

News of Friends of Grasslands

Supporting native grassy ecosystems

ISSN1832-6315

July & August 2022

Events

Sat 16 July, 2pm

NCA Conservation estate at East O'Malley – visit with Peter Beutel.

 $Register: \underline{margaret.ning@fog.org.au}$

Sat 27 Aug 1.30 - 4pm

Aftermath of burning – visits to burnt

grassland and woodland.

 $Register: \underline{margaret.ning@fog.org.au}$

Work Parties

Budjan Galindji (Franklin Grassland)

6 & 20 July, 3 & 24 August Wednesdays 9-11.30am

Register: Margaret.ning@fog.org.au

Gurubang Dhauru (Stirling Park)

17 July, 28 August, 18 September

Sundays 9am -12.30pm

Register: jamie.pittock@fog.org.au

The latest updates are found on our website at Calendar

New Members

Welcome to ...

Rochelle Christian, ACT Hugh Coppell, ACT Zoe Imber, ACT Jaclyn O'Toole, ACT Vivienne Carey, ACT

From the President ...

I don't need to tell members of FOG that temperate native grasslands and box-gum woodlands are amongst Australia's most threatened ecosystems. Yet, we do need to help the new Federal Government understand and better fund conservation for grasslands' flora and fauna.

The need for heightened efforts to conserve our grassy ecosystems are highlighted by the former Federal Government's Threatened Species Strategy 2021-2031. Of 100 threatened species prioritised for recovery, none are from the grassy ecosystems of the ACT and south-eastern NSW. The arbitrary nature of the selection of 100 species for recovery from more than 2000 species and ecological communities that are known to be at risk of extinction demonstrates the challenge for those of us advocating for conservation of all of Australia's biota.

In March, the former Federal Minister for the Environment removed the requirement for 176 nationally threatened species and habitats to have recovery plans. This is part of a move for the Federal Government to adopt quick and nasty guides for recovery, known as a 'Conservation Advice'. These offer a lower form of legal protection for species threatened by development, as the Minister must only 'have regard to 'an approved Conservation Advice, whereas s/he must 'not act inconsistently 'with a Recovery Plan under the Commonwealth Environment Protection and Biodiversity Conservation Act. Similarly, in NSW, it is concerning how little investment there is in the conservation of the threatened grassland flora and fauna of the Monaro region.

While we are fortunate in the ACT to have a government committed to rigorous conservation plans, more can be done to implement them well.

It is for these reasons FOG is in the process of appointing a Project Officer (in collaboration with the Sustineo sustainable development consultancy firm - see https://sustineo.com.au), to be our first paid advocate for grassy ecosystems. FOG has played a vital role in southeast Australia reacting to development and regulatory programs impacting on grasslands by promoting conservation.



Now we need to step up and more proactively argue for systematic conservation programs for grassy ecosystems.

FOG – in partnership with the Conservation Council – will be arguing that the ACT Government and community need to establish conservation area networks. This involves giving overlay legal protection to remnant habitats, and the linking lands that need restoration, over a variety of land tenures so as to conserve larger, more viable areas for biodiversity. We will look to work with ACT natural resources management programs to ensure that these patchworks of road easements, unleased urban lands, agricultural leases and parks are well managed by government agencies and community organisations. The future of species like the Grassland Earless Dragon depends on better conservation across land tenures. Then there is the need to focus on NSW, where more investment is needed in its depleted National Parks Service and community organisations to conserve threatened species like the Monaro Golden Daisy on roadsides, in traveling stock reserves and in the pocket-handkerchief sized reserves in the region.

Please join me in making this advocacy agenda for grasslands conservation a reality. Donations to FOG are tax-deductible and will assist us to conserve the neglected flora and fauna in our region.

See donation advertisement on page 11

Jamie

Advocacy Report

Sarah Sharp

April 2022

Greenway Boardwalk & Open Space Construction Project, submitted 30/4/22

FOG was invited to comment on the options for a proposed viewing platform and path through the space. This area contains a remnant of Natural Temperate Grassland, albeit with a tree plantation over the top and a high component of invasive species. FOG advised that the integrity of the remnant needs to be retained. The path through the grassland should be of minimum width and permeable material to minimise run-off. Recommendations were given to improve its protection and value in the landscape, by including signage and revegetation. Information on suitable plantings were also provided.

Response provided: the viewing platform will go ahead (design agreement for this in 2019 and there was no objection received). Other matters agreed to: methodology and species for revegetation.

May 2022

Casey Community Recreation Park - draft concept plan, submitted 8/5/22

FOG recommended the development of the recreation park be utilised to enhance the existing natural connections across the landscape, linking areas of Box-Gum Woodland, rather than modifying it and conceptually treating it as an isolated remnant. The local trees should all be retained, the naturally undulating landscape be maintained to retain diversity of habitat, and plantings using native trees, shrubs, grasses and herbs be utilised.

Action Plan to prevent the loss of mature native trees, 27/5/22

The background ecological reasoning and issues about the loss are well described. Actions overall are not well defined, however, and implementation information very weak. Have provided recommendations, including the need to identify key actions to be achieved within defined timelines.

Federal Golf Club Retirement Village and Water Infrastructure, EPBC Number: 2022/09201

Although a controlled action, support was given to the proposal. Geoff Robertson was involved in meetings with stakeholders to discuss the proposal and over 10 ha of high quality box gum woodland is to be ceded to the reserve.

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

Naarilla steps down as advocacy coordinator

After twelve years as advocacy coordinator Naarilla has stepped down - Sarah Sharp has taken over that role (temporarily). Over this period Naarilla was largely responsible for gaining FOG's amazing reputation for well-researched and argued submissions on grassy ecosystems and biodiversity more generally. She has left a significant legacy.

In an informal thank you, some current and former committee members recently joined her for a lunch. They gave her a framed copy of a Monaro grassland poster (described on p19, Nov-Dec 2021 issue). The photo (by Andrew Z) below shows Naarilla, Margaret, Rainer, Jamie, Geoff, Sarah and Janet.

Naarilla reports that she has found an ideal spot for it - see below





Hooded Robin, rare and vulnerable in our region but common elsewhere

Michael Bedingfield

The only place I have seen Hooded Robins is in the Gigerline Nature Reserve, which is to the south of Canberra and far away from the bustle of the city. These birds are generally quiet, and described as being shy and sensitive to human presence. The common name comes from the striking colouring of the males, which are black and white, with a black head and upper chest. Most of the upper parts are black with a white shoulder bar and the front is white. The females are grey-brown above and white or pale grey-brown below. My drawing shows a perching pair with the male in the foreground and female behind.

Hooded Robins are largish robins with the body length being 15 to 17 cm from bill to tail. They like to perch on low shrubs, logs, stumps or fences, which they use as observation points. They are generally seen in pairs as they forage, launching from their perch to catch small animals on the ground, tree trunks or branches, or in the air. On the ground they hunt among logs and woody debris. While their main food is insects they also eat other invertebrates. They also eat small vertebrates such as skinks and froglets and sometimes seeds. While they are quiet by nature, they do have a song choice. The calls are various, and can be a series of descending, mellow notes, piping or chirring and some chattering sounds.

Hooded Robins are usually sedentary, but there may be seasonal movements in some parts of their range. They are distributed across most of the inland of the Australian continent but they are absent from Tasmania. While they are rarely seen locally and have been declared vulnerable in the ACT and NSW, nationally they are secure. Locally the preferred habitat is eucalypt woodlands. Our grassy woodlands are an endangered ecological community and this bird is a victim of their decline. In other parts of their range they use other types of lightly woodled country, such as acacia scrub and mallee but avoid densely forested areas.

Because they are prospering in other parts of Australia but are not doing well in NSW, studies have been done to find out why. They have found that these birds have a low tolerance to habitat disturbance and fragmentation such as occurs with conversion of land to pasture and other agriculture. They require a habitat which is structurally diverse, with mature and young eucalypts, shrubs and a healthy grassy understory. They are also more likely to occur if there are fallen logs and branches and other litter. Patch size is also important for them and habitat fragmentation reduces their ability to move around the landscape. Another threat to their well-being is nest predation by native and introduced predators, such as foxes and cats which can reach low nests, but also Pied Currawongs *Strepera graculina*. Competition from the very aggressive Noisy miners *Manorina melanocephala* is a problem too since they are known to exclude these robins from suitable woodland patches.

Hooded Robins breed in monogamous pairs at any time from late winter through spring, laying two or three eggs. There are multiple attempts each season but usually only one successful brood is produced. The nest is a small neat cup made of bark and grass held together by spider webs. It is placed in a tree fork or crevice from less than 1m up to 5m above the ground. The nest is defended by both male and female. They will also feign injury or tumble across the ground to

distract intruders. The birds often live in small groups in which immature birds assist with raising the chicks of the breeding pair. This behavior is also present with some other robins, such as the Eastern Yellow Robin *Eopsaltria australis*. The territories of Hooded Robins vary in size from about 10 hectares when breeding to about 30 hectares in the non-breeding season.

The scientific name of the Hooded Robin is *Melanodryas cucullata*. An interesting point to note is that the robins of Australia are not related to the European Robin or Robin Redbreast *Erithacus rubecula* which belongs to the chat subfamily, nor the American Robin *Turdus migratorius* which is the same genus as the Common Blackbird *Turdus merula* and is a thrush.

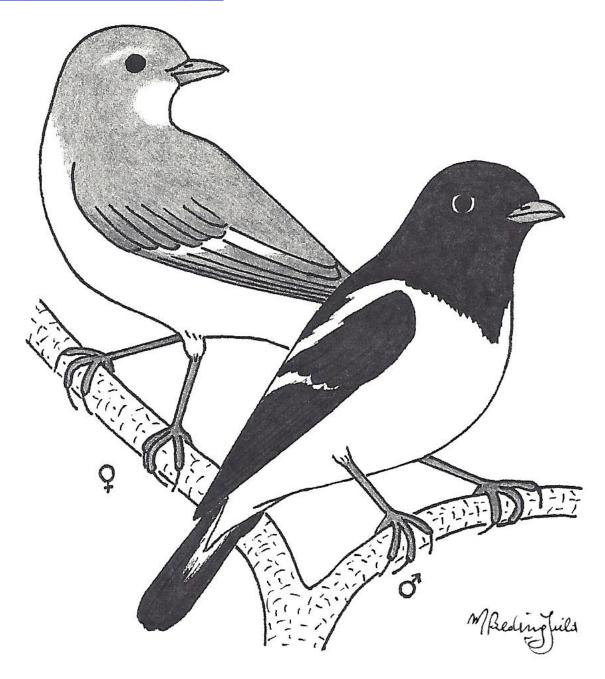
The importance of natural habitat for the Hooded Robin is echoed in the lives of more than a few native woodland birds that are also threatened because of habitat loss. Particularly affected are ground-feeding insectivorous birds. So protecting our grassy woodlands is an important way to arrest the decline of this and other species.

References:

https://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=10519

https://www.birdlife.org.au/bird-profile/hooded-robin

 $\frac{https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Scientific-Committee/sc-hooded-robin-melanodryas-cucullata-review-report.pdf$



Close Up - Catch on to get around

John Fitzgerald

Plants which spread successfully require their seeds to be transported, and many achieve this by catching onto fur or fabric. I am grateful to Roger Farrow for suggesting this as a theme for a close-up. I have prepared a set of images to tell part of the story for two introduced invasives and four native species, and I've kept my text short to allow more space for images that speak for themselves. Each image is labelled near its top left using the first letters of genus and species. Most images include an inset image of the larger dispersal unit.

Essentially a seed catches on with hooks and/or barbs, but there's a fascinating range of structural options.

Let's begin with the large dispersal unit for *Xanthium spinosum* which features a set of sharpened hooks, each with a shaft 2-3mm long.

Bidens subalterns is also large (more than 15mm long), and each linear seed-case has one 4-pronged tip. Each prong is decorated with many formidable barbs pointing back to the seed.

Acaena novae-zelandiae has a large, burr-like spherical head that segments easily into many smaller seed-dispersal units. Each unit has four smooth spines around 10mm long which can attach via tiny short barbs at every spine tip. These barbs are also retrorse (pointing back), and arranged as on a grappling hook.

Another burr is *Calotis lappulacea*. Each spherical burr head is around 6mm diameter and features about 1000 spines each with a set of minute retrorse barbs.

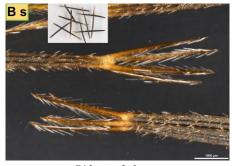
Hackelia suavolens is a burr too, a little smaller at 4mm diameter. Squat spines on this burr have the tip barbed like a grappling hook, the barbs here are distinctively short and spreading. Interestingly the spine array is based on a thin outer shell which, if broken open, releases a single smooth seed.

Finally to *Rytidosperma richardsonii*. This grass has very 'fluffy' florets, almost 10mm long, that will catch on woolly surfaces and are probably also readily blown around. When they do catch on they are easily dislodged because the long, numerous hairs are not ornamentated - only their tips are sharp.

Scale bars in the images represent the following lengths: 1mm for Xs, Bs and Cl; 0.25mm for An and Rr; and 0.2mm for Hs. Micrographs were taken at the National Seed Bank of the Australian National Botanic Gardens. They may be reproduced freely if attributed and linked to the Creative Commons licence CC BY.



Xanthium spinosum



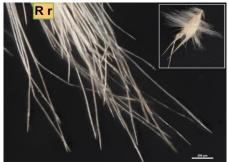
Bidens subalterns



Acaena novae-zelandiae



Calotis lappulacea



Rytidosperma richardsonii

Correction to last issue:

With apology, the images in the previous close-up were reversed. The second image is Sporobolus creber while the first image is Cyperus eragrostis. Some of you noticed this. Editor



Hackelia suavolens

Our native grasslands and the people who care for them (part 2)

This is a second extract from Jenny Horsfield's upcoming book "Our native grasslands and the people who care for them". This extract is a portrait of Alexander Hamilton, a bushwalker, teacher and keen naturalist, who wrote about the threat to our 'indigenous vegetation' in the 1890s.

Alexander Hamilton was a member of the Linnean Society and wrote many learned papers for the *Proceedings* of the Society as well as for *Reports* of the Australian Association for the Advancement of Science. No desk-bound scholar, he learnt from Darwin's methods of patient first-hand observation of creatures and phenomena in the natural world, from insects and insectivorous plants to earthworms; an earthworm he discovered was later named after him. In his paper for the Royal Society he often quotes *The Origin of Species*, referring to the processes of natural selection and variation within species. As a teacher he wanted to see greater emphasis on nature study in primary schools and was influential in promoting this among teachers when he became a lecturer in nature study at Hurlstone Training College, the first teacher training college for women in the colony of NSW. He is remembered for his 'astonishing industry and dedication'.

We see him out on farm paddocks or nearby hillsides, documenting the processes at work since white men had brought their stock onto grasslands that had not known hard-hooved animals before. He pointed out that before white settlement, 'ground disturbance was limited to the small native ground-dwelling foragers' who promoted the health of the soil by regularly turning it over, thus helping to maintain its friable, absorbent qualities. He also observed that 'native animals return to the soil on their death, but with sheep, all their constituents (hides, bones, horns etc) are taken out of the soil'.

Hamilton took a broad view of the environment, observing historical processes at work long before many of his countrymen. He mourned 'the enormous amount of forest cleared for coal-mining purposes' and estimated that probably one third of the colony's total forest cover had been cleared. He enumerated the eucalypt species lost or decimated: red cedar, turpentine, jarrah, ironbark, wattle-bark. He observed, years before Eric Rolls was to write *A Million Wild Acres*, the thick scrub of Callitris (native pine) that sprang up once eucalypt forests were cleared.

Again in advance of his time, he stated that the most valuable outback plant was the hardy saltbush, palatable to sheep but drought resistant and an excellent ground cover. This was an observation repeated in Francis Ratcliffe's *Flying Fox and Drifting Sand* written at the height of inland devastation by drought and rabbits in the late 1930s, when Australia's topsoil was being blown away in dust storms.

On his walks and travel around the colony, Hamilton collected examples of exotic plants spread along roadsides, river banks and railway corridors: horehound and nettles found in the vicinity of sheep stations; blackberry, scotch thistle,

briar rose...all beloved by the early settlers and planted around homesteads by people keen to hold on to memories of their past life in a different hemisphere. Such European weeds, which had survived on open country in Europe for centuries, were tough survivors and able to out-compete the natives on cleared ground.

One last observation from Hamilton's paper, again a prescient one: '...numerous settlers have felt the necessity of laying down artificial pastures with foreign grasses to make up for the diminished grazing capabilities of their holding...'

* 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 2)

In the 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. Continued from previous issue.

Some observations

What follows is a series of comments on the landcare question. The level of debate reveals the complexity of the issues to be considered.

In 2008 Richard Baker in an article titled *Landcare: Policy Practice and Partnerships in Australian Geographical Studies*, commented: the landcare movement is a response to the land degradation crisis facing Australia and is both a community process and a government policy. Landcare is a contested term with different meanings being placed on it by individuals and groups from different places with different levels of power and local knowledge. A key concept of landcare is the forming of partnerships, which is also seen in very different ways by various landcare stakeholders.

To examine this from another perspective, David Yencken in *Resetting the Compass* suggests setting environmental targets for Australia. He says "We can say that for the achievement of environmental sustainability we need: an overall goal; a set of principles which define what is needed to achieve this goal; and general targets".

Karen Reid in Chapter 7 of Land of Sweeping Plains says that the chapter is intended to assist anybody involved in managing grassland remnants to understand: the people who make up the diverse communities with a potential interest in the grassland they work on; the different roles each of these communities can play in the protection and enhancement of grassland; and how to work together with diverse communities to realise the social and ecological benefits of protecting grassland.

For future revegetation programmes Collard et al, in an EMR article titled *Objectives versus Realities*, recommend that greater consideration be given to the use of realistic estimates of threatened species and ecological communities' requirements (such as those documented in recovery plans) to set targets, budgets and completion criteria for reconstruction programmes; higher standards, better risk management and improved accountability in revegetation programs to encourage more realistic costing of revegetation projects; ecologically appropriate timescales for funding, managing, protecting and evaluating reconstruction/revegetation projects so that these can be adequately costed and outcomes achieved and measured; and ensuring that environmental programs that seek to achieve multiple outcomes (e.g. ecological restoration, employment and carbon sequestration) consider trade-offs and also use multiple measures to evaluate program performance.

Dr Kathy Eyles (Convenor, Mt Taylor Parkcare) makes some suggestions in her recently completed PhD thesis which are interesting and relevant to these issues. She proposes (among other things) that landcarers "establish a Biodiversity Sensitive Urban Development community of practice; involve professional associations (Landscape Architects, Engineers, Planners) to promote bio-sensitive practice and work with government to review design standards for new infrastructure (road verges, stormwater, tree planting, parks, etc) and enable programs to monitor landscape function and performance." She also suggests they "develop ACT-wide urban landscaping guidelines to maintain and augment biodiversity assets and minimise future weed invasions (streetscapes and open space management), drawing on the Molonglo Planting Guide and restoration research; investigate the feasibility of one agency to manage urban public land (urban open spaces, streets and nature reserves); enable ACT-wide planning for all biodiversity assets (including mature trees, wetlands, lakes and creeks) and cultural heritage sites; to reduce duplication, share resources and develop consistent approaches to urban biodiversity management; enable sympathetic management of streetscapes and urban open spaces adjacent to nature reserves, through consistent contracting arrangements and ACT-wide (all tenures) codes of practice for urban landscape design, management and weed control."

Further, the Canberra Ornithologists Group has just released their report on the survey of woodland birds showing a decline in the number of small birds that have, up to now, been regarded as relatively common.

Some questions for FOG?

I think this raises a number of issues that FOG could consider in relation to its involvement in landcare activities. I say this in the context of a comment in the FOG annual report relating to Old Cooma Common Grassland Reserve - when I drove past in mid-February the Reserve was being overwhelmed by St John's Wort and threatened by thistles.

First, with the lease of Top Hut TSR, FOG is confronted by a serious thistle problem on a neighbouring property and this leads to the question as to whether FOG has the resources to meet this threat. South of the Reserve on Dry Plains Road there are also serious outbreaks of St Johns Wort.

Second, it raises the question of what priority this has in view of the impressive list of projects that FOG undertakes in this space.

Third, it raises the question of whether FOG can implement meaningful and quantified monitoring and evaluations systems designed to measure outcomes or outputs from this immense effort so that FOG can have some idea of its program effectiveness. This might enable FOG to review the whole program to ensure that it has programs that provide outputs/outcomes that are commensurate with available resources.

Fourth, it would enable FOG to argue its concerns with government.

Fifth, perhaps FOG could review its strategies across all its programs to ensure that they meet current priorities.

Sixth, we need to revise planting policy in the city to get rid of exotic plantings and concentrate on local vegetation.

Scottsdale - a study in grassland restoration (part 1)

Geoff Robertson, Kath McGuirk, Linda Spinaze & Margaret Ning

26 May. On a lovely cool Thursday morning FOG members received a very warm reception at the Bush Heritage (BHA) property of Scottsdale by manager Phil Palmer and Kim Jarvis with a welcome hot cuppa. The eleven FOG visitors included a contingent from the Ginninderry Trust.

In the old shearing shed, Phil started the session with an overview of Scottsdale. He outlined the history of the property - BHA's decision to purchase this challenging property and the various strategies and methods that have been trialled. A fascinating innovative tool that had been developed by BHA is the computerised plant plotting system which records

the plant name, GPS location and plant health for each planting on the property. This monitoring tool was established after the 2021 fire to monitor plantings across the property - the fire had a major impact and while some plants were destroyed in the very hot fire, many have recovered, reshooting from their base.

We were then shown the nursery and seed cleaning and storage area by Kim. The nursery has evolved overtime and is now relatively high tech. All seed has been collected from the property and is used to grow plants in the nearby plant nursery. Kim outlined many different seed collection and storage methods and what is being learnt. The Scottsdale team, often with groups of regional volunteers, plant out tubestock in spring to utilise good soil moisture created by spring rains.



Tein's patch

We then piled into four 4WDs and travelled to our first stop, informally referred to as 'Tein's patch,' where Tein McDonald has led a group, essentially using the Bradley method, to restore what is a lovely natural temperate grassland - previously an intensive area of African love grass.

Next we were shown several sites of endangered button wrinklewort, including a natural population, a site growing small populations from different provenance across south east NSW and Victoria, and an experimental site trialing cross-fertilising plants from different provenance.

Wrinklewort populations have limited genetic variability and by bringing different populations together it is hoped to breed stronger genetic diversity - different provenances may exhibit different leaf structure, e.g. those from Victoria having more luxuriant leaf growth. Kim



Victorian Button wrinklewort has a more luxuriant leaf growth

explained how she carefully managed and monitored the germination and growing stages. The planting site was on the top of a rise in very thin rocky soil. Results to date had proven that this forb prefers high ground, so this was a determining factor in the selection of the trial site. In this work Scottsdale is working in partnership with Monash and Latrobe Universities.

Our next stop was a shed where Phil showed us a grass seed harvester, tree guards and wire guards developed by BHA. Seed harvesters for native grasses have continued to evolve as features are added - the BHA model reflects several innovations to meet its needs. BHA's basic plant guard, compared to other available plant guards, is larger and more robust, and has airflow holes. These innovations allow airflow, especially to prevent overheating within the guard (particularly in case of fire), and to prevent unwanted grazing by kangaroos and deer - the guards can also be used many times. BHA also uses large wire guards to prevent unwanted grazing. BHA can now sell its tree guards to community users to cover its production costs. According to Phil "the key features of the BHA tree guards are they are Australian made, recyclable and include a fire retardant."

From the shed we walked to a large paddock sown to redleg grass as a source for grassland restoration. The paddock had been sprayed with herbicide, ploughed, resprayed, seeded with redleg grass and then seed harvested. Following harvesting, the grass was mown, allowing it to regrow to produce another seed crop. The aim here is to use harvested seed for large-scale application across the reserve. Once redleg grass replaces non-desirable vegetation, it may be augmented by insertion of other grassland plants at a later date. A similar approach is being trialled with kangaroo grass but the jury is still out. Compared to kangaroo grass, redleg is easier and cheaper to establish. A special feature of the paddock is the high deer and kangaroo fence.

Nearby was a fire impacted area, where trees had been previously planted. The trees were reshooting from the base, and while the site looked weedy (fleabane has been particularly bad over the last two years) numerous wattles and native grasses and forbs are naturally establishing - river tussock, previously rare at Scottsdale, is returning to these areas.

In our next issue, how to get rid of ALG, the scrape-and-sow site, and then a trip along the ridge.



Redleg grass paddock



Button wrinklewort crossbreeding trial paddock



Phil Palmer showing Scottsdale seed harvester



Plant protector



Kangaroo and deer fence

Recent FoG Events

Budjan Galindji – Community Planting Day

15th June. Suzanne Orr organised her fourth (or was it a fifth) work party at the Budjan Galindji Grassland. About twenty-five people attended on a very cold morning with rain threatening. Suzanne posted the following statement and photos on her Facebook page. "Budjan Galindji Grassland has 400 more plants now, thanks to a bunch of dedicated volunteers who braved the wind today.

The new plants will add to the biodiversity and conservation value of the grasslands. Looking forward to the next planting day (might schedule for a warmer time of year)."

Geoff Robertson who helped organise the event stated "Fantastic turnout with strong representations by Suzanne's tribe, FOG members, numerous local residents, and our friends from EPSDD who did the preparation and provided the plants. So much was achieved and we look forward to many patches of wattles, bursaria, grasses, etc. appearing soon providing habitat for small bush birds. Thanks Suzanne for your continuing support of Budjan Galindji."



Budjan Galindji work parties

In our last issue we reported on work parties up to 6 April. Since then we have held work parties on 27 April, 4 and 25 May, and 1 June. Our respective attendances were 3, 6, 5 and 6 respectively. On the last occasion that included two ecology students who joined us and had an impromptu lesson on what we have been doing and why, and plant identification. On several of these occasions we have been joined by Ranger Stephen Bruce and are pleased to report that we and the ACT Offset Unit are working extremely well together.

Our main task has been weeding in the large southeastern area burnt by fire. This has been a great learning experience for all. One focus has been hand removing St John's wort seed heads, both living and sprayed (see first image). While herbcide kills the plant, it does not kill the seed. Hence, removing the seed head is an effective stop gap measure for live plants, and good 'value adding' for sprayed plants.



We have also been herbiciding and hand removing St John's wort rosettes - this is a fairly major exercise. Other plants to be attacked are blackberry and unwanted grasses such as serrated tussock, paspalum, phalaris and cocksfoot. This has mostly used herbicide spraying and in some cases hand removal. Despite the cold weather, this has been successful. We have also been using the new Fiskars "extractor" tool to remove herbaceous



weeds from the higher quality patches.

On 25 May we took the opportunity to create a plant list of natives and exotics emerging following the fire.

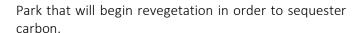
At our latest work party we noticed that many well developed blue devil rosettes had been destroyed. It looks like a large bird had attacked the plants, possibly as a source of food. Anyone else noticed this?

National lands group

May was a very productive month for FOG's national lands group. On 8 May, a FOG work party cut out around 30 square metres of woody weeds at Blue Gum Point. The first image is testament to their work.



A week later a crack team from the British High Commission, Canberra, planted 180 trees in the Westlake clearing, part of Gurubung Dhaura (Stirling)



On 22 May, twelve of FOG's sterling volunteers (excuse the pun) turned out at Gurubung Dhaura to dispatch a highly invasive garden escapee, Blue Periwinkle (see images below). *Photos - Jamie Pittock*







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.

News Roundup

Barton Highway duplication

John Fitz Gerald

The FOG newsletter from Jan-Feb presented some details of environmental and cultural issues related to this Transport for NSW (TfNSW) project, including the news that a landcare 'collective' had formed comprising the Yass Area Network of Landcare Groups (YAN), Ginninderra Catchment Group (GCG), FOG and local residents. This collective has continued to consult the project team over Stage 1 issues and several positive actions have resulted.

In December 2021, TfNSW announced that work was suspended at the northern end of stage 1 to allow investigation of important trees of cultural significance near Kaveneys Road. TfNSW has committed to protecting the group of trees.

TfNSW has also publicised work done for it at the southern end of Stage 1 in the Box-Gum woodland of Hall TSR, including the erection of nest boxes and surveying of glider populations. One outcome is a plan to install gliding poles to assist known groups of sugar gliders to cross the widened highway line.

TfNSW has also started to implement its offset obligations arising from Stage 1 construction. A call has been put out for expressions of interest from all landholders along the Barton Highway to participate in biodiversity conservation. Packages of up to \$20,000 are available for interested and eligible landowners to carry out biodiversity enhancement actions on their land such as tree planting, revegetation, weed control and habitat restoration (eg artificial hollow creation) that will improve the biodiversity value of their properties and contribute to biodiversity conservation in this region. For more information please contact Olivia Stansfield on 0468 580 217 or barton.highway@transport.nsw.gov.au. Expressions of Interest closed on 13 June.

The highway project team also manages significant areas along the road verges where revegetation is needed. TfNSW is committed to returning suitable species to these sites and has been cooperating with the Yass Area Network on plant selection. Another commitment is to involve the community, which it is hoped will want to participate in planting events in the near future. These events will be coordinated through both YAN and GCG landcare groups. Readers should contact either of these if they wish to be involved or to get more information.

The project has its own website with more news and updates <u>found here</u>.

Earless Dragons spotted in Jerrabomberra grassland *Sue Ross*

In an About Regional article on 2 June 2022, found here, Claire Fenwicke reports on the finding of four endangered Earless Dragons, for the first time in four years, during a recent NSW survey by ecologist Rob Armstrong. The article contains some great images and film of our little friend.

The find is exciting because the Earless Dragons have been in significant decline and, in NSW, have only been found in three paddocks. As these are separated by roads the Dragons' breeding chances are adversely affected.

"They're special to the region, a flagship species that brings attention to the difficulties of maintaining grassland habitat in the region," Mr Armstrong said. Maintaining native grassland requires keeping enough of it and keeping it connected as well as removing excess biomass by cool burning.

In the ACT Dr Ben Croak and Dr Sarah May, both part of the Canberra Grassland Earless Dragon breeding program, agree. "Grasslands are under threat everywhere; some sources say there's been a reduction of 99 per cent of the grasslands that once covered NSW and Victoria," Dr Croak said.

"We've noticed a massive drop-off in the animals and we're trying to understand why there's been such a dramatic decline". The pair say that the lizards used to be "super-abundant" in the region, with sightings in the tens of thousands. They now think only hundreds are left in the wild.

Further information on Earless Dragons can be <u>found</u> here and here.

Environmental volunteerism

In their *Inquiry into Environmental Volunteerism,* submissions to which closed on 5 May, the ACT Legislative Assembly has published the 29 submissions made to it including that of FOG. These submissions may be found here.

Vale Geoff Hope

Taking up the item on Geoff in our last issue, further information has become available. According to the *Reclaim Kosci* website, friends and colleagues of Professor Geoff Hope gathered at Dunns Flat, Kosciuszko National Park, on 28th April, to share their memories of his life. Speakers included Di Thompson, who described Geoff's many contributions to NPA ACT, Sam Garrett-Jones who met Geoff as a friendly fellow student, Ben Keaney who followed Geoff into a career in paleo-

ecology (and followed him into freezing bogs in the process), and Andrew Cox who spoke about Geoff's substantial contributions to the science case for removing feral horses from Kosciuszko. All remembered him as a kind, unassuming man, with a quirky sense of humour, who was always willing to share his knowledge. The bogs of Dunns Flat were one of the many research sites that Geoff studied in his long career as an internationally admired and respected paleo-ecologist and bio-geographer. We also have a link to Geoff's obitiuary by Professor Simon Haberle (24th May 2022) which we think our readers will appreciate.



Image: Ben Keaney speaks at Dunns Flat.

Implications of heritage listing for lake and surrounds

In an article by Antoinette Radford in the Canberra Times,10 May 2022 - Canberra's Lake Burley Griffin and surrounds listed as a Commonwealth heritage site - we learnt that Canberra's Lake Burley Griffin and adjacent lands have been listed as a 'matter of national environmental significance' under the Commonwealth Environmental Protection and Biodiversity Conservation Act. The listing was signed off by outgoing Environment Minister Sussan Ley and includes Scrivener Dam, Stirling Ridge and both Commonwealth and Kings Avenue bridges. The article mentions that part of Stirling Ridge had previously been proposed as a site for the construction of new embassies. The National Capital Authority has now ruled out embassy sub-division on this land. Click here for article.

We asked FOG's president Jamie Pittock about implications for FOG's projects on national lands around the lake. He stated that "the listing covers most but not all of the lands of high biodiversity significance around the lake. Stirling Park (Gurubung Dhara) remains zoned under the National Capital Plan for 'national capital purposes' and is informally designated as the site for a potential new Prime Minister's residence. However, the heritage listing of particular parcels of land makes future development on the land very unlikely. FOG's national

lands group is actively restoring, in partnership with the National Capital Authority, woodlands and grasslands on national lands around the lake, as well as on the ACT TCCS land at Blue Gum Point. The heritage listing underscores the importance of these areas as national biodiversity assets. Before the election, FOG wrote to candidates in the federal election for Canberra seeking their support for reservation of national lands at Lawson, Stirling Park (Gurubung Dhara) and Yarramundi Reach as federal nature reserves. FOG will pursue this greater legal protection with the incoming government."

Recent sightings at Hall Cemetery

Andrew Zelnik

At our most recent working bees on 5 February and 5 March (see previous two newsletters), surprise, surprise, I had my camera at hand! So, I couldn't resist taking photos of native fauna and flora that serendipitously caught my eye. I have included some below not only because of their attractiveness (to me) or striking features but also because they can easily be overlooked in the tunnel-vision focus on weeding.

You'll notice the spiders look somewhat similar. This is no coincidence. According to A Field Guide to the Spiders of Australia (Whyte and Anderson), the orb weaver spider Gea theridioides "...species has been found to have DNA no different to that of Argiope species and may get a name change...". It is also "... found all over Australia but rarely noticed..." as seemingly evidenced by only 229 records on the Atlas of Living Australia (ALA) since 1990 - five being from NatureMapr (Canberra Nature Map, CNM) since 2021.



An orb weaver spider *Gea theridioides* (adult female)

By contrast, for the St Andrew's Cross Spider there are 4,433 records on ALA since 1990 - only 49 are from CNM, two of them posted since 2018. This spider is named for its bright web decorations of zig-zag ribbons of bluishwhite silk that form a full or partial cross, called the *stabilimentum*, through the centre of the orb web. The

function of this cross has long been a puzzle - the Australian Museum offers some ideas about this.



St Andrew's Cross Spider Argiope keyserlingi (adult female)

A solitary adult sawfly had a large bright yellow spot on its back (thorax) and was what initially caught my eye. It made a notable contrast to my previous encounters with sawflies – usually as clumped squirming masses of larvae feeding on *Eucalypt* leaves. Some Dark Flat-sedge was one of several hundred plants in a small dense patch. Its occurrence at the cemetery was first noted in 2021 and, thanks to Margaret Ning's eagle eyes, I have now seen it here for the first time. It was in an area that we regularly weed - presumably our work has helped its occurrence. Although it is described as commonly growing in swamps, on roadsides and stream banks, in this case no doubt it has also been a beneficiary of the recent months (and years?) of high rainfall.



A sawfly or spitfire *Perga sp.* (adult)

Dark Flat-sedge *Cyperus sanguinolentus* flower head The many Common Brown Butterflies I observed (~100+) were characteristic of the high abundance of females expected at this time of year. They were mainly in and around large lush patches of Weeping Grass *Microlaena stipoides* (see Mar-Apr newsletter), a key preferred food

plant for their larvae. Again, both the grass and the butterflies appear to have benefited from both the recent years of high rainfall and FOG's ongoing weed-control efforts.



Common Brown Butterfly Heteronympha merope (female)

GSM habitat restoration at Jarramlee

Parks ACT has announced that work is underway to restore three hectares of important Golden Sun Moth habitat in West Belconnen. This will occur at Jarramlee Grassland Nature Reserve in MacGregor, a stronghold for many of Canberra's threatened species.

However, issues with the decommissioned West Belconnen sewerage treatment plant, closed in the 1980s, has meant that parts of the grassland are starting to subside. After years of research and planning, Parks ACT is now ready to remove old sewerage pipes and other buried infrastructure and to rehabilitate the affected sections of grassland.

It will also be building a new walking track through the reserve, with signs depicting the rich ecological and cultural significance of the Jarramlee landscape. Weather permitting, this 3-hectare section of grassland will be reopened before the end of the year. Watch this one!!

My first book - Julian Teh

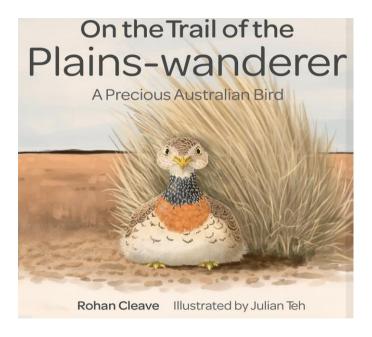
The secret's out! At long last I can reveal what I spent most of last year working on - my first book, and who could have guessed - it's about Plains-wanderers!

It was so exciting to work with CSIRO Publishing and with author Rohan Cleave on this project. I've always said Plains-wanderers would be the perfect characters for a kids' book, and now here they are.

On the Trail of the Plains-wanderer takes the reader on a short journey through what it's like to be one of Australia's rarest and most special birds, and shares the story of the conservation work underway to ensure its existence into the future.

The book is available for pre-order now through CSIRO Publishing and will be hitting shelves in September.

Julian is a young Australian natural history illustrator, currently based in Canberra. He focuses mainly on birds, and enjoys both scientific and design approaches.



Ajax grassland saved

The <u>Grassy Plains Network</u> announced a great victory "as rare as the Spiny Riceflower", by saving a critically endangered grassland from destruction. "It won their VCAT case against a private developer hell-bent on erasing and subdividing one of Melbourne's surviving grasslands!" Now "Ajax Road Grassland will keep doing what it does best – be a vital habitat for birds, lizards and critically endangered plants."



Labor- protecting our unique environment - Geoff Robertson

Before the election, Labor released its statement "protecting our unique environment" which may be found here. It makes a number of commitments which we as grassland advocates should be aware of, support, and ensure that they are implemented. Also, likely there

may be many opportunities to influence the detail and extend their scope.

In the statement, there is much emphasis on major themes such as icons like the Daintree, Kakadu, the Great Barrier Reef, the Franklin and Antarctica; an emphasis on increasing landcare and indigenous rangers, and the ball dropping by the Morrison governments - such as lack of environmental planning and cuts to the environmental department leading to delays in decisions and other work - nothing we did not know.

The topics covered are: Restoring urban rivers and catchments, Doubling Indigenous Rangers, Protecting the Great Barrier Reef and Securing Reef Jobs, Landcare Rangers, Saving Native Species Program, Cheaper Energy and A Safer Climate, Oceans and Marine Parks, Waste and Recycling Plan, Environmental Law Reform and a National Environmental Protection Agency, International Environmental Leadership and Strengthening Access to Justice. Click on any one of them to learn more.

How might we influence these programs towards the recovery of grassy ecosystems? There may be opportunities in the area of Restoring urban rivers and catchments which includes restoration of vegetation. The **Doubling Indigenous Rangers** is welcome but the emphasis is only on employing rangers in "Indigenous Protected Areas" and "Indigenous cultural water". We also need more indigenous rangers in managing all ecosystems and sharing their cultural management with the broader community. Our Saving Native Species Program seems narrowly focussed on a few icon species and threats. Talk of ecosystem conservation and restoration is missing. International Environmental Leadership is very important - something totally neglected by the outgoing government. An important statement is the commitment "to the High Ambition Coalition's pledge to protect 30% of land and seas by 2030, which has now been signed by more than 90 countries." Strengthening Access to Justice, amongst other matters, will restore funding to the Environment Defenders Office.

What is of paramount interest is Environmental Law Reform and a National Environmental Protection Agency. FOG had put a major effort in submissions around the EPBC Act and its reform. We need to watch this closely and be active participants to ensure that reform leads to strengthening of ecosystem conservation and habitat protection and restoration. The statement includes a reference to poor data - music to my ears:

"The collection of data and information is fragmented and disparate. There is no clear, authoritative source of environmental information that people can rely on. This adds cost for business and government, as they collect and recollect the information they need." (p24)

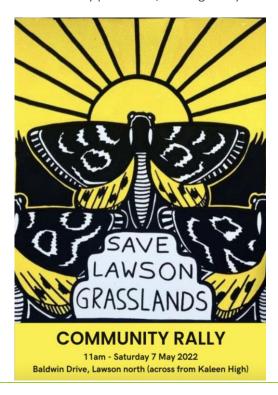
I have raised this issue for comprehensive statistical and other data in many forums and on many occasions - I just get blank looks.

Sadly, the word "biodiversity" in these statements is mentioned but once, and works like "ecosystems", "grasslands" and the like are not mentioned at all. It shows that the political class are not that aware of matters very familiar to us. It shows our lobbying still has much to do.

It was very disappointing that Terri Butler, who was to be the Minister for the environment, in the incoming government, lost her seat. However, Labor appointing a senior minister in the person of Tanya Plibersek as minister for the environment and water is most encouraging. The criticism that this was seen as a demotion underscores how little understanding there is of the "environment" - again it shows we need stronger biodiversity advocacy.

Rally for Lawson North

As part of the Lawson North campaign, on 7 May a great crowd of passionate people gathered at Lawson to rally against the threatened destruction of the Lawson North grassland. In the face of strong community opposition, Defence Housing Australia (DHA) is proposing to build approximately 416 dwellings at Lawson North, a place with very special environmental values. The area is home to critically-endangered Natural Temperate Grassland and Box-Gum Woodland habitat. In Australia, only around 1% of pre-settlement Natural Temperate Grassland is formally protected, making every remaining



patch important. Urban development has pushed this ecological community to the brink of extinction.

Persons who attended were urged to approach the federal minister for the environment and local federal candidates to oppose the development. Speakers included our Jamie Pittock (FOG), Helen Oakey (Conservation Council) and Rainer Rehwinkel (Ginninderra Catchment), Tim Hallo (Greens candidate). Alicia Payne (MP for Canberra) was scheduled to speak but withdrew due to having COVID

Lawson Grassland - so far Geoff Robertson

In July 2020, Defence Housing Australia (DHA) held community consultation with a proposal to develop a housing estate on the natural temperate grassland at Lawson North, part of the former Naval Transmitting Station. This flew in the face of a previous Commonwealth decision to manage the area as a natural temperate grassland reserve. The decision had recognised that some part of the naval station may be suitable for urban development. However, the DHA proposal went far beyond that. FOG with the Conservation Council and Ginninderra Catchment Group began a campaign against the proposal. DHA has reviewed and amended its original proposal but only marginally. While we have yet to see a final proposal, we understand it will come forward. Many reports have appeared in this newsletter on the campaign.

At the annual dinner, Helen Oakey summarised the Conservation Council's efforts on Lawson North in the last twelve months. She said:

"Last year, we asked you to help us protect Lawson Grasslands. Thank you for supporting the work that we did in collaboration with partner groups Friends of Grasslands and Ginninderra Catchment Group.

Since last year there have been over 30 meetings with stakeholders including MLAs and government officials; 28 written submissions to Defence Housing Australia opposing the development; 10,000 flyers distributed across Canberra; more than 75 people at a community rally; 40 people wrote to their local candidates before the Federal election and 627 people emailed Defence Housing Australia calling on them to stop the development.

Community artists did incredible work demonstrating the beauty and value of Lawson grasslands to help explain why we should protect them. This included a mural representing Lawson grasslands at Hackett shops; a golden sun moth cake, which lifted the moth's profile on Threatened Species Day; work by Nature Art Lab to inspire Canberra children; and Judy Kuo's wonderful and iconic design that has become the symbol of the campaign, which you can see on the tote bags for sale here tonight.

Most important, since first hearing about the development in late 2020, we have managed to slow down progress to the point that we haven't yet seen the request for environmental approvals. And we'll be making the case for protection of Lawson with the new government."

This was music to the ears of those at the FOG table. FOG would like to express its appreciation to Helen for her amazing leadership, the equally amazing and innovative work of Peta Bulling who has been organising the campaign, the team of experts who advise and participate in the campaign, the many Council volunteers who have help organise events, prepared artwork and undertaken letter boxing, and many others who have written to DHA and others and signed various petitions.

ACT draft action plan on mature trees

In an opinion piece in the Canberra Times, 3 Apr 2022 -ACT government is barking up the wrong trees link here, Larry O'Loughlin, former executive director of the Conservation Council and FOG member, welcomes the draft action plan on the loss of mature native (hollowbearing) trees, but considers it does not go far enough. He states that it certainly will not stop the the removal of large numbers of trees, and hence biodiversity, in areas proposed for development. His opinion piece provides some very disturbing statistics and projections on mature tree clearing in the Canberra urban area, and states" Many of the proposed actions are premised on offsetting or requiring "recruitment" when mature native trees are cleared. These measures do not replace the losses for biodiversity. Offsetting should be ruled out. Twenty trees that are five years old do not equal one mature tree that is 100 years old."

We approached Larry for an update on his opinion piece. He said:

"What is needed to protect mature native trees is for Canberra's planners in ACT Government to respect and protect the trees as cornerstones of our environment.

In my view groups such as Friends of Grasslands and the Canberra Ornithologists Group do invaluable work to keep biodiversity on the agenda, and are invaluable in that they keep drawing attention to fundamental components of our environment and how biodiversity operates at a local practical level.

This is very important to keep in mind while the essential protection of mature native trees is hidden and reduced by the government through the introduction of other issues into the draft action plan. These include 'the urban canopy, cooling the city, changes to the territory plan to require more tree plantings at new development sites and encouraging the community to have a say on where more trees should be planted'. While important,

these are diversions from the purpose of the plan which is entitled <u>Loss of mature native trees</u> (including hollowbearing trees) and a lack of recruitment.

It's also important to have community groups keeping an eye on the government. The current document has the hallmarks of providing planners and developers with a codifying guide on how to remove mature native trees rather than providing appropriate protection.

We also need to keep watching the planners because time and time again when tree retention is proposed there is a planning override to have tree removal. Proof of this lies in the number of times the Conservator of Flora and Fauna is overruled, if the Conservator does stand up for the trees.

True tree protection would have the planners doing the work to protect the trees so that the developers, including and especially ACT Government projects, have to incorporate and even improve the environment and protect the mature native trees and provide for the recruitment of future mature native trees (and that means looking after teenagers and middle-aged trees, not just planting a lot of babies).

The best way to protect the environment is not to destroy it and that should be the fundamental planning task. Plan to protect our mature native trees as cornerstones of our environment".

Larry informed us that he had sent his article to the government as feedback on the Mature Native Trees draft action plan.

FOG's position

Sarah Sharp provided more information on FOG's submission, referred to in her advocacy report. The submission urged a number of actions, stressing that they should be undertaken on a timely basis. First, all mature native trees in the ACT with a girth of 50cm or more should be identified, measured, their habitat described and registered. Second, all naturally occurring trees with a girth of 100cm should be recorded as 'exceptional'. Third, registered and exceptional trees and their habitat should be protected before beginning planning proposals for greenfield or other development. Fourth, transparent criteria should be developed to value these trees to ensure the penalty cost of illegal removal is prohibitive. Fifth, conservation management plans should be developed to ensure the trees and their habitat are protected within the broader natural landscape. Sixth, financial and other assistance should be provided to urban and rural lessees to encourage tree protection and recruitment and enhance biodiversity. Seventh, the community should be encouraged to participate in citizen-science monitoring and datagathering. These data should be compiled and analysed to ensure protection and management of these trees and their regeneration.

SBS program on indigenous grains

In an episode of the SBS television program *Bad Taste*, food writer Jess Ho talks to Yuin farmer and author Bruce Pascoe and Gamilaraay researcher Jacob Birch on the subject of establishing a sustainable and ethical native grains industry. Bruce has been growing four native grasses and making bread with them - Dancing grass (Mandadyan Nalluk), Kangaroo grass (Buru Nalluk), Weeping grass (Manjamanja Nalluk) and Spear grass (Garrara Nalluk).

You may download and listen to the program <u>here</u>. Our newsletter has published many items on the development of native grasses as food.

A painting of STEP

Recently we received this card from a friend, it's a delightful image of the Southern Tablelands (Ecosystems) Park. The artist is Valentyna Crane, who does lovely Canberra-themed cards and sells online via Red Bubble.



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