

THE BOTANIC GARDEN

A Newsletter for the Botanic Gardens of Australia and New Zealand



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Community Connections

By their very nature, Botanic Gardens lend themselves to community involvement. They are places where people like to be. They provide not only relaxation and enchantment for people of all ages, but opportunities to learn about plants, their environment and the history behind them.

Botanic Gardens are also invaluable in providing practical support and experiences for members of the community with differing special needs and areas of interest. Conversely, members of the community can also provide an invaluable source of assistance to Botanic Gardens.

Capital City Botanic Gardens are leaders in Community Partnerships. In this newsletter, Christine Joy, Sheryn Pitman, Luke Saffigna, Mark Fountain and Alan Macfayden outline some innovative ways their Botanic Gardens have forged partnerships with the community. Stephen Utick outlines how Sutherland Shire Council in Sydney provides a prime example of the positive results of working with the community by its involvement with several groups in the running of the E.G. Waterhouse National Camellia Garden. Many smaller regional Botanic Gardens would be unsustainable without strong support from community volunteers.

This issue of The Botanic Garden gives a glimpse into some of the many successful instances of this two way partnership, demonstrating the resultant benefits that are obvious to both givers and receivers. It is hoped that these experiences will inspire and encourage further partnerships between Botanic Gardens and the community at large.

PEOPLE



NSW Environment Minister appoints Government Botanist
A lost tradition has been rekindled with the reinstatement of the position of the NSW Government Botanist by the Environment Minister, Bob Debus.

Dr Tim Entwisle, Executive Director of the Botanic Gardens Trust, has been awarded the title, which dates back to 1816 and evolved through different forms until being discontinued in 1985.

In announcing the appointment, Mr Debus noted that The Botanic Gardens Trust is the oldest scientific institution in Australia, having researched, catalogued and collected more than one million preserved plants for scientific reference in the National Herbarium of NSW. "The role of Government Botanist pays homage to this continuous record of botanical research in NSW since the works of Banks and Solander in 1770", Mr Debus said.

"...Dr Entwisle is an internationally recognized botanist... who will use his expertise to continue this legacy as guardian of Sydney's three botanic gardens and Domain, to promote plants and their importance to sustaining life, and to encourage the scientific study of our amazing flora."

The Government Botanist appointment will continue as a tradition, awarded to the most senior botanist at the Botanic Gardens Trust.

MEETINGS AND CONFERENCES

BGANZ Australasian Congress

11-13 October, 2007

Hamilton Gardens, Hamilton, New Zealand

'If you think garden management is just about mowing the lawns and weeding the shrub borders then the theme of 'Building Partnerships' probably won't interest you. However if you are associated with a public park or garden that has a role beyond just being a pretty setting then partnerships start to become very important and often one of the most interesting parts of the job.'

So begins the Registration Brochure and Program for the 3rd BGANZ Australasian Congress. The Theme of the Congress is '**Developing Partnerships**' and an exceptionally good line-up of speakers will address this very important theme.

The opportunity of meeting others in the industry is as important as the program itself, so join some of Australasia's top botanic garden managers and curators at a stimulating Congress not to be missed.

The venue is Hamilton Gardens, included in a recent English publication 'Gardens You Must See Before You Die'. So, as the brochure says, *'while you may be feeling chipper now it's probably best to attend this Congress rather than take any chances.'*

See you there!

The Registration Brochure and Program are now available at:
www.sixhats.co.nz Click on 'Upcoming Events'.

ITEMS OF INTEREST

3GBGC IN WUHAN, CHINA

The Third Global Botanic Gardens Congress (3GBGC) took place in April in China, with a strong focus on the role of botanic gardens in advancing the conservation and sustainable use of plant biodiversity. The Congress is held every three years and is recognized as the primary international event for botanic gardens worldwide. Marking the 20th Anniversary of Botanic Gardens Conservation International (BGCI), it was held for the first time in Asia, hosted by BGCI and Wuhan Botanic Gardens and supported by the Chinese Academy of Sciences.

The main aim of 3GBGC was to review the contributions of botanic gardens to the *Global Strategy for Plant Conservation* launched in 2002 by BGCI. The conference highlighted success stories, identified gaps in knowledge or actions, and provided the world botanic gardens community with the chance to exchange experiences and learn from each other. Almost 1,000 people from 67 countries took part, including New Zealand and Australia.

Plenary addresses by people such as Prof Peter Raven, Sara Oldfield (BGCI Secretary General), Prof Steve Hopper (Director, RBG Kew) and Prof Huang Hongwen (Director, Wuhan BG) challenged the gardens' community to redouble our efforts in biodiversity conservation, education, and responding to climate change. Parallel sessions of contributed papers covered a wide array of topics, from conservation and sustainable use of medicinal plants, to managing living collections for conservation, global research on plant-based education, ecotourism and botanic gardens, and making gardens relevant to the local community.

Associated with implementing the *Global Strategy*, BGCI has been working to improve the capabilities and expertise of botanic gardens in developing regions, especially Africa and Asia. At BGCI's invitation, Dan Bishop (Mt Annan Botanic Garden, Sydney), Bian Tan (BGCI Asia) and I organized on behalf of BGANZ a congress workshop to discuss how botanic gardens in Australasia can provide such assistance to Asian and Pacific gardens. The workshop was attended by 35 people from 22 botanic gardens.

This is the first time Asian and Australasian garden representatives have met to develop collaborative links. Although only in its preliminary stages, it is likely that three existing regional networks of gardens (South-East Asia, East Asia, and BGANZ) will collaborate with BGCI to support collaborative initiatives such as staff training programs, staff exchanges, and similar activities. One possibility is to develop a professional short-course for Asian and Pacific gardens in garden management and plant conservation, with lecturers from BGANZ gardens.

Wuhan Botanic Garden is one of 14 gardens in China managed by the Chinese Academy of Sciences. It displays extensive collections of local and exotic flora and undertakes a broad range of botanical and horticultural research. Several Congress events and excursions were held at the Garden amongst its impressive landscapes on the shores of East Lake.

Philip Moors
Director
Royal Botanic Gardens Melbourne and
BGANZ President



top & above: 'GBGC China'

Association of Friends of Botanic Gardens Inc.

The last twelve months has been extremely busy for the Association Committee but with some very positive and enjoyable outcomes.

The Association Purposes & Rules have been updated and the BGANZ definition of a Botanic Garden also adopted. The key purposes of the Association now are:

“To encourage and support the growth of societies or associations interested in the conservation, development, well being and appreciation of Botanic Gardens

To represent the interests of Friends of Botanic Gardens throughout Australia,

The Association membership has increased to 44 (from 6 states) with the inclusion of Friends of King’s Park & Botanic Gardens, W.A, and George Tindale Memorial Gardens, Sherbrooke, Vic., an emerging group from Malmsbury Botanic Gardens, Vic and most recently from an ‘emerging garden’, -Echuca/ Moama Community Gardens.

In September an Information Kit was launched at the Cranbourne Conference and circulated to existing and new members. The contents include; Establishing/maintaining a Friend’s group, Fund raising, Relationships with gardens management, Incorporation, Insurance, Tax Deductible Funds (DGR’S), Grant Submissions etc. The loose leaf folder allows for easy updating and additions to the information.

The Association Conference held at RBG Cranbourne in September, was ably hosted by the Cranbourne Friends and very well attended. Delegates enjoyed the convivial atmosphere and the excellent and challenging speakers. The 2008 Association Conference will be in Orange on April 4th – 6th.

BGANZ(Vic) are to be congratulated on their regional meetings program, given the broad attendance by Councillors, Officers and Botanic Gardens staff -and hosted by the Friends at the recent Benalla meeting.

Annie McGeachy

Seretary, Association of Friends of Botanic Gardens Inc

AUSTRALIAN BOTANIC GARDENS WEED NETWORK – UPDATE

For many years Botanic Gardens were part of an international network exchanging seed lists (known as *Index Semina*), this being the main means of plant acquisition, especially of the rare and unusual species. Seed exchange is now carefully restricted. Firstly, there is the legally binding *Convention on International Trade in Endangered Species of Wild Flora and Fauna* (CITES). Secondly, under Article 8 of the 1993 *Convention on Biological Diversity* (CBD) national governments are called on “to prevent the introduction of” and “control or eradicate those alien species which threaten ecosystems, habitats or species”. The *Global Invasive Species Program* (GISP), was established in 1997 to address the global threat of invasive species and it supports the implementation of Article 8 of the CBD. As a result of these international initiatives there is now a common agreement among many botanic gardens to carefully monitor the acquisition and use of genetic resources, one aspect of which is obtaining consent from the country and/or organization of origin to

ensure potential benefit sharing (including non-monetary benefits). There is no more dipping into the Seed List sweet shop. Australian botanic gardens have not produced Index Semina for many years now and seed acquisition from overseas is dealt with by special request and supervised with caution.

With 60-70% of the naturalised plants in Australia having escaped from private gardens and blackberry (*Rubus* spp.) supposedly dispersed from the Royal Botanic Gardens, Melbourne, and *Mimosa pigra* from the Darwin Botanic Gardens, horticulture and botanic gardens do not have a good record. Keeping our own house in order is not easy as there are tensions between environmental values and what may be termed botanic gardens values like heritage, education, science and scientific research, conservation, and public landscape. However, botanical gardens must play their part in the global attempt to reduce the impacts of invasive plants, the challenge being to minimise the importation, cultivation and promotion of known or potential weeds and provide public education about the environmental and agricultural damage they cause.

Concern about these weeds was a strong theme at the Botanic Gardens of Australia and New Zealand (BGANZ) Conference in Geelong in 2003. In October 2004 the Council of Heads of Australian Botanic Gardens (CHABG) approved a proposal for a cooperative effort to address weed issues and supported the development of common policies, procedures and a weed risk assessment methodology for Australian Botanic Gardens. A facilitator was appointed and in July 2005 a workshop of interested parties was held in Melbourne. An informal team of over 70 organisations has now been established called The Australian Botanic Gardens Weed Network (ABGWN) and a collectively agreed Weed Policy was endorsed at the BGANZ Conference in Hobart in October 2005.

Throughout this period the major city Botanic Gardens have, with the assistance of the Australian Weed Management CRC, been working through the difficult process of an agreed scored Weed Risk Assessment and Management Procedure (WRAP'M). This process is now complete and the Weed CRC has independently "validated" the collectively derived procedure. The results of this "validation" will be published in due course.

With a grant of \$5000 from the Victorian Weed CRC and Department of Primary Industry it has been possible to develop a computer software package to be made freely available to members of the ABGWN. It consists of a simple executable file containing: the BGANZ-endorsed Weed Policy; brief background information on the process and philosophy of weed risk assessment; the fully automated scored WRAP'M with extensive automated help notes and on-screen links to helpful web sites; a summery spreadsheet guide to plant toxicity; a guide to weed management based on the weed risk category (low, medium or high risk) obtained using the scoring system; a Voluntary Code of Practice that can be used as a basis for the development of weed strategies. It is hoped that this will be available by the end of July 2007.

This will essentially complete the process set in train in 2005. CHABG members will be requested to set a good example by adopting the procedure as far as possible in routine horticultural management.

The WRAP'M can, of course, be reviewed as necessary and there remains the possibility of comparison of results, shared accumulated information, plant performance in particular areas, building up weed profiles of particular species and genera, monitoring affiliated organizations and other benefits.

With this combined effort botanic gardens can, together, help stem the tide of invasive plants.

Roger Spencer

Facilitator ABGWN

Royal Botanic Gardens Melbourne

Visitor Service Quality Survey - ANBG

In March this year the Australian National Botanic Gardens was a participant in the Visitor Service Quality Survey endorsed by BGANZ. The survey was developed by researchers from the Centre for Tourism and Leisure Management at the University of South Australia, led by Gary Crilley.

The study was undertaken to provide the ANBG with feedback that can be used to consider ways to improve and develop strategies for visitor management. The full report has been received and will form part of a presentation at the BGANZ meeting in Hamilton, New Zealand, later this year.

The ANBG recorded 485,000 visitors last year, and survey responses indicate that visitors see its role as a place for relaxation, education, conservation and a recreation destination. Visitors attend for reasons such as viewing plants, relaxing and walking with family and friends, and to learn about plants.

Overall, visitors rate dimensions of 'staff and safety', 'sensory aesthetics' and 'engagement' positively. Of interest was the fact that there were few specific groups of visitors that held particularly strong positive or negative feelings about the attributes relative to other visitors.

The Gardens attract visitors mainly from Australia (92%) with relatively few from overseas countries (8%). Eighty per cent of visitors are residents of the ACT or New South Wales. As a percentage of total visitors relatively few attended alone (10%) or with family and friends (11%).

By a very large margin, the majority of visitors visit the Gardens for less than three hours. The time of arrival is evenly split between morning and afternoon.

All age groups from 30-39 through to 65+ are well represented with just 11% of visitors aged under 30.

Eight of the 23 service quality attributes were rated as being delivered at a level matching or exceeding visitors' ratings of importance on that attribute. Negative gaps were quite small and do not suggest or demand immediate intervention efforts.

In a comparative sense, visitors to the ANBG rate service quality relatively similar to the mean of ratings by visitors to all six gardens in this study.

Each year many of the 450,000 visitors to the Australian National Botanic Gardens, Canberra attend functions and events that are presented as fundraising activities. There are also regular fees and charges for a number of services.

The summer series of music concerts at the Gardens is firmly established on the calendar as one of the most popular and successful public activities in Canberra. Thousands of visitors enjoy a wide range of entertainment by local performers in the beautiful settings of the Eucalypt Lawn and Café Lawn each weekend.

The concerts are presented as gold coin donation events, and monies are collected by a team of volunteers from the Friends' group. Proceeds are also raised from the sale of wine, beer and soft drinks.

As a result, the series is the major annual fundraising activity for the Friends of the ANBG. In recent years the Gardens has received major sponsorship from local utility provider, ActewAGL, to support the annual summer concert series. The Gardens demonstrates enjoyable and responsible use of a valuable community resource, and the concerts provide an excellent opportunity for ActewAGL to promote the water saving campaign to a large local audience.

The Gardens' Education Unit offers a range of activities for primary and secondary school students, on a fee for service basis. In addition, there are regular school holiday activities. The most popular of these is Snakes Alive, an annual display of live reptiles presented in partnership with the ACT Herpetological Association each January.

The Gardens national Plant Photographic Index is an extensive photograph collection that includes images taken by staff on field collecting trips and images contributed by other photographers. Fees are charged for a licence to reproduce photographs from the Index, which is used by a wide range of individuals, agencies and businesses.

Grazing in the Gardens is an annual progressive meal event that was first presented by the Friends' group almost ten years ago, and has been extremely successful. It has provided an excellent opportunity for new and existing Friends to enjoy an informal meal and entertainment in several of the Gardens' prime locations.

The Gardens is one of Canberra's best birdwatching locations, and more than 100 species have been observed and recorded. Since 2004 the Gardens has presented a Breakfast with the Birds program, in conjunction with café proprietor Hudsons in the Gardens. For a very modest charge, visitors are able to enjoy a walk through the Gardens led by an experienced local ornithologist, followed by a delicious breakfast at the café.

A fungi lecture and workshop series has been presented during winter in recent years to an enthusiastic local audience of amateur botanists. There is a small fee associated with this series.

The Australian Native Plant Society (Canberra Region) and the Growing Friends of the ANBG both use the Gardens as the public venue for their annual native plant sales each autumn and spring. These are keenly anticipated and very well attended events that draw large crowds of enthusiastic bargain-minded gardeners. The ANPS cover the cost of car parking space used but are not charged a percentage of sales, while the Growing Friends sales are direct fundraisers for the Friends of the ANBG.

The Friends' Activities Committee coordinate a series of weekly public lectures by guest speakers on a wide range of environmental topics. Entry to the talks is by gold coin donation, and this provides a modest, but steady stream of revenue throughout the year.

A high proportion of the revenue generated by the Gardens comes from three licensed commercial operations:

- Café (Hudsons in the Gardens)
- The Botanical Bookshop
- Car parking fees

In addition, there are fees for wedding ceremonies and wedding photography in the Gardens and the café proprietor is contracted to coordinate these activities.

Hire of indoor and outdoor venues also generates considerable annual revenue. Indoor venues are very popular with corporate government and non-government clients, who appreciate the value of the Gardens setting for workshops and seminars.

The Friends of the ANBG have established a public fund, in response to many requests. The fund is administered by an independent management committee and all donations are used to support Gardens' projects.

The Gardens is also an ideal venue for fundraising events presented by external organisations. In recent years AFFIRM (the Australian Foundation for Mental Health Research) has used the Gardens as the venue for two major fundraising events. On each occasion over 300 guests were seated at a continuous long table on the Eucalypt Lawn and served a lunch prepared by a selection of Canberra's leading restaurants. The first event, in 2004, was described by The Canberra Times as the event of the year.

Paul Zeising
Communications and Media Co-ordinator
Australian National Botanic Gardens

ARTICLES

Growing Community Connections and Partnerships

School Partnership Programs at RBG Melbourne – *‘Much more than growing vegetables’*

The Ian Potter Foundation Children’s Garden (IPFCG) was opened in October 2004 with the objective of providing a place *‘where children can delight in nature and discover a passion for plants,’ ‘celebrate the imagination and curiosity of children and foster the creative nature of play’*. In response to this vision a set of educational and interpretive goals and strategies was developed to direct programming.

One way of meeting these goals was to create authentic working relationships with schools.

The School Partnership Programs generates opportunities for long term, ongoing learning experiences for students. Students and their teachers have the opportunity to understand more fully the work of the Royal Botanic Gardens Melbourne by developing ongoing relationships with staff and volunteers, using real tools, experiencing and finding solutions for real environmental challenges. Experiences provide effective opportunities for working in groups, to enjoy the whole harvesting cycle and to experience the garden in all seasons of the year.

The following IPFCG educational and interpretive goals and strategies are particularly relevant to the project;

- *Encouraging participation by community and cultural groups that are currently not well represented.*
- *Making connections between the work of the RBG and children’s lives.*
- *Offering programs that practice authentic pedagogy in a motivating context and setting.*
- *Providing schools with ongoing connections to the IPFCG including its site, resources, staff, expertise and programs.*
- *Provide (ESL and) special schools with a sensory-rich setting and activities to engage students in programs.*
- *Make on-going connections to people and the work they do with plants, including the use of mentors and intergenerational experiences.*
- *Recognise the importance of play, and the multi-faceted way in which children learn and respond to the world around them.*

One example of the School Partnership Program is the Special Schools Gardening Program. Two schools currently participate in the program and two classes from each school participate fortnightly.

The idea is for students to manage two plots in the IPFCG Kitchen Garden throughout the year, making decisions about soil preparation, planting, tending and harvesting. That is, getting their hands into the dirt for some real gardening! A direct channel to the planet’s biological processes and a first step towards acquiring sustainable development values and developing a collective sense of purpose, through an intimate combination of freedom of expression and discipline.

The program has aims to;

1. increase child participation and decision-making opportunities in the IPFCG
2. allow potential for students to harvest their produce and take it back to school to prepare, cook and share a meal
3. provide horticultural work-experience
4. provide opportunities for students to form working relationships with the IPFCG volunteers and horticulturists
5. further understanding of the work of the RBG
6. support students and teachers at school (and/or home) in developing their own gardens

The success of the program is due to the following;

- A reliable and highly effective team of volunteers conduct the sessions. Volunteer selection and training is given high importance.
- Very flexible and supportive horticultural staff member whose role is to plan and organize the session.
- The Education Coordinator and Volunteer Coordinator liaise between the groups and organize rosters, training etc.
- Regular bus transportation; special schools are in an ideal situation as teachers usually have a small bus to transport small groups of students. Alternatively schools need to be close enough to allow the students to walk to the site.

Participating teachers have responded positively to the program;

Vermont South Special School is a State run school attended by children with mild intellectual disabilities. Our partnership with the Children's Garden program is a very valuable part of our schools' program providing a rich experience for the students and exchange of ideas and support for the teachers. Benefits for our students include;

- Learning through hands on experiences
- Building of confidence, pride and self-esteem
- Development of life-long skills both recreational and vocational
- Social skills in dealing with members of the community
- Opportunity to experience a rich garden environment

For teachers the partnership has:

- Provided valuable enrichment and support for teaching across the Domains of the Victorian Essential Learnings.
- Given the opportunity to develop our own Kitchen Garden and have become a Wastewise School with everyone involved in composting and recycling.' (Jan Brown, Vermont South Special School)

The Currajong School is an independent special school catering for students with significant social, emotional and behavioural disorders, and the experiences the Gardening Program offers them are beneficial on a number of levels. Students thoroughly enjoy the hands-on process of digging, planting and harvesting. (Phil Mulally, Art Teacher, The Currajong School)

Outcomes

We have found the approach significant in planning for a range of student learning styles and intelligence types (see Howard Gardner's Multiple Intelligence Theory.) In particular we are making an effective starting point to explore the many possibilities of Place Based Education (PBE).

PBE is the process of using the local community and environment as a starting point to teach concepts in subjects across the curriculum. Emphasising hands-on, real world learning experiences, this approach to education increases academic achievement, helps students develop stronger ties to the community, enhances students' appreciation for the natural world and creates a heightened commitment to serving as active, contributing citizens. Community vitality and environmental quality are improved through the active engagement of local citizens, community organizations, and environmental resources in the life of the school. (Sobel, 2005)



Exploring the sensory delights of the Ian Potter Foundation Children's Garden

Photo Chris Joy

This has made us hopeful that the next stage of the School Partnerships journey will take us out to the school to support the school-based projects on and/or near the school sites.

In conclusion, the advantages to long term community programs continue to be explored.

Phil Mulally, the Art teacher at the Currajong School, sees that the experience has provided, '...an invaluable outdoor classroom experience that gives our staff and students the opportunity to play, imagine and create whilst engaging with others in the community.' As ten year old Adam says, "it's not just growing vegetables!" Long term gardening has provided children with the opportunity for both creative expression and scientific investigation.

The time-lapsed scale of the garden project is especially attractive to children, motivating them to seek the answers to their own many questions of *how* and *why*.

Why does my bean grow like this?

(Moore, 1997)

Rachel Carson amongst others has drawn our attention to the important role of the adult and the connection between rich experiences (playing) in nature with a caring adult, and becoming an ecologically concerned adult. Without a doubt, the positive nature of the gardening experience for the children is due to the open-minded and child-oriented approach of the volunteers and horticultural staff. Jonathon, happily digging in beans for the new season's planting says emphatically, "I love coming to the Gardens because I see Lea and she helps me do the planting and then we play."



For further information contact christine.joy@rbg.vic.gov.au

Vermont South Special School children satisfied after a morning of gardening.

Photo Jan Brown

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Christine Joy

Education Co-ordinator

Royal Botanic Gardens Melbourne/Ian Potter Foundation Children's Garden



The Sustainable Landscapes project partnership

The Sustainable Landscapes (SL) Project is a timely recognition of the need for urban landscapes, including gardens and parks, to cease generating such a significant ecological footprint, and to become more responsive to the environmental challenges of the 21st century. In fact the SL project is now leading the direction of sustainable landscapes in South Australia.

The project is a collaborative partnership between private and public enterprise, hosted by Botanic Gardens of Adelaide (Department of Environment and Heritage) in partnership with the Land Management Corporation, Innovation and Economic Opportunities Group (through the Mawson Lakes Economic Development Project), Adelaide and Mount Lofty Ranges Natural Resources Management Board and SA Water Corporation.

The SL project educates and assists the South Australian community to design, build and manage urban landscapes in more sustainable ways. It demonstrates and promotes appropriate park and garden design, plant species selections and sustainable horticultural practices for South Australian environments including effective, efficient and appropriate water use.

Project partner organizations contribute funding and in-kind resources, and meet regularly to discuss and guide the direction of the project. The fulltime project officer develops and manages the project, including the primary activities of research, demonstration, communication and education. Seminars, lectures, workshops, conference presentations, brochures, fact sheets, posters, website, use of electronic and print media and, very importantly, well-interpreted demonstration landscapes all contribute to comprehensive education and communication activities throughout the community.

A significant aspect of this innovative project is that it brings together the diverse elements of urban landscape sustainability into a user-friendly set of principles for designing and creating parks and gardens of all types. The project defines a sustainable landscape as *a healthy and resilient landscape that will endure over the long term without the need for high input of scarce resources such as water*. A sustainable landscape is in harmony with local environmental conditions, including climate, topography, soil and water. Ideally the natural functions and processes of the landscape are able to maintain themselves into the future although in reality in urban environments this may not always be possible.

The sustainability principles applicable to all urban landscapes, public and private, integrate design for local environmental conditions, low supplementary water use and non-invasive plant selections, minimal chemical use, habitat creation, water conservation measures, minimal non-renewable energy consumption and the use of sustainably and locally sourced products and materials. Simple to understand, to incorporate in planning and to act upon, these criteria are packaged and promoted in different ways for different sectors, with an ultimate goal of improving the ecological literacy and behaviours of urban communities.

The SL project identifies and develops demonstration sites that showcase a wide range of landscape types and styles. They range from public parks, gardens and community spaces reserves to roundabouts, median strips, road verges and home gardens. This work is undertaken in association with the landowners or managers of the sites, and is supported by interpretive signage.

We have recently secured a grant from the Local Government Association R&D Scheme to research, collate and publish recommended plant species lists for the various biophysical zones of the greater Adelaide region. One of the key needs of both local government and the community is easy access to recommended non-invasive and low water use plant lists for each local area. This information will be available on the web in January 2008 and will enable councils and residents to more effectively and efficiently develop sustainably landscaped parks and gardens that will not pose an invasive plant threat to waterways, bushland, dunes, farmland or other vulnerable environments or

ecosystems. The lists will include local indigenous, Australian native and exotic plants and incorporate diverse data fields containing useful plant information including habitat values, cautions and special features.

Education is a critical part of the project, including community, business and industry, government and schools. An example of an achievement in this area is the successful incorporation of Sustainable Landscapes into the Year 11 and 12 curriculum through the Senior Secondary Assessment Board of South Australia (SSABSA). *Sustainable Futures* is a new senior secondary schools subject and we have worked closely with the Education Department of South Australia to include Sustainable Landscapes within the course.

The SL Project acknowledges that we are all managers of our landscapes. Everyone from developers, architects, designers, builders, businesses, industries, government agencies, horticulturalists, families and home gardeners manage landscapes. To make them sustainable every phase including planning, design, construction and maintenance of urban landscapes needs to be informed and guided by sustainability principles and practices. This is why the project works with as many sectors of the community as possible.

This partnership work being undertaken in South Australia is leading a cultural shift towards more sustainable attitudes, practices and behaviours. It demonstrates a powerful model for engaging, educating and assisting the community to make more informed and ethical choices about resource use, develop sustainability knowledge and skills, and work in harmony with natural environmental conditions.

The power of this partnership lies in the shared responsibility for action towards sustainability. Through working together these diverse stakeholders have built a shared vision and strengthened their commitment to facilitating change, as well as combining their knowledge, technology and resources. The significant outcomes and achievements of the Sustainable Landscapes project to date are testimony to the value of the partnership.

Sheryn Pitman

*Sustainable Landscapes Projects Officer
Botanic Gardens of Adelaide*

Growing Community Connections Royal Botanic Gardens Cranbourne -Volunteer Master Gardener Program

The Royal Botanic Gardens Cranbourne is located in one of the fastest growing municipalities in Australia, the City of Casey. That means that every day new residents move into our neighbourhood and every day a new home garden is being planted. To help promote the use of Australian plants in home gardens and to enhance the visitor experience of the new Australian Garden, the Royal Botanic Gardens Cranbourne (RBGC) set up the Volunteer Master Gardener (VMG) program in 2006. The VMG program is an innovative way to help grow community connections by having passionate, experienced Master Gardeners advise community members on growing native plants.

The Volunteer Master Gardener program isn't new; Canada, the USA and Britain all have a version of the program. Where the RBGC program differs from many of the overseas programs is that the volunteers are based within the RBGC Australian Garden itself. A master gardener is available in person seven days a week to provide visitors with information on growing 'Aussie' plants. Many of the overseas programs are either based within a university, offer a phone-in advisory service or are extension programs to various government organisations. Our difference has become our strength in helping us connect to our community.



Master Gardener and volunteer

In May 2006, the Australian Garden opened to the public for the first time. So far the first 11 hectares of an eventual 21 hectare garden has been completed. The final stage of garden development is currently underway and is due for completion in 2011. The Australian Garden has achieved nationwide recognition in its first year of opening. In 2007 the Australian Garden received the 2006 best New Tourist Development Award for Australia and Victoria.

Through its landscapes, gardens, artworks and visitor programs, the Australian Garden seeks to tell stories about Australian plants, about water, about people and the cultures that bring us all together. One of the best ways to connect with people is to talk to them 'face to face', about plants, gardens and gardening. It's in this type of interaction where the VMG program excels.

In order to recruit passionate and knowledgeable home gardeners that we needed for this program the RBGC developed a promotional plan. As well as letting our Friends groups know, placing information on our website, in brochures and in regional volunteer centre's and running information days, we worked with local and state wide media outlets to promote the program as widely as possible.

The RBGC selected thirty volunteers from the local and nearby community based on their written applications and follow up telephone interviews. Once selected, the trainee Volunteer Master Gardeners commenced a training course held once a week for three months. The course was coordinated by the Public Programs team and covered three areas of study: plant and gardening theory; Australian Garden site knowledge; and, public presentation skills and techniques.

The Gardens' horticulture staff and expert guest speakers and lecturers delivered training sessions on soil, water, garden design, weed and pest management, pruning, propagation, site knowledge, plant identification, ecology, public speaking techniques and much more. A written and oral assessment was undertaken by all volunteers at the end of the course. Subject to passing the assessment, active volunteering commenced soon afterwards.

In 2007 we expanded the program by recruiting a second group of Volunteer Master Gardeners. The RBGC now has over forty five active Master Gardeners who live in the local or nearby community.

A typical Volunteer Master Gardener day is spent at the VMG trailer and roaming around the Australian Garden. The trailer has displays boards, a mini library, a blackboard to record interesting information and a demonstration table and display plants. There are also maneuverable trolleys. The trailer and trolleys act as focal points for our visitors. Often the visitor just loves to tell the Master Gardeners all about their own home gardening experience or ask for gardening advice that relates to their local growing conditions.

Although the primary role of the Master Gardener is to engage and inform the public about growing Australian plants, they are also involved in the School Holiday Program and on weekends undertake potting-up plant activities, which is particularly popular with children. Master Gardeners also take guided tours of the Australian Garden and have attended community events and festivals in the City of Casey. In the near future, Volunteer Master Gardeners will be trained to give offsite illustrated talks on gardening and the Australian Garden to clubs, societies and community groups.

The VMGs catch up with each other once a month at the VMG General Meeting. A highlight of the meetings is having guest speakers talk on a variety of subjects. This helps to keep the Volunteer Master Gardeners gardening and plant information current, and makes them feel that they are constantly learning new and interesting things.

The relationship between the Volunteer Master Gardeners and the Royal Botanic Gardens Cranbourne is best described as a partnership – a partnership that promotes community involvement and assists the RBGC in fulfilling its corporate goals. This partnership provides reciprocal rights, responsibilities and recognition between the organisation and volunteers and adheres to the RBGC Code of Practice for Volunteers and Principles of Volunteering. This year the Volunteer Master Gardener program was a finalist in the City of Casey Community Volunteer Awards in the 'Innovation' category.

It has been a very successful first twelve months for the VMG program. There is no doubt that our volunteers enable us to build more bridges with our community and help more of our visitors embrace the use of Australian plants in their own home gardens.

Luke Saffigna
Visitor Programs Officer
Royal Botanic Gardens Cranbourne

Understanding Place

The Royal Tasmanian Botanical Gardens recent work on cultural heritage landscapes has created special community connections throughout Tasmania.

The Royal Tasmanian Botanical Gardens Botanical Resources team has established a reputation for practical expertise and knowledge in the field of assessment and evaluation of cultural heritage landscapes. Built on work achieved at the Royal Tasmanian Botanical Gardens (RTBG) and in line with Goal 1.3.1 of the Royal Tasmanian Botanical Gardens Strategic Plan 2003 – 2007 “*Develop collaborative working relationships with Aboriginal and European Cultural Heritage groups*”, staff have worked on an impressive list of projects over the last four years.

The projects include work on the Sense of Place exhibition and an associated booklet called ‘People, Places, Plants’, both of which look at the RTBG’s influence on Tasmania’s cultural heritage landscapes. The Botanical Resources team has also undertaken consultancies on heritage gardens and landscapes at Woolmers in the north of the state, Woodstock (Hobart), Willow Court (New Norfolk) and assessment work in relation to the Beaumaris Zoo site on the Queens Domain near the Gardens.

The latest collaborative program undertaken by the team saw them working with The Friends of the Soldiers Walk. This community group was formed in 2002 to restore the original Memorial Avenue on the Queens Domain Hobart. Established in 1918 as a memorial to soldiers killed in World War 1, this once significant formal avenue had gradually fallen into disrepair, principally from a lack of appropriate care.

The RTBG has supported this very active group from the outset with basic advice on species selection for replacement plantings and on-going management and also occasionally through the loan of equipment or the use of facilities.

In 2005 the RTBG Botanical Resources Team was asked to contribute to a Memorial Avenues Kit, envisaged as an aid to help communities throughout the State and potentially interstate to resurrect their local commemorative Avenues. In Tasmania these Avenues number over 50, in various states of care, dating from the Boer War onwards.

The complete, very comprehensive Kit, launched in June 2007, contains information on the logistics of starting, running and enthusing a volunteer management group. The Kit goes on to outline how to get things done through set targets and working bees, and includes instruction on how to research and document an Avenues history and rebuild and manage a cultural heritage landscape. Getting the message out and establishing start-up and on-going funding are two other very important chapters in the Kit.

The RTBG Botanical Resources team's contribution was a chapter focussing on managing each Avenue's living assets and included easy to use evaluation processes and the development of a decision making matrix to facilitate the selection of the most suitable methods for assessing and either managing or, alternatively, replacing an Avenue's trees. The chapter also has information on formative pruning, establishing irrigation and the on-going maintenance of existing and new plantings.

To gather information for the project, the Botanical Resources Team visited and assessed over a dozen avenues around the state and found that their condition varied from acceptable to non-existent. A number of these sites were used as case studies to help demonstrate how to use the Kit.

Why do it?

Page 8 in the Kit has the heading '**Why do it?**', then goes on to establish the importance of Memorial Avenues to the community on a number of levels beyond their intrinsic commemorative value, by, amongst other things, pointing out their educational value as "tangible, local and immediate connections" to history.

A short paragraph titled **Bring Communities Together** carries the sense of why the RTBG is involved in projects like this and is worth quoting:

"The process of reviving an Avenue is rewarding, it brings people together who may not know each other or have little experience of each other. It crosses generations, classes and politics. It combines sports clubs and churches, schools and workplaces. It re-connects people with a sense of shared heritage, shared lives, shared pride and understanding".

Cultural heritage landscapes and in particular Soldiers Memorial Avenues are important to, and speak to, people from all generations. Over 189 years, the RTBG has developed strong generational links with the Tasmanian community, the Botanical Resources team's recent work maintains those links.

Mark Fountain Royal Tasmanian Botanical Gardens

Alan Macfayden Royal Tasmanian Botanical Gardens

FEATURE GARDEN

*A beautiful showcase for camellias provides a fine example of the positive results of community involvement. Owned and managed by Sutherland Shire in Sydney, the **E.G. Waterhouse National Camellia Garden** has received invaluable assistance from garden clubs, service clubs, schools and other community associations and volunteers for almost forty years.*

Camellias, the Captain Cook Bicentenary and the Community

Nestled in the north-east arm of Yowie Bay in Sydney's Sutherland Shire, lies a reflective oasis for Shire residents and Sydneysiders at large – the E.G. Waterhouse National Camellia Gardens.

Located on the corner of President Avenue and Kareena Road, Caringbah, the gardens were officially opened 37 years ago on 18 July 1970 by Lady Cutler. The Gardens and the surrounding 2.1 hectares are further enhanced by Kareena Reserve, a remnant of bushland lapped by the tidal waters of Yowie Bay. Visitors to the area have just over 5 hectares to explore at their leisure, with no shortage of native ducks including mallard (*Anas platyrhynchos*), the grey teal (*Anas gracilis*) and the white ibis (*Threskionis molucca*) to keep the children amused. From the lower car park and beyond a small bank of mangroves (*Avicenna marina*), visitors also enjoy views of the Port Hacking River and the Royal National Park.

With the pace of Sydney life becoming more frenetic, the value of the Gardens has become more apparent, particularly as entry is free. As Kurnell is located in Sutherland Shire, the Gardens are one of the more beautiful and lasting monuments of the Bicentenary of Captain Cook, when Sutherland Shire was host to the nation in celebration.

Owned and managed by Sutherland Shire Council, the Gardens are a prime example of the positive results of working with the community. In this case the groups involved included the Australian Camellia Research Society (now Camellias Australia Inc.) with the assistance of Caringbah Rotary, the Caringbah Garden Club and the Sutherland Shire Orchid Society.

The genesis of the project was the brainchild of the late Eric Utick BEM (1915-2005), a retired joinery manufacturer (**pictured in photo 1 at the 1970 opening with Lady Cutler**). Eric subsequently worked for 35 years as Honorary Director in a voluntary capacity, coordinating and supervising the Gardens with the support of many Shire Presidents, Councillors and Engineers. Thanks to his tireless enthusiasm and commitment, the Shire obtained an exquisite horticultural collection of camellias, natives and ornamentals – often through donation – during the heyday of the home garden and nursery.



above left **photo 1**
above **photo 2**
below **photo 3**

The Gardens are named for the late Professor Eben Gowrie Waterhouse OBE (1881-1977), a Sydney academic and linguist. During his life, Professor Waterhouse was considered one of the world's foremost experts on the Genus *Camellia* and its horticultural cultivars. Professor Waterhouse took an active interest in the project and guided the development of early plantings (**pictured in photo 2 inspecting the Kareena Park site in 1969**). Many of the Professor's own cultivars such as the *Camellia sasanqua* 'Weroona' (**photo 3**) formed the basis of the collection, as did contributions of rare cultivars from the late Alex Jessup, a former director of the Royal Melbourne Botanical Garden, and veteran Sydney nurseryman the late Walter Hazlewood.



Today visitors can still see old garden favourites such as *Camellia japonica* varieties 'Aspasia Macarthur' and 'Lady Loch', which were first introduced and propagated at Camden Park by William Macarthur in 1831.



Initial plantings on the site took place as early as 1969, as a special project of the Shire's Captain Cook Bicentenary Horticultural Committee chaired by Eric Utick. High winds, scorching summers and the occasional theft of plants created problems during the early years. However a range of ornamental shade trees combined with remnant native vegetation such *Angophora costata* and *Banksia integrifolia*, allowed sufficient canopy protection to help the Gardens to flourish and mature.

Today the full collection includes more than 1150 camellias including 850 varieties, a number of which are rare cultivars not found anywhere else in Australia. Varieties originally cultivated in Europe, Japan, China, and the United States are also featured alongside home-grown varieties.



During the formative years the Management Committee and council encouraged volunteers to either plant trees and shrubs, or contribute to the Gardens in other ways. Help was provided by garden clubs, service clubs such as Rotary, schools, Probus and other community associations.

These associations also proved important in the addition of key features, such as a Japanese Teahouse supported by Rotary, a sunken rose garden supported by Caringbah Garden Club and an RSL Memorial Fountain. The Fountain was originally opened in 1973 as a water jet, but was later redesigned as a cascade (**photo 4**) running down through the duck ponds on the eastern side of the Gardens (**photo 5**). Some special features around the ponds include handsome Queen Palms *Arecastrum sp* and a Queensland Bottle Tree *Brachychiton rupestris*. Many camellia varieties feature including the recent New Zealand cultivar *Camellia japonica* var. 'Queen Diana' (**photo 6**).

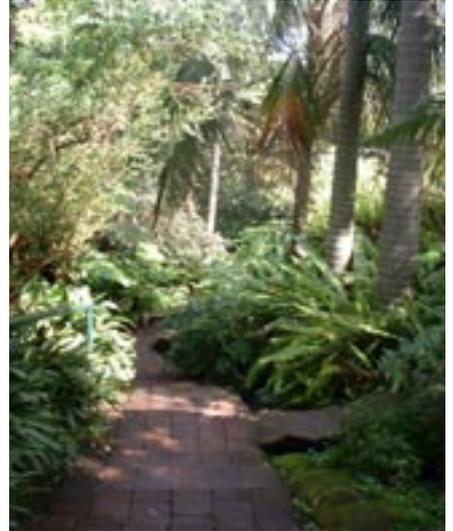


Visitors can choose from five picturesque walks at the Gardens – the Elizabeth Cook Walk, the Wedding Walk, the Tsubaki Walk (*Tsubaki* being Japanese for camellia), the Gully Walk, and on the eastern side of the Gardens, intersected by a small creek and across a feature bridge (**photo 7**), the Duck Pond Walk which is the most popular with families.

top photo 4
middle photo 5
above photo 6

The Elizabeth Cook Walk (named after the Captain's wife) includes a fountain and cascade, first unveiled in 1971, and features flourishing palms that provide extra shade and protection (a mixture of *Archontopheoenix sp* and *Howea sp*) (photo 8).

Horticultural gems to be discovered on this walk include a weeping standard *Camellia lutchuensis* (photo 9), a native of the southern Japanese islands and *Camellia granthamiana*, a native of Hong Kong (photo 10). The visually impaired also appreciate the herbaceous Senses Garden at the end of this walk.



top left clockwise photo 11, photo 12, photo photo 13, photo 14

On the Tsubaki Walk, a Giant Californian Redwood *Sequoia sempervirens* shelters plantings of Japanese Higos or 'flowers of the Samurai' – varieties of *Camellia japonica* with large single flowers and golden stamens (see varieties *Camellia japonica var.*

'Okon' and 'Kake-Hashi' in photos 11 and 12 respectively). Higos have now been used in breeding to produce further new cultivars (see *Camellia japonica var* 'Michelle Ford', a cross between Higo 'Dewatairan' (seed parent) and Australian cultivar 'Betty Cuthbert' in photo 13).



Along the Gully Walk, visitors can inspect many varieties of *Camellia japonica*, *sasanqua* and *reticulata* which are best viewed from late May to late August. Camellia plantings are interspersed with *Cyathea sp* and many other native and exotic fern species. Among the many beautiful cultivars on display in season include *Camellia reticulata var.* Royalty (photo 14).



The Wedding Walk includes many beautiful vistas including broader garden views, commencing under a Mexican Cypress (*Taxodium mucronatum*) (photo 15), continuing past camellia plantings on the sandstone embankment of the Gully Walk (photo 16) and ending in either the rose garden or at a Gazebo by the creek (photo 17).

top down photo 7, photo 8, photo 9, photo 10

As the name suggests, the Wedding Walk is a photogenic backdrop for wedding parties and similar gatherings, providing a useful supplementary income for the Gardens.

Sutherland Shire Council manages the Gardens with a full-time staff of three gardeners, and retains a Management Committee comprising two Councillors, council staff and representatives from Camellias Australia and other garden and community groups.

Opening hours are between 9.00 and 4.00 pm from Monday to Friday; between 9.30 am and 5.00 pm on weekends and public holidays (between 9.30 am and 6.00 pm during daylight saving). The Gardens are closed on Good Friday, Christmas Day and Boxing Day. The Japanese Teahouse serves refreshments and light lunches, and facilities include toilets, electric barbeques, disability access and two playground areas for children to enjoy.

The Gardens' Management Committee would be interested in hearing from other Botanic Garden Management Committees or other similar gardens in Australia that are helping to conserve rare camellia cultivars in Australia. Given the likelihood that these beautiful specimens are in danger of being lost in these times of water shortage and climate change, through working together it may be possible to conserve them for the future.

Please email the Executive Officer-Administration, Sutherland Shire Council kbarrass@ss.nsw.gov.au if you would like to be involved.

Or contact Jim Powell from Camellias Australia
phone **02 971 00507** or **02 42942877** hm
fax **02 9710 0922**
email jpowell@fishinternet.com.au

Or contact Stephen Utick on
email sutick@iimetro.com.au
phone **02 62885195** hm

Stephen Utick



top photo 15
middle photo 16
above photo 17

