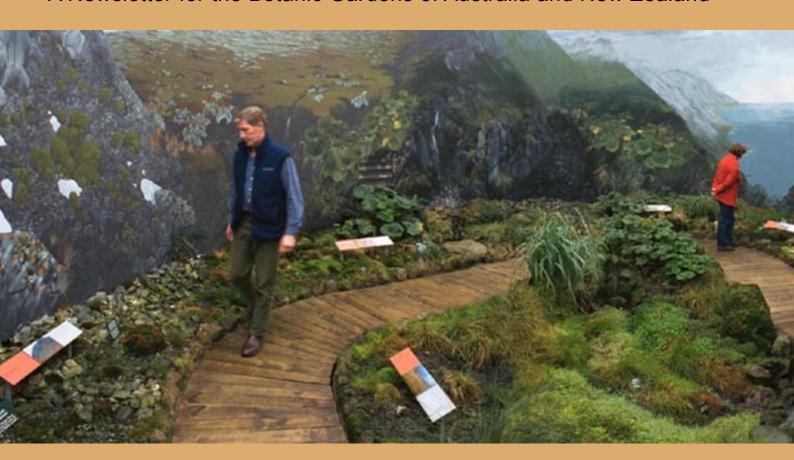
THE BOTANIC GARDEN

A Newsletter for the Botanic Gardens of Australia and New Zealand



Issue 12 - July 2005

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EDITORIAL

BGANZ CONGRESS 2005

The title of the 2005 BGANZ Congress in Hobart is Impacts and Influence – the environmental potency of Botanic Gardens?

The Congress Working Group considered alternatives to the slightly confronting wording of the title (potent is not a word that is readily applied to Botanic Gardens, it carries alternate meanings and the disturbingly implicit corollary of impotency) before making a decision to leave it as it stood.

The question mark was added to hint at challenge and to indicate the inherent aim of the Congress that is; in part, to question the status quo and to present alternative approaches.

The Congress Working Group established four underlying themes as important directions arising from the first BGANZ Congress in Geelong. The streams are:

Future Perfect - environmental sustainability for botanic gardens
Taming the Backyard - weeds and urban ecology
20/20 foresight - collections into the future
Cultivating minds - environmental education

Keynote speaker Tony Kendle, Director of the Eden Foundation, UK, will introduce the innovative Eden Project and will also talk about Eden's deeply considered approach to interpretation and education as part of the Cultivating Minds stream. A strong line up of other Keynote speakers and presenters will engage us with a broad range of informative approaches to the four streams.

Botanic Gardens are certainly not 'impotent' we have the potential to be much more than the sum of our parts. This congress is about assessing our impacts (both positive and negative) and analysing and investigating ways to increase our potential to influence our world of plants both locally and globally.

Please join us in Tasmania with an open mind.

Mark Fountain Congress Convenor Royal Tasmanian Botanical Gardens

YOUR BOTANIC GARDENS' ASSOCIATION – NOW OPEN FOR BUSINESS

Since its incorporation as an association in 2004, you probably haven't heard much about 'Botanic Gardens Australia and New Zealand', also fondly known as BGANZ. Behind the scenes, however, there has been lots of activity. The good news is that BGANZ is now ready to leave the shade house and be planted out in the gardens of Australia and New Zealand. It will be launched as a membership organisation at the BGANZ Congress in Hobart in October.

BGANZ is highly relevant to all of us working in and associated with public gardens. We hope it will become the chief body representing and promoting the interests of botanic gardens on both sides of the Tasman, enhancing botanic gardens for the benefit of our communities. Already BGANZ has supported a national congress in Geelong, and the next is in Hobart. And of course you're reading issue 12 of its newsletter!

Moving to the next stage of becoming a membership organisation means that you will be able to have a direct involvement in the activities and priorities of BGANZ. Members can be individuals – anybody supporting the objectives of BGANZ; or institutions – any public gardens with local, national or international roles; or associates – Friends or other relevant community groups.

Future BGANZ Councils will have state-based and New Zealand representatives elected through regional botanic gardens networks, plus two representatives of the capital-city botanic gardens. An interim Council has been preparing the membership launch of BGANZ, and it will hand over to an elected Council as soon as practicable.

BGANZ's purpose is to assist and advance public gardens. To do that effectively it needs members, and involvement, and support. So attend its membership launch at the Hobart Congress – and most important of all, join it!

Philip Moors
Interim BGANZ President

PEOPLE

Judith Zuk announces retirement.

The Brooklyn Botanic Garden (BBG) in New York has announced that President and Chief Executive Officer, Judith Zuk will retire at the end of June, ending a 15-year tenure that has seen major improvements at the Garden, and the development of a Master Plan that will serve as a guide for capital development for the next decade.

Judith began her career in horticultural botany and landscape design and rapidly established herself as a leader in American horticulture. She is renowned for her work on many professional and civic organizations including being a president of the Association of **Botanical Gardens and Arboreta** (AABGA) and a chair of the Cultural Institutions Group in New York City. In 2004, AABGA honoured her with its Honorary Life Member Award, the Association's most prestigious honour, which is conferred upon individuals who have provided meritorious service to the Association over a long period of time and have displayed an uncommon devotion to the work of the Association.

Judith Zuk was a speaker at the Gardens 2001 Congress hosted by CHABG in Canberra in April 2001, giving an international perspective of the challenges and opportunities of managing Public Gardens in the 21st Century.

Dr Robert Boden

On 13 July 2005, the ANBG will be unveiling a plaque honouring Dr Robert Boden's contribution to the ANBG, as Director from 1979 to 1989, plus his work on the eucalypts.

Robert remains an active participant in debates about Canberra's urban landscape. He turned 70 on 8 June 2005.

New Curator at Townsville Botanic Gardens.

Chris Cole writes from Townsville:

I have recently been appointed as Curator of Townsville Botanic Gardens. This is a newly created position to better manage our 3 Botanic Gardens and bring them all up to world standard. The gardens consist of Anderson Park, Palmetum and Queens Gardens,

Queens Gardens being the oldest of the three. It was initiated in 1870 and is a fine example of a tropical British Colonial garden of that era. The Palmetum opened in 1988, holds one of the most impressive collections of palms in the world, exhibited in a range of habitats from dry tropics through to the wet tropical lowlands. Anderson Park is predominantly an arboretum containing superb specimens of tropical trees, palms and Pandanus. The park was named in appreciation of the work of William Anderson, City of Townsville's first Curator of Parks (1878 - 1934).

My background is botanical, horticultural and landscaping, having trained at the prestigious Royal Botanic Gardens, Kew for three years before moving on to become a Supervisor at Hampton Court Palace and then as a Gardens Manager for a Landscape Design and Build practice in London. The move to Townsville was certainly unexpected, but the position and lifestyle are both fantastic. I am even enjoying the steep learning curve with everything tropical.

The botanic gardens have been without a Curator for the past 8-9 years. The future, however, is

looking very promising and exciting with increased focus and energy towards all things botanical. My initial focus will be to absorb the rich history of the gardens and that of my predecessors, followed by strategic planning to highlight the large and diverse categories that require addressing in order to become a successful and respected botanic garden. The primary objective of the plan will be to provide a clear and concise framework for the future management of our botanic gardens. In addition, a 10-year landscape Master plan for the gardens will be revised later this year.

My new role is certainly challenging but one which I have enjoyed immensely so far and I look forward to implementing the Master plan with a helping hand from my colleagues at Parks Services.

Chris Cole
Curator Botanic Gardens

MEETINGS AND CONFERENCES

The New Zealand Plant Conservation Network Conference 2005 -Christchurch, Friday 12 - Sunday 14 August 2005

Speakers at the conference will include Professor Ian Spellerberg (Lincoln University), Hugh Wilson, Brian Molloy, Gerry McSweeney, Colin Meurk and Peter Heenan (Landcare Research), Jorge Santos, Nick Head and Anita Spencer (Department of Conservation), Mike Peters (NZ Ecological Restoration network) and Rick Menzies (Banks Peninsula Trust).

There will also be a series of plant conservation workshops including one on threatened plant propagation.

David Given will present a public lecture on the future of the native plant life of Canterbury on the evening of Friday 12 August at the same venue.

The inaugural Network plant conservation awards ceremony will be held on the evening of Saturday 13 August and Sunday 14 August will be a full day field trip to Kaitorete Spit and Motukarara Nursery.

Further information:

email - info@nzpcn.org.nz visit - //www.nzpcn.org.nz/Documents/ NZPCN-05-conf-reg.pdf

"Acacia 2006: Knowing and Growing Australian Wattles"

Ringwood Convention Centre & Royal Botanic Gardens, Melbourne 26th – 28th August 2006 Organised by Australian Plants Society Vic Inc & National Herbarium of Victoria

Program:

Saturday 26th August

Horticultural Sessions. Conference Dinner. Venue - Ringwood Convention Centre

Sunday 27th August

Garden Visits – local gardens to enjoy wattles and other species

Monday 28th August

Scientific Sessions – co-hosted by National Herbarium of Victoria Venue – Royal Botanic Gardens, Melbourne

Tuesday 29th - Saturday 2nd September

Post Conference tour of country Victoria. Selfguided day tour maps will also be available Expressions of interest are being called to present papers and posters for the horticultural day and especially the scientific day on 28th August. Researchers wishing to present a paper must submit a short abstract detailing the context of the paper by 31st October 2005. The summary should include recent research used or undertaken on the topic.

Themes on the scientific day will include but are not limited to: taxonomy of Acacia, genetics, pollination and hybridisation, specific studies of acacias in conservation, weediness, utilisation.

Poster presentations will be on similar topics of research and study but may include new trials with propagation and cultivation.

Summaries of papers and posters must include title of proposed paper, author, organisation and email address.

Summaries should be sent by email to: acacia2006.melbourne@netlink .com.au

& daniel.murphy@rbg.vic.gov.au

Contact:

Marilyn Gray - (bh) 9728 4256 (ah) 9728 5891 Sue Guymer - 9872 3583

Plant Conservation - The Challenges of Change National Conference of ANPC 26 Sept to 1 October 2005 National Wine Centre, Adelaide.

The Australian Network for Plant Conservation and the South Australian Department for Environment and Heritage invite you to Adelaide to exchange ideas and to participate in discussions on the challenges that currently face us all in plant conservation. Whether

these be challenges of changing climates, changing environmental conditions, changes in government and policy focus, or confronting scientific information, this conference will stimulate consideration and participation. The Conference theme is Plant Conservation; The Challenges of Change. The subthemes include:

- 1. Extreme Policy Changes
- 2. Urban Ecology
- 3. Using Revegetation to Achieve
- 4. Ecological Outcomes

Indigenous Interests in Conservation The conference will appeal to all those involved in plant conservation from the on-ground practitioners to researchers and policy makers. All are invited to share experiences in managing for conservation in times of change and uncertainty. The Conference will be held at the National Wine Centre, in the environs of the Adelaide Botanic Gardens and adjacent to Adelaide's East End restaurant district. A three-day scientific program and two days of post-Conference Conservation Techniques Workshops are planned with plenty of opportunity to enjoy Adelaide's fine food and wine.

Further information:

visit - http://www.plevin.com.au/anpc2005/index.htm
post - The National Office
The Australian Network for Plant
Conservation Inc (ANPC)
GPO Box 1777Canberra ACT 2601
ring - 02 6250 9509
fax - 02 6250 9528
email - anpc@deh.gov.au website:
www.anbg.gov.au/anpc

The ANPC is a national non-profit, non-government organisation dedicated to the conservation of Australia's native vegetation.

ITEMS OF INTEREST

CHABG March 2005 Report

Representatives from all capitalcity botanic gardens except Darwin were represented at the six-monthly Council of Heads of Australian Botanic Gardens meeting in Sydney. We met for two days at the Royal Botanic Gardens, part of the Botanic Gardens Trust. The agenda ranged from international issues, such as the Global Strategy for Plant Conservation, to sharing the latest developments at each of our gardens.

In our review of actions from the previous meeting we agreed to circulate a compilation of performance indicators from all gardens. This, we hoped, would help us all to devise better indicators for our complex working environments. We also agreed to include the URL for newsletter when we send it out as an email attachment - while we feel more people read it as an attachment, this provides an alternative point of access and may be useful for forwarding to colleagues. The 'theme' approach to most BGANZ newsletters was supported – this one, of course, is concerned with the upcoming BGANZ conference.

There was some discussion about the recent Parks Forum and a business management model promoted at that meeting. We agreed to take a closer look at the model and take from it any ideas or processes that might help us in our particular garden.

Our discussion about the Global Strategy for Plant Conservation confirmed its relevance to botanic gardens (RBG Melbourne noted that



it helped them focus their scientific research planning) but also confirmed that it is proving difficult to raise its profile at a national level. We will continue to work through the Natural Resource Management Standing Committee, and in particular the Biodiversity Decline Working Group, to encourage Australia to fully engage with this important initiative. The Botanic Gardens Trust in Sydney, and its parent department, the NSW Department of Environment and Conservation, have offered to host a national workshop in conjunction with this working group.

We discussed the poor uptake of CHABG career development grants in previous years. The focus this year is attendance at the BGANZ conference in Hobart, and we do expect many more applications in this round. It was agreed that BGANZ conference attendance should remain the focus for these grants in coming years.

Rather than update the 'Australia's Botanic Gardens' brochure, which is now almost out of print, CHABG agreed to update our website and use this as the primary source for information on Australia's botanic gardens.

left to right:
Philip Moors (RBG Melbourne),
Mark Webb (Kings Park &
BG, Perth), John Schutz (BG
of Adelaide), Mark Fountain
(RTBG), Tim Entwisle (BG
Trust Sydney), Ross McKinnon
(Brisbane BG), Robin Nielsen
(ANBG).

However we will look into preparing a single page promotion brochure that promotes the importance of botanic gardens to Australia's economy and well-being.

The preparation of a national Environmental Weeds policy is progressing well, and the working group, headed by Roger Spencer from RBG Melbourne, will meet on 28 July 2005.

There will be a presentation on this policy and associated risk assessments at the Hobart conference.

There were updates from all gardens, including various State and national initiatives. For example, CHABG supports the bid for the International Botanical Congress to be held in Melbourne in 2011. If the bid is successful, I will represent Australian botanic gardens on the steering committee and coordinate the scientific program.

The next morning we devoted to BGANZ business, particularly in refining the new constitution. There will be more about this elsewhere in the newsletter, but CHABG remains enthusiastic and committed to this new organisation.

These meetings are also a chance for heads of gardens to talk informally with each other. On the evening of the first day, most participants joined members of the Botanic Gardens Trust executive and their partners for dinner at Pavilion on the Park, overlooking the returfing of the Domain following this summer's event season and, in the distance, the new Hospital Road plantings. In the afternoon of the second day many of us took a tour of the National Park islands in Sydney Harbour, all managed by the NSW Department of Environment and Conservation.

In addition to enjoying spectacular scenery, we heard about the difficulties in caring for heritage buildings and aging park landscapes (i.e. it was very relevant to many of us).

The next CHABG meeting will be in Hobart, prior to the BGANZ conference.

Tim Entwisle Chair - CHABG

NEW RIVER MODEL AT AUSTRALIAN NATIONAL BOTANIC GARDENS

A new interactive display on water erosion is causing a big splash at the Australian National Botanic Gardens in Canberra. Students are soaking up the opportunity to learn about habitat, the geographical features of streams and causes of erosion through a unique hands-on experience with a giant water slide and sand pit known as the "river model".

The fabricated steel form is made up of four ramps – each piece is flat-bottomed, open at the top and bottom and 800mm wide with18mm high sides. The ramps are connected by flexible joints creating a channel that runs 10 metres. A hose runs alongside from top to bottom and, after each demonstration, the water is caught in a tank and recycled by a pump powered by an 11-watt solar panel.

The model has extendable legs, allowing the slope and gradient to be altered as required.

An entire class can operate and move about the model and, by adding various components, create a stream.

By running water from the top, they can watch erosion take place and deposition patterns emerge.

Creating rock riffles slows the flow of the stream and reduces erosion and, as students then add obstacles such as snags, they see the riverbanks become more stable and the water clear – an improved habitat for fish.

Plants such as native watercourse reeds, rushes and grasses are then put in place to increase stability and provide terrestrial habitat. They're a mix of bare-rooted Myrtaceous plants, all maintained hydroponically in damp sand.

By removing the components while the water flows, students are talked through the radical increase in erosion which can happen as a consequence of land clearing, or bushfire.

This "before your very eyes" approach is the work of the Gardens' Education officers, Peter Lehmann and Jennifer Hemer, who believe the best way to learn is through play.

"Children of all ages can make a connection between different components of the environment and how they interact - then the effects created when humans intervene," Ms Hemer said.

One example of this for students to ponder is when city folk ask people on the land to provide them with fruit, vegetables and meat, she said. In order for them to do that, farmers often need to make changes to river systems. Sometimes those changes have major impacts on habitats – affecting plants and animals.

"We try to make an effort to have the children understand why people would make those changes to rivers in the first instance and see how finely connected the environment is with society and the economy," Ms Hemer said. "We talk to the children about the importance of vegetation and the need for it to be native to maintain the natural balance.

In the future, they may be able to apply what they're learning here to make informed decisions and uphold best practices in land care for future generations."

In the meantime, the students are awash with excitement -getting their hands dirty as they play with the laws of nature.

"After they've experienced it for themselves they say how much fun it was," Ms Hemer said. "But that's pretty obvious to their teachers and Gardens' visitors from their excited chatter!"

Suzanne Mostyn Communications and Media Coordinator Australian National Botanic Gardens

FEATURE GARDEN

Royal Tasmanian Botanical Gardens

Royal Tasmanian Botanical Gardens will be on display during the BGANZ 2005 Congress in Hobart later this year. Mark Fountain and Dr Alan MacFadyen outline the history and current attractions of this beautiful and historic Botanical Gardens.

The City of Hobart, located on the banks of the river Derwent, is Australia's southern-most capital city and enjoys a cool temperate climate. Hobart is in the lee of Tasmania's western mountain ranges and in the direct rain shadow of Mt Wellington, conditions that make it Australia's second driest capital city.

Then and Now

Long before the alien sight of sailing ships entering the river mouth, the local aboriginal tribes had established regular camps within what is now the Royal Tasmanian Botanical Gardens, sustained by the abundant supplies of shellfish in the river nearby. Midden sites (mostly mounds of oyster shells), still evident within the RTBG and along the adjacent shores, attest to a long history of habitation.

The Royal Tasmanian Botanical Gardens is sited on the Queens Domain (a ridge of modified remnant grassy woodland adjacent to Government House) and is just a short walk of approximately 2 kilometres from Hobart's CBD. The Domain is a significant natural and cultural heritage landscape. Sandstone quarries within the Domain supplied building material for the Gunpowder Magazine,

Government House as well as three significant structures within the Gardens; the Superintendents Cottage, the Friends Cottage and part of the Arthur Wall.

Governance - A Brief History

In its 187 years the RTBG has had twenty Superintendents of varying capabilities (called Directors since the nineteen nineties). Influenced by the changes in fashion from the Victorian era onwards each has had some impact on the Gardens' fabric and design. This reflects the history of many other colonial botanic gardens. Originally the Gardens was managed by a Government Committee before forty years of management under the auspices of the Royal Society of Tasmania. Subsequently responsibility reverted to the Government, then in 1950 the Gardens became a statutory body managed by a Board of Trustees under the Botanical Gardens Act. The adjective 'Botanical ' in the title is essentially an historical remnant of the Royal Society era and the appellation 'Royal' was bestowed in 1967.

Built Heritage

The Gardens contain some of Tasmania's most significant built heritage. These structures form the bare bones around which the Gardens have waxed and waned over the years. Important structures include the Superintendent's cottage (now the Administration Office) closely followed by the Arthur Wall. This wall, of a design common in Britain, is hollow and capable of being heated to encourage the growth of fruit trees planted beside it. Nobody had done their homework on Tasmania's climate, so it was soon discovered that fruit trees did very well without any help, and the wall was never used in this way.

At the northern end of this wall stands another cottage, built in 1845 originally for the head gardener, but which has since been a porter's lodge, overseer's residence, tea rooms, board room and administration office. Shortly before that, another brick wall, the longest convict built structure in Australia. transected the landscape from north to south. This is the Eardley-Wilmot wall, which legend states was built to keep out a plague of grasshoppers. Another early structure was the Lily Pond, formed by damming a stream from the Domain, and initially used for irrigation. It was not until 1878 that the spectacular set of wrought iron gates made in the north of England were installed. The Conservatory was constructed in 1939.

Recent construction in the Gardens reflects the changing focus of botanic gardens worldwide, providing facilities for the delivery of education, interpretation, conservation and research programs.

Plant Collections - History

The RTBG is Australia's second oldest botanic garden, established on the Domain site in 1818. The RTBG's history mirrors the history of Australia's other colonial era botanic gardens, with periods as a repository for plants needed for food or likely to be of economic benefit in the development of the colony and with the early importation of many thousands of fruit trees and vines.

A subsequent phase reflected the colonist's state of mind, with the importation and cultivation of many forest trees and plants traditionally grown in the home country juxtaposed with collections of, and a growing interest in, the Tasmanian flora.



During this period the RTBG provided plants for gardens and parks in many other areas of Tasmania, contributing significantly to Tasmania's cultural heritage landscapes. In the 1850s the RTBG was the major distributor of Dicksonia antarctica and Norfolk Island pines to Europe and mainland Australia.

The historic Arthur Wall was designed to be heated from within, but due to Tasmania's mild climate, was never so used.

The RTBG also reflects the Twentieth Century focus of many botanic gardens on collections showing world flora and extolling botanical curiosity and diversity. This has been tempered in the case of the RTBG by a concentration on cool temperate flora (including the many conifers that form the backbone of the Gardens collections) and the introduction of flora from the southern hemisphere, including an early collection of plants from New Zealand.

Plant Collections - Now

Latterly, as with other older botanic gardens worldwide, the RTBG has been reassessing its relevance in the context of the need to manage an important and sensitive cultural heritage site in conjunction with the need to meet the multifaceted demands of today. These demands include the need to clearly communicate our role through more focused educational and interpretive programs linked to the collections.



top:
The Japanese Garden at the Royal
Tasmanian Botanical Gardens is a popular
site for weddings and other celebrations.

above:
The Subantarctic Plant House at the RTBG
recreates the cold, windy conditions needed by the
unique collection of plants from Macquarie Island.

We still pay homage to the traditional approaches such as with the establishment in 1996 of a provenanced Chinese Collection from Yunnan Province.

RTBG's strategic focus has changed recently to concentrate on plant collections with valid regional connections. The newer collections all have strong thematic interpretive and educational potential. This approach is exemplified by the Tasmanian Collections, The Subantarctic Plant House (containing plants from Macquarie Island), and The Greater Hobart collection. The RTBG's Strategic Plan 2003 – 2007 has been drawn up to reinforce this approach.

All botanic gardens are dynamic environments and despite the slow pace of change in the past this change is now accelerating in these Gardens. There is a now a pressing need to anticipate future changes and to plan for them. The RTBG is actively seeking funding to enable it to develop a Strategic Master Plan, a component of which will be a Thematic Plan. This will define the direction of the RTBG's plant collections into the future. Integral to this document will be BGCI's global agenda; the RTBG will work to develop strategies to meet these criteria locally.

Reaching Out

Geographically the RTBG has often been regarded principally as a Hobart institution. To reverse this perception and reinforce our state-wide relevance the Gardens has expanded upon a series of outreach programs. These have all initiated valuable connections

with organisations throughout the state and cover a wide range of activities. Examples of these are the provision of ongoing assistance to the Tasmanian Arboretum and the Emu Valley Rhododendron Gardens as well as the revegetation of the Bell Bay industrial site. The Gardens Education outreach program has also increased significantly. Within the mantle of the management of heritage sites RTBG staff have been involved in the assessment of the trees and vegetation of the Willow Court precinct of the old Royal Derwent Hospital, Soldiers Walk Memorial Avenues around the State and in surveys of the heritage Woodstock property at the Cascade Brewery.

With limited resources the RTBG also undertakes a range of targeted research projects, principally in two areas. The first is the biology and propagation of selected rare and threatened species in conjunction with the Department of Plant Science at the University of Tasmania. This project involves extensive tissue culture experimentation and DNA analysis in order to establish an ex situ collection of the triploid clone

Lomatia tasmanica. This work follows on from a similar successful project to propagate the rare and threatened Philotheca freyciana. The second line of research is in the selection, collection, data basing and propagation of rare and threatened plants suitable for the revegetation of abandoned mines sites. This research is has been largely funded and supported by BHP Billiton

TEMCO and The Mineral Council of Tasmania.

Again like other botanic gardens Australia-wide, the RTBG has joined the Millennium Seed Bank project being run under the auspices of the Royal Botanic Gardens Kew. Construction of the Seed Bank facility is now under way. This project continues an already long-term and valuable partnership with the Nature Conservation Branch of the State Department of Primary Industry Water and the Environment and the Tasmanian Herbarium. This project will not only collect seed from most of Tasmania's rare and threatened flora but will provide the infrastructure and material for future research.



(Macquarie House 2) Planting, careful landscape design and artworked walls combine with wind machines and refrigeration to offer visitors the experience of being on Macquarie Island in the Subantarctic Plant House at RTBG.







top down:

- Tulips make a dazzling Spring display around the Conservatory at the Royal Tasmanian Botanical Gardens.
- The annual Huskies' Picnic has become a popular Winter event in the Royal Tasmanian Botanical Gardens
- Ice carving is a feature of the Huskies' Picnic, part of Tasmania's Midwinter Festival.
- Dr Alan Macfadyen and Jayne Balmer washing down near the site of the rare and threatened Lomatia tasmanica.

Celebrations and Memories

The RTBG engages with its visitors and the local Community through a variety of major events. These include the Tulip Festival, now in it's twentieth year. The Tulip Festival is a two-day event celebrating spring amongst the Gardens' bedding displays and is now recognised as an iconic event on the Tasmanian calendar.

The Huskies Picnic is a unique festival held as the closing event of the Antarctic Midwinter Festival. The festival celebrates Hobart's many connections to the Antarctic and the Picnic's unusual mix of activities includes Husky races re-enacting the use of dog teams in the past, ice carving and Antarctic-themed photographic exhibitions.

The Garden is also home to an active summer theatre program and hosts many smaller community events. On a more intimate scale the RTBG provides a background to those special family occasions, especially weddings.

We will have achieved an important primary aim if our visitors leave with lasting and fond memories of sharing their time in the company of many or with friends and family or of just sitting alone enjoying the peace and the plants.

The Staff

The staff, often omitted from descriptions of the Gardens, number around forty, including a Director, administrative personnel, a marketing and events officer, an interpretation / designer, horticulturists, stonemasons, teachers, scientists, nursery staff and a maintenance team. Many of these staff are multi-skilled and together they form a tightly-knit and dedicated team. They in turn are supported by an energetic group of Friends of the Gardens, who work tirelessly to raise funds and generally support the Gardens.

Mark Fountain
Manager, Botanical and Public Programs
Royal Tasmanian Botanical Gardens and
Dr Alan MacFadyen
Botanical Resources Officer
Royal Tasmanian Botanical Gardens

BOOK REVIEW

Robyn Stacey & Ashley Hay:

Herbarium. Melbourne, Cambridge University Press: 2004. viii+155 pp., colour illus., ISBN 0 521 84277 8 (HB), \$79.95.

(Reviewed jointly for Historical Records of Australian Science (Vol 16, 1, 2005) and The Botanic Garden.)

This large folio-sized volume, produced in both slip-cased and hardback versions, consists of about 100 photographs of herbarium specimens taken from the extensive collection of dried plants at the National Herbarium of New South Wales. Short notes are given on the botanical collection of each plant species photographed, along with an introduction of 26 pages giving a detailed historical account of the total collection that illustrates several distinct stages in botanical history and collection in eastern Australia. The photographs have been taken by Robyn Stacey, while the historical introductory chapter has been written by Ashley Hay and the short species notes by various Sydney Herbarium staff.

Such a matter-of-fact summary of the contents does not do this book justice, however. It is a beautifully designed and produced volume that, given its release date (November 2004), was obviously intended to capture the Christmas gift market and to grace coffee tables. So fine is the design in my opinion that it seems a pity that the book's designer (Melissa Fraser) is mentioned only in the Acknowledgements. So much of the impact of the book depends on its excellent design and the high quality of the photographs.

There is a strong emphasis within the species photographed on ferns and marine algae, both of which groups are often forgotten or overlooked or poorly collected by botanists in general. Another group of plants under-represented in most herbaria is the numerically large group of species introduced to Australia; some introduced species are included in this book however. For a scientific audience, the main interest will be in reading the notes at the back of the book on each species photographed and its collection details. And finally, a bibliography and an index are provided, which will enhance the usefulness of the book to students of Australian botany.

While initially overwhelmed by the beauty of this book, I began to have some doubts about its value and utility, however. Firstly, the grouping of the photographs into sections titled 'The new world', 'Scientific fascination', 'Hobby and decoration' and 'Exotics' is not tied into the separate themes of the historical Introduction and this internal mismatch seems regrettable.

The species most recently collected and highlighted in the Introduction to this book is of the orchid Dendrobium gracilicaule - collected in 1923 by the Anglican clergyman H.M. Rupp. Why are species collected more recently overlooked in the detailed coverage? While the relatively recent discovery in 1994 of the Wollemi pine (Wollemia nobilis) is mentioned briefly on p. 26 and a photo of it is indeed included, no detailed account of its taxonomic classification is given - and yet it was identified by scientists in the very same institution that this book covers.

The interested reader will need to go elsewhere (see, for example, James Woodford, *Wollemi Pine*, Text, 2000) to find the exciting story of the discovery and elucidation of the taxonomic affiliations of Wollemi pine, the latter using modern methods. The reader of this book is left with the impression that only species collected more than 80 years ago are significant and that's a pity.

I currently sit in an herbarium building and hear many seminars on DNA sequences, cladistic trees and other aspects of twenty-first century taxonomy. But there is no hint of these recent developments in taxonomic science in this book. Even more surprising is the omission of any mention of chemotaxonomy and its role in species identification, despite its considerable role in eucalypt classification by Sydneybased chemo-taxonomists of the early twentieth century. The reader is left thinking that taxonomy was strongest in the nineteenth and early twentieth centuries rather than being currently strong and using molecular markers as well as the traditional morphological characters of so-called alpha-taxonomy.

Throughout this book references are not cited in the text and the endnotes are not keyed in to the introductory text, which I found unsatisfactory, although for the general reader this is probably advantageous. In summary, if you can persuade someone to give you this book, do so and you will be well satisfied with its beauty and production. The audience for the book is a general one and not a scientific one, however, and only a few plant scientists will find value for money from the contents of this book, splendidly produced though it is.

R.H. Groves
CSIRO Plant Industry, Canberra