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Public Officer David Coutts
General Committee Don Beer

John Connolly Louise Muir Andy Rawlinson Warwick Wright

Activities Coordinator Warwick Wright

Newsletter Committee Margaret Clarke

Barbara Podger Anne Rawson

Growing Friends Kath Holtzapffel

6281 5817

6281 5817

Helen Hinton

hrh@netspeed.com.au
Director, ANBG Anne Duncan

FriendsofANBG,GPOBox1777

Canberra ACT 2601 Australia
Telephone: (02) 6250 9548 (messages)
Internet: www.friendsANBG.org.au

Email addresses:

Botanic Art Groups

info@friendsANBG.org.au membership@friendsANBG.org.au newsletter@friendsANBG.org.au

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.

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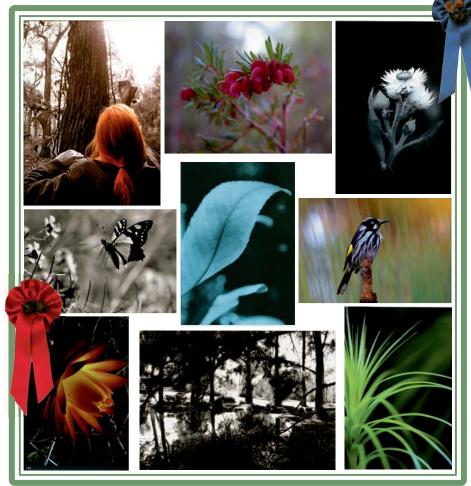
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Cover: Strange musical rituals on the Eucalypt Lawn at summer concerts in the Australian National Botanic Gardens. Photo by Brian McLeay.

Photo Competition 2008

Prize Winning Entries



Top left to right: Amy Goodall 'The Wild Ranga' Canberra Girls' Grammar School (First Open People in the Gardens); Isabella Baladassi 'Flower berries' St Clare's College (First High School Colour); Samantha Harrison 'Bloom' Canberra College (First College Black& White).

Second row left to right: Tobias Hayashi 'McLeay's Swallowtail' Orana School (Second College Black and White); Alex Campbell untitled Canberra High School (First Open Digital/Photographic Effect); Tobias Hayashi 'New Holland Honey-eater' Orana School (First Colleges Colour).

Bottom row left to right: Madeleine Tranter 'Bush flame' Hawker College (Equal second College Colour); Renee Maynard 'Reflections' Canberra High School (First High School Black & White); Samantha Harrison 'Grass' Canberra College (Equal second College Colour).

IN THIS ISSUE

Photo competition 2008	2
Meeting the challeges: AGM report	3&6
Bernard Fennessy 'What's in a name?' Competition	4
What's on at the GardensLetters to the editors	
Landscapes in the GardensFrom the Bookshop	
Garden Shorts	11
Friends Briefs	12

Meeting the Challenges

Report of the 20th AGM of Friends of ANBG

Margaret Clarke

Following are edited versions of the reports by Alan Munns, President of the Friends and Anne Duncan, Director ANBG.

The campaign to demonstrate to government the very high level of public support for the Botanic Gardens and the need for increased funding continued in 2008. Members of Council's Executive met with the Minister's environment advisor and with senior officers of Parks Australia. In October 130 people attended a public forum on The Future of the Australian National Botanic Gardens convened by Senator Kate Lundy with the support of the Friends and the Australian Native Plant Society, Canberra Region (ANPS). In November Council and ANPS members met with the Minister and Senator Lundy to inform the Minister of the forum outcomes. The main points discussed were the Gardens' need for increased resources, reinstatement of an expert advisory body and greater statutory independence for the Gardens. There will be further talks with Senator Lundy about a proposed second forum, focusing on the role of the ANBG as a national institution and in tourism and education.



Crowds enjoy a summer concert on the Eucalypt Lawn. Photo by John Connolly

We were delighted that the Gardens' management extended the concert season in 2009 to eight concerts after a shorter season in 2008. The latest season was highly successful with many audiences over 2,000 and, on one night, over 4,000. Over \$14,000 was raised by the Friends which will be directed to financial support of the Gardens. While the financial result is very pleasing, our greatest satisfaction is in attracting such large numbers of people to the Gardens.

New Initiatives

The Friends agreed to fund a number of new projects in the Gardens in 2008, following a couple of years when there were limited opportunities to provide financial support. They are:



- Spring flower display now completed—\$7,000
- Lichen website that will complement the Bryophyte website which the Friends also funded —\$15,000
- Extension of the Rainforest Gully fogging system that Council has agreed to but work has not yet commenced—\$15,000.

Friends also supported an application to the Australian Research Council for funding of \$110,000 a year for three years to enable the Gardens, in partnership with the ANU and the Friends, to carry out scientific research into how Australian alpine plant species can be expected to respond to predicted climate change. If successful, the Friends will provide \$22,000 a year for three years, plus volunteer support. The ANBG will provide significant inkind support.

Other projects given in-principle support are signage for plants featured in *In Flower this Week*, and production of a souvenir brochure and DVD on the Gardens.

On-going Activities

Lunchtime talks: Warwick Wright and his team put together another wonderful program, with capacity audiences for drawcard speakers Senator Bob Brown and Mark Carmody.

Bernard Fennessy 'What's in a Name?' Award 2008: The award was presented to John Turnbull by Dr Brian Cooke at the Bernard Fennessy Memorial Lecture.

The Botanic Art Groups' first exhibition of work was a great success with a commission on sales going to the Friends.

The Botanical Resource Centre was opened by our Patron, Mrs Marlena Jeffery. Some 20 Friends have trained as facilitators to help members of the public identify plants.

Growing Friends held two very successful plant sales raising nearly \$10,000.

Guides: A highly successful training course for 18 new guides was run by Don Beer and existing guides. We continued on Page 6

BERNARD FENNESSY 'WHAT'S IN A NAME?' COMPETITION Time to enter for 2009 competition!

Entries are now invited for this year's 'What's in a Name?' Award. Established in 2006, this annual \$500 award commemorates the late Bernard Fennessy's love of the Gardens, his enthusiastic service as a volunteer, and the long-running series of articles he wrote for this *Newsletter*, entitled, 'What's in a Name?'. See the Friends website at: www.friendsANBG.org.au/bernardindex.html for all of Bernard's articles. Winners and some entrants from 2007 and 2008 have been published in the *Newsletter* and are listed on the website.

Some of the things you need to know before you enter:

Entries should describe a living plant within the ANBG, should be in the style of Bernard's articles, be no more than 800 words long and, if possible, be accompanied by a photo. Entrants should be a member of Friends of ANBG and each entrant may enter only once. Closing date: **23 May 2009.** The award of \$500 for the best entry will be presented at the Third Bernard Fennessy Memorial Lecture at 12.30pm, 13 August 2009, in the ANBG Theatrette.

If possible, entries should be submitted by email to: info@friendsANBG.org.au. If that is not possible, then by mail to 'What's in a Name?' Award, Friends of the ANBG, GPO Box 1777, Canberra ACT 2601.

All the things you need to know are on the Friends website at www.friendsANBG.org.au and in hard copy in the Friends lounge. Queries to: Doreen Bowdery at doreen.bowdery@anu.edu.au

TWO ENTRIES ON EDIBLE PLANTS FROM PREVIOUS YEARS

Tasmannia insipida

Norm Morrison

Plant names are a bit like Russian babushka dolls, each layer of meaning uncovers another layer, which in turn leads you to the next. A case in point is pepper bush, *Tasmannia insipida*. *Insipida* is the species name and simply means the plant is insipid in comparison to other peppery members of the genus.

The genus is named after Abel Janszoon Tasman, a Dutch sea-captain based in Batavia and serving in the Dutch East India Company. In 1642-43 Tasman was sent on the first of two trips to explore and map the unknown sections of the Great South Land with two ships, the *Zeehaen* and the *Heemskerck*. He cruised down the west coast of Australia then across the Bight to discover Tasmania, which he called Van Diemen's Land after the Governor of Batavia, Anthony Van Diemen. He then went east to discover New Zealand, Tonga and Fiji.

While his voyages were important feats of navigation and mapping, his inability to discover new sources of spices or precious metals convinced the company to direct its energies elsewhere and apparently Tasman's maps were suppressed by the Dutch government so that other countries wouldn't be tempted to explore waters considered a Dutch preserve. Tasman's achievements were appreciated by later explorers however and his name is commemorated by the Tasman Sea, Tasman Bay, Tasman Mountains, the Abel Tasman National Park in New Zealand, and by Tasmania and *Tasmannia*.



Tasmannia belongs in the Winteraceae family. The family is an ancient one: its fossil record goes back to the early Cretaceous, about 125 million years ago. This is right back at the very origin of flowering plants. The first Winteraceae fossils appear in what is now Brazil and on the north-east coast of north Africa. As climates changed and continents drifted so the Winteraceae spread to the regions they now occupy.

Compared to other woody plants, the plants in Winteraceae have several quite basic characters. The veins in the leaves don't fall into any recognisable pattern and the flowers are quite unspecialised, the number of floral parts can vary within a species. For example, in *T. lanceolata* there can be 15 to 28 stamens in the male flower, one or two carpels in the female flower and the flowers may have three to nine petals. There are no vessels in the wood; water transport is carried out by relatively unspecialised cells. All these characters are believed by some to reflect this family's early appearance in the evolution of flowering



plants. When you look at them you could be seeing what the first flowering plants on the planet looked like.

Finally the derivation of the family name is a tale worth telling. When Sir Francis Drake sailed round the world in 1577-80 there were five ships in his fleet. Storms split the fleet up in the Pacific and the *Elizabeth* under Captain Winter headed back to England. He landed on the southern coast of South America seeking herbs to cure sickness on board. The plant they found, Winter's bark, became widely used as a cure for scurvy and was later named *Drimys winteri* by Johann and Georg Forster. John Lindley proposed the family name in honour of this

Elizabethan sea captain who'd introduced the plant to Europe over 200 years earlier. All the species we now consider to belong to the genus *Tasmannia* were originally placed in the genus *Drimys*.

In Australia we have eight species of Tasmannia and the Australian National Botanic Gardens has no less than seven of them listed in the living collection. There are several Tasmannia insipida specimens in the Gardens, mainly in the rainforest gully. Two healthy bushes can be seen on the edge of section 125, twenty meters above Hudson's cafe. It is an attractive shrub and in favourable conditions it can grow to 6 m tall. The branches can be a reddish colour and the leaves are lance-shaped and glossy green. The flowers are white and have an irregular ball-shape with two to four petals. While it may lack the pungency of other species, it is still a peppery plant and Aboriginal people have been recorded as using it to stuff the body cavity of roasting game to flavour the meat as well as eating the fruit. It would almost certainly have been used by early settlers along the eastern seaboard as the seeds are hot and peppery and would make an acceptable pepper substitute. It is found in rainforest communities in the coastal ranges from Moruya in south New South Wales to the north coast of Queensland.

Billardiera scandens

June Foster

Billardiera scandens, climbing Common Apple Berry Showy pendulous flowers, tubular, yellow-green Ripened fallen fruit tasty, known as 'Dumplings' Children's semi-sweet bush tucker cuisine.

Billardiera (pronounced bill-ard-ee-EAR-a) is a small genus of about 25 species endemic to Australia, mostly occurring in the south-west of Western Australia. Many, with their light climbing habit and showy, interesting flowers are of horticultural use. The fruit is either a capsule or a berry. Species bearing edible berries, known as Apple Berries, are widespread in the eastern and southern states.

Billardieras can be found with other members of the sticky seeded Pittosporaceae (from Greek words, *pitta*, 'pitch' and *spora*, 'seed') family in Section 96 at the ANBG.

Billardiera scandens (from the Latin scandere, 'to climb') is a shrubby, slender twining Australian native climber widely distributed in eucalypt forest woodland and heath lands on sandy soils and is a popular plant in English and Californian gardens. Despite its delicate appearance above the ground, the roots of *B. scandens* are thick and fleshy. They will survive adverse conditions and the shoots will regenerate after fire and drought.

It is however the edible fruits which give B.scandens its



particular charm. The sausage-shaped fruits have a delightful apple-like, astringent, perhaps kiwi fruit flavour when fully ripe. Children of the early arrivals at Port Jackson gave them the common name of 'Dumplings'. The botanist Joseph Maiden recorded in 1898 that Aborigines also ate the berries when fully ripened and roasted the unripe ones. Not sur-

prisingly the berries are also a favourite food of our wild bush creatures, when fully ripe and fallen to the ground.

Both generic and specific names for *B. scandens* were given by Sir James Edward Smith, (1759-1828), founder of the Linnean Society in 1788. The French botanist, Jacques-Julien Houtou de La Billardiere after whom the genus is named was one of the naturalists on the D'Entrecasteaux exploring expedition searching for La Perouse. The French word 'billard' means 'billiards' and his surname refers to that game...the actual saloon or the female owner of the property.

Attractive Apple Berries, Tasty Dumplings, Games of Billiards, Upward Climbers, Intrepid Explorers...What's in a Name?...*B. scandens*. A delightful little scrambling plant deserving of a place in our native garden.

This article has been edited for space reasons.

Meeting the Challenges (cont from page 3)

sincerely thank and congratulate our guides for their enthusiasm and commitment. No other Australian botanic garden provides anything near their frequency of guided walks.

Membership: We now have 1520 members, a significant increase from last year.

Friends' Photo Competition: Entries for the 2008 competition for schools and colleges were again of a very high standard. The competition is seen as a way to attract young people to the Gardens as well as developing their artistic skills.



Anne Phillips shows off the seedlings for the spring flowering display to Don Beer. Photo by Barbara Podger

Social Events: In addition to the Summer Concerts, Louise Muir's committee ran an impressive program including the Twilight Dinner, Breakfast with the Birds, a visit to Government House hosted by our Patron, Mrs Marlena Jeffery, and Graze in the Gardens.

Website: Shirley McKeown made significant design improvements to the website which was moved onto a commercial server.

Newsletter: The quality of production of the *Newsletter* has been further improved. The editors would welcome an additional person with desktop publishing skills to provide back up. If anyone can help, please contact Barbara Podger.

A Time to Say Thank You

Alan concluded by thanking all members of Council and the many other Friends who had provided help, counsel, friendship and support during the last 12 months. 'Countless hours of volunteer time are provided in support of the Gardens by Friends who are committed to supporting and promoting this institution as one of the world's major botanic gardens and communicating their enthusiasm for Australian plants. And, as always, the dedication, professionalism and enthusiasm of Gardens' staff is a constant support for the Friends.'

The full President's Report is on the Friends website at : www.friendsANBG.org.au/presreport09.pdf.

Director's Report

Anne Duncan reported that 2008 had been a good year for the Gardens. She recognized that the ANBG had suffered a decade of decline but believed this had now been arrested. While international experience suggested a timeframe of 10 to 15 years was generally needed to completely turn a botanical garden around, she believed all the elements were coming into place to achieve this result. Additional funding from Parks Australia in 2008 and a strong commitment by staff were major factors supporting the start of the turnaround. She hoped the management review would deliver a visionary set of goals to take the Gardens into the next decade and encouraged all Friends to contribute to the consultation process. Anne indicated submissions to the 'Have Your Say' part of the process (which are used to prepare the draft plan) could be accepted up to the end of March 2009.

A major strategic achievement for 2008 was the release of *National Strategy and Action Plan for the Role of Australia's Botanic Gardens in Adapting to Climate Change* and its endorsement by federal, state and territory environment ministers. ANBG was the key driver in developing the strategy, which has put all botanic gardens on the map as part of the conservation agendas of governments, recognising both current activities and huge potential for gardens to contribute to climate change response.

Good progress has also been made in securing a better water supply for the Gardens. Anne reported that the designs were almost complete for the separation of potable/non-potable water delivery. A water entitlement has been purchased and positive negotiations on the supply source are in progress.

Life Membership



Mrs Marlena Jeffery presents Pauline Wicksteed with her Life Membership Award . Photo by Anne Rawson

Wicksteed Pauline awarded life membership for her active and enthusiastic support of the Friends since their inception in 1990. Pauline has served in many ways including as President and Vice President of Friends' Council, a guide (joining in the first intake), and facilitator with the Botanical Resource Centre. She is also Secretary of the Management Committee of the Friends Public Fund.

What's on at the Gardens



April - August

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 Theatrette.

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.

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.

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

APRIL

Second Botanic Art Exhibition



Wednesday 1 – Tuesday 14 April including over Easter 9.30 am to 4.30 pm Visitor Centre Gallery

The ANBG Friends Botanic Art Groups have much pleasure in announcing their second Art Exhibition, featuring Australian native flora. The exhibition will be opened by the Friends' patron, Mrs Marlena Jeffery. On display will also be a small collection of hand made Australian flora silver jewellery by Anne Phillips (these pieces will not be for sale). The Exhibition will feature a number of works by guest artist Helen Fitzgerald. Cards featuring some of the works will also be on sale.

Thursday 2 April at 12:30 pm 'Growing Native Trees' Graham Williams

Radio garden presenter and head gardener of Lanyon station, Graham Williams, gives us some practical pointers in the growing of native trees, their soil requirements and on-going care.

Thursday 9 April at 12:30 pm 'Volcanic Hotspots and Botanic Hotspots'

Morrie Duggan

Retired scientist and now active farmer, Morrie Duggan, provides us with a look at 'Volcanic Hotspots'; the nature and processes of formation of some hotspot-related Cainozoic volcanic centres of eastern Australia; their special habitats and some of the plants that occupy these habitats.

Thursday 16 April at 12:30 pm 'Borneo - Jungle and Mountain' David Young

David Young, former patron of the Friends, gives us a glimpse of Borneo plants, many of which we recognise as Australian relatives. As well, incredibly exotic plants like the orchids and pitcher plants in the botanical diversity on Mount Kinabalu have to be seen in one's lifetime.

Saturday 18 April 8.30 am to 11 am Native plant sale by the Growing Friends of the Australian National Botanic Gardens

Get your unique native garden plants at this sale. ANBG Crosbie Morrison Carpark. See list of plants for sale on the Friends website in April.

Thursday 23 April at 12:30 pm 'The National Reserve System: New Directions and Challenges' Peter Taylor

The National Reserve System (NRS) is the nation's natural safety net against the environmental challenges of climate change and increasingly scarce water resources. This overview of the NRS concludes with an outline of some of the challenges we face in establishing the NRS.

Thursday 30 April at 12:30 pm 'Is There Anything More to Hate about the Gardens?' Gary Watson

Canberra educator, Gary Watson, makes us concentrate on what we are doing to attract visitors and provide a memorable experience during their visit. Communicating science and assisting tourism can go hand in hand – Gary challenges our thinking.

Learn all about fungi with Heino Lepp



A series of ten lectures, held in the Theatrette on Thursdays at 2.30 pm, repeated the following Sunday at 11am

Thur 30 April & Sun 3 May 1. The Basics

What is a Mushroom? Hyphae and mycelium, the out-of-sight networks.

Thur 7 May & Sun 10 May 2. Spore release and dispersal How spores are released, either passively or in an explosion.

Thur 14 May & Sun 17 May 3. Some aspects of fungal ecology Learn how fungi interact with plants, animals and other fungi.

Thur 21 May & Sun 24 May 4. Some aspects of fungal ecology continued

Thur 28 May & Sun 31 May 5. Fungi and humans

A look at some of the economic, social and cultural impacts of fungi.

Thur 4 June & Sun 7 June 6. Mycogeography and knowledge of Australian fungi

Where and why do we find fungi? What is known about Australian fungi?

Thur 11 June & Sun 14 June 7. Some history, mostly 1500 to 1850

A light hearted look at the development and understanding of fungi basics.

Thur 18 June & Sun 21 June 8. Reproduction and survival Sexual and asexual life cycles, with some examples.

Thur 25 June & Sun 28 June 9. Reproduction and survival continued

Thur 2 July & Sun 5 July 10. Structure, classification and identification

What is a fungus? The full and scary details.

MAY

Thursday 7 May at 12:30 pm 'A Walk Around the Lake' Shirley Pipitone

Often we overlook the obvious. Shirley Pipitone takes us for a stroll, looking at our environment afresh. What was once seen as mundane, a trained scientist brings to exciting realism and many things we may have previously pondered start to make sense.

Thursday 14 May at 12:30 pm 'Geology of the ACT' Douglas Finlayson

Check Friends website for details



Thursday 21 May at 12:30 pm 'Recovery of nature-based attractions after the 2003 Canberra fires'

Kate Armstrong

The 2003 bush fires had a significant impact on three natural attractions, Tidbinbilla Nature Reserve, Namadgi NP and the forest reserves. Within the context of ACT tourism, Kate Armstrong examines the short, medium and long-term recovery of these attractions; and how these stories have contributed to the development of a Tourism Industry Crisis and Disaster Recovery Framework with implications and potential applications for other fireprone countries.

Sunday 24 May at 2:00 pm 'Gardens of Paradise' Warwick Forge

Author and tour leader Warwick Forge presents a visual tour of the gardens and landscapes of South America, including those of Roberto Burle Marx and Juan Grimm in Rio de Janeiro, Tersépolis, Buenos Aires and Chile.

Thursday 28 May at 12:30 pm 'Challenging traditions to support biodiversity in Belize' Lucy Sutherland

The sociocultural setting will often influence the conservation work of a botanic garden. This is very evident in Belize, Central America, where the Belize Botanic Gardens has initiated a sustainable agriculture program in an attempt to challenge traditional practices and halt the further loss of Belize's biodiversity. This presentation will examine the grass roots program.

Saturday & Sunday, 30 & 31 May 10am – 12 noon; 1pm – 3pm. Be your own Darwin! ANBG Education Centre

Take a microscopic look at the wonders of plants, create a botanical drawing and make your own plant herbarium specimen. An Australian Science Festival event for all ages.

JUNE

Thursday 4 June at 12:30 pm 'Botanical Illustration – field sketches to the finished product' Helen Fitzgerald

Renowned Canberra wildlife and botanical artist, Helen Fitzgerald, describes the joys and hardships of working in the field and translating the work to paper in both form and colour.



Thur 4 June to Sun 30 August Greening the Silver City Seeds of Bush Regeneration Visitor Centre Gallery

This exhibition tells the story of how the denuded landscape of Broken Hill was repaired by a bush regeneration scheme in the 1930s. It comes to us from the Powerhouse Museum.

Thursday 11 June at 12:30 pm 'Landscape, climate and soils during the Tertiary, and its relevance to the Australian flora' Peter Wellman

Changes in the flora environment during the Tertiary in the Australian region, with an emphasis on the present and past of the south-eastern highlands.

Thursday 18 June at 12:30 pm Judy West

Topic to be advised

Thursday 25 June 2009 at 12:30 pm 'The Weed Risk Assessment System'

Owen Harrod

All plants proposed for importation into Australia are assessed for weed potential before they are permitted entry. This assessment is conducted through Australia's Weed Risk Assessment system, under which plants assessed as likely to become weeds are prohibited entry. This talk aims to cover the background, the mechanics, the outcomes and implications of such assessments.

JULY

Thursday 2 July at 12:30 pm 'Some Trees of the Westbourne Woods'

Richard Hart

Forester Richard Hart talks about both native and introduced conifers that are planted in Westbourne Woods. These plantings, within an arboretum, have provided tree experts from Charles Weston onwards with an indication of their suitability to Canberra.

Sunday 5 – Sunday 12 July NAIDOC Week

Check the ANBG website or contact the Visitor Centre for details of National Aborigines and Islanders Day events closer to the dates.



www.botanicalbookshop.com.au

Friends are offered a 10% discount:

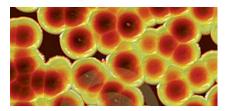
- on purchases over \$10
- on production of your current membership card
- to the person whose name appears on this card
 No discount is given for items marked 'Red Spot Specials'.

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

Thursday 9 July at 12:30 pm 'Preserving our High-country Flora Heritage'

Roger Good

The high country, with great sensitivity to warming global temperatures, presents many problems to both botanists and park managers. Roger Good talks of some of the practical measures already in place to preserve much of the high country flora and the splendid cooperation of many agencies in meeting the developing problem.



Thursday 16 July at 12:30 pm 'Plants: the Inside Story' Brian Gunning

Emeritus Professor Brian Gunning uses microscopes to explore the inner workings of living cells of plants. He will show movies illustrating this marvellous – and remarkably dynamic – hidden world of colour, movement and organisation.

Thursday 23 July at 12:30 pm

'Biosequestration'

Pep Canadel

The reduction of carbon dioxide content of the earth's atmosphere is a present challenge. The use of growing plants and their products may offer some alleviation of the problem. Pep Canadel takes us through some of the issues confronting human endeavours to decrease carbon dioxide levels.

Thursday 30 July at 12:30 pm 'Aboriginal Peoples and the Environment'

Michael Pickering

From an exhaustive case study and many years of experience, Michael Pickering describes the traditional subsistence-settlement patterns of the Garawa people of northern Australia.

AUGUST

Thursday 6 August 2009 at 12:30 pm 'Daisies of the Southern Tablelands' Geoff Robertson



Probably one of the largest group of plants in the southern tablelands; the daisies form a complex and often overlooked family of plants. Geoff Robertson provides us with a glimpse of the many forms of daisies, their distribution and their ecological importance.

Thursday 13 August 2009 at 12:30 pm The Bernard Fennessy Memorial Lecture: 'The Eradication of Rabbits from Phillip Island' Peter Coyne

Following this lecture there will be a short ceremony to award the Bernard Fennessy memorial prize to the winner of the 2009 'What's in a Name?' competition.



Highgrove and Gardens of Scotland

Tue 4-Wed 19 August 2009



Friends of The Sydney Gardens are revisiting Highgrove. Prince Charles' private estate. Our 2009 tour takes in the Scottish capital, with a visit to the Garden of Cosmic Speculation. Highlights include the Alnwick Garden in Northumberland, the Millennium Garden in Norfolk, Beth Chatto's garden in Colchester, Westonbirt Arboretum, Kew Gardens and Wisley. Price \$8990, twin share, land content only. For a detailed itinerary please ring: 02 9231 8182 or email Friends@ rbgsyd.nsw.gov.au Sydney Friends will donate \$100 to ANBG Friends for every member that

joins any of their Tours in 2009.

Thursday 20 August at 12.30 pm 'The Australian National Plant Census and its Interface with ANBG' Bruce Boyes

It is important to know what plants exist in Australia and their distribution over time; identifying naturalised plants and listing synonyms for species; all within regions. The ANBG plays a major role in this continuing assessment and Bruce Boyes brings to us some insights into this recording and potential applications.



Thursday 27 August at 12.30 pm 'A Biblical Garden'
James Haire

Cumin in Isiah 28:25 and Matthew 23:23

Professor James Haire talks about a special garden at the Australian Centre for Christianity and Culture in Barton, within Charles Sturt University. So far, the garden has over half of the 140 plants of the bible. Each plant, many of which we will be familiar with, is labelled with its botanical name, its common name and a Biblical reference. The garden can be viewed on the centre's website at: www.acc-c.org.au/

Botanical Resource Centre

Find out more about plants
Use the herbarium, databases,
microscope, computers and books.
Trained facilitators to help you on
Wednesdays and Sundays 1-4 pm
Located next to the Friends Lounge on
the main path past the café
Open daily 9.30 am to 4.30 pm
tea and coffee in the lounge

Friends' Benefits

Your Membership Card entitles you to the following benefits:

Parking Pass—Display for free parking and please park in the lower levels of the carpark.

Botanical Bookshop—A discount on most items.

Hudsons Café—Loyalty cards, one for meals, one for tea/coffee.

Friends Lounge— in the Ellis Rowan Building, open to members from 9.30 am to 4.30 pm. Relax and enjoy a cup of coffee or tea, 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 on Wednesdays or Sundays 1-4 pm. It's all in the room adjoining the Friends Lounge.

ANBG Library Membership—Borrow books, serials, videos, DVDs plus use of computers and 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.

Letters to the Editors: Dryandra and ducklings



'Dryandra formosa' Photo by G.McEwin

Dear Editors,

Thank you for producing the enjoyable Friends Newsletter. We were however quite taken aback to see the article 'Banksia heliantha once known as Dryandra quercifolia' in the November edition. Contrary to the reference to 'recently accepted name changes', there is no widespread formal agreement on a change to the naming of dryandras.

We are members of the ASGAP Dryandra Study Group, and as you might expect, this topic continues to be widely discussed within the Group. In our August 2008 newsletter, eminent Australian botanist, Alex George, advised that there are no grounds to make the change. Having studied these plants for almost 50 years, Alex is satisfied that there are characteristics which distinguish Dryandra from Banksia, and that the new information confirms their relationship, rather than the opposite. He believes that Mast and Thiele's analysis has actually confirmed that previous botanists were on the right track—that dryandras probably evolved out of banksias. He argues that DNA analysis and cladistics should not be followed blindly, and that taxonomy should be based on readily observable morphological characters.

We also checked the online records of various herbaria around Australia, and could find no evidence that any wholesale change has been made. Alex George notes that the Australian Plant Census has no formal status that requires it to be followed.

We suggest that the impression given in the last edition (that the name change is widely accepted) should be corrected.

Catriona Bate and Phil Trickett

Dear Editors,

We are writing in response to the letter from Catriona Bate and Phil Trickett regarding the taxonomy of Banksia and Dryandra. It is pleasing to see that plant taxonomy and nomenclature can generate such interest!

In response to specific points raised in the letter, we agree that Banksia baxteri Photo by there is no 'official acceptance' D.Greig.



of any changes to plant names or taxonomic concepts. Individuals may choose to follow a particular change based on available evidence and their own personal preference. No one is compelled to adopt the concept of an expanded Banksia (including Dryandra) or any other taxonomic changes. The 'recently accepted changes' referred to in our article in the November 2008 issue of the Friends of the ANBG Newsletter are name changes reflected in the Australian Plant Census (APC). APC represents the consensus view of Australian state and territory herbaria, as ratified by the Council of Heads of Australasian Herbaria (CHAH). The most recent advice we have received from the major Australian state and territory herbaria, including the National Herbarium of Victoria, Melbourne, indicates they have adopted the concept of an expanded Banksia (including Dryandra) as presented by Mast & Thiele (2007). However, there is inevitably a time-lag between the adoption of names and/or concepts and their application to collections (both herbarium and living plants). As a result, these changes may not appear in databases associated with these collections for some time, until all specimens have been amended and the electronic data updated.

For those seeking more information on these name changes, see the following article on the Western Australian Herbarium's FloraBase website: http://florabase.calm. wa.gov.au/articles/dryandra-banksia/

Brendan Lepschi, Anna Mouro, Miorray Fagg

Dear bird lovers.



Photo by Margaret Clarke

A pair of Maned Ducks, living near the large pond below the café, had ten babies on Monday and by Friday they were trekking about with 17! They nabbed some from someone else I

would assume? As far as I know they only start wandering once all the eggs have hatched, so for more to appear they must have got them from someone else, or found them abandoned. At times a second pair of adults were hanging around on the fringes, so I don't know whether these were the second parents, or whether it was just a coincidence. Hopefully more of these ducklings will survive than the single duckling that survived from a hatching of eight babies in spring.

Paul Tyerman

Collecting at Cravens Peak

Margie and Max Bourke AM



Sand dune with Acacia georginae

All photos by Max Bourke



When the offer came from Bush Heritage Australia to work as volunteers setting up a herbarium at Cravens Peak we jumped at it.

Bush Heritage Australia (BHA) is a great national not-for-profit which we had been associated with in a fund raising capacity for some years. It is

one of several organisations which protects biodiversity by acquiring land and managing it for that purpose. Started by Bob Brown in 1991 with just 236 ha of land in Tasmania it is now working towards protecting one per cent of Australia (seven million hectares) by 2025. At 30 June of this year it had some 946,000 ha under protection and through its Beyond the Boundaries program was reaching out much wider.

Cravens Peak in south west Queensland is the largest and most diverse reserve. The country sits astride the boundaries of the Simpson Desert on the west and the start of the Channel Country on the east with the low Toko Range forming the divide. With its neighbouring property at Ethabuka it is in some of the most remote country in Australia. Draw a curved line from Mt Isa (five hours away) to Alice Springs (nine hours away) and you get the picture.

So the offer to go back to country we both liked and had visited before, along with a challenging and useful task, was doubly welcomed. BHA established its first herbarium at Eurardy Reserve in Western Australia, in conjunction with the WA Wildflower Society and their State Herbarium. We were to use the same protocols to establish this herbarium.

I (Max) had done some field collecting in the Snowy Mountains as a young agronomist, decades ago, so a crash refresher course was necessary; thanks to Jo Palmer from the National Herbarium for supplying it. Our task was to work over the most remote areas along the north and west (Northern Territory border) of the property. These remote areas were extremely rugged and rarely visited, though in the 1960s oil exploration lines had been bulldozed through the dunes and swales. Still it was tough and dry country when we went through it, though with a great grandeur. Evidence of Aboriginal ceremonial sites in the hills and pituri plants (Duboisia hopwoodii), growing on the dunes, linked this famous indigenous 'trading' area to the rest of Australia for thousands of years.

Reading Cecil Madigan's wonderful late 1930s book about the first crossing of the Simpson by whitefellas, and taking on 30 to 50 dunes some days for this work, made us realise how isolated we were. It looks so geometric and benign from the air. It feels so remote and at times threatening, though beautiful, on the ground.

Fields of dunes go on for many kilometres, sometimes with narrow swales between and others with broad and tree filled almost meadow like fields of Georgina Lucerne (Cullen australasicum), a native legume, or dried beds of Nardoo (Marsilea drummondii), one of our more interesting native ferns. Occasional open woodlands of Georgina Gidgea (Acacia georginae) or Whitewood (Atalaya hemiglauca) and Beefwood (Grevillea striata), or along the (dry) creek beds dense stands of Red Gum (Eucalyptus camaldulensis), meant that tree lovers' needs were fulfilled.

Between the dune fields there are large areas of gibber plains and here and there small hills of tough gibber and larger rocks, interspersed with the occasional jump-up or mesa, all with richly different flora. Underlying strata changes from sandstone to limestone meant that floristic changes occurred too There are several river 'systems' such as the Mulligan flowing south into the channels and some rivers like the Field River that just drain into the swales.

The plant collecting followed a plan devised by the BHA ecologist, Paul Foreman, and involved sampling different ecosystems in the third of the property not sampled by previous plant collectors. So we collected in clay pans, gibber plains, on high and low sand dunes, in limestone and sandstone ridges and around drainage lines and rivers. We also undertook sampling along a 40 km transect line down the Queensland/Northern Territory border following a very rough set of wheel tracks made during an oil exploration survey 50 years ago.

At each site we collected flowering plants (usually flowering and vegetative samples, but if possible including roots, seeds and bark) which were immediately pressed, a GPS location recorded and some preliminary notes about soil type and geology plus the ecosystem. Back at the homestead these samples were sorted, and given a preliminary identification. They were sorted into a specimen for the field herbarium at Cravens Peak and identical specimens prepared for the Queensland Herbarium and the National Herbarium. Herbarium vouchers with all this information and the pressed specimen were then prepared and a storage system established.

Down to 15 psi



Duboisia hopwoodii



Despite the drought we found some 120 flowering species ranging from ferns and quite small prostrate species to flowering grevilleas, hakeas and even larger Corymbia terminalis/opaca/tumescens—these three are a real trial to sort out in the field. We recorded 75 taxa (new records for Cravens Peak) during the trip. A total of 379 vascular plant taxa have now been recorded for the reserve. One new record for Queensland, Scleroalena deserticola, was recorded on this trip

An interesting month in a remarkable part of Australia, not only for the results but also for the experience of living really isolated for a short period; most of the time there were just four of us on the station, but our ecologist, Paul Foreman, set us up for the job very well. Camping out in the field was something we were used to and the stockmen's quarters on the station for our 'lab' work were excellent. A quiet beer with a great sunset and the wonderful station managers, Nella and Mark Lithgow, topped off most days.

If you are interested in volunteering for BHA see their web site at www.bushheritage.org.au—they will be interested in you!



Water at Meetuka



Landscape Planning at the ANBG

David Taylor, Horticulture Manager

In botanic gardens science has generally driven the presentation of living collections, but there is now greater recognition of the value of creating landscapes with impact and a clear purpose, which engage visitors in learning about the diversity and importance of Australia's flora. As part of the ANBG's management review we have been assessing how sections and areas within the gardens function in terms of their landscape design and value.

Assessing landscape value is, however, a seemingly ambiguous and subjective exercise. So far we have found a great diversity of opinion as to what an area is about, its function and purpose, and from this what it is supposed to look like, what story it is telling and how. There is also diversity of opinion on an area's 'appeal', for example, 'This area appears to be abandoned or not developed yet' versus 'Isn't this a great wild, natural area'.

I have found summarising people's responses an eye opener. In many cases, there is simply not enough definition of purpose or function, and therefore clear understanding, knowledge or interpretation to clarify what an area is and perhaps then what it should look like. It is all good food for thought for future planning discussion and direction.

Our approach is to involve a diverse group of people, to ensure a good cross section of views, ideas and responses to what many of us sometimes take for granted, or have a very specific focus on. As this project progresses, Friends and guides will have an opportunity to have their say and add another crucial perspective from a supportive 'eye'.



Photo by Anne Rawson

From the Bookshop Tom Butt, Shop Manager



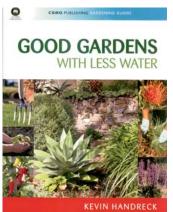


Creating Your Eco-Friendly Garden by Mary Horsfall CSIRO Publishing Gardening Guides, 2008 Paperback, 158 pages, colour photographs throughout, bibliography, index RRP:\$39.95

This book shows you how to develop an environmentally friendly garden for little cost. Practically written, it is based on the author's first-hand experience as well as the wealth of knowledge she has amassed working at Grass Roots, Australia's most popular self-sufficiency magazine.

The book offers advice on planning your garden, choosing plants, planting times, watering options and pest management following organic principles. It explains how to assess the soil and microclimatic effects of surrounding buildings and vegetation so that you can determine the style of garden that best suits your property.

Water efficiency, biodiversity, soil conservation, use of native and biodiversity-friendly plants, organic methods, use of recycled materials and avoidance of environmental weeds are themes that feature strongly throughout the book, and will appeal to gardeners with strong environmental values.



Good Gardens with Less Water by Kevin Handreck CSIRO Publishing Gardening Guide, 2008 Paperback, 166 pages, colour photographs throughout, bibliography, index RRP: \$34.95

It is possible to have a great garden anywhere in Australia, even under the toughest water restrictions. This book, companion to Kevin Handreck's best-selling Gardening Down-Under, shows you how.

This beautifully illustrated, full colour book contains a wealth of information on such key topics as: how to improve soil structure to maximise the retention of water for use by plants; selecting drought-tolerant native and exotic plants; working out how much water to apply to different types of plants; choosing the best lawn grass for your climate; rainwater harvesting and use; and how to avoid problems when greywater is used in the garden.

With specific chapters devoted to watering systems and equipment, mulches, planting techniques and potted plants, this book offers practical solutions for anyone who wishes to garden sustainably.

Growing Friends

Our tank benefited greatly from the recent storms. Fortunately, apart from the need to clean up the area, nothing disastrous happened to the plants. The igloo has been visited on several occasions recently by an immature Water Dragon. How do we know this? It was found in a bucket which takes the water overflow from the cuttings bed, but alas it had been unable to climb out. However, not wanting a death on our hands, we attached a piece of shade cloth inside the bucket to enable the thirsty one to climb out. It is great fun being a member of Growing Friends!

Amongst the plants for sale in our Spring Sale will be:

Olearia rhizomatica is a small shrub in the Asteraceae family. Flowering from December to March with blue/ mauve petals and a yellow centre, this daisy is a hardy plant for the Canberra region.





Calothamnus (beautiful shrub) villosus (covered with soft hairs) is a medium sized shrub in the Myrtaceae family from south-west Western Australia. Spectacular onesided red flowers appear in spring and summer. It has the common name Silky Net Bush as its soft pine needle-like leaves are covered with silvery hairs. A good hedge plant which may attract birds.

spring plant sale

on Saturday 18 April from 8.30 to 11 am in Crosbie-Morrison carpark

Garden Shorts

From the Director

Every year always starts with a bang at the Gardens-the frantic activity associated with concerts, snake exhibitions and watering-providing for thousands of visitors over a few short weeks. Thank goodness it winds down a bit from there! The visitor services staff work very hard to support events and the result this year was a credit to all of them and their team work. Don't forget our other unsung 'hero horts', flat out watering all those plants as well, all summer long. We have been lucky enough to have more rain this year, but January and February are notoriously dry and much hand watering is still required over summer to ensure that each individual plant gets the water it needs, not too much, not too little. Lots of team work involved there too, and not necessarily the most exciting job in the world.

I have a hunch that this year will be seen as a turning point for the ANBG. As part of the process to develop our new management plan we have recently given much thought to our role and our relevance—to state and regional botanic gardens, to communities, and to governments. The key to our future lies in us having an understanding of that, and being able to communicate it in clear and non-technical terms.

Over the years botanic gardens have largely become type cast simply as pleasant places with cafés. This is of course just one aspect of what gardens can offer. One of our jobs is to change that national perception, because they are or can be much more than that. We are integrated and complex institutions which provide: information about plants for both professionals and community; for botanical and horticultural

research contributing to on-ground plant conservation; significant centres for environmental education and awareness; contributors to regional employment and economies; sources of inspiration and places for healthy activity: sources of advice on biodiversity policy and management practice to governments and communities; and significant cultural spaces for integration of people and nature (important in our increasingly urban community).

Most of this of course is not evident to the person walking in the gates. We hope that our new management plan will help us communicate more clearly the whole story of the ANBG and our vision for its future, not forgetting but building on the lovely place we all know and admire today. In the tough economic times of today we need to recognise that things are never going to be easy again, and that having a good management plan will not change that. But having a vision of the future, and clarity of relevance and purpose will be more crucial than ever, if we are to survive and thrive.

Anne Duncan



The Garden's new management plan (2009-19)

Activities for the preparation of the new management plan for the ANBG are underway. The draft management plan is expected to be completed by the end

Consultation is an important part of management planning. The 'Have Your

Say' consultation ran from 17 December 08 – 13 February 09. This gave the public an opportunity to comment on ANBG's management. We have also initiated a consultation process with our key stakeholders, including the Friends of the ANBG, to discuss ANBG's management and opportunities for future partnerships.

Workshops in December and January brought together ANBG staff and representatives from the Friends of the ANBG, Centre for Plant Biodiversity Research, Australian Biological Resources Study. and the Department of Environment, Water, Heritage and the Arts. Participants discussed the focus of ANBG's current work and presented their ideas about where they want ANBG to be in 20 years. The workshop also provided a forum to discuss the values and principles that do and should underpin the work of ANBG and the current and potential relevance of ANBG to Australian society. The ideas emerging from these workshops will help guide the development of a 20-year vision for ANBG and assist in developing solutions so as to move ANBG forward.

During the management planning process, there are several opportunities for Friends to have their say:

- Written responses to 'have your say' will be accepted from Friends of the ANBG until 30 April 2009
- Discussion at the Growing Friends Meeting, 7 March 2009
- Discussion at the Guides Meeting, 21 April 2009.

Small discussion groups on ANBG will be conducted in May 2009. Dates will be advised and you can register interest by sending an email to: anbgplan@anbg.gov.au.

If you would like to receive a regular newsletter on the management planning process, please send an email with vour name/s and information about your town/city of residence to: anbgplan@anbg.gov.au.

Lucy Sutherland

Friends Briefs



Summer Concerts

In early 2009 the Eucalypt and Cafe Lawns once again experienced the annual flocking of over 16,000 colourful creatures that have been observed to collect on these open shady areas each summer for the last 16 years.

Groups ranging in size from single individuals to large 'family' groups were observed, including immature young (and even quite a few unhatched) through to many mature individuals.

Although it is thought that all the creatures are from the one species, they displayed a variety of plumage and diverse behaviours: feeding, communicating with one another, and a strange ritualised dancing accompanied by loud, regular and not unpleasant sounds produced by a small specialised troupe.

Observers noted that more than 1,500 of the visitors were provided with drinks by volunteers. It was also recorded that the colourful flock deposited an almost record amount of money in plastic buckets held by individuals called 'Friends'.

We hope these gatherings will continue in 2010, and we also hope for some generous sponsor to assist in encouraging this colourful species back to the Gardens next summer and with Gardens' costs in organising and protecting the flock. We would also like to thank all who volunteered and supported the phenomenon, and the ANBG staff who worked tirelessly to make this annual event possible.

Damp and cool dinners

Those attending the November Graze in the Gardens event might have been very wet little grazers but for the fact that Hudsons set up decorated tables under cover in the Café and the Banks Building, and served the wonderful meal with good cheer and great efficiency. Only the band was left out in the cold, but they nevertheless played on...

The February Twilight Dinner was a cosy affair on a cool night, with the intoxicating aroma of truffle oil filling Hudsons. Sherry McArdle-English inspired diners with the story of how she and her husband Gavin, became truffle farmers on the outskirts of Canberra. With their crops now beginning to bear fruit (or fungi), we were tantalised with recipes for truffle infused scrambled eggs and brie sandwiched around yummy truffle.



Arboretum visit

How many of us who commuted to and from Belconnen at the time of the GDE road works realised that the trucks carrying soil were heading for the event terrace at the Canberra International Arboretum and Gardens (CIAG)? And how many of us who travel along the Tuggeranong Parkway know that there are 20 forests established at CIAG, with some trees nearly four metres high? All this was revealed to two busloads of Friends, and friends, when they were taken on a special tour of the new Arboreturn in December 2008.

First stop was the event terrace, with views across Lake Burley Griffin and the Arboretum's own dam. We stood on the top of Dairy Farmers Hill, imagining how the 250 ha site would look in thirty years' time.

Those Friends who walked in the pine forests prior to the bushfires of January 2003, had a yen to stride out along the newly formed roads to have a closer

look at the plantings. Perhaps you did that at the Open Day on 15 March.

Jane Keogh

Editors' note: Two hundred Friends went to the Arboretum on Sunday 8 Februarv in four buses and 40° heat. It was a total fire ban so we were not allowed out of the buses, but were informed and entertained with excellent commentary by Friends of the Arboretum.

BGANZ DVDs

The video proceedings of the 2008 Eurobodalla BGANZ conference are now in the ANBG Library. There are speakers from gardens big and small on planning and maintenance; educating and involving the community; plant selection and breeding.

Jardín Botánico Nacional de Cuba



While access to hard currency creates challenges for the management of the gardens, 360 full-time staff still manage to do leading biodiversity research and develop programs promoting health and well-being that connect Cubans with their rich biodiversity. Some amazing facts about JBNC:

- it is 600 ha and has 35 km of roads
- it has four restaurants, a café and two kiosks
- most of the food for the garden's restaurants is grown on site using organic agricultural techniques
- The El Bambu Restaurant was one of the first vegetarian restaurants in Cuba (see photo)
- 17 full-time multilingual guides interpret the garden's living collection

For more information about this botanic garden visit: www.uh/centros/jbn/

Lucy Sutherland, from her AGM talk.