

News of Friends of Grasslands

Supporting native grassy ecosystems

January-February 2003



Program

Saturday/Sunday 11-12 January - Insect Workshop at Garuwanga (near Nimmitabel). The aim of the workshop is to assist FOG members to become more aware of insect identification, behaviour and ecology in grassy ecosystems, to record the insect species found during the weekend, and to lay the groundwork for further FOG involvement in insects in grassy ecosystems in the Southern Tablelands. Ted Edwards, Roger Farrow, and Kim Pullen, FOG members and entomologists, will illustrate the various insect capture methods. They will talk on the identification, behaviour and ecology of insects found at Garuwanga. Those coming to the workshop can also bring along their own photos, specimens, etc. of insects for identification. There will be some activity on the Friday evening if you care to arrive on Friday. The workshop will finish after lunch on Sunday. While some accommodation can be offered indoors, participants are encouraged to bring their own camping gear, plates and cutlery. The catering cost is \$20 a head with some family discount. To attend, please register with Margaret (phone 6241 4065 or 6454 6064, and e-mail margaretning@primus.com.au) and make arrangements to pay by 8 January.

Saturday 22 February 4pm - FOG's Annual General Meeting. This is an important event for FOG so please come along to the short meeting and enjoy the barbecue afterwards. Please read the separate notice below.

Saturday 8 March 9:30am - FOG Working Bee at Old Cooma Common Grassland Reserve. We will be removing and doing some herbiciding of woody and other weeds. Contact Margaret for further details.

Saturday 22 March - FOG Grasses Display at Australian Native Plant Society sale. This will be held all day at the Australian National Botanic Garden, Canberra. More details in next issue.

Membership renewal

Memberships for 2003 are now due. Many thanks to those who have already renewed in the last two months. If you are unsure about your details, or you have misplaced the renewal form, please contact Kim or Margaret whose details appear on the back page.

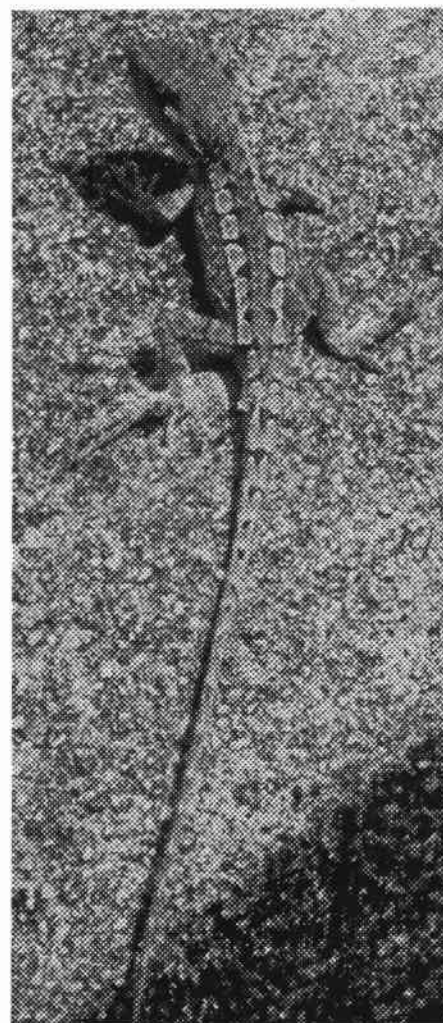
Annual General Meeting

Please note that the AGM will take place at 4pm on Saturday 22 February at Mugga Mugga Education Centre, Narrabundah Lane (opposite the Therapeutic Goods Centre), Symonston. It is important that we get a good roll up at the AGM and allow members to hear and comment on reports and raise any issues. As usual, we shall attempt to keep the meeting to one hour, followed by a barbecue. Please bring your own beverages and any special foods. Meat and salad supplied. Committee members please bring salad.

This year to speed things up a little and to align ourselves to our rules more closely, nominations for the positions of President, Vice President, Secretary, Treasurer, and eight (or twelve) ordinary committee members should be posted to the Secretary at our post box address seven days before the AGM. The nomination should be signed by two members and have the consent of the person nominated.

Notice of change to rules

The committee is proposing at the AGM to change the rules to increase the number of ordinary committee members from eight to twelve. This is to avoid the situation we had last year where eleven persons nominated for these positions. The AGM decided that all nominations should be regarded as committee members and that worked well, although technically only eight were full committee members.



Jacky Lizard photographed by Andrew Paget on Bega Valley weekend.

In this issue:

- News roundup
- Bega Valley weekend
- Chaining yourself to a blade of grass – the final cut
- Two threatened species in good hands
- Friends of Grasslands' website
- Willow Herb

News Roundup

Successful workshop

Groundstorey

Friends of Grasslands joined forces with the Australian Native Plants Society (ANPS), Environment ACT (EACT) and NSW National Parks and Wildlife Service (NPWS) to hold a workshop on the theme *Conservation and restoration in the Southern Tablelands (ST) - future initiatives* on 22 November 2002. The background to the workshop is outlined in the piece on a bid for a feasibility study below.

The aim of the workshop was threefold. First, it examined the current ST conservation and restoration situation with presentations from Maxine Cooper (EACT), Ian Pulsford (NPWS), Jo Clarke (Snowy River Shire Council), Kerry Pfeiffer (South East Catchment Management Board) and David Eddy (World Wide Fund for Nature). Second, it examined a series of possible future initiatives. This included a paper on *establishing infrastructure for conservation planning and restoration* by Geoff Robertson (FOG) and several papers on a *regional botanic garden, research and education centre* by Cathy Robertson and Shirley Pipitone (both ANPS) and Jenny Liney (Eurobodalla Botanic Garden). Third, it discussed how to evaluate the proposals and to turn them into reality. The forty participants divided into five groups for this purpose.

Organisers were very happy with the outcome which gave an opportunity to participants from across the region representing Territory, State and local government, catchment groups, landcare, and large and small non-profit conservation groups to look at the way forward. I shall not attempt to summarise either the papers, the discussions, or the themes that emerged. A copy of draft proceedings (14 pages) and the presentations/papers are available from Geoff Robertson (see details back page).

A bid for a feasibility study

Groundstorey

The Australian Native Plants Society (ANPS) and FOG are seeking funds to undertake a feasibility study to test the viability of two initiatives relating to conservation and restoration of ecosystems in the Southern Tablelands. The initiatives are first to establish a Southern Tablelands regional botanic garden, education and research centre in the region; and second a Southern Tablelands biodiversity strategy and program.

In July this year, FOG wrote to all Members of the Legislative Assembly, enclosing a statement titled, *Strategic Planning for Canberra Nature Conservation* that was published in the July-August 2002 newsletter. That statement proposed a set of proposals that FOG believes would address fundamental nature conservation issues and link work on threatened species and communities, planning, weed abatement, and catchment management. Some FOG committee members subsequently had discussions with staff of Simon Corbell's, Bill's Wood's and Jon Stanhope's offices. During these discussions a proposal being developed by ANPS to establish a regional botanic garden for Southern Tablelands plants and an education and research centre was also mentioned.

Subsequent meetings involving Geoff Robertson and Alan Ford (FOG) and David Shorthouse (EACT) with first Simon Corbell and later Bill Wood were very productive. It was noted that both initiatives may require ACT government funding, and in the case of the garden and ecological centre, provision of a site, although it was agreed that other sources of funding should also be explored. Both Ministers were very supportive. Bill Wood suggested that the FOG initiative should not be confined to Canberra but should encompass the broader region. He asked David Shorthouse (Environment ACT) to work with FOG to develop these proposals further, for consideration in the context of the next budget. Subsequently, EACT, FOG and ANPS, with assistance from NSW National Parks and Wildlife Services, organised a workshop of some forty stakeholders on 22 November to articulate these initiatives further (see previous item). Since the workshop, an Interim Management Committee has been established within ANPS to pursue the establishment of the regional botanic garden, education and research centre. ANPS and FOG have also raised with the ACT Government the possibility of undertaking a feasibility study to pursue these initiatives further.

Michael Unchained

Geoff Robertson

Michael Treanor will not be re-standing as Vice President of Friends of Grasslands in 2003 as he is now about to leave the ACT and move to South Australia where he will be employed by the Commonwealth Government as a land conservation manager.

In his article in this newsletter, *Chaining yourself to a blade of grass – the final cut*, Michael reminds us of his enthusiasm, energy and achievements on grassy ecosystem conservation. He has been a tower of strength in FOG and will remain, we hope, an active if distant member. We know that professionally he has contributed to the ACT Government's conservation management and his close colleagues in the ACT Park Service have mentioned to me his commitment, innovation and sheer hard work.

We all wish Huyen and Michael the best and we will miss his quick smile and loads of wisdom. Perhaps we shall start planning FOG's first foray to South Australia?

East O'Malley revisited

Rosemary Blemings

East O'Malley was visited and explored on Saturday 19 October by 28 people from various community groups to see what all the fuss surrounding East O'Malley was about. FOG had organised Michael Mulvaney, Gill and Richard Langdale-Smith and Geoff Robertson, with their different perspectives, to lead the walk and talk about the different conservation values present.

Our introduction to the values of East O'Malley began from a small rocky outcrop, an island of mainly native vegetation in a sea of degradation where woody weeds have flourished until sprayed, and St John's Wort is healthily green in this season of desiccation. Michael mentioned that the Pink-tail Worm Lizard (*Aprasia parapulchella*) might be present under the minor rocks but has not been recorded as yet. He also mentioned that in the development plans the western-most section would be part of open space. Yet high quality conservation land west of the eroded creek line would be the site of houses for the affluent.

Erratum:

In the article on Fisher Parkland by Maggie Nightingale in our last issue, the words 'part of the extensive Canberra Nature Park' were not in Maggie's original article. I added them to clarify the situation for readers who may not have been aware that Fisher Parkland is in the ACT. Unfortunately, the statement I added was incorrect, a mental glitch on my part. The land is managed by Canberra Urban Parks and Places. My apology to Maggie and others because I know there are some sensitivities on this issue. Editor

The threatened sections contain magnificent Eucalypts and their seedlings, or exotic understorey on which numerous species of birds depend. Gill and Richard Langdale-Smith have recorded 75 bird species over their years of birdwatching there. The inclusion of the threatened or uncommon Speckled Warbler, Diamond Firetail and Southern Whiteface in their observations not only increases East O'Malley's potential but establishes it firmly as a vital link in the chain of connectivity of the ACT's Yellow Box Red Gum woodlands and grasslands. Remnants such as this are virtually non-existent in New South Wales, or certainly not as well represented in size.

Aboriginal use of the older trees was evident as were the scars of trees burnt when younger. Older trees host many animal and bird species in their hollows. Several bird species were involved in nest-building or feeding dependent young. Varied *Sitellas* flew away too high for most to recognise and a Little Eagle showed its supremacy in the boisterous winds. Grey Butcherbirds were on a mission and Magpies had their own quarrelsome agenda.

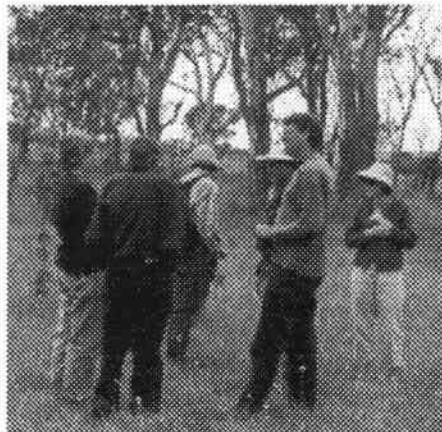
In the dryness, many plants were 'doing it tough' and yet Swamp Isotome (*Isotoma fluviatilis*), Austral Sunray (*Triptilodiscus pigmaeus*) and Billy Buttons (*Craspedia* sp.) indicated where normally damper places or drainage areas were. Michael showed us a specimen of the uncommon Barbed Wire Grass (*Cymbopogon refractus*). Spear grass (*Austrostipa* sp.), Purple Wire Grass (*Aristida ramosa*) and Wallaby Grasses (*Austrodanthonia* spp.) were present in some places. Weeping Grass (*Microlaena stipoides*) was obviously popular with hungry kangaroos even at its early-in-the-season stage.

The high conservation area presented virtual swathes of Creamy Candles (*Stackhousia monogyna*) with at least three species of 'Button daisies', Common Everlasting (*Chrysocephalum apiculatum*), Clustered Everlasting (*C. semipapposum*) and Scaly Buttons (*Leptorhynchos squamatus*). Onion orchids (*Microtis* sp.) grew amongst native Plantains (*Plantago varia*). Sundews (*Drosera peltata*) favoured the wetter places and as they had in the poorer sections, Bulbine Lilies (*Bulbine bulbosa*) grew near rocks. By now Sticky Everlast-

ing (*Xerochrysum viscosa*) and Tufted Bluebell (*Wahlenbergia communis*) will be in flower.

Gundaroo reveals new *Senecio* species Jacqui Stol

Way back on a sunny Saturday (26 October) around 15-20 FOG members gathered at the historic Gundaroo General Store for an afternoon on Celia and Malcolm Lawrie's property "Yuwandi". Yuwandi is a 54 acre grassy woodland on the slopes leading out to the east of Gundaroo along the Dairy Creek Road. For FOG members one of the attractions, besides a wonderful smattering of orchids and other interesting beasties amongst the diverse native grasses, was that Rainer Rehwinkel, who was leading the walk, was keen to relocate a new species of *Senecio* (*S. macrocarpus*) that had been previously surveyed on the



slope above the main creek through the property. I was also looking forward to seeing the place as we have a bush block above the Yass river to the north-west and was keen to see some new area of potentially similar country.

The property is classic higher slope country with rolling to steep hills, mostly originally a woodland of Scribbly Gum (*Eucalyptus rossii*), Brittle Gum (*E. mannifera*) and Red Stringybark (*E. macroryncha*). Typically these types of woodlands were cleared back in the 1920s and '30s and are still in a process of regrowing and forming some of the big old trees that used to be around. The grassy and shrubby understorey is in good condition, with rarely a weed and at least 44 herbaceous species recorded by NPWS surveys despite being aerial sprayed for serrated tussock back in 1969. It is fascinating to look back and see that the current thinking at the time for serrated tussock control was a plane loaded up with herbicides. Can you imagine Gunning Shire Council doing that today?! There has been little or no stock on the place which would typically stock around one sheep to the acre.

The walk started across one of the open areas which had been sprayed for tussock. Celia and Malcolm felt that this part of the area was less diverse and orchids were usually not found, however Rainer and others still found a wonderful flowering selection amongst the Themeda and *Austrodanthonia* tussocks; the widespread large-headed daisy (*Brachyscome diversifolia*), Hoary Sunray (*Leucochrysum albicans*), a couple of the beautifully red and yellow *Pultenaea* including the common *P. subspicata*, Grey Guinea flower (*Hibbertia obtusifolia*), Grass cushion (*Isoetopsis graminifolia*) which looks like a small grass and is uncommon although widespread being often further west, lots of the Austral sunray (*Triptilodiscus pygmaeus*) and some *Crassula*.

As we progressed, a number of orchids were found – the slender sun orchid (*Thelymitra pauciflora*) and a number of *Diuris* spp. of varying kinds. Something I didn't realise before that day was that *Diuris* mimic *Pultenaea*, as orchids are wont to do. Other species were the Yellow Rush Lily (*Tricoryne elatior*), Daphne Heath (*Brachyloma daphnoides*), a pretty purple feral – Pelisser's Toadflax (*Linaria pelisserana*), Narrow-leaf New Holland Daisy (*Vittadinia muelleri*), Plumegrass (*Dichelachne* spp. – there are seven in the Southern Tablelands), and a Rock Lily (*Bulbine glauca*) which caused a bit of angst as to its ID but there it was with slightly bluer-green leaves living on a rock!

We finally got to the area Rainer had identified as potentially having *Senecio macrocarpus*, an steep slope above the creek with huge River Oaks (*Casuarina cunninghamiana*), everyone feeling nervous that they may inadvertently flatten the sole remaining specimens if they strayed off the path. So as we trudged carefully up the slope there was a cry of eureka! found it! There it was - all 20 or so specimens, looking slightly bedraggled and weedy as I think the *Senecios* are apt to do (sorry folks but it did!), about 20cm or so tall with a closed yellow flower. So, tired but happy we climbed up the steep slope via a magnificent mud brick house being built by Celia and Malcolm's neighbours with historic old beams, ceilings, timbers door and window frames, to lovely afternoon tea supplied by the hosts. Many thanks to them both, and thanks for a great afternoon's wanderings.

Combining business and pleasure Groundcover

As the sun set on the golden and fawn waving grasses on Old Cooma Common

Photos on pages 3 and 5 by Alan Ford show leaders, Kevin Thiele and Rainer Rehwinkel, respectively, making a telling point on FOG's Western Slopes' trip in September. Story in last issue.

on Thursday 14 November a bus load of Stipa members arrived. Their purpose was to suss out the Monaro Grassland and to meet members of FOG's committee to arrange the combined Stipa and FOG Conference to be held next November. The bus was a little later than expected so several FOG members went on a sortie to determine what flowers were out. Even though the wind was cold and biting and the drought had been hard, the Monaro Golden Daisy and the Hoary Sunray, were spectacular and showy through the grasses. The flowers and champagne, followed by a relaxed meal at a local café, had got the tour off to a good start. Eighteen people joined the tour and there were two further additions for the Friday night meeting.

Many FOG members will be familiar with the sites we visited but because they are large and ever changing, they are always a delight. David Eddy, who over the years has developed his talent as a grassy ecosystem tour guide, kept up an interesting commentary both on and off the bus, explaining important features of the landscape and the individual sites visited.

While the heavy hand of the drought was clearly evident and many acres had been denuded as sheep tried to find any food possible, the landscapes were clearly spectacular. The golden fawn grasslands often stretched for miles over the rolling hills, with rocky outcrops, sudden rises in the land, slightly green drainage lines, and ephemeral lakes adding characteristic features. Other characteristic landscapes with the grassland on the lower slopes rising to a Snow Gum woodland were also a delight to see. Then at times the bus would travel over a higher ridge between valleys and the group was treated to some dry forest vegetation. Possibly the most memorable view for me on this trip was crossing the Murrumbidgee River with its bluish but totally clear water running through the grassland. It was a sight, with its water lilies and other riparian vegetation and Snow Grasses on the banks, that for me best summed up the relationship between the grassland and riparian zone.

The descriptions and statistics helped put the individual sites we visited into context. There are over 150 travelling stock reserves (TSRs) on the Monaro, many with high conservation value - these are key to any conservation strategy. There are over 200 elevated ephemeral lakes (depressions with flat bottoms), which often contain somewhat unique vegetation. The ephemeral lakes seen on the trip were dry, of course. When David was not talking, one

could hear Kerry Pfeiffer's voice explaining to the visitors the historical and conservation importance of the Monaro grasslands.

On the Friday morning the tour first visited Murrumbucca TSR with its variety of vegetation types and Basalt Plateau grassland. Next it was the Adaminaby Golf Course, now a nine-hole course, its large patches of native grassland looking very spectacular with many yellow, white, blue and mauve flowers breaking through the short green Kangaroo Grass. Lunch was taken there, and then it was on to Top Hut TSR again with a stunning flower display and rocky hillsides. The large and picturesque dam attracted many water bird visitors and we were delighted to see a Little Eagle. The final stops for the day were Round Plain TSR and Round Plain church, both enchanting with their wonderful flower displays although it was decided that the Showy Copper Wire Daisy (*Podolepis jaceoides*) would be more prolific in a week or two.

The Friday night meeting was faced with making many decisions, but despite their diverse backgrounds participants readily agreed on the parameters for the November 2003 Conference to be held in Cooma. It was agreed that both Stipa and FOG would be the chief organisers but many sponsors would be asked for practical assistance. The title will be *Sustainability and beyond*. A number of sub-themes and possible topics were discussed. It was decided to call for expressions of interest in giving papers by the end of March 2003.

On the Saturday morning the tour headed south of Cooma stopping at Ravensworth TSR. After moving away from the more exposed and somewhat icy-cold slopes, the group was treated to magnificent arrays of plants on the less exposed and sunny slopes. Then it was off to Bibbenluke Common where the wildflowers were probably the best - the perfect grassland site to finish the trip.

So Stipa and FOG will build on past cooperation. Five FOG committee members participated in the trip as well as many other FOG members, many of whom are also Stipa members, a good thing in itself. Congratulations to Sue Rahilly, Darryl Cluff and Christine McRae for organising the trip, Bill Semple and Warren Saunders who helped pull it together, and the enthusiastic Canberra and Monaro contingents.

Tinderries

On Saturday 24 November FOG and a couple of Australian Native Plant Society

members joined forces to venture into the Tinderries under the able leadership of Roger Farrow who took us through some fairly challenging but enjoyable dry forest country. Because we were FOG members, there was the obligatory grassland visit on the way. A fellow traveller was Benj Whitworth and we let him take up the story from here.

A small bunch of people from FOG and ANPS went to the Tinderries on Saturday. We didn't really see many birds, eg just white eared honeyeaters, eastern spinebill, brown thornbill, grey fantail, etc but did hear yellow tailed black cockatoo, lyrebird, and wonga pigeon (I thought that was very interesting). Because there aren't really any paths you have to crash through the bush, making bird watching difficult. At lunch we saw a pair of birds of prey circling over the north of the Tinderries, but we were not close enough to see them in the binos. They weren't wedgies as they had a straight tipped tail, but fanned tail, quite angled wings at elbows with not really fanned out tips. They seemed to fly too fast for a little eagle.

We did see some interesting plants. Although most had finished flowering, some were still going, which was better than Canberra. There was a broad-leaved *Grevillea* (*Grevillea victoriae*), a purple Kunzea (*K. parvifolia*), a pale blue *Prostanthera*, a white Waxflower (*Eriostemon* sp.) which was just finishing, and a pretty yellow lily (*Thelionema* sp.) was flowering amongst the rocks. We saw the remains of some orchids - *Caladenia gracilis* perhaps. Other interesting plants included *Derwentia* (*D. perfoliata* and *D. derwentiana*), *Clematis aristata*, a couple of Flax Lilies (*D. tasmanica* and *D. revoluta*), Mat-rush species (*Lomandra* sp.), and a few interesting Eucalypts. Just heaps of native plants - it was great. I wish there were paths there though as my legs were ripped to shreds.

Smokers Flat

Margaret Ning

At 10am Saturday 7 December, six FOG members assembled for a visit to the sub-alpine grassland at Smokers Flat in Namadgi National Park. This beautiful area has been one of Michael Treanor's stomping grounds for many years including in his capacity as Corin Dam Ranger. Because of firefighting commitments, he couldn't join us on the day, and his colleague, Darren Roso did the honours.

To maximise the time Darren could spend with us at the grassland (before another

commitment), we maintained a brisk pace (at least by FOG standards!) to cover the 3km distance to the area of grassy sub-alpine frost hollow. As with everywhere else, this season has not been the best for floral displays, though a sub-alpine grassland is always a good refuge in dry times, and this area was no exception. The area was still damp underfoot and the Sphagnum Moss was still evident.

The grassland was dominated by River Tussock (*Poa labillardieri*) and another *Poa*. Streams flowed through the tussocks, and boggy patches still contained their wet-area specialists. The latter included assorted *Ranunculus* species (including the white-flowered *R. millanii*), *Nymphoides geminata*, a tiny *Myriophyllum* species (*M. pedunculatum* subsp. *pedunculatum*), along with the more normal damp-area specialists, *Hypericum japonicum*, *Gratiola peruviana*, *Oreomyrrhis ciliata*, *Isoetoma fluviatilis*, and a *Luzula* sp.

Shrubs around the edges of the grassland included *Epacris* species and a tea tree (*Leptospermum myrtifolium*). The forbs around the edges and in the grassland included *Aciphylla* sp., *Gingidia harveyana*, a blue *Brachyscome* species, myriad *Arthropodium* leaves, an Eyebright species (*Euphrasia* sp.), and *Plantago muelleri* with its huge broad leaves. Although we only spotted one orchid on the day (a lone *Diuris* plant), Michael had seen Sun Orchids (*Thelymitra* sp.) and Hyacinth Orchids (*Dipodium* sp.) flowering only shortly before.

Once Darren departed we were still able to move efficiently between the different grassland areas with the help of our maps and a GPS. Each new spot had its own subtle different floral and/or vegetative highlights and was worth the navigational effort to locate it. The day was near to perfect with a refreshing breeze that was especially appreciated as we began the longish trek back to our cars. Our thanks to Michael for organising the activity and to Darren for his enthusiastic leadership.

FOG visits the Firing Range

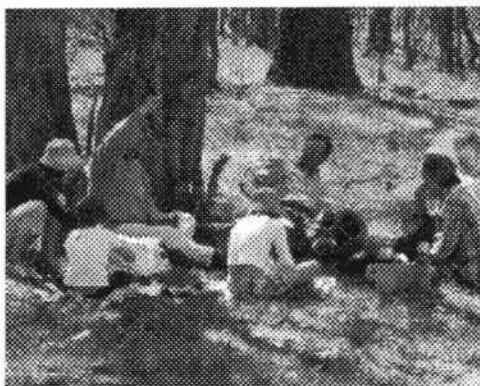
Aristida

The Majura Firing Range is a 5,500ha defence facility immediately to the east of the city. FOG went on a sunny Tuesday afternoon, 17 December, and found a lot in flower. Considering the recent weather, it's amazing that anything was in flower.

We walked along the southern boundary in what is essentially a buffer zone. That zone is an *Austrodanthonia* grassland with a

wide range of flowering plants within the area. It is bounded to the east by woodland and an area of re-growth. It has been invaded by various weeds and the Department of Defence is making a real effort to fight them.

We were particularly impressed by the number of Blue Devils (*Eryngium ovinum*), some of which might not flower.



However, the really impressive nature of the grassland was revealed by the number of Button Wrinklewort (*Rutidosia leptorhynchoides*). You stood in awe of the number of plants of this species as a patch of it covered the ground in front of you! The Department of Defence should be congratulated for making the effort to manage and preserve the area for this plant alone.

The Range has both the Earless Dragon and the Legless Lizard and the woodland/forested elements have sugar gliders and yellow-footed antechinus, to say nothing of the Hooded Robin.

Our thanks to Tom Breen from Defence for making the visit possible

Is GEG finished?

Grasscover

FOG is concerned that the national devolved grant for the conservation of temperate grassy ecosystems in south-east Australia may be coming to an end. This project, usually called the Grassy Ecosystem Grants (or GEG) program, was funded under the national projects component of the Bushcare program of the Natural Heritage Trust in 1999. The long-term objective of GEG is to reverse the ongoing loss of grassy ecosystems through permanent or long-term protection across their range. The shorter-term objective is to distribute targeted funding focussing on priority regions and ecological communities to achieve:

- An increase in the area of grassy ecosystems on private land protected by covenants or long term management agreements;

- An increase in the number of cooperative land management agreements with public authorities;
- An improvement in understanding, and application of best practice management across a range of sites and tenures;
- Increased community involvement in the management of grassy ecosystems across their range; and
- Knowledge generation on the distribution and conservation status of grassy ecosystem remnants, particularly those on private land.

There have been three rounds of project funding. Applications for Round 3 were called nationally in August 2001, and project grants funded from April 2002. All projects will be required to complete and report by no later than May 2003, to allow final project reporting to the NHT by the end of June 2003.

Project applicants have included individual land managers, conservation organisations at the regional and state levels (e.g. Trust for Nature (Vic)), local government, state government land management agencies (eg Rural Land Protection Boards), community trusts and universities. Funding has ranged from minor grants of hundreds, to major grants of tens of thousands of dollars depending on the scope of activity and capacity. All projects have been required to report on their success against proposed objectives/actions.

GEG is led and administered by WWF Australia. WWF Australia has included representatives from relevant government and non-government partners in New South Wales, South Australia, Victoria and Tasmania, particularly in the project development and assessment phases of its administration. Other networks (mostly under NHT) were also drawn on as project supporters and contributors, eg Landcare groups and Bushcare facilitators. The former South East Grassy Ecosystems Networker position (hosted by the Victorian National Parks Association, most recently filled by Donna Smithyman and before that Helen Ryan) was critical support for the program, especially in encouraging action.

FOG has been involved in GEG through Geoff Robertson who was a member of the project National Assessment Panel. Geoff says that GEG was very worthwhile from FOG's viewpoint, although it took many hours to go through the applications, assessments and follow up of applicants, as the basis for the Panel's recommendations for funding to the Minister. Geoff added

that he was extremely impressed with the approach, the volume of work handled, the thoroughness and persistence of WWF Australia in administering GEG. Environment Australia got top value for the their dollar on this important project on biodiversity and grassy ecosystem conservation in particular.

Unfortunately, further national level funding under Bushcare is not available currently to continue GEG. Similarly, WWF Australia has not been successful in securing state level national resource management (NRM) funding (to aggregate to a 'national' program), and investment under regional level funding processes is uncertain. WWF Australia does not have the capacity to engage with each region, although the state based Threatened Species Network Coordinators are seeking consideration of conservation of grassy ecosystems as a priority in their input to integrated regional NRM planning wherever possible.

The final phase of GEG will see projects completed and a focus on communicating outcomes and good practice. Case studies and project outputs should be available on the WWF Australia website www.wwf.org.au from early in 2003. Bernadette O'Leary is the WWF Australia contact on 02 6257 4010 or bolcary@wwf.org.au.

North Gungahlin *Grasscover*

At the end of October 2002, ACT Planning and Land Management (PALM) released the North Gungahlin Structure Plan covering the proposed north Gungahlin suburbs of Bonner, Casey, Forde, Jacka, Moncrieff, Taylor, and Part Ngunnawal/Part Amaroo. Gungahlin is projected to accommodate 100,000 people, and these North Gungahlin suburbs will accommodate 34,500. The package released provided a great amount of information, reflecting the ACT Government's desire for more transparency and community consultation. Much attention has been made to providing information on the impact of proposals on conservation assets.

Among the proposals are that 100 hectares of Yellow Box Red Gum (YBRG) Grassy Woodland, an ACT threatened ecological community, will be largely destroyed, together with large areas of 'other woodland' and 30ha of Natural Temperate Grassland (Site 1 in Action Plan 1). There are also concerns as to how some wetlands will fare. The papers address some of the broader issues. Of the total area of 1408ha of YBRG woodland in Gungahlin, 362ha

will be retained in Mulligan's Flat, and up to 570ha in Gooroo (a further 78ha will be destroyed in Gooroo), 251ha in Kinlyside, and 46ha in North Gungahlin. However, it is unclear what the likely outcome of the reviews of Kinlyside and Gooroo will be, as well as areas outside Gungahlin, which should be dealt with as part of the review of woodland review. FOG in its submission, required by 20 December, raised many concerns but chiefly asked that the ACT Government again look at the trade-off between development and conservation. Copies of this submission, as with all FOG submissions, are available from FOG.

Stipa One Day Conference *Sue Rahilly*

Stipa held a one day conference at "Marapana" on Thursday 17 October, and repeated it in Gilgandra the next day. The title was *Increased profits and decreased salinity with pasture cropping*. Darryl Cluff, Colin Seis, Bruce Maynard and Matthew Barton described how Pasture Cropping works on their properties.

Pasture Cropping is a system of sowing winter cereal crops into dormant summer-growing native grasses. It is proving to be economically and ecologically viable. Matthew has been using Pasture Cropping to grow cereal crops, and has found it to be very profitable, while at the same time rejuvenating the soil. Colin and Darryl developed this system during the 1990s in response to dropping income and increased land degradation. They have been using it very successfully on their properties at Gulgong and Dunedoo.

The system uses native grasses to provide vegetative ground cover, retain moisture and feed stock during the time conventional farmers would have their paddocks fallow. Colin thinks that half a day fallow is too long. Stock are removed from the paddock with the first frost, the grasses knocked back with one application of herbicide and the cereals sown immediately. Darryl observed that oats growing out of a dormant red grass butt grew better than those growing in bare soil. This stimulated Colin to dig a trench through the roots of a perennial grass and out the other side into soil with no grass. There was far more moisture in the roots than in the bare soil. The "preserved sub soil moisture" just wasn't there. There were earthworms, evidence of microbial activity amongst the roots. No wonder the oats liked falling there.

At the same time Darryl and Colin were developing their system, Bruce was direct drilling grazing oats into his degraded native pastures. He sows the oats dry, sowing until the autumn break. He gets a good strike rate without bogging the tractor. With good stock management he has improved his native pastures and increased his profits. He uses salt bush successfully to augment his pastures.

Colin, who is also the Extension Officer for Stipa, emphasised the benefits of native grasses. He understands the various species, and they fit together to give a productive, diverse pasture. He considers that getting native grasses growing on your land is as easy as building a few fences, and managing stock. They persist through drought and frost, and with diversity are productive all year round. As the explorers' journals are read and understood, it is becoming clear that there were extensive grasslands in the interior of NSW. He feels passionately that restoring the landscape with our "fantastic native grasses", and managing stock well on them, is the answer to many land degradation issues.

Darryl has found increasing ground cover in his paddocks has contributed as much to reducing salinity as planting trees. In fact, where he has planted trees, with the advice of experts, in an attempt to lower water tables, there is another saline "boil" appearing. However, in his paddocks where he grazes his Merino stud, the ecology is improving immeasurably.

Bruce outlined the approach which has become integral to the sustainability of both the ecology and economics of his family farm. He aims to "manage a plant community, not a particular pasture type, and to achieve 100 percent ground cover". Instead of battling the land, he works with nature, and as a result has more free time, is more profitable and his soil is improving out of sight. He provided an analysis that showed how profitable Pasture Cropping is. From a traditional farming background using high inputs, but not necessarily achieving high outputs, this low input system is revolutionizing his way of life and his way of farming.

Aiding and abetting the decline and destruction of threatened ecosystems *Ray Maino*

President, Diamond Creek Landcare

Over the last 30 years there has been a net increase in native vegetation in the Port Philip (Melbourne) region of Victoria. On closer examination we find abundant vegetation types have become more abun-

dant while depleted types have continued to decline. More species go onto the threatened species list than come off and some are still coming off the wrong end. These species can only survive in precarious remnants for so long. It is generally agreed we must restore habitat - the right sort of habitat!

Less than 30km north of Melbourne, on the floodplains of the Plenty River near the township of Mernda, there are significant remnants of some of the most threatened ecosystems in south-east Australia, Plains Grassy Woodland and (derived) grasslands (trees removed). Here is an opportunity to not only preserve 700 year old trees but also the seriously threatened ecosystem of which they form part. There is abundant land here for ecosystem restoration and to provide much needed buffer areas to ensure long term sustainability.

Instead, amendments C30 and C45 to the Whittlesea Planning Scheme propose the area be developed for 50,000 people when there are plenty of infertile and less environmentally important areas around Melbourne that could be used. For more information contact the city of Whittlesea telephone 03 9217 2237 or e-mail whitcc@whittlesea.vic.gov.au.

Conder 4A Update

Michael Bedingfield

Two years have passed of the ten year moratorium on the development of Conder 4A. However, FOG is still endeavouring to have the site incorporated into CNP as the moratorium concept doesn't offer adequate protection.

Meanwhile the development of the larger area called Conder 4 (of which 4A is a part) will be going ahead. SMEC and PALM are presently going through the public consultation process for the creation of the Development Control Plan. I have prepared a detailed submission with FOG's support, mainly focusing on maintaining the integrity of the flora and fauna of the moratorium area. Items touched on include adequate buffer zones, appropriate access points, fencing and fire management. This case is a good exercise in creating a proper interface between a residential area and a high quality native remnant.

All you wanted to know on grasses

The Australian Biological Resources Study (ABRS) has recently published *The Flora of Australia* Volume 43 on Australian grasses. It provides an introduction to the grass family and essays by noted researchers on the classification, paleobotany, anat-

omy, ecophysiology, ecology, economic attributes and biogeography of Australian grasses. It includes an illustrated guide to grass morphology with keys to tribe and to genera, and an atlas of maps for all 1403 taxa recognised by the authors to be native or naturalised in Australia.

ABRS is also releasing *AusGrass*, an interactive identification CD, authored by Donovan Sharp and Bryan Simon. Ac-

Put this in your calendar NOW

The Stipa Native Grasses Association

Supported by Friends of Grasslands

THIRD NATIONAL NATIVE GRASSES CONFERENCE

**27 & 28 NOVEMBER 2003
COOMA, NSW**

"Sustainability and Beyond"

Producers, conservationists and horticulturalists will present papers on Australian Native Grassy Landscapes.

For those wishing to submit a paper and/or poster presentation, please send expression of interest to Christine McRae, Conference Coordinator, 1480 Bocoble Rd, Mugdee NSW 2850 or cmcrae@hwy.com.au by 30 March 2003.

cording to our source, this is the largest and most comprehensive identification guide to a plant group ever published. The interactive key is based on Lucid software, which ABRS say is an easy-to-use interface allowing you to choose the questions based on the plant features in front of you. There are also fact sheets for each species, including a botanical description, notes on distribution and taxonomy, and images including line drawings, scanned specimens, photos and maps. Navigation is simple using hyperlinks on every page, you can browse by species name, genus name, common name or synonym, with a comprehensive glossary of terms and an extensive list of references. If you prefer, you can also key out your specimen using an updated version of Bryan Simon's Key to Australian Grasses.

Both are available from CSIRO Publishing, individually or as a set. *Flora of Australia* \$100 hardback, \$85 paperback, while *AusGrass* is \$99. As a set they are: CD with hardback book \$180 and CD with paperback \$165.

Tree protection in the ACT

Grasscover

Environment ACT released public discussion paper *Tree Protection for the ACT: the next steps*, in October 2002 with comments required by 20 December 2002. The paper reviewed the *Tree Protection (Interim Scheme) Act 2001*, which has now been in operation for 12 months. It summarises most issues very well to allow informed public debate. The paper offers three options for tree protection. FOG in its submission raised a number of concerns. In our view, a clear distinction should be made between ecological and other benefits of such legislation. We also took the opportunity to suggest that more thought should be given to what is planted and where it is planted and suggested that more attention be given to the use of indigenous native ground storey plants in appropriate situations. We questioned the use of trees in some circumstances. We also raised concerns as to the social and economic cost of such legislation to the community. We opted to support a limited tree register. The Government will have a big job on its hands attempting to sort through the many and varied submissions it is likely to receive.

Other news

Groundcover

Space prohibits us, yet again, from covering all recent items of interest, but I thought I should mention a few. There have been some negative comments in the rural press about the release of the draft Plains Wanderer recovery plan and lots of relevant drought stories. As usual WWF's *Wildlife* runs a number of good grassland stories, including the wind-up of David Eddy's Monaro project (covered in the last FOG newsletter) with a great photo of Round Plain with several FOG committee members captured amongst the bright and varied coloured grassland. It also reports on a new 3.5ha grassland reserve at Cambooya, on the Darling Downs. The reserve features the endangered native blue grass and the vulnerable Australian cornflower (*Stemmacantha australis*). This is one result of Alison's Goodland's project. For more information contact wfnature@hypemax.net.au. Alison wrote about her project in the September-October 2001 Newsletter.

Bega Valley Weekend

Geoff Robertson

Everyone turned up on time, 10am at Bemboka Hall on Saturday 9 October for Jackie Miles' two-day trip around the Bega and Towamba Valleys to see examples of Bega and Candelo Dry Grass Forests. Both are now listed as Endangered Ecological communities under the NSW *Threatened Species Act*. The group's expectations were low because of the drought, but everyone was relaxed and prepared to make the most of the situation. To begin, all headed off to the Bemboka Bakery, second only to the Nimmitabel Bakery. The nine people on the trip, including the two botanists, had many lively debates over taxonomy issues and there were a number of first plant sightings for most members of the group.

Background briefing

To obtain some more background to this story I re-read back issues of FOG newsletters. The July-August 2000 newsletter mentioned a number of successful grant applications under the WWF/NHT Devolved Grants for Grassy Ecosystems, including \$10,000 for the Bega Valley Remnant Grassland Vegetation Management Plans.

In the November-December 2000 Newsletter, Jackie announced herself in an article titled *Grassy Ecosystems Grant for Bega* as the person who would be working on the project. Shortly after, Jackie joined FOG and has participated in many activities, written for the newsletter, and has led many forays to Southern Tablelands swamps - ideal activities in those hotter months. In her first article she wrote that while much of the Bega Valley Shire is forested and in public hands, there are extensive areas on relatively fertile soils which once carried grassy open forests dominated by Forest Red Gum (*Eucalyptus tereticornis*) and Rough-barked Apple (*Angophora floribunda*). These ecosystems are similar to the listed Victorian endangered community Gippsland Red Gum Grassy Woodland. She mentioned that under the Eden Regional Forest Agreement (RFA) four open forest grassy ecosystems had been recognised. Listing was being pursued for three of them which only existed on private lands, cemeteries and roadside reserves.

Her article also pointed out some interesting facts, which we were to observe first hand. She mentioned that a recent targeted rapid assessment survey revealed the location of about fifty roadside sites carrying regionally significant grassy ecosystem forbs. Surveys of cemeteries also appeared to turn up different forb species to those on private land leading Jackie to the conclusion that cemeteries might provide the best examples of the original vegetation.

In the May-June 2002 newsletter Jackie wrote a piece titled *Bega Valley Grassy Veg Surveys* which summarised work on the project. The survey had found a number of plants which had not been previously recorded and established a strong vegetative link between the previously extensive grassy areas of the coast (possibly twenty percent of the Bega Shire) and Southern Tablelands grasslands and woodlands. A parallel activity was a survey of travelling stock reserves (TSRs) but apart from having one or two populations of significant plants, these were generally not in good condition due to their small size and extensive use. Jackie had found some roadsides and cemeteries to be particularly diverse. This article is a very valuable account of the tasks undertaken to get stakeholders aware and involved, as well as making the wider public aware of the importance of remnant grassy ecosystems.

Old Bemboka tip

The first site visited was the old Bemboka tip. A Sacred Kingfisher welcomed us. Apart from some good specimens of Yellow Box (*Eucalyptus melliodora*) and an occasional Kurrajong (*Brachychiton populneus*), much of the site had been bulldozed and sown with non-sterile Rye Grass, when it had been decided to

'restore it'. In fairness Jackie pointed out that she wasn't aware of what the ground storey was like before the 'restoration work'. However, she did show us some reasonably intact ground storey with several plants of Australian Trefoil (*Lotus australis*) with their beautiful large pink pea flowers and several other peas including Mountain Psoralea (*Cullen microcephalum*) and False Sarsparilla (*Hardenbergia violacea*). There was some discussion as to whether the Native Blackthorn shrub (*Bursaria spinosa*) was getting out of hand. Jackie is working on preparing a management plan for the site.



This is an example of the Candelo Dry Grass Forest community, a community including Yellow Box as well as the more widespread Forest Red Gum. Jackie explained some of the links and transitions between the different dry grass forest communities, although I have to admit I did not get my head fully around that one.

Bemboka Cemetery and Crown Reserve

The second stop was the Bemboka Cemetery followed by a large vacant Crown Land site immediately behind the cemetery. There were a host of wildflowers at the cemetery with a proliferation of Scaly Button (*Leptorhynchus squamatus*) and Common Everlasting (*Chrysocephalum apiculatum*) daisies. Kangaroo Grass (*Themeda australis*) dominated and there was a healthy population of Wild Sorghum (*Sorghum leiocladum*) grass. The cemetery is a good example of a 'secondary grassland', ie a natural grassland arising when tree cover is totally or largely removed. Unfortunately, the cemetery had been divided into three paddocks and

two, which had been leased for grazing, had no conservation value. The Crown Reserve was some 16ha, around which looped the Bemboka River. The ground storey was not as good as the cemetery but had areas with much better tree cover. The group saw examples of Forest Red Gum, Rough-barked Apple and a huge White Stringybark (*E. globoidea*). There was little shrub understorey and the dominant grass was Weeping Grass (*Microlaena stipoides*) in some areas, indicating a past history of intermittent grazing. Kangaroo Grass remains dominant on the more exposed slopes and further from the gate, as is typical of travelling stock reserves. Jackie is attempting to arrange a Joint Management Agreement over the site. Between the cemetery and the crown lease is the old highway, another interesting step into the past. Then the group headed off for an early lunch outside the Bakery.

Tantawangalo Creek TSR

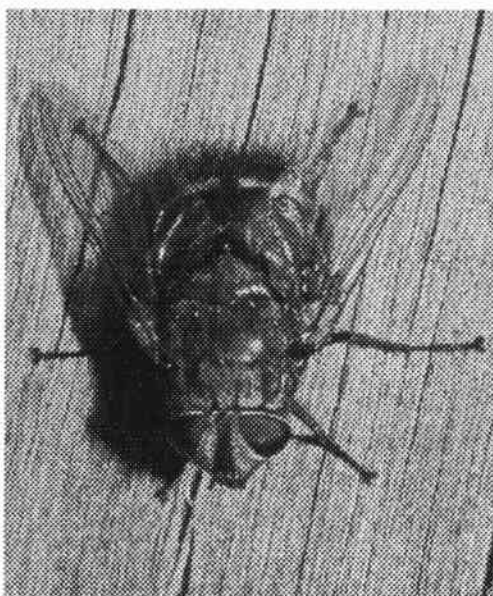
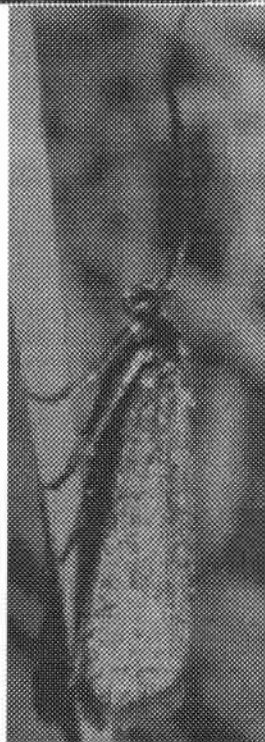
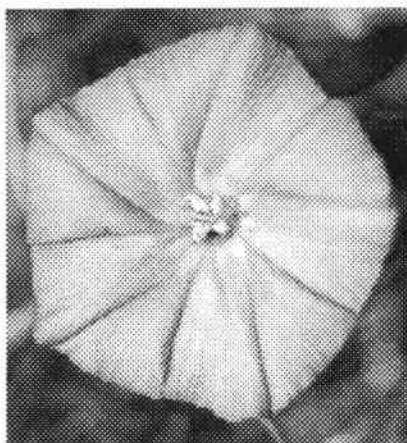
Our first stop after lunch was a TSR alongside Tantawangalo Creek on Kemps Lane off Kameruka Road. Generally the trees had been cleared (only three were left in the TSR) and the vegetation was not impressive except for a large patch of Spur Velleia (*Vellaea paradoxa*). Austral Sunray (*Triptilodiscus pygmaeus*) has been recorded here in the past. Given the generally poor state of ground storey that we observed on this TSR, reputedly one of the better TSR sites, questions arose on the overall state of affairs. Jackie said that there were one or two properties likely to have good ground storey but little work had been done on surveying private lands. One property nearby with excellent remnant Candelo Dry Grass Forest has signed a Voluntary Conservation Agreement, and there is likely to be more out there to be discovered. However, so far, what work has been done on private land was largely directed at revegetation along riparian zones. The group was tempted off to explore the creek bed, for the most part a pretty patch of rocky ledges and vegetation. A Dollar Bird also added a little intrigue.

Roadside verge

The next stop was not officially on the itinerary, but it was a delightful roadside verge on the Candelo Road. There was Yellow Rush Lily (*Tricoryne elatior*), Trigger Plants (*Stylidium graminifolium*), Hoary Sunray (*Leucochrysum albicans*), and four peas *Jacksonia scoparia* (a broom look-alike), False Sarsparilla, *Hovea linearis* and Twinleafed Pea (*Zornia dyctiocarpa*). The grasses included Plume Grass (*Dichelachne* sp.) and Barbed Wire Grass (*Cymbopogon refractus*). This was another secondary grassland.

Wyndham Cemetery

The final stop for the day was Wyndham Cemetery. If some of the earlier sites had suffered due to drought, Wyndham Cemetery was showing no signs of it and there



Photos by Margaret Ning and Andrew Paget. Andrew captured those wonderful insects: the Hibbertia Moth, a wonderfully coloured fly and the fascinating spider eggs hanging from a tree (next page).

was a proliferation of species, including our only orchid for that day. Margaret observed that the cemetery contained what had to be the world's biggest population of *Polygala japonica* (a subtle purple grassland flower). The cemetery provided a host of contrasts in vegetation management. Within the cemetery, which was essentially Kangaroo Grass dominant, there were burnt and unburnt patches, although the unburnt area was regularly mowed. There was a rocky outcrop within the cemetery where Blady Grass (*Imperata cylindrica*) dominated. Outside one fence was an area dominated by Poa grass and outside another fence by Cassinia bush (following ploughing). At the roadside entry to the cemetery, the Kangaroo Grass was very thick with no forbs to be seen.

Interlude

It was time to call in at the Wyndham Hotel to recall the day's experiences. With Alan Scrymgeour and Andrew Paget in the group, story telling gathered momentum but others were not backward with their own contributions. Then it was on to the nearby B&B called Warrawee where most of the group spent the night. A few of the company wandered around to get their bird-observation fix. The B&B is set in Blue Box forest, another vegetation type which has been much depleted by agriculture but not listed as endangered. In the morning the group wandered around absorbing the experience of these grassy forests.

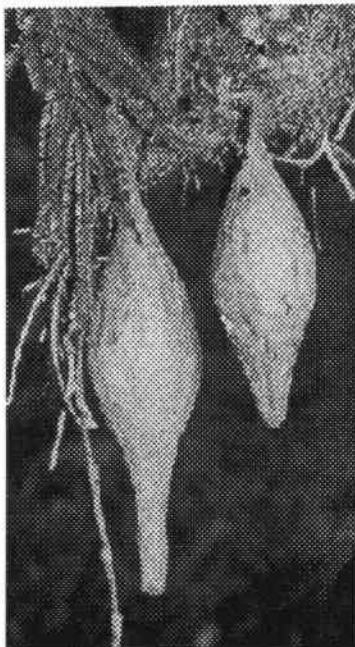
Towamba Cemetery

Our first scheduled stop on Sunday was Towamba Cemetery, which was remarkable for many reasons and Jackie had many fascinating stories to tell about it. Before entering we observed some very large *Pinus radiata* trees, which some of the management committee consider should be planted more widely for their heritage value, and once inside the gate we saw large brick flower beds which contained prolific Rock Lily (*Bulbine glauca*). This had been propagated by Jackie from seed collected in the cemetery, in an attempt to ensure their persistence here (they are susceptible to frequent mowing). The cemetery is largely a Kangaroo Grass secondary grassland with the largest population I have seen anywhere of Milkmaid Lilies (*Burchardia umbellata*). We also saw evidence of Golden Moths orchids (*Diuris chryseopsis*) - the only known population on the South Coast. From what information Jackie could put together, this cemetery had been burnt annually until about five years ago to manage the grassland and keep out the trees. Since then it has been mown.

In a corner stands a remnant of Bega Wet Shrub Forest - a community in which River Peppermint (*E. elata*), Blue Box (*E. baueriana*) and Hickory trees (*Acacia implexa*) dominate and Weeping Grass dominates the understorey. Jackie considers that the cemetery is probably a secondary grassland derived from the Bega Wet Shrub Community - this opens up all sorts of community taxa issues but that's another story. A magnificent stand of Hickory stood in the centre of the cemetery. For many in the group, it was the first time to see *Nothodanthonia longifolia*, which is somewhat like Redanther Wallaby Grass in appearance and habitat. In another corner, a large dam has recently been put in. While some of the group were appalled by this addition, for others it showed how quickly it had been colonised by wet area plant specialists. Here like elsewhere, some weeding tools emerged and several Serrated Tussock plants were removed and bagged. The animals came in for some attention and someone observed that we had a Jackie Miles, a Jacky Winter and a Jacky Lizard all in sight at one moment.

Rocky Hall Cemetery

The next cemetery was Rocky Hall which again contained a large number of native plant species, in common with those found on the Southern Tablelands, and the only known population of Wiry Dock (*Rumex dumosus*) for the South Coast, although only the more common *Rumex brownii* was in evidence on the day. The cemetery was mown around the graves but the rest was left untouched. Jackie understood that it had been burnt about twice in the last twenty years. The landscapes in the vicinity were impressive, as the cemetery was on the lower slopes of the escarpment dominated by



Brogo Wet Vine Forest with large Coast Grey Box (*E. bosistoana*) and Rusty Fig (*Ficus rubiginosa*). This is another listed endangered ecological community. Then it was lunch in a nearby recreation reserve on the Towamba River then home.

Summing up

The group learnt many lessons about vegetation communities and the impacts of different management regimes. All were very impressed by the way Jackie had crafted the program. She also supplied a list of plants for most of the sites visited. The list contained 15 trees, 9 shrubs, 35 grasses (including 17 introduced grasses), 21 sedges and mat rushes (3 introduced), two ferns, five climbers, and 126 forbs (44 introduced). This was very helpful and a few additions were made to her lists. A big thanks from all of us who attended the trip and from FOG who will no doubt have a greater understanding not only of coastal vegetation but also the impacts of various human actions.

A postscript

As a postscript, it has been learnt that signs will shortly be hung on cemetery gates saying they protect locally rare native wildflowers and could people please overlook the odd bit of untidy grass, and not do anything like mowing, spraying or planting without consulting the committee or council. Also no driving if possible. According to Jackie "we'll get them hung with a bit of fanfare". She also mentioned to me that the Bega Council has just received a commendation in the inaugural NSW Roadside Environment Committee awards for its roadside vegetation management program.

Chaining Yourself to a Blade of Grass – the Final Cut

Michael Treanor

A few years ago I wrote my first article for the FOG newsletter, entitled *Chaining yourself to a blade of grass*. It detailed my presentation and workshop held at the largest Australian student environmental conference, *Students and Sustainability*. It is held every year with over 800 students and others coming from all over Australia, and is an excellent forum for sharing new issues and ideas with people. The conference, and my workshop in particular, combined four key elements of my life that I hold very dear, the conservation of the environment, youth involvement in society, education and activism.

Nowadays things have changed a little, priorities have shifted and information gained, but now as I am moving to South Australia to live, I have decided to write this article about the above elements and how I believe they fit into FOG's and my own future.

I had, for many years before joining FOG, been a single-track 'save the trees' type of fellow, as you will still find in many 'un-enlightened' environmentally-minded people, both young and old! This was to change dramatically however when I attended a Friends of Grasslands AGM at Dierk and Rosemary von Behrens' home in 1998. Somehow I was 'coerced' into standing for the committee and then found my way to the position of Vice-President! As a student with a strong botany and plant conserva-

tion background I had been looking for a 'cause' that I could be active in as well as where I could learn from like-minded individuals – and that was not cute and cuddly animal-based! Conversely, FOG was looking for new additions to the committee, and from what Geoff Robertson has said, this was particularly aimed at getting younger members involved.

Many community groups in Canberra, and indeed around the world, are made up of community-minded working age and retired individuals and couples. I believe that it is a travesty that younger people are not getting involved in society. Many say that youth have not the time nor the inclination, but in a society that is more and more reliant on volunteers and active community involvement there should be few excuses. FOG now includes an increasing 'youth contingent' including committee members Benj Whitworth and Ros Wallace. While not always able to be as involved as others, it is imperative that younger people are encouraged, but, more importantly, supported and mentored, a long forgotten practice.

Another challenge for FOG in the future will be that of education of both the general public and specific groups and individuals in the issues and management of grassy ecosystems. The success of conferences and other activities in the past has shown the excel-

lent capacity of FOG to share and make available to the public, particularly those publicly and privately managing the land, a broad range of information. Though highly important I believe that, in some cases, this is 'preaching to the converted' and that those most needing of concise and timely information are being missed. These include schools, areas of government and related community and environmental groups, namely those individuals and groups that are or will in the future be making the final decisions on the future of grassy ecosystems in Australia and beyond. This includes turning the old adage of planting just trees and shrubs ad nauseam around to include grasses and forbs as a key component, and I believe that FOG should be at the spearhead, or at least as the instigator, of this knowledge sharing and education.

When the committee and particular members of FOG became involved in the fight against the ACT Government to stop the development of an area of high conservation value Yellow Box-Red Gum Grassy Woodland in Conder there was much discussion and division as to the role FOG should play in this 'hairy' issue. I assisted the proponent of the issue, Michael Bedingfield, throughout the campaign, including with media, at the Administrative Appeals Tribunal and in many other ways. This 'activism', if you could call it as such, was done on many occasions at arms length from the committee, so as to maintain FOG's excellent record of communication and consultation with the ACT Government. This issue was to change the face of the FOG committee and in many ways start us thinking about what and to which level FOG should become involved in issues. With the ACT (particularly Gungahlin) and surrounding regions about to burst at the seams with new developments, an increase in clearing of grassy ecosystems, and sometimes inadequate management of what is protected (both government and private), I believe that FOG's role in the conservation of these last few areas of grassland and woodland will be of paramount importance and involve an unfortunate, and difficult to maintain, increase in the overall time and energy spent on these issues.

I believe that FOG membership could be both polarised and paralysed by the fact that it can no longer stand back and accept the government of the day's decision on developing these last areas. The decision as to whether to act more aggressively or maintain its current excellent role of education and communication with government will be a hard one. Either way FOG will have to change as an organisation and a direction, activities such as field trips, talks and conferences will remain integral, but the way in which those issues 'at the coal face' are managed will be the clincher. This could include expanding our area of interest to a wider part of Australia, moving back to our core activities, membership and values, or even moving up to the level of an NGO such as Greening Australia.

I myself believe that FOG is one of the best community groups I have ever had an involvement in or heard of, no bias...really! Its mix of people includes landholders willing to share and learn, and the professional scientists and managers that are willing to give and share, in return for nothing but the opportunity to be part of a unique organisation. The dedication and friendship of its members is rare for a group of this size, and the quality and professionalism of its activities, conferences and conduct relating to the government and others, is seen by those in and external to FOG as the reason for its success and continued high-level role in government and NGO committees and consultation. People are the power of this group but there are too few doing the work and to this end the number of members involved in change will be the lynchpin for the future. To this end I know that FOG will face the difficult challenges and choices of the next decade with the same gusto, humour and success as it has faced the last decade. In conclusion I would like to thank all those who have put up with me while at the same time sharing their experiences, knowledge and particularly their friendship with me, and remember to keep an eye out in SA for a rival FOG group coming.

Two Threatened Species in Good Hands

Grasscover Reporter

On 4 September 2001, in accordance with section 21 of the Nature Conservation Act 1980, the Ginninderra Peppercress (*Lepidium ginninderrense*) and the Silver Perch (*Bidyanus bidyanus*) were declared as endangered species. Section 23 of the Nature Conservation Act 1980 requires the Conservator of Flora and Fauna to prepare a draft Action Plan for each declared species or ecological community.

Draft action plans outlining proposed conservation measures for these species were released by ACT Urban Services Minister on 7 September 2002. These plans will establish a framework for determining conservation priorities and guiding resource planning and management programs. Comments were invited before the end November 2002.

The Ginninderra Peppercress is a perennial herb to a maximum height of about 20cm. The only known population, consisting of about 2000 plants occurs in the north-west corner of Belconnen Naval Transmission Station. FOG and Australian Native Plant Society members were privileged to see it on a trip to the Naval Station in late 2001. A second

record of the species is from 1952 in the suburb of Reid. However, a subsequent search failed to rediscover the population. The Peppercress has been recorded only at these two site localities in the ACT and is not known from outside the ACT. The species is remarkably disjunct from all other members of the allied *Lepidium* section *Papillosa* in south-eastern Australia, which are mainly confined to the inland plains west and north of the Eastern Highlands.

Its habitat is the flood plain of Ginninderra Creek, in Natural Temperate Grassland dominated by Spear and Redleg Grass. Associated herbaceous species include *Plantago gaudichaudii*, *Juncus filicaulis*, *Triptilodiscus pygmaeus*, *Parentucellia latifolia* and *Calceophalus citreus* (Scarlett 2001).

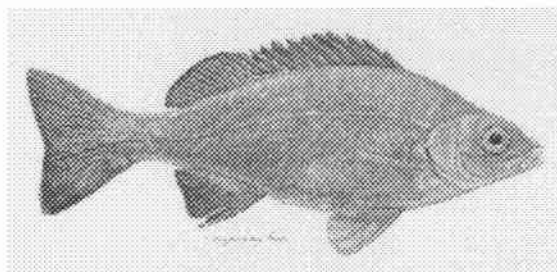
The objectives of the Action Plan are to preserve the single ACT population and to manage the habitat so that natural ecological processes continue to operate. As the Naval Station is planned to be made a grassland reserve and the population and its requirements have received considerable attention, its future seems likely, although it will be interesting to observe what



impacts the drought may have.

Due to the small size and fragmented distribution of the species, management actions will be directed towards maintaining existing conditions and ensuring that activities occurring nearby do not adversely affect the site. Management will be tricky, as the Action Plan points out, and maintaining a low profile for the site is likely. Careful consideration will need to be given the appropriateness of signage and fencing. Consideration is being given to translocation and ex-situ conservation.

The Silver Perch (*Bidyanus bidyanus*) is a moderate to large fish (maximum length of about 500 mm and a maximum weight of around 8kg) which commonly reaches 300-400 mm and 0.5-1.5 kg in rivers. It is a member of the family Terapontidae, which contains the freshwater grunters or perches. The family contains a total of about 22 species in eight genera in Australian freshwaters, of which one species, the Silver Perch, is found in the ACT and surrounding area. It is recognised as nationally threatened. The majority of terapontids occur in northern Australian streams. Action Plan No. 26 contains much interesting



reading about the former distribution, habitat and behaviour of the fish, possible commercial developments, and what has led to the decline of wild populations.

The major conservation objective of this Action Plan is to maintain viable, wild populations of Silver Perch. The objective will be achieved through improving understanding of the biology and ecology of the species as the basis for managing its habitat; protecting sites and habitats that are critical to the survival of the species; managing activities in the Murrumbidgee catchment in the ACT to minimise or eliminate threats to fish populations; and increasing community awareness of the need to protect fish and their habitats. All these issues are spelt out in some detail.

FOG in its submission congratulated Environment ACT for the production of these high quality documents and supported the actions proposed. It requested to be kept informed, formally and informally, about actions taken under the action plans, and looked for opportunities to assist in any hands-on work involving the Ginninderra Peppercress.

Friends of Grasslands' Website

Paul Hodgkinson

In a word, 'ephemeral'. Like a storm that brings perhaps a few drops or a few more, where downpours occasionally break the prolonged dry. The FOG web pages have grown to the extent practicable, and it is difficult to imagine it would be different under the conditions prevailing.

When discussions of an internet presence was initiated in 1997, the cost and availability of a person with an interest in things indigenous and grassy, and capable of making some web pages, was the critical factor in encouraging the project. A Geocities WebPages hosting service for personal and community groups including editing and file transfer tools, enabled real-time updating of WebPages from any computer with internet access, at local call cost and ISP charges. This choice was largely based on matters of funding and accessibility, with web host services that met our needs as a membership and grant-funded association.

FOG's current web information resides at www.geocities.com/friendsofgrasslands.

Of current topical interest is that this web address has since 2000 replaced the very long and somewhat confusing <http://www.geocities.com/RainForest/Vines/7769/>, which had no connection in its title to grassy ecosystems - a step leading toward FOG having its own domain name. Restructuring of GeoCities gave no-fee account holders an opportunity to have short web addresses and this further truncated the problematic long web address to http://www.geocities.com/fog_act. It was a welcome change and symbolic of a shift in the prevailing attitude that rainforest conservation was of critical importance at a time when many temperate grasslands in south-east Australia had little to no conservation status.

Learning to layout web pages graphically using WebPages authoring application, writing in hypertext markup language (HTML), and developing an ability to select, edit and integrate information into an attractive graphical layout that is roughly similar to a multi-page brochure, has been an important part of the experience.

The main aims of the web project are:

- Promote the concerns of the association locally, interstate and overseas;
- Outline to community, business and government the objectives and direction(s) of the organisation;
- Provide a source of information for students and researchers; and
- Foster members sense of connection.

While a colourful and informative web site is still ahead (it is undoubtedly attainable in the hands of a skilled designer), for a non-professional, it has been a source of fun, despite some tedium. I think it has been helpful to focus on the process rather than an end-point. For a person with perfectionist tendencies, an

inconsistent work pattern, and significant other commitments, it has been a challenge to keep it going. Motivation can be found in harnessing creativity and trying to develop something others would find useful.

It has been possible to update the critical information, including an outline of FOG's agenda, activities and contact information, and some basic information about grasslands. A collection of FOG newsletters, downloadable and printable in Adobe Acrobat Reader (.pdf) form, is there in part. Similarly, a collection of colour photos of grassland plants waiting for linkage to relevant information, waits dormant for the next rain.

Links to other closely related web pages, which have been mentioned from time to time in the newsletter and can be helpful in directing people to other internet discoveries, will require more effort in future.

On a lighter note, one of my favourite anecdotes is the e-mail I received a year or so back asking that as FOG had a birthday listed as 12 November 1994 would we please ask our parent's or guardian's permission to operate under a *family* account. Somewhat incredulously I searched for a remedy and found it in the age-long experience of pretending to be a few years older than in real life. It was quirky to think that FOG's history as an organisation, actually involved such a parenting relationship with SGAP, for the first few years.

Naturally FOG's web site won't attract or hold the interest of *all* visitors. The typical web surfer decides quickly (at a glance)

whether it's worth looking further, like when a person meets another for the first time, initial impressions are pivotal to an ongoing relationship. Web pages design can through thorough planning and developing an understanding of the information needs of people who will visit the site, work *with* this phenomenon to broaden organisational links and networks.

The challenge is to do this with the available expertise and time constraints that invariably lead to compromises.

Some rain is needed to water the presently parched perennial grassland web site.

Willow Herb

Michael Bedingfield



Willow Herb.
*Epilobium
billardierianum*

© Michael BEDINGFIELD
1998

What never ceases to interest me about the plant life of our grassy ecosystems is the rich variety of ways in which plants go about their business of growth, survival and reproduction. And they do it in such beautiful ways.

At first glance the Willow Herb (*Epilobium billardierianum*) can appear to be an untidy, ordinary looking plant. But on a closer inspection it is quite interesting and attractive in its small details.

This plant is common in our region and is widespread, occurring in all Australian states. It is perennial, grows to about 30 cm tall and prefers moist or disturbed sites.

The flowers, which grow in spring or summer, begin as a small sausage shaped pod. As the pod grows a flower forms on the tip, with four notched, pink petals in the shape of a cross. After fertilisation the flower withers and the pod continues to grow larger, into a fruit which is up to 7.5 cm long. When it is mature, the fruit dries out and peels open, releasing hundreds of tiny, downy seeds, to be dispersed in the wind.

In the drawing I've tried to depict this cycle. The full plant is shown at half size, and the fruit and flowers are shown at normal size.

The scientific name? *Epilobium* comes from the Greek "epi" - "upon", and "lobos" - "a pod", referring to the flowers resting on the pod-like fruit; *billardierianum* comes from the French botanist Billardiere, 1755-1834, who visited Australia and named many new plants.

Willow Herb attractive? - it's all in the detail!



FRIENDS OF GRASSLANDS INC

Supporting native grassy ecosystems

Address: PO Box 987, Civic Square ACT 2608

Membership/activities inquiries: Please contact Kim Pullen or Margaret Ning whose details appear below.

Your committee:

Geoff Robertson	President	6241 4065 (h & fax)	margaretning@primus.com.au
Michael Treanor	Vice President	-	micwin@bigpond.com
Ros Wallace	Secretary	-	ros.wallace@mdbc.gov.au
Alan Ford	Treasurer	-	alford@cyberone.com.au
Rosemary Blemings	Committee	6258 4724	roseble@tpg.com.au
Di Chambers	Committee	-	di.chambers@abs.gov.au
David Eddy	Committee	6242 8484 (w) 6242 0639 (fax)	deddy@ozemail.com.au
Richard Langdale-Smith	Committee	-	langdalesmith@bigpond.com
Margaret Ning	Committee	6252 7374 (w) 6241 4065 (h & fax)	margaretning@primus.com.au
Kim Pullen	Committee	6246 4263 (w)	margaret.ning@abs.gov.au
Warren Saunders	Committee	-	kimp@ento.csiro.au
Benjamin Whitworth	Committee	-	warrenganter@bigpond.com
Susan Winder	Committee	-	benjamin.whitworth@brs.gov.au
Dierk von Behrens	Committee	6254 1763 (h)	susan.winder@ea.gov.au
			dierk.von.behrens@immi.gov.au

Web address: <http://www.geocities.com/friendsgrasslands>

FRIENDS OF GRASSLANDS NEWSLETTER

You have read this far, so we must have kept your interest. If you are not a member of Friends of Grasslands why not subscribe to the newsletter? It comes out six times a year and contains a lot of information on native grassland issues.

You can get the newsletter by joining Friends of Grasslands. 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 land-care 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, 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.

HOW TO JOIN FRIENDS OF GRASSLANDS

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 Kim Pullen or Margaret Ning, or if you would like to discuss FOG issues contact Geoff Robertson. Contact details are given in the box above. We look forward to hearing from you.

Friends of Grasslands Inc
PO Box 987
Civic Square ACT 2608

Membership payment for 2003 is due.