



News of Friends of Grasslands

Supporting native grassy ecosystems

September-October 2010

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Program - take the diary out now

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

SAT 11 SEPT, 9am– 4pm. **FOG-Fenner School working bee at Yarramundi Reach.** Enquiries: Jamie Pittock (jamie.pittock@fog.org.au or 0407 265 131).

SAT 25 SEPT, 9.45am-4pm. **Workshop on monitoring your patch** with Sarah Sharp. More information on page 2.

SAT-SUN, 2-3 OCT, 10am-4pm. **Russells' Open grassy ecosystem garden.** See information on open gardens on page 2.

SUN 10 OCT, 9am to 4pm. **Biodiversity & Farming Fair, Bredbo.** FOG will be hosting several activities at the fair and needs members' assistance. More information on page 2.

SAT 16 OCT, 9am– 4pm. **FOG-Fenner School working bee at Stirling Ridge.** Enquiries: Jamie Pittock (jamie.pittock@fog.org.au or 0407 265 131).

SAT 23 OCT, 9.30am-3pm. **Old Cooma Common working bee.** Enquiries: Margaret Ning (margaret.ning@fog.org.au or 6241 4065).

TUES 26 OCT 5.30 to 7pm. **FOG newsletter despatch** at the Conservation Council office. More information on page 3.

WED 27 OCT 9.30am-3.30pm. **FOG African lovegrass monitoring at Scottsdale** More information on page 3.

SAT 6 NOV 10am to noon. **A stroll through Stirling Ridge** with Sarah Sharp. See page 2 for details.

SUN 7 NOV, 10am to 1 pm. **Hall Cemetery working bee.** Enquiries: Andy Russell (6251 8949 or andy.russell@fog.org.au).

SAT-SUN, 13-14 NOV. **Indigenous values workshop at Garuwanga.** See page 2 for details.

SAT 20 NOV, 9am– 4pm, **FOG-Fenner School working bee at Yarramundi Reach.** Enquiries: Jamie Pittock (jamie.pittock@fog.org.au or 0407 265 131).

SAT-SUN, 27-28 Nov, 10am-4pm. **Rehwinkels' open grassland garden.** See information on open gardens on page 2.

FRI-SAT, 10-11 DEC. **Visits to Tommey's Plain and the Tops,** near McPhersons Plain NSW. More information on page 2.

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Photos: from FOG's Stirling Ridge working bee on 1 May. Further information on page 2.



Upcoming FOG Events

Monitoring your patch

Sat 25 Sept, Mugga Mugga

Sarah Sharp and Lori Gould, Greening Australia (GA), have recently published a vegetation monitoring manual for community groups. Sarah will provide a workshop on the manual for FOG members (max. 20 people) and describe different ways to monitor patches. GA will organise additional workshops in the region in spring.

The FOG workshop will be held at Mugga Mugga with a visit to nearby Callum Brae to illustrate the different monitoring methods.

Cost of the workshop will be \$10 for lunch and morning tea.

Copies of the manual will be for sale, CD - \$5, or hard copy \$30. You may download your own copy from the GA ACT website.

For enquiries and to register, please contact John Fitz Gerald at john.fitzgerald@anu.edu.au or 6125 4176 or 6254 0327.

Biodiversity & Farming Fair

Sun 10 Oct, Bredbo

Kosciuszko to Coast, in which FOG is a very active partner, will be holding a Biodiversity and Farming Fair at Bredbo on 10 October. There will be lots of great stalls and activities. It should be a fun and rewarding event for people of all ages.

FOG is assisting in a number of areas such as organising the FOG stall, the Speakers Hall, field trips, and the connecting the community and landscapes demonstration.

The FOG stall will showcase what we do and answer questions on all manner of things. For the Speakers Hall we are planning a number of great presentations on biodiversity, sustainable farming and what K2C and partners are doing.

FOG needs volunteers. To assist, please contact John Fitz Gerald, at john.fitzgerald@anu.edu.au, or 6125 4176 or 6254 0327.

Ngarigo tools and equipment

@ K2C Biodiversity and Farming Fair, Bredbo
Sun 10 Oct, 10am-4pm.

Throughout the day, FOG has arranged for Rod Mason to demonstrate the use of Ngarigo tools and equipment. You will be truly amazed by what Rod will show you.

Connecting community and landscapes Workshop

13-14 Nov, Nimmitabel NSW

This is the first of the five two day workshops organised by FOG with Rod Mason, Ngarigo elder and natural resource scientist, and funded by the Murrumbidgee CMA under the project title of *Connecting the community to natural values and resources in the landscape*.

The workshop is titled *Making string, glue & baskets*, and will cover the plants and materials used, how, when and where to find the materials, their ecology, and the language surrounding them. The workshop will be held at Garuwanga near Nimmitabel. Enquiries: Geoff Robertson (geoff.robertson@fog.org.au or 6241 4065).

Open gardens

10am-4pm

Russells 2-3 Oct, Charge \$6
Rehwinkels 27-28 Nov, Charge \$6

Two FOG members will have open gardens this spring and this is an opportunity to see how local grasses and forbs may be successfully grown and to learn some horticultural tips.

The Russells' garden is located at 6 Gidabal St, Aranda, while the Rehwinkels' garden is located at 23 McCusker Drive Bungendore.

FOG will receive part of the takings from the Rehwinkels' open garden but we need some volunteers to assist. Enquiries for Rehwinkels' garden: Margaret Ning (02 6241 4065 or margaret.ning@fog.org.au).

A Stirling stroll

Sat 6 Nov, 10am-noon

Sarah Sharp has for many years been committed to the preservation and management of our grassy woodland remnants, and is very familiar with Stirling Ridge, a spectacular woodland site, and home to the endangered button wrinklewort. Sarah will provide a thorough but simple understanding of the woodlands, the plants, and their best management.

We will meet on Alexandrina Drive across from the Canberra Yacht Club (car park on Mariner Place), Yarralumla. This is also by the lake-side bike track. You should bring appropriate clothing, hats, water and a sense of fun. Local residents are especially welcome. Bring your Yarralumla friends along.

To let Sarah know that you are coming and to give us a sense of the numbers, please contact her on sarah.sharp@fog.org.au or 02 6257 5619, after hours.

Visits to Tommey's Plain and the Tops

Fri-Sat 10-11 Dec

These two sites are near McPhersons Plain NSW. FOG will be undertaking plant identification to assist with the surveys of these sites. This work will be led by Dave Mallinson and Joe McAuliffe and should be lots of fun. Accommodation (Thurs and Fri nights) is \$15 a night, and bring your own bedding. Food is provided except on the Thursday night. Enquiries: Margaret Ning (6241 4065 or margaret.ning@fog.org.au).

Front page photos by Jamie Pittock from Stirling Ridge day on 1 May. Story appeared in previous issue.

Top: Kylie Woodward and Amy Hankinson dwarfed by weeds.

Middle: Bernadette O'Leary and Peter Ramshaw.

Bottom: Ingrid Stirnemann, Bernadette O'Leary, Sarah Sharp & Christina Zdenek with cut Cootamundra wattle.

Upcoming events

continued

ALG monitoring at Scottsdale

Wed 27 Oct, 9.30am-3.30pm

Since March 2008, FOG has been monitoring, with Bush Heritage Australia, the impact of grazing on African love grass (ALG) at Scottsdale. In spring 2009, FOG increased the monitoring to study the interplay of native grassy vegetation and ALG in sites where both are present.

These are fun days and a great learning opportunity, plus free lunch. To learn more/to register contact Enquiries: Linda Spinaze (6288 6916 or linda.spinaze@fog.org.au).

Working bees

11 Sept, Yarramundi Reach, ACT
16 Oct, Stirling Ridge, ACT
23 Oct, Old Cooma Comm, NSW
7 Nov, Hall Cemetery, ACT,
20 Nov, Yarramundi Reach, ACT

FOG working bees are an excellent way to learn about the biodiversity values of important grassland and woodland sites, to see some of their spectacular flowers, especially in spring, and to learn how to manage these sites, not to mention the opportunity to meet new people and to learn from experts. Lunch is provided at each of these working bees, except for Hall Cemetery, which is a morning event with morning tea provided. FOG can assist with organising transportation when sites are further away. To enquire or to register, see activities on page 1 and the relevant contact person.

FOG newsletter despatch

Tues 26 Oct, Canberra

It would greatly assist if members regularly or occasionally help in despatching the newsletter. If you can assist, we are compiling a list of volunteers, and will email you a reminder as despatch dates come up. To help, please contact Margaret Ning (6241 4065 or margaret.ning@fog.org.au).

FOG wins heritage grant

FOG has applied for and received a grant of \$9,680 for a project entitled *Connecting the community to natural values and resources in the landscape*, to be completed by 30 June 2012. This project will connect indigenous and non-indigenous people with traditional natural values and resources in the landscape and promote the adoption, understanding, and use of traditional knowledge in land management.

The project has two components. The first consists of a demonstration in the use of Ngarigo tools and equipment at K2C Biodiversity and Farmers Fair at Bredbo on 10 October.

The second is a series of two-day workshops. These cover two titles *Making string, glue & baskets* and *Resource flows in the landscape*, and may be repeated, or other titles covered. The first workshop will cover the plants and materials used, how, when and where to find the materials, their ecology, and the language surrounding them. The second will cover the plants and animals, resources for Ngarigo people, and their seasonal movements and flowering and fruiting, and how Ngarigo people moved with the seasons. Again the Ngarigo language used to describe these resources and their use will be covered.

FOG is very fortunate to have Rod Mason, Ngarigo elder and natural resource scientist, to provide the demonstration and lead the workshop. Geoffrey Simpson is assisting in arranging these events. The grant is being made by the Murrumbidgee Catchment Management Authority under the Commonwealth's Caring for our Country program.

News Roundup



The photograph shows Rod, Geoffrey, Adam Muyt and Margaret Ning at Garuwanga in 2007 when the concept of the workshops was first discussed. Enquiries: Geoff Robertson (geoff.robertson@fog.org.au or 6241 4065).

North Forde outcome

Naarilla Hirsch

In April FOG provided comments on the proposed Forde North development in Gungahlin, submitted under the Environment Protection and Biodiversity Conservation 1999 (EPBC) Act. FOG's submission had expressed concerns about impact on the Golden Sun Moth (GSM) from this development, and also the possible spread of weeds from the development into Mulligans Flat.

The Commonwealth approved this development as an uncontrolled action, but imposed conditions upon it. These included at least \$100,000 in funding for an applied research proposal into translocation of the GSM, and mitigation of possible impacts on Mulligan's Flat Nature Reserve, e.g. by construction of a boundary fence, \$10,000 for a weed control program at Mulligans Flat, and education of Forde North residents about the values of Mulligans Flat, use of appropriate garden plants, and the cat containment policy.

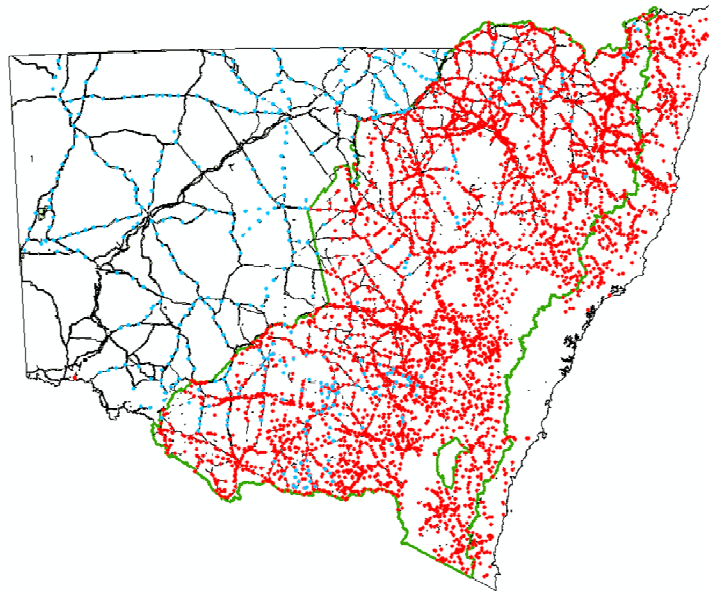
A garden, a landscape, an ocean

Geoff Robertson

SAT 17 JULY Twenty-eight FOG members turned up to FOG's winter presentation and heard two absolutely fantastic talks and one by me. The first presentation was by Andrew Zelnik and was called *Conservation values of NSW travelling stock routes and reserves*. Andrew Zelnik, while working for DECCW put together an inventory of biodiversity and cultural heritage values and management issues for a majority of the nearly 5,000 Travelling Stock Reserves (TSRs) listed in *The Long Paddock*. The inventory brings together both existing and new survey datasets and new data obtained in interviews with TSR rangers.

Andrew outlined the origins of this project, and provided a brief history of TSRs and their usage, project methodologies, and key innovations, results and findings. This work is truly impressive. For two years I was a director on the Cooma Rural Lands Protection Board and served as an interim director on the South East Livestock Health and Pest Authority. Even though I followed what was happening with TSRs closely, never did I hear such an authoritative, informative and interesting presentation on this subject. Likewise, Andrew's findings are truly amazing. The map shown here, just one of his many images, shows the presence of TSRs and travelling stock routes in NSW. Given that they are harbingers of threatened grassy ecosystems and species, they provide important reservoirs of biodiversity, and provide a good framework for biodiversity and landscape corridors. Andrew pointed out some of the opportunities for connectivity. FOG is currently considering how to promote knowledge of this work and what advocacy work might be pursued.

The second presentation was by Rainer Rehwinkel on *gardening with grassland flora*. We provided



a biography on Rainer in the last issue. His presentation had many stunning pictures of his plants and how he had landscaped his garden. He showed what could be done in a suburban garden to grow indigenous grasses and wildflowers, including rare and endangered species, and illustrated what a spectacular garden he has. His presentation also illustrates what can be learnt about the horticultural properties of many plant species which will build up our knowledge on the best ways to preserve and reintroduce them into the wild. As advertised in this newsletter, Rainer's garden will be included in the Australian Open Garden Scheme (27-28 Nov). Please try to get there and if you can help as a volunteer also let us know.

My presentation was on visits, all arising from business trips, that I have made to fourteen separate Pacific Island countries and territories. I touched on some observations about the interplay of economic development, social structures and environmental management for each of these countries.

M2G Pipeline offset

Tony Lawson

20 AUG Naarilla Hirsch, David Eddy and I were shown around the proposed offsets site for the Murrumbidgee to Gugong (M2G) Pipeline, by two ecologists preparing the offsets document and three members of the pipeline project team.

ACTEW have bought the lease of a grazing property, which is alongside the Monaro Highway at the southern border with NSW, and stretches up to the Angle Crossing Road. ACTEW is building a transmission grid, an electricity sub-

station and the M2G Pipeline on part of the property, but other parts of the property will be offered as offsets for each of those projects.

The total offset area is L-shaped and amounts to 110 hectares. It consists of grassland and grassy woodland. There is extensive eucalyptus regeneration taking place and many rocky outcrops, which are home to many pink-tailed worm lizards. (Only thirty rocks had to be turned over to find a lizard.) Last spring over thirty forbs were found, including many specimens of the relatively common *Swainsona sericea* and one of the rare *Swainsona recta*. The area has been conservatively grazed and seemed in relatively good condition, though there are weeds, especially near the roads, and briars scattered more widely.

The kangaroo grass dominant ground layer has been converted by livestock grazing to a spear grass/wallaby grass dominance on the higher ground and the northern and western aspects, but the kangaroo grass is still prevalent on the easterly aspects. There are plenty of kangaroos to 'mow' the grasses.

We were generally impressed with the area as an offset. The plan is to do some rehabilitation and conservation work and then perhaps hand it over to the ACT Government to add to the reserve system. It is contiguous with Gigerline NR which abuts the Murrumbidgee River.

FOG supports applications

Naarilla Hirsch

There are several exciting projects seeking ACT Environment grants in 2010-2011, which FOG has supported. The first, *Seeing Grasslands* seeks to set up a photographic workshop of grasslands, an idea that came out of the recent Grassland Forum. The aims of the project include increasing awareness of the intrinsic value, uniqueness and natural beauty of grasslands, of their endangered status and associated conservation issues.

The second was the Southern Tablelands Ecosystems Park (STEP) application to undertake Stage 2, of the botanic garden development, which will involve designing the ecological gardens and deciding on the plants to encompass the other elements of the STEP vision.

The third was the Conservation Council bid to expand Bush-on-the-Boundary (BOB) Groups from Gungahlin to other areas of the ACT, including Molonglo. The existing BOB group represents a co-operative effort involving government, developers, researchers and community groups, as well as important contributions from retirees with a great deal of relevant ex-

perience. The group has identified and tackled a wide range of issues and has improved outcomes for the adjoining bush in Mulligans Flat Reserve. The Conservation Council has also applied for funding for its Biodiversity Mapping Project, which aims to provide baseline ecological information for spatial planning and development control at early stages of assessment.

Fourth, the Cooma Community Alliance has applied for NSW community funding to set up a community garden on Cooma Creek. If this project goes ahead, FOG sees it as an opportunity for people to grow small indigenous plants (local native grasses and wild-flowers) and to learn about their horticultural and ecological values. It may also be possible to develop linkages between Cooma Creek and Old Comma Common Grassland Reserve, increasing local awareness of this important grassland and its biodiversity values.

Henry

Grasscover

I have to express my frustration with the way the regular press has reported on the Henry Report. In its executive summary the report made this important statement "Our anticipated high population growth and continuing economic growth will also put pressure on our increasingly fragile ecosystems. To ameliorate this pressure a suite of policy interventions will need to be considered, including environmental taxes where appropriate, along with targeted stewardship and statutory duty of care programs." Did anyone see any mention of this?

Delegate Property for Sale

2,000 acre (or smaller lots) +4 bed weatherboard house + 1.75k Snowy River frontage + magnificent views and trees + largely gently sloping + native grasses and forbs + heritage slab sheering shed + 3 stand sheering shed + netted orchard

FOG member is selling this beautiful property, with magnificent stands of yellow box, apple box, snow gum and cypress pine, with ground storey of native grasses and some forbs, with views of the snow capped Kosciuszko Range and forested hills. The property has been owned since 2001 and has been managed for conservation for the last five years. The property consists of six portions some of which could be sold separately. One of these is a bush block of 360 acres with power and phone and the other two total approx. 500 acres. One of these latter two has Snowy River frontage. For further information contact Virginia on 02 9389 4130 or agent on 6458 3558.

Karleila, a conservation property, is for sale

Karleila is a beautiful and floristically diverse 52 ha (129 acre) property located between Numeralla and Nimmitabel. It's an easy 45 minute drive east of Cooma, with 2WD access all year round. The property includes a furnished, very comfy, 2 to 3 bedroom weatherboard house built in the early 1990s, as well as caravan accommodation and various storage and work sheds. *Karleila* is being sold as the owners have moved interstate.

Karleila sits at around 950 metres elevation, has Turoos River frontage and stunning views onto Wadbilliga National Park and its escarpments. More than 140 local native plant species occur on the property including two listed threatened species, *Diuris ochroma* and *Eucalyptus parvula*.

Vegetation communities include poa-dominated grassland, snow gum-candlebark-ribbon gum woodland and narrow leaf peppermint-candlebark-brownbarrel forest. Naturally wildlife is also abundant on the property. *Karleila* is basically weed-free after three years of targeting the most serious invasive species.

For sale @ \$225,000. For further details and/or to arrange a visit, contact Adam Muyt or Kathryn Godman on 03 6244 5621 or mobile 0428 312 384.

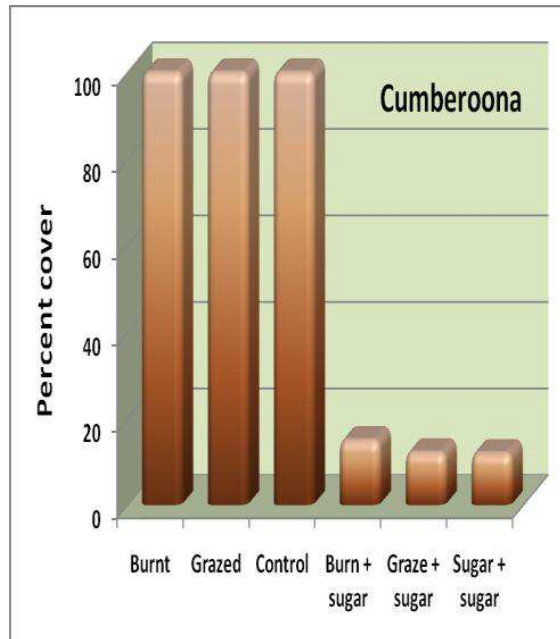


Restoring woodland understorey *Grasscover*

I read with some interest the January issue of *Restoring woodland understorey* newsletter, published by Ian Lunt, Suzanne Prober and Ian Cole describing the demonstration research trial project in southern NSW, funded by the Murray CMA (NSW) and the NSW Environment Trust. The newsletter provides an overview of activities and outcomes over the past year.

The newsletter is a good advocate for the 'sugar treatment'. Ian Cole has produced a graph (see insert) showing the impact of several methods used at Cumberoona Travelling Stock Reserve to reduce weeds. The burning and grazing methods did little to reduce herbaceous weeds, compared to the control, whereas methods using sugar had a marked effect. Ian notes that to control weeds, sugar creates a good seed bed for establishing native grasses. When established, the grasses can then continue to out-compete weeds. However if no natives are re-established, the weeds are likely to come back by next season. More information may be found on <http://www.csu.edu.au/research/ilws/about/members/lunt.htm>

In follow-up contact with Suzanne, she stated "at present we simply apply the sugar by sprinkling it on the surface, allowing rain to wash it in. Larger scale applications could be done for example using a sugar or molasses drench (already used for other purposes in some industries). However owing to the cost of sugar and especially native grass seed, our recommendation is to use the sugar to establish small 'nodes' of kangaroo grass scattered across a degraded site. Once the nutrient cycling is shifted back to the natural state in these small patches, they should be self-perpetuating, and the seed produced should help the patches to



slowly expand, especially if sugar or other weed control is applied in an expanding fashion around each node each year." If people have further queries, they may contact Suzanne at Suzanne.Prober@csiro.au.

Ian Lunt has pointed out to *News of Friends of Grasslands*, that "even though sugar works amazingly well, we aren't really advocating it as a tool to manage widespread weed problems, due to its high expense and temporary effect. Unfortunately its too expensive to be used over large areas." However, he states "Its very easy to apply – you just spread it over the soil, we did it by hand. We used about $\frac{3}{4}$ kg sugar per square metre in this trial, I think."

BOB for Molongo

A new Bush on the Boundary (BOB) Group for Molongo has been formed. The concept is to bring together all the Molongo stakeholders, including conservation groups and developers, so that as Molongo develops good on-ground conservation practices may be put in place and new residents made aware of the biodiversity assets that surround them. This should encourage local residents to protect those assets.

Andy Westcott, the Molonglo Catchment Coordinator, is the coordinator the BOB Molongo group and Sarah Sharp represents FOG on the group.

FOG advocacy

Naarilla Hirsch

June 2010

FOG opposed the proposed **Macgregor West 2 Estate** development submitted under the EPBC Act. While the proposal keeps an area with high numbers of the Golden Sun Moth (GSM), it will impact on areas containing lower density GSM. Despite an offset being offered, FOG's view is that offsets for impacts on endangered species or ecosystems should only be considered as a last resort. If a decision is made to proceed, FOG suggested strengthening the offsets offered. These included a long term commitment to rehabilitation and management of the offset area (to ensure a positive GSM outcome), a covenant to protect the offset site in perpetuity, conservation management of that site, and sufficient funding to support that management in the long term, not just for a year or two. Limited information on offsets was available in the proposal, insufficient to guarantee a successful outcome.

NSW Department of Environment, Climate Change and Water released a paper for public comment canvassing three options for the staged **repeal of the NSW Threatened Species Conservation Regulation 2002**. FOG supported the second option, which was that this regulation be remade as Threatened Species Conservation Regulation 2010, and also supported the draft 2010 Regulation. While this option may cost government and property owners more, this option gave more complete protection to grassy ecosystems.

Late last year FOG provided ACT-PLA with comments about the **Lawson South Planning Study**. This proposal has now reached another stage under the EPBC Act. FOG generally supports the proposed development, especially as it combines high intensity housing with sensible open space provisions. It also supports the three measures to reduce the impact on the natural temperate grassland and the loss of potential habitat for GSM.

However, FOG was disappointed to find no firm offset proposals in this development proposal, particularly after FOG made several strong recommendations to ACT-PLA, concerning no-net-loss. The offsets offered were very general and dependent upon other decisions made elsewhere. FOG's view is that offsets should actually be in place before a development commences. FOG suggested delaying the development until more information is known about GSM populations across the area.

July 2010

The proposed **Clarrie Hermes Drive extension**, which will impact on yellow box-red gum grassy woodland, has progressed to another EPBC Act stage. FOG reiterated its concerns, particularly the lack of an integrated long term planning approach in this area of the ACT. On the plus side, the proposed offset package has significantly improved, but there are still concerns. First the research into woodland rehabilitation and propagation of understorey species is much needed, but there is no guarantee that the research findings will be used here or elsewhere in the ACT. Second FOG is concerned that offset money for Kama Nature Reserve may just be an alternative source of government funding. Third there is lack of public information about the ACT Government's offset policy.

FOG commented on the **proposed carpark access road along one end of York Park, Barton**, under the EPBC Act. This will be part of the development of a multi-storey carpark, which will shade part of York Park over winter and perhaps during spring and autumn as well. FOG opposes the development as York Park is an icon site with scientific values as well as conservation values. While a small site, York Park supports a viable population of the GSM, and the proposed loss of habitat of 6.5 per cent is significant. On a recent site visit, FOG noted that there is an is-

sue with weeds on the site, but that the site is in better condition than it has been in the past. With improved management and no impacts from development activities, the site could be restored to a very good condition, and the GSM population maintained and improved. FOG has flagged its willingness to work with the National Capital Authority (NCA) on the site. FOG's view is that to preserve endangered species and ecosystems for future generations, there must be some areas that are "no go". FOG questions whether a multi-storey car park is essential infrastructure.

In its submission on York Park, FOG noted that within the previous few weeks it commented on five development proposals impacting on the GSM. All proposals argued that GSM were in low numbers on the site or that the area being affected is small. The observation that the GSM is present (albeit in low numbers) at more sites than previously thought should be providing an opportunity to take stock of how we can increase the numbers of this critically endangered species, and it should not be used as an argument to destroy these habitats. Once again, FOG asked that a more strategic approach to the conservation of this species be considered and discussed with the community before any development of any of these sites (including York Park) occurs.

Under the **upgrade and extension of Morisset road in Kenny** proposal, (also under the EPBC 1999 Act), the road alignment has been designed to avoid as far as possible mature trees within the white box – yellow box – Blakely's red gum grassy woodlands community. The road extension is the forerunner to development of the suburb of Kenny. The quality of the woodland in the area may not be as good as that in the nearby Mulligans Flat Nature Reserve, but there has been recent regeneration, so FOG asked that all of the grassy woodlands within the Kenny area be reassessed in terms of meeting the EPBC criteria.

FOG has supported the **provisional registration of Kama woodland, small purple pea and button wrinklewort on the ACT Heritage Register** when the public was asked to comment on these registrations. For some time, FOG has recognised the importance of Kama Reserve (in the Molonglo Valley) in conserving the endangered yellow box - red gum grassy woodland ecosystem in the ACT. Another visit to this reserve was recently held by FOG.

The button wrinklewort populations to be listed on the Heritage Register include the population in Stirling Park. As readers know FOG has now done a lot of work on this site, in partnership with the NCA. FOG considers that heritage listing of the button wrinklewort habitat in Stirling Park is an important measure that may aid better appreciation and conservation of this species' habitat.

The small purple pea is so rare that any sites containing it are of significance and FOG considers that all sites should be given special status to ensure the ongoing protection of the species in the ACT.

TAMS has asked for comment on the **Tidbinbilla Draft Plan of Management**. FOG welcomed this comprehensive document, but had some strong reservations about expanding the range of activities available at Tidbinbilla.

While FOG accepted that the main focus of Tidbinbilla should be on the sclerophyll forest area, there seemed to be little emphasis on the grasslands and grassy ecosystems within Tidbinbilla as a habitat of interest to visitors. In fact there is the possibility of additional infrastructure being placed in grassland areas. Other reservations included additional developments occurring at the expense of the traditional uses of Tidbinbilla, a lack of interpretative signage about the grassland areas, and whether more tourism, with its associated impact on the environment, would in fact lead to a better financial outcome.

Cultivation Corner:

Vittadinia revisited – what a difference a good season has made

– John Fitz Gerald

Even though Janet Russell wrote about fuzzweed in this column just a year ago, I thought readers could be interested in extra information about this plant, hopefully leading to more of them popping up in your gardens. I'd like to tell you about two of the vittadinia, both commonly known as New Holland daisies.

Vittadinia muelleri and *V. cuneata* have

been able to spread naturally through my grassy back yard in, effectively, full sun over at least the past five years. This year however, following the good rains in mid February, there was far more germination than I have seen before. So now I have a carpet of seedlings and this led me to look more closely at the plants and compare the narrow-leaf (*V. muelleri*) and the fuzzy (*V. cuneata*) forms.

The fuzzy type of this daisy grows to 30cm high, is distinctly woody, and its grey leaves have smooth edges. The narrow-leaf type is a shorter plant (20 cm), less woody, with leaves that are greener, longer and generally divided into at least three clear lobes. After the tiny mauve flowers fade off either plant type, they are replaced by dandelion-like heads 1.5 cm across. The fuzzy type has a silvery head colour while that of the narrow-leaf is distinctly yellowy. Both types of heads carry about 25 tiny elongate seeds which blow off in even gentle breezes and often collect in

thick mats. I calculated at peak seed time that I had roughly 60,000 seeds about to fly, so it shouldn't have surprised me that the favourable rains produced such good germination. Driving around Canberra it was quite obvious that many of the nature strips and roadside reserves went through similarly heavy seeding.

Perhaps to magnify that calculation even more, seeds have been produced from these little bushy plants steadily since December last year



and many remain attached even now in early June.

It seems, where both vittadinia species have seeded together, that the narrow-leaf daisy germinates somewhat more readily than its fuzzy grey relation, but then the latter grows faster and quickly evens up any competition. It is surprisingly easy to tell seedlings apart since the colour and leaf shape (photograph above shows *V. cuneata* plus one ungerminated seed to the left and *V. muelleri* to the right) are distinctly different from very early growth stages.

From experience in the past five years I know that seedlings easily fall victim to heat and dry, so I have helped along a few self-germinated patches by giving them an irregular sprinkling in the driest weeks during

March. The larger plants also suffer a little during the driest spells so, if you need set-and-forget gardening, I suggest you could need extra plants to see you through a few casualties.

More good news is that germination of vittadinia seed is quite easy. Tipped-off through a seed-banking talk at the ANBG, a quick web search on keyword "tasgerm" led me directly to a Royal Tasmanian Botanical Gardens site on which Australian plant species can be searched for their germination requirements. Vittadinia appears there - actually both *V. cuneata* and *V. muelleri* species. Essentially total germination of viable seed occurs in seven days at either 15 or 20 degC if seed is exposed to a regular day/night light cycle.

Janet Russell has been trialling production of vittadinia plants for the STEP block in the last few months and she has excellent germination rates from seed freshly collected from my backyard plot. The website above confirms that year-old seed would behave similarly. Several other information sources confirm the ready-germination story.

Over time, mature plants tend to grow woody and straggly. Fortunately this is accompanied by plenty of new shoots low on the plant so a simple hedge-shearing can rejuvenate plants whenever required. Presumably this is how they manage to do so well in Canberra's mown nature strips!

So, if you are looking for a small plant widely found in local woodland and grassland, easy to cultivate, needing just a little water in driest times, then I unreservedly recommend these New Holland daisies. I find them attractive planted en masse. Of course there are more species which you might be able to find from across New South Wales including one other, *V. gracilis*, of the Southern Tablelands.

Mt Oak - Philip Jansen

Mt Oak is an 1,140 hectare tract of apple box dominated grassy woodland and Monaro temperate grasslands on the Murrumbidgee River on Ngarigo country at Billililingra, near Bredbo, NSW.

The property was sheep and rabbit degraded when collectively purchased after the first ConFest held in 1976 at Cotter River in the ACT. It then became the site of the 1977/78 and 1987/88 ConFest gatherings. While Mt Oak was established as an innovative new type of collective community, after more than thirty years, the original community of "Mt Oakies" have moved on to mostly greener pastures and the restoration and stewardship of the ecosystems has become the primary focus for today's community association and friends.

The elevation ranges from 700 metres at the Murrumbidgee River and Murrumbucca Creek confluence to over a thousand metres on Big Mountain and Mt Sheoke itself. There are six peaks around 1000m surrounding a valley at Warm Corners. The rest of the property is gentle slopes on the plateaus and steep slopes and small gorges along the watercourses. Rock outcrops, mainly 'granites', occur throughout the site.

The rocks on site are mainly granite, granodiorite and adamellite, that is, acid igneous rocks. The granites on site show a variety of colours and textures. Quartz veins outcrop on the northern end of the property and black tourmaline bands can be seen in the quartz. Lesser amounts of gneiss and schist show where metamorphism occurred. Alluvium has built up on the confluence of Murrumbucca Creek and the Murrumbidgee River, and along the drainlines. It is at least 3m deep in parts visible in the erosion gullies.

Mt Oak is home to at least 250 indigenous plant species, including the smallest flowering plant in the world and many kinds of mammals and lizards as well as prolific bird and invertebrate life. Many of the species that Mt Oak supports are listed as vulnerable, rare or threatened, such as the silky swainson pea, hooded robin and the Rosenberg's monitor. There is an as yet undescribed eucalypt species that may be confined to Mt Oak, and other possibly unique flora. There are a number of discrete vegetation types at different elevations and aspects. Environmental weeds and feral animals are the key manageable threatening processes acting on the landscape and ecological values.

Cultural artifacts are common over many areas of the land, including old Ngarigo tracks. Stone tool scatters of chert, silcrete or quartz are often seen where erosion has removed the topsoil. An expertly knapped axe lies on the top of one of higher peaks on Mt Oak, the edge ground stone below, near the Bullanamang Gap.

The title to Mt Oak is now held in trust by the Free Land Association Inc., (FLA) also known as the Nyar-



gun Trust, and the land is managed for biodiversity outcomes by the Mt Oak Community Association Inc. (MOCA). FLA has Ngarigo elder representation and Mt Oak recognises traditional ownership rights to the land. Mt Oak keeps to the original principle that anybody may live on the land providing they respect the collective, ecological and constitutional agreements.

FLA and MOCA are now entering the final stages of a Voluntary Conservation Agreement with the NSW National Parks and Wildlife Service, covenanting a majority portion of the property, 880 hectares.

We have an ever increasing website with many pictures of landscapes, flora and fauna and the axe mentioned earlier. The web address is <http://mtoak.weebly.com/index.html>.

Offsets workshop - Naarilla Hirsch

25 MAY Seven people attended the workshop on environmental offsets, the aim of which was to develop a FOG policy on this issue. Such a policy will have a number of uses, such as in preparation of submissions on development proposals. The workshop started with a presentation of some of the policies and quantitative approaches in use by the Commonwealth and some of the State governments (the ACT government is still finalizing its approach to offsets and has not yet made it public). John Hibberd then presented the Conservation Council's policy.

At the Commonwealth level, there are eight offset principles associated with the EPBC Act. These include concepts such as environmental offsets delivering a real conservation outcome. They should also be "like-for-like", "long lasting" and enforceable, monitored and audited. The New South Wales government's principles were similar, and included concepts such as offsets being agreed prior to the impact occurring, and being supplementary (i.e. not already funded under another scheme).

In NSW offsets are implemented by a "biobanking" scheme, which is a market-based scheme with consistent scientific methodology for calculation of credits. Landowners establish a biobank site and commit to enhancing and protecting biodiversity values. They may then sell the credits to provide income and fund future management of the site. Purchasers buy credits for possible later resale or for offsetting a development, and the Biobanking Trust Fund holds biodiversity credit dollars in trust for owner of land and provides payments to the landowner to assist with the cost of carrying out the management actions.

In Victoria, offsets are part of the Native Vegetation Management Framework, the primary goal of which is "a reversal, across the entire landscape, of the long-term decline in the extent and quality of native vegetation, leading to a net gain". Native vegetation at a site is assessed by comparing it to a benchmark which has

the average characteristics of a mature and apparently long-undisturbed stand of the same type of vegetation. If offsets are to be considered, there needs to be a clear link between gains and losses, with calculation of gain associated with the offset to be based on an estimate of the improvements that will be realised within ten years of the actions being initiated.

There are a number of general problems with offsetting, including the difficulty in measuring the complexity of biodiversity, administrative problems, funding of the amount of biodiversity data needed, and that high offset ratios are needed when restoration effectiveness is uncertain. Other problems include definitions of "like-for-like" and "net gain/no net loss", whether placing an area not currently under threat into a reserve or conservation agreement is actually an offset, and long-term site security and maintenance of site quality. Indirect offsets (e.g. research, rather than conserving parcels of land) may be problematic, as there is no certainty of any on-ground work happening in the end, or of offsets delivering a real conservation outcome.

There was agreement that loss of grassy ecosystems should be minimised in all developments, that offsets should only be used as a last resort, and that high conservation value areas should be "no-go". There was some discussion of what "like-for-like" means. The consensus was that flora, fauna and landscape function should be taken into account, not just the flora, and that offsets should include both land and funding for management of the land. Another area generating a lot of discussion was that of compliance to the agreed offset plan, with independent long-term monitoring needed and rehabilitation being to an appropriate standard.

The final result of the workshop was a draft set of principles, with a couple of areas needing further work identified. Once this is done, the principles will be presented to the FOG committee for discussion and finalization.

FOG Membership To join or renew

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

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

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

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

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

FOG website

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

Flora & the Law Exhibition

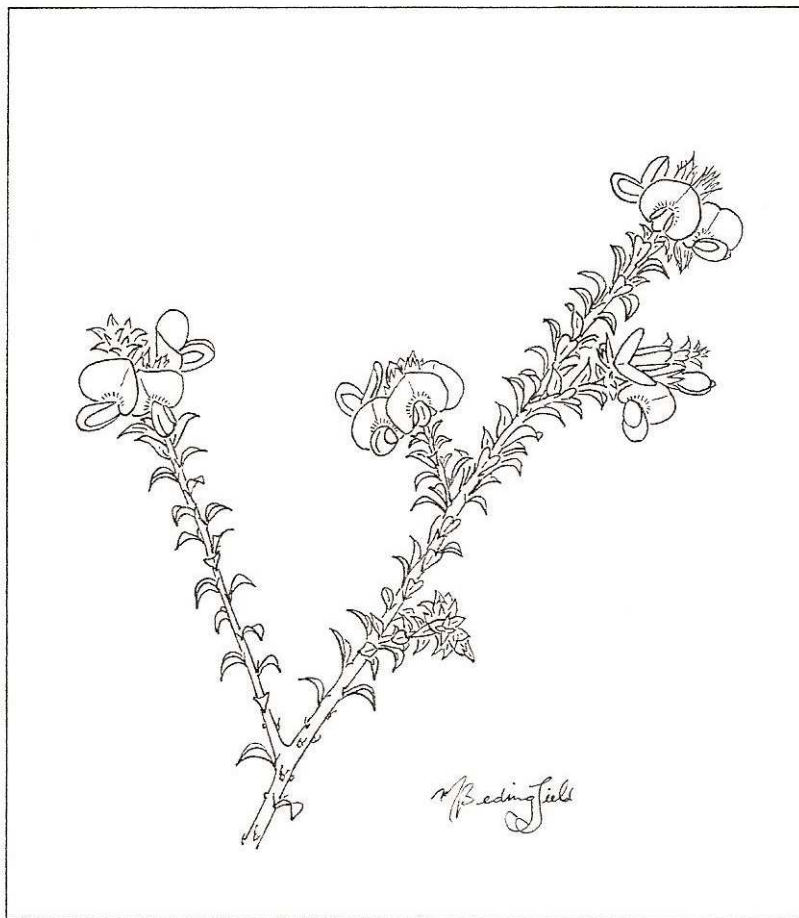
High Court of Australia, Canberra
Mon-Fri, 9.45-4pm, & Sun 12-4pm.
During Floriade

Enquiries: (02) 6270 6811

Pultenaea procumbens

— a common and distinctive bush pea, Michael Bedingfield

At the end of a busy day, if we stop and take time to watch the sunset, we can find this regular natural spectacle to be very calming and refreshing. Also, spending a few minutes gazing at the moon can bring a feeling of profound tranquillity. And if we have an unhappy heart, then being near a river, lake or the ocean can gently sooth those feelings and return us to equilibrium. In a similar way, getting out into our native bush can be quite nourishing and invigorating. For example, visiting a healthy patch of grassy woodland or open forest, which has retained its richness and diversity of native flora and fauna. This is especially true in spring when there is an abundance of flowers and birds. There is something very wholesome and healing in visiting and enjoying our native areas, something which is simply absent from other places. The role of FOG in ensuring the preservation of natural ecosystems is more than just protecting biodiversity. Without any effort on their part, many things in nature can nurture us and make life more worthwhile. This includes our grassy ecosystems and the plants that grow among them, such as common bush peas.



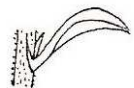
Pultenaea procumbens has the common names of egg-and-bacon pea or bush pea, names which are not unique, and which also apply to quite a number of other shrubs with pea flowers. The botanical name comes from an English botanist and surgeon, Richard Pulteney (1730-1801), and “procumbent” means to grow in a prostrate manner. The pronunciation of the name is pull-ten-EE-a pro-CUM-benz.

This plant is a low growing shrub, producing flowers with a mix of colours of yellow, orange and red in the spring. The leaves are small, 3-8 mm long, and have a particular shape, being folded inwards and curved downwards toward a sharpish point. The leaves are a distinguishing feature differing from all other local bush peas, so the plant is easy to recognize. The smaller branches are covered in short, soft, down like hairs. The fruit is a small pod, 5 mm long. The shrub is usually about 30 cm high, and can be up to about 45 cm. The *Pultenaea* genus is endemic to Australia, and there are about 120 species that occur here, with over 60 occurring in NSW.

The preferred habitat for *Pultenaea procumbens* is woodland, dry sclerophyll forest and heath. It is widespread on the Southern Tablelands, occurring along the NSW tablelands and slopes, and down into Victoria.

In the associated drawing I’ve shown a small branch of the plant at normal size, and a leaf at three times its size.

The *Pultenaea procumbens*, egg-and-bacon pea, although common in our region, is an important part of our native grassy ecosystems, our natural areas that can nourish and enrich us in unknown ways.



FOG groups and projects

Activities organises FOG field trips, talks, workshops, on-ground works, support to other groups, property visits, and the FOG calendar. Inquiries: activities2@fog.org.au.

Advocacy prepares submissions and advocates for grassy ecosystem issues. It holds occasional meetings and workshops. Inquiries: advocacy@fog.org.au.

African love grass (ALG) monitoring holds monitoring days at the Bush Heritage property at Scottsdale. Inquiries: linda.spinaze@fog.org.au.

Committee & correspondence The Committee organises, coordinates and monitors FOG activities. Members are Geoff Robertson (Pres.), Isobel Crawford (Vice Pres), Sarah Sharp (Vice Pres.) Al Gabb (Sec.), Sandra Hand (Treas), Kim Pullen (Imm. Past Pres), David Eddy, Naarilla Hirsch, Stephen Horn, Tony Lawson, Margaret Ning and Benjamin Whitworth. Andy Russell is public officer. Inquiries/correspondence: committee@fog.org.au. Postal address: FOG, PO Box 987, Civic Square, ACT 2608.

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

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

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

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

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

General inquiries Contact info@fog.org.au, Geoff Robertson (6241 4065) or Janet Russell (6251 8949).

Golden sun moth In 2008-09, FOG conducted a major survey of GSM in Canberra region. Inquiries: geoff.robertson@fog.org.au.

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

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

Membership and newsletter despatch See Membership box (page 10). Newsletter despatch is fourth Tuesday of Feb, Apr, June, Aug, Oct. To help, contact margaret.ning@fog.org.au.

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

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

Woodland Flora is planning the production of *Woodland Flora*, the sequel of the popular *Grassland Flora*. Inquiries: sarah.sharp@fog.org.au.

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