

THE BOTANIC GARDEN

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Staying Valuable and Viable

Philip Moors

I hope to be seeing many of you in October at the BGANZ Congress hosted by Albury Botanic Gardens. Paul Scannell and his local organising group, with considerable support from Albury City Council, are preparing another enjoyable and informative conference for the Australasian botanic gardens community. The call for papers, registration forms, and application details for BGANZ travel grants have all been recently emailed to members and uploaded to the BGANZ website. Be sure to meet the various timelines for the Congress – especially the earlybird dates for registrations!

Albury Botanic Gardens is an excellent example of the theme for this Congress – *Staying Valuable and Viable* – with its well-established involvement in community activities such as education, regional conservation, tourism, and recreational enjoyment of the Garden. In my experience, the past decade or two has seen a greatly increased engagement by communities with their local public gardens which has created a much greater 'valuing' of those gardens and their benefits.

This change in attitude contrasts with the experiences of the 1960s and 1970s when, in Victoria for example, botanic gardens had land requisitioned by councils for developments such as caravan parks, playgrounds and sports facilities. Thankfully, in several of those cases, the requisitioned land is now being returned to the garden for replanting. To me, the message from those experiences is that if botanic gardens, individually and collectively, don't remain viable and valuable to their communities, they will be allowed – even encouraged – to wither away.

I think we are all now aware of this danger and spend time, thought and effort in engaging with our communities and governmental masters – not that our efforts are always recognised or successful! Of course our gardens and their roles must still change with the times and community expectations, and indeed with our own realisation of new ways to contribute. Things like social media, 'virtual' visitors, e-learning, carbon accounting and revenue generation bring opportunities as well as challenges to staying valuable and viable. BGANZ seeks to help gardens deal with these realities by providing communication channels like the website and newsletter for sharing ideas and experiences, by fostering garden networks through the Regional Groups, and by 'information transfer' at workshops, regional meetings and the biennial Congress.

Volunteering is one way in which gardens have been valuable to their communities for many years. National Seniors Australia has just released a report from a study of older volunteers in botanic gardens (see the BGANZ website for a copy). The report highlights that the benefits of volunteering flow both ways, and notes that "the wider community benefits accrue to international and domestic tourists, school and university students, coach tours, and local residents. Those with closer relationships to the volunteers also benefit – for example, partners or spouses, grandchildren, neighbours and friends." And the bottom line is that many of our smaller and regional gardens just couldn't function without the immense contributions of their older volunteers.

The Albury Congress will examine this 'valuable and viable' theme from various points of view – community and support groups, plant collections, climate change, fundraising, education, tourism - so be there to enjoy and learn and contribute. Sharing knowledge and experiences is the most cost-effective way for our gardens to make progress!

This is my last contribution to President's View – I will be retiring in October after six years (the maximum allowable term) as your President. It has been a privilege and a pleasure to have contributed to the progress of BGANZ during that time and to have seen its membership and activities steadily grow. I thank all those who have worked with me on the BGANZ Council during that time for their energy, ideas and commitment, and I wish the new Council and President every success in their stewardship of BGANZ.

The theme of the November 2011 issue of *The Botanic Garden* will be 'Plant Collection Management'. The deadline for contributions will be Friday, 28 October 2011. Please contact the Secretariat if you are intending to submit an article.

BGANZ Congress - *Staying Valuable and Viable*

Albury 20 – 23 October 2011



The preparations for the Congress are progressing well with a good response to the call for abstracts and the workshops. Many of the presentations that have been submitted fit superbly with the theme of Botanic Gardens “Staying Valuable and Viable”.

Albury is situated centrally between Melbourne and Canberra, and we hope many people will take advantage of the generous BGANZ Congress attendance grants. With a total of \$7,000 available, we expect people from far and abroad to be able to attend.

Confirmed keynote speakers include

- ♦ Prof Brian Huntley – Former Chief Executive Officer South African National Biodiversity Institute & Kirstenbosch Botanic Garden
- ♦ Robyn Williams – Host of ABC Radio National “The Science Program”
- ♦ Stephen Ryan Host of ABC TV Gardening Australia

There will be great opportunities for all our BGANZ groups to hold meetings, do introductions and network. Many of these will be held around social lunchtimes. We will also have the opportunity to discuss our organisation and the way ahead, at an open forum, held prior to the AGM.

Come along and meet new friends and old, professional leaders, horticultural experts and international guests.

Don't forget to take note of the various deadlines – papers, grants and early-bird registration. All info is posted at <http://www.bganz.org.au/bganzevents/congress11>

Join us in Albury for what promises to be an essential event for “Valuable and Viable Botanic Gardens”.

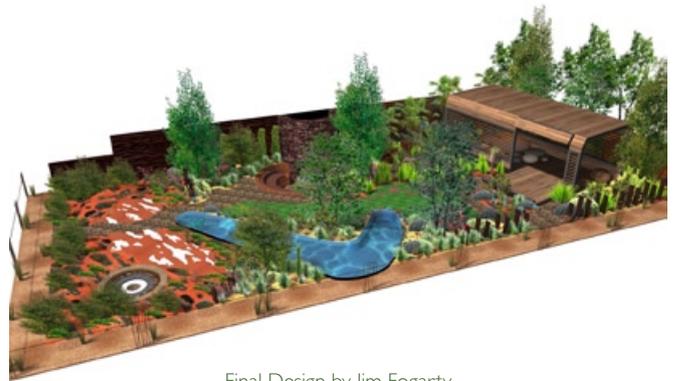
‘The Australian Garden’ wins Gold at Chelsea

Mark Webb

Congratulations to the Royal Botanic Gardens (RBG) Melbourne in winning a prestigious gold medal for ‘The Australian Garden’ at the most sophisticated garden show in the world – the Royal Horticultural Society’s Chelsea Flower Show.

Landscape designer Jim Fogarty based his design on the award-winning garden of the same name at the Royal Botanic Gardens Cranbourne designed by Taylor Cullity Lethlean with Paul Thompson. The Chelsea garden was exhibited to raise international awareness and media coverage of the ‘real’ Australian Garden at Cranbourne, where its second and final nine-hectare stage is due to be opened in mid-2012.

Planning for the Chelsea garden started in 2009 when RBG Director and Chief Executive Dr Philip Moors was approached by three donors who expressed their interest in helping RBG Melbourne participate in its first-ever Chelsea Flower Show.



Final Design by Jim Fogarty

Subsequently, the Gardens was able to source adequate funds from government, the corporate sector and individual donors to ensure that a world-class display could be delivered.

The difficulties overcome by RBG Melbourne and its team in installing a garden at Chelsea should not be underestimated. The UK is 17,000kms away from Australia and has its own quarantine and OHS laws and various supply requirements. Contrary to the views of some, London's climate is different from Melbourne's and



so allowances had to be made in the times that plants and turf take to germinate, grow to a suitable stage for planting, and reach a peak of flowering at the time of the Show. It didn't help the RBG team that the UK had just experienced their coldest winter in decades.

The Australian Garden obviously needed to display Australian plants, but quarantine restrictions meant that Jim Fogarty had to source suitable plants from nurseries in Spain and Italy, with seed from RBG Melbourne being sent to a specialist nursery in the UK for germinating and growing on. In total, about 2000 Australian plants from over 100 species were used in the 220m² display on the Main Avenue at Chelsea.

Co-ordinating the supply of materials and plants for this project is a testimony to the expertise of the RBG team. The logistics of organising the various materials required items as diverse as sculptures and tools, loading them into two containers, shipping them, getting them to site and then making sure the plants and any other locally sourced materials were available at the right time and at the quality required is a terrific achievement. While the planting team, including four RBG staff and several volunteers, the designer, and local contractors are to be congratulated on a fantastic job, I know from personal experience that there is another larger team back at the Gardens who also helped in bringing the whole project together, so there is genuinely a sense that this is an achievement for Jim Fogarty, RBG Melbourne, its staff and volunteers as a whole.



Having won gold at Chelsea and accepted all the appropriate accolades that go with such a magnificent achievement, it is wonderful to know that 'The Australian Garden' will live on in the UK, albeit it in another form. It is to be relocated to Capel Manor Gardens, the UK's leading horticultural college, at Enfield just north of London as a permanent display in their themed garden area.

Will RBG Melbourne go back to the Chelsea Flower Show and go for another gold? According to Philip 'maybe in the medium term - but only if there is a specific reason to go'. And for those of you who just want to know, yes, Philip did meet the Queen and other Royals!

BGANZ Communications Toolkit Project

Anne Duncan

BGANZ Communications Toolkit – Coming soon to botanic gardens near you!!

Our communications consultant, Cinden Lester, has been working very hard on the toolkit over the last few months. She has had a lot of input from members, which has been fantastic – thirty-two people responded to the on-line survey and 19 people gave up time to be interviewed. As well as taking into account these research findings, Cinden did a desk-top survey about the environmental, social and economic values of botanic gardens, and considered the current BGANZ web page and draft business plan. Using all of this research, she undertook a situation assessment and then designed the communication tools.

The toolkit contains communications messages about botanic gardens generally and on environmental, social and economic aspects more specifically, presented in a range of formats, including a template for a communications strategy, a power-point presentation, one-page key message summaries, and factsheets; all designed so that you can adjust to suit local needs and include local material.

A draft has recently been sent out to a wide range of people for constructive feedback. Once it has been finalised it will be made available to members as soon as possible. It is planned to “launch” the toolkit formally at the Albury Congress. Following this, if there is interest, the Council has discussed with Cinden the prospect of holding a “web-based workshop” for gardens to discuss how to use the toolkit with Cinden via email, with Q and A’s posted to the Web so that we can learn from each other. We wanted to be able to assist people to digest the toolkit and apply it to their situation in a low cost and efficient way and that was the suggestion we came up with. Such “webinars” are all the rage and have a distinct advantage for workplaces which are widely scattered. This seemed a good opportunity for BGANZ to try something like this out.

If you have any views about this or any other aspect of BGANZ, what it is doing and how, and what you think it should be doing and how, there will be another informal discussion session at the Albury Congress (similar to Mackay), where you can have your say.

REPORTS FROM BOTANIC GARDENS – CHILDREN’S GARDENS

Engaging children in designing gardens

J.P. Rayner, M.T. Rayner and A.C. Laidlaw

While there has been significant growth of children’s gardens in public, school and institutional landscapes in recent years (Tai et al 2006), there is a tendency for many to be modelled on adults’ values and needs, rather than those of children (Wake 2007). This may, in part, be because of perceived needs in maintenance and supervision (Malone and Trantor 2003), but it may also be a result of the design process itself, where there is a focus on designing *for* children, rather than *with* children (Wake 2007). This is despite evidence that understanding children’s knowledge, values, experience and use of a place is crucial to improved planning and design (Hart 1992) and leads towards to more successful outcomes (Hart 1987; Malone and Tranter 2003; Titman 1994). Two recent Victorian projects that illustrate different, but successful, approaches to engaging children in design include The Ian Potter Foundation Children’s Garden (Royal Botanic Gardens Melbourne) and The Patch Primary School Garden.



The Kitchen Garden at the Ian Potter Foundation Children’s Garden

The design process for The Ian Potter Foundation Children's Garden at the Royal Botanic Gardens Melbourne included involvement from children from two contrasting Victorian Primary Schools during 2001 and 2002. The children provided input through interviews, discussion and drawings and they also spent time in the Botanic Gardens in a 'research day' based around engaging, exploring and interacting with plants, through structured activities and play. Outcomes from the children's involvement reinforced the need for having designed elements, spaces and sensory experiences in the garden for contrasting experiences (e.g. group/alone, quiet/noisy, active/passive), as well as enabling opportunities for imagination, role-play, challenge and risk. It also revealed some key differences between children, based around their familiarity with plants and the natural world, their spatial awareness and their experiences of and in play. The garden opened in October, 2004.



The Patch School Garden

The Patch School Garden Project opened in April, 2009 after a design and development process lasting more than three years. Built on a 0.5 ha site, it contains multiple themed gardens and an environmental studies centre/classroom. The project was entirely funded and built by the school community. Design of the garden was supported by the school garden team (teachers' and parents' committee), but largely driven by the children themselves. During 2006 all students at the school had weekly garden classes led by the environmental educator. While these were linked to core curriculum outcomes in science, maths, language, humanities, physical education and arts, they were activities based around designing and developing the garden. These classes focussed on three main areas during the year – completing a shared vision for the garden, completing a detailed site inventory, survey and analysis and developing a design concept for the garden. Age-appropriate techniques and creative methods (drawing and modelling) assisted the children's active participation in this process.

Having the children involved in the garden's development for a whole year enabled exploration and interaction with issues on a



Drawing and modelling are excellent ways to engage children in design

variety of levels. From the visioning stage of the project, where individual topics were introduced, through to the final design plan, ideas were frequently translated into design elements. Thus, discussion of flowers, insects and reproduction was interpreted into the Butterfly Garden; food and culture became the Koori Garden; and issues of drought and water scarcity became the Low Water Garden. The Patch School Garden is fundamentally the result of the children's input throughout the design development.

Whilst the projects are significantly contrasting – one is located in a large public garden with a mixed, transient user group, the other is a school garden with a stable, resident user group – they both sought design outcomes through a process *with* children. At The Ian Potter Foundation Children's Garden, the consultation was used to ensure the garden met the main user needs, consistent with the mission and vision for the garden. At the Patch School Garden, whilst developing a garden that met user needs was important, it was the *process* itself that was more important, particularly to build student responsibility and ownership of the garden as it developed.

Based on the outcomes of these projects, engaging children in designing gardens should encompass the following:

1. Plan for consultation that includes children in the design process.
2. Understand and apply children's knowledge, values and needs.
3. Use facilitators to guide the design process.
4. Use age-appropriate methodologies.
5. Use methods that are active, creative and fun.
6. Allow for a time-rich process.
7. Ensure everyone has a voice.
8. Ensure children's input is reflected in design outcomes.
9. Build a culture of participation and reflection.
10. Ensure engagement continues to build responsibility and ownership.

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(Note: This is a much abridged version of a paper from the proceedings of the Healthy Parks and Healthy People Conference, April 2010)

The Children's Garden at Brooklyn Botanic Garden

Sara Oldfield

Last year the Brooklyn Botanic Garden (BBG) in New York celebrated its centenary. From the very beginning, environmental education has been a major goal for this highly-respected garden. Its chief mission remains to educate the public about plants and as an extension, inform people about ecology and awareness of the environment. A whole host of activities is undertaken throughout the year reaching all age groups. BBG serves more than 150,000 children annually through a wide range of on-site, in-school, and community-based initiatives. When I visited in March this year, there was a real buzz of activity. For children this focussed round insectivorous plants – ever popular to capture the imagination! It was too early to see the Children's Garden in its full glory – for that I look forward to a future visit!

Designed by Ellen Eddy Shaw in 1914, the one-acre Children's Garden is subdivided into 4x15' beds that can be easily gardened by teams of two children with an instructor. They are connected by pathways and surrounded by a fence which defines the space designated for children. Children dig in the soil to plant lettuce, tomatoes, squash, onions, peppers, along with other vegetables and companion plants such as herbs and flowers.

Over 900 children aged 2-13 attend one or more seasonal sessions every year, totalling over 16,000 hours of lesson time in the garden. In addition, more than 60 teenage interns in the Garden Apprentice Program (GAP) work in the garden each year. Children come from neighbourhoods throughout Brooklyn and beyond, and many attend with a full or partial scholarship which is awarded based on financial need.

Sessions are offered in spring, summer, autumn, and winter. Families pre-register their children to participate for a season-long session, which can vary from 4 to 12 weeks. Children learn the basics of planning, planting, weeding, and harvesting, while caring

for their plots in the Children's Garden field. Tool maintenance, crafts, cooking projects, and ecological studies may all be covered at levels appropriate for the age group. Two full-time permanent staff supervise programming, and seasonal instructors are hired to teach groups of about 12 children. Teenage GAP interns are paid to work as assistants to the instructors. All horticultural maintenance is done by these staff and the kids in the program.

The education programmes at Brooklyn are hugely popular, not least in encouraging children to take an interest in the source of food. As one parent notes:

I've been meaning to let you know what a wonderful experience my daughter had in the Children's Garden Program. Not only was she excited about planting and harvesting but the program got her to try vegetables that she never would have tried at home! One day when she came home from the garden with her bag full of a variety of produce I asked her what one leafy green item was. She promptly tore off a bit of the green, popped it in her mouth and said, "oh, that's basil." It was great that she was able to play in dirt with a purpose!

A particular scheme at Brooklyn, Project Green Reach, inaugurated in 1989, encourages the study of botany and environmental science in low-income urban communities. BBG's programs enable young people and adults alike to acquire a broader sense of the natural world and to understand the responsibility individuals have in preserving and improving the quality of our environment. As the sheer scale of global environmental problems is increasingly recognized, botanic gardens around the world have a vital role to play in re-connecting people to the natural world. Brooklyn Botanic Garden anticipated from the outset that learning and fun with plants in the local community are a powerful environmental tool.

Where Ideas Grow: the Potters Children's Garden at the Auckland Botanic Gardens

Jackie Chambers

The Potters Children's Garden at the Auckland Botanic Gardens is unique: it evokes ecological, cultural and environmental themes in an engaging and interactive way that appeals to our youngest visitors. Our children's garden has shifted the perception that botanic gardens are destinations mainly for adults rather than children, entrenching the Botanic Gardens as a major family destination and educational resource in the community. Built in 2005 and extended in 2010, this garden has quickly become a success both as an attraction in its own right, by increasing family visitation to the gardens and as an educational resource that is increasingly accessed by schools and community groups.

Family Visitation

While many botanic gardens around the world are searching for ways to expand their visitor base to engage younger people and their families, with the creation and subsequent expansion of our children's garden, we have successfully gained a steady increase in our number of visiting families and children's groups.

When the garden opened in 2005, with a majority of funding provided by the Potter Masonic Trust, the primary objective was to engage children with the wonder and importance of plants. The original garden had a uniquely New Zealand feeling. It was tied to the place with native plants and local themes. This portion of the garden explores the relationship between the Kereru (the NZ native woodpigeon) and the Pururi Tree (*Vitex lucens*) with interactive sculptures, information panels, and a boardwalk that takes visitors under the tree canopy to explore interactions between living birds and trees in real time. Other activities include a themed maze which delves into the history of New Zealand's indigenous population through the legend of Maui. There are also areas for digging around for bugs, an interactive sundial, waterwheel and pump, and streams with tadpoles and other freshwater aquatic and amphibious life. It is planted almost exclusively with native species, a robust planting that can handle enthusiastic young foot-traffic. In addition to the native material, there is a vegetable garden – planted with edible native plants like Nikau Palm (*Rhopalostylis sapida*) and imported plants such as taro, silverbeet and peas. All these components were woven together to tell a unique New Zealand story.

The garden has since more than doubled in size with a new extension that was opened in November 2010. The extension moved the plantings from local to global; the garden now explores New Zealand in relation to the rest of the world. While the original garden focused on uniquely New Zealand plants, history and ecological interactions, the extended garden is about exploring plant adaptations to their environments around the globe - the story of the Kereru and Pururi on a global scale. Families can take a trip around the plant world and still be back home for nap time.

The new extension features replica habitats ranging from extremely dry desert to a permanently wet bog. There is a jungle that shows how epiphytes such as bromeliads and orchids survive perched on other plants. A meadow shows how plants such as annuals have abbreviated their life cycle to survive seasonal extremes.



The primary objective of the garden is to engage children with the wonder and importance of plants. Photo: Jack Hobbs

The project has been a wonderful success, proven so in part by increased family and child visitations to the gardens. Visitor numbers have increased from 485,000 in 2004/05 when the children's garden was first opened to 969,000 visits in 2009/10. This is by far the greatest increase in visitation for any of the parks in the Auckland regional parks network and is accounted for in large part by more children families, school groups, and day cares visiting the garden.

The success of the Potters Children's Garden was recognized with the awarding of the Outstanding Park Award for 2010 by the New Zealand Recreation Association. The judges stated they were impressed with the innovation of the project and the way it captures the imagination of children.

Educational Resource

The design of the garden is appealing and inviting and it is easy to see an instant attraction for families. But what is most exciting about the project is witnessing the garden become increasingly important as a resource into the future. As Education Coordinator I have seen first-hand the range of educational opportunities the garden can provide.

In advising teachers on the resources we have at the garden, the children's garden is a fantastic place to explore so many concepts – photosynthesis, adaptations, life cycles, invertebrates, the process of pollination, flower morphology and purpose, seed dispersal methods – an ideal place to send groups looking for self-guided and structured activities on these and many other themes. The garden has been able to meet many different levels and needs, including catering to English as a second language classes, preschools, special needs, home school groups, children from the public education system ranging in ages from 5 to 15... the list goes on.

Within the public education system, we deliver curriculum-based programmes as part of the council- wide 'Learning through Experience' programme. Our garden is intensively used by schools from across the Auckland region, catering to roughly 8000 students annually.

In our vegetable gardens children learn through experience. Participants experience growing plants and working in a productive edible garden. Activities include planting seeds, transplanting seedlings, harvesting vegetables, digging soil, watering, composting, and worm farming. Most importantly, children get to eat the products of their toil. Education goals emphasize our dependence on plants, the nutrients they provide and the various plant parts we eat.



'Robust plantings in the garden can handle enthusiastic young foot traffic'.
Photo Jack Hobbs

In addition to school programs, we also host school holiday programs. Based around the same educational objectives of the curriculum program, these have proven an effective means of delivering quality education the year round.

There have been a number of other benefits that have come out of this garden. The gardens are becoming a reference point for many educators in the region looking for ideas and information that they can implement in their own schools. This includes plant selection and horticultural techniques and increasingly ideas on low impact design (LID). This is largely due to the fact that the design of the children's garden is underpinned by LID components. This focus on sustainability is shown through features like a vegetative swale and filter strip that show how plants can be used to filter impurities from grey water, a rain garden to show how storm water flow can be slowed down and utilized, and active use of green roofs.

The Potters Children's Garden at the Auckland Botanic Gardens is an exciting place to teach. It is extremely satisfying to bring a group into the children's gardens and to hear gasps of 'oh cool' and watch their faces light up with wonder as they take in the gardens for the first time. This garden has shifted the perception that botanic gardens are destinations for adults, entrenching the Gardens as a major family destination and educational resource for the children in the community. This garden has quickly become a success, as an attraction in its own right increasing family visitation to the gardens, but increasingly as an educational resource for the community.

A Fresh Approach to a Children's Garden in Western Australia

Rebecca Maddern

A one-of-a-kind project in Western Australia is challenging what it means to create a children's garden.

Rio Tinto Naturescape in Kings Park, set to open this spring, is a new outdoor space designed to connect children with nature. It will also be the new home of environmental education in Kings Park and Botanic Garden.

The project is challenging many current practices relating to children's playgrounds in an effort to give children a real 'bush' experience in the middle of a city.

The absence of plastic play equipment, rubber matting and rolling lawns sets this project apart from the majority of today's playgrounds. Instead the site is set in native bushland, where it seeks to showcase the natural environment rather than trying to minimise it.



Girl playing in stream. Image courtesy of BGPA

Children and their families will be encouraged by a team of Bush Guardian volunteers to build cubbies, climb, collect bush treasures, splash around in a creek, catch tadpoles and generally be curious.



Ducks take a sneak peek at one of the new tree hides. Image by D Smith, Plan E Landscape Architecture.

"It brings back a level of challenge, exploration and connection to nature that has been missing from playgrounds for a generation," says Kings Park and Botanic Garden Chief Executive Officer, Mark Webb. "Many city children miss out on the freedom of exploring and playing in nature. *Rio Tinto Naturescape in Kings Park* is being created just for this purpose and will encourage learning through adventure. "Children need to touch and feel nature in order to understand it and to learn to love it and protect it."

The design of the 60,000-square-metre site incorporates a series of zones, offering an array of experiences and discoveries. The zones include hidden thickets, a wetland, a cubby building area and a creek. Upside-down trees provide a tangle of climbing webs and treetop lookouts offer a bird's-eye view of the bushland.



Planting some of the 40,000 new plants in RTNKP. Image by J Thomas

The zones are connected by a series of meandering paths, boardwalks and bridges which wind through the site. This maze-like design, combined with minimal signage, aims to give a sense of immersion in the bushland for visitors. Children will be able to experience a feeling of isolation and exploration as they come across new areas unexpectedly. Childhood researchers explain that even the sense of being 'a little bit lost' is good for children:

"These kind of experiences encourage critical thinking, self-reliance and problem-solving, which are all part of healthy childhood development' according to Kings Park Education Coordinator, Charlotte Vaughn.

A growing body of research shows that interaction with nature is critical for healthy childhood development, with a positive impact on motor skills, cognitive development, mental health, problem-solving ability, creative play and self esteem.

It is also the basic building block to develop children's appreciation for our natural environment. 'If we don't give today's children the opportunity to connect with nature, how can we expect this generation to care for our fragile environment in the future?' asks Mark Webb.

Rio Tinto Naturescape in Kings Park seeks to raise the profile of bushland in the community. "Although two thirds of Kings Park's 400 hectares are native bushland, most of our six million annual visitors have traditionally been drawn to the park's beautiful rolling lawns and parklands.

"One of the aims of this project will be to draw attention to the beauty of Kings Park's bushland and its importance to the health of the environment and community. Urban bushland provides 'lungs' for the city.



Hon Bill Marmion MLA, Minister for Environment; Water and Jonica Foss, Kings Park Volunteer Master Gardener, planting in RTNKP 25 June 2011. Image by Darryl Peroni. Courtesy of Water Corporation

Forty thousand new native plants have just been planted in the site to enhance the existing vegetation and repair the limited effects of the construction phase. "An army of volunteers and staff have been working around the clock to get these plants in the ground during the rainy season before the much-anticipated opening of *Rio Tinto Naturescape in Kings Park*," said Grady Brand, Senior Curator of Kings Park and Botanic Garden.

"We will water the new plants for one year, but then the whole area will be a 'dry site' with no irrigation. Suitable plant species have been selected from the Kimberley, desert areas and the Wheatbelt specifically to cope in Perth's dry environment. "The planting is the culmination of several years' preparation and growing, with most of the seedlings and advanced tree stock raised in the Kings Park nursery," explained Grady.

Rio Tinto Naturescape will also be a new base for the well-established Kings Park Education program. A dedicated education zone features a series of outdoor classrooms in natural settings around mature trees and wetland areas. Lessons in these areas will provide hands-on learning about the sensitive eco-systems found in the WA landscape, indigenous knowledge, the power of solar energy and an understanding of how precious water is in a drying climate. Kings Park Education explores the interconnected world of plants, animals and people for students from kindergarten to university. The project includes a new state-of-the-art education centre, built to the highest environmental standards. The building will be partially immersed underground and be powered by solar energy.

Rio Tinto Naturescape in Kings Park is the result of a community partnership led by Kings Park and Botanic Garden. Corporate funding partners, researchers from the University of Western Australia, landscape designers and a number of community organisations have all contributed to the project.

A new volunteer program has also been established to enhance the project. *Naturescaper* volunteers will be on duty in *Rio Tinto Naturescape in Kings Park* six days a week to encourage a sense of fun and exploration among our young visitors and their families. "The *Naturescaper* volunteers will be a friendly presence for children and their families in this potentially challenging space, where they will share their passion for and understanding of the Western Australian bush," said Mark Webb.

"This project is the first of its kind in Australia."

Rio Tinto Naturescape in Kings Park will open to the public in October 2011.



Eucalyptus caesia in Kings Park and Botanic Garden. Image by D Blumer.

A Regional Botanic Garden's Position

Ro Noone

Children in the Geelong region are fortunate to have a very special garden dedicated to children of all abilities. "The Geelong Playspace" sits snugly in Eastern Park close to the Geelong Botanic Gardens (GBG). As a regional botanic garden without large amounts of resources available, it was not possible to create a children's garden within the GBG.

The Playspace was a community initiative launched in 2006 and has been a favourite meeting place for young families ever since. Rotary International, celebrating 100 years, was the main sponsor along with government, business and community sponsors. The Playspace attracts families to the Park and often draws them to the GBG for further play, education and/or refreshments. The Geelong Play Space is an exciting concept in playground design, integrating children with disabilities in a unique play environment. The playground covers about 3,000 square metres of area and has over 3,000 plants.

Designed by Ric McConaghy, in conjunction with Red Box Design Group, the Play Space ensures the whole playground is suitable for people of all ages and all abilities. The design objectives were:

- To create a special Play Space for all, allowing for physical and explorative play and a sense of wonder within a culturally sensitive environment.
- To create a series of levels of play opportunity linked by access ramps, separated by hanging gardens, with interactive art elements – all encouraging a sense of wonder and engagement.
- To create a metaphorical cycle (circle) of landscape - suggesting the evolution from the original land and plants of Gondwanaland, on a play journey through the evolving native vegetation, to the impact of the arrival of Europeans and the changes that this brought to the native vegetation, landscape and culture - culminating in a built structure of contemporary living.



There are 20 significant landscape areas or features to find and explore within the Play Space.

Special features of the Playspace include:

- Hard and soft ground surfaces
- Plantscapes to encourage discovery, adventure, imagination and connection to the natural environment
- Textural materials including sand, water, leaf litter
- Raised wheelchair-accessible sandpit
- Whispering Casuarina forest
- Gondwanan rainforest
- Bamboo tunnel
- Brick maze
- Swings, including a Liberty Swing which is wheelchair friendly
- A "pirate ship"
- Low rock-climbing/scrambling wall
- Foot-bells, embedded in the boardwalk
- Sound stations, activated by movement nearby
- Ride-on "pelicans" and twisting poles
- A "cottage ruin" with brick chimney
- A massive Buddleia which provides a "secret hideaway" under its canopy
- Numerous ramps and fences delineating changes in level
- Many bench seats
- Surrounding fence and child safety gates

Children of all abilities are encouraged to explore amongst the robust plantings and can play safely within the fenced area, even when they may be out of sight of their carers. This promotes more imaginative and less structured play, which is typical of traditional playgrounds limited to hard structures.

Planting selection was made by the previous GBG Director and staff. The garden is maintained by the GBG but is usually unattended. Because of the high visitation by young families, misuse of the Playspace is rare. The Playspace beautifully integrates the borrowed landscape of mature trees in surrounding botanic parkland. Families can picnic within the Playspace, use Eastern Park facilities closeby or take a 5 minute walk into the GBG.



Bendigo Botanic Gardens

Brendan Beale

Bendigo Botanic Gardens does not have a children's garden as such as yet, although it is proposed in the master plan. It does however have some natural elements for child's play or interactive play. These are quite simple structures which need little maintenance and are very well utilized by the younger members of the community.



Photo: B Beale

This is our bluestone Dublin maze, based on the design from the Iveagh Garden in Dublin. It is a fairly simple maze and can be navigated quite easily, as you can see, over the stones to where the dead ends are. But the children - and adults - love it. There are well worn tracks around the gravel pathways giving an indication of how many people use it. One of our local special schools uses the botanic gardens and again the maze is the most popular.

The construction was quite easy as the large stones sit on the ground and are quite heavy, but once in place cannot be moved. Then the gravel was laid out and compacted. It is a low-cost, low-maintenance feature which is greatly utilized by children.

Our second feature is a tree which over the years has become a 'cubby' for the children who visit our gardens. The *Dovyalis caffra* or Kei Apple is very popular as the branches reach the ground forming a closed canopy except for the entrance. This was created from many years of children climbing the tree. Even though this plant has two-inch thorns there are no reported injuries to any children. The tree does not seem to be suffering in any way and fruits quite regularly.



Photo B. Beale



Photo B. Beale

Our last item which slightly relates to children’s gardens is a simple formation of large bluestones, which are worn smooth over the tops from children climbing over. Again, this is a very simple structure, which occupies little area and requires virtually no maintenance.

The only official “playground” in the Bendigo Botanic Gardens is a standard plastic play area. But it is obvious how much the other more natural features are used for children’s interaction and stimulation within the gardens. Having these spread around the gardens gets the parents away from the playground seeing more of what our gardens have to offer.

Albury Botanic Garden’s Children’s Garden

Paul Scannell



Once upon a time, there were two mums and an old garden gnome, who wanted to build a Children’s Garden...

And so the story goes.

The passion needed to get this \$900,000 project off the ground was amazing to witness. Our “Two Lou’s” have been nudging the community and the Council along for almost four years now.

With the combined use of a questionnaire, forum and working group meeting we gathered the community’s input and ideas into the proposed Albury Children’s Garden.

There were some fantastic original and creative suggestions which people would like to see incorporated into the design. Whilst understandably not all the ideas could be included, the brief provided a guide into what the community of Albury would like as features in the Children’s Garden.

Our superb team of mums and dads gathered all the information and survey results and formulated the design brief. The design brief was given to Mary Jeavons Landscape Architects and a brilliant concept plan was formulated.

The design brief highlighted the enthusiasm of the community towards a worthwhile project, which will be an exciting place to encourage a child’s creativity, imagination, knowledge and sense of wonder.

The Troll Cave, Fairy Temple, Wetlands and Story Telling Stools are just the tip of the iceberg.



Our fantastic staff, French students, Wiradjuri elders, artists and artisans, musicians and our wonderful Friends of the Albury Botanic Gardens members, have been incredible in launching this project.

If anyone would like to view the survey questions and results, please contact Paul Scannell on pscannell@alburycity.nsw.gov.au.

Hunter Region Botanic Garden Children's Play Sites

Rita Stewart

In September, 2006, the Hunter Region Botanic Gardens' Board approved the development of eight Children's Play Sites. This was in response to the growing realisation that botanic gardens need a stronger focus on educating children and on fostering their interest in the natural environment. Thus, the aim of the Hunter Region Botanic Gardens' Play Sites is to provide interesting and educational activities to help children develop an appreciation of plants and animals and of the Gardens themselves, and for children to begin to understand mankind's role as care-taker of the environment. With the environment and sustainability in mind, the Play Sites were designed with a focus on targeting the use of natural materials wherever possible, especially materials already available in the Gardens. For example, two of the sites use timber which was left over from tree felling, and three of the sites feature plants which are propagated and grown by the Hunter Region Botanic Gardens' nursery.

Work commenced on the first of the sites in November 2006, and by mid September 2007 eight Play Sites had been established. An additional site, Alphabet Pavers, was proposed by the working party and accepted by the Board in November 2007. Work on this site was completed in March 2008, bringing the total of Play Sites to nine. The nine sites from Animal Circles (site 1) to Sensory Squares (site 9) form the Children's Adventure Trail, which follows a loose circuit from the western side of the Eucalyptus Lawn to roughly as far as Parry's Place. Each of the sites has a different focus and presents a different challenge for the children.

In December 2009, the draft of a booklet to accompany the Children's Adventure Trail was completed. The booklet features information and activities relevant to each of the nine sites and is designed to inform and stimulate young minds. The Play Sites and the accompanying booklet primarily target children in the 3-8 year age group, although 12 and 13 year-olds have been observed enjoying the sites. The intention is that visitors read the booklet and complete the activities whilst completing the Children's Adventure Trail.

The Play Sites

1. Animal Circles was the first site to be developed. As number 1 on the Children's Adventure Trail the site consists of 18 log off-cuts, arranged in a circular fashion with an additional large off-cut in the centre. Each Animal Circle depicts an Australian animal, and its common name, which have been etched into the timber. Marsupials, monotremes, and placental mammals, birds, reptiles and insects are represented via the log circles. The large off-cut in the centre depicts the compass points and the Hunter Region

Botanic Gardens logo. The site enables children to link pictures to names of some Australian animals. They can also use a piece of paper to make rubbings from the images or to copy them. Children can also jump, climb or sit on the log off-cuts and the site forms a great picnic area. It is also ideal for story telling.

2. Bush Music is the second site on the trail. It consists of two structures made from timber and bamboo. The timber provides a frame from which six lengths of bamboo are suspended. On one of the frames, bamboo of varying thicknesses and the same length is hung. The other frame has bamboo of the same thickness but of varying lengths. Children can use a stick or their fingers to run across the pipes of bamboo or to strike them. They can then describe the various sounds and hypothesise reasons for the differences. It is a simple 'music-making' experience for the children which encourages them to listen carefully and also teaches them to differentiate sounds.

3. Spy Holes, the third site on the trail, was commenced in December 2006 when two wooden poles were set into the ground. The poles were obtained when a tree had to be removed from the Gardens. In February 2007 holes of varying sizes were drilled into the poles. The holes are drilled at different angles and are designed to encourage children to see "specifics" by focusing their gaze via the holes, e.g. the top of a particular tree which they may otherwise not have noticed. Children can enjoy spying aspects of the garden, their friends and learning about depth perception. To add interest and to make the site more aesthetically pleasing, eyes have been engraved around the holes and an owl has been carved on one of the poles.



Spy holes Photo: Garden Volunteer

4. Bandicoot Bridge and Sandpit features a sandpit and a bridge to 'cross' the sandpit. Two bandicoots were engraved on the sides of the bridge to add interest for children. This is a free-play site where children can use their imaginations by digging or building in the sand (like the site's namesake) or they can play on or run across the bridge. Activities observed at this site include counting the number of steps needed to cross the bridge, estimating how long or wide it is and seeing how many children can comfortably fit onto the bridge at once.

5. Animal Tracks has 21 pavers set into the lawn to form a winding path. Each paver depicts an animal footprint, the first and last of these being the footprints of children. Seven different Australian animals (as well as humans) are represented via their footprints. The signs accompanying the site feature a legend showing the various animal prints next to the names of their 'owners'. Children can match the tracks to the names of the animals or they can compare the different tracks. They can identify the different features of feet or 'hands' designed for swimming, digging or climbing or ponder on how their own feet are different or similar.

6. Wombat Cave consists of a 'tunnel-shaped' trellis covered with a variety of Australian climbing plants including *Hardenbergia violacea*, *Hibbertia scandens*, *Pandorea jasminoides* and *Prostanthera rotundifolia*. Signage includes pictures and names of the plants. This is to encourage children and other visitors to learn about and recognise plants in the Gardens. For the children 16 pavers showing wombat tracks have been set into the ground to form a trail of tracks entering and exiting the 'cave'. There are also three wombat statues placed amongst the plants and concrete scats in the tunnel. Children can enjoy following the wombat tracks through the cave while they 'hunt' and look for the wombats and their scats.



Kids at the Wombat Cave. Photo: Garden Volunteer

7. Blue Wren Maze is a fairly simple maze with the plants trimmed to a height of one metre because it targets children from the age of three. Initial plantings of *Austromyrtus dulcis* were begun in

December 2007. It was decided to use this species as the hedging plant for the maze for a number of reasons: a decision to use native plants at the site, the ready availability of cuttings from the nursery and existing hedges, and the status of *Austromyrtus dulcis* as a 'bush tucker' plant.

Later the plantings were supplemented with *Prostanthera rotundifolia*, which has the added advantage of helping to deter mosquitoes, and *Westringia fruticosa*. For children the maze offers a challenge and a place where they can run and play, as well as assisting the development of depth perception. Mazes provide a safe haven for small birds, so children will have the opportunity to see Blue Wrens darting in and out of the foliage. They will also be able to taste the Midgen Berries (fruit of *Austromyrtus dulcis*), which were harvested and eaten by Aborigines.

8. Alphabet Pavers consists of 26 pavers set into the lawn to form a winding path. Each paver depicts a letter of the alphabet (upper and lower case), a picture of a corresponding plant and the name of that plant, e.g. "Aa for Acacia". The main intention is to help children (and adults) to learn to identify plants in the garden, whilst being active. Children can hop from one paver to another, chanting the alphabet or reading plant names. They can study the different images of the plants, pondering on leaf and flower shape. They can also try pronouncing some of the botanical names and may be thrilled by others (e.g. Venus Fly Trap). Signage at the site includes a list of all plant names shown on the pavers and their corresponding botanical or common name, eg *Xanthorrhoea australis* and its common name of Grass Tree.



Alphabet Adventure. Photo: Garden Volunteer

9. Sensory Squares is the last site on the trail. The aim here is to provide children with a multi-sensory experience. The site consists of 18 pavers and 18 prostrate plants set into the ground in a "checker board" pattern, so that pavers and plants are alternated. The pavers are designed to look like a frame with a picture inside.

The 'picture' consists of pebbles which are set into the concrete. As well, the pavers are of three different colours: cream, mustard and brown. This provides children with a variety of visual and tactile experiences. Children can describe the different shapes and colours of leaves and stems, the feel and smell of some of the leaves or the colour and feel of the pavers.

Developing the Hunter Region Botanic Gardens Children's Play Sites has not been without its challenges. Some issues overcome include the development of an appropriate tool for engraving the end grain of the log offcuts used for the Animal Circles and the replacement of the initial plantings of culinary herbs in the Sensory Squares with more robust plants, when it became apparent that the site was too shady. Ongoing maintenance at the sites includes gradual replacement of all the Animal Circles with new ones as the older ones succumb to the effects of weather and replacement of the bamboo pipes at the Bush Music site. Pruning and replanting also form part of the maintenance program.

Since their development the Hunter Region Botanic Gardens Children's Play Sites have continued to be a popular venue for visitors and a source of delight for children. On any day of the

week, children can be seen peeping through the Spy Holes, clambering on the Animal Circles, playing music on the bamboo pipes or playing on the bridge or in the sandpit, while the adults prepare a picnic on the Eucalyptus Lawn. I feel that part of the appeal lies in the simplicity of the sites, which allow children to utilise the structures, whilst still leaving room for imagination. For instance the Animal Circles site is one of the most popular sites, where children climb, sit or jump on the log off-cuts. They wander around feeling the etchings and saying the names of the depicted animals and may play games of "musical circles" or compete to fit the most children onto a circle. In this way play and learning can occur together.

Development of the Hunter Region Botanic Gardens Children's Play Sites is continuing, with the team about to embark on the construction of a new play site (Casuarina Castle) which, again, will utilise materials already available in the Gardens. As co-developer and coordinator of the Hunter Region Botanic Gardens Children's Play Sites I would like to extend an invitation to anyone wishing to see the Play Sites and welcome any enquiries from interested parties. It would be my pleasure to share the sites with you.

An ingenious 'Garden for Children' planned for the Gold Coast

Kate Heffernan

School holidays always provide a reminder of how children engage in our botanic garden. Although the gardens are immature, there have been terrific growth rates in most areas. Adventurous kids always manage to locate a secret hideaway, or are absorbed by the antics of our extensive bird and insect species. Unpaved tracks in the denser parts of the Mangroves to Mountains Transect weave in and out of an array of interesting textures, and children stop to experience the appealing touch of barks and foliage. It is this continuing interaction with nature that continues to drive the members of the Gold Coast Regional Botanic Gardens (GCRBG) Project Control Group and Horticulture Reference Group in their quest to secure funding and complete construction of 'A Garden for Children'.

BGANZ members who attended the Queensland conference hosted by GCRBG in 2008 will recall creative Horticulture Designer Nick Walford-Smith presenting his visionary design for 'A Garden for Children'. Curious garden elements with titles like 'The Henge', 'Stickly Pricklies' and 'Insectopia' captivated all who heard Nick's presentation, or later viewed his remarkable and very detailed concept plans.

"The Garden for Children" will represent plants and horticulture, or more simply it will put nature first with its many opportunities for direct and diverse sensory stimulation. A revealing element of Nick's response to the design brief is captured in part of his written response "The Garden is for children...they don't first label it as a garden, or as having a distinct architectural style, or as having an acceptable image as a piece of expensive infrastructure".

Finding a designer with the perception and the imagination to create such a blueprint was just the first part of a challenge to implement the 'Garden for Children'. For my own part, as then Senior Officer for the GCRBG, I was excited by and championed the concept created by Nick. Family health problems took me away from the role where I would have had an uncomplicated opportunity to deliver such a legacy for the Gold Coast's fledgling botanic gardens and the local community.

Time moves on, with three unproductive years where Nick's plan for an "attraction that is a synthesis of nature and the fantastical" was unwittingly transformed into contemporary urban architecture and complex engineering. The price tag defied the allocated budget and the project stalled. Now, the Gold Coast's 'Garden

for Children' project has come full circle and the integrity of the original and more economical design may soon be realised.

For those not at the Gold Coast BGANZ Q Conference, a written description, (albeit a poor relation of the plan and images provided in Nick Walford-Smith's design), will hopefully inspire designs and construction, as well as applications for funds and grants for a string of children's gardens in all of our botanic gardens.

Picture Nick's design if you will, an entrance under a giant 'Upside down tree' and through a rough hewn stone wall, with a surrounding security fence that becomes invisible within the backdrop of vegetation and the immediate attraction of a paving surface of tumbled glass and coloured stones. Those accompanying young children will need to respond quickly to keep pace with their tugging hands as they venture towards 'Insectopia' and 'Fairybower'. The curved rammed earth walls of the 'Greenroom', a hub for education in the children's garden, glistens with crystals and jewel-like ceramic insects and insect-like fairies. The roof is a wild mass of native grasses and wildflowers and the adjacent, but essential store room and service area will blend innocuously with the novel and tactile qualities of the 'Greenroom'. The Storeroom and Greenroom will be located above underground water storage tanks, where storm water harvested from the roof and surrounds will supplement irrigation.

Tough times getting children to eat their vegetables may be forgotten in 'Yummo', the kitchen garden where not so ordinary seasonal vegies and fruits will be grown.

It is just a short hop to the novel and bizarre 'Lizards Gizzards', where "inanimate curiosities and plantscaping will invite creative play and exploration." The names of the features along the gizzards trail will appeal to your imagination and no description is necessary.

"Build It Rhythm Tree Blue Bower ... Giant's Marbles Crow's Nest....Stickly Pricklies.... HopscotchGorgeous Gourds Stinky.....Wombatty Tunnels"

The central feature of the gizzards, reached along a winding goat track is the summit "Farview" which will provide an open panorama around most of "the Garden for Children". Like the whole 'Garden for Children' all of 'Lizards Gizzards' will be landscaped with imaginative, yet sustainable regional plantings.

Older children, and especially the energetic and explorative, will enjoy 'Woodlands' and 'The Fortress'. Both are the highest topographical points in the garden with the intent of providing a special space where kids may gain a genuine sense of independence and connection with nature. From 'The Fortress' which is shrouded in a thicket of tea tree, adventurers will be able to look across to the 'Lookout Tree' perched high in 'The Rainforest'.

Before reaching 'The Rainforest', children will traverse 'Riverland', a natural system of dry creek beds flowing through wallum, littoral and riparian plant communities. Stepping stones and fallen logs are in the riverbed, and as well as river rocks and pebbles, occasional 'bones and fossils' and 'relics from the past' will be found. A beach and sand-based pond facilitate water play, and artefacts such as gourd balers, bamboo and palm trunk pipes, stones for damming and palm rachises for shovelling will encourage construction. 'The Henge' at the top of the creek bed is a ring of standing stones set amongst the existing roots of fig trees and will be the perfect location for storytelling.

Back at the entrance the maze-like 'Bamboozled' and 'Monolithic' are designed to tease but not confuse. The basalt columns forming 'Monolithic' will be softened by clumps of grasses and lithophytes and 'Bamboozled' will have an outer circle of living bamboo and an inner circle of palisaded bamboo poles.

The vision for GCRBG's 'Garden for Children' is now closer to reality. Ultimately the realisation of 'A Garden for Children' set within a sustainable built landscape, rather than merely a sophisticated built landscape means the budget will be more realistic, and the outcome will mirror the whimsical and imaginative nature based design of Nick Walford-Smith.

Fun is the key word in the design intent. Building this garden for children will also be fun. Realising the vision created by Nick Walford-Smith for the children of the Gold Coast, many of whom live urbanized, artificial and protected lifestyles, will create a link between nature and everyday life.



Mountains to Mangroves entry

Teaching children using the essence of nature

Merilyn Haigh

Gladstone Tondoon Botanic Gardens are regional botanic gardens maintaining a scientific collection of plants from two main areas, the Port Curtis Region and Far North Queensland. Up to 4,000 students per year enjoy environmental education experiences in Gladstone Tondoon Botanic Gardens.

Explore, Educate & Nurture Discover Tondoon – Lessons in the Garden – Early Childhood to Year 12



Conservation Officer, Lindsay Boyd & Visitor Services Officer Merilyn Haigh delivering a Lesson to local school students

Botanical and environmental experiences have been developed to increase awareness of our natural environment and stimulate students' awareness in line with Queensland Syllabus Learning Outcomes.



Local School Students undertaking a plant propagation lesson with Gardens Curator Brent Braddick

Through our team of dedicated staff and volunteers, the Gladstone community has embraced environmental education at the garden extremely well, and interest is growing in the programmes we offer. Our hands-on learning approach also helps students to become more aware of the botanic garden and encourages them to gain an appreciation of plant conservation and plant taxonomy from an early age.

Our most popular groups are primary schools with many schools participating in experiences such as:

- Queensland plants and their uses (incorporating bush foods, medicines and useful plants)
- Rainforest ecology, study of Queensland's remaining rainforest types
- A variety of 'Sense-sation' experiences
- How diverse are Queensland's plants? - Plant classification and reproduction
- Insects are fun!
- Water cycles and catchments
- Sustainable school gardens



A local high school student undertaking a plant classification study

Sustainable School Gardens Project

In partnership with Education Queensland's Boyne Island Environmental Education Centre (BIEEC) Gladstone Tondoon Botanic Gardens has welcomed local schools to take part in a lesson in Sustainable School Gardening to enhance their school grounds.

Following an assessment of the local school grounds Tondoon Botanic Gardens technical staff provides horticultural advice. The school group then visits Tondoon and takes part in the lesson - Sustainable School Gardens - to get up close and personal with local species that grow within the Gardens and the local area. The final part of the process involves a visit by gardens' staff to the school to advise on planting, site related specifications, plant education and species selection.

Interpretive Exhibitions Community Education and School Holiday Programmes

Our annual calendar is produced in conjunction with local artists to showcase exhibitions and include workshops about the environment, botanic gardens and nature. Each winter, spring and Christmas holidays, local artists work with children of all ages to conduct workshops on environmentally themed art activities in the Gardens. The Summer Sunfest Programme is also a wonderful opportunity for Children to become involve in public programmes at the Gardens.

Our latest exhibition "Discover the Interactive Living Book of Tondoon Botanic Gardens" by local artist Kim Scrimshaw encourages visitors and children to explore and become involved in a hands-on interactive exhibition. During July school holiday workshops are being offered, and the 'Living Book' also provides opportunity for children to share their thoughts, and compose poetry about the Gardens.

The Biggest Brush Turkey Nest in the History of Gladstone Tondoon Botanic Gardens

For some time there has been a goal within our successful Botanic Gardens Education Programme to produce an environmental education storybook to complement our existing lessons. Local artist Rosemary Anderson wrote a story about the scrub turkey, and the Gardens' staff applied for funding from the Regional Arts Development Fund. Talented artist Irene Sparks produced the drawings, and the project '*The Biggest Brush Turkey Nest in the History of Gladstone Tondoon Botanic Gardens*' was commenced. This project incorporated a public book launch, the BGANZ Queensland Conference, an interpretive installation including the artist's impression of a real-life scrub turkey nest, and interpretive sculpture and panels.

This wonderful resource for children who visit Gladstone Tondoon Botanic Gardens has been a very exciting project to be involved with. Hopefully many more wonderful stories about the unique environment of the Gardens will be produced in future years.



Rosemary Anderson, Author & Sculptor; Irene Sparks, Illustrator; Marilyn Haigh, Visitor Services Officer, at the launch of "The Biggest Scrub Turkey Nest in the History of the Tondoon Botanic Gardens"

One of the primary roles of staff of our botanic gardens is to provide positive learning experiences, lasting memories and impressions to all visitors to Tondoon. Staff continue to inspire and encourage the children to appreciate, conserve and preserve the unique environment which is Gladstone Tondoon Botanic Gardens.

Ecofest

The Boyne Island Environmental Education Centre developed the concept of the Ecofest after staff attended a seminar by world environmental expert, David Bellamy, in 1998. Mr Bellamy commented on the surprisingly good balance that exists between industry and the environment in the Gladstone region. He was also impressed by the level of community involvement and suggested the Region should promote its environmental performance.

Education Queensland supported the Ecofest idea, working in partnership with industry and community groups to educate the community on the environment and sustainability.

What is it all about?

Ecofest has been designed to promote environmental sustainability through educational displays and interactive activities promoted by government departments, Councils, local industry, business and community groups as well as promoting products with an 'environment' theme. Ecofest provides an opportunity for these organisations to showcase local efforts, which contribute to global sustainability through preservation and promotion of biodiversity.

To allow the whole family to participate and learn about the environment, entertainment, food and drink stalls and hands-on demonstrations are also organised for the day.

Timed to coincide with World Environment Day, the Gladstone Regional Council event has firmly stamped itself as the Central Queensland region's premier environmental event. About 7,000 visitors made the most of perfect conditions to join in the sights and sounds of Ecofest 2011 at Gladstone Tondoon Botanic Gardens this year.

Ranger Frank Manthey, who with his bilbies again proved to be one of the Ecofest's most popular attractions, summed it up best

by saying Ecofest was all about maintaining precious animals, plants and resources for future generations.

Children learned about the environment, and the effects of human activity upon it, by completing Passport Trail questions and activities. There were displays of cute and furry wombats, wallabies, sugar gliders and bilbies and the not-so-cute, but just as ecologically important, crocodiles, snakes and turtles located around the Gardens.

Neville, the 'confused clown' and Council's own mascot Reece Cycle, who was much more certain about his facts, moved among the children delivering their recycling messages.

A special place at the Royal Botanic Gardens Melbourne

Dale Alford

The Ian Potter Foundation Children's Garden (the Children's Garden) at the Royal Botanic Gardens Melbourne (RBG Melbourne) is a special place where children can delight in nature and discover a passion for plants.

The Children's Garden has been designed to intrigue, teach and excite children from a very young age about the importance of conservation and the environment. At a time when we are seeing increasing urbanisation and high density living, the Children's Garden provides an environment where children can safely venture outdoors to explore, experience, and enjoy the natural world.

The Children's Garden fulfils an important role as an interactive educational environment in which children and adults of all ages, backgrounds, physical abilities and cultures can play, explore and discover the natural world. It features plants, water, structures and pathways that reflect Melbourne's changing seasons and is the perfect setting for families to learn together about the magical plant kingdom.

With the Children's Garden, RBG Melbourne has created a natural experience for children that will inspire happy memories and develop a life-long appreciation and interest in plants and gardens.

Importantly, the Children's Garden was deliberately scaled to size for children so as to create a sense of ownership, leading to care and increased responsibility for the environment. Another key design aspect is that the Children's Garden is accessible to all, including wheelchair users, visitors with walking frames and parents with prams.

Every aspect of the Children's Garden has been designed to promote the fun and enjoyment of gardening and to nurture the link between children and the earth. The various design features, including the highly ornamental entrance garden, the 'parterre' styled kitchen garden, the Rhill waterway, the plant tunnels and the bamboo forest, provide something for every child to enjoy and marvel at.

The much-anticipated opening of the Children's Garden in 2004 saw the culmination of two years' detailed planning and design. Since 2004, more than one million people have visited the Children's Garden, including thousands of school groups.

The question now, as we look to the future, is how can we best continue to help children connect with plants and the environment? The answer, in our experience, is teamwork.

Managing the Children's Garden has its challenges from Horticultural, Education and public engagement perspectives, and requires a great deal of teamwork from a range of RBG departments.

The Horticulture team works tirelessly to ensure the Children's Garden remains a safe and vibrant green space; our Education team utilises the garden to provide opportunities to enliven and enhance the learning of students from kindergarten to tertiary; and the Visitor Programs team offers children (and adults) opportunities to focus and extend their experience of the Children's Garden.

The Children's Garden is also supported by a dedicated group of Volunteers who donate their time, skills and experience to enhance

visitor enjoyment and build connections with the community. The Volunteers are specially trained to communicate effectively with children, engage with adults, assist with Visitor and Education programs, and provide horticultural assistance.

With visitation to the Children's Garden growing to over 170,000 a year, the need for a dedicated Children's Garden Horticulture Technician (CGHT) with expertise in Horticulture, Education and public engagement was identified

The CGHT is a specialised resource with a key objective of giving the public the access to face-to-face horticulture knowledge and skills. In our experience at RBG Melbourne, it is the CGHT who provides the crucial link between the Education, Visitor Programs, and Horticulture teams.

The CGHT is responsible for soil preparation, planting, tending and harvesting of the various garden beds, as well as engaging and interacting with visitors and school groups. Horticultural duties include sourcing new edible plant varieties for the garden, seasonal pruning when required, irrigation repairs and maintenance, integrated pest management practices and general maintenance.

From an Education perspective, the CGHT provides an invaluable link for children as they learn about plants. The CGHT participates in programs that increase children's connection to nature and this assistance means that more children and families will have greater access to the Children's Garden throughout the year.

From a Horticultural perspective, the CGHT ensures that the educational programs have access to active garden and vegetable beds with a mix of plants and vegetables at varying stages of maturity. The CGHT also assists the Education team with planning and conducting authentic organic gardening, making it a high quality educational experience.

The Education programs rely heavily on the Children's Garden as a quality resource with a rotating vegetable crop to provide lots of different lessons. The skills and experience of the CGHT are integral to maintaining the Children's Garden and, in turn, the success of the Education programs.

The CGHT also provides invaluable direction, guidance and mentorship to the Children's Garden Volunteers, increasing the areas and ways in which they contribute to the Garden. Working with the Volunteers, the Technician is able to provide professional development to these committed individuals, enhancing the quality of their skills.

The importance of the CGHT is a key learning form RBG Melbourne's management of the Children's Garden over the past seven years. In our experience, a CGHT is vital to getting the most out of a Children's Garden and making it a magical place where children and adults are able to dig, build, create, hide and explore as part of their everyday learning about themselves and their place in the world.

ITEM OF INTEREST

The **Australian Seed Bank Partnership** has recently launched their website <http://www.seedpartnership.org.au>

- Learn out about the partnership and its diverse expertise and leadership.
- Discover the key initiatives that will help achieve the partnership's vision of *safeguarding Australia's flora*.
- Visit the weekly 'seed' blog and make a comment.
- Read news on how the work of seed banks and seed science supports conservation and restoration.

If you have any comments please contact Dr Lucy A. Sutherland, National Coordinator - Australian Seed Bank Partnership, Australian National Botanic Gardens, Canberra, ACT 2601; lucy.sutherland@environment.gov.au, Ph: (02) 6250 9473, 0418 955 661 (mobile).

BGANZ 5th Biennial Congress 2011

21-23 October 2011

Albury, NSW

<http://www.bganz.org.au/bganzevents/congress11>

BGANZ 6th Biennial Congress 2013

October 2013

Dunedin, New Zealand

In conjunction with the triennial BGCi Global Botanic Gardens Congress

The Garden Clubs of Australia Inc – 2011 Biennial National Convention *Crossing the Mountains*

9-13 October 2011, Katoomba NSW

<http://www.gardenclubs.org.au>

Australian Native Plants Society (Australia) 2011 National Biennial Conference *Australian Plants in a Wondrous Web*

2-7 October 2011, Marion, South Australia, 5062

To be placed on the conference mailing list, [email](mailto:leemarg@tpg.com.au) your contact details to leemarg@tpg.com.au or post them to: Conference 2011, PO Box 304, Unley, SA, 5061

<http://anpsa.org.au/whatson.html#events>

XVIII International Botanical Congress

23-30 July 2011, Melbourne Vic

<http://www.ibt2011.com>

11th Queensland Weed Symposium *Weed Management - Back to Basics*

31 July - 3 August 2011, Mackay Entertainment and Convention Centre, Mackay, QLD

<http://www.wsq.org.au/11%20QWS.htm>

Australian Garden History Society 32nd Annual National Conference

19-21 August 2011, Maryborough Qld

http://www.gardenhistorysociety.org.au/conferences_tours

Australasian Conference of Volunteer Guides in Botanic Gardens 2011 *Subtropical Splendour*

12-16 September 2011, Mt Coot-tha Botanic Gardens, Brisbane, QLD

<http://www.friendsbotanicgardens.org/news/5/68/Subtropical-Splendour.htm>

23rd Asian Pacific Weed Science Society Conference

25-30 September 2011, Cairns Qld

<http://apwss2011.com/>

Global Eco Asia-Pacific Tourism Conference.

7-10 November 2011, Sydney, Australia

Ecotourism Australia, with the support of NSW National Parks and Wildlife Service is currently organising the organisation's nineteenth annual conference

<http://www.globaleco.com.au>

National Conference on Volunteering 2011

9-11 November 2011, Brisbane

<http://www.volunteeringaustralia.org/conference>

Ecological Society of Australia – 2011 Annual Conference *Ecology in Changing Landscapes*

21-25 November 2011, Hobart, Tasmania

<http://esa2011.org.au/index.asp?IntCatId=14>

7th International Association for Lichenology Symposium

9-13 January 2012, Bangkok, Thailand

<http://www.ru.ac.th/lichen/IAL7>

BGCi – 8th International Congress on Education in Botanic Gardens *Education and the Global Strategy for Plant Conservation*

22-28 October 2012, Mexico

<http://www.bcgi.org/education/congress>



www.bganz.org.au