

# *Fronds*

*Friends of the Australian National Botanic Gardens  
Number 109 April 2025*





# Friends of the Australian National Botanic Gardens

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## Fronds is published three times a year. We welcome your articles and photographs.

The deadline for articles is mid-February for the April issue, mid-June for the August issue and mid-October for the December issue.

Email material to the Fronds Committee at the above email address or place in the Friends letterbox, located inside the Gardens Visitor Centre, between 9.30 am and 4.30 pm, Monday to Sunday. Editorial messages: telephone 02 6250 9548. Previous issues of *Fronds* may be found on the Friends website under the Newsletter tab.

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Friends of the ANBG is a member of the AAFBG

## Acknowledgment of Country

We acknowledge the traditional custodians of the land throughout Australia and their continuing connection to country and culture, and pay our respects to Elders past and present.

Front cover: *Ranunculus anemoneus*, taken at Kosciuszko National Park, above Thredbo, NSW. Photo: ©M Fagg, 2006. Courtesy of APII.  
Back cover: *Ranunculus dissectifolius*, taken at Kosciuszko National Park, NSW. Photo: C Totterdell, 1972, ©ANBG. Courtesy of APII  
[anbg.gov.au/photo](http://anbg.gov.au/photo)

# What we owe to Alec Costin

By Jenny Horsfield

Those who love the landscapes of the southern tablelands and the mountains beyond, are indebted to the work and vision of Dr Alec Costin.

Calling himself an 'ecologist', Costin first brought to many people's attention the concept of 'ecosystems' as complex webs in nature that connect all the organic and inorganic components of the environment. His field of study and action was the high country of the Monaro; his 1954 report *A study of the ecosystems of the Southern Monaro* was the first detailed research into the soils and vegetation of this challenging and beautiful mountain environment.

Costin, an Agricultural Science graduate from the University of Sydney, initially worked at Cooma in a branch of the NSW Soil Conservation Service. It was from that base that he had made a study of the soils and vegetation of the Monaro region, the basis of his classic *Ecosystems* book.

This study was to earn him an honorary Doctorate of Science (Agriculture) and the University Medal in later years. It was the beginning of his lifelong connection to the high country.

Costin's book has become a classic, a work that soil scientist Roger Good called "*the bible of tableland to Alpine ecology*".

In the book Costin makes clear that plants and animals (the 'biome') as well as the soil all need to be studied in relation to climate and physical geography, and also in relation to the variable of *time* – especially as stable and fully evolved 'climax' communities changed under the impact of human intervention.



Dane Wimbush, Alec Costin and Roger Good inspecting a recovering landscape at Mt Carruthers.

A Costin private collection

Costin made the point that of all the climax communities he studied, most have been threatened by 'profound anthropogenic disturbance'.

On the Monaro, these changes were largely caused by grazing and its associated practices of burning, ring-barking, clearing and draining of land; road-making; and the introduction of new plants and animals.

In describing the alliance of sod tussock grasslands, often dominated by *Poa* and *Danthonia* species (various forms of Snow Grass and Wallaby Grass), he pointed out that this alliance "*includes some of the most sought-after native summer pastures of the Monaro*".

He found clear evidence of the impact of sheep grazing on these grassy tussocks. Removal or thinning of the grasses led to the entry of secondary vegetation such as heaths, with associated disappearance of the numerous forbs – beautiful flowering plants like *Euphrasia*, *Ranunculus* and *Hardenbergia* – that flowered in spring.



C Totterdell @ANBG

Left: *Poa costiniana* taken at Kosciuszko National Park, NSW. Courtesy of APII.



A Costin private collection

Right: Costin camping at Blue Lake.

# What we owe to Alec Costin (cont.)

Also threatened were the fauna which had evolved in these grasslands.

One of the main objects of annual burning by the mountain pastoralists was the removal of this secondary heath layer, to bring back new tussock growth for their stock.

Costin refers the reader to the work of Professor John Turner and botanist Maisie Fawcett, who studied the effects of grazing in the Victorian high country in the 1930s, and who found clear evidence of accelerated erosion and long-term damage to the alpine landscape. Costin's advice was to discontinue grazing in all alpine and sub-alpine areas in the interest of catchment area protection.

At the time he made an exception to the extensive sod tussock grasslands of the northern sub-alpine tract around the Kiandra/Tantangara area. However in later years he revised his view on this, as he saw the extensive damage feral horses were doing to the grasslands and wetlands of the region.

At the time of writing his 1954 report, the alpine herbfields seemed to him to face a desolate future. These included the extensive carpets of *Celmisia longifolia*, the Silver Snow Daisy, whose short summer season was "unsurpassed for beauty and abundance of floral production".<sup>1</sup>

Inspecting the herbfields at a time of unchecked summer grazing, he concluded: "Such complete destruction of these communities has occurred in certain areas through grazing/burning that full regeneration is now impossible".<sup>2</sup>

Fen and bog formations were also severely damaged by grazing animals. Fens (wetlands fed by groundwater) were much prized for their grazing



Snow Daisies (*Celmisia costiniana*) above Blue Lake.

Mike Brenners

value for cattle, and had been very damaged by the stockmen's habit of burning and draining these areas as well as by grazing of livestock.

The precious sphagnum bogs, where snow melt was retained and slowly released into the water catchments, were also being severely damaged and trampled by stock and horses.

Costin's research on the effects of grazing in the high country was influential in the NSW government's decision in 1958 to withdraw grazing above 1,350 metres, and in the decision of the Park Trust in 1963 to establish a Primitive Area in the region surrounding Kosciuszko. After the snow leases were abolished, Costin was able to document a remarkable recovery of many alpine species, celebrated in his beautiful book, *Kosciuszko alpine flora*.

During his research for *Ecosystems* Costin visited all the mallee, woodland and forest communities of the Monaro, most of which had not been previously studied as ecosystems.

He found that none of them had escaped the impact of recent human interference, and many showed evidence of a severe post-settlement fire history.

The White Gums and Native Pine (*Callitris glaucophylla*) of the steep country on the lower Snowy River had been in a state of stable equilibrium 100 years ago, with mature trees and well-grassed, uneroded soil.

The area provided valuable grazing for cattle despite its steepness and inaccessibility. A century later there were dense, even-aged stands of *Callitris* and bare eroded soil caused by ring-barking and burning: country useful for nothing but as a stock route from the mountains down into Victoria.

The tall montane forests of Alpine Ash and Mountain Gum are, in their virgin condition, "among the most magnificent forest communities in the world", but few intact communities remained because fire damage had been so extensive. Fire was used repeatedly and indiscriminately to clear land for pasture, and it often escaped unchecked into surrounding forest.

1. Costin, *Ecosystems*, p215.

2. Costin, p218.

Of all the woodland formations, the Yellow Box Red Gum alliance (commonly known as 'grassy woodland') had suffered the most interference through pastoralism and settlement, with box timber valued for fencing and rural construction work. The prized perennial grasses of the understorey had been selectively eaten out, to be replaced by poorer native grasses and increasingly by annual broadleaf weeds.

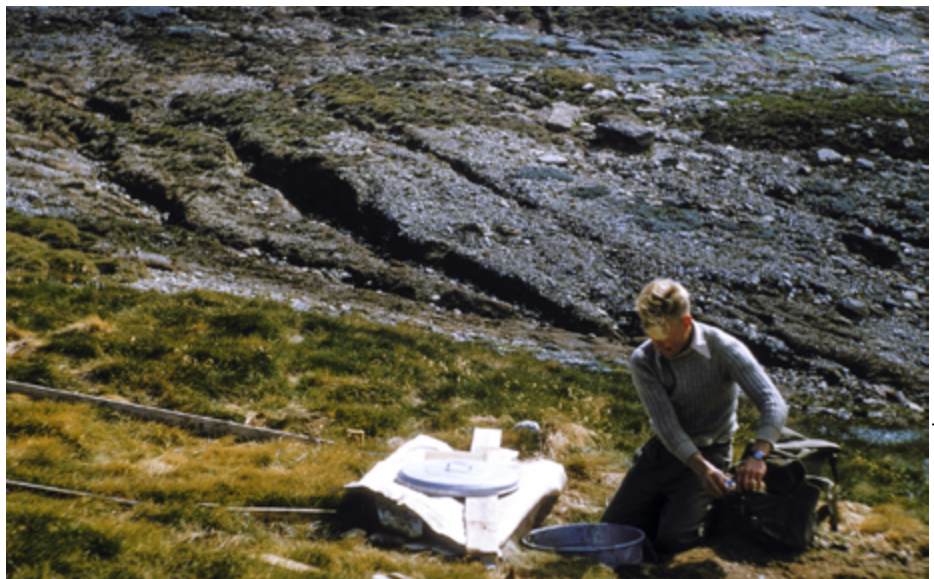
These grassy woodlands – and associated temperate grasslands – are very familiar to us in the ACT. Costin's research has been 'foundational' in our understanding of these beautiful and threatened landscapes and has provided a sound scientific basis for efforts to help heal and restore them.

## About the author

Jenny Horsfield is a Canberra writer with a special interest in the stories of the region where she lives. She has twice been the recipient of an ACT Writers and Publishers non-fiction Book of the Year award.



A Costin private collection



A Costin private collection

Top: A young Alec Costin on field work.  
Above: Costin inspecting erosion damage to the alpine herbfields.

If you'd like to know more about the life and work of Alec Costin, in his own words, he was interviewed by David Salt in 2006 as part of the Australian Academy of Science's *Conversations with Australian Scientists* series. Go to:

[science.org.au/learning/general-audience/history/interviews-australian-scientists/dr-alec-costin-alpine-ecologist](https://science.org.au/learning/general-audience/history/interviews-australian-scientists/dr-alec-costin-alpine-ecologist)

Alec Costin is just one of the many people and organisations highlighted in Jenny Horsfield's eighth book, *Our grassy landscapes: A celebration of the people who care for them*.

The book was launched in December 2024 at the National Library and is available for sale at the Botanical Bookshop. A review by Carolyn Page is on page 15.

"This beautifully presented and thoroughly researched book really is a celebration of the countless people who have loved and cared for grassy ecosystems and landscapes in Canberra and surrounds! Author Jenny Horsfield shines a light on those individuals involved in research projects, Parkcare, coordination of environmental organisations, liaison with Landcare users, park rangers, ecologists and so on."

**Botanical Bookshop review**

# Emigrant eucalypts

By John Turnbull

If you have travelled outside Australia you will have seen eucalypts growing in other countries. Often the local people think these trees are native to their area, but eucalypts are endemic only in Australia and some adjacent islands. This article traces the way eucalypts spread around the world after they were discovered by English, French and Dutch explorers at the end of the 18th century.

Seeds of *Eucalyptus obliqua* collected by Captain Tobias Furneaux on Cook's second expedition were planted in a glasshouse of the Royal Botanic Gardens, Kew, in 1774. The first eucalypt planted outdoors in Europe was *E. robusta* in 1792 in the English Garden of the Royal Palace of Caserta near Naples, Italy. The seed was donated by Sir Joseph Banks.

Frenchmen Jacques de Labillardière and Felix Delahaye collected eucalypt seeds during a visit to Tasmania with the d'Entrecasteaux expedition in 1791. In 1804 Delahaye was Head Gardener at Empress Josephine's Malmaison residence in Paris and planted his eucalypts there. Botanists Leschenault and Guichenot also collected eucalypts for Malmaison on Baudin's survey expedition to Western Australia in 1800-04.

The French were active in the spread of eucalypts. French friends gave eucalypt seeds to the Ruler of Mysore who had planted 16 species as ornamentals in the Nandi Hills, India, by 1802. Among these plantings was a form of *E. teretecornis*, known locally as 'Mysore hybrid' which was later planted extensively on lowland sites in India.

Eucalypts were in Isle de France (Mauritius) by 1804 from where in 1828 the newly appointed Governor of Cape Colony took *E. globulus* seedlings with him to his new posting. Progeny of



Mysore hybrid in agroforestry in India.

S Midgely

these Blue Gums were later introduced to other parts of South Africa.

Ferdinand von Mueller, Victorian Government Botanist from 1853-73, was by far the most important individual influencing eucalypt planting in the mid-19th century. A member of the Acclimatisation Society, he enthusiastically promoted the spread of eucalypts around the world.

Von Mueller was aided and abetted by Alfred Howitt, Australian naturalist and explorer, who sent seeds of many species to Rome and Algeria in the 1850s. Frenchman Prosper Ramel, a friend of von Mueller, visited Australia in 1854 and later promoted eucalypt planting in North Africa.

The first introductions to California were made by German immigrant Hans Behr in 1852-53 with seed provided by von Mueller. In 1869 when the Bishop of Melbourne attended the Vatican Council in Italy he carried Blue Gum seeds from von Mueller. Trappist monks from Tre Fontaine monastery planted these trees in the Pontine

Marshes near Rome where malaria was a problem. They dried out the marshes and the malaria disappeared. The reputation of the Blue Gum as the 'fever tree' for the control of malaria accelerated its spread elsewhere.



Baron Ferdinand von Mueller.  
Image: Johnstone O'Shannessey & Co.  
National Library of Norway

Wikimedia

Between 1850–1900 eucalypts were widely planted around the world as windbreaks for shade and shelter, for fuel, environmental rehabilitation, and as ornamentals.

French missionaries introduced *E. globulus* to Yunnan Province, China, in about 1890 and Chinese Consul in Italy, Wu Zonglian, took seeds to China in about 1910 and promoted their planting. Initially eucalypts in China were used as ornamentals, as well as for eucalyptus oil and mining timbers.

In 1895 a French railway engineer recommended planting eucalypts around the Ethiopian capital, Addis Ababa, to provide fuelwood. Blue Gums are now valued throughout the country for fuel, and poles for houses and scaffolding.

In 1908 Navarro de Andrade introduced Blue Gums from Portugal to Brazil. Early plantations were mainly for fuelwood, especially for wood-burning locomotives in San Paulo state. Later plantings in Brazil were for paper pulp and industrial charcoal.

By 1979 there were at least four million hectares of eucalypt plantations in over 90 countries. They were now becoming valuable sources of sawn timber, wood-based panels, poles and posts, and especially pulpwood for paper. By 2024 there were 25 million hectares, mainly in Brazil, China and the Indian subcontinent.

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### About the author

Dr John Turnbull has a PhD in eucalypt genecology from ANU. He is a former Research Scientist at CSIRO and Chief Scientist at the Centre for International Forest Research in Indonesia. He has managed collaborative forest research projects and provided consultancy services to many countries on the use of Australia trees in plantations. John has been a Volunteer Guide at the ANBG since 1999.



John Turnbull



John Turnbull



John Turnbull

Top: Eucalypt pitprops in Guangxi province, China. Centre: Blue gum plantation in Addis Ababa, Ethiopia. Above: Eucalypt plantations surrounding a pulp mill in Brazil.

# Friends Briefs

## Friends gift of photograph to ANBG

Each year the Friends select a photograph from the annual Photographic Group exhibition to donate to the ANBG.

On 27 November 2024, a panel comprising Beth Tyerman and Alan Henderson from the Friends Council, and Helen McHugh and Peter Byron of the ANBG, selected *Pink petals and native wings* by Debbie Howard from the *Illuminate 2024* exhibition. The framed photograph was valued at \$190.

**Linda Beveridge, President**



Graham Gail

*Pink petals and native wings* by Debbie Howard was presented by Linda Beveridge (President) to Peter Byron (former Director ANBG) and Rebecca Pirzl (Branch Head, Science and ANBG).

## Visiting the birds in the Gardens

On the first weekend of autumn, more than 70 members of the Friends gathered early on Saturday and Sunday to enjoy bird watching in the Gardens. Each small group was led by an experienced 'birdo' who helped us discover the places birds like to hide, eat and play.

One surprise was a beautifully decorated Satin Bower Bird bower, just outside the front gates, close to all the noisy traffic.

Another surprise was the number and variety of small birds, including Spotted Pardalotes, White-browed Scrubwrens, and Red-browed Finches, that make the Gardens their home, but are perhaps not so numerous in home gardens.

We are very grateful to our birding guides, and to the other volunteers who assisted with the organisation and running of this event. Our thanks too to Ranger Gregor for being so helpful.



Clockwise, from top left: Spotted Pardalote, Gang Gang, Currawong, Red-browed Finch and White-browed Scrubwren spotted in the Gardens. All images by Richard Arculus.

## A tribute to Bruce Lindenmayer

We would like to pay tribute to our father Bruce Lindenmayer OAM, who we sadly lost in recent years.

Bruce was a highly dedicated environmentalist, conservationist and ornithologist. He was a long-time resident of Canberra (moving here in 1969) and loved the region, its forests and wetlands, and its birds and plants. He treasured 'The Bush Capital' and dedicated countless hours of work, and significant donations during his life, to preserving and enhancing the character of the city where we are privileged to live.

Bruce was President of the Canberra Ornithologists Group (and led innumerable field walks in the Brindabellas and elsewhere). He was instrumental in having key areas of bushland conserved around the ACT, including Mulligans Flat and Bluett's Block (near Denman-Prospect).

In many respects, he was a conservation visionary, recognising



Bruce Lindenmayer was a member of the Friends of the ANBG for 14 years. His thoughtfulness and exceptionally generous contribution to the Friends are greatly appreciated.

that these precious areas were at risk of being lost to expanding urban development, often decades before those threats began to be realised.

These special places are conserved today because, together with his many friends and colleagues, he wrote countless submissions and worked tirelessly to ensure they were not lost.

One of Bruce Lindenmayer's favourite places in Canberra was the ANBG. He loved to birdwatch there, and his daughter Annie was married in the Gardens. It was also far and away his favourite place for lunch – an almost weekly event with David before a walk to check out what was flowering and what birds were calling. Bruce often commented about the role of the Gardens in protecting so many of the extraordinary native plants that he loved and providing shelter for the native birdlife he cherished.

It is fitting that part of Bruce Lindenmayer's estate includes a bequest to the Friends of the ANBG. We know that he would be thrilled to see such an extraordinary place thriving and giving so many people pleasure in connecting with this nation's environment.

**David and Phillip Lindenmayer**

## Calling all budding photographers: The 25th Student Photographic Competition

The annual photographic competition made a triumphant comeback in 2024, with 88 student entrants from 17 schools. We expect the 2025 competition to be bigger and better – if our Friends help spread the word!

The competition is open to students attending Australian primary or secondary schools or colleges. It provides a fun and educational opportunity for students to discover the value and beauty of the ANBG, by using their photographic skills to share that beauty with other visitors.

All entries must be digital photographs taken in the ANBG between 30 August 2024 and 28 August 2025, featuring some aspect of the Gardens such as plants, wildlife or scenery.

Cash prizes are awarded across five categories for individual students and their schools, and winning entries are displayed in the Gardens. The First Prize winners also receive a native plant for their school or college garden.

The competition closes at 5.00 pm AEST on Friday 29 August 2025. More information is on the Friends' website

[friendsanbg.org.au/activities\\_schoolsphotocomp](https://friendsanbg.org.au/activities_schoolsphotocomp)



# Friends Briefs (cont.)

## Butterfly Walks

On almost any walk through the Gardens we can expect to briefly enjoy the company of a few butterflies, but I wonder how many of us know much about them. On 19 January the Friends were fortunate to have Dr Suzi Bond, author of *Field Guide to the Butterflies of the ACT*, lead two walks through the Gardens to help us learn more about these lovely insects.

The day was sunny and warm, ideal butterfly spotting weather, and we were fortunate to see and sometimes get close to about nine species.

As we walked up past the Eastern Mallee section of the Gardens, there were plenty of Common Brown butterflies. As the afternoon group stopped to admire one which settled on an *Acacia*, someone spotted a beautifully camouflaged Wattle Goat Moth which was settled on the tree trunk. This moth is about 10 centimetres long with soft grey and blue colours that enable it to hide on



Graham Gail

At the November **Volunteers Recognition Ceremony**, Patrick De Deckker (left) of the Thursday Talks Team and John Buckley (right) from Growing Friends were awarded by immediate past President Neville Page for their service to the Friends.



Graham Gail

bark. Its larvae live inside and eat the *Acacia* wood and apparently smell like a goat.

The lovely Orchard Swallowtail, a familiar visitor to many Canberra gardens, visited us near the Queensland Bottle-trees and we saw them again on the other side of the rainforest. We also saw the punch holes of the Bronze Flat on the Kurrajong tree.

The Rock Garden was a hot spot for butterflies, including the Australian Painted Lady, seen on a Sticky Everlasting.

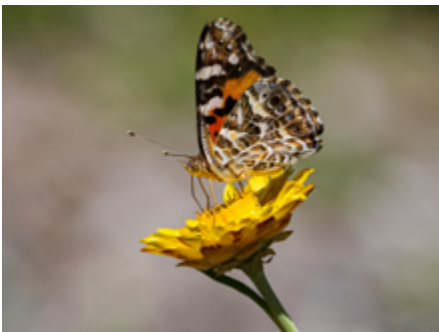
It was agreed that now we all have an additional bonus when going to the Gardens in looking for these beautiful butterflies.

The species seen included: Australian Painted Lady (*Vanessa kershawi*); Bronze Flat, (*Netrocoryne repanda*); Cabbage White (*Pieris rapae*); Common Brown (*Heteronympha merope*); Common Grass Blue (*Zizina labradus*); Orchard Swallowtail (*Papilio aegaeus*); Spotted Brown (*Heteronympha paradelpha*); Stencilled Hairstreak (*Jalmenus ictinus*); Yellow Admiral (*Vanessa itea*).

**Julia Newton-Howes and Sue Chambers**



Stephen Playford



Stephen Playford

Top: Well camouflaged Wattle Goat Moth (*Endoxyla encalyption*) on an *Acacia*. Above: Australian Painted Lady (*Vanessa kershawi*) seen in the Rock Garden.



Kevin Gale

### Council of Friends of ANBG, December 2024

Front row L-R: Beth Tyerman, Linda Beveridge, Alan Henderson.  
Back row L-R: Ian Primrose, Chris Mackay, Kerry Moir and Cathy Robertson.  
Inset: Rod King.

# Friendly Chatter

## Botanic Art Group

The Botanic Art Group has chosen the theme of *Rainforest* for our 18th annual exhibition at the Visitor Centre from 5 April to 4 May 2025. This exhibition focuses exclusively on Australian native plants.

There are many types of rainforest in Australia stretching from Kakadu and the Daintree down the east coast of Australia to Tasmania, in places where there is sufficient rainfall and fertile soil. Sadly, over 80 per cent of Australia's rainforest has been destroyed in the last 200 years. Despite this, one half of Australia's plant species are found in rainforests, including many tree species, special growth forms, prominent vines and ferns and often epiphytes. This diversity of species has given artists the opportunity to explore a wide variety of subjects.

To encourage participation in the exhibition, we have requested that members contribute a small square to demonstrate work produced in monthly meetings, in addition to other framed works. This part of the exhibition was very popular last year and a number of new people were encouraged to join the group as a result.



Robin McKeown (right) receives a Volunteer Recognition Award in December 2019 from Friends of ANBG President Max Bourke (left).



Morgan Phillips

Part of the work *Littoral Rainforest Remnants NSW* by Morgan Phillips.

This year all squares will be available for sale at a small cost of \$10–\$50 with the proceeds donated to the Friends. The small squares are original artworks and have a small border allowing them to be framed. Buy several and start your own small collection of botanical art.

**Members of the Friends are invited to a special preview of the exhibition on Friday 4 April starting at 2.00 pm. All works will be available for sale at the preview.**

Please encourage your family and friends to visit the exhibition: members of the group really appreciate the interest and comments by the public.

Email [botanicart@friendsanbg.org.au](mailto:botanicart@friendsanbg.org.au) for more information.

**Kate Ramsey**

## Robin McKeown, her legacy lives on

Robin McKeown, founder of the Botanic Art Group, passed away in November 2024. Robin established the group in March 2005, with a small group of ten people. She had no idea that in the years to come that small group would grow to more than a hundred members.

Robin was passionate about botanical watercolour painting. A wonderful painter herself, she wanted everyone to see, depict, appreciate and learn about our amazing Australian native flora. She was an avid reader with a very impressive knowledge of Australian native plants. Her enthusiasm was contagious.

She will be sadly missed, particularly by her friends in the Botanic Art Group.

**Helen Hinton  
Botanic Art Group**



# Friendly Chatter (cont.)

## Plant Science Group

There will be a special Plant Science Group talk on Monday 12 May, at 10:30 am at the ANBG Theatrette by Dr Alison Pouliot.

In her talk, *Curry Punk and Jelly Brain: The conservation and aesthetics of fungi*, Alison will explore how fungi are perceived across hemispheres in conservation contexts and which fungal flagships might best capture the public imagination. She will also tell some stories from the writing of her recent book, *Funga Obscura: Photo journeys among fungi*. Alison is happy to sign your copy(ies) of her book(s).

Bookings are open at [trybooking.com/events/landing/1357729](http://trybooking.com/events/landing/1357729)

**Lesley Harland**



Supplied



Supplied

Top: The intricate ribs of this fungus are intriguingly almost lace-like.  
Above: *Lycoperdon perlatum* (Common puffball) and its 'pearls'. Its ball-shaped fruit body, brown when mature, bursts on contact or impact, releasing a cloud of dust-like spores.

## Growing Friends

With autumn now upon us and the daytime temperatures starting to fall, it is a good time to be planting. With this in mind, the group's autumn plant sale attracted many eager buyers, just itching to get plants to fill gaps in their gardens.

At the November Volunteer Recognition Ceremony, John Buckley, a long-time member of Growing Friends, was recognised for his many years of valuable and tireless work for the group (see photo page 10).

Anyone who has had any dealings with Growing Friends over the last ten years, is likely to have received an email from its Secretary, Sue Waterworth. Sue recently decided that it was time to take a small step backwards to the Assistant Secretary job, and Bronwyn Houlden has now taken over the Secretary role. At the group's February meeting, Sue was thanked by all members for all that she has done for the group, as well as stepping in as de facto Convenor when the real Convenor was away.

New members bring new ideas and this has led to Growing Friends adding a new activity to its program. Most weeks, after its Tuesday working bee (and morning tea at Pollen), members with time and energy set off on a discovery walk around the Gardens – sometimes to look for a particular plant or plants and sometimes to explore little visited corners of the Gardens. But sometimes it is what is not planned which gives the greatest enjoyment.

On a recent walk, whilst walking near the Visitor Centre, the group came across a *Decaspermum struckoilocum* (Mt Morgan Myrtle). A challenge was put out to pronounce the plant's name, without hesitation or stumbling. Needless to say, no-one succeeded.



Murray Fagg, AP11

*Decaspermum struckoilocum* (Mt Morgan Myrtle) taken at ANBG December 2012.

The next point of discussion was how the plant got such an unusual name. It turns out that the plant is endemic to the Struck Oil region near Mt Morgan in Queensland. The region was named after a JC Williamson play of the same name which toured through Mt Morgan in the late nineteenth century.

For more information about the plants that the group propagates for its sales (with no promise that *Decaspermum struckoilocum* will be available in the foreseeable future), as well as how to join the group, please email [growingfriends@friendsanbg.org.au](mailto:growingfriends@friendsanbg.org.au)

**Donna Growcock**

## Nature Journaling

Nature Journaling meets on the first Monday of the month at 10.00 am at the Visitor Centre.

If you would like to join us, please contact [lespage26@gmail.com](mailto:lespage26@gmail.com)

**Lesley Page**



Lucinda Lang

*Brachychiton* by Lucinda Lang.

## Photographic Group

Each year a highlight of the activities of the Photographic Group is the *Illuminate* exhibition. In 2024 it was held from 28 November to 15 December. More than 20 members of the Photographic Group exhibited images, cards, calendars, earrings, bags and scarves. Around \$1,700 was raised for the Friends of ANBG through the sale of images, raffle tickets and other items.

The standard of photography on exhibit was very high. The enthusiastic reactions of the many visitors who attended the exhibition tell us how effective *Illuminate* is in increasing the knowledge and engagement of the public in the mission and beauty of the ANBG.

The David Cox Memorial Flora Award (in 2024 awarded for images of *Grevillea*) was won by Simone Slater for her photograph *Washed Out*. Simone also won the Fauna Award for *Two's Company*. The People's Choice Award was taken out by Phil Green for *Lookout! Superb Fairy-wren on Kangaroo Paw*.

The Group's program of regular meetings is always well attended. It is an engaging forum for exploration of the intersection between photography and the natural world, both in the context of the ANBG and more broadly. In November Rainer Rehwinkel gave a fascinating account of his travels in South Africa and of the extraordinary flora and fauna he encountered. In February Ben Harvey, a well-known and highly regarded Canberra photographer made a presentation on wildlife photography.

In March Dr Michael Mulvaney from Naturemapr, a verified citizen science project, was the guest presenter.

The Group's meetings also include a show and tell segment in which participants share their photographic

works and the background to them. This is an avenue towards the development of members' photographic and creative skills. Plus, it enhances abilities to promote and share the beauty of the Gardens.

In a relatively new initiative, each month the Photographic Group conducts a *Cameras and Café* gathering. We welcome all levels of photographic skill to informally explore and photograph the Gardens and join each other for refreshment and conversation at the café. Over the summer months it has been a popular event. As a bonus it is emerging as a good source of the high-quality images the Photographic Group provides each month to the ANBG social media team.

This year we look forward to continuing to support the Friends of the ANBG in its work to enhance public engagement with the Gardens. Among other activities we will be contributing to the annual ANBG calendar and assisting with judging the entries to the Student Photographic Competition.

**Stephen Hunter**



## Friends Benefits

### As a Friend you are entitled to:

- Three issues of *FronDS* a year
- Three hour free parking pass

### Discounts at:

- Botanical Bookshop (most items)
- Pollen
- Jindii Eco Spa
- Cool Country Natives, Pialligo
- Australian Choice, Canberra Centre

### You also receive:

- Advance details of lectures
- Advance bookings for some events
- Discounts on some events
- ANBG library membership – borrow books, serials, videos and DVDs, and use computers and interactive CDs
- Special rates for functions at ANBG

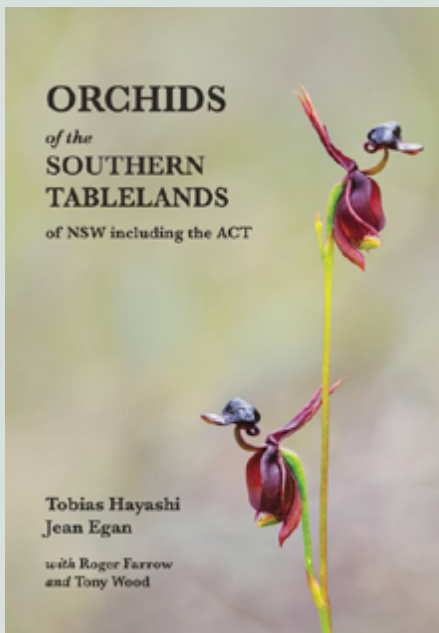
### You can join:

- Botanic Art Group
- Growing Friends
- Photographic Group
- Plant Science Group
- Nature Journaling Group
- Assist with ANBG research projects
- Become a guide

And you can relax with tea/coffee and interesting reading material in the Friends Lounge in the Ellis Rowan Building, open 9.30 am to 4.30 pm.



# Botanical Bookshop book reviews



## **Orchids of the Southern Tablelands of NSW including the ACT. 2024**

**By Tobias Hayashi and Jean Egan with Roger Farrow and Tony Wood**

**Colour photographs and maps. Soft cover. 288 pages, \$50**

A fabulous book for all those who love to discover and identify native orchids! This comprehensive field guide contains hundreds of beautiful colour photographs and field notes for 202 native orchid species of the Southern Tablelands of NSW, including the ACT. Each species is treated to a full page, illustrated with a generous selection of photographs including close-ups of flowering parts and other helpful features to aid with identification. There are also detailed notes on time of flowering, size, status, habitat and general notes, as well as location maps. The introductory chapters include a comprehensive overview of orchid biology and ecology, pollination, habitats, threats and conservation. The inclusion of a general page about the orchid genera before each species listing (eg Gnat Orchids, Rock Orchids, Greenhood Orchids to name a few) is a bonus, with plenty of information including naming, taxonomy, morphology, ecology, pollination and mycorrhizae.

There is also a chapter at the back of the book for photography enthusiasts with tips and hints on orchid photography. A comprehensive, excellent field guide!



## **The Bee Squad: Boosting biodiversity in your neighbourhood. 2025**

**By Judy Friedlander**

**Illustrations and colour photographs. Paperback. 201 pages, \$28**

What's the buzz?... this great new kids book!

A fun, fact-filled, hands-on guide for the next generation of wildlife warriors.

From pollination to recycling and nature photography, this book aims to encourage kids aged 8-14 to get outside and observe their natural surroundings with a new perspective. It provides kids with a positive and hopeful view of our current climate, where they can have an active role in caring for their local environment. The author does an excellent job making the point that you don't need to live on a farm or next to a national park to be involved, there is so much to learn about nature and its roles in urban and built-up areas. The projects and activities presented in *The Bee Squad* are created with urban accessibility in mind, from the backyard to the schoolyard and the step-by-step instructions are easy to follow and lots of fun! This book covers a wide variety of topics that include building insect hotels, composting, climate, policies and campaigns, sustainability and protecting and appreciating our flora and fauna.

*The Bee Squad* covers many aspects of biodiversity in the modern world and translates the numbers and graphs into an engaging collection of information, ensuring everyone can find their passion for environmental advocacy.

Earn your stripes and join the bee squad today!

# Book review



## **Our Grassy Landscapes: A celebration of the people who care for them. 2024**

**By Jenny Horsfield. Colour  
photographs. Soft cover,  
186 pages, \$40**

*"The grassy ecosystems of the Southern Tablelands – woodlands and associated grassland – are to the tablelands what the rainforests are to the Wet Tropics. They help to define those of us who live on the tablelands, to give us a character that is different from that of other parts of Australia."*

This new book by Canberra historian and conservation campaigner Jenny Horsfield tells an extraordinary story of ecological change, settlement, science, politics and volunteer action in our beloved landscape and growing city.

Richly illustrated with historic and recent photographs and with the black-and-white drawings of Michael Bedingfield, *Our grassy landscapes* is a delight to hold – and will also offer the reader a surprising sense of optimism.

One of the strengths of the book is its 'voices', including those of early explorer-scientists John Lhotsky

and Paul Edmund de Strzelecki, and of those who witnessed the changes brought by over-stocking; loss of native species and habitat; fire; erosion and siltation; and, in more recent times, the advent of 'industrial agriculture'.

From these stories we develop a deep appreciation of the role of science, and of our science and research institutions, in supporting the informed and persuasive advocacy we now rely on.

International perspectives have been critical to the process of change – including the Third Empire Forestry Conference, held in Australia in 1928, and exposure to the changing discourse about the natural environment led by writers like America's Rachel Carson.

Jenny's account of the farming practices, and struggles, of early settlers is clear-eyed but humane. The 'soldier-settlers' of the inter-war years were ill-prepared for the challenges they would face in the landscape that had been carved up for them: drought and fire, rabbit plagues, low prices for their sheep, isolation, the effort to clear the land, and lack of knowledge and experience.

She later celebrates the partnerships that have now been forged between landholders and the dedicated government field officers and conservation volunteers who work with them.

Best of all, Jenny's book celebrates the work – and wins – of the many voluntary organisations that have committed themselves to policy change and landscape restoration: 'hands-on' conservation; political smarts; the grind of submission-writing; community outreach and education; and simply maintaining an organisation's morale over the years.

Jenny uses an incident in 2021 to describe the key elements in the long-term success of one voluntary organisation, FOG (Friends of Grasslands). A volunteer group based in Victoria asked FOG for pointers on a range of matters, but primarily: "... they wanted to know about the way a group of volunteers and activists could sustain its energy and commitment over such a long time. How had FOG remained vibrant for so many years? What worked well in organising FOG activities and keeping members engaged?"

Jenny's book provides many of the answers to this question.

**Carolyn Page**



**Always welcomes Friends...**

...with a 10% discount on purchases over \$10 (including gift vouchers) on presentation of their current membership card.

No discounts given on redemption of gift vouchers or sale table items.

For more information please visit the Botanical Bookshop Facebook page, Instagram or website

**[botanicalbookshop.com.au](http://botanicalbookshop.com.au)**

# Gardens Shorts

## Director's update

We were delighted to achieve record visitation during 2024, finishing the year with 552,371 visitors. This is on top of record numbers of students visiting the ANBG in 2024.

In February, we witnessed the blooming of an endangered Corpse Flower, *Amorphophallus titanum*, which began unfurling in the evening of Saturday 8 February. The flower-spike reached 135 cm tall and 93 cm wide, emanating its distinctive stench for visitors. The free public ticketed sessions sold out within hours. More than 1800 visitors experienced the display which included Australia's two native *Amorphophallus* species.

We have now signed a contract with a new builder, FDC, to complete the construction of the Ian Potter National Conservatory. They are currently setting up on site and full-scale construction works will commence around April.

The major upgrade to the National Seed Bank is progressing well and planned to be completed in May.

We unveiled the replacement bust of Sir Joseph Banks following the previous bust being stolen earlier in 2024. The bust was expertly recast by Carwoola Casting using the original Maquette mould created by artist Ninon Geier. The bust honours the legacy of Sir Joseph Banks and his contributions to the science of botany.



Dr Veronica Briceno Rodriguez, the ANBG's new Conservation Manager.



Left: Ribbon cutting of the original Flora Explorer vehicle, 29 May 2012.  
Right: Peter Byron with King Charles in 2024.



Department of PM&C

We would like to welcome Dr Veronica Briceno Rodriguez, our new Conservation Manager, to the ANBG. Veronica has a strong research and threatened species policy background, having a PhD in plant ecophysiology from the ANU and experience with the ACT Government's Office of Nature Conservation. Veronica is looking forward to combining research, policy, and her passion for plant conservation in the work of the ANBG.

This will be my final contribution to *FronDS* and after 14 years at the ANBG I am moving on to another role in the public service. I have enjoyed working closely with the Friends of the ANBG over the years and we have celebrated many successful projects that were funded by the Friends.

**Peter Byron**

## Changing of the guard

Peter Byron, Director ANBG, is moving to a new role with the National Indigenous Australians Agency. His last day at the ANBG was on 14 February.

At the ANBG, Peter oversaw the development of the Master Plan, delivered the actions from the

Management Plan 2012–22 and guided the development of the new Management Plan in 2022.

Peter ushered the Ian Potter National Conservatory progress through the national design competition to its design development and construction stage. Other key projects included the development of the Red Centre Garden, Banksia Garden, Friends lawn, upgrades to the Education Centre, installation of night lighting systems and the development of online Plant Science Learning Hub used by primary schools around Australia.

Peter has represented the ANBG on the Board of Botanic Gardens Australia/NZ for many years and other boards such as the National Capital Attractions Association. He was privileged to guide the King and Queen through the ANBG during their visit in October 2024.

**The Friends thank Peter for his contributions over many years with the Gardens and wish him all the best in his future endeavours.**

## The unexpected flowering

The announcement that the ANBG had a Corpse Flower (*Amorphophallus titanum*) AND it was blooming created a buzz all around Australia and the world.

For more than 15 years the Tropical Horticulture Team have quietly cared for this single exotic specimen along with Australia's two native species in the genus: Elephant Yam, *Amorphophallus paeoniifolius*, and Cheeky Yam (*Amorphophallus galbra*).

Corpse Flowers are known for their huge flowering structure, the largest unbranched inflorescence in the world, and the stench it produces.

Found only in Sumatran rainforests in Indonesia, Corpse Flowers are endangered with less than 1,000 plants left in the wild.

Corpse Flowers only produce a single leaf or a single inflorescence at a time. The leaf can grow up to five metres tall. This leaf photosynthesises to generate energy and sugars for storage underground in the corm. The single leaf or flower will die back completely, and the plant will be dormant as an underground corm or tuber for up to a year before a new leaf or inflorescence emerges. The Gardens' Corpse Flower has never flowered before.

On New Years Eve, 2024, Horticulture staff spied a green tip in the pot of the *Amorphophallus titanum*. Emerging from dormancy months earlier than expected, staff anticipated a single leaf to unfurl. Staff measured and photographed the growth of the bud which grew up to 6 cm a day. On 28 January the tip of the spadix first appeared showing that this was not a leaf! The Corpse Flower was going into a flower cycle.

The Gardens wanted to share the blooming of this rare and endangered plant with the public. But when would it flower?



Left: Horticulture staff cut a hole in the spathe to collect pollen. Right: The Corpse Flower was displayed against a black background, surrounded by two Australian *Amorphophallus* species.

Conversations with colleagues at the Royal Botanic Garden, Sydney and the Adelaide Botanic Garden, systematic daily measuring of height and temperature, and graphing of the data all zeroed in on a due date of Thursday 13 February. Staff went home on Friday 7 February sure that they would have a weekend to relax.

One can easily imagine how many cups of coffee were spilled in the excitement in the early afternoon of Saturday 8 February. "I was still in my pyjamas," laughs one staff member. Not unlike the beginning of a mother going into labour, Nursery Manager Carol received a call from one of the Horticulture Team in the middle of a regular watering shift. It went something like this: "It's changing! I think it's happening!"

A flurry of phone calls later, and it was all hands on deck to bring the public viewing forward. Staff and Volunteers were called to work the next day and for most, this was their first notification that the Gardens had a Corpse Flower in the collection. Free public ticketing ensured minimal waiting time. Tickets were snapped



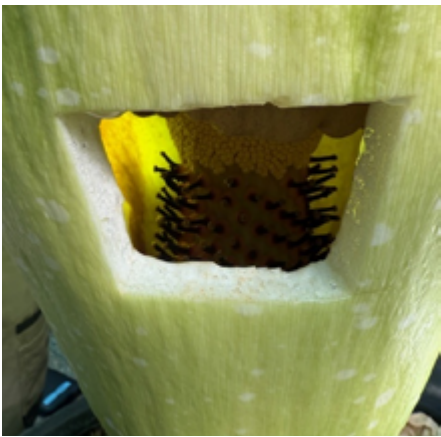
Barbara Podger

up within hours of being released each day. Over two days, more than 1,800 people trekked up the hill for a chance to see and smell a Corpse Flower in person. The Corpse Flower was displayed through the open doors of the Tropical Greenhouse against a black background. Built into the schedule was 'plant rest time' where for 20 minutes the doors were closed to equilibrate the greenhouse temperature (30°C ambient) and humidity (80% relative humidity).

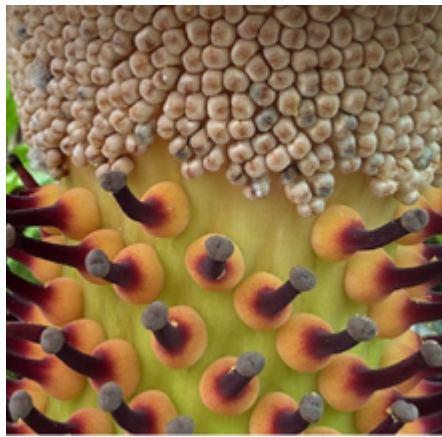
The inflorescence reached a height of 135 cm and the spathe opened to 93 cm wide and heated up to a high of 34°C on the Saturday evening. Staff reported a strong smell of wet socks, gas and sulfur. Visitors on Sunday reported rust or fertiliser scents and on Monday the scent changed to rotten fish but could only be detected in close proximity.

Pollen was collected by the National Seed Bank. A small window was cut into the spathe for access to the male flowers that are below the base of the spadix. Fresh pollen has been stored in the fridge (4°C), freezer (-20°C) and dry room (15°C and 15% relative humidity).

# Gardens Shorts (cont.)



Left: Hole cut into the spathe to access male flowers and pollen.  
Right: Male flowers above, female below.



The samples will be periodically tested to determine optimum storage conditions for long-term viability. We are in discussions with other botanic gardens regarding the best use and distribution of the pollen to further the conservation efforts of this species.

The decaying spathe and spadix were removed to allow closer inspection of the male and female flowers and to monitor for any potential fruit and seed development. Although self-pollination is unlikely due to the male and female flowers maturing at different times, it is not impossible. If unpollinated, the stem will continue to decay and detach from the corm indicating the dormancy phase of the plant's lifecycle.

The Horticulture Team will then re-pot the corm. The corm will be weighed and measured, then potted up into a larger pot with fresh potting mix and slow-release fertiliser. The pot will be kept dry in the tropical greenhouse until fresh growth emerges. The plant will need several leaf and dormancy phases before having enough energy to flower again.

Special thanks to:

- Kate Croft for her stunning and accurate graphic design work on the life cycle of the Corpse Flower at extremely short notice.

- Dr Veronica Briceno Rodriguez, Carol Dale, Bek Hyland, Kathryn Scobie, Acacia Stevenson, Sarah Aylott and Lizzie Bickmore for making themselves so accessible to the insatiably curious public and media.

## Tasmanian Garden upgrades

The Tasmanian Garden at the ANBG has recently undergone an upgrade with installation of a new fogging system, and resurfacing of paths.

The fogging system, funded by the Friends of the ANBG, creates a microclimate to emulate the natural environment of Tasmanian plants and

was intentionally designed with the ability to add extensions in the future.

A fully integrated system of 100 nozzles and 200 metres of piping fires up each day between 8.00 am and 5.00 pm, for ten minutes, at quarter past the hour. The nozzles are deliberately close to the ground to keep the soil moist, and the air damp at the height of the heaths and other low-growing plants. At this height it is also (mostly) protected from wind disturbance. Trades staff did a delicate job of laying the pipes without disturbing existing plantings.

In Tasmanian natural environments, humidity levels are generally around 60 per cent. The nozzles create micro-fine droplets that moisturise the leaves without wetting them, simulating Tasmanian conditions.

In addition to increasing local humidity levels, misting systems reduce air temperature as the water evaporates. Combined, comfortable temperatures and appropriate humidity levels can improve plant growth by keeping the stomata open, maintaining photosynthesis processes and minimising evaporation from the leaves.



The Tasmanian Garden misting system in the rain.

# Moving the National Seed Bank

By Tom North

In 2025, the ANBG will open a new National Seed Bank, dubbed NSB2. This new facility will improve the National Seed Bank's capacity to store its valuable seed collections as well as providing dedicated spaces to undertake germplasm research.

After 30 years the National Seed Bank, and its ever-expanding team of staff, volunteers and students, have finally outgrown the previous building. The NSB2 will provide:

- bigger and better office and meeting rooms for the team
- larger, better-equipped laboratory spaces that will enable a higher calibre of seed research than previously possible
- dedicated preparation/curation rooms that will ensure more efficient routine curation and imaging of seed collections
- the option to take on and train more volunteers to assist with the growing volume of collections to be curated
- the capacity to engage in more research projects including projects for tertiary students
- the possibility of utilising the new space to deliver traineeships in Conservation Horticulture.

To allow for the building of NSB2, the team along with 8,500 seed collections, acquired equipment, and odds and ends, have had to temporarily relocate to the Crosbie Morrison building that was thankfully made available in order for the new build to happen.

The relocation process started in early September 2024 and took four months to complete. Over the duration of the move, five staff and 16 volunteers worked to maintain the safety and quality of the seed collections and germination tests, all whilst removalists moved two laboratories, four offices and the necessary freezers, fridges, and incubator equipment down the hill to the Crosbie Morrison building.



Pip Alvarez and Tom North, returning 'seed in process' to the new temporary dry room at the Crosbie Morrison Building.



Architect impression of the entry to the new National Seed Bank, NSB2.

Moving the dried and banked collections had to take place in stages to allow for the moving of freezers and dry room. The freezers were moved one by one over the course of a week and acclimatised before close to 6,000 banked collections were relocated, all to ensure collections were maintained at  $-20^{\circ}\text{C}$ .

The dry room collections took longer to relocate and necessitated us temporarily moving approximately 2,500 collections to the Australian Tree Seed Centre (ATSC) at CSIRO on Black Mountain. These collections remained at the ATSC for two months while a temporary dry room was built at Crosbie Morrison (at  $15^{\circ}\text{C}$  and 15% relative humidity) and eventually returned to the ANBG on 6 January, finally marking the end of the moving process.

In spite of the move, the National Seed Bank has still been able to:

- achieve a 5-yearly full stocktake of the NSB seed collections (8,648 accessions)
- continue a program of collection field trips (with 26 Seedy Volunteers)
- maintain a program of germination testing and retesting of collections to assess the ongoing viability of banked collections
- complete the experimental component of the Survive and Thrive project
- deliver one hundred new digital microscope images with trait data to the Biodiversity Informatics group for uploading to the Australian Plant Image Index.

All of this has been no small feat and would not have been possible without the assistance of the ANBG staff from other units and the hard work of NSB volunteers.

In all, the temporary move of the National Seed Bank has been very successful with most of its functions continuing in the Crosbie Morrison location despite the disruptions. Whilst the team is eagerly anticipating the completion of the NSB2, for now, they are enjoying the much-needed respite from packing and moving.

# What's on at the Gardens

## April to July 2025

Details are correct at the time of printing. Please check the Friends website [friendsanbg.org.au](http://friendsanbg.org.au) or the ANBG website [anbg.gov.au](http://anbg.gov.au) for changes and updates.

## Walks, Tours and Trails

### Guided Walks

**11.00 am and 2.00 pm daily**  
**Free\***

Enhance your visit to the Gardens by going on a free guided walk with a Volunteer Guide. Every guided walk is different as Guides share stories about the fascinating array of Australian plants on display.

### Self-guided walks

**Free**

Collect a map from the Visitor Centre to begin the trail.

### Flora Explorer Bus Tours

**Saturday, Sunday and Public Holidays**

**11.30 am and 1.30 pm**  
**\$8 adult, \$5 child and concessions**  
**Book on ANBG website**

Sit back, relax and be taken on a 45 minute highlight tour of the Gardens.

### Book a Private Tour

**Costs apply**

Tour the Gardens with your own tailored guided walk or Flora Explorer bus tour to suit your special interests, or purchase as a gift. Conditions apply. For more information contact [bookedwalks@friendsanbg.org.au](mailto:bookedwalks@friendsanbg.org.au) or [floragroups@anbg.gov.au](mailto:floragroups@anbg.gov.au)

\* Meet at the flag near the cafe bridge. No booking required for individuals, but groups of more than six people should contact [walks@friendsanbg.org.au](mailto:walks@friendsanbg.org.au) a week in advance.

### Secrets of the Australian bush: A family adventure

**14, 16, 17, 23 and 24 April**  
**10.30 am**

**Book on ANBG website**

Discover the amazing secrets of the plants that live in the Australian bush on this family-friendly tour at the ANBG. This 1-hour tour on the Flora Explorer bus is designed for children 4-10 years who must be accompanied by an adult.

### Storytime in the Gardens

**First Friday of the month**  
**10.00 – 11.00 am**  
**\$5 per child, adults and infants under 12-months free**  
**Crosbie Morrison Lawn**  
**Book on ANBG website**

Join us on the first Friday of every month for family fun with stories about Australian plants and animals. Each themed session is packed with stories, songs and craft. Suitable for pre-schoolers.

### Sophocles' Antigone

**9–11 April and 17–20 April**  
**Burbidge Amphitheatre**  
**Book on ANBG website**

An outdoor production of ancient Greek theatre play Sophocles' Antigone at the Burbidge Amphitheatre for the general public, teachers, and school and university students.

### Canberra Tree Week Children's Art Exhibition

**4–31 May**  
**Children's Trail**  
**Free**

See the work of Canberra's budding artists on display in a special outdoor exhibition showcasing the winning entries from the children's 5–12 years Branch Out art competition.

### Themed Walks

**11.00 am – noon and 2.00 – 3.00 pm**  
**Free\***

**Tree Week Walks**

**Leaves: To drop or not to drop**  
**5–11 May**

Most Australian trees are evergreen but there are a few that lose some or all of their leaves. Join a free guided walk to see examples and hear some of the factors that influence why a tree might drop its leaves.

**Botanic Gardens Week**

**19–25 May**  
**TBC**

The theme for this year is *Guardians of the Green: Protecting our future*. It's the 10th year of celebrating botanic gardens with expanded celebrations over a week.

**Off the beaten track**

**2–8 June**

Join a free guided walk to less commonly visited parts of the Gardens. The walk features examples of work done by Gardens staff to conserve our threatened native species, as well as plants in flower at this time of year.

**Australian plants in foreign lands**  
**30 June – 6 July**

While many Australian plants have found success in overseas countries, some have behaved badly. Come on a guided walk to discover some plants which have made significant contributions in other countries and meet some that have exceeded their welcome.

**MEGAfauna: Tracks and traces**  
**1–31 July**

What traces did these giants leave behind and how do scientists find out what they ate, how they moved and what might have caused megafauna to die out?

## The Art of Living Together

11-17 August

When plants and animals interact, both participants may benefit, one may benefit while the other is not affected, or one may benefit while the other is harmed. Join a free guided walk to see some interesting examples of plants that interact with each other and plants that interact with insects, birds and mammals, and decide who gets the better deal from each of these interactions.

## Removing woody weeds from Black Mountain and/or ANBG

Saturday 5 April, 8.30 am to 11.30 am

Saturday 3 May, 7 June, 5 July and 2 August, 9.00 am to 12.00 noon

Weeding Work Parties are the first Saturday morning of every month. See details on the Friends of ANBG website for the meeting place for each party.

Please book on the Friends of the ANBG website, so there is enough delicious morning tea.

Email [friendsofblackmountain@gmail.com](mailto:friendsofblackmountain@gmail.com) for further information or phone Linda on 0437 298 711.



E Kirsch

Weeding Work Party collecting weeds.

## Exhibitions

Visitor Centre Gallery

Open Daily 9.30 am – 4.30 pm

Free

5 April – 4 May

### Rainforests – the 18th Annual exhibition by the Botanic Art Group

There are many types of rainforests in Australia stretching from Kakadu and the Daintree down the east coast to Tasmania, in places where there is sufficient rainfall and fertile soil. This diversity of species has given artists the opportunity to explore a wide variety of subjects. Framed, unframed works and cards will be available for sale at the exhibition.

7 May – 1 June

### Trees

Join us for an exhibition by local Yass artist Ruth Dodd. Ruth explores trees and their beauty, creating oil paintings showing different aspects of the ANBG. She also includes views from her land near the Yass River.

4 June – 29 June

### The ties that bind us: Botanical inspirations

Art binds us together: at least it does in the talented Federick family. Join the three artists (sister, mother, and son), Pam Fredericks, Joan Asmussen and Scott Fredericks who have collaborated to explore aspects of the natural world and the botanical connections. The works include artistic forms of mosaics, fibre art, photography and sculpture.

2 July – 27 July

### Wild Places

*Wild Places* is an exhibition bringing together the works of four local Canberra artists, Penny Deacon, Amy Beggs-French, Emma Wiadrowski and Andrew Deacon. The exhibition connects us to wild places and celebrates wild Australian landscapes and ecosystems from rugged alpine environments to open woodlands and lush forests. The works feature the beauty of our native flora and the uniqueness of the place and climate.

2 August – 24 August

### An exhibition by Arkie Haga and Julie Bradley

See glass artist Arkie Haga's delicate glass installations and Julie Bradley 'In the company of trees' mixed media works created living near a forest in the company of trees. Both artists' works in the exhibition explore botanical and organic forms.

# Thursday Talks

April to July 2025

One hour talks are held at 12.30 pm every Thursday from February to November in the ANBG Theatre. We welcome donations by gold coins, notes or electronically. The Friends use the donations received to support Gardens programs and development and thank all those who have donated. It is a good idea to reserve a seat at the talks that you wish to attend; talks can book out very quickly. The booking link is on the [friendsanbg.org.au/calendar](https://friendsanbg.org.au/calendar) entry for the talk. Bookings can be made about 30 days in advance of the Wednesday night before the talk.

The Friends of the ANBG thank the speakers who volunteer their time and talents to further the knowledge of all attending events in the Gardens. Some summaries or PowerPoint presentations of talks are available from the ANBG library. Please direct queries to [talks@friendsanbg.org.au](mailto:talks@friendsanbg.org.au)

## April

**3 April**

**Dr Kylie Cairns**  
**Dispelling the wild dog myth**

Kylie, a researcher from the University of NSW, specialises in wildlife genetics and conservation biology. Cutting-edge genetics has altered our understanding of the dingo and its origins and is leading to policy changes about dingo management.

**10 April**

**Professor David Lindenmayer**  
**A 25 year experiment to document the effects of large-scale plantation transformation on forest biodiversity**

David, a world-leading expert in forest and woodland ecology, resource management, conservation science, and biodiversity conservation, has maintained some of the largest, long-term research programs into forests in Australia.

**17 April**

**Dr Peter Fullagar and Chris Davey**  
**Potential impacts of a rodent eradication program on Lord Howe Island lowland terrestrial avifauna**

Peter and Chris, from Canberra Birds, will describe the extent to which a rodent control program caused a detectable change in abundance of birds on Lord Howe Island. They matched the avian response to rodent removal in terms of the known biology of species, particularly the Lord Howe Island Woodhen.

**24 April**

**Emma Cooke**  
**Breaking family ties: The genetic rescue of Canberra's Small Purple Pea population**

Emma will discuss work done over the last nine years by the National Seed Bank, ANBG nursery, ACT Office of Nature Conservation and the Parks and Conservation Service teams to collect seed from across the region, establish a seed production orchard, grow on established plants for translocation and design and implement a translocation plan incorporating both genetic rescue and ex-situ population formation of the Small Purple Pea.

## May

**1 May**

**Dr Rod King**  
**Not too hot ... not too cold**

Rod, a retired CSIRO scientist, and currently Treasurer of Friends of the ANBG, will talk about temperature and reproduction of plants, including Australian natives.



Chris Davey and Peter Fullagar.

**8 May**

**Doug Laing**  
**Invasive species in Australia: History, culture and consequences**

Are invasive species or climate change the most costly threat to biodiversity and our broader natural environment? Doug, a former diplomat and now active volunteer with the ANBG and Friends, will reflect on the origins, costs, consequences and future trajectory of past follies.

**15 May**

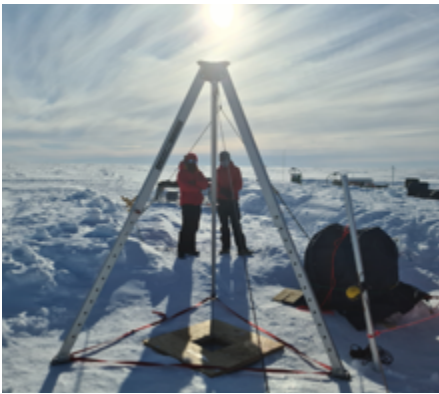
**Dr Kathy Eyles**  
**International commitments towards conservation**

Kathy, of the Australian Seed Bank Partnership, will describe how, in this third decade of Global Strategy for Plant Conservation, the Partnership will continue to support conservation of Australia's native flora and global efforts to reverse the impacts on plant species.

**22 May**

**Dr Mathew Trinca**  
**Writing the Brindabellas: Country, landscape and nation**

Matthew will present stories and ideas about the Brindabellas ranging from First Nations' stories to tales of the more recent past like *My Brilliant Career* and the poems of Banjo Paterson.



Getting the evidence in Antarctica.

Supplied

**29 May**

**Associate Professor Duanne White**  
**Antarctic ice shelves?**

What lies beneath Antarctic ice shelves? Duanne, from University of Canberra, will show field studies of how warm ocean currents, past and present, are melting the weak underbelly of the ice sheet in the Denman Glacier region.

**June**

**5 June**

**Professor Jochen Brocks**  
**The deep origins of our eukaryotic ancestors and the rise of algae in the oceans**

Friends of the ANBG will be among the first to hear Jochen, from the ANU, talk about the evolution of modern eukaryotes, the 'Rise of Algae', in the body and molecular fossil records, and how it may be a most profound ecological transition in the evolution of complex life, ultimately leading to the emergence of animals.



Community of stem group eukaryotes on microbial mat 057.

Orchestrated in MidJourney by TA 2023

**12 June**

**Dr Ben Walcott**  
**Our garden 20 years on**

The Walcott's garden is now mature at 21 years and counting. Ben will do a picture show of some of their best performing plants both in the ground and in pots.

**19 June**

**Dr Peter Caley**  
**So, how many foxes were there in Tasmania?**

Was there a widespread breeding population or not? Peter, a CSIRO research scientist, will discuss some of the challenges involved in inferring the presence of foxes in Tasmania.

**26 June**

**John Feehan**  
**Dung Beetles are a win-win for farmers and the environment**

John, a retired CSIRO scientist, describes Dung Beetles as ultimate recyclers, burying dung, improving soil quality and reducing pests like flies.

**July**

**3 July**

See details on the Friends of ANBG website.

**10 July**

See details on the Friends of ANBG website.

**17 July**

**Ryan O'Donnell**  
**Contributions towards understanding the evolution of the Australian terrestrial orchid flora and its associated fungi**

Ryan, from the ANU, will summarise recent contributions towards understanding the evolution of the Australian terrestrial orchid flora and its associated fungi spanning macro- to micro-evolutionary scales.



Anke-Maria Hoefler.

Supplied

**24 July**

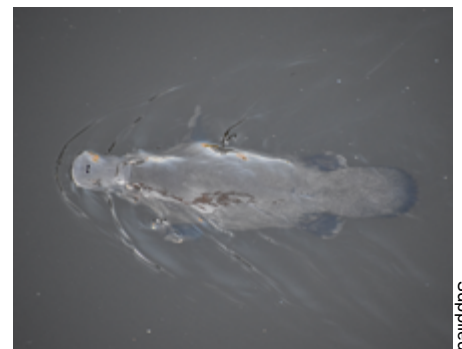
**Anke-Maria Hoefler**  
**Frog-tastic facts: Bringing local croakers into your mind (and into your garden)**

Frogs are excellent indicators of waterway and wetland health, but they are highly susceptible to environmental change. Anke-Maria, ACT Frogwatch Coordinator, will ask are there ways to better manage, improve and create frog-friendly habitats? Could we entice frogs into our gardens?

**7 August**

**Jed Pearson**  
**Beyond the Bill: Platypus, science and waterway conservation**

Jed, Waterwatch Coordinator with Molonglo Conservation Group, will dive into the secret life of the platypus, and how these monotreme marvels help us read the health of our freshwater ecosystems, and what we can do to protect them.



Chris the platypus from Queanbeyan.

Supplied



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