



# *Fronds*

*Friends of the Australian National Botanic Gardens  
Number 76 April 2014*



Friends of the  
Australian National  
Botanic Gardens

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*Fronds* is published three times a year. We welcome your articles for inclusion in the next issue. Material should be forwarded to the *Fronds* Committee by mid-February for the April issue; mid-June for the August issue; mid-October for the December issue.

Email or post material to the *Fronds* Committee at the above addresses 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.

Design and layout: Anne Rawson

Printing: Union Offset Printers

ISSN 1036 9163



Image courtesy of Andrew Tahnell, Department of the Environment

**Rainforest to desert**

Over four nights, visitors were treated to a Gardens' adventure that brought two iconic landscapes to life. As part of the Enlighten Festival guests were greeted with a pre-tour aperitif before embarking on a night-time guided journey through the beautifully lit Rainforest Gully. They continued their way to the Red Centre Garden and were immersed in the special lighting, arid plants in flower, striking red landscape and enchanting sounds of the didgeridoo, finishing off with a silver-service dessert.

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Cover: *Telopea speciosissima*, (New South Wales Waratah) by Fanny Karouta-Manasse was on display in the Friends Photographic Group Exhibition, ANBG...through the Lens.

# Summer Sounds Concerts

*"We had such a lovely time and will go again"*



Andrew Podger

A great time was had by the 13,000 people who came to concerts in the Gardens this January. Everyone surveyed said they would come again!

*I have lived in Canberra for over 50 years and have only visited the Gardens on special occasions. My visit (to a concert) opened my eyes as to what a wonderful treasure the Botanical Gardens are and made me realise that I must spend more time with my family looking around this wonderful place.*

*Confirms my opinion that the Gardens are a very beautiful part of Canberra.*

*We have been coming to the concerts in the Gardens for at least 16 years since our children were babies. It is our favourite Canberra event each year and we would be devastated if it were no longer held. It is the best value and quality of any ongoing event in Canberra.*

*The concert is great. The atmosphere is great. We absolutely loved the family atmosphere. Keep it up as we will attend next year as well.*

Much of the success of this effort was due to more than 60 volunteers who worked collecting donations, selling drinks, helping with children's activities, driving the assistance vehicles, providing information in the Red Centre Garden and in the Information Tent. Volunteers worked more than 450 hours at the concerts, and of course many more hours were worked by both volunteers and staff behind the scenes organising and running the concerts.

We were lucky with the weather this year, with only one concert cancelled, and that was due to a total fire ban rather than the storms that caused cancellations last year.

Due to the good weather and large crowds, \$21,000 was

raised from donations and sales of drinks. The Friends have traditionally paid for the bands and the sound technician and this cost \$10,000 this year. We have not covered the other costs in the past as these have been met from Gardens' funds and external sponsorships. However, the Gardens was unable to find commercial sponsorship for this year's concerts, and was unsuccessful in attracting any government grants or other funding. The Friends therefore agreed to provide additional sponsorship of \$12,000 to avoid the concerts being cancelled. All the money raised at the concerts this year therefore went to cover the cost of staging them. The end result for the Friends was a relatively slight outlay of around \$2,000.

It is hoped that the Gardens will be able to attract other sponsors for future concert series, but if the Friends are asked again to act as the main financial sponsors, we will need to look to increasing the admission/donation charge at the concerts, so we do not run the risk of a substantial loss to our existing funds.

Enormous thanks are due to all those who made the concerts such a success this year: volunteers, staff, musicians, refreshment providers, and of course the wonderful audiences.



Artist: Chloe 7

A masterpiece that emerged from the children's activity table.



## My patch

An occasional series introducing the Gardens' horticulturists and the sections they care for

Barbara Podger

*Dan Marges cares for the Sydney Region garden and its surrounding sections of Acacias, small Myrtaceae and Rutaceae and the proximate Eucalypt Lawn.*

*Born in Canberra, Dan studied horticulture at CIT and after a stint in a landscape gardening business, joined the Gardens' team 14 years ago.*

*Dan also manages the full range of the Gardens' trees, assessing them for health and safety and managing any pruning/removal needs. He is currently studying arboriculture at TAFE so that he can undertake more of the tree maintenance work in-house. He clearly has a head for heights!*

### **What do you like about your sections?**

I like the way the narrow, meandering paths in the Sydney Region gully section bring visitors so close to the plants. It's a different type of visitor experience from the wider boardwalks of the Rainforest Gully or the broad sweep of the Main Path. I hope such close encounters with nature, (like the chance to hug an *Angophora!*), will be a special experience for visitors and inspire them to grow native plants in their own gardens.

One advantage of managing the Sydney region plantings is that it's relatively easy to organise field trips to collect propagating material. I'd like to have a lot more representation from the Blue Mountains, even a whole section. I'd like to collect more *Angophora* species, especially the larger species though it's often hard to access seed from the very tall ones unless they just happen to have fallen over!

After a challenging few years working on the construction and establishment of the Red Centre Garden as well as my usual sections, it's nice to be able to devote more time to the Sydney Region garden.

### **What are some of the challenges?**

The presence of the *Armillaria* fungus is a major challenge.

Plants that look perfectly healthy one day can be dead the next. Only last week we lost a big *Acacia* to *Armillaria* and each day it's a question of whether I will find something else that has succumbed to it. It's a naturally occurring fungus so you do just have to accept it as a management challenge. The redevelopment of the entrance areas was a good opportunity to dig out a large amount of infected root material. I also apply a beneficial fungus every three months or so. This is sprayed onto the foliage and when it gets down to the roots it occupies the places that the *Armillaria* would like to go.

### **What new things would you like to do in your sections?**

I'd like to renovate the swamp which has largely disappeared and needs to be dug out. In the gully, I'd like to replace the remaining sleeper steps and tanbark path with sandstone pavers and crushed sandstone and do more planting.

I'm also trying to establish a grove of *Wollemia nobilis* in the upper part of the gully where they can enjoy their preferred moist and shady conditions. We have been lucky enough to have had a number of quite large potted *Wollemias* donated to the Gardens when they have outgrown their domestic situation.

### **Favourite/least favourite plants?**

There are too many 'favourites'. The *Angophoras* with their amazing bark are probably my favourite trees. I'm always happy to see a new seedling emerge and encourage its development. It's a good insurance policy in an *Armillaria* area to have new stock coming on.

Of the flowering plants, the Epacridaceae are hard to go past and they seem to flower nearly all year round. *Senna odorata* may not be the most beautiful plant, but it is

# Growing Friends

Yvonne Robinson

A Milestone! Growing Friends – 20 Years: It will be 20 years in April since the Growing Friends came into existence. All will be revealed in a later edition of *Fronde* this year. Meanwhile...

## AUTUMN PLANT SALE

Saturday 5 April (See What's on)

Included in this year's autumn plant sale will be the results of our trials of *Melaleuca fulgens* 'Hot Pink', mentioned in the last edition of *Fronde*. Also on offer will be *Gastrolobium celsianum*.



Murray Fagg

A native of Western Australia, *Melaleuca fulgens* prefers light, well-drained soil in an open, sunny, position. It grows to a height of 1.5 m with a spread of 1.5 m and can be tip pruned to keep it bushy. It is drought and frost resistant but may need some protection when young. The flowers are deep pink with gold tips and showy, occurring in oblong, lateral spikes, mainly in spring and summer.



Murray Fagg

*Gastrolobium celsianum* can be low and scrambling but also a shrub of up to 2 m in height. The scrambling habit tends to develop when the plant is grown in close proximity to other plants. The 'pea' flowers are bright red and occur in winter and spring. Swan River pea is adaptable to a wide range of soils and climates in sun or semi-shade. Its flowers produce nectar attracting honey-eating birds and it tolerates at least moderate frosts.

Feel welcome to join our usual monthly meeting that is held on the first Saturday of each month at 9.00 am during spring and summer and 9.30 in autumn and winter in the Joseph Banks Building. We also have a working bee on the third Tuesday of each month.



Barbara Podger

Left: Dan Marges in the Sydney Region gully knows visitors can't resist stroking the bubbly bark on this old *Banksia serrata*

Above: Dan walks along a narrow path of sandstone pavers in the gully

spreading and thriving well in the *Armillaria* area so is a very welcome species. As it likes damp areas it's unlikely to escape and become weedy.

The plant I have the most trouble growing is *Melichrus procumbens*. Fortunately, the Nursery seems to have no trouble propagating it and keeps supplying new plants so I can keep trialling different growing conditions.

Undoubtedly my least favourite plant is *Tylophora barbata*, a rampant groundcover that is very hard to control.

### Do you garden at home?

My home garden is almost purely native, but I have very little time to garden in it. One of my favourite plantings in it is a hedge of about 8 closely spaced *Angophora hispida*. My main problem is a white cedar which is being decimated by possums eating its leaves.



Barbara Podger

Dan assesses a donated Wollemi pine

# Encountering *Welwitschia*

'platypus of the plant kingdom'

Liz Truswell



Liz Truswell



Warwick Wright



Warwick Wright

Main photo: Young *Welwitschia* plants in their special growing place at Kirstenbosch Gardens. Inset photos Top: Female cones. Bottom: Male cones. See page 14 for photo of mature *Welwitschia*

The Friends' 2013 expedition to explore the flora of South Africa yielded a wealth of botanical experiences, from tip-toeing carefully among tiny succulents on the high plateau of the Cedarbergs, to exploring the spectacular shrubby fynbos in other areas of western Cape Province.

But it was in Cape Town's Kirstenbosch Gardens that I experienced one of the highlights of the trip: my first 'face to face' encounter with the bizarre gymnosperm *Welwitschia*.

In its native habitat *Welwitschia mirabilis* grows in isolated communities in the Namib desert receiving a little moisture from coastal fogs. At Kirstenbosch it grows in its own dedicated building where it thrives in raised beds heated from below and filled with red sand.

Visually, it is a minimalist. It consists of two leaves which persist through life after the initial cotyledons are lost. These leaves are wide, leathery, and immense, becoming tattered and split with age and the action of wind. Its large woody stem is often hollowed and eroded. The sexes are separate; the male with narrow pollen cones, the female with larger, chunkier, bluish, pointed cones. Both produce sugary nectar attractive to insects. The pollen too is sticky, clearly reflecting insect pollination. The plants, with their two persistent leaves, may live for 1000 years.

Since its first European discovery by the Austrian botanist and explorer Freidrich Welwitsch in 1859, *Welwitschia* has attracted controversy. Welwitsch is said to have fallen to his knees on the hot sand in wonderment at first encountering it. Joseph Hooker, who described and gave it a formal name, referred to it as the most interesting, but ugliest, plant he had ever seen. Charles Darwin described it as the 'platypus of the plant kingdom', no doubt because of its unusual and unexpected assemblage of characters. Its inclusion on the coat of arms of Namibia is popular acknowledgement of its unique place in the plant kingdom.

My own excitement at seeing *Welwitschia* goes back to my student days in England. My doctoral thesis was concerned with unraveling the history of the earliest flowering plants from the fossil pollen record in southern England. In the sediments below the white chalk cliffs, we retrieved the earliest angiosperm pollen in the Early Cretaceous (about 120 million years ago) and observed its rapid diversification as the flowering plants came to dominate the vegetation.

Naturally, the question of the origin of angiosperms arose; which group was ancestral to the flowering plants? Charles Darwin called this 'an abominable mystery'. *Welwitschia's* large leaves with net-like veins, its flower-like male structures, the nature of its female ovules, and the presence of vessels in the sap-conducting system are all characters found in angiosperms. But the structure of its cones are more gymnospermous. Thus *Welwitschia* was a candidate for the missing link between gymnosperms and angiosperms.

Hooker, in his original description, placed *Welwitschia* in the gymnosperm division and recent molecular research would seem to confirm this. The evidence suggests that it is more closely related to the conifers than to the flowering plants.

Recently *Welwitschia* leaves and pollen cones have been found in Brazilian Early Cretaceous sediments (112–114 million years old). These beds also yielded early angiosperm leaves.

Nevertheless, because of the controversy that has swirled around this curious plant, and indeed because of its zany appearance and heroic lifestyle, seeing it up close at Kirstenbosch was exciting. I could understand why Freidrich Welwitsch, who described many hundreds of African plants, insisted that this was the one he wanted carved on his tombstone in Kensal Green cemetery in London.

# Gondwana on our doorstep

Jo Lynch



Murray Fagg

Murray Fagg

Main photo: Plumwood trees at Monga National Park. Right: The unique pinnate leaves and white blossom of the Plumwood.

For me, one of the joys of the ANBG is the rainforest gully. I first 'got into' plants many years ago when I lived in Tasmania and spent time working in the cool temperate rainforests. I became acquainted with such iconic trees as the Myrtle Beech (*Nothofagus cunninghamii*), Southern Sassafras (*Atherosperma moschatum*), Huon Pine (*Lagarostrobos franklinii*) and Leatherwood (*Eucryphia lucida*) which flourish in the lower reaches of the gully.

I've been fascinated with cool temperate rainforests ever since. They are like time capsules, relics from the past when Australia was part of Gondwana and these forests dominated the land. But when Australia broke free about 50 million years ago and became drier and more arid, they shrank considerably, giving way to tougher competition such as the Eucalypt forests.

Unknown to most people, small pockets of cool temperate rainforest survive in southern NSW, in the sheltered valleys of the coastal escarpments at high altitude, where the rainfall is high and misty cloudy weather is frequent. The dominant tree here is the Plumwood (*Eucryphia moorei*), a close relative of the Leatherwood, and named for the pink or plum colour of its wood. It ranges from Bulli Pass near Wollongong to the Howe Range just over the border in Victoria.

The fossil records show that the *Eucryphia* genus was widespread in Gondwana. There are now only seven species in the world, two in Chile and five in Australia. A second species in Tasmania is a smaller montane version of the Leatherwood, once considered a variety. And in recent times two new species with very restricted distribution have been discovered, one in the cloud forests of the wet tropics in 1970, and the other in the subtropical forests of northern NSW/Southern Queensland in 1994.

Some of the largest and best examples of Plumwood forest can be found in Monga National Park, about

20 km south-east of Braidwood. The trees here can reach enormous sizes and ages, with some ancient specimens reportedly measuring four metres in width and estimated to be two to three thousand years old.

Penance Grove is an easy and delightful spot to view the Plumwoods of Monga. Turn off the Kings Highway at River Forest Rd and follow the signs south. A raised 240 m boardwalk with interpretive signs leads you through this magical grove which evokes what the ancestral forests of 100 million years ago probably looked like.

Due to low light levels, the understorey is sparse and dotted with graceful tree ferns which provide a high platform for Plumwood seedlings to germinate out of reach of nibbling swamp wallabies. As they grow, they extend their roots to the soil below before eventually encompassing the host plant. Sadly, a few of the tree ferns have been 'beheaded' by illegal plant collectors.

The Plumwood is an attractive tree due to its pinnate leaves (which are unique for this genus) and its large cream-coloured, strongly scented flowers. If you visit in early Autumn, you'll see the petals sprinkling the rainforest floor like snowflakes.

The genus name *Eucryphia* was bestowed by Melbourne Botanic Gardens Director, Baron Ferdinand von Mueller in 1863, the name derived from the Greek for 'well hidden', referring to the cap which is formed by the sepals. The specific name is in honour of botanist Charles Moore, Director of the Sydney Botanic Gardens from 1848 to 1896.

Plumwood trees can also be seen in the rainforest gully at the Gardens. Next time you are on the Main Path, look out for five or six specimens on the southern side of the creek just to the west of the café.

*Jo Lynch, a self-confessed 'plant spotter', works for the Australian Network for Plant Conservation which is based at the Gardens and aims to promote and improve plant conservation. [www.anpc.asn.au](http://www.anpc.asn.au)*



## Postcards from Christmas Island



*Working together on Christmas Island*

### POSTCARD



We, Nursery Manager Joe McAuliffe and Seed Bank Manager Tom North, spent one week in February on Christmas Island sharing our skills and expertise in seed collecting, seed storage, propagation, nursery techniques and phyto-sanitation with local Parks Australia staff. Ranger Dan Carmody is spending two months on the Island helping with the ranger & reforestation programs.



*Joe with a baby Booby*

### POSTCARD



This handsome marine bird, the Abbott's Booby (*Papasula abbotti*), breeds only on Christmas Island. It spends much time at sea, travelling long distances to feed, but comes ashore to breed in tall, sheltered rainforest trees. Much breeding habitat has been destroyed by phosphate mining and rehabilitated sites may not be suitable if they are windy and too close to cleared areas. Joe is holding a juvenile bird from the Abbott's Booby Recovery Program.



*Joe inside a Strangler Fig*

### POSTCARD



There was much for us to learn. The island is home to 237 native plant species, including at least 17 endemic species and about half the island's plants are not known anywhere else in Australia. Its vegetation ranges from tall evergreen rainforest, through semi-deciduous forest and palm to vine forest and coastal herbland.





*Robber Crab*

## POSTCARD

Ranger Dan looks at ease holding a Robber Crab, the largest land crab in the world; it can break open a coconut with its huge claws. Robber Crabs climb palm trees to feed on fruits. One climbs to the top and shakes down the fruit for up to 100 others sitting at the bottom. A fast food meal, is peanut butter sandwiches from unwary campers. They are now considered vulnerable to extinction because of over-harvesting. Christmas Island, where they are protected, has the most extensive breeding colony in the world.

Christmas Island  
Feb 2014

Dear ANBG  
We hope you have enjoyed the postcards, especially Dan with the crab. There are also around 50 million Red Crabs living on the Island - the only place in the world where they are found. Their breeding migrations to the ocean are one of the most spectacular mass migrations on the planet. Happily this year's massed arrival of the resultant Red Crab babies was one of the largest for many years, ensuring the replenishment of the population. During the migration Parks Australia rangers are busy baiting colonies of the predator yellow crazy ants, opening crab crossings and generally helping the crabs make a safe journey.  
Collecting seed from the endemic tree palm, *Arenga listeri* is a bit tricky. First we had to fell the tree, carefully. Any contact between skin and the fine hairs on its fruit and branches resulted in an itchy and painful rash. The perils of seed collecting!  
See you soon



*Tiny Red Crab*

## Guides go a'roving

*Glenys Bishop, Volunteer Guides Convenor*

Did you visit the Red Centre Garden in the early morning during the summer? If so, you may have spoken to one of our roving guides. We were not there every day but, when we were, visitors welcomed the information we provided and stories we told. On average, we spoke to about 21 visitors each morning we were there. Some of us also roved during the summer concerts. There were almost more visitors than plants in the Red Centre Garden during the intervals!

Subject to guide availability, we may continue roving in the Red Centre Garden in the future. If you see one of us, dressed in the khaki guide's shirt and sporting a guide badge, feel free to ask us about the Red Centre Garden. We have lots of interesting tidbits to share.

Coming up this winter we have a new special themed walk. Australia has many plants whose names are familiar to most Australians and to many overseas visitors. Per-



Pam Rooney

haps you have wondered how to differentiate between a wattle and a gum tree, or which plant the "banksia men" came from. You may know, but perhaps you have friends who do not. A new Winter Walk with Famous Australians, developed by a group of five guides, will help visitors identify many of Australia's plants made famous in stories, poems, songs and as floral emblems. The guides will also tell some interesting stories and lesser known facts about the plants. Come along on this walk during the winter. See What's On for details.



## Digging for daisies

with David Taylor, Curator Living Collection

*Rutidosia leptorrhynchoides*, *Olearia laciniifolia*, *Olearia magnifolia*, *Leucochrysum graminifolium*, *Olearia argophylla*, *Olearia rhizomatica*, *Ammobium craspedioides*.

The Asteraceae family certainly knows how to put on a show and a new garden of this largest of all plant families is coming soon to the ANBG.

The Gardens has long recognised that the existing main Asteraceae planting (on the main path next to the Monocot Section) is located in an area that does not provide the ingredients needed to grow a large suite of Australian daisies. Some of the limitations of this restricted, small space include it being a frost hollow with drainage issues, as well as lacking sun and shade diversity. It's now time to salvage the best of the species from this section and move to a bigger, more suitable site, leaving the Monocots to happily spread out into this space.

The new site chosen is in section 4 (along the main path opposite the rockery). It will become the new section 328. It also incorporates the current fenced planting of Asteraceae annuals, though the fencing will be removed. Friends' funding of just over \$13,000, combined with a similar contribution from the Gardens, will enable the stage 1, construction phase, to get underway, culminating in a first plant-out this spring.

Stage 1 will focus on the all-important site preparation. With the root disease fungus, *Armillaria luteobubalina* known to be present this will involve substantial earth-works to remove infected root material and the adding of

the beneficial *Trichoderma* fungus, a mitigating treatment also being done in the Sydney Region entrance garden. It is also hoped that the higher turnover of Asteraceae plants (many of which are annuals or biennials) will make them a better choice for living with potential *Armillaria* incursions.

The remaining soil profile will then be assessed and rectified accordingly. Different soil mixes will be used to replicate some of the variety of habitats the Asteraceae family ranges over. The Garden will also feature pipe containers which allow specialised mixes to be used for some of the more difficult to grow species, and can provide a more prominent presentation of small, delicate plants.

Other construction components will include drainage materials, rock supply and installation (to blend in with the rocks already in place on the adjacent lawn), a more efficient and tailored irrigation system and rockwork with gravel used for pathways to provide access into and through the new garden.

With around 1,000 species of daisies in Australia, there is much to choose from. While perhaps most renowned for their massed displays, blooming as carpets in both arid zones and alpine herb fields, there are many different forms, including from tiny salt pan ephemerals through to large shrubs and trees. It is hoped the collection will

*Xerochrysum bracteatum*, *Leptorrhynchus squamatum*, *Chrysocephalum apiculatum*. All photos by HM Rawson





All photos by Murray Fagg

grow to enable some flowering display all year round. Some rare and threatened species will be featured, like *Leucochrysum graminifolium*, an endangered species of the Blue Mountains and *Olearia rhizomatica*, found locally in the upper parts of the ACT.

The site will tell the story, including the history and use, of this fascinating Family in its Australian context. It will display the diversity of form, colour and flowering time as an inspiration for how people may use and grow Australian daisies in their own gardens. It is the first time for many years that a new Garden has been developed based solely on a taxonomic grouping (rather than an ecological grouping, as in the new Red Centre and Woodland Gardens).

Of course stage 1 is just the start of the garden, it will be further enriched with an ever expanding and ever-changing range of Australian daisies as we collect, propagate and grow-on many new species.

Horticultural staff will record key aspects as the garden evolves and working with the Communications and Visitor Services Unit and the Guides and Friends of the ANBG are aiming to promote significant information as we make discoveries and grow the garden to maturity.

Watch as the Asteraceae Garden develops – it promises to bring a new wave of colour and interest along the main path.

### What's your angle on Asteraceae?

If you have ideas on themes that should be highlighted in this new garden, or views on interpretation of this significant family, the planning group would like your input. Please send your ideas as soon as possible to: David.Taylor@environment.gov.au.

*Don Beer, Friends' representative on the Asteraceae Garden planning group*

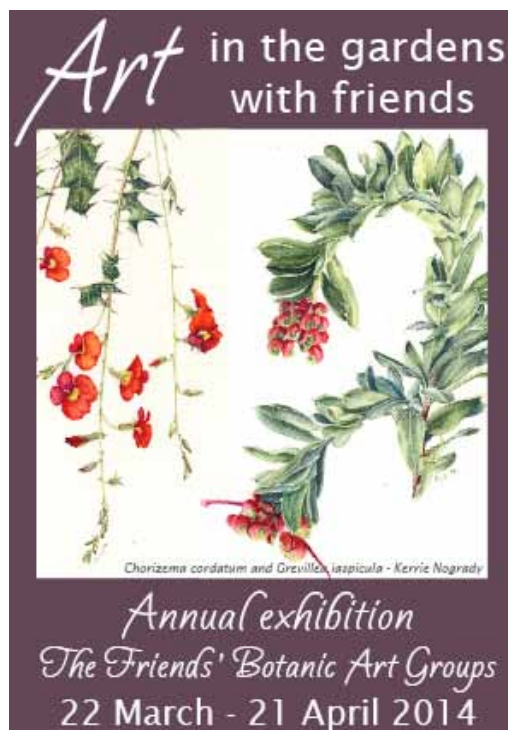
## Art in the Gardens with Friends

*Helen Jensma*

The Botanical Art Groups' 7<sup>th</sup> Annual Exhibition is up and running in the Visitor Centre Gallery until 21 April.

Over 70 paintings by 27 artists have been selected for the exhibition. This year there are Botanical works depicted in watercolour, oils and in ceramics. It is an exhibition not to be missed!

Friends were invited to a Special Friends Preview on Friday 21 March, giving them an opportunity to purchase a work of art prior to the opening.



Over Easter, in conjunction with the Gardens' Easter celebrations, all previously sold work will be taken down and a selection of paintings with 'gentler' pricing will be exhibited. These will be of other botanical subjects, not just of Australian flora. You may take these home as soon as you make your purchase.

After admiring the Exhibition, you can also purchase raffle tickets to go in the draw to win a beautiful watercolour painting 'Lilly Pilly' *Syzygium smithii* by Cornelia Buchen-Osmond.

Come and support the artists and the work of the Friends of the Botanic Gardens and buy a masterpiece!

# Friends Briefs

## An update from the President

The Friends continue to play a most important role at the ANBG and the range of our activities has expanded over the last few years, with the establishment of the Photographic Group, the Plant Science Group, the Stock take Volunteers and the Visitor Centre (VC) Volunteers. It is a tribute to our volunteers that we can contribute in so many ways to the ANBG and exciting that we can provide such a range of opportunities for our members.

These additional activities bring their challenges however. The Friends are an all-volunteer organisation and there will be limits on how much more can be taken on. We are in the process of reviewing the relationship with ANBG management to ensure there is effective consultation as new ideas emerge and that we can respond appropriately to any requests. The Friends are especially concerned to avoid taking on functions that replace overall staff resources.

In this context it is important that the Friends continue to put pressure on the Government to maintain and increase the resources available to this vital national institution. We are making representations to the Minister and the new Director of National Parks on a range of issues that are central to the Government's role with the ANBG, especially the maintenance of funding. However, in the meantime, I believe that the Friends should be prepared to respond favourably, as far as possible, if the ANBG needs to reallocate resources from one function to another of high priority. A recent example is the request for assistance in operating the VC.

As far as the VC goes I note that the ANBG is virtually the only botanic gardens in Australia where volunteers have not made a major contribution in the past to welcoming and helping visitors on arrival. I think it is a rewarding activity for our members and one which they are filling with distinction. The new arrangements will be reviewed shortly and all members are welcome to make their views known by emailing: [info@friendsanbg.org.au](mailto:info@friendsanbg.org.au).

In addition to direct government funding, there are several key issues that we are discussing with ANBG management: the need for an agreed site Masterplan, the need for a Board or Advisory Council; and an effective strategy to access a wider range of non-government funding. This last is critical for major projects such as a new seedbank, a children's garden and implementation of the recently adopted Public Art Masterplan. I am also keen to see further development of research programs at the ANBG, especially related to climate change and the impacts on native plants. Such research is an area where I believe the Friends can play a greater support role.

In the end a major priority of the Friends is to complement the resources available to the ANBG and to help ensure the ANBG can fulfill its vital role as the definitive collection of Australian native plants. We need to keep that in mind and respond as positively as possible as new proposals emerge.

David Coultts



Anne Rawson

Visitor at the new information desk at the Visitor Centre

## A Floral Evening



Alan Munns

On a perfect February evening, guests assembled for a floral themed dinner, with vases of beautiful banksias and flickering candles adorning the tables.

Our guest speaker, Catriona Anderson from the Pictures and Manuscripts Branch at the National Library of Australia, spoke to us about accessing the wonderful botanical resources at our National Library. She then described the long and painstaking process that led to the publication of *Banks' Florilegium* more than 200 years after Banks' return to England in 1771 from the voyage of the *Endeavour*.

Floresco once again served a delicious meal, including bush food flavours and edible flowers. Our indomitable quiz queens Marion and Tricia set us some floral conundrums, with plenty of prizes. [e.g. Flora is the Roman Goddess of flowers but who is the Greek equivalent? What year was Woody Allen's *The Purple Rose of Cairo* released? (See answers below)]

The stunning menu and place cards were created by Mike Johnson who included illustrations from the *Florilegium*, and even references and web links. All the place cards and menus were souvenired by discerning diners!

Our thanks to the many others who contributed to the success of the Dinner, including Growing Friends who donated plants for prizes, the Gardens for permission to use flowers from the Gardens and Rosella Hampshire for picking and arranging them for us.

Jan Finley and Barbara Podger,  
Social Events Committee

[Answers: 1985; Chloris]

## New Friends funding for the Gardens

Council recently approved funding for four projects worth a total of \$23,169, following a call for proposals in mid-2013. The proposals were approved at the December 2013 Council meeting, on the recommendation of the Projects Committee. Proposals approved for funding, either in part or in full, were:

### **Stage 1 of a new Asteraceae Garden**

(Friends contribution \$13,000) to be constructed in Section 4 along the main path opposite the rockery. Stage 1 involves ground preparation and site landscaping. Don Beer is the Friends' representative on the Working Group overseeing the development of the new garden. (see Asteraceae Garden article on page 10)

### **Audio equipment for Flora Explorer**

(\$3,669). New audio equipment will allow Flora Guides to address passengers while driving around the Gardens. At present Guides can only address passengers when the bus is stopped or when passengers are off the bus.

### **Field Trip to collect threatened rainforest plants**

(Friends contribution \$4,000). The field trip will collect NSW/Queensland state-listed rare and endangered rainforest taxa that are currently unrepresented in the ANBG collection, from botanic gardens and State reserves. The plants will be placed on the slope above the rainforest verge from the Brigalow Section (220) down to the Pacific Islands bed (68). Our contribution will cover expenses for the trip.

### **New ANBG library books**

(\$2,500). The funding will cover the purchase of books of particular interest to Friends' groups. Purchases will cover, *inter alia*, botanical illustration, plant identification, and propagation.



Anne Rawson

## Alpine Seed Ecology Project



Margaret Clarke

Alpine Seed Ecology Project, a collaborative venture between the ANBG, the Friends of the ANBG, and researchers at the Australian National University and University of Queensland, draws to a close this year. The project has seen great advances in our understanding of the germination ecology of alpine plants. The tireless effort from Gardens staff, Friends and students and staff at the Uni has seen the alpine seed collections at the ANBG grow to be the leading collection in the country. The project has also supported a range of students who will take their valuable experience with them into their future studies and work and has led to publications in leading scientific journals as well. The collaborators on the project will celebrate the culmination of the project with a symposium on Alpine Seed and Seedling Ecology at the ANBG in June 2014. Outcomes of the project will be presented, and discussions among current and potential future collaborators will explore priorities and opportunities for ongoing Alpine seed ecology research in Australia. More information on the Symposium will be forthcoming in *Fronde*.

Associate Professor  
Adrienne Nicotra

## Book donation

Lyn Craven, of the Australian National Herbarium, has generously donated a copy of his book *Melaleucas*. which he wrote in collaboration with Joseph Brophy from UNSW and John Doran from the Australian Tree Seed Centre at CSIRO. This book is a consolidated account of their taxonomy, essential oils, silvicultural characteristics and utilisation. The book is now in the Friends' Lounge and the BRC. Please do not remove the book. It joins a small collection of reference books in the Lounge and in the BRC.



## Get well soon

We are sure Friends will be happy to learn that Barbara Daly the brains behind "In Flower this Week" is now recovering at home after a long stay in hospital following a car accident. Barbara, who is a Life Member of the Friends, has been writing this information sheet since the early 1990s. Barbara says she is really missing her volunteer work, the Gardens and her friends there. She would love to hear from her friends, so do give her a call. We send our best wishes to Barbara for a speedy recovery.

Our thanks to Ros Walcott who has stepped in to publish "In Flower this Week".

*Friends' Briefs continued on page 15*

# Garden Shorts

## From the Executive Director

I am really pleased to welcome the new Director of National Parks, Sally Barnes. Sally has come from serving as Chief Executive of the NSW Office of Environment and Heritage with responsibilities for parks and reserves, including the NSW National Parks and Wildlife Service and the Royal Botanic Gardens. I look forward to working with her to progress the mission of the Gardens.

With a hot, dry start to this year our horticultural staff have been very busy keeping up water to the living collection. The plants in the Red Centre Garden thrived in this heat and we are delighted with their development and so many species flowering at the moment, as well as the positive feedback from visitors. Overall the plants have held up well to the very hot conditions and the recent rain that provided much needed relief to the living collection, staff and visitors.

An idea that was spawned from discussions at last year's Global Botanic Gardens Congress in Dunedin was to use our detailed databases to investigate the genetic basis and provenance of the threatened species in the Gardens' Living Collection. We were fortunate to have Lottie Boardman, a Summer Scholar, undertake a research project with initial analyses indicating it is an area worthy of further investigation. By assessing the genetic representation in our *ex situ* collections, we have a better understanding of the status of threatened species in our collection and to develop a strategic approach to target future collecting that best contributes to conservation.

Several of our staff are participating in *Mobility and Capacity Building* programs across Parks Australia. Nursery Manager Joe McAuliffe and Seed Bank Manager Tom North have recently spent one week sharing skills and expertise in seed collecting, seed storage, propagation, nursery techniques and phyto-sanitation with staff on Christmas Island, fulfilling some of the goals of sharing knowledge across our Parks. Ranger Dan Carmody is spending two months on Christmas Island assisting with the reforestation program.

The successful partnership between the Gardens and the Friends was again evident during the 2014 Summer Sounds series. I wish to thank all the volunteers who worked closely with our staff to deliver another outstanding event attended by nearly 13,000 people. I also wish to thank all the new volunteers who have commenced in the last six months in roles such as Stocktake Volunteers, Visitor Centre Volunteers, new Guides and Seed Bank Volunteers – your contributions are highly valued.

*Dr Judy West*

*Garden Shorts contributed by  
Sabrina Sonntag*

## Sizzling summer



Dr Stovepipe perform on the Flora Explorer at the launch of the Summer Concerts

The Gardens had one of our hottest summers yet with a jam packed program of events. Sunset Cinema kicked off the season with movies for every taste. Around 13,000 people dusted off their picnic blankets and enjoyed the musical entertainment and delicious food stalls at the Summer Sounds concerts. Flix in the Stix was a sell-out event with short films and entertainment by Eskimo Joe and the Axis of Awesome. The annual Snakes Alive! exhibition attracted young and old alike, giving the chance to see native reptiles and amphibians. The program was topped off by Delicious afterDARK, which was so popular that we had to add in more nights to satisfy the crowds.

## Welwitschia



Mature *Welwitschia* in the Namib desert, still with only two leaves!

## Stocktaking

The Gardens' living collections stocktake has been progressing well with nine very dedicated and enthusiastic volunteers, many of whom are Friends of the ANBG. So far almost a third of the stocktake has been completed with 85 out of a total of 261 garden sections either completed or in progress. If there are Friends or Guides who would like to participate in this activity we are still accepting volunteers. This is a great opportunity to learn more about the plants and meet new people.



Anne Rawson

Stocktake volunteers get caught up in their work

## Leading Ecotourism



Peter Byron and the Communication and Visitor Services team show off the ACT Tourism eco-tourism award.

The Gardens took the winning prize in the ecotourism category of the Canberra and Capital Region Tourism Awards held towards the end of 2013. The annual Awards showcase the best of the region's tourism industry and promote, encourage and reward tourism excellence. The Gardens' winning entry highlighted the significant range of new visitor experiences such as afterDARK and the Flora Explorer tours, together with new developments such as the Red Centre Garden.

# Friends Briefs cont.

## Congratulations Ros!



Trish Morton

Fellow Guides toasting Ros, on the far right

Congratulations to one of our volunteer Guides, Ros Joslin (Osbourne) on being awarded the Medal (OAM) of the Order of Australia. Ros has been a volunteer Guide at the Gardens for nearly 20 years. During this time she has also been an active community volunteer in a number of other ways, including in Rotary and the Girl Guides. Ros has also volunteered in other roles at the Gardens, most recently helping to co-ordinate the team collecting donations at the Summer Concerts. Well done, Ros!

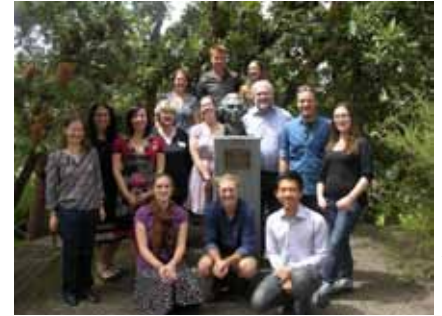
## More perils of seed collecting



Barbara Poelger

December 2013: It was a good year for seed collecting, although this team got caught in a sudden downpour and driving hail in Crace – lucky they found a sheet of plastic blowing around in the wind, and took shelter

## Interns



Julie Akmeac, ANBG

For the last 22 years the Herbarium has run a summer internship program. On 14 February eleven botanic interns completed the six-week 2014 program. Students were studying (or had studied) a variety of subjects including biology, resource and environmental management, horticulture, ecology, journalism and landscape restoration. The group spent six weeks mainly working in the Herbarium's collection, providing support in collections maintenance in vascular and cryptogamic collections and the loans and exchange area. At their graduation the Friends gave each intern a book voucher worth \$80 to be used at the ANBG Botanical Bookshop and a year's complimentary membership of the Friends.

Lesley Jackman

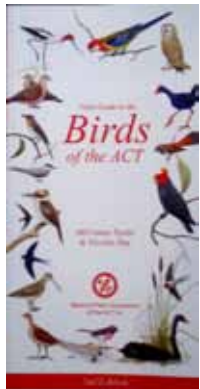
## AGM addendum

The following was omitted from the summary of the Friends' AGM in the December issue of *FronDS*.

Margaret Webber, Friend of the ANBG and Volunteer Guide of 11 years, spoke about her concerns about the use of volunteers in lieu of paid staff in the Visitor Centre. She emphasised that this is contrary to Parks Australia Policy for volunteers and also contrary to Volunteering Australia policy. She suggested that if individuals are concerned they contact the Federal Minister for the Environment as well as Zed Seselja, ACT Liberal Senator.

# From the Bookshop

with Bookshop staff



*Field Guide to the Birds of the ACT*  
Taylor McComas and Nicolas Day  
Second edition, paper back, 95 pages  
RRP: \$27.50

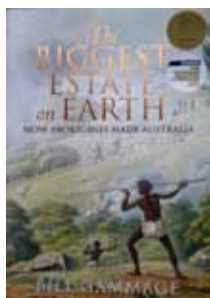
We waited most of last year for this 2<sup>nd</sup> edition, and it has certainly been worth it. The guide has always been a favourite for locals and visitors alike, and now that it is revised it is even better.

This revised second edition illustrates in colour the 217 birds likely to be seen in and around the ACT. It has easy-to-follow descriptions in a compact format.

Only local birds are shown making this Field Guide much simpler to use than comprehensive national guides.

McComas Taylor has been watching birds in Canberra for over 30 years and has written, broadcast and lectured on the subject. His other major project (now out of print) was the *Birds of the ACT: An Atlas with the Canberra Ornithologists Group*. He lives close to the bush in Ainslie where he pursues interests in publishing, the environment and Asia.

Nicholas Day is widely recognised as one of Australia's foremost wildlife artists. His work encompasses exhibitions, commissions, illustrations and fine art prints. He has exhibited in Tokyo and at the International Miniature Exhibition on Toronto. He illustrated the *Field Guide to the Birds of Australia* by Ken Simpson.



*The Biggest Estate on Earth*  
Bill Gammage  
\$40.00  
Paper back, 434 pages  
Winner: The Victorian Prize for Literature 2012, and Prime Minister's Awards 2012  
Winner Australian History.

For over a decade, Bill Gammage examined written and visual records of the Australian landscape and uncovered an extraordinarily complex Aboriginal system of land management using fire and the life cycles of native plants to ensure plentiful wildlife and plant foods throughout the year. *The Biggest Estate on Earth* rewrites the history of this continent, with huge implications for us today. This is still one of our best selling books.

## ...through the Lens

Lesley Jackman

On Thursday 19 February members of the Friends' Photographic Group slogged through puddles and braved major storms to attend the opening of the exhibition of their photographs at the Gardens, called, appropriately, ANBG...through the Lens.

It was exciting for the exhibitors, who very much enjoy photography in the Gardens, to see their efforts on display in the Visitor Centre. We have contributed to other displays but this was the first time the Photographic Group has had a discrete exhibition of its works.

The exhibition comprised photographs inspired by the plants, animals, birds, insects, light and landscapes of the Botanic Gardens, arranged in three broad categories. Much work went into this exhibition and the Group's pleasure in exploring and photographing the Gardens was very evident.



"Star burst" by Margaret Webber from the Exhibition

## Plant Science Group

Anne Campbell

The Plant Science Group was established in June 2013 to act as an umbrella group for Friends' volunteer activities of a more technical, scientific and research nature. The main, regular activity is the Technical Talk held on the first Monday of each month. Previous talks included:

*Melaleuca Callistemon* situation; How the Australian flora was assembled over the last 65 million years; Tracing history using DNA; Classifying *Dodonaea*; The science of botanical illustration; Ecology and pollination biology of the cycad *Macrozamia communis*; Native plant cultivar names, covering Plant Breeders Rights, Australian Cultivar Registration Authority, etc; Collecting biases in Australian herbaria, eg daisies; an update on the ACT Plant Census.

There has also been a visit to the ANBG Nursery and a visit to the Seed Bank is planned. If you would like to join the Group so we can keep you updated please email: [info@friendsanbg.org.au](mailto:info@friendsanbg.org.au).



# What's on at the Gardens

April – August

Details of events are correct at the time of printing. For changes and updates please check the Friends' website at [www.friendsanbg.org.au](http://www.friendsanbg.org.au), or the Gardens' site at: [www.anbg.gov.au](http://www.anbg.gov.au), or the local press.

The Friends of the ANBG thank the many speakers who volunteer their time and talents to further the knowledge of all who attend the events in the Gardens. The Friends use the 'gold' coin donations received at each activity to support Gardens' programs and development. The Friends thank all those who have donated.

Please note: unless otherwise indicated, talks are in the ANBG Theatre.

Summaries or PowerPoint presentations of Thursday talks are available to Friends from the ANBG library. A donation to the Friends for the use of this material will be gratefully accepted.



## Friday 4 April and first Friday of every month

Enjoy stories and craft activities in the Gardens 10.00 - 11.00 am

\$5 per child. Suitable for pre-schoolers

April – Bilby Stories

May – Mother's Day Stories

June – Bird Stories

July – Doona Stories

Follow the signs from the Cafe bridge

## FRIENDS' AUTUMN PLANT SALE

### Saturday 5 April 8.30-11.00 am Car park behind Crosbie Morrison Building

Plants propagated by Growing Friends from material from the Gardens. List of plants on website a week before sale.



D.Greig



## Exhibitions at Visitor Centre Gallery

### Until Monday 21 April

#### Art in the Gardens with Friends

A collection of botanical paintings and drawings by the Friends' Botanic Art Group. Artworks for sale. See page 11.

### Friday 25 April–Monday 16 June Offshoots by Julie McENERNY

A travelling exhibition of drawings, paintings and etchings, based on five years collaboration between Julie and Cairns Botanic Gardens. Julie is giving a talk on Thursday 8 May at 12.30 pm.

Visit the ANBG website at: [www.anbg.gov.au/whatson/](http://www.anbg.gov.au/whatson/) for future exhibitions

### Weeding Black Mountain



### Saturday 5 April 9 am to 12 noon Black Mountain Weeding Working Party. Friends of Black Mountain and Friends ANBG

Removing woody weeds from ANBG Northern Extension. Please email your name and phone number to: [friendsofblackmountain@gmail.com](mailto:friendsofblackmountain@gmail.com) or phone Linda (0437 298 711) or Carol (0439 031 162), so there is enough morning tea.

Meet at ACTEW Sub-station on Frith Road behind CSIRO.

### Saturday 3 May

Same meeting place.

### Saturdays 7 June, 5 July, 2 August

Meet at junction Clunies Ross Street and Black Mountain Drive.

## APRIL

### Thursday 3 April 12.30 pm Lydia Guja 'Seed Biology and Seed Conservation of Endangered Plants at the National Seed Bank'

Lydia will discuss the unprecedented threat to the Australian Alps from climate change and fire, *inter alia*, and their place within the ANBG's seed conservation and research program.

### Thursday 10 April 12.30 pm Simon Gould 'The Regeneration of Australia's Landscape Imperative'

Simon will discuss the role of the Soils for Life program in encouraging change in managing agricultural landscapes.

### Saturday 12 April 9 am to noon Black Mountain's changing landscape since ancient times

Walk organised by Friends of Black Mt and Molonglo Catchment Group. Expert guides discuss Aboriginal cultural sites, bush tucker and other plants. Easy walk but some steep sections. Light morning tea provided. Meet at Frith Road entrance to Black Mtn behind ACTEW substation. Wear sturdy shoes, bring water and sunscreen. Bookings essential: Linda 0437 298 711; or [friendsofblackmountain@gmail.com](mailto:friendsofblackmountain@gmail.com)



## afterDARK

### Star Gazers afterDARK



### April Saturday 5, Wednesday 16, Wednesday 23 and Saturday 3 May at 7.00 pm Start at the Visitor Centre

Be treated with a heart warming hot chocolate then embark on a fascinating night tour of the Gardens. Finish with a star gazing experience on the Rock Garden Lawn with *The Canberra Astronomical Society*.  
Not suitable for children under 5 years.

### Sunday 13 April 9.30 am Walk in Westbourne Woods

There is a walk every second Sunday. See Friends' website for more information

### Thursday 17 April 12.30 pm Trevor Murray 'Crested Pigeons: Communicating on the Wings of Sound'

Trevor will discuss research on the Crested Pigeon's use of non-verbal communication of danger in the ANBG and surrounding suburbs.

### Friday 18 April to Monday 21 April 9.30 am to 4.30 pm Easter Craft Activities in the Visitor Centre

Celebrate Easter in the Gardens and make your own Bilby mask or other Easter masterpiece.

### afterDARK Firefly Tours



### Saturday 7 June, 5 July 6.30 pm

Warm your hearts and hands with a delicious hot chocolate then construct your own hand-made lantern. Have your lanterns lit by a guide then embark on a fascinating after dark discovery of the Gardens.

### Booking information

\$22.50 adults, \$16.50 child

Bookings essential at:

[www.anbg.gov.au/gardens/whatson](http://www.anbg.gov.au/gardens/whatson)

### Thursday 24 April 12.30 pm Dr Jake Gillen 'Introducing the Landscape Ecology of SA's Cooper Creek Floodplain Region'

Jake will discuss the main vegetation communities encountered within the region and the factors driving their distribution, both across the floodplain and down the Cooper Creek system.



H/M Rawson

**Thursday 1 May 12.30 pm**  
**Dr Saul Cunningham 'Bees and the Future of Pollination in Australia'**

Saul will discuss the importance of bees to ecosystems - as pollinators of native plants and many crops.

**Thursday 8 May 12.30 pm**  
**Julie McEnergy 'An Artist in Tropical North Queensland'**

Julie will speak on the development of her Offshoots works and her relationship with the Cairns Botanic Gardens, features of which are depicted in her work, including the ever popular *Amorphophallus titanum*.

**Thursday 15 May 12.30 pm**  
**Dennis Ayliffe 'The Realm of the Polar Bear'**

Dennis will discuss some of the fauna, flora and geography of a rarely visited area in the Arctic around the Svalbard Archipelago north of Iceland and west of Greenland.



**Sunday 18 May 9.30 am–4.30 pm**  
**Fascination of Plants Day**

Discover Australian eucalypt stories on a self-guided Eucalypt trail or take a free guided walk to celebrate *Fascination of Plants Day*. Pick up your Eucalypt trail brochure from the Visitor Centre. Free guided walks depart 11.00 am and 2.00 pm daily

**Thursday 22 May 12.30 pm**  
**Rosemary Purdie 'Kamchatka Revisited: Plant Life on the Edge'**

Rosemary will draw on two recent Kamchatka visits to discuss the challenges facing plants in a landscape dominated by 30 active and 250+ inactive volcanoes.

**Thursday 29 May 12.30 pm**  
**Kay Johnston 'Heritage Chinese Gardens'**

Kay will introduce the audience to the history and development of classical Scholar Gardens, illustrated by pictures of the Suzhou gardens.

## JUNE

### Winter Walks



Janelle Chalher

**Winter Walks with Famous Australians: Banksias to Wollemis**

Join a Guide for a stroll through the Gardens discovering the wonders of Australia's most famous plants and hearing some intriguing stories about them. Meet at the Visitor Centre at 11am on any Saturday in June and July for this free walk. Groups of eight or more need to make a special booking, by emailing: [bookedwalks@friendsanbg.org.au](mailto:bookedwalks@friendsanbg.org.au). A fee is usually charged for a booked walk.

**Thursday 5 June at 12.30 pm**  
**Rainer Rehwinkel 'Linking Landscapes'**

Rainer will discuss Kosciuszko to the Coast's partnership of Government and non-government agencies and projects, including the glossy-black cockatoo.

**Thursday 12 June 12.30 pm**  
**Phil Cheney 'Bushfire Behaviour and Management in Australia'**

Phil will discuss the centrality of prescribed burning to reducing fuels over broad areas and the need for a good knowledge of fire behaviour and public acceptance.

**Thursday 19 June 12.30 pm**  
**Peter Byron 'The Gardens' Public Art Policy and Master Plan'**

Peter will discuss the recently updated art master plan for the Gardens and how public art helps inspire, inform, and connect people to Australian flora.

**Thursday 26 June 12.30 pm**  
**Bill Handke 'Making Mynas Less Common: Returning the Balance to Native Birds'**



Bill will talk about action the award-winning Canberra Indian Myna Action Group has taken to reduce the risk presented by mynas.

## JULY

**Thursday 3 July 12.30 pm**  
**Dr Karen Williams and others**  
**'Changing Landscape Since Ancient Times'**

Karen will discuss what happens to our perception of connectivity when we experience the landscape as a juxtaposition of present day, historical and ancient environments.

**Thursday 10 July 12.30 pm**  
**Dr Liz Truswell 'Oceans apart? Reflections on the History of the Floras of South Africa and Australia'**

Liz will explore the history of plant groups shared between South Africa and Australia, drawing on information from DNA and the fossil record.

**Thursday 17 July 12.30 pm**  
**Duncan McCaskill 'Birds in Canberra Gardens and Birds in the Gardens'**

Duncan will provide a meandering exploration of bird life in Canberra suburban gardens and the ANBG using the records of the Canberra Garden Bird Survey and other COG sources.

**Thursday 24 July 12.30 pm**  
**Dr John Dargavel 'Yearning for Sylvan Futures'**

John will trace how generations of botanists and foresters, yearning for a better future for their countries' forests, have directed their science to that end.

**Thursday 31 July 12.30 pm**  
**Glenys Bishop et al, 'Guiding at the ANBG – Keeping Them Interested?'**

Several volunteer guides will share the strategies/anecdotes they use to engage the interest of their visitors.



Geoffrey Dabb

## AUGUST

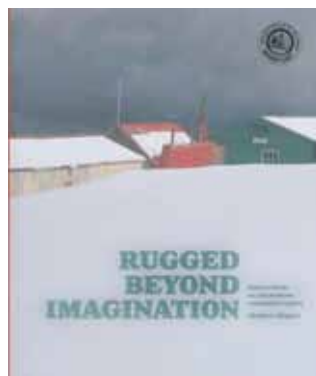
**Thursday 7 August 12.30 pm**  
**Dr Mike Gore 'The Genesis of Questacon'**

Mike will talk about the genesis of Questacon, Australia's first interactive science centre established in 1988.

**Thursday 14 August 12.30 pm**  
**Dr John Turnbull 'Dr Lindsay Pryor and His Walk'**

John will discuss Professor Lindsay Pryor's achievements and how he is remembered in Canberra, especially in ANU's Lindsay Pryor Walk.

### Marking the border



In February Matthew Higgins gave a fascinating talk about the men (and their wives) who tramped our mountains marking the ACT border. His book is now available from the Botanical Bookshop.

## Friends' Benefits

*As a Friend you are entitled to:*

Three issues of *Fronds* a year

Free parking pass

Botanical Bookshop – a discount on most items

Discount at Floresco cafe

*You also get:*

Advance details of lectures

Advance bookings for some events

Discounts on some events

ANBG library membership – borrow books, serials, videos, DVDs plus use of computers and interactive CD ROMs

Function facilities – special rates for functions at ANBG

*And opportunities to:*

Join Botanical Art Groups,

Growing Friends

Photographic Group

Plant Science Group

Assist with Gardens research projects

Become a Guide

Relax in the Friends Lounge – in the Ellis Rowan Building, open to members 9.30 am to 4.30 pm.

Relax with tea/coffee and lots of interesting reading.

## The Botanical Bookshop

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

always welcomes Friends!

with a 10% discount:

- on purchases over \$10
- on purchase of gift vouchers
- on production of your membership card
- to the person whose name is on this card

(no discount on redemption of gift voucher)