

Friends of the Australian National Botanic Gardens

NEWSLETTER

Number 59 July 2008





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Mrs Marlena Jeffery

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The Friends Newsletter is published three times a year. We welcome your articles for inclusion in the next issue. Material should be forwarded to the Newsletter Committee no later than the first week of June for the July issue; September for the October issue; and February for the March issue.

Email or post material to the Newsletter Committee at the above addresses or place in the Friends letterbox, located inside the Gardens' Visitor Centre between 9.00am and 4.30pm, Monday to Sunday. Editorial messages: telephone (02) 6250 9548.

Design and layout Anne Rawson
Margaret Clarke

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Cover: *Callistemon citrinus* watercolour by Nilavan Adams, exhibited at the Botanic Art Exhibition, ANBG in March (see page 7). Crimson Bottlebrush is probably the best known bottlebrush with its bright red flower spikes appearing in summer and autumn.



Money and the Gardens' future

Alan Munns, President, Friends of ANBG

Last year's federal budget was not kind to the Gardens. In response, many of our members took part in a postcard writing campaign to demonstrate to the government the very high level of public support for the Gardens. Around 800 postcards were sent to the Minister. That, and other action, avoided the immediate threat of further staffing cuts. It also resulted in extra funds being provided to address the Gardens' water problems.

The 2008-09 federal budget has now been handed down. At the time this *Newsletter* goes to press its impact on the Gardens is not known. Unlike other comparable national institutions (the National Museum, National Gallery and National Library) the ANBG does not have its own 'line' in the budget. The budget allocates an amount to Parks Australia (ie the national parks service) of which the Gardens is a part. That amount is divided up internally.

What we do know is that Parks Australia was not treated kindly in the 2008-09 budget. As a result, staff numbers across the agency will fall by 5.5 per cent. By comparison, staff numbers at the National Gallery and National Museum will remain steady. The National Library will lose nine staff or two per cent. Details are in the relevant budget papers at: www.environment.gov.au/about/publications/budget/2008/pbs/pubs/pbs-2008-09.pdf.

The Friends have argued that the Gardens should have its own budget line. We believe it is such a different kind of place from the mainstream national parks that are administered by Parks Australia that its financial fortunes should not be hidden away. The parliament should be told the precise level of government funding being given to the Gardens. The government should be directly accountable for this. We will continue to argue this case.

Over the last 25 years, staffing levels at the Gardens have fallen by over 30 per cent. The number of horticultural staff now directly involved in maintaining the 50 ha of gardens can almost be counted on the fingers of two hands (an extra two or three fingers might be needed). The effects are noticeable. The Friends hope that, when Parks Australia divides up the budgetary pie this year, they will recognise that the ANBG has done more than its share of suffering in the past and will ensure that staff numbers are maintained.

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What Plant is That?

New Botanical Resource Centre Opens

Barbara Podger

Have you ever wanted to identify a native plant you have seen somewhere, but didn't have the resources to do it?

Now you have—in the new Botanical Resource Centre at the Australian National Botanic Gardens.

The Centre was officially opened on 15 May by Her Excellency Mrs Marlena Jeffery (the Friends' patron), who enjoyed a hands-on preview tour of the Centre with volunteer facilitators and staff.



Her Excellency Mrs Marlena Jeffery (seated) being shown how to use the Centre's computer by (standing L-R) Margaret Webber (facilitator), Anne Duncan (ANBG Director), Lesley Harland (facilitator).
Photo by Barry Brown

The brain-child of Murray Fagg, the Centre is a joint initiative between the Gardens and the Friends, with the Friends providing funds for the fit-out and recruiting 20 members to be trained as facilitators. It is in the Ellis Rowan Building, with entry through the Friends lounge.

Users have direct access to a library of pressed and dried plant specimens collected from Canberra and the surrounding southeast region, from Sydney to the Victorian border and almost as far inland as Wagga. These specimens are duplicates from the Australian National Herbarium.

Visitors will be able to use online plant databases, reference books and microscopes—tools to help name any native plant they wish to identify.

Volunteer facilitators will be available on Wednesdays and Sundays between 1pm and 4 pm to provide assistance and demonstrate how to use the facilities, including specialised computer programs.

Remember, if you are bringing plant matter into the Gardens for identification, it should be in a container – a plastic bag is ideal for this. If possible, you should bring

Your Invitation to Learn to Use the Botanical Resource Centre

You are invited to join one of our trained facilitators for a small-group, one-hour demonstration session at the Centre. You will be shown the computer programs and other equipment, and introduced to the herbarium specimen library. The small group sessions will be held on:

- Saturday 26 July 2-3 pm
- Thursday 31 July 2-3 pm
- Tuesday 5 August 2-3 pm
- Wednesday 13 August 11 am-12 noon

Please book at the Visitor Centre on 6250 9540, as numbers at each session will be kept to five or six.

If none of the session times suit, phone the Visitor Centre to arrange an individual session with a facilitator.

Open days will also be held on Saturday 23 and Sunday 24 August. See What's On for details.

a sample of leaves, fruit and flowers and even a piece of bark where *Eucalypts* are concerned. A photo can also be useful.

Our sincere thanks to Dr Robert Boden (a former Director of the Gardens) and Susan Parsons for their much appreciated donation of a large number of reference books for the Centre; and to Gardens IT providers, Commander Volante, for the generous donation of two computers.



Dried herbarium specimen of *Derwentia derwentiana* ssp. *derwentiana*

THE BERNARD FENNESSY 'WHAT'S IN A NAME?' AWARD 2008

The winner: John Turnbull

Eucalyptus cloeziana (Gympie Messmate)

An unusual eucalypt grows at the top of the Eucalypt Lawn in Section 34. It is a tall tree with rough, yellowish brown, flaky bark covering the trunk and lower branches while above, the smaller branches are smooth, grey or creamy white. It bears gum nuts in prominent bunches. This species is of scientific interest because it is not closely related to any of the other 800 or more eucalypts and so is the sole occupant of its own subgenus (*Idiogenes*). It is also the largest eucalypt growing in Queensland.

The size of *E. cloeziana* is affected greatly by the soils and climate in which it grows. Tall, straight-boled and densely crowned trees are found on well-watered, deep soils, but on dry, rocky sites they are reduced to stunted trees with open crowns. Very large trees occur in southeast Queensland where past giants are reported to have been up to 12 m (40 feet) in girth. There is still a tree, known as the 'Doggrell Tree', over 60 m tall and with a girth of almost 7 m.

After James Nash discovered gold near the Mary River in south Queensland in 1867, mining activity continued for another 60 years. During this period, exploitation of *E. cloeziana* was severe and substantial quantities of its timber were used in Gympie's gold mines and to build houses in the town. It was also used in the developing regional railway network. The heavy, strong and very durable wood made excellent sleepers with an operational life of over 20 years. Today it is planted commercially in plantations in Australia and overseas for poles and mining timbers. In South Africa it is regarded as having few equals for telegraph poles. Although the dense wood is unsuitable for paper pulp, it can be used to make fibreboard and industrial charcoal.

The common names 'Gympie Messmate' and 'Queensland Messmate' relate to the natural occurrence that extends from southern Queensland as far north as Cooktown. 'Messmate' is a name given to many eucalypts that grow with their stringybarked 'mates'. In north Queensland this species is often called 'dead finish', a name applied to at least three other species (*Acacia carneorum*, *A. tetragonophylla* and *Archidendropsis basaltica*) elsewhere in Australia. The reason for this name is obscure. One explanation is that these are extremely hardy plants and when droughts are so severe that even they die, then everything else is well and truly finished! It may allude to *E. cloeziana* growing on dry, rocky sites on the Atherton Tableland.



E. cloeziana below the Nancy Burbidge Amphitheatre on the Eucalypt Lawn ANBG. Photo by Anne Rawson

Eucalyptus cloeziana was named by von Mueller on the basis of a specimen collected by Scotsman John Dallachy near Cardwell, south of Cairns, in 1867. Dallachy was the Superintendent at Melbourne Botanic Gardens from 1849-1857, he was succeeded by von Mueller but remained as Curator of the Herbarium until 1861. He collected extensively in Victoria and northern Queensland. The name honours Francois Stanislas Cloez (1817-1883), a French chemist who included the analysis of eucalypt leaves and oils in his medical studies. He identified the active ingredient as 'eucalyptol' and in 1884 this was found to be a terpene compound and named 'cineole'. Cloez prescribed this eucalypt oil for bronchitis, asthma, catarrh, coughs, colds and flu. Ironically, *E. cloeziana* has little or no cineole in its leaves!

Ferdinand Jakob Heinrich von Mueller (1825-1896) trained as a pharmacist in his native Germany. He was an enthusiastic plant collector who was awarded a Doctor of Philosophy at the University of Kiel for his plant studies. In 1847, when 22 years old, he arrived in Adelaide where he soon found work as a chemist. He continued in this profession until 1853 when he became the first Government Botanist of Victoria. With his pharmacy background von Mueller would have followed the publications of Cloez on eucalypt oils with great interest, especially as he keenly promoted the potential of Australian plants for medicinal purposes. He published an

account of *Australian Medicinal Plants* in 1855 and, recognising the medicinal value of eucalypt oil, he had already in 1853 encouraged his friend Joseph Bostisto to begin extracting it on a commercial scale in Victoria.

Von Mueller's outstanding contributions to Australian botanical exploration and plant taxonomy are legendary and he received many scientific awards. The King of Wurttemberg made him a hereditary Baron in 1871 and he was conferred with an Honorary Doctorate of Medicine by the University of Rostock in the city of his birth. He is commemorated in the names of three genera (*Austromuelleria*, *Muellerina* and *Sirmuelleria* now known as *Banksia*) as well as numerous specific names of plants.

Gympie Messmate is a unique eucalypt that combines impressive size with economic value and great scientific interest. The association of Cloez and von Mueller with its botanical name recognises two men who made significant contributions to medical science through their plant studies.

Further reading:

Boland, D.J. *et al* (1984) *Forest Trees of Australia*. 4th ed. Thomas Nelson and CSIRO, Melbourne.

Hall, N. (1978) *Botanists of the Eucalypts*. CSIRO, Melbourne.

Pearn, J.H. (2001) *A Doctor in the Garden*. Amphion Press, Brisbane.



'The Doggrell Tree' near Gympie, with Dick Grimes, research forester, and Professor Mario Ferreira, a visiting Brazilian forester. Photo taken in the 1970s by John Turnbull

From the Bookshop

Tom Butt, Shop Manager

Orchids can be found throughout the ACT; in nature parks, urban reserves and in Namadgi National Park. They can be beautiful or bizarre; some look like ducks or spiders, others grow long beards or have delicately hinged appendages. Finding orchids on a walk in the bush can be a satisfying experience.

This book is the first complete guide to the native orchids of the territory. It contains comprehensive and authoritative descriptions of all the known orchid species, together with notes, botanical drawings and photographs to aid identification. Locality information and flowering period are also recorded for each species. It is an invaluable identification guide for orchid lovers and for all those who enjoy the Australian bush. Its handy size makes it suitable for use in the field.

Orchids are special and many are rare and endangered. They will not survive outside their native habitat so please do not disturb or handle the plants in any way. All flora are protected in our parks and reserves.

The National Parks Association of the ACT is committed to conservation of the territory's rich indigenous flora and fauna. To achieve this, the association hosts many activities during the year, and has published field guides to assist in the identification of our native trees, birds,



Field Guide to the Orchids of the Australian Capital Territory

by David Jones, with Jean Egan and Tony Wood

National Parks Assoc of ACT, 2008

Paperback, 288 pages, colour photographs and line sketches

ISBN: 978 0 9802854 2 0

RRP:\$38.50

reptiles and frogs. The publication of this *Field Guide to the Orchids of the Australian Capital Territory* is a welcome addition to these publications.

We are fortunate to have the services of David Jones, one of the world's authorities on native orchids, in our midst. David has documented, described and catalogued hundreds of orchids, but he has reserved a special love for the native orchids he finds on his doorstep. This book is a result of his determination to enable us to recognise and care for these unique plants that are such a special feature of the bush capital.

In putting this work together he has been ably assisted by Jean Egan and Tony Wood. Jean is a gifted botanical artist and has worked tirelessly on the digital enhancement of David's drawings. Tony is renowned for his orchid photos and achieves amazing detail, colour and clarity for these difficult subjects.

The Gardens' Library

Catherine Jordan, ANBG Librarian

There is a library in the Gardens, located on the first floor of the Botany Building, with 15,000 books and 500 serial titles, plus lovely views of Canberra.

The library is accessible via several flights of stairs. One approach route is via the Visitor Centre/Administration Building. Take the stairs located beside the door to the Dickson Room, then at the top find the door to the glass walkway. Proceed along the walkway and at the end take the next flight of stairs up to the library...and catch your breath!

Alternatively, from the rocky waterfall/pond, opposite the bridge to the café, walk up the stone steps to reach the Botany Building, and follow the stairs to the first floor. Once you have reached the library take in the views, through the tree tops to southern Canberra on one side and to the Mallee section on the other side.

Our library has a relatively brief and modest history compared to other botanic gardens libraries. It commenced in the 1960s as a small collection of books in the Herbarium. The first permanent librarian was appointed in 1988, by which time the collection numbered 2,500 titles. The library has grown significantly since then with a collection now exceeding 15,000 books and 500 serial titles.

Most material in the collection is catalogued and you can search the library catalogue via the Gardens' website at: www.anbg.gov.au/library/

What is in the collection ?

Books, not only on the taxonomy, botany and horticulture of Australian plants, but also on plants from other countries, on botanic gardens, national parks, conservation issues, Aboriginal use of plants, landscape design and botanical art.

We have a wide range of serials from *Your Garden* magazine to *The Lichenologist*. There's a small collection of videos and DVDs, an extensive map collection, and a reference collection which includes floras, dictionaries and directories.

Computers in the library give you access to the internet and to the interactive CDROMs for plant identification, such as Euclid, Wattle and Ausgrass.

The rare book collection includes the magnificent three volume work on the banksias by Celia Rosser and Alex George. Volume three of this work was purchased by the Friends for our collection. Also in the rare book room is a small collection of art works. The major item of this collection is the set of watercolour pencil drawings of orchids and pea-flowers by Collin Woolcock.



Catherine Jordan in the rare book room looking at volume 3 of *Banksias* by Celia Rosser and Alex George, which was donated to the library by the Friends. Photo by Barbara Podger.

The library houses an archival collection which includes Gardens' publications and reports by Gardens' staff, biographical information, oral histories, botanists' field books and press clippings about the Gardens from 1949 to the present day.

Our newest books and magazines are displayed in the library for several weeks so everyone gets a chance to view these items and reserve for loan. A monthly list of the new books is accessible via the Gardens' website at: www.anbg.gov.au/library/new-books.html And there is a new segment in the volunteer guides meetings titled 'What's new in the library', where a guide highlights some new books or information about the library.

And last, but not least, don't forget to take a look at our special feature, the bookmark collection displayed on the walls of the library.

Opening hours are 9.00 am to 4.30 pm Monday to Friday. Friends are welcome at any time and you are eligible to borrow once you have registered. Phone 6250 9480 or email: ANBG.library@environment.gov.au





What's on at the Gardens

July – November 2008

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

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

When bookings are required, phone the Visitor Centre on 02 6250 9540. Members who make bookings for events are requested, as a courtesy to their fellows, to notify the Visitor Centre if they are unable to attend.

Details of events are correct at the time of printing. For changes and updates please check the Friends' website at: www.anbg.gov.au/friends or on the Gardens' site at: www.anbg.gov.au or in the local press.

JULY

Thursday 3 July at 12:30 pm

'Trees: the Inside Story'

Roger Heady

Roger Heady so enthused the Friends with 'Secrets of the Wollemi Pine' and his article in the following Newsletter in 2004 that the Friends have again invited Dr Heady to talk with us. This time on a wider subject.

Thursday 10 July 10.30 am

Dreamtime in the Gardens

Phillip Brown

Create your own Aboriginal art, hear stories from the dreamtime, express stories through dance, take a guided walk to learn about traditional Aboriginal plant use. For all ages. Free admission. *A NAIDOC week event.* Contact the Visitor Centre for program times.

Thursday 10 July at 12:30 pm

'Educational Tourism – ANBG want their share'

Gary Watson

Gary Watson of the Educational Tourism Project encourages us to take advantage of the 150,000 students visiting Canberra on Exchange to communicate the ANBG story.

Thursday 10 to Sunday 27 July

Working on Country Photographic Exhibition 2008

Visitor Centre

Featuring images by Indigenous Australians and staff of Dept. of the Environment that explore the relationships between people and places in *Working on Country* projects.

Thursday 17 July at 12:30 pm

'Alpine Vegetation and Climate Change'

Roger Good

Roger presents us with an overview of the potential impacts of climate change on the vegetation and on some indicator species in the alpine zone of Australia.

Thursday 24 July at 12:30 pm

'Mapping Biodiversity

Donald Hobern

Thursday 31 July at 12.30 pm

'Modern Gardens'

Geoff Cleary

Geoff Cleary of Pialligo Plant Farm presents a wide-ranging look at how our gardens have changed, from modern cultivars to water-wise and new design.

AUGUST

Thursday 7 August at 12:30 pm

'Reviewing the ANBG Living Collections'

Anne Duncan and Mark Richardson

The ANBG is examining how its living collections are relevant to the future of the nation and how they should be developed, managed and valued. The talk will discuss the process of reviewing the collection and the progress that has been made.

Thursday 14 August at 12:30 pm The Bernard Fennessy Memorial Lecture

Brian Cooke

In this, the second Bernard Fennessy memorial lecture, Brian Cooke honours his colleague, the long-time guide, raconteur and 'ambassador' for ANBG, Bernard 'Bunny' Fennessy. Also presentation of award to 'What's in a Name?' winner.

Thursday 21 August at 12:30 pm 'Grasses: Habits and Habitats'

Geoff Robertson

Grasses aren't the easiest plants to understand, but learning about some key features and habitat preferences, one can become knowledgeable in a short time. This presentation will talk about some key local grassy ecosystems and the main grass families to be found there.

Saturday 23 and Sunday 24 August at 10 am – 4pm

Botanical Resource Centre Open Days

Get hands-on guidance in using interactive computer keys, microscopes and the public reference herbarium as you discover how to identify native plants in the new BRC.

Saturday 23 and Sunday 24 August 10 am – 4 pm

For Curious Kids – a Micro-view of plants

Discover plants and water bugs close up. See their minute wonders through microscopes in the Gardens education centre. *A National Science Week event* in conjunction with Botanical Resource Centre Open Days.

Thursday 28 August at 12:30 pm 'Huon Pine'

Anne Duncan, Director ANBG

Anne Duncan presents some little known aspects of this iconic

Tasmanian tree. Drawing from her work in Tasmania Anne Duncan presents another talk on the character of the remarkable flora and vegetation of Tasmania.



SEPTEMBER

Monday 1 to Sunday 7 September at 11am each day

Wattle Walks

Did you know that 1000 of the world's 1350 species of *Acacia* are found in Australia? Guides offer free one hour walks to admire many of the species in the Gardens. Meet at the Visitor Centre. No bookings required.

Thursday 4 September at 12:30 pm 'Update on the Australian National Sustainability Initiative, ANSI'

Wendy Rainbird

The plan for the Eastlake precinct includes a Sustainability Demonstration Centre. Designs for ecologically positive outcomes for buildings are being advanced. ANSI is also working with communities in Social Learning for Sustainability.

Saturday 6 to Tuesday 9 September 2008

Botanic Gardens of Australia & New Zealand (BGANZ) NSW Conference 2008

At Eurobodalla Regional Botanic Gardens, south of Batemans Bay, NSW. Registration forms and further information may be obtained by

contacting Heather Haughton, at: heather@melbpc.org.au or visit www.esc.nsw.gov.au/community/gardens/ and follow links to BGANZ NSW Conference. Friends may seek reimbursement of 50% of Registration fee from the Friends. Contact 62509548 (messages) or email :frienddbg@netspeed.com.au

Thursday 11 and 18 September at 12.30 pm

Floriade related talks TBA

Check Friends' website and paper.

Friday 19 September to Sunday 12 October, Fridays, Saturdays, Sundays at 10am

Spring Flower Walks

During Floriade special one hour guided walks, plus a voucher for morning tea at Hudsons, all for \$8. Book at the Visitor Centre on 62509540. Payment will be collected on the day. Meet at Visitor Centre.

Every Saturday during Floriade 13 September to 11 October at 2 pm Connecting People and Plants

Digital video film workshops. Expand your talent and discover the tricks of nature-based digital video film. Learn camera techniques, how to plan a story, and in-camera editing. Bookings essential through the Visitor Centre. Cost applies – special Friends' rate. *A Floriade Trail event.*

Thursday 25 September at 12.30 pm Floriade related talk TBA

Check Friends' website and paper.

OCTOBER

Thursday 2 October at 12.30 pm Floriade related talk TBA

Check Friends' website and paper.

Sunday 5 October 10 am and 1 pm Orchid walks on Black Mountain with Tony Wood

Meet at the Belconnen Way entry just before Caswell Drive. These walks are a delight with a range of often overlooked terrestrial orchids. A hand lens, stout shoes, water and perhaps some snack food will complement the walk. Limited to 15 people on either walk; bookings on 62509540 are essential. The afternoon walk repeats the morning walk

Thursday 9 October at 12:30 pm
'The Groundsels and Lobelias of Mt. Kenya'

Roger Farrow

Roger will give the second part of his talk on the Alpine Plants of East Africa, in the Plants of the



World Series, with an ascent of Mt Kenya to 4500 m to see the Giant Groundsels and Lobelias as well as more Helichrysums, Afrocarpus and other Gondwana connections.

Saturday 11 October, 9:30 am
37th Annual Burbidge/Chippendale Walk on Black Mountain

Peter Ormay

Suitable for beginners and long-term enthusiasts. Looking at the biodiversity of Black Mountain flora. Please BYO morning tea, hat, sunblock, water and stout shoes. Meet at the Belconnen Way entry just before Caswell Drive. Contact: Jean Geue 62511601

Thursday 16 October at 12:30 pm
'Conservation Activity in Tasmania'
Senator Bob Brown

Venue TBA

Despite his busy schedule, Senator Bob Brown has agreed to talk to the Friends about his role in the



conservation movement in Tasmania. The influence of this dedicated Senator has already proved to be inestimable and one can easily be affected by his enthusiasm and humility.

Thursday 23 October at 12:30 pm
'The ACT Plant Census'
Brendan Lepschi

In this talk, Brendan 'steps back' to look at the recording of the plant

communities and their components within the ACT. This recording establishes a basis upon which future scientists can assess changes brought about by global warming and other factors such as urbanisation.

Thursday 30 October at 12:30 pm
'Parallel Journeys: Australia and South America'

Ian Fraser

Ian Fraser, looks at the similarities and differences between the birds, mammals and flowering plants of South America and Australia. The continents have followed very similar journeys from their Gondwana connection, through 50 million years in isolation, to the recent end of that isolation.



Photo by Barbara Podger

Breakfast with the Birds

September: Saturday 20, Sunday 21, Saturday 27 and Sunday 28

October: Saturday 4, Sunday 5, Monday 6, Saturday 11, Sunday 12

Meet at the Visitor Centre at 7.30 am

Last year this very successful program attracted 158 visitors who, like the leaders, were out to enjoy the Gardens in the early morning, the great breakfast and the birds. Highlights were nesting birds, choughs, honeyeaters, tawny frogmouth, and many more including the powerful owl. Spring nesting birds at this time provide for added enjoyment, and interest, as for many participants this was their first introduction to bird watching.

Book early as numbers are limited, and spaces fill quickly. Bird walk and sumptuous breakfast is \$28.00 per person \$25.00 for Friends. Bookings and payment made by phoning the Visitor Centre on 6250 9540. Pre-payment is ESSENTIAL by credit card, cash, cheque to the 'Friends of the ANBG' Enquiries: Louise Muir Ph. 62816295

Request to Birdo Friends

If you are a Friend and birdwatcher, and are familiar with the local birds, and particularly those of the ANBG, and would like to lead or assist on some of these walks, please contact the Visitor Centre. Training, support and information is provided, and you get to meet some great people.

NOVEMBER

Thursday 6 November at 12.30 pm
'How Evolution Works'
Adrian Gibbs

Thursday 13 November at 12.30pm
'Tasmania...'
Chris Cargill

Thursday 20 November at 12.30 pm
'The National Reserves System'
Peter Taylor

Saturday 22 November at 6 pm
Grazing in the Gardens

As always a great event to celebrate what the Gardens has to offer. Gather your friends to enjoy the music, wine and food in beautiful surroundings. Information and booking forms will be sent out in October with membership renewals.

Thursday 27 November at 12.30 pm
'Coral and Carbon Dioxide'
Malcolm McCulloch



Date in November TBA
A tree in the palm of your hand...
Sixth national exhibition of
Australian plants as bonsai
Crosbie Morrison Building

See Australian plants grown as living sculptures using the ancient art form of bonsai. Entry fee applies. Check Friends' website or local paper.

The Botanical Bookshop

www.botanicalbookshop.com.au

always welcomes Friends of the ANBG to the store.

A 10% discount is offered:

- on purchases over \$10
- on production of your current membership card
- to the person whose name appears on this card

No discount is given for items marked 'Red Spot Specials'.

There are two free (30 mins) parking spaces for customers in both southern and northern parking areas

Friends' Benefits

Your Membership Card entitles you to the following benefits:

Parking—Free parking at the ANBG. Display your parking pass and please park in the lower levels of the carpark.

Botanical Bookshop and the Cafe—A discount on most items.

Friends Lounge—is open to members from 9.30 am to 4.30 pm. It is in the Ellis Rowan Building - follow the path past the Cafe. A space of our own to relax and enjoy a free cup of coffee or tea. Take the opportunity to catch up on newsletters from other botanic gardens, plus lots of other interesting reading.

Botanical Resource Centre— Public access herbarium, text books, access to online resources, trained facilitators to help you, all in the room adjoining the Friends Lounge.

ANBG Library Membership—Borrow books, serials, videos, DVDs plus use of computers and interactive CD ROMs

Function Facilities—Special rates on bookings for functions at the ANBG.

Open Hours

Australian National Botanic Gardens, Clunies Ross Street, Black Mountain, Canberra.

Open 8.30 am - 5.00 pm daily. Closed Christmas Day. Visitor Centre open 9.00 am to 4.30 pm, (02) 6250 9540.

Free guided walks with volunteer guide: 11.00 am and 2.00 pm daily

Booderee Botanic Gardens, Caves Beach Rd, Jervis Bay. Phone for opening times on (02) 4442 1122.



Botanic Art Exhibition

The first 'Art in the Gardens with Friends' exhibition displayed works from 23 of the Botanic Art Groups' members and included works in watercolour, oil, graphite, and silkscreen. All the works were images of Australian native plants, and over 90 different species were represented.

The exhibition was opened on Monday 3 March by Annette Ellis, MP for Canberra. Anne Duncan, Director of ANBG, paid tribute in her remarks to an employee of the Gardens, Carolyn Parsons, who played a pivotal role in establishing the botanical art groups. The exhibition ran from Tuesday 4 to Monday 24 March in the Visitor Centre

With the primary aim of the exhibition being to provide another opportunity for the public to see the beauty and diversity of our Australian plants, it was very encouraging

to have more than 1000 visitors through the exhibition. Their numbers and their interest and positive reactions were very rewarding. Of the 54 works for sale 30 were sold, as were more than 300 cards showing various works of the artists. A 10 per cent commission on all works sold was donated to the Friends.

The exhibition committee is grateful to the Friends Council and members of the ANBG administration whose generous assistance made the exhibition possible.

With the success of this first exhibition, it has been suggested that 'Art in the Gardens with Friends' might become an annual event.



Opening of Exhibition in Visitor Centre. (from left) Alan Munns, President of Friends of ANBG, Annette Ellis, MP for Canberra, and Anne Duncan, Director ANBG. Above: *Alogyne hueglinii*, watercolour by Helen Hinton.

Photo by Barry Brown

Growing Friends

Loris Howes



Photo by Murray Fagg

Following a successful May plant sale which raised \$4,300, Growing Friends are now turning their attention to a spring event. With the new water tank currently supplying all our watering needs, fingers are crossed for enough further rain to maintain this much enjoyed watering independence.

Barring any extreme climatic events, we can expect the Growing Friends' spring sale to provide some new and

interesting offerings, including *Melaleuca* 'Seafoam' and *Philotheca* 'Poorinda' (formerly *Eriostemon* 'Poorinda').

Melaleuca 'Seafoam'

Melaleuca 'Seafoam' is a small to medium shrub with dense aromatic foliage and a mass of foamy white flowers in summer. There is a fine specimen in the Gardens at the bottom of the lawn below the café, near the pond.

Philotheca 'Poorinda'

Philotheca 'Poorinda' is probably a cross between a large leaved form of *P. myoporoides* and a pink form of *P. verrucosa*. It is drought and frost tolerant and grows to around 1.5 m tall and 0.8 m across. Flowering occurs from spring to summer with the bright pink buds opening to white with a pale pink tinge.



Photo by L.Hodge

Watching Bower Birds

A diary by Doreen Wilson



Photo by James Rolevink ©

I first knew they had come back to my Rivett garden when I found the blue plastic bits and pieces in the gardens surrounding the bird bath.

These pieces were from cut soft plastic seedling containers I had prepared last year and I had the feeling I was being told, 'Here we are again—more blue presents please!' I complied and out went cut rings from bottles, straws, etc. all blue of course. Everything disappeared!

The bower is not in my garden yet, but with the growth of all my plantings I hope this will be an event of the future. In past years (it's too early this year) I have found all my peas and other tender greens have been thoroughly grazed. They also love the lovely soft chick weed which I have in plenty.

The bird bath is in good view of my kitchen window so I spend a long time washing dishes. The long bathing sessions amaze me—on these cold days!

Some other plants with blue green leaves attract the birds—I find the soft tips of a *Cistus* plucked and often brought to the bird bath and dropped into the water. Other leaves are placed in the water as well.

Another day in June

Well—the peas have been found and the two plants not under the wire frame have been trashed—well, actually, eaten! I won't spread snail pellets around at this time of year, because I use the blue ones which have antidote through the Vet. But I am not sure if the bower bird is attracted to them.

The bird bath is south of the window so the low winter sun is just right to illuminate the birds' colourings to the greatest degree, both the juvenile/female and the male bird, in all his wonderful blue-black, and the eyes!

June 27th

I've just had five green and one full-coloured male drinking at the water bowls and grazing on my nice green uncut patch of grass—what a sight!

The male went missing for a few days, as he does, so the blue bits and pieces lay untouched, then look out the window and the garden is cleared once again. The frosty mornings they have to work hard for their water, taking little sips from the edge of the bowl. It's surprising how they know exactly where there are little containers dotted through the garden and after rain they are all full and the birds fly straight off to see if they may be ice free.

Damn! Just saw 'his nibs' pulling a yellow name tag out of a pot plant!

You won't believe this! Thought I had finished writing for the day, went back to the window for a last check—a few green birds grazing, 'his nibs' drinking from a bailer shell and lo-and-behold, a second male appears and joins the troupe. Male One did disappear into a leafy shrub at that stage. Later, 3 pm, a blue-skied wonderful winter day, 11°C, as Canberra does, I'm at the clothes line and from the Photinias towering beside me (in my neighbour's yard) bird imitations and whirring and chirring continue as I softly call, 'bower bird, bower bird', hoping they will get used to me in my yard and know I'm a 'goody'.

July 6th

Things have been going along as usual, visits to the 'drinking holes', grazing on the grass, eating all the tops off my very young carrot seedlings and then I heard a sound yesterday that I had heard last winter—the sound of a cat me-ow! I actually went looking for the cat, last year, to send it on its way, realising then it was the bower bird!

Later on. The two males are having a lovely time showing off to each other, just a metre apart. There is much dancing and chirring.

July 10th

I made a very sad discovery this morning. A green bird drowned in one of the bins I use to catch water, then use on the garden. I immediately fashioned a wire cover for the bins, wrapped the bird in paper and a plastic bag and popped it into the freezer. The CSIRO Wildlife section will be collecting the bird; using the 'freeze dry' method will preserve our little friend for display and research.

The bird was collected this afternoon and CSIRO were pleased that they would have a bird that was intact, as mostly they receive birds hit by vehicles or flown into windows and can be quite badly damaged.

July 23rd

Lots of rain last weekend and some dull weather since has kept the bower birds pretty much to the Photinia hedge. They are not silent. There is much practice by the males, both adult and young, at sounds and bobbing and weaving.

I keep being reminded of things eaten in past years that are being tackled again. *Lampranthus* (pig-face—but it was *Mesembryanthemum* when they ate it in previous years)

has all its tips nipped off. Currawongs also eat these and other succulents.

July 30th

I was about to write that there was only one blue-black male around these days but just now at 4 pm there are three! They are grazing on the grass and bathing. One selected a dead leaf and approached the others in turn but they hopped away in turn, not really appreciating his advances. I have looked over the fence and under the Photinias there is a heap of small fine twigs, many are from my tea tree (*Leptospermum*) and I have been watching the birds selecting and taking these off for some time. There is no sign of a bower, but this may have been one, or an attempt, now demolished.

It is now September...

...and it has come with a hot dry rush. There has not been a sighting now for a couple of weeks—I think they have gone, considering the weather. The end of September and this will be the last entry—the birds have flown!

Bush birds no. 16

CJ Dennis

C.J. Dennis, writing as 'DEN', published this poem in *The Herald*, 7 November 1932.

'Spare a bloom of blue, lady,
To adorn a bower.
A violet will do, lady—
Any azure flower.
Since we hold a dance to-day,
We would make our ball-room gay,
Where the scented grasses sway,
And the tall trees tower.
Beautiful but shy, lady
Yesterday we came
Dropping from the sky, lady,
Flecks of golden flame—
Golden flame and royal blue—
We have come to beg of you
Any scrap of heaven's hue
For our dancing game.
Spare us but a leaf, lady,
If our suit be spurned
We shall play the thief, lady,
When your back is turned;
Ravishing your garden plot
Of the choicest you have got—
Pansie or forget-me-not—
Counting it well earned.
Then, if some rare chance, lady,
Later should befall,
And you gain a glance, lady,
At our dancing hall,
You will find your blossoms there
'Mid our decoration where,
With a proud, patrician air,
We hold the Bushland Ball'.



Photo by Helen Fallow ©

Satin Bower Birds

Nell Pain

There are seven different bower birds in Australia but only one, the Satin Bowerbird, *Ptilonorhynchus violaceus*, is found in the ACT. The 1992 Bird Atlas of the ACT states that the birds are common in the wet forests of the ranges but that a small number are recorded in Weston Creek between April and November each year. Since that date the birds have been moving east into the suburbs and are now regularly sighted in Woden, in Weston Park, on Black Mountain peninsular and in the Botanic Gardens during autumn, winter and spring in the non-breeding season. No nests have been recorded in Canberra, but simple bowers occur.

The Satin Bowerbird is about 27 to 33 cm long. The females and immature males are olive grey-green with rufous brown wings and tail. Paler under parts have a brown scaly pattern. It isn't until the sixth to seventh year that the male assumes its beautiful glossy blue-black feathers. The mature male has a bluish white bill and all birds have violet blue eyes.

The display bower of the male is a tunnel-like structure with a platform of twigs on the ground into which are pushed thin sticks and pieces of grass to form two parallel arched walls which the bird 'paints' inside with chewed-up charcoal or similar material, moistened with saliva. The entrance is decorated with a variety of blue items: flowers, feathers, berries, foliage and, if near to human habitation, drinking straws, clothes pegs, pens, bottle-tops.

The nest is a saucer of sticks lined with leaves usually placed in a fork of a tree high in the canopy or in thick mistletoe. The male plays no part in this nest building or other nest duties, as making and re-making, decorating and re-decorating his bower is a full time job!

The birds forage from treetops to ground, eating fruits, leaves and insects, and in suburbia, garden seedlings, orchard fruit and the contents of compost receptacles. The flight is characteristic with strong deep wing beats. There are a variety of calls but most are loud and quite harsh and easy to distinguish from the calls of other birds.

ANBG Alpine Collecting 2008

Joe McAuliffe, Nursery and Collections Manager



Above: Heather Sweet, Anne Phillips and Joe McAuliffe find one of the rarest grasses in Australia, *Austrodanthonia pumila*. Joe balanced the camera on some rocks. Below: *Ranunculus productus*. More photos on opposite page. Photos by Joe McAuliffe.

Recognition of climate change science and its perceived impacts on alpine ecology and species compositions brought Roger Good, (who has had a long association with Kosciuszko National Park) and the ANBG together, initially to build conservation seed lots and develop a scientific program to increase species specific knowledge.

As a result of discussions with Roger, the ANBG targeted species from the following areas within Kosciuszko National Park:

- feldmarks including scree, snow-patch, windswept and *Epacris/Chionohebe* alliances
- short alpine herbfields
- fens, streamside soaks, swamp margins and bogs at altitude greater than 1000 m
- endemic flora.

The ANBG has targeted these areas with short and long term aims to:

- minimise the effects on soil seed banks by adopting a seed collection protocol that prevents the collection of more than about five per cent of seed set from any individual plant or population
- obtain seed lots of c3000 viable seed for use by the scientific community to develop collaborative partnerships
- develop a resource for seed germination trials
- develop a resource for seed storage life
- advance knowledge in the cultivation of Australian alpine species
- further develop known localities of Kosciuszko alpine species
- obtain herbarium specimens for collections made

- enable the development of a mobile display which would aim to educate the public on the threats that face high altitude regions in Australia.

This year there was an intensive collecting schedule from February to April, involving weekly trips of two to three days. The majority of the trips were led by Joe McAuliffe and Sarah Fethers with various staff invited to help out.

From 2006 to date, seed and a herbarium specimens from about 90 species have been collected, with several species approaching the collection target figure of 3,000 viable seed. ANBG is currently processing the seed from the 2008 season and the results of this will be available in the near future. However, the restriction of taking only five per cent of seed set will lengthen the time required to obtain the collecting target, effectively requiring a collection period of several years. In addition to imposed restrictions, natural fluctuations in seed predation and climatic influences on seed set have significantly affected collection efforts during the past collection time frame, eg in the 2007 collecting season, insect predation reduced the collection of Asteraceae species by nearly 100 per cent.



Garden Shorts

From the Director

Climate change has made us all stop and think not only about threats but about opportunities. Australia is considering the future more carefully than at many times in the past. I notice that one of our nation's aspirations voiced at the recent 2020 summit is to be the world's leading green and sustainable economy. In the finer detail of the summit it was also acknowledged that stakeholder engagement, capacity building and education, including with regional Australians, are needed to support the significant behavioural change required to achieve this. Maybe I'm just a botanic gardens nut, but I read that as a significant opportunity for botanic gardens. We know about communicating and educating and we have regional networks—we can communicate with gardeners all over Australia and the BGANZ network of 150 plus regional gardens can connect us to regional communities. We can tell stories about plants, climate change and sustainability till the cows come home...

As most of you would be aware the ANBG is also about to carefully consider its future - the Plan of Management review will be getting underway in the next month or so. The Plan review will have a number of components and stages, but there is one we have already started to think about: the review of the Living Collection. Given the size and complexity of the collection – how do we assess it? What should we consider? We have engaged a consultant,



Mark Richardson, to help us work out how we might do it as efficiently and effectively as possible. This is at the very early stages and Mark has just had preliminary sessions with staff and a group of Friends to talk about the reasons for reviewing the collection and identifying outcomes that would be useful.

There are many reasons to do the collection review.... most notably we need to understand the value of and purpose for the plants that we have now, as a base for planning for the future. We need to evaluate them in terms of water efficiency, as well as importance for conservation (eg climate change and threatened species), education, horticultural interest and landscape. One of the recurring and most significant themes in discussions so far has been that we need to have the plants which will tell the stories we want to tell for the future. So a key question for the strategic planning process is looking like being—what stories do we want to tell?

Going back to where I started, botanic gardens could have a key role in telling a national story of sustainability which will reach the millions of Australians who visit our gardens. That's an exciting prospect.

Anne Duncan



Spring fantasy

Floriade will be cast into the shade this spring by a wonderful display of Australian natives planned by the gardeners at the ANBG.

Buoyed by the success of plantings of Sturt's Desert Pea (*Swainsona formosa*) last year, the horticultural staff have propagated more, and will be planting them out in pots to brighten up areas around the Visitor Centre, Banks Walk and the café.

These iconic red and black beauties will be supported by massed displays of various Asteraceae species, including *Brachysomes*, *Craspedias*, *Rhod-anthes* and *Schoenias*. These will be planted further along the main path and around the rock garden.

Planting out will commence in August and it is anticipated that the flowers will be in full bloom during September/October.

The Guides will be offering special Spring Flower Walks during Floriade, with morning tea, for \$8.00 (includes a small donation to the Friends). See 'What's On' for details.

Wattle week



Did you know that Golden Wattle (*Acacia pycnantha*) was officially proclaimed as Australia's National Floral Emblem as recently as 1988, and that the ceremony was conducted on 1 September in the ANBG, where the then Minister for Home Affairs, the Hon. Robert Ray, made the formal announcement. So don't forget Wattle week and come on a guided walk to see many wattles in bloom. (See What's On.)



Left: Anne Phillips and Heather Sweet on top of the world. Above: Getting a lift to the top of Mt Northcote in a National Parks helicopter. Photos by Joe McAuliffe.

Friends Briefs

Flowers and fog



For many years the Friends have funded projects in the Gardens: the fogging system in the Rainforest Gully; the cascades by the Visitor Centre; motorised wheelchairs for disabled visitors. Friends' Council has recently agreed to fund two new projects:

- \$7000 for a display to interpret Australia's spring-flowering flora, coinciding with Floriade. This will be the trial of a possible annual spring display
- \$15,000 for an extension of the fogging system in the Tasmanian Rainforest below the café bridge to the Victorian sections above the bridge. It will provide a foggy experience for visitors along the lower boardwalk and will efficiently raise humidity and reduce the amount of water needed to irrigate the area.

The Friends also provide financial support for the Gardens outside this formal annual allocation, for example, the Botanical Resource Centre, which opened on 15 May. See page 3.

We also support the Gardens through the tax-deductible Public Fund, which funded the Rock Garden Shelter in 2007. The Management Committee of the Public Fund is seeking ideas from Gardens' management about another suitable project.

Arboretum Friends

The Canberra International Arboretum and Gardens (CIAG), the responsibility of the ACT government, is on a 250 ha site close to Lake Burley Griffin and on the site Walter Burley Griffin identified for an international arboretum in 1915. A proposal for *100 Forests 100 Gardens* won the competition in 2005; the forests will concentrate on trees which are threatened in the wild, or rare or symbolic and which can survive on the site, while the gardens will feature a Bonsai Garden.

In addition to the two mature forests of *Quercus suber* (Cork Oak) and *Cedrus deodara* (Himalayan Cedar) already on the site, nine new forests have been or are in the process of being planted. These include *Wollemia nobilis* (Wollemi Pine), over 2000 *Eucalyptus benthamii* (Camden White Gum) and 300 *Quercus macrocarpa* (Burr Oak).



Cork oak plantation

Not content with this huge amount of work, the plan is to plant 10 new forests per year for the next four years, including Monkey Puzzle Trees, Chinese Tulip Trees and Yoshima Cherries.

At the moment the site is closed to the public to allow for grading of public access roads, and the building of a 42 mega litre dam to collect run-off from the site which can be used to water the trees if needed.

The Friends of the CIAG have invited the Friends of the ANBG to visit the site later in the year, once the earthworks are finished. We will keep you posted.

For a list of species or to enquire about joining, visit: www.cmd.act.gov.au/arboretum.

Our Nation's Garden



Madeleine Bond, St Clare's College (Year 10). First, High School Colour section 2007 competition.

The Friends' annual photographic competition for high school and college students of the ACT and Queanbeyan region is on again this year. Information and entry forms have been sent to all local schools and colleges and details are on the Friends' website. Photos must be taken in the Gardens; cash prizes are awarded in six categories; entries close on 26 September, and awards will be presented on Saturday 18 October. For the first time this year, all entries will hang in the Visitor Centre Gallery for at least three weeks, from the date of the award presentation. Award-winning entries from previous competitions can be found on the Friends' website at: www.anbg.gov.au/friends.

Orange Friends Conference

Orange was the site for The Friends of Botanic Gardens Conference, 'Passion Bears Fruit', in April. The highlight was the interaction with other, like-minded people from some 47 gardens.

'Volunteers are not paid because they are worthless but priceless', said the key note speaker, Steve Corbett of the Centennial Park Authority. Other speakers extolled volunteers as communicators of the contemporary role of botanic gardens. 'Love your product with passion and you will transmit it to others'.

The next conference is at the Australian Inland Botanic Gardens near Mildura in autumn 2010.

Pat and Warwick Wright thank the Friends for the support received as delegates to the Friends Conference.