

# Newsletter

## Mackay Regional Botanic Gardens

2014 No 8

Spring has really sprung! New growth is bursting in awesome colours and flowers filled with nectar are luring butterflies and birds. What a special time of the year. Enjoy the latest from 'The Botanic Gardens'...

### Did you see it?

#### 'THE WORLD THAT WE WANT' Exhibition...



Inspired by the book "The World That We Want" by Kim Michele Toft and their recent beach cleaning excursion...three, four and five year old children from Mackay Kindergarten and Preschool made some very interesting creations using some of the items they found on the beach.

They were thrilled to have people see how recycled pieces can be transformed into colourful artworks.

Other artworks included in the exhibition were 'Life In A Rotten Log'.

If you missed the children's exhibition then make sure you see BOTANICA 2014

### Currently on show in the Lagoons Gallery.

#### 'BOTANICA 2014'...

#### An Exhibition by the Mackay Botanical Art Interest Group

Lagoons Gallery: October 8th - November 2<sup>nd</sup> 2014

Colourful, curious and captivating flora from our local region is showcased in the botanical art exhibition 'Botanica 2014' by the Mackay Botanical Art Interest Group (BAIG).

The Botanica 2014 Exhibition's special feature this year is 'Fabulous Fungi' where the artists use a range of techniques to portray their chosen subject.

Botanical art combines detail, accuracy and artistry, with many hours needed for each watercolour painting or graphite drawing. A glimpse into the inner workings of the botanical artists is provided by displays of their sketchbooks, photos, odd pods and all things flora, showing how the artists take a live specimen and create a "living" piece of botanical art.

Featured image is Bridal Veil Fungus *Dictyophora multicolour* by Madge Barnett.



Selected works are available for sale. Entry is free and the Café will be open. Mackay Regional Botanic Gardens Lagoons Gallery is open Wednesday to Friday 10 am - 3pm and Weekends from 9am - 4pm



## What have the friends been up to?

They had a chance to be a part of the **Eungella Biodiversity Monitoring Study**



On Sunday 14<sup>th</sup> September over 20 Friends met at Goodes lookout and convoyed to the end of Mt. Dalrymple Road and visited sites where the a variety of scientists have been collecting data for the Eungella Biodiversity Monitoring Study.



Bill McDonald (noted herbarium scientist) spoke about many different species of trees and how some were chosen (the criteria they had to meet, eg... trunk diameter) and then tagged with a number. These living specimens will be revisited in years to come... to see their growth and any effects caused by climate change. Trees were selected at different elevations... 200, 400, 600, 800, 1,000 and 1200 feet.



Maya Harrison demonstrated how the scientists involved with collecting creatures...beetles, moths, ants, dragonflies and other insects... used a variety of trapping methods, pitfalls, bark-sprays ( seen in image), malaise traps and leaf-litter collections.

Bird enthusiasts were also rewarded by their walk through the sites by hearing and spotting the Eungella Honeyeater.



← The Climbing Pandanus (seen here) was flowering and the honey-eating birds are known to frequent the flowers for nectar. Still more was learnt and knowledge shared around the table after a lunch feast at the Quandong Lodge. Friends of the Gardens supported the Eungella Biodiversity study by assisting with accommodation costs.





## In the Botanic Gardens Dale Reports....

### Eungella Biodiversity Study and collection of material for the MRBG Living Collection.

The week of September 13-19 saw MRBG staff and volunteers involved in the final phase of plant identification for the Eungella Biodiversity Monitory Study project.

- September 13 - Curator Dale Arvidsson and Society for Growing Australian Plants – Mackay Branch (SGAP Mackay) member and Garden Friend Irene Champion travelled to Quandong Creek Lodge at Dalrymple Heights. They were joined by noted herbarium scientist Bill McDonald and author/photographer of the seminal plant identification book 'Mangroves to Mountains' Glenn Leiper.
- September 14 – the Gardens Friends joined the group to learn about the project and how the flora and fauna was identified.
- September 15 – all tagged specimens were located and checked that all trees over 15cm had been measured, ID numbers recorded and all trees and understorey plants were identified in each plot.
- September 16 – an all day visit to the steep 600m sites above Owens Creek; finalised and recorded identifications and collected plant material for genetic evaluation. MRBG staff joined Irene Champion in procuring specimens for the MRBG Living Collection at Quandong Creek Lodge, with permission - the owners of the Lodge have given the MRBG permission to collect propagating material from their extensive property. All the species collected will be added to the MRBG data base and voucher specimens will be sent to the Herbarium.
- September 17 was spent entering data, sorting and pressing specimens, collecting plant material for bar-coding and DNA identification. This entailed the lamina of fresh leaves of vouchered specimens being torn into small pieces and put into coffee filters to be dried then taken back to the Herbarium for later processing.



- September 18 - volunteer Kate Brunner from the Botanic Art Interest Group joined the group trekking to the summit of Mt David.



- At the summit, the endemic ***Acronychia eungellensis*** → *Zieria eungellaensis* (only known from 2 locations), *Solanum francisii*, and *Plectranthus graniticola*. (Thanks to Glenn Leiper for the 2 images)
- September 19 – understory identification occurred at the Diggings Road plot Bill, Ross and Dale finished putting tags on the palms in the 800m plots. All was finished in time for a late morning tea before Irene, Ross and I took our leave.
- Acknowledgement for the Gardens Friends who sponsored the accommodation at Quandong Creek Lodge for participants and to Irene Champion for the diary entries.  
There will be more opportunities for learning about the flora of Eungella so watch this space.

## Herbarium

- Monday September 29 - SGAP Mackay members Clare Davies, Irene Champion and Gloria Canning added labels to the collection duplicates, photo-copying them all, filing the copies in the ring binders in alphabetical genus order and the duplicate specimens in their family folders in the filing cabinet.

## Orchid Extravaganza at Queens Park



Saturday 20<sup>th</sup> September, Friends of the Gardens had a presence at the Queens Park Orchid Extravaganza with a display of creatures... (yes those bungy jumping caterpillars were there) and some souvenir goods. We had some good sales of calendars and books and loved the shady position. SGAP plant sales were next to us and also the Botanical Art Interest group had children trying out a bit of botanical drawings.

## Small Explorers Springtime Storytelling...



A cosy little group of children and parents joined Maya and listened to some nature inspired stories... then headed off around the Botanic Gardens to see some of the creatures that were in the stories.



There was a lot of delight when a host of baby (nymphs) Harlequin bugs were found on the Native Hibiscus.



To end the session, the children and parents draw pictures of some of the creatures they saw.

Some used clay and skeleton leaves to make some winged specimens.  
It was FUN!





## Plant-ed:



Early in September, 63 Walkerston Prep children visited the Botanic Gardens over 2 days. Their topic of interest was Weather and Plants. During their exploration of the Botanic gardens, we talked about sun... and how plants make food (sugar) from the sunshine called Photosynthesis.

We went on a water search and found water in some interesting places... in bromeliads, waterfalls, drains and even some dewdrops. Where had this water come from? Rain was the answer, so we explored the process of evaporation by painting on pavers with water and watching the puddles disappear.



The cactus garden was explored to see how some plants have adapted to limited water and lots of sunshine... Cacti have pretty interesting ways of staying cool by creating shade! Hairy heads, rills and tough skins.



Wind was another element of the weather investigated. Some plants use the wind to have their seeds dispersed and the children had hands on experiences blowing the parachute seeds from the everlasting paper daisies and later tossing winged seeds into the air and watching them spin like helicopter blades.



Water was another dispersal method seen while investigating a range of seeds on display in the meeting room.

Children tossing helicopter seeds to watch them spin

Look at the tiny parachutes on this seed...→





## More Plant- ed

Other schools and learning centres that visited during September were...

Small explorers from South Mackay Kindy 2 groups of 22 children on September 2<sup>nd</sup> and 3<sup>rd</sup>. Their topic was Plants... Food for people (including some bush tucker)... but also food for animals and insects.



23 year 4 children from St. John's Catholic School in Walkerston visited on September 4<sup>th</sup> and learnt about seed dispersal, endangered plants and the creatures they support, and adaptations that plants use to attract pollinators. Below is a quick note from Tracey Vella the teacher,

*Just a quick email... Thank-you so very much... for designing our excursion last Thursday. You have spent so much time organising the displays, and the children gained so much from their experience. Thanks again so very much, you truly do a wonderful job!*

*Tracey Vella & Year 4V St John's Catholic School Walkerston*

September 16<sup>th</sup>... 2 classes of prep children (44) from Whitsunday Anglican School discovered all sorts of plants and creatures in the Botanic Gardens and the lagoons....like watching Plumbago Blue butterflies in the Native Plumbago plant flowers.



A highlight... was watching the pelican dip his head under the water and fill its stretchy bill with water. We even saw the fish moving inside the bill as he gulped it down.

Of course, we were scientists recording the things we saw. Whitsunday School children are regular excursion visitors especially during their camp week.

## Just squeezing in... More visitors

20 Parkinsons' Support Group members enjoyed their talk on seed dispersal on September 18<sup>th</sup>, while taking in the ambiance of the Lagoon Outlook Deck, an outside venue, as the Meeting Room hosted Horticultural students





## School Holiday Activities... Took a walk on the wild side!

Two sessions a day were held...10.00 - 12noon or 2.00 - 4.00pm on Tuesday September 23<sup>rd</sup>, Wednesday 24<sup>th</sup>, Thursday 25<sup>th</sup> September.

All children received a 'Nature Play' passport and completed a mission or two...such as a 'Worm's eye view', 'Bush Sculpture', Pond Dip', 'Garden Sounds' or 'You're a Scavenger'.

Meeting at the Meadowlands Amphitheatre the excited children took a walk with Maya and Friends (Thanks Carolyn and Kevin) to the Brigalow Belt creek where we fished for small water creatures.



A large freshwater prawn



was a surprise as were the turtle eggs we found in the garden beds.

We walked through dry creek beds and discovered loads of butterflies, fairy paintbrushes and spiders and creatures hiding under bark and in the leaf litter. We continued our walk commenting on the aboriginal icons that were cemented in the path, listening to sounds of birds and echoing voices under the railway bridge, even finding a windmill to complete the scavenger hunt and then settled down to create some creative bush sculptures that are still on display in the regional forest.



The Nature Play Passport to an Amazing Childhood is all about getting kids outside to run, jump, climb, splash, invent, imagine, play and be an outdoors kid. To have some green time... instead of screen time

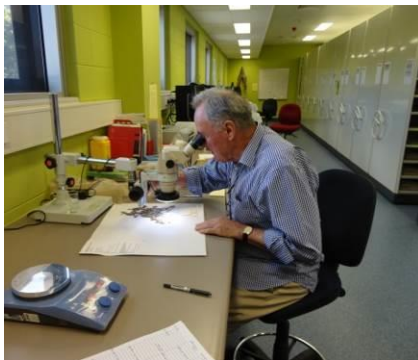


GREAT FUN!



# BGANZQ Cairns Conference highlights.

## Herbarium visit.

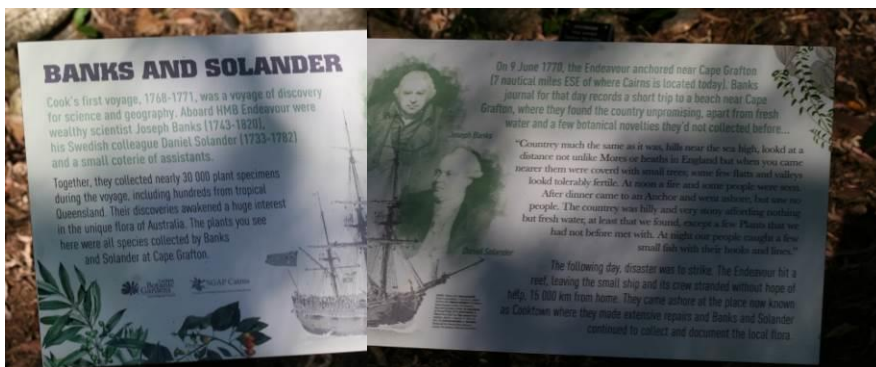


What a collection! With a room for public to come and identify specimens... their own or the ones in the collections (great for students), a wet store and a dry store for a huge amount of specimens including 3 specimens from Cook, Banks and Solander's collection in 1770. Amazing!

## Different flowering trees and plant species to be amazed by...



## And of course signage and interpretation...



**AND....**  
**Maya sold**  
**6 more books.**  
**Yippee!**





**OOOOOH ..... They are nearly finished.**

## **Endangered Orchid flowering at the Mackay Regional Botanic Gardens**



### **Swamp Orchid *Phaius australis***

is nearly finished putting on a showy performance in the Tropical Shade Garden of the Botanic Gardens. It only flowers for 3- 4 weeks of the year, so don't miss out on seeing it.

This spectacular clumping ground orchid has long 'pleated' dark green leaves that arise from partly buried egg-shaped pseudo-bulbs. It can be up to 2m tall when in flower with up to 12 showy orchid flowers borne on the upper part of the cane-like stems.

The flowers that can be up to 100mm in diameter are probably the largest of the Australian orchids.

The large, showy flowers, with up to 20 per stem, have four petals which are white /cream on the outside and brown with white or yellow veins on the inside. The central tongue of the flower is pink and yellow with lobes slightly curved inwards. It flowers in September.

It was once widespread in eastern Australia, growing in swamps with grasses and sedges in the open or in open forests; however it is now... Endangered in the wild.

**We are nearly finished too!**

**Last Month of Free Friday Guided Walks ... Every Friday at 10.00am**



The scenic Lagoons and glorious foliage make perfect backdrops during your informative stroll at the picturesque Botanic Gardens.

Join us 10.00 am Fridays (April – October) at the Administration Building.

**The LAST Special Free Friday Guided Walk for 2014:**

**“Shade Garden Secrets” Friday October 31st 10.00am – 11.30am**

Join Visitors Services Officer, Maya Harrison, on a shady cool walk in the Tropical Shade Garden adjacent to the Administration Building and discover some of the secrets of the special plants growing there. Meet the hat snatching vine, see exploding seed capsules, flowers rising from the soil, spore bearing ferns, pungent fruit and powder puffs!

Intrigued, then contact the Botanic Gardens 49527300 and book the date with us or meet us at the Administration Building / The Garden's Shop just before 10.00am. Guided walks are Free!



You may also like to finish your walk with some delicious refreshments at the Lagoons Café and see the BOTANICA 2014 Exhibition on show in the Lagoons Gallery.



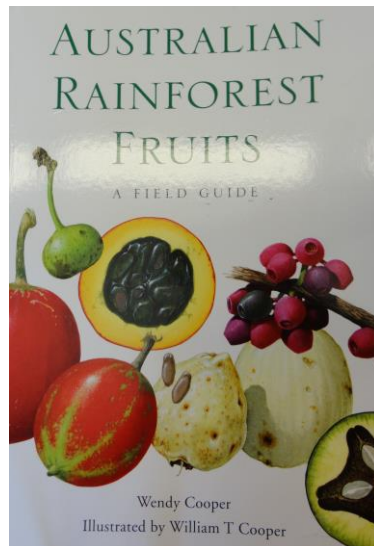
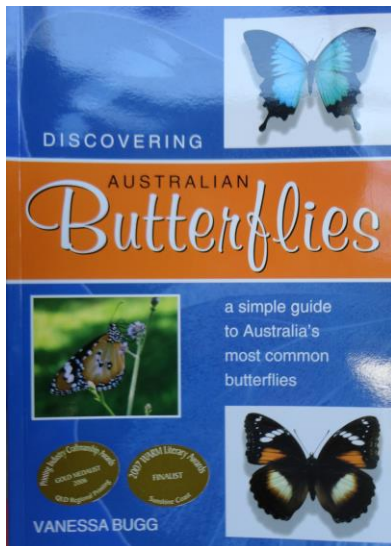
## Have you done your Christmas shopping yet?

The Garden's Shop might just have something for everyone.

### Calendars...

**Jeremy Boot  
Birds \$20**

**Butterflies and Other  
Invertebrates \$15**



### Books... (new arrivals)

**Australian Butterflies \$30**

**Field Guide of Australian  
Rainforest Fruits \$55**

**And don't forget those caterpillars...  
\$15.00**



Hope you enjoyed the latest news from Mackay Regional Botanic Gardens... For more information, call us on 07 49527300 or email [botanic@mackay.qld.gov.au](mailto:botanic@mackay.qld.gov.au).