

Summer 2006/07

BOTANIC NEWS

FRIENDS of the ROYAL BOTANIC
GARDENS MELBOURNE INC.

FEATURE

Sustaining Biodiversity in Australian
Cities and Towns p 4-6



FROM THE PRESIDENT



I feel very privileged to have been elected as President of the Friends as this special and successful organization approaches its 25th anniversary. It is certainly a time to reflect on what has been achieved in the past and to know that, although there are bound to be many challenges in the future, the many dedicated volunteers who run the Friends will meet those challenges with skill and determination.

Planning is already well advanced for our anniversary celebrations next year and further information will appear in the Autumn edition of *Botanic News* but please note that there will be a birthday party on Wednesday evening, 14 March.

The Plant Craft Cottage and the Voluntary Guides have already celebrated their 25th birthdays. Congratulations to both groups and our very best wishes for the next 25 years.

The Friends' Annual General Meeting was held on 13 November. With his senior corporate background, Irwin Newman brought to his role as President over the last four years a vast amount of experience and expertise. These attributes, when teamed with Irwin's ability to quickly identify the core of any particular issue, substantially contributed to the



Friends' affairs and we warmly thank him. Irwin will continue to be involved with the Friends as Immediate Past President.

I would also like to thank retiring Council member Anne Weber for her significant contribution to the Friends. A loyal and hard working member of the Growing Friends since 1990, Anne joined the Council in 2000. We wish Anne well in her move to Canberra.

Peter Kelly, who joined the Friends in 2002, has been elected to Council as an Ordinary Member.

The Growing Friends excelled themselves again in October with their Spring Sale. The handsome amount of \$27,848 (incl GST) was raised – a wonderful result. Our thanks go to all the skilful members of the Growing Friends for the work they do so successfully, and to the other volunteers who lend a very helpful hand on Sale days. Pam Eames stood down as convener on 15 September and our

grateful thanks go to her for her commitment, hard work and enthusiasm in this role. She has been replaced by Juliana Horsfall, a member of the Growing Friends since 2002.

On 10 November, our Patron, Professor David de Kretser AC, Governor of Victoria, opened *The Art of Botanical Illustration* 2006 Exhibition – what a magnificent Exhibition this was, with the 170 works of art providing a visual delight for the 300-plus Members and friends present that evening. We were delighted to welcome the Governor, who spoke eloquently and thoughtfully about the scientific nature of botanical art and the role it plays in botanical research.

A first for the Friends – a beautiful 2007 wall calendar containing 14 illustrations executed by our botanical artists – went on sale at the Exhibition. Selling at \$10 each, the calendars would make excellent Christmas gifts. An order form is included with this edition of *Botanic News*. May I

also remind Members that there is still time to purchase the Friends' very attractive 2006 Christmas cards featuring detail from Anita Barley's illustration of *Erythrina acanthocarpa*.

Congratulations to our Honorary Life Member and former Secretary Lawrence Cohn, who was recently appointed for a second three-year term as an Honorary Associate of the Royal Botanic Gardens, Melbourne. Currently Lawrence is preparing the consolidated biographical register for the Mueller Correspondence Project which covers three volumes. Each volume contains a list of the people named in the letters and a few lines about each of them. The intention is to put the letters on a website.

I look forward to my term as President and welcome any comments or ideas from Members about the Friends.

Season's Greetings to all who read *Botanic News* and best wishes for a happy and peaceful 2007.

Janet Thomson

FROM THE GARDENS AND HERBARIUM

Contents

Feature	4
Growing Friends	6
Activities	7
Illustrators	10
Gardens	12
Book Review	14

Front cover: *Sarracenia x exornata* (*S. purpurea* x *alata*) – Pitcher Plant, Watercolour by Sandra Sanger, exhibited at The Art of Botanical Illustration Exhibition 2006 and granted an Honorable Mention for the Celia Rosser Medal. See pages 10 and 11.

Australian Garden

In order to gain an early measure of visitors' responses to the Australian Garden and to identify any issues affecting those responses, we commissioned a market research consultancy to conduct visitor surveys in June and July. Overall, the Australian Garden received high praise from almost 600 visitors who completed the questionnaire, with overall performance receiving an average rating of 8.8 out of 10 and 32 per cent of respondents giving the Garden 10 out of 10.

Water Management at the RBG

The RBG has successfully sought exemptions from water restrictions in the last few years on the basis of heritage values of the Gardens, and its significant water-saving track record since 1995. This year we have again applied for an exemption from South East Water to allow the health of the Gardens' living collections to be protected, and the irrigation system and main water features to be maintained. Exemptions are also being sought for RBG Cranbourne in recognition of the need to adequately establish the new plantings in the Australian Garden. Currently both Nursery sites are also exempted from restrictions.

The RBG, under the auspices of Botanic Gardens Australia and New Zealand (BGANZ), conducted a two-day National Workshop on Water Management for Botanic Gardens on 25–26 October in

Domain House (and on site in the Gardens). We received significant interest from botanic garden colleagues, with over thirty attendees participating. This intensive workshop focused on irrigation management, and management of water bodies in the landscape.

A new automatic irrigation system controller has been installed in the Gardens and staff are currently gaining familiarity with it, in order to continue our outstanding record of responsible water use.

Minor Capital Works

Five new public toilet structures have been erected at new sites, (glasshouse site pictured, left) and two existing facilities expanded, within RBG Melbourne. The buildings have been located in places where they will better serve the distribution and numbers of visitors, particularly during the busy summer season. The toilets are all built to the same general design and provide full disabled access and baby-changing facilities. Their style and materials are such that they already blend sympathetically with their surrounding landscapes. The old toilet blocks at the rear of the Terrace Tea Rooms (in the Tennyson Lawn shrubbery) will be demolished this year, while the now decommissioned female-only brick toilet inside 'D' Gate has been converted to a storage shed.

The brick veneer house just inside 'A' Gate is also to be demolished this year, allowing scope for enhancement of the entry to the Gardens for visitors

through this gate.

A new boathouse is under construction, to provide appropriate protection for Euphemia, the beautiful clinker-built rowing dinghy donated by Lindsay Fox and Family and constructed by Blunt's Boatbuilders in Williamstown. The new structure will sit near to the old row boat 'bunker' shed, west of Eel Bridge.

Functions in RBG Melbourne

Recently there have been several media reports about our application for a liquor licence covering functions in RBG Melbourne. These reports claimed that the Gardens will become the venue for unruly parties day and night and that other visitors will be unable to enjoy the landscapes and tranquil atmosphere here. The reports are inaccurate and unnecessarily alarmist.

Weddings, family parties and other booked functions have been held in the Gardens for many years. I believe it is important that these activities continue because they allow our community to experience the beauty of the Gardens while providing access for others who wish to enjoy the pleasant surroundings during a function. These functions are now being managed by Blakes Feast Pty Ltd, rather than the RBG. Our contract with Blake's Feast contains strict controls on how functions must be managed and where they can be held. These controls include protection of the Gardens, security, after-

Photo: Meg Miller



Photo: Meg Miller



hours exit gates to be used by guests, noise, service of alcohol, placement of marquees and finishing times of evening functions. Marquees may be located at only two sites within the Gardens and there are controls on the erection of marquees and how long they can be in place.

RBG Staff have worked hard to ensure that the collections and amenity values of the Gardens are properly protected by these conditions, while enabling Melburnians and others to continue enjoying functions in the Gardens.

Philip Moors, Director



Photo: Meg Miller



Photo: Jennifer Marshall

Sustaining Biodiversity in Australian Cities and Towns

Australia is one of the most urbanised countries in the world with 88 per cent of Australians living in cities. In the past, agricultural activities have caused most extinctions, but now many plants and animals under threat are found in urban areas. In order to preserve and manage this biodiversity we must have a more detailed understanding of the important ecological processes operating and how organisms live in urban environments, as well as community education about the great value of Australia's plants and animals and how to conserve them so that we can continue to appreciate them in the future.

In recognition of these needs, in 1998 the Royal Botanic Gardens, Melbourne, with generous assistance from the Baker Foundation, established the Australian Research Centre for Urban Ecology (ARCUE). Although the Centre is a Division of the Royal Botanic Gardens, for practical reasons it is located in the School of Botany at the University of Melbourne. It is one of the few research centres in the world having its prime focus on the conservation of biodiversity in cities and towns. ARCUE's activities cover research, student training and research (Honours and Postgraduate), community education and training programs, and policy and management advice to all levels of government and consultancy services.

Over the past eight years

ARCUE staff and students have conducted a range of research projects focusing on the conservation of indigenous plants and animals in urban and suburban areas. The research has also provided baseline information essential for conservation planning. An example of the latter work is the comprehensive remnant vegetation mapping of Melbourne's suburbs that ARCUE provided to the Victorian Department of Sustainability and Environment. In the following sections we will highlight the results of four areas of research including studies of grasslands, heathlands, roads and tree hollows.

Grasslands

Native grasslands are one of the most endangered ecosystems in Australia. Despite recent losses due to urbanisation, substantial areas of native grassland remain in and around cities such as Melbourne, Canberra and Geelong. Grassland research projects at ARCUE have focused on understanding the ecology of these unique ecosystems. We have been especially interested in

investigating the impacts of landscape fragmentation and edge effects on the composition and structure of the plant communities. Our botanical surveys of grasslands in the Melbourne area have discovered many previously unknown populations of the endangered Plains Rice-flower (*Pimelea spinescens*) and a single population of Button Wrinklewort (*Rutidosia leptorhynchoides*) in a suburban park less than 10 km from the centre of the city.

We have analysed grassland fragmentation patterns in Melbourne through the development of a temporal Geographical Information Systems dataset spanning the period 1985 to 2000 that recorded the extent and distribution of native grassland patches. Of the 7,230 ha of native grassland present in 1985, 23 per cent were destroyed by development and 21 per cent were degraded to non-native grassland by 2000. There were fewer patches and a greater distance between them in 2000 than in 1985, indicating that fragmentation has intensified. Logistic regression models determined that patches that were privately or government owned, close to major roads and close to Melbourne, had a higher probability of being destroyed while patches close to streams or on railway land had a lower probability of destruction but high susceptibility to weed invasion.

By understanding the risk factors that result in the destruction of grasslands we are able to better prioritise conservation efforts.



Photo: Nicholas Williams

Heathlands

The heathlands occurring in the suburban south-east of Melbourne have been the subject of several ARCUE studies. Initial research compared the composition and structure of

Photo: Mark McDonnell



urban heathlands to those in rural areas. Analyses indicated that these differences were correlated with the amount of urbanisation of the landscape and were probably at least partly related to changed disturbance regimes in it. Further research investigated the soil seedbank of heathlands and found that burnt areas of urban sites had significantly more seed in the soil seedbank than unburnt areas. This was due to the reduced numbers of heath species in the unburnt vegetation of urban sites. In contrast, unburnt areas of rural sites retained many heath species in the vegetation, and at these sites no significant differences were detected between the soil seedbanks from burnt and unburnt areas.

Recent heathland research has investigated the invasion of *Leptospermum laevigatum* into heathland remnants due to fire-suppression in Melbourne. Local councils have been reclaiming

invaded patches by burning *L. laevigatum* after the original heathland community has spent 50 to 60 years confined to the soil seedbank. The vegetation was surveyed and compared with nearby patches of intact, uninvaded heathland. We found that although reclaimed heathlands have retained 85 per cent of their original species diversity, they have lost important dominant species including *Leptospermum myrsinoides*, *Hypolaena fastigiata*, *Banksia marginata* and *Allocasuarina paradoxa*, and are now dominated by *Bossiaea cinerea*, *Aotus ericoides*, *Hibbertia sericea* and other hard-seeded species that have been able to persist in the soil seedbank. Patches of heathland in the Royal Melbourne Golf Club that have been managed exclusively by slashing for over 70 years were also surveyed and compared with reclaimed and uninvaded heathlands. Slashed sites have retained *L. myrsinoides* and *B. marginata*, although species richness has been reduced in the shrub layer and increased in the herbaceous layer where grasses such as *Microlaena stipoides* are common.

Road Ecology

One of the most common aspects of cities and towns around the world is the presence of roads. In the Greater Melbourne area alone, there are 18,078 km of road. Roads are critical to the social and economic health of all Australians and there are ongoing programs to widen and straighten roads to increase travel efficiency and human

safety. While roads are expensive to build and maintain, they also create costs to the environment that are rarely fully considered. Conflict often arises where new or upgraded roads dissect areas of natural vegetation that are home to native plants and animals.

ARCUE staff and students are part of a research team which includes collaborators from Monash and Melbourne Universities and VicRoads. This group is focused on quantifying the extent to which major roads form a barrier to the movement of wildlife, either through increased mortality due to roadkill or animals avoiding the road and traffic. This

Photo: Rodney Van der Ree



research is innovative because we are building on the foundations of road ecology and expanding it to include the novel and important study area of animal movement and population viability. It will be the first study to combine three different techniques (empirical observations [trapping, radio-tracking], genetic analyses and metapopulation modelling) to specifically address questions related to the barrier effect of roads on mammals (Squirrel Gliders, Yellow-footed Antechinus and Common

Brushtail Possums), reptiles (Garden Skinks) and invertebrates (Cockroaches). By combining studies of distinctly different taxonomic groups, we expect to gain powerful insights into the relative effects of roads on the groups. Because of their lower mobility relative to the mammals, the invertebrates may provide an indication of the potential long-term effects of reduced movement on mammals. They may also reveal the need for very different mitigation strategies for different faunal groups, since the major factors affecting their mobility are amount, distribution and nature of coarse woody debris.

Finally, and perhaps most importantly, this research is highly significant because it will assess the effectiveness of measures that have been proposed for numerous road projects in eastern Australia, and which potentially will have great impact on reducing barrier effects. This project is a significant collaboration between researchers (with expertise in modelling, genetics and ecology) and senior personnel from a road construction agency, that crosses taxonomic boundaries.

Tree hollows – a limited reserve

As has happened in cities around the world, the rapid urban growth of Melbourne has led to the loss and degradation of native vegetation. The eucalypt forest that once dominated Melbourne's eastern suburbs is today mainly confined to small bushland parks. These parks are an important refuge

CONT'D GROWING FRIENDS

for many species of fauna as they provide resources that are not available in more developed areas. In particular, they provide shelter for many species that den or nest in tree hollows.

Unfortunately, Melbourne's bushland parks contain only a third of the number of tree hollows that they once contained, and, even with careful management, new tree hollows are unlikely to become available for more than 50 years. Therefore, it is important to preserve tree hollows that are presently available, and find short-term solutions to the 'housing shortage' facing native fauna. One potential short-term solution may be the provision of nest boxes. Although this idea has promise, it requires careful planning to ensure nest boxes suit the fauna they are built for, and careful monitoring so as not to provide homes for unwanted pest species.

Given the lack of tree hollows in Melbourne's bushland remnants, it is encouraging to note that some hollow-dwelling mammals such as possums, gliders and bats, and birds such as rosellas, lorikeets and galahs, still call Melbourne home. However, we have work to do to ensure that this continues.

Julia Stammers/Mark McDonnell



Photo: Harjono Djoyobisono

This is my first article for the *Botanic News* as the new convener of the Growing Friends' Nursery. Most of you will know that the group has been led, for the past two and a half years, by Pam Eames, who followed Colin Herbert. I am taking this opportunity to say what a terrific leader Pam has been. She has always impressed me as being totally at ease and composed, while constantly getting things done and moving the nursery happily along.

Pam is pictured here



receiving her 'leadership trophy'. Our group all agreed that the presentation of a trophy to Pam for her work as a "top leader" was an appropriate way to mark her passing on the job of convener. She will be a hard act for me to follow as we continue to work with Pam on Friday mornings (when Members of the Friends are welcome to visit and purchase, between 10.00am and 1.00pm).

In my time with the Growing Friends I have gradually become aware that the members have a strong history and self-belief. Past

members are fondly referred to and often mentioned for their individual contributions to the work done in the nursery, and in association with the plant sales. Long-serving members are happily passing on to me the traditions of the growers, and I hope that I am able to fulfill their expectations and keep the group in at least as good form as I have found it.

On a different note I would like to thank all the extended Friends' family who willingly answered the calls from Janet

previously been done commercially, so the money raised by the catalogue sales this Spring added to the profits. The raffle, organized by one of our newer members, Ros Jones, was most successful. All the prizes were donated or grown. They included an Azalea in a special pot given by retiring member Anne Weber (who is leaving us after 16 much-appreciated years); an *Eremophila scoparia* grafted by Dermot Molloy from the RBG nursery; a mixed succulent pot beautifully grown in our own nursery under the hand of Dorothy Smith; a meal at the Observatory Café and a book about the Royal Botanic Gardens, from the Gardens Shop in the Visitor Centre were much appreciated. A special thank you to all involved – donors, ticket-sellers and buyers.

We wish Anne Weber a most happy retirement in Canberra.

Julie Horsfall, Convener

Thomson, Maurice Castro and Linda Floyd to work as volunteers, selling plants and in the entry and exit tents at the Spring Plant Sale.

The sale was, again, a great financial success. At the time of writing the gross figure raised was \$27,848.00. Thank you and well done to everyone involved. It was a great team effort, like a complex jigsaw puzzle, with each person involved being an important part of the complete picture.

Special thanks also to the team at Gate Lodge for their help in copying and stapling the sale catalogue. This has

ACTIVITIES



Christmas Shopping Visit to the Growing Friends' Nursery

Friday 8 December at 10.30am
Meet at Gate Lodge (opposite Shrine)
Cost \$5 MEMBERS ONLY
RSVP by Wednesday 6 December
on enclosed booking form
BOOKINGS ESSENTIAL AS NUMBERS
WILL BE LIMITED

This morning will be a special opportunity for new members and for other members, who are not familiar with the whereabouts and workings of our Growing Friends' Nursery. We will meet at Gate Lodge (the Friends' headquarters) opposite the Shrine, for morning tea and to meet some fellow plant loving members, plus a representative of the Friends' Activities Committee.

You will then be guided down to the Growing Friends' Nursery (open Friday mornings to Members only), for a brief overview of the nursery. There will be some Xmas specials, and other plant purchases may be made during the visit.

If you plan to buy a number of plants think about bringing your shopping jeep or market trolley to help carry your purchases.



Summer 'Talking Plants' Morning

GREY PLANTS

Friday 16 February at 10.00am
Meet at Domain House
on Dallas Brooks Drive
Cost: \$15 Friends \$10
RSVP by Monday 12 February
on enclosed booking form

The Summer 'Talking Plants' theme will be Grey Plants. The morning will be held in Domain House and will be an informal gathering of Friends with a common interest in plants and gardening.

We'll have a knowledgeable person to discuss the topic and make valuable suggestions for using these plants.

All those attending are invited to bring a piece of a favourite grey plant to show and share.

Refreshments will be served during the morning.

Following the discussion there will be an opportunity to visit the Growing Friends' Nursery for plant purchases.



Summer Fit Friends' Ramble

HISTORIC SOUTH MELBOURNE/ALBERT PARK: FROM COASTAL SWAMP TO 'SOUGHT AFTER' ADDRESS

Thursday 22 February at 9.00am sharp
Meet at Light Rail Station Cafe, corner Armstrong St/Canterbury Rd, Middle Park. Melways 59 1A. Tram #96 Stop 130. N.B. Early start for full morning's walk (9.00am-12.00noon). Remember to bring hats, sunscreen and water bottles. Cost: \$15 Friends \$10
RSVP by Monday 19 February
on enclosed booking form

We will walk the 30-year-old Urban Forest pathway adjacent to the light rail line, identifying native trees and bushes while enjoying the native birds that have returned as a result of the planting. Points of interest along the way will be the Aquatic Centre with recently completed additions for the Commonwealth Games; the Confucian Chinese Temple (in continuous use since the 1850s Gold Rush days); Emerald Hill, noting the fine

Town Hall and old corrugated iron cottage (property of National Trust); the beautiful St. Vincent Place Gardens and surrounding terraces; a multitude of fine cafes for morning tea/coffee and many other historic points of interest, observing the interesting juxtaposition of the old and the new.

This will be a long walk in possibly very hot weather. Please be capable of completing this walk while keeping up a good walking pace.

ACTIVITIES



Summer Quarterly Insiders' Walk

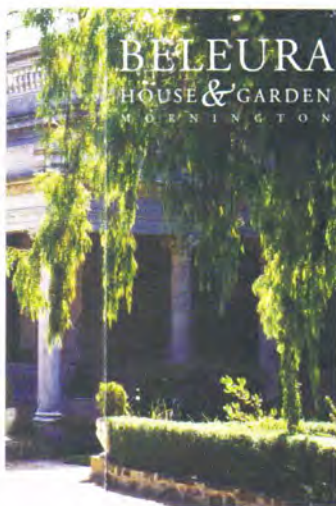
CALIFORNIAN GARDEN

Wednesday 28 February at 10.00am
Meet at Gate Lodge (opposite Shrine)
Cost: \$10 MEMBERS ONLY
THIS IS A LIMITED NUMBER EVENT
RSVP by Friday 23 February
on enclosed booking form.
Join us for morning tea and an
information session at Gate

Lodge before the walk.

After the introduction, which will include the meaning of 'Chaparral', we will walk directly to the Californian Garden. The guides will examine the plants, discuss the original habitats, growth habits and their uses. We will enjoy the brilliance of the blooms and be shown the specific foliage characteristics which enable plants such as agaves, oak and poppies, to survive in the Californian conditions.

This garden is one of the areas of the RBG which displays the beauty of drought tolerant plants and their use in water conservation gardening.



Beleura: A Garden Villa

BUS TOUR

Wednesday 28 March 2007
Depart: 8.15am sharp from Vision Australia car park (opp. Kooyong Tennis Club)
Return: 5.00pm approximately
Cost: \$60 pp includes bus, transfers, entrance, morning tea, informative history talk, tours of both Villa and Garden and lunch.
RSVP by Wednesday 28 February on enclosed booking form.

Beleura, an Italianate villa, was built in 1863/4 for James Butchard. It was subsequently owned by noted Victorian families and in 1899 sold to Robert Smith Esq., pastoralist and father of Helen McPherson Schutt who established the charitable foundation of this name.

In 1916 *Beleura* was purchased by Mr and Mrs George Tallis, later Sir George and Lady Tallis, who continued the traditional use of the villa as a seaside house. Dame Nellie

Melba was a frequent guest. A superb garden was laid out using designs by Edna Walling.

John Tallis, son of Sir George and Lady Tallis, acquired the property in 1948 – a gentleman, composer of music and art collector, he bequeathed *Beleura*, its contents and the Tallis Foundation to the people of Victoria in 1996. According to his wishes, a rose garden based on Sissinghurst, a wilderness garden, hen house and herb garden are today being restored.



Introduction to Horticulture

A SHORT COURSE BEING PRESENTED IN CONJUNCTION WITH THE RBG, MELBOURNE

April 2007

Following the success of previous hands-on courses conducted by RBG staff exclusively for members of the Friends, we are delighted to announce a short course to be conducted in 5 x 2-hour sessions over five weeks.

It will combine classroom-style teaching with some hands-on work. The course will cover the five general aspects of horticulture by following the life of a plant being introduced to the Gardens.

The five Ps of introducing a plant to the RBG are planning, processes, propagation, planting and pruning.

Please call our office to register your interest in advance for this course. Exact details and costs will be available in the Autumn 2007 issue of *Botanic News*.

Numbers will be strictly limited and places in the course will be offered first to those members who have registered their interest with us.

ACTIVITIES



Gardens, Art and Houses of the Southern Highlands

AIR AND COACH TOUR

Wednesday October 31 to Sunday November 4, 2007
 COST: \$1948.00 per person double or twin (Singles extra \$275.00) includes GST. Virgin Blue air travel to and from Sydney, and 5-star coach travel. All admissions, all lunches (apart from Day 3), luxury accommodation at Craigieburn with all breakfasts and dinners at its 'Montfort Restaurant', featuring fresh seasonal food with Mediterranean and Asian influences

Land content only: \$1665.00
 Detailed flyer, booking form and further information from
 Caroline Davies Garden Tours
 6 May Road, Toorak, VIC 3142
 Tel/fax 03 9827 6944
 (In conjunction with Acland Travel Agency, Licence No. 30016)



Photos by Caroline Davies
 (top) Espaliered *Fremontodendron californicum* at Moidart, Bowral
 (centre) Lantern Hill, Exeter
 (below) Red Cow Farm at Sutton Forest

Our new tour in the Southern Highlands of New South Wales, an area renowned for its cool-climate gardens, is based at Craigieburn, a luxury country retreat on the outskirts of Bowral. The five-day itinerary includes an outstanding range of houses and gardens, as well as memorable meals in idyllic surroundings. The tour has been designed by Caroline Davies and David Martin in consultation with the Friends' Activities Committee and they will both accompany the group.

Included in the itinerary are lunch with talented cook Michelle Scamps at her ultra-modern home, Greyladies, spectacularly sited on the slopes of Mount Gibraltar; a visit to Retford Park, the home of James Fairfax, to view his outstanding art collection and impressive gardens in the grand English style; and Greenbrier Park where Robert and Janet Constable have combined a fine selection of Australian native and exotic plants, set in woodlands of ancient eucalypts. The borrowed landscape is an integral feature of Helen Rowe's skilful garden at Laureldale, framing one of Robertson's original houses. At Chinoiserie, peonies are Dominic Wong's obsession. In spring, the Long Border at Lantern Hill, set high at Exeter, comes into its own, filled with flowering shrubs, irises and roses.

The evolving garden at Dragon Farm reveals Robin Frolich's excellent choice of plants and colour combinations, while Bruce Rosenberg's Yarrawa at Burrawang has been described as "one of the loveliest in the country",

distinctive for its use of "masses and voids" in perfect scale and proportion. A tranquil Japanese tea garden contributes to the atmosphere of Prittlewell, at Fitzroy Falls, where water features extend to a reed-edged lake. At Sallyhill, harmonious plantings of native grasses, sedges and low shrubs link the classical colonial-style house with the surrounding natural bush and remnant rainforest. We visit famous gardens of the region including Kennerton Green, with its series of garden rooms, woodlands and artistic potager; Moidart, where the original grand garden has been regenerated with exceptional new plantings; Red Cow Farm, admired for its old-fashioned roses and cottage gardens, which continue into the paddocks, with maturing woodlands, lake and bog areas, and finally the Sturt Craft Centre, where studios, workshops and gallery nestle into a romantic spring garden.

A feature of this special tour is country hospitality, meeting the owners of the gardens and sharing their enthusiasm and vision. We have allowed ample time at each property to enjoy it in a leisurely fashion.

ILLUSTRATORS

Classes

Term 1 will start in the week beginning 5 February 2007. Classes will be held on Tuesday evenings and in the daytime on Mondays, Wednesdays (two sessions) Fridays and Saturdays.

2.5hr classes: \$255 (incl GST)
Friends \$215 (incl GST)
3hr classes: \$295 incl GST
Friends \$255 (incl GST)

For further information on classes contact the Friends' office on 9650 6398.

Workshops

Four day beginners' workshop with Dianne Emery
2, 3, 4 and 5 January 2007,
10.00am-4.00pm
Cost: \$265, Friends \$225

This intensive course is an introduction to botanical art via pencil and watercolour. Over the four days, students will begin to develop skills in outline drawing and foreshortening, tonal work and rendering of surfaces, basic colour work and paint application.

The cost includes drawing materials, paint, watercolour paper and brushes and morning and afternoon tea. Classes will be held in the Whirling Room Studio, Observatory Gate.

Plant Dissection and Microscope Workshop with Mali Moir
8, 9 January 2007, 10.00am-3.00pm
Cost \$155 Friends \$115

Suitable for both beginners and more advanced artists. Basic botany and plant dissection for illustration will be covered. Choose your medium – pen

and ink, graphite pencil or watercolour. Students need to apply for a materials list.

Ongoing Students' Workshop with Dianne Emery
'Red and Green'
16,17,18 January 2007
10.00am-4.00pm
Cost: \$230 Friends \$190

This workshop deals with red and green, especially flowers, leaves and fruits.

Students will need to apply for a materials list.

Vellum Workshop with Mali Moir
Monday 22, Tuesday 23 January,
10.00am-3.00pm
Cost: \$155 Friends \$115

A new workshop offer to advanced students only. Vellum is an animal skin from the leather industry, specially prepared for painting. Its semi-opaque quality gives watercolours a uniquely lustrous and vibrant effect. This course will focus on producing small works using primarily a 'dry brush' technique. Kelmscott vellum from England will be available for purchase at the workshop or you may bring your own. One 6 x 8 inch piece will cost approx \$25. Students will need to apply for a materials list.

Working with Vellum

Terri McDonald recently gave a very interesting talk to the illustrators on working with vellum. After visiting an exhibition of Franz Bauer and Charles Lesueur paintings, she discovered vellum and loved its texture and glow. Terri is currently completing her PhD



Photo: Mali Moir

in botanical and zoological illustration, and showed us her workbook containing pieces of different vellums and trials on them with many colours and paint materials such as gouache, watercolours, ink and powder.

Terri brought in several books including *Painting for Calligraphers* by Marie Angel and *Nature Illuminated* from the J. Paul Getty Museum, showing exquisite miniature paintings on vellum with many washes and fine details.

Vellum is made from a variety of animal skins, including sheep, goat, calfskin and kangaroo. It will last indefinitely if well looked-after. The early Greeks began using it instead of papyrus rolls because it could be used flat and this continued through the Middle Ages. The vellum is separated and split into layers and then can be bleached and stretched – book pages are not stretched. Paint is not absorbed by the vellum and sits on top of it so the colour intensity is greater. Skins can be purchased from the UK, but are very expensive and it was recommended that smaller pieces be acquired.

Terri then discussed her technique and how she built up the layers of colour.

Judy Jarman

Whirlybirds

We have been fortunate to have had two very interesting and inspiring talks this term – the first by Dianne Emery explaining the use and application of colour, and the second by Terri Macdonald about working on vellum.

The Whirlybirds will meet on 5 December for the last time in 2006. We will resume our weekly painting days on 30 January 2007. If you would like to join us on Tuesdays in the Whirling Room Studio, please contact Sandra Sanger on 9598 9532 for further information.



The Art of Botanical Illustration Exhibition 2006

Our Patron, Professor David de Kretser, Governor of Victoria opened the eighth biennial exhibition on 10 November in Domain House Gallery. More than three hundred guests attended the opening reception.

Five paintings were purchased for the State Botanical Collection. Three of these were purchased with a grant from the Friends – Diane Boak's *Lactarius deliciosus*; Margaret Holloway's *Anthurus archeri* and Merle McIntyre's *Marchantia berteroana*.

ILLUSTRATORS

The Director's Circle provided the funds for the purchase of Marta Salamon's *Eucalyptus ficifolia* and the other painting, which was purchased by the RBG, was Edyta Hoxley's *Lysiana exocarpi* on *Allocasuarina luehmannii*. The Celia Rosser Medal was awarded to Anita Barley while honorable mentions were given to Elizabeth Cooper and Sandra Sanger.

Anita's exhibited work included *Erythrina acanthocarpa*, an exceptional and superbly crafted painting. (This painting, pictured at left, was featured on the cover of Spring 2006 *Botanic News* and this year's Christmas card.) The finely observed contrasting characteristics of the plant are expertly expressed through dramatic use of composition and colour, combined with superb technical skills and a remarkable sensitivity to detail. Anita's other exhibits were *Kniphofia uvaria*, *Pinus roxburghii* and *Wisteria floribunda*.

Elizabeth's exhibits included three finely executed pencil drawings: in particular, a well-observed and sensitively rendered illustration of a *Magnolia grandiflora* seedpod, which beautifully captures the characteristics of the specimen. Her other exhibits were *Illicium verum* and *Stenocarpus sinuatus*.

Sandra's body of work included four beautifully-presented watercolour paintings. She was commended, in particular, for the composition and finely observed and painted botanical detail of the study of *Sarracenia x exornata* which is featured on the cover of this issue of *Botanic News*. Her other

exhibits included *Gloriosa superba*, *Paeonia suffruticosa* and *Pterostylis nutans*. The opening night sales continued strongly over the first weekend and more than seventy paintings had been sold by the end of that weekend. Many thanks to the artists who produced the 170 stunning paintings and drawings on display and the hardworking committee members who organized the event.

Edyta Hoxley and Louise Coronel.

top right: Margaret Holloway, *Anthurus archeri*
right: Edyta Hoxley, *Lysiana exocarpi* on *Allocasuarina luehmannii*
far right: Marta Salamon, *Eucalyptus ficifolia*
below: Merle McIntyre, *Marchantia berterona*
below middle: Elizabeth Cooper, *Magnolia grandiflora*
below right: Dianne Boak, *Lactarius deliciosus*
Photos by Greg Hoxley



Whenever I think back to my school days (in a previous century), the thoughts are accompanied by a soundtrack of a lone piper, playing a seemingly endless medley of a limited number of traditional Scottish tunes. Late afternoon light playing across the school grounds, and 'Scotland the Brave' are part of the same scene in my memory. I find it hard to think of the place without the tune, or the tune without the place, if you see my point.

It is interesting to recognise the role that music or other sounds play in our reflections on places. Undoubtedly, our emotional response to a physical place is heightened by stimulation of various senses (aural in this case). I suppose that is why those clever film-making folk put such evocative sound tracks on their films. We're putty in their hands, really.

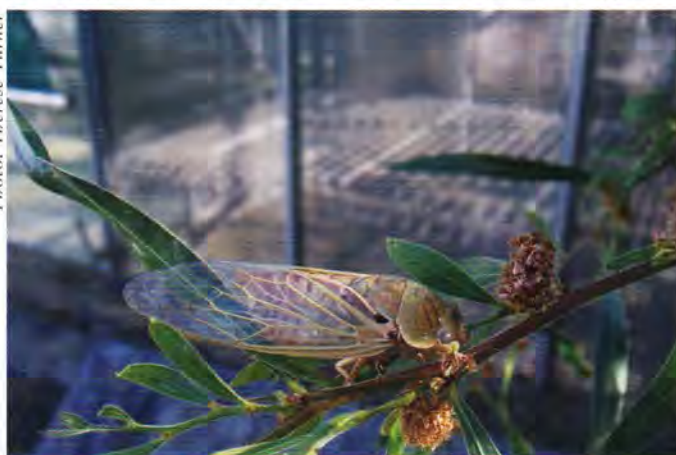
I heard the suggestion recently from one of our younger readers that all our daily activities should be accompanied by suitable soundtracks (she suggested the title 'The Soundtrack of Life'). I'm not sure of the logistics with this one, but the boffins down in the lab are bound to come up with something. Hang on a minute – they already have. The gadgets go by the unlikely names of iPod or MP3. They'll never take off – mark my words.

So – when you think of summer in the Gardens, what is the soundtrack that accompanies the picture? Is it something instrumental, is it the sound of children laughing, a breeze rustling the leaves of a big shady oak ... hopefully it's not the howling discordance of our

beloved backpack blowers clearing leaf litter off the paths!

For me there are several sounds which are synonymous with summer in our Gardens. Without doubt, the cicada is one of the most evocative. I say the cicada, but let's be honest – it's the full cacophony of a truckload of cicadas that does the trick. One on its own is a bit unsatisfactory. Think of a hot summer's day, and the soundtrack is a deafening pulsating chorus of cicada calls.

Photo: Therese Turner



I'm no expert on the little beasties, but I note that the ones I have found around the place tend to be greenish and, to my untrained eye, they appear to be 'Green Grocers'. There are others though, with far more exotic names: 'Double Drummer', 'Floury Baker', 'Yellow Monday', and my favourite of all, the 'Black Prince'. My sources tell me that there are around 200 species in Australia, of a staggering (and probably deafening) 2000 species worldwide.

There is an endearing quality to the cicada. I find it hard to ignore the plight of one that is being pursued by a bird intent on making the cicada its

luncheon (let's clarify this – the bird isn't actually making luncheon for the cicada, which in itself would be a generous and thoughtful gesture for a bird to make, and quite out of character for most birds, from my observations – no, the bird is intending to eat the cicada for its own lunch. Phew! Glad we sorted that mess out).

I suspect I am not alone in mounting rescue missions to save the occasional poor cicada from its fate (and robbing the

bird of its feed), through a sentimental fondness for the critters. To be honest, it's their faces that get me in – those big soulful compound eyes, the benign expression, and the air of a kindly uncle. Who could resist their charms? Well, not the birds as it turns out.

Bird's dinner or not, the adult cicada doesn't live long (3-4 weeks), before laying eggs and peeling off. The nymphs burrow underground, where they may remain for up to six or seven years. In some other parts of the world, they may remain underground for up to 17 years! When the nymphs finally emerge, they shed the dull brownish skin and hey presto,

the winged adult cicada appears. Three to four weeks of the noisy high life and that's all there is.

I remember hearing a tale of someone travelling in country Victoria in the early years of the automobile, who stopped on a number of occasions, convinced that the confounded auto was about to expire, such were the ominous mechanical sounds apparently emanating from under the bonnet. It was only after the ignition was finally switched off that it was found that the sound continued undiminished; that they realized it was, of course, those old tricksters, the cicadas.

The cicada sound is apparently made by flexing a pair of ribbed membranes at the base of the abdomen – the tymbals. This has been described as being a bit like popping the top of a fruit juice bottle (you know – the 'if this doesn't pop when you break the seal, proceed at your own risk' ones). They do this several times per second, and can achieve sound levels in excess of 120dB, which is well into the pain threshold of the human ear, and seems to be comparable to a jumbo jet heard from about 500m away.

Gather together a bunch of cicadas all making this sort of noise, and there you have a good protection against predation from a range of birds – they literally can't stand the noise! The cicadas themselves can by all accounts change the configuration of their own ear organs to protect themselves from being deafened by their own sound.

With respect to my earlier

comments about the lone piper, it now occurs to me that we may have stumbled upon the solid underpinning of the Scottish highlanders' battle tactics. Line up a few of the clan playing bagpipes, provide ear plugs to the pipers and those near at hand, and render the enemy helpless from the intensity of the noise! I expect that the Geneva Convention would not be silent on this matter these days.

Almost as unsettling as the cicada symphony at full tilt is the unexpected lack of noise

through the drier months was common. On really hot days, the sprinklers somehow made one feel a little bit more comfortable, even if their actual function of irrigation was not being carried out efficiently.

Of course we now regard such things far more seriously. We very rarely irrigate during the daytime at all – to avoid the periods of high evaporation potential, and to avoid watering our visitors (also to meet the current restrictions on water use). We now know that impact sprinklers have fairly

control unit (to allow remote activation from anywhere on site), 18 satellite controllers, a 'rain bucket' (for sensing rainfall) and connection to the existing RBG soil sensor network.

The technology alone doesn't do the trick, though. It takes significant amounts of Gardens' staff expertise, thought and time to prepare and run the watering programs and to maintain them properly, to deliver the water that the living plant collections require to remain healthy. Our objective is to work to an irrigation index 'budget', which means that we only apply as much water by irrigation as is necessary to negate the deficit between precipitation, and plant use combined with evaporation from the soil. Through various means (mulching, irrigating at night) we seek to keep the evaporation to a minimum, as we derive no direct benefit from losing water to the atmosphere, though it could be argued that we are contributing our valuable water vapor to another community's next rainshower, somewhere in the world.

So – ignore the lack of impact sprinklers. Spend a few moments this summer in the Gardens with your eyes closed. I think you will be surprised by the subtle menu of aural offerings from the natural world, together with some tasty contributions of our own making. Hopefully more of the former, than the latter. If you hear a lone piper, please let me know. I think we may have a specific regulation to protect us.

Richard Barley

2006 Annual General Meeting

This meeting of the Friends on Monday 13 November was presided over by Irwin Newman in his last duty as President before handing the post to Janet Thomson for the next two years. Anne Weber retired from Council and Peter Kelly was elected as an Ordinary Member.

Volunteer Service Medals were awarded to Linda Floyd, Janet James (each 15 years) Joan Murphy, David Plant, Janet Thomson and Cathy Trinca (each 10 years).

Guest speaker Professor David Cantrill, recently appointed as Chief Botanist and Director, Plant Sciences and Biodiversity, regaled his audience with tales of life in the Antarctic where he undertook fossil plant research with the British Antarctic Survey in Cambridge. More recently he worked in the Department of Palaeobotany at the highly-regarded Swedish Natural History Museum in Stockholm, in the company of many other research scientists conducting ground-breaking work in various fields. David's vision for the future of the Herbarium and its collections, his enthusiasm and his experience augurs well for the coming years.

Attending Members were fed by the hard-working catering committee, watered by our resident barman, Geoff Hardy and treated to another magnificent floral arrangement by Robyn Tymms. The Friends are truly fortunate to have such dedicated volunteers in each of our fields of endeavour.

Helen Fahey

Photo: Therese Turner



sometimes. The calls can die away quite quickly, leaving a dramatic absence of sound. We find the same use of pauses and gaps in classical music to emphasize the effect of a piece – and indeed in landscapes the eye and brain sometimes need to find the unfilled void, in order to fully appreciate the various masses, rhythms, textures and flow of the land.

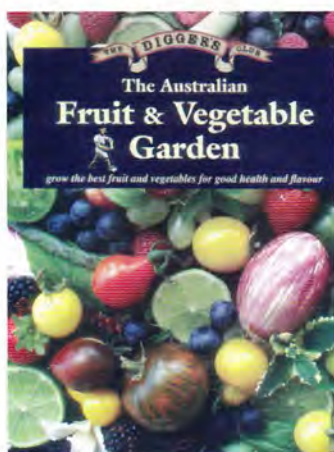
There is another sound with which many of us associate summer days in gardens, and that is the rhythmical choofing of an impact sprinkler. In these Gardens, as in most others, the sound of sprinklers running

uneven distribution patterns for the water they deliver, whereas other delivery devices, such as the sprays and sprinklers fitted in the RBG automatic system, are far more efficient.

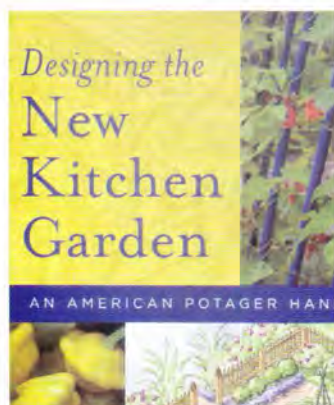
The efficiency of the irrigation is the key thing. We need to ensure that every drop of water that we put out through the system, for the purposes of keeping plants alive, is not wasted. We have a new computer-based irrigation control system, which replaced the 'old' controller (which had been in place since 1994) in winter this year. The new system includes a 'Freedom' radio

BOOK REVIEWS

REPORT



RRP \$39.95
Published 2006
Distributed by Bloominings Books



Jennifer R. Bartley
RRP \$59.95
Timber Press, 2006

Rising fruit and vegetable prices, a concern about the quality of the food we are putting into our mouths and a concern about a lack of diversity in the produce we can buy generally are all factors that are encouraging people to start growing their own. The potager, a mixture of food and ornamental plants is one way of having a handsome and productive garden space.

If you are interested in growing such a garden, *Designing the New Kitchen Garden* will inspire you. It contains case studies of a variety of such

gardens in America including design notes and plant lists. The use of food plants for architectural and design purposes is well illustrated, so as well as getting an aesthetic bang for your buck, you also eat really well.

Once excited about the design possibilities you will probably turn your attention to what you can grow given your climate and geography. *The Australian Fruit and Vegetable Garden* will help you with this. Since its release in July this comprehensive book, that emanates from the Diggers stable, has received a large amount of publicity. Those of us who have been to Heronswood have first hand experience of the work and experimentation that has gone on there to create vegetable and fruit gardens that are beautiful as well as productive. Most of us are also aware of their work to gather seeds and propagate heirloom vegetables.

This book is like a manual with clear illustrations and design ideas as well as detailed growing instructions and climate information. In writing this book, the authors have consulted experts from all over the continent and their expertise is apparent in the detail. They have provided everything one would need to know to successfully grow fruit and vegetables and establish a potager anywhere in Australia.

So, if you are interested, these two books together can provide a raft of ideas and knowledge to help you get the most from your bit of earth.

Terri Kay



Association of Friends of Botanic Gardens Inc.

Ninety delegates attended the very successful Association conference hosted by the Friends of the Royal Botanic Gardens Cranbourne in September.

Inspirational and passionate speakers included Professor Rachel Webster, School of Physics, University of Melbourne, who delivered a riveting graphic report on the state of the world environment, leaving no one in doubt about the need to change our relationship with the planet; to be responsible for our lifestyle and for the footprint we make; to be informed and to make sure our political leaders are informed and perform. Dr Wendy van Dok discoursed on 'The Sustainable Garden', demonstrating that we will need to adapt our gardens to climate change yet still have wonderful plants to enjoy. She expressed concerns about the continual mushrooming of housing estates that ignore the basics of environmental planning or any reference to sustainable gardening.

RBG's Senior Conservation Botanist, Neville Walsh, described the involvement of the Herbarium in the Millennium Seed Bank Project, and Senior Mycologist, Dr. Teresa Lebel, explained some of the RBG's public programs on fungi and

the work of the Australian Fungi Map. Teresa noted that our relationships with fungi generally involve "kickers, stompers or those who say 'wow!'".

John Arnott, Director of the Geelong Botanic Gardens, spoke of conservation, education and information activities being conducted in the catchment area of the Geelong Botanic Gardens.

Naturally the new Australian Garden at Cranbourne featured in the lectures with Landscape Architect Kevin Taylor, of Cullity Taylor Lethlean, talking about the myriad aspects of its design, and Chris Russell, Director of the RBG Cranbourne, describing the process of taking the project "From Concept to Reality". Delegates then visited the Australian Garden to see what has been so successfully achieved.

The conference concluded with a visit to Cruden Farm, the home of Dame Elisabeth Murdoch, Patron of the RBG. What a treat and privilege it was to have Dame Elisabeth personally lead the tour of her extensive and very beautiful garden.

All participants left the conference with plenty to think about concerning the future of botanic gardens and the planet.

Janet Thomson

FRIENDS' BENEFITS BOTANIC NEWS

The Gardens Shops offer 10 per cent discount on all Members' purchases.

The following businesses kindly offer discounts to Friends on PRIOR presentation of their current membership cards, which are not transferable.

RBG Cranbourne

Australian Garden

Entry \$6.75 for Members.
(Non-Members \$9.00)

Gills Nurseries (all branches)

1 Centre Rd, East Brighton
390 Balcombe Rd, Beaumaris
cnr Bay/Graham Sts, Port Melb.
5% off plants only

Bulleen Art and Garden

6 Manningham Rd West, Bulleen
10% off plants, 5% off other goods

Town and Country Gardens

1280 Malvern Rd, Malvern
24 Whitehorse Rd, Balwyn
10% off plants over \$20 only.

The Gardeners Corner Store

190-192 New St, Brighton
10% off all plants

Collectors Corner

Springvale Rd, Keysborough
10% off all plants

Kew Nursery

Cnr High & Gladstone Sts, Kew
10% off all plants

Burwood Garden Patch

1418 Toorak Rd, Burwood
10% discount

Garden of Eden Nursery

33 Ferrars St, Albert Park
10% off everything

Botanical Creations

122 Grange Rd, Glenhuntly
Discount on monthly Garden Club items

Cultivate Nursery & Gifts

Rear 91-93 Doncaster Rd
North Balwyn.
10% off everything

Cloudehill Nursery

89 Olinda-Monbulk Rd, Olinda
10% off all purchases

Lister Teak Garden Furniture

22 Industry Court, Lilydale,
Ph: 9735 4010. Free 100-page
colour catalogue of Cotswold
Furniture Collection.
Ask for the Members' surprise

Simply Panoramic

Landscape Design & Maintenance
Ph: 9859 3610 Michael Seeley
10% off garden consultations

The Arts Bookshop

1067 High St, Armadale
10% discount

Banksia Hill B & B

RMB 5349, Horsham, 3401
10% discount on accommodation

Feldspar at Trentham B&B

via Daylesford. Ph: 5424 1821
10% discount on accommodation

Blackwood Lane Gallery

24 Blackwood Lane, Gembrook
10% off paintings, prints and
commissions

Sculptured Steel

Custom Metalwork

mail@sculpturedsteel.com.au

Ph: 0433 121 848

10% off custom-made pieces

Terrace Tea Rooms & Reception Centre, Royal Botanic Gardens

10% discount on all purchases

Patron

Prof. David de Kretser AC
Governor of Victoria

President

Janet Thomson

Vice-President

Catherine Trinca

Secretary

Richard Smith

Treasurer

Maurice Castro

Immediate Past President

Irwin Newman

Council

Susan Brookes
John Hawker
Judy Jarman
Peter Kelly
Dr. Richard Kirsner
Dr. Philip Moors
David Plant
Sir Ninian Stephen

Editor

Meg Miller

COMMITTEE

CONVENERS

Activities, Catering and Events

Susan Brookes
Christine Harris

Botanical Illustrators

Edyta Hoxley

Growing Friends

Juliana Horsfall

Membership and Promotions

Catherine Trinca

Volunteers

Janet Thomson

FRIENDS' OFFICE

Virginia Henderson
Helen Fahey
Jackie Courmadias

Gate Lodge
100 Birdwood Avenue
Melbourne Vic 3004
Tel: (03) 9650 6398
Fax: (03) 9650 7723

Email:

friends@frbgmelb.org.au

Website:

www.rbg.vic.gov.au/friends

Print Post Approved

PP 345842/10025

A12827T

ISSN 0817-0650

Printed on 50 per cent
Australian recycled paper

Printer

Deluxe Printing
9555 5529

ADVERTISING

Single DL and A4 inserts will be accepted in **Botanic News** at a rate of \$550 and \$650 (including GST) respectively. For ease of handling, DL size is preferred. Multiple sheets - POA. Advertising material requires the approval of the editorial committee. Contact the Friends' office 9650 6398 for details



MEMBERSHIP APPLICATION

- ☐ **Household** \$63
(two adults living at same address)
- ☐ **Individual** \$43
- ☐ **Pensioner, Student, Country, Interstate or Overseas** \$31.50

Trust Fund DONATIONS

(Tax deductible, receipt issued)

\$

TOTAL ENCLOSED

Cheque/Money order enclosed
OR please charge my

\$

- ☐ Mastercard ☐ Visa

Signature

Expiry Date

Please tell us about yourself (please print):

Name(s)

(Mr / Mrs / Miss / Ms / Dr)

Address

Postcode

Telephone: ()

Email:

Age Group

- ☐ Under 25 ☐ 25-39 ☐ 40-59 ☐ 60 and over

I would like details of:

- ☐ Gift membership ☐ Life Membership ☐ Bequests and Wills

Subscription rates current at 1 January 2007

Please make cheques payable to: Friends of RBG,
and post with this form to: Gate Lodge,
100 Birdwood Ave, Melbourne 3004



FRIENDS of the
ROYAL BOTANIC GARDENS
MELBOURNE INC.

We invite you to join the Friends and help us grow (see adjoining application form). Subscribing Friends support the work of the National Herbarium and the Royal Botanic Gardens, Melbourne. Benefits include:

Discounts on purchases from

The Gardens Shops
Terrace Tearooms
Selected B&Bs
Specialty Bookshops and Galleries
Selected Nurseries

Botanical Illustrators

Beginners, Intermediate and
Advanced classes available

Growing Friends' Nursery

Open to Members only
on most Fridays
Advance notice of Sale dates
and 'Terrific Temptations'

Volunteers

are always welcome.
Contact Gate Lodge for details

Members' Activities

Learn about gardens, gardening,
botany, horticulture and
botanical photography.
Attend talks, lectures, behind-the-
scenes visits, guided walks, social
events, day trips and extended tours.

