



News of Friends of Grasslands

Supporting native grassy ecosystems

July – August 2011

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Program - take the diary out now

July

SAT 16 JULY, 2.00-5.00pm **FOG Midwinter**

Presentation, Mugga Mugga

Afternoon tea provided. Contact John Fitz Gerald
john.fitzgerald@anu.edu.au to register or to obtain more information. See page 2.

THURS 21 JULY, 1.00 **FOG Visit to Transgrid offset site, Williamsdale**

Register with Naarilla Hirsch Naarilla@webone.com.au or 6288 2413 (after 25 June). Limited places available.

August

TUES 23 AUGUST, 5.30-6.30pm **FOG Newsletter Collation & Despatch, Conservation Council Office, Acton**

September

SUN 18 SEPTEMBER, 9.00-4.00pm **FOG/Fenner Working Bee, Yarramundi Reach**



Photos: Jaqui Stol (top), the group hunting for truffles under the trees (middle) and just what they were looking for – native truffles (bottom) by Jean Geue. See story page 7.



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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.

July

Midwinter Presentation, Mugga Mugga 2:00 pm, Sat 16 July

FOG's midwinter presentation will be held at the Mugga Mugga Education Centre, 8 Narrabundah Lane, Symonston. The theme for this year is **Restoration**.

Sue McIntyre, of CSIRO Ecosystem Sciences, will give the main presentation on *Prospects for restoring function and diversity in grassy woodlands*.

Following afternoon tea, Jason Cummings from Greening Australia, ACT will give a presentation entitled *Big picture, little picture*, an update on GA's landscape restoration efforts in the region. For inquiries and to register, please contact:
john.fitzgerald@anu.edu.au.
We need a good idea of numbers for catering purposes.

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 student 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

Visit to Transgrid offset site, Williamsdale

1:00 pm, Thurs 21 July

In 2009 Transgrid obtained approval to build a substation and access road near Williamsdale. As this development impacted on a few hectares of yellow box-red gum grassy woodland, an offset was required by the Commonwealth under the EPBC Act. The offset site is also near Williamsdale, and is an area of modified grassy woodland adjoining a larger area of high quality grassy woodland. The offset site is being rehabilitated by Greening Australia on behalf of Transgrid.

FOG has an opportunity to visit this offset site and find out how the regeneration is being done. The visit will be at 1pm on Thursday 21 July. There are limited places available, so please register with Naarilla Hirsch at Naarilla@webone.com.au or ring 6288 2413 (after 25 June).

August

FOG Newsletter Despatch, Conservation Council Office, 5.30-6.30pm, Tues 23 August

Join us at the Con Council, 3 Childers St, Acton to help get the newsletter out.

September

FOG/Fenner Working Bee, Yarramundi Reach

9.00-4.00pm, Sun 18 September

Contact Jamie Pittock
pittockj@yahoo.com for more information.

FOG e-Bulletin

The FOG e-Bulletin contains the latest information on FOG happenings and more. It contains no pictures so its size is minimal.

If you haven't been receiving it, and you want to, please provide Margaret (membership@fog.org.au) with your e-mail address. Also, please let Margaret know of address changes.

Conferences

July

STIPA and Communities in Landscapes Native Grassland Regeneration Workshop, Murringo (Vic)

10.00am-3.00pm, Tues 5th July
This workshop will be held at Murringo hall. This is a great opportunity to hear Graeme Hand talk about rotational grazing and its benefits to animal production and the environment. The day is free and a BBQ lunch will be served on the day. Please RSVP to Maryanne Smith, Community Woodland Officer on 0457 953 779.

2nd NSW Travelling Stock Routes Conference, Orange

9.30am-4.30pm, Thurs 28 July

The second state-wide TSR Conference will bring together a wide range of stakeholders with the purpose of working together to develop the foundations of a framework of strategic management principles for the shared and sustainable use of the NSW TSR Network.

The day will be more workshop-style than a conference. After brief welcomes and short presentations, delegates will participate in discussion groups addressing the different issues & opportunities related to TSR management. To book a place please visit www.npansw.org.au or call (02) 9299 0000.

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: webmanager@fog.org.au.

Snow gum woodlands listed *Grasscover*

15 APRIL The NSW Scientific Committee gazetted the final determination for declaring snow gum woodland as an endangered ecological community. The short title for this community is *Tablelands Snow Gum, Black Sallee, Candlebark and Ribbon Gum Grassy Woodland in the South Eastern Highlands, Sydney Basin, South East Corner and NSW South Western Slopes Bioregions*, which provides an indication of the diversity of this community and the difficulty that was experienced by those proposing the nomination to describe it.

As many FOG members have this community on their properties it is well to read the determination which may be found on www.environment.nsw.gov.au under threatened species. Such determinations are always highly informative describing the community and its locations, its structures and landscape settings, its defining and threatened species, and the threats to it. The community now occupies 14,000ha and the original community is estimated to have been cleared by up to 72 percent since European settlement.

Rainer Rehwinkel has put many hours of work into having this community listed and is to be congratulated as are the others that he recruited to this work. FOG played an important role in on-ground surveys that provided data to the immense database that has been built up as supporting evidence for the listing and for taking part in meetings that reviewed the evidence and made the case.

Photos: (left) a snow gum woodland (Rainer Rehwinkel), and (right) the fire brigade across the road from Stirling Ridge (John Fitz Gerald).



News Roundup

Stirling Ridge Working Bee *Margaret Ning*

15 MAY It was a very cold morning, worthy of winter, with a temp of minus 7 degrees. However it had turned into a lovely sunny day by the time we had arrived at the Stirling Ridge site.

We had our brief intro and orientation and set about our various tasks. John Fitz Gerald was keen to use the chain saw for the first time since he had completed a recent chain saw course, and was partnered by a couple of people in the course of the day. I put on a backpack of herbicide and set out to locate some grasses that needed despatching, and the balance of the volunteers paired off to cut and daub various cotoneaster, briar, hawthorn and other exotic 'woody weeds'. They then dragged their prunings out to the large pile that grows and grows throughout a normal working bee day, from where the NCA later collects and disposes of them.

Morning tea was especially appreciated given the cold start to the day, and lunch was another fantastic effort, where everyone could construct their own sandwiches and enjoy exotic juices, dips and fruit.

I was keen to use our new dauber doovers for a sustained period, so after completing a couple of backpacks of herbicide, I took some secateurs and a doover containing 50/50 roundup and water and headed for some cotoneaster. It's such an easy operation, and reasonably speedy even if one works on ones own.

There was a little extra excitement when the fire brigade appeared for a prearranged burn of an area adjacent to where we were working. Some of us had a look at the burnt area at the end of the day, and found ourselves alongside a group of curious kangaroos that also seemed to be trying to make sense of what had gone on earlier. Another part of the Stirling Ridge site was burnt a week earlier, and some of our earlier plantings were singed, but are likely to survive.

The button wrinkle wort showed appreciation for our efforts by continuing to flower throughout a large part of the site, and it was very gratifying to see it flourishing in areas that we have cleared out at earlier working bees. Indeed, looking at the areas we have already done brings an enormous sense of satisfaction. The estimate of the amount of woody weeds piled up for NCA collection was 45 cubic metres, with an estimated similar amount of felled trees left on the ground.

GED Research *Billy Buttons*

9 JUNE University of Canberra researchers have been awarded an Australian Research Council grant of \$395k for a four year research program to study the cause of the grassland earless dragon (GED) recent decline. The ACT government will contribute an additional \$304k to the study. Leading researcher Professor Sarre is optimistic that the research will give the GED a shot at survival.

FOG is very concerned about the survival of the GED given much anecdotal evidence that few are turning up in intensive GED surveys. The nationally endangered GED is known to occur at seven sites in the ACT.





Pauline Lynga recognised at volunteering awards

John Fitz Gerald

MAY 10 The tremendous volunteer work of Pauline Lynga was recognised at the 2011 ACT Volunteering Awards. A special and well deserved award acknowledging Pauline's work was presented to her husband Gosta in commemoration of her contribution, dedication and outstanding voluntary service to the community.

Pauline joined the Cooleman Ridge Park Care Group in 1992, taking an active part in the Cooleman Ridge tree survey as well as always being active in weekly and monthly work-parties. Her contribution to the success of the Group and to the maintenance of the nature of Cooleman Ridge is immeasurable.

She expertly coached the Group's members in the recognition and naming of plants. Pauline provided leadership, support, knowledge and friendship to all as well as a huge enthusiasm for the work involved.

As an extraordinary example, immediately after the Canberra fire of 2003, which dramatically hit Cooleman Ridge, Pauline helped organise the Group to work there in the following week, despite the fact that she and Gosta had lost their home and possessions in the same fires.

Some of Pauline's fine work in documenting the flora of Cooleman Ridge has been published in the Group's monthly newsletter, of which she was the editor for years. Her plant list is published on the Cooleman Ridge web site.

Most recently, her meticulous records provided the basis for a monograph just published on the web site – plant recovery following a prescribed burn in November 2009.

Audrey Jones

Geoff Robertson

On 21 May Audrey Jones, aged 88, died at Yass. In her last days she was surrounded by her family. Audrey was Margaret Ning's mother and my mother-in-law. Audrey arrived as a young girl in Canberra in the mid 1920s and apart from a few years in Melbourne, she lived all her life in Canberra.

On my arrival back in Australia in 1996, she said that she had registered me for a FOG working bee at St Mark's. There I met Dave Mallinson who told me about Canberra's grasslands. She also registered Margaret and me for the amazing FOG two-day workshop that was held later that year.

She was the only person at that time that I knew who had such a wonderful knowledge of plants. Earlier I had persuaded her to compile a herbarium for our property at Garuwanga which was very extensive by the time Margaret and I returned to live in Australia after living in Moscow and then Washington DC from late 1993 to late 1996. If she didn't know the species, she had them identified at the Australian National Botanic Gardens. On visits to Australia and after our return, Audrey, Margaret and I would wander around Garuwanga looking for plants and she would provide a lot of information on each species. She certainly played a major role in getting Margaret interested in plants.

For some years she played an active role in FOG, attended many functions, and she nominated me to take on the position of president. So, in so far as Audrey inflicted Margaret and me on to FOG, she carries a large responsibility. Unfortunately as her husband Bob became ill she had less time for FOG but always read the newsletter and commented favourably on it, and pointed out typos, etc.

Apart from her involvement in FOG she took a lot of interest in gardening, and native plants in particular. She was a founding member of the Canberra Society for Growing Native Plants and she attended many (then) Technical College classes to learn about them and how to grow them. For many years she worked at the Australian Institute of Aboriginal Studies and took much interest in Indigenous matters. When I wanted to find a suitable name for Garuwanga, she assisted in finding information on the Ngarigo language.

She was a remarkable woman and she will be missed.

Seeing Grasslands Exhibition

Heather Sweet

THURS 2 JUNE A large crowd packed Photo Access' Huw Davies Gallery in Manuka to view David Wong and Chris Holly's grassland images. ACT Commissioner for the Environment, Maxine Cooper, opened the exhibition with a fine speech that stressed the importance of conserving our grasslands, given how little remains. She urged us to heed the title of the exhibition, and really see what grasslands, which are so easily overlooked, have to offer. David and Chris may have to work on her vision for travellers arriving at Canberra Airport to be greeted by a gigantic image of a grassland dragon!

The images presented by David and Chris ranged from close up shots highlighting the beauty of grassland plants and insects to panoramas showing suburbia encroaching, highlighting just how close we live to these remarkable places. A new audience was introduced to these beautiful natural places by both David and Chris's photographic skills and creativity. The exhibition ran until 19 June.

David's photos can also be seen on the flickr site <http://www.flickr.com/groups/seeinggrasslands/>.

News from MoTH

Jenny Horsfield

MoTH is a member of Friends of Grasslands and has long appreciated the work FOG does in advocacy, education and on-ground support of landcare in our district.

I last wrote a report for the newsletter in August 2009, in which I described our work, in partnership with the Southern ACT Catchment Group (SACTCG), in a long-term project that aims to 'Return Life to Tuggeranong Creek' through extensive plantings of native grasses and shrubs above the dry creek bank. I commented at the time, in the middle of our extended and seemingly endless drought, that many of the grasses were flourishing but the bigger plantings were struggling.

Now, after this amazing spring and summer, I can report that our project has 'taken off'! The scattered plantings of yellow box (*Eucalyptus melliodora*) are thriving, a couple of the young trees reaching head height. A number of *Indigofera* and *Cassinia* shrubs are well-established and provide protection for the grasses and groundcovers beneath them. We are discovering with great interest that as we extend the area of native vegetation above the creek bank and eliminate the introduced pasture grasses and exotics like African lovegrass, much of the vegetation that would have grown along the original creekline is coming back. We have healthy stands of wallaby grass (*Austrodanthonia* sp.), redleg grass (*Bothriochloa macra*), various forms of *Stipa*, and some areas covered by a lovely purple *Glycine* and native geranium. We are very proud of the success of our planting of sticky everlasting daisies which now cover a whole bank and have seeded profusely.

These past months, the croaking of frogs has been a welcome sound as we worked along the creekline, with the usually dry creekbed retaining water for the first time in many decades. I took a photo in

mid-March, showing extensive clumps of frog spawn on the surface of the ponds. All around us we see a revival of insect and bird life, a welcome addition to the area's biodiversity.

MoTH is also involved in caring for the remnant woodland on the Tuggeranong Homestead property. A Caring for our Country Community Action grant, gained through the tireless work of Steve Welch, our SACTCG coordinator, has allowed us to further our work on this site. Plantings over the summer are intended to provide a healthy understory in the woodland where there are some fine stands of yellow box and Blakely's red gum (*E. blakelyi*).

MoTH is very grateful for the continuing support of Geoff Robertson. We welcome any FOG members who perhaps live in Tuggeranong and would like to be involved with MoTH on an occasional basis in landcare work at this historic property.

robhorsfield@bigpond.com

MoTH are currently involved in developing a rehabilitation plan for the old creekline at the homestead, and plan to submit a formal proposal to the Minister and seek approval from the relevant ACT government agencies.-Ed.

Photo: Working on Tuggeranong Creek



Dauber Doovers Update

Margaret Ning

One third of our stash of 100 dauber doovers has been snapped up by people seeking to find a better way to do battle with woody weeds. I tried one out myself at our recent Stirling Ridge working bee, and found it wonderful to use, even though I was operating on my own. I just sat on the ground, up close and personal with the cotoneasters, used secateurs to cut the stems and immediately applied the Roundup mix on the cut stumps. Other members of the work party operated in pairs equally efficiently.

The applicators are perfect for work on cotoneaster, briar, hawthorn, pyracantha, and other woody weeds, using a mix of 50/50 Roundup and water. I have even made the occasional gratuitous daub at an offending flat weed, and also wondered how effective they may be to paint onto a strappy-leaved plant like a cape tulip or some of those white lilies one sees on coastal roadsides. (Digging plants with bulbs inevitably leads to some bulbs being missed.) Obviously rubber gloves would also be used in that process, and one couldn't realistically tackle large numbers of the invaders. Anyway, these ideas are just speculative at this stage, but I shall definitely be doing some experiments once spring comes around.

Please contact me if you would like to buy some for your woody weed campaign in your own patch.



FOG advocacy

Naarilla Hirsch

April 2011

FOG provided comments on three papers released for comment by the Commissioner for Sustainability and the Environment (CSE) as part of her "Investigation into the Canberra Nature Park; the Molonglo River Corridor and Googong Foreshores". The papers were "Managing Rabbits in Canberra Nature Park", "Impacts of Climate on Canberra Nature Park: Risks and Responses" and "Funding options for protecting the environment through enhanced management actions".

FOG believes that resourcing of maintenance of the high conservation areas of Canberra Nature Park is inadequate, and that rabbit control is best considered as part of a bush management approach rather than a single management issue. FOG is concerned about the reference in the rabbit management paper to the establishment of enclosures to promote recovery or restoration of suppressed plant and animal species as potential biodiversity offsets. Biodiversity offsets require a long-term commitment to their maintenance and to ensuring that they achieve the desired effect of enhancing conservation of native grasslands.

FOG supports the key strategy of enhancing the resilience of ecosystems and species through maintaining diversified habitats and refugia and improving connectivity on a 'whole of landscape' basis in the climate change paper. FOG has been arguing for such an approach to grassland and grassy woodland conservation for some time.

FOG supports a levy such as is proposed in the funding paper in principle. FOG has been arguing for an expert bush management team in the ACT, but knows that this will require additional funding – a levy seems to us to be a good way to go about this.

The Commonwealth released a Recommendation Report with proposed conditions for the development of Googong Township NSW. A pink-tailed worm-lizard Protection and Management Plan must be approved by the Minister and implemented. The plan should include establishment of a pink-tailed worm-lizard conservation area, management measures to mitigate construction impacts, and details of legal mechanisms to protect the conservation area in perpetuity. FOG was pleased to see this requirement and indicated that we would be happy to provide comment on, or input to, such a plan in the future.

Another proposal submitted under the EPBC Act 1999 concerned a wind farm at Collector. This referral attempted to minimize infrastructure in areas identified as moderate to very high conservation value. FOG supported the suggestion in the referral to seek input from an ecologist when deciding the final infrastructure siting, and asked that connectivity issues also be taken into account. We also suggested that monitoring the rehabilitation of areas disturbed by the development or of any offset area should continue until these areas are restored to a higher conservation value.

May 2011

A further paper released by the CSE as part of her investigation into the Canberra Nature Park was "Should Goorooyarroo, Mulligans Flat, Mount Majura and Mount Ainslie become a National Park or remain as discrete Nature Reserves as part of Canberra Nature Park". FOG has argued for years that native grassland and grassy woodland conservation in the ACT needs to be on a landscape basis. We supported the proposal that these areas become a National Park in the ACT. We supported the recommendation that the proposed park be managed to showcase world class science and to guide best practice woodland recovery and management. FOG also considered as critical the report's recommendations that this proposed amalgamation not

be at the expense of reduced management of other high-conservation-value reserves in Canberra Nature Park.

FOG has written to Minister Simon Corbell about the proposal for all sections of the ACT public service to use one logo (the ACT government 'crest'). We argued for the retention of the gang-gang logo by Parks, Conservation and Lands (PCL). Reasons for doing so include recognition of PCL's important role in managing more than 50% of the land mass of the ACT, easy recognition of parks and parks services officers on the ground, and the strong association for many Canberrans with the gang-gang.

Offsets discussion

In May the advocacy group held a discussion about offsets, as they have become a part of the development process. This followed the offsets workshop and development of our offsets policy last year.

The following questions were raised. What is an acceptable offset? Does FOG want to target specific offsets? How well are offsets working? What sort of long term monitoring is needed? What sort of involvement does FOG want to have in each offset arrangement?

FOG opposes development in high conservation areas. FOG also opposes development that impacts vulnerable or endangered species' habitat or ecosystem communities. We therefore oppose offsets in these circumstances. However, the reality of the current situation is that offsets are mandated by government for the destruction of native vegetation. In these circumstances FOG endeavours to achieve the best conservation outcomes.

As a result of the discussion, FOG's offsets policy will be refined and a summary for public release will be developed. The discussion raised a number of questions for further investigation by the advocacy group.

Finding truffles at Mulligans Flat

Jean Geue

SUNDAY 1 MAY At least four things were on the menu. Searching for native truffles at Mulligans Flat beckoned. Good decision, the sun shone and it was a great autumn day. Jim Trappe and Jacqui Stol had a great story to tell. About 25 people from FOG and Field Naturalists gathered to hunt for truffles – lots of new faces and old friends.

Finding Mulligans Flat via the new suburb of Forde was easier than it had been for some time. During the last decade, each visit has needed a different route as Gungahlin expands over the old Gundaroo Road. Now there are brown (tourist standard) traffic signs off Horse Park Drive and within Forde.

The truffle story is fascinating. It is part of endangered Box-Gum Woodland research that ANU and ACT Parks & Conservation are undertaking at Mulligans Flat/Goorooyarroo Nature Reserves. One of the research projects is to reintroduce small burrowing animals such as bettongs. Their loss (coupled with grazing by hard footed sheep, cattle and horses) has caused excessive compaction of our ancient soils. The result has been a loss of vegetation diversity and a loss of resilience in our landscapes.

The small burrowing animals selected for the project are bettongs from Tasmania that are being bred for the project. There are none suitable for our region left on the mainland.

For bettongs to survive they need fences to protect them from cats, foxes and rabbits. And they need to eat. Truffles are their favourite food. The question is 'are there enough truffles for them to survive and will they prosper without unforeseen adverse impacts? Australia has an incredible variety of species, but there has been very little scientific research and our world truffle authority was from the United States.

Professor Jim Trappe of the US and Jacqui Stol of CSIRO Sustainable Ecosystems talked about their project then led the hunt for native truffles. Truffles live underground and the specialised tool for finding them is a rather scary looking rake.

The truffle hunt took us through one of the exclusion fences within the reserve. Ranger Grant Woodbridge explained how the special fence was constructed. Grant and Peter Mills had been to South Australia to investigate the best fencing to keep ferals out and to protect

vulnerable native animals. The fence continues well underground to cope with rabbits and wombats. There are two or three lines of electric wires and a floppy top to keep the kangaroos at bay. The gate for walkers has a clever closing device and a text message is sent to Grant if something goes wrong. We went into the exclusion area using the vehicle gate that the rangers normally open electronically from their vehicle.

I was much happier with fenced enclosures within the reserves after listening to Jacqui. As I had predicted when they were first proposed, there are a number of places along the enclosure fences with bare earth caused by vehicle tracks on both sides of the fence. However, this enclosure allows monitoring of grazing pressure. The rabbits were eliminated and most of the kangaroos moved out. We've just had a great season for the kangaroo grass with prolific flowering and seeding. Inside the fence the kangaroo grass was as high as I've ever seen. Outside, it was grazed to a couple of inches.

Jacqui's team has undertaken an impressive number of transects for their soil and vegetation surveys. I particularly liked her focus on examining soil types and linking them with the dominant plant species in each zone. Soils are not well understood. Apparently, there was a better correlation with trees than understorey.



I was interested that Jacqui accepted up to 30% of bare patches as being healthy. What we think of as bare, is often protected by lichen crusts and litter. Some people are against digging out weeds because it disturbs the soil. Perhaps the roles of digging animals and of soil

crusts need more widespread understanding.

Next we headed on our truffle hunt toward wetter spots under mature eucalypts with a tangle of old branches and sapling regrowth. Fascinating to see how well microlaena had done this season and the lack of weedy sheep camps under the trees.

Jacqui made like a borrowing animal and scratched in the leaf litter. No luck, try again. April had been dry after more than a year or rain. Then success - and tiny truffles are in Jim's hand. Watch this project for more results.

Thanks Jim, Jacqui, Grant, FOG and Field Naturalists. Keep up the good science – we can't make effective conservation decisions without it.



PHOTOGRAPHY WORKSHOP AT GARUWANGA

Margaret Ning and Geoff Robertson



We were a group of twelve who converged on Nimmitabel for our photography workshop. Our presenters were Geoffrey Dabb and 'Steve' Stephinson, well known birdos from the Canberra Ornithologists Group.

Saturday began as overcast, which suited us totally as we were intending to stay in the barn for our first session. Geoffrey showed us slides and fielded many questions. Equipment, depth of field and photography software were among the topics he covered. He also showed some advantages of shooting in 'RAW' format where this option is available. There was a show and tell of everyone's equipment, and then Joe McAuliffe talked about how he takes some of his splendid pics.

We had toasted sandwiches for lunch, and then regathered for the afternoon session. Geoffrey discussed traps for young players, and then Steve showed us his photographs and talked about his photography dos and don'ts.

After finishing the workshop for the day, Geoffrey, Steve and Greg were shown around the property by Geoff. At the tallest peak on the property, Geoffrey spotted some very small mammals climbing around a dead tree. They optimistically reported back, and the hope was that a new native species for Garuwanga had been sighted.

The break in the weather continued, and we were able to go ahead with the planned evening BBQ. In fact, it was such a pleasant evening that we ate our dinner

around the barby. Geoffrey Dabb entertained us with some poetry and song, with such an outstanding performance that few were game to follow. Then there was a minor hiccough, when the power went out in the house and barn, but fortunately we had sufficient candles to see us through. A phone call confirmed there was a general outage in the area.

On the Sunday morning before breakfast, Geoffrey was out and about with his longest lens taking photographs of birds, and this developed into an informal session as many of the participants took instruction on how to take pictures in those circumstances. After breakfast, we drove in convoy to an area on the property near the Kydra River, where people fanned out, cameras in hand, to take further instruction and photos. Joe spent most of his time taking photos of reptiles. It was shaping up to be a lovely fine day so we were able to wander extensively.

Before lunch Geoffrey showed us the various photographs he had taken earlier in the morning, and illustrated that pictures taken in dim light, using raw format, could be resurrected.

After lunch on the Sunday, Joe talked about his reptile breeding program, and Geoff gave a presentation on Garuwanga, and his and Margaret's biodiversity and cultural heritage stewardship agreement with Murrumbidgee Catchment Management Authority.

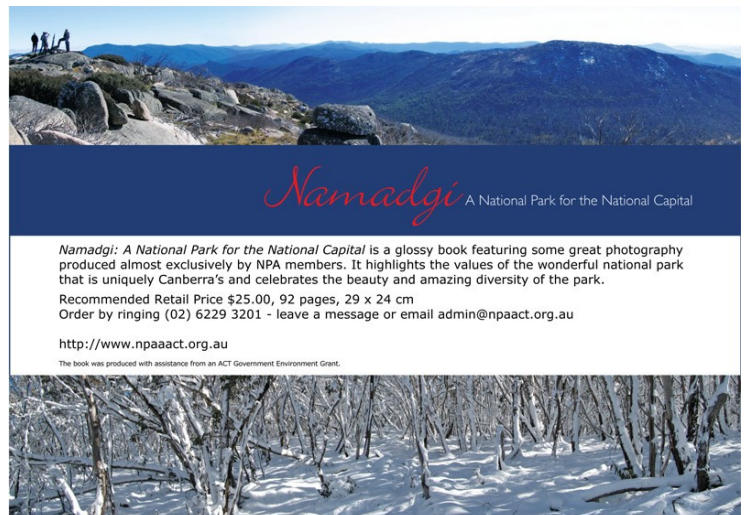
By the time Geoff and I departed Garuwanga on the Sunday evening, Geoffrey Dabb was stationed at the 'small mammal site', totally optimistic that he would be able to get some pictures of the little critters, which we were all hoping would turn out to be antechinus. And that is what it was – a group of agile antechinus, as kindly identified for us by Darryl King who was one of those who originally described the species.

Special thanks go to Geoffrey and 'Steve' for coming along and patiently imparting their expertise, and to Greg Flowers for organising the weekend.

Do you want to advertise an event, job, etc through FOG?

The FOG Newsletter only advertises FOG activities. However, non-FOG activities, of interest to FOG members, are included in the FOG e-Bulletin, which appears frequently (usually before a major FOG activity).

To publicise an activity, etc., please provide a short description to FOG e-Bulletin editor (see back page).



Report 2010

FOG program 2010

Geoff Robertson

FOG's program continued to offer many and a wide variety of events in 2010 and, in addition, there were many meetings etc where members were representing FOG or assisting in governance. FOG's program has always aimed to educate its members, assist them in skills development, and to have fun doing so. However, its on-ground work also has a substantial physical outcome. An important FOG theme is that an event is successful if only a few people attend, providing they learn something new and/or simply enjoy it.

During 2010 the level of on-ground activity increased. The FOG-Fenner group organised six working bees and added two more when FOG teamed up with Conservation Volunteers Australia – Jamie has given a detailed report on this elsewhere. The Old Cooma Common group held two working bees as well as a couple of extras when Margaret Ning and Jim Williamson took on extra blitzes. The Hall Cemetery group held three working bees, or was it four? The FOG-Scottsdale group undertook the annual (previously six monthly) African lovegrass survey at Scottsdale. Rainer Rehwinkel organised two *Lepidium hyssopifolium* translocation days. While no additional field work was undertaken on the golden sun moth project, the project team met frequently behind the scenes, pulling the data together and drafting and finalising the report.

Field trips were confined to the Canberra region (Stirling Ridge, Kama Woodlands, Hall TSR, Goorooyarroo, and Burra) except for the trip to south east forests and swamps led by Jackie Miles early in the year. In addition there were several visits to properties (e.g. Lake George).

There was a wide variety of workshops. January kicked off the Showcase with the *FOG All Stars On-ground Team*. Unfortunately, a more complete write-up of proceedings did not eventuate. On that same weekend Sarah Sharp did a short field workshop on *monitoring grassy ecosystems* – both events were held at Garuwanga to coincide with the opening of the Garuwanga barn. Later in 2010 Sarah held a much longer workshop *Different ways to monitor your patch*, as one of a series of workshops designed to introduce new guidelines into the ACT. A different type of workshop was that held by the Advocacy Group on determining FOG's policy on *offsets*. The group meets regularly to discuss its strategies and hone its skills. Yet another type of workshop, *Seeing grasslands*, this one on photography, was organised by David Wong in November, also a great success.

Open gardens were a new feature with the Russell's open garden (Aranda) in October and the Rehwinkel garden (Bungendore) in November with FOG and STEP members providing the volunteer labour. The Russells donated their takings to STEP and the Rehwinkels to FOG.

Then there was more. The AGM in March took on a new format. It was held at the Conservation Council, was well attended, enjoyed by all (or so they said), and was followed by dinner. In March FOG also had a combined stall with STEP at the Festival of the Forests, a pleasant event. In May FOG was the co-host of the *Grassland Forum*. This event was well attended, lively and helped to shift thinking. Some of the recommendations have already been effected but the more substantial issues need further work. In July, the winter slide afternoon had three presentations (Andrew Zelnik, Rainer Rehwinkel and me). Andrew's presentation on travelling stock reserves was outstanding and should lay the groundwork for further work in this area – FOG has been assisting to scope Livestock Health and Pest Authority TRS Management ranger training with the Australian Network for Plant Conservation. In November FOG held a stall as the successful Kosciuszko to Coast Fair at Bredbo and organised the Speakers' Hut. Also in October FOG had a grassland education encounter with Little Family.

Organising such an enormous program has required developing procedures so that the roles and responsibilities are clearly understood. The program group, especially Janet Russell and Linda Spinaze put much effort into developing procedures and these should provide a good framework in the years to come. Towards year's end, Janet and I stood down as co-leaders of the program group, and John Fitzgerald and Linda took over. They are making events hum nicely.

Con Council Bio Group 2010

Sarah Sharp

Tony Lawson and I are FOG's representatives on the Conservation Council's Biodiversity Group. The major activities of the group in 2010 were biodiversity mapping, Bush on the Boundary Molongo (see separate report), submissions and weeds.

The biodiversity mapping project involves a grant of \$27,000 to prepare maps of the ACT's vegetation and species. Planning has commenced on this project and I am taking an active part in this.

Submissions were made in response to many matters including development applications, studies and strategies. Those requiring major effort centred on Molonglo issues, the Eastern Broadacre Study, Throsby developments, and the inquiry into the ecological carrying capacity for the ACT.

The government's weeds budget was identified as a major concern and submissions made to the Chief Minister on this.

Continued next page

Molonglo BoB 2010

Sarah Sharp

The Molonglo Bush on the Boundary (BoB) was established in May 2010. Anna See from Conservation Council has been employed part-time to co-ordinate the group's activities. I was appointed as FOG's representative. Its members also include the Molonglo Catchment Group, Land Development Agency, STEP, Greening Australia, Conservation Council, Canberra Ornithologists Group, and Hawker College.

Other groups, ACT Govt agencies have been invited, but have not yet attended.

The main issues occupying the group have been retaining conservation values of the river corridor, cat containment, and planning standards for the suburbs. Cat containment has now been mandated for Wright and Coombes. The group is still awaiting the environmental report on the Molonglo River corridor.

FOG Profit and Loss for 2010 Excluding Publication Account

	2010	2009
Income		
Membership	4,110.00	4,290.00
Donations	907.00	1,466.70
Net income from grants	275.00	0
Other income	350.00	184.50
Interest income	490.63	448.13
Total income	6,132.63	6,389.33
Expenditure		
Newsletter	1,205.70	2,187.11
Administration & stamps	2,102.96	954.21
Catering & workshops	245.65	164.05
Membership of groups	184.00	215.00
Purchase of FOG cards	662.50	0
Purchase of outdoor display	1,278.00	0
GSM expenditure	0.00	268.81
OCCGR expenditure	0.00	1,114.15
Miscellaneous	250.30	439.35
Total income	5,929.11	5,342.68
Surplus/deficit	203.52	1,046.65

FOG Balance Sheet for 2010 Excluding Publication Account

	2010	2009
Assets		
Bank deposits		
General account	17,036.70	11,605.06
Fixed term	12,031.08	6,540.45
Petty cash	50.00	50.00
Other assets	0.00	227.70
Total assets	29,117.78	18,423.21
Liabilities		
Grant funds carried forward	13,840.79	3,349.74
Other	0.00	0.00
Total liabilities	13,840.79	3,349.74
Members funds		
Opening balance	15,073.47	14,026.82
Plus surplus for year	203.52	1,046.65
Closing balance	15,276.99	15,073.47

FOG 2010 Accounts

Geoff Robertson

The tables show the annual profit and loss and balance sheet for 2010 for the FOG general accounts. These annual statements have been kept relatively simple. The second table shows the FOG financial accounts which have been audited and from which the analysis has been performed.

The tables show that during the year:

- FOG had a small surplus of \$204. Overall income was \$6,133 and expenses \$5,929.
- Members' funds at the end of the year were \$15,277. FOG's assets were \$29,118 and liabilities were \$13,841, essentially due to grants that have been received but not yet spent.

Newsletter available electronically

You can receive the newsletter electronically. The electronic version is in colour. To arrange, contact margaret.ning@fog.org.au.

Geoff Robertson

Isobel Crawford

Geoff Robertson retired recently as President. Isobel Crawford asked him about the role and about his plans for the future

IC: When did you become President?

GR: It was late 1997.

IC: Were you still in the paid workforce?

GR: Yes, but I didn't think the job was going to be as big as it proved to be. Margaret had been on the Committee. The previous President, Art Langston, stayed on the Committee as Treasurer and was my mentor on all the issues which I knew nothing about. Also the Committee had a lot of great people who could think about the issues, and had a sense of where we were trying to go.

IC: Would you see yourself as having any background in conservation at that stage?

GR: No. I did economics and political science at uni, and I've always been involved in organising things and I have been involved in lots of groups.

I worked at the Australian Bureau of Statistics and at the International Monetary Fund. In many ways the sort of statistical economics work I had been doing did have parallels with ecology: concepts, how to measure things, classifications. And of course, luckily, being involved the way I was when I started to learn about ecology, I had access to FOG's experts: I'd ask all these questions, and they would answer them!

IC: What future did you see for FOG? What was its most important role?

GR: I think all the things it's doing today: advocacy, education, communication. Initially we weren't involved in on-the-ground work, but that became a very important aspect.

I've always thought that in biodiversity we keep losing the battle. But if we can slow down the rate of destruction then at some stage we may learn how to reverse the damage.

IC: Do you feel you've achieved the future you envisaged?

GR: I think collectively we have. Sometimes sitting in a cafe I'll hear people, people I don't know, talking about a local plant. That's a measure of achievement. All the people in the bureaucracy speak the right language, and a lot really are switched-on. I think FOG has had a big influence.

IC: What ambitions do you have in the future?

GR: I want to spend more time with my family. It's really great having these impressionable grandchildren. Spending time with them is really important, and a great privilege.

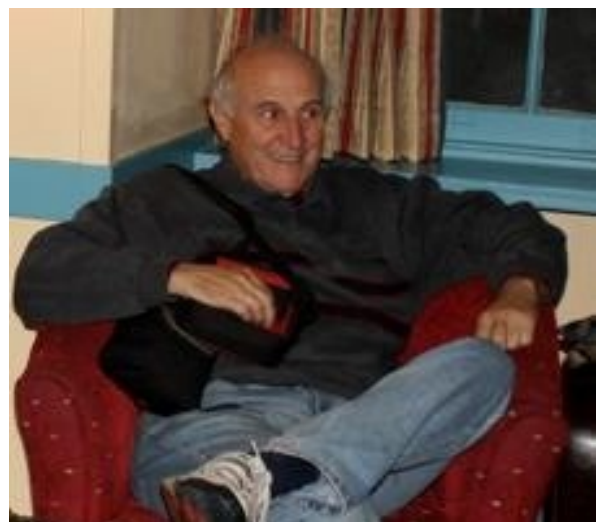
I'm involved as chair of Kosciusko to Coast. I want to see that on its feet.

I'd like to get back to doing some drawing and painting.

And then there are the indigenous workshops at Garuwanga. More and more I see the indigenous connection as important. Taking this on was extremely challenging. The benefit is that from the point of view of conservation or farming you can get a lot of insight about ecological function or biodiversity.

IC: Thank you for agreeing to be interviewed. And thank you so much, both you and Margaret, for such an outstanding contribution to FOG over so many years.

Photos: in case you didn't know who Geoff is!



Cultivation Corner:

An Australian Garden Alan Ford

This garden is an Australian garden with almost total local plantings. It was begun in 2003 after a long struggle with the local toy Government to remove the exotic trees in the front yard.

Initially, the centre of the front yard was planted with a *Themeda triandra* base which was added to over the years with 3-4 local native grasses –for example, *Cymbopogon refractus* and a variety of local daisies (*Brachyscome* sp-in particular) and *Helichrysum ruti-dolepis*. There is an on-going attempt to establish lilies such as *Arthropodium* sp and *Bulbine bulbosa*. The nature strip was left as is for a long time but that was eventually mulched and the natives are spreading.

The northern (road) edge of the garden has a *Eucalyptus sideroxylon* (not local) which must have been planted when the block was established over 40 years ago. It has been allowed to stand but has been damaged and may have to come down in the longer term. The road edge was planted with a mixture of local shrubs from local seed sources, *Cassinia quinquefaria* becoming the dominant but with *Bursaria spinosa*, *Daviesia mimosoides* and the occasional *Grevillea lanigera* and *Pomaderris pallida* adding to the variety. A later planting included a number of wattles, including *Acacia dealbata* and *Acacia pycnantha*.

The eastern edge of the front is very similar to the road edge, although there are surviving *Acacia buxifolia*, *Acacia rubida* and some *Pomaderris* sp. making an in-

teresting combination.

The backyard is a different matter, although the shrub layer tends to be almost the same as the front. In this case the central grassland has 10 local grasses in it plus the array of daisies and lilies that have been planted in the front. When the large trees were removed from the edge in 2005 a series of locals emerged, notably *Bothriochloa macra*, *Austrodanthonia racemosa* and the daisy *Cymbonotus* sp. In view of this base I decided to leave the area and weed it as necessary adding daisies and grasses like *Microlaena stipoides* as I went.

The edges of the backyard contain the same shrub mix as the front, although the edge contains a *Callistemon* from the origins of the block and a *Banksia integrifolia*. Beware of the local *Acacia mearnsii*, which, in my backyard, is trying to become a tree. There is another successful local wattle, *Acacia dawsonii*, a *Leptospermum* and examples of both *Mirbelia oxylobioides* and *Crocea exalata* hiding in the bushes.

The daisy that I am really hoping will establish itself in the garden big time is *Leucochrysum albicans*, which is needed to offset the very aggressive *Chryscephalum apiculatum*.

Although the *Themeda* is establishing itself in the backyard it clearly doesn't like the conditions and the other herbaceous plants are putting up a fight to limit its spread. Never plant *Themeda* on the drip line.

The garden has depended on the availability of local plants and the hard work of those who have developed a local plant base. It is a work in progress.

Which herbicide should I use? Margaret Ning

I asked Brett Jones, Chief Weeds Officer for Cooma-Monaro Shire Council whether FOG should be using Taskforce instead of Roundup when chasing Chilean needle grass and African love grass here in Canberra.

I prefer Roundup biactive to Taskforce due to the cost, eco friendly aspect and lack of residual, and thought that Taskforce only becomes active after it has rained, whereas Roundup is immediately effective.

Brett set me straight "Yes and no to all of the above"!!!!

According to Brett, Roundup biactive cost \$130-\$140 per drum when bought about a month ago. Current quotes for Taskforce and other generic brands of sodium flupronate product range from \$451-\$499 per drum. The dose rate of Roundup biactive for serrated tussock (1L/100L) is 5 times that of Taskforce (200mL/100L), which means it's relatively cheaper to go with Taskforce. The Taskforce rate for African lovegrass is half as much again as serrated tussock (300mL/100L), which comes out at about the same cost as Roundup. Using lighter dose rates can still be effective, and will of course alter the costings.

Brett believes you're better off sticking with Roundup from spring to autumn when the plants are growing well and a quick kill to prevent seeding is important. He recommends a combination of the two in most circumstances to

ensure a good kill. Serrated tussock and lovegrass type weeds often have overhanging seedheads or other vegetation that prevents a complete coverage, so with straight Roundup they're often only browned off and come back to life. Taskforce is absorbed through the roots and leaves, and while it does start working straight away, it will take several months or longer to kill the weeds. It's mostly taken in through the roots, so takes effect better after rain which soaks it down into the root zone. But, at the end of the day what's the hurry, it's only June and they're not going to seed until November-ish– that's plenty of time for Taskforce alone to take effect

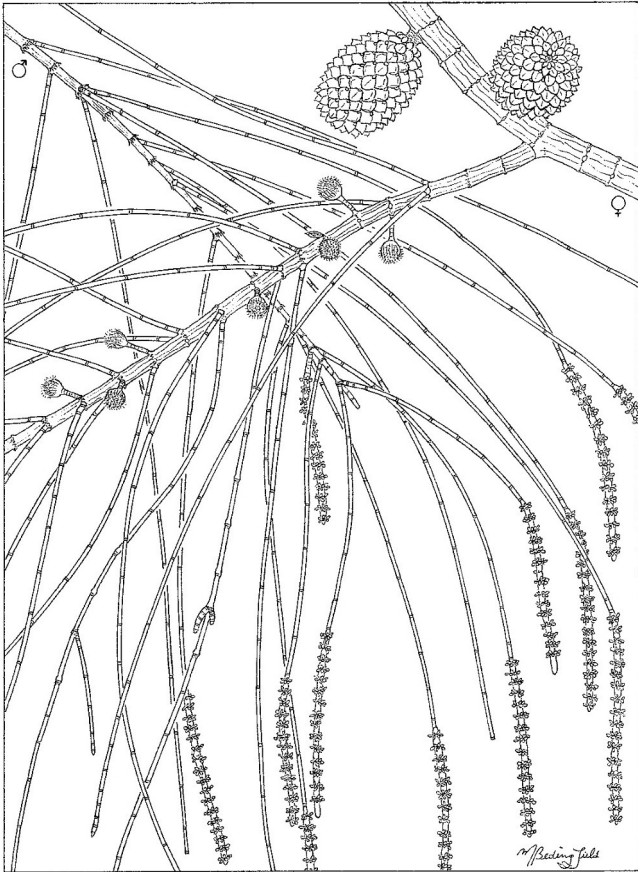
Brett recommends Taskforce for spot spraying individual plants or small patches until about August, then in combination with Roundup to prevent seeding. Serrated tussock and Chilean needle grass should be growing well enough at the moment (Lovegrass probably won't be) to use Roundup alone but consider that in the event it doesn't work you will have to do them again and time is valuable.

Brett stressed that Roundup is no good this time of year on African lovegrass as the plants are dormant. It will not achieve the desired results when weeds are dormant or stressed.

When using chemicals, always read the label and observe the directions on it - Ed

Drooping she-oak – an interesting tree that's important for our birdlife

by Michael Bedingfield



When drawing and getting to know the drooping she-oak I found it to be a very interesting tree indeed. Its leaves are most unusual. They appear to be long, needle-like, and divided into short segments. But these drooping “needles” are actually very thin branches, with the actual leaves being long, narrow scales on the surface of these branches. They are arranged lengthwise along them, and look like stripes along the stems. A magnifying glass is required to examine them properly. There are 9 to 16 scales per segment, which can be 10 to 20 mm long. As the tree grows, some of the “needle-branches” wear out and drop off, and particular branches get thicker. As they grow, the impression of the original leaves remains on those branches, even when they are quite thick, producing a decorative linear pattern on the branches. There is a gap between each circle of leaves, and any new growth occurs in this gap. New needle-like branches can grow in these gaps, as well as the female flowers.

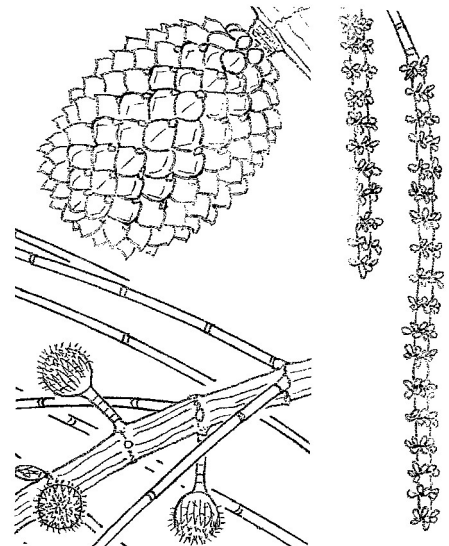
The tree has different forms for male and female (i.e. it is dioecious). On the female tree the flowers are tiny orbs, up to about 7 mm in diameter, covered in the bright red filaments of the stigmas. The male flowers are orange, and grow on the tips of the branchlets, arranged in circles around them. Since they produce many male flowers on the tips of so many branchlets, the tree can be quite colourful at flowering time, which is in spring.

Fertilization occurs via wind-blown pollen. The orbs of the female flowers grow into an oval-shaped cone, which is hard and woody and up to 5 cm long. The preciseness, regular geometric shape, and arrangement of the parts of the cone, are the stuff of mathematics. The triangular points look like little beaks, and when they open the tiny seed is released.

The drooping she-oak is a small tree that grows up to about 10 metres tall, with a rounded head and drooping branchlets. It is fairly common in the ACT, and its local habitat is on the dry rocky hillsides, at lower altitudes. The wood is very hard, and the fissured bark on the trunk is quite tough. It copes in various ways with extremes of heat, cold, drought and bushfire. The tree belongs to the family *Casuarinaceae*, which includes both *Casuarinas* and *Allocasuarinas*. Its botanical name is *Allocasuarina verticillata* (though it has been known previously as *Casuarina verticillata*, and before that as *C. stricta*). The word *casuarina* comes from the resemblance of the leaf-branchlets to the feathers of the cassowary. The different species of she-oaks are similar in many ways. The large ovoid cone is the easiest way to distinguish the drooping she-oak from other she-oak species.

The glossy black cockatoo (*Calyptorhynchus lathami*) has been declared a vulnerable species in NSW, and is of concern in the ACT too, mostly because of loss of habitat and food trees. It inhabits woodlands and open forests, and feeds almost exclusively on the seeds of she-oaks. So, in our area, the drooping she-oak is an important food source for it. Some people have been planting this tree in order to improve the future food supply for the bird. For example, at the National Arboretum, 190 of these trees were planted in 2010.

In the drawing I have shown a branch from a male tree coming into the picture from the left, and a branch from a female tree coming in from the right. The framed drawing is at half size, with the flowers and cone shown separately at normal size. The drooping she-oak is a hardy tree with a difference, and important for our birdlife too.



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.

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.

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 (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, 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.

Grassland monitoring, Scottsdale holds monitoring days at the Bush Heritage property, Scottsdale, at Bredbo. Inquiries: 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.

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.

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 *Woodland Flora*, the sequel to the popular *Grassland Flora*, is now at advanced production stage. 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.