

The background of the entire page is a photograph of a dense fern forest. A narrow path is visible, winding through the center of the image. The ferns are various shades of green, and the lighting is soft, creating a dappled effect on the ground and foliage.

*Fron*ds

Newsletter of the Friends of the Australian National Botanic Gardens

Number 64 April 2010

**2010 — Year of Anniversaries
Celebrating the Friends' 20th
and the Gardens' 40th birthdays**



Patron Mrs Marlena Jeffery
 President Alan Munns
 Vice President Barbara Podger
 Secretary David Coutts
 Treasurer Marion Jones
 Membership Secretary Barbara Scott
 Public Officer David Coutts
 General Committee Don Beer
 John Connolly
 Jill More
 Andy Rawlinson
 Warwick Wright
 Activities Coordinator Warwick Wright
 Events Coordinator Louise Muir
 Newsletter Committee Margaret Clarke
 Barbara Podger
 Anne Rawson
 Growing Friends Kath Holtzapffel
 Botanic Art Groups Helen Hinton
 Exec. Director, ANBG Judy West
 General Manager Peter Byron

Post: Friends of ANBG, GPO Box 1777
 Canberra ACT 2601 Australia
 Telephone: (02) 6250 9548 (messages)
 Internet: www.friendsanbg.org.au
 Email addresses:
 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 by the first of June for the August issue; first of October for the December issue; and first of February for the April 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
 Printing: Goanna Print
 Printed on recycled paper

ISSN 1036 9163

Cover: We hope you like the new name 'Fronds' for our newsletter. Thankyou to all those who entered the competition. Our winner, who wishes to remain anonymous, has donated their prize to the Friends. Rainforest gully photo by Anne Rawson.

Australia's Garden

The Friends present a new souvenir book for the Gardens, to celebrate the Gardens' 40th birthday and the Friends 20th. Copies are now for sale in the Bookshop.



IN THIS ISSUE

Friends 21st AGM.....	3
Science challenges for the ANBG	5
The RTBG: a guide's view	6
Volunteering at the Australian National Herbarium.....	7
Philanthropy & you in the International Year of Biodiversity ..	8
Public forum hosted by Senator Lundy.....	10
From the Bookshop	10
Friends Briefs	11
Garden Shorts	12
What's on in the Gardens	14
What's in a Name? competition.....	16

Friends' 21st AGM, 4 February 2010

Following are edited versions of the reports by Alan Munns, President of the Friends and Dr Judy West, Exec. Director ANBG.

President's Report

In our 20th anniversary year the Friends' foundation objective to 'promote the continued development of the Gardens' has never been more relevant or required the extent of political lobbying we now engage in to try to convince government of the Gardens' need for support and funding.

Council members met with Peter Cochrane (Director of National Parks) and Peter Taylor (Assistant Secretary, Parks South). We greeted the Minister, Peter Garrett, on two visits he made to the Gardens. We engaged with the media on many occasions. We supported and participated in a second public forum on the future of the Gardens, again hosted by Senator Kate Lundy.



David Taylor and Senator Lundy watch Minister Garrett plant an Eremophila. Photo by Barry Brown



Part of the Wattle Exhibition. Photo by Warwick Wright



Old nursery site. Photo by Anne Rawson

Positive developments

There were some positive and very welcome developments this year. In October 2009 it was announced that the Gardens would become part of a new science-based branch within Parks Australia. Dr Judy West was appointed to head that branch and also became Executive Director of the Gardens. The Friends think this is a very positive development, which will give the Gardens the kind of senior executive representation within Parks Australia that it has not had for many years. We know Judy well from her many years as Director of the Centre for Plant Biodiversity Research and look forward to working closely with her. We have thanked Anne Duncan, the previous Director, for her work for the Gardens and wished her well for the future.

Another very welcome development was the inauguration by the Minister of the project to enable lake water to be used within the Gardens. We understand that construction will start within a few weeks and lake water will be used within the Gardens next summer. This will enable the living collection to recover from years of drought

and water restrictions. Gardens' horticultural staff, whose skills and dedication have nursed the living collection through the long dry years, deserve special thanks.

We also welcomed the announcement that, during this 40th anniversary year of the Gardens, work will start on remediation of the old nursery site. This site, at the very heart of the Gardens, has been an eyesore since the nursery moved to its new buildings. We would have preferred full-scale redevelopment of the site, but appreciate that a start is being made.

Gardens' Management Plan and Friends' Strategic Plan

During the year the Friends were very actively engaged in the process of preparing a new management plan for the Gardens. The draft Management Plan will be released for public comment shortly.

Also during the year we looked at our own Strategic Plan, as we normally do each year or two. We will soon have an updated draft plan for consultation with members.

Membership

We now have 1570 members, a small increase on last year. We thank Barbara Scott and Lesley Harland for their conscientious work again this year, and thank Les Fielke for computer support.

Friends' Activities

Wattle Day and Exhibition

Our highest profile event this year was on 1 September to celebrate Wattle Day and the opening of the Wattle Exhibition. This event marked the 21st anniversary of the proclamation of Golden Wattle as the national floral emblem. Sir William and Lady Deane, and Environment Minister Peter Garrett, were our guests and Sir William opened the exhibition. Thanks go to Pat and Warwick Wright who put an enormous amount of time and effort into developing the exhibition.

Summer concerts

The ever-popular summer concert series was only made possible this year by the Friends agreeing to fund advertising as well as their usual funding of the bands and sound system. While audiences were large and appreciative, the weather was not kind. With two concerts cancelled, only around \$5,000 was raised this year, compared with \$14,000 last year.

Financial support for the Gardens

Frustration with lack of opportunities for the Friends to fund Gardens' projects continued in 2009. Despite our readiness to contribute nearly \$20,000 to enable a spring flower display to be mounted, the Gardens was unable to take up the offer. We are hopeful that this kind of problem will not recur.

We are working with Gardens' management to reintroduce a formalised system for funding Friends projects in the Gardens. We hope this will be in place by mid-2010.

Guides

Volunteer guides led two scheduled walks every day and a number of booked walks. The guides are, in a very real sense, the public face of the Gardens and help out in many, many ways. We are contemplating another intake of new guides this year. (See 'Friends Briefs' on page 11).

Growing Friends

Up to 30 members participate in Growing Friends. Plants they produced were sold at two plant sales, raising around \$8,600.



New misting. Photo by Barbara Podger



Summer concert. Photo by Barbara Podger



Retiring (but untiring!) Treasurer, Bev Fisher. Photos by Barry Brown

Projects which we funded or agreed to fund during 2009 are:

- Alpine research project, roughly \$22,000 a year for three years. This is a joint project between the ANU, ANBG and Friends to research the effects of climate change on Australian alpine flora. It has attracted funding by the Australian Research Council of \$253,000. There are opportunities for Friends to provide voluntary support with field and laboratory work.
- Extension to the rainforest gully fogging system, \$14,000 – now complete and a 'launching event' will be held soon;
- Souvenir booklet, \$15,000. A 40-page full-colour booklet will soon be on sale in the Botanic Bookshop. Most of the expenditure will be recovered from sales.
- A photographic DVD *Impressions of a Year in the Gardens* was produced by Sheila and Peter Cudmore. More than 100 copies have sold, with proceeds to the Friends.
- An illustrated brochure on birds of the ANBG, around \$6,000. Original artwork has been commissioned. Louise Muir and Jenny Bounds are leading the work.
- The website on the lichens of Australia, \$15,000, is now being funded by the Public Fund.

Other Friends' activities

Many other Friends' activities operated very successfully during the year. They include lunchtime talks, two visits to the gardens of Parliament House, the Botanic Art Groups' very successful exhibition, facilitators for the Botanical Resource Centre, the Newsletter team, the Bernard Fennessy *What's in a Name?* Award, the schools photographic competition, *Breakfast with the Birds*, a twilight dinner and the website.

A Time to Say Thank You

Alan concluded by thanking all members of Council and others who helped with Friends' ventures for their hard work, enthusiasm, and friendship throughout the year. He paid particular tribute to retiring Council colleagues Louise Muir who convened the Social Events Committee for the past four years and Bev Fisher who retired after 16 years as Treasurer. Truly the end of an era!

Alan also thanked all Gardens' staff who so willingly helped the Friends throughout the year. 'We admire your professionalism and commitment to the Gardens and we value your support.'

Congratulations to newly elected Council Members Marion Jones (Treasurer) and Jill More; and to Don Beer on his re-election to Council

The full President's report is on the Friends' website at: www.friendsanbg.org.au/presreport10.pdf

Executive Director's Report

After just two whirlwind months as Executive Director of the ANBG, Dr Judy West reflected on some of the projects she manages and some of the new opportunities ahead.

- The planning approval process is now being worked through with the ACT Government to allow water abstraction from the lake. All approvals are expected to be in place within a month.
- An environmental assessment of the old Nursery site is being undertaken to determine the state of the soil below the old concrete. Once the outcomes are known, plans for the future use of the site will be developed.
- The draft Management Plan is expected to be released for public comment by end February/mid March. The challenge of bringing the agreed Plan to life can then begin.
- With the Gardens now on Twitter and Facebook and with the revamped website undergoing final link-testing, communication services are getting a facelift.

Judy spoke of the opportunities partnerships were already bringing to the Gardens and their scope for further development. The partnership with the Friends and the ANU for the Alpine Seed Ecology Project has leveraged substantial funding, already providing a new facility for the Gardens' Seed Bank.

Other partnership projects, like the Australian Cultivar Registration Authority and the Australian Plant Name Index also demonstrated the funding leverage that can be achieved. Gardens' expertise is also being recognised through a contract with the Department of Environment, Water, Heritage and the Arts to provide weed images and profiles for their database.

While very proud of its scientific focus, Judy is also keen to nurture arts and culture in the Gardens and would like to see the Friends contributing to this future development.



Sarah Fethers (pictured right) in the new Seed Bank drying room made possible by Friends' contributions to the alpine research project. The facility maintains a constant temperature range (15° to 18°C) and humidity (15%) allowing seeds to be reliably dried to 5% moisture content. Once dried, the seeds are stored in a freezer at -21°C. Sarah is delighted she no longer has to use the old haphazard method of drying seed over silica gel in plastic boxes (pictured left). Photos by Barbara Podger.

Science Challenges for the ANBG

Dr Judy West

Dr Judy West was guest speaker at the AGM. Following are selected points from her talk.

The ANBG is the only botanic garden in the world which validates a native living plant collection with dried voucher specimens in its herbarium.

But there is a cost to taxonomic perfection!

For example, taxonomists, for very good genetic reasons, recently placed *Callistemon* into the genus *Melaleuca*. But with over 2,000 *Callistemon* plants in the Gardens, the cost of changing all their labels is around \$20,000 and there is currently no budget for this. And this is only one example of the many taxonomic changes that genetic research continually throws up.

There has also been fascinating research undertaken in the Gardens by collaborative researchers on species such as Superb Fairy Wrens, Eastern Water Dragons and the five moths that make the 'scribbles' on some Eucalypts. A challenge is to ensure this work has an ongoing presence after the initial researchers finish their projects and to bring their research results into the visitor experience.



The RTBG: A Guide's View

John Turnbull

From convict-era construction techniques to celebrity vegetable growing, a Guide at the Royal Tasmanian Botanical Gardens (RTBG) in Hobart has to be across a vast range of information for visitors. I was introduced to the depth of the Tasmanian experience and flora in November 2009 when, with nine other ANBG Guides, I participated in the Seventh Australian Conference of Voluntary Guides at RTBG.

The RTBG can claim to be the second oldest botanic garden after Sydney. In 1818 Governor Sorrell established 'Government Gardens' on slopes beside the River Derwent to provide fruit and vegetables for Government House. They were very functional and public access was restricted. Lieutenant-Governor Arthur succeeded Sorrell in 1824 and introduced a wide range of trees and shrubs, flowers and food crops from England. With the appointment of William Davidson as the first Superintendent in 1828 more buildings were erected, for example, an internally-heated wall, the 'Arthur Wall', with an accompanying greenhouse built by convict labour. This facility enabled more exotic plants, including pineapples, to be grown.

As horticulture and botany became more fashionable pressure mounted to develop a more traditional 'botanic garden'. The opportunity came when the Royal Society of Tasmania took over management of the gardens in 1844, also introducing a 'Plants Supplied for the Decoration of Public Places' program in which plants were given to schools, churches, government buildings, cemeteries and public parks. Some were used to landscape the gardens of Government House, built in 1857 adjacent to RTBG. When one of the local guides was explaining the complex history I realised this was a very important aspect of RTBG, contrasted with the relatively simple history of ANBG and the minor emphasis we give it.

Today, the 14 hectares of the RTBG include a great diversity of plant collections. There are colourful annual and herbaceous flower beds around a lily pond, along convict-built walls, in a Conservatory, and in Fuchsia and Cactus Houses. There is an impressive heritage collection of old, very large, exotic trees including oaks (*Quercus*), pines (*Pinus*) and cedars (*Cedrus*). A collection of palms, with a Canary Island Palm (*Phoenix canariensis*) over 100 years old, provides a striking landscape. Separate plantings show plants from New Zealand, Japan and China. There are more than 400 Tasmanian plant species featured in the Tasmanian Section, the Fern House and



The Subantarctic Plant House, apparently looking over Macquarie Island.
Photo by Jenny Turnbull

the greater Hobart Garden. Plants of Macquarie Island are beautifully displayed in the Subantarctic Plant House which mimics the cool, windy conditions of the island. An unusual and popular feature, perhaps reflecting the Gardens' early history, is 'Pete's Vegetable Patch' made famous by Peter Cundall in the popular ABC 'Gardening Australia' program. Perhaps an area featuring Aboriginal food plants would be a popular addition at ANBG?

There has been a dramatic shift in the aims of RTBG from those of the 19th and early 20th centuries. Public recreation needs are well catered for but there are now more science-based activities with emphasis on conservation of the Tasmanian flora. Field collections of rare and endangered species are made then propagated as *ex-situ* collections in the Gardens. The Tasmanian Seed Conservation Centre in RTBG is an important contribution to global conservation and Kew's Millenium Seed Bank Project. The Centre aims to collect 60 per cent of Tasmania's threatened flora by 2010.

The RTBG differs from the ANBG as it reflects the 19th and early 20th century focus of many botanic gardens on collections showing world flora and highlighting botanical curiosity and diversity. I found that this global diversity provided a very different experience to the ANBG where the entire collection focuses on Australian plants. However, enthusiastic presentations by the local guides succeeded in stimulating my interest in both the RTBG's history, and the exotic and native plants on display.



Jan Bailey. Photo by Barbara Podger

Volunteering at the Australian National Herbarium

Margaret Clarke
Anne Rawson



Margaret Mansfield. Photo by Barbara Podger

The ANBG is unique among botanic gardens world-wide in validating its Living Collection with dried voucher specimens in its herbarium, the Australian National Herbarium. The visible sign of this link is the aluminium tag attached to plants in the Gardens, showing the name of the plant and the ID number given to it in the Herbarium.

The dried herbarium specimens include data about where and when they were collected and by whom. Among its over one million specimens the collection contains 50+ specimens collected by Joseph Banks and Daniel Solander on the east coast of Australia in 1770.

The Herbarium is an amalgamation of the ANBG and CSIRO collections which all finally came together under the new name in 1994, with angiosperms (about 75 per cent of the collection) housed at CSIRO and bryophytes (mosses, lichens, fungi) at ANBG. It is a dynamic record of the plant life of the Australian continent and provides an unparalleled dataset for the documentation, conservation and management of our flora.

Preparing a typical herbarium specimen starts with a field trip. A suitable flowering and fruiting section of plant is selected and pressed between sheets of absorbent paper. The researcher takes extensive notes on the habitat of the plant. After further drying each specimen is ready to be mounted on acid free paper along with a label recording its scientific name and details of the site from which it was collected. It is then filed in the Herbarium's specialised storage vaults for use in scientific research. Properly prepared herbarium specimens in a climate controlled environment can remain in good condition for over 500 years.

Some 40 volunteers regularly work weekly three hour shifts at the Herbarium to mount around 15,000 specimens a year. Only five per cent of the volunteers have a professional botanic background but all have an

interest in plants. When we visited to see what is involved, Margaret Mansfield (ex-archivist and a volunteer for 11½ years) and Jan Bailey (ex-teacher with three years volunteer experience) were busily mounting specimens sent as part of the Perth Exchange. These are specimens now surplus to the Perth collection, which have been donated to the herbarium in Canberra. We looked at a newly mounted specimen of *Eremophila setacea* originally collected in 1970 '46 miles S of Ningaloo turn off' and sent in its original newspaper wrapper, which was *almost* as interesting as the plant specimen.

Some of the specimens we saw were quite beautiful in their dried state, like *Tetratheca plumosa* with its tiny, still deep-violet flowers. Many specimens do keep some original colouring and we were told a few of the specimens collected by Banks and Solander 240 years ago still have some green colour remaining. Not all the specimens are such a joy to behold. Some once-beautiful fleshy rainforest plants can look grotesque in desiccated form. Fine leafed grasses are perhaps the most challenging specimens to mount and certainly would require a steady hand.

Margaret and Jan agreed that a major interest in the Herbarium work is the sheer diversity of the specimens they see. Unwrapping each new specimen is like a lottery. The ten or so minutes it takes to mount the specimen and attach the label, provides a good opportunity to marvel at the features of each. Both find it a very worthwhile volunteering experience with good training, a volunteer supervisor and two thank you gatherings provided each year.

If you would like to find out more about becoming a volunteer at the Herbarium contact Natalie Aked on Natalie.Aked@environment.gov.au.



Philanthropy and you in the Int

In this International Year of Biodiversity we are faced with unprecedented rates of species extinction worldwide. It has been said: 'During the last fifty years or so... our actions have resulted in the loss of roughly one-fifth of Earth's topsoil, one-fifth of its land suitable for agriculture, almost 90 per cent of its large commercial fisheries, and one third of its forests while we now need these resources more than ever, as our population has almost tripled in this time...'¹

In Australia birds are disappearing, small mammals across the top end are collapsing, plant species are disappearing and, in some cases more worryingly, being wiped out by invasive species, weeds.

Since 1972, at ten year intervals, the international community has convened, conferred, submitted, ratified and in 2002 agreed to achieve by 2010 a significant reduction of the current rate of biodiversity loss at the global, regional and national levels as a contribution to poverty alleviation and to the benefit of all life on Earth.² There have been lots of fine words but action is pitifully slow at both international and national levels. However we can all join citizen-led efforts and help to make a difference.

One of the greatest 'gifts' to world culture from the USA has been the idea of national parks. Sure national parks have antecedents in other places and times but the modern concept of these parks, really was an American invention. A group of determined men, and later women, started the movement for national parks with Yellowstone established in 1872.

At the same time similar pushes were going on in Australia which led to Royal National Park being established two years after Yellowstone. The idea that you could have development and at the same time conserve biodiversity was a revolutionary concept. While public lands were being acquired for conservation, legislation was being passed to protect flora and fauna and prevent the spread of weeds and feral animals.

But by the mid-twentieth century people began to realise this was not enough.

Again an idea was born in the USA. In 1951, with \$10,000 and a lot of energy Dick Goodwin put a bunch of academics together to see what they could do to save disappearing wetlands in north-eastern USA. Almost 60 years later The Nature Conservancy (TNC) is now one of the largest conservation organisations in the world with over a million members. It has helped protect over 60 million hectares of land, some 10,000 kilometres of rivers and over 100 marine sites around the planet.

In Australia from the 1940s individuals like Thistle Harris in New South Wales and Reg Spriggs in South Australia also began to take matters into their own hands, setting up private conservation reserves for flora, fauna and geology. In the early 1970s concerned citizens, led by people like Vincent Serventy in Queensland, raised funds directly from the public to buy land for conservation on the Daintree River.

In 1972 the innovative Premier of Victoria, Sir Rupert Hamer, introduced the Victorian *Nature Conservation Act* which established what is now known as The Trust for Nature. This body, though set up as a statutory authority, has been one of the main instigators of large scale biodiversity conservation in the private sector over the past almost 40 years. Through its revolving funds, land acquisitions and, most importantly, its power to covenant land it has set the national pace on private land conservation.

In 1991 Bob Brown received the Goldman Prize which recognises the achievements of international conservationists. He used that as a deposit to purchase the first two properties of what became Bush Heritage Australia. Today they own some 31 reserves, and 946,000 hectares of land directly managed for nature conservation while other large areas of land are conserved in conjunction with Indigenous traditional owners.



International Year of Biodiversity by Max Bourke AM

Martin Copley, a successful West Australian business man, began his journey to conserve endangered marsupials in 1991. Some years later with the assistance of Professor Tim Flannery and TNC in the USA he established what is now the Australian Wildlife Conservancy. It now owns 21 sanctuaries covering 2.5 million hectares. It is actively involved in land management and particularly involved in captive breeding programs for marsupials.

Thousands of Australians are now contributing in both small and large ways, to establishing biodiversity reserves. The Thomas Foundation³, established by David and Barbara Thomas 12 years ago, has as its primary focus the preservation and enhancement of biodiversity in Australia. In 2006 it established the David Thomas Challenge which has been a resounding success leveraging the raising of over \$20 million for investment into large scale conservation.

In addition to these individual reserves is the emergence of major 'linked landscapes' projects. The oldest and most advanced of these is Gondwanalink in Western Australia. Over the last ten years a group of private conservation organisations, with some corporate sponsorship and later government support, has begun to string together a 1,000 km long corridor from the wet zone of south-western West Australia right out into the arid country of the Great Western Woodlands south of Kalgoorlie. Now we have other collaborations emerging such as the Great Eastern Ranges project from Victoria to Queensland, Habitat 141 down the border (along meridian 141) from south of Broken Hill to Portland in Victoria, and the smaller east-west Kosciuszko to the Coast project south of Canberra. All of these projects are driven by local concerned people trying to make space for biodiversity in our altered farming landscapes.

So are we doing enough in this International Year of Biodiversity?

Sadly the answer is 'no'. Reserves are an excellent beginning but action also needs to be taken on the 75 per cent

of Australia that is privately owned and producing food and fibre. The work of Landcare is one way. Another is the innovative, though long and slow, scientific work of people like Professor David Lindenmayer from ANU, whose studies on the New South Wales southern slopes have shown farmers what doing such simple things as leaving rockpiles and fallen trees can do.

But just like the hard issues of climate change, grappling with biodiversity loss will involve 'paying back' what we have borrowed from the earth for so long. It seems right in this International Year of Biodiversity to ponder how and when we begin to do that. I think it is time for all of us to put up our hands to help.

References

- 1 E.O.Wilson (2008) Foreword in *Sustaining Life – How human health depends on biodiversity*. E Chivian and A Bernstein eds. Oxford UP, New York, xi.
- 2 Conference of the Parties to the Convention on Biological Diversity.
- 3 Declaration of interest: the author is Executive Director of The Thomas Foundation.

Suggestions for further reading

- Hughes, Lesley (2003), 'Climate Change and Australia: Trends, projections and impacts', *Austral Ecology*, 28, 423 – 443.
- Steffen, W et al (2009) *Australia's Biodiversity and Climate Change*, CSIRO.
- Worster, Donald (1998) *Nature's Economy: a history of ecological ideas*, 2nd ed, Cambridge UP.
- Farnham, T.J. (2007) *Saving Nature's Legacy: origins of the idea of biological diversity*, Yale UP.
- Lindenmayer, D, and others (2009) *Ten Commitments: reshaping the Lucky Country's environment*, CSIRO.

To donate

The Nature Conservancy: www.nature.org; Bush Heritage Australia with links to Gondwana Link and Kosciuszko to Coast: www.bushheritage.org.au; Habitat 141: www.greeningaustralia.org.au/visionary-projects/habitat-141; Trust for Nature: www.trustfornature.org.au; Thomas Foundation: www.thomasfoundation.org.au; Australian Wildlife Conservancy: www.australianwildlife.org.au.

Photo credits

From left: Pelicans on Murray River at Ned's Corner, property of Trust for Nature, photo by Max Bourke; Pages Creek flowing through temperate rainforest at Liffey River Reserve, Tasmania, first Bush Heritage property, photo by Wayne Lawler/ECOPIX; The Bridled Naitail Wallaby, presumed extinct in 1960s, rediscovered in central Queensland in 1973, reintroduced to Scotia in December 2004 by Australian Wildlife Conservancy, photo AWC; *Beaufortia decussata* in the Gondwana Link, photo by H.M. Rawson; Scottsdale Reserve, a Bush Heritage property part of Kosciuszko to Coast, photo by Stuart Cohen.

Public forum— hosted by Senator Lundy

A second Forum on the Australian National Botanic Gardens, entitled *Looking to the Future*, was convened by Senator Kate Lundy with the support of the Friends of the Gardens on 9 December 2009. Some 130 people participated in two sessions led by distinguished speakers, including the new Executive Director, Dr Judy West. This Forum followed up on the first held in October 2008.

A number of key priorities for the future of the Gardens were identified, including:

- properly conserving and using the unique living collection and its genetic material, the major *ex situ* collection of Australian flora
- taking a lead role in unfolding the story of Australia's native flora to Australian and international visitors
- developing partnerships to enhance the research and information base on Australian flora
- connecting effectively with schoolchildren who visit the national capital institutions

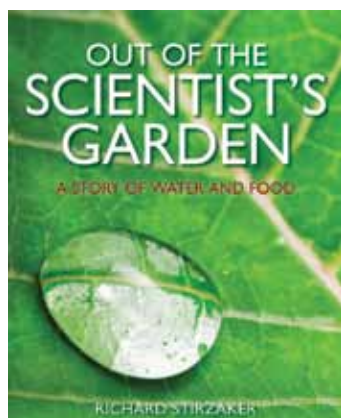


Photo by Anne Rawson

- developing modern communication techniques, especially to reach younger people
- seeking adequate government funding to implement the new Management Plan
- sourcing additional outside funding, possibly through establishing a Foundation
- establishing an independent expert Advisory Board without delay.

A more detailed report on the Forum is available on the Friends website: www.friendsanbg.org.au.

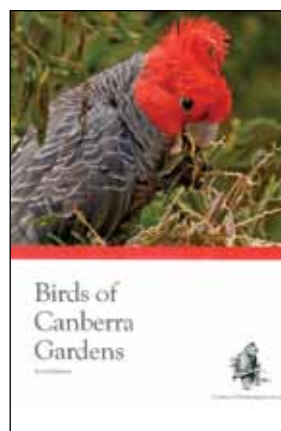
From the Bookshop with Tom Butt, Shop Manager



Out of the Scientist's Garden: a Story of Water and Food

by Richard Stirkaker
CSIRO Publishing, 2010
Paperback, 208 pages, illus
ISBN: 9780643096585 (pbk)
RRP: \$29.95

Out of the Scientist's Garden is written for anyone who wants to understand food and water a little better—those growing vegetables in a garden, food in a subsistence plot or crops on vast irrigated plains or who wonder how we will feed a growing population in a world of shrinking resources. Although a practising scientist in the field of water and agriculture the author has written in story form about the drama of how the world feeds itself. It starts in his fruit and vegetable garden, exploring the 'how and why' questions about the way things grow, before moving on to stories about soil, rivers, aquifers and irrigation. The book closes with a brief history of agriculture, how the world feeds itself today and how to think through some of the big conundrums of modern food production.



Birds of Canberra Gardens
by Canberra Ornithologists Group

Second edition, paperback,
112 pages, colour
photographs throughout, map.
ISBN: 9780959954159 (pbk)
RRP: \$27.50

Nearly 230 bird species have been recorded in and around Canberra suburban gardens over the past 27 years in the Canberra Ornithologists Group's Garden Bird Survey. This book describes those birds, and it is illustrated with brilliant photographs and plenty of graphs showing what time of year to expect each bird and how their abundance has been noted over the life of the survey.

The book is an excellent introduction to the birds of Canberra. It is beautifully presented and easy to read, with plenty of good information readily accessible.

Correction:

In the article 'Botanical Art' by Nilavan Adams (Newsletter 63 December 2009, p6), the date of publication of William Dampier's account of his voyages should have been 1703 and not 1699.

Friends Briefs

Guides Intake 2010

Do you have an interest in Australian native plants, a commitment to the ANBG and an ability to communicate your enthusiasm to visitors? Would you like to become a volunteer guide at the ANBG?

In June we will be advertising in the local media for expressions of interest from those wishing to undertake the training course. After an information session on 16 June, interviews will follow early in July. The training course itself will begin on Wednesday 28 July, continuing on Wednesdays and Thursdays (9.30 am to 3.45 pm approx.) for five weeks until 26 August.

Please register your interest with the Visitor Centre, phone 02 6250 9540 to receive a package of further information and the application form when it becomes available.

Association of Friends of Botanic Gardens

The biannual conference of the Association, which represents many of Australia's botanic gardens, will be held at the Australian Inland Botanic Gardens at Buronga, just outside Mildura, on 22-23 May 2010, with optional tours on 21 and 24 May. The conference theme is *Secrets of the Mallee*. Details of the program and the registration form are available on the Association website www.friendsbotanicgardens.org under *events*. These conferences are a most rewarding experience for members of the Friends. Those who register should inform the Friends (info@friendsanbg.org.au) or 6250 9548 as consideration will be given to refunding all or part of the cost of registration to members who attend (depending on how many attend).

Growing Friends Autumn sale Saturday 10 April 8.30 to 11 am Crosbie Morrison Bldg

After some very dry, hot months, Growing Friends are happy we have managed to maintain a good range of plants in our shadehouse to fill empty spots in Canberra gardens. Autumn is usually an excellent time to establish new plants. Many of our plants occur locally, including grasses and clumping plants.

A hardy small shrub is *Grevillea diminuta* which grows in the Brindabella Range, Bimberi Nature Reserve and Namadgi National Park. It has neat, dark green foliage and rusty red flowers, mainly in spring. It is frost hardy and grows in well-drained soils in sun or part shade. Of course it attracts birds and parrots sometimes take the developing flower clusters.

Olearia algida (Alpine Daisy Bush) is another small shrub from sub-alpine and alpine areas in New South Wales, the ACT and Tasmania. Its leaves are

shiny green, woolly underneath, and of course it has small white daisy flowers in summer. It is hardy on the tablelands in well-composted, well-drained soils in sun or part shade.

Our autumn sale will take place on Saturday, 10 April. Be early for the best selection and bring a box for your purchases.

A detailed list of plants on offer will be available in late March on the Friends website (www.friendsanbg.org.au) and from the Visitor Centre. We hope to see you there.

Our normal monthly meeting is held on the first Saturday of each month at 9 am (9.30 in June, July and August). We also have a working bee on the third Tuesday of each month. Feel welcome to join our friendly and hardworking team.

Kath Holtzapffel



Photo by Murray Fagg



Photo by Colin Tottardell

Friends Projects

One of the key ways the Friends support the Gardens is through funding projects. Now is the time for new project ideas and suggestions from Friends are welcome. Any suggestions should indicate what the proposal entails, how it enhances the objectives of the Friends and approximately what it would cost. Any enquiries and suggestions (by mid-April) to David Coutts on info@friendsanbg.org.au. A full list of projects funded by the Friends is available on the website and on the notice board in the Friends lounge.

Book Donation to Friends Lounge

In the Friends lounge we have the *Encyclopaedia of Australian Plants*, a highly regarded horticultural compendium and a definitive reference source for Australian plants. The ninth and final volume has just been published and covers plants with the letters Sp to Z. A former President of the Friends, Pauline Wicksteed, has most generously donated this final volume to the Friends and it now completes the set in the bookcase in the lounge and is available for Friends to consult.

Garden Shorts

From Executive Director

I take this opportunity to welcome the ANBG's new General Manager, Peter Byron, who I'm sure will develop a productive and harmonious relationship with the Friends of the ANBG.

Peter has over 20 years experience in park management, most recently as General Manager at Tidbinbilla and before that working for the National Capital Authority. In these positions he has developed a strong visitor focus.

Some of the first tasks Peter will be involved with are the implementation of the new ANBG Management Plan and review of the Living Collection by the Gardens' horticulture team. As the Living Collection is one of our key assets, Gardens management has been discussing criteria by which to assess this collection. These criteria include information relating to each section's conservation significance, scientific integrity, amenity values and its educational role as well as the relevance of the plants to particular themes.

Much of this information has been developed over many years in Plant Records and the IBIS database and other parts of our information management system. This will enable more scientifically informed planning for the future development of the Living Collection as a whole.

Judy West

Murray Fagg—40 years at the Gardens

Murray Fagg recently celebrated 40 years working at the Gardens. Director of National Parks, Peter Cochrane, joined Murray and staff for an informal morning tea in the Gardens' Library. Murray arrived in Canberra on the



January long weekend in 1970, after driving from Adelaide via Sydney in his Goggomobil (which he wishes he still had). In Sydney he had vacation work at the herbarium of the Royal Botanic Gardens, and a phone call from the Gardens' Director was all it took to get the job at the herbarium of the Canberra Botanic Gardens. Murray's starting wage was \$42 per week and he's worked ever since in what is now the Ellis Rowan Building.

Murray has made an enormous contribution to the Gardens over the years. He has recorded a timeline of many significant events at the Gardens over the past four decades and grown and maintained the Gardens website which has thousands of pages and receives thousands of visitors every day.

His contribution to Australian publishing is impressive with *Native Australian Plants* produced in collaboration with John Wrigley in its fifth edition. Murray also owns a personal collection of some 30,000 photographs of native plants and vegetation.

Happy Anniversary Murray.



From L-R Barbara Daly (volunteer), Christine Cargill, Murray Fagg, Mario Catanzariti, John Hook, Jan Wilson (volunteer), Peter Cochrane and Jess Miller.

Student Botanical Interns



Back row: Lawrence Mou, Priyanka Suryanarayanan, Kylie Singh, Maree Elliot, Alicia Brown, Clare Vincent. Front row: Samantha Cullen, Michele Marron, Jonathan Carr, Francis Carter

Ten students from around Australia recently graduated from the 2010 Student Volunteer Botanical Internship Program, after working with botanical researchers in Canberra for the previous seven weeks. The Program is run annually by the Centre for Plant Biodiversity Research – a joint venture between CSIRO Plant Industry and the Australian National Botanic Gardens (ANBG). More than 250 students have completed the Program since it started in 1993. "Students take an active part in research projects and herbarium collection management, working closely with botanical researchers and conservation managers," says Internship Coordinator, Bronwyn Collins. The Friends give each graduating Intern a \$70 book voucher from the Bookshop and a year's free Friends membership.



Bulgarian dancers

Music and Dance

A crowd of several hundred people enjoyed the Gardens' Multicultural Festival event on the Education Lawn and once again presented by Rodina, the Bulgarian-Australian Association, and the ACT Office of Multicultural Affairs. This was the third consecutive year the Gardens has hosted the event.

New grass trees

Gardens horticultural staff recently planted a number of grass trees (*Xanthorrhoea*) which were made available through collaboration with ACTEW. As the original location of the grass trees will soon be submerged as part of an expansion of Canberra's Cotter dam, ACTEW offered the plants to the Gardens. Other grass trees will be maintained as potted specimens as part of a trial to compare their responses to transplanting.



Horticultural staff (L-R) Anthony Haraldson, Adrian Gallman and David Taylor planting a *Xanthorrhoea*

Non potable water project

The water project is well under way with husband and wife contractor team, Janice and Tony Johnson of Draincorp Pty Ltd, taking up residence in the Trades Cottages at the Gardens. Construction begins in March to bring 170 megalitres of water from Lake Burley Griffin to the Gardens. Janice and Tony made a warm presentation to staff at the Gardens earlier in the year. The team were chosen for their appreciation of our unique heritage. Tony said, 'Our desire is that you won't know we've been here'. Apart from all that fantastic water, of course.

Old Nursery Site

The old nursery site has begun its facelift with a geo-technical assessment of the subsoils in and around the area. Following that, the area will be cleared accordingly before being mulched in preparation for new developments. The public will be invited to come into the newly maintained site and think about what they would like to see in the space.

The Sound of Summer

January's Summer Concert Series was a great success. Despite two cancellations (one due to the arrival of a severe storm and the other due to the extension of a total fire ban) a total of 12,000 people attended the series. Unlike previous years, all concerts were held on the Eucalypt Lawn – a concession to the popularity of the events which have outgrown the smaller surrounds of the Café Lawn. Once again Annie and the Armadillos, accompanied by the Jumptown Swing Dancers, drew the largest crowd of the series – more than 2,500 people.

Snakes Alive

ACT Commissioner for the Environment and Sustainability, Dr Maxine Cooper, opened the ACT Herpetological Association's annual display and fundraiser, Snakes Alive! at the Botanic Gardens in January. The theme of this year's event was survival and conservation of the endangered Corroboree Frog, and other exhibits included a freshwater crocodile, death adder and desert python.

Find free movie tickets in this magazine

Hopscotch Films has kindly provided a '2 for the price of 1' movie offer for our members— please find your ticket to 'The Concert' inside. "Opening at #1 at the French cinema box-office, 'The Concert' is pure entertainment – a warm-hearted, joyous story filled with great wit and humanity. The stirring finale set against Tchaikovsky's Concerto is simply magnificent. In Cinemas 29 April 2010

Friends Briefs (cont)

Southern India—people and plants

Twilight Dinner guest speaker, Lucy Sutherland, (Assistant Director, Policy and Strategic Planning at the ANBG) drew us into her work with Botanic Gardens Conservation International. She shared her experiences over five years in the states of Kerala and Tamil Nadu in Southern India and her enchantment with both the people, the food and the plants.



Photo by Barbara Podger



Support the Friends, buy a card

A beautiful *Patersonia occidentalis*, painted by Nilavan Adams and donated to the Friends, graces a card for sale in the Botanical Bookshop. Please support the Friends by buying a card for birthdays and other special occasions.

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 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. Summaries or PowerPoint presentations of Thursday talks are available to Friends from the ANBG library.

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 on the Gardens' site at: www.anbg.gov.au or in the local press.

APRIL

Third Botanic Art Exhibition



Sturt's Desert Pea, *Swainsona formosa*
by Vivien Pinder

Wednesday 31 March to
Sunday 18 April
9:30 am to 4:30 pm
Visitor Centre Gallery

The ANBG Friends Botanic Art Groups have much pleasure in announcing their third Art Exhibition, featuring Australian native flora. The exhibition will be opened by Senator Kate Lundy. Sturt's Desert Pea, the plant portrayed in the exhibition image above, was grown in the Gardens. Some works at the exhibition will be for sale, with donations from sales going to the Friends. Cards featuring some of the works will also be on sale.

All welcome.

Thursday 1 April at 12:30 pm
'Botanic Gardens of the American West'

Alan Munns

Featuring Sonoran and Mojave desert landscapes in California and Arizona.

Thursday 8 April at 12:30 pm
'Urban Food Production under Stage 3 Water Restrictions'

Richard Stirzaka

The insights of a Canberra scientist and gardener to the problem of food production and distribution to a growing population in a changing climate.

Saturday 10 April 8.30 am – 11 am
Growing Friends Plant Sale
Crosbie Morrison Car Park

Thursday 15 April at 12:30 pm
'Thomas Appleby - Lanyon Shepherd to Wattle Bark Gatherer'
Fred Mitchell

Following from the successful Friends Celebrate our Wattle Exhibition last year there were many stories. One is the story of a convict, Thomas Appleby, who contributed in many ways to this community, told by his proud descendent, Fred Mitchell.

Thursday 22 April
Visitor Centre Gallery

Friends Schools Photo Retrospective Exhibition opens

Thursday 22 April at 12:30 pm
'Making a DVD out of Stills'
Sheila Cudmore

Guide and photographer Sheila Cudmore shows us techniques for making more permanent recordings of precious slides and still photographs of plants and flowers.

Thursday 29 April at 12:30 pm
'Fairy-wren Alarm Calls and Eavesdropping Between Species'
Pamela Fallow

Some animals eavesdrop on the alarm calls of other species but little is known about how they do it or what they learn. Pamela presents her research results on fairy-wren alarm calls and interspecific understanding

Bush Magic:

Story time in the Gardens
from 10 to 11 am on the
Education Lawn

Friday 9 April

Easter Bilby stories

Friday 7 May

Bush babies and their Mums

Friday 4 June

Birds surviving the winter cold

Friday 2 July

Bring your doona for winter stories

Friday 6 August

Dress up as a favourite character for Book Week.

Learn all about fungi with
Heino Lepp



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

Thur 6 May & Sun 9 May

1. The Basics

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

Thur 13 May & Sun 16 May

2. Spore release and dispersal

How spores are released, either passively or in an explosion.

Thur 23 May & Sun 24 May

3. Some aspects of fungal ecology

Learn how fungi interact with plants, animals and other fungi.

Thur 27 May & Sun 30 May

4. Some aspects of fungal ecology continued

Thur 3 June & Sun 6 June

5. Fungi and humans

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

Thur 10 June & Sun 13 June

6. Mycogeography and knowledge of Australian fungi

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

Thur 17 June & Sun 20 June

7. Some history, mostly 1500 to 1850

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

Thur 24 June & Sun 27 June

8. Reproduction and survival

Sexual and asexual life cycles, with some examples.

Thur 1 July & Sun 4 July

9. Reproduction and survival continued

Thur 8 July & Sun 11 July

10. Structure, classification and identification

What is a fungus? The full and scary details.

MAY

Thursday 6 May at 12:30 pm

'Some Observations on Horticultural Produce Handling'

Borrry Gartrell

Orange fruit grower and restaurateur, Borrry Gartrell incisively reviews the fresh produce distribution and retailing industry. While the views are essentially his, the insights are disturbing.

Thursday 13 May at 12:30 pm

Thursday 20 May at 12:30 pm

For details of these talks check Friends website www.friendsanbg.org.au

Friday 21 to Monday 24 May

Conference of Association of Friends of Botanic Gardens. See page 11 for details.

Saturday 22 May

International Biodiversity Day

Check website for details of activities celebrating Biodiversity Day in the International Year of Biodiversity.

Thursday 27 May at 12:30 pm

For details of this talk check Friends website.

JUNE

Thursday 3 June at 12:30 pm

'A Partnership with Greening Australia and the Seed Bank'

Stuart Johnston

TransGrid, a commercial undertaking, supports the collection and preservation of seed in a working partnership with Greening Australia and the Seed Bank.

This enterprise is detailed by Stuart Johnston as TransGrid Corporate Manager, Environment.

Monday 7 June

National Parks Association Photo Exhibition opens

Visitor Centre Gallery

Thursday 10 June at 12:30 pm

'Growing Native Plants'

Ben Stocks

A practical nurseryman presents some advice on native plant growing. This is a return visit, after Ben's much appreciated talk in 2006.

Thursday 17 June at 12:30 pm

'Eucalypts of the ANBG'

Murray Fagg

Long-time staff member Murray talks about the ANBG Eucalypts – 'A natural and social history'.

Thursday 24 June at 12:30 pm

For details of this talk check Friends website.

Tuesday 29 June

Working On Country Photo exhibition opens

Visitor Centre Gallery

JULY

Thursday 1 July at 12:30 pm

'The Australian Inland Botanic Gardens'

Ken Mansell

The manager of the AIBG talks of the beauties and problems of the mallee and the outcomes of the Assoc. of Friends of Botanic Gardens Conference held there in May

Sunday 4 to Sunday 11 July

NAIDOC Week

Bush tucker walks, storytelling, drop-in family activities. Check website for details.

Thursday 8 July at 12:30 pm

'Australian Mountain Stories'

Matthew Higgins

Matthew talks about his book, 'Rugged Beyond Imagination', supported by his new short film 'High Stakes', the Snowies in winter.

Thursday 15 July at 12:30 pm

'Seven Mile Beach Bush Regeneration Plan'

James Doak

A severe weed infestation, and problems of local administration, prompted James to use his skills in management to achieve a cooperative long-term regeneration program.

Thursday 22 and 29 July at 12.30 pm

For details of these talks check Friends website.

August events on back page.

What's on in August

Monday 2 to Sunday 15 August Australian Science Festival

Check website for details of program of events and activities as part of the Gardens participation in the 2010 Australian Science Festival. This year's theme links to the International Year of Biodiversity.

Thursday 12 August at 12.30 pm Fourth Bernard Fennessy Memorial Lecture

Includes presentation of Award to 'What's in a Name?' competition winner.

Thursday 5, 19 and 26 August at 12.30 pm For details of these talk check Friends website.



Photographed and created by Geoffrey Dabb

Whenever I feed on this shrub I always think of Charles Francis Greville (1749-1809), second son of the Earl of Warwick and a founder of the Royal Horticultural Society and a close friend of Sir Joseph Banks (something of a coincidence there, because this species is named *G banksii*), and said to be the lover of Emma Hart who married Greville's uncle, Sir William Hamilton, and later became the mistress of Horatio Nelson, which makes me think it's a pity they don't put up signs with this kind of information ...

THE BERNARD FENNESSY 'WHAT'S IN A NAME?' COMPETITION

Time to enter for 2010 competition!

Entries are invited for this year's Bernard Fennessy '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 Bernard's articles. Winners and some entries from previous years competitions 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 of the plant. Entries are not restricted to members of the Friends – anyone may enter, but only one entry per person, please. Entries should not describe a plant already covered by one of Bernard's articles or by any competition entries published in the Newsletter (see website for a list of these).

Closing date: 28 May 2010. The award of \$500 for the best entry will be presented at the Fourth Bernard Fennessy Memorial Lecture at 12.30pm, Thursday 12 August 2010, in the ANBG Theatre.

Entries to be submitted by email to: newsletter@friendsanbg.org.au. If that is not possible, mail to 'What's in a Name?' Competition, Friends of the ANBG, GPO Box 1777, Canberra ACT 2601, or drop in the Friends letterbox in the Visitor Centre. Please include your name, address, phone number and email address with your entry.

All the things you need to know are at www.friendsanbg.org.au and in hard copy in the Friends Lounge. Queries to Newsletter editor at newsletter@friendsanbg.org.au.