Program

SAT 28 JAN 9:00am to 12:30pm Workshop on propagating native grasses and forbs. Join Warren Saunders for seed collection and propagation techniques. See page 4 for more details.

SAT 25 FEB 4 to 7:30pm FOG’s AGM, Mugga Mugga Short but enjoyable AGM followed by the traditional free barbeque. We plan a short slide presentation on FOG activities for the year. This is an important annual event for FOG to discuss its broad directions, elect a new committee, and relax and enjoy the comfortable environs of Mugga. Venue: Mugga Mugga Education Centre, Narrabundah Lane, Symonston ACT (opposite the Therapeutic Goods Administration).

SAT 10 MAR 9:30am to 4pm Visit to Scottsdale Scottsdale is a 1300ha grassy ecosystem property which Bush Heritage plans to restore. (See Kosciuszko to Coast news item page 7.)

SAT 24 MAR 9:30 am to 3:30pm Working bee at Old Cooma Common.

For activities in March and April, more details will be given in the next issue. For the remainder of 2007, see page 2.

Of special interest

MON to SUN, 15-21 JAN Snakes Alive in a Changing Climate. This is the annual ACT Herpetological Association display at the ANBG and has much to attract FOG members, including getting up close with reptiles, and learning about the frogs, turtles, lizards and snakes of the Southern Tablelands. This year corroboree frogs, grassland earless dragon and striped legless lizard will be on display. Entry fee applies. Enquiries: 6250 9540 or www.anbg.gov.au.

Membership renewal

Margaret Ning

We have only enclosed renewal forms for members who have not yet renewed. Of course, if you renewed only in the last week or so, we may not have everything up to date, so forgive us for putting in a form for you. Many thanks to those who have already sent in their FOG membership renewal or waylaid me to pay it or indeed paid it while attending a FOG activity. A special thanks to those who also added a donation to their renewal amount as it all helps to keep FOG such a viable organisation.
**News Roundup**

**Membership renewal**
The FOG committee is pleased to report that at the end of 2006 FOG has over 200 members. In both 2004 and 2005 there were just under 200 members. Some of these memberships are corporate, including government agencies and non profit organisations, and many are family, which means that the actual number of people who can say they are members is much larger. It is also pleasing to report that over half of our members have already renewed for 2007. The committee would also like to thank those who have included a donation with their renewal.

**Leek orchid no show**
22 NOVEMBER FOG’s proposed visit to Hall Cemetery was cancelled because the Tarengo leek orchid which is often in reasonable numbers in late November did not show. Typical of other sites, native grass cover was good, despite the drought, and forb flowering was early and sparse. FOG has programmed a visit to the cemetery in 2007 assuming seasonal conditions are better than in 2006.

**Molonglo Valley**
FOG’s committee is seriously concerned by the proposed development in Molonglo Valley (ACT) and the general lack of regard for natural grassland and woodland areas when land is released for urban development. FOG, like the Conservation Council, believes that Australia should seriously question ‘greenfield’ development. FOG has not objected to the development of areas of little or no conservation value (unless they are potential ecological corridors) but we have consistently opposed the clearing of native grassy ecosystems for development.

In the Molonglo Valley there are areas of both natural temperate grassland and yellow box-red gum grassy woodland, sensitive riparian areas, and habitat for pink-tailed worm lizard, raptors and threatened species such as brown tree creepers. FOG understands that current proposals would mean the removal of 600 hectares of yellow box-red gum woodland, 25 percent of the pink-tailed worm lizard habitat, raptor and brown tree creeper habitat.

FOG is considering nominating the pink-tailed worm lizard as a threatened species in the ACT. FOG understands that the reason that it was not listed in the past is that its habitat was considered secure as there were no proposals to develop the Molonglo riparian area.

**Box-gum grassy woodlands listed**
Box-gum grassy woodlands (woodlands dominated by yellow box, Blakely’s red gum and white box) and derived grasslands (box-gum woodlands where trees have been cleared but the native grassy layer has been retained) have been listed as a threatened ecological community under the Environment Protection Biodiversity Conservation Act.

The community was once widespread on the western slopes and tablelands, throughout southern Queensland, western NSW, ACT and Victoria. Less than five percent remains in good condition and much of that is in small patches. More than 400 native plant species, mostly grasses and forbs, have been found in the community. For more information on species composition, whether you might have the community on your property, and how to manage and restore it, please contact www.deh.gov.au/box-gum or 1 800 803 772.

**Old Cooma Common working bee**
11 NOVEMBER At FOG’s most recent working bee at Old Cooma Common Grassland Reserve, weeds were attacked from a number of directions. Margaret Ning spot sprayed woody weeds and potentilla, from a 200 gallon tank located inside her brumby, several people used back packs, and two teams cut and daubed woody weeds.

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**More diary dates for 2007**

**Please place the following dates (subject to change) in your diary. For more details, contact Geoff Robertson (see back page).**

**MAY** – to be advised

SAT 16 JUN 2 to 4:30pm FOG slide afternoon title to be advised. Mugga Mugga Education Centre.

SAT 14 JUL 2 to 4pm Understanding Canberra’s grasslands. FOG’s winter afternoon visit to Mulangarri, ACT.

SAT 25 AUG 1:30 to 5pm Workshop on FOG’s future directions Mugga Mugga Education Centre.

Fri night to Sunday 28 to 30 SEPT Eastern Riverina grassy ecosystems tour

THURS-FRI 11 to 12 OCT Post-Stipa Conference Field Trip. Mudgee and Wellington NSW.

SAT 20 OCT 2 to 4pm. Visit to Belconnen Naval Station, Lawson ACT

WED 7 NOV 12:30 to 1:15pm St Mark’s Grassland, ACT

SAT 10 NOV 9:30 to 3:30pm Working bee at Old Cooma Common.

WED 21 NOV 5 to 6pm Tarengo leek orchid Hall Cemetery, ACT

SAT 8 DEC 9 to 5pm Nungar Plain, north of Adaminaby NSW.
Murrumbateman Cemetery

26 OCTOBER Seven FOG members turned out for the Murrumbateman Cemetery plant survey. FOG had been requested to undertake the survey to assist in the preparation of the management plan for the three hectare cemetery which, for management purposes, has been divided into nine areas.

The cemetery has superb woodlands and secondary grasslands, and despite the drought, some areas put on wonderful wildflower displays. While the only fauna spotted was a pardalote, the cemetery is an important woodland bird refuge.

At five o’clock members of the local landcare and cemetery trust turned up and were most interested to learn about the nature of the vegetation communities and the importance of the cemetery as a harbinger of remnant vegetation and habitat, to see examples of the grasses and forbs, and to discuss suitable conservation management practices.

Insect workshop

18 NOVEMBER Twenty-five people attended FOG’s half day insect workshop at the Australian National Botanic Gardens. The aim of the workshop was to familiarise participants with several local insect groups, their ecology, habitat and identification, and to develop educational material that might be used with interested groups and students.

Geoff Robertson kicked off the workshop by talking about the importance of insect ecology, methods of capturing and studying insects, the impact of legislation on the protection and study of insects, and what FOG is doing to promote the understanding of local insects. This was followed by sessions on local butterflies and grasshoppers by Kim Pullen and Roger Farrow respectively.

Kim and Roger also ran a session on the use of microscopes to study morphology, choosing plant hoppers (Cicadellidae) as their subject. Following this, Kim and Roger provided slide presentations on beetles, with particular reference to local Christmas beetles, and the importance of type specimens in taxonomy. Kim used work done at Blundell’s Flat as an example of taxonomy at work.

FOG is looking at ways to publish some of this material. Big thanks to Geoff, Kim and Roger for an original and fascinating workshop.

Repairs to Conder 4a

SUNDAY 29 OCTOBER

Four FOG members turned up to a hastily called working bee at Conder 4a to repair damage that had been done to the site by energetic youth who from time to time attempt to establish a BMX bike facility in the high quality yellow box red gum grassy woodland remnants that are relatively recent additions to Canberra Nature Park. The working bee moved soil more or less back to its previous position, removed various impromptu constructions, and relocated rocks that had been used in the construction of jumps and obstacles. The working bee members reflected that they probably had been worse environmental vandals when young.

Other tasks included repairing the fence where it had been cut and removing some builders’ rubble and other rubbish from the site. Michael Bedingfield pointed out other destruction that had been done to the site - this time by the developer who probably considered that he was tidying up nature’s mess. Unfortunately a natural water channel with three species only found in that channel was destroyed.
From the ground-up
Groundcover

28-29 NOVEMBER Over seventy people are now wiser about the conservation and rehabilitation of grassy ecosystems, following the Australian Network for Plant Conservation’s workshop held in Canberra.

Tightly organised, day one heard from eleven speakers talking about various aspects of conservation and rehabilitation of our grassy ecosystems. Sue McIntyre spoke on the processes by which grassy ecosystems, with human assistance, evolve into exotic pastures, and provided a framework suggesting how these processes might be reversed. Geoff Butler outlined how to plan for rehabilitation projects, based on his rich experience of what does and what doesn’t work.

After morning tea, David Tongway outlined his landscape function analysis techniques. This was supplemented by two field exercises on day two. Peter McGee spoke on the work of microbes in soils and their essential role in plant establishment in grassland rehabilitation. Melinda Pickup talked on her studies of the genetics of some native grassland plants which may particularly assist in unravelling issues such as provenance.

After lunch, there were three talks centred on the ACT. Susie Wilson spoke on guidelines for collecting seed for revegetation, and Lori Gould on monitoring and adaptive management for rehabilitation projects. Sarah Sharp provided a series of images of grasslands and suggested what management strategy might be attempted in each case.

In the last session, presentations were given on direct seeding of complex grasslands by Paul Gibson Roy, whose fascinating work has been commented on many times in recent newsletters, the importance of volunteering by Geoff Robertson, and Kuma Nature Reserve as a grassland case study by James Dawson. Hopefully many of these papers will be published in the next issue of Australasian Plant Conservation.

Day two largely took the form of eight field sessions where small groups shuffled around Mulligan’s Flat in the morning and Justice Robert Hope Reserve (Watson) in the afternoon. These sites provide good examples of high quality woodland and woodland being restored, respectively. These sessions focused on landscape analysis function, using the recently released grassy ecosystem management kit as an assessment and planning tool, and habitat management.

Cooma Council reacts positively

25 SEPTEMBER The Recreational Facilities Committee of Cooma Council has responded positively to FOG’s recent request to establish a Section 355 Management Committee for the Old Cooma Common Grassland Reserve. The Committee recognised FOG’s role over many years in weed control, fencing and obtaining funding.

The Committee also recognised that as the reserve harbours a threatened ecological community and a number of threatened species, it is important that specialist skills be employed in managing the reserve.

The proposed management committee will be known as the Old Cooma Common Management Committee and will be required to prepare a five-year management plan and annual budget, meet twice yearly, and consult with the community. Membership will comprise a Councillor (Councillor Sutcliffe), two Council officers (including the Weeds Officer), an officer from the Murrumbidgee Catchment Authority and one from National Parks and Wildlife Service, three FOG members, and two community members.

Proceedings of NPA symposium

The July–August 2006 FOG newsletter reported on the 5–7 May NPA symposium on Namadgi. Now the 190 page proceedings are available for $25 and they are a must read for Capital Territorians who are at all interested in Namadgi. For further information, contact npaact@bigpond.com or 6282 5813.

Workshop on propagating native grasses and forbs.
SAT 13 JAN 9:00am to 12:30pm
Cost: FOG members $10 ($5 concession), others $15.

Join Warren Saunders on seed collection and propagation techniques, and (if you wish) take away and grow in your garden (or property) some of your favourite grasses and forbs. The workshop covers collecting seed at one of Warren’s sites, and planting them in seed boxes at Seeds and Plants Australia to propagate them. You need to bring a polystyrene box to take home plants. Target species include river tussock (Poa labillardieri), snow grass (P. sieberiana), kangaroo grass (Themeda australis), wallaby grasses (Austrodanthonia spp.), spear grasses (Austrostipa spp.), weeping grass (Microlaena stipoides), red leg grass (Bothriochloa macra), common everlasting daisy (Chrysocephalum apiculatum), flax lily (Dianella sp.), New Holland daisies (Vittadinia spp.), sticky everlasting (Xerochrysum viscosa), and blue bells (Wahlenbergia spp.). For enquiries and registration contact Janet Russell (6251 8949) or fogcanberra@yahoo.com.au.

PLANTS OF THE ACT
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Full Licence $150 (student and quantity discounts available – ask us). Send payment made out to ‘Wildwood Flora’, Wildwood, 367 Koppin Yarratt Road, Upper Lansdowne NSW 2430
St Mark’s grassland

15 NOVEMBER Over 25 people, mostly non FOG members, from government offices near Barton, turned up to learn about St Mark’s grassland from Benj Whitworth. Drought meant that not much was in flower, except button wrinklewort (*Rutidosis leptorhynchoides*).

Benj has reported that this year has been very good for button wrinkleworts, a threatened grassland species. Lots of flowers are on the one hundred or so plants and three plants outside the main population. Benj is optimistic that plants now seeding might help the spread of the plants.

**Golden sun moth (GSM)**

There have been many sightings of GSM (*Synemon plana*), a threatened species, around Canberra this spring. On 26 Nov Kim Pullen observed several groups of GSM within a kilometre of Civic, the centre of Canberra. He saw two dozen males, and mentioned three sites: Torrens Street at Haig Park, the north side of Haig Park along Henty Street between Torrens Street and Limestone Avenue, and Limestone Avenue between Henty Street and Ijong Street. Kim stated that none of the sites could be considered ‘good’ grassland, and observed that it is interesting that the moths are hanging on there.

Margaret Ning reports that she popped into York Park on 27 Nov. for about half an hour and saw a female GSM. Being a little uncertain of her identification, she said it had lots of orange on its wings, and couldn’t fly, but flitted around on the ground.

She also thinks she saw a couple of males, but only two *Austrodanthonia carphoides* plants in flower. Benj Whitworth also reported seeing GSM at St Marks.

On 27 Nov, David Eddy reported “during our field visit to the western grassland portion of Mulligan’s Flat Reserve, for the ANPC workshop, James Dawson pointed out a male GSM flying around low over the kangaroo grass - very little if any noticeable wallaby grass.” Mark Dunford has also reported several sightings.

Ted Edwards says “this calls to mind the spring of 1982 where, after a similarly dry winter and spring very large numbers were flying. Now, as in 1982, adult males are seen in all sorts of places where they were not expected and where, if the wetter seasons after 1982 are any guide, they will not be seen again during more normal conditions. After our experiences in 1982 and some other dry winters this was expected but it is great to have it confirmed.”

Ted questions various suggestions that GSM might feed on non wallaby grass species. “The evidence for GSM-austrodanthonia association is the result of hundreds of observations, in the ACT, NSW and Vic. These observations range from larvae dug from largely austrodanthonia grasslands, pupil shells protruding from dead tussocks which, when dug, showing obvious larval feeding, to the usual observation of populations confined or adjacent to grasslands containing austrodanthonia, but never in pure (eg. Themeda) stands.

The only suggestion of wider feeding is a record of Chilean needle grass which on the face of it, as an introduced species, is unlikely. Some plausible explanations might be the rapid invasion of an Austrodanthonia grassland by Chilean needle grass leaving GSM with its two or more year lifecycle appearing from a largely needle grass sward. It is possible that Chilean needle grass was eaten, although not demonstrated, as many moth larvae when forced in the laboratory will feed on things they never touch normally. The classic example is a butterfly which feeds only on cycads in the wild, but successfully accepting kurrajong in confinement.

The norm in *Lepidoptera* is for the larval foodplants of a species of moth to frequently be limited to a single species or genus of plants.

*S. plana* belongs in a group of six fairly closely related species. There is no information on the food plant of one of these but the remaining five have all been associated with austrodanthonia with the same sort of evidence available for *S. plana*.

The evidence for *S. plana* on austrodanthonia is very strong and it would be a pity to misapply conservation measures on the basis of untested assumptions.”
Visit to Dining with the Ngambri
Hanna Jaireth

The Friends of Aranda Bushland (FoAB) invites you to bring Our Patch: Field Guide to the Flora of the Australian Capital Region for a meander along the Frost Hollow to Forest Walk, and to imagine that you are a member of the Ngambri before the time Europeans came to live in this area. The Ngambri people now largely identify as the Ngunnawal people. The descendants of the Ngambri, living in the area now known as Canberra, were previously also known as Ngarbra, Kamberra, Kamberry, Kamberri and Canburry.

Start from the stile at the Glenloch Interchange end of Caswell Drive with Black Mountain (once known as Ngambri) behind you.

As you proceed along the walk you will be encouraged to identify the resources that used to be accessible to provide shelter, food, weaving materials for baskets and bags, warm clothing, and ceremonial decorations.

Although these days they’re strictly ‘no-take’, you’re likely to come across an abundance of former protein sources along the walk, especially kangaroos and wallabies. For carbs you might find some yam daisy, or bindweed, orchids and bulrushes which used be baked and skinned, and chewed to extract the starch.

A table of species and their uses is available on the FoAB’s environmental education website at <http://www.friendsofarandabushland.org.au>. The website encourages users to interpret the environment along the walk, using Our Patch and other educational materials on the website.

To promote awareness of local native fauna, the website includes a selection of templates for making wildlife sculptures from recycled materials. These were commissioned from wildlife sculptor Ms Robyn Thomas. Photographs of several completed sculptures using the templates are on the website.

To encourage visitors to appreciate the habitat value of tree hollows, and the general ambience of the area, FoAB has also placed two sculptured seats created from salvaged yellow box (E. melliodora) in the grassy woodland walkway on the walk. The group commissioned these from local sculptor, Mr Paul Jamieson, who also runs The Front café-gallery in Lyneham.

The website was extended as part of the FoAB Education Project, funded by the ACT Environment Grants Program. Nearly thirty individuals and several local businesses and environmental groups supported the project. Approximately 700 volunteer hours were expended.

The website includes a range of activity sheets describing the local flora and fauna, a map and flyer explaining the Walk, and numerous photographs and other graphics. As part of the project, a Frost Hollow to Forest Art Competition was held in 2004–05. This attracted more than 100 entries, including those from four participating schools. The aim of the competition was to stimulate artistic appreciation of the environment along the walk.

A reptile survey was also conducted as part of the project in association with the ACT Herpetological Association. An evaluation form for the educational materials on the website was developed and trialled with Campbell Primary School, which attended an activity day in the Aranda Bushland in May last year. A series of activities were offered along the walk using materials from the website.

Hanna is the Education Project Coordinator and has drawn on Ann Jackson-Nukano’s. The Kamberra: A History from the Records of Aboriginal Families in the Canberra-Queanbeyan District and Surrounds 1820-1927 (2001) and Historical Overview 1928-2001, Weereewaa History Series Vol 1, Aboriginal History Monograph No 8, Canberra.

Chilean needle grass survey

Ginninderra Catchment Group is seeking FOG’s assistance in its project to monitor Chilean needle grass in the Gungahlin area of Canberra, as part of the Group’s Managing Biodiversity at the Urban Interface (MBUI) project. Chilean needle grass has been targeted because of the threat this highly invasive weed poses to local nature reserves (e.g. Mulligans Flat and Goorooyarroo) and the reasonable prospects of containing its spread in the Gungahlin area.

FOG endorses this project and if any FOG members in the Gungahlin area, or areas bordering on Gungahlin, can assist, or are just curious, they should contact Geoff Robertson (see back page for contact details). Material which describes the grass and its threat to nature reserves, has been forwarded to FOG.

MBUI is one of a number of research, education and community capacity building projects in Gungahlin, which seeks to improve the conservation and management of biodiversity, particularly at the interface between the rapidly developing urban areas and the surrounding nature reserves. Other organisations involved with these projects include the Conservation Council, Territory and Municipal Services (WRM), CSIRO, ANU (CRES), Greening Australia, CRC for Invasive Animals, UC (Institute of Applied Ecology), and developers associated with Forde. A Bush on the Boundary (BOB) reference group has been formed to collaborate in the development and delivery of these projects and ensure the best synergies are derived from their collective roll-out. BOB will also be addressing control of feral cats and foxes. Feral cat monitoring aims to complement the Cat Containment policy which now applies to the new suburb of Forde. The ACT government hopes to eliminate foxes and cats from a fenced area inside Mulligan’s Flat.

Ginninderra Catchment Group is also exploring enlisting community support for monitoring turtles in the Gungahlin area to assess the impact of urbanisation on local turtle populations.
**Kosciuszko to Coast**

9 DECEMBER Bush Heritage celebrated its purchase of Scottsdale, a 1300ha grassy ecosystem property north of Bredbo (NSW). FOG has supported the K2C project since its inception and there have been reports on the project in the May-June and Sept-Oct 2006 FOG newsletters. These reports have not mentioned (for confidential reasons) the proposed purchase of Scottsdale which is a linchpin in the K2C corridor project. Scottsdale contains some exciting grassy ecosystem vegetation, and some real weed challenges. FOG proposes to visit Scottsdale in March 2007 – see program.

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**LFA at Old Cooma Common**

Geoff Robertson

2 DECEMBER David Tongway, Maryke Booth and I visited OCC to undertake a landscape function analysis of the site as an input to future management once the Section 355 committee has been established (see Cooma Council responds positively, page 4). It was very exciting to wander around OCC and to see it through David’s eyes.

David has since sent me a CD with his assessment and photos. If anyone would like a copy please contact me. A big thanks David for making your time available and for the very helpful report.

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**Mulgargarri**

Geoff Robertson

25 NOVEMBER Due to drought and other reasons, FOG’s proposed visit to Mulangarri, part of the Gungahlin grasslands, was cancelled. I turned up on the Saturday morning in case anyone turned up, and despite the heat, I took a wander and felt that the trip may have been cancelled prematurely because there was a lot to see, especially how native grassland copes with drought.

While called a grassland reserve, Mulangarri is in fact a mix of woodland, comprising some magnificent examples of yellow box and red gums, and natural temperate grassland. There were extensive patches of yellow common everlasting, a prolific flowering of deep-blue blue-devils, albeit somewhat stunted, patches of scaly buttons which had finished flowering, and occasional patches of pink Australian bindweed and yellow scrambled eggs. These were set amongst patches of tall spear and wallaby grasses. While very dry, the colours were fantastic in the hot sun. I also saw two chocolate lilies.

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**Letters to editor**

**How to support our Kooris**

Joan Goodrum

A practical way to understand and support Indigenous people and to understand the important link between caring for people and country is to purchase and read the *Koori Mail* and *Indigenous Times*. Both are on sale in some local newsagents.

An example of Indigenous peoples’ involvement in land management is an article titled *Mapping their future* published in the 22 Nov issue of the *Mail*. It mentions that elders and young people from the Wet Tropics World Heritage Area in far north Queensland earlier this month shared and workshoped their ideas in order to work out ways to map their cultural heritage for future generations.

Aboriginal Rainforest Council (ARC) Chairman Russell Butler said the idea behind the project was to allow members of the 18 rainforest tribal groups between Townsville and Cooktown to take control of the management and protection of their own cultural knowledge and heritage. Elders and younger people with the technical knowledge would work together.

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**Jewel beetle**

Roger Farrow

In the last newsletter (page 9) the insect photo could be described as a jewel of a beetle but not a jewel beetle, family Buprestidae. It is in fact a leaf or tortoise beetle, family Chrysomelidae, genus Chrysophtharta.
FOG’s Victorian Trip

Part I
Geoff Robertson

THURSDAY 19 OCTOBER The initial group (Kim and Yola, Maryke and Helen, Margaret and I) met in Ngunnawal, and chose the route suggested by Kim, via Wagga, Lockhart, Urana, Jerilderie, Conargo, and Deniliquin to Moama. Walkie talkie communications between the cars made the trip enjoyable as information about roadside vegetation was exchanged. Beyond Lockart we passed many healthy grasslands with wonderful displays of pycnosorus, pussytails (*Ptilotus* sp.) and some billy buttons (*Craspedia* sp.). While there was an urge to stop, we did not, as a long trip was ahead of us. We were joined by Richard and Bernadette in Moama on Thursday evening, and after an initial shop we wandered around Echuca before finding a restaurant. Sue and Patrick joined us later that night.

FRIDAY 20 OCTOBER The enlarged convey travelled south to Elmore and then north-west to Hunter. We were a little late for our meeting with Darren Bain (Case Manager, Northern Plains Conservation Management Network (CMN), Department of Sustainability and Environment (DSE) and Jenny at Hunter Flora Reserve. Darren told us a little about the CMN and history of the reserve, which was an old rail reserve. He supplied us with a species list. There was much to see, and the beauty of many daisies is that they keep their colour even though dry and crunchy underfoot. Daren explained that the reserve was burnt every three to five years and how the weeds were managed.

From Hunter we travelled north-west to Mitiamo and then to Terrick Terrick National Park, mostly along dirt roads. These would have been impossible in wet weather. We saw some wonderful grasslands and made several stops. We had mistimed the distance to Terrick Terrick. When we arrived (late) we were met by Mark Tscharke, Ranger-In-Charge of the vast grassland estate. Mark spent much time explaining the nature of the grasslands and the complex management issues. Drought had very much affected the flowering this year. We went to Fabians which contain one of our best representations of Northern Plains grasslands and numerous threatened flora and fauna species, including *Pterostylis despectans*, *Swainsona murrayana*, *Swainsona plagiotropis*, and *Prasophyllum* sp. aff. *occidentale* D. This is also plains wanderer territory.

Despite the dryness and the brittleness of the plants, the group was truly delighted. We were joined by several people, one a neighbouring farmer, and a couple of grassland enthusiasts, including a journalist who wanted to write up our visit. We had brought several copies of the latest newsletter and other FOG literature which were left as thankyou’s and information about FOG. Deanna Mar-

Photos this page: Terrick Terrick visited on Friday, Kanawalla unused rail reserve visited on Saturday, and daisy at Terrick Terrick.

Page 9: Sun orchid and diuris being fertilised by insect, both grassland species, and a picture of Karen Wales.

Page 10: measuring the ploughed and sprayed grassland.
shall (DSE) was instrumental in organising this part of the trip but could not meet us on the day.

The group was back on the road by about 3:45pm. We travelled via Mitiamo, Boort, Charlton, St. Arnaud, Horsham, and Cavendish. The trip went through some lovely woodland and occasional grassland country. Again we could not stop, apart from an afternoon tea break, and because it was Kim’s birthday, we purchased a cake. Finally the tour reached Hamilton around 7:30pm where Karen met us with cabin keys in hand. Most stayed in the cabins to cook, but a few ventured off to a restaurant. Yvonne and partner Reto joined us who, with Karen, had put together a package of sites to be visited and maps for the next two and a half days. Sometime later in the evening, everyone adjourned to one cabin where we sang happy birthday to Kim. We now let Karen take up the story, but a big thanks to Karen, Reto and Yvonne who not only managed to put together a magnificent tour, but enticed a throng to join us, especially on the Saturday.

Part II
Karen Wales

Recently a group of people passionately interested in native grasslands travelled from as far as central NSW and Canberra to spend several days based in Hamilton visiting and admiring our local varied grassland communities. The interstate group were members of Friends of Grasslands who through advocacy and on-ground activities are working to retain native grassy ecosystems throughout Australia. Victorian members, from as far away as Melbourne, plus Hamilton Field Naturalists and Hamilton Society for Growing Australian Plants members also joined other interested community members on the tour.

I initiated the tour and co organised it with Yvonne Ingeme of the Hamilton Field Naturalists. I first made contact with the FOG group in 2004 while studying the excellent native grasslands at the Woorndoo Common. At the time I was looking for assistance in identification of species plus information on best practice management when I came across the FOG website. After joining the group, I proposed that the group should come and visit to get to know our area and help us raise awareness of the unique and varied grasslands in our region.

The tour on Saturday (21 October) took in areas north of Hamilton including Kanawalla unused rail reserve, Ga-

News of Friends of Grasslands, January-February 2006, page 9
southeastern section. The group was again dismayed to see some potentially destructive operations had taken place but probably due to lack of knowledge of the importance of retaining this area. One was spot spraying and inappropriate burning of some native grass tussocks within a floristically diverse area of grassland, and the other was dumping of weedy topsoil in depressions. This topsoil contained pieces of live plant material of introduced grasses and seeds which could potentially become well established and out compete the native species. The problems relating to this topsoil have since been brought to the attention of the local community and efforts have been made to rehabilitate the site. Several stops around Wickliffe saw some of the best seen, intact and diverse grasslands in flower (including a sea of sun-orchids), and created a lot of ooh’s and aah’s and camera activity.

Before the group finally dispersed, the interstate members made comments that this was one of their best tours because of the diversity of sites seen and the quality of some sites. Many were planning to come back next spring and bring other members and friends to admire our beautiful grasslands. For the local members, we felt renewed vigour in our attempts to enjoy and educate people about our local gems. As one person put it “You don’t have to go to the Grampians or Western Australia to enjoy spring wildflowers, they are throughout the region and their value is so underestimated.”

I would like to hear from individuals with an interest in native grasslands with the idea of forming a Victorian subgroup of FOG. Please phone 5562 0021 or e-mail: wales.karen@bigpond.com for further information.

Postscript

Editor

11 NOVEMBER The Hamilton Spectator, page 30, carried a large article titled sprayer road reserve shocks grassland tour. The leading paragraph stated “the discovery by a local and interstate tour group of a significant roadside native grassland east of Hamilton that had been ploughed and sprayed, has underlined the need for greater public awareness of caring for native grasslands.” It was accompanied by photos of twelve tour members standing across the nine metre ploughed and sprayed perimeter of native grassland and hoary sunray (rare in Victoria) seen on the trip. The article quoted extensively from Karen’s piece above. Unfortunately, space prevents me from publishing the Spectator article in full, but I am happy to forward a copy to anyone interested.

A big thanks to the many Victorian and Canberran organisers, especially Yvonne, Karen and Margaret for such a fantastic effort. FOG would welcome a Victorian FOG group and looks forward to developments.

Rainer Rehwinkel:
Give me a home amongst the grasses and forbs

Grasscover

5 OCTOBER 2006. A small FOG troupe visited Marianne and Rainer Rehwinkel’s home to see one way to establish a grassland garden. The Rehwinkels had rushed home from the coast and Marianne and Eilish had cooked for the mob, making scones and muffins. People turned up with more food, but with six people in the household, four of whom are Rehwinkel children (although that epithet hardy applies to Fabian and Rohan, two young and accomplished men in their twenties), hopefully leftovers will not be a problem. But I digress.

We were led by Rainer around the garden, which is now three years old, as he answered numerous questions about the many grassland plants that he was successfully growing. Many are plants one will not find in other gardens. Chamomile burr-daisy (Calotis anthemoides) grew lushly amongst the spaced pavers in several areas of the garden. It is a prolific flowerer; white petals surrounding a yellow disc (actually white ray florets surrounding yellow tube florets), with bright green finely-divided foliage. It likes low-lying, dampish areas. Rainer has been growing this plant for twenty years.

Rainer showed us many other well-established plants as we began our tour. These included Australian bindweed (Convolvulus erubescens), that delightful pink-flowered grassland plant, that had self-established without any encouragement from Rainer, and kidneyweed (Dichondra repens), a delightful creeping perennial with dark olive-green foliage that is found in grasslands throughout the region. He also showed us another kidneyweed (Dichondra species A), as an as yet undescribed species that is regionally confined to the Monaro, and has hairy, grey foliage. Also on the list were a stoloniferous wetland spe-
cies of buttercup (Ranunculus sp.) that Rainer did not know the name of, and white hoary sunray (Leucochrysum albicans var. tricolor). While he had planted a number of hoary sunray, the original plantings had long-since died and have now been replaced by plants which had emerged from the self-sown seed of the original plants.

Rainer makes growing grassland plants look easy, but newcomers should be warned that Rainer’s greenness starts with his thumbs and his background as a horticulturalist. Rainer undertook a three year trade certificate in horticulture when he left school in 1972. Between then and 1990, when he started an honours degree in Applied Science at Canberra University, specialising in vegetation and wildlife management, Rainer worked as a professional horticulturalist, spending many years working at the ANU and also in his own landscaping business. He has never lost his love of, or skill in, horticulture.

His selection of plants comes from his vast knowledge of grassy ecosystem plants. His first job after graduating in 1994 was in the Wildlife and Research Unit in the then ACT Parks and Conservation, where he worked with David Shorthouse and Sarah Sharp. In that work in Gunghalin and Jerrabomberra, he honed his skills in what was to become another passion, doing plant surveys.

In 1995, he became the Grassland Project Officer in National Parks and Wildlife Service (NSW). While the organisation’s titles have changed, Rainer has remained a grassy ecosystem specialist: he now has the title of Senior Threatened Species Officer at the Biodiversity and Conservation Section, South Branch (Queanbeyan) of NSW Department of Environment and Conservation. His contributions to grassy ecosystem ecology are major and numerous and include being a co-author of Grassland Flora, undertaking grassy ecosystems surveys of the Southern Tablelands, South-western Slopes, and the South Coast (he has now amassed well over two thousand survey sites), being a major force in the national Natural Temperate Grassland Recovery Team and managing the Joint Regional Biodiversity Survey of Grassy Ecosystems project that led to the publication of A Planning Framework for Natural Ecosystems of the ACT and NSW Southern Tablelands. He has also been an innovator in mapping grassy ecosystems in south-eastern NSW using remotely-sensed imaging technology.

So, while being a big-picture person in grassland ecology, Rainer has taken a deep understanding of the individual grassland plants and what might grow in the home garden. I was curious about Rainer’s source of plant material: while much of it has come from specialist horticultural channels and other commercial sources, many are from wild-collected seeds or cuttings – “I grew this forb from a cutting” was not an unusual Rainer statement.

As we toured the garden, we saw many-more grassy ecosystem plants, such as pale everlasting (Helichrysum rutildolepis), diggers’ speedwell (Derwentia perfoliata), this one grown from cuttings taken at Garuwanga, and lemon beautyheads (Calocephalus citreus), which has gone wild in the garden from locally-collected seeds.

Rainer’s garden is rather unusual. He grows many of his grassland plants in the B horizon of the soil. That is, the top soil has been scraped off leaving the clayey B horizon. Rainer is convinced that grassland plants do better in these poorer soils, and because the soils are poor there are fewer weed competitors. In other parts of the garden the top soil has been piled up to 20 or 30 cm, and in those areas wattles, grevilleas, correas, croweas, tea-trees, bottle-brushes and melaleucas, some of which are local species, are thriving. Accents are provided by the beautiful and hardy grey saltbush (Ragodia spinescens) blue flax-lily (Dianella tasmanica) black-anthered flax-lily (D. revoluta), spiny-headed mat-rush (Lomandra longifolia) and desert senecio (Senecio artemisifolia). On the poorer soils we saw pigface (Carpobrotus equilateralis), a very effective ground cover, the magenta storksbill (Pelargonium rodneyanum), tall amobium (Ammobium alatum), scrambled eggs (Goodenia pinnatifida), mossy knawel (Scleranthus biflorus), variable plantain (Plantago varia), scrambled eggs (Goodenia pinnatifida), mossy knawel (Scleranthus biflorus), variable plantain (Plantago varia), blue devil (Eryngium ovimum), mauve burr-daisy (Calotis glandulosa), the delightful and delicate short-flowered mat-rush (Lomandra bracteata) and creeping hop bush (Dodonaea procumbens) which was grown from cuttings from John Brigg’s garden. In wet spots near the water tank Rainer grows the lovely white purslane (Neopaxia australiensis), and the blue-and-white ivy violet (Viola hederacea). The list goes on and on.
Rainer explained that the blue devil and short-flowered mat-rush have re-emerged from rootstocks retained in the soil and were at the site prior to the block being developed, having been retained in the native and exotic pasture mix that was on the site before. The Australian bindweed seems to have emerged exclusively from a buried seed-store, as presumably did the sole nodding saltbush (Einaida nutans), which had “just turned up”. Alternatively this saltbush may have been brought in by a bird-dropping, as this species has a fleshy fruit, and Rainer’s plant is near a fence.

To make his point about B horizon soil, Rainer pointed to one of many small and not-so-conspicuous plants with its small, green flowers. This plant, a peppercress, turned up in the garden as two individuals, and it was many months before he was able to get it positively identified by an expert in Victoria. It turned out to be the aromatic peppercress (Lepidium hyssopifolium), a species that was previously only known from one extant population in NSW: five or so plants struggling for survival under a pine tree at Bathurst. While Rainer has since found a third population in a nearby travelling stock reserve, his garden now contains the largest known population of this species in NSW, and possibly in Australia! Rainer’s original two plants of this species that emerged from their buried seed store have now multiplied to hundreds of individuals.

Another example of plants taking to poor soils is Rainer’s gravel area which is now being invaded by native flax (Linum marginale), tall ammobium, native palargonium (Pelargonium australe), and common everlasting daisy (Chrysocephalum apiculatum). Did I mention we also saw clustered everlasting (Chrysocephalum semipapposum), vanilla lily (Anthropodium milleflorum), bulbine lily (Bulbine bulbosa) and narrow-leaf New Holland daisy (Vittadinia muelleri).

The grasses also tell an interesting story. Rainer has planted kangaroo grass (Themeda australis), wallaby grasses (Austrodanthonia spp.), spear grasses (Austrostipa spp.), and river tussock (Poa labillardieri). The spear grasses and wallaby grasses are thriving, and the river tussock and kangaroo grass are doing well in selected areas. Some river tussocks did not survive in particularly dry areas, showing their liking for moisture. Part of the success of the garden is that the block is on a situation that was once grassland and so the area is pretty exposed, suffering from heat and cold as well as almost perpetual drought since its establishment – ideal grassland conditions. Indeed, a remnant of this grassland is on a reserve on the hill behind Rainer’s house. Rainer uses water only to establish his native plants - thereafter they are on their own. Some of the more water-loving plants have been planted in areas where water is more likely to accumulate and the water tank, which collects water off his roof, is allowed to drip to encourage some wet-loving plant. The garden was amazing when one considers that this area of Australia is still experiencing one of its worst droughts. However, he had made a special effort to water the bulbine lilies, and thanks to this they were in full flower - thank you Rainer, we appreciated this.

There is more to tell about the plants, shrubs and trees that are growing in the garden. Rainer is not a purist, and included in his plantings are many exotics, though they are confined to two discrete areas. These do not detract from the magnificent grassland garden.

Darkness fell and so we adjourned inside to make an impact on the mountain of food and wine that appeared. People were not in a hurry to go, and so chatted on for another hour, and we even talked about people’s preferred way of washing up. Looking around Marianne’s and Rainer’s house one can see many of Rainer’s paintings on his favourite topic – plants and birds. Rainer is an accomplished painter and for those who know him well he is a budding musician as a keyboard player in the local folk-rock group, The Fire Pigs, which recently released their first CD.

Rainer’s most recent project, which we hope he will tell us about sometime, was a two month voluntary assignment on a very small Aboriginal community, near Port Hedland, W.A., where he assisted in establishing a nursery so that local plants could be used for mine site rehabilitation. Thanks Marianne, Rainer, Fabian, Rohan, Eilish and Aislinn for welcoming us to your home and for a fun outing.
There are a number of bluebell species that occur locally. Among them is the royal bluebell, *Wahlenbergia gloriosa*, which is the floral emblem for the ACT, and which occurs naturally only in forests at higher altitudes. Another is the tufted or common bluebell, *W. communis*, which is very common and a familiar sight on the Southern Tablelands. It grows in a variety of situations, even on dry dusty roadsides, and occurs throughout Australia. In this article we shall look at the tall bluebell, known as *W. stricta*.

The tall bluebell is erect growing, lives up to its name, and in the best conditions can grow up to about 60cm high. The stems are quite thin, and when they fail to stand erect, perhaps because of some windy weather, the new growth shoots will again be erect, and so sometimes the branches can be bent in various ways. For convenience, I drew a bent stem and a straight one, so that I could show both the lower and upper leaves. The lower leaves grow in opposite pairs, and the upper leaves are narrower and grow in an alternate manner along the stems. The new season’s growth occurs from a sturdy perennial root, which resists the heat of summer and the frosts of winter. The plant is densely covered in short hairs. New branches form in the leaf joints and single five-petalled blue flowers occur at the tips of the branches. The fruit is an ovoid capsule containing many tiny seeds, and stays on the plant as it withers and turns brown in the summer sun. For habitat it generally prefers a little shade, such as is afforded in woodlands and open forests. However it can also be found growing in the open sun, and is often present in places which were once woodlands, and have been cleared of trees. It occurs widely in southern and eastern Australia, Tasmania and New Zealand.

Ian White has a reputation for being very gifted in understanding the medicinal value of native plants. In his book *Australian Bush Flower Essences* he describes the therapeutic value of many plants, including the *Wahlenbergia* genus. For his bluebell remedy he used a specimen from the Olgas in central Australia, but says the healing qualities apply to wahlenbergias in general. He says some people can be a bit stiff and rigid and may not be so good at giving and receiving affection and be lacking in generosity. This remedy helps them to release blocked off emotions and the heart opens. They loosen up, become more trusting, happier, and able to give and share. Also, when people have had open heart surgery they sometimes cry a lot, releasing bottled up feelings. The bluebell remedy helps those people through this difficult process.

The name *Wahlenbergia* is after Goran Wahlenberg (1780 to 1851), who was a Swedish botanist. Coming across a patch of bluebells growing in the dappled shade of a eucalypt on a hot and sunny day is a refreshing encounter. The tall bluebell (*Wahlenbergia stricta*) is a member of an interesting plant group with healing and decorative properties as well.
Do you want to subscribe to the newsletter? It comes out six times a year, and you can obtain it by joining FOG. You do not need to be an active member - some who join often have many commitments and only wish to receive the newsletter.

However, if you own or lease a property, are a member of a landcare or parkcare group, or actively interested in grassland and woodland conservation or revegetation, we hope we have something to offer you. We may assist by visiting sites and identifying native species and harmful weeds. We can suggest conservation and revegetation goals as well as management options, help document the site, and sometimes support applications for assistance, etc.

Of course you may wish to increase your own understanding of grasslands and woodlands, plant identification skills, etc. and so take a more active interest in our activities. Most activities are free and we also try to arrange transport (or car pool) to activities.

If you are already a member, why not encourage friends to join, or make a gift of membership to someone else? We will also send a complimentary newsletter to anyone who wants to know more about us.

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Send us details of your name, address, telephone, fax, and e-mail, etc. You might also indicate your interests in grassland issues. Membership is $20 for an individual or family; $5 for students, unemployed or pensioners; and $50 for corporations or organisations - the latter can request two newsletters be sent. Please make cheques payable to Friends of Grasslands Inc.

If you would like any further information about membership please contact Margaret Ning, or if you would like to discuss FOG issues contact Kim Pullen, Janet Russell or Geoff Robertson. Contact details are given in the box above. We look forward to hearing from you.