# News of Friends of Grasslands

Supporting native grassy ecosystems

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March & April 2023


## Activities

**Bat activity**
Wandiyali, Googong area.
Fri 17 Mar, 5pm. This activity will involve trapping bats, identifying bats and discussion with bat expert Michael.
Wandiyali is managed for the purposes of conservation and restoration by the Wandiyali Restoration Trust.
margaret.ning@fog.org.au

**Ginninderry Conservation Corridor tour**
Thurs 6 Apr, 9am – 12noon
Ginninderry Conservation Trust
margaret.ning@fog.org.au

## Work parties

Budjan Galindji (Franklin Grassland); Wednesdays 22 Mar, 5 Apr & 26 Apr
margaret.ning@fog.org.au

Gurubung Dhaura
Sat 11 Mar; Sun 16 Apr.
margaret.ning@fog.org.au

Top Hut TSR
Sun 26 Mar
margaret.ning@fog.org.au

Hall Cemetery
Sat 4 Mar and Sat 1 Apr
john.fitzgerald@fog.org.au

# From the President …

Seldom has FOG's mission for the conservation of grassy ecosystems, the most endangered ecological communities in Australia, been more tested than in 2022.

A third year of La Niña weather conditions saw grasslands flourish but at significant costs. Rampant weed infestations overwhelmed control efforts and exposed the limited resources available in both the ACT and NSW government programs. Control of some key weeds like St John's Wort essentially ceased over most of the conservation estate. Further, the growth of grass biomass threatens to smother other grassland flora and fauna. Efforts to reduce grass through burning or slashing or grazing have been limited by wet conditions and cross-agency coordination challenges and lack of resources.

Sadly, the governments have not acted with requisite urgency to protect key grassy ecosystem remnants. While the new Federal Government has announced its intention to prevent extinctions and conserve threatened biota with new laws, it is yet to match fine rhetoric with action. Three examples from 2022 demonstrate the need for rapid improvement in practice by the Federal department for the environment and other Commonwealth agencies:

- Instead of being rejected outright, Defence Housing Australia's dreadful proposed residential development at North Lawson has been accepted by the Federal Minister for further assessment under the Environment Protection and Biodiversity Conservation Act;
- Canberra Airport Group gained permission in questionable circumstances to build a road around the north end of the airport that will bisect and kill off a key population of the critically endangered Canberra Grassland Earless Dragon (recently identified as one of four separate Grassland Earless Dragon species within the region). FOG is seeking a last-minute revocation of this approval; and
- Bizarrely, the Department of Defence has sought approval to damage grassy woodland habitat for a totally unnecessary car park at Campbell Park.

As indicated in the advocacy section of this report, defending these and other grassy ecosystems occupied much of FOG's time and energy during 2022 and will continue to occupy FOG into 2023.

There are some reasons to be optimistic. In December the world's governments agreed to targets to protect 30% of the Earth's surface in reserves for a representative array of ecosystems by 2030, and to restore 30% of each ecosystem. As these targets were endorsed by the Australian Government,

implementation should mean protection for remaining temperate grassy ecosystems. The Federal Government's new environment laws are proposed to include regional plans marking 'no development' zones to protect matters of national environmental significance. FOG has an opportunity to apply our expertise to ensure that grassy ecosystem remnants will be designated for protection.

Following FOG's work with ANU students in 2021 to review management of grassy habitats outside reserves in the ACT, we met with ACT Government agencies. This has resulted in some extra weed control at four sites, and more conservation work is planned for the Black Street grassland in Yarralumla. FOG's on-ground work has seen great progress in better management of grasslands at Top Hut travelling stock reserve near Adaminaby, Hall Cemetery, Budjan Galindji Reserve in Franklin, Blue Gum Point and Gurubung Dhaura (Stirling Park) in Yarralumla, and Yarramundi Reach Grasslands.

FOG's work to conserve grassland sites either side of Lake Burley Griffin was recognised with a 2022 ACT Heritage Award. We thank the ACT Government for financial support for some on-ground conservation activities, including through the ACT Environment Grants. In 2022, FOG continued our diverse and vital range of activities to promote the conservation of grassy ecosystems, including our work on education, field trips, on-ground projects, grants and advocacy, as well as the excellent newsletter. I again thank the members of the Committee and other volunteers leading these activities for their critical work. On behalf of FOG I wish to pay tribute to three special FOG members:

- Marg Ning celebrated 26 years' service on the FOG committee in 2022. Marg has been leader for our conservation efforts in so many areas, including instigating key on-ground conservation work, organising field trips and helping producing the newsletter;
- Janet Russell is stepping down as Treasurer and leaving the committee at the 2023 AGM. Janet has made a great many contributions to FOG, and most recently, it is her stewardship of our finances that mean that FOG has rigorous systems in place and is in great financial health; and
- Andrew Zelnik is also stepping down from the FOG Committee at the 2023 AGM. Andrew is also contributor to many of FOG's endeavours. I am grateful that he will continue to coordinate our hugely successful grassy ecosystems conservation grants program, that he instigated.

I encourage any FOG member interested in doing a little more to volunteer to join the committee or to take on one of the other modest but enjoyable activities that make FOG so vibrant and effective. Please call me if you would like to discuss options to help more (m. 0407 265 131).

Thanks to donations from FOG members, we were able to employ a part-time project officer in 2022 who ramped up FOG's efforts to advocate for conservation. While Aaron Midson has left to undertake PhD studies, in 2023 FOG will focus on strategic advocacy to try and pro-actively conserve grassy ecosystems rather than fighting rearguard efforts against those seeking to destroy significant habitat, such as the Canberra Airport Group.

We begin 2023 with three key initiatives for systematic conservation of our threatened grassy ecosystems. In the ACT, we are engaging in the reform of the planning system in order to protect off-reserve habitats. We have partnered with the Conservation Council to advocate for a biodiversity network to conserve and link grassy ecosystem remnants across land tenures in the ACT. We expect to support the ACT Government's proposed biodiversity corridor pilot projects as a welcome and tangible expression of how this could work. In NSW, we will join with partners in the Monaro region to improve protections for grassy ecosystem remnants. Please redouble your support for FOG in 2023 with membership, participation in events, labour and donations for the conservation of grassy ecosystems.

# Proposed road at Canberra Airport will mean extinction for a population of a newly discovered reptile

*Matt Whitting*

FOG noticed in late January that the Canberra Airport Group had moved earthmoving equipment into position at the northern end of Canberra Airport. FOG has since been advised that CAG is doing maintenance, however, FOG remains on alert knowing that CAG have all the approvals they need to clear grassland for its proposed 'Northern Road' and two bus parking areas between Fairbairn and Majura Roads in Pialligo.

When the original decision-maker granted her approval in November 2009, she said CAG had to develop a strategy for the project, backed by peer-reviewed science, that demonstrated that the road would achieve no increase in the risk of extinction for the population of an endangered species thought at the time to be widely distributed with tens of populations, the Grassland Earless Dragon. As advised previously, in September 2022 FOG asked the federal Environment Minster to suspend the thirteen-year-old EPBC Act approval for the road on the basis that new information had come to hand - namely that the species under threat is actually the genetically-distinct *Canberra* Grassland Earless Dragon, aka 'Bidjiwang' and *Tympanocryptis lineata*. The population living on and adjacent to the Canberra Airport is one of just three small remnant populations of this species.

The proposed public, paved road will bisect the habitat of the CGED population living at CBR Airport (Figure 1). The bisected Dragon population is then likely to be lost to vehicle strikes and events such as fires. The Commonwealth Government's Threatened Species Scientific Committee (TSSC) has recommended listing the Canberra Grassland Earless Dragon under the EPBC Act. The TSSC found that the species qualifies for listing at the level 'Critically Endangered' against not one but three (out of five) listing criteria: small population size; precarious geographic distribution; declining population[1]. So, to FOG it was of enormous concern that the earthmovers were moving in. FOG was advised in early February that the Minister is yet to make a decision on FOG's request to revoke approval for the road.

The arguments in favour of this road are very weak. Proponents argue that the road will:

- create a second paved egress from Fairbairn, needed to minimise risk in the event fire threatens the area – FOG notes that dirt tracks already exist through the grassland and we call on Defence to unlock the gates to enable egress whenever the fire danger rating is extreme;
- support the growth of Canberra Airport as a regional freight hub – FOG notes that when Badgery's Creek was selected as Sydney's second airport, those prospects dimmed.

The fact is, the unnecessary road will benefit a small number of people who lease land or work in the Fairbairn area.

We are in the midst of a biodiversity crisis, and the Environment Minister has included the Canberra Grassland Earless Dragon in her list of 110 species to be prioritised in the fight against species extinctions[2]. **This road must be stopped now, before it is too late for the population of CGED that lives at Canberra Airport.**

[1] TSSC (1 Sept 2022) Canberra Grassland Earless Dragon Consultation Paper, p. 24
[2] Commonwealth of Australia (4 Oct 2022) 2022-2032 Threatened Species Action Plan: Towards Zero Extinctions, p. 44

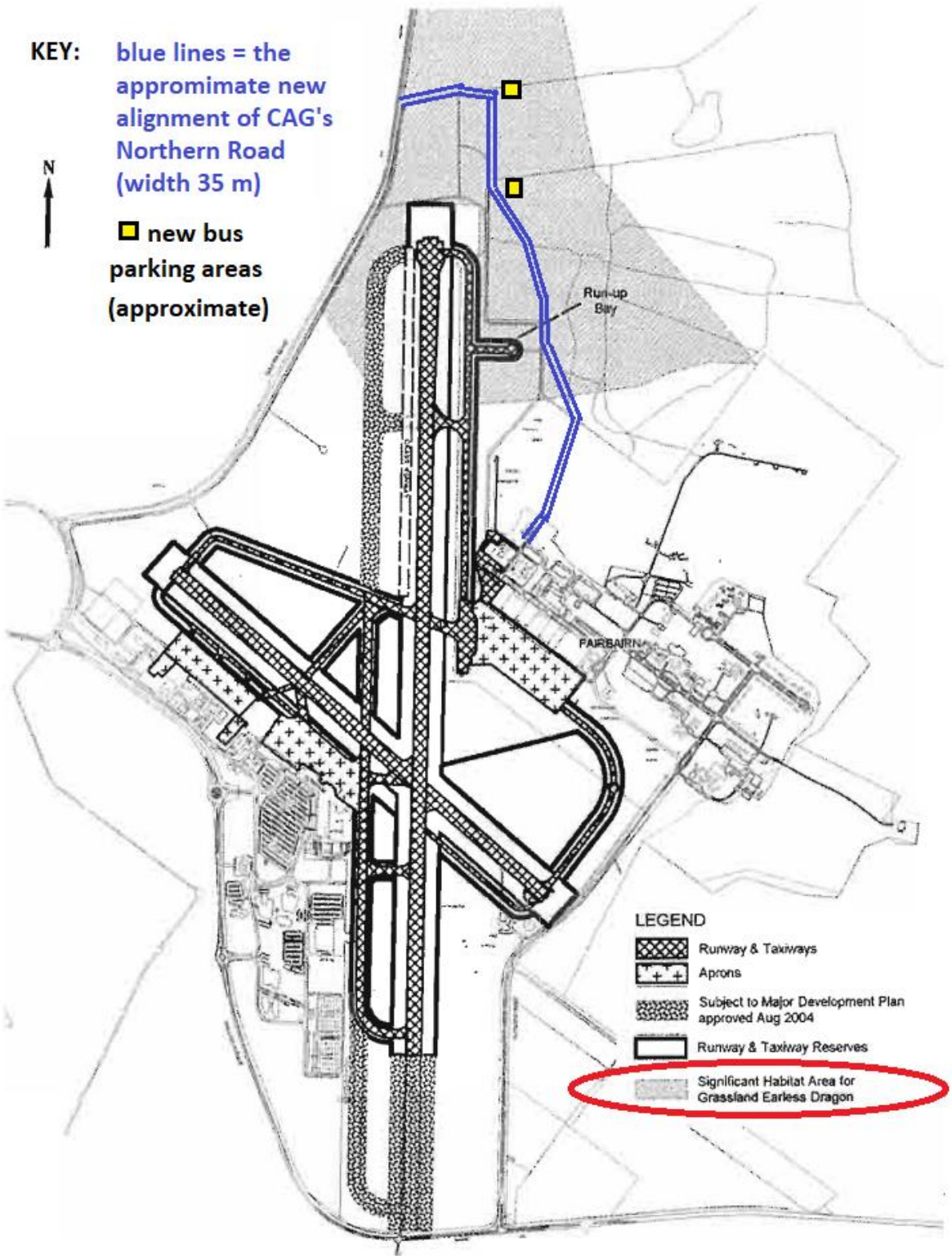


Figure 1: CAG's 'Northern Road'

*FOG has superimposed the approximate location of the proposed 'Northern Road' (including its bus parking areas) onto the diagram, included in the original approval, showing where the Canberra Grassland Earless Dragon has been sighted. The actual road alignment (including the location of the bus parking areas) can be seen here: approval after the Second Variation Decision (29 May 2020), Annexure 2.*

# Advocacy Report

*Sarah Sharp*

## 1. Submissions

### *Inquiry into the Planning Bill 2022, 6/12/22*

FOG was represented by Sarah Sharp at a public hearing to give evidence on the Bill on 6 December. The committee's report is at https://www.parliament.act.gov.au/parliamentary-business/in-committees/recent-reports. We were very heartened by the response of the Committee in regard to the lack of inclusion of environmental considerations in the Planning Bill. See in particular the recommendations 37 to 47 that deal with environmental issues, including those that FOG raised.

### *Campbell Park Car Park Consolidation Project, EPBC Number: 2022/09354 8/12/22*

Significant concern was expressed about the direct and indirect impact of expanding the car park into threatened community and species habitat and impacts on connectivity. The question was raised as to whether the car park extension was justified, given it was only partially utilised on several visits to the site.
This is another example alongside North Lawson and the Airport Northern Road of Department of Defence and other Commonwealth departments overriding EPBC matters for development.

### *Statutory Review of the native vegetation provisions (Part 5A and Schedule 5A and Schedule 5B) of the Local Land Services Act 2013*

Significant concern was expressed about past actions and the lack of emphasis in the review upon how biodiversity and ecological integrity will be maintained and improved; about the limited coverage of land clearing, despite stated objectives; the lack of evidence that the implementation of the Act will effectively protect and recover native grassy ecosystems; and the lack of completion of actions that were committed to in the review of the Biodiversity Act, including listing of NTG in the South Eastern Highlands and the draft Native Vegetation Regulatory Map.
The full text of all submissions appears on FOG's website Advocacy (fog.org.au)

## 2. Issues

### *Airport Northern Road*

Lobbying has continued with the aim of suspending the approval given for building the road, based on two main concerns:

- the recent identification of the Canberra Grassland Earless Dragon as a separate species puts one of the four extant populations of this species at risk of extinction; and
- the divergence of the project from the approval given in 2009.

Following a letter to the Hon. Tanya Plibersek by FOG, the Department of Climate Change, Energy, the Environment and Water (the department) has responded that the department is "considering your request to review and suspend the *Environment Protection and Biodiversity Conservation Act 1999* approval for the northern road at Canberra Airport". In January FOG prepared an issues paper on the approval of the Northern Road at Canberra Airport (EPBC 2009/4748), to assist with further lobbying.

### *North Lawson*

Following on from the public consultation period, the proposal was identified as a controlled action that requires assessment and approval under the EPBC Act before it can proceed. The project will be assessed by an environmental impact statement. Together the Conservation Council, Ginninderra Catchment Group and FOG have been lobbying for no development of, or impact on, the area containing NTG and threatened species.

## 3. 2023 Planning Meeting

It was suggested at the meeting that Matt Whitting be asked to join the advocacy group, which he has subsequently agreed to. Welcome Matt! Issues and priorities for 2023 were identified and advocacy members given responsibility for working on the following.

**Ongoing**

- Biodiversity Network implementation (management off-reserve including weeds, protection, community involvement)
- Territory Plan and District Strategies (due March 3)
- North Lawson
- Airport Northern Road
- National Lands reservation
- NSW TSRs: workshop to be held on the Monaro TSRs
- Input into government initiatives: tree planting, connecting people, connecting nature program

**New/expected**

- Budget 2023-24 (including weeds): 27 June 2023
- Monaro Grasslands

Anyone with particular interest or expertise in any of these areas would be most welcome to help; contact Sarah at advocacy@fog.org.au.

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# Donations Requested

FOG uses donations to fund various projects such as our Grassy Ecosystem Grants and on-ground conservation management work at Top Hut TSR. You can make a tax-deductible donation (of $2 or more) to the FOG Public Fund as follows:

- *Direct debit: account name 'Friends of Grasslands Public Fund', BSB 633 000, A/c 153493960. Please include your name and notify our Treasurer (treasurer@fog.org.au) to receive your tax-deductible receipt.*
- *Cheque: payable to 'Friends of Grasslands Public Fund' mailed to Treasurer, Friends of Grasslands Inc., PO Box 440, Jamison Centre, ACT 2614. Please include your name and address for a tax-deductible receipt.*

You can include your preference for use, if any, when you make your donation. By law the final decision on the use of tax-deductible donations to the FOG Public Fund rests with the FOG Public Fund Management Committee. Donations to the Public Fund are tax-deductible.

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# 2023 Grassy Ecosystem Grants - Applications Invited

FOG is again offering a small number of grants of up to $1500 each for projects that promote its objectives and priorities in relation to the understanding, conservation and management of native grassy ecosystems. A grant may be used to solely fund a small project or to partially contribute to a larger project. The nature of an eligible project can involve one or more of the following: education, research, surveys, monitoring, citizen science, on-ground work or training, publications and other media (physical or electronic), advocacy or policy development, publicity and awareness-raising, collaboration and networking, Indigenous engagement, or other forms of communication (spoken or written word, visual, other sensory). Any individual or organisation can apply.

Further information and the 2023 Application Form are available from our Grants webpage at https://www.fog.org.au/supportedprojects.htm. **Closing date for applications is Friday 14 April 2023.** We aim to notify applicants of the outcomes of their applications within six to eight weeks of the closing date. For enquiries and further information please contact us at supportedprojects@fog.org.au.

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# Daisies in Droves - a closeup

*John Fitz Gerald*

I was surprised to find that my last daisy-only closeup was in Jan-Feb news from 2018 so decided it was time to do another, focusing on 3 common native species. All of these flowered well and produced many seeds in the recent very good summer.

I'll start with the largest plant and seed - *Xerochrysum viscosum*, Sticky Everlasting. The plant is described as both annual and perennial though my feeling is that in the ACT we find mostly perennial examples with preference for woodland over grassland. ALA shows 6400 records of the species that range across Vic, ACT and NSW and from near the coastline to up to 500km inland.

The seeds are cylindrical and brown with slight longitudinal patterning. The scale bar in my image is 1mm so the seeds are 2mm long and 0.6mm wide and with blunt tips.

Next in my list is *Leptorhynchos squamatus*, Scaly Button. In the Jan-Feb news 2023 on page 13, the article by Margaret and Geoff mentioned good-quality NTG areas having a spectacular show of flowers of this plant in Jaramlee Nature Reserve. This perennial forb grows mostly in grasslands but also in open woodland. Two subspecies are recognised: *squamatus* and *alpinus* with the subspecies *squamatus* being distinguished by concolurous and hirsute leaves.

ALA holds around eleven thousand sighting records distributed through SE Australia, mostly within 200 km of the coast. Under one third of the records have subspecies assigned; of these, 2800 are differentiated *subsp*. *squamatus* and I suggest my collection from beside Lake Burley Griffin is likely to be in this subspecies. My image has a scale bar of 1mm, so seeds are 1.5-2 mm long, 0.3 wide and 0.15 thick. The smooth seeds are tapered, slightly flattened and pale brown.

Last is *Pseudognaphalium luteoalbum*, Jersey Cudweed. ALA shows a continent-wide distribution with 10,400 records but concentrated in the SE at latitudes from Sydney and southwards. This species is petite and an annual plant with flower buds that are pale, small, and only 2-3mm diameter. Here in the ACT it is observed mostly in urban open spaces and reserves.


In my accompanying image of seeds of this species, the scale length is just 0.1mm, so each seed is about 0.4mm long and 0.2mm wide, once again flattened with thickness about 0.1mm. These brown seeds are blunt and covered in minute

warty lumps. Attached to every seed of all 3 species is a pappus, which more or less readily detaches.

To compare single-seed weights, a volume calculation produces the relative result Sticky Everlasting : Scaly Button : Cudweed of roughly 100:10:1. So, we could predict that Sticky Everlasting seed would mostly fall near the mother plant, Cudweed seed could drift easily on the wind, Scaly Button would be somewhere in between.

*Micrographs were taken at the National Seed Bank of the Australian National Botanic Gardens. They can be reproduced freely if attributed and linked to the Creative Commons licence CC BY. Some of the information above came from websites, principally ALA - www.ala.gov.au and Plantnet - plantnet.rbgsyd.nsw.gov.au/search/simple.htm*

# Greater Bilbies, hummock grasslands, feral cats and assisted evolution

*Michael Bedingfield*

The bilby is an iconic Australian mammal but it is listed nationally as a vulnerable species. Hummock grasslands are unique to our country and provide one of the main habitats in which bilbies survive. These unusual grasslands are characterised by being dominated by spinifex or porcupine grasses of the genus *Triodia* and *Plechrachne*. These evergreen perennial grasses create an open groundcover which form into spiny hummocks with mounds up to one metre tall. The hummocks are separated by spaces that are mostly bare except for a few shrubs, but are populated prolifically by ephemeral herbs after suitably heavy rains. Also present may be scattered trees, such as acacias or eucalypts, that would grow above the predominant hummock layer. Hummock grasslands cover extensive parts of the flat or undulating plains of inland Australia on sandy or skeletal soils in arid or semi-arid country. The mounds of spiny grass provide a refuge for a variety of small marsupials and reptiles. Hummock grasslands have been modified to some extent by grazing from domestic and feral introduced mammals but are not threatened as are our Natural Temperate Grasslands. Photos of these grasslands can be seen in the 'agriculture.gov' reference.

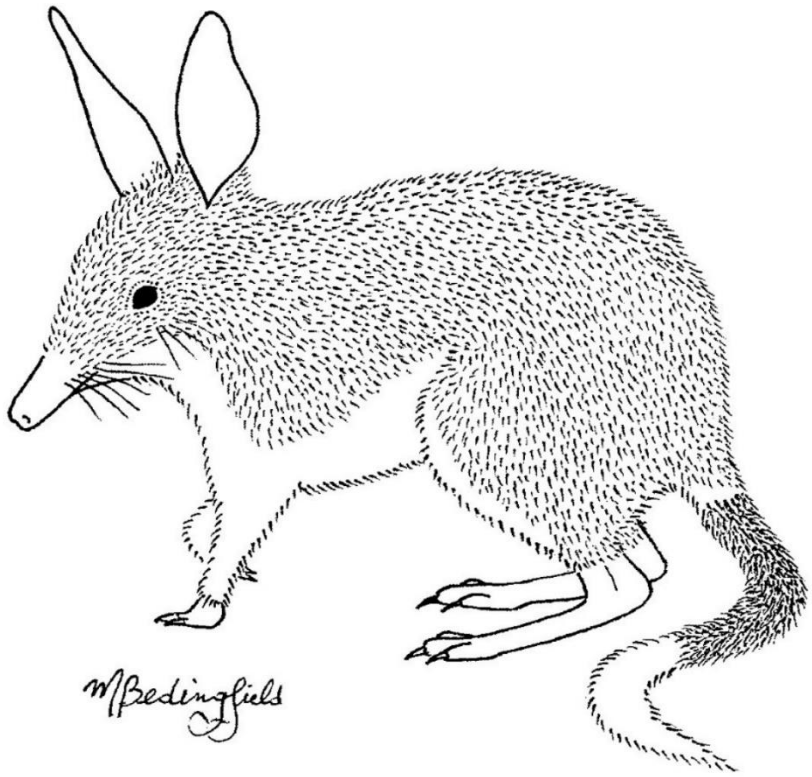
The bilby we are talking about is also called the Greater Bilby *Macrotis lagotis*, to distinguish it from the Lesser Bilby *Macrotis leucura* which is now extinct. Bilbies were once abundant and widespread over about 70% of Australia, occupying a great variety of habitats in the drier parts of the continent. The Greater Bilby now occurs mainly in the northern parts of WA across into NT with a separate population in western Queensland. The main habitats it now occupies are the drier and less fertile areas in arid and semi-arid country, namely open tussock grassland, mulga woodland/shrubland and hummock grasslands.

The current threats to its future are predation by foxes, feral cats and dingoes; habitat degradation from grazing by introduced herbivores, namely rabbits, cattle and camels; unsuitable fire regimes; increasing dryness due to climate change; and loss of habitat to mining and other development. Much of the current distribution of the bilby is on Aboriginal land and Indigenous people are actively involved in the recovery process. See my reference below to the National Recovery Plan.

Bilbies are nocturnal, emerging from their burrows at night to feed. The burrows protect them from predators and the elements and may be up to 3m deep, descending in a gentle spiral. One animal may have up to a dozen burrows in its home territory. It may use any one of them in the night for rest or refuge. They are known to back-fill within a burrow for further protection from a predator. Their eyesight is poor but their senses of smell and hearing are very good and are used to locate their food which they obtain by digging in the sand or soil. They are omnivorous, feeding on plant roots, bulbs, grass seeds, fungi, ants, termites, beetles, insect larvae and spiders.

The animal is lightly built but has strong forelimbs and toes that are strongly clawed for digging. They are generally solitary except after breeding when a female's offspring will stay with her after leaving the pouch and learning to be independent. They are marsupials, the female having a backward-facing pouch, and they breed at any time of the year depending on the food supply. Males will mate with multiple females.

The Greater Bilby is about the same size as a rabbit, with the much larger male being about 50cm from head to tail and weighing up to about 2.5 kg. I have provided a drawing for illustration. The fur is soft and silky, coloured blue-grey above and white below, with the tail being black with a white tip. The ears are large and rabbit-like and the snout is long and pointed.




Feral cats have been a major threat to native wildlife for some time, including to bilbies, which have evolved without the presence of cats and foxes and haven't developed the innate skills to protect themselves from becoming their prey. Dr Katherine Moseby and others from UNSW, Arid Recovery and UCLA have been conducting live experiments with bilbies and feral cats to determine if bilbies can be better equipped to survive with cats around.

It was found that the bilbies' reaction to the odours and images of feral cats sharpened over time when they were made to co-exist, improving the survival chances of the bilbies. In a controlled experiment it was found that bilbies that had previous exposure to cats were much more likely to survive over a course of time than those that had no such contact. Of the naïve bilbies 71% died within one week compared to only 33% for the educated ones. Other experiments found that because they have co-existed for some 5000 years, bilbies are instinctively much smarter at dealing with dingoes than with cats. Also we know that while dingoes will prey on bilbies, they instinctively kill foxes and cats thus reducing their numbers, so they indirectly give some protection to the bilbies.

With threatened species such as Greater Bilbies, it is common for people to create a safe predator-free environment where they can breed the animals in captivity with the intention of releasing them into the wild when they are mature. This research shows that it is possible to 'train' them beforehand so the survival rate is significantly higher after release, and that in time such species may be able to adapt to the presence of the introduced predators. They call this 'assisted evolution', and while there is a long road to travel yet, it provides some optimism for the future of some of Australia's small but threatened mammals.

*Main references*

*https://www.agriculture.gov.au/sites/default/files/documents/mvg20-nvis-hummock-grasslands.pdf*

*https://phys.org/news/2019-05-predator-exposure-vulnerable-species-survive.html*

# Farms as ecosystems

*Jenny Horsfield*

*This is another extract from Jenny's book in progress, 'Our native grasslands and the people who care for them'.*

A farmer in conversation with Els Wynen when she was writing a doctorate in agricultural economics in the 1980s, admitted, "*We did not do our land much good, but we made money. Now we have to pay for it.*' Another comment Wynen recorded was made by a farmer to a local Department of Agriculture officer, about 'X', a neighbour practising regenerative farming: '*The difference is that 'X' will still have soil left in 20 years' time, while we won't.*"

A new awareness was growing that farms were 'ecosystems', and that the health of the stock or the crops was tied up with the overall health of the farm: its soil, water, plant life, tree cover and biodiversity. The 1970s also saw the rise of a popular and active environmental movement with its associated impact and demands for better conservation of native species of flora and fauna.

There was also growing awareness that Australia had a 'salinity problem', where rising water tables in every state brought salts to the surface from ancient weathered soils, leading to increasing salt loads in streams and major rivers. Other farm practices like clearing of trees and over-grazing also disturbed the natural balance of the soil and increased its salinity.

Salinity has been described as 'the leprosy of the soil'. As early as 1853, a Victorian settler, J.G.Robertson, documented in a letter to Governor Latrobe the alarming changes he'd noticed on his land near Dundas, in Western Victoria, where saline springs were appearing in the watercourses and salt was killing the native grasses.

The rapid post-war expansion of 'improved' pasture, and its support at local, state and federal levels meant that there was little interest in carrying out research on the potential value of native pasture species. In 1970, in an article in an authoritative text, 'Australian Grasslands', C.M. Donald wrote:

> *All the evidence indicates that our native plants have neither actual nor potential value as artificially sown species…they will be progressively replaced by plants from other parts of the world. They are incapable of high production, of response to high levels of fertility…they are adapted to poor soils, to light grazing by soft-footed marsupials.*

This received wisdom came under scrutiny in the face of new or recurrent environmental challenges. A severe drought in 1965 and the massive dieback of eucalypts on the Northern NSW Tablelands in the 1970s had a dramatic effect on the thinking of many landholders and scientists. Government-funded bodies were also collecting evidence of the damaging impact of traditional land practices on soil and landscape health.

In March 1982 officers from the Soil Conservation Service NSW attended a meeting in Geneva of soil experts to ratify the 'U.N World Soils Policy…to help national governments prevent soil degradation and promote soil conservation'. The service's subsequent journal issue contained a number of articles laying bare the problem as they found it:

- A joint Commonwealth/States study on soil conservation carried out between 1975 and 1977 concluded that 'approximately 90% of agricultural and pastoral areas in NSW required soil conservation work';
- A study in the lower Namoi Valley on northern NSW showed that 'in 30 years to 1975 the area affected by gully erosion had increased by 50% and by sheet erosion, 150%';
- In the catchment of the Pejar Dam on the Southern Tablelands, paddocks with a long history of superphosphate application on improved clover-based pastures led to a chemical imbalance in the soil and increased soil acidity. This in turn 'markedly affected pasture growth and created erosion hazards from depleted ground cover'; and
- Clearing of timber from hilltops everywhere was leading to increased runoff and erosion further down the slopes, with salty water surfacing in patches and killing the vegetation.

The journal's concluding message was that 'European cultivation techniques have a generally negative effect on soil structure.'

# Activities and Excursions

## Krawarree

*Margaret Ning and Rainer Rehwinkel*

On Saturday 21 January 2023, nine FOG members, plus one, assembled on a 72 ha property on Harts Rd, 35 kms south west of Braidwood owned by FOG members. The property was purchased in 2016 and is adjacent to two other properties with existing conservation agreements, Parlour Grassland and Bunhybee, both already known to FOG. With us on the day was another neighbour from the area who is also conserving her property.

The property we visited is managed to protect the diversity of native groundcover plants found on it, and we compiled a list of approximately 140 species in around three hours of wandering. The areas we visited included Natural Temperate Grassland, Grassy Woodland, and forest, and some of the grassland had had experimental cool burns in winter 2021 and winter 2022.

Rainer Rehwinkel's Facebook post for that day, 'Nature pics from Jerrabatgulla, 21 January 2023', is the following, and his pictures tell the story beautifully (all pictures by Rainer unless otherwise noted):

> *"Friends of Grassland (FOG) led a trip to a beautiful conservation property on Harts Road near Jerrabatgulla Creek south of Braidwood. This large property is now one of four similar properties that protect some excellent and highly diverse Natural Temperate Grassland and Snow Gum Woodland.*
>
> *The Harts Road property has a significant area of Broad-leaved Peppermint and Silver-topped Ash forest that's equally diverse. These properties represent the very best of off-reserve conservation - excellent examples of large, connected ecological communities, in excellent condition, managed by sympathetic and knowledgeable landholders, and under in-perpetuity conservation covenants".*

*Pic 1: Reluctant photo subject that was Facetimed to Margaret's grandson*

*Pic 2: Coral Heath,* Epacris microphylla, *along drainage lines*

*Pic 3: In the Broad-leaved Peppermint and Silver-topped Ash forest*

*Pic 4: Grassland area*

*Pic 5: Grassy woodland area*

*Pic 6: The first time a Common Elbow Orchid has been sighted on a FOG activity, photo: Andrew Zelnik.*

Pic 1

Pic 2

Pic 3

Pic 4

Pic 5

Pic 6

# Work parties

## Southside

*Jamie Pittock & Paul Archer*

### Sunday 18th December

"*Putting the wood back in grassy woodland*". Ten volunteers assembled at our accustomed spot in Alexandrina Drive to plant 15 advanced Yellow Box and Blakely's Redgum on cleared areas at Blue Gum Point. Regrowth woody weeds were treated at Attunga and Blue Gum Point. We also carried out maintenance of past plantings, did some weeding and collected rubbish at Blue Gum Point & Gurubung Dhaura (Stirling) Park.

***Photo: Andrew Zelnik***

### Sunday 22 January

Our annual return to this grassy woodland on the lower slopes of Capital Hill. Large numbers of Cootamundra Wattle, Fleabane, Thistle and Vinca were cut and daubed, sprayed or pulled unceremoniously from the ground. Several bags of rubbish were collected from the surrounding roadsides.

***Photo: Paul Archer***

### Saturday 18 February

Thirteen volunteers dispatched woody weeds on a sunny day at Blue Gum Point. Past FOG plantings are doing really well. An ecological burn is planned in the coming month.

Photo: Jamie Pittock

# News Roundup

*Geoff Robertson*

## The North Road and the GED

For some years now, FOG has lobbied against the proposal by Canberra Airport to build a sealed road at the northern end of the airport that would bisect habitat of the Canberra Grassland Earless Dragon ('GED'). Only since the election of the Labor government has the Department of Climate Change, Energy, the Environment and Water ('the environment department') engaged in discussions with FOG on our concerns.

Approval was given for the road subject to strong conditions (11 Nov 2009, EPBC 2009/4748). These conditions were varied on 29 May 2020 to make it easier for Canberra Airport to get the approval, and the road construction was approved the same day. The GED recovery team, appalled by the process, raised informal queries in the environment department which then informed the team it had not been properly constituted and hence had no status. The team continued as an expert group but environment department staff were forbidden to communicate with the group, and ACT government staff also withdrew. A letter (20 Oct 2020) to the department by the expert group was not answered. Numerous letters by FOG to both Commonwealth and ACT government ministers and agencies were also unanswered.

*Photo attribution here*

In 2019 a paper by Melville et al (reference here) led to the GED being split into four separate species: the Bathurst and Melbourne species which are probably extinct; the Canberra GED; and the Cooma-Nimmitabel GED.

The Canberra GED (Tympanocryptis lineata) consists of two genetically distinct populations - one found around the defence land/airport areas and the other in south Canberra and Queanbeyan. Numbers of both populations are extremely low. The proposed road is highly likely to result in the extinction of the north Canberra population.

A captive breeding program has commenced for the Canberra GED, a partnership of the ACT Government with the Melbourne Zoo and Canberra University. While the breeding program is proceeding satisfactorily, reintroducing them into the wild is far from guaranteed - see link here). The partnership is spending $2.1m on GED. Likewise, the Commonwealth has spent many $millions on GED.

Since the change of government, the minister for the environment has included the Canberra GED among 110 critically endangered species that must not be allowed to go extinct. We are still waiting on a formal response to our submissions. Fingers crossed.

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## New Landcare groups in Canberra

*This article is reprinted from 'Southern ACT Catchment News' February 2023*

"Two new urban Landcare groups are emerging in the Southern ACT Catchment. Monash Grassland and Little Taylor Grassland are both stunning examples of grassland in the southern ACT and with assistance from ACT Environment Grants work has begun to preserve them. If you would like to learn more about these areas or get involved yourself, click on the links below":

- Friends of Monash Grasslands
- Friends of Little Taylor Grassland

# Budjan Galindji (Franklin Grassland) 22 February 2023

*This article was contributed by Christine Kendrick of the Wednesday Walkers Group, Australian Native Plants Society. The walk was hosted by Geoff Robertson and Margaret Ning on behalf of FOG.*

Following a couple of pretty hot days we expected to have an uncomfortable walk in the Grassland with no cover over most of the area but it turned out to be a cool overcast day perfect for walking (or should I say strolling) and we donned warm gear.


Geoff gave us an introduction to the background of the Grassland which is an offset for road widening in Yarralumla in an area of Golden Sun Moth habitat. This species also lives in the Budjan Galindji Grassland. Having lobbied the ACT Government about the future of the site, Friends of Grasslands (FOG), were asked to set up a ParkCare Group in 2020, with the aim of restoring the Grassland as well as providing recreation facilities for the community. The government has budgeted $3m for the restoration program. The group, led by Margaret Ning, works on the restoration and maintenance of the Grassland fortnightly.

The first area we saw was the wildflower seed garden where there were raised beds of daisies including *Leucochrysum albicans*, *Goodenia pinnatifida* and *Convolvulus angustissimus* (the latter on a climbing frame). There were also several ground beds of various plants including *Linum marginale*, *Chrysocephalum semipapposum* (which grows in the Grassland), *Arthropodium fimbriatum* and *Chrysocephalum apiculatum*. The Park Ranger, Steve Bruce, spoke to us about seed production and the success they had achieved in producing and scattering seed in the Grassland, following a burn to reduce the perennial weed grass Phalaris growing throughout the site. He also spoke about the difficulty of reducing the nitrogen in the soil which was aiding weed growth.

There is also an area of Grassy Box Woodland with Blakely's Red Gum *Eucalyptus blakelyi* and Yellow Box, *Eucalyptus melliodora* where the aim is to increase shrub undergrowth and attract more birds. During the walk Geoff spoke to us about some of his own visions of which increasing biodiversity is important.

A small wetland is located on the northern side of the Grassland with *Eleocharis acuta*, Juncus spp., *Carex inversa*, *Alternanthera denticulata* and Goosefoot *Dysphania pumilio*.

The Grassland boasts the Striped Legless Lizard which Geoff believes can cope with increased mowing, one method of stemming the weeds and aiding native grasses. There was concern about the survival of the Golden Sun Moth. On the southern side of the Grassland there's an old dam which supports some bird life, e.g. the Australian Reed Warbler and Latham's Snipe.

There are small patches of Kangaroo Grass *Themeda triandra* and Wallaby grass Austrodanthonia spp. on which the Golden Sun Moth larvae feed, plus some large clumps of Lemon Beauty Heads *Calocephalus citreus*. Peppercress Lepidium spp. was also growing there. Blue Devil *Eryngium ovinum* was just finishing flowering and there were hundreds of them. The Yellow Rush Lily *Tricoryne elatior* was scattered around.

We had a lovely day looking at the Grassland and catching up with FOG members. Special thanks to Geoff for giving us such an informative guided tour, Margaret for expert advice, and Steve for coming to join us at the wildflower seed garden.

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**Welcome to new FOG members**
Gordon McAllister & Morgyn Philips, ACT
Pierre Defourny (Midlands Conservation Partnership), TAS
Lisa Bradley, ACT
**Michael & Bronwyn Stone, ACT**

## *Picture of the month (Andrew Zelnik)*

Viewed from above during the work party at Blue Gum Point in February, in the foreground flowering is the endangered Button Wrinklewort (*Rutidosis leptorhynchoides*) against a background of Kangaroo Grass (*Themeda triandra*) on the southern shores of Lake Burley Griffin.

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## About the newsletter

*News of Friends of Grasslands* is published six times a year. It is sent by email (or posted on request) free to members. Occasionally it is supplemented with special ebulletins. The current issue and most prior issues are fully searchable and available here as *text* (no pictures or graphics) or in pdf format (1 to 4 MB files, including colour pictures and graphics with the original multicolumn format. Acrobat Reader is required.

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