



News of Friends of Grasslands

Supporting native grassy ecosystems

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March–April 2018

Annual General Meeting

Tuesday 20 March 5.30 for 6 pm

All financial members of FOG are warmly encouraged to attend the 2018 Annual General Meeting of Friends of Grasslands Inc., at the Conservation Council offices, 26 Barry Drive (Lena Karmel Lodge), Acton ACT. The agenda is included with this newsletter.

Come at 5.30 pm so you can chat with other members beforehand. Parking (free at 5.30) is available directly across Barry Drive. Afterwards you are invited to dinner at a nearby restaurant.

Election of the 2018 committee

Once again we would particularly welcome new faces on the committee to future-proof FOG. Any financial member of FOG may nominate office bearers and committee members, either before the AGM in writing with the nominee's written acceptance, or at the meeting itself. It may be helpful to know that FOG's committee meets at 5.30 pm on the 4th Tuesdays of March and every second month thereafter.

Please contact the Secretary before 13 March with nominations, john.fitzgerald@fog.org.au.

For inquiries and to RSVP (for catering for the AGM & for booking dinner afterwards), contact president@fog.org.au.



Potter Wasp (*Eumeninae* sp.) on Blue Devil (*Eryngium ovinum*) at STEP (Southern Tablelands Ecosystem Park), National Arboretum Canberra. Photos: Andy Russell. Wasp ID: Kim Pullen. On Canberra Nature Map, <http://canberra.naturemapr.org/Community/Sighting/3370961>.

Come and help lead FOG!

Being an 'ordinary' committee member for FOG is interesting and low-risk. You learn about, and become part of, what is happening in grassland and grassy woodland conservation in SE Australia (even more than by joining in FOG activities and reading the newsletter). Do consider putting up your hand to be on the committee this year to help in discussions about FOG's courses of action! The main FOG tasks are currently managed by office-bearers and non-committee members, so this is a learning opportunity for you, with little work involved. You don't have to know anything about ecology of grassy ecosystems but you do need to be willing to contribute your ideas to their support.

FOG Advocacy by Naarilla Hirsch & Sarah Sharp

Annual meeting

The advocacy group has just held its annual meeting to discuss both administrative processes and priorities for the coming year. These include a number of reports we expect to see out for public consultation this year (the Draft Management Plan for the Molonglo River Reserve has already appeared since the meeting), and areas we would like to be more proactive in pursuing, such as weeds and their impact on our native grasslands.

The advocacy group doesn't have expertise in all the areas FOG would like to cover, and is looking for anyone from the membership who might have a particular interest in or expertise about a couple of specific areas: NSW grassland sites, and threatened species nominations and recovery plans. If you are prepared to help us out when something comes along in one of these areas, please let the advocacy coordinator know via advocacy@fog.org.au. We'd also welcome some help from anyone interested in advocating better weed control in the ACT.

December

FOG provided the NSW Office of Environment and Heritage with comments on the Draft Biodiversity Conservation Investment Strategy 2017–2037. FOG supported acquisition of appropriate Crown lands of high conservation value that adjoin parks as important for improving park design, but noted that the strategy made no reference to those other parcels of Crown land with high conservation value that are not adjacent to the existing national parks system. In general, Travelling Stock Reserves (TSRs) fell between the two documents out for comment – namely, this strategy and the accompanying Draft National Parks System Directions Statement. FOG pointed out the outstanding biodiversity values of many TSRs, as well as their important connectivity function, and expressed concern that the outcome of the recent NSW Travelling Stock Reserve Review has not been made public. All high conservation value TSRs and Travelling Stock Routes should be included as priorities under the principles of this strategy.

The full text of FOG submissions appears on our website.

Places to see; Things to do

Walks at Mcleods Creek, Gundaroo 7 & 8 April

Mcleods Creek Nature Reserve (204 ha) was established in 2010. The area has been largely cleared for agriculture, and is currently being restored to preserve the Natural Temperate Grassland and the White Box–Yellow Box–Blakely's Red Gum Woodland.

Please join us to view native grasses and groundcover species, and discuss restoration techniques applied at the reserve.

Rainer Rehwinkel with Susannah Power will lead a **walk through the grassland, from 11 am to 12.30 pm** (you can stop earlier if you wish) **on both the Saturday and the Sunday**, for Open Gardens Canberra. Just turn up. Free of charge, though donations are welcome (they will be directed to FOG's projects).

The entry is on Marked Tree Road, Gundaroo, NSW 2620, approx. 2.4 km east of Gundaroo. For inquiries, contact (Ranger) Susannah.Power@environment.nsw.gov.au, ph. 02 6229 7059.

Malleefowl Lore – bringing culture and biodiversity together, 6–9 April

You are invited to a special weekend event on 7–8 April which will induct Aboriginal and non-Aboriginal participants into Malleefowl lore and explore the question 'Can Traditional Kinship, Country, Culture and Lore bring about species protection & sustain long-term engagement in environmental management?'.

This trial of a new cultural approach model has been arranged by the Knowledge Services Team, NSW Office of Environment & Heritage based at Wagga, and funded by the NSW Environmental Trust. The activity will be on the Aboriginal-managed 'Rick Farley Reserve' in western NSW, starting at Lake Mungo Visitor Centre at 2 pm on Friday 6 April, and ending back there early on Monday 9 April. The Visitor Centre is 147 km from Balranald which is 640 km from Canberra (so 10–11 hours drive from ACT to the meeting point). Rick Farley Reserve is about 70 km beyond the Visitor Centre, and will be reached in convoy.

The reserve has camping facilities, toilets and limited showers. For a map, meeting times, the weekend program, an outline of the thinking behind the trial, camping details, and to discuss participation, email or phone Geoff Robertson (02 6241 4065 or 0403 221 117, geoffrobertson@iprimus.com.au).

March and May activity ideas

FOG's Activities team is hoping to arrange an activity for March. Details will be sent by email when and if we succeed.

Here is another call for ideas for **Tree Week 2018** (30 April – 6 May). There are a couple of possibilities so far, and more ideas are welcome. One idea is to invite readers to look out for tree hollows, noting where they are and some other features. A plan to guide this citizen science will be sent to you if you register with activities@fog.org.au. The resulting observations could become a FOG publication for Tree Week, with an on-ground activity that week as well. What do you think? Please email and tell us. activities@fog.org.au

FOG workparties before mid-May 2018

Weeding workparties are planned for the dates below. All are expected to **start at 8.30 or 9 am** and end by 12.30 pm. Your help is needed and always welcome.

Tools are provided. You need to wear protective gear (including hat) and footwear appropriate for the work and the weather, and bring your own drinking water.

Each workparty convenor provides morning tea, making these into pleasant social occasions.

Please **register by two days before the date** of the workparty so there are enough tools and tea for everyone, and to find out where to meet if you are not sure, and so you can be told if the weather forecast has led to a cancellation.

Workparties are cancelled if: the forecast is 35°C or more; it is a total fire ban day; there is lightning; or there is heavy rain.

Hall Cemetery woodland, Wallaroo Rd, Hall ACT
Saturday 3 March, 8.30 am, john.fitzgerald@fog.org.au

Stirling Park woodland, Yarralumla ACT
Sunday 25 March, 9 am, jamie.pittock@fog.org.au

Hall Cemetery woodland, Wallaroo Rd, Hall ACT
Saturday 14 April, 8.30 am, john.fitzgerald@fog.org.au

Stirling Park woodland, Yarralumla ACT
Sunday 29 April, 9 am, jamie.pittock@fog.org.au

Clean Up day & bbq, 10 March, 2 – 4 pm

North Mitchell/Franklin, ACT

FOG is joining Andrew Leigh (federal MP) and Suzannne Orr (MLA in ACT) in a Clean Up Day followed by barbecue at the **North Mitchell Grassland/Franklin Grassland** area on Saturday 10 March. FOG will lead a guided walk and there will be talks about the area's environmental values.

This large reserve is assigned to the highest conservation category in the newly released *ACT Grassland Strategy*. It has areas of Natural Temperate Grassland and numerous flowering forbs in spring, as well as Striped Legless Lizards, Golden Sun Moths, and the rare Ginninderra Peppercreep, as well as a natural wetland and remnant Box–Gum woodland. However, the most commonly seen species is *Phalaris*.

Come to Cristina Stead St, Franklin ACT 2913. **More detail:** www.andrewleigh.com/north_mitchell_grasslands

'Bettongs, bulbs and biodiversity'

Catherine Ross will speak about her research on this topic at the **Australian National Botanic Gardens (ANBG)** on **Thursday 15 March, 12.30 pm**. Can the return of Bettongs, an 'ecosystem engineer', help to restore biodiversity in grassy woodlands?

Sales of Australian native plants, at ANBG

Saturday 17 March, 8.30 am – 1 pm or sold out, ANBG main carpark, run by Australian Native Plant Society.

Saturday 7 April, 8.30–11 am, carpark behind Crosbie Morrison Building, run by the Growing Friends (of ANBG).

News – from the FOG committee and otherwise

2018 Small Grants Project Applications wanted!

Friends of Grasslands (FOG) is again pleased to offer a small number of grants of \$500–\$1500 each in 2018 to support projects that promote investment in the understanding and management of grassy ecosystems. Any individual or organisation can apply.

A grant might enable the recipient to undertake a small project, to meet some expenses with a project, to support training, and/or contribute to a larger project. Projects might include publications, research, education, on-ground work, advocacy, publicity and/or training. The July–August 2017 FOG newsletter (<http://www.fog.org.au/newsletter.htm>) lists projects supported in 2017, the first year these grants were offered.

FOG will publicise the projects it funds, and in addition may provide practical in-kind support if required. A grant recipient will need to keep FOG informed of progress, and provide support to FOG, for example by preparing a short article for the FOG newsletter, giving a talk to FOG, leading FOG visits to the project study site(s), and/or providing of a copy of any relevant project output; e.g. research paper, information brochure etc.

Grant applications must be submitted using our 2018 FOG Supported Projects Small Grants Project Application Form which can be downloaded from FOG's website at <http://www.fog.org.au/supportedprojects.htm> or via the Small Grants link at the bottom of the home page at <http://www.fog.org.au>. For further information contact the FOG Supported Projects Sub-committee at supportedprojects@fog.org.au.

Closing date for applications is **Monday 16 April 2018**. Grant funding is expected to be made available to successful applicants no later than the end of June 2018.

Welcome to a new member!

Nadine Richings, from Victoria

Congratulations!

FOG member **Ian Fraser** has been awarded a Medal (OAM) in the General Division, in the Australia Day 2018 Honours, 'for service to conservation and the environment'.

Membership renewals

Thank you to all the members who have renewed for 2018. Thank you also for the generous donations you have sent. They will go towards the supported projects grants.

If you received a notice for renewal late last year and haven't yet renewed, we remind you that membership payments are overdue.

If you haven't got a renewal form you can download a copy from the website www.fog.org.au

‘ACT Native Grassland Conservation Strategy & Action Plans’, 2017

The strategy is intended to ‘guide the protection, management and restoration of native grasslands and its [*sic*] component species for the next 10 years ... It includes all native grassland ecosystems of the ACT from lowland Natural Temperate Grassland in and around Canberra to the grasslands of the montane and subalpine zones, regardless of their tenure and land use.’

The full document is 266 pages and there is a separate 16-page summary.

Both documents are available at: https://www.environment.act.gov.au/cpr/conservation_and_ecological_communities/grasslands

Species needing attention?

Nominations can be submitted up to **5 pm Friday 30 March** for threatened species, threatened ecological communities or key threatening processes to be considered for listing under the *Environment Protection and Biodiversity Conservation Act 1999*. See <http://www.environment.gov.au/biodiversity/threatened/nominations>

Coolatai Grass in ACT now!

(*Hyparrhenia hirta*)

Michael Mulvaney reports:

“Unfortunately the first outbreak of Coolatai Grass in the ACT has been confirmed on Brindabella Road.”

See <http://canberra.naturemapr.org/Community/Sighting/3391460>

As reported in last *News of FOG*, January–February, the grass resembles Kangaroo Grass and Barbed Wire Grass, and clumps grow up to 1.5 m tall.

If you detect or suspect an incursion of Coolatai Grass in the ACT, please report it on Canberra Nature Map <http://canberra.naturemapr.org/> with a close-up photo.



Superb Parrots eating chickweed beside a house fence on Mt Rogers, ACT.

*Photo: Rosemary Blemings.**

Help save Superb Parrots

An article by Brett McNamara in *The Chronicle* (ACT region newspaper) on 13 February, says the ACT Government & Australian Museum are **seeking volunteers** to help sort through numerous images of ACT tree hollows to study Superb Parrot nesting behaviour.

For the article, see <http://www.queanbeyanagechronicle.com.au/story/5229818/snap-and-save-a-parrot>. To volunteer, see <https://volunteer.ala.org.au/project/index/22993321>.

**This is not a recent photo.*

A summary of the talks that **Dr Jamie Pittock** (ANU, on behalf of FOG) & **Peter Beutel** (NCA) gave in May last year.

Conservation of threatened species and ecological communities on Commonwealth land

by Dr Jamie Pittock, FOG's National Lands Volunteer Coordinator

'National lands' are lands reserved by the Federal Government in central Canberra for 'national capital purposes' and managed by the National Capital Authority (NCA). FOG volunteers work regularly to restore and protect the natural environment in three National Lands areas: Yarramundi Reach grassland (23 ha), Stirling Park woodland (52 ha), and Scrivener's Hut woodland (6 ha).

FOG sees several challenges in protecting these environments, which most

In 2009 (and again in 2013), FUG signed a partnership agreement with the woodland endangered

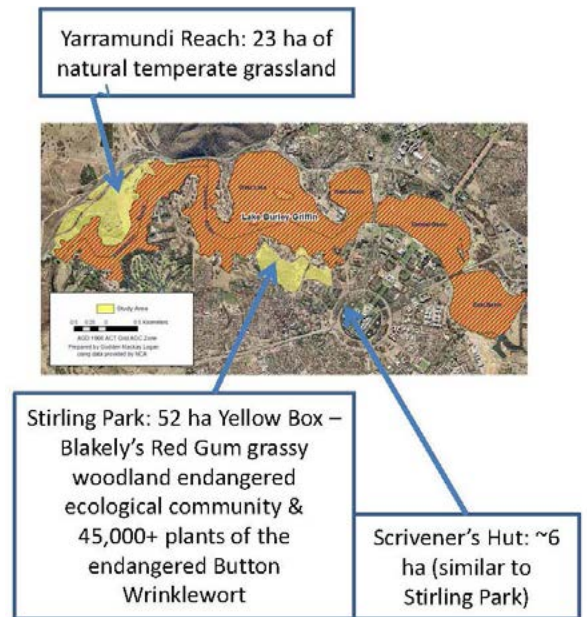
FOG's work in the **woodlands** is now greatly assisted by Yarralumla

Different situations challenge conservation work at

The conservation work has benefited from considerable



Partnership of government with community works: Persistence is required over



Above: National Lands in Canberra where FOG works in partnership with the NCA.

Below: Development and zoning proposal 2012, Stirling Park.



5185 volunteer hours valued at \$143,000,, and removed 3125 m³ of woody weeds. Also, the ACT Government has contributed over \$44,000 in grant funds, and the NCA has invested in extra management planning, weed control, tree felling and burning.

There have been considerable **successes** from both advocacy and the on-ground action, including: the Conservation plan; extensive weed control; strategic plantings; the reinstatement of fire in the system; the involvement of local people; no development so far at Stirling Park; and the rezoning of Yarramundi as open space.

Lessons have been learnt. Threatened biota can focus conservation action.

Partnership of government with community 'works'. Persistence is required over the years. Skilled contractors are limited. It is important to celebrate successes.

Talks at 'Protecting the environment on Commonwealth land', an EIANZ forum on 3 May 2017, continued

Good management of national lands with limited resources

by Peter Beutel, NCA, Manager of Lake and Dam

Managing 'national lands' involves complying with both the Heritage Management Plan, which covers ecological conservation, indigenous heritage and European heritage, and the Ecological Management Plan (EMP).

Guidelines in the EMP cover those areas within the National Capital Estate that contain **Matters of National (and Territory) Ecological Significance**: that is, Yellow Box – Red Gum Grassy Woodland; Button Wrinklewort *Rutidosia leptorhynchoidea*; Natural Temperate Grassland; Golden Sun Moth *Synemon plana*; Striped Legless Lizard *Delma impar*; and the Perunga Grasshopper *Perunga ochracea*.

Focusing on Stirling Park, which is largely woodland, NCA management must also comply with: the *ACT Emergencies Act 2004* in its large fire-prone areas (several have had no fires since the mid-1970s); and the *ACT Biosecurity Strategy 2016–2026*, in relation to pests and diseases.

Stirling Park also has a number of **stakeholder groups** with their own expectations of management: viz. Yarralumla Residents Association; Save the Stirling Ridge group; Friends of Grasslands; Australasian Bat Society; Wildlife ACT; Rural Fire Service; educational institutions; neighbouring agencies (the ACT Parks & Conservation Service, and several Diplomatic missions); and recreational groups.

UTILISING COMMUNITY SUPPORT

While there are various reasons for land managers to work closely with community volunteer groups, this author believes that **both parties can mutually benefit if the working relationship is based on trust, respect and common goals**.

A good example is the NCA's contractual partnership with Friends of Grasslands Inc. We have an Environmental Care Agreement, which harnesses expertise from the group. FOG is a community group with the capacity to attract other grants and sponsorships, and FOG is recognised for providing strong advocacy for environmental consideration for otherwise politically sensitive tasks. FOG also enables weed control at a micro-level.

Operation	Group Assisting
Weed & endangered plant mapping	FOG volunteers & CIT Students
Weed spraying & woody weed removal	Silvicultural contractors, FOG & Yarralumla Resident volunteers
Exotic Tree Removal	Commercial harvesting contractors
Pest Animal control	Pest control contractors, ABS & Wildlife ACT volunteers, ACT Parks Rangers
Managing Public Amenities and track maintenance	Contractors
Fuel Management	RFS volunteers

Works program for NCA Conservation Estate, showing involvement of community volunteers as well as contractors.

MANAGING LAND WITH LIMITED FUNDS

The overall conservation management program for the NCA has been undertaken with considerable collaboration with the local residents, community groups and volunteer organisations.

In the current financial environment land managers might consider using community groups to undertake works as a cost reduction measure only. **However, the varied skills and enthusiasm which volunteers possess provide many more benefits than just cost savings.**

Community involvement in NCA estate management projects has led to a better understanding of what each party is capable of and how best to work together to achieve better, long lasting results.



Information session, conferences & EIANZ forum coming up

Molonglo River Reserve, ACT, management plan information session

To prepare for declaration of the (new) Molonglo River Reserve, there is a **community information session, 7–8 pm, 8 March**, at Charles Weston School, 80 Woodberry Ave, Coombs, ACT 2611. To have your say on the Draft Reserve Management Plan for the reserve's first 10 years, register (free) at <https://www.eventbrite.com.au/e/molonglo-river-reserve-information-session-tickets-43380868345>.

CONFERENCES Conservation in action *Research to reality*

16–17 May, Bathurst NSW, organised by the Central West Councils Environment & Waterways Alliance. Watch <http://www.cwcewa.com.au/conservation-in-action-2018> for details as they emerge.

Striving for restoration excellence

25–28 September, UQ, Brisbane, organised by the Society for Ecological Restoration Australasia. Themes include: Indigenous values; Monitoring; Grasslands; Woodlands; Invasive species; etc. <https://www.sera2018.org/>.

EIANZ 'Impact assessment forum', 14 March 2018

9 – 4, University House, ANU

A forum examining environmental policy and practice relating to impact assessment:

– national, regional and local aspects, such as compliance processes, major projects and strategic assessment.

\$150: non-members. \$75: members. <https://www.eianz.org/events/event/impact-assessment-forum>

Articles

Pasture Day Moth, *Apina callisto*, a colourful day-flying moth that likes to keep cool by Michael Bedingfield

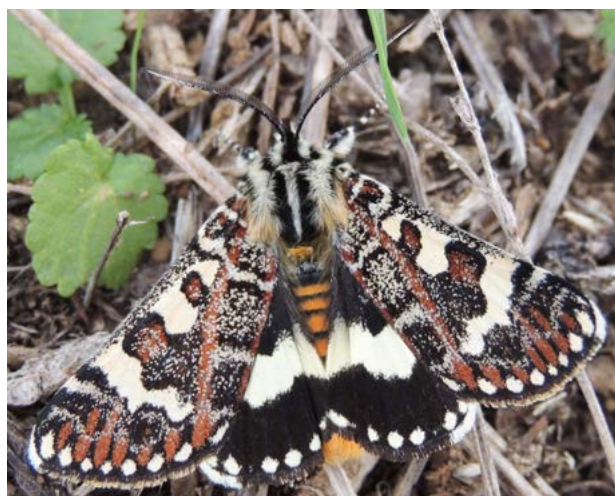
The adult form of the Pasture Day Moth appears in autumn, and although colourful it is quite hard to see when perched among the browning grasses. The times I have seen it have been when it has flown away from the vegetation at my feet to find a safer place away from my intrusion. To photograph it required a slow and cautious approach to the location where it landed. I was very pleased to be able to capture the animal at rest with its distinctive variety of colours and patterns (photo at right).

On the upper surface of the forewings it has a decorative arrangement of black, white and orange-brown. The hindwings are black and white, and the abdomen is banded in orange and black. The rear edges of all wings have a row of white dots. It is a medium sized moth and the wingspan can be up to about 5 cm.

Like the adult, the caterpillar is easily recognisable with its striking colours and it can grow up to 6 cm long. It is mostly black or dark brown with splashes of pale yellow or cream. There are two cream-yellow stripes along each side on the back and regularly spaced blotches of reddish-brown. Along the body are rows of white stiff hairs emerging from blue-grey spots and there are two prominent cream-yellow spots at the back end of the body (right-hand photo below).

The life cycle of this moth follows the seasons with one generation each year. After mating in autumn the eggs are laid in the pasture or other grassy landscape. They hatch after rain when the weather is cooling for winter. The caterpillar larvae feed on broadleaf or herbaceous plants such as erodiums, clovers, rumex species, capeweed, etc. The larvae are quite small during winter and not noticeable except to the keen observer. After they have grown, the colourful caterpillars become a common sight in spring in local grassy habitats. When mature enough they excavate a vertical tunnel in the soil and pupate in a cell underground. They avoid the difficulties of a hot summer by spending the season underground, which is a fine ploy to conserve their energy and stay cool. They emerge as adults in the following autumn and are ready to mate. They are active during the day and that's when you see them flying. They prefer to fly close to the ground, which is unusual for members of their family.

The Pasture Day Moth has the scientific name *Apina callisto* and is a Noctuid or Owlet moth in the family Noctuidae. It is related to other Noctuid moth species such as the Bogong moth *Agrotis infusa*, and the Australian Native Budworm *Helicoverpa punctigera* (left-hand photo below).



Images © Michael Bedingfield

The Noctuid family has a lot of members that are agricultural or garden pests, particularly the cutworms. The Australian Native Budworm is one such pest. The caterpillar of the species eats the foliage of a variety of crop and garden plants. It is regarded as a serious pest and farmers have various strategies to limit the damage it causes. It also pupates underground but only for about three weeks. The adult is migratory and has a wingspan of up to 4 cm. It occurs in all Australian states and has become established in New Zealand. Since the Pasture Day Moth feeds on broadleaf plants it is not regarded as a pest for pastures. There are some cereal and pasture crops, such as canola and peas, for which it is a minor and irregular pest. This is mainly when their normal host plants are killed by herbicides.

The Pasture Day Moth is a common native and is widely distributed in south-east Australia, in New South Wales, Victoria, South Australia, Tasmania and southern Queensland, as well as in south-west Western Australia. It lives in various types of grassy habitats including native grassland, grassy woodland, pasture and urban parks.

When you've been out and about on an autumn day and you've seen the colourful adult form of the Pasture Day Moth up close, then you have passed your day most favourably!

References

- http://www.herbiguide.com.au/Descriptions/hg_Pasture_Day_Moth.htm
- <http://lepidoptera.butterflyhouse.com.au/agar/callisto.html>
- <http://cesaraustralia.com/sustainable-agriculture/pestnotes/insect/Pasture-day-moth>
- <http://lepidoptera.butterflyhouse.com.au/heli/punctigera.html>
- <https://bie.ala.org.au/species/urn:lsid:biodiversity.org.au:afd.taxon:23e03d07-ad58-486b-8ae2-d1794ca29961>
- <http://lepidoptera.butterflyhouse.com.au/noctuidae/noctuidae.html>

Close-up: Glorious Grasses

John Fitz Gerald



This month I'll bypass any story line and allow the beauty of inflorescences and seeds of three less-common grasses that flower in the height of summer to speak for itself.

Seeds were separated by peeling open a few seed units. The three species are:

- *Dichanthium sericeum* – Queensland Bluegrass,
- *Digitaria brownii* – Cotton Panicgrass,
- *Pentapogon quadrifidus* – Five-awned Speargrass (collected at St Marks Grassland in December; see page 5, News of FOG January–February 2018).

The Bluegrass [1, 2] and Panicgrass [3, 4] structures are complexly hairy, even silky. Each Speargrass seed unit has five awns [5]: the longest and thickest is brown and twisted arising from the centre of the top of the lemmas, while two shorter awns extend from both lateral lobes. A beautifully bearded callus occurs at the other end [6].

Each image contains one white scale bar. In order from [1] to [6], these bars mark lengths of 5, 0.5, 1, 1, 5 and 0.5 mm respectively.

Images were recorded at the National Seed Bank at the Australian National Botanic Gardens.

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Weedy Wattles in Canberra: They are ‘natives’, so are they ok?

Sarah Sharp & Geoff Butler

The authors would appreciate your views on ‘weedy wattles’ – please email us any comments (addresses below).

In this article we discuss ‘alien’ wattle species that have become naturalised in the ACT and region. In light of the extensive invasion of Cootamundra Wattle into reserves, parks and on roadsides, we ask you to reflect on these other native weedy wattles – are they ok?

Current situation: general

In the ACT, our committed and passionate government weed officers have initiated some of the best weed mapping and focused weed management programs in Australia. They have done so through careful long-term strategic planning, and despite fluctuating weed budget allocations. Their priorities are on suppressing and containing weeds that are Declared Pest Plant species in the ACT, listed under the *Pest Plants and Animals (Pest Plants) Declaration 2005 (No 1)*, with a focus on maintaining our nature reserves and other natural assets as weed free as possible.

However, **in addition to those Declared Pest Plants, there are many other introduced ‘weeds’** that occur in the ACT. Among them, there are some Australian wattle species alien to the ACT that have become naturalised (defined as ‘an exotic or non-local native plant that can reproduce and sustain itself without human assistance’). Others are classified as ‘doubtfully naturalised’ (DN), indicating that they have self-propagated, but it is not known whether these plants will survive and regenerate away from parent plants.

The best-known species that is naturalised in ACT and the region and is identified as a Declared Pest Plant species is Cootamundra Wattle, *Acacia baileyana*.

For some of these species, management may not currently be a priority, and indeed sometimes in some locations they are considered of benefit (e.g. providing excellent bird habitat). Others are widespread and are currently or potentially impacting indigenous biodiversity.

Current situation: wattles

The recently updated ACT plant census* lists 27 species of *Acacia* that are identified as ‘Exotic Australian’ in the ACT.

Four species are listed as indigenous to the ACT, but populations are establishing outside their original range: *Acacia dawsonii*, *A. melanoxydon*, *A. pycnantha* and *A. rubida*.

...continues on next page



Community views matter

Community views can differ on the recognition of ‘native’ species as weeds. Some people have leanings towards them: e.g. ‘better to have native weeds than exotic weeds, as they blend in and fauna is adapted to them’, and ‘native weeds will blend into new ecosystems over time’.

The information we give in this article, on the potential weediness of the eight wattles ‘alien’ to the ACT (and region) is based primarily on observation over a number of years, and reference to observations recorded on Canberra Nature Map. It could not be said that any of the species should take priority for removal, though *Acacia boormanii*, *A. cultriformis*, *A. floribunda*, *A. longifolia* subsp. *longifolia* and *A. pravissima* are showing a propensity to naturalise within reserves and other native bush areas.

Native plants they may be, but *are they OK* when viewed in the light of the now-known issues of weediness of another old favourite – Cootamundra Wattle?

The authors would appreciate your views on these wattles. Please email any comments to Geoff, gbu22182@bigpond.net.au and/or Sarah, sarahsharp@grapevine.net.au.



*Census of Plants of the Australian Capital Territory version 4 (Centre for National Biodiversity Research 2017). It identifies species as ‘Exotic Australian’ (EA) when they have become naturalised, and as ‘doubtfully naturalised’ (DN) when they may become naturalised.
<https://www.anbg.gov.au/cpbr/ACT-census-2017/index.html>

Weedy Wattles in Canberra: They are ‘natives’, so are they ok? continued

Four have established naturalised populations: *A. baileyana*, *A. boormanii*, *A. decurrens* and *A. longifolia* subsp. *longifolia*.

Seventeen species are doubtfully naturalised (DN):

A. cardiophylla, *A. cultriformis*, *A. dealbata* × *decurrens*, *A. elongata*, *A. extensa*, *A. falcata*, *A. fimbriata*, *A. flexifolia*, *A. floribunda*, *A. howittii*, *A. lunata*, *A. saligna*, *A. stricta*, *A. subulata*, *A. venulosa*, *A. vestita* and *A. viscidula*.

Two are identified as formerly naturalised (FN): *A. baileyana* × *decurrens* and *A. terminalis* (no naturalised populations are known to occur in ACT).

For eight ‘exotic Australian’ wattle species there are now signs of potential future weed issues. Those eight are described in the list below, with their current status as EA or DN.

A. boormanii (EA) hails from the upper catchment of the Snowy River, from Cooma to the Victorian highlands. It grows on rocky slopes and along creeks in sandy and gravelly soils (Florabank 2017). It has been widely cultivated in gardens and in public and roadside plantings in the ACT for its hardiness and prolific winter/spring flowering. It readily regenerates around parent plants. It has become naturalised on poorer sites. At this stage removal is warranted, at least in reserve areas.

A. cardiophylla (EA, DN) hails from Gilgandra south and west to Wagga Wagga and the Lake Cargelligo area. This species has naturalised on Central Coast and Southern Tablelands from garden escapes (PlantNET 2017a). This species has primarily been used in gardens in the ACT and region as an ornamental. While currently regarded as DN (Centre for National Biodiversity Research 2017), indications are that it is naturalising in disturbed sites and in bushland areas in the local region. Needs monitoring.

A. cultriformis (EA, DN) hails from Wagga and west from the Denman–Singleton district; common on the Western Slopes. This species is often cultivated, sometimes naturalised (PlantNET 2017b). Grown widely in cultivation and for its hardiness as public planting/roadside plantings on hard sites. Currently regarded regionally as DN (Centre for National Biodiversity Research 2017), but is sparingly naturalising near existing plantings. Needs monitoring.

A. fimbriata (EA, DN) is found primarily in coastal districts north from Nerriga and west to Inverell and is widely cultivated (PlantNET 2017c). Widely used in cultivation in our region, primarily as garden plants or in suitable moister sites of public area plantings. Currently regarded as DN, but is showing a tendency to spread to moderately poor sites. Needs monitoring.

A. floribunda (EA, DN) extends from coastal sclerophyll communities, westward to the Rylstone area, in sandy alluvial soil and along watercourses (PlantNET 2017d). Widespread in cultivation regionally, and is adapting to harder, poorer and drier sites. Currently regarded as DN but is now being observed to spread to moderately poor sites near and in reserve areas. At this stage monitoring can continue but removal is probably warranted, at least in reserve areas.

A. longifolia subsp. *longifolia* (EA) is common on the coast and tablelands in sclerophyll communities and coastal heath and scrub, including sand on foredunes (PlantNET 2017e). Widespread in cultivation regionally, and adapts to harder, poorer and drier sites. This species is now being observed to spread to moderately poor sites near and in reserve areas. It has been used in many regional freeway plantings and is gradually spreading. At this stage monitoring can continue but removal is probably warranted in reserve areas.

A. pravissima. This species is chiefly found on the ranges south from the ACT and east to the Coolumbrooka Nature Reserve near Bombala, and grows on many soil types on hillslopes, ridges and riverbanks (PlantNET 2017f). This species is found naturally in the ACT’s western ranges, but probably did not occur naturally further east than the Murrumbidgee area. Because it occurs in the ACT, the ACT *Plant Census* (Centre for National Biodiversity Research, May 2012) does not comment on its naturalisation status. It has been used widely in domestic gardens and public plantings. It is a very hardy species that has readily adapted to many sites in the ACT and region. This species appears to be spreading more quickly in the region than other species, and is probably the most urgent ‘introduced’ wattle for management in and near lowland reserve and bush areas.

A. vestita (EA, DN) is widespread in the Wellington, Mudgee, Forbes, Bathurst to Cowra areas in dry sclerophyll forest, often on steep slopes or sheltered gullies, with dubious records from near Bega in 1891 and from Bombala district in 1901. Widely cultivated, occasionally naturalised (PlantNET 2017g). Currently regarded as DN, but this species appears to be gradually spreading from domestic cultivation/public plantings. At this stage monitoring should continue but removal is probably warranted in reserve areas.

References and further reading

- ACT Govt (2017) 2016/17 *Environmental Weeds Program – end of financial year report* (p. 4). Steve Taylor (ACT Senior Weeds Officer).
- Centre for National Biodiversity Research (2017) *Census of Plants of the Australian Capital Territory – Vascular Plants* Version 4. <https://www.anbg.gov.au/cpbr/ACT-census-2017/index.html>
- Florabank (2017) Fact Sheet: *Acacia boormanii*. http://www.florabank.org.au/lucid/key/species%20navigator/media/html/Acacia_boormanii.htm
- PlantNET (2017a) *Acacia cardiophylla* A.Cunn. ex Benth. <http://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=sp&name=Acacia~cardiophylla>
- PlantNET (2017b) *Acacia cultriformis* A.Cunn. ex G.Don. <http://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=sp&name=Acacia~cultriformis>
- PlantNET (2017c) *Acacia fimbriata* A.Cunn. ex G.Don. <http://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=sp&name=Acacia~fimbriata>
- PlantNET (2017d) *Acacia floribunda* (Vent.) Willd. <http://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=sp&name=Acacia~floribunda>
- PlantNET (2017e) *Acacia longifolia* (Andrews) Willd. <http://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=sp&name=Acacia~longifolia>
- PlantNET (2017f) *Acacia pravissima* F.Muell. <http://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=sp&name=Acacia~pravissima>
- PlantNET (2017g) *Acacia vestita* Ker Gawl. <http://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=sp&name=Acacia~vestita>

Visit to Gungarlin River, Botherum Plain NSW: Nothing but the best!!!

By Margaret Ning

At FOG, we are nothing if not flexible! With cool and wet days leading up to our Gungarlin River activity in Kosciuszko National Park, FOG members Bob and Jean very kindly did a recce (in 6 degree weather!!) of the proposed camping site, as they live a mere hour's drive from our destination. They reported back that the camp site was very damp, although the track was definitely drivable, and then extended an invitation for participants to camp on their property near Berridale on the Friday, Saturday and Sunday evenings. Things would be a little more dry and predictable there, and we would have a secure shed over our heads at meal times. It was a great plan, and a combined group of a dozen FOG and Australian Native Plant Society (ANPS) members gathered there on the Friday evening 8 December 2017.

Roger (Farrow) had put together a great program of specially chosen sites for Day 1 which were all on the track into the Gungarlin River camping area. The plan was to spend the whole of Saturday looking at them, returning to Bob and Jean's in the evening, and on Day 2 we would retrace our steps and do the final few kilometres into the Gungarlin River area for a walk on the Botherum Plain. The weather forecast was favourable, watercourses were running and it was moist under-foot, and we already knew from Bob and Jean that there were flowers 'out there'.

Saturday, Day 1, we visited six fine examples of grassy ecosystems, at various points along the road into the Gungarlin River camping area. Most of these spots had been visited on our previous trips to the area, generally at a different time of the year, and each spot had its own set of species, including occasional plants specific to only the one site. Some highlights follow.

Spot 1 was a travelling stock reserve. My highlight was a *Podolepis jaceoides* (top photo), with a lowlight of a Euphorbiaceae weed outbreak.

Powerlines marked Spot 2 – the 'Tetratheca spot' for a lovely display of *Tetratheca* (right) in an elevated, open rocky spot (below right).

Spot 3 was half way down a hill in a lightly forested area on the eastern side of the track. Wandering around, we found some *Podolobium alpestre* patches, and on closer inspection they all had a few white *Caladenia* (below left) protruding from them, reminiscent of a similar patch Geoff and I owned at Nimmitabel ('Nimmy'), and I am pretty sure it was the same *Caladenia* species (*C. lyallii*, as it was 20 years ago, or *C. alpina* these days). Nice bird orchids there too (photo left).



Towards the bottom of a steep hill, on the western side of the



track this time, was Spot 4, a beautifully open grassy area we had visited in the past. Lots of orchids, damp under foot – FOG and ANPS heaven (right).



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Visit to Gungarlin River, Botherum Plain, NSW: Nothing but the best!!! continued

Spot 5 was a large open grassy area sloping down to a drainage line full of little things, including one of my favourites, *Hydrocotyle tripartita* (photo right), another Nimmy reminder, which was prominent amongst a range of interesting water plants that were still inundated following the recent rains. Closer to the roadside we finally found *Geranium antrorsum*, as well as *Swainsona behriana* (photo next page).

And finally there was Spot 6 – which could only be called the ‘leek orchid’ spot as it contained two leek orchid species (centre below). We explored both sides of the track and once again sighted *Podolepis jaceoides* and *Leptorhynchos elongatus* (below left & right).



On Sunday we parked in the picturesque day visitors’ spot at Gungarlin River, and had morning tea to the call of a Pobblebonk. The river was up on my previous visits, but according to Bob and Jean it was down from five days earlier. We discussed the walking route we would take, but first, after crossing the bridge over the Gungarlin River, we took a quick look at a handful of special plant species within 30 metres or so of the bridge, including *Discaria nitida* (right), *Muehlenbeckia axillaris* (left below) and *Drabastrum alpestre* (right below).



And then we proceeded to do a huge (7 km!!!!) loop walk onto the Plain, wandering through the prettiest and most spectacular display of wildflowers I have seen for a long time (ever?). Even Roger who is a regular visitor to the Park said it was the best December wildflower display he had ever seen there.

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Visit to Gungarlin River, Botherum Plain, NSW: Nothing but the best!!! continued

From the outset, within 50 metres of beginning our walk, we encountered floriferous areas with each generally containing a different suite of wildflowers, all looking splendid, and occasionally finding a species that Roger had not seen in that area (or the Park) previously.



Gentianella polyspheres (left) were seen in profusion. I was told that the *Pterostylis* I thought was *P. cycnocephala* was something else (below), a more robust species than the grassland species we are used to in the Canberra region.



Above: *Diuris* sp.

Far right: *Swainsona bebbiana*.

All photos by Margaret Ning



Our lunch spot had a million dollar view of a spectacular *Bossiaea foliosa* expanse (above), even more impressive than the one at our Nimmy property.

There were occasional 'sad to sees'. The pig diggings were bad enough, but then the *Hypochaeris* moves in and dominates, and Sweet Vernal



Grass was everywhere. Horses beget horse poo and make horse tracks, quite apart from the major ecological damage they do with their hooves. 'Nuff said, I guess.

It was a truly a memorable weekend, that made my title of 'Nothing but the best for FOG and ANPS' come to mind very early in the adventure.

Thank you Roger.



Visit to Nerriga NSW by FOG & Australian Native Plant Society (ANPS), 10–11 February

by Ann Milligan

If you read the article (in the previous newsletter) by FOG member Lauren Booth about their property at Nerriga, between Nowra and Braidwood, you will not be surprised that the FOG and ANPS visit there was *full* of interest – and very comfortable. Our party numbered 21, half of whom arrived on the Friday night, before or during a thunderstorm, and the rest on the Saturday morning.

The first activity was a walk southwards, first through an open area with plenty of plant interest, which Norm Booth keeps mown for fire management (*photo at right*); then into the bushy strip where gold mining flourished for a while in the 1800s (*below right*). The mine shaft was 100 m deep (dip at front of photo), now blocked for safety, and the channel of the water race is still clearly visible nearby, though the metal lining has gone. Water from Corang Creek was diverted along it to wash the ore brought to the surface.

After lunch, we walked northwards on the tracks around and across the property's larger end that is bounded on two sides by Morton National Park. Among numerous plants here are the four threatened species Lauren mentioned in January–February. The group saw the four, though not in flower, it being February. Many other species were added to the Booths' already extensive list. On this warm afternoon the group was grateful for a pause, sitting on the plastic chairs Norm had deposited about halfway along the walk.

Highlights of the evening were the convivial atmosphere, and the challenging plant-knowledge quiz Lauren had devised, and the lovely rain (this is a 900–1000 mm p.a. rainfall area). The quiz had 15 questions for a maximum score of 20 points. The winning team (Sue and Stephen) achieved 19 points, and were awarded a bottle of Corang estate wine.

On the fresh clear Sunday morning, we visited the Nerriga Museum, thanks to prior arrangement by Lauren. The two small former school-rooms are full of items from the 1800s and early 1900s and there is an old sawmill in the museum grounds as well. The morning ended with a visit to the Corang River, where there are several bluey-green Corang Pine bushes (*Callitris oblonga* subsp. *corangensis*), and a few of our group had a swim in the clear water.

The weekend may have been a 'camping' trip, in that we were all in tents and caravans and sharing a pit toilet, but Norm's and Lauren's warm welcome and thoughtful hospitality, and the extremely well managed property, campground, buildings and facilities made this a very pleasant place to stay.

Thank you, Lauren and Norm. A follow-up visit is planned for 10–11 November.

Left–right: Solenogyne gunnii (KN); *Spiranthes australis* (MN); *Pomax umbellata* (KN); Corang Pine *Callitris oblonga* subsp. *corangensis* (KN).
(KN = Kat Ng, MN = Margaret Ning, PA = Paul Archer, PM = Peter Milligan)



Top: Hosts Norm (with clipboard) & Lauren (blue cap), both in blue shirts, central, with the group (*photo: PM*)



Left: Hyacinth Orchid near the shaft (PA).
Above & below: Shaft & museum (PM).



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FOG and others' dates March – mid-May

3 March	Hall Cemetery woodland workparty, ACT
8 March	Information session on Molonglo River Reserve, ACT
10 March	'Clean Up' & bbq at North Mitchell grassland, ACT
13 March	Send nominations for FOG committee by today
14 March	EIANZ forum, 'Impact assessment', ANU
15 March	'Bettongs, bulbs and biodiversity', ANBG talk
17 March	ANPS native plant sale, ANBG
20 March	FOG Annual General Meeting
25 March	Stirling Park woodland workparty, ACT
30 March	Closing date for new nominations of threatened species
6–9 April	Malleefowl Lore activity, far western NSW
7, 8 April	Open Garden walks at Mcleods Creek, Gundaroo NSW
7 April	Growing Friends (ANBG) plant sale, ANBG
14 April	Hall Cemetery woodland workparty, ACT
16 April	Closing date for FOG small grants applications
29 April	Stirling Park woodland workparty, ACT
30 April – 6 May	ACT region Tree Week
16–17 May	'Conservation in action' conference, Bathurst NSW

In this issue

Annual General Meeting; Come and help lead FOG!

FOG Advocacy, *Naarilla Hirsch & Sarah Sharp*.

Places to see; Things to do

– Mcleods Creek NR walks; Malleefowl Lore weekend.

– FOG workparties; Clean Up day & bbq; Activity ideas.

– Bettongs & biodiversity talk; Sales of native plants.

News from FOG Committee and other news

– 2018 Small Grants Applications wanted!

– Member news; Membership renewals.

– Coolatai Grass now in ACT!; Native Grassland strategy;
New TS Commissioner; Call for new TS nominations;
Help save Superb Parrots.

Two talks involving FOG, given at EIANZ forum 2017.

Information session, conferences & EIANZ forum ahead.

Pasture Day Moth *Apina callisto*, *Michael Bedingfield*.

Close-up: Glorious Grasses, *John Fitz Gerald*.

Weedy Wattles: are they ok? *Sarah Sharp & Geoff Butler*.

Visit to Gungahlin River, Botherum Plain NSW, *Margaret Ning*

FOG & ANPS visit to Nerriga NSW, 10–11 February.

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