

Jubaea

Friends of Geelong Botanic Gardens Inc Newsletter

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FRIENDS OF
GEELONG
BOTANIC
GARDENS

Special Conference Issue



Temperate Lawn

Welcome Conference Delegates and Friends

It is with great pleasure that I welcome Friends and visitors to this conference.

The Geelong Friends are hosting the biennial Conference of the Australian Association of Friends of Botanic Gardens from 29 April –2 May 2016 and delegates from around Australia will attend at the Geelong Conference Centre in Eastern Park.

An insert of the programme for this prestigious event is included in this edition of our quarterly magazine, so it is fitting that this Jubaea is particularly devoted to historical aspects of the Friends and the Geelong Botanic Gardens. It is intended to be informative for our own members as well as the Friends groups and others who have travelled to Geelong for what we are sure will be an inspiring and educational conference.

I would like to acknowledge and sincerely thank all of the Geelong Committee and our Office staff for their tireless contributions to the planning of this event. Thank you to our Guides and all the other non Committee members who have contributed as well and I have no doubt that everyone's combined efforts will culminate in an enjoyable and memorable time for everyone who attends.

Allison Martland - President Friends of Geelong Botanic Gardens

SYNOPSIS GEELONG BOTANIC GARDENS

Background

Welcome to the Geelong Botanic Gardens and Eastern Park.

In 1851 81 h of land to the east of the town overlooking Corio Bay, then known as the Eastern Hill, was secured as the site for Public Gardens (Botanic Gardens)

The Wathaurong people were the original owners of the land.

In 1854 carriage drives through the Eastern Park Botanic Gardens were surveyed, in 1855 a cottage for a future curator was built and in 1856 a nursery with rectangular paths was established in a sheltered gully to receive plants.

The Geelong Botanic Garden and Eastern Park are the fourth oldest in Australia and were listed on the Victorian Heritage Register in 2006.

In 2001 the Friends celebrated the 150th Anniversary of the founding of the Geelong Botanic Gardens by hosting the (Aust) Association of Friends of Botanic Gardens Conference 'Bunce, Bunyas and Beyond'.

Early Curators

1857-1872 Daniel Bunce

In 1857 Daniel Bunce was appointed curator. He had owned and managed nurseries in Tasmania and Victoria.

He introduced drought tolerant, indigenous and exotic plants and planted fast growing blue gums around the Gardens' perimeter as a windbreak against the harsh conditions.

The public garden improved dramatically with Bunce at the helm. The whole area was fringed with young trees, intersecting footpaths and significant trees which remain today.

Bunce worked with the Acclimatization Society and traded with the Captains of ships calling at Geelong.

1892 – 1896 John Raddenberry

Raddenberry had a different vision for the Gardens, with more European plants introduced. He had not had the opportunity to explore the Australian country like his predecessor Bunce. (The Blue gums were replaced with English elms).

He built a massive shade house over Bunce's rectangular paths with dimensions possibly based on the palm house at Kew. It was opened in 1885 and when completed was 300 feet in length, but eventually fell into disrepair and was demolished in the 1950's.

The Friends' logo *Jubaea chilensis*, Chilean Wine Palm planted by Bunce became enclosed within the fernery.

The gardens have evolved over the 19th 20th & 21st Centuries in keeping with garden styles of the period as demonstrated in the 'Three Centuries, Three Landscapes' walk.

Drought brings change

The 1995 Master Plan for Eastern Park & Botanic Gardens triggered the start of rejuvenation of the gardens. In 2001 the 1.2 h development of the 21st century garden introduced a bold contemporary design and a demonstration of the myriad of plants tolerant of drought conditions.

Other areas of the garden have also been redesigned and the completion of the gardens' recycled water irrigation system this year has substantially benefited the whole garden.

The recent planting of 1000 trees in Eastern Park is rejuvenating this aging collection.

FGBG Inaugural President, George Jones, "Growing together" the history of Geelong Botanic Gardens and 19th Century gardens in the region, was published in 1984 with supplements in 1988 and 1996.

Friends of Geelong Botanic Gardens - a glimpse of the 30 year journey.

Established in 1985 initially to, "to assist when able and when required!"

With the initial Committee meeting at the Curator's Residence, it was then members' homes, the Gardens Amenities Room, or the Tea House, weather permitting, until 1996.

However, the first initiatives were training guides and raising funds for a Friends Tea House in the gardens which opened in 1992 and was managed by the Friends. It became an essential element of the social fabric of the Friends and the Gardens. In 2012 for various reasons the business was leased to a private contractor.

A Friends Nursery followed and 'Growing Friends' have propagated plants from the gardens for sale to the public for over 25 years. The Nursery stock and Grower numbers have increased considerably and continues to provide valuable income for the Friends.

An informal lunch and a noted Speaker at Historical Records Centre in 1990, and a few years at the Mayor's Reception room in City Hall, heralded the Friends' signature Annual Winter Lunch. Since Berkley Lodge in 1994 only the venues have changed, apart from a brief aside into High Tea.

Friends hosted "Growing Together towards 2000" in 1994 the successful 2nd Association of Friends Botanic (AFBG Vic) Conference. Members also attended Botanic Gardens Conservation International Congress (BGCI) in Perth in 1995, the first held in the Southern Hemisphere. Geelong Friends have been represented at many conferences since.

The Perennial border planted with support of gardens management in 1989, has been a summer highlight since. Designed and managed by a small group of Border Friends it is an expression of the exceptional horticultural talent within the group.

SYNOPSIS GEELONG BOTANIC GARDENS

Jubaea was first published in 1985 using a Roneo spirit duplicator, moved to Desk Top Publishing in the mid 1990s', then it was professionally published, with a sepia banner and updated Friends' logo in 2001. Very recently a coloured format has been produced 'in house'.

The Friends initiative, pursuit of and the continued support for the Master Plan for Eastern Park and the Botanic Gardens since the early 1990's, is legendary.

The first portable building, 1996, provided an office, large meeting room and space to locate the Botanic Gardens Reference Library. Then indexed by Dewey card system it was updated to a computer database with the help of Deakin librarians in 1998. A Friends' librarian was employed to do the work and since then volunteer librarians have managed the library.

Friends moved to the current building in 2002, the library being moved for the third time.

Friends of Geelong Botanic Gardens Gift Fund was established in 1997 to provide a vehicle for the receipt of tax deductible donations. Donated funds have been used to support a number of Botanic Garden's projects including the Bunce Bollards.

Since 1997 Friends have been successful in securing a number of Heritage Conservation Grants to restore heritage-listed structures in the gardens and Eastern Park.

Friends member, The Western District Heritage Rose Group, planted the Heritage Rose Garden in 1997 for the International Conference in 1999 and have continued to maintain this impressive garden, which tells the story of the rose - a source of pleasure and public interest.

A Friends' Education Officer managed a highly successful Schools Program for 10 years until 2012, doubling as Office staff until 2008, when a second staff member was employed. A website was developed in 2003 and continues to be professionally updated.

The very successful and much loved Friends' summer 'Music in the Gardens' program was held for 15 years before succumbing to increasing costs and regulations in 2014.

The 25th Anniversary was marked with the development of the 'Silver Border' in 2010 providing a striking year round entrance to the 20th Century Garden.

The Friends have managed the School of Botanic Art since 2007 with great success. Inspiring instruction has been provided by internationally acclaimed Botanic Artists resulting in some outstanding exhibitions.

The Volunteer Guides continue to adapt to garden changes and community expectations, providing a broad range of interpretation options to support the Gardens' evolving educational role.

A very recent initiative is the presentation of a successful U3A program about the gardens.

The inaugural Botanic Gardens of Australia and New Zealand (BGANZ) Conference 2004, held in Geelong, was ably assisted by the Friends.

Geelong Friends have benefited from their membership of the Association of Friends of Botanic Gardens (now AAFBG) and Committee since 1993 and being consistent delegates to 18 AAFBG conferences and the 10 Biennial National Conference of Volunteer Guides.

Funding support of Gardens projects, programs of Garden tours, talks, presentations, exhibitions, field trips and numerous other events open to Friends and the public have continued throughout the Friends 30 years.

Annie McGeachy OAM.

Pelargoniums in the Geelong Botanic Gardens



Pelargoniums have been grown for the past 150 years in the Geelong Botanic Gardens. Currently there are around 1000 pelargoniums in pots in the collection for conservation and research, including about 120 types of regals and a similar number of zonals.

Many are displayed in the Florence E. Clarke Conservatory, while others from the Barry Grandpierre Collection of South African *Horreas* are growing opposite this in the beds near the Sunken Hothouse. These were acquired by Lara pelargonium breeder, Cliff Blackman.

There are also some species pelargoniums growing in the 21st Century Garden under the Ponytail Palm.

How to identify a Pelargonium

Pelargoniums are from the Geraniaceae family, along

Pelargoniums in the Geelong Botanic Gardens cont'd

with Geraniums, Sarcocaulon, Erodium and Monsonia. Classification depends upon how the floral parts are arranged, though all have diversified in response to their environment.

Pelargoniums are zygomorphic, which means that the flower can be dissected longitudinally in equal sections. They all have a nectar tube below the petals, though in some pelargoniums this is not obvious. This is the main way that pelargoniums are differentiated from geraniums, as geraniums are actinomorphic, meaning that when you look at the flower from above it is symmetrical, and there is no nectar tube.

Another point of difference is that the seed pods are thought to be shaped like the beaks of birds: Cranesbill for geraniums, Storksbill for pelargoniums, though personally, I think that this is a bit of poetic licence!

Geographical Origins

Most pelargoniums originate from South Africa (about 90%) but some come from Syria, Australia, tropical Africa and some islands in the Indian Ocean. They display a wide variety of stems, leaves, roots and flowers. However, the flowers have 2 upper and 3 lower petals, with 10 stamens of which only 7 are fertile.

History of Collecting

In 1652 a permanent settlement was established on the Cape of Storms, later known as the Cape of Good Hope, to supply ships heading towards the Spice Islands and Far East from Holland. People stopping there explored the flora of the area and plants were brought back to Europe, including pelargoniums. This accelerated when England took the colony in 1795 (it reverted to the Dutch in 1802) and wealthy collectors coveted the new species and paid handsomely for them.

There has always been confusion about the naming of these plants. This began with the Swedish botanist, Linnaeus, who put them all together as "*genus geranium*". Later, the French botanist, Charles L'Heritier, in 1789 – one would think he would have had other matters on his mind – tried to separate the categories. In the USA, following the fondness of Martha Washington for these plants, they are still often called "Marthas" or "Martha Washingtons"!

During the 1800's England experienced a "geranium mania" similar to the "tulip mania" of the Dutch and the "rose mania" of the French. All were in response to the opening up of the world by traders and explorers, and resulted in experiments in cross breeding of the new plants in each type. The parentage of the new plants was kept secret, and in many cases has now been lost. Further, the first plants to be hybridized have often become extinct.

There are hurdles to "recreating" these early types: artists often embellished the new plants to create desirability and therefore to attract higher prices; colour is often subjective anyway and descriptions often did not adhere to the current "colour chart" system.

Some Popular Types

Today, there are many types of pelargoniums and some of those in the Geelong Botanic Gardens Collection are:

Species Pelargoniums: These are naturally occurring wild species.

Zonals: These have "zones" of different colours on their foliage. These colours can include bronze, gold, silver, red, yellow and orange.

Ivy-leaved: The veins of the leaves are often "meshed" in different colours and they have a trailing or compact habit.

Scented: The foliage is scented and they are prized for this trait. Scents include coconut, lime, rose, nutmeg, cedar, peppermint, lemon and others.

Regals: These are grown for their large, showy flowers.

Uses and Misuses

People have used these plants for millennia in many ways. The scented plants have yielded oils that have been used to treat coughs and chest ailments, diarrhoea, headaches and as an antispasmodic. It has also been used as a psychedelic drug.

In my research my favourite use is as follows: "The Zulu people use an infusion of the root for diarrhoea. They also dried powdered root (sic) mixed into porridge for dysentery. During courtship, the young men rub a mixture of this root powder and fat of python or hippopotamus on themselves to attract the opposite sex."

These hardy and beautiful plants have had a long history with the human race, and continue to attract fascination and admiration from gardeners. Many pelargoniums of all the above types can be purchased from the Friends of the Geelong Botanic Gardens Nursery located at the eastern end of the Gardens.

These notes are sourced from:

Previous Guides' notes

Geraniums, The Complete Encyclopedia by Faye Brawner

Pelargoniums of Southern Africa, Volume 1, by JJA van der Walt

Mark Dobbie of the Geelong Botanical Gardens staff

Jenny Dean - Volunteer Guide





***Australian Association of
Friends of Botanic Gardens
Conference***

hosted by

***The Friends of Geelong Botanic
Gardens***

April 29 – May 1, 2016



Geelong - Regional Relevance

***Botanic Environments and their Survival in a
Time of Global Warming***

Welcome!

It's a pleasure to welcome everyone to the biennial conference of the Australian Association of Friends of Botanic Gardens. Our conference is being hosted this year by the Friends of Geelong Botanic Gardens – and my welcome is doubly pleasing because I have the honour of being Patron of both organisations!

The Organising Committee has put together a stimulating and informative program of talks, site visits, social functions and guided tours. We will spend time in the beautiful landscapes of the Geelong Botanic Gardens, explore the arboretum collection in the surrounding Eastern Park – and even have the chance for an early evening visit to the local Grey-headed Flying-Fox colony! The Geelong Conference Centre, in Eastern Park and close to the Gardens, will be the venue for the conference. And there will be a tour of a new botanical art exhibition at the Geelong Gallery, followed by our conference dinner at the Deakin Waterfront Kitchen.

Most importantly, there will be the chance to meet old and new friends from Friends' groups around Australia and to learn much of value for our own gardens from the speakers and discussion panels. After all, this is why we have AAFBG conferences – to benefit from the experiences of colleagues in Friends' groups and botanic gardens and to enjoy the company of like-minded people.

Thank you for supporting AAFBG by attending our conference, and I look forward to meeting you in Geelong.

Philip Moors - Patron AAFBG and FGBG

Why are Botanic Gardens important to us?

Plants = Life. This simple statement sums up the importance of plants to everyone. We may live in an increasingly urban and 'virtual' world but our daily reliance on plants cannot be disputed.

Many of our Victorian Botanic Gardens have plant specimens which created huge excitement when first discovered by early explorers or 'plant hunters'. Can you imagine the awe that the Giant Redwoods inspired? And the hope that when planted halfway across the world in gardens like Geelong Botanic Garden that a seedling would one day reach its parents' massive size.

Botanic Gardens have a major role in developing our knowledge of plants through ongoing exploration, identification and holding collections of plants. New discoveries such as the Wollemi Pine amaze us that we have not found these plants before! Countries like Oman who are developing their first Botanic Garden are exploring and making new plant discoveries. Contemporary 'explorations' include targeted research into plants for their potentially significant role in modern medicine.

We have been modifying our environment for centuries. Often the cost of progress is the loss of plants from their natural environments and subsequent loss of biodiversity. It is estimated that there are 300,000 flowering plants in the world. Scientists estimate that at least one-third of all flowering plant species are threatened with extinction. There are many examples plants which have been conserved in Botanic Gardens can provide genetic material for the restoration of degraded landscapes through the reintroduction of indigenous flora.

Throughout the world new Botanic Gardens have a greater focus on the conservation of local flora. The work of the Botanic Gardens Conservation International in the development of the 'red books' which document threatened species and supporting in situ conservation programs is vital work.

The role of Botanic Gardens in ex situ conservation becomes an increasingly important and gardens can be viewed as a 'botanical ark' of genetic material. We are safeguarding our future through 'seed banks' such as the Millennium Seed Bank in the United Kingdom and the NSW seed bank which stores Australian seeds. This genetic material can be used for restoration of natural habitats, research projects and plant breeding. If you believe in the many 'end of the world is nigh' movies, or are aware of the negative impacts of increasing populations and natural disasters these seed banks may one day save us.

Climate Change demonstrates the escalating impact of human life on the environment. Our landscapes are predicted to change dramatically and our need for plants which can adapt is high. We are already experiencing changed weather patterns and our concern for the loss of species is heightened. Gardens such as Geelong's 21st Century Garden and the Royal Botanic Gardens Cranbourne advocate a strong message to the community to grow plants which are better suited to the Australian climate.

Botanic Gardens public programs exist to 'switch on' a fascination with plants. When you see a child stand beneath such a tree look up and marvel at its size you know that this sense of discovery is timeless.

Socially we live in an increasingly virtual world. The escalation of social issues, the prevalence of obesity and the increased diagnosis of mental health illnesses give us pause for thought. I find conditions such as 'nature deficit disorder' in children are quite worrying. The fact that we can formally diagnose that we are becoming separated from the natural environment is a significant issue for our society.

I believe that Botanic Gardens have an increasingly important role in wellbeing. As welcoming places of beauty and tranquillity which are accessible to all in our community we cannot underestimate their power to make a positive difference to the lives of the many who wander through them. To these people, who often don't have a voice and visit unnoticed, a walk through a garden makes their day better. Life should be that simple.

Many Botanic Gardens have strong supporters in Friends groups and we highly value them. Members give generously of their time, sharing their passion for plants and gardens with all who interact with the garden. This relationship provides support and an important connection to the broader community. We are thrilled to have the Australian Association of Friends of Botanic Gardens Conference hosted by the Friends of Geelong Botanic Garden here to share our passion for plants and gardens.

Annette Zealley, Director, Geelong Botanic Gardens



Australian Association of Friends of Botanic Gardens Conference
hosted by

The Friends of Geelong Botanic Gardens

April 29 – May 1, 2016

‘Geelong – Regional Relevance:

Botanic Environments and Their Survival in a Time of Global Warming’



AAFBG Conference Programme

The Conference Program may be subject to minor change.

The Geelong Botanic Gardens are open daily 8.00 am – 5.00 pm

Friday April 29

- 7.45 am – 4.00 pm **The Bellarine Tour**
3.00 - 5.15 pm Registration
5.30 – 7.30 pm **Welcome to Geelong**

Saturday April 30

- 8.00 am **Registration**
9.00 am Australian Association of Friends of Botanic Gardens Conference Opens
9.25 am **Conference – Session One: Plants and People – Everyone has a Role**
John Arnott Exploring the Role of Botanic Gardens in Plant Conservation
Jenny Houlihan Community and Environment Shaping a Botanic Garden
10.30 am **Morning Tea**
10.55 am **Conference – Session Two: Improving Our Urban Landscape**
Dr Greg Moore Urban Tree Management Strategies for Climate Change
Annette Zealley Securing Geelong Botanic Gardens’ Future
Dave Kendal How are Urban Landscapes Important to People?
12.10 pm Dolores Skowronski-Malloni: TREES Capturing the Essence of Geelong Botanic Gardens;
Artists’ Views
12.15 pm **Lunch**
1.00 pm **Session Three: How to Win Friends and Influence People**
1.05 pm Conference Panel/Forum
Prof Tim Entwisle Connecting with Social Media
Jenny Houlihan
John Bentley - FMBG AAFBG
Liz Bennetto - FGBG
2.05 pm **Afternoon Tea**
2.30 pm **Coaches depart GCC for City Precinct**
3.00 – 5.00 pm Explore the Geelong Arts and Culture Precinct
Geelong Gallery ‘Geelong Botanic Gardens revealed’
Geelong Library and Heritage Centre and Johnstone Park
5.00 pm **Coaches leave City Precinct for GCC**
7.00 – 10.00 pm **Conference Dinner**
Deakin Waterfront Kitchen
Jacqui Young: Mount Rothwell Biodiversity Centre
Mount Rothwell Conservation Model – Reversing Species Loss
(Quolls and Bandicoots v Foxes and Cats)

Conference Programme

Sunday May 1

8.30 – 10.20 am **Guided Walks - Geelong Botanic Gardens and Eastern Park**

Eastern Park Landscaping and Water Harvesting
Our Significant Horticultural Collections
Trees: Heritage Trees and Artists' Views
Three Centuries, Three Landscape

10.30 am **Morning Tea**

10.55 am **Conference – Session Four: Understanding Our Fragile Communities**

Neville Walsh	Threatened Flora of Victoria
Cathy Powers	Something's Happening! Citizen Science in the Brisbane Ranges
Graeme Stockton	Geelong Regional Growth:- Threats to flora and ecosystem sustainability

Q & A

12.20 pm **Lunch**

1.10 pm **Session Five: Governance, Compliance and Existence**

Conference Panel/Forum

Robert Wright AAFBG FRBG Legal Issues
Stephen Wight NFP Financial Issues
Lesley Jackman FANBG
Justin McGrath
Judy Fyfe FGBG AAFBG

2.15 pm **Conference – Session Six: The Association – Beyond 2016**

2.20 pm Presentations by AAFBG Members – 'Planning for the Future'

2.50 pm BGANZ President, John Sandham

3.00 pm Annual General Meeting of Australian Association of Friends of Botanic Gardens

3.45 pm Presentation by Host of 2018 AAFBG Conference

3.50 pm **Conference Closes**

4.00 pm **Afternoon Tea**

4.30 pm Display Area closes

4.30 – 5.30 pm Geelong Friends' Plant Nursery open – tours and sales

4.30 – 5.30 pm Geelong Friends at Library, Meeting Room etc. Light refreshments available before Bat Watch.

6.00 pm Grant Baverstock **Bat Watch in Eastern Park**

Monday May 2

7.45 am – 6.00 pm **The Great Ocean Road and Otways Tour**

Tuesday May 3

7.45 am – 6.00 pm **The Western Plains Tour**

Conference Presentations

Saturday

Session One: Plants and People – Everyone has a Role

Exploring the Roles of Botanic Gardens in Plant Conservation

John Arnott has been with the Royal Botanic Gardens Cranbourne as Manager Horticulture since April 2008. Previously, John worked in a number of significant public gardens. For over 20 years, John worked at the Melbourne Zoo facilitating a number of roles both technical and managerial; during this time, the Melbourne Zoo was transformed to be one of the world's leading exponents of zoological horticulture.

John joined the team at the Geelong Botanic Gardens in 2000 and played a key role in the delivery of the 21st Century Garden project - the catalyst for the rejuvenation of the gardens.

Currently John leads the team of horticulturists at the Royal Botanic Garden Cranbourne at a challenging and exciting time in the history of the gardens.

John's paper will examine the roles and approaches that regional botanic gardens can undertake towards plant conservation. John will also discuss a new initiative between BGANZ Victoria and the Royal Botanic Gardens to explore the establishment of a multi-site (multiple gardens) conservation collection of Victorian Rare and Threatened plant species.

Community and Environment Shaping a Botanic Garden: Friends and Councils?

Jenny Houlihan lives in Shepparton with husband Leo and is a mother, grandmother and great grandmother. Jenny taught in local schools for twenty years and operated a retail business in the CBD for twenty six years. Since 2005, has served as a councillor on Greater Shepparton City Council, including four terms as Mayor. Was elected with strong community support to establish botanic gardens in Shepparton and has made that a major goal. Believes strongly in the value of community engagement and partnerships to establish and strengthen lasting relationships and genuine commitment to a project. When not spending time on the development of the Australian Botanic Gardens Shepparton and other Council work, Jenny enjoys walking, dining out, gardening, reading and watching her grandchildren play sport.

The development of the Australian Botanic Gardens Shepparton began 5 years ago with the establishment of a Section 86 Committee of the Greater Shepparton City Council and an agreement by Council that the site for Shepparton's gardens would be a 22 hectare, former rubbish tip site on the outskirts of the city. From the very beginning the Committee decided on a list of major guiding principles for the development of the gardens.

Two of these were the importance of community participation and appropriate environmental considerations. This is a project with a relatively small budget which has relied on partnerships, individual volunteers and community groups to grow and become established in the hearts and minds of residents. Given that the site abuts the Broken River, is close to the Goulburn River and includes and is surrounded by native bushland, sound environmental management is paramount. The principles of using recycled materials and low water use gardening techniques are keenly adhered to.

Session Two: Improving Our Urban Landscape

Urban Tree Management Strategies for Climate Change

Dr Greg Moore, Senior Research Associate of Burnley College, University of Melbourne was Principal of Burnley from 1988 to 2007, and Head of the School of Resource Management at the University from 2002 to 2007.

With a general interest in horticultural plant science, revegetation and ecology, Greg is particularly interested in arboriculture. He was inaugural president of the International Society of Arboriculture, Australian Chapter, and has been a member of the National Trust's Register of Significant Trees since 1988 and chair since 1996. He has served the Board of Greening Australia (Victoria) 1988-2012 and chaired Treenet since 2005. He is on the board of Sustainable Gardening Australia and is a trustee of Trust for Nature. He has written two books, contributed to three others and has published over 120 scientific papers and articles.

It is usually assumed that the impacts of climate change on urban trees will be deleterious. While there will be adverse effects, the real scenario will be more subtle. Some species will benefit from climate change and others will be disadvantaged. It is an ill wind that blows nobody good and the winds of climate change will bring both good and bad for urban tree managers.

By understanding tree biology and physiology and observing how long established trees are responding at present, it will be possible to take advantage of some of the changes wrought by climate change and pro-active manage urban trees more efficiently and effectively. This paper presents scenarios relevant to urban trees and discusses their implications on some of the arboricultural and financial management strategies that might be useful to arborists as climate changes.

The scenarios included will be based on observations made in local streets and gardens and should fit the conference theme nicely

Conference Presentations

Securing Geelong Botanic Gardens' Future

Annette Zealley is the Director at the Geelong Botanic Gardens, leading a team of passionate horticulturalists and volunteers. This diverse role includes development of the gardens plant collections, public garden management and community engagement. Annette facilitates the Geelong Botanic Gardens and Eastern Park Master Plan strategic initiatives to improve the quality of the landscape and recreational facilities.

Annette is an active member of Botanic Gardens of Australia and New Zealand (BGANZ) professional network. She supports regional Botanic Gardens staff and volunteers through advocacy, knowledge sharing, supporting professional development and facilitating strategic projects and conferences.

Previously Annette managed the Dandenong Ranges Gardens. She has a Bachelor of Applied Science (Horticulture) from the University of Melbourne (Burnley).

As a living entity, the survival of a Botanic Garden depends on its ability to evolve. At Geelong Botanic Gardens we are delivering strategic projects to secure the gardens future. Water is vital to the survival of any urban landscape and the Eastern Park Stormwater Harvest Dam has an important role in supporting the Gardens plant collection.

The most significant change to the Gardens landscape is the rejuvenation of the historic arboretum. Ongoing development of the plant collection delivers on our role and supports City of Greater Geelong's Urban Forest Strategy. The Botanic Gardens public programs provide opportunities for connecting people to plants. It builds strong community engagement which bodes well for the community supporting the gardens long term survival.

How are Urban Landscapes Important to People?

Dave Kendal has been a researcher at the Australian Research Centre for Urban Ecology, a division of the Royal Botanic Gardens Victoria, since 2011. Since early February 2016, Dave has been at the Burnley campus of University of Melbourne, part of the Clean Air and Urban Landscape hub of the National Environmental Science Program. He has developed an international research profile exploring how people interact with nature, and the ecology of cultivated landscapes.

Landscape managers are increasingly incorporating the views of the public into design and management of parks, gardens and streetscapes. This has often been done using visitor satisfaction surveys, focus groups, or feedback from customer service – who tend to the voice of a vocal minority. We have developed some new tools to understand the different ways the broader public 'values' landscape to help inform land

management decision. By values, we mean what is important to people (e.g. social justice, protecting the environment), rather than economic pricing. This research shows that people value landscapes for a range of reasons including natural, cultural, social, experiential, production and recreational reasons, and these values are useful predictors of people's attitudes and the acceptability of management.

Session Three - Panel/Forum: How to Win Friends and Influence People

Connecting with Social Media

Professor Tim Entwisle is a scientist, scientific communicator and botanic gardens director. He took up the role of Director and Chief Executive of Royal Botanic Gardens in March 2013, following two years in a senior role at Royal Botanic Gardens Kew, and eight years as Executive Director of the Royal Botanic Gardens and Domain Trust in Sydney. Tim writes for a variety of science, nature and garden magazines and maintains an active social media profile (including his popular 'Talkingplants' blog). He is a regular contributor to ABC Radio National, hosting the show Talking Plants over Summer.

Twitter, Facebook, Instagram and whatever joins these by the time we meet in Geelong are cheap and effective marketing tools as well as your gateway to a conversation with the world. Botanic gardens are coming relatively late to this realisation but with our superabundance of beautiful images and all our powerful stories about plants sustaining and enriching life, we should be in there boots and all. In this workshop we'll explore how to best use social media – recycling and reposting content, pros and cons of major platforms, linking ephemeral messages back to blogs and websites...

And if that's not enough, we'll run a mock social media activity using paper and maybe even tell you how to be interesting in 140 characters [the length of that sentence].

Liz Bennetto

Liz joined the Friends of the Geelong Botanic Gardens in 2002 and has volunteered enthusiastically on Committee, with the Marketing and Events Committee and is currently a Grower and the co-ordinator of our Volunteer Guides. Liz was the driver behind the plant database for our Friends' Nursery; the creator of all the plant labels on the nursery stock!

John Bentley

John joined the Friends of the Melton Botanic Garden in early 2004, President since August 2005, managing the Friends in the development of the Melton Botanic Garden. John is not horticulturally trained, but

Conference Presentations

he passionately manages a great team with a range of appropriate skills to help build and promote the garden. The Friends have formed significant partnerships with many businesses and local groups, also building positive working relationships with the Melton City Council.

John is a Committee Member of the AAFBG, nominated by the Friends of the Melton Botanic Garden.

Jenny Houlihan *See Session One*

Conference Dinner Speaker

Jacqui Young: Reserve Officer, Threatened Species Management at Mount Rothwell Biodiversity Interpretation Centre (also referred to as Mount Rothwell Conservation and Research Centre).

Mount Rothwell Conservation Model – Reversing Species Loss (Quolls and Bandicoots v Foxes and Cats)



On first experiencing Mt Rothwell in 2010 as a visitor on a nocturnal spotlight tour, Jacqui was so inspired by their conservation achievements that she completed the work experience component of her studies at Mt Rothwell in 2012. Captured by the strong community of volunteers, their passion for Mt Rothwell, their commitment, diversity of cultural backgrounds, age groups, experiences and world views, Jacqui soon felt right at home and signed up as a volunteer. Late 2013, Jacqui commenced as a guide for Mt Rothwell's guided spotlight tours and in 2014, commenced as Reserve Officer, assisting with the day to day running of Mt Rothwell. Jacqui has also worked at Serendip Sanctuary with Parks Victoria and with Flora Victoria.

Jacqui came to conservation from a 17 year career within the health industry, holding various non-clinical roles, her last being Medial IT Specialist at St Vincent's Hospital, Melbourne. She has a strong passion for the environment and has been lucky enough to change her career which has allowed her to use her previous experience to assist Mt Rothwell in achieving greater conservation success.

You will be sure to be inspired by a passionate and vibrant young speaker who will share her story of the conservation of native animals in the You Yangs area of Victoria.

Australia has the worst mammal extinction rate in the world. In the last 400 years, one third of global mammal extinctions have occurred in Australia. The majority of critically endangered species no longer have the luxury of waiting for government policy to affect change across the Australian landscape. They need immediate protection and conservation.

At over 1000 acres, Mt Rothwell is Victoria's largest feral predator free ecosystem and has been for over 10 years. Protected by an 11km predator proof fence, Mt Rothwell conserves some of Victoria's most threatened flora and fauna populations including the critically endangered Eastern Barred Bandicoot, Brush-tailed Rock-wallaby and Eastern Quoll. These species all co-exist across the landscape. Mt Rothwell's conservation model is simple: remove the threats, restore the habitat and the natives will thrive. Our holistic approach to threatened species management focuses on eliminating threats, restoring ecosystems and maintaining and improving population genetic diversity.

Sunday

Session Four: Understanding Our Fragile Communities

Threatened Flora of Victoria

Neville Walsh, Senior Conservation Botanist at the Royal Botanic Gardens Victoria started working at the National Herbarium of Victoria in 1977, initially as a survey botanist, then taxonomist. Work involves the survey and development of recovery strategies for threatened Victorian plants as well as taxonomic research. With Tim Entwisle, he edited the 4-volume Flora of Victoria and, with other RBGV botanists, is working to make it available on-line.

He is a member of the Helmeted Honeyeater Recovery Team, and working groups devoted to the recovery of several threatened plant species.

Neville manages the Victorian Conservation Seedbank (commenced in 2001), focussing on Victoria's threatened species. The bank includes around 1100 species; some of the seed is being used for re-establishment projects. He specialises in the taxonomy and ecology of alpine species.

The native flora of Victoria comprises some 3500 species of which about a third are considered at least rare, and about 750 considered threatened with extinction to some degree. Like most large cities, the growth of Geelong has caused and continues to cause the rarity and sometimes extinction of local species. Situated as it is at the junction of the Victorian Volcanic Plain and the Otway Coastal Plain, with the granitic You Yangs outcropping nearby, the Geelong area naturally is botanically diverse. Some of the threats that face the ever-retreating native flora of Geelong and Victoria generally will be explored, and case studies examined. Of these, climate change is all-pervasive, but has particular relevance for some plant communities of the greater Geelong area.

Conference Presentations

Something's Happening! Citizen Science in the Brisbane Ranges

Cathy Powers is a member of Friends of Brisbane Ranges and co-leader of its Citizen Science project; her flora photography is published widely. An interest in Australian flora began with terrestrial orchids but flourished after moving to the eastern slopes of the Brisbane Ranges in 1994; Cathy has been President / Vice-President of the Australian Plants Society Victoria for six years. Now retired from nursing, Cathy pursues an understanding of what nature provides in such a unique place as the Brisbane Ranges. "Understanding where I live, bordering the Brisbane Ranges National Park, gives me inside knowledge to share".

The Brisbane Ranges is like an island in a sea of farmland. Even if the flora and fauna were capable of slowly shifting their habitat zone in response to a change in climate, at present there is no suitable linking habitat for them to travel through.

Plants do not rely just on climate for suitable habitat, but geology and soil chemistry also play a role. Climate can shift, but geology is not so mobile, thus plants that are reliant on a particular geology or soil chemistry may not be able to colonise new habitats in the face of climate change.

Data collection and interpretation is the first step. We must map the distribution of significant species and have an understanding of their habitat requirements. Only then will it be possible to identify threats and potential new habitats (private or public land) for setting up insurance populations.

We have identified 26 species as the initial subjects of a Citizen Science project. This number may increase over the project life however the project concept has already reaped rewards towards establishing a location basis which will facilitate an understanding of the selected species.

Botanic Gardens can play an important role in such projects as a source of expertise on seed collection, seed storage and seedling production if an insurance population or seed bank is deemed necessary.

Geelong Regional Growth:- Threats to Flora and Ecosystem Sustainability

Graeme Stockton originally comes from the Grampians but now lives on a small, rural property at Bellbrae on the Surf Coast. He has a science degree in horticulture (1985) and then developed West Coast Indigenous Nursery specialising in local flora of the Bellarine and Torquay regions - servicing local land managers, businesses and community groups wanting to restore local habitat. Graeme is involved with Surfers Appreciating Natural Environment (SANE) and with Jan Juc Coast Action. Graeme worked in Guatemala (1996 – 1999) with communities living in the rainforest. On return, he completed postgraduate study in International Development. In 2007 he founded the Surf

Coast Energy Group (SCEG); 200 members focusing on climate change and sustainability issues.

Since forming West Coast Indigenous Nursery in 1987, there has been a growing community resolve to provide environmental stewardship for the coastal vegetation in and around Torquay. Almost three decades on and the legacy of monthly working bees, involvement by Shire and Corporate bodies to restore ecosystem integrity has seen a tremendous positive change to the coastal environment - and perhaps also to the attitudes of the broader coastal community who seem more switched on to nature than previously.

Ironically, whilst the coastal vegetation here is in arguably the best shape since maybe the 1950s, it is now juxtaposed against the global backdrop of climate change and mass species extinction; both a result of human activity and population pressure.

The problem of each is manifest locally with the City of Greater Geelong alone doubling present numbers by 250,000 extra people by 2050. Many coastal environs and species are under enormous extinction pressure even now, and whilst local coast action groups continue to refine onground activities in accordance with previous successes, by far the newer and much greater challenge will be defending nature against population growth. What is achievable? This presentation looks at previous successes, the challenges and some ideas for this big topic.

Session Five – Panel/Forum: Governance, Compliance and Existence

This forum will cover many of the legal issues and financial matters which involve AAFBG groups – legal structure and reporting obligations, decision making, financial authorisations and communication with members, liability of an organisation and committee and statutory liability. There will be consideration of NFP organisations, charity status, DGR status and GST responsibilities. The relationship with the owner of your Gardens will be discussed and also some of the intricacies of volunteers, employees and contractors – what are the responsibilities?

Robert Wright is a Victorian solicitor who, for more than forty years, has specialised in the law of associations; he has written two manuals on incorporating associations. Robert was the Law Institute of Victoria representative on the Office of the Community Sector Regulatory Reform Working Group, which was very largely responsible for the Victorian Associations Incorporation Reform Act 2012. He is a member of the Australian Charities and Not for Profits Commission Professional Users Group, a group of about 20 Australian lawyers and accountants who advise the ACNC on the practical application of charity law. Robert has been involved with many community organisations (often as President) ranging from a kindergarten federation to a national mental health body

Conference Presentations

Robert is a Committee Member of the AAFBG, nominated by the Friends of the Royal Botanic Gardens Melbourne.

Stephen Wight is a chartered accountant and the current managing director of Davidsons, an accounting firm with offices in Geelong, South Melbourne and Torquay. Stephen has served as a board member of Barwon Health, is a board member of a local Community bank and is a member of a number of audit and risk committees. He is a registered company auditor, a self-managed superannuation fund auditor and a graduate member of the Australian Institute of Company Directors.

Judy Fyfe

Judy joined the Geelong Friends as a Grower in 2007 and joined the Committee of Geelong Friends as Treasurer in 2010. Judy taught in the Business Studies Department of South West TAFE for 14 years and has worked part-time as a bookkeeper with clients of accountancy firms in Portland, Warrnambool, Hamilton and Geelong since 2000.

Judy is Treasurer of the AAFBG, nominated by the Friends of Geelong Botanic Gardens and Treasurer of the Friends of Geelong BG.

Lesley Jackman

Lesley has been on the Council of the Friends of ANBG since 2010, running the popular and highly regarded weekly lunchtime talks program for the Friends and also helped to establish the Friends' new Photographic Group.

Lesley has worked for the New Zealand and Australian governments, including a posting to Canberra in the 1980s. Lesley was also Executive Director of the Australian Institute of International Affairs in the 1990s, thereby gaining invaluable insight into running a membership organisation.

Lesley is President of the Friends of the Australian National Gardens

Justin McGrath

Justin joined Davidsons in 1997 and became a director in 2007 and is a Certified Practising Accountant. He is on the board of Headspace, Barwon Foundation and a volunteer member of the Drysdale Country Fire Authority

Session Six: The Association – Beyond 2016 Presentations by AAFBG Members – 'Planning for the Future'

Friends of the Australian National Botanic Gardens:
Glenys Bishop

The 2017 Australasian Botanic Gardens Volunteer Guides Conference

Friends of Botanic Gardens of Adelaide:

Bodo Jensen

Looking with Enthusiasm to a Bright Future

Friends of Ballarat Botanic Gardens:

Elizabeth Gilfillan

Ballarat Botanic Gardens Redevelopment, 19th Century Fernery

Friends of Geelong Botanic Gardens:

Liz Bennetto

Promoting Our Gardens via U3A

Friends of Gold Coast Botanic Gardens:

Rana Baguley

Story of Our Country

Friends of Royal Botanic Gardens Melbourne: Robert Wright

Do You Know Something that I Could Use? - better sharing of collective knowledge amongst Friends groups.

BGANZ President

John Sandham took up a late apprenticeship at the Royal Botanic Gardens, Kew in 1972 as an assistant gardener. Then he studied and worked in England and Scotland until 1989, when he started in the Botanic Gardens of Adelaide as the Curator of Conservatory Displays and Plant Propagation; then became Collection Development Officer in 1996 and Manager of the Adelaide Botanic Garden 2001 - 2003.

John is currently the Living Collections Officer as well as a pivotal part of the Centre of Horticultural Excellence at the Botanic Gardens of Adelaide. He is the South Australia BGANZ Representative and has served as the BGANZ Treasurer for the past three years. John commenced as BGANZ President 2015 and the Chair of BGANZ Professional Development Group.

John would like to address all friends that serve Botanic Gardens and say a big thank you, as without your input, Botanic Gardens would be the poorer. A multiple dexterity of skills from fund raising, guiding to getting hands dirty in the garden - all your help makes a difference to which Botanic Gardens should be thankful.

To highlight the work Botanic Gardens accomplish across Australia and New Zealand, BGANZ is having its first Open Day on Sunday 29 May. The idea is to show how rich and diverse the gardens are and what access there is to a wide and supportive group of people who are part of the Botanic Garden industry. Hopefully this will lead to some beneficial support from prospective sponsors. If your Botanic Garden is not already involved there is still time to do so. Both of our organisations are part of the wider world of Botanic

Conference Presentations *cont'd*

Gardens and we would welcome your interest in the BGANZ 8th Congress in Adelaide from Sunday 22 to Wednesday 25 October 2017

Bat Watch (or Grey Headed Flying Fox Camp)

Grant Baverstock, Manager of Parks and Gardens with the City of Greater Geelong has keenly studied Australian fauna for the past 40 years with a particular interest in Bats. This interest has resulted in Grant travelling across much of Australia observing fauna and assisting in field surveys, and Grant has authored the results through papers in various scientific journals. Grant has monitored the colony of Flying Foxes in Eastern Park since their arrival in 2003.

Eastern Park is home for a colony of Grey Headed Flying foxes and five species of insectivorous bats. The Grey-headed Flying Fox camp has established in the park since 2003 and is one of four permanent camps in Victoria. Since 2003 monthly bat counts and activity data are undertaken to gauge the status of the colony. The insectivorous bats forage throughout the park and Botanic Gardens roosting in the tree hollows and buildings nearby.

On the night we will observe the Grey-headed Flying Fox colony depart the roost and if the weather conditions are not too cool we will use a bat detector to listen to the insectivorous bats call as they forage overhead.

Conference Tours

Bellarine Tour

Explore Port Phillip Heads at low tide with Parks Victoria expert staff. Baron Ferdinand von Mueller, Victoria's first government botanist and Director of the Royal Botanic Gardens Melbourne, collected algae from this area.

Discover the secrets of Swan Bay, a Ramsar wetland site, with our professional guides.

Enjoy lunch and explore the historic town of Queenscliff. Early citizens of Melbourne travelled by train or boat to enjoy summer at this popular seaside resort.

Learn about the development of our sustainable seafood industry. Engage in a talk about the internationally recognised Hatchery for Port Phillip mussels and oysters.

We have a unique opportunity to view an outstanding regional garden with wonderful views across Corio Bay. This garden displays a magnificent collection of sculpture by internationally acclaimed artists. These works of art are beautifully sited in an extensive landscape of indigenous plants.

Essential: footwear with good grip; old sneakers are ideal. There will be 'walking on rough terrain and possibly in very shallow water'.

Great Ocean Road and Otway Ranges Tour

Our coach will travel along the spectacular Great Ocean Road through the seaside resorts of Anglesea,

Lorne and Apollo Bay.

We shall travel through the Mountain Ash forest of the Otway Ranges to Melba Gully, the 'Jewel of the Otways', renowned for its dense forest of ancient Myrtle Beech and gullies of tree ferns.

At Lavers Hill we shall visit the Otway Ridge Arboretum which holds a unique collection of conifers. The Araucariaceae family is well represented with species from New Caledonia and South America

Lunch will be at a garden in the Aire River environs.

A further highlight will be a visit to the historic Colac Botanic Gardens, set aside in 1865. Daniel Bunce, the curator of the Geelong Botanic Gardens, was commissioned to plan the gardens in a "proper and scientific manner" and made visits to Colac in 1868. He provided the basic form with an internal carriageway that enabled a circuit of the gardens. In 1910 William Guilfoyle, who had recently retired as Director of RBG Melbourne, was invited to revise the landscape and improve the plantings. Not all the recommended changes were implemented but the Guilfoyle influence is evident with numerous clumps of New Zealand Flax, Cordyline, Yucca and Aloe.

We shall enjoy a walk and afternoon tea at the gardens before returning to Geelong inland via Winchelsea.

Essential: flat walking shoes with good grip. The boardwalk and paths may be slippery or muddy.

Western Plains Tour

Explore part of the Victorian Volcanic Plain – the third largest volcanic plain in the world. We will visit the young emerging 'dryland' Melton Botanic Gardens and enjoy morning tea with the Melton Friends.

Then to the historic Werribee Park precinct and its many delights including the formal gardens, The Victoria State Rose Garden, the Heritage Orchard and the Werribee Park Sculpture Walk. This property is a significant part of the history of the Australian pastoral industry.

Lunch will be enjoyed with the Karen volunteers at the historic 'Homestead' kitchen gardens which they have helped to rebuild through a community refugee project – sustainable gardening at its best.

Then visit the extensive wetlands created by the Melbourne Water's Treatment Plant close to Port Phillip Bay; another Ramsar Wetlands site, this area is a bird-lover's paradise and we are privileged to gain access to this secure site.

Enjoy the Kevin Hoffman Walk at Lara - a passive, scenic linear trail (800 m) with significant indigenous vegetation, lush ground covers, flowering native shrubs and trees that overlook part of the tranquil Hovells Creek.

There will be a drop off at Lara Station (train to Melbourne, taxi to Avalon Airport) if requested

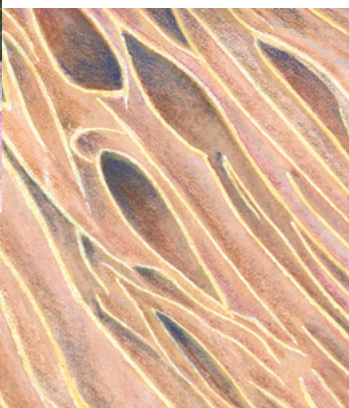
Essential: long pants and long sleeved shirt, flat, closed footwear and socks without holes! Autumn weather in Geelong is a little unpredictable – so come prepared for everything. Temperature range in late April/May can be 10 – 25 during the day and overnight temperatures may drop below 10. Bring binoculars, good walking shoes, hat, sunscreen, wind and water-proof jacket etc.

Geelong Botanic Gardens revealed



A world of mysterious, rare and unusual plants is growing at the Geelong Botanic Gardens. Investigate the living collection from a new perspective – the art of botanical illustration.

Explore the subtleties of form, pattern and texture of selected species through the work of botanical artists from the Friends of Geelong Botanic Gardens. Step outside the Geelong Botanic Gardens and into the Geelong Art Gallery and enjoy an intimate view into the world of plants.



Top:
Amanda Blake-Sutterby, *Hydrangea macrophylla* cv.
Middle:
Suellen Simpson, *Xerula radicata*
Bottom:
Marlene Hurt, *Rheum x hybridum*

Geelong Art Gallery | Little Malop Street Geelong

30 April to 19 June | 10.00 am to 5.00 pm



Australian Association of Friends of Botanic Gardens Conference
'Geelong – Regional Relevance:'



Botanic Environments and Their Survival in a Time of Global Warming'

We acknowledge the generous support given by:

- Partners and Sponsors,
- Local Businesses and Service Providers,
- Donors,
- Speakers and Panel Members,
- Volunteers and Staff.

Including:

- | | |
|-----------------------------|---|
| • City of Greater Geelong | • Geelong Botanic Gardens |
| • Geelong Conference Centre | • Tourism Greater Geelong and the Bellarine |
| • Barwon Water | • Botanica World Discoveries |
| • Cafe Go | • Davidsons |
| • Deakin University | • Geelong Library and Heritage Centre |
| • Geelong Gallery | • Officeworks |
| • Queenscliff Golf Club | • Roraima Nursery |

* Correct at time of printing



Roraima Nursery



For the conference Tours, we particularly thank these organisations and people:

Bellarine Tour

Marine and Freshwater Discovery Centre
Parks Victoria
Bellarine Catchment Network
Queenscliff Bookshop
Lance Wiffen
Jennifer and Brian Bourke

Alex Giannuzzi
Mark Rodrigue and Danni Rizzo
Matt Crawley
Marylou Gilbert

Otways and Great Ocean Road Tour

Colac Otways Tourism Centre
Melba Gully Garden B&B
Otway Historical Society
Otway Ridge Arboretum
Friends of Colac Botanic Gardens

Virginia and Bob Atkins

Alistair and Julie Watt

Western Plains Tour

Friends of Melton Botanic Gardens
NatureWest (formerly Western Melbourne Catchment Network)
Melbourne Water
Friends of Kevin Hoffman Walk
Geelong Committee

John Bentley
Colleen Miller
Kim O'Hoy and Penny Baxter
Kevin and Beverly Hoffman

Whispers in the Gardens Reflections of a Volunteer



*A myriad of blushing roses boast of adventures in
China
The sounds of Winchester Cathedral comforts our
senses
And memories of high tea with Lordly Oberon and
Charlotte
Catching up with gossip as birds sing in the black
wattle*

*The sounds of carriages echo in the distance
As images of ladies smelling of lavender parade in
splendid hats
Their pale skin shaded from sunlight under the big
Redwood*

*I follow their scattered petals along the garden path
As the smell of flowers waft in the air
Finding love rekindled at the fountain*

After 12 months as a volunteer I discovered that the whispers in the gardens I hear will linger forever for all volunteers who have touched the gardens. As a volunteer of the Friends of the Geelong Botanical Gardens I have been inspired by:

- volunteers talking about their gardens and ones visited overseas
- their flare in botanical art
- tips on propagation and their expertise on plants in the nursery and the Geelong Botanical Gardens
- lasting photos capturing the plant life and trees in the gardens
- volunteer time spent on the perennial border which welcomes the public with a colourful array of flowers in Spring and Summer stories and articles on the Friends history and past volunteers.

Reesh Rogulsky - Volunteer



*Allison Martland presenting Annie McGeachey with
flowers on the occasion of the announcement of her
OAM*

Have you heard the whispers in the gardens?

In 2015 I heard the whispers and became a volunteer of the Friends at the Geelong Botanical Gardens and divide my time between the botanical reference library and plant nursery.

It was not only the interest in revamping my own garden or enhancing my knowledge about plants or planting that urged me to become a volunteer. It was also the exchange of ideas and social interaction with others from different walks of life who shared an interest in gardens and plants. Maybe it was to soak up the intoxicating smells of flowering plants as you meander around the shady paths. Or, the chats with other volunteers over a cup of coffee and sharing experiences at the Teahouse (or morning teas).

I realized recently that I am helping to promote a heritage listed botanical garden on my doorstep. When you wander through the Geelong Botanical Gardens as a volunteer you are respecting its history and contributing to its preservation.

*I can hear the soothing whispers from the palms
Nostalgic tales swirling amongst their swaying
branches*

*Life rejuvenating the lush cool fernery.
The past comes alive*

*As colours of the pelargoniums penetrate my skin
And the blue hue from the plumbago dissolves into the
sky*

SALVIAS in the Geelong Botanic Gardens

During the summer and autumn months the salvias of the Geelong Botanic Gardens (GBG) present a gloriously colourful display.

Growing in nature over a wide geographic range, many species of the genus *Salvia* have proven to be ideally suited to the growing conditions found in the GBG where they have been cultivated since Daniel Bunce, the original curator, listed 17 species in his catalogue of 1862.

What is now recognised as the National *Salvia* Collection held by the gardens began with the donation of a collection of plants by members of the *Salvia* Study Group of Victoria in 1999.

This collection was expanded by Horticulturalist Des Lawrence, who curated the *Salvia* collection in the gardens from 2000 until his retirement in 2011. Des' passionate drive, tenacity and networking led to the development of a collection of some significance that was more representative of this large genus of plants.

With the expansion of the gardens in 2003 and the development of the 21st century extension, the opportunity was presented to include in the collection drought tolerant species from Southern Africa, Central and South America as well as The Canary Islands.

The collection was formally registered as the National *Salvia* Collection by the Ornamental Plant Conservation Association of Australia in 2006.

A major replanting of the collection was undertaken in 2011 to group plants with similar natural geographic distributions into garden beds dedicated to regions of origin. By this time, the collection had expanded to include 180 species, varieties and cultivars.

Salvias are the largest group of plants that belong in the mint family. With about 900 species, genus *Salvia* is the largest genus of family LAMIACEAE.

Plants in this family are typically shrubs, herbaceous perennials or annuals. They are recognised by their tube-shaped flowers, which are arranged in whorls on long flower spikes. The flowers are characteristically shaped with fused petals that form an upper and lower lip. The upper lip forms a hood over the lower lip which serves as a landing platform for pollinating insects. The leaves and stems are often covered with short hairs and have aromatic oil glands. The stems are squarish in cross section.

Plants in the genus *Salvia* are distinguished from other members of the mint family by having two stamens instead of the usual four. The structure of these stamens is distinctive and characteristic of the genus. They form a pair of hinged lever structures which pivot as the pollinator brushes past them while probing the floral tube for nectar, efficiently depositing pollen on the back of the bee to be transferred from one flower to the next.

This mechanism is unique to the genus *Salvia* in the family LAMIACEAE and is believed to have evolved at

least three times in the evolutionary history of the genus.

Evidence for this theory is based on the genetic analysis of DNA sequencing. Different species of salvias may look remarkably similar but are genetically different in significant and distinct ways.

The genus *Salvia* is thus an interesting example of convergent evolution where the same characteristic, the structure of the hinged stamen, has evolved independently on more than one occasion to facilitate the efficient transfer of pollen from one plant to another.

Salvias form a large group of diverse but distinct plants with a wide global distribution in temperate and tropical regions of the world. The largest group is found in the region of Central and South America. The second group spreads from the Mediterranean through to Central Asia. The smallest distribution is found in Southern Africa. No species occur naturally in Australia but fortunately they are easily cultivated in the garden situation.

Jenny Stein - Growing Friend

ANNIE McGEACHY OAM

Many congratulations to Annie McGeachy, long time volunteer at FGBG, who was awarded an OAM in the Australia Day Honours, 2016.

Annie first joined the Committee of Management of FGBG in 1992, was Secretary from 1993 to 2001. Annie was a member of the 1995 Master Plan Committee and Special Projects Officer on the Committee of Management. The Master Plan was a catalyst for change at the Geelong Botanic Gardens. It provided guidelines for FGBG to carry out some of many recommendations including restoration of historic features within the Gardens.

Annie's talent for finding grant funding has seen many historic buildings restored in the GBG precinct. The restoration of Eastern Park Rotunda provides an excellent example. Early in 2010 Annie undertook primary research at the Heritage Centre, located early images of the Rotunda located in Eastern Park, and discovered the original tender notice crediting the building design to W. H. Clevedon, Architect and Surveyor of 21 Ryrie Street. It is meticulous and thorough research work such as this which underpins the restoration of the Eastern Park Rotunda, and many other historic buildings in the GBG.

Annie on behalf of FGBG has made a number of successful grant applications to various authorities for funding to restore many of the Garden's significant assets including:

Annie has been a member of the FGBG Guide group, and has been a most engaging Guide since 2005.

In addition to her contribution to FGBG, Annie has played a pivotal role in the now Australian, formerly Association of Friends of Botanic Gardens (now AAFBG). We salute Annie, a tireless volunteer for FGBG and for many projects at the GBG.

Helen Rodd and Jayne Salmon

Special FGBG Autumn / Winter Activities MAY, JUNE, JULY and AUGUST 2016

JULY

**DISCOVERY WALK – ‘FERNERY FASHION’
Sunday 10 July, 2.00 pm. Gold Coin
Donation.**

Remember Grandma's shade house of potted palms and ferns? The Geelong version of this fashion was a huge Victorian Gothic style fernery built in the 1880s. Join your guide for some fernery fashion history and a walk through the newly renovated fern glade. Meet your volunteer guide at the front gates.

**DISCOVERY TABLE in the Gardens
Sunday 17 July, 1.00 – 3.00 pm**

Meet the Friends' Guides for interesting information and direction to key plants and seasonal change. Copies of the Self-guided Walks and information sheets are available at the Discovery Table and the Teahouse.

WINTER WEEKEND PLANT SALE

**Saturday 30 and Sunday 31 July, 10.00 am to
4.00 pm.**

Featuring a wide selection of Australian plants, colourful perennials, hardy shrubs, pelargoniums and salvias, sourced from the Geelong Botanic Gardens. The Friends' Nursery and car park is located at the rear of the Gardens.

AUGUST

**WINTER LUNCH with GUEST SPEAKER
RICHARD ALLEN**

Monday 8 August, 12.00 noon

Join us at Jack Rabbit Vineyard on the Bellarine Peninsula whilst enjoying beautiful panoramic views, a la carte cuisine and cool climate wines. Hear captivating speaker Richard Allen presenting an illustrated talk on his new book 'Great Properties of Country Victoria - The Western District's Golden Age'.

**DISCOVERY WALK – ‘SPICE UP YOUR DAY’
Sunday 14 August, 2.00 pm. Gold Coin
Donation.**

Aromatic plants fascinate our noses and titillate our taste buds. Have fun exploring the aromas and flavours of plants in Geelong Botanic Gardens and learn how they are used in food, drinks, cosmetics and medicines. Meet your volunteer guide at the front gates.

**DISCOVERY TABLE in the Gardens
Sunday 21 August, 1.00 – 3.00 pm**

Meet the Friends' Guides for interesting information and direction to key plants and seasonal change. Copies of the Self-guided Walks and information sheets are available at the Discovery Table and the Teahouse.

FGBG ANNUAL GENERAL MEETING

Monday 29 August, 5.30 for a 6.00 pm start

All Members are invited to attend our AGM and light supper in the GBG Meeting Room. The guest speaker is GBG Director Annette Zealley, whose informative overview of the year's achievements is always of great interest to our members.

Parking is at the rear of the gardens.

WEEKLY ACTIVITIES with the FRIENDS

Guided Walks: Guides are on duty Wednesdays 11.00 am and Sundays 2.00 pm to take you for a guided walk or answer your questions. Meet at the front steps of the Gardens.

Plant Sales: The Friends' Nursery at the rear of the Gardens is open every Wednesday 9.30 am to 12.30 pm offering a wide selection of plants sourced from the Geelong Botanic Gardens, including the Pelargonium and Salvia collections.

U3A at Geelong Botanic Gardens

During term 1, 2016, our volunteer guides have conducted a course for University of the Third Age. The course was advertised as follows:

Geelong Botanic Gardens – a local treasure

Do you know your gardens? GBG is one of the oldest botanic gardens in Australia. Learn about its history, special collections, remarkable trees ... and the people who make it work. Each session includes a guided walk designed to focus on the study topic.

Annette Zealley gave a great overview of the GBG and seven guides were involved in the presentations, while others provided delicious morning teas.

Areas covered included:

The role of Botanic Gardens and Friends

History of Botanic Gardens, and specifically of the GBG

Plants & climate – drought, conditions for growing, water conservation, irrigation Eastern Park

Significant trees & Special Collections

Plant names, simple botany. Plant reproduction

Plant Evolution

Everyone involved in the program really enjoyed the experience. The resulting evaluation was extremely positive and complimentary. Participants enjoyed the variety of presenters and content, and recommended that we run an extended course next year. The class was a delightful group and we have certainly recruited several new members for the Friends and at least two potential guides.

Special FGBG Autumn / Winter Activities ***MAY, JUNE, JULY and AUGUST 2016***

MAY

CONFERENCE of the AUSTRALIAN ASSOCIATION OF FRIENDS OF BOTANIC GARDENS

GEELONG - REGIONAL RELEVANCE: Botanic Environments and their Survival in a Time of Global Warming

Friday 29 April to Tuesday 3 May.

The Friends of Geelong Botanic Gardens will host this biennial conference at the Geelong Conference Centre. It is designed to celebrate the Geelong Region with many associated activities. Visit the Friends' website for more details of the Conference, Dinner and associated bus tours.

FGBG BOTANIC ART EXHIBITION – 'GEELONG BOTANIC GARDENS REVEALED' at the GEELONG ART GALLERY

**30 April to 19 June, Open Daily 10.00 am to
5.00 pm**

A world of mysterious, rare and unusual plants is growing in our historic public Gardens. Investigate this living collection from a new perspective—the art of botanical illustration.

Explore the subtleties of form, pattern and texture of selected species through the work of botanical artists from the Friends of Geelong Botanic Gardens. These works provide an intimate view into the world of plants.

PUBLIC FLOOR TALK by JOHN PASTORIZA- PINOL at the GEELONG ART GALLERY Exhibition 'Geelong Botanic Gardens Revealed' Thursday 5 May 11.00 am

DISCOVERY TABLE in the Gardens Sunday 8 May, 1.00 – 3.00 pm

Meet the Friends' Guides for interesting information and direction to key plants and seasonal change. Copies of the Self-guided Walks and information sheets are available at the Discovery Table and the Teahouse.

VOLUNTEER WEEK LUNCH

Wednesday 11 May, 12.30 pm, Meeting Room

All Friends' volunteers are invited to attend a Volunteer Week complimentary lunch to celebrate and acknowledge your valued contributions to the Friends.

DISCOVERY WALK – 'SOUNDS OF THE GARDENS'

Sunday 15 May, 2.00 pm. Gold Coin Donation.

In today's world we pay a lot of attention to what we see. Come to the gardens for a different experience that will delight your senses. You may be surprised what you can discover with your ears alone. Meet your volunteer guide at the front gates.

BGANZ OPEN DAY

Sunday 29 May

The Friends will support the Geelong Botanic Gardens Open Day with activities to be announced.

JUNE

DISCOVERY WALK – 'SEEDY MATTERS – A CAPSULE OF LIFE'

Sunday 12 June, 2.00 pm. Gold Coin Donation.

Discover the wonderful ways in which plants ensure their survival. We explore how our ancient species have survived to modern times and the adaptations of seeds to wind, water, insects and animals, including us.

Meet your volunteer guide at the front gates.

DISCOVERY TABLE in the Gardens

Sunday 19 June, 1.00 – 3.00 pm

Meet the Friends' Guides for interesting information and direction to key plants and seasonal change. Copies of the Self-guided Walks and information sheets are available at the Discovery Table and the Teahouse.

Submissions for the Jubaea Spring issue are welcome by 1 Aug 2016

All articles, including high resolution jpg pictures can be sent to the office at

info@friendsgbg.org.au

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