

News of Friends of Grasslands

Supporting native grassy ecosystems

SSN1832-6315

May & June 2022

Events

Sat 7 May, 11am

Community Rally to Save Lawson

North. Baldwin Drive, Lawson, ACT. Info: geoff.robertson@fog.org.au

Sat 28 May

Exploring Scottsdale.

Register: margaret.ning@fog.org.au

Sun 5 June, 10am-2pm

Planting at Budjan Galindji (Franklin

Grasslands Reserve).

Info: geoff.robertson@fog.org.au.

Work Parties

Budjan Galindji (Franklin Grassland)

25 May & 1, 29 Jun Wednesdays 9-11.30am

Register: Margaret.ning@fog.org.au

National Lands

22 May & 19 Jun Sundays 8.30 – 1pm

Register: jamie.pittock@fog.org.au

The latest updates are found on our website at Calendar

New Members

Welcome to

Allan & Pamela O'Neil ACT Fiona Hamer & Craig Moritz NSW

From the President ...

Our annual general meeting last month was a moment to reflect on the work that Friends of Grasslands does and how we can be more effective and enjoy our activities. Our 2021 annual report (<u>found here</u>) details another year in which FOG has made major contributions to conserving key grassland remnants on the ground and through advocacy, and played key roles in educating the community and decision makers of the wonders of our threatened grassy ecosystems.

A great committee was elected to carry our work forward for the coming year, and I welcome and thank those who volunteered to help (who include those listed on the back page of this newsletter). We also celebrate and thank a number of volunteers who are taking a step back to better enjoy the grass. Former President (twice) Geoff Robertson, is stepping back from the wonderful work he has been doing coordinating the newsletter, events and seminars. Naarilla Hirsch is stepping down after devoting 12 of the last 13 years coordinating our advocacy work. The systematic contributions of Naarilla and Geoff have been vital to FOG's work as a champion for conservation of grassy ecosystems and for holding developers and governments to account. I thank them for their exceptional contributions.

FOG needs volunteers willing to step forward and take on tasks that range from big to small. Help with advocacy, event organisation and the newsletter are particular priorities. Please call me if you are willing and able to help (0407 265 131).

Our Committee is currently considering whether the time has come for FOG to have some part-time paid assistance for a few key tasks. This may help to sustain our very active committee members and other volunteers and to reduce their work-load. Conserving threatened grassland ecosystems is an ongoing task. FOG Committee and other members have been greatly concerned in recent months by a number of instances of poorly -planned tree-planting activities in Canberra. These are often being undertaken in the name of climate change adaptation, but



if undertaken poorly, they may have perverse impacts. There are a number of cases where ACT City Services have planted trees on roadsides next to significant grasslands, posing threats by shading sun-loving grasslands, spreading weeds, and providing perches to raptors who may predate on threatened fauna. We are concerned that a number species on ACT City Services' list of trees to plant along streets, are invasive species. And as raised elsewhere in this newsletter, we question the merits of planting 'microforests' in urban parks when other revegetation approaches may provide more benefits.

Sat 19 March. Canberra open space tour with Michael Mulvaney

For these reasons FOG will step up its engagement with the ACT Government to help identify better practices for revegetating our urban spaces and conserving grassy ecosystems.

By contrast with these issues with tree planting, in March FOG held a productive meeting with ACT City Services and local residents to examine the threat posed to the Black Street grassland in Yarralumla from historic tree planting. At that site some scrawny oaks add nothing to the urban amenity but increasingly threaten biodiversity. Together, we prepared some proposals for government and community consideration that may result in selective tree removal to conserve this grassland habitat. We thank ACT City Services for their professional approach to conserving the site.

Advocacy Report

Sarah Sharp

I wish to thank Naarilla Hirsch personally for her amazing contribution as Advocacy Coordinator over the past 12 years. She has decided to ease out of this demanding role but has left a significant legacy in the organised and dedicated way she ensured FOG responded to all matters of importance within this region. I am acting as interim coordinator for the time being.

At our annual Advocacy Group planning meeting Naarilla provided an important document to guide her successors. I have decided to provide a summary of that document to describe what our priorities are, generally, and specifically, for 2022. In many cases, FOG works closely with other community groups, through our involvement with the Conservation Council's Biodiversity Working Group and as representatives in other groups.

Our focus is primarily on addressing grassy ecosystem matters within the capital region of ACT and NSW, rather than more broad-scale legislative matters. FOG is increasingly advocating for systematic and proactive conservation and restoration of grassy ecosystems, to conserve and manage remaining grassy ecosystem remnants across all tenures. This project was described in the President's Report in our March-April newsletter: 2022-03newsletter.pdf (fog.org.au)). Additionally, FOG will seek to actively influence key regional and thematic strategies, such as weed-management programs to reduce threats and conserve and restore condition across multiple sites.

Advocacy matters that require our attention this year include:

- North Lawson: continuing to campaign for the preservation of the grassland areas, in conjunction with the Conservation Council. This will be a federal election item.
- Lobbying our local representatives in the Federal election to reserve significant Commonwealth -owned sites: North Lawson, Gurubung Dhaura (including Stirling Park woodland and Scrivener's Hut Woodland) and Yarramundi Grasslands.
- Lobbying for improved best-practice management at all grassland and grassy woodland remnants, on and off reserve (see the current President's report for our latest success, working with City Services at Black St Grassland in Yarralumla).

Submissions, March and April

There were no submissions finalised in the past two months. Several significant submissions are pending, due later in April, May and June.

- 1. Greenway Boardwalk & Open Space Construction Project due 20/4/22
- 2. Action Plan to prevent the loss of mature native trees due 27/5/22, see https://yoursayconversations.act.gov.au/action-plan-prevent-loss-mature-native-trees
- 3. Budget 2022-23 submission, due 27/5/22, see 2022-23 Budget Consultation | YourSay ACT
- 4. ACT Planning System Review and Reform Project, due 15/6/22, see <u>ACT Planning System Review and Reform Project | YourSay ACT</u>

Any additional assistance to the Advocacy group would be very welcome, in the preparation of the pending submissions or to contribute to any of the 2022 priorities. Please contact me at advocacy@fog.org.au for more information or to discuss your potential involvement.

The full text of all submissions appears on FOG's website Advocacy (fog.org.au)

Microbats, grassy ecosystems' and the Eastern Bentwing-bat

Michael Bedingfield

The Eastern Bentwing-bat is the most commonly recorded microbat on Canberra Nature Map. Nonetheless it has been declared vulnerable in NSW and Victoria. Many of the records of this bat are at grassland sites, such as Mulanggari Grasslands in the ACT. Like a variety of other microbats, it finds grasslands a fine place to forage for food, which it does at night using echolocation to detect its prey in the dark. Microbats have this name because they are much smaller than fruit eating Flying Foxes or Fruit Bats, genus *Pteropus*, sometimes called megabats. Microbats are insect eaters and are also known as Insectivorous Bats. If you are foraging for flying insects in the dark using echolocation, then an open space with no obstacles is a good place to do so. Grasslands provide an excellent venue with a broad menu.

I have provided a drawing of our subject in flight. If you look carefully at the wings you will see that although bats have quite different abilities to us earthbound humans, the bone structure of the wing resembles that of our arm and hand. You can see the elbow just slightly away from the furry body. The long "forearm" stretches away to the "hand" which has been greatly modified. The "thumb" is quite short and has a tiny hook at the tip. The other four "fingers" have been elongated. A thin membrane of skin stretches from the body and short back legs and goes across this bone structure to create a very effective wing. A feature of the bent-wing bats is that they are able to bend the longer "fingers" and fold back the tips of their wings when not in flight. This enables them to have longer wings with a larger surface area than other microbats. So they are capable of very fast and long-distance flight. At night when they disperse to forage they are able to travel 50 km from their roost in search of food.

The scientific name for the Eastern Bentwing-bat is *Miniopterus orianae oceanensis*. It is also called the Large Bentwing Bat and was formerly known as *Miniopterus schreibersii oceanensis*. It is distributed widely on the east side of the Australian continent from north Queensland to southern Victoria, with most of the population concentrated on the east side of NSW. Smaller numbers are also found in north-eastern Australia. It is migratory and moves between roosting sites with the seasons and the relative abundance of food. It forages over a wide variety of ecosystem types, all described in the environment.nsw.gov reference, but notably it includes grasslands and grassy woodlands.

This bat is has a body weight of 13 to 17 grams, with pregnant females being up to 20 grams. The head and body length is about 6 cm and the wingspan is 30 to 35 cm. The fur is chocolate to reddish-brown on its back and slightly lighter coloured on its front. The snout is short and it has a high "domed" head with short round ears and small beady eyes.

Eastern Bentwing-bats roost communally in caves as well as man-made structures such as derelict mines, storm-water tunnels and occasionally buildings. They form into colonies with discrete populations centred on special maternity caves that are used each year in spring and summer by the females to give birth and raise their young. These caves are few in number but in the region of southern NSW there are two such caves, at Wee Jasper and Bungonia. These caves are very important for the preservation of the species so maintaining their integrity is vital. The bats spread out up to about 300 km from these maternity caves, using a number of other caves etc. as roosts during the annual lifecycle. In our region where the winters are cold and insect food is scarce, the bats seek out cold caves for hibernation. It is very important to avoid disturbing the bats, especially during the maternity phase and winter hibernation. Human disturbance of roosting caves is one of the reasons for the decline of the species. Cave entrance management, with gates, barriers or fences is required at some locations to prevent human intrusion but also allow the bats free movement in and out.

Breeding by Eastern Bentwing-bats occurs in May or June but the females are able to delay development in the womb through winter until August. In November or December the females move away from the males to congregate in the maternity caves and each gives birth to a single pup. There is a strong bond between mother and infant until the young are able to fly well and fend for themselves. By February or March the females and young have left the maternity caves to join the other bats. Breeding and roosting colonies may contain 100 to 150,000 members.

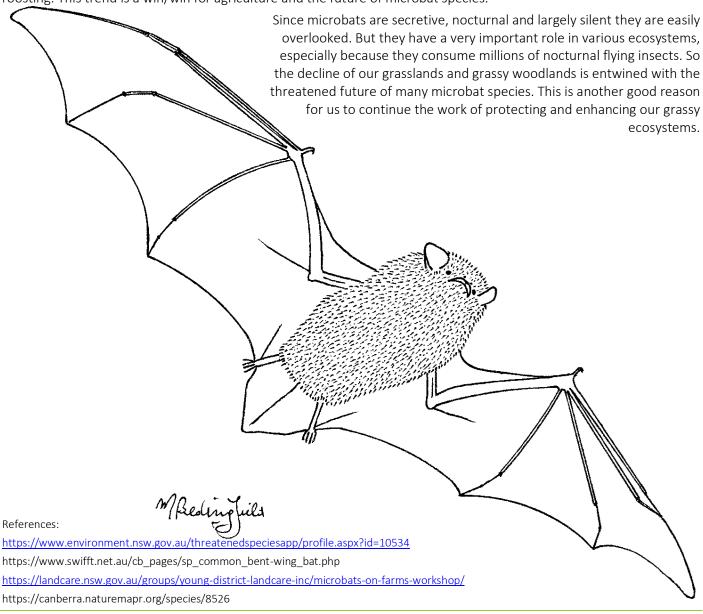
When using echolocation microbats emit a high-pitched sound repeatedly while listening to the echo coming back from any objects nearby. Their finely attuned senses allow them to create a picture of their surroundings and be able to navigate obstacles, interact socially and locate prey in the dark. The sound produced by most species is above the

hearing range of us humans. But with ultrasonic audio equipment these sounds can be detected and different species can be identified by their unique sound. This high-tech method is used for doing microbat surveys. Microbats are very acrobatic and most feed by capturing flying insects in their mouth. But some are also able to catch insects in their wing membrane, transfer the prey to the tail membrane and from there to their mouth, all while in flight. They consume a lot of moths but also beetles and other nocturnal insects.

In recent decades there have been declining numbers of microbats, including our subject, and some of them are threatened. Researchers are trying to learn more about them to try to understand why. One of the reasons is the gradual loss of high quality roosting and foraging habitat. While our subject roosts in caves many other microbats roost in tree hollows or other cavities as well as under peeling bark. So the clearing of woodland and forest trees is a problem for them. Foraging habitat is lost to increasing urbanisation as well as a variety of agricultural activities that can reduce insect numbers and biodiversity.

At Mulanggari Grasslands, there are three other bat species recorded apart from our subject. These are Gould's Wattled Bat *Chalinolobus gouldii*, South-Eastern Freetail Bat *Ozimops planiceps* and White-striped Freetail-Bat *Austronomus australis*. All these species need woodland trees or other trees for roosting and breeding. They also forage over woodlands and grasslands. So they are more closely tied to grassy ecosystems than the Eastern Bentwingbat.

Michael Pennay is the coordinator for ACT Batwatch which studies and monitors local bat activity. There is increasing interest in encouraging microbats to live on farms as a form of pest control for a variety of crops. Michael has been helping some farmers with his knowledge. Because microbats eat so many insects they can save farmers lots of money by reducing the need for pesticides. Roosting boxes can be placed appropriately where there are insufficient trees for roosting. This trend is a win/win for agriculture and the future of microbat species.



Close Up - two winners from recent seasons

John Fitzgerald

This time I look at two plants that I've seen doing quite well right now around Canberra - one native, one weed.

The desirable native is one that I've included in a previous close-up - the grass *Sporobolus creber* (see also <u>FOG News May-Jun 2019</u>, page 4). This grass is not abundant locally but is fairly common. It seems to be doing better in 2022 than I remember from earlier years and has grown and flowered well in many places. It does not require a damp site but has enjoyed good rains. The way that the slender, long inflorescences change colour over time fascinates me. After florets have fertilised, the contracted panicle is notably grey-green interrupted by bright green segments of bare stem. At maturity, the spikelet colour has changed to red-brown. My close-up image shows that grains are mostly responsible for this - they are initially very pale green when they start to be pushed out from the lemma+palea and become browner; many grains remain weakly held, dropping as drying of the panicle progresses from its tip to its base. The exotic relative *Sporobolus africanus* behaves in a similar way.

The undesirable weed is *Cyperus eragrostis*. This plant definitely prefers damp spots in drainage lines and ditches. *Weeds of Australia* says this plant (<u>link here</u>) originally from the Americas has spread widely and in Australia is rated an environmental weed in both SE states and SW of our country. My advice on this one, even if it is not prioritised in lists of our worst invasives, is to prevent it getting away in any native area that you value. Make sure you remove all flower structures and carefully dig plants out - they have rhizomes and roots but these are neither deep nor large. Its waxy, bright-green stems and leaves seem to resist herbicide.

Our recent wet seasons have encouraged its vigorous growth and spread, all of FOG's work sites included. Some inflorescence features are shown in my image. Glumes are green when young, turning brown with maturity and freely falling from the plant shedding plump nuts. Those who've read my close-ups previously know that I enjoy playing with numbers. I pulled apart one medium-sized plant with green inflorescences to count. My plant had 12 culms, with around 8 clusters of flowers on each. Each cluster had about 30 spikelets and each spikelet bore about 14 glumes. Multiplying all this comes to about 40,000 potential nuts from one plant, depending on how many glumes were full. I've recently seen drainage areas containing hundreds of plants and therefore many millions of Umbrella Sedge seeds. If you doubted my advice about clearing the plant above, maybe I've pushed you to act before your glumes go brown I hope so, as this one will readily take over any damp place.

If you don't know these plants and want more information, search out details and photos in your favourite websites and reference guides.



Sporobolus creber with exposed red-brown, ripe grains



Seed structures from spikelets of *Cyperus eragrostis*. A two-sided spikelet still holding some glumes is shown in centre, 7 detached brown glumes containing single nuts lie to its left side, 11 shiny bare nuts lie on the right, each with a short black beak and most with a dried style still attached.

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. Black scale bars near the bottom right corner of both images represent 1 millimetre.

Our native grasslands and the people who care for them

FOG member and author, Jenny Horsfield*, is writing a book to be called 'Our Native Grasslands and the People Who Care For Them'. She hopes this will be published in good time to mark the 30th anniversary of FOG in November 2024. Below is a short extract from the opening chapter, called 'Early Enquirers'.

Ninety years ago a young forestry graduate spent six months exploring the Kosciuszko region, covering 700 square miles on foot and on horseback. Baldur Byles had studied forestry at the University of Sydney, and, after field assignments for the Commonwealth Forestry Service in Europe, he was commissioned to undertake an environmental survey of the Snowy Mountains region. His task was to examine in detail the water catchments for evidence of damage to the soil, water and vegetation of these areas.

The historian Keith Hancock reckoned that Byles 'was ready to live rough in rougher country than the Man from Snowy River ever penetrated'. His method was 'to ride along the stockman's tracks with his packhorse on lead, to pitch camp in suitable places and then examine the surrounding country on foot, forcing his way through the thick scrub of the steep slopes down to the bottom of the deep gorges' where the dangers of erosion were greatest.

Until Baldur's survey very little scientific research had been conducted in the area, and his report, published in 1932 as Bulletin 13 by the Commonwealth Forestry Bureau, was a comprehensive study of Australia's alpine environment. In fact it encapsulated a new way of looking at that landscape, one in which all elements were part of a significant whole: soil, water, rock, grasslands, forests and wetlands.

Decades of grazing on the snow leases had brought dramatic and damaging change to the high country. Byles found, for example, that approximately two thirds of the area he traversed that had originally been covered by alpine shrubs, was now completely bare, cleared out by fires, mainly man-made. Often there was nothing but dead stems on the ground, and the exposed soil was then blown away or washed down the slopes by rain and snow.

What Byles was witnessing was the result of decades of burning practices by the men who had summer leases in the high country. In talking to men who had worked this country, Byles was told that often their first task was 'to burn and keep on burning the woody shrubs and snow gums'. That allowed easier passage for horses and stock, and in the

place of the shrubs palatable grasses appeared for the cattle, though this was often eaten out after a season or two. Bare soil and exposed rocks led to increasing erosion and a general drying out of the swamps and watercourses. Byles rode through one area on the Jagungal plateau where, in the former swamps 'the dry peaty material could be heard crackling under the horse's hooves'.

Byles was not the first person to be disturbed by the burning and grazing practices common in the high country. In 1840 the Polish geologist and explorer Paul Strzelecki noted the extreme 'dryness of the soil... and the alteration which colonization impresses on its surface'. He saw how the forests, grasses and shrubs which sheltered moisture were disappearing 'under the innumerable flocks and axes which the settlers have introduced'.

That report was written ninety years before Byles wrote his notebooks, during which time such practices had continued unchecked.

* Jenny has written seven books and been the recipient of two awards for non-fiction Book of the Year from the ACT Writers and Publishers Centre. Her latest books are 'Voices Beyond the Suburbs: the Soldier Settlers of Tuggeranong' and 'A Bookshop in Wartime'.



Landcare - the FOG experience in the Australian context, part 1.

In this article, Alan Ford, long-term FOG member and land carer, reviews historical views about the purpose and evaluation of landcare programs and poses questions for FOG to consider about its own landcare projects. Part 2 in the next issue.

The recent FOG *Annual Report* for the AGM listed the wide-ranging work that FOG now does in the landcare space. I have tried to look at Landcare in a longer context and what follows is less than the tip of the iceberg on this and the related topics of biological diversity and survival. It begins a long time ago and Preliminaries are relatively recent.

Historical perspective

In the *Report on the ecology of the Hume Catchment* Mrs S G M Carr began to draw a comprehensive and historical overview of the situation as she saw it in 1947, saying "it has been well known for many years that soil erosion is reducing the efficiency of the Hume and similar mountainous catchments. The dangers attending further deterioration have been emphasised by officers of the Government Department concerned in the management of such country. The 1939 fires have since made the situation much worse, completing the ruin of many parts and initiating the destructive process of soil erosion in the rest of the area. These 1939 fires were...the accumulated result of a hundred years of mismanagement and abuse of the country. During this long period it has been occupied and used by graziers, miners and farmers....." (D J Carr A Book for Maisie 2005)

In 1979 the Commonwealth government accepted in principle the need for a national soil conservation program.

The Australian Conservation Foundation (ACF) has pointed to the beginnings of the Landcare program in the 1980s and its long-term significance. "For too long, Australians had witnessed the impact of pollution in their local communities and not known what to do. Across our wide, brown land, people cared deeply and wanted to come together to protect their local rivers, trees, land and wildlife."

Joining forces with the National Farmer's Federation (NFF), ACF proposed the idea to Prime Minister Bob Hawke, taking a local model and turning it into a national movement that would engage communities in activities to reverse the degradation of farmland, public land and waterways. The federal government declared the 1990s as the 'Decade of Landcare'. The subsequent Plan had the following goals: to make the whole community aware of the problem of land degradation and of the benefits of sustainable land use; to continue the development and implementation of sustainable land use principles and practices; to ensure all public and private landowners and managers understood the principles of sustainable land use and could apply them in their use and management decisions; for all Australians to work together in partnership for sustainable land use; to put effective and appropriate economic, legislative and policy mechanisms in place and to facilitate the achievement of sustainable land use.

The second report by the Landcare facilitator, Andrew Campbell (1991) noted that the draft *Decade of Landcare Plan* generally lacked visions, strategic direction and specific plans for action and lacked evidence of community inputs. In his third report, he recommended (among other things) that: "a natural resource monitoring and land literacy initiative (be funded)....in order to develop and implement a landcare monitoring strategy which would...establish principles and guidelines for the funding of landcare-based monitoring programs....that 5% of the community Landcare budget be allocated to support the implementation of a landcare evaluation strategy".

In Land Degradation in Australia L E Woods suggested that you would need to develop outcome indicators for Commonwealth goals, such as research, education and national awareness; planning and coordination; and support for community action.

In *Rural Land Degradation in Australia*, Arthur and Jeanette Conacher discussed the possible confusion between Landcare and the soil conservation movement and organisations. They outlined their concerns, chief among them being the possibility that the problem that the group was formed to deal with may be insoluble - much depended on how well the problem was targeted, the quality of leadership and training, the availability of funds and the efficient transfer of information.

In *Critical Landcare* (1997) Andrew Campbell indicated that if Landcare was to make a lasting contribution to improving rural sustainability it must come to grips with some difficult issues including: unrealistic expectations; confusion over who should pay for what; preoccupation with funding; implementation questions; group interests versus those of catchments or regions. He said that the principal role of landcare groups was to generate commitment to sustainability at a community level and to change social norms in favour of developing more sustainable systems of

land-use and management. He concluded by stating that landcare groups had a fundamental role to play in fomenting commitment to sustainability at a community level, and in acting cooperatively to improve natural resource management.

In the same volume Robert Haworth took the example of tree-clearing to demonstrate the problem that Landcare is an ideology that diverts attention from the real forces at work in contemporary Australian agriculture. Haworth pointed out that landcare had received public funding without undergoing a rigorous analysis of its philosophy or purpose. Put simply, the question was whether the 'Decade of Landcare' had resulted in a net increase in the number of trees in Australia. The evidence pieced together suggested that it had not, and there had been no let-up in the clearing of Australian native vegetation in the 1990s.

In 2003 the Commonwealth commissioned a review. The CSIRO was asked as part of that review, whether there been an improvement in the natural resource condition at the property, local and regional levels. They said that it is extremely difficult to quantify an improvement in resource condition in the absence of regular, long-term monitoring of key natural resource attributes. Most people consulted during this review stated there had been no monitoring program in place to assess the benefits of Landcare activities, nor had they been asked to implement such a program. Landcare was not having the impact at the catchment and regional level that was originally intended. It was also difficult to determine at the catchment level, the impact of Landcare activities that occur as a series of discrete onground works across the catchment without connectivity or a strategic focus.

The review stated that the 'way forward 'for Landcare was to collaborate with Commonwealth, state and local governments to initiate monitoring and evaluation programs and to assess the benefit of the investment in it. Data and information collected as part of monitoring programs needed to be analysed by people with appropriate skills and summary information needed to be fed back to those responsible for managing the resource.

In 2014 the ACF and the NFF again called for governments at all levels and the community to: one, commit to a decade of action to overcome the challenges confronting Australia's land, water, wildlife and farmland that lie at the heart of our economic security and way of life; two, strengthen the connection between farmers, traditional owners, urban Australians and all those working to improve the health of our environment; and three, recognise the maintenance and improvement of our farmlands and natural environment as vital components of our living national infrastructure.

A Senate committee in 2015 noted that the Australian Framework for Landcare, authored in 2010 by a working group representing the Landcare community, explains the Landcare ethos. Landcare is a unique community-based approach that has played a major role in raising awareness, influencing farming and land-management practices and delivering environmental outcomes across Australian landscapes for many years. Largely, local group involvement had been the catalyst for voluntary community engagement, understanding and action in the development and adoption of sustainable land-management practices and the acknowledgement of our shared responsibility for conserving biodiversity.

The Senate Committee also noted that The Australian National Audit Office had commented on one of the related programs, that the administering agency's evaluation of the program had found that there was a "lack of standard, meaningful and quantified monitoring and evaluation systems for the national investment stream". The ANAO came to a similar conclusion. As a consequence, reporting to Parliament on the extent to which NHT initiatives, funded at the national level, have contributed to program objectives had been limited.

Donations

FOG makes small grants to researchers, educators and on-ground projects such as FoG's TSR Project. You can make a tax-deductible donation to the FOG Public Fund:

Direct debit: BSB 633 000, A/c 15343960 (Bendigo Bank). Please include your name and advise our Treasurer <u>treasurer@fog.org.au</u>

Or Cheque: payable to 'Friends of Grasslands Public Fund', mailed to Treasurer, Friends of Grasslands Inc., PO Box 440, Jamison Centre, ACT 2614. Include your name and postal address.

Note: if you would like your donation to go to the TSR project please indicate this when you make your donation. A receipt for tax purposes will be sent to you.

Recent FoG Events

Budjan Galindji

Our first work party for 2022 was held on 2nd Feb with attendance of seven, and since then scheduled and impromptu work parties (and attendance) have been held on 23 Feb (6), 2 Mar (4), 7 Mar (4), 21 Mar (4), 23 Mar (5), 6 Apr (7). Work parties have undertaken a number of tasks - slashing tall grass in some better patches, hand weeding and herbiciding weeds with daubing and backpacks, removing seed heads of numerous fleabane and St John's Wort (SJW), and cutting and daubing woody weeds.

More recently time has been spent preparing and cleaning up after the burn-offs which took place over two days - 21 and 22 March. These took place mostly in higher-quality grassland areas with the aim of removing seeds of unwanted plants, woody weeds and invasive grasses such as phalaris, paspalum, serrated tussock and so on. Nowadays we tend to be more focussed than hitherto.

Work parties have become more flexible in their timing, rescheduling around rains and intensive work associated with fire preparation.



Removing St Johns wort seed-heads before the burn



First burn



Volunteer downtime



Removing St Johns wort seed-heads after the burn

Budjan Galindji clean-up

On 13th March local residents and FOG members joined in the clean-up day at Budjan Galindji organised by Suzanne Orr MLA. This is the fourth time she has organised such an event. She informed FOG that in political circles Budjan Galindji is known as 'Suzanne's patch' - she has been a driving force in creating interest in the site.

Suzanne's office advertised the event through her Facebook page and by letterboxing, registered with Cleanup Australia, and provided the marquee, bags, gloves and lunch. The clean-up was supported by FOG and ACT Parks and Conservation Services. The photos are those she posted on her Facebook page.

The first image shows some of the 17 people who attended the event. The site was exceptionally clean and so the clean-up went very quickly. Before lunch the group adjourned to the seed production area where Geoff, Suzanne and Maree talked about the history, plans and aspirations for the site and the seed garden area.

The following is Suzanne's Facebook post on 13 March: "A big thanks to everyone who came out today for bit of

hands-on environmentalism cleaning up the Budjan Galindji Grasslands in Franklin.

I'm often asked what's going to be developed here, the answer is "nothing" - we are preserving and restoring this precious landscape!

Friends of Grasslands and ACT Parks and Conservation Service have been working on the site for a few years now and have now started a planting garden to grow lots of stock to put back into the grasslands."

The next joint event will be a planting day, Sunday 5 June, noon-2.30pm, a light lunch to be provided.

Thanks Suzanne for all your support.





Hall Cemetery - John Fitz Gerald

On 5th March, an impressive number of nine volunteers each put in 2-3 hours at work in the Hall Cemetery woodland. This was particularly to follow-up from the February work, and was mostly de-seeding and grubbing unwanted plants from areas in the northern woodland block. In addition to the regular cull of Sowthistle, Spear Thistle, Fleabane, Cleavers, etc., focus was on removing isolated plants of Pigeon Grass which are threateniing to multiply fast. Some additional solo work was done at later dates to contain small patches of Blackberry and Umbrella Sedge.

Life flourishing in Canberra open spaces

Michael Mulvaney opened his remarks by stating "Until about the last five years, the standard management of urban open space was to plant trees and mow an understorey, creating conditions of low biodiversity. Today there are over eighty resident groups in Canberra's suburbs which, with the support of the ACT Government, are increasing the biodiversity of their areas through mid and understorey plantings and regeneration, with the aim of restoring or enhancing the life that once occurred there. This leads to much greater local involvement, appreciation and use of the public



areas." At each of the four sites Michael gave a brief history of the site and local community involvement.

Bass Gardens (Griffith ACT) is former natural temperate grassland and retains a population of golden sun moth. When the suburb was being developed, the site was planted with cedars and redwoods, and now these magnificent trees are part of Canberra's settled heritage. The Bass Gardens' group was formed some years ago with the aim of recovering the natural grassland vegetation which is now flourishing and is a past recipient of a FOG grant. When Michael worked for the ACT government, he arranged for the mowing regime to change, thus helping the recovery of the vegetation. At that time removing the mowing was an important strategy, but with rains in the last two years biomass reduction has become a challenge.

Driving south along Kent Street we pulled into the car park across the road from Phipps Close. The woodland on the east side of Kent Street is now permanently protected following its inclusion in the Hughes-Garran Woodlands. There was much interest in a small remnant of snow gums, very rare within the lowland areas of the ACT. We then crossed Kent Street and walked to the edge of the Hughes Woodland. The local community group has done much to clear woody weeds. Curiously an old planting of non-indigenous eucalypts has become home to Canberra's largest population of Gang Gangs,

and has resulted in several published papers on Gang Gang ecology.

At the Dawson Ecopark in Curtin, we observed the transformation of an exotic grassed area to plantings of many local native shrubs, grasses and forbs. This project is conducted by two retired school teachers and essentially involves local school children from the two nearby primary schools who plant, care for, play in and observe the growth of the plantings. The image by Larry O'Loughlin shows Michael talking enthusiastically about the site. One thing he pointed out was that an area planted like this may attract up to 400 invertebrate species and the small birds that feed on them.

Our final stop was at Fowles Place, Weston, where the previous wall-to-wall infestation of African Lovegrass has been converted to a thriving, diverse carpet of grasses and forbs in two and a half short years - this is truly an amazing site. The driver behind this is FOG committee member Alice Hathorn. We hope to have a longer item on this project in a future newsletter.

Attendees were impressed by the variety of approaches taken, the numerous groups and volunteers involved, and their learning and contribution. While the bulk of attendees visited each site, some made an appearance at one or two sites. All up 30 people attended this event. Thanks Michael for your fascinating tour, your historical perspective and very valuable insights, and also Margaret for organising this and so many other enjoyable and informative events.

Our busy national lands group

This year our FOG national lands group work parties have been highly successful.

On 20 February, FOG held its work party at Blue Gum Point, and was joined by the ANU Intrepid Landcare Group, organised by Olivia Stansfield. In all seventeen volunteers were present. According to FOG president and our national lands group organiser Jamie, "The volunteers slew woody weeds along the lake shore at Blue Gum Point.



This work greatly contributed to FOG efforts to remove woody weeds along the southern shore of Lake Burley Griffin and return it to grasslands. This project is supported by an ACT Environment Grant which is paying for larger tree removal. Nevertheless there remains plenty of work for volunteers." (See top two images)

The work party on 20 March was another joint event this time with Greening Australia and the National Capital Authority (NCA). The work party focused on supplementary planting at Gurubung Dhaura (Stirling Park) to restore to Box-gum grassy woodland some 6ha of former pine plantation. Some 37 volunteers planted around 350 tube stock.



On Saturday 2nd and Monday 4th April, four volunteers from FOG national lands group and Yarralumla Residents addressed a field trip of about 90 Fenner first -year students to describe the long involvement of FOG and local residents in Gurubung Dhaura - why they became involved, community objectives there, the partnership with NCA, the lobbying successes of volunteers, the social and environmental importance of volunteering and the skill-learning and personal benefits of volunteering. This session complemented the other sessions on First Nation culture and land management, European occupation, history and development, and NCA biodiversity, land and fire management.

On Sunday 10th April, ten volunteers planted 71 eucalypts and acacias along the weediest section of Haines Creek in Gurubang Dhaura and celebrated the significant birthday of longstanding FOG volunteer Allan O'Neil. The plantings are intended to provide competition to the weeds as part of our long-term restoration plans.

Top Hut TSR Update Margaret Ning

Top Hut TSR has seen a lot of visitors lately. On Monday 14 March Rainer, Andrew and I visited the site for yet another assessment of the vegetation levels which have grown heaps over the last six months. The future of the Monaro grassland Earless Dragon at the site has been questioned by the Department of Planning and Environment (DPE) as recent Dragon surveys have not detected any of the previously healthy population. Too much vegetation for them to survive, or just too much vegetation to find them in? It was noted that the dam on Back Creek (the TSR's northern boundary) has been breached, which has implications for the type of future management that can be employed on the site. On our wanders it was possible to gather a bag of thistle seedheads which made it a very successful day. (See dam photo and photo of RR and MN)

We held a second FOG working bee at the TSR on Saturday 26 March, and half a dozen FOG members mopped up any remaining thistles and seeding weeds, and sprayed around 100 St Johns Wort as well as 300 or so broom plants. And the latter were a bit of a shock, as was the further discovery of another couple of hundred which we have yet to treat! (See pic of June and Margaret)

A third visit to the site occurred on Monday 5 April when a rather large group of eleven people took yet another look at the vegetation levels on the site. The group included Dragon experts and FOG members Andrew, Charlie, June and me, and we roamed over both sides of the site discussing the biomass build up, possible biomass reduction methods (cattle vs sheep, fire, slashing, etc.), and the logistics of it all. (See pic of biomass discussions)

Rob Armstrong from DPE is in charge of coming up with a working plan, hopefully sooner rather than later. Images of dam by Peter Chandler and the rest by Andrew Zelnik









Creewah weekend – Sat & Sun 9-10 April

Margaret Ning

Maybe some things are meant to be, as we certainly had to jump through quite a few hoops for this activity to get off the ground. Initially postponed due to copious quantities of rain back in late February 2022, this rerun was looking ominously similar. However with phone calls to a couple of very helpful FOG members living in the area, it was easier to make the decision to go ahead. The plan was to spend Saturday on Brett Howland's (ACT Govt ecologist) 50ha property, with its many grassy, riverine and woodland ecosystems, and then to move on to nearby Nunnock Swamp on Sunday morning.

Many people pulled out because of the weather, so it was a small group of eight members who assembled on Saturday morning. Local FOG members Peter and Fiona with grandson Teddy were able to provide a lot of background info for the area, including the recent fire history in January 2020. In parts the Eucalyptus regrowth was very thick, but for the most part we roamed the area easily.

It drizzled briefly early on Saturday, but we were already on our way (some in gum boots!), wandering across the grassy open area near the house towards the fast-flowing Bombala River on the property's western boundary. We wandered along the river bank for quite a while, recognising most species, and adjusting to the influx of less familiar plants. We returned to the house for lunch, and then set out again to a much hillier area on the eastern part of the property. Mid afternoon some more drizzle moved in, so we began the walk back to the house. Highlights were yam daisies, a beautiful range of fungi, kookaburras galore, gang gangs, azure kingfisher, scarlet robin and the very pleasant knowledgable company.

On Sunday morning we were delighted to see clear blue sky, but following a brief reccy, we decided that, unfortunately, the water levels had not subsided sufficiently. We couldn't go east across the Bombala River on New Line Rd to Nunnock Swamp, and we also heard from other members that the northern access road to Nunnock was a forbidding slushy sludge, so we all had an early mark.

We added a dozen species to Brett's plant list which is OK for a late season visit. Brett couldn't join us unfortunately, but we were very grateful that he made his place available for us to stay in, given some of the weather possibilities.

Thank you Fiona for the cuppa and yummy finger buns on Sunday morning!



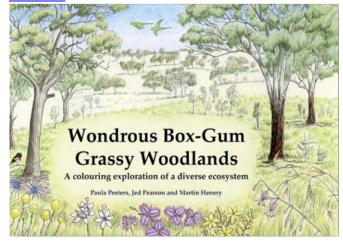
News Roundup

Rapid response team for ACT grassland

An article by Alex Crowe (Wed, 23 Feb, Canberra Times) reported on the establishment of a rapid response team in the ACT, headed by Ian Lenon. It has been established to defend against increase in the biosecurity threat posed by invasive species - flora and fauna. The article mentions "invasive weed species pose a unique threat to the ACT due to its prevalence of natural temperate grasslands. The team's focus will be on emerging weeds and pests using drone technology to conduct surveys of parks and reserves". This more rapid response team has been provided with \$3m in funding over the next four years to work alongside a larger biosecurity network in the ACT. FOG hopes to hear more in the coming months.

Free woodlands colouring book Paula Peeters

I'm very pleased to announce the launch of a new, free colouring book all about Box-Gum Grassy Woodlands. The book was commissioned by the Molonglo Conservation Group, with funding from the ACT government and National Landcare Program, and is available as a free ebook download from their website: click here.



Check out these Plains Wanderers

The Australian Geographic recently ran a story about releasing ten Plains Wanderers into grasslands in western NSW. Many years ago on a FOG trip we were able to see this delightful little grassland bird on a pleasant night on the Hay Plains. Take a few minutes to click on the article, which includes a two-minute film of their release. The film shows the birds cautiously looking around their new home. Each has a wire at least as tall as the bird emerging from its back. The film is both delightful and informative and reminds us what grassland conservation is all about. Click here for article and film.

Environmental grants for a green and clean CBR

On 4 March, The ACT Government released the following on its "Our CBR page". The statement was prepared with the assistance of Jamie Pittock and was used to promote its 2022 environment grants. The statement reads:

From nature reserves and local parks to urban green spaces and rural land, we're lucky to call Canberra home.

Our community plays an important role as stewards helping to conserve, promote and protect these environmental values.

A community group that played a particularly important role in recently restoring the parkland surrounding the lake in Yarralumla is Friends of Grasslands.

Friends of Grasslands President Jamie Pittock says the 'Blue Gum Point Woodland Restoration' project was possible thanks to a grant from the ACT Government. The Environmental Grants Program provides financial assistance for community based environmental projects, like this one.

"The Environment Grant has allowed Friends of Grasslands to dramatically accelerate the grassy woodland habitat restoration," Jamie said.

"We have been able to pay contractors to undertake work such as broad scale weed spraying and invasive tree removal that is beyond volunteers."

The 8 hectares of Box-Gum grassy woodland is listed as nationally endangered and contains populations of the nationally endangered Button Wrinklewort and the Golden Sun Moth.

"Improving the resilience of grasslands is important in light of climate change, impacts of weeds and pests, and human impacts such as compaction, erosion, and ground disturbance," Jamie said.



Volunteers from Friends of Grasslands planting along the lake in Yarralumla.

Restoration activities undertaken as part of this project included spraying weeds, removing weeds along the lake shore, planting native trees and shrubs, and removing rubbish.

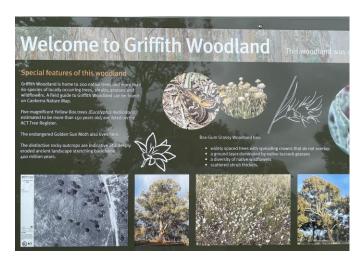
"Community members working in partnership with government can significantly increase conservation of our common environment. Participating residents now feel a greater sense of ownership and responsibility for the woodlands," said Jamie.

The grants provide an opportunity for the community to address environmental issues they are concerned about, to restore and conserve natural places that are special to them, and to engage other community members to do the same.

Exciting signage at Griffith Woodland Margaret Ning

With my many years wandering around our grasslands and woodlands, it has been exciting to watch things grow - not just the plants, but also the people and their contributions.

This includes creating artwork and information one sees on signs. I was blown over when I saw this at Griffith Woodlands.





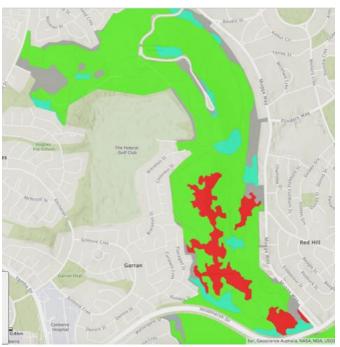
Red Hill Woodland map

Maps, even simple ones, are useful in understanding our remnants and planning their management. This one was recently prepared by Bret Howland (Parks and Conservation Service) for the ACT Red Hill woodlands.

The woodlands are described by Michael Mulvaney as "a vital component of the second largest Yellow Box-Red Gum woodland remnant in Australia, that covers about 1,200 ha from Red Hill to East O'Malley, Symonston Mugga Lane and Callum Brae".

The colours in the map show areas that are high quality (green), moderate quality (blue), low quality (red), and those dominated by plantings (grey).

The map may be found on the Red Hill Regenerators website <u>found here</u>.



Restoring native grassland Nicki Taws

At Greening Australia we know we're in the treeplanting game for the long haul — no one expects overnight results. It's the same when restoring native grasslands, although if you tell most people you're restoring native grassland they will expect instant lawn within a month.

Working with Bush Heritage on their Scottsdale Reserve, it has taken eight years for our first restored grassland to develop a good cover of Kangaroo Grass — the gold standard grass for our region. Significantly, the site was burnt two years ago when the last bushfire of the Black Summer emerged from the mountains and swept across much of Scottsdale, burning particularly intensely in the areas infested with the highly flammable invasive African Lovegrass. The native grassland however acted as a natural firebreak and the wildfire barely made it across the site.



Feb 2020



Nov 2020



Feb 2022

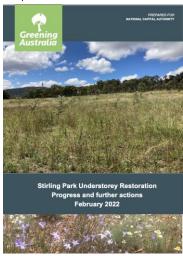
We have always wanted to be able to manage our restored grasslands with fire and this disastrous event afforded us the opportunity to see the response. The natives responded wonderfully as we had hoped. So did the African Lovegrass but some judicious control by Bush Heritage has kept it in check. This grassland now truly does qualify as the Critically Endangered Ecological Community-Natural Temperate Grassland of the South Eastern Highlands.

Editor's note: See Bush Heritage's Magazine Bushtrack, Autumn 2022, pages 2-5 'Ashes to orchards', for an illustrated account of the effects of the 2019/20 bushfires on the Scottsdale restoration project.

Stirling Park (Gurubung Dhaura) Understorey Restoration Progress Sue Ross

This is the title of a second progress report by Nicki Taws for the National Capital Authority. As readers know, Gurubung Dhaura restoration is a FOG program led by Professor Jamie Pittock. This report describes the restoration of the 2 ha pine plantation near the corner

of Hopetoun Circuit and Alexandrina Drive. The objective is to restore Box-gum grassy woodland by removing the pines, sowing a temporary cover of sterile ryecorn (the latter two activities are complete) and then planting trees, understorey shrubs, grasses and forbs.



By February 2022, 310 trees and 350 understorey plants have been planted. The 2021 rainfall promoted growth of native and exotic grasses, native shrubs and assorted weeds. Unfortunately, unexpected losses of Acacia, Cassinia, Hardenbergia and Indigofera occurred, possibly due to 'wet stress'.

Approximately 2.5 ha of bare ground remain to be restored in the northern and western areas of the site. This will involve planting more trees, understorey shrubs, grasses and forbs in Autumn 2022.



Community Planting 27 March 2021

Plantings bring back birds Sue Ross

An article in *The Conversation* of 6th April 2022, titled *New research shows planting trees and shrubs brings woodland birds back to farms, from Superb Fairy Wrens to Spotted Pardalotes, found here, provides a precis of research into the importance and value of revegetating farmland for the benefit of woodland birds. The research was carried out by four academics from La Trobe University, and one from Monash University,*

The research is important because of the steep decline in woodland bird species in southern Australia.

The research team sampled 133 plantings in three groups of farm landscapes of 8 square kilometres in south-western Victoria. The first group had tree cover from revegetation, the second was remnant i.e. post-clearing native vegetation, and the third was a mix of revegetation and remnant. The research found that bird species increased with increasing wooded cover and that different bird species were noted in different landscapes. For example 1% revegetation cover favoured open country species and an average of only 11 woodland species whereas landscapes with 15% revegetation had an average of 25 woodland species.

The team's research showed the greatest value is from mixed revegetation and remnant landscapes; and for individual patches within a landscape a diverse range of trees and shrubs provided the greatest value for birds.

Visit our website http://fog.org.au/



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Events & work parties: Calendar.

Book order forms: Grassland & Woodland Floras.

Small grassy ecosystem grants: supportedprojects@fog.org.au

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