



# News of Friends of Grasslands

Supporting native grassy ecosystems

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September–October 2014

## FOG dates to note

### Hall Cemetery working bees:

- **13 September**, Saturday, 9.00 – 12.30. Details p. 2.
- **8 November**, Saturday, 9.00 – 12.30.

### National Land workparties, August – November, at:

- Stirling Park, Yarralumla ACT
- Yarramundi Reach, Lady Denman Drive, ACT
- Scrivener's Hut, State Circle, ACT;

on:

**31 August:** Sunday, 9.30 – 1.00. A planting party at Stirling Park; details p. 2;

and

**17 September:** Wednesday, 9.00 – 12.30, Stirling Park

**20 September:** Saturday, 8.30 – 12.00, **Yarramundi Reach**

**28 September:** Sunday, 9.00 – 12.30, Stirling Park

**15 October:** Wednesday, 9.00 – 12.30, Stirling Park

**18 October:** Saturday, 8.30 – 12.00, **Yarramundi Reach**

**26 October:** Sunday, 9.00 – 12.30, Stirling Park

**19 November:** Wednesday, 9.00 – 12.30, Stirling Park

**22 November:** Saturday, 8.30 – 12.00, **Yarramundi Reach**

**30 November:** Sunday, 9.00 – 12.30, **Scrivener's Hut**.

Please register for each of these with [jamie.pittock@fog.org.au](mailto:jamie.pittock@fog.org.au), ph. 0407 265 131.

**Lake Bathurst excursion: 11 October**, Saturday. Details p. 4.

**Stirling Park spring wildflower walk: 26 October**, Sunday, 2.00–3.30 pm. Details p. 2.

**'Grass half full or grass half empty? Valuing native grassy landscapes'**, 30 October – 1 November. Details p. 3. This is FOG's 20-year anniversary forum. **Registration is now open!** See the preliminary program and how to register, on p. 3, and keep watching [www.fog.org.au/forum2014.htm](http://www.fog.org.au/forum2014.htm) for updates.

**Grassland monitoring, Scottsdale: 5 November**, Wednesday, 9.30–3.30. Details p. 2. Register with [linda.spinaze@fog.org.au](mailto:linda.spinaze@fog.org.au)

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Fireweed on a road verge in Gungahlin, with close-up (inset).  
Photos: TAMS Incident management team, ACT Government.

## Alert! Fireweed now in ACT

Fireweed *Senecio madagascariensis* has appeared in ACT suburbs, across Gungahlin on road-verges and elsewhere, including near Gungaharra Grassland and Mulligans Flat. It has been found in Lyneham, Chisholm and Coombs also.

This highly invasive Weed of National Significance can quickly dominate large areas, as it has in NSW. It outcompetes small native plants and causes irreversible liver damage to livestock.

Please report sightings as immediately as possible, to Canberra Connect ph. 13 22 81 or [fireweed@act.gov.au](mailto:fireweed@act.gov.au), giving the exact location and a photo if possible, and saying what you have done (e.g. left it as is, or pulled it out and disposed of it, or ...).

**Identification:** Many daisy-like flowers, each the size of a 10c piece, with bright yellow flower centre and petals (usually 13), and always 20 green bracts, whether in bud or open. Seeds are fluffy and readily wind-borne, and occur in tens of thousands.

Leaves have toothed edges (not lobed) even when tiny; leaves are smooth, not furry or hairy, and bright green.

Fireweed flowers all year round in ACT, even in winter. It can crossbreed with Native Groundsel *Senecio pinnatifolius*.

**Removal:** To remove Fireweed by hand, wear gloves to avoid skin irritation; enclose the plant in a strong plastic bag before pulling (to catch the seeds); double-bag the weed; put the sealed bag into a regular bin (not recycled or green waste).

DO NOT USE GLYPHOSATE or Brushoff®. Grazon® is possible, but check, via [fireweed@act.gov.au](mailto:fireweed@act.gov.au), first.

## Coming events; Membership matters

### Stirling Park planting party

31 August, Sunday 9.30–1.00

*Jamie Pittock*

The next work party is on Sunday 31 August, just one day short of the first day of spring. Appropriately then, we will be occupied with planting. Friends of Grasslands have ordered 200 trees to replace the felled Tasmanian Blue Gums, so the planting will be in these areas on the ridge and we will also expand earlier woodland-restoration plantings.

The trees we will be planting are locally indigenous, including Yellow Box *Eucalyptus melliodora*, Blakely's Red Gum *E. blakelyi* and a range of wattles and *Bursaria* to improve bird habitat. While some of the ground is reasonably soft, much of it is not unless we have a couple of days rain, so the holes for planting will be drilled by a contractor earlier in the week. The process for planting will be: a) clean out the hole, b) add a water crystal and fertiliser slurry, c) put in the tree, d) replace the soil firmly, e) mulch and water it, f) place a tree guard around it and drive in the stake to hold the tree guard in place. Easy!

The best access for those coming by car is to park in the open clay patch behind the Danish and Norwegian embassies off Fitzgerald St in Yarralumla, and walk through the opening in the wire fence onto the ridge. Please remember the usual instructions: gardening clothes, solid footwear, eye protection, sunburn cream and drinking water. Morning tea will, of course, be provided.

Please register for this workparty, with [jamie.pittock@fog.org.au](mailto:jamie.pittock@fog.org.au) or [pmcghie@optusnet.com.au](mailto:pmcghie@optusnet.com.au)

### Stirling Park wildflower walk

Sunday 26 October, 2.00–3.30 pm

*Jamie Pittock*

Our annual ramble through Stirling Park will start from the junction of Clarke St and Fitzgerald St in Yarralumla.

Please contact [jamie.pittock@fog.org.au](mailto:jamie.pittock@fog.org.au) if you would like more information.



Stirling Park in the old days, pre-FOG. Photo: Ann Milligan

### Hall Cemetery workparty

13 September, Saturday 9.30–12.00

*John Fitz Gerald*

This early spring morning's work is to continue our control of fleshy weeds especially emerging thistles, and also selected patches of exotic grass. The major activity will be spot application of herbicide through the grassy woodland. Some physical removal (cut and daub) of briar regrowth can also be done. Morning tea will be provided. Please dress for the occasion, considering weather and tall grass. It is MOST important that you register so that enough equipment and morning tea is on hand to match the enthusiasm of volunteers.

Register with [john.fitzgerald@fog.org.au](mailto:john.fitzgerald@fog.org.au) by 11 September at latest.

The Hall Cemetery entrance is off Wallaroo Road, near the Barton Highway intersection.

### Scottsdale grassland monitoring, Bredbo, NSW

Wednesday 5 November,

9.30 – 3.30

*Linda Spinaze*

Since March 2008 FOG has held an annual monitoring day at the Bush Heritage property 'Scottsdale'. Now that the property is no longer grazed we monitor native plant species competition, and this time we will possibly start some new revegetation monitoring.

All are welcome to attend and help. No experience is necessary. Lunch will be provided.

Please email [linda.spinaze@fog.org.au](mailto:linda.spinaze@fog.org.au), or [linda@xamax.com.au](mailto:linda@xamax.com.au) to register for 5 November and for further information.

A few of us will meet at Yarramundi Reach, ACT, on Tuesday 21 October at 9.30 am, to refresh our monitoring techniques. You are welcome to join us.

### For sale! 309 Stoney Creek Rd, Berridale

This 100 acre property is mainly tree-covered, though it also has 2 fenced gardens which are chemical-free and usable for commercial production. There is ample water, via collection from the roof plus 4 dams. Solar hot water and solar panels feeding to the grid make the property self-sufficient in power. Two slow combustion fires provide heat for cooking and warmth for the lounge room. One of the fenced gardens also has a slab shed which could easily be converted into a cottage.

See: [www.realestate.com.au/property-lifestyle-nsw-berridale-7598947](http://www.realestate.com.au/property-lifestyle-nsw-berridale-7598947)

### Membership matters

**FOG welcomes new members** Keiran Kinney of Wentworth Point NSW, Bethany Dunne, student, of Duffy ACT and David Crawford of Nicholls ACT.

Membership of Friends of Grasslands Inc. costs \$20 per calendar year (for individuals, families, not-for-profit organisations), and \$5 per year for students and concessions, or \$50 per year (corporate).

Payment can be made by EFT to BSB 633 000, A/c 124770835, adding your name in the reference/description; or by posting a cheque to PO Box 440, Jamison Centre ACT 2614.



## **Coming events: FOG forum, 30 October – 1 November, CSIRO Discovery, Canberra**

### ***Grass half full or grass half empty? Valuing native grassy landscapes.***

FOG invites you to join in a three-day forum in Canberra, to celebrate 20 years of work on behalf of native grasslands and grassy woodlands. The forum is intended for sharing and demonstrating achievements in conservation and management of grassy ecosystems.

Information:

[www.fog.org.au/forum2014.htm](http://www.fog.org.au/forum2014.htm)

or: [forum2014@fog.org.au](mailto:forum2014@fog.org.au),

or phone: 0400 806 089 (Lesley).

Participants and speakers will include land owners, land managers, scientists, community members, government policy-makers and others.

There will be an underlying theme of research-based management, on-ground experience, community-led advocacy, and action in a context of political decision-making.

**Registrations are now open!**

Registrations close on 22 October.

The program of talks, workshops, displays and a field trip is outlined below. The full program will be published when it has been finalised. There are some excellent and exciting speakers!

The forum dinner is on Thursday evening 30 October at the Australian National Botanic Gardens. Friday dinner is casual.

Register and pay for all or some days, and book dinner tickets, at:

<http://www.trybooking.com/FIWY>

**Preliminary program outline** (with some expected speakers). For fuller details see [www.fog.org.au/forum2014.htm](http://www.fog.org.au/forum2014.htm)

#### **Thursday 30 October**

9.00–5.00 *Presentations and displays*

##### **1. Roles, values and strategies of stakeholders**

**Values:** Perceptions of grassy ecosystems and their conservation, 20 years ago and now.

Sarah Sharp (President, FOG); Sarah Ryan (CSIRO Fellow)

**Governance:** Changing priorities of government, influencing planning, policies and actions at various levels of governance.

Bob Neil (ACT Commissioner for Sustainability and the Environment); Philip Gibbons (ANU Fenner School);

Murray Evans (Environment & Planning, ACT Government)

**Managing for multiple purposes:** Landholders' responses to changing values; issues in conserving natural values in land also used for production.

Charlie Massy (farmer, and ANU Fenner School);

Josh Dorrrough (research ecologist, NSW south coast)

##### **Not-for-profit lobbying, education and services:**

Contributions by volunteers and not-for-profit organisations; their rewards; and the outcomes they achieve.

Geoff Robertson (Past President, FOG);

Graham Fifield (Greening Australia Capital Region)

##### **2. Posters, demonstrations, sales, information**

In this last part of the afternoon participants will be able to see what else is going on, inspect various resources, talk with other delegates, see (perhaps buy) some new publications, and view amazing botanical artwork.

**3. Forum dinner, 7.00 pm**, at the Australian National Botanic Gardens, adjacent to the CSIRO site. Before the dinner, you may wander or be guided through these gardens of Australian native flora. Booking and payment with registration is essential, for yourself and guests.

#### **Friday 31 October**

9.00–5.00 *Presentations and workshops*

##### **1. Science and practice in managing and restoring grassy ecosystems**

**Aboriginal knowledge & land management:** Aboriginal people and others are sharing traditional knowledge and values for incorporation into on-ground management and protection.

Adrian Brown (Ngunnawal Ranger, ACT Parks & Conservation Service); Geoff Simpson (Community/Aboriginal Engagement Officer, NSW Office of Environment & Heritage)

**Managing for biodiversity:** Innovations in restoration and management of floristic diversity and for fauna conservation; managing the urban edge; planned burns and ecosystem dynamics; the place of kangaroos in managing grassy areas.

John Morgan (La Trobe University, Melbourne); Paul Gibson Roy (Greening Australia, Sydney); Sue McIntyre (CSIRO Fellow)

##### **2. Workshops**

Take part in two of the three workshops, to share your knowledge, and to learn.

**A. Advocacy and community involvement:** publicity; governance; advocacy for better outcomes and resources; volunteering.

**B. Indigenous management:** what opportunities are there for better respect and for incorporating Aboriginal knowledge and skills into conservation of grassy ecosystems?

**C. Restoration and weeding:** what strategies, methods and outcomes are being applied? What works well, or not?

##### **3. Where have we got to?**

The opportunity for all delegates to discuss 'where we are at now', led by Ian Lunt (Charles Sturt University, Albury, NSW).

**For dinner & drinks**, we will go to University House at ANU, nearby. This will be 'pay as you go'.

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#### **Saturday 1 November. 9.00–4.30 *Field visits (by coach) and on-site talks***

Volunteers' restoration sites; long-term experiment sites; a grassy ecosystem sanctuary where locally-extinct fauna are being reintroduced; issues; conservation at the urban edge; monitoring of flora and fauna and how non-scientists can get involved.

Jamie Pittock (ANU Fenner School); Adrian Manning (ANU Fenner School); Nicki Taws (Greening Australia Capital Region).

## Coming events, continued

### Lake Bathurst excursion, NSW, Saturday 11 October, 9.30 onwards

Rainer Rehwinkel

The itinerary for the day is as follows:

1. **Meet at Lake Bathurst Village** (in the Main St) at **9.30 am**. From here it would be best to car-pool and limit the number of cars to no more than three. Four-wheel-drives are essential for access to the lakeshore over a causeway and a dirt road to the staging post above the lake. We will walk from there. If there is heavy rain immediately beforehand, access may be difficult because it is necessary to cross the river.
2. Arrive at the lakeshore and historic siding at 10.00 am. We will leave the cars at the siding and walk from here across the lake bed.
3. Lunch at 12.30. Bring all that you require to eat and drink.
4. After lunch, continue till 3.30.
5. At 3.30 we shall return to the cars, and drive back to Lake Bathurst Village.

Here is what we can expect to see at Lake Bathurst:

- the little-visited and very scenic and isolated bed of Lake Bathurst;
- a wetland that in season can have many waterbirds, including rarities such as Freckled Duck, Pink-eared Duck, Australian Shelduck and, if we are lucky, flocks of migrant waders of several species; and in the adjacent grassland, Banded Lapwing and the threatened Spotted Harrier and White-fronted Chat;
- pockets of extraordinary endangered, vulnerable or rare flora species, including:
  - (a) one of the only four known populations of the beautiful, endangered Omeo Storksbill *Pelargonium* sp. (G.V. Carr 10345); see its profile at: <http://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=20147> and its SOS Conservation Project page at: <http://www.environment.nsw.gov.au/savingourspeciesapp/project.aspx?ProfileID=20147>;
  - (b) a very large population of the endangered Round-leaved *Wilsonia rotundifolia*, which is otherwise only found at Lake George in tablelands NSW;
  - (c) a very large and isolated population of vulnerable Creeping Hopbush *Dodonaea procumbens*, which is otherwise only found in NSW on the Monaro;
  - (d) the only known population of *Lawrenia spicata* in NSW;
  - (e) the only known population in the NSW Southern Tablelands of *Schoenus nites*;
  - (f) the only site I know of in SE NSW of the parasitic Golden Dodder *Cuscuta tasmanica*;
  - (g) a population of the Silky Swainson-pea *Swainsona sericea*;
  - (h) large patches of the restricted Fan-flower Mudwort *Selliera radicans*; and
  - (i) populations of what may be *Convolvulus graminetinus* (yet to be confirmed), which is otherwise confined to western NSW;
- Natural Temperate Grassland Endangered Ecological Community, some in very high condition, but most, unfortunately, invaded by Serrated Tussock;
- Fringing Snow Gum Woodland Endangered Ecological Community, with extremely old trees; and
- upslope of the lake, dry forest with unusual or otherwise significant species, including *Jacksonia scoparia*, *Allocasuarina littoralis* and *Styphandra glauca*.

All-in-all, this is a pretty amazing place that is rarely visited by field naturalists!

The trip could take the whole day. **Be sure to bring** water and lunch, standard sun-protection, boots for walking and, preferably, knee-length gaiters because of the risk of Tiger Snakes.

More information? [rainer.rehwinkel@environment.nsw.gov.au](mailto:rainer.rehwinkel@environment.nsw.gov.au)

## News roundup

### FOG midwinter talk and slides afternoon

The cheerful fire in the fireplace at the Mugga Mugga Education Centre welcomed 30 people to this year's FOG midwinter afternoon of talks, social networking and delicious afternoon tea.

Jamie Pittock began the talks. He took us through the recent history of Stirling Park, formerly known as Stirling Ridge. We heard about the various policies and plans for the general area, and then impressive facts and figures about the restoration work. Volunteers from FOG and Yarralumla residents have, since 2009, cleared mountains of invasive woody weeds/shrubs in that lovely patch of land. There has been invaluable support from the Fire service and TAMS, as well as from the National Capital Authority. And the work continues.

Sarah Sharp then described the survey, last summer, of native and threatened plant species at Stirling Park. She compared survey findings this year and five years ago (during drought) as FOG began work in the area. Overall, by 2014 there has been a slight improvement in native species richness, and a very large decrease in invasive species.

Finally Michael Mulvaney (ACT Government) explained the rare plants program he is running. It involves using the community's eyes and the Web, to locate and identify rare plants that otherwise might be overlooked in this region. Kris Nash (FOG Secretary) provides expert ID for the program.

It was all fascinating, and I am looking forward to next year's afternoon already!

Contributed by: 'Earwig (*Labidura* sp.)'

### NSW Environmental Trust Restoration and Rehabilitation Grants Program

*Applications close 19 September 2014.* The Restoration and Rehabilitation program supports projects run by community organisations and government entities to prevent or reduce environmental degradation of any kind, and to protect, restore and enhance the environment. Grants of \$5000–\$10,000 are available.

See [www.environment.nsw.gov.au/grants/restoration.htm](http://www.environment.nsw.gov.au/grants/restoration.htm)

## *News roundup, continued*

### **Supervisor required for Yass Council Green Army Team**

Yass Council (NSW) is looking for a person to supervise the Green Army team for a project in the Yass Gorge, starting early in September. The Supervisor will support and supervise daily activities of the Green Army participants. As well as liaising with sponsors, duties include induction, day-to-day mentoring, coaching of performance, ensuring safe transport to and from projects, monitoring OH&S and reporting on attendance and engagement.

If you are interested, please contact Gary Warner, at: ph. 02 8245 1700,  
or [Gary.Warner@campbellpage.org.au](mailto:Gary.Warner@campbellpage.org.au)

### **Help needed with plant species ID and surveys**

Volunteers are needed to help with plant surveys in an exciting PhD project. We will be studying the movement of plants and ground-level arthropods (both beneficial predators and pests) in mixed cropping landscapes. The study will be in the Lachlan–Riverina area.

I'd particularly appreciate some plant ID help from people who know the local vegetation species very well around Young, Grenfell and Barellan. Surveys will be conducted during September–November.

Please contact me, Katherina Ng, if you can help or would like more information.  
[katherina.ng@anu.edu.au](mailto:katherina.ng@anu.edu.au)  
mob: 0402 138 896  
phone: 02 6125 8148

### **Bush on the Boundary Ngunnawal walks and talks**

A number of FOG members have been on several of the Ngunnawal walks and talks offered recently by the Molonglo Catchment Group and the Ngunnawal Walks and Talks team. For instance, there was a walk at West Macgregor ACT, and one to London Bridge Arch, NSW.

Now, to help further the discussion and experience of the natural environment through the Ngunnawal perspective, there is a 'Place Stories' webpage. It tells stories of the walk and talk series, and shows photos taken during those events.

This webpage will be developing and evolving, particularly if the group receives funding for a 2015 series of walks and talks. See  
<http://placestories.com/project/154400>.

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## *Activities run by other groups*

### **Landcare Week celebration day Sunday 31 August, 11.00 – 3.00**

An Indigenous heritage walk, community barbecue, information, and a chance to put your views. Corner of Owen Dixon Drive and William Slim Drive, Mckellar, ACT.

### **Erosion Control field day Saturday 6 September, 8.30–1.00**

Prioritising erosion control; fixing gully and riparian erosion; the role of structural works; etc. Meet at Tharwa Hall for presentations, then visit field sites at Tidbinbilla Station. Morning tea and lunch provided. Book at [actlandcare@act.gov.au](mailto:actlandcare@act.gov.au)

### **'Plants and animals: the eternal partnership'**

**Thursday 18 September, 12.30 pm**

Ian Fraser will give the Alison McKenzie memorial lecture, at Australian National Botanic Gardens Theatre, ACT.

### **Parkcare groups display, Jamison Friday 26 – Sunday 28 September, 9.00–4.00**

Find out (or help show and tell) what local groups are doing to care for ACT grasslands and grassy woodlands.  
Jamison shopping centre, ACT.

### **Black Mountain wildflower walk Saturday 11 October, 9.30 (sharp) – 12.00 (or later)**

All welcome. Meet at Belconnen Way, near Caswell Drive exit, ACT. BYO morning tea. Be sure to book with Linda Beveridge ph. 6262 555, or [friendsofblackmountain@gmail.com](mailto:friendsofblackmountain@gmail.com)

### **Reflect, Explore and Inspire Friday 17 – Saturday 18 October**

A forum celebrating 25 years of ParkCare and Landcare in ACT, bringing together anyone interested in caring for ACT parks and reserves, to share stories, challenges and successes. Anne Harding Conference Centre, Building 24, University of Canberra.  
Details: [jasmine.foxee@act.gov.au](mailto:jasmine.foxee@act.gov.au)

### **10th Australasian Plant Conservation Conference 11–14 November, Hobart, Tas.**

For draft conference program, and registration, see <http://www.anpc.asn.au/conferences/2014/index.html>. Early bird registration closes on 29 August.

### **Grasslands workshop, Sydney Tuesday 11 November, 8.30–4.30**

'The conservation and protection of the world's indigenous temperate grasslands: Current status and strategic directions for the next decade' is a workshop run by the Temperate Grasslands Conservation Initiative, open to everyone interested; no cost; at Sydney Olympic Park aquatic centre, Dawn Fraser Room.

Book with [bdownie@thekeshotrust.org](mailto:bdownie@thekeshotrust.org)  
[www.iucn.org/about/work/programmes/gpap\\_home/gpap\\_biodiversity/gpap\\_wcpabiodiv.gpap\\_grasslands/](http://www.iucn.org/about/work/programmes/gpap_home/gpap_biodiversity/gpap_wcpabiodiv.gpap_grasslands/)

### **ANTHOLOGY: Performance, Installation, Sound, Video, Live music, Song, Dance and Tea 26 November – 6 December**

Anthology is a theatrical journey through Westlake, now known as **Stirling Park**, ACT. The area is Ngunnawal land, a traditional pathway, and the site of a workers' camp for building the new city 100 years ago. [While nothing to do with grassy ecosystem conservation, this event will raise community awareness of places where FOG's volunteers have been working for several years.]

More information: [www.anthology.net.au](http://www.anthology.net.au)

## FOG Advocacy

Naarilla Hirsch

In the last few months, the Advocacy Group has been assisted by other committee members in the preparation of submissions, in one case quite extensively. I'd like to thank those who have provided this help. Input from any FOG member is always welcome when either preparing submissions or otherwise raising grassland issues with Government, developers and others.

### June

1. The NSW Government released its Crown Lands Legislation White Paper for public comment. FOG provided an extensive submission on this paper. Travelling stock reserves and routes (TSRs) are one form of Crown Lands. While not disagreeing that, as proposed by the White Paper, reducing the administrative cost and reporting burden associated with the management of Crown Lands has an economic benefit, FOG had considerable concerns about the paper and felt that it made no appeal to sectors of the community concerned with protecting environmental, indigenous or other community values, nor would it provide them with any assurance that these values will be protected let alone enhanced. One major concern was that the White Paper's proposals will allow the NSW Government to sell or otherwise walk away from its land-owning responsibilities. In this regard, there was no mention of resources, or of how or whether TSRs and other Crown reserves will continue to be used for grassland conservation purposes. In FOG's view, each parcel of land should be carefully and comprehensively assessed to determine its values, and management standards established. From this all else will follow, including whether or not the sale of the land is appropriate. FOG's submission on this paper was extensive and included comment on a number of specific provisions in the White Paper.

2. The ACT Government is proposing to construct a new sub-acute hospital on the grounds of the University of Canberra. In looking at this environmental assessment, FOG notes that, while the Golden Sun Moth (GSM) has not been found on the block under consideration, it has been found on an adjacent block. As well, there are some better quality patches which conceivably could form the

core for future regeneration of the block. In its comments, FOG accepted that the block may be developed because of the social and other benefits of the proposed hospital, and supported the proposed offset site, a corridor linking the Pinnacle and Kama nature reserves.

### July

3. The LDA released a Planning and Development Strategy for the Canberra Brickworks and Environs. FOG considered the strategy and associated site analyses totally inadequate in the lack of recognition that within the developed site there is an area containing a nationally threatened endangered community and a population of the critically endangered GSM. Our submission made reference to the 2014 study by Dr Ken Hodgkinson undertaken on behalf of the Commissioner for Sustainability and the Environment, which identified that the site is in low floristic condition. Recommendation 3 in that report states: 'These grasslands are now at sub-marginal levels in the ACT and there should be no offsets of this threatened community in land development'.

4. The ACT Government has finally released the draft ACT offsets policy. As a primary principle, FOG believes that there should be no development that impacts on vulnerable or endangered species' habitats or ecosystem communities, and it opposes the use of offsets in these circumstances. However, recognising the reality of the current situation where offsets are mandated by government for the destruction of native vegetation, FOG has provided comments on the proposed ACT offsets policy in an attempt to achieve the best conservation outcome. In general, FOG was disappointed that the position paper does not include a clear articulation of the ACT's offset principles, including and especially a principle to achieve 'no net loss'. FOG had major concerns about the application of the offset policy to Natural Temperate Grassland (NTG) sites, particularly the use of offset calculators. Because of the decline in NTG sites around the ACT, FOG's view was that the ACT offset policy should state that NTG sites will not be developed and therefore will not need to be offset. This could

be achieved by identifying all unsecured areas as Advanced Offsets, so that they are clearly protected from development. FOG also provided a number of specific comments on the draft policy.

5. The NSW Government released for comment a proposed listing of Tablelands Snow Gum, Candlebark and Kangaroo Grass Grassy Woodland in the NSW South Western Slopes, South East Corner, South Eastern Highlands and Sydney Basin Bioregions as critically endangered, to replace the existing listing of this community type. FOG supported changing the determination of Snow Gum, Candlebark Grassy Woodland to critically endangered but had some concerns about details of the proposed listing. In particular, the report by R.C. Armstrong and others, titled *Plant communities of the upper Murrumbidgee catchment in New South Wales and the Australian Capital Territory* (referenced in the Resources section of FOG's website) does not appear to have been referred to, despite being a definitive work that has identified all vegetation communities that occur within the bioregion in question. Other concerns include exclusion of some community types that are in the current listing, the emphasis on Kangaroo Grass in the listing name, and the species list defining the listing.

6. The ACT Emergency Services Agency has asked for comments on the exposure draft to the Strategic Bushfire Management Plan version 3. FOG recognised the acknowledgement of environmental values in this document, and the work done to date to minimise the impact of bushfire prevention operations on high value conservation areas. FOG supported the approach, for new developments, that Inner Asset Protection Zones will lie within the footprint of the developable area, and that Outer Asset Protection Zones will only be accepted on adjacent lands such as nature reserves where the ability of the adjacent land manager to meet the fuel management requirements for an Outer Asset Protection Zone is not limited or prevented by conflict with sustainable management regimes in high conservation value ecological assets.

The full text of FOG submissions appears on our website.



## Articles

### Burn, slash and reap: the Pinnacle grass experiment

*Don Driscoll, Friends of the Pinnacle*

Exotic grasses and herbs are major contributors to the degradation of Box–Gum Woodlands. They replace native plants and drive the decline of native animals. Community groups and land management agencies that want to restore grassy communities have to tackle this weed menace, but these weeds are hard to beat down. They are widespread and often intermingle with native species at a fine scale, making traditional weeding and spraying methods hard to apply.

At the Pinnacle, ACT, the Friends of the Pinnacle took an experimental approach to this difficult problem. The rationale behind our experiment was that the weed menace is largely driven by soil-nutrient enrichment. Elevated levels of phosphorus and other nutrients favour the growth of many exotic species and disadvantage many native species. Previous research found that adding sugar locked up nutrients in a flush of growth by soil bacteria. The change in soil nutrients brought about by sugar addition suppressed exotics and favoured natives. At the Pinnacle, we wanted to see if we could replicate that finding, as well as find cheaper ways to manage soil nutrients. We calculated that spreading sugar across the entire Pinnacle Nature Reserve would cost almost \$50,000 each time. Burning, slashing and removing grass, or reaping a crop, might be more affordable ways to remove nutrients, but would they be equally effective?

With funding from an ACT Environment Grant, a Caring for Our Country Community Action Grant, and the Belconnen Labor Club, we set up our study in 2010–11. We built 10 herbivore exclosures each 18 m x 12 m (see below) and marked out five (5 m x 5 m) plots within the fence, and five in matched areas outside each fence. The five plots were allocated to our five treatments: (1) control: do nothing; (2) sugar: add 0.5 kg sugar/m<sup>2</sup>, three times/year; (3) slash: slash all growth and remove the slashings; (4) crop: as for slash, but with sterile ryecorn seeds spread over the surface in early winter, with the intention of slashing and removing



Measuring the plant species in 1 m x 1 m quadrats, in teams.

the crop; (5) burn: burn in late autumn using gas-driven flames in 2012 and 2013. Burns were completed by ACT Parks and Conservation staff.

We wanted to know exactly which species were advantaged or disadvantaged by our treatments, so we used species level surveys (see above). Each November between 2010 and 2013, teams of volunteers from Friends of the Pinnacle, Department of the Environment and ANU streamed into the reserve to estimate cover and occurrence of each species within four quadrats, each 1 m x 1 m, in each experimental plot. With teams of 5–6 people, we could complete the surveys over 3–4 weekends. We also took soil samples before the experiment to measure levels of phosphorus, nitrogen and carbon at the ANU soils lab.

The first discovery was in accordance with the literature: areas with high nutrient levels (a combination of P, C and N) had fewer native species. This confirmed that somehow managing soil nutrients was likely to be the key to successful ground-layer restoration at the Pinnacle. We found some evidence that the number of exotic species increases as nutrient levels increase. However, interestingly, these trends were not true across all species. For example, two native species (*Geranium solanderi*, *Stuartina muelleri*) occurred more often in high nutrient sites, while some exotic species (e.g. *Briza minor*, *Vulpia* sp., *Tolpis umbellata*) did better on low nutrient sites. These species-level results emphasised that we are studying an ecosystem, where species interact with one another in complex ways. Conceivably, small annuals like *Briza* and *Vulpia* would do just as well on high nutrient sites but are outcompeted by larger exotics that dominate high nutrient sites, such as some of the brome grasses, clovers (*Trifolium* spp.), and Wild Oats (*Avena fatua*).



Fence to exclude kangaroos and rabbits at the Pinnacle Nature Reserve, Belconnen, ACT.

...continued next page

## *Burn, slash and reap: the Pinnacle grass experiment, continued*



Measuring species in the 1 m x 1 m quadrats was a detailed task.

With our treatments, we unfortunately did not discover the silver bullet to solve the nutrient problem!

Our main discovery was that disturbance of any kind maintained high species richness of both natives and exotics, whether the disturbance was grazing by kangaroos, or burning or slashing. When all three kinds of disturbance were

prevented the number of native and exotic species declined, because exotic species like Wild Oats quickly dominated the plot. Interestingly, adding sugar prevented exotic species from dominating when all disturbances were excluded. This observation suggests that at low nutrients levels our native understorey communities may be more robust to low disturbance environments than in nutrient-enriched sites (at least, for grassy Box–Gum Woodlands with a diverse mix of grass species).

We will re-measure nutrient levels next year to discover if our treatments had any effect towards reducing soil nutrient concentrations; although the limited changes in the plant community suggest nutrient levels have not changed appreciably. We will also explore some new ideas using our fence infrastructure. Our slashing treatments were timed to remove biomass, but next year we will time our slashing to remove Wild Oat flowers as well as biomass. There are many other new opportunities to experiment with different levels of grazing and other treatments using the fences.

Contact Don if you want to lead a new collaboration.

Photos: courtesy of Friends of the Pinnacle.

## **Bigga Cemetery revisited ... first bird, one stone** (see also p. 11)

*Margaret Ning*

It was around 10 years ago that FOG visited the Bigga area (NSW, near Cowra) on one of its annual 'cemeteries' visits on the October Halloween weekend. I remember seeing many stunning grassland species on that trip, including at the Bigga Cemetery. This time I found myself in the sleepy village in mid-August, and because I had a spare half hour on my hands I popped in to the cemetery to see how it had fared in the last 10 years.

From the front gate it looked pretty good, even though it had been mown not all that long ago, because the familiar colour of Kangaroo Grass *Themeda triandra* dominated the site. The only flowering species were Golden Moths *Diuris chryseopsis* and Early Nancy *Wurmbea dioica* which had regrown sufficiently since the mowing to be flowering nicely. Everything else was recognisable only by its vegetative parts.

Some of the plants I spotted that should flower over the next few months were Parsons Bands *Eriochilus cucullatus*, Sun Orchid *Thelymitra* sp., Scaly Buttons *Leptorhynchus squamatus*, Sundew *Drosera* sp., Showy Copper Wire Daisy *Podolepis jaceoides*, Ivy Goodenia *Goodenia hederacea*,

Blue Devil *Eryngium ovium*, Yam Daisy *Microseris lanceolata* and Adders Tongue *Ophioglossum lusitanicum*.

The only weeds I saw there in my quick visit were a lot of Onion Grass *Romulea rosea*, occasional Flatweed *Hypochaeris radicata* and one Capeweed *Arctotheca calendula*, and if I had taken my dauber in there with me, those plants of the latter two species would be no more. Even a simple act like that could make a bit of a difference, and I must remember to be a bit better organised next time I make such a visit. While the quantity of Onion Grass was a worry, at least it was a relatively inconspicuous one! The grassland was a pleasure to visit, and appears not to have deteriorated since my last visit there. It was like the natural temperate grasslands FOG used to visit 10–20 years ago: relatively few weeds; many inter-tussock spaces.

The cemetery itself stood out as a grassland island in the Bigga area. Although I saw quite a lot of Kangaroo Grass in the many kilometres before reaching Bigga, it was mainly on

the road verges. Although it still lingered in some paddocks it was chewed within an inch of its life and severely threatened by introduced pasture grasses.

Of course, I had another reason for visiting Bigga. ... (See page 11).



The grassland at Bigga Cemetery had the familiar tinge of Kangaroo Grass.  
Photos Margaret Ning.



## Articles, continued

### The ACT Tree Register

Samantha Ning, Tree Protection Officer, City Services, Urban Treescapes, Canberra ACT

Canberra is well-known for the outstanding trees that make up its urban forest. It is often described as the 'leafy city', a 'city within a garden' or a 'city scattered through a park'.

The ACT Government manages this urban forest which is one of the largest in Australia. In recognition of this, the ACT Tree Protection Act 2005 (the Act) came into force on 29 March 2006 and provided for the establishment of the ACT Tree Register, to protect trees or groups of trees that are of exceptional value to the ACT's urban environment. The ACT Tree Register is administered by Territory and Municipal Services (TAMS), and reinforces the ACT Government's ongoing commitment to the management of Canberra's world renowned urban forest.

Registered trees are those trees that have been identified as being exceptional for their:

- natural or cultural heritage value
- landscape and aesthetic value
- scientific value.

Trees that meet the criteria are placed on a Provisional Register. Within one year of the provisional registration of a tree, a decision will be made regarding the full registration of the tree.

There are many fascinating trees on the ACT Tree Register already, including many groups of native trees and spectacular individual remnant trees. One example is an exceptional



*Eucalyptus mannifera* and *E. blakelyi* trees in Mitchell, ACT (Tree Register PTR136-Group)

group of remnant *Eucalyptus mannifera* (Brittle Gum) and *E. blakelyi* (Blakely's Red Gum) trees located in the middle of Mitchell. This group of trees offers a much needed sanctuary for our native wildlife in a suburb dominated by industrial buildings and warehouses.

These trees are important providers of shelter, foraging and nesting sites for arboreal mammals and birds. Staff members of the surrounding businesses have also reported seeing Echidnas wandering through the trees. The block is bound by Cheney Place and Essington Street in Mitchell.

Another important group of natives can be found close to the Gungahlin Town Centre on a currently undeveloped block. This group consists of *Eucalyptus melliodora* (Yellow Box), *E. blakelyi*, *E. bridgesiana* (Apple Box) and *E. dives* (Broad-leaved Peppermint).

The group has been placed on the Provisional Register because of its exceptional landscape and aesthetic values.

...continued next page



Provisionally registered eucalypts in Gungahlin, ACT (Tree Register PTR155-Group)

All photos: Samantha Ning



## Articles, continued

### *The ACT Tree Register, continued*

It offers important habitat for a number of local bird species including Eastern Rosellas, Crimson Rosellas and native Noisy Miners. The group is dominated by *E. melliodora* and *E. blakelyi* which are representative of the endangered Yellow Box–Red Gum Grassy Woodland community.

One of the most recent additions to the ACT Tree Register is a group of 18 remnant eucalypts located on land designated for the suburb of Kenny. The registration consists of 12 single *E. melliodora* trees, three single *E. blakelyi* trees and one group consisting of three *E. blakelyi* trees. These trees play an important role within the landscape and will contribute significantly to the final design outcomes of the new suburb. Some of the trees are already included within a designated grassy woodland reserve.

The entire ACT Tree Register can be seen spatially online via the ACTMapi website. This is a good way to explore the trees on the ACT Tree Register and discover why each tree or tree group is exceptional. Using this mapping web page you can zoom in on any tree, click on the green dot and access all the information about that tree. To explore the ACT's registered trees on ACTMapi just visit [www.actmapi.act.gov.au](http://www.actmapi.act.gov.au) and go to the 'Significant Plants, Animals and Registered Trees' map. You will need to turn the tree



Group of three *Eucalyptus blakelyi* trees in Kenny (Tree register PTR164-Group)

layer on by clicking on the 'I want to...' button and selecting 'Turn map data on/off', then click the box next to 'ACT Registered Trees'.

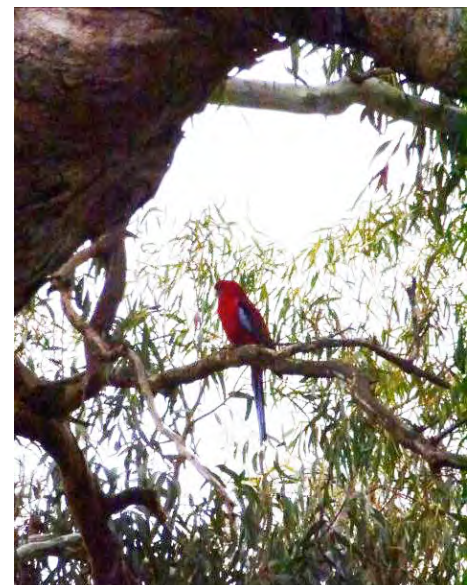
If you would like to view a hardcopy version of the ACT Tree Register (which is located at Macarthur House, at 12 Wattle Street, Lyneham) please contact Canberra Connect on 13 22 81 to arrange a time.

Do you know of an exceptional tree or group of trees that could be included on the ACT Tree Register? Anyone can nominate a tree by phoning Canberra Connect on 13 22 81 or visiting our web page at [www.tams.act.gov.au](http://www.tams.act.gov.au)

If you have any questions regarding the ACT Tree Register or would like to help us promote and protect the best trees in Canberra, please contact Samantha Ning through Canberra Connect, or email [samantha.ning@act.gov.au](mailto:samantha.ning@act.gov.au)



*Eucalyptus blakelyi* in Kenny (Tree Register PTR169)



*Eucalyptus mannifera* in Mitchell, ACT: good habitat for native birds and mammals.



## Cultivation corner

### The wheat and the chaff

Janet Russell

I take my camera and wander the garden to see what is happening there when I am ready to write my article. It is the time of year to discover what is seeding, and to deal with weeds. It seems that every year there is a different mix of weeds and often one weed that is more prolific than others.

As I walked around I pulled up the Fumitory *Fumaria* sp. seedlings that are thriving in the damp spots. We have had odd seedlings before but not the number that have germinated this year. As we generally pull plants before they produce seed it is interesting to see how widespread they are. Chamomile Sunray *Rhodanthe anthemoides* seedlings are the same colour as the Fumitory and on closer inspection this is what some of the Fumitory turned out to be. I was very pleased as we had very little germination of the Chamomile last year and it is a bit sparse in the garden.

One of the other common weeds this year has been the Clustered Clover *Trifolium glomeratum*. They have fruit when they are small and can be easily overlooked. As we now have prolific seeding of many native species, identification is sometimes difficult, as is knowing what to focus on first. We carefully fostered seedlings of the Native Storksbill *Pelargonium australe*, transplanting them around the garden. It is now a profligate seeder and overtakes many of the smaller plants if we do not judiciously weed. One advantage is that the leaves are distinctive at a young stage.

Our Canberra Grass *Scleranthus biflorus* has broken out and tiny seedlings are starting to colonise further away from the original plant. While they are attractive groundcovers, they do not prevent germination of species and in fact seem to act as nurseries for them. They can make work, but the vibrant green compact plant is such an attractive contrast to other herbaceous plants it is exciting to see the beginning of new plants. The seedlings are distinctive but can be easily overlooked.



Fumitory *Fumaria* sp.



Clustered Clover *Trifolium glomeratum*



Native Storksbill *Pelargonium australe*

There are masses of unremarkable seedlings which I believe are Bluebells *Wahlenbergia* sp. The main species we have is *W. stricta*. This species is tall and leggy and has a tendency to fall over. As 'stricta' broadly means 'having an erect and upright habit of growth' the name does not quite seem to fit. The plant has rhizomes and when weeding it out I always seem to leave some of it in the ground, particularly if the ground is dry and compacted. It is hugely weedy in our garden.

As you have probably gathered, our garden is slightly out of control. We have to weigh up which weedy native specimens will be given space to put their heads up in any one place. This, together with ensuring that the right decisions are made about which seedlings are the exotic weeds, has made work for us that we have not had to deal with before. We will be sorting the wheat from the chaff for some time to come.

Photos: Janet Russell



## HogHopper™ for feral pigs: a workshop at Bigga (second bird, same stone) (see also p. 8)

Margaret Ning

I was at the Memorial Hall at Bigga (NSW, near Cowra) to attend a workshop on a feral-pig bait-delivery device, a.k.a. the HogHopper™, having spent a short time revisiting the grassy cemetery on the way (see page 8).

Jason Wishart, a field research officer at the Invasive Animals Cooperative Research Centre (CRC), gave us some background to the feral pig problem. We heard that: pigs must drink at least once a day; they need a good quality diet for reproduction; their diet consists of vegetation, lambs, roots and bulbs, eggs of ground birds, earthworms and carrion; they particularly prey on twin lambs, eating everything so the farmer doesn't even know the lambs have gone. Also, feral pigs cause environmental damage, eating slow-moving ground species (frogs, reptiles, bird eggs); they cause habitat degradation; and they carry diseases which can be spread to stock.

We also heard about current control methods, which include: aerial shooting (best when pig populations are large), aerial baiting in difficult areas (bad for non-target species, and only legal in Queensland); trapping, which is good for isolated populations but labour intensive and needs pre-feeding; ground baiting; ground shooting (good for cleaning-up populations); and dogging (useful with low density populations).

Then Jason showed us the HogHopper device. This control method is not labour intensive, though it still needs free feeding, and a sensor camera is a useful adjunct. It dispenses PIGOUT® baits. This bait is designed with a toxic core, colour and composition that reduces risk to non-target animals. We heard how baits might affect non-target animals, including fox, dog, cat, eagle, raven, kite, Lace Monitor, Spotted Tail Quoll and Brushtail Possum. Foxes and dogs are the most susceptible, depending on whether muscle or guts are consumed. However, the design of the HogHopper ensures that it excludes all non-target species.

Jason had various suggestions for site selection and for strategies for using the HogHopper; for example, baiting in cooperation with neighbours. He also stressed that it was good to monitor results, to ensure feral pig numbers were being reduced. Monitoring can be done by: looking at bait-take; camera-trapping; aerial surveys; or recording catch per unit effort. As well, it is good to monitor areas showing pig-rooting; crop yields and damage; and lamb marking percentages. It is also useful to survey the abundance of prey.

Jason's experience with feral pigs has included extensive work in the Macquarie Marshes and the Mt Hope areas, reducing impacts on agricultural production and on Malleefowl habitat.



The HogHopper™  
pig-bait delivery system.

Image: Invasive Animals CRC

Unfortunately, I was unable to stay longer and go out into the field to see the HogHopper in action. I shall be looking for opportunities in the future to do so, however.

More information:

<http://www.animalcontrol.com.au/Hoghopper01.htm>;

[http://www.animalcontrol.com.au/pdf/Hoghopper\\_Brochure.pdf](http://www.animalcontrol.com.au/pdf/Hoghopper_Brochure.pdf)

## Dingoes, past and future: a follow-up

Michael Bedingfield

Michael's Dingo article in the last newsletter was cut to fit, inadvertently introducing erroneous implications which Michael corrects below. Ed.

At the time the British colonists arrived in Australia the Dingo had a well-defined place as a top-order predator.

However, with the new pastoral industry came the desire to exterminate the animal from farming districts, as a simple and reliable way to protect the growing flocks of sheep. Sheep in particular are quite vulnerable to attack, and Dingoes can have a devastating effect on them. So Dingoes were shot, trapped and poisoned, and a bounty was put on them. A rabbit control fence, which has since become known as the Dingo Fence, was built in the late 1800s. It is 5600 km long, and is designed to exclude the native dog from the more fertile land in the south-eastern part of the continent. It protects all of NSW and Victoria, south-eastern Qld and south-eastern SA. People tried to eradicate the Dingo from these areas, and have been partly successful. For example, in our region the Dingo is quite rare, and is restricted to remote areas such as our National Parks.



Things have changed, and a number of people are looking at cost-effective farming practices that enable them to prosper without persecuting the Dingo. A good success story comes from some Australian farmers who have been using Maremma Sheepdogs, also called Livestock Guardian Dogs, to protect their livestock from predators. They are very large muscular dogs with a white coat, and have been used for centuries in Italy to guard sheep from wolves. They develop a strong social bond with the animals in their care. They are calm and intelligent, and very protective of their flocks and their territory. Their use has been quite successful in eliminating Dingo attacks, on small and large holdings. They are effective with sheep, goats and even chickens, against wild dogs, foxes and Tasmanian Devils. They have also been used to protect Little Penguins from foxes. Some farmers are also experimenting with the use of other dog breeds, as well as llamas, alpacas and donkeys as guard animals. So it is to be hoped that our future will include a more harmonious relationship with the Dingo.

## The Australian Bustard, once common but now endangered in NSW and Victoria

Michael Bedingfield

Last year I was casually browsing through the shelves of a charity bookstore when I came across a valuable gem and bought it for just a few dollars. It is a large hardcover book by Peter Slater published in 1978, entitled *Rare and Vanishing Australian Birds*, and beautifully illustrated with paintings of the birds. On the Australian Bustard he says:

In the nineteenth century, the Bustard ranged over most of the continent when conditions were suitable; now it has almost disappeared from the southern half of Australia, is regarded as endangered fauna in Victoria and New South Wales, and as rare fauna in South Australia.

The situation for the bird has not improved since then, and the large flocks seen in the past are now unusual. It is now relatively common only in some parts of the north. It is very rare in the south-east, and is still classified as endangered in NSW and Victoria. It also is found in southern New Guinea, and while it may have been an itinerant visitor, it was not common in the local region.

Peter quotes the famous ornithologist John Gould on the subject of this bird:

When seen at freedom slowly stalking over its native plains, no Australian bird, except the Emu, is so majestic, or assumes in its carriage so great an air of independence.

It is a large bird, with the male being up to 1.2 m tall and having a wingspan of up to 2.3 m, and the female being up to 0.8 m tall. It walks very erect, often with the head tilted back and an aristocratic air.

If approached it will walk slowly away, keeping one eye on the intruder, and will take flight only if the threat continues. The flight is strong and they can cover large distances. The plumage of the two sexes is similar, being mostly pale grey with a black crown and nape; back and tail brown, wings brown with speckled black markings, and a black band across the chest.

Their breeding is communal. They gather in flocks in spring or early summer, usually at traditional locations and after rain. Each male establishes and clears a patch of ground for the purpose, these being 100–1000 m apart. He mates with those females that he is able to attract into his display arena. Because the males are so far apart this is called the 'exploded' lek mating system. During his spectacular breeding display the male enlarges a throat sac, which balloons out, his feathers hanging low towards the ground as he struts around. He makes a loud booming or roaring sound. The female later lays a single olive-green egg, or occasionally two, on bare ground or in grass, but with a good view in case of predators. She is well camouflaged for nesting, and raises the young by herself.

The Australian Bustard, also known as the Plains Turkey, has the scientific name *Ardeotis australis*. It is omnivorous, feeding on seeds, fruit, leaves and buds, and small animals such as insects, lizards and mice. It is nomadic, and flies to where its food sources are more abundant.

The habitat is grassland, dry plains, low shrublands and grassy woodland. It prefers areas of long grass or low shrubs. This allows it to have a view, but the young can easily hide. These ecosystems have changed much since European settlement and the introduction of grazing animals and other agriculture. The bird was also hunted extensively and shot for food. So numbers have declined dramatically. Other threats are foxes and cats, which take eggs and chicks, and Dingoes. It is shy of human settlements and occurs only in more remote places.

While the Australian Bustard is not a local character around the ACT it is an interesting and valuable part of grassy ecosystems in other parts of the country. It is a beautiful bird to be admired, cherished and kept safe.

Other references I used were these web sites:  
[oiseaux-birds.com](http://oiseaux-birds.com),  
[birdsinyard.net](http://birdsinyard.net),  
[australianwildlife.org](http://australianwildlife.org),  
[australianmuseum.net.au](http://australianmuseum.net.au),  
[en.wikipedia.org](http://en.wikipedia.org)



## *Contacts for FOG groups and projects*

### **General inquiries**

Contact [info@fog.org.au](mailto:info@fog.org.au) or Sarah Sharp (0402 576 412).

**Activities** organises FOG field trips, talks, workshops, on-ground work, support to other groups, property visits and FOG's calendar. *Inquiries:* [activities@fog.org.au](mailto:activities@fog.org.au)

**Advocacy** prepares submissions and advocates on 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: Sarah Sharp (President), Kris Nash (Secretary), Leon Pietsch (Treasurer), John Fitz Gerald, Naarilla Hirsch, Stephen Horn, Tony Lawson, Ann Milligan (newsletter), Katherina Ng, Margaret Ning, Kim Pullen, Rainer Rehwinkel, Andrew Zelnik.

Public Officer: Andy Russell.

*Inquiries or correspondence:* [committee2@fog.org.au](mailto:committee2@fog.org.au)

*Postal address:* PO Box 440, Jamison Centre ACT 2614.

**Communication** produces FOG e-Bulletin.

*Inquiries:* [ebulletin@fog.org.au](mailto:ebulletin@fog.org.au)

**Financial matters**, excluding membership,

*contact:* [treasurer@fog.org.au](mailto:treasurer@fog.org.au)

**Grassland flora and other sales.** FOG sells and distributes the book *Grassland Flora*, other books, cards and T-shirts. *Inquiries:* [booksales@fog.org.au](mailto:booksales@fog.org.au)

**Grassland monitoring.** FOG holds monitoring days at the Bush Heritage property 'Scottsdale' near Bredbo, NSW.

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

**Hall Cemetery.** FOG with ACT Government holds regular working bees to protect leek orchids and generally restore Hall Cemetery. *Inquiries:* [john.fitzgerald@fog.org.au](mailto:john.fitzgerald@fog.org.au)

**Media spokesperson:** Sarah Sharp (0402 576 412).

**Membership.** New members are welcome. We have two new membership categories: \$20 per year for not-for-profit organisations, and a new 'voluntary life membership' category. Membership forms are at the website.

*For inquiries, or to help with newsletter dispatch, contact:* [membership@fog.org.au](mailto:membership@fog.org.au)

**National land.** FOG, with the National Capital Authority, holds regular working bees at Yarramundi Reach (grasslands) and Stirling Park (woodlands), ACT.

*Inquiries:* [jamie.pittock@fog.org.au](mailto:jamie.pittock@fog.org.au)

**Newsletter.** *News of Friends of Grasslands* is dispatched on the fourth Tuesday of February, April, June, August, October, December. Please send photos and articles about FOG or related grassland activities before the third Tuesday of those months to editor Ann Milligan at: [newsletter@fog.org.au](mailto:newsletter@fog.org.au)

**Old Cooma Common.** FOG, with Cooma-Monaro Shire Council, holds working bees twice yearly at the Old Cooma Common Grassland Reserve.

*Inquiries:* [margaret.ning@fog.org.au](mailto:margaret.ning@fog.org.au)

**Southern Tablelands Ecosystems Park (STEP).**

STEP is a regional botanic garden and recovery centre at the National Arboretum Canberra. STEP showcases local ecosystems, especially native grasses and forbs.

*Inquiries:* [secretary@step.asn.au](mailto:secretary@step.asn.au), or The Secretary, STEP Inc., PO Box 440, Jamison Centre ACT 2614.

**Website, [www.fog.org.au](http://www.fog.org.au)** The website holds information about FOG and grasslands, back issues of the newsletter, and program details.

*Inquiries:* [webmanager@fog.org.au](mailto:webmanager@fog.org.au)

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