

News of Friends of Grasslands

Supporting native grassy ecosystems

July-August 2006

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Program

SAT 15 JULY 9.30am to noon FOG's winter grassland tour: Blundells Flat with Mark Butz. Mark is currently preparing a conservation management plan for Blundells Flat, below Mount Coree. This large area of meadow and grassland escaped pine planting in the 1950s and once supported *Keyacris scurra*. Access is two-wheel-drive, but the last part of the road is unsealed. Come prepared for some wet ground underfoot and for cool temperatures. The event will be cancelled in the event of heavy rain. Meeting for carpooling at 9.30am at the Police College, Heysen St, Weston. (To get there, go south on Streeton Drive, turn left onto Heysen St, and park about 50 metres along Heysen St). Blundell's Flat is about a half hour drive from Canberra. Contact Margaret (details back page) regarding car pooling.

SAT 26 AUGUST 2:00 to 4:30pm FOG's winter slide afternoon: you decide. Many FOG members have interesting tales of trips that they have made and/or hobbies or interests. Here is your opportunity to speak for five to thirty minutes, present a slide show, or whatever. The rules are that the presentations must refer to grasses somewhere, be informative, enjoyable and not too serious. Please let Margaret Ning (details back page) know if you like to be a presenter. We will circulate an e-mail about the presentations before the event. Venue: Mugga Mugga Education Centre, Narrabundah Lane, Symonston ACT (opposite the Therapeutic Goods Administration Centre). Free event, afternoon tea provided.

Expressions of interest in FOG's Victorian grassland tour (Terrick Terrick and Hamilton grasslands), Fri. to Mon., **20 to 23 October**. Details of this trip were recently emailed to members for whom FOG has current email addresses - for those without email addresses we can post or phone you with more information. As accommodation may be tight we need to book ASAP. To keep the group together we plan to book on-site cabins, and for those prepared to share a cabin with three others, the cost should be \$20-\$25 a night. Camping is also an option, as are motels, etc. In any event, please contact Margaret (details back page) ASAP, if planning to come.

For FOG events and other events of special interest for the rest of the year, see *diary dates on page 2*.



News Roundup

Opening our eyes

Groundcover

SATURDAY 17 JUNE Thirty-three members attended the FOG presentations by Greg Baines and Geoff Hope, and were delighted to learn so much more about what is happening in the Southern Tablelands region.

Greg, who is the project officer for the National Recovery Team for the

Natural Temperate Grasslands (NTG) of the Southern Tablelands (NSW-ACT) spoke on the recovery plan implementation project being administered by the recovery team.

The first focus of the project is to determine the extent, distribution and quality of NTG in the region. Starting with the NTG modelling work done by Rainer Rehwinkel, a survey strategy was developed to identify and survey potential sites. Greg was able to report that 46 properties had been surveyed, particularly around Goulburn, 2,024ha of NTG identified, of which 573ha were of high quality. Survey work will continue next year.

Having identified such sites, land-owners have to be won over to continue to manage the sites for conservation, and Greg outlined strategies the recovery team was adopting to obtain good outcomes. Other strategies include increasing organisation and community awareness of NTG. Also, the project is attempting to make the large amount of data on NTG sites available to interested parties.

Geoff Hope described the likely changes that have taken place in the region's vegetation in the last 100,000 years. He initially showed us data on climate and sea level, reminding us that for most of the period, the area was in the grip of the last ice age.

He showed a number of sites in the region, where he and his colleagues have undertaken core samples to determine the vegetation structure and composition at the site and its surrounds. Unfortunately such methods largely rely on examining pollen which can only tell us about the broad categories of plants involved (grasses, sedges, daisies, and broad types of trees). Nevertheless they assist in providing likely scenarios. Data on the presence of charcoal provides useful data on fire patterns.

Grasslands would have held sway in many areas over long periods. Geoff provided interesting maps on possible

vegetation patterns. Often forgotten, is that a very different suite of animals were occupying the area for much of that time.

Geoff posed the question: so what does history mean for future flora? He raised some interesting speculation about flora's ability to migrate and persist, and the alternating woodland-grassland biomes.

It is hoped that both gentlemen will enlighten us further on their fascinating work in future newsletters.

Namadgi symposium

Groundcover

5-7 MAY National Parks Association, ACT is to be congratulated for its three day symposium *Caring for Namadgi, science and people*. The aim of the symposium was to provide the latest available science that sustains the management of Namadgi, and to showcase many of the people involved in the science.

Speakers followed in rapid succession and covered a diverse range of subjects – an information junkie's paradise. Each speaker brought out new information and invaluable insights. Some favourites speakers were Murray Evans (corroboree frog recovery), Bob Abell (geology of Namadgi), Ian Fraser (teasing out natural science riddles – "I can't help wondering....."), Mark Lintermans (threatened native fish recovery), Don Fletcher (kangaroos and dingos), Adrian Whitehead (climate change), Roger Good (rehabilitation of wetlands), and Geoff Hope (history of wetlands).

The cost was \$10 and for a little extra, one could acquire the proceedings, which I suggest are worthwhile following up.

Some diary dates –Margaret Ning

The following are FOG's program dates for 2006 after August – please record them in your diary. For more details, please contact me (see back page).

Sat and Sun, **16 and 17 Sept.** Visit coastal heathland near Eden with Jackie Miles.

Fri. to Mon., **20 to 23 October.** Visit to Terrick Terrick and Hamilton grasslands, Victoria.

Sat. **11 Nov.** 9:30 am to 3:30pm. Working bee at Old Cooma Common, Cooma.

Wed **15 Nov.** Lunchtime St Mark's grassland with Benj Whitworth.

Sat. **18 Nov.** 1:15 to 5pm. Discovering insects workshop with Kim Pullen and Roger Farrow. Mugga. Small cost.

Wed. **22 Nov.** 5 to 6pm. Visit to Hall Cemetery.

Sat **25 Nov.** 10 to 11am. Mulangari grassland with Benj Whitworth.

Sat and Sun, **16 and 17 Dec.** Southern Grasslands and swamps with Roger Farrow.

Special interest to members

6 to 13 Sept Flora of the Warrumbungles. See news item on page 6.

Tues-Wed, **28-29 Nov.** (revised dates previously 29-30 Nov.) Australian Network for Plant Conservation ACT Grassy Ecosystem Workshop.

Photos front page: Susie Smith explaining willow removal project on FOG/GA tour – Story page 3. Middle and bottom photos: Jackie, Steve and group botanising, and group on FOG May weekend. Story by Paul Hodgkinson page 5.

FOG/GA bus tour

Grasscover

30 APRIL Twenty two members of FOG and other community groups joined Susie Wilson from Greening Australia (GA) to tour ACT Land Keepers project sites.

In common with last year's trip (see *after the pine forests*, FOG May-June 2005 newsletter), the sites visited were burnt by the 2003 Canberra Fire, and the theme was how to manage situations in which native vegetation was recovering, along with healthy weeds. While supplementary planting is usually a GA focus, the pendulum is increasingly swinging to land management considerations.

The first stop was Coppins Crossing on the Molonglo River where Susie discussed GA's strategies to remove willows, and other challenges presented by a combination of native vegetation and weed regeneration.

The second site was in the Mt Stromlo area, where Susie outlined options for native revegetation of a large area of previous pine forest plantation, where there were patches of remnant forests. Many participants, drawing on their experience, suggested strategies that might be adopted.

The final site was near Mount Macdonald, in the Lower Cotter Catchment. It was a small and diverse remnant patch on a hill top which had survived despite being surrounded by pine forests. Around the patch, pine wildings, emerging native vegetation, and weeds were vying for supremacy. With the recently announced management plan for the lower Cotter Catchment, support should swing behind the native vegetation.

The view from the site was magnificent showing the ACT landscape to the south – a complex of mountains and valleys. We were also able to observe some 115 GA volunteers planting on the slopes below us.

The final part of the activity was a visit to the Australian National Botanic Gardens to see GA's seedbank project, part of the Seeds for Survival project, managed by Ben Cavuoto. Ben, another of those treasurers that GA have been recruiting, walked us



View of Lower Cotter Catchment – a complex of mountains and valleys, and the FOG/GA group at lunch.

through the project which promises many breakthroughs in our knowledge of growing local herbs for revegetation work. GA then provided a wonderful picnic lunch in the gardens.

Big thanks to Susie, Ben and GA for their hospitality, knowledge, enthusiasm, and commitment.

ACT Frogwatch report

Geoff Robertson

27 MARCH ACT Frogwatchers have done it again with the release of the 2005 Frogwatch report. It is full of great pictures of frogs and many maps, a frogophile and statistician's delight. The report for 2004 was written up in the July-August 2005 issue of this newsletter.

In 2005, over 200 volunteers participated in the census, monitoring at over 140 sites. Of the 144 sites monitored, one species was recorded at 102 sites with another at only two sites. Nine species were recorded and the number of sites for each are: spotted

grass frog (*Limnodynastes tasmaniensis*, 102), common eastern froglet (*Crinia signifera*, 96), plains froglet (*Crinia parinsignifera*, 87), eastern banjo frog *Limnodynastes dumerillii*, 62), Peron's tree frog (*Litoria peronii*, 45), smooth toadlet (*Uperoleia laevigata*, 40), brown-striped frog (*Limnodynastes peronii*, 20), whistling tree frog (*Litoria verreauxii*, 11), and spotted burrowing frog *Neobatrachus sudelli*, 2).

The eastern banjo frog was found at many more sites this year compared to 2004, probably a return to more normal levels. Many other species were found at more sites compared to 2004. However, the whistling tree frog was down from 32 sites in 2004 to 11 in 2005.

Also available is a ten-page pamphlet on *creating a frog friendly habitat in the ACT community*. It has some great ideas for the home gardener or more ambitious projects.

For anyone interested in frogs or conservation in the ACT, this is a must read. To follow this up, contact Rachelle McConville, the ACT Frogwatch Coordinator on waterwatch@ginninderralandcare.org.au.

In this issue

- FOG program
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- Climate change: are we part of the problem or part of the solution?
- FOG letters
- Showy copper-wire daisy: an impressive flower of grassy ecosystems

Friends of Merri Creek

The Web (WWF, TSN Newsletter)

AUTUMN 2006 Friends of Merri Creek have helped to safeguard the future of the golden sun moth and the striped legless lizard within the 300 hectares of Craigieburn grassland reserve on Melbourne's northern fringe.

The group has been busy erecting fencing, removing weeds and planting 7,500 native wallaby grasses, some of which have never been planted before.

During recent surveys, volunteers were lucky enough to see sun moths flying about in the new wallaby grass plantings. Unlike most moths, the golden sun moth only flies during the sunniest part of the day. In December 2005, the first survey - held on a hot, sunny day with no wind - resulted in the sighting of 1,254 golden sun moths. However, the second survey, on the following Sunday, which was a cool, overcast and windy day, resulted in no sightings. Similar results were recorded in 2004.

The golden sun moth population was only rediscovered at Craigieburn grasslands in December 2003 by Brian Bainbridge. Until 2004, there were only five other known populations of the species in Victoria.

Lower Cotter management plan *Grasscover*

26 MAY The ACT Government is seeking comments by 31 July on a draft management plan for the Lower Cotter Catchment that proposes the re-zoning of former forestry land as mountains and bushland and that will put the protection of water quality at the centre of all future decision-making. The *Lower Cotter Catchment Draft Strategic Management Plan, Clean Water, Healthy Landscapes*, comes as Canberra begins to draw on water from the Cotter Dam for the first time in decades.

In announcing the draft plan, ACT Chief Minister Jon Stanhope said "water is a precious resource and clean water from healthy catchments is a priority for the ACT Government. This draft plan puts forward a 100-year vision for protecting our water through science-based, adaptive management."

Under the plan, no further commercial or broad-acre pine plantations would be established in the Lower Cotter Catchment, and existing plantations would be phased out over 35 years. Areas in the catchment zoned for commercial pine plantations in the Territory Plan would be rezoned as mountains and bushlands. This would make the land use consistent with the rest of the catchment, where the objectives for land use are for the protection of existing and future water supply, natural and cultural heritage conservation and recreational uses.

Jon Stanhope said natural regeneration in the catchment since the 2003 fires meant experts now believed that restoring native vegetation to many areas was achievable in the long term. The draft plan also allowed for non-native vegetation such as exotic grasses to be established in areas where this would assist soil stability. The draft plan draws on the findings of the CSIRO study, *Revegetation of water supply catchments following bushfire*, commissioned by the ACT Government last year. The draft plan also builds on works already undertaken in the catchment to stabilise soils.

The ACT Government has spent or allocated \$14.5 million to post-fire clean up and remediation in the catchment, with another \$7.5 million programmed until 2008-09. Work has included the removal of standing burnt pines, the decommissioning of about 100km of roads, sediment control and about 1330ha of planting. ACTEW has also spent \$1.5 million on roads and erosion prevention and is working with Environment ACT on further road and drainage works, sediment basins, wetlands, vegetation planting, monitoring and research.

Jon Stanhope said the latest climate-change scenarios suggested fires could be more frequent in the future. Native vegetation that would regenerate after fire would help secure the future water supply of Canberrans, while in the eastern area of the catchment closest to Canberra, revegetation strategies would take into account fuel management, integrating fire protection with catchment man-

agement. Both the draft plan and the CSIRO report can be found at www.environment.act.gov.au.

This is a recognition of FOG's view, advocated for many years now, that where possible our landscapes should be managed to facilitate recovery of our natural grassy ecosystem vegetation. All things considered, it is finally being recognised that what has evolved here is better than any recent human-induced change to provide best possible environmental services. In the aftermath of the 2003 Canberra Fire, restoring native vegetation was considered to cost too much. However, with time, native vegetation has been making a comeback naturally, huge armies of volunteers have been organised by Greening Australia to bring back indigenous vegetation, and it has been recognised that pine plantations are not only commercially a non-starter but provide poor water outcomes and enhance fire risk. In their place we shall see more open forest, grasslands and grassy woodlands, and hopefully a huge opportunity for wildlife recovery. Hopefully, the final document will omit the reference to exotic grasses.

Science Fair

Paul Hodgkinson

5 JUNE Representing FOG, I attended the opening of the annual Science Fair at Hughes Primary School organized by the Science Educators Association of the ACT (SEAACT). FOG was invited as a sponsor in the Life and Living section.

Student science projects were on display at the Fair, and as on previous occasions showed there are many budding scientists.

The official opening was by Andrew Barr (MLA Molonglo) Minister for Education and Training and Kathryn Brown, SEAACT President. Kathryn gave a very informative presentation on the various science themes, while systematically picking her way through the various science projects. For more information, see: <http://www.seaact.asn.au>.

Some non-grassy ecosystems

Paul Hodgkinson

20-21 MAY The FOG weekend visit to Mollmook, north of Ulladulla (NSW), along South Coast revealed some vegetation communities with few if any grasses. On Saturday, those who had travelled down on the Friday night, were joined by Greg and Anne, Alan, Emma, Colin and guides Jackie Miles and Steve Douglas.

FOG visited heath on Little Forest Plateau in Morton National Park described as *low closed heath with emergent eucalypts* and we just kept ahead of the rain. Some had a brief glimpse of Pigeon House Mountain mostly obscured for the day. *Lambertia formosa*, showing off bright red flowers is quite flamboyant at this time of year, dressing down the sap dripping from the stunted bloodwood emerging from the low heath that dominates the level ground on top of this escarpment. *Banksia ericifolia*, *Chloanthes stoechodes* and *Woolsia pungens* were also in flower and provided colourful subjects for photo shoots. *Woolsia* when small resembles a *Pinus radiata* seedling and develops into a white flowered epacrid-like plant.

A high point was standing by the trig four metres from a sheer drop with heath on top and rainforest of lily pilli, sassafras and cabbage trees festooned with vines. Colin, Margaret's younger brother, was puzzled why people could be so absorbed in identifying plants and seemingly overlook the spectacular view. We mused about how nice it was to see a mix of green plants together, unlike the drought stricken Southern Tablelands with its rusty *Themeda*, although there is something nice about *Themeda* in autumn with its frosted foliage.

So it is hard to write a truly unbiased report. Could we find a grass? Actually no, but we found a grass tree (*Xanthorrhoea* sp.)! So the theme of the weekend became "No grasses, functional ecosystems never-the-less".

After lunch we took a short 1.5 km stroll along Little Forest walk. We



Examples of proteaceae seen on FOG's Mollmook weekend, and Jackie paddling off in her canoe.

could hear yellow-tailed black cockatoos, eastern spinebills and yellow faced honeyeaters as we walked through the bush past iconic bloodwoods and banksias. I caught another view of Pigeon House Mountain, ap-

parently named by Captain James Cook after the cylindrical pigeon houses of Europe. On our way back to Mollmook we stopped at the sandstone rock ledges down Porters Creek Dam Rd to the Princes Hwy. These were a vegetation community Steve refers to as *escarpment complex* comprising wet rainforest species like *Acmena smithii*, *Todea barbara*, *Blechnum* sp., *Cyathea australis* and *Smilax australis*, even some Port Jackson fig (*Ficus rubiginosa*). Down slope were Sydney peppermint (*Eucalyptus piperita*), silver-top ash (*E.* sp.) and turpentine (*Syn-carpia glomifera*).

The following day we visited Narrawallee Creek Nature Reserve in Conjola National Park. We botanised open tall forest of blackbutt, swamp mahogany (*E. robusta*) and turpentine, and another tall open forest community dominated by bloodwood, scribbly gum (*E. sclerophylla*) and narrow-leaved stringybark (*E. eugenoides*) interspersed with *Casuarina littoralis*, *Banksia spinulosa* and a patch of bangalay (*E. botrioides*) and cycads (*Macrozamia* sp.). There were a few native grasses to be found including *Panicum* sp., *Microlaena stipoides*, *Stipa pubescens* and *Cymbopogon refractus*.

Lunch was had on the shoreline of Lake Conjola, after which Jackie said good bye and paddled off in a rented canoe. The crowd had been dropping away but the remainder, Margaret, Geoff, Heather and I, travelled in convoy with Steve and Emma to UHF radio commentary from Steve, stopping at Penance Grove, a wet temperate rainforest of ancient plumwoods, treeferns and clubmoss in Monga National Park. We also recognised the Monga waratah (*Telopea mongaensis*) along Mongarlowe River track. A nice weekend away from Canberra.

World environment day dinner

6 JUNE CANBERRA Two hundred people attended the Environment Dinner organised by the Conservation Council. The dinner was held at the new Multicultural Centre in Civic, a great venue, and all food coordination, preparation and on the

night serving and waiting was undertaken by a team of volunteers. Clare Henderson and Larry O'Loughlin of Consensus Productions did the catering - an Asian style banquet.

From the feedback received all had a good time. The event was successful as a fundraiser, which assists the Council to meet some of the shortfall arising from the Commonwealth Government's withdrawal of administrative funding last year. Thanks to the many FOG members who attended the dinner, and/or who provided support to the event in other ways.

Flora of the Warrumbungles

Anthony O'Halloran

To coincide with the peak of the wildflower season, the Warrumbungle Discovery Program is offering a weeklong program of activities in and around the Warrumbungle National Park (6 to 13 September).

Activities will include guided half day and full day walks to sites to see a great variety of plant life. Many walks will be to less accessible areas of the park. Mt Naman on the south western side is a challenging but rewarding walk and parts of the Pilliga Nature Reserve also provide walks into a brightly coloured landscape.

Early morning bird walks through the woodlands will show the importance of a healthy plant life to maintain birdlife. Other activities will include some special workshops on plant identification and flower photography.

Evening presentations will include slide nights on various aspects of the area and Dr Morrie Duggan will impart his extensive knowledge of the geology of the region, linking the variety of landform and geology to the vegetation and fauna. A cosy campfire evening will be a great opportunity to relax with friends and share stories with the Discovery Guide-come-raconteur, Peter McDonough. Leaders for the week will include Discovery Rangers Annabelle Greenup, Anthony O'Halloran and Sue Brookhouse, each of whom has an expert knowledge of the flora of the area.

For more information and details about accommodation and camping see the Warrumbungle National Park Guided Tours website, or contact the Warrumbungle National Park on 02 6825 4364.

ACT enquiry on DV257

Geoff Robertson

27 APRIL on behalf of FOG and the Conservation Council, I summarised both organisations' submissions on DV257, suburb of Crace, Gungahlin to the ACT Legislative Assembly's Standing Committee on Planning and Environment. Michael Gentleman MLA and Zed Seselja MLA represented the Standing Committee.

The meeting took place in the field on the outskirts of the proposed new suburb of Crace which should commence development in late 2008. Representatives of the ACT Planning and Land Authority, the Housing Industry Association, and Ginninderra Catchment also provided information and/or presentations.

The key point in the FOG/Council submissions was that as much as possible of the biodiversity values should be retained or compensation provided in lieu. The area occupied by the proposed suburb has many magnificent old yellow box and red gum trees, each of which is a haven for biodiversity (thousand of insect species may be present on a single tree), as well as habitat and food for threatened species such as regent honey eater. Such trees should be kept in clumps as far as possible, but the inevitable tree loss should be made up by realistic biodiversity compensation using the principle of "no net loss" that is contained in some state native vegetation legislation.

The submissions emphasised that the proximity of the Crace grasslands and the striped legless lizard habitat needed special attention. Principles such as housing not fronting onto the reserves, appropriate buffers, cat containment, education about animal and weed impacts from urban gardens, and generally giving priority to ecological considerations were emphasised. Landscape design to prevent inappropriate water run-off, and pas-

sive solar design for housing were also emphasised.

Seeds forum

Paul Hodgkinson

26 MAY Local and interstate native seeds industry representatives and specialists attended a conference at Greening Australia's *Serious about Seeds Forum* to talk about aspects of native seed production.

Ben Cavuoto, who heads up the Seeds for Survival Project, spoke about the seed bank concept and GA's commitment to establish a seed production area at Yarralumla Nursery's Pialligo Farm. The principles established by Martin Driver (GA Murray - Deniliquin) and others, in creating seedbanks of local native shrubs and trees would be realised with investment in plants native to the ACT and surrounding NSW areas.

Paul Gibson Roy from Victoria's Grassy Groundcover Research Project presented a different approach to seed production of grassland plants, container growing plants, and harvesting these seeds. Information on Paul's exciting grasslands work has appeared in earlier FOG newsletters.

Sarah Sharp, Environment ACT, presented draft ACT guidelines for using native seed in revegetation, Linda Broadhurst, Centre for Plant Biodiversity Research, CSIRO Plant Industry, spoke about plant genetics and implications for seed collection, production and use, and John Weatherstone gave his thoughts on native seed collection, storage and distribution.

Following the key speakers and lavish lunch we listened to Martin Driver and John Weatherstone discuss aspects of the prospective seed production area at the Pialligo Nursery. GA has some challenges ahead with this site. The key is to keep it small, manage for plants in short supply, and to get participation by local landholders, seed collectors and local seedbanks.

Sculptured seats in Aranda grassy woodland *Hanna Jaireth*

25 MAY 2006 Friends of Aranda Bushland celebrated the end of the grant-phase of the education project with the launch of two seats sculpted by Paul Jamieson. Paul translates recycled and salvaged timber sourced from around the Canberra region into sculpture and furniture. He also runs *The Front* café-gallery in Lyneham. The seats are located in the grassy woodland walkway on the Frost Hollow to Forest Walk.

At the launch FAB Convenor, Mary Falconer, expressed hope that younger Canberrans might be inspired by the educational activities accessible at <www.friendsofaranadabushland.org.au> to become involved in conservation activities.

She reminded those who attended the high conservation value rural lease area known as South Aranda Woodland that work needs to be done to reduce the dense herbaceous weeds endangering the native grasses in the area, and threatening to spread into the adjoining Canberra Nature Park. She said she would like to see that woodland become part of Canberra Nature Park.

Native pasture plants field day *Groundcover*

4 MAY Several FOG members were among the approximately sixty people who attended the second native pasture plants field day organised by the Southern Rivers Catchment Management Authority as part of its Maintenance of Biodiversity in Native Pasture Project.

The project recognised that native pastures are managed, valued and used in a variety of ways in the Southern Tablelands. Management influences the range of native plants that occur within native pasture. The project aims to learn from these management approaches and styles.

The field day was held at Jillamatong near Braidwood. The aim of the field day was to provide more information about the project. Following several



Top: Launch of sculptured seats by ACT's new minister responsible for the environment, John Hargreaves, with Ian and Mary Falconer (convenor FoAB), Mary Porter and Michael Gentleman MLAs. Photo provided by Hanna. Bottom: David Eddy's presentation at the Jillamatong field day.

interesting talks, covering a range of topics on managing native pastures for production, the group visited several paddocks which were excellent examples of productive native pastures and weed controlled areas.

One of the speakers, our own David Eddy, gave a wonderful talk on reading landscapes, the evolution of native grasslands and pastures, and how such areas can be used for good production and conservation outcomes. Workshops on plant identification in the field and the value of individual

plants in pastures also provided valuable information and insights.

FOG members who want to learn more about this work, should talk to Donna Hazell or Rebecca Hall (02 4842 2594).

NSW PAS for threatened species

In New South Wales, 1004 native species, populations and ecological communities are listed as threatened with extinction. NSW DEC website shows you what they look like, where and how they live, why they're threatened, and what we can do to help bring them back from the brink of extinction. The site now includes Threatened Species Priorities Action Statement (PAS) which is now open for comment until 12 August. See: <http://www.threatenedspecies.environment.nsw.gov.au>.

Wildlife corridors and DV231 *Geoff Robertson*

A smart but not decisive response was made in early June by the ACT Government to the wildlife corridors and DV 231 report prepared by the Legislative Standing Committee on Planning and Environment (see

Jan-Feb 2006 issue of the FOG newsletter).

The Government's response neither supports or rejects the Committee's recommendations, despite using words like 'noted', 'agreed', 'agreed in part', and 'not agreed'. It will depend upon what ACTPLA actually do in future in preparing each draft variation and the conservation community's ability to keep them honest.

For example, while the Government did not agree with recommendation 2 to pull back the boundary of Throsby towards Horse Park Drive, it said it would change the final variation document to reflect that more research should be done before the final boundary is decided – Throsby does not come on line until 2016. For more information, please contact me (details back page).

Open Space Network Project

MAY 2006 ACT Planning Variation 165 was tabled in the Legislative Assembly. This involved a review of 300 sites in and around Canberra. It recommended planning protection, or enhanced protection for 248 sites.

Some of these, of great interest to FOG, are Fisher Parkland (36ha), the Conder grassland moratorium site (5.6ha), and native grassland adjoining Ginninderra Creek at Umbagog Park in Latham (2.2ha).

Planning for sustainable suburbs

5 JUNE Late comments may still be accepted on the ACT Government's draft *Water Sensitive Urban Design Guidelines for Sustainable Development in Canberra* (WSUD) if stakeholders check with ACTPLA, according to ACTPLA officer John Neal, who highlighted the main features of the guidelines at a forum hosted by the Ginninderra Catchment Group to celebrate World Environment Day. The aims of the guidelines include reducing reliance on the city water supply system, reducing storm water runoff, and maximizing wastewater reuse. The guidelines are available on CD or <www.actpla.a-ct.gov.au>.

Malcolm Leslie, Forde Development Corporation, told the forum that construction would begin on the Forde development in 2007, for occupation from 2008. WSUD principles had been applied. Wetlands and open space areas for water quality, and

habitat and aesthetic values would be created. Mains water usage would be reduced by about forty percent. Riparian corridors would be revegetated, trees retained where possible and native plantings undertaken. Cat containment applies and energy savings would be made through passive solar design and other HIA GreenSmart initiatives. Partnerships were being developed with Parkcare and Greening Australia, and two traineeships would be funded. A part-time community worker would be employed and a public art strategy implemented.

Adrian Moy, Madison Constructions, queried the achievability of the WSUD guidelines and criticized their impact on new house prices. He said that new developments should not have to carry the main WSUD implementation burden, and that the ACT Government should retro-fit public housing stock. He also called for estate level WSUD initiatives, rather than at individual house level, solar streetlights and quicker land release. Mr Neal responded that ACT residents have permanent water savings measures in place, dual flush toilet rebates, rainwater tank rebates, etc. and that WSUD principles would be applied to all planning and design, including re-development in established urban areas, public works, etc.

FOG submissions

The last newsletter had two news items *fourth part of trilogy needed,*

on the draft aquatic species and riparian strategy (Action Plan 29), and *FOG comment sought on ACT as a biosphere reserve.* FOG put in submissions on both these matters and copies can be obtained from fogcanberra@yahoo.com.au.

Editor's desk

Again, there is far too much material crossing my desk and I cannot include it all. So I thought that I would mention some of the things left out.

Australian Plant Conservation, the ANPC bulletin, March-May 2006, had a special theme on fire for conservation, a must read for those with an interest in this subject, especially grassy ecosystem management using fire.

We received a copy of the first *Grassy Groundcover Gazette* (May 06) the newsletter of Grassy Groundcover Research Project (see *putting back the ground cover* – Mar-Apr 2006 newsletter.) For more information contact Rebecca Passlow (rpasslow@gavic.org.au).

The *Stipa newsletter* (April 06) contained fascinating information on native grasses, soils, native grasslands, pasture cropping, and paddock monitoring, and a good round up of news and issues by Sue Rahilly.

Rural Fringe contained the latest piece by Geoff Robertson – this time on *Native daisies of the Canberra region*.

Veg. Futures Conference

Geoff Robertson

As mentioned in the last newsletter, the wrap-up on the Veg. Futures Conference had to be held over.

19 to 23 MARCH The Greening Australia (GA) and Land and Water Australia (LWA) conference was a highly and well organised event to which 550 people flocked, including some 16 FOG members, although some of them were recruited during the event.

The conference opened on the Sunday evening at the trade display part of the conference, consisting of many stalls organised by government agencies, businesses with an agricultural or environmental focus, and some of the larger non-profit environment organisations. It was very tempting to avail oneself of the free literature and goodies

available, and although I was moderate in my sampling, I nevertheless managed to remove a dental filling with one of those dreaded Minties.

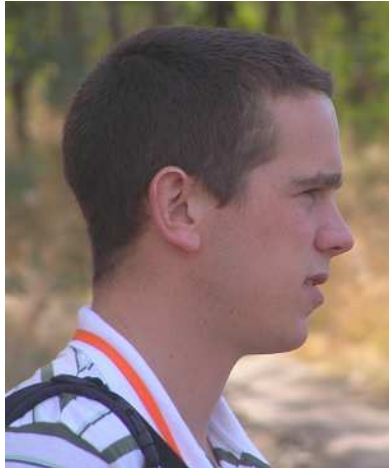
On day one, 20 March, there was a variety of speakers coming from many perspectives. Carl Binning's and Andrew Campbell's talks on behalf of GA and LWA were a little scattered and bland, appealing to all stakeholders, especially those providing funding. The Hon. Peter McGauren MP, Minister for Agriculture, reminded us of the Federal Government's inconsistent approach to the environment. His talk started badly, as Carl confused the minister with his more notorious brother. Maybe in revenge, the Minister, while saying some good things about the environment, proceeded to attack the states on their

native vegetation legislation, quoting all the more extreme and ill researched views reported in the *Land* in recent times. He also stated that those who advocated saving single paddock trees were only protecting the habitat of individual rabbits. This might have appealed to some rednecks who have been asleep for the last fifteen years or so, but his otherwise very polite audience started groaning quite audibly.

Two very impressive talks were given by Indigenous people. Yalmambirra gave the welcome to country combined with a talk on how he attempted to reclaim and revegetate Aboriginal land near Albury. Leanne Liddle, described as a scientist and a lawyer, who works for the SA Department of Environment and Heritage, manages a wildlife project in the Anangu Pitjantjatjara Yankunytjatjara lands to enhance wildlife habitat and landscapes and to enable the harvesting of wildlife species sustainably by combining traditional and scientific knowledge with that of the traditional owners and community leaders. One other keynote speaker was David Lindenmayer, the leader in “natural experiments” in landscapes, vegetation and habitat, who explained his scientific work and what it is telling us. Another fascinating talk was given by Bill Knight (Alcoa), who described the work being done by his company to re-establish 100 percent of species in mining revegetation sites.

Day one finished with the poster sessions with many interesting posters and presenters. There were displays with a grassy ecosystem focus and FOG’s posters received many compliments. The day was a good one, and the large diversity of views probably reflected the community’s spectrum.

Day two was the field day with three options. I ended up in the *Corowa/Rutherglen – ‘broad acre, big changes’ – farming for the future* session, and my travelling companion for the day was Rainer Rehwinkel. I had not expected much, but I was very pleasantly surprised. The bus trip itself was great as we travelled through the back blocks around Albury on both sides of the border and I was delighted by the bits of remnant vegetation. Having an expert interpreter by my side



Some of the many presenters: Leanne Liddle, Tom Wright, Anne Brown, and Paul Gibson Roy.

added to my appreciation of what we were seeing. Martin Driver (Murray Catchment) provided a commentary throughout much of the day and provided a wonderful explanation of the ecology of the area, or what was left of it, the Catchment’s approach to revegetation, and the players involved.

We stopped briefly at a roadside remnant where the local landcare group had done some revegetation work, before going onto Buraja Station where we were given three excellent talks, one by Robert Lambeck (GA, WA) who was good at reading landscapes and talked very insightfully about ecological function in the landscape around us, Tony Piggins who talked about the politics of changing community attitudes on native vegetation (a real Aussie battler), and Alastair Robb the station owner who talked about revegetation work (a farmer with a green heart). His vision and work had won him the 2005 NSW landcare primary producer award. Most fascinating was his work on enclosures to protect breeding bush stone-curlew.

Around lunchtime we visited a grassy box woodland remnant where Ian Davidson, an ecologist consultant, whom I have come across on previous travels, spoke about the vegetation, animals, and management of this site. One part of the big picture plan is to reconnect this site with another large forest remnant many miles away. We might schedule this for a FOG trip in future. Next it was off to the Rutherglen Research Institute and its field sites for much more on some of the scientific research taking place. What

struck me most was the importance of paddock trees and their eventual demise – these harbour thousands of insect species which play a very important ecological function.

Day three was a workshop and colloquium day. There were sixteen half-day workshops, and in the morning I went to the grassland workshop, where I gave a presentation on FOG’s experience. Other presentations in this session were Tom Wright who spoke about the trialing of various techniques to manage native grassland and suggested there were no “quick fixes”, and Ian Chivers who spoke on the key ingredients needed to grow native grasses successfully. Millie Nicholls and Anne Brown took us to the

field where they illustrated in vary practical ways how they teach farmers how to assess and manage their native vegetation. Many insights were gained from each talk. Mary Goodacre performed admirably as facilitator and there was much lively discussion around grassland issues.

After lunch on day three, I had the privilege of chairing a colloquium on the topic of what we are doing about the threats to native vegetation. The topics, excellently presented, covered mistletoe, carbon tendering, Defence Department conservation practice (with our own Michael Treanor as a co-presenter), and arthropods in vineyards and adjacent native vegetation. Each had a heavy scientific and statistical basis and covered much new ground – all delightful. After that I caught the last half of a workshop on *retain, repair, re-establish; the future of revegetation*. Luckily I heard an update by Paul Gibson Roy on his work on returning complex indigenous grassland communities to agricultural land (see putting back the ground cover, page 4 of the March-April newsletter), and some interesting insights from Josh Dorrough on why natural regeneration is not the most attractive option in revegetation work.

The dinner was a most enjoyable affair, and Ian Lowe was the guest speaker. Never having heard him speak before, I was impressed with his after dinner speech banter, truly entertaining, and then he got to the more serious stuff on how Australia is missing the boat on environmental issues, especially global warming. If any tonic was need after the Hon Peter McGauran, Ian Lowe was a cure-all. At that point, I thought that Carl and Andrew were good at working both sides of the conservation divide.

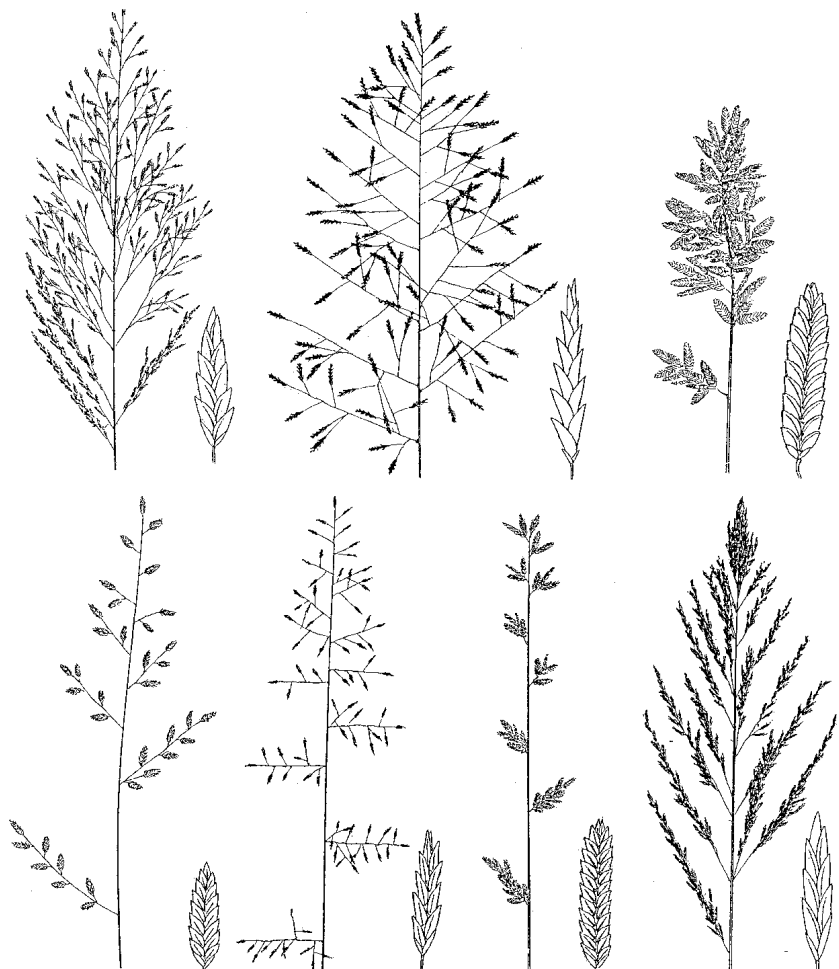
On the last morning, a series of speakers attempted to summarise the conference working from a myriad of reports that had been put together by the host of people who made reports on each presentation, the field days, the workshops and colloquium sessions. It is of course difficult to take on such a task, but the speakers made a good attempt, and I was most impressed with Mark Butz who threw in some challenging ecological issues for us to ponder. Congratulations GA and LWC on a wonderful effort.

Van Klaphake's pictorial keys

Margaret Ning

From time to time I am in contact with FOG member, Van Klaphake of Wauchope, who has produced his own pictorial keys to the grasses, sedges and rushes of the Sydney region, and more recently the grasses of the Blue Mountains. In the past, I have discussed with Van the appropriateness of his booklets for my own use at Nimmitabel, and with that in mind Van has recently suggested that his latest booklet (*Guide to the Grasses of the Blue Mountains*, 3rd ed., 2005) might go a reasonable distance to helping me at both Canberra and Nimmitabel, as it contains a greater selection of higher altitude grasses.

Van's keys are pictorially based, and are designed to be used in the field, although they are A4 in size, i.e. not the traditional field guide size. In his latest grasses booklets he uses a three-stage pictorial key which uses panicle diagrams first, and then a sketch of spikelets to get to the second stage (genus), and the third stage contains drawings of species within each genus. Van hopes that most experienced users would be able to get to genus within one minute. However, he acknowledges that users would have to be able to already use keys, and of course there is a section on how to use

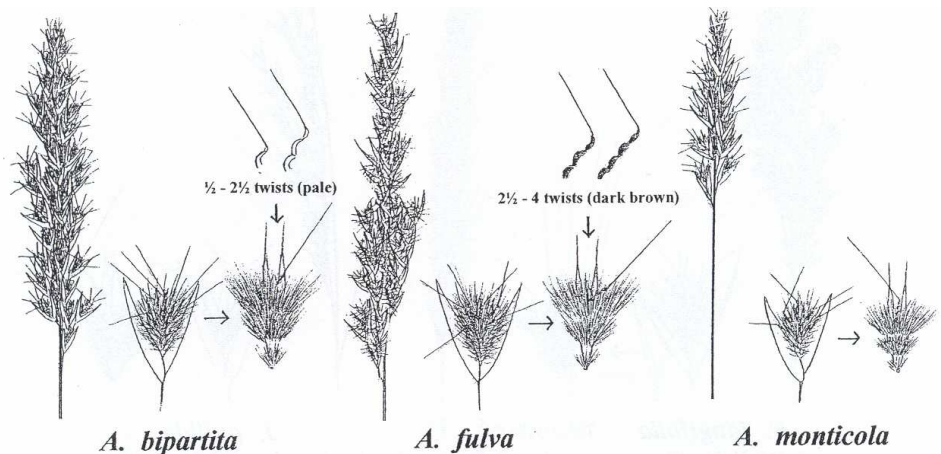


Illustrations of love grasses (this page) and wallaby grasses (next page) from Blue Mountains guide.

his key at the beginning of the books. I'm not sure how easy it would be to pick up Van's books as a starting point to teach yourself about grasses as I think they assume a certain level of existing identification skills and background knowledge. However his booklets also include a glossary and very good drawings of grasses/sedge parts which are very useful aids. Personally I find Van's books particularly useful once I already know the genus of a grass. This assumes of course that the species is actually in the book – this is a potential problem discussed below in the second dot point. Truth be told, I am excited about having another couple of reference books to aid in grass identification in the ACT/Southern Tablelands area.

I have shown Van's Blue Mountains' grasses booklet and an older version of the Sydney grasses to three FOG members who are more than casual users of grasses keys, i.e. they use them on a regular basis. I have attempted to summarise their comments below.

- Very user friendly at all levels, especially if beginners refer to the explanation of keys at the beginning.
- Regarding relevance for Southern Tablelands – the books would be quite a help down to genus level and, although there is some overlap of species, they might only be confusing at species level for the genera which have several species, e.g. *austrodanthonia* and *poa*.
- They seem to me very useful guides to their particular areas - the Blue Mountains book has corrected some of the (minor) format problems with the original Sydney guide. The drawings are very good and demonstrate well the significant differences.
- There are very useful drawings of distinguishing characteristics which are not found in either the *Grasses of NSW* or the NSW Flora.



Details of Van's most recent issues include:

- **Guide to the grasses of Sydney, 3rd ed., 2005.** (Covers the Central Coast botanical region of NSW. 175 pages covering 298 species.) \$25 plus \$3 for postage.
- **Guide to the grasses of the Blue Mountains, 3rd ed., 2005.** (Covers all but the rarest species. 104 pages covering 184 species.) \$25 plus \$3 postage.
- **Key to the commoner species of sedges and rushes of Sydney and the Blue Mountains, 4th ed., 2004.** (81 pages covering 168 species.) \$25 plus \$3 postage.

If you are interested in any of Van's booklets, they can be ordered directly from him at 470 Bulli Ck Rd, Byaburra, NSW 2446, and if you have any questions you can phone him on 02 6587 1210. If you would like a look first, please contact me to arrange a brief perusal of the books, although I do not have an up-to-date edition of the Sydney grasses book. (As an exercise, I shall count the number of (native and exotic) Southern Tablelands grasses species in the Grasses of New South Wales, as well as the number of (native and exotic) grasses in Andrew Paget's *Plants of the ACT*, and shall endeavour to see how many of our local grass species are covered in Van's two grasses booklets. (See the next newsletter.)

Climate change:

Are we part of the problem or part of the solution?

Steve Douglas

Ok, so the question is dichotomous and the issues are far more complex than this. We're all somewhere on a spectrum between highly problematic and neutral, or even beneficial when it comes to our impacts on climate change.

FOG and many similar groups have a substantial conservation agenda but to what extent is FOG and its operations consistent with the broader ecological cause? When FOG members participate in fieldtrips, car pooling is encouraged but we can go further in reducing the impact of our travel by using CO2 offsets. These are intended to

neutralise the greenhouse gases emitted when we burn fossil fuels to power our cars.

Schemes include Green Fleet (www.greenfleet.com.au) and Carbon Neutral (www.carbonneutral.com.au). Both operate by planting 'trees' (can include woody shrubs) in quantities and locations where their modelled growth rates are used to calculate the amount of CO2 that they will absorb. You make a tax deductible donation to these schemes at a rate calculated to achieve the planting of sufficient trees to take up the annual emissions from your vehicle. Green Fleet's website provides the option of a flat fee based on average emissions from a vehicle, or the

ability to calculate specific emissions based on your provision of data such as fuel type, weekly fuel cost or annual distance or annual fuel cost. It then provides the annual emissions in tonnes, from which you can see how many 'trees' you need to purchase.

Some schemes also extend to offering offsets for air travel and domestic energy use. The latter is particularly relevant in situations where green power (certified renewable electricity) is not available or where other forms of energy are used e.g. gas. From what I've seen, I suspect buying tree-based carbon offsets for domestic electricity use is far cheaper than buying green power. However, despite the cost, I've opted for 100% green power at an additional \$200 per year. Offsets aren't as effective as stopping the problem at its source.

The above mentioned offset schemes are definitely not the answer to transport-based or domestic greenhouse gas generation and they don't consider issues such as the embodied energy of a vehicle or even emissions associated with use of other vehicle consumables such as tyres. They are only a 'bandaid' and an imperfect one at that. But they do result in lots of reforestation and the trees are not harvested, so they provide long-term benefits beyond CO2 uptake, e.g. wildlife habitat and groundwater draw-down in areas with or at risk from salinisation. I can't vouch for the ecological appropriateness of the schemes' tree planting activities, but given the very limited range of options available for CO2 offsets, I opted to purchase (very cheaply) sufficient tree planting credits to neutralise CO2 emissions from my annual use of petrol. I encourage members to investigate these schemes to offset their annual travel emissions. If we aren't taking action to offset such impacts, every time we travel on fieldtrips to appreciate aspects of Nature, we're harming the very focus of our appreciation through adding to the gas emissions that power climate change.

FOG letters

Editor

The FOG newsletter is generally restricted to grassy ecosystems matters and threats to such systems, or matters of general ecology which help us to understand grassy ecosystems. We also recognise that issues such as climate change will have major impacts on the adaptation of grassy and alpine ecosystems.

From time to time, FOG receives letters from members and others about issues of concern; for example we have recently received letters about the the sale of the Snowy Hydro and the proposed drag way. The FOG committee does not have an official view on such matters, although it realises that they may potentially, but not clearly, have some negative impacts on grassy ecosystem remnants.

FOG has decided that within limits, it will publish letters it receives where the issues are not clear cut, but where they may be of interest to members. The committee therefore decided to publish the letter below.

Two issues that may be of particular relevance to FOG are: whether noise levels have an adverse effect on wildlife and therefore threaten the integrity of remnant ecological communities, and the site chosen would ap-

pear (from the photo on the website) to be a lowland box woodland site with well established red-gum and yellow box trees, although with a not so intact understorey.

Dragway noise threatens nature park, Jenni Savigny, President, Dragwayaway

Dear Friends of Grasslands, we are seeking your support for our campaign to stop the construction of a dragway in the Majura Valley.

One of our concerns about the proposed dragway is that it essentially uses the Mt Ainslie/Majura Nature Park as a noise buffer zone, with no respect for the peaceful and quiet amenity that so many of us enjoy. The government's noise modelling shows noise levels in the Nature Park of 70 to 90 decibels, depending on the type of event and the wind direction. Such excessive noise levels would make being in the Nature Park so unpleasant that it would be tantamount to closing it for the duration of the drag way event. Drag way events are proposed for the same time that other recreational users of this area enjoy, i.e., weekends and public holidays, with some events lasting twelve hours (9am to 9pm).

The government is currently seeking community comment on its draft Dragway Motorsport Noise Envi-

ronment Protection Policy (EPP), and we are encouraging all groups and individuals that use the Mt Ainslie/Majura Nature Park to make a submission. If you want to have a look at some (scary but true) noise contour maps, they're on our website, www.dragwayaway.org.au on the page 'Why Majura Valley is the Wrong Place'. You'll also find the draft EPP there. For more information, please contact me on 6257 5648.

PLANTS OF THE ACT

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Showy copper-wire daisy: *An impressive flower of grassy ecosystems* Michael Bedingfield

Many are the plants of local grassy ecosystems which are modest or inconspicuous. Not so the showy copper-wire daisy. The large golden-yellow flowers are on display in late spring or early summer, standing high above the grassy tussocks.



This handsome plant has a perennial rosette of lanceolate leaves from which the flower stems emerge. The stems have a few leaves spaced along their length and have a reddish-brown wiry look about them. They usually don't have branches and stand quite erect and up to 50cm high, with a single flower at the top. The flower buds are bell-shaped and large, 2-3cm wide, papery and brown coloured. The flower-head consists of a typical daisy composite grouping, which is 2-3cm wide, containing many tiny florets clustered together. The outer florets or 'petals' surround the structure. These are deeply toothed and attractively decorative, making the whole flower up to 5cm wide.

The large and attractive flowers make it quite ornamental, and in the book *Grassland Flora* by Eddy, Mallinson, Rehwinkel and Sharp, it is suggested that this plant may be of use in gardens. It is uncommon, and is usually found in less disturbed areas. But it is widely distributed nonetheless, occurring throughout the Southern Tablelands, as well as other tablelands, and on the coast, slopes and plains of NSW. It is also found in Qld, Vic, SA and Tasmania. Its preferred habitat is various grassy areas - grassland, woodland or dry forest - extending up to the subalps.

The scientific name for the showy copper-wire daisy is *Podolepis jaceoides*. A very similar species is the tall copper-wire daisy (*P. hieracioides*), which is a bit taller, growing up to 70cm high, has branched flower stems, and is less common than our main subject. The alpine podolepis or mountain lettuce (*P. robusta*) has large crinkly leaves, branched flower stems, grows up to 60cm tall, and is restricted to the alpine areas.

Please refer to the associated drawings. The daisy is shown as viewed from above at about half normal size, and the whole plant is shown at roughly quarter normal size. I have shown only one flower stem but several stems can grow from the centre of the basal rosette of leaves. The showy copper-wire daisy - *Podolepis jaceoides* - an uncommon daisy with colour and flair.

FRIENDS OF GRASSLANDS INC

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Supporting native grassy ecosystems

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Friends of Grasslands Newsletter

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.

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

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