

Naturelink

NEWSLETTER OF THE FRIENDS OF THE ROYAL BOTANIC GARDENS CRANBOURNE, INC.

Director's report

Chris Russell

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Changing and growing...

You may recall previous mention of an organisational structure review that Royal Botanic Gardens Victoria is undertaking. Whilst there have been local changes over time to different areas within the organisation, it has been over 20 years since we have explored the structure in its entirety. A great deal has changed over that time. The size of RBGV has grown significantly and the range of functions diversified. We have a 'new' vision of 'Life is sustained and enriched by plants' supported by the values of being Creative, Open, Brave and Remarkable. Also our budget situation continues to become more challenging as the cost of doing



Banksia menziesii enjoying late winter sun in the Australian Garden.

business increases. This is, of course, a situation common to most of the public and private sector, and means that we need to continue our focus on revenue generation and exploring new opportunities. The organisation review is well progressed, and due for completion by the end of 2016. The main things to report to you at this stage are changes at the divisional level, with the Australian Research Centre for Urban Ecology (ARCUE) coming together with Plant Science and Biodiversity (PS&B) to form a single Science Division that will be headed by Professor David Cantrill, with Professor Mark McDonnell departing RBGV. Consistent with the need to increase revenue and business generation is the formation of a new division, Public Engagement and Business Development, which will include our Public Programs and Marketing functions and a specific business development function. Garden Operations will continue as divisions at both Cranbourne and Melbourne sites, but will transition to a single division over the next three years.

Locally at Cranbourne there has been some change as well. Nursery Coordinator Di Clark has moved on to head up the Nursery at Eurobodella Regional Botanic Gardens



The giant weaving frame was the most popular activity at this year's NAIDOC celebration. Photo: Jo Fyfe.

near Batemans Bay in New South Wales. Di played a pivotal role in the production and procurement of plants for the Australian Garden and we wish her and partner Al all the best in their new life 'up north'. Mandy Thomson has stepped into the role as Acting Nursery Coordinator until October.

When freely draining sand is not

Out in the Australian Garden we continue to love the areas that are performing well, and are actively tackling the areas that could be doing better. Large areas of the Ian Potter Lakeside Precinct (IPLP) have been struggling for some time with sluggish plant performance, with the main issue being the plant selections not matching the prevailing soil conditions. In this area we have water-retentive sand making the growing conditions too wet for the selected plants. We have this same condition in some other areas of the Australian Garden, and where we can we will increase sub-surface drainage, replace the soil with 'good sand' and/or introduce soil mounding to improve the performance of plants in the affected area. In some instances, such as IPLP, it is not practical to take this approach and it is a case of altering the plant selection to match the prevailing conditions. Taking the cue from plants in other wet areas in the garden, we have introduced large numbers of suitable Callistemon, east coast Banksia and Wattles such as *Acacia fimbriata*. Their tolerance to wet soil is certainly being tested this winter, so we will watch with interest how they perform over coming months.

Social role of botanic gardens

Once again the Australian Garden played host to a well-supported NAIDOC



Garden Ambassador and Friends member Barrie Gallacher planting some of the 2,500 Kangaroo Paws for display this November. Photo: Mandy Thomson.

celebration, with over 1,000 visitors and Indigenous community members braving the cold and wet conditions on 6 July. Boon Wurrung elder Aunty Faye Stewart-Muir opened the event with the Welcome to Country followed by the smoking ceremony assisted by RBGV Aboriginal Programs Officer Ben Church. Uncle Ron Murray captivated with his story telling and didgeridoo playing, with other activities including dance workshops, potting plants, weaving, painting, the Gardens Explorer people mover and free barbecue. It is a great honour for the Gardens to be actively involved in this aspect of celebrating Indigenous culture.

The American Public Gardens Association held their annual conference in Miami, Florida from 6 to 10 June, with our own Sharon Willoughby, Manager of Public Programs, invited to speak on the social role of botanic gardens. Sharon has played a key role in the establishment of the Balee Koolin Bubup Bush Playgroup along with supporting other initiatives such as NAIDOC events so was able to showcase RBGV's role in her talk 'Making Space for Conversation – Exploring Socially Inclusive Partnerships'.

AGM 2016

Sunday 27
November

Auditorium,
Cranbourne
Gardens

2pm

All Friends members are warmly invited to attend our 25th AGM, which will be held in the Auditorium at the Cranbourne Gardens on Sunday 27th November at 2pm.

A number of items of business involving changes to our rules will be presented for adoption at the AGM. To follow suit with the new name and logo of the Royal Botanic Gardens Victoria, we will change our name to: Cranbourne Friends, Royal Botanic Gardens Victoria. Other proposed Rule changes will concern our Special Interest Groups and finances.

We will also be awarding an Honorary Life Membership to another very worthy recipient!

After the formal proceedings, the Guest

Speaker will be Angus Stewart, renowned plant breeder, Gardening Australia presenter and key participant in our November Kangaroo Paw Celebrations.

We do hope that you will attend this AGM and also join us in a special afternoon tea to celebrate our quarter century.



Angus Stewart holding the recent book that he co-authored with AB Bishop. Photo: Gwen Elliot.

Darwin's Unfinished Business

Illustrated Talk by
Stephen D. Hopper
AC

Wednesday 23
November
6pm for 6.30pm

Mueller Hall
National Herbarium
Birdwood Avenue
South Yarra
\$25 Adults, \$20
Friends, \$10 Students



Prof Stephen Hopper amongst his beloved *Anigozanthos manglesii* at Kings Park, WA. Photo: Matthew Galligan

Stephen Hopper is the Winthrop Professor of Biodiversity at the University of Western Australia. As a botanist and a global science leader in the field of plant conservation biology, Stephen delivers world class research programs contributing to the conservation of endangered species and ecosystems.

Stephen was Director of Kings Park and Botanic Garden in Perth for seven years, and CEO of the Botanic Gardens and Parks Authority for five. From 2006 to 2012 he was Director of the Royal Botanic Gardens, Kew and was the first non-British person to hold this position. Stephen will participate as a keynote speaker in the Kangaroo Paw Symposium from 24 – 26 November which is being hosted by the Royal Botanic Gardens Victoria, Cranbourne Gardens and Cranbourne Friends.

Join Stephen Hopper on a fascinating exploration of Darwin's unfinished business in the Southern Hemisphere as exemplified by the evolution of kangaroo paws and related plants.

From the President

Indra Kurzeme

Dear Friends,

The Committee has been working very closely with the Gardens' leadership team and the Board on a number of new initiatives. By now you will know that the overarching organisation for the Botanic Gardens is now known as Royal Botanic Gardens Victoria and you will have seen the new Royal Botanic Gardens Victoria visual identity designed by Ken Cato. The garden that we support is now known as Royal Botanic Gardens Victoria, Cranbourne Gardens. To keep in line with this naming hierarchy we have been asked to consider naming ourselves Cranbourne Friends. This will mean that our Annual General Meeting in November we will be putting the change to you and we hope that you agree that it is a good move forward.

Ken Cato has been very generous and designed a new visual identity for both the Melbourne and Cranbourne Friends groups. We will be revealing the new look at the same time.

In early July I was asked by Tim Entwisle to join a group of dedicated people on the Campaign Council. The Campaign Council is a committee of the Royal Botanic Gardens Victoria Board with responsibility for working on a large money raising campaign known as Discover Life. The RBGV has committed, through its Corporate Plan 2014-

2019, known as Sustaining Life, to the largest fund raising campaign in its history. Some of the projects that the RBGV would like to fund are a new herbarium, an iconic glasshouse and a science precinct. There are some very exciting projects planned and I will keep you informed of progress.

The other day I was walking through our local bushland with my teenage daughter and I asked her why people her age weren't interested in their environment. She politely corrected me and said that I was generalising and that there were teenagers who were interested in the environment but at this time of life she and others her age had too much going on. It gave me hope to think that later on in life there may be time for the next generation to become more active in supporting native flora.

The Committee has been looking at what we do for younger people as far as activities are concerned and how we need to position ourselves to market the good work of the Friends to a younger audience. Amy Akers and Christine Kenyon have formed a small subgroup of the Committee and would welcome any suggestions from you. They have come up with some great ideas and I am looking forward to implementing them.

See you in the Gardens

Indra

Staff Profile

Sturt Gibbs,
Horticultural
Technician

Sturt started working at the Cranbourne Gardens in 2010. He was employed at the time to maintain Australian Garden Stage 1 plantings while Stage 2 construction was in full swing. Sturt has quite an eye for detail and takes a common sense, intuitive approach to gardening and horticultural practices. In 2012 Sturt secured an ongoing role in the horticulture team. He currently curates the Ephemeral Garden, the Water Savings Garden and the Gondwana Garden.

Sturt came to the gardens after 10 years working at the Flecker Botanic Gardens in Cairns where he started his career in horticulture. This is where he gained a passion for tropical plants and rainforest gardens – hence the connection the Gondwana Garden here.

Getting into horticulture was a “tree change” for Sturt as prior to this he was employed by the Royal Australian Navy Hydrographic Branch, where he was involved in the making of navigational charts.

Sturt lives in Junction Village with his wife Sharen and has 2 young boys, Joshua and Arron. Joshua looks like taking a leaf from his dad and is keen on getting his hands dirty in the garden.

Sturt grew up on the land in Violet Town in NE Victoria where his parents ran a sheep



Sturt Gibbs, Horticultural Technician.

farm. Not surprisingly, the property had a large native garden and Sturt was heavily involved in maintaining and developing the garden. Sturt's dad was actively involved in the Landcare movement with a lot of revegetation, erosion control and planting of shelterbelts happening on the property.

Sturt is a passionate gardener – he loves tending to the garden and working with the horticulture team on all of the challenges that are associated with the establishment of the Australian Garden.

ACTIVITIES CALENDAR FOR JULY - SEPTEMBER

We hope there will be no changes to the program, but if there are, members will be notified via *Quicklink* and/or email.

SEPTEMBER

Thursday 8: Friends Elliot Centre Open House (see below)

Sunday 11: Orchid Walk in Cranbourne Gardens (pg 7)

Wednesday 14 – Tuesday 27: South Africa Tour

OCTOBER

Tuesday 4: Discovery Day: Wonthaggi Heathlands (pg 7)

Thursday 13: Friends Elliot Centre Open House (see below)

Sunday 16: Afternoon Talk by Garry Presland (pg 7)

Monday & Tuesday, 17 & 18: 2-Day beginners' Introduction to Botanical Illustration (pg 10)

Saturday 22 – Sunday 23: Growing Friends Plant Sale (pg 9)

Wednesday 26: Visit to The Art of Botanical Illustration 2016, Domain House, Melbourne Gardens (pg 10)

Date to be announced via email to Members: Waratah Pruning by Gardens Horticultural Staff (pg 12)

NOVEMBER

All Month: Exhibition in Australian Garden Gallery for Kangaroo Paw Celebration (pg 6)

Thursday 10: Friends Elliot Centre Open House (see below)

Wednesday 16: Morning Talk with Botanical Artist Sandra Sanger (pg 10)

Wednesday 23: Talk by Prof Stephen Hopper at Mueller Hall, Melbourne Gardens (pg 2)

Sunday 27: AGM with Guest Speaker Angus Stewart (pg 2)

SPECIAL EVENTS:

Saturday 19 & Sunday 20 November: Kangaroo Paw Picnic in the Australian Garden

Thursday 24 – Saturday 26 November: Kangaroo Paw Family Symposium (pg 6)

Open House at the Elliot Centre

2nd Thursday of each month (except January)

1.00–4.00pm
FREE

Afternoon tea is supplied
Contact Helen Morrow
9850 9125

Future Topics for Open House - 1pm to 4pm:

September 8 - Travellers Tales with Ken and Carlene Gosbell

October 13 – To Prune or Not to Prune with Rodger Elliot

November 10 – Kangaroo Paws, cultivation and other information

The Elliot Centre is open to members on the second Thursday of each month. Members are invited to come along to interesting and inspiring presentations.

It was a small group who joined Lynn Lochrie in April to hear about the ancient craft of basket making. Lynn took us through a list of plants growing in Australian gardens that can be used. Vines are woven to make trays and baskets, reeds such as Lomandras and bull rushes can be woven or stitched to create bowls, sculptural objects and even a sun hat. Contact Lynn on 0437 759 610, if you are planning to prune some of these plants, as the group always need materials to work with.

The Basket Makers are currently working on a project for display at the Kangaroo Paw Festival in October. Thank you Lynn for opening our eyes to the many ways our plants can be used.

Judith Cooke led the May discussion titled Birds of Cranbourne. Judith is a keen photographer and many of the photos were taken when walking through the gardens with Friends in Focus. It was almost a full house and several members brought photos along to join in the discussion. We saw close up photos of more than 20 birds, all frequently

seen in the Cranbourne Gardens. Judith also went through the process she used to Photoshop images for presentation and for card making. It was a most informative talk, thank you Judith for a great afternoon.

In June, the topic was Open Garden Victoria, which has just finished its first successful season following the close of the Australian Open Garden Scheme. Helen Kennedy who is a Committee member, discussed with us some exciting initiatives of this organisation. A number of exciting events will be held each year in addition to garden openings, and garden owners now receive a fairer division of Gate takings. OGV is now run entirely by enthusiastic and experienced volunteers and will open a maximum of 2 gardens per weekend into the future. Helen gave us an insight into how gardens are selected and showed us photos of many of the gardens included in both the past and the coming season. Many thanks Helen, for an enthusiastic and interesting talk.

- Two of Judith Cooke's fungi photographs appear in this publication on page 9 - ed.

Activities planning day for 2017

It was a bumper brainstorming day on Sunday 29 May for the 2017 activities calendar planning day. Many ideas were shared and decisions made as to what we will have in store for next year.

The brainstorming session in the morning was followed by the Activities Sub-committee coming up with a program for 2017. It is to be a busy and exciting time for the sub-committee, and we encourage you

all to attend the events we hold. It's great for members to get together and share their passions!

If anyone has an idea for something they'd like to do please don't hesitate to email me, or a member of the sub-committee, throughout the year.

The 2017 Program will be listed in the summer issue of Naturelink in December. Chloe Foster

(Some of) What's On at RBGV Cranbourne

For enquiries and bookings phone 5990 2200. For information about more activities at RBGV, see <www.rbg.vic.gov.au>.

DAILY

Flora Australis

Take a journey through time and learn about the evolution, adaptations and the interaction of Australian plants and people.

Tours available at various times by request. Group tours available at 11am or 2pm.

\$7.10 adult, \$6.10 concession (group bookings \$6.10 per person)

Bookings required on 03 5990 2200

Plants for your place

Experienced guides share tips that will help you find the best Aussie plants for your place.

Tours available at various times by request. Group tours available at 11am or 2pm.

\$7.10 adult, \$6.10 concession (group bookings \$6.10 per person)

Bookings required on 03 5990 2200

Spring pass: Your choice of TWO tours in one day: Plants for your place, Flora Australis or Snapshots of Australia tour

Enjoy two daily guided tours of the Australian Garden at a reduced rate with a spring pass. Select from Plants for your Place, Flora Australis or Snapshots of Australia tours.

Tours available at various times by request. Group tours available at 11am or 2pm.

\$11 adult, \$9.50 concession

Book on 03 5990 2200

NOVEMBER

Kangaroo Paw Celebration

A month-long celebration of the iconic Kangaroo Paw. Program highlights include a three-day symposium on the Haemodoraceae family, a Kangaroo Paw Picnic and the launch of the new Anigozanthos 'Landscape Violet' by Angus Stewart.

Call 03 5990 2200 for more information and see page 6

Kangaroo Paw Celebration self-guided walk

Discover a diverse palette of colour with hundreds of Kangaroo Paws in flower and learn how to grow them in your home garden.

9am to 5pm

Free - All ages

FOR KIDS

Elves and fairies in bloom

Discover the magic of wildflower fairies and elves in the Australian Garden through storytelling and activities.

Tuesday 20, Thursday 22 and Wednesday 28 September

10 to 11am, \$8 per child

Suitable for children aged 3 to 5 years old

Bookings Required 03 5990 2200

(Some of) What's On at RBGV Melbourne

The following events are presented by the Friends of the Royal Botanic Gardens Melbourne.

For enquiries contact the Friends office on 9650 6398 or at <friends@rbgfmelb.org.au>.

Book events online, or download a booking form from the FRBGM website at <www.rbgfriendsmelbourne.org>.

SEPTEMBER

Talking Plants: Rose gardens of excellence in Victoria with Veronica O'Brien

Three Victorian rose gardens, at Werribee, Morwell and Mornington, have been made Gardens of Excellence by the World Federation of Rose Societies. The President of the Rose Society of Victoria will describe them and their maintenance, all carried out by volunteers.

Friday 16 September, 10am to 12noon
Domain House, Dallas Brooks Drive

\$20 Friends' members, \$25 non-members

Book online or via FRBGM Events Booking Form available on FRBGM Website: www.rbgfriendsmelbourne.org

Botanical illustration beginners workshop with Dianne Emery

An introduction to botanical art via pencil and watercolour.

Saturday 17, Sunday 18, Saturday 24 and Sunday 25 September (four day course)

10am to 4pm

\$342 Friends' members, \$399 adult

Bookings essential either online at www.rbgfriendsmelbourne.org or by telephoning the Friends' office

OCTOBER

Opening night and reception - The Art of Botanical Illustration 2016: A New Direction

The opening night of the Friends' biennial exhibition of work by leading botanical artists from Australia and overseas.

Friday 14 October, 6 to 8pm

Domain House, Dallas Brooks Drive

\$30 Friends' members, \$40 adult

Book online or via FRBGM Events Booking Form available on FRBGM Website: www.rbgfriendsmelbourne.org

NOVEMBER

Christmas candle nest workshop with artist Sheryl Cole

In an afternoon workshop, artist Sheryl Cole will demonstrate how to weave palm inflorescence, or flowers, into a sculptural nest to hold a candalina jar and tealight candle. Participants will make their own nests to take home. Perfect for the Christmas table!

Saturday 19 November, 1 to 4pm

Domain House, Dallas Brooks Drive

\$45 Friends' members, \$65 adult

Includes all materials and afternoon tea

Kangaroo Paw Celebration at Cranbourne During November

The Cranbourne Gardens and Cranbourne Friends are combining to present a wonderful opportunity for people to participate in a very special occasion later this year.

This will be a marvellous celebration of the iconic kangaroo paw and its relatives. We may be familiar with kangaroo paws in our own and other gardens, but there is a whole lot more to this fascinating plant family.

The Australian Garden will be certainly be enlivened by the planting of over 5000 kangaroo paws. The main plantings will be in the Cultivar Garden and the Northern Exhibition Garden precinct. Planting of gardens and containers of varying proportions will provide a stunning floral display.

Over November the gallery behind the Visitor Information Centre will have an exhibition of artworks, crafts and floral art, all with a Kangaroo Paw and relatives theme. The Cranbourne Friends groups such as the Botanical Illustrators, Botanical Basketmakers and Botanical Fabricators will be represented. During the month there will be a 'Best Kangaroo Paw Pic Instagram Competition' with the winner announced on 27th November. (See page 16 for details).

The **Kangaroo Paw Picnic** over the weekend of Saturday 19th and Sunday 20th November will provide a varied program of activities for people to enjoy.

Some of the highlights include:

- Guided Tours by Angus Stewart (Bookings are essential: 5990 2200)
- Launch of the beautiful Angus Stewart bred *Anigozanthos* 'Landscape Violet' at 11 am on the Saturday
- Special Growing Friends Plant sale of Kangaroo Paws & Cottonheads
- Floral art demonstrations with Kangaroo Paws & Australian plants
- Live music by Dan Arnott & the Gardeners Blue Grass Band
- Everybody will have the opportunity to vote in the 'Best Kangaroo Paw Competition'
- There will also be displays by some of the sponsors and public gardens in the Melbourne region

A Special 3-Day Event:

Kangaroo Paws, Bloodroots, Cottonheads and More Symposium

As part of this month-long celebration there will be a special three-day symposium on this group of plants that sit in the Haemodoraceae plant family.

Members of this plant family include the iconic Kangaroo Paws, *Anigozanthos* and *Macropidia*, Bloodroots, *Haemodorum*, Cottonheads, *Conostylis* and other genera such as the more poorly known *Blancoa*, *Phelebocarya* and *Tribonanthes*.

This Symposium is packed with interesting and inspiring topics to be presented by a range of experts over three days and will

cater for all levels of interest and expertise. It will be a 'not to be missed occasion'!

Symposium Day One: Thursday 24th November will be a Science Day dealing with botanical, zoological and horticultural aspects. It will be held at the Melbourne Gardens.

Symposium Day Two: Friday 25th November will be a Professional Day dealing with breeding, design, cultivation and diseases. It is aimed at people who work in botanic gardens, parks and gardens, horticulture, design and construction. This day will be at the Cranbourne Gardens.

Symposium Day Three: Friday 25th November will be a Home Gardeners Day dealing with subjects that gardeners like. This day will also be at the Cranbourne Gardens.

We are very excited to have **Prof. Stephen Hopper AC** as our keynote presenter each day. Stephen is regarded as one of the world's leading botanical experts on the family Haemodoraceae and Stephen is currently writing a comprehensive book on this plant family.

Angus Stewart, dubbed by John Doyle as the "Doctor of the Dirt" and "Surgeon of the Soil", is a renowned horticulturalist and Kangaroo Paw breeder, Australian plant enthusiast and tour leader. He is also a lecturer, author of many books and presenter on the ABC TV's Gardening Australia television show. Angus will be speaking at each day of the Symposium on breeding and cultivation.

Other speakers we have been able to engage include the following:

- Professor Kingsley Dixon who is renowned for his scientific research on Western Australian plants, including his revelatory work on the importance of smoke in germination of many seeds.
- Dr Brett Summerell, Deputy Executive Director, Science and Conservation at the Botanic Gardens & Centennial Parklands in Sydney. Brett is one of Australia's leading specialists in plant diseases and the taxonomy and population genetics of plant pathogenic fungi.
- Professor Michael Simpson from San Diego State University, California, USA is renowned for his research on the who phylogeny (evolutionary development) of Haemodoraceae.
- Digby Grows who is a successful plant breeder from the Botanic Gardens and Parks Authority in Perth where he works at Kings Park and Botanic Garden.
- Keith Oliver from Perth who is renowned for being the first plant breeder to work on kangaroo paws.
- Bronwyn Ayre and Ellen Hickman who are undertaking PhD studies with Prof. Stephen Hopper at the University of WA.
- Craig Scott who is proprietor of East Coast Wildflowers, north of Gosford, NSW and is a leading grower of Australian flowers.

Continued Page 11...



Western Australia's floral emblem *Anigozanthos manglesii* photographed at Wireless Hill near Perth



Conostylis setigera 'Lemon Lights' is a small plant suitable for gardens and pots.

The Registration form for the 3-day Symposium is included in this issue of Naturelink

Orchid Walk

Sunday 11
September

9.30am
FREE

Meet at the Visitor Centre

Contact

Amy Akers
0423 513 281

Did you know that Victoria has over 400 species of native orchids and that over 10% of those have been recorded in the bushland at the Cranbourne Gardens? If you are anything like me then you may have walked past some of them without noticing. Alternatively, you may have spotted them, taken a photo but not known what species they were.

We are planning to take a walk through the bushland in September with one or two knowledgeable orchid enthusiasts and have proposed it to take place on the morning of Sunday 11 September. However, this date may change depending on the abundance of orchids at the time. An email will be sent to all members confirming these details closer to the date.

Ensure that you bring a raincoat, sturdy



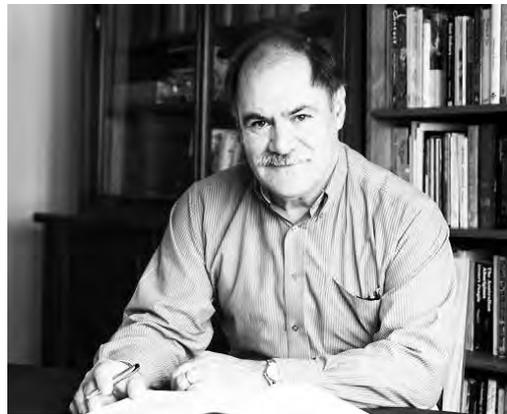
Black-tongue Hood-orchid (*Caladenia congesta*), one of the many orchids that can be found in the bushland at Cranbourne. Photo: David Francis (via NatureShare)

boots and a keen eye. Although there is no charge for this event, you may like to purchase coffee and cake afterwards in the Boon Wurrung Café where you can discuss what orchids you found. Amy Akers

Pre-European Indigenous Culture on the Mornington Peninsula

Sunday 16 October

Auditorium,
RBGV Cranbourne
Gardens
Members \$20,
Non-members \$25,
Students \$10



Gary Presland

At the time Europeans entered the Port Phillip region, the area was occupied by a number of Indigenous clans. Those clans, whose estates comprised the area of the Mornington Peninsula, spoke Boon wurrung and were part of the Kulin nation. The ways in which the Boon wurrung made a living,

and how they were connected to other members of the Kulin will be detailed in Gary Presland's talk on Sunday 16 October.

Gary Presland is an archaeologist and historian who is best known for his work on the Indigenous history and natural history of the Melbourne region. He is published widely on these subjects, his most important books being: **The place for a village: how nature has shaped the city of Melbourne** (Museum Victoria, 2008) and **First people: the Eastern Kulin of Melbourne, Port Phillip and central Victoria** (published by Museum Victoria, 2010).

Gary is a Fellow of the Royal Historical Society of Victoria, an Honorary Fellow of The University of Melbourne and an Honorary Associate of Museum Victoria. In his spare time he is an editor of **The Victorian Naturalist**.

Discovery Day: Wonthaggi Heathlands

Tuesday 4 October

10am to 3pm (or
later with extra
wetlands option)

Meet at Guide Park,
South Dudley Road,
Wonthaggi

BYO morning tea to
be held on arrival in a
covered area with toilets
and seating.

Contact Alex Smart
smartie38@bigpond.
com or 9707 5275

Join leaders Terri Allen and Jenny Rejske to explore the Wonthaggi Heathlands. Terri is a leading local environmentalist and historian with a lifetime of active experience in the area. Jenny is a long-term member of the Cranbourne Friends and is active with the Australian Plants Society, Australasian Native Orchid Society, Field Nats and now particularly with revegetating the Corinella Foreshore Reserve. Terri will speak to us about the fascinating history of Wonthaggi. Then we will be led through the precious heathlands for about 4 km on a flat sandy track. Expect to see a stunning range of flowers including herbs, forbs and orchids.

Lunch will be at the East Mine Site, again undercover and with toilets. BYO lunch and there is a café for those addicted to proper coffee. Then we may take a short walk to the Wonthaggi Seedbank and Nursery which grows plants for revegetation projects.

After lunch we'll take a short walk (1 km return) to the Wonthaggi Rifle Range

Wetland to inspect extensive revegetated areas where, over ten years, bird species have increased from 20 to over 100. The Rifle Range is now managed by Parks Victoria with enormous support from Friends of Wonthaggi Heathland and Coastal Reserve Inc. and the Wonthaggi Seedbank Inc.

People may like to head for home or you (especially Birdos) may enjoy an optional visit to the Baxter Wetlands.

Heathlands contain a wonderful diversity of plants which, in turn, support a diverse range of fauna.

Directions from Melbourne: On the outskirts of Wonthaggi turn right into South Dudley Rd, B460 which is sign-posted 'Cape Patterson' and 'to Hospital'. Continue for 2 kms until the Hospital and Rose Lodge Aged Care and Caravan Park is on your right. The entrance to Guide Park is on the left where there is a large grassed area.



REGULAR MONTHLY ACTIVITIES

The Friends RBG Cranbourne run several regular monthly activities, which are described below. If you are interested in participating in any of these activities, even on an irregular basis, please ring or email the contact person, or just turn up. Don't worry if you don't have specific skills, you will learn on the job, and you will be made most welcome!

Botanical Basketmakers

3rd Saturday of the month

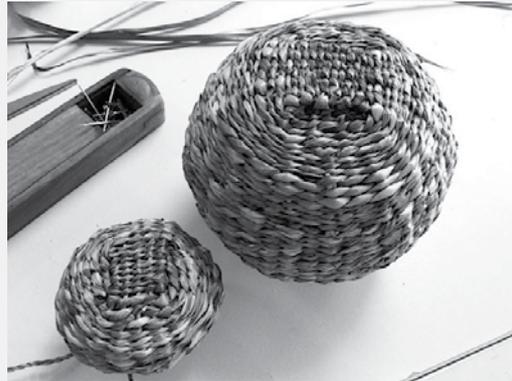
10am–2pm
Elliot Centre

Contact

Lynn Lochrie
0437 759 610
basketry@
rbgfriendscranbourne.
org.au

The Botanical Basketmakers are excited to be working on some items to be displayed at the Kangaroo Paw Festival in November and possible upcoming events next year.

Members use a variety of native materials to create useful or sculptural objects, either for



Kangaroo Paw Sculpture by Liz McDonald

our own use or display and our skill levels range from beginners to experienced.

At our meetings on the 3rd Saturday of the month, we work on our own projects whilst sharing techniques and ideas. We often have members giving a short talk and display on their favourite material and technique at the meeting, or if it is a fine day we might go for a walk in the gardens to identify plants that may be useful in Basketry.

Recently we had a Lomandra Stitch and Coil Workshop with Heather Turner; a highly respected Basketmakers of Victoria Tutor who taught us how to turn this popular plant into beautiful bowls etc.

We would love you to come and join us, in the Elliot Centre. BYO lunch and materials/project if you have them. Hope to see you soon.

Botanical Fabricators

2nd Tuesday of the month

10am
Elliot Centre

Contact

Gwen Elliot
8774 2483
fabricators@
rbgfriendscranbourne.
org.au

Well, KANGAROO PAWS are certainly the major focus of our Cranbourne Friends activities this spring, and they are also the main focus of work for the Botanical Fabricators group.

The Kangaroo Paw flowers provide a wealth of inspiration for a wide range of fabric crafts and we have certainly been letting our imaginations run freely in preparation for the celebrations in November.

From table mats to top hats we will have around 50 different items with a Kangaroo Paw theme, on display in the Australian

Garden Gallery area, and for visitors to purchase.

We are also preparing for next year's Australian Textile Exhibition which will be launched in the Visitor Centre on Tuesday 28 February 2017.

New members are always very welcome to join in our friendly monthly get-togethers.

Growing Friends

3rd Wednesday
Every Thursday

Growing Friends
Nursery

Contact

Marjanne Rook
9769 7881
growing.friends@
rbgfriendscranbourne.
org.au

Plant Sales

At the Spring plant sale on 22 and 23 October we will have some wonderful plants such as the *Banksia integrifolia* - prostrate form - also known as Coastal Banksia. The Coastal Banksia is a groundcover with grey-green leaves with silver-white undersides and upright large yellow brush flowers which attract birds to your gardens. It is the perfect plant to cascade over an embankment for a striking look. Have a look when visiting the gardens - it grows near the Visitors Centre.

The Growing Friends will also be having a plant-sale on Saturday 19 and Sunday 20 November as part of the Kangaroo Paw Celebration - Picnic Weekend. Not only will there be a great range of stylish Kangaroo Paws, but also a small selection of *Conostylis* with bright yellow flowers.

Farewell to Di Clarke

Recently, we held a special morning tea for Di Clarke, the now ex-Manager of the Gardens Nursery which is opposite to our nursery, who has moved to the Eurobodalla Regional Botanic Gardens.

We shall miss Di who supported our nursery in many ways, be it for plant or propagation advice, the loan of equipment or looking after our irrigation hiccups. She also patiently shared her office and nursery with us during the period when our nursery was being established.

As a token of our appreciation, we presented Di with a rusted Bandicoot from the Gardens Gift shop - I think it was a hit. We wish Di all the best in her new job.

The Growing Friends Nursery is open to members of the Friends every Thursday from 10am to 3pm or later by arrangement—check with Marjanne.

For more information, email growing.friends@rbgfriendscranbourne.org.au

or contact Marjanne on 9769 7881 or Don on 9736 2309

A Gift to Us

The Growing friends have been presented with a gift by Pat McDonald, a Growing Friend of many years, who gave us with a three volume set of 'The Grevillea Book' by Peter Olde and Neil Marriott. These beautiful books are now out of print and hard to come by and so we are truly grateful to Pat for her generous gift. They will have pride of place next to our wonderful Encyclopaedia of Australian Plants.

Tawny Visitors

For some weeks now, much to the delight of us and the gardens staff, we have been visited by a Tawny Frogmouth which perches in a tree close to our veranda. After some weeks there were two and I expect come spring, there may be more.

Special Orders

Any wishes? Perhaps you have seen a plant in the Gardens or want multiple plants for a large area. If so, then please contact the Growing Friends by email or phone with your request and we shall endeavour to grow them or may even have them in stock. Contact details are on this page.



Two Tawny Frogmouths on a branch near Growing Friends lunch area
Photo: Alex Smart

Do you need some Australian Plants for your Garden? Would you like some growing advice to go along with that?

These two amazing sales give you the opportunity to buy some beautiful Australian Plants for your garden at a fraction of what you would pay elsewhere! Come along and see what the Growing Friends have been working on for you!

Growing Friends Spring Plant Sale



Saturday 22 &
Sunday 23 October,
2016

10am - 4pm

Kangaroo Paw and Conostylis Sale

Saturday 19
& Sunday 20
November 2016

10am - 4pm



Friends in Focus

2nd Saturday of the
month at 2pm

Contact

James McKee
0411 102 107
photography@rbgfriendscranbourne.org.au



Delicately coloured toadstools (above) & bulky individual with fleshy pores (right)
Photos: Judith Cooke

In the Friends In Focus group we get together to have fun and learn about photography, take photos and enhance and practise our skills in a friendly, social and non-judgmental environment. We range from 'snappers' to serious photographers.

Come along and learn, teach, discuss and take photographs of this inspiring environment!



Botanical Illustrators

1st and 3rd
Wednesday
10am–3pm

Elliot Centre

Contact

Margaret Holloway
0438 985 382
illustrators@
rbgfriendscranbourne.
org.au

Wednesday Botanical Illustrators Group

The Botanical Illustrators group meets regularly in the comfort of the Elliot Centre to enjoy the pursuits of painting, drawing and sharing ideas together. We support and encourage each other, hold workshops and talks and work towards holding exhibitions. Visitors are welcome to drop in and see what we do and to join us.



Botanical Illustrators events

Monday & Tuesday
17 & 18 October

10am to 3pm

Elliot Centre

Members \$170,
Non-members
\$190

To book

See Booking form

2-Day Beginners' Introduction to Botanical Illustration with Margaret Holloway

This 2-day workshop will cover creating a true representation of the chosen subject using graphite. This will include observation, measuring, foreshortening, creating volume and surface rendering.

All art materials will be provided, but participants should bring their own notebook. Class size is limited to ten. It is envisaged that we will hold a follow-up beginners watercolour workshop at a later date.

Instruction will be by Margaret Holloway, who is an experienced art teacher and botanical artist.



Ink drawing of *Banksia baueri* (above) and Graphite drawing of *Hakea gibbosa* (below) by Margaret Holloway.

Wednesday 26
October

11am

Domain House,
Dallas Brooks
Drive, Melbourne

Visit to The Art of Botanical Illustration 2016: A New Direction Exhibition

The Cranbourne Botanical Illustrators plan to tour the annual Botanical Illustration Exhibition together and share lunch at a nearby restaurant afterwards.

Meter parking is available in the local streets for periods of 1 - 4 hours.

Contact Margaret on 0438 985 382 to come along.

Wednesday 16
November

10.30am to 12
noon

Elliot Centre

Cost: \$6
All members are
welcome



Sarah Sanger exhibiting her work in the UK

Morning Talk with Sadra Sanger

Sandra Sanger will talk through her road to success at the prestigious Royal Horticultural Society's Annual Botanical Art Competition. This year she won her fourth gold medal. She will discuss this as well as her 2013 entry which also won a gold medal. The theme at the last two exhibitions was Orchids, Paphiopedilum and Australian Natives.

Sandra has been a botanical artist for many years and has produced a significant body of work. Her paintings are held in collections in Australia and overseas. This is an excellent opportunity to see Sandra's fabulous work up close and she will bring plenty of examples for us to peruse.

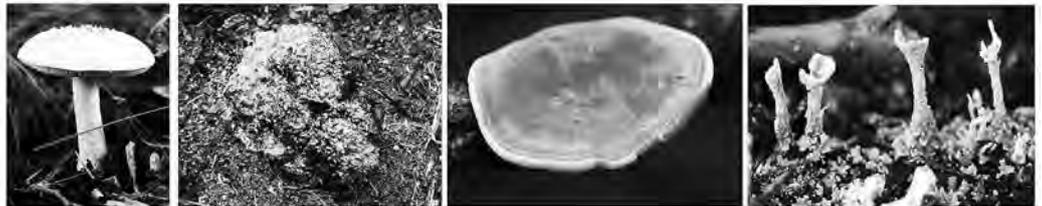
Fabulous Fungi workshop

4 June 2016

We're all familiar with fungi. Who hasn't eaten mushrooms, suffered athlete's foot or fought fungal garden pathogens? But the 60+ participants of the Fabulous Fungi Workshop now have an even greater understanding and appreciation of these amazing organisms!

The day-long workshop kicked off with a seminar from Dr Tom May, Senior Mycologist at RBGV. He explained that fungi lead cryptic (hidden) lives, growing as microscopic hyphae (Gk. Web), and reproduce by spores. They cover the Earth in an invisible, gossamer-like network, only revealing themselves when hyphae aggregate to form mycelia and fruits such as mushrooms. Fungi, as saprotrophs (decomposing dead plant material), parasites (feeding on living hosts) or mutualists (partnering with other organisms), are

Inset: Fungi and lichens spotted at Cranbourne bushland during the workshop. Photos: Charles Young.



key players in nutrient recycling and soil production. Tom also introduced us to Fungimap (www.fungimap.org.au).

Fungi form important associations with other organisms and RBGV orchid conservation botanist, Dr Noushka Reiter, next described how symbiotic and mycorrhizal (fungus-root) associations are essential for optimal plant function and how hyphae penetrate and 'nourish' microscopic orchid seeds, facilitating their germination and assisting threatened orchid conservation programs. She passed around Petri dishes containing 'baby' orchids germinating in fungal inoculum and presented a very entertaining video (<https://www.youtube.com/watch?v=D94Oe0Vuh9U>).

Although fungi appear to be shamelessly exploited by orchids, they have the upper hand in lichens, where they enslave algae/cyanobacteria to produce food. The third

speaker, lichenologist Dr Simone Louwhoff (Federation University), described lichen classification, structure, habitats (anywhere!), reproduction, ecological functions (food, shelter, nutrient cycling and soil production), uses (food, bio-monitoring, dyes, perfumes, pharmaceuticals) and vulnerabilities.

After lunch, Geoff Lay, an experienced field naturalist, enthralled with colourful images and tales of weird and wonderful fungi. He covered fairy rings, edible and poisonous *Agaricus* and *Amanita sp.*, inky capped *Coprinopsis sp.*, star-shaped *Geastrum sp.*, stinkhorns (*Phallus sp.*) and 'the living dead' – *Cordyceps gunnii* (Dark Vegetable Caterpillar), that parasitizes underground moth larvae and grows a 'tomb stone' fruit for its victim.

John Thompson, native plant enthusiast/grower and glass artisan, rounded off the five seminars with a fascinating talk on the cultural history of fungi. His wide-ranging talk covered their use in cooking, baking, brewing, medicine, 'consciousness-raising', dyeing, arts, crafts and tattooing! Even Ötzi the Iceman was carrying birch and tinder fungi when he perished in the Ötztal Alps 3300 years ago!

After a stimulating Q&A session, the day concluded with bushland expeditions uncovering night-glowing Ghost Fungi (*Omphalotus nidiformis*), Earth Balls (*Scleroderma sp.*), Horse Dung Fungi (*Pisolithus sp.*), Bonnets (*Mycena sp.*), purple-capped *Cortinarius archeri* and lichens (see photographs).

Congratulations and thanks to the Friends Committee for turning on another great workshop! Charles Young

Kangaroo Paw Celebration at Cranbourne During November.....continued from Page 6

If you would like to be kept up to date regarding the Symposium via email

Contact the writer on rgelliot@optusnet.com.au.

- Jim Fogarty is a highly respected and sought-after landscape designer. His design for RBG Victoria won a Gold Medal at the RHS Chelsea Show in 2011.
- Loretta Childs is an experienced landscape designer who works on small and large scale projects.
- John Arnott, Manager Horticulture, and Warren Worboys Curator Horticulture both at RBGV Cranbourne Gardens.
- Neil Marriott is a prominent botanist, horticulturalist, author and naturalist with years of experience in cultivating Australian plants.
- Amy Akers is a very active Friends' Committee member and an environmental

scientist who is passionate about growing, photographing and communicating about Australian plants.

- John Thompson is Friends member and a stained glass artisan who has an extensive knowledge of Australian plants covering their cultivation and use.
 - Rodger Elliot has experience of over 55 years in commercial propagating and growing Australian plants as well as writing many publications.
- This promises to be a very special time for the RBGV Cranbourne Gardens and all visitors! Registrations are now open for the Symposium.
Rodger Elliot

Friends Library Open for Business!

Elliot Centre

The Friends Library is open for business with some 750 titles listed in the catalogue. It is a reference library and books are available for perusal within the Elliot Centre, although members of staff may take them to their office for a period of one week, having signed them out in the borrowers' book. At present, access to the library is only when the Elliot Centre is open. Later, when the office is staffed on a regular basis, access to the collection will increase.

When a book has been published in several editions, only the latest is held given this collection is for practical use and is not a research library.

The arrangement of the collection is in broad subject groups and a notation has been assigned to each group. Group "A" holds the botanical encyclopaedias and dictionaries. "B" is assigned to floras of Australia, for example the multi-volume Flora of Australia, of which we hold some of the volumes. These are followed by the floras of each of the states and territories, with Victoria, both the state as a whole and regions within Victoria represented by "I".

At "L" the floras are to be found, and this subdivides into La - acacias ; Le - eucalypts ; Lg - grasses ; Lf - ferns and fungi ; Lo - orchids ; Ls - seaweeds & other marine plants and Lt - trees. The floras are followed by books relating to gardening, insect pests and

weeds. Skipping to the environment at 'Q', this subdivides into Qc - climate change; Qd - conservation; Qf - fire and floods; Qs - soils; and Qu - sustainability. Further on are the books on botanical art and crafts.

At the end of each of the bays is a list of the categories in each bay. I hope this notation will make it reasonably easy for browsing.

A small number of books which are valuable, by virtue of age or fragility, for example E.E.Pescott's The native flowers of Victoria [1914] as well as books which have been signed by the author, are kept in the office and this information is recorded in the library catalogue. For access to these books, phone me on 9818 6012 or email amiller@melbpc.org.au and arrangements for access will be made.

Donations of books to the library are welcome, however it would be useful if the catalogue could be checked beforehand, since duplicate copies are not added to the collection. These books can be left in the right hand side of the cupboard inside the library or on top of the cupboard. Please, in all cases, leave a note with the name and phone number of the donor.

Further articles will appear in Naturelink and will focus on individual books or groups of books.

Ann Miller, Honorary Librarian.

Masterclass:

Pruning Waratahs

October
Date to be
determined

Contact Alex Smart,
smartie38@bigpond.com.
au or 9707 5275

In October each year, soon after the Waratahs in the Future Garden within the Australian Garden have finished flowering, the Cranbourne Gardens' horticulture staff prune them. The initial response is to think that the Waratah pruning may have been brutal. However each year following there has been an impressive display of flowers.

This year Gardens Management has agreed to allow the Friends to watch and possibly ask questions during the pruning process. It really will be a Master Class conducted by 'hands on' experts.

It will be on a weekday at a date to be

determined by the season. Please watch your email for an invitation giving details of time and date.



A very handsome Waratah that has responded very well to pruning.

Membership Update

Please contact Helen if you have any membership queries:

Phone: 9850 9125; if you leave a message I will return your call

Email: membership@rbgfriendscranbourne.org.au

I have received lots of subscription renewal payments this month. Thank you to all who have paid, for your prompt response.

Increased benefits and discounts are now available to members and a list of these will be included when you receive your 2016 - 17 membership card. Remember to show your card when requesting a discount at the Boon Wurrung Cafe and the Gardens shop or any of the other organisations on the list.

For those who have not yet paid you will receive a reminder in this newsletter.

I hope to hear from you soon.

Some members pay directly into the bank or by transfer. Please be sure to use the code

'Subs' and your family name, then send the renewal and receipt to me by post or email. Karen (our hard working treasurer) and I need this information to record your payment.

We are delighted to welcome 12 new members this quarter and look forward to meeting them at some of our activities and special interest groups. Welcome to: AB Bishop, Mary Britt, Coralie Davies, Jennifer Hubbard, Marleen Ling, Dawn-Maree Player, Barbara Rollinson, Alan & Zdenka Stoops, Wally Sutton and Jill & Malcolm Walker.

Helen Morrow

2016 Australian Association of Friends of Botanic Gardens Conference

29 April 2016



This year the Australian Association of Friends of Botanic Gardens biennial conference was hosted by the Friends of the Geelong Botanic Gardens commencing on Friday 29 April, with a reception at the Geelong Civic Centre. The conference continued on Saturday and Sunday in the facilities at the Geelong Conference Centre which is in Eastern Park close to Geelong Botanic Gardens and dealt with issues relevant to Botanic Gardens around Australia.

Delegates and Friends came from Qld, NSW, ACT, Vic and SA. I was pleased to be the delegate representing FRBGC and I enjoyed meeting many people who attended the 2006 conference that was hosted by the Cranbourne Friends.

RBG Victoria was very well represented

- Dr Philip Moors the Patron of Friends of Geelong Botanic Gardens and the AAFBG chaired several sessions

- Prof Tim Entwisle covered the subject Connecting with Social Media

- Neville Walsh spoke about Threatened Flora of Victoria

- John Arnott spoke on Exploring the Role of Botanic Gardens in Plant Conservation

An optional pre-conference tour explored the Bellarine Peninsular. One post-conference tour ventured down the Great Ocean Rd and another ranged over the Western Plains.

The Association networks Friends from Botanic Gardens in all states plus ACT and NT. Check out the website www.friendsbotanicgardens.org. Member groups contribute articles to the AAFBG newsletter, Eucalypt, which is published twice each year. Through the website you can read copies or subscribe to have a free email version sent to your computer.

Alex Smart

Bookfest 2016

3 - 4 June 2016 &
11 - 13 June 2016



People perusing books in the Australian Garden Auditorium

This year's Bookfest took place from Saturday 11 to Monday 13 June in the Gardens Auditorium and was preceded by a 2 day pre-Bookfest sale for staff and members on Friday 3 and Saturday 4 June at the Elliot Centre.

Although we already had a great collection of many books, some friends made further donations and after sorting and pricing we were ready for the sale. Some books were set aside to be donated to the Melbourne Gardens Library, Cranbourne Gardens Library and the Cranbourne Friends Library.

Prior to Bookfest, some attractive Australian plant, landscape, botanical art and flower craft books were left on bookcase shelves at the Elliot Centre for the various Friends groups and visitors to look over and buy, and \$120 was made this way.

The pre-sale Friday was well attended by enthusiastic staff and members, many of whom found treasures at a very low price. One happy staff member found Volume 2 (now out of print), to his Volume 1. Some members were thrilled with their findings and left with bundles of books. The Saturday was a quieter day until lunch time when attendees from the Fungi workshop came over for a shopping spree. We made about \$1,275 over these two days.

Saturday 11 June: day 1 of Bookfest. Despite a very rainy morning, the first customer was at the door at 9.30am. This was the day of the serious buyers and the various science and Australian plant and gardens books were the most popular. Many bargains were found, with some customers needing the assistance of a trolley to wheel out their purchases. Taking for the day were \$1,350.

On Sunday 12 and Monday 13 June, Bookfest was visited by a light but steady stream of visitors to the Gardens who dropped in with their children and bought a book or two. The 'Gift Books' table with individually displayed and attractive flower gardens and craft books was quite popular. Animal books for children or free magazines also seemed attractive. We made \$325 over these two days.

Thank you to the Gardens for making available the auditorium as a venue and moving the many boxes and tables in and out. Thank you to the numerous volunteers who assisted in their various ways. Thank you to the members for their book donations and purchases. All of you contributed to make for a successful Bookfest 2016.

Marjanne Rook



Books ready for the Pre-Bookfest Friends and Staff in Elliot Centre. Photo: Gwen Elliot.

From the Bushland:

Echidnas



Echidna and diggings



Echidna beside path. Photo: Warren Worboys.

More Echidna Facts:

- Male and female echidnas have a different number of chromosomes with 63 in the male and 64 in the female.
- Echidnas are the only mammals that have a true beak; a bony part of the skull structure.
- Surprisingly, echidnas are good swimmers, paddling about with only the snout and a few spines showing.
- Male echidnas have a four-headed penis. Each time it copulates, it alternates heads in sets of two.
- Echidnas have no teeth, but grind food between hard pads on the back of their tongue and the roof of their mouth.
- Echidnas are infested with what is said to be the world's largest flea - *Bradiopsylla echidnae*, which is about 4 mm long.

The echidnas on site at the RBGV Cranbourne are Short-beaked Echidnas (*Tachyglossus aculeatus*). Echidnas are our most widespread native mammal, found in almost all Australian environments and certainly anywhere ants and termites are available. They can sometimes be seen slowly wandering along beside the roads and tracks at Cranbourne with their characteristic rolling gait. This waddle is due to their legs protruding outwards and then downwards (similar to reptiles).

Tachyglossus means 'quick tongue', referring to the speed with which the echidna uses its tongue to catch ants and termites. The echidna can flick its tongue in and out up to 100 times a minute and extrude it up to 18cm. They also eat the larvae of small beetles, moths, and earthworms. *Aculeatus* means 'spiny'. Echidnas have both strong and sharp spines (modified hairs) for defence and short, coarse hair as insulation.

The Echidna's status is listed as of 'Least Concern' and they are described as relatively common. However, no one really knows how many there are in Australia and how their numbers are changing. Along with habitat fragmentation and predators (cats, dogs, foxes), threats include road accidents, bush fires and drought. Echidnas do not tolerate extreme temperatures and are more active at night during hot weather. Echidnas can live 16 years in the wild, but usually less than 10 years. One captive echidna is reported to have lived for 49 years.

Echidnas are monotremes (egg laying marsupials). The female lays the egg and incubates it in her pouch, taking about 10 days to hatch and hatching at about the size of a jelly bean. Echidnas don't have fixed nest sites except for nursery burrows (where the young puggle is deposited once its spines begin to form). They shelter under vegetation, roots or piles of debris, in caves or crevasses, and sometimes use the burrows of other animals such as rabbits and wombats.

Echidnas are mostly solitary animals but have large, mutually overlapping home ranges. In the breeding season (mid to late winter) 'trains' of echidnas may be seen for several weeks before mating eventually occurs. The female at the front leaves a scent trail and is followed by up to 10 males in single file, however three or four is more usual. The males sometimes move from one train to another. The male who endures the courtship period, and remains closest to the female, may be the lucky one and have a chance to breed when the female is receptive.

I haven't been lucky enough to see one of these echidna trains on site but a visitor did come to the Visitor Centre one morning to say they had seen a line of four or five echidnas near the main entry road on their way in. Long time staff members Terry Coates and Warren Worboys have also seen these trains.

Signs that an echidna is about are cylindrical scats made up of a lot of soil and ant-nest material and the mark they make with their snout in soft sand and soil when they're searching for food (a small triangular furrow with a round hole at its apex). Another sign is the half-moon-shaped hollows at the base of plants where echidnas have been searching for food. These large excavations in clusters are quite obvious.

The echidna is a powerful digger: the front feet have five flattened claws used to dig and tear open logs and termite mounds. The hind feet point backwards and help to push soil away when they are burrowing. Two of the claws on each back foot are used for grooming and are elongated to clean between the spines.

We don't really know the numbers of echidnas on site but our ecologist, Terry, suspects that we have a fairly stable resident population of about 10 to 20. They frequently come and go on site through gates (including wombat gates) and often manage to push under the wire skirts of our fences. Diggings are prolific. They turn up on the survey cameras but in lowish numbers and their tracks are rarely seen on the sand pads that are regularly monitored.

Some interesting echidna facts:

- The echidna has small external eyes, but its sense of sight is highly developed. They have highly sensitive hearing and a good sense of smell.
- The echidna's snout has touch and temperature receptors that are sensitive to cold and heat, and electroreceptors (similar to a platypus but far fewer) presumably used in searching for prey in humid ant and termite nests.
- Echidnas can also climb quite well. Dave Hunt tells me that at Mt Rothwell Conservation and Research Centre they came across an echidna on the top of their 1.8metre high floppy fence.
- Short-beaked Echidnas have the lowest, most variable body temperature of all mammals. The normal active body temperature is 30 to 33°C but can fluctuate by up to 6-8°C, dropping down to 28°C without any problems.
- Echidnas are very adaptable in their use of torpor, an energy saving strategy they can use at any time of the year, though prolonged torpor is usually in winter. They are certainly not seen as often here in the depths of winter. During hibernation echidnas have a lowered body temperature to 4°C and reduced heart rate to 4 beats per minute.

Many thanks to Dr Terry Coates, Warren Worboys and Dave Hunt for their contributions. Mary Thackeray

Round the Prom Cruise



The green and cream flowered variant of *Correa reflexa* at Refuge Cove

Far right: People eagerly awaiting the Kasey Lee to take them close enough to allow them to touch Cleft Island (top) & the spectacular Cleft Island commonly known as Skull Rock (below).

The Devonian granites which make up Wilson's Promontory are about 380 million years old and they show a very blocky appearance due to prominent jointing. They are spectacularly coloured from their minerals and coatings of lichens. Photons of light from the sun are reflected off the rocks directly into camera lenses, iPads and mobile phones, transmuting into pixels. A few people also use their eyes.

At 2 bells on the Forenoon watch, 61 Friends of Cranbourne left Port Welshpool in the Kasey Lee under the care of Captain John and his able crew. After negotiating the Lewis channel of Corner Inlet and passing between Entrance Point on Wilson's Promontory and Snake Island we headed south. There was an easterly breeze which caused sufficient pitch and roll to make holding on to rails (or friends) a necessity.

As we passed Sealers Cove there were reminiscences heard from people who had reached it previously by land. Similarly, the next landmarks of Refuge Cove and Waterloo Bay were passed with similar comments.

At this stage, although we could see it quite clearly on the port bow, Rodondo Island was in Tasmanian waters. The marine border is at 39° 12' and Rodondo is south of that at 39° 13' 54.5". On the starboard bow was Wilsons Promontory lighthouse dominating Southeast Point, no longer staffed but we heard of its history. You can't get much further south on mainland Australia than this.



Lunch was served while we were at anchor in sheltered Fenwick Bight; a sit-down roast dinner with all thoughts of sea sickness banished. After this fine repast we headed north; it was much calmer in the lee of the western side of the Promontory. One of the advertised highlights was the viewing of Skull Rock, also known as Cleft Island. The ship's photographer took numerous shots of passengers with the enormous cave in the background; she was not alone in this activity. The captain then took the Kasey Lee around to the western side and nosed in sufficiently close for passengers in the bow to touch the rock. Surely the screams signifying each successful touch were from the crew not any of the Friends! *Continued page 16...*

Afternoon Talks:

Urban Gardens

19 June 2016

Professor Lesley Head shared some findings from a study of 265 backyards in selected suburbs of Sydney and Wollongong. The study showed that exotic plants were significantly more popular than natives. The small number of gardeners with a passion for native and Indigenous plantings sometimes found themselves in conflict with their neighbours, especially regarding trees. The study was undertaken in 2002-3 and it is interesting to speculate, if it was repeated, (perhaps in Victoria?) whether any changes have occurred in the interim.

The study also looked at water usage and seemed to suggest that the installation of tanks did not reduce mains water consumption significantly when compared with non-tank households. This suggestion generated many questions from the audience and vigorous discussion as to how it could be investigated further.

In closing, Lesley mentioned the disappearance of backyards, once an integral part of Aussie childhoods, especially in our cities. This is a change, which has many social consequences.

Associate Professor HariPriya Rangan talked us through the process whereby plants were sourced by Europeans in the 18th and 19th centuries from all over the globe, collected

by elites, propagated by Botanic Gardens and nurseries and made available for general purchase. Plants usually moved around if they had economic value ie. were productive, or if they had curiosity value or were ornamental. She traced the connections with influential landscape designers and social changes in politics and the arts. HariPriya focused on lantana, originally from South America but which became well established in South Africa, Madagascar and India by the late 19th century. Lantana was seen to be a hardy, colourful perennial that flowered throughout the year and so perfect for inclusion in the quintessential English cottage garden, which was fashionable at the time. Here in Australia, it is considered an invasive weed, although it has been recognised as excellent small bird habitat.

Both speakers could only skim their topics and left us wanting more detail and more recent studies. The afternoon showed that humble domestic gardens are now recognised as sites worthy of enquiry and research. They may not be seen to be as important as 'real nature' but gardens can inform and broaden our thinking on the varied relationships and connections between humans and nature in very interesting ways.

Anne Heath Mennell

Cranbourne Friends Annual Luncheon 2016

7 May 2016



Indra Kurzeme (l) and Bev Roberts (r) taking a break (above) and much to talk about pre-luncheon (below).

The 20th Annual Luncheon/Dinner of the Friends of the Royal Botanic Gardens Cranbourne was held on Saturday 7 May in the Tarnuk Room, RBGV Cranbourne and once again it was a very friendly and enjoyable occasion.

With a couple of tables less than last year everyone was able to move around more easily, to chat with other people.

Our MC for the day was the inimitable Alex Smart. The guest speaker was Andrew Laidlaw, Landscape Architect at RBGV Melbourne Gardens who spoke with passion and enthusiasm about his work at the Melbourne Gardens, as well as in several other public gardens in Victoria. He also spoke about his work with Moira Kelly of Global Gardens of Peace and the garden currently being planned for establishment in Gaza which will provide some 'green space' for residents.

Once again the Silent Auction created much interest. Thirty separate items were donated and proceeds of \$2040 were added to our funds, primarily to assist in the provision of the Garden Explorer vehicle this year. The

raffle raised about \$570.

Bev Roberts was aided by Margaret Clarke in organising our Luncheon this year, but unfortunately Bev has indicated that she will not be available for this role in 2017. Sincere thanks are extended to Bev for the enjoyable luncheons we have been able to share in recent years, as a result of her enthusiastic dedication and hard work.



John Armstrong and Jill Harrison meet up again



The Friends of RBG Cranbourne Committee

President: *Indra Kurzeme* 0408 002 028
 Secretary: *Helen Kennedy* 9560 0185
 Vice President: *Helen Morrow* 9850 9125
 Vice President: *Amy Akers* 0423 513 281
 Immediate
 Past President: *Richard Clarke* 5974 1750
 Treasurer: *Karen Russell* 9878 4857
 Membership Secretary: *Helen Morrow* 9850 9125
 RBGC Representative: *Chris Russell* 5990 2200
 General Committee
Margaret Clarke 5974 1750
Rodger Elliot 8774 2483
Chloe Foster 9725 3569
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Naturelink Editor
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 naturelink@rbgfriendscanbourne.org.au
Quicklink Editor
Chloe Foster 9725 3569
Social Media Convenor
Amy Akers 0423 513 281

The committee meets on the second Thursday of the month at 6pm.

Round the Prom Cruise....continued from page 15

Still within the Anser group of islands, we visited the Kanowna Island Seal Colony detected first by the olfactory senses rather than sight. No attempts were made to count them but the Australian Fur Seals (*Arctocephalus pusillus doriferus*) were in their hundreds, sliding down rocks to view the visitors and swimming in the bays. More pixels were collected.

If you can do that in a ship, we retraced our steps to Refuge Cove where passengers were ferried ashore for swimming, hiking to vantage points to photograph the ship, or to botanise amongst this normally hard to access flora. For the ornithologically inclined it was interesting to see and hear the Forest Raven, even if it was scavenging a dead Brushtail Possum on the sand.

Although highly anticipated, Dolphins had been sighted, briefly, only by a very select group of people. We disembarked at 1 bell on the Last Dog watch, entranced by the scenic geology, companionship of Friends, the competence of the friendly crew, and a sense of achievement.

Ian Endersby

Capture a Kangaroo Paw Photo Competition!

1. Take a photo of a Kangaroo Paw
2. Post it on Instagram with your profile set as public
3. Tag @friendsrbgcranbourne and use the hashtag #kpawcelebration

Win a copy of this book

We're running this photo competition as part of the Kangaroo Paw Celebration that the Friends of Cranbourne and the Royal Botanic Gardens Victoria are holding.

Competition closes on Saturday 26th November. The winner will be announced at the Kangaroo Paw Picnic on Sunday 27th November. The winner will be notified via their Instagram account. Open to Australian residents only.