



# News of Friends of Grasslands

Supporting native grassy ecosystems

May-June 2011

ISSN 1832-6315

## Program - take out the diary now

### May

SUN 1 MAY, 10.30am—12:30pm **FOG Native Truffle Hunt, Mulligans Flat**

Contact Tony Lawson to register your interest - email [tony.lawson@fog.org.au](mailto:tony.lawson@fog.org.au) or 6161 9430 - there may be a limit on numbers. See page 2

SUN 15 MAY, 9:00 - 4:00 pm **FOG/Fenner Working Bee, Stirling Ridge**

Register with Jamie Pittock for lunch and insurance purposes: [pittockj@yahoo.com](mailto:pittockj@yahoo.com). See page 2.

### June

SUN 19 JUNE, 9:00 - 4:00 pm **FOG/Fenner Working Bee, Stirling Ridge**

Register with Jamie Pittock for lunch and insurance purposes: [pittockj@yahoo.com](mailto:pittockj@yahoo.com). See page 2



Photos from the Indigenous Values workshop held at Garuwanga: (left) Rod Mason, (top) a toy bird, (middle) making string and (bottom) bush rice or Lomandra - see story page 8.



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Tomneys Plain

Cultivation corner @ ANBG

Button wrinklewort, A threatened daisy that is important to biodiversity

## *Upcoming FOG Events*

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

### *May*

#### **FOG Native Truffle Hunt, Mulligans Flat**

10.30am – 12.30pm, Sun 1 May

Plans to re-introduce locally extinct species (or their near cousins) into the Mulligans Flat Sanctuary depend on enough food being available for them. Bettongs will be one of the first species to be re-introduced. Truffles are the major part of their diets. Australia is regarded as one of the world's mega-diverse truffle hotspots. Professor Jim Trappe - a world authority on truffles from the US, has been checking out the availability of native truffles in the Sanctuary.

This is a joint activity with the Field Naturalists Association of Canberra led by Jim and Jacqui Stol. Meet at Mulligans Flat Nature Reserve carpark (just off Amy Ackman St between Cleggett and Jessie Streets in Forde). Expect to walk one kilometre or more into the Reserve to view some of the great truffles for which Mulligans Flat is known. .

Contact Tony Lawson to register, as places may be limited - email [tony.lawson@fog.org.au](mailto:tony.lawson@fog.org.au) or ph 6161 9430.

#### **FOG/Fenner Working Bee, Stirling Ridge**

9:00-4:00 pm, Sun 15 May

The Working Bee will comprise two half-day sessions – from 9:00 to Noon, followed by lunch, then from 1:00 to 4:00 pm.

We plan to expand the woody weed free area at Stirling Ridge, Yarralumla where Australia's second largest population of button wrinklewort is being overrun. This is inspiring work where the fruits of our previous work can be seen in a rejuvenated grassy understorey.

Meet beside Alexandrina Drive midway between Mariner Place and Hopetoun Circuit. We will set up camp further west than on previous work parties. Those arriving late can find us on the north east side of the ridge by the northern fence.

Please register with Jamie Pittock for lunch and insurance purposes: [pittockj@yahoo.com](mailto:pittockj@yahoo.com). Please bring drinking water, sun protection and sturdy footwear.

### *June*

#### **FOG/Fenner Working Bee, Stirling Ridge**

9:00 – 4:00 pm, Sun 19 June

This working bee will also comprise two half-day sessions – from 9:00 to Noon, followed by lunch, then from 1:00 to 4:00 pm.

We plan to expand the woody weed free area at Stirling Ridge, Yarralumla around a new, large sub-population of button wrinklewort at

the northern end of the ridge. The woody weeds (mainly Cootamundra wattle and cotoneaster) are more scattered here so we should be able to make great progress.

Meet at a new location (further west than on previous work parties) beside Alexandrina Drive midway between Mariner Place and Hopetoun Circuit at the car park on the lake side of the road beside a major new sculpture. We will set up camp. Those arriving late can find us at the northern end of the ridge.

Please register with Jamie Pittock for lunch and insurance purposes: [pittockj@yahoo.com](mailto:pittockj@yahoo.com). Please bring drinking water, sun protection and sturdy footwear.

#### **FOG EMAIL FORWARDING PROBLEMS**

Over the last couple of months most of the FOG email addresses have not been working due to some ISPs' new anti-spam procedures. If anyone has sent an email to any of the FOG addresses in this period and not received a response, please assume the mail didn't get through, and resend it if a reply or other action is still required. The email problem has now been resolved.

#### **The FOG newsletter has a new editor**

After many years of faithful service as editor, Geoff Robertson has stepped down from this role and handed over to Heather Sweet. Heather has been involved with FOG for over 10 years and looks forward to receiving your articles and FOG activity write-ups. Email: [heather.sweet@fog.org.au](mailto:heather.sweet@fog.org.au)

Some articles have been held over, and will be printed in the next newsletter, including more 2010 reports.

#### **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](http://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](mailto:membership@fog.org.au)



## **A word from the new president.**

*John Fitz Gerald*



I slid quietly into the FOG presidential seat at the AGM a few weeks ago and thought, since I've only been a FOG member for two years, that I'd better introduce myself via the next newsletter. The need for this was reinforced by flicking through the current membership list to find that I have only met a small fraction of members at FOG events over two years – I sincerely hope that I will get to know many of more you very soon.

My background is in natural sciences – I am a geologist and have been a full time researcher, manager and scientific writer over the last 30 years at the ANU. My speciality lies in the microscopic world where I have some international recognition as an electron microscopist. Like many of you, I have also been involved in outside interests and friends groups all that time, and environment, botany and photography rate highly amongst them.

I joined FOG to learn to know the local grasslands and their plants better, and quickly found plenty of satisfaction (plus knowledge) by joining in the work parties at Hall Cemetery and at Stirling-Yarramundi. I have subsequently worked with the advocacy group, and recently with the program group. I hope to continue all these lines.

FOG is an impressive operation with its streams of parallel activi-

## **News Roundup**

ties focused on grassy ecosystems, and I hope that in my time as president the organization will only get better at such important objectives. However, that can only happen through members who put up their hands to contribute and give their time and expertise when they can. So, would all readers please look carefully at FOG's events scheduled throughout the year and make sure you hook into at least one, but preferably many, of them!

I'd like to finish by thanking Geoff Robertson for his huge contributions as president over recent years. FOG's quality and standing amongst environmental groups and authorities owes a great deal to Geoff's energy, commitment and high standards. Geoff, on behalf of all FOG members, I wish you great success in all the other activities that you have planned for coming months and years, and also thank you for agreeing to remain active with FOG in several capacities.

### **Stirling Ridge Working Bee**

*Margaret Ning*

13 MARCH Perfect weather, lots of equipment, a team of around fifteen willing workers, all ready to embark on our allocated tasks. Our site for the day was approximately 300m west of earlier sites we had worked at, which had been closer to the Canberra Yacht Club.

Tasks included the cutting and daubing of many woody weeds (briars, cotoneasters, hawthorn),



which, unsurprisingly, most people still prefer to do in pairs even though our new dauber doover device essentially enables one person to cut and daub (see story elsewhere in newsletter). A couple of other volunteers used back packs to spray, another couple used a weed whacker to cut the grass around earlier tree plantings so that a proposed control burn wouldn't damage them, and another couple used a chain saw to bring down a few outsized exotic trees, including pines and a huge three-stemmed exotic, and some large Cootamundra wattles.

Lunchtime is always a welcome break from our strenuous efforts, and, at such a site, it's always possible to find a pleasant shady spot to eat and discuss one's efforts. On this occasion volunteers liked the way they were able to choose their own sandwich fillings, and wash them down with a selection of juices and coffee. Interesting sightings were reported, and on this occasion they included news of large numbers of the button wrinklewort continuing to flower and of a patch of flowering Queensland silky blue grass. The difference between the areas cleared at earlier working bees and those still needing to be cleaned out was remarked on. It was also observed that the survival rate of the earlier tree plantings was very high, and that they were growing quite quickly.

Jamie estimates that 30 cubic metres of exotics were cut and daubed, and that doesn't include the large trees that were felled and had to be left where they fell.

Volunteering is very fulfilling. In the case of NCA working bees, it is an opportunity to socialize and learn at the same time, and to contribute something worthwhile and visible for the environment. And by being part of our team, we manage to get even more done! There's plenty more for all of us to tackle at the next working bee which is on Sunday 15 May.

Photo: Andy Russell pitching in.

### **Visit with GA to Cotter Catchment Grasscover**

19 FEB It was a typical Canberra summer day for 2011, or what we have come to expect, overcast with the threat of rain, not too hot but humid, and everything green. While the group was smallish, seven FOG members plus our Greening Australia hosts, Jason Cummings and Ian Rayner, were in for a treat as we boarded the bus at the GA Aranda nursery.

The plan was to visit two GA sites in the Cotter Catchment to look at the restoration work. Ian, whose GA responsibilities cover the catchment, described these projects as assisted regeneration as nature did the hard yards. Along the way, other GA sites were pointed out. This was the fourth of such trips. GA had hosted FOG visits to the catchment in autumn 2005, 2006 and 2007.

The first stop was what GA called the National Tree Day Site 2007, a day when 350-400 GA volunteers turned up for planting. The site is on Bullock Paddock Rd in Uriarra Forest. After we unloaded, Ian gave a history of the area, starting with the original pine plantings, the Canberra 2003 fire and subsequent developments. At this site some 24 species, including eucalypts and acacias, were planted by GA, but many more indigenous species colonised the site. Ian talked about the various methods that were used to establish the plants. Ian also talked about Blundell's Flat and its recent history, as FOG had shown a lot of interest in Blundell's Flat several years back. The 2007 site looked absolutely fabulous and there were many questions until the rain bucketed down. Then it was back on the bus and many more things were



pointed out and many more questions were asked and answered as we travelled. The rain did not last long.

The second stop was on the other side of the Cotter River and we passed by the new works on the dam on the way there. This stop is known as the Spring Planting of 2010 and is located in Pierce's Creek Forest. Again, Ian provided a history of the site. Seed balling has been trialled here, and while GA still needs to perfect this tool, it is having success seed balling with grasses. Ian also pointed out the evolution of GA's approach. Over time GA has moved from a focus on trees and shrubs, to all vegetation layers and to trialling many different techniques. In the Cotter Catchment, they have kept good records of work done and to date they have involved 7,000 volunteers and planted 400ha, an impressive effort by any standard. Monitoring has also become a strong theme, and here Sarah Hnatiuk, well known to FOG members, has led this effort and has established 46 monitoring sites.

Another change is now starting to occur. GA has almost finished planting new sites in the Cotter Catchment, and the future for GA in the catchment will likely include monitoring, infilling and adaptive management and the replanting of sites that are currently pines. Ian handed out a statistical summary for July-Dec 2010 - a good advertisement for GA. Again the discussion was terminated by a downpour, and so it was back to Aranda for afternoon tea and the next part of our activity.

### **Afternoon tea with GA Grasscover**

19 FEB Following our adventures into the Cotter Catchment, we adjourned to the Aranda nursery of GA for afternoon tea and a talk on GA's new initiative on seed containerisation (see article in Jan-Feb issue of newsletter). There Lesley and John Fitz Gerald swelled our numbers.

Jason provided a short presentation on some of the projects of interest to FOG that GA is undertaking, and then talked about the containerisation project. Meanwhile, Ian prepared a great afternoon tea. Then we wandered outside to see the various containers that were part of the project. There was a lot of interest in working together with FOG members seeing a lot of potential for reintroductions into the region's grasslands, reintroduction into projects that FOG was involved with, and even opportunities to acquire plants for local home gardens. Stay tuned for further developments.

### **Mulligan's Flat rangers recognised**

Peter Mills and Grant Woodbridge have been awarded the Public Service Commissioners Award for Outstanding Service to the Community.

Well done and well deserved for all the time, commitment and effort these guys have put into Mulligan's Flat.

### **Free Conservation Biology Text**

Apparently in support of "the International Year for Biodiversity", Oxford University Press is making a 2010 Conservation Biology textbook freely available. Many of the authors are famous conservation biologists.

Feel free to download it at the website: <http://www.mongabay.com/conservation-biology-for-all.html>

### **Newsletter available electronically**

You can receive the newsletter electronically. The electronic version is in colour. To arrange, contact [margaret.ning@fog.org.au](mailto:margaret.ning@fog.org.au).



## FOG weeding at Scrivener's Hut

John Fitz Gerald

20 FEB This 5 hectare piece of National Land lies alongside the historic Surveyor's Hut between State and Capital Circles and just downslope, to the NW, of the Australian Parliament House atop Capital Hill. While one CVA volunteer party worked this area in conjunction with FOG last year, this was the first occasion for the FOG-Fenner group to tackle it.

Twenty two volunteers participated on a day that turned out cool enough for hard work and weeding. It was very pleasing to find quite a few enthusiastic new faces, mainly via the Fenner School connection – we hope they become regulars. As usual for these events, this was a morning and afternoon activity. Our main task was cutting and daubing woody weeds, particularly Cootamundra wattle (*Acacia baileyana*), but there are plenty of other targets (firethorn and cotoneaster) amongst garden escapees in this grassy woodland area. In all, forty cubic metres of undesirable plant material was cut down and dragged into piles awaiting collection.

This area, like nearby Stirling Ridge, is an important zone for restoration as it houses a population of the endangered button wrinklewort. Volunteers took the opportunity of breaking from their hard work to inspect areas richest in this small plant which was still flowering. Several people commented that they had probably travelled past the edge of the site tens or hundreds of times without realising its existence – definitely a place for quiet revisiting.

Unfortunately, even after our efforts, a moderately large area of woody weeds remains requiring at least one more visit by a large weeding team. Blackberry, St. John's wort and exotic grasses were coming back in areas weeded last year. They



received a re-treatment this time but need future monitoring of regrowth.

Overall, the team had an enjoyable if tiring day outdoors, but definitely produced a major positive impact. All who participated in weeding and organization deserve thanks. It was great that this included the National Capital Authority's land manager, Peter Beutel, who put up his hand and contributed with some heavy cutting and hauling for the morning session. Well done all.

## Old Cooma Common

Grasscover

5 MAR It was a perfect day for a working bee at Old Cooma Common Grassland Reserve, not too cold or too hot. Just right said baby bear. The group consisted of many regulars, Coral, Max, Bob, Andrew, David, Warren, Margaret, Geoff and a newcomer, Evelyn, who has come to all FOG's working bees and joined the committee and advocacy group besides.

The big equipment was out and there were many teams attacking the weeds. Bags and bags of lambsear seed head were gathered.

Photos: Stirling Ridge is in sight of Parliament House (above), and Marg showing off the big equipment (below)



## ANU Crawford School

Naarilla Hirsch

FOG recently put in a submission under the EPBC Act concerning the Crawford School extension at ANU (see November-December 2010 newsletter). The Commonwealth has determined that this proposed development is not a controlled action, provided certain conditions to avoid significant impacts on listed threatened species and communities are met.

Prior to construction, ANU must appoint an independent expert on grassland ecology to prepare and implement a Grassland Conservation Strategy for the Acton Peninsula. The strategy will include fencing some areas prior to construction, rehabilitating disturbed areas with native grassland species, training ANU ground staff to undertake conservation activities, and monitoring of the grasslands to identify and prioritise seasonal maintenance activity.

The expert will also carry out monthly inspections and report to ANU on the condition of the R1 to R5 grassland areas, in particular the persistence of the Hoary Sunray (*L. albicans* var *tricolor*). This will commence from the date of this decision and continue for a period of five years, with immediate corrective action to be undertaken if the expert identifies areas of concern or evidence that the grassland measures have been compromised.

We are pleased with this result, as it addresses the concerns we had with the development proposal.

## **FOG advocacy**

*Naarilla Hirsch*

### **February 2011**

The *Draft NSW Biodiversity Strategy 2010-2015* was made available for public comment by NSW Department of Environment, Climate Change and Water (DECCW). FOG supported many of the concepts and objectives of the strategy in general, but considered that it needed strengthening in a number of places. For example, there was no discussion of the ongoing funding of biodiversity work or the skilling and training of people who may be employed on biodiversity matters. We thought that the strategy should contain recognition of the importance of DECCW in delivering programs, such as its skilled staff and generally client-friendly culture, and more generally the requirement to sustain the department in the longer term.

There is also a need for the NSW government to work with other jurisdictions to bring about a coherent framework for biodiversity across Australia and to avoid possible duplication of effort and the regulatory environment. FOG was disappointed there was no commitment in the strategy to practical ongoing support for the Greater Eastern Ranges Initiative, and the partnerships that make up this initiative, including Kosciuszko to Coast (K2C). Also lacking was a statement addressing the future of travelling stock reserves, whose future remains in limbo.

FOG provided comments to AECOM Australia Pty Ltd for the Environmental Impact Study (EIS) on the proposed Throsby playing fields. FOG reiterated the views in the comments provided for the EPBC referral for this development last April, and added comments about a strategic approach to Golden Sun Moth conservation similar to those provided to the proposed Ngunnawal Residential Estate 2C development (see last newsletter).

A proposal submitted under the EPBC Act concerned the development of Googong Township (NSW).

The design of this development has, as far as possible, avoided environmentally sensitive areas, although there will be a small impact on the pink tailed worm lizard (PTWL). While in principle FOG opposes any development having a negative impact on vulnerable and endangered species, we supported the establishment of a pink-tailed worm lizard conservation area, and ask that sufficient resources be made available under this referral to ensure suitable management of the conservation area and its buffer zone.

The ACT Department of the Environment, Climate Change, Energy and Water released a discussion paper on the *Review of Nature Conservation Act 1980*. Given the deterioration of some of the ACT's biodiversity, and the reliance (from the community's perspective) on Federal legislation (EPBC Act) to protect threatened species and ecosystems that are found outside our nature reserves and national parks, FOG sees this review as essential, and believes changes to the Act are necessary to improve conservation of our natural environment.

FOG provided a number of detailed comments (see website), a few key comments follow.

Social, economic and biodiversity outcomes need to be integrated, not 'balanced' – in practice, environmental considerations seem to be regarded as a constraint on economic and social development, rather than being complementary.

Key issues for future nature conservation in the ACT should include legislation and mapping, a regional focus, a bush restoration theme, resourcing and infrastructure, education and training, and indigenous values.

The Act should allow for the protection of threatened ecosystems, the habitat of threatened species and clearly demarked connectivity corridors. Once again, FOG supported the concept of 'no net loss' or, in fact an emphasis on net gain, in terms of conservation of our biodiversity, and put the view that there should be no

development that impacts on vulnerable or endangered species habitat or ecosystem communities, i.e. no development in high conservation areas.

Monitoring is essential if our environmental resources are to be adequately managed by TaMS and subsequently audited by the CSE, however monitoring processes should be kept simple and not too costly.

FOG expressed concerns regarding the lack of deterrent provided by the current Act, both in terms of enforcement and penalties, and asked for improvements in this area.

### **March 2011**

Last year FOG put in a submission supporting the addition to the ACT Heritage Register of both small purple pea and button wrinklewort habitat. We have been notified that these have been added to the Register.

*The full text of FOG submissions appears on our website.*

### **E-Bulletin 2010**

*Tony Lawson (e-Bulletin editor)*

The FOG e-bulletin has been established for a number of years now. In 2010 there were 10 issues. Its intended to draw members attention to the various FOG activities, picking up events advertised in the *Newsletter* as well as last minute events that are arranged after the *Newsletter* has gone to print and before the next *Newsletter* comes out. It also publicises other non-FOG events that may be of interest to some members in some locations (our membership is widespread), but we can only publicise what we hear about.

The e-Bulletin is of course only available to those members who have email addresses but we can only reach you if we have your current email address. Don't forget to let our Membership Secretary, Margaret Ning, know if you change your address. The contents are put on the FOG website. The e-Bulletin, or events appearing in it, are often republished by other organisations.

## Indigenous values workshops

Geoff Robertson

8 APRIL At the time of writing, we have completed our first Indigenous values workshop, held on 10 and 11 March at Garuwanga, and are preparing for the next two workshops in late April. These workshops are the main element of FOG's project, *Connecting the community to natural values and resources in the landscape*, *Indigenous values workshops with Rod Mason*.

The concept of the workshops started when Margaret Ning and I signed an Aboriginal heritage agreement with the Murrumbidgee Catchment Management Authority (MCMA) over Garuwanga near Nimmitabel. Geoffrey Simpson, then head of the Indigenous unit of the MCMA, introduced Margaret and me to Rod Mason, then working with the NSW National Parks and Wildlife Service. Rod suggested that we might run a series of workshops at Garuwanga on sharing Aboriginal heritage. Subsequently, Geoffrey approached FOG and suggested that it apply for a grant to host such workshops. It was very pleasing that FOG responded very positively to this opportunity.

There were many challenges to organising these workshops and to explain what might be the benefits for participants. These benefits are now starting to become apparent. They occur at many levels - personal, social, skills development and ecological. The flier that was included in the last newsletter mentioned many learning possibilities. We mentioned that "These workshops are likely to change completely your understanding of nature and our grassy ecosystems in particular, and to change your approach to conservation." All the participants talked about how this statement was true for them.

The first workshop was titled *making string, glue and baskets*. It included four elements. First was to find, gather, dry and prepare plant materials. The second was how to make string, glue and baskets, important tools and equipment for Indigenous people. The third was how to identify plants, their properties and ecology (where to find them and when), and the significance of these plants to Aboriginal people. Finally we learnt the language used for them and how the plants form part of Aboriginal living and culture.

Many themes ran through the workshop. To begin, where and how do you to begin to describe the heritage of a traditional Aboriginal elder? Rod stressed many el-

ements. He emphasised that his was a personal and family history. He could only reveal what had been taught to him and could not speak on behalf of others. Aboriginal people view Country as a resource that sustains people—food, equipment, medicine and shelter. There are many valuable lessons here for ecologists and farmers. Rod described, in various practical ways, many plants and animals, and described their uses, ecology and how to manage them. Yes, Aboriginal people are not passive recipi-

ents of nature's bounty – they were traditionally active natural resource managers, with a deep understanding of landscape function and how it should be managed. As farmers and land managers we can learn much from traditional owners. Aboriginal people had maps, but in a form not so apparent to us.



Rod spoke about how this traditional knowledge was passed down. This was done in formal bush classrooms and through individuals experiencing various exposures to nature. Rod mentioned many of the words used for plants, animals, landscape function, and many elements of life. Rod also spoke of his family's history, the injustices, their contributions, and more recent challenges.

The ways in which traditional knowledge is imparted to us are unfamiliar. So the question posed to us is how to absorb this knowledge. We encouraged people to take notes and we are now pooling those notes to document what we have learnt. This process will continue. We are also asking how this information might become more widely available. We are exploring with Rod how we might validate the notes we are compiling and in what ways we might publish (in the broadest sense) the heritage Rod is imparting to us. These are not straightforward issues. We are also researching what other Aboriginal heritage resources are available.

Several important lessons are becoming clear. The seed of this heritage has been in our Country for a long time. We are discovering that there is a tremendous flowering of this heritage. Aboriginal heritage is something that all Australians inherit – it is our future. Learning and understanding this heritage will benefit all of us in many and profound ways. This is the beginning of an important journey.



## My Grassland Garden

Rainer Rehwinkel

This article was prepared as an introduction to Rainer Rehwinkel's open garden which was held on 27 and 28 November. A report on this successful event appeared in our last newsletter. Due to lack of space, this was held over. Photos by Margaret Ning. Enjoy.

My garden has been established over the last seven years in the harsh climate of Bungendore with its cold frosty winters, year-round winds and hot summers, and enduring the recent severe drought. My garden uses many of the plant species found in the region's grasslands and grassy woodlands. With a backdrop of hardy non-local and locally indigenous native shrubs, including melaleucas, mint-bushes, bottlebrushes, and a range of wattles (*Acacia* spp.) which provide a succession of golden flowers for weeks in early spring, the main feature of this garden is its grassland flora. The front garden has, at its centre, a lawn composed of kangaroo grass, tall spear-grass and wallaby grasses. This is now starting to function as a native grassland, with native grassland wildflowers (forbs) emerging, including lemon beautyheads and common everlastings. This "lawn" has now reached a stage where regular high mowing keeps it looking neat. It never needs watering!

The first "garden room" you encounter as you step into the back yard is a mixture of native and exotic species (the latter mostly Mediterranean or South African species and some bulbs). This area features specimens of river tussock set into an open gravel and paved area. The next room features corkscrewgrass, whose feathery plumed heads are allowed to flourish before being mown prior to setting seeds. One of the upper rooms features a regularly mown lawn of wallaby grass. I have been cultivating weeping grass (*microlaena*) to ultimately replace this lawn when conditions become shadier - *microlaena* will tolerate dense shade.

Grassy ecosystems are characterised by a huge diversity of wildflowers – up to 700 species occur in south-eastern NSW. I have had the opportunity to collect a range of these. Several have been in cultivation for many years, including mossy knawel and common everlastings. There are many that I have introduced after having collected them during field trips as part of my work as a grassland ecologist. These include pale everlastings, buttercups

(*Ranunculus inundatus*), tall ammobium, digger's speedwell, black-anthered flax-lily, lemon beautyheads, native mint (*Mentha diemenica*), camomile burr-daisy, yellow burr-daisy, mauve burr-daisy and scrambled eggs (*Goodenia pinnatifida*). More recently, many other grassland species have become commercially available, usually in specialist outlets, but often in your nursery down the street. Species that I have recently added to my collection in this way include austral bugle, bulbine lily, grass-tree, sticky everlastings, hoary sunray, smooth flax-lily and rock isotome.

As a bonus, several grassland species have self-introduced in my garden. Amongst these are *Lo-mandra bracteata* and blue devil which emerged from dormant rootstocks that were present in the

degraded grassland that occurred on the site before I established my garden. Native woodbine, kidneyweed, bluebells and the beautiful and quite rare native flax emerged from seeds in the soil seed store. Remarkably, also emerging in this way was the endangered aromatic peppergrass, a plant otherwise known from only three other sites in NSW. To secure its future in the region and beyond my garden, this plant has become the subject of a translocation program, a collaboration between the NSW Department of Environment, Climate Change and Water and FOG.

Continued next page





To add interest and colour, I have established other hardy native herbaceous species, including various lo-mandras, dianellas, scaevolias, brachyscomes and native pelargoniums (*Pelargonium australe* and *P. rodneyanum*). This has been a trial-and-error process, as many other species that I have tried have succumbed to Bungendore's harsh winters or the drought. I recently discovered a great native plant nursery in Mildura that specialises in mallee plants and have been trying, with some success, some of these.

I have been growing the common strawflower (*Xerochrysum bracteatum*) for many years, originally from seeds of the commercially available, multi-coloured form, but more recently, crossing these with the tall, all-yellow form that grows in the mountains to the east. Initially, these plants would struggle through the winter, but after many years of selection, I have produced a very hardy form that emerges so prolifically that I need to weed them out copiously from where I don't want them. These provide a brilliant display for many months – mostly in shades of bright yellow, but sometimes with bronze or pink hues and sometimes in cream or pure white.

My favourite non-herbaceous species include correas, eriostemons and croweas. I have many varieties of correa, which attract the eastern spinebill to their waxy, honey-filled tubes in winter. My garden has large areas covered by creeping boobialla, which along with some of the native grassland forbs, provides a useful lawn alternative. I have tried to limit the use of taller, red-flowered grevilleas to prevent the larger, more aggressive honeyeaters like the red wattlebird driving smaller birds out of the garden. As a result, I have had successful breeding by superb fairy-wrens, and visits by many other insectivorous birds, including flame robin, scarlet robin, yellow, yellow-rumped and brown thornbills and grey fantail. I have even had a visit from a diamond firetail!

I have limited the use of tall, evergreen trees to the north of the house in order to maximise the solar gain to our passive solar house. The paving and gravel has been carefully chosen to harmonise with the colours and textures of the materials of the house. The rocks and pebbles are mostly sourced and gathered from the garden, so also harmonise with their surrounds. The dominance of wattles and the expanses of native grasses in the garden echo the vegetation of Days Hill beyond the garden.

While the garden is mostly native, there are two areas, one in the north, and one in the south, which are a mixture of natives and exotics. This provides extra colour, while the choice of plants is aimed at being in harmony with the natives. For example, the silk tree has feathery foliage very much like the related wattles. My aim is to be able to replace the exotic herbaceous species with corresponding natives. My collecting will continue.

Initially, I mulched heavily with straw, being careful to obtain weed-free material. Now, all mulch is from prunings of shrubs from the garden, and the regularly cut river tussocks. I cut these several times each year. It is important to never allow river tussock to go to seed; they can be quite invasive. The shrubs and

small trees are carefully pruned to maintain their shape and keep them from encroaching on paths. My gravel areas are ideal for the germinating of many of the native forbs, and I allow these free rein. It does mean that I have to weed out stray wallaby grass seedlings, but I feel that is a small price to pay for the otherwise maintenance-free patch of colour. I rig up a grey-watering system from the washing machine in the summer and of course, have a rainwater tank which is exclusively for garden use.

The philosophy of my garden is simple – my aim is to promote the use of grassland flora in the home garden. In the process I have learnt much about the ecology of some of these species, but more importantly, they provide me with much beauty and enjoyment.





## *Tomneys Plain*

*Grasscover*



24-27 FEBRUARY Twenty-three people participated in FOG's plant survey of Tomneys Plain. This trip had originally been planned for spring when a lot more would have been in flower, however, the spring downpours prevented access to the area. Even in February there was still a lot of rain, and wet areas had to be negotiated – a challenge even for the best of drivers.

It was one of those events in which people came and went. The initial group arrived at Tomneys Plain on the Thursday evening, after some delays and concern about how to find the Tops where we all stayed. The Tops, which overlooks the Plain, is owned by AME, a local Canberra school. There we met Barry who with Lee acted as our hosts and who provided some fantastic meals during our stay. Over the next three days the crowd grew, and included Patricia Murray, from the Murrumbidgee CMA, who had requested FOG undertake the survey and who had arranged the accommodation and catering. Various researchers and students were part of the throng and the interactions amongst the diverse group raised a lot of excitement about the project.

On the Friday, the large group found its way to Brandy Marys, where we were welcomed by long-term FOG members, Jim and Mary Kelton. Many articles and news items have appeared in the newsletter on Brandy Marys and its amazing biodiversity over the years, but for most this was their first visit there. Initially everyone just enjoyed Jim's many stories about Brandy Marys and his management issues, and there were many probing questions. Then Jim took the group for a tour along the edge of McPhersons Plain, which was looking magnificent, even though it was past its best flowering. Jim continually mentioned various orchids that had flowered throughout spring and early summer. After lunch Jim led us along the other edge of the McPherson Plain wetland and then we ventured into the woodland where we wandered, travelling from one orchid spot to another – a long but wonderful day. There

was a fantastic meal that evening, and then many stories were told – one of those very memorable FOG evenings.

On Saturday, we tackled Tomneys Plain. To get to the wetlands, there was a longish walk through some challenging water flows, which took its victims who were unable to avoid getting wet, much to the amusement of fellow travellers and embarrassment to themselves, and then we ventured through some wonderful grasslands before we arrived at the large bog areas where the plant identification started in earnest. Geoff Hope, FOG member and a world expert on wetlands, provided a history of the bogs and their deterioration through neglected management, and then took the group on a tour to an area of the bog where he proceeded to take a core sample and then explained the findings as he pointed to the various layers in the sample. He was also one of our plant identifiers.

There were many experts who were able to identify the plants and Janet made a list, while others took samples that could be keyed out at a later time. There was great excitement as the group wandered from spot to spot, and as each spot provided slightly different ecological niches, the plants varied along the way. Somewhere in the midst of the activity, Barry turned up with an amazing morning tea. Soon it was back to the Tops for a superb lunch.

There were fewer takers for the grassland walk in the afternoon. Many of the plant experts thought that time was best spent keying out the plant material that had been collected in the morning. Geoff Robertson led this walk and he took time out to explain the structure of the grasslands and the many species found there. Andy recorded the species, and again specimens were taken of plants where identification was uncertain. These plants were later handed to the stay behinds who relished sorting out the species. The afternoon group next ventured into the woodland which was on the higher slopes and Andy started a new list. However, these endeavours were cut short by rain. That evening was a repeat of the previous evening, good food, a little alcohol, and much sharing of stories.

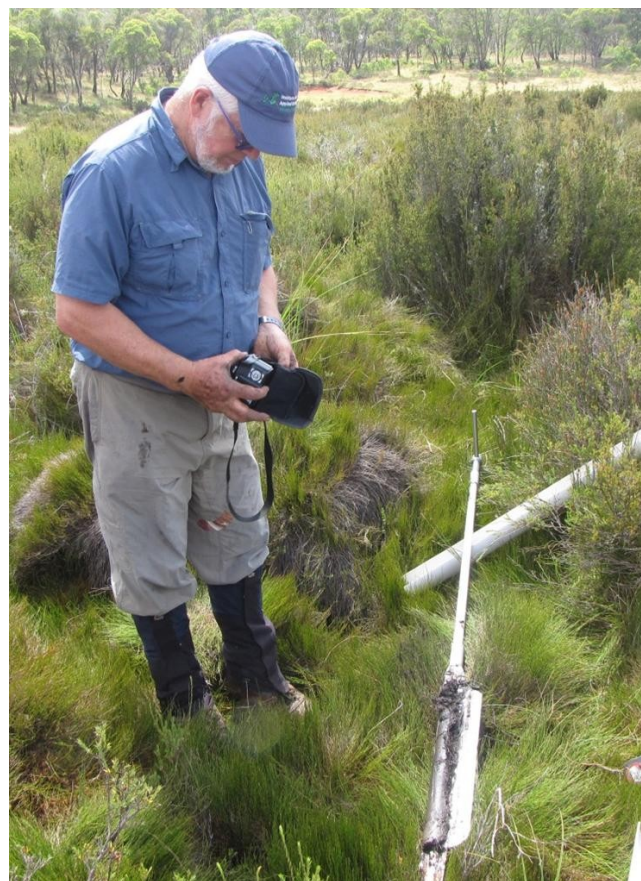




The Sunday started off somewhat bleakly. Packing up was the first thing on people's minds but once accomplished, it was time to continue the plant survey of the woodland. Again the names of plants were shouted out, confirmed, and Janet did the recording. Unfortunately, a downpour stopped this event. It was obvious that more time was needed and a return visit in spring would have much appeal.

Thanks go to Margaret, Patricia and Barry for arranging and facilitating the event and to the many members of FOG who participated and compiled the plant lists. Geoff, in thanking the participants, welcomed the new friendships and alliances formed. He said that he had only one criticism of the event, namely, that the catering was so good, it set too high a standard for future activities – joke Joyce! Final thanks go to Dave Mallinson for IDing the specimens we took back to Canberra.

Photos:(above) is a montane grasshopper at Brandy Marys by Jim Kelton, and (above right) shows Geoff Hope with a core sample on Tomneys Plain by Geoff Robertson.



### **Understanding Our Native Grasslands -**

NRAC booklet. The NSW Natural Resources Advisory Council (NRAC) has produced a booklet, *Understanding Our Native Grasslands*. The booklet aims to raise community awareness about the critical role native grasslands play in maintaining healthy soils and water, creating habitat for animals and plants, fodder for stock and as being culturally important for indigenous people. Many areas of native grasslands rank among Australia's most threatened ecosystems. The booklet is available from the NRAC Secretariat (02 9895 7334) or can be downloaded from <http://www.nrac.nsw.gov.au/>.

### **Cutting and daubing made easy**

*Margaret Ning*

Cutting and daubing becomes a one man operation when you arm yourself with one of these little beauties.

You may be familiar with the little container (110mm in size) shown here - it is designed for a product to restore shoe colour. The bottle contains a sponge applicator which regulates the flow of liquid.



Fill with a mix of 50/50 Roundup and water (and red dye, if desired) pop it in your top pocket, venture forth with some secateurs or loppers, and may conquer the world, or at least the woody weeds in your patch! Once a woody weed has been cut, immediately daub all cut surfaces with the applicator. It becomes part of a process that is very user friendly in so far as you are not potentially in contact with the chemical like when using a backpack, etc. Gone are the unwieldy and messy tins and brushes, though a pair of gloves is still the go.

FOG has purchased 100 of these little daubing doovers, with three sponge tops per bottle (as they could wear faster than the rest of the item). We are already using them at our working bees, and are happy to sell them to interested members at three for \$10.



## Cultivation Corner: The ANBG's Grassy Wood- land Entrance Garden

Margaret Clarke

One of the 40<sup>th</sup> Anniversary projects in the Gardens was to create an arrival experience for visitors. The challenge was to transform the original grassland garden into something that would excite and inspire visitors and show off the diversity and delicacy of these disappearing plant communities.

The Gardens' team responsible for rejuvenating the entry garden were determined that it would be simple, striking and engaging. It would recognise the importance of grasslands as one of the most species rich plant communities in Australia and it would tell the story of their demise to less than one percent of their pre-European coverage.

The original grassland garden, which had greeted visitors at the entry to the carpark for 20 years was an authentic grassland representation. It had minimal landscaping with plantings that complemented the grassy woodland that occurred naturally on the site. Unfortunately the most common visitor response was to ask when this area would be planted out with something interesting!

A bold approach was needed to give the grassy woodland species high visual impact and immediately invite exploration. The new Garden relies on a number of design elements to create its striking effect. A boardwalk of recycled timber planking curves through the garden inviting visitors in. Huge rocks (salvaged from the Gungahlin Drive Extension roadworks) are a dramatic contrast to the smaller plants and provide a first visual focus. Mass plantings of small grasses create a sculptural effect. Undulations and contours create not only visual interest but provide different growing conditions, including a dry creek bed for water harvesting, increasing the

range of species that can be grown. Bare gravel around the *Xanthorrhoeas* (some of which were saved by ACTEW from submersion by the expanded Cotter Dam) allows their full sculptural effect to be viewed without distraction. Container plantings raise small plants for better viewing and examination of their features.

The scientific underpinning of the Gardens is evident here too. Signage explains the work the ANBG is undertaking in collaboration with the ACT Government to ensure survival of the Ginninderra Peppergrass



(*Lepidium ginninderrense*) which is threatened by urban encroachment and modification of its habitat on the floodplain of Ginninderra Creek amid newer Canberra suburbs. The ANBG is already looking to extend its conservation work; collecting, researching and growing more threatened grassland species such as *Swainsona recta*.

Even the entry signage to the garden is different but connected. The grass cutouts in the rusted steel main sign are taken from illustrations by the distinguished systemic botanist and herbarium curator Nancy Burbidge. Nancy Burbidge is also remembered in the Gardens by the amphitheatre that bears her name.

Perhaps the greatest achievement of this project has been its engagement with the community. Friends of Grasslands, Greening Australia and, of course, the Friends of the ANBG have all supported and helped in many different ways. We reported on the flurry of planting to have the Gardens ready in time for the 40<sup>th</sup> Anniversary celebrations in the last edition of Fronds. Men in suits, women in boots, friends and staff all came to help. A special thank you is due too to Ewan Buckle and his team from Gundaroo Landscaping and Civil who put in a herculean effort to

have the landscaping ready on time and then helped to get the last of those 2,000 plants into the ground as night fell.

Plans are now underway for further plantings in autumn and to document the vigour and longevity of each species under different conditions. This will greatly add to our knowledge of the growing requirements for grassland species in cultivation. This is a garden that works on many levels.

*This article was reprinted from Fronds, Newsletter of the Friends of the Australian National Botanic Gardens Number 67 April, 2011.*

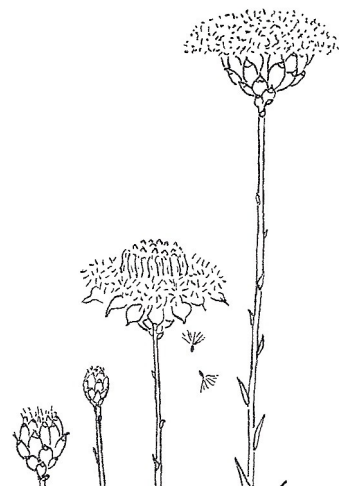


## Button wrinklewort - *A threatened daisy that is important to our biodiversity*

by Michael Bedingfield

The button wrinklewort has been mentioned in the pages of this newsletter before as our members are working to protect it and its habitat. The botanical name is *Rutidosia leptorhynchoidea*, which is quite a mouthful, and is pronounced root-id-O-sis lep-toh-rin-COY-deez. It occurs locally at a small number of significant sites within the ACT, for example at St Mark's in Barton, Stirling Ridge in Yarralumla, and at Majura Field Firing Range. It is also found near Queanbeyan and Goulburn, and in Victoria. In the wild it survives on the margins of Yellow Box – Red Gum Grassy Woodlands and in Natural Temperate Grasslands.

This plant is a perennial daisy, erect growing, with numerous stems rising up from the base, to about 30 cm tall. Leaves are narrow, up to 1.5 mm wide, and occur along each of the branches, being longer at the bottom and gradually getting shorter further up the stems. The flowers are yellow, button-like, up to 20 mm across, without petals, and occur at the tips of branches. Flowers have an unusual underside, with lots of small leafy bracts, which have an unusual shape. The name *Rutidosia* means "wrinkled" and refers to these bracts. The other part of the botanical name, *leptorhynchoidea*, refers to its similarity to the genus *Leptorhynchus*, for example scaly buttons, *L. squamatus*. Another similar local species is the Monaro golden daisy, *Rutidosia leiolepis*, which is also threatened.



Since the button wrinklewort is a threatened plant, it is important to maintain our biodiversity. But there is more to biodiversity than is generally understood. Most people think of biodiversity in terms of species, and they want to maintain the existing variety of species, without further loss. This is species diversity. However, in order for a species to be strong enough to survive indefinitely there needs to be enough genetic flexibility to cope with changing conditions. This requires a population of a good size, and with individuals being different from each other in various ways. This is genetic diversity. But all species live and thrive in a certain habitat or range of habitats, or particular types of ecosystem, and need to be spread broadly over the landscape in different locations. Some species cannot survive without other members of their community. There are a great number of different types of ecosystem, including many different types of grasslands and grassy woodlands. Each of these has its own unique combination of species that make it their home. This is called ecosystem diversity. All types of ecosystems are of value and need to be looked after. So, in order to maintain biodiversity, it has to remain strong on these three levels. (The three levels to biodiversity were explained by Rainer Rehwinkel in an article titled "What is Biodiversity?" in the *Austral Bugle*, Newsletter of the Southern Tablelands Grassy Ecosystem Conservation Management Network, in autumn 2003.)



In the drawings I have shown the button wrinklewort at half size, with a flower, buds and seed-head shown separately at full size. So, for this daisy, it is important firstly to keep it in existence. It also needs to have a sufficiently large, healthy, genetically diverse population, which is spread widely in its natural range. And thirdly, the ecosystems where it makes its home, the endangered native grasslands and grassy woodlands mentioned above, have to be well preserved.

## **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](mailto:activities2@fog.org.au).

**Advocacy** prepares submissions and advocates for grassy ecosystem issues. It holds occasional meetings and workshops. Inquiries: [advocacy@fog.org.au](mailto:advocacy@fog.org.au).

**Committee & correspondence** The Committee organises, coordinates and monitors FOG activities. Members are John Fitz Gerald (Pres.), Isobel Crawford (Vice Pres), Sarah Sharp (Vice Pres.) Al Gabb (Sec.), Sandra Hand (Treas), Kim Pullen, David Eddy, Naarilla Hirsch, Stephen Horn, Tony Lawson, Margaret Ning, Benjamin Whitworth and Evelyn Chia. Andy Russell is public officer.

Inquiries/correspondence: [committee@fog.org.au](mailto:committee@fog.org.au). Postal address: FOG, PO Box 987, Civic Square, ACT 2608.

**Communication** produces *News of Friends of Grasslands* and *FOG e-Bulletin*.

Inquiries: [heather.sweet@fog.org.au](mailto:heather.sweet@fog.org.au) (newsletter), and [tony.lawson@fog.org.au](mailto: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](mailto: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](mailto:jamie.pittock@fog.org.au).

**Financial matters, excluding membership**, contact [sandra.hand@fog.org.au](mailto: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](mailto:booksales@fog.org.au).

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

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

Inquiries: [geoff.robertson@fog.org.au](mailto:geoff.robertson@fog.org.au).

**Grassland monitoring, Scottsdale** holds monitoring days at the Bush Heritage property at Scottsdale.

Inquiries: [linda.spinaze@fog.org.au](mailto:linda.spinaze@fog.org.au)

**Hall Cemetery**, with ACT Government, holds regular working bees to protect the Hall leek orchid and generally restore the site. Inquiries: [andy.russell@fog.org.au](mailto: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 2). Newsletter despatch is fourth Tuesday of Feb, Apr, June, Aug, Oct.

To help, contact [membership@fog.org.au](mailto:membership@fog.org.au).

**Old Cooma Common (OCC)** with Cooma Monaro Shire Council manages the OCC Grassland Reserve. Working bees are held twice yearly.

Inquiries: [margaret.ning@fog.org.au](mailto:margaret.ning@fog.org.au) or [david.eddy@fog.org.au](mailto: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](mailto:limestone@grapevine.com.au).

**Woodland Flora** *Woodland Flora*, the sequel to the popular *Grassland Flora* is now in advanced production stage. Inquiries: [sarah.sharp@fog.org.au](mailto:sarah.sharp@fog.org.au).

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