in restoration projects, Pamela Graf and Sue McIntyre from CSIRO Ecosystem Sciences have set out to develop processes by which a variety of successful species might be selected at a range of sites.

Graf and McIntyre have begun to generate prioritized lists of grassy woodland species for three different restoration scenarios (high-level conservation, functional vegetation and perennial native pasture). Seven plant traits, including Phosphorus tolerance, grazing tolerance and seed availability, are being used to generate 50 top-ranked species for each of the three scenarios. Their ranking of species will become a good starting point but needs to be tailored to specific site conditions and knowledge of particular species. Preliminary results emerged in June. FOG members can contact president@fog.org.au for more details.

Madeira vine infestation

Jamie Pittock

In late 2009 FOG member Adam Muyt found the first infestation of Madeira vine (*Anredera cordifolia*) in the ACT at Stirling Park. This serious environmental weed is an aggressive climber that smothers all in its path. It is a particularly difficult weed to kill due to its underground tubers. FOG reported this incursion to the



National Capital Authority, and we welcome their prompt action to spray it out when the vine resprouted earlier this year. We will check the site again this coming summer to ensure that the ACT remains Madeira vine free.

Photos: Jamie Pittock inspects the Madeira vine infestation (above) and Amy, Catherine and assistants establish transects for button wrinkleworts in Stirling Park (below)



Fenner students monitor button wrinklewort response to fire

Jamie Pittock

FOG has welcomed the National Capital Authority's work to reinstate patch burning of the grassy ecosystems it manages at Stirling Park and Yarramundi Reach. We think that this is likely to remove overly dense

native grass tussocks providing space for the full range of other grassy ecosystem species to thrive. The NCA has assiduously consulted FOG on its fire management plans and incorporated our advice.

In May 2010 in three separate actions the NCA burnt the Attunga Point grassland and a central portion of Stirling Park. Given that we know little about the response of the endangered button wrinklewort and weed species to fire, FOG sought ANU's help to monitor the outcomes. Two ANU Fenner School third year "independent research project" students established transects in unburnt and now burnt areas. Amy Macris is measuring how fire impacts on the population of button wrinklewort, and Catherine Ross is measuring whether the disturbance caused by the burn increases or decreases infestations of weeds like St John's wort, *Paspalum* and Chilean needle grass amongst the button wrinklewort population.

On Button Wrinklewort Knoll the NCA and Rural Fire Service achieved the desired patchwork of around 70% burnt. Amy and Catherine now await rain and warmer weather in spring to see if and how the burn changes the button wrinklewort population. We will report on their results late in the year.

Associate membership for K2C

Geoff Robertson

The Kosciuszko to Coast Partnership, of which FOG is an active member, is now seeking to sign up Associate members who support its objectives and may wish to work with K2C on projects of mutual interest, manage land for sustainability and conservation outcomes, provide support or just generally get to know what K2C is doing. Associate membership will enable you to receive K2C's occasional newsletter, *Groundcover*, and to participate in K2C activities. K2C is offering two years associate membership for free. A flier is enclosed with this newsletter.

Transgrid offset site, Williamsdale

Naarilla Hirsch

21 JULY On a cold and windy July afternoon, seven FOG members gathered at Williamsdale to visit the Transgrid offset site, led by Stuart Johnston (Transgrid) and Angela Calliess (Greening Australia). In fact, we visited both the 20ha Transgrid site and the adjoining 18ha ACTEW offset site.

During the 2003 firestorm, the only substation bringing power into the ACT, at Parkwood, was threatened but luckily not damaged. To reduce Canberra's vulnerability to similar events in the future, a second substation to bring power into the ACT is being constructed by Transgrid at Williamsdale. The first site is the offset for a small area of grassy woodland that was destroyed as part of this construction. As well, a high voltage line from the substation to Canberra has gone through more grassy woodland areas. The ACTEW site is offset for this development.

Part of the offset is that the condition of the two sites be improved. They were originally part of a rural lease, but don't appear to have been heavily grazed and, we understand, have not been stocked for the past five years. Looking at the two sites, it was evident that this had given them time to recover from any grazing impact. Greening Australia (GA) has a three year contract to manage and improve both Transgrid and ACTEW sites. Once the Transgrid site is up to a high conservation standard, Transgrid will hand it over to ACTEW. Long term management of the two sites has not been resolved at this stage.

The sites appeared to be in quite good condition. They are a mosaic of grassland and grassy woodland patches. Some of the grassland is dominated by kangaroo grass, whereas other parts are dominated by spear grass and wallaby grass. The woodland areas contained a lot of tree regrowth, mostly



Photo: FOG members braving the midwinter weather at the Williamsdale site

Blakely's red gum. As well as the red gum, some mature yellow box and apple box were present. Broad leaved peppermints are present on the ridge. Because of the time of year, many of the forbs GA has recorded on the sites were not evident to us. There is an obvious lack of mid-storey shrub vegetation, especially in regenerating woodland patches.

The biggest weed issue on both sites is briar rose. GA is removing these with a staged approach that includes foliar spraying followed by cutting and daubing. Dead briars are being retained on the site as cover for small birds. In the long term GA proposes to plant some clumps of suitable mid-storey plants (such as bursaria and prickly wattle) to replace the briars as cover for birds. Other weeds present include St Johns wort, minor African love grass and thistles with just a couple of clumps of serrated tussock.

A major problem is feral goats – there are three herds that use the area. Fuel control for bush fire management is an issue, particularly where the kangaroo grass has become very dense. GA is investigating different ways of resolving these problems. Kangaroos graze the area but not in large numbers, perhaps as there is no water on either site.

GA has also been monitoring the vegetation, both rigorously in four 20m x 20m plots, and casually as they work at the sites. They are also monitoring birds on the site. Based on GA's species lists, this would be a great place for FOG to visit in spring, once construction of the substation is complete and access to the area is easier to arrange.

Proposal for a new national park. *Heather Sweet*

A community group in Canberra is lobbying for a new national park that would incorporate Ginninderra Falls and adjoining areas of the Murrumbidgee River. The name Murrumbidgee – Ginninderra Gorges National Park has been suggested. The group have written to the NSW Office of Environment and Heritage outlining the proposal. A community meeting was held in Belconnen on July 19 to inform the local community and garner support. A further meeting is planned for 6pm. Monday October 31 at the Legislative Assembly's Reception Room.

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

FOG advocacy

Naarilla Hirsch

June 2011

FOG participated in the forum on the Molonglo River Park Concept Plan, and subsequently wrote a submission to the ACT Planning and Land Authority (ACTPLA).

Particular concerns included: part of the proposed outer asset protection zone lying within the Kama Nature Reserve or within the River Park; better isolation from construction and community-recreational damage of the key area of high-quality pink-tailed worm lizard (PTWL) habitat; the lack of effective plans and budget for conservation of some existing areas of grassy ecosystems and rehabilitation of other areas.

FOG also saw a need to design, establish and implement long-term monitoring of conservation values across the Park.

The Conservation Council ACT Region put in a more detailed submission on the Molonglo River Park Concept Plan. The Council was concerned about the three equally weighted primary objectives that are identified for the river corridor – conservation, recreation and fire management – and believed that these are not compatible land uses: any weight given to the last two will automatically downgrade the conservation objective. The Council proposed ten Molonglo River principles that it believed would still offer Molonglo residents a quality recreational experience in a natural area while protecting the essential ecological identity of the river corridor and its landscape connectivity functions. These principles covered every aspect of conservation of the river corridor's biodiversity and included discussion of reserve zoning, fire management Asset Protection Zones, PTWL habitat and management, survey and habitat needs assessment of the corridor's biodiversity, followed by

long term monitoring and auditing, and community engagement. The Council also emphasised that the Molonglo River is, and should continue to be, a critically important connectivity corridor.

In May FOG, along with others, wrote to the Minister for the Environment and Torres Strait Islander Affairs, Simon Corbell, about retention of the gang-gang logo by Parks, Conservation and Lands (PCL). We have received a reply confirming that the gang-gang logo will be retained by PCL.

July 2011

The ACT Land Development Agency (LDA) has asked for comment on its proposal to meet EPBC Act requirements in relation to the proposed development at Block 799 (Wells Station Road) in Gunghalin. FOG reiterated its view that there should be no development that impacts on vulnerable or endangered species habitat or ecosystem communities. Of particular concern on this site is the striped legless lizard (*Delma impar*). While the offsets identified in the report may well result in much better management of existing habitat of the lizard, as well as better knowledge of the current status of the population, FOG remained concerned about the lack of knowledge of the importance of what could be the second largest population of the lizard in Gunghalin.

Ideally, all existing habitats across the ACT should be re-surveyed prior to development of any part of Kenny (including block 799) that contains the striped legless lizard. FOG advocated for a moratorium on development until better current data on the species is collected.

The Commissioner for Sustainability and the Environment will be undertaking an investigation into the state of the water courses and catchments for Lake Burley Griffin and has released terms of reference for public comment. FOG provided input as we have a strong interest in, and ongoing work on lands adjacent to Lake

Burley Griffin (in particular Yarra-mundi Reach and Stirling Park). We argued that the terms of reference are too narrow and that the inquiry should also consider management of the Lake to benefit indigenous wildlife (particularly fish) and riparian vegetation to maximise biodiversity conservation, adaptive management of Scrivener Dam to enable continual environmental improvement and adaptation to climate change, and implementation of the 2007 "ACT Aquatic Species and Riparian Zone Conservation Strategy". FOG's reasons were that we perceive a number of interlinked environmental problems with management of the Lake that require an integrated response, consistent with the measures recommended in the ACT Conservation Strategy but not yet implemented.

The full text of FOG submissions appears on our website.

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).

FOG website

The FOG website (www.fog.org.au) is now well established and attracting over 2,000 visits per month. If there is anything you'd like to contribute to the site, let us know: webmanager@fog.org.au.

Indigenous values workshops two and three

Geoff Robertson

FOG has now held its second and third workshops, 20 - 21 and 27 - 28 April, in its series *connecting the community to natural values and resources in the landscape with Rod Mason*. The first workshop (see previous newsletter) focussed on *making string, glue and baskets*. The second and third were on *resource flow in the landscape*. Apart from Rod Mason, 15 people attended the first workshop, 19 the second, and 22 the third, a total of 56. Not counting repeating participants, 49 people attended the workshops.

Each participant was exposed to the experience of another culture which cannot readily be described. To take part in this experience, each person was asked to immerse himself/herself in it, setting aside all previous learning, preconceptions and knowledge. Most participants reported that the workshops were very moving and valuable, awaking them to an ancient (and future) culture that is in harmony with Country.

Many themes emerged. Each person experienced a time before white settlement and gained insights into what it was like to live off Country. Each was acquainted with the available resources (flora, fauna, landscapes, water, rock, fire and wind) and shown how they could be used for food, fibre, medicine, shelter, tools and equipment. Rod discussed the availability of resources changing with the three seasons, each of which had two phases.

Ngarigo people travelled from the coast into the high country each year. People moved in small groups of family or extended families, coming together in bigger groups for important events. There were the traditional routes and camping grounds. The camping grounds were often places of rich resources that were managed and cultivated to ensure suitable resources were present for future visits. Traditional natural resource management techniques were practised at these sites and areas through which the Ngarigo travelled.

Each resource (e.g., species of plants and animals) and its use, each landscape, each locality and travel route, and each aspect of human behaviour and society had its own word and associated story. So from Rod we learnt about tradition and language. Each element of tradition has a strong spiritual base and has associated rules for roles and responsibilities. We learnt how knowledge was earned and assigned. Learning often took the form of experience first and reflection later. Rod told us of adolescents living alone in the bush for up to several weeks – the aim was to experience the fear of nature and only later would they reflect on these experiences with elders, often around camp fires.

When Cook arrived his presence was broadcast. Then white settlement intruded. Rod expressed his deep personal and family pain as he related his family's stories of massacre, forcing people onto reserves, the loss of

knowledge, and more recent struggles within Aboriginal communities.

Despite the pervasiveness of white settlement, Rod's family managed to pass on traditional knowledge. Rod describes how his family avoided living on reserves and how he was taught traditional practices. Rod's own family and children lived for long periods in the remote bush. This involved much deprivation, but it was combined with learning, experimentation and resourcefulness.

Aboriginal people have been willing to share knowledge and country with non-Aboriginal people. They believe that if country speaks to you, you become part of country. For those who have an affinity with country this makes sense. However, we need to remember that probably most Australians dislike the bush and many of its inhabitants. While Rod believes that landowners and managers should understand and practise traditional land management activities, there is a long history of attempts made to share knowledge, only to have white folk, to put it politely, not take up the offer.

Sharing knowledge of traditional land management practices is a win-win situation. Non-Aboriginal people have many insights and rewards to gain. Aboriginal people such as Rod can see that much of what is wrong with our modified landscapes, soils, water use, etc., and matters such as the decline of species, could possibly be made right by the reintroduction of traditional natural land management practices and species. This belief of Rod's has taken a long time to gain acceptance and maybe the FOG workshops are one of the first occasions where the willingness to learn traditional knowledge is a priority for participants.

Rod has devoted his life to gaining the knowledge and finding a suitable way to share it. Early on he realised that to share the knowledge, he himself needed to obtain a sound knowledge of natural resource management science, so he embarked on and obtained the necessary tertiary qualifications. Rod has also undertaken studies in Indigenous land management practices and is one of less than twenty people with qualifications in that field. By bridging and synthesising traditional knowledge with natural resource management Rod has become a formidable thinker and visionary. He believes that we in this country might reintroduce the flora, fauna, functionality, landscapes and traditional natural resource management practices that would have been present in ancient times.

Rod provides us with another valuable lesson in human history. He stresses that his story and his knowledge is a personal and family history and that he cannot speak on behalf of others. Like many families, his would have within-family language. He also encouraged us to listen to other Aboriginal people if we want to see the common patterns.

Thinking of Country as a resource for food, fibre, shelter and medicine makes a lot of sense, and is close to many farmers' and economists' view of land. Unlike most farmers and economists, traditional Aboriginal people used indigenous resources and had an in-depth knowledge of nature that many an ecologist or natural scientist can only aspire to. This is not to say that traditional Aboriginal knowledge is all one needs to know. Rod readily acknowledges the importance of non-indigenous agricultural practice and scientific knowledge. Rod believes that by combining the different traditions, we will get our best outcomes. Excitingly, much, if not all, of what Rod is suggesting can be tested scientifically.

There are many good books on indigenous plants and their traditional Aboriginal uses produced for other regions. Rod's plant show-and-tell at the workshops included descriptions of individual plant species, their uses, ecology and landscape function, their growth, flowering and seed production, and how to manage them to ensure their proliferation in the landscape. It may be possible to publish a local food and health guide from the material gathered from the workshop.

Rod's ideas on fauna management are also fascinating. He discussed what fauna are missing or existing in reduced numbers. He asked two searching questions: What ecological function did they perform? How might we reintroduce them in large numbers? Emus, for example, play many roles such as suppressing predators, giving a feeling of safety to other animals, and turning over soils.

While we might imagine that traditional Aboriginal people wore no clothing, carried a spear or two and maybe children, and hunted and gathered food, consuming it immediately, this is a very simplistic and in many ways an incorrect understanding of what occurred. To use the resources for food, medicine, fibre, tools and shelter, much work was required by way of preparation and preservation. Equipment and resources needed to be made and carried. Clothing to protect the body also had to be produced. Rod showed a kangaroo skin coat, tools, weapons, baskets, preserved foods, jewellery and toys made by him or his kin. He also provided lessons in the manufacture of these items.

Mapping the landscape and having language to describe landscape features are essential to survival. Many traditional story lines describe geography and major landscape features such as *Wallaga* (coast), *Wadbillaga* (the area between coast and escarpment), *Nallaga* (escarpment country through to grassland), *Narrawallee* (tall grass country or grassland), *Burrungubagee* (foothills to Snowy Mountains around Jindabyne) and *Tidbillaga* (Snowy Mountains). We also learnt some other place names: *Gullaga* (Sacred Mountain, or Mount Dromedary) and *Dyillaga* (Dyillagamberra Mountain). Kosciuszko to Coast should be called *Tidbillaga to Wallaga* – sounds good!



Burning was an important theme for Rod and at each workshop Rod demonstrated Aboriginal use of fire and, with few exceptions, participants were keen to light fires. This was a valuable piece of learning – when, where and how to burn, how to control fire, and how to use it for production. The links between fire and wattles, high valued resource plants, were stressed.

An important concept, which I dubbed *wickileaks* is Rod's concept of landscapes *wicks*. The matted roots of tea tree and bush rice (mat rush) in drainage lines draw water and nutrients uphill. These below-ground wicks perform important ecological functions, but may be cut by roads, tracks and other management practices, not to mention clearing. Various management tools may be used to restore such wicks. An exciting concept!

Through his use of slides, walks and show-and-tell plant sessions, Rod stressed the importance of *natural gardens* and *seed orchards*. These are natural areas where bush rice, many other fruit-bearing shrubs and wattles may grow thickly and provide a good variety and quantity of food. These areas may also function as wicks. Maintaining and extending such areas (through seed planting) are important for Aboriginal communities and Rod described techniques to maintain and extend such places. Rod pointed out particular ways to burn around but not under such plants. He also described how plant aeration, use of charcoal, and applying nutrient-rich soils may promote plant growth. Such techniques were important in yam daisy production.

According to Rod, individual plant species change the soil nutrient composition and structure. For example, soils from the base of tea tree communities may be usefully added to natural gardens and seed orchards. The attraction of assemblages of butterflies to particular areas in late summer shows that those soils have high nutrient values. Rod has used butterfly soils successfully in horticultural work.



Particular plants also provided important food and habitat for certain animals. Rod described how persoonia orchards could be cultivated to attract, feed and provide protected habitat for pigeons.

Rod described work that he had undertaken to bring back certain animals and plants. Aboriginal natural resource management has all the best features of active and adaptive land management.

Participants have been asked to provide feedback and to help document the material Rod is making available. Rod finds this is of great benefit. Several people have shared their notes taken at the workshops and Ellie Gilbert video-recorded the third workshop. She will use the video to prepare a workshop record and as a promo for further work. Julia Holman, ABC radio Rural Reporter attended the second day of the third workshop and her resulting interviews were heard widely on ABC radio. I have become aware of the tremendous outpouring of knowledge and resources that indigenous communities are producing. These include many books, videos, education resources, crafts, museums and centres. What are the possibilities here?

Missed out?

There will be two more workshops with Rod Mason held at Garuwanga in October (20-21, & 22-23). Two field days will be held in November, Tuross Falls (Thursday 3rd), and Bullocks Flat And Perisher Valley (Thursday 24th). See the details on the accompanying flier.

These workshops and field days are organised by Friends of Grasslands and Rodney Mason, and supported by the Kosciuszko to Coast partnership and the Murrumbidgee Catchment Authority. They are generously sponsored by the *Connecting the community to natural values and resources in the landscape project*, funded by the Murrumbidgee Catchment Management Authority, under Caring for our Country.

While FOG has done much ground-breaking work, these workshops may be the most remarkable events it has ever held. From the outset, the workshops were very demanding and challenging for organisers and participants. The response has been amazing, and participants, many of whom are outstanding people in their own right, are important influence-makers. Documenting what has been learnt presents another challenge and taking the material to a new level may provide some important opportunities. At the centre of all this work, is an outstanding and very courageous traditional Ngarigo elder to whom this country, and this region in particular, have a large debt.

OEH Conservation Agreements.

The Conservation Partnerships Officer at OEH, is interested in contacting FOG members who are conserving grassland on their properties under a conservation agreement. The project is funded under the National Reserve System Caring for our Country program. More information is available at <http://www.environment.nsw.gov.au/cpp/ConservationPartners.htm>

Please email heather.sweet@fog.org.au if you are interested in being contacted for an article on conservation agreements.

Newsletter available electronically

You can receive the newsletter electronically. The electronic version is in colour. To arrange, contact margaret.ning@fog.org.au.

Red-leaved wattle – one of many wattle trees that herald the spring

By Michael Bedingfield

Spring, they say, is the season of renewal. During the cold months nature has been withdrawn, resting and waiting, and we too can feel a little contracted. As time goes by, towards the end of winter, the sparkling frosts don't seem so sparkling, and another cold foggy morning makes you think of having a holiday in Queensland. But you notice the sunsets are getting later, and the days longer. And that's when the wattles begin to bloom, heralding the new growth season, and you know that winter is nearly over. Even though the weather is still cold, the spectacular display of yellow by the wattle trees flowering in many parts of the landscape warms our hearts. And those of us with a love of nature start to think about what the new season will bring, what wildflowers will come up, or what migratory birds will be returning from their northern retreats. In spring, all of nature renews itself, with flower, colour, birdsong and new life, and our spirit is refreshed at the same time.

The red-leaved wattle is also known as the red-stemmed wattle, and its main flowering time locally is in August, joining a number of other acacia species in this showy period. This one is a small tree or large shrub. It is fast growing, hardy, frost and drought tolerant, and produces masses of pale yellow globular flowers. The leaves have two forms. The juvenile leaves are bipinnate, i.e. having small leaflets arranged in opposite rows on a

number of pairs of short stems. It is common for them to be present on a mature tree. The mature "leaves" are called phyllodes, and are straight or curved in shape, with a visible gland on the upper margin, and an off-centre mid-vein. It is also common to see leaves that are partly phyllodes and partly juvenile. A brown, fairly straight, flattish seedpod is produced which is 5 to 12 cm long. The botanical name for this wattle is *Acacia rubida*. The word *rubida* comes from the Latin for red. This is because the smaller branches are usually coloured a reddish-brown or turn to that colour when dried, and when the leaves are dried they too become reddish. This tree is distributed widely in eastern NSW, and occurs in Vic and QLD too. It prefers rocky areas in open forests and along creeks and rivers.

Like many other wattle trees, *Acacia rubida* is a pioneering plant, and will colonize disturbed areas. In doing so, acacias prepare the soil for other native plants to follow. Being short-lived they dominate for a number of years and then gradually die off and thin out, and are replaced by more permanent native plants such as eucalypts, grasses and flowering herbs, and a more balanced plant community evolves. During their life cycle, wattles create a lot of debris on the ground from old seedpods, twigs, leaf litter and eventually from the decaying wood. This process takes carbon dioxide from the air and increases carbon content in the soil. Wattles have other important good qualities, such as providing food and shelter for many birds and insects. They also improve soil fertility by adding nitrogen to the soil.

I have provided a drawing of some small branches of this plant, shown at about half size, illustrating the phyllodes, juvenile leaves, flowers and a seedpod. The red-leaved wattle or red-stemmed wattle, *Acacia rubida*, is a valuable native plant that adds a bit of cheer toward the end of a cold winter.



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: activities2@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 and 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).

Golden sun moth In 2008-09, FOG conducted a major survey of GSM in Canberra region.

Inquiries: geoff.robertson@fog.org.au.

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 Geoff Robertson (6241 4065). FOG is a regular contributor on Radio Landcare, Tues 9-10am on (2XX, Canberra 98.3FM).

Membership and newsletter despatch See Membership box (page 6). 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.